

D

Е

F

BCS

CONTENTS

PRECAUTION3
PRECAUTIONS
SYSTEM DESCRIPTION4
COMPONENT PARTS4
BODY CONTROL SYSTEM4 BODY CONTROL SYSTEM : Component Parts Location
POWER CONSUMPTION CONTROL SYSTEM4 POWER CONSUMPTION CONTROL SYSTEM: Component Parts Location4
SYSTEM6
BODY CONTROL SYSTEM6 BODY CONTROL SYSTEM : System Description6 BODY CONTROL SYSTEM : Fail-safe7
COMBINATION SWITCH READING SYSTEM8 COMBINATION SWITCH READING SYSTEM: System Diagram
SIGNAL BUFFER SYSTEM11 SIGNAL BUFFER SYSTEM: System Diagram12 SIGNAL BUFFER SYSTEM: System Description12
POWER CONSUMPTION CONTROL SYSTEM13 POWER CONSUMPTION CONTROL SYSTEM: System Diagram
DIAGNOSIS SYSTEM (BCM)15

COMMON ITEM
DOOR LOCK
REAR WINDOW DEFOGGER18 REAR WINDOW DEFOGGER : CONSULT Function (BCM - REAR DEFOGGER)18
BUZZER18 BUZZER : CONSULT Function (BCM - BUZZER)18
INT LAMP
HEADLAMP21 HEADLAMP : CONSULT Function (BCM - HEAD LAMP)21
WIPER : CONSULT Function (BCM - WIPER)23
FLASHER24 FLASHER : CONSULT Function (BCM - FLASH-ER)24
INTELLIGENT KEY
COMB SW 29 COMB SW : CONSULT Function (BCM - COMB SW) 29
BCM : CONSULT Function (BCM - BCM)30
IMMU30 IMMU : CONSULT Function (BCM - IMMU) 30

BATTERY SAVER	DTC/CIRCUIT DIAGNOSIS	83
BATTERY SAVER : CONSOLT FUNCTION (BCN) - BATTERY SAVER)	U1000 CAN COMM	83
TRUNK 32	Description	
TRUNK : CONSULT Function (BCM - TRUNK) 32	DTC Logic Diagnosis Procedure	
THEFT ALM 32		
THEFT ALM : CONSULT Function (BCM -	U1010 CONTROL UNIT (CAN) DTC Logic	84
THEFT)	Diagnosis Procedure	
RETAIND PWR	U0415 VEHICLE SPEED	85
RETAIND PWR : CONSULT Function (BCM - RE-	Description	
TAINED PWR)	DTC Logic	85
SIGNAL BUFFER34	Diagnosis Procedure	85
SIGNAL BUFFER: CONSULT Function (BCM -	B2562 LOW VOLTAGE	86
SIGNAL BUFFER)34	DTC Logic	
ECU DIAGNOSIS INFORMATION35	Diagnosis Procedure	86
BCM35	B26E7 TPMS CAN COMM	
Reference Value	DTC Logic	
Fail-safe 56	Diagnosis Procedure	87
DTC Inspection Priority Chart57	POWER SUPPLY AND GROUND CIRCUIT	88
DTC Index 58	Diagnosis Procedure	88
WIRING DIAGRAM60	COMBINATION SWITCH OUTPUT CIRCUIT	89
BCM60	Diagnosis Procedure	
Wiring Diagram	COMBINATION SWITCH INPUT CIRCUIT	01
	Diagnosis Procedure	
BASIC INSPECTION79	Š	
INSPECTION AND ADJUSTMENT79	SYMPTOM DIAGNOSIS	93
ADDITIONAL SERVICE WHEN REPLACING	COMBINATION SWITCH SYSTEM SYMP-	
CONTROL UNIT (BCM)79	TOMS	
ADDITIONAL SERVICE WHEN REPLACING	Symptom Table	93
CONTROL UNIT (BCM): Description	NORMAL OPERATING CONDITION	94
CONTROL UNIT (BCM): Work Procedure 79	Description	94
CONFIGURATION (BCM)79	REMOVAL AND INSTALLATION	95
CONFIGURATION (BCM): Description	DOM	
CONFIGURATION (BCM): Work Procedure 80	Removal and Installation	
CONFIGURATION (BCM) : Configuration list 81		
SHIPPING MODE CANCEL OPERATION 82	COMBINATION SWITCH	
Description	Exploded ViewRemoval and Installation	96
Work Procedure82	ivenioval aliu ilistallatiofi	90

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. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

Precautions for Removing Battery Terminal

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

NOTE:

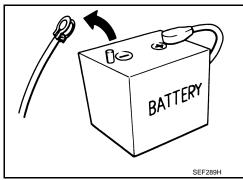
ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.

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

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

detected.
 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.



C

В

Α

D

Н

I

J

INFOID:0000000010262501

Κ

L

BCS

Ν

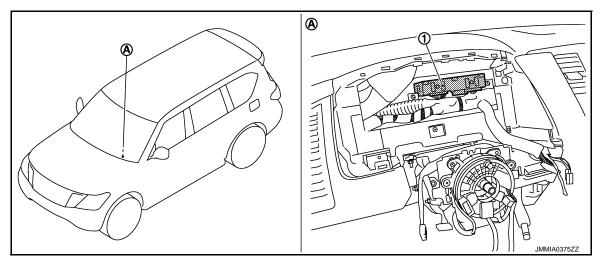
 \cap

SYSTEM DESCRIPTION

COMPONENT PARTS BODY CONTROL SYSTEM

BODY CONTROL SYSTEM: Component Parts Location

INFOID:0000000010262502

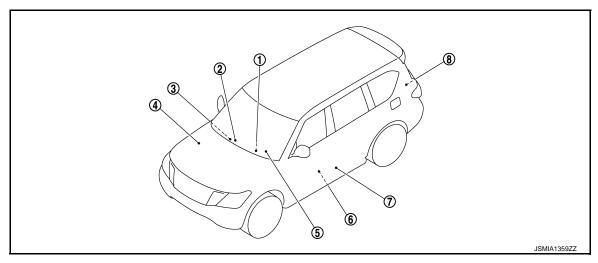


- 1. BCM
- A. Behind of combination meter

POWER CONSUMPTION CONTROL SYSTEM

POWER CONSUMPTION CONTROL SYSTEM: Component Parts Location

INFOID:0000000010262503



- BCM
 Refer to <u>BCS-4</u>, "<u>BODY CONTROL</u>
 <u>SYSTEM</u>: Component Parts Location".
- 2. TCU
 Refer to AV-316, "Component Parts
 Location".
- 3. CAN gateway
 Refer to LAN-115, "Component
 Parts Location".

COMPONENT PARTS

BACK DOOR SYSTEM:

Component Parts Location".

< SYSTEM DESCRIPTION >

4.	IPDM E/R
	Refer to PCS-4, "Component Parts
	Location".

- 7. Pre-crash seat belt control unit Refer to SBC-5, "Component Parts Location".
- 5. Combination meter

8.

Driver seat control unit Refer to ADP-7, "Component Parts Location".

Α

Automatic back door control module Refer to <u>DLK-15</u>, "AUTOMATIC

В

D

Е

F

G

Н

K

BCS

Ν

0

SYSTEM BODY CONTROL SYSTEM

BODY CONTROL SYSTEM: System Description

INFOID:0000000010262504

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-8, "COMBINATION SWITCH READING SYSTEM: System Diagram"	
Signal buffer system	BCS-12, "SIGNAL BUFFER SYSTEM : System Diagram"	
Power consumption control system	BCS-13, "POWER CONSUMPTION CONTROL SYSTEM : System Diagram"	
Auto light system	EXL-14, "AUTO LIGHT SYSTEM : System Description"	
High beam assist system	EXL-16, "HIGH BEAM ASSIST SYSTEM: System Description"	
Turn signal and hazard warning lamp system	EXL-22, "TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM: System Description"	
Headlamp system	EXL-13, "HEADLAMP SYSTEM : System Description"	
Daytime running light system	EXL-18, "DAYTIME RUNNING LIGHT SYSTEM : System Description"	
Parking, license plate, side maker and tail lamps system	EXL-23, "PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMP SYSTEM: System Description"	
Front fog lamp system	EXL-25, "FRONT FOG LAMP SYSTEM : System Description"	
Exterior lamp battery saver system	EXL-26, "EXTERIOR LAMP BATTERY SAVER SYSTEM : Stem Description"	
Interior room lamp control system	INL-6, "INTERIOR ROOM LAMP CONTROL SYSTEM : System Diagram"	
Interior room lamp battery saver system	INL-9, "INTERIOR ROOM LAMP BATTERY SAVER SYSTEM: System Diagram"	
Illumination control system	INL-10, "ILLUMINATION CONTROL SYSTEM : System Diagram"	
Auto light adjustment system	INL-11, "AUTO LIGHT ADJUSTMENT SYSTEM : System Diagram"	
Front wiper and washer system	WW-7, "FRONT WIPER AND WASHER SYSTEM : System Diagram"	
Rear wiper and washer system	WW-10, "REAR WIPER AND WASHER SYSTEM : System Diagram"	
Headlamp washer system	WW-12, "HEADLAMP WASHER SYSTEM : System Diagram"	
Warning chime system	WCS-6. "WARNING CHIME SYSTEM : System Diagram"	
Power door lock system	DLK-17, "System Diagram"	
Infiniti Vehicle immobilizer System (IVIS)	SEC-14, "INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS: System Diagram"	

SYSTEM

< SYSTEM DESCRIPTION >

System		Reference	
Vehicle security system	Theft warning alarm	SEC-16, "VEHICLE SECURITY SYSTEM: System Diagram"	
	Panic alarm	SEC-10, VEHICLE SECORITY STSTEM . System Diagram	
Rear window defogger system		DEF-6, "System Diagram"	
Intelligent Key system/engine start system		DLK-19, "INTELLIGENT KEY SYSTEM : System Diagram"	
Power window system		PWC-8, "System Diagram"	
Retained accessory power (RAP) system		PWC-8, "System Description"	

BODY CONTROL SYSTEM: Fail-safe

INFOID:0000000010262505

Α

В

D

Е

FAIL-SAFE CONTROL BY DTC

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

Display contents of CONSULT	Fail-safe	Cancellation
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI-SCANNING	Inhibit engine cranking	Ignition switch $ON \rightarrow OFF$
B2198: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
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)
B260F: ENG STATE SIG LOST	Inhibit engine cranking	When any of the following conditions are fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
B261B: RES ENG RUN STUCK MALFUNC	Fuel cut	When engine status signal (CAN) is received normally
B26F1: IGN RELAY OFF	Inhibit engine cranking	When the following conditions are fulfilled Ignition switch ON signal (CAN: Transmitted from BCM): ON Ignition switch ON signal (CAN: Transmitted from IPDM E/R): ON
B26F2: IGN RELAY ON	Inhibit engine cranking	When the following conditions are fulfilled Ignition switch ON signal (CAN: Transmitted from BCM): OFF Ignition switch ON signal (CAN: Transmitted from IPDM E/R): OFF
B26F3: START CONT RLY ON	Inhibit engine cranking	When the following conditions are fulfilled • Starter control relay signal (CAN: Transmitted from BCM): OFF • Starter control relay signal (CAN: Transmitted from IPDM E/R): OFF
B26F4: START CONT RLY OFF	Inhibit engine cranking	When the following conditions are fulfilled Starter control relay signal (CAN: Transmitted from BCM): ON Starter control relay signal (CAN: Transmitted from IPDM E/R): ON
B26F7: BCM	Inhibit engine cranking by Intelligent Key system	When room antenna and luggage room antenna functions normally
B26FE: HOOD SW CAN DIAG ERROR	Inhibit remote engine start	When the following conditions are fulfilled • Power position ON • Hood switch signal (CAN) is received normally

FAIL-SAFE CONTROL BY RAIN SENSOR MALFUNCTION

BCM detects the light and rain sensor serial link error and the rain sensor malfunction. BCM controls the following fail-safe when rain sensor has a malfunction.

- Front wiper switch AUTO and sensing rain drop: The condition just before the activation of fail-safe is maintained until the front wiper switch is turned OFF.
- Front wiper switch AUTO and not sensing rain drop: Front wiper is LO operation until the front wiper switch is turned off.

REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper stop position signal.

Revision: 2014 October BCS-7 2015 QX80

BCS

0

< SYSTEM DESCRIPTION >

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

Condition of cancellation

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

FAIL-SAFE CONTROL OF COMBINATION SWITCH READING FUNCTION CAUSED BY LOW POWER SUPPLY VOLTAGE

If voltage of battery power supply lower, BCM maintains combination switch reading to the status when input voltage is less than approximately 9 V.

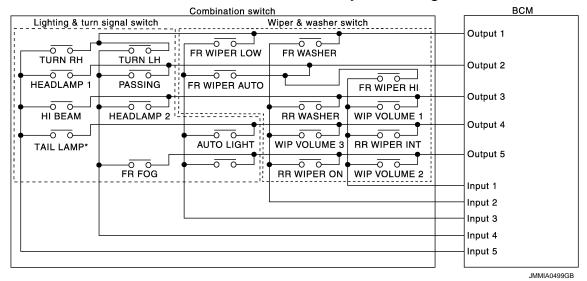
NOTE:

When voltage of battery power supply is approximately 9 V or more, combination switch reading function returns to normal operation.

COMBINATION SWITCH READING SYSTEM

COMBINATION SWITCH READING SYSTEM: System Diagram

INFOID:0000000010262506



NOTE:

COMBINATION SWITCH READING SYSTEM: System Description

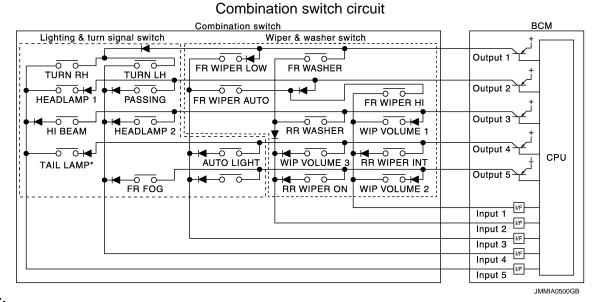
INFOID:0000000010262507

OUTLINE

- BCM reads the status of the combination switch (light, turn signal, wiper and washer) and recognizes the status of each switch.
- BCM has 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

^{*:} TAIL LAMP switch links lighting switch 1ST and 2ND positions.



NOTE:

*: TAIL LAMP switch links lighting switch 1ST and 2ND positions.

Combination switch INPUT-OUTPUT system list

System	INPUT 1	INPUT 2	INPUT 3	INPUT 4	INPUT 5
OUTPUT 1	_	FR WASHER	FR WIPER LOW	TURN LH	TURN RH
OUTPUT 2	FR WIPER HI	_	FR WIPER AUTO	PASSING	HEADLAMP 1
OUTPUT 3	WIP VOLUME 1	RR WASHER	_	HEADLAMP 2	HI BEAM
OUTPUT 4	RR WIPER INT	WIP VOLUME 3	AUTO LIGHT	_	TAIL LAMP
OUTPUT 5	WIP VOLUME 2	RR WIPER ON	_	FR FOG	_

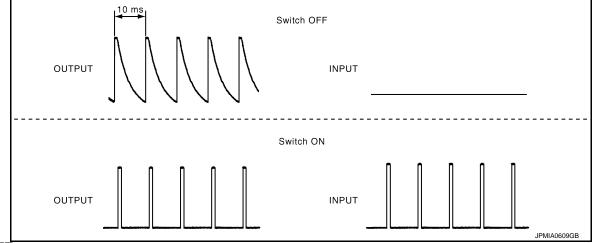
NOTE:

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 control mode.

- BCM operates as follows and judges the status of the combination switch.
- It operates the transistor on OUTPUT side in the following order: OUTPUT 1 \rightarrow 2 \rightarrow 3 \rightarrow 4 \rightarrow 5, and outputs voltage waveform.

Revision: 2014 October BCS-9 2015 QX80

В

Α

С

D

Е

F

G

Н

|

J

Κ

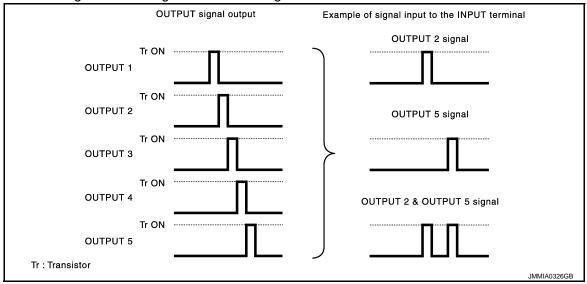
BCS

0

Ν

< SYSTEM DESCRIPTION >

- The voltage waveform of OUTPUT corresponding to the formed circuit is input into the interface on INPUT side if any (1 or more) switches are ON.
- It reads this change of the voltage as the status signal of the combination switch.

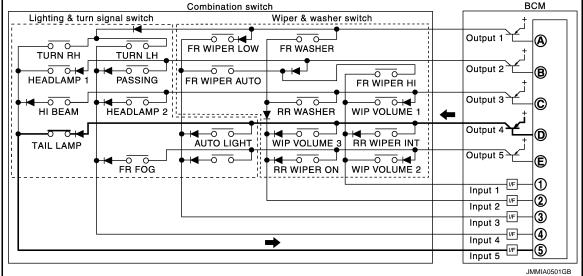


Operation Example

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 "A - E".

Example 1: When a switch (TAIL LAMP switch) is turned ON

The circuit between OUTPUT 4 and INPUT 5 is formed when the TAIL LAMP switch is turned ON.



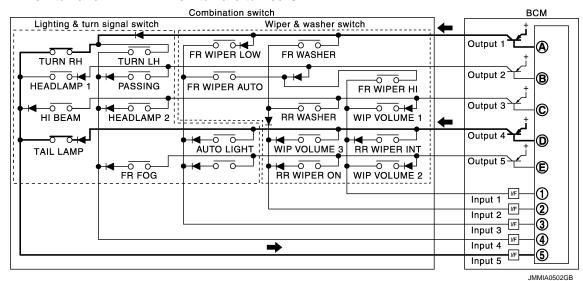
- BCM detects the combination switch status signal "5D" when the signal of OUTPUT 4 is input to INPUT 5.
- BCM judges that the TAIL LAMP switch is ON when the signal "5D" is detected.

Example 2: When some switches (TURN RH switch, TAIL LAMP switch) are turned ON

SYSTEM

< SYSTEM DESCRIPTION >

• The circuits between OUTPUT 1 and INPUT 5 and between OUTPUT 4 and INPUT 5 are formed when the TURN RH switch and TAIL LAMP switch are turned ON.



- BCM detects the combination switch status signal "5AD" when the signals of OUTPUT 1 and OUTPUT 4 are input to INPUT 5.
- BCM judges that the TURN RH switch and TAIL LAMP switch are ON when the signal "5AD" is detected.

WIPER VOLUME DIAL POSITION

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

Wiper volume	Switch status		
dial position	WIP VOLUME 1	WIP VOLUME 2	WIP VOLUME 3
1	ON	ON	ON
2	ON	ON	OFF
3	ON	OFF	OFF
4	OFF	OFF	OFF
5	OFF	OFF	ON
6	OFF	ON	ON
7	OFF	ON	OFF

NOTE:

For details of wiper volume dial position, refer to WW-7, "FRONT WIPER AND WASHER SYSTEM: System Description".

SIGNAL BUFFER SYSTEM

BCS

K

Α

В

C

D

Е

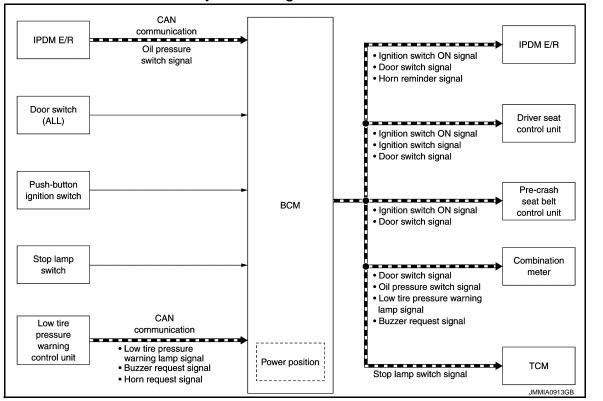
F

Н

Ν

SIGNAL BUFFER SYSTEM: System Diagram

INFOID:0000000010262508



SIGNAL BUFFER SYSTEM: System Description

INFOID:0000000010262509

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) Pre-crash seat belt 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 (CAN) IPDM E/R (CAN) Driver seat control unit (CAN) Pre-crash seat belt control unit (CAN)	Inputs the door switch signal and transmits it via CAN communication.
Oil pressure switch signal	IPDM E/R (CAN)	Combination meter (CAN)	Transmits the received oil pressure switch signal via CAN communication.
Stop lamp switch signal	Stop lamp switch	TCM (CAN)	Inputs the stop lamp switch 1 signal and stop lamp switch 2 signal, and transmits it via CAN communication.
Low tire pressure warning lamp signal	Low tire pressure warning control unit	Combination meter (CAN)	Transmits the received low tire pressure warning signal via CAN communication.

Signal name	Input	Output	Description
Buzzer request signal	Low tire pressure warning control unit	Combination meter (CAN)	Transmits the received buzzer request signal via CAN communication.
Horn request signal	Low tire pressure warning control unit	IPDM E/R (CAN)	Received the horn request signal, transmits the horn reminder signal via CAN communication.

POWER CONSUMPTION CONTROL SYSTEM

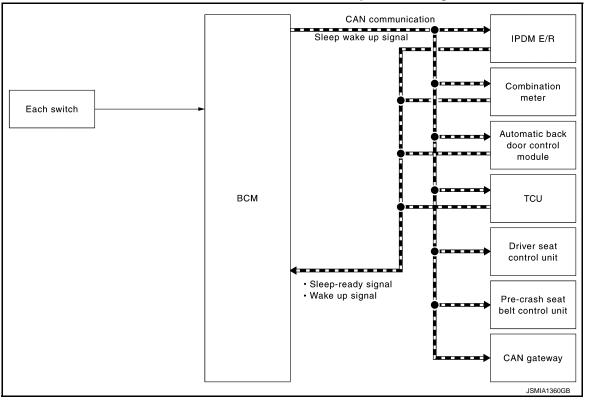
POWER CONSUMPTION CONTROL SYSTEM: System Diagram

INFOID:0000000010262510

Α

D

Е



POWER CONSUMPTION CONTROL SYSTEM: System Description

INFOID:0000000010262511

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, driver seat control unit, automatic back door control module, pre-crash seat belt control unit, TCU and CAN gateway) 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.

BCS-13 Revision: 2014 October 2015 QX80

BCS

Ν

SYSTEM

< SYSTEM DESCRIPTION >

Sleep mode activation

- BCM receives the sleep-ready signal (ready) from IPDM E/R, combination meter, TCU and automatic back door control module 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.

Sleep condition

CAN sleep condition	BCM sleep condition
Receiving the sleep-ready signal (ready) from all units Ignition switch: OFF Vehicle security system: Not operation Warning chime: Not operation Intelligent Key system buzzer: Not operation Stop lamp switch: OFF 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 IVIS: Not operation Remote keyless entry receiver communication status: No communication LOCK indicator lamp: Not operation ACC indicator lamp: Not operation ON indicator lamp: Not operation

Wake-up operation

- BCM transmits sleep wake up signal (wake up) to each unit when any condition listed below is established, and then goes into normal mode from low power consumption mode.
- Each unit starts transmissions with CAN communication by receiving sleep wake up signals. Each unit transmit wake up signals to BCM with CAN communication to convey the start of CAN communication.

Wake-up condition

BCM wake-up condition	CAN wake-up condition	
Back door opener switch: OFF → ON	 Receiving the sleep-ready signal (Not-ready) from any units Push-button ignition switch (push switch): OFF → ON Hazard switch: OFF → ON, ON → OFF PASSING switch: OFF → ON, ON → OFF HEADLAMP 1 switch: OFF → ON, ON → OFF HEADLAMP 2 switch: OFF → ON, ON → OFF TAIL LAMP switch: OFF → ON FR FOG switch: OFF → ON, ON → OFF TURN RH: OFF → ON TURN LH: OFF → ON 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 Stop lamp switch: ON Door lock and unlock switch: NEUTRAL → LOCK, NEUTRAL → UNLOCK Door key cylinder switch: NEUTRAL → UNLOCK Remote keyless entry receiver communication: Receiving Front door lock assembly (driver side) (unlock sensor): OFF → ON, ON → OFF 	

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM: CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000010262512

Α

В

D

Е

F

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. Refer to BCS-58, "DTC Index".
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.

×: 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 systemEngine start system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	ВСМ	×		
IVIS	IMMU	×	×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
-	AIR PRESSURE MONITOR*	×	×	X

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

FREEZE FRAME DATA (FFD)

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

Revision: 2014 October **BCS-15** 2015 QX80

BCS

K

< 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" (Vehicle is stopping and selector lever is except P position.)	
	CRANK>RUN		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)	
	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emergency stop operation)	
	ACC>OFF		While turning power supply position from "ACC" to "OFF"	
	OFF>LOCK	Power position status of the moment a particular DTC is detected	While turning power supply position from "OFF" to "LOCK"	
Vehicle Condition	OFF>ACC		While turning power supply position from "OFF" to "ACC"	
	ON>CRANK		While turning power supply position from "IGN" to "CRANKING"	
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode	
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK".) to low power consumption mode	
	LOCK		Power supply position is "LOCK" (Ignition switch OFF with steering is locked.)	
	OFF		Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.)	
	ACC		Power supply position is "ACC" (Ignition switch ACC)	
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)	
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)	
	CRANKING		Power supply position is "CRANKING" (At engine cranking)	
IGN Counter	0 - 39	 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. 		

DOOR LOCK

DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)

INFOID:0000000011528935

BCM CONSULT FUNCTION

CONSULT performs the following functions via CAN communication with BCM.

WORK SUPPORT

Α

В

D

Е

F

Н

J

K

BCS

Ν

0

Р

< SYSTEM DESCRIPTION >

Monitor item	Description	
DOOR LOCK-UNLOCK SET	Selective unlock function mode can be changed to operation with this mode On: Operate Off: Non-operation	
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 24 km/h (15 MPH) 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 this 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 MODE 5: This item is displayed, but cannot be used MODE 6: This item is displayed, but cannot be used 	
AUTOMATIC LOCK/UNLOCK SET	Automatic door lock/unlock function mode can be selected from the following in this mode Off: Non-operation Unlock Only: Door unlock operation only Lock Only: Door lock operation only Lock/Unlock: Lock and unlock operation	
SIGNATURE LIGHT SETTING	Signature light function can be changed to operation with this mode On: Operate Off: Non-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 switch
KEY CYL UN-SW	Indicated [On/Off] condition of unlock signal from door key cylinder switch

ACTIVE TEST

Revision: 2014 October BCS-17 2015 QX80

< 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 LOCK" on CONSULT screen is touched The all door lock actuators are unlocked when "ALL UNLK" on CONSULT screen is touched The front door lock actuator (driver side) is unlocked when "DR UNLK" on CONSULT screen is touched The front door lock actuator (passenger side) is unlocked when "AS UNLK" on CONSULT screen is touched The door lock actuator (other) is unlocked when "OTR ULK" on CONSULT screen is touched

REAR WINDOW DEFOGGER

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

INFOID:0000000011528947

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:0000000011528948

CONSULT APPLICATION ITEMS

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

DATA MONITOR

NOTE:

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

Display item [Unit]	Description
PUSH SW [On/Off]	Status of push-button ignition switch judged by BCM.
UNLK SEN-DR [On/Off]	Status of unlock sensor judged by BCM.
VEH SPEED 1 [km/h]	Value of vehicle speed signal received from combination meter with CAN communication line.
TAIL LAMP SW [On/Off]	Status of lighting switch judged by BCM using the combination switch readout function.
FR FOG SW [On/Off]	Status of front fog lamp switch judged by BCM using the combination switch readout function.

< SYSTEM DESCRIPTION >

Display item [Unit]	Description
DOOR SW-DR [On/Off]	Status of driver side door switch judged by BCM.
CDL LOCK SW [On/Off]	Status of door lock unlock switch judged by BCM.

ACTIVE TEST

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

INT LAMP

INT LAMP: CONSULT Function (BCM - INT LAMP)

INFOID:0000000011528944

Α

В

C

D

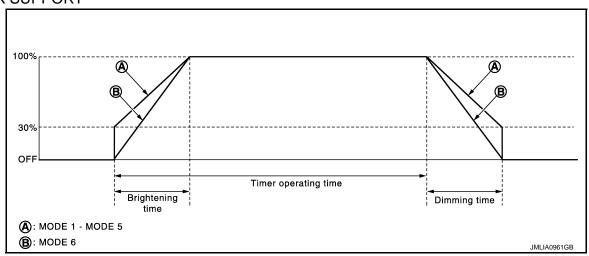
Е

F

G

Н

WORK SUPPORT



Service item	Setting item		Setting		
CET I/I D LINII CIZ INTCON	On*	With the interior room lamp timer function			
SET I/L D-UNLCK INTCON	Off	Without th	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.		
ROOM LAMP ON TIME SET	MODE 4	3 sec.			
	MODE 5	0 sec.			
	MODE 6*	Gradually brightens from 0% to 100% brightness in 1 second.			
	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.		
ROOM LAMIF OFF TIME SET	MODE 4	3 sec.			
	MODE 5	0 sec.			
	MODE 6*	Gradually dims from 100% to 0% in 1 second.			

Revision: 2014 October BCS-19 2015 QX80

BCS

K

Ν

0

< SYSTEM DESCRIPTION >

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

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)
REQ SW-RR [On/Off]	NOTE: This item is displayed, but cannot be monitored
REQ SW-RL [On/Off]	NOTE: This item is displayed, but cannot be monitored
PUSH SW [On/Off]	Indicates [On/Off] condition of push-button ignition switch
UNLK SEN -DR [On/Off]	Indicates [On/Off] condition of driver door UNLOCK status
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 switch
KEY CYL UN-SW [On/Off]	Indicated [On/Off] condition of unlock signal from door key cylinder switch
TRNK/HAT MNTR [On/Off]	NOTE: This item is displayed, but cannot be 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
INT LAMP	On	Outputs the interior room lamp control signal.
INT LAWF	Off	Stops the interior room lamp control signal.

< SYSTEM DESCRIPTION >

Test item	Operation	Description
STEP LAMP TEST	On	Outputs the step lamp control signal.
	Off	Stops the step lamp control signal.

HEADLAMP

HEADLAMP: CONSULT Function (BCM - HEAD LAMP)

NFOID:0000000011528942

Α

В

D

Е

WORK SUPPORT

Service item	Setting item		Setting		
	MODE1*2	Normal	Normal		
CUSTOM A/LIGHT SETTING	MODE2	More sensitive setting than normal setting (Turns ON earlier than normal operation)			
OOOTOW/VEIGHT GETTING	MODE3	More sensitive setting than MODE2 (Turns ON earlier than MODE2)			
	MODE4	Less sensitive setting	than normal setting (Turns ON later than normal operation)		
BATTERY SAVER SET	On* ²	With the exterior lamp	p battery saver function		
BATTERT ON ER OFT	Off	Without the exterior la	amp battery saver function		
	MODE1*2	45 sec.			
	MODE2	Without the function			
	MODE3	30 sec.			
ILL DELAY SET	MODE4	60 sec.	Sets delay timer function timer operation time.		
ILE DELATI GET	MODE5	90 sec.	(All doors closed)		
	MODE6	120 sec.			
	MODE7	150 sec.			
	MODE8	180 sec.			
	MODE1*2	With twilight ON custom & with wiper INT, LO and HI			
AUTO LIGHT LOGIC SET*1	MODE2	With twilight ON custom & with wiper LO and HI			
	MODE3	With twilight ON custom & without			
AUTO LIGITI LOGIC SET	MODE4	Without twilight ON custom & with wiper INT, LO and HI			
	MODE5	Without twilight ON custom & with wiper LO and HI			
	MODE6	Without twilight ON c	ustom & without		

^{*1:} For models for Canada, this item cannot be used.

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/STALL/CRANK/RUN] condition of engine states
VEH SPEED 1 [km/h]	Display the vehicle speed signal received from combination meter by numerical value [km/h]

BCS

0

F

^{*2:} Factory setting

< 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 SW 1 [On/Off]	Each switch status that BCM judges from the combination switch reading function
HEAD LAMP SW 2 [On/Off]	
PASSING SW [On/Off]	
AUTO LIGHT SW [On/Off]	
FR FOG SW [On/Off]	
RR FOG SW [On/Off]	NOTE: This item cannot be 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
OPTI SEN (DTCT) [V]	The value of outside brightness voltage input from the optical sensor
OPTI SEN (FILT)* [V]	The value of outside brightness voltage filtered by BCM
OPTICAL SENSOR [On/Off/NG]	NOTE: This item cannot be monitored

^{*:} For models for Canada, this item cannot be monitored.

ACTIVE TEST

Test item	Operation	Description		
TAIL LAMP	On	Transmits the position light request signal to IPDM E/R via CAN communication to turn the parking, license plate, side marker and tail lamps ON Transmits the position light request signal to combination meter via CAN communication to turn the position lamp indicator lamp ON		
	Off	Stops the position light request signal transmission		
HEAD LAMP	НІ	Transmits the high beam request signal to IPDM E/R via CAN communication to turn the headlamp (HI) ON Transmits the high beam request signal to combination meter via CAN communication to turn the high beam indicator lamp ON		
	Low	Transmits the low beam request signal to IPDM E/R via CAN communication to turn the headlamp (LO) ON		
	Off	Stops the high beam request signal and low beam request signal transmission		

< SYSTEM DESCRIPTION >

Test item	Operation	Description		
FR FOG LAMP	On	Transmits the front fog light request signal to IPDM E/R via CAN communication to turn the front fog lamp ON Transmits the front fog light request signal to combination meter via CAN communication to turn the front fog lamp indicator lamp ON		
	Off	Stops the front fog light request signal transmission		
RR FOG LAMP	On	NOTE:		
RR FUG LAWIP	Off	This item cannot be tested		
DAYTIME RUNNING LIGHT	On	Transmits the daytime running light request signal via CAN communication to turn the daytime running light ON		
	Off	Stops the daytime running light request signal transmission		
ILL DIM SIGNAL	On	Transmits the dimmer signal to combination meter via CAN communication and dims combination meter Transmits the dimmer signal to AV control unit and dims display		
	Off	Stops the dimmer signal transmission		

WIPER

WIPER: CONSULT Function (BCM - WIPER)

INFOID:0000000011528946

Α

В

D

Е

F

WORK SUPPORT

Service item	Setting item	Description				
RAIN SEN WIP	On*	With rain sensor (Front wiper intermittent time linked with the rain sensor, vehicle speed, and AUTO dial position)	The setting of front wiper AUTO operation can			
FUNC SET	Off	Without rain sensor (Front wiper intermittent time linked with the vehicle speed and AUTO dial position)	be changed			
DROP WIPE MODE: FUNC SET MODE	MODE1	Front wiper and rear wiper OFF				
	MODE2*	Front wiper ON and rear wiper OFF	The setting of drop wipe operation can be changed			
	MODE3	Front wiper OFF and rear wiper ON				
	MODE4	Front wiper and rear wiper ON				

^{*:}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.	
VEH SPEED 1 [km/h]	Displays the value of the vehicle speed signal received from combination meter via CAN communication.	
FR WIPER HI [Off/On]		
FR WIPER LOW [Off/On]	Status of each switch judged by PCM using the combination switch reading function	
FR WASHER SW [Off/On]	Status of each switch judged by BCM using the combination switch reading function	
FR WIPER INT [Off/On]		

Revision: 2014 October BCS-23 2015 QX80

BCS

Ν

L

 \circ

< SYSTEM DESCRIPTION >

Monitor Item [Unit]	Description	
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]	Status of each switch judged by BCM using the combination switch reading function	
RR WIPER ON [Off/On]	Status of each switch judged by BCM using the combination switch reading function Rear wiper motor (stop position) status input from the rear wiper motor	
RR WIPER INT [Off/On]		
RR WASHER SW [Off/On]		
RR WIPER STOP [Off/On]		
H/L WSR SW [Off/On]	NOTE: This item is indicated, but not monitored	
RAIN SENSOR [OFF/LOW/HIGH/SPLASH/NG]	Request signal from rain sensor detected by BCM is displayed	

ACTIVE TEST

Test item	Opera- tion	Description		
FR WIPER	Hi	Transmits the front wiper request signal (HI) to IPDM E/R via CAN communication to operate the front wiper HI operation.		
	Lo	Transmits the front wiper request signal (LO) to IPDM E/R via CAN communication to operate the front wiper LO operation.		
	INT	Transmits the front wiper request signal (INT) to IPDM E/R via 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	Output the voltage to operate the rear wiper motor.		
	Off	Stops the voltage to stop the rear wiper motor.		
HEADLAMP WASHER*	On	Transmits the headlamp washer request signal to IPDM E/R via CAN communication operate the headlamp washer operation.		

^{*:} The item is displayed but not operated on models without headlamp washer.

FLASHER

FLASHER: CONSULT Function (BCM - FLASHER)

INFOID:0000000011528943

WORK SUPPORT

Service item	Setting item		Setting
HAZARD ANSWER BACK	Lock Only	With locking only	Sets the hazard warning lamp answer back function when the door is lock/unlock with the door request switch and In telligent Key
	Unlock Only	With unlocking only	
	Lock/ Unlock*	With locking/unlocking	
	Off	Without the function	

^{*:} 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.

< SYSTEM DESCRIPTION >

Monitor item [Unit]	Description	
REQ SW -DR [On/Off]	Indicates [On/Off] condition of door request switch (driver side)	
REQ SW -AS [On/Off]	Indicates [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]		
TURN SIGNAL L [On/Off]	Each switch status that BCM detects 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

Test item	Operation	Description
FLASHER	RH	Outputs voltage to turn the right side turn signal lamps ON Transmits the turn indicator signal to combination meter via CAN communication to turn the turn signal indicator lamp (RH) ON
	LH	Outputs voltage to turn the left side turn signal lamps ON Transmits the turn indicator signal to combination meter via CAN communication to turn the turn signal indicator lamp (LH) ON
	Off	Stops the voltage to turn the turn signal lamps OFF Stops the turn indicator signal transmission

INTELLIGENT KEY

INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)

INFOID:0000000011528936

WORK SUPPORT

Monitor item	Description This function allows inside key antenna self-diagnosis	
INSIDE ANT DIAGNOSIS		
LOCK/UNLOCK BY I-KEY	Door lock/unlock function by door request switch mode can be changed to operation in this mode On: Operate Off: Non-operation	
ENGINE START BY I-KEY	Engine start function mode can be changed to operation with this mode On: Operate Off: Non-operation	
TRUNK/GLASS HATCH OPEN	Buzzer reminder function mode by back door opener switch can be changed to operation with this mode On: Operate Off: Non-operation	

Revision: 2014 October BCS-25 2015 QX80

BCS

Α

В

D

Е

F

G

Н

. .

< SYSTEM DESCRIPTION >

Monitor item	Description	
PANIC ALARM SET	Panic alarm button pressing time on Intelligent Key button can be selected from the following with this mode • MODE 1: 0.5 sec. • MODE 2: Non-operation • MODE 3: 1.5 sec.	
TRUNK OPEN DELAY	Back door open button pressing to Intelligent Key button can be selected as per the following in this mode • MODE 1: Press and hold • MODE 2: Press twice • MODE 3: Press and hold, or press twice	
LO- BATT OF KEY FOB WARN	Intelligent Key low battery warning mode can be changed to operation with this mode On: Operate Off: Non-operation	
ANTI KEY LOCK IN FUNCTI	Key reminder function mode can be changed to operation with this mode On: Operate Off: Non-operation	
HAZARD ANSWER BACK	Hazard reminder function mode by door request switch and Intelligent Key button can be selected from the following with this mode Lock Only: Door lock operation only Unlock Only: Door unlock operation only Lock/Unlock: Lock and unlock operation Off: Non-operation	
ANS BACK I-KEY LOCK	Buzzer reminder function (lock operation) mode by door request switch 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 operation with this mode On: Operate Off: Non-operation	
SHORT CRANKING OUTPUT	Starter motor can operate during the times below	
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 operation time can be changed in this mode • MODE 1: OFF • MODE 2: 30 sec. • MODE 3: 1 minute • MODE 4: 2 minutes • MODE 5: 3 minutes • MODE 6: 4 minutes • MODE 7: 5 minutes	
HORN WITH KEYLESS LOCK	Horn reminder function mode by Intelligent Key button can be selected from the following with this mode On: Operate Off: Non-operation	
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.	

< SYSTEM DESCRIPTION >

Monitor item	Description
WELCOME LIGHT SELECT	Welcome light function mode can be selected from the following with this mode • Puddle/Outside Handle • Room lamp • Head & Tail Lamps (this item is displayed, but cannot be used) • Heart Beat
WELCOME LIGHT OP SET	Welcome light function mode can be changed to operation with this mode On: Operate Off: Non-operation

SELF-DIAG RESULT

Refer to BCS-58, "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 -BD/TR	Indicates [On/Off] condition of back door request switch	
PUSH SW	Indicates [On/Off] condition of push-button ignition switch	
CLUTCH SW	NOTE: This item is displayed, but cannot be monitored	
BRAKE SW 1	Indicates [On/Off]* condition of stop lamp switch power supply	
BRAKE SW 2	Indicates [On/Off] condition of stop lamp 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/Stall/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 combination meter by numerical value [Km/h]	
VEH SPEED 2	Display the vehicle speed signal received from ABS or VDC or TCM by numerical value [Km/h]	
DOOR STAT-DR	Indicates [LOCK/READY/UNLK] condition of unlock sensor	

Revision: 2014 October BCS-27 2015 QX80

BCS

K

Α

В

D

Е

F

G

Н

Ν

0

< SYSTEM DESCRIPTION >

Monitor Item	Condition
DOOR STAT-AS	Indicates [LOCK/READY/UNLK] 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
PRMT RKE STRT	NOTE: This item is displayed, but cannot be monitored
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-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
SHFTLCK SLNID PWR SPLY	Indicates [On/Off] condition of shift lock solenoid

^{*:} OFF is displayed when brake pedal is depressed while brake switch power supply is OFF.

ACTIVE TEST

Test item	Description		
BATTERY SAVER	This test is able to check interior room lamp operation On: Operate Off: Non-operation		
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation On: Operate Off: Non-operation		
INSIDE BUZZER	This test is able to check warning chime in combination meter operation Take Out: Take away warning chime sounds when CONSULT screen is touched Key: Key warning chime sounds when CONSULT screen is touched Knob: OFF position warning chime sounds when CONSULT screen is touched Off: Non-operation		
INDICATOR	This test is able to check warning lamp operation KEY ON: "KEY" Warning lamp illuminates when CONSULT screen is touched KEY IND: "KEY" Warning lamp blinks when CONSULT screen is touched Off: Non-operation		
INT LAMP	This test is able to check interior room lamp operation On: Operate Off: Non-operation		
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 monitored • P position warning displays when "SFT P" on CONSULT screen is touched • INSRT: This item is displayed, but cannot be monitored • BATT: This item is displayed, but cannot be monitored • Take away through window warning displays when "NO KY" on CONSULT screen is touched • Take away warning display when "OUTKEY" on CONSULT screen is touched • OFF position warning display when "LK WN" on CONSULT screen is touched		
FLASHER	This test is able to check security hazard lamp operation The hazard lamps are activated after "LH/RH/Off" on CONSULT screen is touched		

Revision: 2014 October BCS-28 2015 QX80

< SYSTEM DESCRIPTION >

Test item	Description
P RANGE	This test is able to check A/T shift selector power supply On: Operate Off: Non-operation
ENGINE SW ILLUMI	This test is able to check push-button 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 (push-button ignition switch) operation On: Operate Off: Non-operation
ACC INDICATOR	This test is able to check ACC indicator (push-button ignition switch) operation On: Operate Off: Non-operation
IGNITION ON IND	This test is able to check ON indicator (push-button ignition switch) operation On: Operate Off: Non-operation
HORN	This test is able to check horn operation On: Operate Off: Non-operation
TRUNK/BACK DOOR	NOTE: This item is displayed, but cannot be used

COMB SW

COMB SW: CONSULT Function (BCM - COMB SW)

INFOID:0000000010262521

Α

В

D

Е

F

Н

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	J
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.	K
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.	L
FR WIPER INT [Off/On]	Displays the status of the FR WIPER AUTO switch in combination switch judged by BCM with the combination switch reading function.	
INT VOLUME [1 - 7]	Displays the status of wiper volume dial position judged by BCM with the combination switch reading function.	BCS
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.	N
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.	- IV
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.	0
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.	- P
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.	_

BCS-29 Revision: 2014 October 2015 QX80

< SYSTEM DESCRIPTION >

Monitor item [UNIT]	Description
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.
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)

INFOID:0000000010262522

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)

INFOID:0000000011528940

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	Indicates [YET] at all time.	
CONFIRM ID3	Switches to [DONE] when a registered Intelligent Key backside is contacted to push-button ignition switch.	
CONFIRM ID2		
CONFIRM ID1		
NOT REGISTERED	Indicates [ID OK] when key ID that is registered is received or is not yet received. Indicates [ID NG] when key ID that is not registered is received.	
TP 4		
TP 3	Indicates the number of IDs that are registered	
TP 2	Indicates the number of IDs that are registered.	
TP 1		
PUSH SW	Indicates [ON/OFF] condition of push-button ignition switch.	

ACTIVE TEST

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

WORK SUPPORT

< SYSTEM DESCRIPTION >

Service item	Description
CONFIRM DONGLE ID	It is possible to check that dongle unit is applied to the vehicle.

BATTERY SAVER

BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)

INFOID:0000000011528945

Α

В

D

Е

F

WORK SUPPORT

Service item	Setting item		Setting
	MODE 1	30 min.	Sets the interior room lamp battery saver timer operating
	MODE 2	60 min.	time. NOTE:
ROOM LAMP TIMER SET	MODE 3	15 min.	The factor setting is 10 minutes. The setting cannot be returned to the factory setting, when the setting is changed once.
BATTERY SAVER SET	On*	With the exterior lamp battery saver function	
BATTERT SAVER SET	Off	Without the exterior lamp battery saver function	
	MODE 1	Without	
	MODE 2	30 min.	
IGN BATTERY SAVER SET	MODE 3*	10 min.	Sets the ignition battery saver timer operating time.
	MODE 4	5 min.	
	MODE 5	60 min.	
	MODE 1	Without	
	MODE 2*	30 min.	
ACC BATTERY SAVER SET	MODE 3	10 min.	Sets the accessory battery saver timer operating time.
	MODE 4	5 min.	
	MODE 5	60 min.	

^{*:} 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
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)
REQ SW-RR [On/Off]	NOTE: This item is displayed, but cannot be monitored
REQ SW-RL [On/Off]	NOTE: This item is displayed, but cannot be monitored
PUSH SW [On/Off]	Indicates [On/Off] condition of push-button ignition switch
UNLK SEN -DR [On/Off]	Indicates [On/Off] condition of driver door UNLOCK status
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)

BCS

K

L

Ν

0

Р

Revision: 2014 October BCS-31 2015 QX80

< SYSTEM DESCRIPTION >

Monitor item [Unit]	Description
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 switch
KEY CYL UN-SW [On/Off]	Indicated [On/Off] condition of unlock signal from door key cylinder switch
TRNK/HAT MNTR [On/Off]	NOTE: This item is displayed, but cannot be 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
BATTERY SAVER	Off	Cuts the interior room lamp power supply.
	On	Outputs the interior room lamp power supply.

TRUNK

TRUNK: CONSULT Function (BCM - TRUNK)

INFOID:0000000011528938

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 switch
UNLK SEN -DR	Indicates [On/Off] condition of unlock sensor
VEH SPEED 1	Indicates [Km/h] condition of vehicle speed signal from combination meter
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

THEFT ALM

THEFT ALM: CONSULT Function (BCM - THEFT)

INFOID:0000000011528939

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.

< SYSTEM DESCRIPTION >

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 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	
UNLK SEN -DR	Indicates [ON/OFF] condition of driver door UNLOCK status.	
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch (driver side).	
DOOR SW-AS	Indicates [ON/OFF] condition of front door switch (passenger side).	
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 door key cylinder.	
KEY CYL UN-SW	Indicates [ON/OFF] condition of unlock signal from door key cylinder.	
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-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.	
ORK SUPPORT		
Service Item	Description	

Service 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. Security indicator lamp is turned on when "ON" on CONSULT screen is touched.
VEHICLE SECURITY HORN	This test is able to check horn operation. Horn is activated for 0.5 seconds after "ON" on CONSULT screen is touched.
HEADLAMP(HI)	This test is able to check headlamp operation. Headlamps are activated for 0.5 seconds after "ON" on CONSULT screen is touched.
FLASHER	This test is able to check hazard warning lamp operation. Hazard warning lamps are activated after "ON" on CONSULT screen is touched.

RETAIND PWR

RETAIND PWR : CONSULT Function (BCM - RETAINED PWR)

INFOID:0000000011528941

BCS

0

Data monitor

Revision: 2014 October BCS-33 2015 QX80

< SYSTEM DESCRIPTION >

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
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)

INFOID:0000000010262528

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
	Off	OFF
OIL PRESSURE SW	On	BCM transmits the oil pressure switch signal to the combination meter via CAN communication, which illuminates the oil pressure warning lamp in the combination meter.

Α

В

ECU DIAGNOSIS INFORMATION

BCM

Reference Value INFOID:0000000010262529

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
IX WIF LIX I II	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch AUTO	Off
TR WIFER IN	Front wiper switch AUTO	On
FR WIPER STOP	Front wiper is not in STOP position	Off
FR WIFER STOP	Front wiper is in STOP position	On
NT VOLUME	Wiper volume dial is in a dial position 1 - 7	Wiper volume dial po- sition
RR WIPER ON	Other than rear wiper switch ON	Off
XIX VVIF LIX OIN	Rear wiper switch ON	On
RR WIPER INT	Other than rear wiper switch INT	Off
	Rear wiper switch INT	On
RR WASHER SW	Rear washer switch OFF	Off
	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
TUDNI CIONAL D	Other than turn signal switch RH	Off
TURN SIGNAL R	Turn signal switch RH	On
TURN SIGNAL L	Other than turn signal switch LH	Off
TURN SIGNAL L	Turn signal switch LH	On
TAIL LAMD OW	Other than lighting switch 1ST and 2ND	Off
TAIL LAMP SW	Lighting switch 1ST or 2ND	On
LII DEAM CW	Other than lighting switch HI	Off
HI BEAM SW	Lighting switch HI	On
JEAD LAMD CW/4	Other than lighting switch 2ND	Off
HEAD LAMP SW 1	Lighting switch 2ND	On
JEAD LAMB CW 2	Other than lighting switch 2ND	Off
HEAD LAMP SW 2	Lighting switch 2ND	On
DA COINIO CIA/	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
ALITO LIGHT CV	Other than lighting switch AUTO	Off
AUTO LIGHT SW	Lighting switch AUTO	On

BCS-35 Revision: 2014 October 2015 QX80

BCM

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
FR FOG SW	Front fog lamp switch OFF	Off
1 K 1 00 0W	Front fog lamp switch ON	On
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off
DOOR SW-DR	Driver door closed	Off
	Driver door opened	On
DOOR SW-AS	Passenger door closed	Off
	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
DOOK OW-KIK	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
DOOK SW-DK	Back door opened	On
CDL LOCK SW	Other than power door lock switch LOCK	Off
DDL LOCK SW	Power door lock switch LOCK	On
	Other than power door lock switch UNLOCK	Off
CDL UNLOCK SW	Power door lock switch UNLOCK	On
(E) (O) (I I C) (I)	Other than driver door key cylinder LOCK position	Off
KEY CYL LK-SW	Driver door key cylinder LOCK position	On
(E) (O) (L D) O) (Other than driver door key cylinder UNLOCK position	Off
KEY CYL UN-SW	Driver door key cylinder UNLOCK position	On
	Hazard switch is OFF	Off
HAZARD SW	Hazard switch is ON	On
25.45 DEF 0.W	Rear window defogger switch OFF	Off
REAR DEF SW	Rear window defogger switch ON	On
H/L WSR SW	NOTE: The item is indicated, but not monitored.	Off
ED/DD ODEN OW	Back door opener switch OFF	Off
TR/BD OPEN SW	While the back door opener switch is turned ON	On
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
FAN ON SIG	NOTE: The item is indicated, but not monitored.	Off
AIR COND SW	NOTE: The item is indicated, but not monitored.	Off
RKE-LOCK	LOCK button of the key is not pressed	Off
ANL-LOON	LOCK button of the key is pressed	On
DKE TINI OOK	UNLOCK button of the key is not pressed	Off
RKE-UNLOCK	UNLOCK button of the key is pressed	On
RKE-TR/BD	NOTE: The item is indicated, but not monitored.	Off
DICE DANIC	PANIC button of the key is not pressed	Off
RKE-PANIC	PANIC button of the key is pressed	On
DIVE MODE OUG	LOCK/UNLOCK button of the key is not pressed and held simultaneously	Off
RKE-MODE CHG	LOCK/UNLOCK button of the key is pressed and held simultaneously	On

A

В

С

D

Е

F

G

Н

J

Κ

L

BCS

Ν

0

Р

Monitor Item	Condition	Value/Status
ODTI CENI (DTCT)	Bright outside of the vehicle	Close to 5 V
OPTI SEN (DTCT)	Dark outside of the vehicle	Close to 0 V
ODTI CENI (EILT)	Bright outside of the vehicle (Lighting switch AUTO)	Close to 5 V
OPTI SEN (FILT)	Dark outside of the vehicle (Lighting switch AUTO)	Close to 1.50 V
OPTICAL SENSOR	NOTE: The item is indicated, but not monitored.	Off
	No rain (or very light rain)	Off
	Light rain	LOW
RAIN SENSOR	Heavy rain	HIGH
	When liquid is splashed on the front window	SPLSH
	Rain sensor internal error	NG
DEC 0W DD	Driver door request switch is not pressed	Off
REQ SW -DR	Driver door request switch is pressed	On
D=0.0W.4.0	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 OW DD/TD	Back door request switch is not pressed	Off
REQ SW -BD/TR	Back door request switch is pressed	On
DUOU OW	Push-button ignition switch (push switch) is not pressed	Off
PUSH SW	Push-button ignition switch (push switch) is pressed	On
CLUCH SW	NOTE: The item is indicated, but not monitored.	Off
DDAKE OWA	The brake pedal is not depressed	Off
BRAKE SW 1	The brake pedal is depressed	On
	The brake pedal is depressed when No. 7 fuse is blown	Off
BRAKE SW 2	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
	Selector lever in P position	Off
DETE/CANCL SW	Selector lever in any position other than P	On
OFT DAIAL CO.	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
HNIK CEN DD	Driver door is locked	Off
UNLK SEN -DR	Driver door is unlocked	On
DUOLLOW IDEA	Push-button ignition switch (push-switch) is not pressed	Off
PUSH SW -IPDM	Push-button ignition switch (push-switch) is pressed	On
10N BLV4 = 75	Ignition switch in OFF or ACC position	Off
IGN RLY1 -F/B	Ignition switch in ON position	On

Monitor Item	Condition	Value/Status
DETE SW -IPDM	Selector lever in any position other than P	Off
DETE 3W -IF DIVI	Selector lever in P position	On
SFT PN -IPDM	Selector lever in any position other than P and N	Off
SELEN-IEDIVI	Selector lever in P or N position	On
SFT P -MET	Selector lever in any position other than P	Off
SFI F-IVIET	Selector lever in P position	On
CET NI MET	Selector lever in any position other than N	Off
SFT N -MET	Selector lever in N position	On
	Engine stopped	Stop
ENGINE CTATE	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 (60 seconds)	READY
	Driver door is unlocked	UNLOCK
	Passenger door is locked	LOCK
DOOR STAT-AS	Wait with selective UNLOCK operation (60 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Driver side door is open after ignition switch is turned OFF (Shift position is in the P position)	Reset
	Ignition switch ON	Set
DOME ENG CEDE	The engine start is prohibited	Reset
PRMT ENG STRT	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
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.	_
CONEDMID ALL	The key ID that the NATS antenna amp. receives is not recognized by any key ID registered to BCM.	Yet
CONFRM ID ALL	The key ID that the NATS antenna amp. receives is recognized by any key ID registered to BCM.	Done
CONFIDM ID4	The key ID that the NATS antenna amp. receives is not recognized by the fourth key ID registered to BCM.	Yet
CONFIRM ID4	The key ID that the NATS antenna amp. receives is recognized by the fourth key ID registered to BCM.	Done

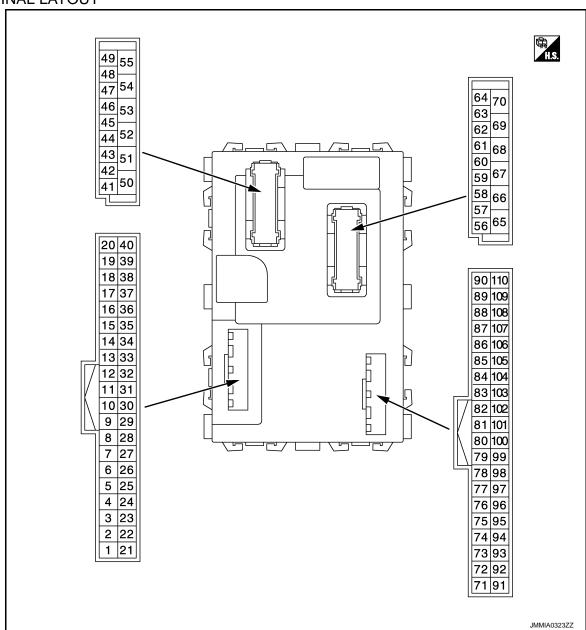
< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status	Λ
CONFIRM ID3	The key ID that the NATS antenna amp. receives is not recognized by the third key ID registered to BCM.	Yet	- A
CONFIRM IDS	The key ID that the NATS antenna amp. receives is recognized by the third key ID registered to BCM.	Done	В
CONFIRM ID2	The key ID that the NATS antenna amp. receives is not recognized by the second key ID registered to BCM.	Yet	_
CONFIRM ID2	The key ID that the NATS antenna amp. receives is recognized by the second key ID registered to BCM.	Done	_ C
CONFIRM ID1	The key ID that the NATS antenna amp. receives is not recognized by the first key ID registered to BCM.	Yet	D
COM IKWIDI	The key ID that the NATS antenna amp. receives is recognized by the first key ID registered to BCM.	Done	
NOT REGISTERED	BCM detects registered key ID, or BCM does not detect key ID.	ID OK	Е
THO I REGIOTERED	BCM detects non-registration key ID.	ID NG	
TP 4	The ID of fourth key is not registered to BCM	Yet	F
11 7	The ID of fourth key is registered to BCM	Done	- '
TP 3	The ID of third key is not registered to BCM	Yet	_
II J	The ID of third key is registered to BCM	Done	G
ΓP 2	The ID of second key is not registered to BCM	Yet	_
11 4	The ID of second key is registered to BCM	Done	
ΓP 1	The ID of first key is not registered to BCM	Yet	
	The ID of first key is registered to BCM	Done	
AIR PRESS FL	NOTE: The item is indicated, but not used.	0kPa	-
AIR PRESS FR	NOTE: The item is indicated, but not used.	0kPa	J
AIR PRESS RR	NOTE: The item is indicated, but not used.	0kPa	_
AIR PRESS RL	NOTE: The item is indicated, but not used.	0kPa	K
ID REGST FL1	NOTE: The item is indicated, but not used.	Done	_ L
ID REGST FR1	NOTE: The item is indicated, but not used.	Done	
D REGST RR1	NOTE: The item is indicated, but not used.	Done	ВС
WARNING LAMP	NOTE: The item is indicated, but not used.	Off	_ N
BUZZER	NOTE: The item is indicated, but not used.	Off	_
	Normal engine run mode (brake pedal is depressed)	On	_ 0
SHFTLCK SLNID PWR SPLY	Normal engine run mode (brake pedal is not depressed) Remote engine run mode	Off	

Revision: 2014 October BCS-39 2015 QX80

Р

TERMINAL LAYOUT



PHYSICAL VALUES

	nal No. color)	Description			0 111	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF Turn signal switch RH Lighting switch HI	0 V
2 (BR/Y)	Ground	Combination switch INPUT 5	Input	Combination switch (Wiper volume	Lighting switch 1ST	10 5 0 PKIB4958J 1.0 V
				dial 4)	Lighting switch 2ND	(V) 15 10 5
					All switches OFF	2.0 V 0 V
					Turn signal switch LH	
					Lighting switch PASS	(V) 15
3 (GR)	Ground	Combination switch INPUT 4	Input	Combination switch (Wiper volume	Lighting switch 2ND	10 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
(=-7				dial 4)	Front fog lamp switch ON	(V) 15 10 5 0 PKIB4956J
					All 21 055	0.8 V
					All switches OFF	0 V
					Front wiper switch LO	(V)
4		On making a the control of the contr		Combination	Front wiper switch MIST	(V) 15 10 5
4 (L)	Ground	Combination switch INPUT 3	Input	switch (Wiper volume dial 4)	Front wiper switch AUTO Lighting switch AUTO	5 0 ++10ms PKIB4958J 1.0 V

	nal No.	Description			0 1111	Value
+ (vvire	e color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper volume dial 4)	0 V
					Front washer switch ON (Wiper volume dial 4)	(V) 15
					Rear washer switch ON (Wiper volume dial 4)	10 5
5 (G)	Ground	Combination switch INPUT 2	Input	Combination switch	Any of the condition below with all switches OFF • Wiper volume dial 1 • Wiper volume dial 5 • Wiper volume dial 6	++10ms PKIB4958J
					Rear wiper switch ON (Wiper volume dial 4)	(V) 15 10 5 0
					All switches OFF	0.8 V
					(Wiper volume dial 4)	0 V
					Front wiper switch HI (Wiper volume dial 4)	(V) 15
					Rear wiper switch INT (Wiper volume dial 4)	10 5 0
					Wiper volume dial 3 (All switches OFF)	→ +10ms PKIB4958J
6 (V)	Ground	Combination switch INPUT 1	Input	Combination switch	Any of the condition below with all switches OFF • Wiper volume dial 1 • Wiper volume dial 2	(V) 15 0 5 0 1.9 V
					Any of the condition below with all switches OFF • Wiper volume dial 6 • Wiper volume dial 7	(V) 15 10 5 0 ++10ms PKIB4956J 0.8 V

	inal No.	Description	Description				0 110	Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)		
8 (V)	Ground	Power window switch communication	Input/ Output	Ignition switch O	N	(V) 15 10 5 0 20ms PKIA7023E		
9 (R)	Ground	Stop lamp switch 1	Input	Stop lamp switch	OFF (Brake pedal is not depressed) ON (Brake pedal is de-	9.0 - 10 V 0 V		
					pressed)	Battery voltage		
				Ignition switch O	FF	12 V		
11 (R)	Ground	Ground Rain sensor serial Input/ Output		Ignition switch O	N	(V) 15 10 5 0 JPMIA0156GB 8.0 - 9.0 V		
4.4			Impition ou		Lanitian avsitale	When bright outside of the vehicle	Close to 5 V	
14 (P/B)	Ground	Optical sensor	Input	Ignition switch ON	When dark outside of the vehicle	Close to 0 V		
16 (L/O)	Ground	Dimmer signal	Output	Ignition switch	Either of the following conditions • Lighting switch OFF • The area around the vehicle is bright (Shine a light on the optical sensor)	0 V		
					The area around the vehi- cle is dark (Block the light from the optical sensor)	12 V		
17	Ground	Sensor power sup-	Output	Ignition switch	OFF, ACC	0 V		
(Y/G)		ply		g : 2 2	ON	5 V		
18 (B/Y)	Ground	Receiver and sensor ground	Input	Ignition switch O	N	0 V		
					Turn signal switch OFF	0 V		
19 (G/Y)	Ground	Turn signal RH (Front)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0		

	nal No.	Description				Val.	
(Wire	color)	Signal name	Input/ Output		Condition	Value (Approx.)	
					Turn signal switch OFF	0 V	
20 (G)	Ground	Turn signal LH (Front)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 18 18 18 PKIC6370E 6.0 - 7.0 V	
21 (P)	Ground	NATS antenna amp.	Input/ Output	During waiting	Intelligent Key backside is contacted to push-button ignition switch, turn ignition switch ON.	Just after pressing push- button ignition switch. Pointer of tester should move.	
22	Ground	Remote keyless en-		Ignition switch	Waiting	(V) 6 4 2 0 100 ms JMKIA5952GB	
(W/B)		try receiver RSSI	Input	OFF		When pressing and hold- ing either button on Intelli- gent Key	(V) 6 4 2 0 100 ms JMKIA5953GB
					ON	0 V	
23 (GR/R)	Ground	Security indicator lamp	Output	Security indicator lamp	Blinking (Ignition switch OFF)	(V) 15 10 5 0 JPMIA0590GB 11.0 - 12.0 V	
24*			Innut/		OFF	Battery voltage	
(SB)	Ground	Dongle link	Input/ Output	Ignition switch O	FF	5 V	
25 (LG/R)	Ground	NATS antenna amp.	Input/ Output	During waiting	Intelligent Key backside is contacted to push-button ignition switch, turn ignition switch ON.	Just after pressing push- button ignition switch. Pointer of tester should move.	
26		Intelligent Key iden-			FF o ON, after unlocking egistered to BCM	5 V	
(O)	Ground	tification	Output		FF o ON, after unlocking registered to BCM	0 V	
29	Ground	Hazard switch	Input	Hazard switch	OFF	12 V	
(W)	Cround	TIGEGIA SWITCH	прис	. Idzaid Switch	ON	0 V	

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value	А
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)	A
					Pressed	0 V	В
30 (W/L)	Ground	Back door opener switch	Input	Back door opener switch	Not pressed	(V) 15 10 5 0 10 ms JPMIA0012GB	C
						1.0 - 1.5 V	-
31 (W/G)	Ground	Front door lock as- sembly driver side (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 10 5 0	F
		(Officer Serisor)				PKIB4960J 7.0 - 8.0 V	G
					UNLOCK status (Unlock sensor switch ON)	0 V	
					All switches OFF (Wiper volume dial 4)	(V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V	H I
32 (LG)	Ground	Combination switch OUTPUT 5	Output	Combination switch	Front fog lamp switch ON (Wiper volume dial 4)	(I)	K
					Rear wiper switch ON (Wiper volume dial 4)	(V) 15 10 5	
					Any of the condition below with all switches OFF • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 6 • Wiper volume dial 7	0	ВС

0

Ν

Ρ

	nal No.	Description				Value
(Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper volume dial 4)	(V) 15 10 5 0 → 10ms PKIB4960J 7.0 - 8.0 V
33 (Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch	Lighting switch 1ST (Wiper volume dial 4)	
, ,					Lighting switch AUTO (Wiper volume dial 4)	(V) 15 10
					Rear wiper switch INT (Wiper volume dial 4)	5 0
					Any of the condition below with all switches OFF • Wiper volume dial 1 • Wiper volume dial 5 • Wiper volume dial 6	PKIB4958J 1.2 V
					All switches OFF (Wiper volume dial 4)	(V) 15 10 5 0 → 10ms PKIB4960J 7.0 - 8.0 V
34 (W)	Ground	Combination switch OUTPUT 3	Output	Combination switch	Lighting switch 2ND (Wiper volume dial 4)	
					Lighting switch HI (Wiper volume dial 4)	(V) 15 10
					Rear washer switch ON (Wiper volume dial 4)	5
					Any of the condition below with all switches OFF • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 3	PKIB4958J

	nal No.	Description	l			Value	Λ
(Wire	color)	Signal name	Input/ Output		Condition	(Approx.)	А
35		Combination switch		Combination switch	All switches OFF	(V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V	B C D
(R/W)	Ground	OUTPUT 2	Output	(Wiper volume dial 4)	Lighting switch 2ND	(1)	
				,	Lighting switch PASS Front wiper switch AUTO	(V) 15 10 5	Е
					Front wiper switch HI	0 → +10ms PKIB4958J	F
						1.2 V	G
36		Combination switch		Combination switch	All switches OFF	(V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V	Н
(SB)	Ground	OUTPUT 1	Output	(Wiper volume dial 4)	Turn signal switch RH		J
				diai 4)	Turn signal switch LH	(V) 15 10	J
					Front wiper switch LO Front wiper switch MIST	5 0	K
					Front washer switch ON	→ →10ms PKIB4958J	L
37	Ground	P position	Input	Selector lever	P position	0 V	
(G/Y)	Ground	η ρυσιμυπ	Input	Selector level	Any position other than P	12 V	BCS
39 (L)	Ground	CAN-H	Input/ Output		_	_	
40 (P)	Ground	CAN-L	Input/ Output		_	_	Ν
43 (Y/L)	Ground	Back door switch	Input	Back door switch	OFF (When back door closed)	(V) ₁₅ 10 5 0 + 10ms JPMIA0593GB 9.0 - 10.0 V	O P
					ON (When back door opened)	0 V	

	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
44		Rear wiper stop po-		Ignition switch	Rear wiper stop position	12 V
(G/W)	Ground	sition	Input	ON ON	Any position other than rear wiper stop position	0 V
45 (W)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closed)	(V) 15 0 5 0 → 10ms PKIB4960J 7.0 - 8.0 V
					ON (When passenger door opened)	0 V
46 (GR)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closed)	(V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V
					ON (When rear RH door opened)	0 V
47 (GR/R)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closed)	(V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V
					ON (When driver door opened)	0 V
48 (O)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closed)	(V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V
					ON (When rear door LH opened)	0 V
49	Ground	Luggage room lamp	Output	Luggage room	OFF	12 V
(BR/Y)	Crodila		Carput		ON un mode (Brake pedal is de-	0 V
50 (B/Y)	Ground	Remote engine start	Output	Normal engine not depressed Remote engine		Battery voltage

	nal No.	Description				Value
+ (VVire	e color)	Signal name	Input/ Output		Condition	(Approx.)
51	Ground	Back door request	Input	Back door re- ON (Pressed)		0 V
(W/R)	Giodila	switch	Input	quest switch	OFF (Not pressed)	12 V
54	Ground	Rear wiper	Output	Poor winer	OFF (Stopped)	0 V
(L)	Giouna	Real wiper	Output	Rear wiper	ON (Activated)	12 V
55	Ground	Rear door UNLOCK	Output	Rear door	UNLOCK (Actuator is activated)	12 V
(G)	Ground	Real door oncook	Output	ixeai dooi	Other then UNLOCK (Actuator is not activated)	0 V
					p battery saver is activated. room lamp power supply)	0 V
56 (W/R)	Ground	Interior room lamp power supply	Output	vated.	p battery saver is not acti- rior room lamp power sup-	12 V
57 (LG)	Ground	Battery power sup- ply	Input	Ignition switch Ol	FF	Battery voltage
58 (R/W)	Ground	Air bag signal	Input		_	_
59	Ground	Passenger door UN-	Output	Passenger door	UNLOCK (Actuator is activated)	12 V
(G)	Cround	LOCK	Odiput	1 dooringer door	Other then UNLOCK (Actuator is not activated)	0 V
					Turn signal switch OFF	0 V
60 (G)	Ground	Turn signal LH (Side and rear)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0
					Turn signal switch OFF	0 V
61 (G/Y)	Ground	Turn signal RH (Side and rear)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 18 18
62	Ground	Ston Jama	Outout	Stan lama	ON	6.0 - 7.0 V 0 V
(R)	Ground	Step lamp	Output	Step lamp	OFF	12 V
63	Ground	Interior room lamp	Output	Interior room	OFF	12 V
(BR)	Giodila	control	Output	lamp	ON	0 V

	Terminal No. (Wire color)		Description			Value	
+ (VVire	color)	Signal name	Input/ Output		Condition	(Approx.)	
					Engine stopped (Selector lever is in P position)	0 V	
64 (GR/R)	Ground	Cranking request	input	Ignition switch ON	Engine stopped (Selector lever is not in P position)	12 V	
					Engine running	12 V	
65	Ground	All doors, fuel lid	Output	All doors, fuel lid	LOCK (Actuator is activated)	12 V	
(R)	0.00.10	LOCK	Carpar	7 300.0, 1303	Other then LOCK (Actuator is not activated)	0 V	
66	Ground	Driver door, fuel lid	Output	Driver door, fuel	UNLOCK (Actuator is activated)	12 V	
(V)	Cround	UNLOCK	Odiput	lid	Other then UNLOCK (Actuator is not activated)	0 V	
67 (B)	Ground	Ground	Output	Ignition switch OI	N	0 V	
68 (Y)	Ground	P/W power supply (IGN)	Output	Ignition switch ON		12 V	
69 (W)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		12 V	
70 (Y)	Ground	Battery power sup- ply	Input	Ignition switch OFF		Battery voltage	
71	Ground	Remote keyless en-	emote keyless en- y receiver commu- Input	Inniion swiich	Ignition switch	Waiting	(V) 15 10 5 0 JMKIA3838GB
(G/R)		nication		OFF	When operating either button on Intelligent Key	(V) 15 10 5 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW	
72	Ground	Puddle lamp control	Output	Puddle lamp	OFF	12 V	
(P)	-	,	1	'	ON OSE (LOOK)	0 V	
73 (W)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage	
					ON	0 V	
74 (Y/B)	Ground	Trailer turn signal RH control	Output	Ignition switch ON	Turn signal switch OFF Turn signal switch RH	Battery voltage (V) 15 10 5 PKIC6370E 6.0 - 7.0 V	

Terminal No. Description (Wire color)		Condition		Value		
+	-	Signal name	Input/ Output		Condition	(Approx.)
75 (LG/R)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed) OFF (Not pressed)	0 V 12 V
76 (SB)	Ground	Push-button ignition switch (push switch)	Input	Push-button ig- nition switch (push switch)	Pressed Not pressed	0 V 12 V
					Turn signal switch OFF	Battery voltage
77 (O/L)	Ground	Trailer turn signal LH control	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 10 PKIC6370E 6.0 - 7.0 V
78	Ground	Driver door antenna	Output	When the driver door request	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	(V) 15 10 5 0 5 0 JMKIA5954GB
78 (P/B)	Glound	(+)	Output	switch is operated with ignition switch ON	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 JMKIA5956GB
79	Ground	Ground Driver door antenna (-)	Output	When the driver door request switch is operat- ed with ignition switch ON	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	(V) 15 10 5 0 JMKIA5954GB
(V)	Ground				When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 JMKIA5955GB

	nal No. color)	Description				Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
80		Passenger door an-		When the passenger door request switch is	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	(V) 15 10 50 MKIA5954GB
(LG/B)	Ground	tenna (+)	Output	operated with ignition switch ON	When Intelligent Key is in the antenna detection area (The distance between In- telligent Key and antenna: 80 cm or less)	(V) 15 10 5 0
81	Ground	Passenger door an-		When the passenger door request switch is operated with ignition switch ON	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	(V) 15 10 5 0 500 ms JMKIA5954GB
(Y/R)	Glound	tenna (-)	Output		When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 500 ms
82	Ground	ound Back door antenna Outp		When the back door request switch is operated with ignition switch ON	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	(V) 15 10 5 0
62 (W/G)			Output		When Intelligent Key is in the antenna detection area (The distance between In- telligent Key and antenna: 80 cm or less)	(V) 15 10 500 ms JMKIA5955GB

Terminal No. Description (Wire color)		Open distant		Value			
+	- COIOI)	Signal name	Input/ Output		Condition	(Approx.)	F
83	Ground	Back door antenna (-	Outout	When the back door request	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	(V) 15 10 5 0 5 0 JMKIAS954GB	()
(B/W)	Giouria)	Output	switch is operat- ed with ignition switch ON	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 JMKIA5955GB	E
84 (BR) Ground	Ground	Room antenna 1 (+) (Instrument center)	Output	Ignition switch ON	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA5951GB	(-
	Ground				When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB	ŀ
85	Ground	Room antenna 1 (-)	Output	Ignition switch	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA5951GB	В
(Y)	Ground	(Instrument center)	Caiput	ON	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s	F

	nal No.	Description				Value	
+ (vvire	e color)	Signal name	Input/ Output		Condition	(Approx.)	
86		Room antenna 2 (+)		Ignition switch	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA5951GB	
(W)	Ground	(Console)	Output	ÖN	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB	
87	Ground	Room antenna 2 (–) (Console)	Output	Ignition switch ON	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA5951GB	
(B)	Glound				When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB	
88	Ground	Luggage room an-	Output	Ignition switch	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA5951GB	
(V)	Ground	tenna (+)	Output	ÓN	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB	

	nal No. color)	Description			Condition	Value	А
+	-	Signal name	Input/ Output		Condition	(Approx.)	, (
					When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA5951GB	С
89 (G)	Ground	Luggage room antenna (-)	Output	Ignition switch ON	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB	E
90 (Y)	Ground	Push-button ignition switch illumination	Output	Push-button ig- nition switch illu- mination	ON OFF	12 V 0 V	G
91	Cround	LOCK in digates laws	Outnut	LOCK indicator	OFF (Ignition switch OFF)	Battery voltage	Н
(O)	Ground LOCK indicator lamp Output la	lamp	ON	0 V			
					OFF	0 V	
92 (L)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	ON	NOTE: When the illumination brightening/dimming level is in the neutral position (V) 15 10 5 UNDER THE PROPERTY OF THE PROPER	J K L
						6.0 - 7.0 V	
93	Ground	Intelligent Key warn-	Output	Intelligent Key	Sounding	0 V	50
(GR/R)		ing buzzer		warning buzzer	Not sounding	12 V	BC
96 (BB)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V	
(BR)		-	•		ACC or ON	12 V	Ν
97	Ground	Starter relay control	Output	Ignition switch	When selector lever is in P or N position	12 V	
(R/W)				ON	When selector lever is not in P or N position	0 V	0
98	Ground	Ignition relay (IPDM	Output	Ignition switch	OFF or ACC	12 V	
(O)		E/R) control		-	ON	0 V	Р
99 (R)	Ground	Ignition relay-1 con- trol	Output	Ignition switch	OFF or ACC	0 V	
					ON (December 1)	12 V	
100 (P/L)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V	
(F/L)		quesi swilcii		request switch	OFF (Not pressed)	12 V	

	nal No. color)	Description			O a madistic m	Value	
+	-	Signal name	Input/ Output	Condition		(Approx.)	
101	Ground	Ignition power sup-	Output	Ignition switch	OFF or ACC	0 V	
(W/B)	Ground	ply No. 2	Output	Igrillion Switch	ON	12 V	
102	Ground	P/N position	Input	Selector lever	P or N position	12 V	
(BR)	Giodila	F/N position	прис	Selector level	Except P and N positions	0 V	
104 (R/B)	Ground	A/T shift selector (detention switch) power supply	Output	Ignition switch ON		12 V	
105 (O/L)	Ground	Stop lamp switch 2	Input	Ignition switch OFF		Battery voltage	
106	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	0 V	
(Y/G)	Ground	lay control	Output	ignition switch	ON	12 V	
109 (L/W)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage	
(L/VV)		, , , , , , , , , , , , , , , , , , ,			ACC	0 V	
110 (BR)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF		(V) 15 10 5 0 500 ms JMKIA3838GB	

^{*:} For Canada

Fail-safe

FAIL-SAFE CONTROL BY DTC

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

Display contents of CONSULT	Fail-safe	Cancellation
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI-SCANNING	Inhibit engine cranking	Ignition switch $ON \rightarrow OFF$
B2198: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
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)
B260F: ENG STATE SIG LOST	Inhibit engine cranking	When any of the following conditions are fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
B261B: RES ENG RUN STUCK MALFUNC	Fuel cut	When engine status signal (CAN) is received normally
B26F1: IGN RELAY OFF	Inhibit engine cranking	When the following conditions are fulfilled Ignition switch ON signal (CAN: Transmitted from BCM): ON Ignition switch ON signal (CAN: Transmitted from IPDM E/R): ON
B26F2: IGN RELAY ON	Inhibit engine cranking	When the following conditions are fulfilled Ignition switch ON signal (CAN: Transmitted from BCM): OFF Ignition switch ON signal (CAN: Transmitted from IPDM E/R): OFF

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
B26F3: START CONT RLY ON	Inhibit engine cranking	When the following conditions are fulfilled • Starter control relay signal (CAN: Transmitted from BCM): OFF • Starter control relay signal (CAN: Transmitted from IPDM E/R): OFF
B26F4: START CONT RLY OFF	Inhibit engine cranking	When the following conditions are fulfilled • Starter control relay signal (CAN: Transmitted from BCM): ON • Starter control relay signal (CAN: Transmitted from IPDM E/R): ON
B26F7: BCM	Inhibit engine cranking by Intelligent Key system	When room antenna and luggage room antenna functions normally
B26FE: HOOD SW CAN DIAG ERROR	Inhibit remote engine start	When the following conditions are fulfilled • Power position ON • Hood switch signal (CAN) is received normally

FAIL-SAFE CONTROL BY RAIN SENSOR MALFUNCTION

BCM detects the light and rain sensor serial link error and the rain sensor malfunction.

BCM controls the following fail-safe when rain sensor has a malfunction.

- Front wiper switch AUTO and sensing rain drop: The condition just before the activation of fail-safe is maintained until the front wiper switch is turned OFF.
- Front wiper switch AUTO and not sensing rain drop: Front wiper is LO operation until the front wiper switch is turned off.

REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper stop position signal.

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

Condition of cancellation

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

FAIL-SAFE CONTROL OF COMBINATION SWITCH READING FUNCTION CAUSED BY LOW POWER SUPPLY VOLTAGE

If voltage of battery power supply lower, BCM maintains combination switch reading to the status when input voltage is less than approximately 9 V.

NOTE:

chart.

When voltage of battery power supply is approximately 9 V or more, combination switch reading function returns to normal operation.

DTC Inspection Priority Chart

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

Priority	DTC	
1	B2562: LOW VOLTAGE	Ν
2	U1000: CAN COMM U1010: CONTROL UNIT (CAN)	
3	B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI-SCANNING P2403: PONOLE IN ICC.	0
	B2196: DONGLE NGB2198: NATS ANTENNA AMP	Р

BCS-57 Revision: 2014 October 2015 QX80

BCS

INFOID:0000000010262531

K

Α

В

Е

Priority	DTC
4	 B2555: STOP LAMP B2556: PUSH-BTN IGN SW B2567: VEHICLE SPEED B2601: SHIFT POSITION B2602: SHIFT POSITION B2603: SHIFT POSI STATUS B2604: PNP/CLUTCH SW B2608: STARTER RELAY B2608: STARTER RELAY B2619: ENG STATE SIG LOST B2614: BCM B2615: BCM B2616: BCM B2618: BCM B2618: RES ENG RUN STUCK MALFUNC B2671: IGN RELAY ON B2672: IGN RELAY ON B2673: START CONT RLY ON B2676: BCM B2676: BCM B2677: BCM B2678: BCM B2679: CRANK REQ CIR SHORT B2679: CRANK REQ CIR SHORT B2676: CRANK REQ CIR OPEN B2676: HOOD SW CAN DIAG ERROR U0415: VEHICLE SPEED
5	 B2621: INSIDE ANTENNA B2622: INSIDE ANTENNA B2623: INSIDE ANTENNA
6	 B2626: OUTSIDE ANTENNA B2627: OUTSIDE ANTENNA B2628: OUTSIDE ANTENNA
7	B26E7: TPMS CAN COMM

DTC Index INFOID:0000000010262532

NOTE:

The details of time display are as follows.

- CRNT: A malfunction is detected now.

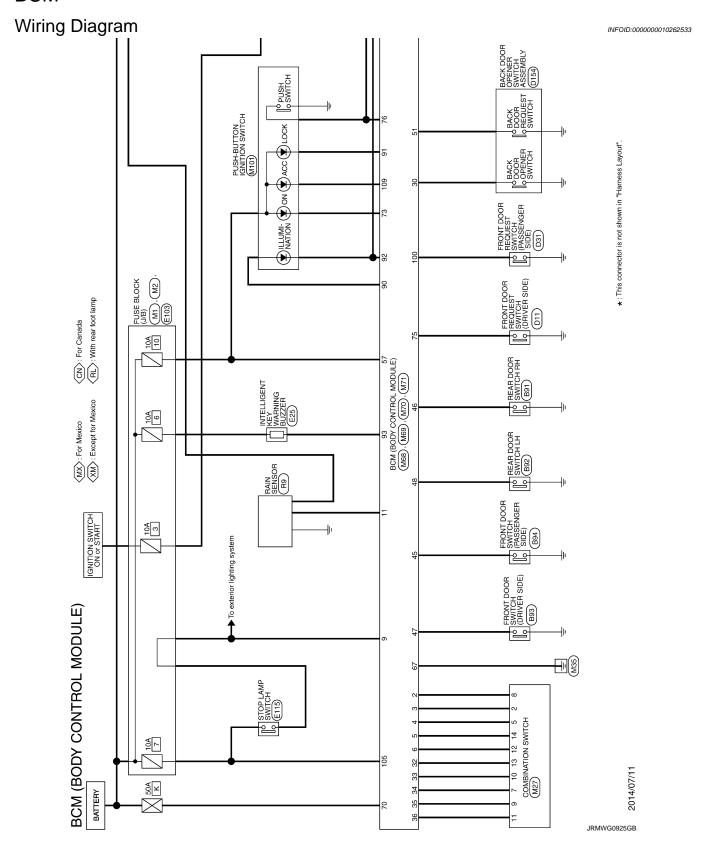
• PAST: A malfunction was detected in the past. IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to BCS-15, "COM-MON ITEM: CONSULT Function (BCM - COMMON ITEM)".

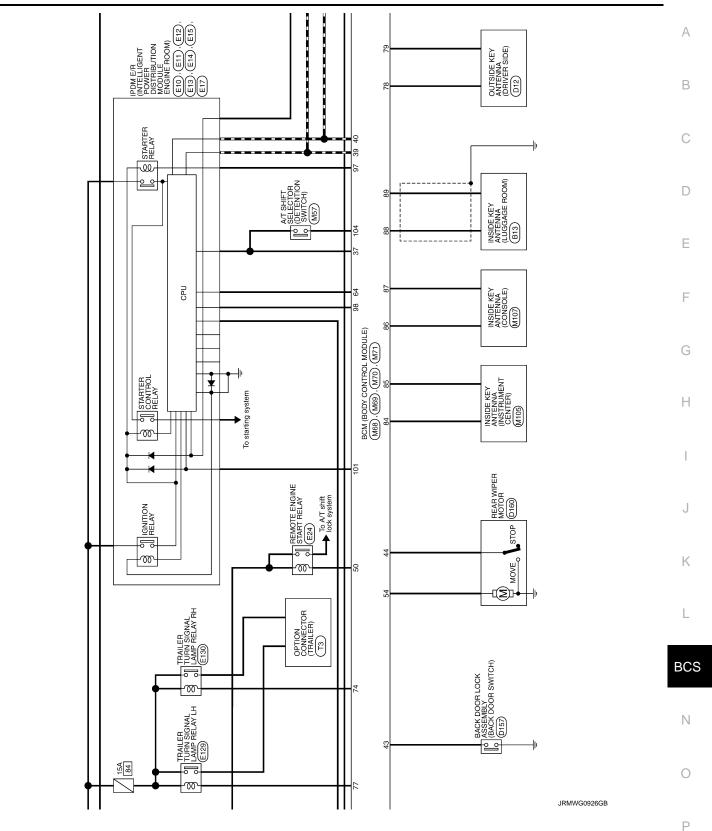
CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warn- ing lamp ON	Reference page
No DTC is detected. further testing may be required.	_	_	_	_
U1000: CAN COMM	_	_	_	BCS-83
U1010: CONTROL UNIT (CAN)	_	_	_	BCS-84
U0415: VEHICLE SPEED	×	_	×	BCS-85
B2192: ID DISCORD BCM-ECM	×	_	_	SEC-62
B2193: CHAIN OF BCM-ECM	×	_	_	<u>SEC-63</u>
B2195: ANTI-SCANNING	×	_	_	<u>SEC-64</u>
B2196: DONGLE NG	×	_	_	<u>SEC-65</u>

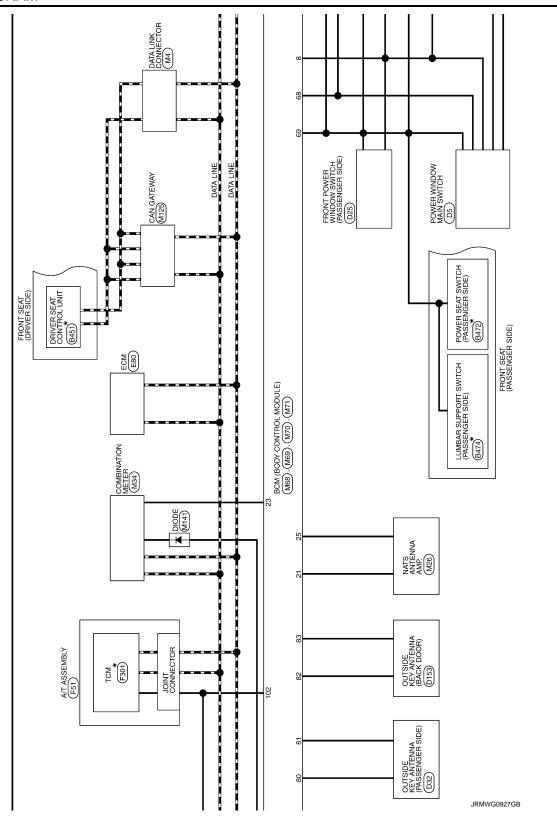
CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warn- ing lamp ON	Reference page	-
B2198: NATS ANTENNA AMP	×	_	_	SEC-67	_
B2555: STOP LAMP	_	×	×	SEC-71	_
B2556: PUSH-BTN IGN SW	_	×	×	SEC-74	-
B2557: VEHICLE SPEED	×	×	×	SEC-76	-
B2562: LOW VOLTAGE	_	×	_	BCS-86	-
B2601: SHIFT POSITION	×	×	×	SEC-77	-
B2602: SHIFT POSITION	×	×	×	SEC-80	-
B2603: SHIFT POSI STATUS	×	×	×	SEC-83	-
B2604: PNP/CLUTCH SW	×	×	×	SEC-87	-
B2605: PNP/CLUTCH SW	×	×	×	SEC-89	=
B2608: STARTER RELAY	×	×	×	SEC-91	-
B260F: ENG STATE SIG LOST	×	×	×	SEC-93	-
B2614: BCM	_	×	×	PCS-58	=
B2615: BCM	_	×	×	PCS-61	=
B2616: BCM	_	×	×	PCS-63	-
B2618: BCM	_	×	×	PCS-65	-
B261A: PUSH-BTN IGN SW	_	×	×	PCS-66	-
B261B: RES ENG RUN STUCK MAL- FUNC	×	×	×	SEC-94	_
B2621: INSIDE ANTENNA	_	×	_	DLK-108	-
B2622: INSIDE ANTENNA	_	×	_	<u>DLK-110</u>	-
B2623: INSIDE ANTENNA	_	×	_	<u>DLK-112</u>	-
B2626: OUTSIDE ANTENNA	_	×	_	DLK-114	-
B2627: OUTSIDE ANTENNA	_	×	_	DLK-116	-
B2628: OUTSIDE ANTENNA	_	×	_	<u>DLK-118</u>	-
B26E7: TPMS CAN COMM	_	_	_	BCS-87	-
B26F1: IGN RELAY OFF	×	×	×	PCS-68	-
B26F2: IGN RELAY ON	×	×	×	PCS-70	-
B26F3: START CONT RLY ON	×	×	×	SEC-95	
B26F4: START CONT RLY OFF	×	×	×	SEC-96	- [
B26F6: BCM	_	×	×	PCS-72	- =
B26F7: BCM	×	×	×	<u>SEC-97</u>	-
B26F8: BCM	_	×	×	SEC-98	-
B26F9: CRANK REQ CIR SHORT	_	×	×	SEC-99	-
B26FA: CRANK REQ CIR OPEN	_	×	×	SEC-101	=
B26FC: KEY REGISTRATION	_	×	×	SEC-103	-
B26FE: HOOD SW CAN DIAG ERROR	×	×	×	SEC-104	-

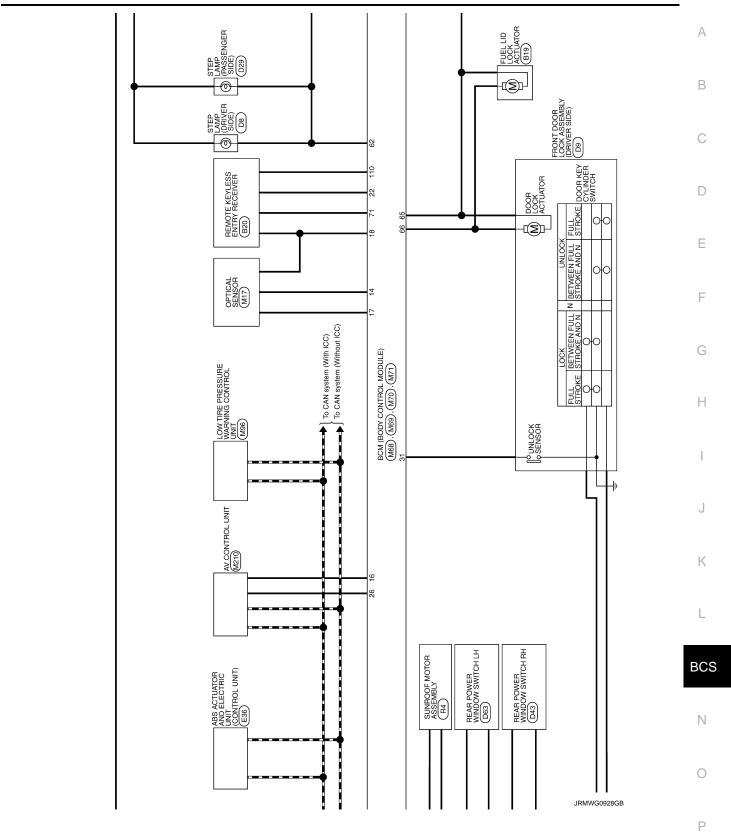
WIRING DIAGRAM

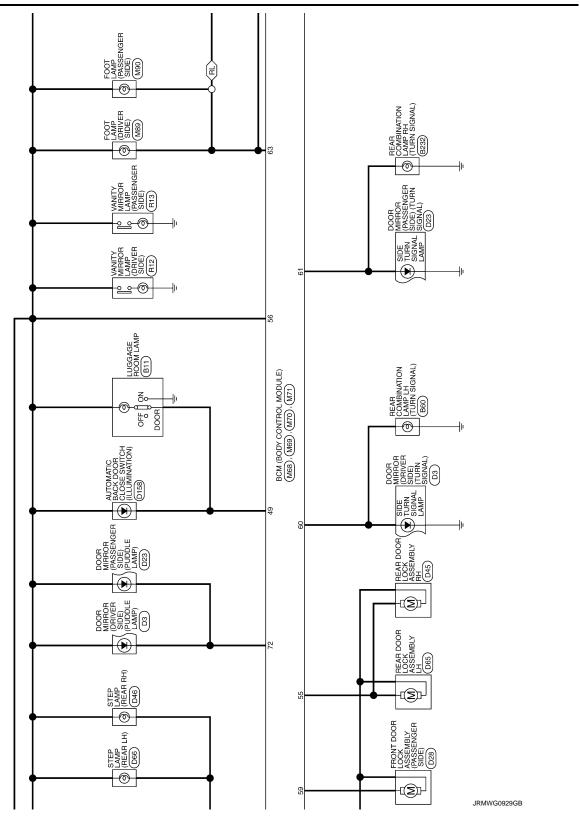
BCM

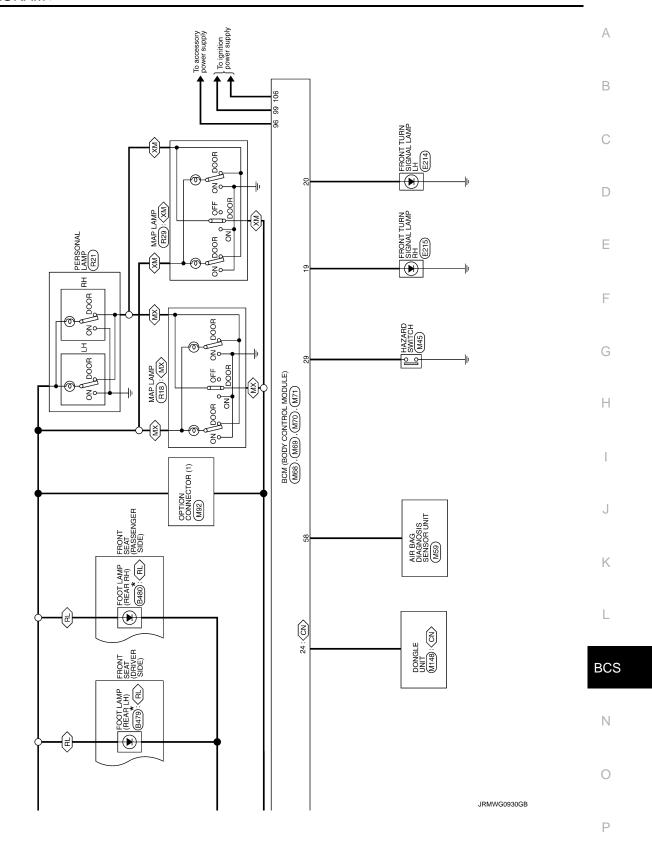


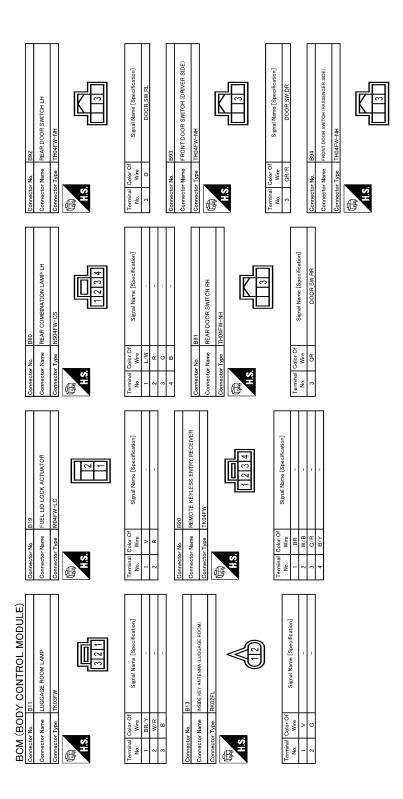












JRMWG0931GB

Connector Name FOOT LAMP (REAR RH)	
Connector No. B474	
17 V	
Terminal Color Of Wire Signal Name (Specification) Wire DOOR SWAS	JRMWG0932GB

Revision: 2014 October BCS-67 2015 QX80

A

В

С

D

Е

F

G

Н

J

Κ

L

BCS

Ν

0

Р

ŀ	22 UR 23 W/L -		Connector No. D25 Connector Name Provir Power wecow awtros passabilities size. Connector Type NS 16FW-CS	H.S. 8 9 10 11 12 15 16	Terminal Golor Of Signal Name [Specification] No. Wire 3 W/B 4 G/R -	a ≥ 8 × 5 × 5 × 5 × 5 × 5 × 5 × 5 × 5 × 5 ×	+++	Connector No. D28 Connector Name Front DODB LOCK ASSENCY PASSENGER SDE	Connector Type E06FGY-RS	THS.		Termina Color Of	No. Wire Signal Name [Specification]	2 B G			7
		Connector Type RK02MGY	H.S.	Terminal Color Of Signal Name [Specification] No. Wire Signal Name [Specification] 2 V	Connector No. D23 Connector Name DOOR MIROR (PASSENGER SIDE)		19	Terminal Color Of Signal Name Specification No. Wire	3 W SIDE CAMERA LH COMM 5 G -	FG T	10 V	12 L/O 14 P -	H	16 GR/L – 17 SHIELD –	Ħ	19 B = -	t
	D9 FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE)	ector Type E06FGY-RS	HS (123456)	E .	23 W/G	Connector No. D11 Connector Name FRONT DOOR REQUEST SWITCH (DRIVER SIDE) Connector Taxe RECOST			Terminal Color Of Signal Name [Specification]	1 LG/R 2 B							
	22 G/W 23 W/L 24 Y		Opiniector No. D5 Connector Name POWER WINDOW MAIN SWITCH Connector Type NS16FW-CS	H.S. 3 4 5 6 7 9 10 11 12 13 15 16	Terminal Color Of Signal Name Specification Nmre 3 G/R 4 W F C C C C C C C C C C C C C C C C C C	$+++^{2}$		15 W	Connector Name STEP LAMP (DRIVER SIDE)	Connector Type TB02FW	H.S.	2 1]		No. Wire Signal Name [Specification]	1 W/R -	$\left\{ \right.$

JRMWG0933GB

A

В

С

D

Е

F

G

Н

J

Κ

L

BCS

Ν

0

Р

Connector No. D63 Connector Name REAR POWER WINDOW SWITCH LH Connector Type INS 16FW-CS 3 4	Terminal Color Of No. 9 Signal Name [Specification] 3 SB 4 4 LG	
Connector No. D45 Connector Name REAR DOOR LOCK ASSEMBLY RH Connector Type ED6FGY-RS H.S.	Terminal Color Of No. Wire Signal Name [Specification] Wire Gonnector No. D46 Connector Name STEP LAMP (REAR RH) Connector Type TB02FW Terminal Color Of No. Wire Signal Name [Specification] I W/R I W/R 2 R 2 R	
Connector No. D32 Connector Name OUTSIDE KEY ANTENNA (PASSENCER SIDE) Connector Type RRKOZMGY	Terminal Color Of Wire Signal Name Specification	
BCM (BODY CONTROL MODULE) Connector Name STEP LAMP (PASSENGER SIDE) Connector Type TE02FW	Tremmal Color Of Wire Signal Name [Specification] 1 W/R 2 R	
		JRMWG0934GB

Revision: 2014 October BCS-69 2015 QX80

BCM (BODY CONTROL MODULE)						
Connector No. D66	Connector No.	or No. D154		Connector No.	D158	Connector No. E10
Connector Name STEP LAMP (REAR LH)	Connect	Connector Name BACK DOOR	BACK DOOR OPENER SWITCH ASSEMBLY	Connector Name	AUTOMATIC BACK DOOR CLOSE SWITCH	Connector Name ROOM)
Connector Type TB02FW	Connector Type	or Type TH04MW-NH	NH.	Connector Type	TK06FGY	Connector Type M06FW-LC
	1			£		
H.S.	H.S			H.S.		H.S.
21			1234		4 3 2 1	
Terminal Color Of Signal Name [Specification]	Termina	Ferminal Color Of S	Signal Name [Specification]	Terminal Color Of	Of Signal Name [Specification]	Terminal Color Of Signal Name [Specification]
╁	-	M/L		╁	1	╁
2 0 -	2	В	1	2 B	1	4 L –
	6	В	-	7	1	5 P/L –
Connector No D152	4	W/R	1	4 BR/Y	1	7 W/G =
						┨
Connector Name OUTSIDE KEY ANTENNA (BACK DOOR)	Connector No.	or No. D157		Connector No.	D160	
Connector Type RK02FL	Connect	9	BACK DOOR LOCK ASSEMBLY	Connector Name	REAR WIPER MOTOR	Connector No. E11
	Connector Tyne	NS08FW-CS	9	Connector Type	C.104EW-1V	Connector Name PDDM E.P. (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
		7	3		1	Connector Type M06FB-LC
113	厚			厚	¢	d)
	HS		1 0	H.S.		The state of the s
)		ı	4 5 6 7 8		1 4 8	6
Terminal Color Of Signal Name [Specification]]	[14]
1 W/G	Termina No.	Terminal Color Of S	Signal Name [Specification]	Terminal Color Of No. Wire	Of Signal Name [Specification]	Terminal Color Of
1	-	~	1	t	1	No. Wire Signal Name [Specification]
	2	>	-	3 G/W	-	- B 6
	4	G/Y	-	4 B	1	14 L
	2	\sim	1			
	9	N/	-			
	7	1/\r	1			
	8	В	_			

JRMWG0935GB

	Connector No. E25 Connector Name INTELLIGENT KEY WARNING BUZZER	Connector Type RK03FBR		Color Of Signal Name [Specification] Wire Y BUZZER SIGNAL	Connector No. E36 Connector Name Assactuation AND ELECTING UNIT CONTINGL UNIT)	11 1		Wire Signal Name [Specification]		MOTOR SUPPLY R/R ANN BATE / SIDE / DECENS OF SUPPLY	†	BRANE FL		O DS FR		V DP RL		LG DPFR		
	60 V/R – Connector No connector No connector No connector Na connector		Connector No. E17 Connector Name Peut a anti-Listor Power BSTRBUTION WOOLLE ENGINE POWER COnnector Type TH10FB-NH	H.S. T2 771 69 68 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Nire Signal Name [Specification]		W/B	Connector Name REMOTE ENGINE START RELAY Terminal No.		<u>8</u>		2 X 11		Terminal Color Of Signal Name [Specification] 19	B/Y	1		5 G - 33	35	36
	Connector No. E14 Connector Name IPPM E/R DYTELLIBENT POWER DISTRIBUTION MODILE ENGINE	Connector Type NS12FBR-CS		Terminal Color Of Signal Name [Specification] No. Wire Signal Name [Specification] 35 W -	. ∠B L/G	42 LG 43 LG 45 V/R	ctor 1		50 0 49	/c 9c 6c 00		No. Wire Signal Name [Specification]	BR		BR/Y	Н	0	56 L	58 BR/R -	Н
딩	Connector No. E12 Connector Name PDM or PUTELLISENT POWER DISTRIBUTION MODILE ENGINE	Connector Type NS08FBR-CS		Terminal Color Of Signal Name [Specification] No. Wire Signal Name [Specification] 18 B		9 0	1		No. Wire Signal Name [Specification]	25 UN'N 2	++	Н	+	32 LG -	2 ق	ł				

A

В

С

D

Е

F

G

Н

1

J

Κ

L

BCS

Ν

0

(

JRMWG0936GB

Р

BCM	BCM (BODY CONTROL MO)	OI MODIII E)						
39	R V	STP VDC OFF SW	158	W/B	STOP LAMP SWITCH ENG COMMUNICATION LINE	Connector No.	E115	Connector No. E130
41		CAN-H	163	5/7	ECM RELAY (SELF SHUT-OFF)	Connector Name	STOP LAMP SWITCH	Connector Name TRAILER TURN SIGNAL LAMP RELAY RH
46	W STOR	STOP LAMP SW ON	166	GR/R	=	Connector Type	M04FW-LC	Connector Type MS02FL-M2-LC
			169	G/B	ENGINE SPEED SIGNAL OUTPUT	E		
Connector No.	No. E80		171	*	POWER SUPPLY FOR ECM	Į.		C
Connector Name	Name ECM		172	+	POWER SUPPLY FOR ECM		3 4	13
T. Topogoo	T.m. MARSECR-MERIOLI II		5/17	o a	THROTTLE CONTROL MOTOR POWER SUPPLY		1 2	
Collinector	7		175		ECM GROUND			2 X 1
修		deliales						
						lal	Signal Name [Specification]	lal
	おり	98 12	Connector No.	Т	E103	No.		No. WIFE
	= ¥ = ¥ 	章 (2) (2) (2) (2) (2) (2) (2) (2) (2) (2)	Connector Name		FUSE BLOCK (J/B)	- ~		2
		1	Connector Type	П	NS16FW-CS	H	1	
20 I I			Q.			4 L/R	1	= 5/A G
No.		Signal Name [Specification]	事		IE			
11	R FUEL INJECTOR	FUEL INJECTOR DRIVER POWER SUPPLY	Š		61 41 7 11	Connector No.	E129	Connector No. E214
112	SB FUEL INJECTOR DRIVER POW	R DRIVER POWER SUPPLY			15F 14F 10F 9F 8F	Connector Name	TRAILER TURN SIGNAL LAMP RELAY LH	Connector Name FRONT TURN SIGNAL LAMP LH
113		-						П
114		ECM GROUND				Connector Type	MS02FL-M2-LC	Connector Type RH02FB
115	Y EVAP CANISTER VENT CONT	ECM GROUND TER VENT CONTROL VALVE	Terminal Color Of	Solor Of		@		•
╁	BR/W VVELACTUATOR MOTOR RELAY ABORT SIGNAL	SLAY ABORT SIGNAL (VVB. CONTROL MODULE)	Š	Wire	Signal Name [Specification]		2	E
123	V/R THROTTLE CO	THROTTLE CONTROL MOTOR RELAY	10F	ŋ	1	į. E	2	
125	T	FUEL PUMP CONTROL MODULE (FPCM)	14F	>	1			((2 1))
126	O ACCELERATOR F	ACCELERATOR PEDAL POSITION SENSOR 2	<u>15</u>	5 E	1		2X	
120	D/I ASCU/ICC	SENSOR GROUND	<u>ا</u> ا	0 0				
130		SENSOR GROUND	44	: 0	1	Terminal Color Of	C	Terminal Color Of
131	L/W SENSOF	SENSOR POWER SUPPLY	6F	J//G	-	No. Wire	olgran Marrie Lopecinication	No. Wire Ogna Marine Copecinication
+	4	SENSOR POWER SUPPLY	₩.	L/B	ı	1 G/B	I	- 5
$^{+}$	$^{-}$	FUEL TEMPERATURE SENSOR	B	>	-	2	1	2 B = -
136	W/R ACCELERATOR F	ACCELERATOR PEDAL POSITION SENSOR 1				3	1 1	
138		BATTERY CURRENT SENSOR				ł		
139	G BATTERY TE	BATTERY TEMPERATURE SENSOR						
140	Ļ	SENSOR GROUND						
141	SB IGNI	IGNITION SWITCH						
142	R/W FUEL PUMP CONT	FUEL PUMP CONTROL MODULE (FPCM) CHECK						
143	┪	EVAP CONTROL SYSTEM PRESSURE SENSOR						
144	O/B REFRIGERAN							
146		CAN COMMUNICATION LINE						
/4/	1	ASCD/ICC BRAKE SWITCH						
15.1	D CAN COL	CAN COMMINICATION I INF						
156	+	POWER SUPPLY FOR ECM (BACK-UP)						

JRMWG0937GB

Commettor No. M17 Commettor Nume OPTICAL SENSOR Commettor Type TR03FW H.S.	Terminal Color Of Signal Name Specification 1 1 1 1 1 1 1 1 1	
Connector No. M2 Connector Name FUSE BLOOK (J/B) Connector Type NS10FW-OS HS HS HS HS HS HS HS	Terminal Color Of No. Wire Signal Name [Specification] No. Wire 105 W/18 105 W/18 105 W/18 105 W/18 105 W/18 105 W/19 105 W/1	
Ocunector No. F301 Connector Name TCM Connector Type SP10FG H.S. (1 2 3 4 5)	에 보존 [8] [8] [8] [8] [8] [8] [8] [8] [8] [8]	
BCM (BODY CONTROL MODULE) Connector Name FRONT TURN SIGNAL LAMP RH Connector Type RH027B	Terminal Color Of Signal Name Specification 1 0 0 0 0 0 0 0 0 0	

Α

В

С

D

Е

F

G

Н

J

Κ

L

BCS

Ν

0

JRMWG0938GB

BCM (E	BCM (BODY CONTROL MODULE)	_			:					
Connector No.	o. M2/	~ 00	¥ 2	TRIP RESET SWITCH SIGNAL	Connector No.	Mb/	23	SHIFLD	GND	
Connector Name	ame COMBINATION SWITCH	6	0	LED HEADLAMP (LH) WARNING SIGNAL	Connector Name	Connector Name A/T SHIFT SELECTOR	23	R/W	AIRBAG W/L	
Connector Ty	Connector Type TH16FW-NH	Ξ	ŋ	ENTER SWITCH SIGNAL	Connector Type	TH16FW-NH	24	J.√	SEATBELT W/L	
q		12	0	SELECT SWITCH SIGNAL	ą		25	æ	CUTOFF TELLTALE	
厚	<u> </u>	13	7	+	图	[21	J/\	SIDE SES2 RH+	
S E		14	+	ILLUMINATION CONTROL SWITCH SIGNAL (-)	Ę		25	٧/١	SIDE_SENS2_RH-	
2	1 2 3 4 5 6	15	┨		i i	1 2 3 4 5	23	Α	SIDE_SENS2_LH+	
	F :	18	\dashv	AMBIENT SENSOR SIGNAL		0 :	54	œ	SIDE_SENS2_LH-	
	7 8 9 10 11 12 13 14	19	N/N	A/C AUTO AMP. CONNECTION RECOGNITION SIGNAL.		9 10 11 12 13 14	57	R/W	DEPLOYMENT_INFORMATION	
		20	В	AMBIENT SENSOR GROUND			29	٦	CAN-H	
		21	\dashv	CAN-H			9	œ	CAN_LO	
ıal	Color Of Signal Name [Specification]	22	+	CAN-L	lar O	Signal Name [Specification]				
No.		23	В	GROUND	No. Wire	,				
-		24	┪	FUEL LEVEL SENSOR GROUND	1 G/W	1	Conne	Connector No.	M68	
2	GR OUTPUT 4	25	4	ALTERNATOR SIGNAL	2 \	-	Conne	ctor Name	Connector Name BCM (BODY CONTROL MODULE)	
e	~	56	+	PARKIN	3 ×/B	1				
1	W IGN	28			+	1	Conne	ctor Type	Connector Type TH40FB-NH	
2	L OUTPUT 3	29	æ	WASHER LEVEL SWITCH SIGNAL	5 R/Y	1	þ			
9	B GND	30	SB	VEHICLE SPEED SIGNAL (2-PULSE)	9 L/W	_	B	_		
7	W INPUT 3	31	BR/W	VEHICLE SPEED SIGNAL (8-PULSE)	10 B	_	•	ď		
8 B	BR/Y OUTPUT 5	33	W	SNOW MODE SIGNAL	11 L/R	_	1	á	00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
6	R/W INPUT 2	34	BR/Y	FUEL LEVEL SENSOR SIGNAL	12 B	1			2 3 4 3 0 0 8 III 6 14 10 13 10 10 10 10 10 10 10 10 10 10 10 10 10	
10		35	0/B	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)	13 R/B				[2] 22 23 24 25 20 21 24 30 31 32 32 34 30 31 32 32 30 31 32 33 40 31 32 32 32 32 32 32 32 32 32 32 32 32 32	
H	SB INPUT 1	36	H	PASSENGER SEAT BELT WARNING SIGNAL	H					
H		37	H	NON-MANUAL MODE SIGNAL	1					
┝	LG INPUT 5	38	W/1	MANUAL MODE SHIFT DOWN SIGNAL			Terminal	ial Color Of	9	
14	G OUTPUT 2	39	A//B	MANUAL MODE SHIFT UP SIGNAL	Connector No.	M59	Š	Wire	oignai ivame Lopecinication	
		40	G/W	MANUAL MODE SIGNAL	Nonce Nonce	TINI GOSNES SISONOVIO OVO GIV	2	BR/Y	COMBI SW INPUT 5	
					COLLIECTOR INGINE	AIR DAG DIAGNOSIS SENSON ONI	3	GR	COMBI SW INPUT 4	
Connector No.	o. M34				Connector Type	NH28FY-EX	4	٦	COMBI SW INPUT 3	
	OSMBINATION METERS	Conne	Connector No.	M45	[2	9	COMBI SW INPUT 2	
		Č	Connector Mame	HAZABD SWITCH	B		9	>	COMBI SW INPUT 1	
Connector T	Connector Type TH40FW-NH		000)	8 0 7 6 7 3 1 1 3	∞	>	POWER WINDOW SW COMM	
4		Conne	Connector Type	TK04FW	2		6	В	STOP LAMP SW 1	
F		4				19 52 54 23 24 22	Ξ	٣	RAIN SENSOR SERIAL LINK	
Ę	K	ß	_			T	14	P/B	OPTICAL SENSOR	
Ś	1 2 3 4 5 5 7 8 0 1112 1214145	7	e			33 00	16	0/1	DIMMER SIGNAL	
	- 50 50	1	2				17	Y/G	SENSOR PWR SPLY	
				3 1 2 4	Terminal Color Of	Complete Name Complete	18	B/Y	RECEIVER/SENSOR GND	
					No. Wire	ogran warne Lopecincauori	19	λ/5	TURN SIG RH OUTPUT (FRONT)	
					1 R/L	IGN	20	5	TURN SIG LH OUTPUT (FRONT)	
lar	slor Of Size Name [Saccification]				2 B	GND	21	Ь	NATS ANT AMP.	
No.	Wire Signal Name Lopeomoadori	Termi	nal C	f Signal Name [Specification]	3	DR1 (+)	22	M/B	KYLS ENT RECEIVER RSSI	
-	BAT	No.	Wire	orginal realite [Opeomoattori]	4 Y/R	DR1 (-) DR2 (-)	23	GR/R	SECURITY IND CONT	
2	GR IGNITION SIGNAL	_	В	-	9 Y/L	AS1 (+)	24	SB	DONGLE LINK	
3		2	*	1	+	AS1 (-)	25	LG/R	NATS ANT AMP.	
4		e	0/	1	8 B/Y	AS 2 (+)	26	0	INTELLIGENT KEY IDENTIFICATION	
+	\dashv	4	80	-	+	AS 2 (-)	29	┪	HAZARD SW	
9	GR LED HEADLAMP (RH) WARNING SIGNAL				18 0	ECZS (+)	30	M/L	BK DOOR OPNR SW	

JRMWG0939GB

Commector Name FOOT LAMP (PASSENGER SIDE)	
156 S.89 PUSH SW 77	
Commector Name	
BCM (BODY CONTROL MODULE)	

Α

В

С

D

Е

F

G

Н

I

J

Κ

L

BCS

Ν

0

Commector No. M107 Commector No. M141	Connector Name INSIDE KEY ANTENNA (CONSOLE) Connector Name DIODE	Connector Type RK02FL Connector Type 24335_C9900	B A A A A A A A A A A A A A A A A A A A		Terminal Color Of Signal Name (Specification) No. Wire Signal Name (Specification) Signal Name (Specification) No. Wire Signal Name (Specification) Signal Name (Sp	1 B		Connector No M125 Connector No M148	ne CAN GATEWAY Connector Name	TH13EW-NH	THISTAN IN			1 3 4 5 6			Of Simal Name [Specification]	No. Wire	L CAN-H 1 SB DON	3 Y BATTERY 4 B GND	n a		7 0	9 GR IGNITION	THAN O	
Connector No. M101	Connector Name PUSH-BUTTON IGNITION SWITCH	Connector Type TK08FBR	11 HS.	45678	Terminal Color Of Signal Name [Specification]	2	3 ×	5 O	-	W - 0	$\frac{1}{1}$		Connector No. M105	Connector Name INSIDE KEY ANTENNA (INSTRUMENT CENTER)	Connector Type RK02FL			1	((1 2))			Terminal Color Of	No. Wire Signal Name [Specification]	1 BR -	- ×	
BCM (BODY CONTROL MODULE) Connector No. M96	Connector Name LOW TIRE PRESSURE WARNING CONTROL UNIT	Connector Type TH32FW-NH		1 2 3 4 5 6 7 8 9 10 15 192021223242526 3	Terminal Color Of Signal Name [Specification]	1 P CAN-L	3 0/L RR TIRE PRESSURE RECEIVER SIGNAL	4 L RL TIRE PRESSURE RECEIVER SIGNAL 5 R/I FR TIRE PRESSURE RECEIVER SIGNAL	FL TIRE PRESSURE RECEIVE	7 SB RR TIRE PRESSURE RECEIVER POWER SUPPLY 8 GD DI TIDE DDESSUDE DECENARD POWED SUDDI V	F \	LG FL TIRE PRESSURE F	GR	19 L/R RR TIRE PRESSURE RECEIVER SIGNAL (SENSITIVITY) 20 P RL TIRE PRESSURE RECEIVER SIGNAL (SENSITIVITY)	21 G/R FR TIRE PRESSURE RECEIVER SIGNAL (SENSITIVITY)	22 BR/Y FL TIRE PRESSURE RECEIVER SIGNAL (SENSITIVITY)	R/B	M/L	BR/W FL TIRE PRESS	32 B GND						

JRMWG0941GB

Connector No R18	Connector Name	Connector Type TK08FGY	Œ	SH	345678		ion] Terminal Color Of Signal Name [Specification]	3 P	4 B LED-	5 Y DOOR SIG BYPASS	6 B GND	7 BR DOOR SIG	SIDE) 8 V BAT		Connector No. R21	Т	Connector Name PERSUNAL LAMP	Connector Type TH04FW-NH	ą	医		4004	P +		-	Terminal Color Of Signal Name [Specification]	$^{+}$	n >	>	_
Connector No R12	<u>و</u> ا	Connector Type MCA02FW				1	Terminal Color Of Signal Name [Specification]	- B	2 v			Connector No. R13	Connector Name VANITY MIRROR LAMP (PASSENGER SIDE)	Т				1.3.	C	7		Terminal Color Of	No. Wire Signal Name [Specification]	1 B -	2 V -				T	1
Connector No R4	e	Connector Type YEA10FGY		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9		Terminal Color Of Signal Name [Specification]	1 B GND	3 Y IGN	5 P OPEN SW			10 GR CLOSE SW		Connector No. 189	Т	Connector Name KAIN SENSOR	Connector Type AAB03FB	á		4	1123			-	Terminal Color Of Signal Name [Specification]	t			
BCM (BODY CONTROL MODULE) Connector No. M210	me AV CONTROL UNIT	DD6 TH32FW-NH			79 80 81 82 83 84 87 88 89 90 91 92		Terminal Color Of Signal Name [Specification] No.	W PARKING BRAKE SIGNAL	W COMPOSITE IMAGE SIGNAL GND	R COMPOSITE IMAGE SIGNAL	O INTELLIGENT KEY IDENTIFICATION SIGNAL		SHIELD MICROPHONE SHIELD	Y MICROPHONE VCC [With DCM]	COMM (CONT-DISP)		LG AV COMM (L)				BO AN VICINICAL SPEED STONAL (0 DILL SE)	VEHICLE SPEED SIGNAL (8-	COMPOSITE	BR MICROPHONE SIGNAL [With DCM]	MICROPHONE	SHIELD SHIELD		S AV COMM (U)		
BCM (BC	Connector Name	Connector Type		76	7		<u>~</u>	┝	⊢	Н	Н	4	9	+	╀	Ͱ	Н	\dashv	\dashv	+	+	1"	Ή	Н	\dashv	9	+	+	╀	1

A

В

С

D

Е

F

G

Н

ı

J

Κ

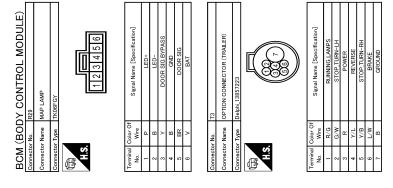
L

BCS

Ν

0

JRMWG0942GB



JRMWG0943GB

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

BASIC INSPECTION

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM)

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM): Description

INFOID:0000000010262534

Α

В

C

D

Е

BEFORE REPLACEMENT

When replacing BCM, save or print current vehicle specification with CONSULT configuration before replace-

NOTE:

If "READ CONFIGURATION" can not be used, use the "WRITE CONFIGURATION - Manual selection" after replacing BCM.

AFTER REPLACEMENT

CAUTION:

When replacing BCM, always perform "WRITE CONFIGURATION" with CONSULT. Or not doing so, BCM control function does not operate normally.

- Complete the procedure of "WRITE CONFIGURATION" in order.
- Configuration is different for each vehicle model. Confirm configuration of each vehicle model.
- If you set incorrect "WRITE CONFIGURATION", incidents might occur.

NOTE:

When replacing BCM, perform the system initialization (NATS) (if equipped).

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM): Work Procedure INFOID:0000000010262535

1. SAVING VEHICLE SPECIFICATION

©CONSULT Configuration

Perform "READ CONFIGURATION" to save or print current vehicle specification. Refer to BCS-80, "CONFIG-URATION (BCM): Description".

NOTE:

If "READ CONFIGURATION" can not be used, use the "WRITE CONFIGURATION - Manual selection" after replacing BCM.

>> GO TO 2.

2.REPLACE BCM

Replace BCM. Refer to BCS-95, "Removal and Installation".

>> GO TO 3.

3.writing vehicle specification

(P)CONSULT Configuration

Perform "WRITE CONFIGURATION - Config file" or "WRITE CONFIGURATION - Manual selection" to write vehicle specification. Refer to BCS-80, "CONFIGURATION (BCM): Work Procedure".

>> GO TO 4.

4.INITIALIZE BCM (NATS) (IF EQUIPPED)

Perform BCM initialization. (NATS)

>> WORK END

CONFIGURATION (BCM)

BCS

K

L

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

CONFIGURATION (BCM): Description

INFOID:0000000010262536

Vehicle specification needs to be written with CONSULT because it is not written after replacing BCM. Configuration has three functions as follows.

Function	Description
READ CONFIGURATION	Reads the vehicle configuration of current BCM.Saves the read vehicle configuration.
WRITE CONFIGURATION - Manual selection	Writes the vehicle configuration with manual selection.
WRITE CONFIGURATION - Config file	Writes the vehicle configuration with saved data.

NOTE:

Manual setting item: Items which need selection by vehicle specifications

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

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

CAUTION:

When replacing BCM, always perform "WRITE CONFIGURATION" with CONSULT. Or not doing so, BCM control function does not operate normally.

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

CONFIGURATION (BCM): Work Procedure

INFOID:0000000010262537

1. WRITING MODE SELECTION

©CONSULT Configuration

Select "CONFIGURATION" of BCM.

When writing saved data>>GO TO 2. When writing manually>>GO TO 3.

2.PERFORM "WRITE CONFIGURATION - CONFIG FILE"

(P)CONSULT Configuration

Perform "WRITE CONFIGURATION - Config file".

>> WORK END

${f 3.}$ PERFORM "WRITE CONFIGURATION - MANUAL SELECTION"

©CONSULT Configuration

- 1. Select "WRITE CONFIGURATION Manual selection".
- Identify the correct model and configuration list. Refer to <u>BCS-81, "CONFIGURATION (BCM): Configuration list".</u>
- 3. 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 "SETTING". Refer to <u>BCS-81, "CONFIGURATION (BCM): Configuration list"</u> for written items and setting value.

4. Select "SETTING".

CAUTION:

Make sure to select "SETTING" 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 can not be memorized.

5. When "COMMAND FINISHED", select "END".

>> GO TO 4.

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

4. OPERATION CHECK

Confirm that each function controlled by BCM operates normally.

>> WORK END

CONFIGURATION (BCM): Configuration list

INFOID:0000000010262538

CAUTION:

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

	SETTING ITEM	NOTE
Items	Setting value	NOTE
HZRD (SHCK DTCT ULK) FUNC	WITH	_
A/LIGHT LOGIC	MODE2 ⇔ MODE4	MODE2: For Canada MODE4: Except for Canada

^{⇔:} Items which confirm vehicle specifications

G

В

D

Е

F

Н

Κ

L

BCS

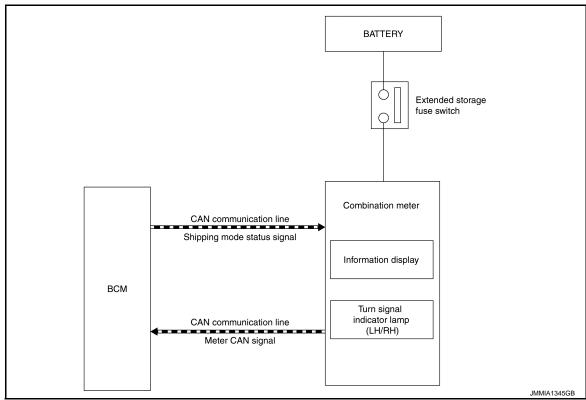
Ν

0

SHIPPING MODE CANCEL OPERATION

Description INFOID.000000010262539

SYSTEM DIAGRAM



DESCRIPTION

- The combination meter transmits meter CAN signal*1 to BCM via CAN communication, when the extended storage fuse switch is ON.
- BCM switches the status (shipping mode or normal mode) by itself according to the meter CAN signal*1 from combination meter, and transmits shipping mode status signal to combination meter via CAN communication.
- The combination meter displays extended storage fuse warning message*2 on the information display, and turns the turn signal indicator lamp (LH/RH) ON, when BCM is in shipping mode.
- BCM control function is limited in shipping mode. Refer to BCS-94, "Description".
- *1: Odometer signal, wake up signal and each signal.
- *2: When shipping mode function operates, "SHIPPING MODE ON PUSH STORAGE FUSE" is displayed.

Work Procedure

1. SHIPPING MODE CANCEL OPERATION

- 1. Turn ignition switch OFF.
- Push in (switch on) the extended storage fuse switch. Refer to <u>PG-136, "How To Check"</u>.
- 3. Turn ignition switch ON.
- 4. Turn ignition switch OFF and wait at least 2 seconds.

>> GO TO 2.

2. SHIPPING MODE CANCEL CHECK

- 1. Turn ignition switch ON.
- Check that extended storage fuse warning message is not displayed on information display.

>> WORK END

U1000 CAN COMM

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM

Description INFOID:000000010262541

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 <u>LAN-31</u>, "CAN COMMUNICATION SYSTEM: CAN Communication Signal Chart".

DTC Logic

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:0000000010262543

1.PERFORM SELF DIAGNOSTIC

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

Is DTC "U1000" displayed?

YES >> Refer to LAN-21, "Trouble Diagnosis Flow Chart".

NO >> Refer to GI-43, "Intermittent Incident".

BCS

K

Α

В

D

F

Ν

Р

Revision: 2014 October BCS-83 2015 QX80

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:0000000010262545

1.REPLACE BCM

When DTC "U1010" is detected, replace BCM.

>> Replace BCM. Refer to BCS-95, "Removal and Installation".

U0415 VEHICLE SPEED

< DTC/CIRCUIT DIAGNOSIS >

U0415 VEHICLE SPEED

Description INFOID:000000010262546

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 description	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 BCM with CONSULT, when passed 2 seconds or more after the ignition switch is turned ON.

Is any DTC detected?

YES >> Refer to BCS-85, "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-39</u>, "CONSULT Function".

Is any DTC detected?

YES >> Repair or replace the malfunctioning part.

NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

BCS

Ν

Р

Revision: 2014 October BCS-85 2015 QX80

G

Н

INFOID:0000000010262548

Α

D

Е

F

K

B2562 LOW VOLTAGE

< DTC/CIRCUIT DIAGNOSIS >

B2562 LOW VOLTAGE

DTC Logic

DTC DETECTION LOGIC

DTC	CONSULT display de- scription	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 BCM with CONSULT, when passed 120 seconds or more after the ignition switch is turned ON.

Is any DTC detected?

YES >> Refer to BCS-86, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010262550

1. CHECK POWER SUPPLY CIRCUIT

Check BCM power supply circuit. Refer to BCS-88, "Diagnosis Procedure".

Is the circuit normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".

NO >> Repair the malfunctioning part.

B26E7 TPMS CAN COMM

< DTC/CIRCUIT DIAGNOSIS >

B26E7 TPMS CAN COMM

DTC Logic INFOID:0000000010262551

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC Detection Condition	Probable cause	
B26E7	TPMS CAN COMM	When ignition switch is ON, BCM cannot received CAN communication signal from low tire pressure warning control unit.	CAN communication system Low tire pressure warning control unit BCM	C

DTC CONFIRMATION PROCEDURE

1.DTC CONFIRMATION

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

Is any DTC detected?

YES >> Refer to BCS-87, "Diagnosis Procedure".

>> INSPECTION END NO

Diagnosis Procedure

NOTE:

If DTC "B26E7" detected along with DTC "U1000", first diagnose the DTC "U1000". Refer to BCS-83, "Diagnosis Procedure".

 ${f 1}$.LOW TIRE PRESSURE WARNING CONTROL UNIT SELF DIAGNOSTIC RESULT

Perform "Self Diagnostic Result" of low tire pressure warning control unit with CONSULT. Refer to WT-12, "CONSULT Function".

Is any DTC detected?

YES >> GO TO 2.

NO >> GO TO 4.

2.LOW TIRE PRESSURE WARNING CONTROL UNIT DIAGNOSIS

Perform low tire pressure warning control unit component diagnosis of detected DTC. Refer to WT-18, "DTC Index".

>> GO TO 3.

3.BCM SELF DIAGNOSTIC RESULT

Erase DTC of BCM, and perform "Self Diagnostic Result" again.

Is DTC "B26E7" detected?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".

NO >> INSPECTION END

f 4.REPLACE LOW TIRE PRESSURE WARNING CONTROL UNIT TEMPORARILY

Remove low tire pressure warning control unit, and install normal low tire pressure warning control unit.

>> GO TO 5.

5.BCM SELF-DIAGNOSTIC RESULT

Erase DTC of BCM, and perform "Self Diagnostic Result" of BCM again.

Is DTC "B26E7" detected?

>> Replace BCM. Refer to BCS-95, "Removal and Installation". YES

>> Replace low tire pressure warning control unit. Refer to WT-63, "Removal and Installation". NO

BCS

K

Α

D

Е

F

INFOID:0000000010262552

Ν

Р

2015 QX80

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000010262553

1. CHECK FUSE AND FUSIBLE LINK

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

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

Is the fuse fusing?

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

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

1	Terminals							
(+)	(-)	Voltage					
В	СМ		(Approx.)					
Connector	Terminal	Ground						
M70	70	Glound	Battery voltage					
IVI7 O	57		Ballery Vollage					

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M70	67		Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

COMBINATION SWITCH OUTPUT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

COMBINATION SWITCH OUTPUT CIRCUIT

Diagnosis Procedure

INFOID:0000000010262554

Α

В

D

Е

1. CHECK OUTPUT 1 - 5 CIRCUIT FOR OPEN

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

System	ВС	CM	Combinat	Continuity		
System	Connector	Terminal	Connector	Terminal	Continuity	
OUTPUT 1		36		11		
OUTPUT 2		35		9	Existed	
OUTPUT 3	M68	34	M27	7		
OUTPUT 4		33		10		
OUTPUT 5		32		13		

Does continuity exist?

YES >> GO TO 2.

NO >> Repair harnesses or connectors.

2. CHECK OUTPUT 1 - 5 CIRCUIT FOR SHORT

Check for continuity between BCM harness connector and ground.

System	В	СМ		Continuity		
System	Connector	Terminal		Continuity		
OUTPUT 1		36				
OUTPUT 2		35	Ground	Not existed		
OUTPUT 3	M68	34				
OUTPUT 4		33				
OUTPUT 5		32				

Does continuity exist?

YES >> Repair harnesses or connectors.

NO >> GO TO 3.

3.CHECK BCM OUTPUT VOLTAGE

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

		Terminals		
System	(-	+)	(-)	Voltage
System	ВС	CM		(Approx.)
	Connector	Terminal		
OUTPUT 1		36		
OUTPUT 2		35	0	(V) 15
OUTPUT 3		34	Ground	10 5
OUTPUT 4	M68	33		0
OUTPUT 5		32		+ + 10ms PKIB4960J 7.0 - 8.0 V

Is the measurement value normal?

Revision: 2014 October BCS-89 2015 QX80

BCS

Ν

0

COMBINATION SWITCH OUTPUT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

YES >> Replace combination switch.

NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

COMBINATION SWITCH INPUT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

COMBINATION SWITCH INPUT CIRCUIT

Diagnosis Procedure

INFOID:0000000010262555

Α

В

D

Е

1. CHECK INPUT 1 - 5 CIRCUIT FOR OPEN

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

System	ВС	M	Combinat	Continuity		
System	Connector	Terminal	Connector	Terminal	Continuity	
INPUT 1		6		12		
INPUT 2		5		14		
INPUT 3	M68	4	M27	5	Existed	
INPUT 4		3		2		
INPUT 5		2		8		

Does continuity exist?

YES >> GO TO 2.

NO >> Repair harnesses or connectors.

2.CHECK INPUT 1 - 5 CIRCUIT FOR SHORT

Check for continuity between BCM harness connector and ground.

System	В	CM		Continuity	
System	Connector	Terminal		Continuity	
INPUT 1		6			
INPUT 2		5	Ground	Not existed	
INPUT 3	M68	4			
INPUT 4		3			
INPUT 5		2			

Does continuity exist?

YES >> Repair harnesses or connectors.

NO >> GO TO 3.

3. CHECK BCM INPUT SIGNAL

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

System	(+	-)	(-)	Voltage		
System	BC	BCM		(Approx.)		
	Connector	Terminal				
INPUT 1		6				
INPUT 2		5	Ground	Refer to BCS-		
INPUT 3	M68	4		35, "Refer-		
INPUT 4		3		ence Value".		
INPUT 5		2				

Is the measurement value normal?

Yes >> Replace BCM. Refer to BCS-95, "Removal and Installation".

Revision: 2014 October BCS-91 2015 QX80

BCS

Ν

 \cap

COMBINATION SWITCH INPUT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

No >> Replace combination switch.

COMBINATION SWITCH SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

COMBINATION SWITCH SYSTEM SYMPTOMS

Symptom Table

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

Malfunction item	1:	×	
------------------	----	---	--

	Data monitor item																
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	Malfunc- tion com- bination
	×	×						×	×								А
×			×									×		×			В
						×	×				×		×				С
					×		×			×					×		D
				×			×									×	Е
×					×		×										F
		×		×		×	×										G
	×		×												×		Н
									×				×	×		×	I
								×		×	×	×					J
	All Items						K										
	If only one item is detected or the item is not applicable to the combinations A to K							L									
2 1/	Identify the malfunctioning part from the agreed combination and repair or replace the part																

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 OUTPUT 1 circuit					
В	Combination switch OUTPUT 2 circuit					
С	Combination switch OUTPUT 3 circuit	Inspect the combination switch output circuit applicable to the malfunctioning part. Refer to <u>BCS-89</u> , " <u>Diagnosis Procedure</u> ".				
D	Combination switch OUTPUT 4 circuit	nig para Noron to <u>bee set, bragnesier recedure</u> .				
Е	Combination switch OUTPUT 5 circuit					
F	Combination switch INPUT 1 circuit					
G	Combination switch INPUT 2 circuit					
Н	Combination switch INPUT 3 circuit	Inspect the combination switch input circuit applicable to the malfunctioning part. Refer to BCS-91, "Diagnosis Procedure".				
I	Combination switch INPUT 4 circuit	- partition to <u>200 or 1 2 registros 1 10000000</u> .				
J	Combination switch INPUT 5 circuit					
K	BCM	Replace BCM. Refer to BCS-95, "Removal and Installation".				
L	Combination switch	Replace combination switch.				

Revision: 2014 October BCS-93 2015 QX80

P

Α

С

D

Е

F

G

Н

ı

J

Κ

BCS

Ν

0

NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

NORMAL OPERATING CONDITION

Description INFOID.000000010262557

SHIPPING MODE

- Shipping mode inhibits battery power consumption during transportation or storage of the vehicle. Vehicle is set to shipping mode before being shipped from the factory.
- When ignition switch is OFF, BCM operates shipping mode.
- BCM control functions are limited in shipping mode. The limited items that are not operated during the shipping mode are as follows.
- Door lock and unlock switch function
- Remote keyless entry function
- Theft warning alarm function
- Lighting & turn signal switch function
- Interior room lamp timer control function
- For shipping mode cancel operation, refer to BCS-82, "Description".

NOTE:

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

REMOVAL AND INSTALLATION

BCM

Removal and Installation

CAUTION:

Before replacing BCM, perform "READ CONFIGURATION" to save or print current vehicle specification. Refer to BCS-80, "CONFIGURATION (BCM): Description".

REMOVAL

- 1. Remove combination meter. Refer to MWI-88, "Removal and Installation".
- Remove bolts.
- 3. Remove BCM and disconnect the connectors.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Be sure to perform "WRITE CONFIGURATION" when replacing BCM.
- Be sure to perform the system initialization (IVIS) when replacing BCM. Refer to <u>BCS-80, "CONFIGU-RATION (BCM): Work Procedure"</u>.

Α

INFOID:0000000010262558

Е

F

D

Н

.

Κ

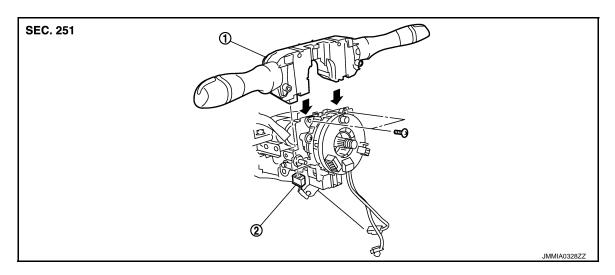
L

BCS

Ν

COMBINATION SWITCH

Exploded View



- 1. Combination switch
- 2. Combination switch connector

Removal and Installation

INFOID:0000000010262560

REMOVAL

- 1. Remove steering column cover. Refer to IP-13, "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.