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< BASIC INSPECTION > **BASIC INSPECTION** Α INSPECTION AND ADJUSTMENT ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM) ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM): Description Perform the following operations when replacing BCM. [For details, refer to BCS-3, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM): Work Procedure".] BEFORE REPLACEMENT D When replacing BCM, save or print current vehicle specification with CONSULT configuration before replacement. NOTE: If "Before Replace ECU" of "Read / Write Configuration" cannot be used, use the "Manual Configuration" after Е replacing BCM. AFTER REPLACEMENT F **CAUTION:** When replacing BCM, always perform "Read / Write Configuration" or "Manual Configuration" with CONSULT. Or not doing so, BCM control function does not operate normally. • Complete the procedure of "Read / Write Configuration" in order. Configuration is different for each vehicle model. Confirm configuration of each vehicle model. If you set incorrect "Read / Write Configuration" or "Manual Configuration", incidents might occur. NOTE: Н When replacing BCM, perform the system initialization (NATS). ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM): Work Procedure INFOID:0000000012167396 1. SAVING VEHICLE SPECIFICATION (BCM) CONSULT Configuration Perform "Before Replace ECU" of "Read / Write Configuration" to save or print current vehicle specification. Refer to BCS-4, "CONFIGURATION (BCM): Description". NOTE: If "Before Replace ECU" of "Read / Write Configuration" cannot be used, use the "Manual Configuration" after replacing BCM. L >> GO TO 2. 2.REPLACE BCM **BCS** Replace BCM. Refer to BCS-97, "Removal and Installation". >> GO TO 3. Ν f 3.WRITING VEHICLE SPECIFICATION (P)CONSULT Configuration Perform "After Replace ECU" of "Read / Write Configuration" or "Manual Configuration" to write vehicle specification. Refer to BCS-4, "CONFIGURATION (BCM): Work Procedure". Р

>> GO TO 4. 4.INITIALIZE BCM (NATS)

Perform BCM initialization. (NATS)

>> WORK END CONFIGURATION (BCM)

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INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

CONFIGURATION (BCM): Description

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Vehicle specification needs to be written with CONSULT because it is not written after replacing BCM. Configuration has three functions as follows. [For details, refer to BCS-4, "CONFIGURATION (BCM): Work Procedure".]

Function		Description
Read / Write Configuration	Before Replace ECU	Reads the vehicle configuration of current BCM. Saves the read vehicle configuration.
	After Replace ECU	Writes the vehicle configuration with saved data.
Manual Configuration		Writes the vehicle configuration with manual selection.

NOTE:

Manual setting item: Items which need selection by vehicle specifications

Automatic setting item: Items which are written in automatically (Setting cannot be changed)

For some models and specifications, the automatic setting item may not be displayed.

CAUTION:

When replacing BCM, always perform "Re/programming, Configuration" with CONSULT. Or not doing so, BCM control function does not operate normally.

- Complete the procedure of "Read / Write Configuration" in order.
- Configuration is different for each vehicle model. Confirm configuration of each vehicle model.
- Never perform "Read / Write Configuration" except for new BCM.
- If you set incorrect "Read / Write Configuration", incidents might occur.

CONFIGURATION (BCM): Work Procedure

INFOID:0000000012167398

1. WRITING MODE SELECTION

©CONSULT Configuration

Select "Re/programming, Configuration" of BCM.

When writing saved data>>GO TO 2.

When writing manually>>GO TO 3.

2.PERFORM "AFTER REPLACE ECU" OF "READ / WRITE CONFIGURATION"

(P)CONSULT Configuration

Perform "After Replace ECU" of "Read / Write Configuration".

>> WORK END

${f 3.}$ PERFORM "MANUAL CONFIGURATION"

(P)CONSULT Configuration

- Select "Manual Configuration".
- Identify the correct model and configuration list. Refer to <u>BCS-5</u>, "CONFIGURATION (BCM): Configuration list".
- Confirm and/or change setting value for each item.

CAUTION:

Thoroughly read and understand the vehicle specification. ECU control may not operate normally if the setting is not correct.

NOTE:

If items are not displayed, touch "Next". Refer to <u>BCS-5, "CONFIGURATION (BCM): Configuration list"</u> for written items and setting value.

- 4. Touch "Next".
- Touch "OK".

CAUTION:

Make sure to select "OK" even if the indicated configuration of brand new BCM is same as the desirable configuration. If not, configuration which is set automatically by selecting vehicle model cannot be memorized.

6. Check that the configuration has been successfully written and touch "End".

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

>> GO TO 4.

4. OPERATION CHECK

Confirm that each function controlled by BCM operates normally.

>> WORK END

CONFIGURATION (BCM): Configuration list

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CAUTION:

- Thoroughly read and understand the vehicle specification. ECU control may not operate normally if the setting is not correct.
- The "setting value" of this vehicle is as follows: Never select any other value than the setting value shown below. (If there is only 1 item in "setting value" that means that item is the only choice for this certain vehicle.)

MANUAL SETTING ITEM		NOTE	
Items	Setting value	NOTE	
HANDLE	LHD	LHD: LHD models	
AUTO SET	TING ITEM		
Items	Setting value	NOTE	
UNLOCK WITH SHOCK	WITHOUT		
AUTO DOOR LOCK SPEED	MODE2	_	
P-POS WARN	MODE1	_	
ROOF FUNCTION		_	
	W/O REQ SW	-	
ACC BATTERY SAVER	MODE1	_	
IGN BATTERY SAVER	MODE2	_	
BATTERY SAVER FUNCTION	MODE3	_	
Trunk/Glass Hatch select	Glass Hatch	"Glass Hatch" is indicated also for vehicles without a glass hatch.	
PANIC ALM TYPE	MODE1	_	
TRANSIT MODE	WITH	_	
SHIPPING MODE	MODE2	_	
TR OPEN SW (INT)	MODE1	_	
H/L BULB	DEFAULT	_	
AUTO LIGHT	WITH	_	
FR FOG LAMP	WITH	_	
RR FOG LAMP	WITH	"WITH" is indicated also for vehicles without a rear fog lamp	
DTRL	WITH	_	
DI LMP VARIAT	MODE2	_	
LIGHT RECOG	MODE7	_	
TRANSMISSION	AT with ABS	_	
RAIN SENSOR CONFIG	WITHOUT	_	
REAR WIPER	WITH	_	
THEFT ALM AREA	MODE2	_	
H/L WASHER	MODE1	_	
TR CANCEL SW	WITHOUT	_	
BCM AC CONTROL	MODE1	_	

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INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

AUTO SETTING ITEM		NOTE	
Items	Setting value	NOTE	
WELCOME LIGHT TIMER2	MODE4	_	
TPMS	WITH	_	
TIRE PRESSURE	230kPa	_	
FR FOG LOGIC	MODE1	_	
AUTO LOCK&UNLOCK FUNC	WITH	_	
AUTO DOOR LOCK SELECT	WITH	_	
AUTO DOOR UNLOCK SELECT	WITH	_	
FOG ON WITH AUTO LIGHT	WITHOUT	_	
Key Fob Type	MODE9	_	
DROP WIP FUNCTION	FR & RR	_	
WELCOME LIGHT OP SET	WITH	_	

TRANSIT MODE CANCEL OPERATION

< BASIC INSPECTION >

TRANSIT MODE CANCEL OPERATION

Description INFOID:000000012167400

- BCM is in transit mode if turn signal indicator on combination meter turns ON for 1 minute when ignition switch is turned from OFF to ON.
- In this case, cancel operation must be performed.

NOTE

Do not cancel transit mode during storage of the vehicle. Always cancel transit mode before delivery of the vehicle to customer.

Work Procedure

1. TRANSIT MODE CANCEL OPERATION

- 1. Turn ignition switch OFF.
- Turn and hold front wiper switch to HI, and then operate turn signal switch to RH or LH.

>> GO TO 2.

2.TRANSIT MODE CANCEL CHECK

- 1. Turn front wiper switch and turn signal switch OFF.
- 2. Turn ignition switch ON.
- 3. Check that turn signal indicator on combination meter does not turn ON.

>> WORK END

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Revision: July 2016 BCS-7 2016 QX50

BODY CONTROL SYSTEM

< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION

BODY CONTROL SYSTEM

System Description

INFOID:0000000012167402

OUTLINE

- BCM (Body Control Module) controls the various electrical components. It inputs the information required to the control from CAN communication and the signal received from each switch and sensor.
- BCM has combination switch reading function for reading the operation status of combination switches (light, turn signal, wiper and washer) in addition to a function for controlling the operation of various electrical components. It also has the signal transmission function as the passed point of signal and the power saving control function that reduces the power consumption with the ignition switch OFF.
- BCM is equipped with the diagnosis function that performs the diagnosis with CONSULT and various settings.

BCM CONTROL FUNCTION LIST

System	Reference	
Combination switch reading system	BCS-10, "System Diagram"	
Signal buffer system	BCS-14, "System Diagram"	
Power consumption control system	BCS-15, "System Diagram"	
Auto light system	EXL-15, "System Diagram" (Xenon type headlamp) EXL-258, "System Diagram" (Halogen type headlamp)	
Turn signal and hazard warning lamp system	EXL-27, "System Diagram" (Xenon type headlamp) EXL-266, "System Diagram" (Halogen type headlamp)	
Headlamp system	EXL-12, "System Diagram" (Xenon type headlamp) EXL-255, "System Diagram" (Halogen type headlamp)	
Parking, license plate and tail lamps system	EXL-29, "System Diagram" (Xenon type headlamp) EXL-268, "System Diagram" (Halogen type headlamp)	
Front fog lamp system	EXL-25, "System Diagram" (Xenon type headlamp) EXL-264, "System Diagram" (Halogen type headlamp)	
Exterior lamp battery saver system	EXL-31, "System Diagram" (Xenon type headlamp) EXL-270, "System Diagram" (Halogen type headlamp)	
Daytime running light system	EXL-18, "System Diagram" (Xenon type headlamp) EXL-261, "System Diagram" (Halogen type headlamp)	
Interior room lamp control system	INL-6, "System Diagram"	
Step lamp system		
Interior room lamp battery saver system	INL-10, "System Diagram"	
Front wiper and washer system	WW-6, "System Diagram"	
Rear wiper and washer system	WW-11, "System Diagram"	
Warning chime system	WCS-5, "WARNING CHIME SYSTEM : System Diagram"	
Door lock system	DLK-11, "System Diagram"	
Infiniti Vehicle Immobilizer System (IVIS) - NATS	SEC-14. "System Diagram"	
Vehicle security system	SEC-18, "System Diagram"	
Panic alarm	SEC-10, System Diagram	
Automatic drive positioner system	ADP-13, "AUTOMATIC DRIVE POSITIONER SYSTEM : System Diagram"	
Rear window defogger system	DEF-4, "System Diagram"	

BODY CONTROL SYSTEM

< SYSTEM DESCRIPTION >

System		Reference	
Intelligent Key system/engine start system	Door lock unlock function		
	Remote keyless function		
	Back door open function	DLV 45 "INTELLICENT VEV SVSTEM - System Disgram"	
	Warning function	DLK-15, "INTELLIGENT KEY SYSTEM : System Diagram"	
	Key reminder function		
	Engine start function		
Power window system		PWC-7, "System Diagram"	
Retained accessory power (RAP) system		PWC-7, "System Description"	
Tire pressure monitor system (TPMS) - AIR PRESSURE MONITOR		WT-8, "TIRE PRESSURE MONITORING SYSTEM : System Description"	

Component Parts Location

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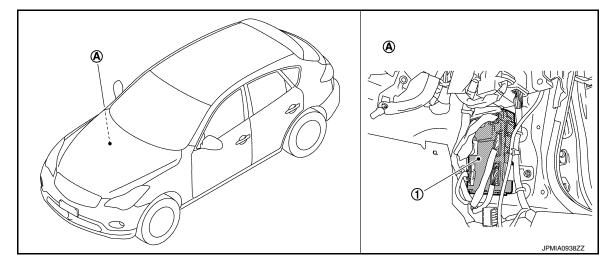
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- 1. BCM
- A. Dash side lower (passenger side)

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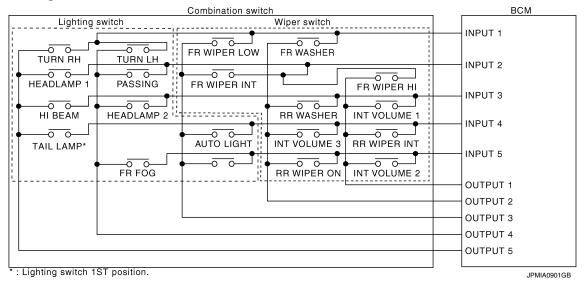
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System Diagram

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System Description

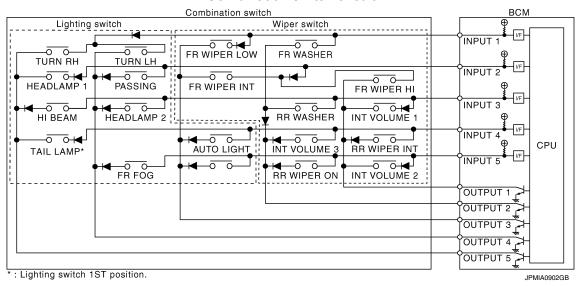
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OUTLINE

- BCM reads the status of the combination switch (light, turn signal, wiper and washer) and recognizes the status of each switch.
- BCM is a combination of 5 output terminals (OUTPUT 1 5) and 5 input terminals (INPUT 1 5). It reads a
 maximum of 20 switch status.

COMBINATION SWITCH MATRIX

Combination switch circuit



Combination switch INPUT-OUTPUT system list

System	OUTPUT 1	OUTPUT 2	OUTPUT 3	OUTPUT 4	OUTPUT 5
INPUT 1	_	FR WASHER	FR WIPER LOW	TURN LH	TURN RH
INPUT 2	FR WIPER HI	_	FR WIPER INT	PASSING	HEADLAMP 1
INPUT 3	INT VOLUME 1	RR WASHER	_	HEADLAMP 2	HI BEAM

< SYSTEM DESCRIPTION >

System	OUTPUT 1	OUTPUT 2	OUTPUT 3	OUTPUT 4	OUTPUT 5
INPUT 4	RR WIPER INT	INT VOLUME 3	AUTO LIGHT	_	TAIL LAMP
INPUT 5	INT VOLUME 2	RR WIPER ON		FR FOG	_

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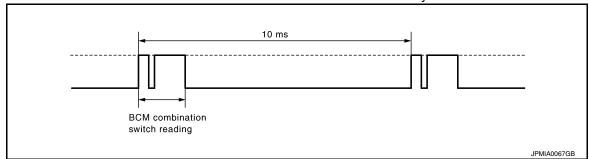
NOTE:

Headlamp has a dual system switch.

COMBINATION SWITCH READING FUNCTION

Description

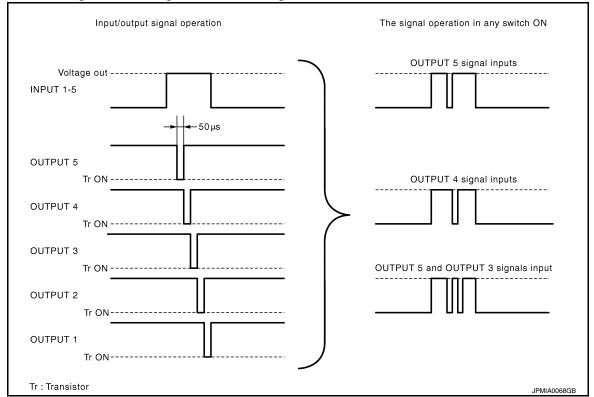
BCM reads the status of the combination switch at 10 ms interval normally.



NOTE:

BCM reads the status of the combination switch at 60 ms interval when BCM is controlled at low power consumption mode.

- BCM operates as follows and judges the status of the combination switch.
- INPUT 1 5 outputs the voltage waveforms of 5 systems simultaneously.
- It operates the transistor on OUTPUT side in the following order: OUTPUT $5 \rightarrow 4 \rightarrow 3 \rightarrow 2 \rightarrow 1$.
- The voltage waveform of INPUT corresponding to the formed circuit changes according to the operation of the transistor on OUTPUT side if any (1 or more) switches are ON.
- It reads this change of the voltage as the status signal of the combination switch.



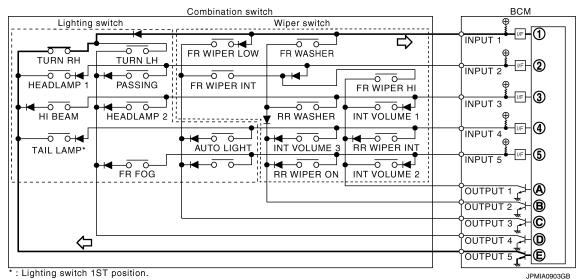
Operation Example

In the following operation example, the combination of the status signals of the combination switch is replaced as follows: INPUT 1 - 5 to "1 - 5" and OUTPUT 1 - 5 to "1 - 5" and OUTPUT 1 - 5 to "1 - 5".

Example 1: When a switch (TURN RH switch) is turned ON

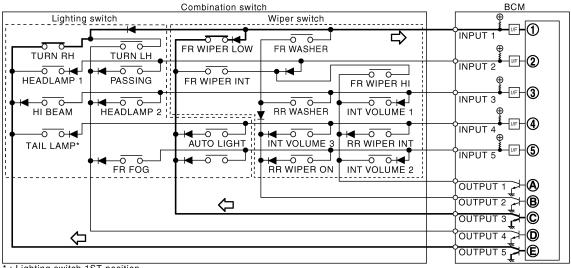
< SYSTEM DESCRIPTION >

• The circuit between INPUT 1 and OUTPUT 5 is formed when the TURN RH switch is turned ON.



- BCM detects the combination switch status signal "1E" when the signal of OUTPUT 5 is input to INPUT 1.
- BCM judges that the TURN RH switch is ON when the signal "1E" is detected.

Example 2: When some switches (turn RH switch, front wiper LO switch) are turned ON
• The circuits between INPUT 1 and OUTPUT 5 and between INPUT 1 and OUTPUT 3 are formed when the TURN RH switch and FR WIPER LOW switch are turned ON.



- : Lighting switch 1ST position.
- BCM detects the combination switch status signal "1CE" when the signals of OUTPUT 3 and OUTPUT 5 are input to INPUT 1.
- BCM judges that the TURN RH switch and FR WIPER LOW switch are ON when the signal "1CE" is detected.

WIPER INTERMITTENT DIAL POSITION

BCM judges the wiper intermittent dial 1 - 7 by the status of INT VOLUME 1, 2 and 3 switches.

Wiper intermittent	Switch status			
dial position	INT VOLUME 1	INT VOLUME 2	INT VOLUME 3	
1	ON	ON	ON	
2	ON	ON	OFF	
3	ON	OFF	OFF	
4	OFF	OFF	OFF	
5	OFF	OFF	ON	

< SYSTEM DESCRIPTION >

Wiper intermittent		Switch status	
dial position	INT VOLUME 1	INT VOLUME 2	INT VOLUME 3
6	OFF	ON	ON
7	OFF	ON	OFF

NOTE:

For details of wiper intermittent dial position, refer to WW-6, "System Description".

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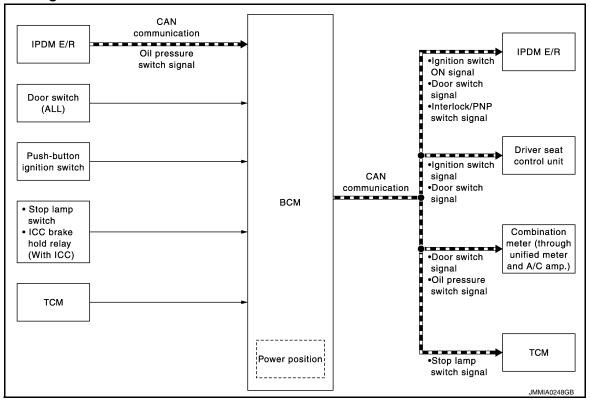
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SIGNAL BUFFER SYSTEM

System Diagram

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System Description

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OUTLINE

BCM has the signal transmission function that outputs/transmits each input/received signal to each unit. Signal transmission function list

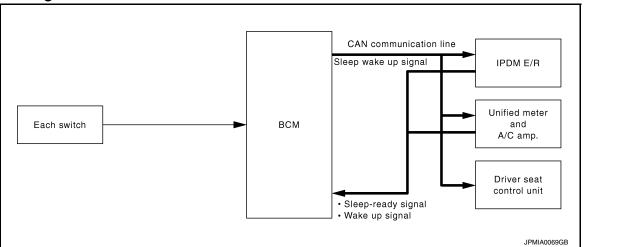
Signal name	Input	Output	Description
Ignition switch ON signal Ignition switch signal	Push-button ignition switch (Push switch)	IPDM E/R (CAN) Driver seat control unit (CAN)	Inputs the push-button ignition switch (push switch) signal and transmits the ignition switch status judged with BCM via CAN communication.
Door switch signal	Any door switch	Combination meter (through unified meter and A/C amp.) (CAN) IPDM E/R (CAN) Driver seat control unit (CAN)	Inputs the door switch signal and transmits it via CAN communication.
Oil pressure switch signal	IPDM E/R (CAN)	Combination meter (through unified meter and A/C amp.) (CAN)	Transmits the received oil pressure switch signal via CAN communication.
Stop lamp switch signal	Stop lamp switch ICC brake hold relay (With ICC)	TCM (CAN)	Inputs the stop lamp switch 1 signal, and stop lamp switch 2 signal or ICC brake hold relay (with ICC) signal, and transmits it via CAN communication.
Interlock/PNP switch signal	ТСМ	IPDM E/R (CAN)	Inputs the selector lever P/N position signal, and transmits the interlock/PNP switch signal via CAN communication.

POWER CONSUMPTION CONTROL SYSTEM

< SYSTEM DESCRIPTION >

POWER CONSUMPTION CONTROL SYSTEM

System Diagram



System Description

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OUTLINE

- BCM incorporates a power saving control function that reduces the power consumption according to the vehicle status.
- BCM switches the status (control mode) by itself with the power saving control function. It performs the sleep request to each unit [IPDM E/R, combination meter (unified meter and A/C amp.) and driver seat control unit] that operates with the ignition switch OFF.

Normal mode (wake-up)

- CAN communication is normally performed with other units
- Each control with BCM is operating properly

CAN communication sleep mode (CAN sleep)

- CAN transmission is stopped
- Control with BCM only is operating

Low power consumption mode (BCM sleep)

- Low power consumption control is active
- CAN transmission is stopped

LOW POWER CONSUMPTION CONTROL WITH BCM

BCM reduces the power consumption with the following operation in the low power consumption mode.

The reading interval of the each switches changes from 10 ms interval to 60 ms interval.

Sleep mode activation

- BCM receives the sleep-ready signal (ready) from IPDM E/R and unified meter and A/C amp. via CAN communication.
- BCM transmits the sleep wake up signal (sleep) to each unit when all of the CAN sleep conditions are fulfilled.
- Each unit stops the transmission of CAN communication with the sleep wake up signal. BCM is in CAN communication sleep mode.
- BCM is in the low power consumption mode and perform the low power consumption control when all of the BCM sleep conditions are fulfilled with CAN sleep condition.

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POWER CONSUMPTION CONTROL SYSTEM

< SYSTEM DESCRIPTION >

Sleep condition		
CAN sleep condition	BCM sleep condition	
Receiving the sleep-ready signal (ready) from all units Ignition switch: OFF Vehicle security system and panic alarm: Not operation Warning chime: Not operation Intelligent Key system buzzer: Not operation Stop lamp switch: OFF ICC brake hold relay (with ICC): ON Key slot (card switch) status: No change Turn signal indicator lamp: Not operation Exterior lamp: OFF Door lock status: No change CONSULT communication status: Not communication Meter display signal: Non-transmission Door switch status: No change Rear window defogger: OFF	Interior room lamp battery saver: Time out RAP system: OFF Power window switch communication: No transmission Push-button ignition switch illumination: OFF Infiniti Vehicle Immobilizer System (IVIS) - NATS: Not operation Remote keyless entry receiver communication status: No communication Tire pressure monitor system (TPMS) - AIR PRESSURE MONITOR: Stop LOCK indicator lamp: OFF ACC indicator lamp: OFF ON indicator lamp: OFF	

Wake-up operation

- BCM changes from the low power consumption mode to the CAN communication sleep mode when the any of the BCM wake-up conditions is fulfilled. Only the control with BCM is activated.
- BCM transmits the sleep wake up signal (wake up) to each unit when any of the CAN wake-up conditions is fulfilled. It changes from the low power consumption mode or the CAN communication sleep mode to the normal mode.
- Each unit starts the transmission of CAN communication with the sleep wake up signal. In addition, the unified meter and A/C amp. transmits the wake up signal to BCM via CAN communication to report the CAN communication start.

Wake-up condition

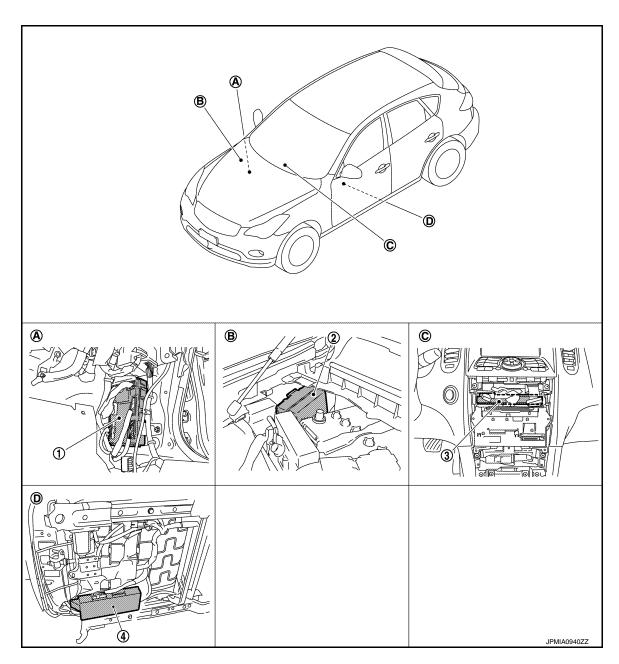
BCM wake-up condition	CAN wake-up condition
Power window switch communication: Receiving Remote keyless entry receiver communication: Receiving	 Receiving the sleep-ready signal (Not-ready) from any units Key slot (key switch): OFF → ON, ON → OFF Push-button ignition switch (push switch): OFF→ ON Hazard switch: OFF → ON PASSING switch: OFF → ON, ON → OFF TAIL LAMP switch: OFF → ON, ON → OFF Driver door switch: OFF → ON, ON → OFF Passenger door switch: OFF → ON, ON → OFF Rear RH door switch: OFF → ON, ON → OFF Rear LH door switch: OFF → ON, ON → OFF Back door switch: OFF → ON, ON → OFF Driver door request switch: OFF → ON Passenger door request switch: OFF → ON Back door opener request switch: OFF → ON Stop lamp switch: ON ICC brake hold relay (with ICC): ON

POWER CONSUMPTION CONTROL SYSTEM

< SYSTEM DESCRIPTION >

Component Parts Location

INFOID:0000000012167410



- 1. BCM
- 4. Driver seat control unit
- A. Dash side lower (passenger side)
- D. Backside of the seat cushion (driver seat)
- 2. IPDM E/R
- B. Engine room dash panel (RH)
- 3. Unified meter and A/C amp.
- C. Behind cluster lid C

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< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM: CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000012167411

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	 Read and save the vehicle specification. Write the vehicle specification when replacing BCM. 	

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

x: Applicable item

System	Sub system selection item	Diagnosis mode		
System	Sub system selection item	Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
_	AIR CONDITONER*			
Intelligent Key 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 system	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	AIR PRESSURE MONITOR	×	×	×

NOTE

FREEZE FRAME DATA (FFD)

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

^{*:} This item is displayed, but is not used.

< SYSTEM DESCRIPTION >

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

NOTE:

*: Power supply position shifts to "LOCK" from "OFF", when ignition switch is in the OFF position, selector lever is in the P position, 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".

DOOR LOCK

DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)

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BCM CONSULT FUNCTION

CONSULT performs the following functions via CAN communication with BCM.

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< SYSTEM DESCRIPTION >

Diagnosis mode	Function Description	
WORK SUPPORT	Changes the setting for each system function.	
DATA MONITOR	The BCM input/output signals are displayed.	
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.	

WORK SUPPORT

Monitor item	Description
DOOR LOCK-UNLOCK SET	Selective unlock function mode can be changed to operate (WITH) or not operate (WITHOUT) with this mode.
AUTOMATIC DOOR LOCK SE- LECT	 Automatic door lock function mode can be selected from the following in this mode. VH SPD: All doors are locked when vehicle speed more than 24km/h (15MPH) P RANGE: All doors are locked when shifting the selector lever from P position to other than the P position
AUTOMATIC DOOR UNLOCK SELECT	 Automatic door unlock function mode can be selected from the following in the mode. MODE 1: All doors are unlocked when the power supply position is changed from ON to OFF MODE 2: All doors are unlocked when shifting the selector lever from any position other than the P to P position MODE 3: Driver side door is unlocked when the power supply position is changed from ON to OFF MODE 4: Driver side door is unlocked when shifting the selector lever from any position other than the P to P position
AUTOMATIC LOCK/UNLOCK SET	Automatic door lock/unlock function mode can be selected from the following in this mode. Off: non-operational Unlock Only: door unlock operation only Lock Only: door lock operation only Lock/Unlock: lock/unlock operation

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.

Monitor Item	Contents
REQ SW-DR	Indicated [ON/OFF] condition of door request switch (driver side).
REQ SW-AS	Indicated [ON/OFF] condition of door request switch (passenger side).
REQ SW-BD/TR	Indicated [ON/OFF] condition of back door request switch.
DOOR SW-DR	Indicated [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS	Indicated [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR	Indicated [ON/OFF] condition of rear door switch RH.
DOOR SW-RL	Indicated [ON/OFF] condition of rear door switch LH.
DOOR SW-BK	Indicated [ON/OFF] condition of back door switch.
CDL LOCK SW	Indicated [ON/OFF] condition of lock signal from door lock unlock switch.
CDL UNLOCK SW	Indicated [ON/OFF] condition of unlock signal from door lock unlock switch.
KEY CYL LK-SW	Indicated [ON/OFF] condition of lock signal from door key cylinder.
KEY CYL UN-SW	Indicated [ON/OFF] condition of unlock signal from door key cylinder.

ACTIVE TEST

< SYSTEM DESCRIPTION >

Test item	Description	
DOOR LOCK	 This test is able to check door lock/unlock operation. The all door lock actuators are locked when "ALL LCK" on CONSULT screen is touched. The all door lock actuators are unlocked when "ALL UNLK" on CONSULT screen is touched. The door lock actuator (driver side) is unlocked when "DR UNLK" on CONSULT screen is touched. The door lock actuator (passenger side) is unlocked when "AS UNLK" on CONSULT screen is touched. The door lock actuator (rear LH and RH) is unlocked when "OTR ULK" on CONSULT screen is touched. 	

REAR WINDOW DEFOGGER

REAR WINDOW DEFOGGER: CONSULT Function (BCM - REAR DEFOGGER)

INFOID:0000000012801446

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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.

Monitor Item	Description	
REAR DEF SW	This is displayed even when it is not equipped.	
PUSH SW	Indicates [ON/OFF] condition of push switch.	

ACTIVE TEST

Test Item	Description
REAR DEFOGGER	Rear window defogger operates when "ON" on CONSULT screen is touched.

BUZZER

BUZZER: CONSULT Function (BCM - BUZZER)

INFOID:0000000012801410

CONSULT APPLICATION ITEMS

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

DATA MONITOR

NOTE:

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

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

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< SYSTEM DESCRIPTION >

Display item [Unit]	Description		
FR FOG SW [On/Off]	Status of front fog lamp switch judged by BCM.		
DOOR SW-DR [On/Off]	Status of driver side door switch judged by BCM.		

ACTIVE TEST

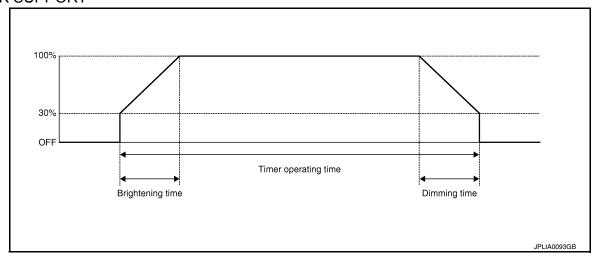
Display item [Unit]	Description
IGN KEY WARN ALM	The key warning chime operation can be checked by operating the relevant function (On/Off).
SEAT BELT WARN TEST	The seat belt warning chime operation can be checked by operating the relevant function (On/Off).
ID REGIST WARNING	The ID regist warning chime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

INT LAMP

INT LAMP : CONSULT Function (BCM - INT LAMP)

INFOID:0000000012801407

WORK SUPPORT



Service item	Setting item	Setting	
SET I/L D-UNLCK INTCON	ON*	With the interior room lamp timer function	
SET I/L D-UNLOK INTOON	OFF	Without the interior room lamp timer function	
	MODE 2	7.5 sec.	
ROOM LAMP TIMER SET	MODE 3*	15 sec.	Sets the interior room lamp ON time. (Timer operating time)
	MODE 4	30 sec.	
	MODE 1	0.5 sec.	
	MODE 2*	1 sec.	
ROOM LAMP ON TIME SET	MODE 3	2 sec.	Sets the interior room lamp gradual brightening time.
	MODE 4	3 sec.	
	MODE 5	0 sec.	
	MODE 1	0.5 sec.	
	MODE 2	1 sec.	
ROOM LAMP OFF TIME SET	MODE 3	2 sec.	Sets the interior room lamp gradual dimming time.
	MODE 4*	3 sec.	
	MODE 5	0 sec.	

< SYSTEM DESCRIPTION >

Service item	Setting item	Setting
R LAMP TIMER LOGIC SET	MODE 1*	Interior room lamp timer activates with synchronizing all doors.
IN LAWIE THINLIN LOGIC SET	MODE 2	Interior room lamp timer activates with synchronizing the driver door only.

^{*:} Initial setting

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.

Monitor item [Unit]	Description	
REQ SW-DR [On/Off]	Indicated [ON/OFF] condition of door request switch (driver side).	
REQ SW-AS [On/Off]	Indicated [ON/OFF] condition of door request switch (passenger side).	
PUSH SW [On/Off]	Indicates [ON/OFF] condition of push-button ignition switch.	
KEY SW-SLOT [On/Off]	Indicates [ON/OFF] condition of key slot.	
DOOR SW-DR [On/Off]	Indicated [ON/OFF] condition of front door switch (driver side).	
DOOR SW-AS [On/Off]	Indicated [ON/OFF] condition of front door switch (passenger side).	
DOOR SW-RR [On/Off]	Indicated [ON/OFF] condition of rear door switch RH.	
DOOR SW- RL [On/Off]	Indicated [ON/OFF] condition of rear door switch LH.	
DOOR SW-BK [On/Off]	Indicated [ON/OFF] condition of back door switch.	
CDL LOCK SW [On/Off]	Indicated [ON/OFF] condition of lock signal from door lock unlock switch.	
CDL UNLOCK SW [On/Off]	Indicated [ON/OFF] condition of unlock signal from door lock unlock switch.	
KEY CYL LK-SW [On/Off]	Indicated [ON/OFF] condition of lock signal from door key cylinder.	
KEY CYL UN-SW [On/Off]	Indicated [ON/OFF] condition of unlock signal from door key cylinder.	
TRNK/HAT MNTR [On/Off]	NOTE: The item is indicated, but not monitored.	
RKE-LOCK [On/Off]	Indicates [ON/OFF] condition of LOCK signal from Intelligent Key.	
RKE-UNLOCK [On/Off]	Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key.	

ACTIVE TEST

Test item	Operation	Description	
INITIAMD	On	Outputs the interior room lamp control signal.	
INT LAMP Off		Stops the interior room lamp control signal.	
STEP LAMP TEST	On	Outputs the step lamp control signal.	
STEF LAWIF TEST	Off	Stops the step lamp control signal.	
LUGGAGE LAMP TEST	On	Outputs the trunk room lamp control signal.	
LUGGAGE LAWF TEST	Off	Stops the trunk room lamp control signal.	

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< SYSTEM DESCRIPTION >

HEADLAMP

HEADLAMP : CONSULT Function (BCM - HEAD LAMP) (Xenon Type)

INFOID:0000000012801403

WORK SUPPORT

Service item	Setting item	Setting		
BATTERY SAVER SET	On*	With the exterior lamp battery saver function		
DATTERT SAVER SET	Off	Without the exterior lamp battery saver function		
	MODE 1*	45 sec.		
	MODE 2	Without the function		
	MODE 3	30 sec.		
ILL DELAY SET	MODE 4	60 sec.	Sets delay timer function timer operation time. (All doors closed)	
	MODE 5	90 sec.		
	MODE 6	120 sec.		
	MODE 7	150 sec.		
	MODE 8	180 sec.		
	MODE 1*	Normal		
CUSTOM A/LIGHT SET- TING	MODE 2	More sensitive setting than normal setting (Turns ON earlier than normal operation.)		
	MODE 3	More sensitive setting than MODE 2 (Turns ON earlier than MODE 2.)		
	MODE 4	Less sensitive setting than normal setting (Turns ON later than normal operation.)		

^{*:} Initial setting

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.

Monitor item [Unit]	Description	
PUSH SW [On/Off]	Indicates [ON/OFF] condition of push-button ignition switch.	
ENGINE STATE [Stop/Stall/Crank/Run]	Indicates [STOP/START/CRANK/RUN] condition of engine states.	
VEH SPEED 1 [km/h]	Display the vehicle speed signal received from unified meter and A/C amp. by numerical value [Km/h].	
KEY SW-SLOT [On/Off]	Indicates [ON/OFF] condition of key slot.	

< SYSTEM DESCRIPTION >

Monitor item [Unit]	Description	
TURN SIGNAL R [On/Off]		
TURN SIGNAL L [On/Off]		
TAIL LAMP SW [On/Off]		
HI BEAM SW [On/Off]		
HEAD LAMP SW1 [On/Off]	Each switch status that BCM judges from the combination switch reading function	
HEAD LAMP SW2 [On/Off]		
PASSING SW [On/Off]		
AUTO LIGHT SW [On/Off]		
FR FOG SW [On/Off]		
RR FOG SW [On/Off]	NOTE: The item is indicated, but not monitored.	
DOOR SW-DR [On/Off]	Indicated [ON/OFF] condition of front door switch (driver side).	
DOOR SW-AS [On/Off]	Indicated [ON/OFF] condition of front door switch (passenger side).	
DOOR SW-RR [On/Off]	Indicated [ON/OFF] condition of rear door switch RH.	
DOOR SW- RL [On/Off]	Indicated [ON/OFF] condition of rear door switch LH.	
DOOR SW-BK [On/Off]	Indicated [ON/OFF] condition of back door switch.	
OPTICAL SENSOR [V]	The value of exterior brightness voltage input from the optical sensor	

ACTIVE TEST

Test item	Operation	Description
TAIL LAMP	On	Transmits the position light request signal to IPDM E/R with CAN communication to turn the tail lamp ON.
	Off	Stops the position light request signal transmission.
	Hi	Transmits the high beam request signal with CAN communication to turn the headlamp (HI).
HEAD LAMP	Low	Transmits the low beam request signal with CAN communication to turn the headlamp (LO).
	Off	Stops the high & low beam request signal transmission.
FR FOG LAMP	On	Transmits the front fog light request signal to IPDM E/R with CAN communication to turn the front fog lamp ON.
	Off	Stops the front fog light request signal transmission.
RR FOG LAMP	On	NOTE:
INCI OO LAWII	Off	The item is indicated, but cannot be tested.

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< SYSTEM DESCRIPTION >

Test item	Operation	Description
DAYTIME RUNNING LIGHT	On	Transmits the daytime running light request signal with CAN communication to turn the daytime running light ON.
	Off	Stops the daytime running light request signal transmission.
	RH	NOTE: The item is indicated, but cannot be tested.
CORNERING LAMP	LH	
	Off	
ILL DIM SIGNAL	On	NOTE:
ILL DIIVI SIGNAL	Off	The item is indicated, but cannot be tested.

HEADLAMP: CONSULT Function (BCM - HEAD LAMP) (Halogen Type) INFOID:000000012801404

WORK SUPPORT

Service item	Setting item	Setting		
BATTERY SAVER SET	On*	With the exterior lamp battery saver function		
DATTERT SAVER SET	Off	Without the exterior lamp battery saver function		
	MODE 1*	45 sec.		
	MODE 2	Without the function		
	MODE 3	30 sec.		
ILL DELAY SET	MODE 4	60 sec.	Sets delay timer function timer operation time.	
	MODE 5	90 sec.	(All doors closed)	
	MODE 6	120 sec.		
	MODE 7	150 sec.		
	MODE 8	180 sec.		
	MODE 1*	Normal		
CUSTOM A/LIGHT SET- TING	MODE 2	More sensitive setting than normal setting (Turns ON earlier than normal operation.)		
	MODE 3	More sensitive setting than MODE 2 (Turns ON earlier than MODE 2.)		
	MODE 4	Less sensitive setting than normal setting (Turns ON later than normal operation.)		

^{*:} Initial setting

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.

Monitor item [Unit]	Description
PUSH SW [On/Off]	Indicates [ON/OFF] condition of push-button ignition switch.
ENGINE STATE [Stop/Stall/Crank/Run]	Indicates [STOP/START/CRANK/RUN] condition of engine states.
VEH SPEED 1 [km/h]	Display the vehicle speed signal received from unified meter and A/C amp. by numerical value [Km/h].
KEY SW-SLOT [On/Off]	Indicates [ON/OFF] condition of key slot.

< SYSTEM DESCRIPTION >

Monitor item [Unit]	Description
TURN SIGNAL R [On/Off]	
TURN SIGNAL L [On/Off]	
TAIL LAMP SW [On/Off]	
HI BEAM SW [On/Off]	
HEAD LAMP SW1 [On/Off]	Each switch status that BCM judges from the combination switch reading function
HEAD LAMP SW2 [On/Off]	
PASSING SW [On/Off]	
AUTO LIGHT SW [On/Off]	
FR FOG SW [On/Off]	
RR FOG SW [On/Off]	NOTE: The item is indicated, but not monitored.
DOOR SW-DR [On/Off]	Indicated [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS [On/Off]	Indicated [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR [On/Off]	Indicated [ON/OFF] condition of rear door switch RH.
DOOR SW- RL [On/Off]	Indicated [ON/OFF] condition of rear door switch LH.
DOOR SW-BK [On/Off]	Indicated [ON/OFF] condition of back door switch.
OPTICAL SENSOR [V]	The value of exterior brightness voltage input from the optical sensor

ACTIVE TEST

Test item	Operation	Description
TAIL LAMP	On	Transmits the position light request signal to IPDM E/R with CAN communication to turn the tail lamp ON.
	Off	Stops the position light request signal transmission.
	Hi	Transmits the high beam request signal with CAN communication to turn the headlamp (HI).
HEAD LAMP	Low	Transmits the low beam request signal with CAN communication to turn the headlamp (LO).
	Off	Stops the high & low beam request signal transmission.
FR FOG LAMP	On	Transmits the front fog light request signal to IPDM E/R with CAN communication to turn the front fog lamp ON.
	Off	Stops the front fog light request signal transmission.
RR FOG LAMP	On	NOTE:
NICI OG LAWIF	Off	The item is indicated, but cannot be tested.

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< SYSTEM DESCRIPTION >

Test item	Operation	Description	
DAYTIME RUNNING LIGHT	On	Transmits the daytime running light request signal with CAN communication to turn the daytime running light ON.	
	Off	Stops the daytime running light request signal transmission.	
	RH		
CORNERING LAMP	LH	NOTE: The item is indicated, but cannot be tested.	
	Off		
ILL DIM SIGNAL	On	NOTE:	
ILL DIIVI SIGNAL	Off	The item is indicated, but cannot be tested.	

WIPER

WIPER: CONSULT Function (BCM - WIPER)

INFOID:0000000012801409

WORK SUPPORT

Service item	Setting item	Description
WIPER SPEED	On	With vehicle speed (Front wiper intermittent time linked with the vehicle speed and wiper intermittent dial position)
SETTING	Off*	Without vehicle speed (Front wiper intermittent time linked with the wiper intermittent dial position)

^{*:}Factory setting

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.

Monitor Item [Unit]	Description
PUSH SW [Off/On]	The switch status input from push-button ignition switch.
VEHICLE SPEED 1 [km/h]	The value of the vehicle speed signal received from unified meter and A/C amp. with CAN communication.
FR WIPER HI [Off/On]	
FR WIPER LOW [Off/On]	Each quitab status that DCM judges from the combination quitab reading function
FR WASHER SW [Off/On]	Each switch status that BCM judges from the combination switch reading function.
FR WIPER INT [Off/On]	
FR WIPER STOP [Off/On]	Front wiper motor (stop position) status received from IPDM E/R with CAN communication.
INT VOLUME [1 – 7]	Each switch status that BCM judges from the combination switch reading function.
RR WIPER ON [Off/On]	
RR WIPER INT [Off/On]	Each switch status that BCM judges from the combination switch reading function.
RR WASHER SW [Off/On]	
RR WIPER STOP [Off/On]	Rear wiper motor (stop position) status input from the rear wiper motor.

< SYSTEM DESCRIPTION >

ACTIVE TEST

Test item	Operation	Description	
Hi		Transmits the front wiper request signal (HI) to IPDM E/R with CAN communication to operate the front wiper HI operation.	
FR WIPER	Lo	Transmits the front wiper request signal (LO) to IPDM E/R with CAN communication to operate the front wiper LO operation.	
INT	Transmits the front wiper request signal (INT) to IPDM E/R with CAN communication to operate the front wiper INT operation.		
Off		Stops transmitting the front wiper request signal to stop the front wiper operation.	
RR WIPER On Off		Outputs the voltage to operate the rear wiper motor.	
		Stops the voltage to stop.	

FLASHER

FLASHER: CONSULT Function (BCM - FLASHER) (Xenon Type)

INFOID:0000000012801405

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WORK SUPPORT

Service item	Setting item	Setting		
HAZARD ANSWER BACK	Lock Only*	With locking only		
	Unlk Only	With unlocking only	Sets the hazard warning lamp answer back function when the door is lock/unlock with the request switch or	
	Lock/Unlk	With locking/unlocking	the key fob.	
	Off	Without the function		

^{*:} Initial setting

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.

Monitor item [Unit]	Description	
REQ SW-DR [On/Off]	Indicated [ON/OFF] condition of door request switch (driver side).	
REQ SW-AS [On/Off]	Indicated [ON/OFF] condition of door request switch (passenger side).	
PUSH SW [On/Off]	Indicates [ON/OFF] condition of push-button ignition switch.	
TURN SIGNAL R [On/Off]	Each switch condition that BCM judges from the combination switch reading function	
TURN SIGNAL L [On/Off]	Lacif switch condition that bow judges from the combination switch reading function	
HAZARD SW [On/Off]	The switch status input from the hazard switch	
RKE-LOCK [On/Off]	Indicates [ON/OFF] condition of LOCK signal from Intelligent Key.	
RKE-UNLOCK [On/Off]	Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key.	
RKE-PANIC [On/Off]	Indicates [ON/OFF] condition of PANIC button of Intelligent Key.	

ACTIVE TEST

Revision: July 2016 BCS-29 2016 QX50

< SYSTEM DESCRIPTION >

Test item	Operation	Description
	RH	Outputs the voltage to blink the right side turn signal lamps.
FLASHER	LH	Outputs the voltage to blink the left side turn signal lamps.
	Off	Stops the voltage to turn the turn signal lamps OFF.

FLASHER: CONSULT Function (BCM - FLASHER) (Halogen Type)

INFOID:0000000012801406

WORK SUPPORT

Service item	Setting item	Setting		
HAZARD ANSWER BACK	Lock Only*	With locking only		
	Unlk Only	With unlocking only	Sets the hazard warning lamp answer back function when the door is lock/unlock with the request switch or	
	Lock/Unlk	With locking/unlocking	the key fob.	
	Off	Without the function		

^{*:} Initial setting

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.

Monitor item [Unit]	Description
REQ SW-DR [On/Off]	Indicated [ON/OFF] condition of door request switch (driver side).
REQ SW-AS [On/Off]	Indicated [ON/OFF] condition of door request switch (passenger side).
PUSH SW [On/Off]	Indicates [ON/OFF] condition of push-button ignition switch.
TURN SIGNAL R [On/Off]	Each switch condition that BCM judges from the combination switch reading function
TURN SIGNAL L [On/Off]	
HAZARD SW [On/Off]	The switch status input from the hazard switch
RKE-LOCK [On/Off]	Indicates [ON/OFF] condition of LOCK signal from Intelligent Key.
RKE-UNLOCK [On/Off]	Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key.
RKE-PANIC [On/Off]	Indicates [ON/OFF] condition of PANIC button of Intelligent Key.

ACTIVE TEST

Test item	Operation	Description
FLASHER	RH	Outputs the voltage to blink the right side turn signal lamps.
	LH	Outputs the voltage to blink the left side turn signal lamps.
	Off	Stops the voltage to turn the turn signal lamps OFF.

INTELLIGENT KEY

INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)

INFOID:0000000012801399

WORK SUPPORT

< SYSTEM DESCRIPTION >

Monitor item	Description
CONFIRM KEY FOB ID	It can be checked whether Intelligent Key ID code is registered or not in this mode.
AUTO LOCK SET	Auto door lock time can be changed in this mode. • MODE 1: 1 minute • MODE 2: 5 minutes • MODE 3: 30 seconds • MODE 4: 2 minutes
LOCK/UNLOCK BY I-KEY	Door lock/unlock function by door request switch (driver side, passenger side and back door) mode can be changed to operate (ON) or not operate (OFF) in this mode.
ENGINE START BY I-KEY	Engine start function mode can be changed to operate (ON) or not operate (OFF) with this mode.
TRUNK/GLASS HATCH OPEN	Buzzer reminder function mode by back door request switch can be changed to operate (ON) or not operate (OFF) with this mode.
PANIC ALARM SET	Panic alarm button pressing time on Intelligent Key remote control button can be selected from the following with this mode. • MODE 1: 0.5 sec. • MODE 2: Non-operation • MODE 3: 1.5 sec.
PW DOWN SET	Unlock button pressing time on Intelligent Key button can be selected from the following with this mode. • MODE 1: 3 sec. • MODE 2: Non-operation • MODE 3: 5 sec.
TAKE OUT FROM WIN WARN	NOTE: This item is displayed, but cannot be supported.
TRUNK OPEN DELAY	NOTE: This item is displayed, but cannot be supported.
LO- BATT OF KEY FOB WARN	Intelligent Key low battery warning mode can be changed to operate (ON) or not operate (OFF) with this mode.
ANTI KEY LOCK IN FUNCTI	Key reminder function mode can be changed to operate (ON) or not operate (OFF) with this mode.
HAZARD ANSWER BACK	Hazard reminder function mode can be selected from the following with this mode. • LOCK ONLY: Door lock operation only • UNLOCK ONLY: Door unlock operation only • LOCK/UNLOCK: Lock/unlock operation • OFF: Non-operation
ANS BACK I-KEY LOCK	Buzzer reminder function (lock operation) mode by door request switch (driver side and passenger side) can be selected from the following with this mode. • Horn chirp: Sound horn • Buzzer: Sound Intelligent Key warning buzzer • OFF: Non-operation
ANS BACK I-KEY UNLOCK	Buzzer reminder function (unlock operation) mode by door request switch can be changed to operate (ON) or not operate (OFF) with this mode.
SHORT CRANKING OUTPUT	Starter motor can operate during the times below. • 70 msec. • 100 msec. • 200 msec.
INSIDE ANT DIAGNOSIS	This function allows inside key antenna self-diagnosis.
HORN WITH KEYLESS LOCK	Horn reminder function mode by Intelligent Key button can be changed to operate (ON) or not operate (OFF) with this mode.
WELCOME LIGHT OP SET	Welcome light function mode can be changed to operate (WITH) or not operate (WITHOUT) with this mode.
WELCOME LIGHT SELECT	Welcome light function mode can be selected from the following with this mode. • Without room lamp • With room lamp • Without paddle lamp • With paddle lamp

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< SYSTEM DESCRIPTION >

SELF-DIAG RESULT

Refer to BCS-90, "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.

Monitor Item	Condition
REQ SW -DR	Indicates [ON/OFF] condition of door request switch (driver side).
REQ SW -AS	Indicates [ON/OFF] condition of door request switch (passenger side).
REQ SW -RR	NOTE: This item is displayed, but cannot be monitored.
REQ SW -RL	NOTE: This item is displayed, but cannot be monitored.
REQ SW -BD/TR	Indicates [ON/OFF] condition of back door request switch.
PUSH SW	Indicates [ON/OFF] condition of push-button ignition switch.
IGN RLY2 -F/B	Indicates [ON/OFF] condition of ignition relay 2.
CLUCH SW	NOTE: This item is displayed, but cannot be monitored.
BRAKE SW 1	Indicates [ON/OFF] condition of brake switch power supply.
BRAKE SW 2	Indicates [ON/OFF] condition of brake switch.
DETE/CANCL SW	Indicates [ON/OFF] condition of P position.
SFT PN/N SW	Indicates [ON/OFF] condition of P or N position.
S/L -LOCK	NOTE: This item is displayed, but cannot be monitored.
S/L -UNLOCK	NOTE: This item is displayed, but cannot be monitored.
S/L RELAY -F/B	NOTE: This item is displayed, but cannot be monitored.
UNLK SEN -DR	Indicates [ON/OFF] condition of driver door UNLOCK status.
PUSH SW -IPDM	Indicates [ON/OFF] condition of push-button ignition switch.
IGN RLY1 -F/B	Indicates [ON/OFF] condition of ignition relay 1.
DETE SW -IPDM	Indicates [ON/OFF] condition of P position.
SFT PN -IPDM	Indicates [ON/OFF] condition of P or N position.
SFT P -MET	Indicates [ON/OFF] condition of P position.
SFT N -MET	Indicates [ON/OFF] condition of N position.
ENGINE STATE	Indicates [STOP/START/CRANK/RUN] condition of engine states.
S/L LOCK-IPDM	NOTE: This item is displayed, but cannot be monitored.
S/L UNLK-IPDM	NOTE: This item is displayed, but cannot be monitored.
S/L RELAY-REQ	NOTE: This item is displayed, but cannot be monitored.
VEH SPEED 1	Display the vehicle speed signal received from unified meter and A/C amp. by numerical value [Km/h].
VEH SPEED 2	Display the vehicle speed signal received from ABS or VDC or CVT by numerical value [Km/h].
DOOR STAT-DR	Indicates [LOCK/READY/UNLOCK] condition of driver side door status.
DOOR STAT-AS	Indicates [LOCK/READY/UNLOCK] condition of passenger side door status.
ID OK FLAG	Indicates [SET/RESET] condition of key ID.
PRMT ENG STRT	Indicates [SET/RESET] condition of engine start possibility.

< SYSTEM DESCRIPTION >

Monitor Item	Condition
PRMT RKE STRT	NOTE: This item is displayed, but cannot be monitored.
KEY SW -SLOT	Indicates [ON/OFF] condition of key slot.
TRNK/HAT MNTR	NOTE: This item is displayed, but cannot be monitored.
RKE-LOCK	Indicates [ON/OFF] condition of LOCK signal from Intelligent Key.
RKE-UNLOCK	Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key.
RKE-TR/BD	NOTE: This item is displayed, but cannot be monitored.
RKE-PANIC	Indicates [ON/OFF] condition of PANIC button of Intelligent Key.
RKE-P/W OPEN	Indicates [ON/OFF] condition of P/W DOWN signal from Intelligent Key.
RKE-MODE CHG	Indicates [ON/OFF] condition of MODE CHANGE signal from Intelligent Key.
RKE OPE COUN1	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing.
RKE OPE COUN2	NOTE: This item is displayed, but cannot be monitored.

ACTIVE TEST

Test item	Description
BATTERY SAVER	This test is able to check interior room lamp operation. The interior room lamp will be activated after "ON" on CONSULT screen is touched.
PW REMOTO DOWN SET	This test is able to check power window down operation. The power window down will be activated after "ON" on CONSULT screen is touched.
INSIDE BUZZER	This test is able to check warning chime in combination meter operation. Take away warning chime sounds when "TAKE OUT" on CONSULT screen is touched. Key warning chime sounds when "KEY WARN" on CONSULT screen is touched. Position warning chime sounds when "PRNG WARN" on CONSULT screen is touched. ACC warning chime sounds when "ACC WARN" on CONSULT screen is touched.
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation. The Intelligent Key warning buzzer will be activated after "ON" on CONSULT screen is touched.
INDICATOR	This test is able to check warning lamp operation. • "KEY" Warning lamp illuminates when "KEY ON" on CONSULT screen is touched. • "KEY" Warning lamp flashes when "KEY IND" on CONSULT screen is touched.
INT LAMP	This test is able to check interior room lamp operation. The interior room lamp will be activated after "ON" on CONSULT screen is touched.
LCD	This test is able to check meter display information Engine start information displays when "BP N" on CONSULT screen is touched. Engine start information displays when "BP I" on CONSULT screen is touched. Key ID warning displays when "ID NG" on CONSULT screen is touched. ROTAT: This item is displayed, but cannot be tested. Position warning displays when "SFT P" on CONSULT screen is touched. Intelligent Key insert information displays when "INSRT" on CONSULT screen is touched. Intelligent Key low battery warning displays when "BATT" on CONSULT screen is touched. Take away through window warning displays when "NO KY" on CONSULT screen is touched. Take away warning display when "OUTKY" on CONSULT screen is touched. OFF position warning display when "LK WN" on CONSULT screen is touched.
TRUNK/GLASS HATCH	This test is able to check back door opener actuator open operation. This actuator opens when "ON" on CONSULT screen is touched.
FLASHER	This test is able to check hazard warning lamp operation. The hazard warning lamps will be activated after "ON" on CONSULT screen is touched.
HORN	This test is able to check horn operation. The horn will be activated after "ON" on CONSULT screen is touched.
P RANGE	This test is able to check A/T shift selector power supply A/T shift selector power is supplied when "ON" on CONSULT screen is touched.

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< SYSTEM DESCRIPTION >

Test item	Description
ENGINE SW ILLUMI	This test is able to check push-ignition switch illumination operation. Push-ignition switch illumination illuminates when "ON" on CONSULT screen is touched.
LOCK INDICATOR	This test is able to check LOCK indicator in push-ignition switch operation. LOCK indicator in push-ignition switch illuminates when "ON" on CONSULT screen is touched;
ACC INDICATOR	This test is able to check ACC indicator in push-ignition switch operation. Indicator in push-ignition switch illuminates when "ON" on CONSULT screen is touched.
IGNITION ON IND	This test is able to check ON indicator in push-ignition switch operation. Indicator in push-ignition switch illuminates when "ON" on CONSULT screen is touched.
KEY SLOT ILLUMI	This test is able to check key slot illumination operation. Key slot illumination flash when "ON" on CONSULT screen is touched.
TRUNK/BACK DOOR	NOTE: This item is displayed, but cannot be tested.

COMB SW

COMB SW: CONSULT Function (BCM - COMB SW)

INFOID:0000000012167422

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.

Monitor item [UNIT]	Description
FR WIPER HI [Off/On]	Displays the status of the FR WIPER HI switch in combination switch judged by BCM with the combination switch reading function.
FR WIPER LOW [Off/On]	Displays the status of the FR WIPER LOW switch in combination switch judged by BCM with the combination switch reading function.
FR WASHER SW [Off/On]	Displays the status of the FR WASHER switch in combination switch judged by BCM with the combination switch reading function.
FR WIPER INT [Off/On]	Displays the status of the FR WIPER INT switch in combination switch judged by BCM with the combination switch reading function.
FR WIPER STOP [Off/On]	Displays the status of the front wiper stop position signal received from IPDM E/R via CAN communication.
INT VOLUME [1 - 7]	Displays the status of wiper intermittent dial position judged by BCM with the combination switch reading function.
RR WIPER ON [Off/On]	Displays the status of the RR WIPER ON switch in combination switch judged by BCM with the combination switch reading function.
RR WIPER INT [Off/On]	Displays the status of the RR WIPER INT switch in combination switch judged by BCM with the combination switch reading function.
RR WASHER SW [Off/On]	Displays the status of the RR WASHER switch in combination switch judged by BCM with the combination switch reading function.
RR WIPER STOP [Off/On]	Displays the status of the rear wiper stop position signal received from rear wiper motor.
TURN SIGNAL R [Off/On]	Displays the status of the TURN RH switch in combination switch judged by BCM with the combination switch reading function.
TURN SIGNAL L [Off/On]	Displays the status of the TURN LH switch in combination switch judged by BCM with the combination switch reading function.
TAIL LAMP SW [Off/On]	Displays the status of the TAIL LAMP switch in combination switch judged by BCM with the combination switch reading function.
HI BEAM SW [Off/On]	Displays the status of the HI BEAM switch in combination switch judged by BCM with the combination switch reading function.
HEAD LAMP SW 1 [Off/On]	Displays the status of the HEADLAMP 1 switch in combination switch judged by BCM with the combination switch reading function.

< SYSTEM DESCRIPTION >

Monitor item [UNIT]	Description
HEAD LAMP SW 2 [Off/On]	Displays the status of the HEADLAMP 2 switch in combination switch judged by BCM with the combination switch reading function.
PASSING SW [Off/On]	Displays the status of the PASSING switch in combination switch judged by BCM with the combination switch reading function.
AUTO LIGHT SW [Off/On]	Displays the status of the AUTO LIGHT switch in combination switch judged by BCM with the combination switch reading function.
FR FOG SW [Off/On]	Displays the status of the FR FOG switch in combination switch judged by BCM with the combination switch reading function.
RR FOG SW [Off/On]	NOTE: The item is indicated, but not monitored.

BCM

BCM: CONSULT Function (BCM - BCM)

WORK SUPPORT

Item	Description
RESET SETTING VALUE	Return a value set with Work Support of each system to a default value in factory shipment.

IMMU

IMMU : CONSULT Function (BCM - IMMU)

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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.

Monitor item	Content
CONFRM ID ALL	
CONFIRM ID4	
CONFIRM ID3	Indicates [YET] at all time. Switch to [DONE] when a registered Intelligent Key is inserted into the key slot.
CONFIRM ID2	Owitin to [BONL] when a registered intelligent very is inserted into the key slot.
CONFIRM ID1	
TP 4	
TP 3	Indicates the graph or of ID which has been registered
TP 2	Indicates the number of ID which has been registered.
TP 1	
PUSH SW	Indicates [ON/OFF] condition of push-button ignition switch.
KEY SW -SLOT	Indicates [ON/OFF] condition of key slot.

ACTIVE TEST

Test item	Description	
THEFT IND	This test is able to check security indicator lamp operation. The lamp will be turned on when "ON" on CONSULT screen touched.	Р

BATTERY SAVER

BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)

INFOID:0000000012801408

WORK SUPPORT

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< SYSTEM DESCRIPTION >

Service item	Setting item	Setting	
BATTERY SAVER SET	On*	With the exterior lamp battery saver function	
	Off	Without the exterior lamp battery saver function	
ROOM LAMP BAT SAV SET	On*	With the interior room lamp battery saver function	
	Off	Without the interior room lamp battery saver function	
ROOM LAMP TIMER SET	MODE 1	30 min.	Sets the interior room lamp battery saver timer operating time.
	MODE 2	60 min.	
	MODE 3*	15 min.	

^{*:} Initial setting

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.

Monitor item [Unit]	Description		
REQ SW-DR [On/Off]	Indicated [ON/OFF] condition of door request switch (driver side).		
REQ SW-AS [On/Off]	Indicated [ON/OFF] condition of door request switch (passenger side).		
PUSH SW [On/Off]	Indicates [ON/OFF] condition of push-button ignition switch.		
KEY SW-SLOT [On/Off]	Indicates [ON/OFF] condition of key slot.		
DOOR SW-DR [On/Off]	Indicated [ON/OFF] condition of front door switch (driver side).		
DOOR SW-AS [On/Off]	Indicated [ON/OFF] condition of front door switch (passenger side).		
DOOR SW-RR [On/Off]	Indicated [ON/OFF] condition of rear door switch RH.		
DOOR SW- RL [On/Off]	Indicated [ON/OFF] condition of rear door switch LH.		
DOOR SW-BK [On/Off]	Indicated [ON/OFF] condition of back door switch.		
CDL LOCK SW [On/Off]	Indicated [ON/OFF] condition of lock signal from door lock unlock switch.		
CDL UNLOCK SW [On/Off]	Indicated [ON/OFF] condition of unlock signal from door lock unlock switch.		
KEY CYL LK-SW [On/Off]	Indicated [ON/OFF] condition of lock signal from door key cylinder.		
KEY CYL UN-SW [On/Off]	Indicated [ON/OFF] condition of unlock signal from door key cylinder.		
TRNK/HAT MNTR [On/Off]	NOTE: The item is indicated, but not monitored.		
RKE-LOCK [On/Off]	Indicates [ON/OFF] condition of LOCK signal from Intelligent Key.		
RKE-UNLOCK [On/Off]	Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key.		

ACTIVE TEST

< SYSTEM DESCRIPTION >

Test item	Operation	Description	
BATTERY SAVER	Off	Cuts the interior room lamp power supply.	
DATILITI GAVLIT	On	Outputs the interior room lamp power supply.	

TRUNK

TRUNK: CONSULT Function (BCM - TRUNK)

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BCM CONSULT FUNCTION

CONSULT performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description	
DATA MONITOR	The BCM input/output signals are displayed.	
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.	

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.

Monitor Item	Contents	
PUSH SW	Indicates [ON/OFF] condition of push-button ignition switch.	
UNLK SEN -DR	Indicates [ON/OFF] condition of driver door UNLOCK status.	
VEH SPEED 1	Indicates [Km/h] condition of vehicle speed signal from combination meter.	
KEY CYL SW-TR	NOTE: This item is displayed, but cannot be monitored.	
TR CANCEL SW	NOTE: This item is displayed, but cannot be monitored.	
TR/BD OPEN SW	Indicates [ON/OFF] condition of back door opener switch.	
TRNK/HAT MNTR	NOTE: This item is displayed, but cannot be monitored.	
RKE-TR/BD*	NOTE: This item is displayed, but cannot be monitored.	

ACTIVE TEST

Test item	Description	
TRUNK/GLASS HATCH	This test is able to check back door opener actuator open operation. This actuator opens when ""	

THEFT ALM

THEFT ALM: CONSULT Function (BCM - THEFT)

INFOID:0000000012801401

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.

Monitored Item	Description	
REQ SW -DR	Indicates [ON/OFF] condition of door request switch (driver side).	
REQ SW -AS	Indicates [ON/OFF] condition of door request switch (passenger side).	
REQ SW -RR	NOTE: This is displayed even when it is not equipped.	

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< SYSTEM DESCRIPTION >

Monitored Item	Description	
REQ SW -RL	NOTE: This is displayed even when it is not equipped.	
REQ SW -BD/TR	Indicates [ON/OFF] condition of back door request switch.	
PUSH SW	Indicates [ON/OFF] condition of push-button ignition switch	
UNLK SEN -DR	Indicates [ON/OFF] condition of driver door UNLOCK status.	
KEY SW -SLOT	Indicates [ON/OFF] condition of key slot.	
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch LH.	
DOOR SW-AS	Indicates [ON/OFF] condition of front door switch RH.	
DOOR SW-RR	Indicates [ON/OFF] condition of rear door switch RH.	
DOOR SW-RL	Indicates [ON/OFF] condition of rear door switch LH.	
DOOR SW-BK	Indicates [ON/OFF] condition of back door switch.	
CDL LOCK SW	Indicates [ON/OFF] condition of lock signal from door lock/unlock switch LH and RH.	
CDL UNLOCK SW	Indicates [ON/OFF] condition of unlock signal from door lock/unlock switch LH and RH.	
KEY CYL LK-SW	Indicates [ON/OFF] condition of lock signal from front door key cylinder switch.	
KEY CYL UN-SW	Indicates [ON/OFF] condition of unlock signal from front door key cylinder switch.	
KEY CYL SW-TR	NOTE: This is displayed even when it is not equipped.	
TR/BD OPEN SW	Indicates [ON/OFF] condition of back door opener switch.	
TRNK/HAT MNTR	NOTE: This is displayed even when it is not equipped.	
RKE-LOCK	Indicates [ON/OFF] condition of LOCK signal from Intelligent Key.	
RKE-UNLOCK	Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key.	
RKE-TR/BD	NOTE: This is displayed even when it is not equipped.	

WORK SUPPORT

Test Item	Description	
SECURITY ALARM SET	This mode is able to confirm and change security alarm ON-OFF setting.	
THEFT ALM TRG	The switch which triggered vehicle security alarm is recorded. This mode is able to confirm and erase the record of vehicle security alarm. The trigger data can be erased by touching "CLEAR" on CONSULT screen.	

ACTIVE TEST

Test Item	Description	
THEFT IND	This test is able to check security indicator lamp operation. The lamp will be turned on when "ON" on CONSULT screen is touched.	
VEHICLE SECURITY HORN	This test is able to check vehicle security horn operation. The horns will be activated for 0.5 seconds after "ON" on CONSULT screen is touched.	
HEADLAMP(HI)	This test is able to check vehicle security lamp operation. The headlamps will be activated for 0.5 seconds after "ON" on CONSULT screen is touched.	
FLASHER	This test is able to check vehicle security hazard lamp operation. The hazard lamps will be activated after "ON" on CONSULT screen is touched.	

RETAIND PWR

RETAIND PWR : CONSULT Function (BCM - RETAINED PWR)

INFOID:0000000012801452

Data monitor

NOTE:

< SYSTEM DESCRIPTION >

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

Monitor Item	Description	
DOOR SW-DR	Indicates [ON/OFF] condition of driver side door switch.	
DOOR SW-AS	Indicates [ON/OFF] condition of passenger side door switch.	

SIGNAL BUFFER

SIGNAL BUFFER: CONSULT Function (BCM - SIGNAL BUFFER)

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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.

Monitor item [UNIT]	Description
PUSH SW [Off/On]	Displays the status of the push-button ignition switch (push switch) judged by BCM.

ACTIVE TEST

Test item	Opera- tion	Description
OIL PRESSURE SW	Off	OFF
	On	BCM transmits the oil pressure switch signal to the unified meter and A/C amp. via CAN communication, which illuminates the oil pressure warning lamp in the combination meter.

AIR PRESSURE MONITOR

AIR PRESSURE MONITOR: CONSULT Function (BCM - AIR PRESSURE MONITOR)

WORK SUPPORT MODE

ID Read

The registered ID number is displayed.

ID Regist

Refer to WT-23, "Description".

SELF-DIAG RESULTS MODE

Operation Procedure

Refer to BCS-90, "DTC Index".

DATA MONITOR MODE

Screen of data monitor mode is displayed.

NOTE:

- When malfunction is detected, CONSULT perform REAL-TIME DIAGNOSIS.
- Also, any malfunction detected while in this mode will be displayed at real time.
- The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

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< SYSTEM DESCRIPTION >

Display item list		
Monitor	Condition	Specification
AIR PRESS FL AIR PRESS FR AIR PRESS RR AIR PRESS RL	Drive vehicle for a few minutes. or Ignition switch ON and tire pressure sensor tire pressure sensor activation tool is transmitting activation signals.	Tire pressure (kPa, kg/cm ² or Psi)
ID REGST FL1 ID REGST FR1 ID REGST RR1 ID REGST RL1		Registration ID: Green No registration: Red
WARNING LAMP	Ignition switch ON	Low tire pressure warning lamp ON: on Low tire pressure warning lamp OFF: off
BUZZER		Buzzer in combination meter ON: on Buzzer in combination meter OFF: off

NOTE:

Before performing the self-diagnosis, be sure to register the ID, or erase the actual malfunction location may be different from that displayed on CONSULT.

ACTIVE TEST MODE

NOTE:

Before performing the self-diagnosis, be sure to register the ID, or erase the actual malfunction may be different from that displayed on CONSULT.

TEST ITEM LIST

Test item Content	
WARNING LAMP	This test is able to check to check that the low tire pressure warning lamp turns on.
ID REGIST WARNING	This test is able to check to check that the buzzer sounds or the low tire pressure warning lamp turns on.
FLASHER	This test is able to check to check that each turn signal lamp turns on.
HORN	This test is able to check to check that the horn sounds.

U1000 CAN COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description INFOID:000000012167431

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H-line, CAN L-line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only. CAN Communication Signal Chart. Refer to LAN-28, "CAN Communication Signal Chart".

DTC Logic

DTC DETECTION LOGIC

DTC	CONSULT display description DTC Detection Condition Possible caus		Possible cause
U1000	CAN COMM	When BCM cannot communicate CAN communication signal continuously for 2 seconds or more.	CAN communication system

Diagnosis Procedure

INFOID:0000000012167433

1.PERFORM SELF DIAGNOSTIC

- 1. Turn ignition switch ON and wait for 2 seconds or more.
- 2. Check "Self Diagnostic Result".

Is DTC "U1000" displayed?

YES >> Refer to LAN-18, "Trouble Diagnosis Flow Chart".

NO >> Refer to GI-42, "Intermittent Incident".

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U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

U1010 CONTROL UNIT (CAN)

DTC Logic

DTC DETECTION LOGIC

DTC	CONSULT display de- scription	DTC Detection Condition	Possible cause
U1010	CONTROL UNIT(CAN)	BCM detected internal CAN communication circuit malfunction.	BCM

Diagnosis Procedure

INFOID:0000000012167435

1.REPLACE BCM

When DTC "U1010" is detected, replace BCM.

>> Replace BCM. Refer to BCS-97, "Exploded View".

U0415 VEHICLE SPEED SIG

< DTC/CIRCUIT DIAGNOSIS >

U0415 VEHICLE SPEED SIG

Description

U0415 is displayed if any unusual condition is present in the reception status of the vehicle speed signal from the ABS actuator and electric unit (control unit).

DTC Logic

DTC DETECTION LOGIC

DTC	CONSULT display de- scription	DTC Detection Condition	Probable cause
U0415	VEHICLE SPEED	When the vehicle speed signal received from the ABS actuator and electric unit (control unit) remains abnormal for 2 seconds or more.	ABS actuator and electric unit (control unit) BCM

DTC CONFIRMATION PROCEDURE

1.DTC CONFIRMATION

- 1. Erase the DTC.
- Turn ignition switch OFF.
- Perform the "Self Diagnostic Result" of CONSULT, when passed 2 seconds or more after the ignition switch is turned ON.

Is any DTC detected?

YES >> Refer to BCS-43, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

1. ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) SELF-DIAG RESULTS

Perform "Self-Diagnostic Result" of ABS actuator and electric unit (control unit) with CONSULT. Refer to <u>BRC-30</u>, "CONSULT Function".

Is any DTC detected?

YES >> Repair or replace the malfunctioning part.

NO >> Replace BCM. Refer to BCS-97, "Exploded View".

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B2562 LOW VOLTAGE

< DTC/CIRCUIT DIAGNOSIS >

B2562 LOW VOLTAGE

DTC Logic

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC Detection Condition	Possible cause
B2562	LOW VOLTAGE	When the power supply voltage to BCM remains less than 8.8 V for 120 seconds or more	Harness or connector (power supply circuit)

DTC CONFIRMATION PROCEDURE

1.DTC CONFIRMATION

- 1. Erase DTC.
- Turn ignition switch OFF.
- Perform the "Self Diagnostic Result" of CONSULT, when passed 120 seconds or more after the ignition switch is turned ON.

Is any DTC detected?

YES >> Refer to BCS-44, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000012167440

1. CHECK POWER SUPPLY CIRCUIT

Check BCM power supply circuit. Refer to BCS-45, "Diagnosis Procedure".

Is the circuit normal?

YES >> Replace BCM. Refer to BCS-97, "Exploded View".

NO >> Repair the malfunctioning part.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000012167441

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1. CHECK FUSE AND FUSIBLE LINK

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

Signal name	Fuse and fusible link No.	
Battery power supply	К	
battery power suppry	10	

Is the fuse or fusible link is blown (open)?

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

NO >> GO TO 2.

2. CHECK POWER SUPPLY CIRCUIT

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

	Voltage (Approx.)		
(
В	CM		(Approx.)
Connector	Terminal	Ground	
M118	1	Ground	Battery voltage
M119	11		

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	Connector Terminal		Continuity	
M119	13		Existed	

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

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Revision: July 2016 BCS-45 2016 QX50

COMBINATION SWITCH INPUT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

COMBINATION SWITCH INPUT CIRCUIT

Diagnosis Procedure

INFOID:0000000012167442

1. CHECK INPUT 1 - 5 SYSTEM CIRCUIT FOR OPEN

- 1. Turn the ignition switch OFF.
- 2. Disconnect the BCM and combination switch connectors.
- 3. Check continuity between BCM harness connector and combination switch harness connector.

System	ВСМ		Combinat	Continuity	
System	Connector	Terminal	Connector	Terminal	Continuity
INPUT 1		107		11	
INPUT 2		109		9	
INPUT 3	M122	88	M33	7	Existed
INPUT 4		108		10	
INPUT 5		87		13	

Does continuity exist?

YES >> GO TO 2.

NO >> Repair the harnesses or connectors.

2. CHECK INPUT 1 - 5 SYSTEM CIRCUIT FOR SHORT

Check for continuity between BCM harness connector and ground.

System	BCM			Continuity
System	Connector	Terminal		Continuity
INPUT 1		107		
INPUT 2		109	Ground	
INPUT 3	M122	88		Not existed
INPUT 4		108		
INPUT 5		87		

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> GO TO 3.

3.CHECK BCM OUTPUT VOLTAGE

- 1. Connect the BCM connector.
- Check voltage between BCM harness connector and ground.

System	(+)		(-)	Voltage
System	BCM			(Approx.)
	Connector	Terminal		
INPUT 1		107		
INPUT 2		109	Ground	Refer to BCS-
INPUT 3	M122	88		50, "Refer-
INPUT 4		108		ence Value".
INPUT 5		87		

Is the measurement value normal?

YES >> GO TO 4.

NO >> Replace BCM. Refer to BCS-97, "Exploded View".

Revision: July 2016 BCS-46 2016 QX50

COMBINATION SWITCH INPUT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

4. CHECK BCM INPUT SIGNAL

- 1. Connect the combination switch connector.
- 2. Turn ON any switch in the system that is malfunctioning.
- 3. Check voltage between BCM harness connector and ground.

System	(+)		(-)	Voltage
System	BCM			(Approx.)
	Connector	Terminal		
INPUT 1		107		
INPUT 2		109	Ground	Refer to BCS-
INPUT 3	M122	88		50, "Refer-
INPUT 4		108		ence Value".
INPUT 5		87		

Is the measurement value normal when any of the switches is turned ON?

YES >> Replace BCM. Refer to BCS-97, "Exploded View".

NO >> Replace the combination switch.

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COMBINATION SWITCH OUTPUT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

COMBINATION SWITCH OUTPUT CIRCUIT

Diagnosis Procedure

INFOID:0000000012167443

1. CHECK OUTPUT 1 - 5 SYSTEM CIRCUIT FOR OPEN

- 1. Turn the ignition switch OFF.
- 2. Disconnect the BCM and combination switch connectors.

NOTE:

BCM connector disconnects M123 only.

3. Check continuity between BCM harness connector and combination switch harness connector.

System	ВС	M	Combinat	Continuity	
	Connector	Terminal	Connector	Terminal	Continuity
OUTPUT 1		143		12	
OUTPUT 2		144		14	
OUTPUT 3	M123	145	M33	5	Existed
OUTPUT 4		146		2	
OUTPUT 5		142		8	

Does continuity exist?

YES >> GO TO 2.

NO >> Repair the harnesses or connectors.

2.CHECK OUTPUT 1 - 5 SYSTEM CIRCUIT FOR SHORT

Check for continuity between BCM harness connector and ground.

System	В	CM		Continuity
System	Connector	Terminal		Continuity
OUTPUT 1		143		
OUTPUT 2		144	Ground	
OUTPUT 3	M123	145		Not existed
OUTPUT 4		146		
OUTPUT 5		142		

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> GO TO 3.

3.check combination switch internal circuit

- 1. Connect the combination switch connector.
- 2. Turn ON any switch in the system that is malfunctioning.
- 3. Check voltage between combination switch harness connector and ground.

NOTE

Check that the combination switch outputs a signal from combination switch input system.

COMBINATION SWITCH OUTPUT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

System		Terminals				
	(+))	(-)	Value (Approx.)		
System	Combination	on switch		Value (Approx.)		
	Connector	Terminal				
OUTPUT 1		12				
OUTPUT 2		14	0 1	(V) 15		
OUTPUT 3		5	Ground	10		
OUTPUT 4	M33	2		0		
OUTPUT 5		8		2 ms JPMIA0041GB		

Is the measurement value normal when any of the switches is turned ON?

YES >> Replace BCM. Refer to BCS-97, "Exploded View".

NO >> Replace the combination switch.

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< ECU DIAGNOSIS INFORMATION >

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 LIX III	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
FR WIFER LOW	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
TIX WASHEN SW	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT	Off
I IX WIF LIX IIN I	Front wiper switch INT	On
FR WIPER STOP	Front wiper is not in STOP position	Off
TIX WIF LIX STOF	Front wiper is in STOP position	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent 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 WIPEK INT	Rear wiper switch INT	On
RR WASHER SW	Rear washer switch OFF	Off
KK WASHEK 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
TURN 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 SVV	Lighting switch 1ST or 2ND	On
HI BEAM SW	Other than lighting switch HI	Off
HI BEAW 3W	Lighting switch HI	On
HEAD LAMP SW/1	Other than lighting switch 2ND	Off
HEAD LAMP SW 1	Lighting switch 2ND	On
HEAD LAMD CW/2	Other than lighting switch 2ND	Off
HEAD LAMP SW 2	Lighting switch 2ND	On
DASSING SW	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
ALITO LICHT SW	Other than lighting switch AUTO	Off
AUTO LIGHT SW	Lighting switch AUTO	On

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
R FOG SW	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
	Driver door closed	Off
OOR SW-DR	Driver door opened	On
OOD CW AC	Passenger door closed	Off
OOOR SW-AS	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
JOOR SW-RR	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
DOOK SW-KE	Rear LH door opened	On
DOOR SW-BK	Back door closed	Off
JOOR SW-BR	Back door opened	On
CDL LOCK SW	Other than power door lock switch LOCK	Off
DE LOCK SVV	Power door lock switch LOCK	On
CDL UNLOCK SW	Other than power door lock switch UNLOCK	Off
DE UNLOCK SW	Power door lock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
LI OIL LN-3W	Driver door key cylinder LOCK position	On
(EY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off
CLI CIL ON-OW	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
HAZARD SW	Hazard switch is OFF	Off
IAZARD SW	Hazard switch is ON	On
REAR DEF SW	NOTE: The item is indicated, but not monitored.	Off
FR CANCEL SW	NOTE: The item is indicated, but not monitored.	Off
FR/BD OPEN SW	Back door opener switch OFF	Off
DD OI LIVOW	While the back door opener switch is turned ON	On
FRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
REVERSE SW	NOTE: The item is indicated, but not monitored.	Off
RKE-LOCK	LOCK button of the key is not pressed	Off
	LOCK button of the key is pressed	On
RKE-UNLOCK	UNLOCK button of the key is not pressed	Off
THE ONLOOK	UNLOCK button of the key is pressed	On
RKE-TR/BD	NOTE: The item is indicated, but not monitored.	Off
RKE-PANIC	PANIC button of the key is not pressed	Off
XIXL-CAINIO	PANIC button of the key is pressed	On
RKE-P/W OPEN	UNLOCK button of the key is not pressed	Off
ANE-PIW OPEN	UNLOCK button of the key is pressed and held	On

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Monitor Item	Condition	Value/Status
RKE-MODE CHG	LOCK/UNLOCK button of the key is not pressed and held simultaneously	Off
	LOCK/UNLOCK button of the key is pressed and held simultaneously	On
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V
OF HOAL SENSOR	Dark outside of the vehicle	Close to 0 V
DEO SW. DD	Driver door request switch is not pressed	Off
REQ SW -DR	Driver door request switch is pressed	On
REQ SW -AS	Passenger door request switch is not pressed	Off
REQ SW -AS	Passenger door request switch is pressed	On
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off
DEO SW. PD/TD	Back door request switch is not pressed	Off
REQ SW -BD/TR	Back door request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
- 0317 377	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
	The brake pedal is depressed when No. 7 fuse is blown	Off
BRAKE SW 1	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
BRAKE SW 2	The brake pedal is not depressed	Off
BRARE SW 2	The brake pedal is depressed	On
DETE/CANCL SW	Selector lever in P position	Off
DETE/CANCE SW	Selector lever in any position other than P	On
CET DN/NI CW	Selector lever in any position other than P and N	Off
SFT PN/N SW	Selector lever in P or N position	On
S/L -LOCK	NOTE: The item is indicated, but not monitored.	Off
S/L -UNLOCK	NOTE: The item is indicated, but not monitored.	Off
S/L RELAY-F/B	NOTE: The item is indicated, but not monitored.	Off
UNLK SEN -DR	Driver door is unlocked	Off
OINER SEIN FUR	Driver door is locked	On
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
OOI I OVV -IF DIVI	Push-button ignition switch (push-switch) is pressed	On
GN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
GN RLI I -F/D	Ignition switch in ON position	On
DETE SW. IDDM	Selector lever in any position other than P	Off
DETE SW -IPDM	Selector lever in P position	On
	Selector lever in any position other than P and N	Off
SFT PN -IPDM	Selector lever in P or N position	On

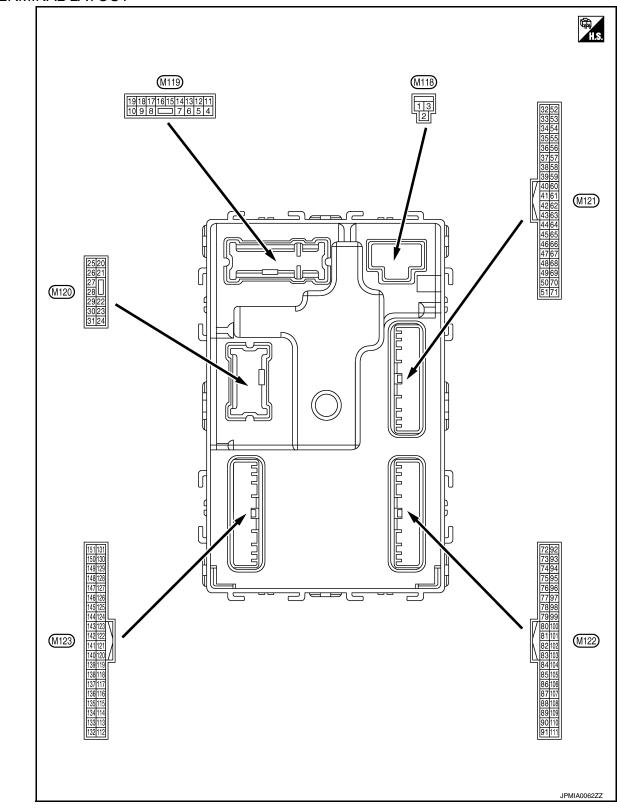
< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
SFT P -MET	Selector lever in any position other than P	Off
OF I F-WEI	Selector lever in P position	On
SFT N -MET	Selector lever in any position other than N	Off
SFI IN -IVIET	Selector lever in N position	On
	Engine stopped	Stop
ENGINE STATE	While the engine stalls	Stall
ENGINE STATE	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	NOTE: The item is indicated, but not monitored.	Off
S/L UNLK-IPDM	NOTE: The item is indicated, but not monitored.	Off
S/L RELAY-REQ	NOTE: The item is indicated, but not monitored.	Off
VEH SPEED 1	While driving	Equivalent to speed- ometer reading
VEH SPEED 2	While driving	Equivalent to speed- ometer reading
	Driver door is locked	LOCK
DOOR STAT-DR	Wait with selective UNLOCK operation (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	LOCK READY UNLOCK Reset Set
D OK FLAG	Driver side door is open after ignition switch is turned OFF (Shift position is in the P position)	Reset
	Ignition switch ON	Set
PRMT ENG STRT	The engine start is prohibited	Reset
YRIVIT ENG STRT	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
VEV CW CLOT	The key is not inserted into key slot	Off
KEY SW -SLOT	The key is inserted into key slot	On
RKE OPE COUN1	During the operation of the key	Operation frequency of the key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	
CONFRM ID ALL	The key ID that the key slot receives does not accord with any key ID registered to BCM.	Yet
OOM NWID ALL	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 does not accord with the fourth key ID registered to BCM.	Yet
55	The key ID that the key slot receives accords with the fourth key ID registered to BCM.	Done
CONFIRM ID3	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	Yet
55.11 II III IBO	The key ID that the key slot receives accords with the third key ID registered to BCM.	Done

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Monitor Item	Condition	Value/Status
CONFIRM ID2	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	Yet
CONFIRMIDZ	The key ID that the key slot receives does not accord with the second key ID registered to BCM. The key ID that the key slot receives accords with the second key ID registered to BCM. The key ID that the key slot receives does not accord with the first key ID registered to BCM. The key ID that the key slot receives accords with the first key ID registered to BCM. The ID of fourth key is not registered to BCM The ID of fourth key is registered to BCM The ID of third key is registered to BCM The ID of third key is registered to BCM The ID of second key is not registered to BCM The ID of second key is not registered to BCM The ID of first key is registered to BCM The ID of first key is not registered to BCM The ID of first key is registered to BCM Air ID of first key is registered to BCM Ignition switch ON (Only when the signal from the transmitter is received) I gnition switch ON (Only when the signal from the transmitter is received) I gnition switch ON (Only when the signal from the transmitter is received) I gnition switch ON (Only when the signal from the transmitter is received) I D of front LH tire transmitter is registered ID of front RH tire transmitter is not registered ID of front RH tire transmitter is not registered ID of rear RH tire transmitter is not registered ID of rear LH tire transmitter is not registered ID of rear LH tire transmitter is not registered ID of rear LH tire transmitter is not registered ID of rear LH tire transmitter is not registered ID of rear LH tire transmitter is not registered ID of rear LH tire transmitter is not registered ID of rear LH tire transmitter is not registered ID of rear LH tire transmitter is not registered	Done
CONFIRM ID1		Yet
CON IKWIDI		Done
TP 4	The ID of fourth key is not registered to BCM	Yet
17 4	The ID of fourth key is registered to BCM	Done
TD 2	The ID of third key is not registered to BCM	Yet
TP 3	The ID of third key is registered to BCM	Done
TD 0	The ID of second key is not registered to BCM	Yet
TP 2	The ID of second key is registered to BCM	Done
TD 4	The ID of first key is not registered to BCM	Yet
TP 1	The ID of first key is registered to BCM	Done
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID REGST FL1	ID of front LH tire transmitter is registered	Done
ID REGGI FLI	ID of front LH tire transmitter is not registered	Yet
ID REGST FR1	ID of front RH tire transmitter is registered	Done
ID REGGI FRI	ID of front RH tire transmitter is not registered	Yet
ID DECCT DD4	ID of rear RH tire transmitter is registered	Done
ID REGST RR1	ID of rear RH tire transmitter is not registered	Yet
ID DECCT DL4	ID of rear LH tire transmitter is registered	Done
ID REGST RL1	ID of rear LH tire transmitter is not registered	Yet
VAVA DALIALO I. AAMD	Tire pressure indicator OFF	Off
WARNING LAMP	Tire pressure indicator ON	On
DUZZED	Tire pressure warning alarm is not sounding	Off
BUZZER	Tire pressure warning alarm is sounding	On

TERMINAL LAYOUT



PHYSICAL VALUES

Revision: July 2016 BCS-55 2016 QX50

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Tour Condition Condition		inal No.	Description				Malura.
Ground Battery power supply Input Inpu		e color)	Signal name			Condition	Value (Approx.)
Ground GAT Count GAT GAT		Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage
Ground Ground Ground Interior room lamp Double Interior room lamp pattery saver is activated. (Clus the interior room lamp power supply) O V		Ground		Output	Ignition switch OF	F	Battery voltage
A (LG) Ground Interior room lamp power supply Output Interior room lamp power supply Output Interior room lamp pattery saver is not activated Gutput ste interior room lamp power supply Output Cox Output Passenger door Output Output		Ground		Output	Ignition switch ON		Battery voltage
Clark Ground Common Co							0 V
Passenger door UN-LOCK Passenger door UN-LOCK Passenger door Output LOCK Overhead		Ground	•	Output	ed.	-	Battery voltage
Common	5	Ground		Output	Passonger door		Battery voltage
Cround C	(L)	Ground	LOCK	Output	Passenger door		0 V
Common	7	Cround	Ston Jamn	Output	Ston Jama	ON	0 V
Section of Common of Com	(Y)	Ground	Step lamp	Output	Step lamp	OFF	Battery voltage
Company Comp		Ground		Output	All doors		Battery voltage
Ground Ground Driver door, fuel lid UNLOCK Driver door Driver do	(V)	Ground	LOCK	Output All doo	Juiput All doors		0 V
Company Comp		Ground		Output	Driver door		Battery voltage
Rear RH door and rear LH door UNLOCK Output LOCK Out	(G)	Cround	UNLOCK	Output	Diver deer		0 V
Cock Sand rear LH door Other than UNLOCK (Actuator is not activated) O V		Ground		Output			Battery voltage
(R) Ground Battery power supply Input Ignition switch OFF 13 (B) Ground Ground — Ignition switch ON OFF OV NOTE: When the illumination brightening/dimming level is in the neutral position switch illumination ground ON OFF ON Battery voltage OUTput Fail lamp ON OFF or ON Battery voltage	(BR)	Cround		Output	and rear LH door		0 V
(B) Ground Ground — Ignition switch ON OFF OV NOTE: When the illumination brightening/dimming level is in the neutral position Switch illumination ground ON OFF or ON Battery voltage		Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage
ROTE: When the illumination brightening/dimming level is in the neutral position Switch illumination ground Output Tail lamp ON Fush-button ignition switch illumination ground ON ON Battery voltage		Ground	Ground	_	Ignition switch ON		0 V
Push-button ignition switch illumination ground Push-button ignition switch illumination ground Output Tail lamp ON When the illumination brightening/dimming level is in the neutral position (V) 10 2 ms JSNIA0010GB Battery voltage						OFF	0 V
(W) Ground Switch illumination ground Output fall lamp ON 10 10 2 ms JSNIA0010GB 15 Ground ACC indicator lamp Output Ignition switch		Cround		Outout	Toil lame		When the illumination brighten- ing/dimming level is in the neutral position
Ground ACC indicator lamp Output Ignition switch		Ground		Output	тан натр	ON	10 0 2 ms
Ground ACC indicator lamp Output Ignition switch	15		A00 := 1' 1 1	0.1.1	India	OFF or ON	Battery voltage
		Ground	ACC indicator lamp	Output	ignition switch	ACC	0 V

	inal No.	Description				Value
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)
					Turn signal switch OFF	0 V
17 (W)	Ground	Turn signal RH (Front, side)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 1 s
					Turn signal switch OFF	6.5 V 0 V
18 (BG)	Ground	Turn signal LH (Front, side)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s
19	Ground	Room lamp timer	Output	Interior room	OFF	6.5 V Battery voltage
(V)	2.00110	control		lamp	ON Turn signal switch OFF	0 V
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
23			0	B	OPEN (Back door opener actuator is activated)	Battery voltage
(G)	Ground	Back door open	Output	t Back door	Other than OPEN (Back door opener actuator is not activated)	0 V
					Turn signal switch OFF	0 V
25 (G)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
26	_		_		OFF (Stopped)	0 V
(G)	Ground	Rear wiper	Output	Rear wiper	ON (Operated)	Battery voltage

	inal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
34	Ground	Luggage room anten-	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 11 1 s JMKIA0062GB
(SB)	Clound	na (–)	Сифи	ÖFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB
35	Ground	Luggage room anten-	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB
(V)	Glodina	na (+)	Cutput	Ignition switch OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 11 1 s JMKIA0063GB
38	Ground	Back door antenna (–	Qutout	When the back door opener re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB
(B)	Ground)	Output		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB

	inal No.	Description				Value	А
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	A
39		Back door antenna		When the back door opener re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 1 1 s JMKIA0062GB	B C
(W)	Ground	(+)	Output	quest switch is operated with ig- nition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB	E F
47	Ground	Ignition relay (IPDM	Output	Ignition switch	OFF or ACC	Battery voltage	G
(Y)	Giodila	E/R) control	Output	ignition switch	ON	0 V	
52	Ground	Starter relay control	Output	Ignition switch	When selector lever is in P or N position	Battery voltage	Н
(SB)	Oround	Ctartor relay control	Output	ON	When selector lever is not in P or N position	0 V	
60		Push-button ignition		Push-button igni-	Pressed	0 V	1
(BR)	Ground	switch (Push switch)	Input	tion switch (push switch)	Not pressed	Battery voltage	
					ON (Pressed)	0 V	J
61 (W)	Ground	Back door opener request switch	Input	Back door opener request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB	K
		Intelligent Key warn-		Intelligent Key	Sounding	1.0 V	ВС
64 (V)	Ground	ing buzzer (Engine	Output	warning buzzer	Not sounding	Battery voltage	
. ,		room)		(Engine room)	The bounding	Dattory voltage	Ν
65 (BG)	Ground	Rear wiper stop position	Input	Rear wiper	In stop position	(V) 15 10 5 0 10 ms	O P
						1.0 V	-
					Not in stop position	0 V	

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

	inal No.	Description				Value	^
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	А
72	Carried	Room antenna 2 (–)	Outout	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	B C
(R)	Ground	(Console)	Output	ŎFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB	E F
73		Room antenna 2 (+)		Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	G H
(G)	Ground	(Console)	Output	ŎFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB	J K L
74	0	Passenger door an-	0.4.4	When the passenger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	BC:
(SB)	Ground	tenna (-)	Output	quest switch is operated with ig- nition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	O

	inal No. e color)	Description	I			Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
75		Passenger door an-		When the passenger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(GR)	Ground	tenna (+)	Output senger door request switch is operated with ignition switch OFF Whe in the area	When Intelligent Key is not in the antenna detection area	(V) 15 10 1	
76	Ground	Driver door antenna	Output	When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 11 1 s JMKIA0062GB
(V)	Glound	(-)	Guipar	switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB
77	Canada	Driver door antenna	Output	When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(LG)	Ground	(+)	Output	switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB

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< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value	Α
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	Α
78		Room antenna 1 (–)		Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	B C
(Y)	Ground	(Instrument panel)	Output	ŎFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB	E
79	Ground	Room antenna 1 (+)	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB	G H
(BR)	Glound	(Instrument panel)	Cutput	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB	J K L
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.	вс
81 (W)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.	N
82 (R)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V	
(11)		SISON (U/D/)] COINIOI			ON	Battery voltage	

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	inal No.	Description				Value
+ (Wire	e color)	Signal name	Input/ Output		Condition	Value (Approx.)
83	Canada	Remote keyless entry receiver communication	Input/ Output	During waiting		(V) 15 10 5 0 1 ms JMKIA0064GB
(Y)	Ground			When operating ei	ther button on the key	(V) 15 10 5 0 1 ms JMKIA0065GB
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
87	Ground	nd Combination switch INPUT 5	Input	Combination switch	Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 2 ms 1.3 V
(BR)	Glound				Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	(V) 15 10 5 0 2 ms JPMIA0040GB 1.3 V

	inal No.	Description				Value	А
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	<i>/</i> -\
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	B C
					Lighting switch HI (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V	F
88 (V)	Ground	Combination switch INPUT 3	Input	Combination switch	Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3 V	G H
					Rear washer switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V	, L
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	(V) 15 10 5 0 2 ms JPMIA0040GB 1.3 V	ВО
90 (P)	Ground	CAN-L	Input/ Output	_	I	_	(
91 (L)	Ground	CAN-H	Input/ Output	_		_	F

	inal No. e color)	Description			0 1111	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
					OFF	Battery voltage
92 (LG)	Ground	Key slot illumination	Output	Key slot illumina- tion	Blinking	(V) 15 10 5 0 JPMIA0015GB
					ON	6.5 V 0 V
93					OFF or ACC	Battery voltage
(V)	Ground	ON indicator lamp	Output	Ignition switch	ON	0 V
94	_		_		OFF	Battery voltage
(Y)	Ground	Puddle lamp control	Output	Puddle lamp	ON	0 V
95	Craund	ACC relevine metrel	Outrout	lauitian avvitah	OFF	0 V
(BG)	Ground	ACC relay control	Output	Ignition switch	ACC or ON	Battery voltage
96 (GR)	Ground	A/T shift selector (Detention switch) power supply	Output	_		Battery voltage
99	Ground	Selector lever P posi-	Input	Selector lever	P position	0 V
(R)	Cround	tion switch	mput	Ocicotor level	Any position other than P	Battery voltage
					ON (Pressed)	0 V
100 (G)	Ground	Passenger door request switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V
					ON (Pressed)	0 V
101 (SB)	Ground	Driver door request switch	Input	Driver door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms
					OFF or ACC	1.0 V 0 V
102 (BG)	Ground	Blower fan motor re- lay control	Output	Ignition switch	OFF of ACC	Battery voltage
103 (LG)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OF	F	Battery voltage

< ECU DIAGNOSIS INFORMATION >

Terminal No		n			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 JPMIA0037GB 1.3 V
107 (LG) Grou	nd Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	Turn signal switch RH	(V) 15 10 5 0 2 ms JPMIA0036GB
				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

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

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

	inal No. e color)	Description	Γ		Constitution	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
113 (P)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle When dark outside of the	Close to 5 V Close to 0 V
116 (SB)	Ground	Stop lamp switch 1	Input	_	vehicle	Battery voltage
		Stop lamp switch 2 (Without ICC)		Stop lamp switch	OFF (Brake pedal is not depressed) ON (Brake pedal is de-	0 V
118	Ground	(William 1997)	Input		pressed)	Battery voltage
(P)		Stop lamp switch 2		pressed) and ICC	OFF (Brake pedal is not de- brake hold relay OFF	0 V
		(With ICC)			ON (Brake pedal is de- rake hold relay ON	Battery voltage
119 (SB)	Ground	Front door lock assembly driver side (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 10 5 0 10 ms JPMIA0012GB
					UNLOCK status (Unlock switch sensor ON)	0 V
121	Ground	Key slot switch	lnnut	When the key is in	serted into key slot	Battery voltage
(BR)	Giodila	Rey Slot Switch	Input	When the key is no	ot inserted into key slot	0 V
123 (W)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V Battery voltage
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	(V) 15 10 5 0 JPMIA0011GB 11.8 V
132 (BR)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		0 V (V) 15 10 5 0 10 ms JPMIA0013GB 10.2 V Battery voltage

	inal No.	Description				Value
(Wire	e color) –	Signal name	Input/ Output		Condition	(Approx.)
					ON (Tail lamps OFF)	9.5 V NOTE :
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON (Tail lamps ON)	The pulse width of this wave is varied by the illumination brightening/dimming level. (V) 15 10 5
				_	OFF	JPMA0159GB
					OFF OFF	Battery voltage
134 (GR)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF	0 V
137 (BG)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V
138	Ground	Receiver and sensor	Output	Ignition switch	OFF	0 V
(Y)	Ground	power supply	Output	Ignition switch	ACC or ON	5.0 V
139	Ground	Tire pressure receiver communication	Input/ Output	Ignition switch	Standby state	(V) 6 4 2 0 ••• 0.2s OCC3881D
(L)		G Communication	Output	ŎN	When receiving the signal from the transmitter	(V) 6 4 2 0 + 0.2s OCC3880D
140 (GR)	Ground	Selector lever P/N position	Input	Selector lever	P or N position	Battery voltage
(011)		position			Except P and N positions	0 V
141 (G)	Ground	Security indicator	Output	Security indicator	ON	0 V (V) 15 10 5 0 JPMIA0014GB
						11.3 V
					OFF	Battery voltage

Terminal No. (Wire color)		Description				Value
+	e color)	Signal name	Input/ Output	Condition		(Approx.)
142 (BG)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	0 V
					Lighting switch 1ST	(V) 15 10 5 0 2 ms JPMIA0031GB
					Lighting switch HI	
					Lighting switch 2ND	
					Turn signal switch RH	
					All switches OFF (Wiper intermittent dial 4)	0 V
143 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	Front wiper switch HI (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0032GB
					Rear wiper switch INT (Wiper intermittent dial 4)	
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	
					Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0033GB 10.7 V
					Rear washer switch ON (Wiper intermittent dial 4)	
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	
145 (L)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Front wiper switch INT	0.0
					Front wiper switch LO	(V) 15 10 5 0 2 ms JPMIA0034GB
					Lighting switch AUTO	

< ECU DIAGNOSIS INFORMATION >

Terminal No.		Description				Value	
(Wir	e color)	Signal name	Input/ Output		Condition	(Approx.)	Α
-					All switches OFF	0 V	
					Front fog lamp switch ON		В
				Combination	Lighting switch 2ND	(V)	
146	Ground	Combination switch	Output	switch	Lighting switch PASS	10 5	С
(SB)	Ground	OUTPUT 4	Output	(Wiper intermit- tent dial 4)	Turn signal switch LH	0 JPMIA0035GB 10.7 V	D
						(V) 15 10	Е
150 (LG)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	0 10 ms	F
					JPMIA0011GB 11.8 V	G	
					ON (Door open)	0 V	
151		Rear window defog-	0	Rear window de-	Active	0 V	Н
(G)	Ground	ger relay control	Output	fogger	Not activated	Battery voltage	

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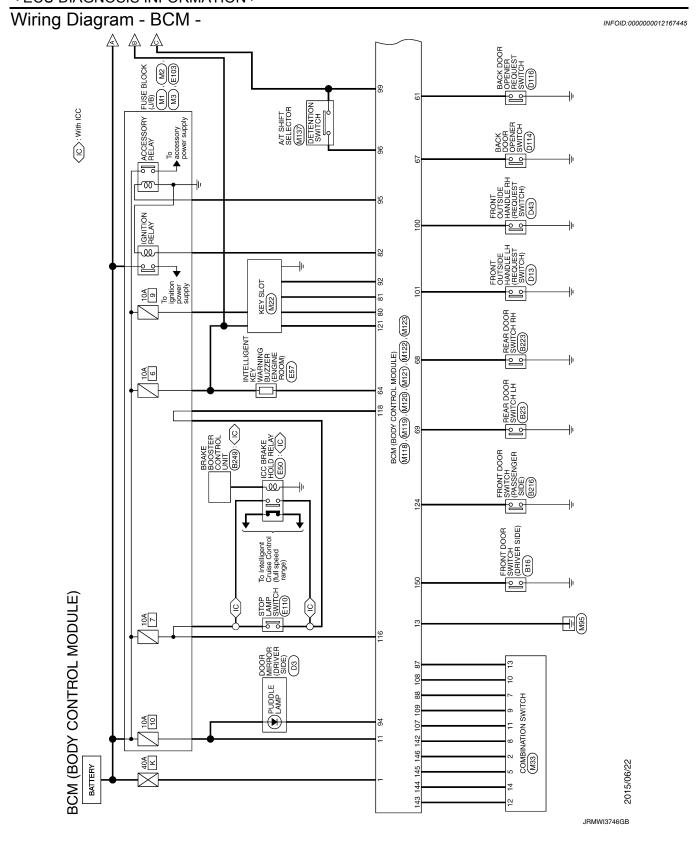
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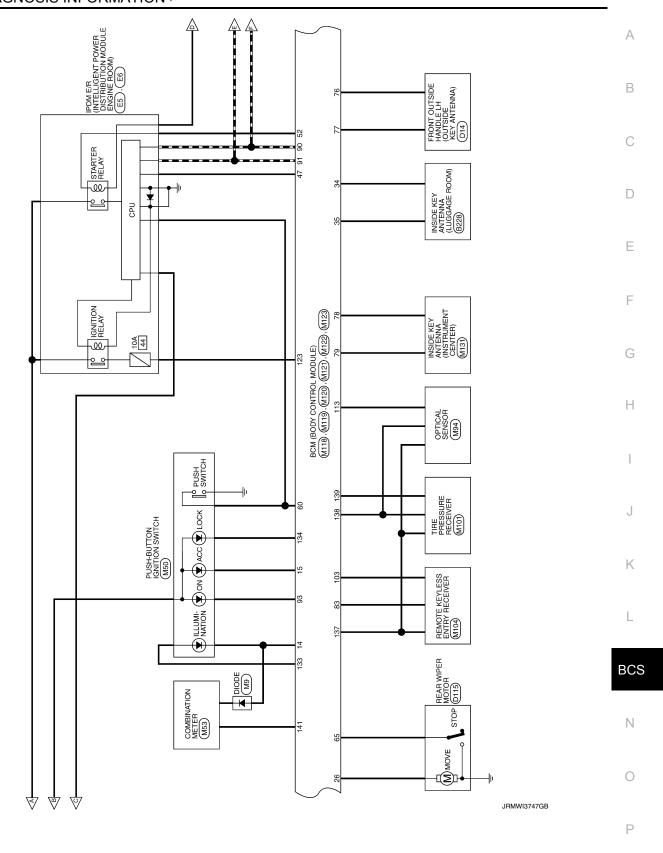
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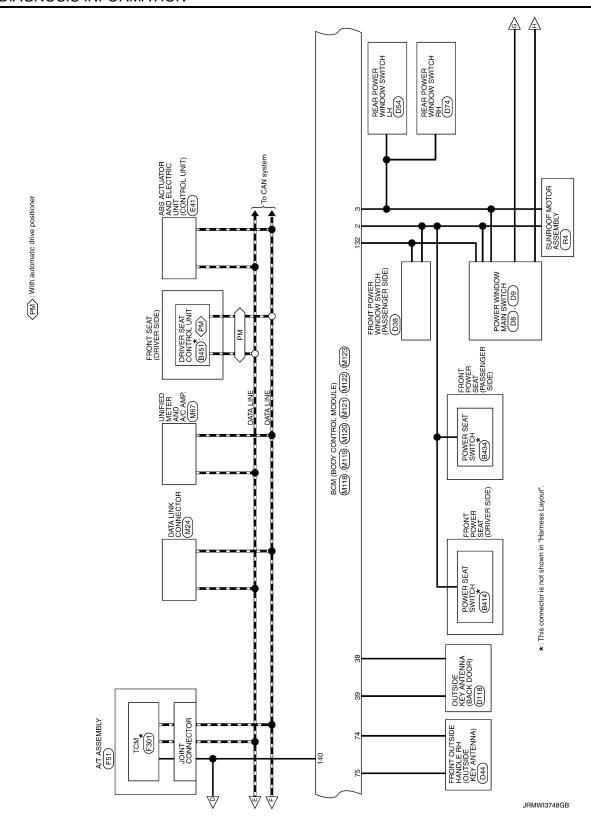
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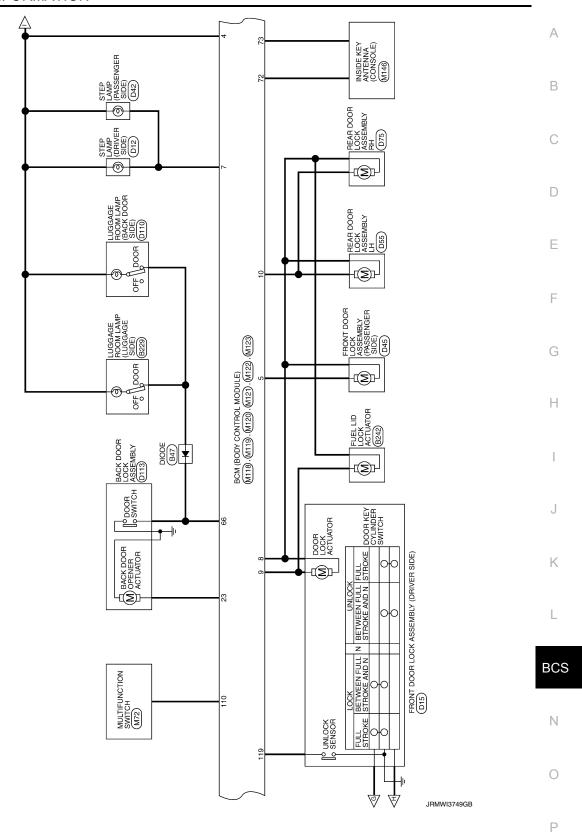
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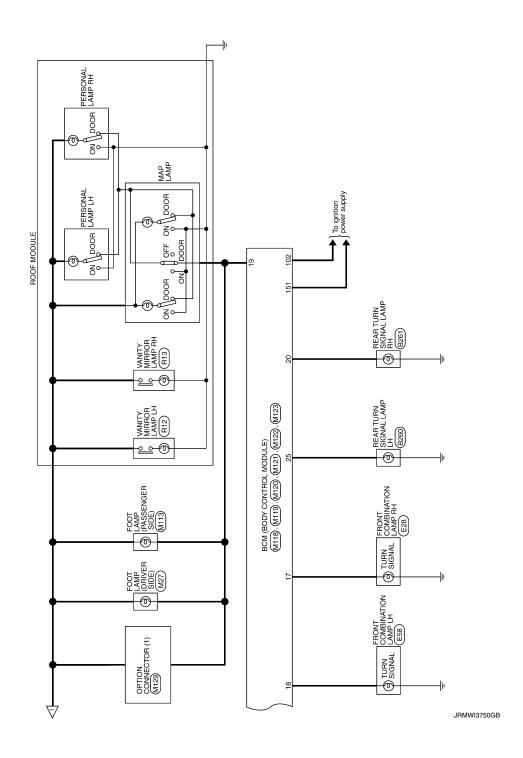
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< ECU DIAGNOSIS INFORMATION >

	A
Signal Name [Specification]	В
B242 M04F	С
Connector No. Connector Name Connector Type I reminal Color Of No. Connector Name Connector Nam	D
SE FOCOMO	Е
BE28 INCOPECY RIGORY Signal Name (Specification) Signal Name (Specification) Signal Name (Specification) Signal Name (Specification)	F
Commetter No. 6228	G
	Н
Signal Name (Specification) E216 FRONT DOOR SWITCH (PASSENGER SIDE) REAR DOOR SWITCH RH A035FW A037FW Signal Name (Specification) Signal Name (Specification)	1
A03FW A03FW	J
Terminal Color Of New 1	К
OOR SWITCH (CHRUCER SIDE) Signal Name [Specification] Signal Name [Specification]	L
(CO) A03FW A03FW A03FW A03FW A03FW	ВС
BCM (BOD) Connector Name Connector Name Terminal Color Of No. Connector Name Conn	Ν
	0
	JRMWI3751GB

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BCM (BODY CONTROL MODULE)								
Connector No. B260	Connector No.	B414	Connector No.	o. B451		Connector No.	or No.	D3
Connector Name REAR TURN SIGNAL LAMP LH	Connector Name	POWER SEAT SWITCH	Connector Name		DRIVER SEAT CONTROL UNIT	Connect	Connector Name	DOOR MIRROR (DRIVER SIDE)
Connector Type HS02FG-W	Connector Type	NS10FW-CS	Connector Type	rpe TH32HW	HW	Connector Type		TH24MW-NH
B	E		Œ			15		
¢.	V	21 87	× E	<u>[</u>		Š		<u> </u>
		3 6 5			12 11 10 9 8 7 6 5 4 3 2 1 28 27 26 25 24 23 22 21 20 19 18 17		_	12 11 10
							-	
Terminal Color Of Signal Name [Specification] No. Wire	Terminal Color Of No. Wire	Of Signal Name [Specification]	Terminal No.	Color Of Wire	Signal Name [Specification]	Terminal No.	Color Of Wire	Signal Name [Specification]
1 G	- 2	-	-	-	CAN-H	-	^	-
2 B = -	2 B		2	-	UART (TX/RX)	2	0	
	3 G√	_	m	,	1	က	BR	CONT
	+	-	4	-	PULSE (RECLINER)	S.	۵	COMP+
Connector No. B261	+	-	r)	-	PULSE(TELESCOPIC)	9	88	NO
Connector Name REAR TURN SIGNAL LAMP RH	9	-	9	+	ADDRESS 2	7	*	-
Т	7		7		IND 2	0 :	9 1	
Connector Type HS02FG-W	+		8		SLIDE SW (BACKWARD)	=	۵	
á	+		6	-	RECLINER SW (BACKWARD)	12	0	
THE	10 G/W		10	,	FRONT LIFTER SW (DOWNWARD)	14	LG	-
Ę			=	1	REAR LIFTER SW (DOWNWARD)	17	SHIELD	COMP-
			12		POWER SUPPLY (ENCODER)	18	51	GROUND
	Connector No.	B434	17	,	CAN-L	19	В	1
)	Connector Name	POWER SEAT SWITCH	18	,	PULSE (SLIDE)	21	GR	
			19		PULSE (FRONT LIFTER)	22	BR	-
	Connector Type	NS10FW-CS	20		PULSE (REAR LIFTER)	23	>	,
ler	4		21	-	PULSE(TILT)	24	۸	-
No. Wire Ogus name Openingston	B		22	1	ADDRESS 1			
^	· ·	[]	23	-	IND 1			
2 B -	Ĉ.	7 0 /	24	-	SLIDE SW (FORWARD)	Connector No.		8G
		6 5 9 10 3 4	25	-	RECLINER SW (FORWARD)			CLUTTO THE PROPERTY CLUTTO
		0 0 0 0	26	-	FRONT LIFTER SW (UPWARD)	Connect		POWER WINDOW MAIN SWILCH
			27	,	REAR LIFTER SW (UPWARD)	Connector Type	or Type	NS16FW-CS
			28		SET SW		 _	
	Terminal Color Of	Of Samuel Name (Samueline)				B		
	No. Wire					Ŷ.		1 0 0 4
	- R	-				2		<u>ا</u> ا
	2 B							8 9 10 11 13 14 15
	3 G∕Y							
	4 P	1						
	2 M	-						
	9					Terminal	Color Of	Signal Name [Specification]
	Š .					No.	wire	
	+					- «	× 0	REAR POWER WINDOW MOLION LH UP SIGNAL
	+					2	HE S	ENCODER GROUND
	10 G/W					m	SK.	REAR POWER WINDOW MOTOR LH DOWN SIGNAL

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< ECU DIAGNOSIS INFORMATION >

		Α
Signal Name [Specification]		В
### P P P P P P P P P P P P P P P P P P		С
Connector No. Gomestor Name Connector Type Terminal Color Of No. Wire 1 2 SB 2 SB 2 Connector Nome Connector Nome Connector Nome Connector Nome 1 Wire 1 Wire 1 SB 2 SB		D
PR SEED PR SEE		Е
FRONT DOOR LOCK ASSEMBLY (DRVER SIDE) FEMFOR-RS Signal Name [Specification] ENCORER ORDOWN ENCORER PULSE FOWER WINDOW MOTOR FOWER BATTERY POWER SIMPLY ENCORER PULSE FOWER WINDOW SERIAL LINK FOR THE POWER WINDOW SERIAL LINK FOWER WINDOW SERIAL LINK FOR THE POWER WINDOW SERIAL LINK FOWER WINDOW SERIAL LINK FOWER WINDOW SERIAL LINK FOR THE POWER WINDOW SER		F
Color Of		G
		Н
FRONT CUTSDE HANDLE LH (REQUEST SWITCH) Signal Name [Specification] -		l
		J
Connector No. Connector Name Connector Type Terminal Color Of No. Wire Townwestor Type Connector Name Connector Type Townwestor Type Connector Type Townwestor Type Connector Type		K
NUTROL MODULE) YOUR COUNTERS HERE SOUND ESSENDED HIS COUNTER SOUND THE TANKED POWER SUPPLY THE TANKED POWER POW		L
Y CONTROL MODU. DOOR EAST COUNTERS WITCH LINE DOOR EAST COUNTERS WITCH LINE BEAT FORCES WITCH LINE REAL FORCES WITCH LINE REAL FORCES WITCH LINE REAL FORCES WITCH TOWN TO THE WITCH FROM THE WITCH TOWN TO THE WITCH FROM THE WITCH TOWN TO THE WITCH FROM THE WITCH TOWN TO THE WITCH REAL FORCES FORCES BY THE WITCH TOWN TO THE WITCH REAL FORCES WITCH FROM THE WITCH TOWN TO THE WITCH REAL FORCES WITCH FROM THE WITCH TOWN TO THE WITCH REAL FORCES REAL FORCES WITCH REAL FORCES	В	BCS
BCM (BODY CONTROL MODU) 4		Ν
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Revision: July 2016 BCS-81 2016 QX50

BCM (BODY CONTROL MODULE) Connector Name Front outside week the outside ser vareaw Connector Type RIQQMGY HIS	Connector No. D54 Connector Nume REAR POWER WINDOW SWITCH LH Connector Type NSIGRY-CS HSG	Connector No. D74 Connector Name REAR POWER WINDOW SWITCH RH- Connector Type INSDEPW-CS HS.	Connector No. D110 Connector No. Connector No. TKIJSFW Connector Type Connector Type
(ZI)	2 3 4 5 1	23451	211
Terminal Color Of Signal Name [Specification] No. Wire	Terminal Color Of Signal Name [Specification] No. Wire	Terminal Color Of Signal Name [Specification]	n] Terminal Color Of Signal Name [Specification] No. Wire
1 P	Н	- w	>
2 \	3 0	3 0 0	2 P
	4 L	4 P	
Connector No. D45	M	5 0	Connector No. D113
Connector Name FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE)	7 B -	7 8 -	Connector Name BACK DOOR LOCK ASSEMBLY
Connector Type E06FGY-RS			Connector Type NS04FW-CS
4	Connector No. D55	Connector No. D75	đị.
The state of the s	Connector Name REAR DOOR LOCK ASSEMBLY LH	Connector Name REAR DOOR LOCK ASSEMBLY RH	*
	Connector Type E06FGY-RS	Connector Type E06FGY-RS	
	香	匮	4321
Terminal Color Of Signal Name [Specification] No.			Terminal Color Of Signal Name [Specification]
1 P -			2 B
	Terminal Color Of Signal Name [Specification]	Terminal Color Of Signal Name [Specification] No.	n] 3 V = -
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	$\frac{1}{1}$	$\frac{1}{1}$	

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< ECU DIAGNOSIS INFORMATION >

Connector No. E28 Connector No. E28 Connector No. E28 Connector Type Rispital P.R.	
Connector No. ES	
Connector Name BACK DOOR OPENER RECUEST SWITCH Connector Name BACK DOOR OPENER RECUEST SWITCH Connector Name Signal Name (Specification) Connector Name (OUTSIDE KEY ANTENNA (BACK DOOR) Connector Name (Specification) No. Were No. Were 1	
BCM (BODY CONTROL MODULE) Connector Name BACK DOOR OFENER SWITCH Demander Type Thoraman Back Band Name (Specification) Terminal Color Of Signal Name (Specification) Connector Name REAR WIPER MOTOR Connector Name REAR WIPER WOTOR CONNECTOR WIPER WOTOR CONN	
	JRMWI3755GB

Revision: July 2016 BCS-83 2016 QX50

Connector No. F51 Connector Name A-7 ASSEMBLY Connector Type RK10FG-DGY	Terminal Color Of New Signal Name [Specification] No. Wire Signal Name [Specification] New Signal Name [Specification] New Signal Name [Specification] New Signal Name [Specification] New Signal Name Signal Na		Color Of Signal Name (Specification)
Connector No. E103 Connector Name PUSE BLOCK (J/B) Connector Type NS16FW-CS HE HE PF F HS. HS. HS HE HF HS HS HS HS HS HS H	Terminal Color Of Signal Name [Specification] The We Signal Name [Specification] The We Signal Name [Specification] The Name Signal Name Specification] The Name Th		W V C C 4
Connector No. E57 Connector Name Intelligent scriviolets sutten brose room Connector Type RR03F9R This	Terminal Color Of Signal Name [Specification] No. Wee Signal Name [Specification] 3 V	Color Of Ware B Signal Name [5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	- BO
M (B	45 B BUS-H Connector No. E50 Connector Name ICO BRAKE HOLD RELAY Connector Type MORFOY-R-US H.S.	Terminal Golor Of Signal Name (Specification)	

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< ECU DIAGNOSIS INFORMATION >

	A
Signal Name [Specification]	В
POOT CAL	С
Connector No. Connector Name Connector Type No. Wire No. Connector Name Connector Name Connector Name Connector Name Connector Name No. Connector Name No. N	D
SignAut.	Е
Signal Name (Special Name (Spe	F
Connector No. M/2	G
	Н
000 (J. B.) Signal Name (Specification) Signal Name (Specification)	I
NSIZEW- NSIZEW- 100	J
Commetter Name Comm	K
NTROL MODULE) OCK (L/E) SCK (L/E) Styral Name [Specification] CSS Styral Name [Specification] CSS Styral Name [Specification] CSS CSS CSS CSS CSS CSS CSS C	L
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Terminal Color Of Name Connector Nam	N
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BCM ((BOD)	BCM (BODY CONTROL MODULE)						
Connector No	No.			22 B	GROUND	7 69	A/C LAN SIGNAL	Connector No. M101
Connector Name		PUSH-BUTTON IGNITION SWITCH	2 0	24 BR	+	+	EACH DOOR MOTOR POWER SUPPLY	Connector Name TIRE PRESSURE RECEIVER
	T		. 7	+	COMMUNICATION SIGNAL (AMP>LCD)	11 B	GROUND	
oouiiectoi išbe	7	INVOIDE	1	07 5	DARKING BRAKE SWITCH SIGNAL	4 7/	CANT	action 13be
4			1	- M	BRAKE FLUID LEVEL SWITCH SIGNAL			
·			[~	<u> </u>	SEA	Connector No.	M72	
Ź		пΙ	8	30 G	SEAT BELT BUCKLE SWITCH SIGNAL (PASSENGER SIDE)	Connector Name	HOLLON SMITCH	
		4 5 6 7 8	8	31 L	WASHER LEVEL SWITCH SIGNAL			1 2 4
			e	33 B	ILLUMINATION CONTROL SIGNAL	Connector Type	TH16FW-NH	
			0	+	1	Ą		
	1.0		"['	η γ	1	季	<u> </u>	
No Wire	Vire c	Signal Name [Specification]	216	38	I HIM A/B RESEI SWITCH SIGNAL	HS] : - -	Lerminal Golor Of Signal Name [Specification]
-			1	F	+		4 6 8 14 16	t
- 2	×			1	1		1 3 5	
8	۸	-						4 Y BATTERY
4	BR	-	Con	Connector No.	M67			
5	GR	-	5	Connector Name	LINITIED METER AND A / C AMP	nal C	Simal Nama [Spanification]	
9	Υ.	-	5			No. Wire	Officer results [Observed of the control of the con	Connector No. M104
7	>	-	Conr	Connector Type	TH32FW-NH	1 B	GROUND	Connector Name REMOTE KEYI ESS ENTRY RECEIVER
8	а		ģ			3	ACC	
			逐	_		4	ILL	Connector Type JAB04FB
	1		4	Ų.	[/ \ 	+	ILL CONT	Q
Connector No.	1	M53	ļ	3	41 42 43 44 45 46 47 53 54 55 56	+	AV COMM (H)	季
Connector Name		COMBINATION METER			61 62 63	+	AV COMM (L)	
	Т	THE PERSON NAMED OF THE PE				+	OND WE	1 2 4
Collinacion	٦.	- H40FW-INH				# #	DISK EJECT SIGNAL	
Œ.			Ŀ	20		$\frac{1}{1}$	INCAMP ON	
事			ź		Signal Name [Specification]			
Ś	۳		4	t	ACC POWER SUPPLY	Connector No.	M94	Terminal Color Of
		04 00 00 00 00 00 00 00 00 00 00 00 00 0	4	42 Y	FUEL LEVEL SENSOR SIGNAL		000000000000000000000000000000000000000	
	ك	11	4	43 R	INTAKE SENSOR SIGNAL	Connector Name	OF HOME SENSOR	1 BG GROUND
			4	44 LG	1	Connector Type	TK03FW	2 Y SIGNAL OUTPUT
			4	45 P	AMBIENT SENSOR SIGNAL	4		4 LG BATTERY
Terminal Color Of	Color Of	Signal Name [Specification]	4	7	┪	厚		
No.	Wire		4	+	EXHAUST GAS / OUTSIDE ODOR DETECTING SENSOR SIGNAL	S H		
-	ž :	BALLERY POWER SUPPLY	"[2 :	+			
2	9	COMMUNICATION SIGNAL (METER->AMP.)		+	BATTERY POWER SUPPLY		1 2 3	
e	GR	COMMUNICATION SIGNAL (AMP>METER)	S	55 B	GROUND			
9	В	GROUND	S	2e r	CAN-H			
9	۵	ALTERNATOR SIGNAL	S	\dashv	BR			
7	BR	AIR BAG SIGNAL	S	58 BR	FUEL LEVEL SENSOR GROUND	nal C	Signal Name [Specification]	
10	g	SECURITY SIGNAL	2	59 GR		No. Wire	Common Cobonication	
15	В	GROUND	9	P 09	IN-VEHICLE SENSOR GROUND	-	POWER	
16	В	METER CONTROL SWITCH GROUND	ا ا	+	4	2 P	OUTPUT	
19	8	ILL GND	9	+	SUNLOAD SENSOR GROUND	en 80	GROUND	
50	œ	TIT	_	+				
21	BG	IGNITION SIGNAL	۰	65 BG	ECV SIGNAL			

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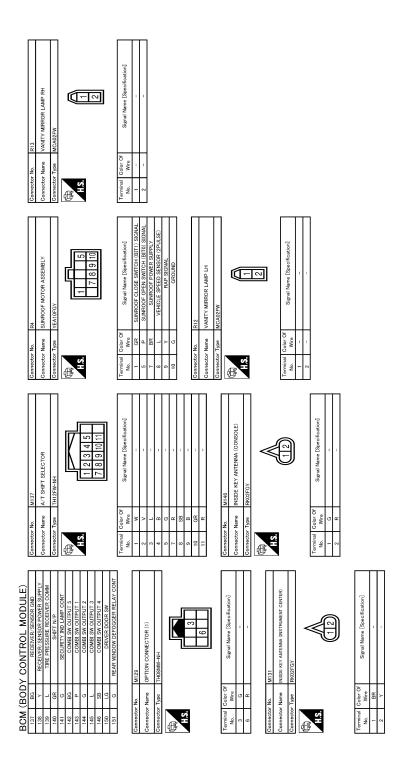
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< ECU DIAGNOSIS INFORMATION >

18	
Connector No. M121 Connector No. M121 Connector Name TH46FGY-NH TH46F	
Connector No. M19 Connector No. M19 Connector No. M19 Connector No. M19 Connector Type MSI 6FW-CS Connector Type MSI 6FW-CS Connector No. M15 MSI 6FW-CS Connector No. MSI 7 Connector No. Connector No. Connector No. MSI 7 Connector No. Connector	
BCM (BODY CONTROL MODULE)	
	JRMWi3759GB

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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 motor relay control signal Starter relay status signal (CAN)
B260A: IGNITION RELAY	Inhibit engine cranking	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (Battery voltage) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization

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

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

DTC Inspection Priority Chart

INFOID:0000000012167447

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

Priority	DTC	h.I.
1	B2562: LOW VOLTAGE	N
2	U1000: CAN COMM CIRCUIT U1010: CONTROL UNIT (CAN)	0
3	B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM	

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< ECU DIAGNOSIS INFORMATION >

Priority	DTC
4	 B2553: IGNITION RELAY B2555: STOP LAMP B2556: PUSH-BTN IGN SW B2557: VEHICLE SPEED B2560: STARTER CONT RELAY B2601: SHIFT POSITION B2602: SHIFT POSITION B2603: SHIFT POSI STATUS B2604: PNP SW B2605: PNP SW B2606: STARTER RELAY B2607: ENG STATE SIG LOST B2607: ENG STATE SIG LOST B2614: ACC RELAY CIRC B2615: BLOWER RELAY CIRC B2616: IGN RELAY CIRC B2617: STARTER RELAY CIRC B2618: BCM B2618: DCM B2618: PUSH-BTN IGN SW B2618: VEHICLE TYPE B262A: KEY REGISTRATION C1729: VHCL SPEED SIG ERR U0415: VEHICLE SPEED SIG
5	 C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR C1706: LOW PRESSURE RR C1707: LOW PRESSURE RL C1708: [NO DATA] FL C1709: [NO DATA] FR C1710: [NO DATA] RR C1711: [NO DATA] RL C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR C1718: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RR C1734: CONTROL UNIT
6	B2621: INSIDE ANTENNA B2622: INSIDE ANTENNA B2623: INSIDE ANTENNA

DTC Index

NOTE:

The details of time display are as follows.

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

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to <u>BCS-18. "COM-MON ITEM"</u>.

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
No DTC is detected. Further testing may be required.	_	_	_	_	_
U1000: CAN COMM CIRCUIT	_	_	_	_	BCS-41
U1010: CONTROL UNIT (CAN)	_	_	_	_	BCS-42
U0415: VEHICLE SPEED SIG	_	_	_	_	BCS-43
B2190: NATS ANTENNA AMP	×	_	_	_	SEC-40

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< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condi- tion	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference	
B2191: DIFFERENCE OF KEY	×	_	_	_	<u>SEC-43</u>	-
B2192: ID DISCORD BCM-ECM	×	_	_	_	SEC-44	-
B2193: CHAIN OF BCM-ECM	×	_	_	_	SEC-45	-
B2195: ANTI SCANNING	×	_	_	_	SEC-46	-
B2553: IGNITION RELAY	_	×	_	_	PCS-52	-
B2555: STOP LAMP	_	×	_	_	SEC-47	-
B2556: PUSH-BTN IGN SW	_	×	×	_	SEC-49	-
B2557: VEHICLE SPEED	×	×	×	_	SEC-51	-
B2560: STARTER CONT RELAY	×	×	×	_	SEC-52	-
B2562: LOW VOLTAGE	_	×	_	_	BCS-44	-
B2601: SHIFT POSITION	×	×	×	_	SEC-53	-
B2602: SHIFT POSITION	×	×	×	_	SEC-56	-
B2603: SHIFT POSI STATUS	×	×	×	_	SEC-59	-
B2604: PNP SW	×	×	×	_	SEC-62	-
B2605: PNP SW	×	×	×	_	SEC-64	-
B2608: STARTER RELAY	×	×	×	_	SEC-66	-
B260A: IGNITION RELAY	×	×	×	_	PCS-54	-
B260F: ENG STATE SIG LOST	×	×	×	_	SEC-68	-
B2614: ACC RELAY CIRC	_	×	×	_	PCS-56	-
B2615: BLOWER RELAY CIRC	_	×	×	_	PCS-59	-
B2616: IGN RELAY CIRC	_	×	×	_	PCS-62	-
B2617: STARTER RELAY CIRC	×	×	×	_	SEC-71	-
B2618: BCM	×	×	×	_	PCS-65	-
B261A: PUSH-BTN IGN SW	_	×	×	_	SEC-73	-
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	SEC-76	-
B2621: INSIDE ANTENNA	_	×	_	_	DLK-58	
B2622: INSIDE ANTENNA	_	×	_	_	DLK-60	-
B2623: INSIDE ANTENNA	_	×	_	_	DLK-62	-
B26E1: ENG STATE NO RES	×	×	×	_	SEC-69	-
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	_	<u>SEC-70</u>	-
C1704: LOW PRESSURE FL	_	_	_	×		-
C1705: LOW PRESSURE FR	_	_	_	×	MT OF	
C1706: LOW PRESSURE RR	_	_	_	×	<u>WT-25</u>	
C1707: LOW PRESSURE RL	_	_	_	×		
C1708: [NO DATA] FL	_	_	_	×		-
C1709: [NO DATA] FR	_	_	_	×	VA/T 07	
C1710: [NO DATA] RR	_	_	_	×	<u>WT-27</u>	
C1711: [NO DATA] RL	_	<u> </u>	_	×		

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< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
C1716: [PRESSDATA ERR] FL	_	_	_	×	
C1717: [PRESSDATA ERR] FR	_	_	_	×	WT-30
C1718: [PRESSDATA ERR] RR	_	_	_	×	<u> </u>
C1719: [PRESSDATA ERR] RL	_	_	_	×	
C1729: VHCL SPEED SIG ERR	_	_	_	×	WT-32
C1734: CONTROL UNIT	_	_	_	×	<u>WT-34</u>

COMBINATION SWITCH SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

COMBINATION SWITCH SYSTEM SYMPTOMS

Symptom Table INFOID:0000000012167449

- 1. Perform "Data Monitor" of CONSULT to check for any malfunctioning item.
- 2. Check the malfunction combinations.

	,														Mal	functior	item: ×
								Data	monito	r item							
Malfunction combination	FR WIPER HI	FR WIPER LOW	FR WASHER SW	FR WIPER INT	RR WIPER ON	RR WIPER INT	RR WASHER SW	INT VOLUME	TURN SIGNAL R	TURN SIGNAL L	TAIL LAMP SW	HI BEAM SW	HEAD LAMP SW 1	HEAD LAMP SW 2	PASSING SW	AUTO LIGHT SW	FR FOG SW
Α		×	×						×	×							
В	×			×									×		×		
С							×	×				×		×			
D						×		×			×					×	
E					×			×									×
F	×					×		×									
G			×		×		×	×									
Н		×		×												×	
I										×				×	×		×
J									×		×	×	×				
K		All Items															
L		If only one item is detected or the item is not applicable to the combinations A to K															

3. Identify the malfunctioning part from the agreed combination and repair or replace the part.

Malfunction combination	Malfunctioning part	Repair or replace
Α	Combination switch INPUT 1 circuit	
В	Combination switch INPUT 2 circuit	
С	Combination switch INPUT 3 circuit	Inspect the combination switch input circuit applicable to the malfunctioning part. Refer to BCS-46, "Diagnosis Procedure".
D	Combination switch INPUT 4 circuit	part. Note: to <u>bee 10, blaghout 1 toetale</u> .
Е	Combination switch INPUT 5 circuit	
F	Combination switch OUTPUT 1 circuit	
G	Combination switch OUTPUT 2 circuit	
Н	Combination switch OUTPUT 3 circuit	Inspect the combination switch output circuit applicable to the malfunctioning part. Refer to BCS-48, "Diagnosis Procedure".
I	Combination switch OUTPUT 4 circuit	ing part. (Color to <u>Doc 40, Diagnosio i recodure</u> .
J	Combination switch OUTPUT 5 circuit	
K	ВСМ	Replace BCM. Refer to BCS-97, "Exploded View".
L	Combination switch	Replace the combination switch.

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NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

NORMAL OPERATING CONDITION

Description INFOID:000000012167450

TRANSIT MODE

- Transit mode inhibits battery power consumption during transportation or storage of the vehicle.
- BCM is set to transit mode before delivery.
- In transit mode, remote keyless entry function, headlamp ON/OFF function, theft warning alarm function, and other BCM control functions do not operate normally.
- Therefore, cancel operation must be performed so that the vehicle is used in normal status.
- For transit mode cancel operation, refer to BCS-7, "Description".

NOTE:

Do not cancel transit mode during storage of the vehicle. Always cancel transit mode before delivery of the vehicle to customer.

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, it is recommended that all maintenance and repair be performed by an authorized NISSAN/INFINITI dealer.
- Improper repair, 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 or batteries, and wait at least 3 minutes before performing any service.

Precautions for Removing Battery Terminal

When disconnecting the battery terminal, pay attention to the following.

- Always use a 12V battery as power source.
- Never disconnect battery terminal while engine is running.
- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.
- For vehicles with the engine listed below, remove the battery terminal after a lapse of the specified time:

BR08DE : 4 minutes YD25DDTi : 2 minutes YS23DDT D4D engine : 20 minutes : 4 minutes YS23DDTT HRA2DDT : 12 minutes : 4 minutes K9K engine : 4 minutes ZD30DDTi : 60 seconds ZD30DDTT : 60 seconds M9R engine : 4 minutes

R9M engine : 4 minutes V9X engine : 4 minutes

BATTERY

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.

 After high-load driving, if the vehicle is equipped with the V9X engine, turn the ignition switch OFF and wait for at least 15 minutes to remove the battery terminal.

NOTE:

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PRECAUTIONS

< PRECAUTION >

- Turbocharger cooling pump may operate in a few minutes after the ignition switch is turned OFF.
- Example of high-load driving
- Driving for 30 minutes or more at 140 km/h (86 MPH) or more.
- Driving for 30 minutes or more on a steep slope.
- 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.

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.

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

BCM (BODY CONTROL MODULE)

Exploded View

INFOID:0000000012167453 В

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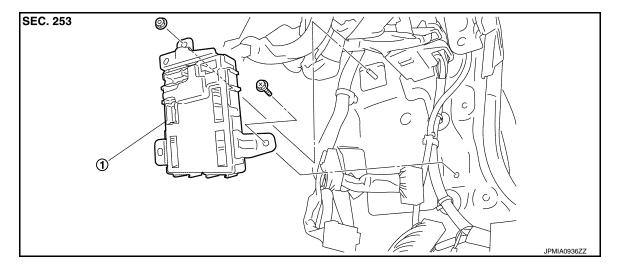
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CAUTION:

Before replacing BCM, perform "Before Replace ECU" of "Read / Write Configuration" to save or print current vehicle specification. Refer to BCS-3, "ADDITIONAL SERVICE WHEN REPLACING CONTROL **UNIT (BCM): Description".**



1. BCM

Removal and Installation

INFOID:0000000012167454

CAUTION:

Before replacing BCM, perform "Before Replace ECU" of "Read / Write Configuration" to save or print current vehicle specification. Refer to BCS-3, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM): Description".

REMOVAL

- Remove dash side finisher (passenger side). Refer to INT-21, "Exploded View".
- Remove bolt and nut.
- Remove BCM and disconnect the connector.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Be sure to perform "After Replace ECU" of "Read / Write Configuration" or "Manual Configuration" when replacing BCM. Refer to BCS-3, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM) : Description".

NOTE:

Be sure to perform the system initialization (NATS) when replacing BCM.

BCS

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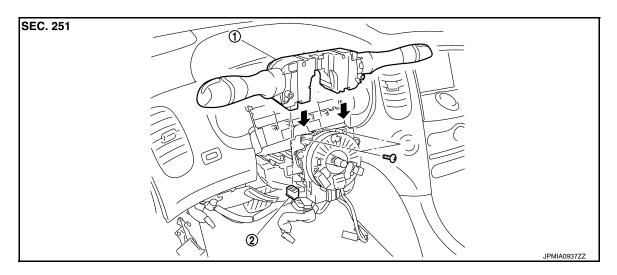
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COMBINATION SWITCH

Exploded View



1. Combination switch

2. Combination switch connector

Removal and Installation

INFOID:0000000012167456

REMOVAL

- 1. Remove steering column cover. Refer to IP-12, "Exploded View".
- 2. Remove screws.
- 3. Disconnect the connector.
- 4. Pull up the combination switch to remove it.

INSTALLATION

Install in the reverse order of removal.