Revision: October 2015



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CONTENTS

PRECAUTION3	DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)19
PRECAUTIONS	REAR WINDOW DEFOGGER
BODY CONTROL SYSTEM5 BODY CONTROL SYSTEM : Component Parts	INT LAMP21 INT LAMP : CONSULT Function (BCM - INT LAMP)21
POWER CONSUMPTION CONTROL SYSTEM5 POWER CONSUMPTION CONTROL SYSTEM : Component Parts Location	HEADLAMP
SYSTEM7	WIPER : CONSULT Function (BCM - WIPER)27
BODY CONTROL SYSTEM7 BODY CONTROL SYSTEM : System Description7 BODY CONTROL SYSTEM : Fail-safe8	FLASHER28 FLASHER : CONSULT Function (BCM - FLASH-ER) (Xenon Type Headlamp)28
COMBINATION SWITCH READING SYSTEM9 COMBINATION SWITCH READING SYSTEM : System Description9	FLASHER: CONSULT Function (BCM - FLASH-ER) (Halagen Type Headlamp)29 AIR CONDITIONER29
SIGNAL BUFFER SYSTEM12 SIGNAL BUFFER SYSTEM : System Description13	AIR CONDITIONER: CONSULT Function (BCM - AIR CONDITIONER) (Auto A/C)30
POWER CONSUMPTION CONTROL SYSTEM14 POWER CONSUMPTION CONTROL SYSTEM: System Description14	AIR CONDITIONER : CONSULT Function (BCM - AIR CONDITIONER) (Manual A/C)30 INTELLIGENT KEY30
DIAGNOSIS SYSTEM (BCM)17	INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)30
COMMON ITEM	COMB SW
DOOR LOCK18	BCM34

BCM : CONSULT Function (BCM - BCM) 34	CONFIGURATION (BCM) : Description	
INANALI	CONFIGURATION (BCM): Work Procedure	85
IMMU : CONSULT Function (BCM - IMMU)	CONFIGURATION (BCM): Configuration list	86
	SHIPPING MODE CANCEL OPERATION	87
BATTERY SAVER35	Description	
BATTERY SAVER : CONSULT Function (BCM -	Work Procedure	
BATTERY SAVER)	Work Froodure	07
TRUNK 36	DTC/CIRCUIT DIAGNOSIS	88
TRUNK: CONSULT Function (BCM - TRUNK) 36	U1000 CAN COMM	88
THEFT ALM	Description	88
THEFT ALM : CONSULT Function (BCM -	DTC Logic	88
THEFT ALM : CONSOLT FUNCTION (BCM - 37	Diagnosis Procedure	
INEFI)	3	
RETAIND PWR	U1010 CONTROL UNIT (CAN)	89
RETAIND PWR : CONSULT Function (BCM - RE-	DTC Logic	89
TAINED PWR) (Front Window Anti-pinch) 38	Diagnosis Procedure	89
RETAIND PWR: CONSULT Function (BCM - RE-		
TAINED PWR) (Driver Side Window Anti-pinch) 38	U0415 VEHICLE SPEED	
TAINLE T WITH (Briver olde Willdow Artif-pillori) 30	Description	
SIGNAL BUFFER38	DTC Logic	90
SIGNAL BUFFER: CONSULT Function (BCM -	Diagnosis Procedure	90
SIGNAL BUFFER) 38		
	B2562 LOW VOLTAGE	
AIR PRESSURE MONITOR39	DTC Logic	
AIR PRESSURE MONITOR: CONSULT Function	Diagnosis Procedure	91
(BCM - AIR PRESSURE MONITOR)39	DOWED CURRLY AND CROUND CIRCUIT	
	POWER SUPPLY AND GROUND CIRCUIT	
ECU DIAGNOSIS INFORMATION41	Diagnosis Procedure	92
BCM41	COMBINATION SWITCH OUTPUT CIRCUIT.	93
	Diagnosis Procedure	
Reference Value	Diagnosis i focedure	90
Fail-safe	COMBINATION SWITCH INPUT CIRCUIT	95
DTC Inspection Priority Chart	Diagnosis Procedure	
DTC Index 64	•	
WIRING DIAGRAM67	SYMPTOM DIAGNOSIS	97
	COMBINATION SWITCH SYSTEM SYMP-	
BCM67	TOMS	
Wiring Diagram67		
DAGIO INODECTION	Symptom Table	97
BASIC INSPECTION84	NORMAL OPERATING CONDITION	98
INCRECTION AND AD ILICTMENT	Description	
INSPECTION AND ADJUSTMENT84	Description	90
ADDITIONAL SERVICE WHEN REPLACING	REMOVAL AND INSTALLATION	99
CONTROL UNIT (BCM)84		00
ADDITIONAL SERVICE WHEN REPLACING	BCM	99
CONTROL UNIT (BCM): Description84	Removal and Installation	
ADDITIONAL SERVICE WHEN REPLACING		
	COMBINATION SWITCH	.100
CONTROL UNIT (BCM): Work Procedure 84	Exploded View	. 100
CONFIGURATION (BCM)84	Removal and Installation	
(,		

PRECAUTION

PRECAUTIONS

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRF-TFNSIONFR"

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

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

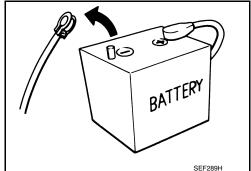
When disconnecting the battery terminal, pay attention to the following.

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

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

R9M engine : 4 minutes V9X engine : 4 minutes YD25DDTi : 2 minutes

Revision: October 2015



NOTE:

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

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

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PRECAUTIONS

< PRECAUTION >

- Turbocharger cooling pump may operate in a few minutes after the ignition switch is turned OFF.
- Example of high-load driving
- Driving for 30 minutes or more at 140 km/h (86 MPH) or more.
- Driving for 30 minutes or more on a steep slope.
- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

NOTE:

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

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

NOTE:

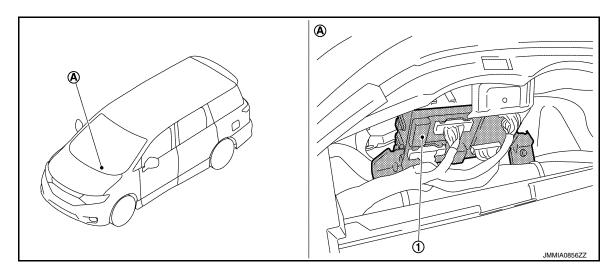
The removal of 12V battery may cause a DTC detection error.

SYSTEM DESCRIPTION

COMPONENT PARTS
BODY CONTROL SYSTEM

BODY CONTROL SYSTEM: Component Parts Location

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- 1. BCM
- A. Behind of combination meter

POWER CONSUMPTION CONTROL SYSTEM

POWER CONSUMPTION CONTROL SYSTEM: Component Parts Location

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- Sliding door control unit RH
 Refer to <u>DLK-23</u>, "<u>AUTOMATIC</u>
 <u>SLIDING DOOR SYSTEM</u>: Component Parts Location".
- 2. Combination meter
 Refer to MWI-7, "METER SYSTEM:
 Component Parts Location".
- 3. BCM
 Refer to BCS-5. "BODY CONTROL
 SYSTEM: Component Parts Location".

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COMPONENT PARTS

< SYSTEM DESCRIPTION >

- IPDM E/R
 Refer to PCS-4, "IPDM E/R: Component Parts Location".
- 7. Automatic back door control module Refer to <u>DLK-22</u>, "AUTOMATIC <u>BACK DOOR SYSTEM</u>: <u>Component Parts Location"</u>.
- 5. Driver seat control unit
 Refer to <u>ADP-6</u>, "Component Parts
 <u>Location"</u>.
- 6. Sliding door control unit LH
 Refer to <u>DLK-23</u>, "AUTOMATIC
 SLIDING DOOR SYSTEM: Component Parts Location".

SYSTEM BODY CONTROL SYSTEM

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BODY CONTROL SYSTEM : System Description

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-9, "COMBINATION SWITCH READING SYSTEM: System Description"
Signal buffer system	BCS-13, "SIGNAL BUFFER SYSTEM : System Description"
Power consumption control system	BCS-14, "POWER CONSUMPTION CONTROL SYSTEM: System Description"
Headlamp system	EXL-12, "HEADLAMP SYSTEM: System Description" (Xenon type headlamp) EXL-113, "HEADLAMP SYSTEM: System Description" (Halogen type headlamp)
Auto light system	Xenon type headlamp models EXL-14, "AUTO LIGHT SYSTEM: System Description" Halogen type headlamp models EXL-14, "AUTO LIGHT SYSTEM: System Description"
Turn signal and hazard warning lamp system	EXL-17, "TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM: System Description" (Xenon type headlamp) EXL-118, "TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM: System Description" (Halogen type headlamp)
Parking, license plate, side maker and tail lamps system	EXL-18, "PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMP SYSTEM: System Description" (Xenon type head-lamp) EXL-119, "PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMP SYSTEM: System Description" (Halogen type headlamp)
Front fog lamp system	EXL-21, "FRONT FOG LAMP SYSTEM: System Description" (Xenon type headlamp) EXL-122, "FRONT FOG LAMP SYSTEM: System Description" (Halogen type headlamp)
Exterior lamp battery saver system	EXL-23, "EXTERIOR LAMP BATTERY SAVER SYSTEM: System Description" (Xenon type headlamp) EXL-124, "EXTERIOR LAMP BATTERY SAVER SYSTEM: System Description" (Halogen type headlamp)
Interior room lamp control system	INL-7, "INTERIOR ROOM LAMP CONTROL SYSTEM : System Description"
Interior room lamp battery saver system	INL-12, "INTERIOR ROOM LAMP BATTERY SAVER SYSTEM: System Description"
Front wiper and washer system	WW-8, "FRONT WIPER AND WASHER SYSTEM : System Description"
Rear wiper and washer system	WW-12, "REAR WIPER AND WASHER SYSTEM : System Description"
Rear window defogger system	DEF-7, "System Description"

Revision: October 2015 BCS-7 2016 Quest

SYSTEM

< SYSTEM DESCRIPTION >

System		Reference	
Warning chime system		WCS-6, "WARNING CHIME SYSTEM : System Description"	
Air conditioning control system		HAC-17, "FRONT AUTOMATIC AIR CONDITIONING SYSTEM: System Description" (Automatic air conditioning) HAC-166, "FRONT MANUAL AIR CONDITIONING SYSTEM: System Description" (Manual air conditioning)	
Power door lock system		HAC-166, "FRONT MANUAL AIR CONDITIONING SYSTEM:	
Intelligent Key system/engine start system		DLK-36, "INTELLIGENT KEY SYSTEM: System Description"	
Nissan Vehicle Immobilizer System (NVIS) - NATS			
Vahiala sagurity system	Theft warning alarm	SEC-20, "VEHICLE SECURITY SYSTEM : System Diagram"	
Vehicle security system Panic alarm		SEC-20. VEHICLE SECORITY STOTEM: System Diagram	
Power window system		PWC-10, "System Description"	
Retained accessory power (RAP) system		PWC-10, "System Description"	
TPMS (Tire Pressure Monitoring System)		WT-8, "System Description"	

BODY CONTROL SYSTEM: Fail-safe

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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 → OFF
B2196: DONGLE NG	Inhibit engine cranking	Erase DTC
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 Ignition switch changes to ACC Receives engine status signal (CAN)
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

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.

< SYSTEM DESCRIPTION >

Condition of cancellation

- More than 1 minute is passed after the rear wiper stop.
- 2. Turn rear wiper switch OFF.
- 3. 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 Description

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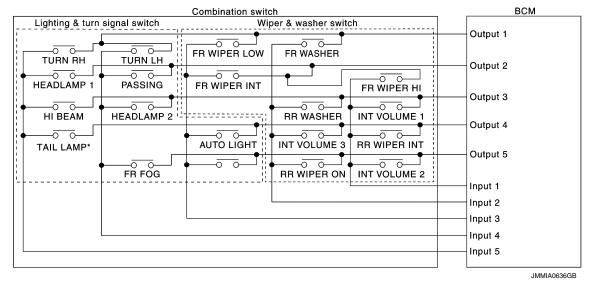
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SYSTEM DIAGRAM



NOTE:

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

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

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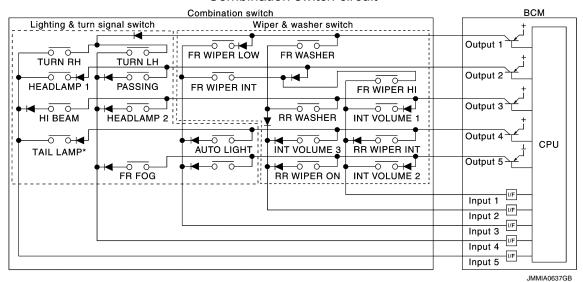
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Combination switch circuit



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 INT	PASSING	HEADLAMP 1
OUTPUT 3	INT VOLUME 1	RR WASHER	_	HEADLAMP 2	HI BEAM
OUTPUT 4	RR WIPER INT	INT VOLUME 3	AUTO LIGHT	_	TAIL LAMP
OUTPUT 5	INT VOLUME 2	RR WIPER ON	_	FR FOG	_

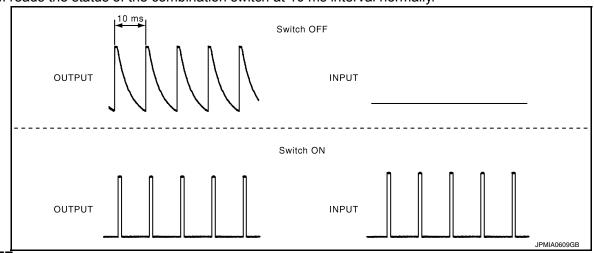
NOTE:

Headlamp has a dual system switch.

COMBINATION SWITCH READING FUNCTION

Description

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



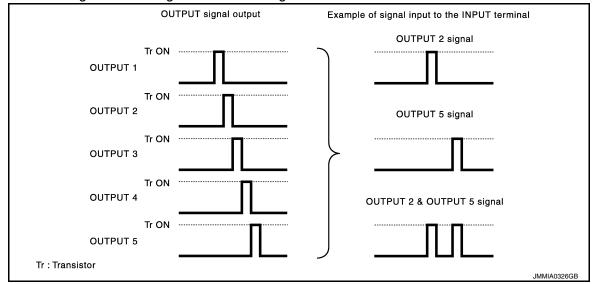
NOTE:

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 → 2 → 3 → 4 → 5, and outputs voltage waveform.

< 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.

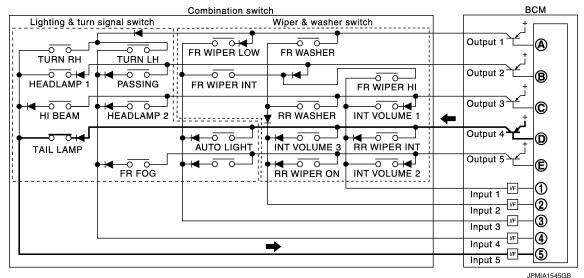


Operation Example

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

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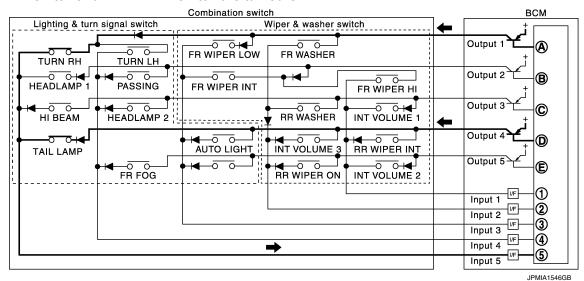
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• The circuits between OUTPUT 1 and INPUT 5 and between OUTPUT 4 and INPUT 5 are formed when the TURN RH switch and TAIL LAMP switch are turned ON.



- 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 INTERMITTENT DIAL POSITION

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

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

NOTE:

For details of wiper intermittent dial position, refer to WW-8, "FRONT WIPER AND WASHER SYSTEM: System Description".

SIGNAL BUFFER SYSTEM

SIGNAL BUFFER SYSTEM : System Description

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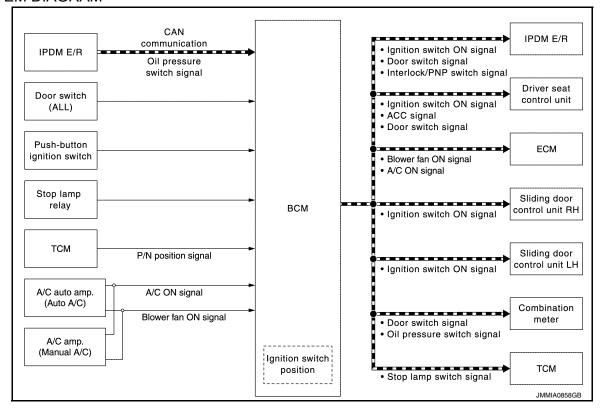
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SYSTEM DIAGRAM



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	12
Ignition switch ON signal ACC signal	Push-button ignition switch (Push switch)	IPDM E/R (CAN) Driver seat control unit (CAN) Sliding door control unit LH (CAN) Sliding door control unit RH (CAN)	Inputs the push-button ignition switch (push switch) signal and transmits the ignition switch status judged with BCM via CAN communication.	L
Door switch signal	Any door switch	Combination meter (CAN) IPDM E/R (CAN) Driver seat control unit (CAN)	Inputs the door switch signal and transmits it via CAN communication.	ВС
Oil pressure switch signal	IPDM E/R (CAN)	Combination meter (CAN)	Transmits the received oil pressure switch signal via CAN communication.	Ν
Blower fan ON signal	A/C auto amp. (Auto A/C) A/C amp. (Manual A/C)	ECM (CAN)	Input blower fan ON signal, and transmits it via CAN communication.	0
A/C ON signal	A/C auto amp. (Auto A/C) A/C amp. (Manual A/C)	ECM (CAN)	Input A/C ON signal, and transmits it via CAN communication.	Р

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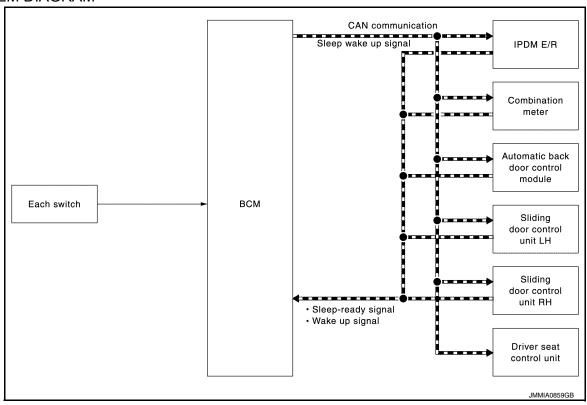
Signal name	Input	Output	Description
Stop lamp switch signal	Stop lamp relay	TCM (CAN)	Inputs the stop lamp switch 1 signal and stop lamp switch 2 signal, and transmits it via CAN communication.
Interlock/PNP switch signal	TCM	IPDM E/R (CAN)	Inputs the P/N position signal and transmits Interlock/PNP switch signal via CAN communication.

POWER CONSUMPTION CONTROL SYSTEM

POWER CONSUMPTION CONTROL SYSTEM: System Description

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SYSTEM DIAGRAM



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, sliding door control unit LH and sliding door control unit RH) 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

SYSTEM

< SYSTEM DESCRIPTION >

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

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

Sleep mode activation

- BCM receives the sleep-ready signal (ready) from IPDM E/R, combination meter, automatic back door control module, sliding door control unit LH and sliding door control unit RH 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 NVIS: 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

NOTE:

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.

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^{*:} Refer to INL-12, "INTERIOR ROOM LAMP BATTERY SAVER SYSTEM: System Description" for details of the interior room lamp battery saver time.

SYSTEM

< SYSTEM DESCRIPTION >

Vake-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: ON HI BEAM 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 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 Passenger door request switch: OFF → ON Door lock and unlock switch: NEUTRAL → LOCK, NEUTRAL UNLOCK Front door lock assembly (driver side) (door key cylinder switch NEUTRAL → LOCK, 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)

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APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

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

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

x: Applicable item

System	Sub avatam calcation 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 control system	INT LAMP	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
Air conditioning control system	AIR CONDITONER		×	×*
Intelligent Key system Engine start system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM ×			
NVIS	IMMU	×	×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door open	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	AIR PRESSURE MONITOR	×	×	×

NOTE:

FREEZE FRAME DATA (FFD)

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

Revision: October 2015 BCS-17 2016 Quest

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^{*:} For models with automatic air conditioning control system, this diagnosis mode is not used.

< SYSTEM DESCRIPTION >

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

NOTE:

- *: Refer to the following for details of the power supply position.
- · OFF (OFF, LOCK): Ignition switch OFF
- · ACC: Ignition switch ACC
- IGN: Ignition switch ON with engine stopped
- RUN: Ignition switch ON with engine running
- · CRANK: At engine cranking

Power supply position shifts to "OFF (LOCK)" from "OFF (OFF)", when ignition switch is in the OFF position, shift position is in the P position, and any of the following conditions are met.

- · Closing door
- · Opening door
- · Door is locked using door request switch
- · Door is locked using Intelligent Key

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

DOOR LOCK

< SYSTEM DESCRIPTION >

DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)

INFOID:0000000013056755

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BCM CONSULT FUNCTION

CONSULT performs the following functions via CAN communication with BCM.

WORK SUPPORT

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) PRANGE: 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

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)	BCS
DOOR SW-AS	Indicated [On/Off] condition of front door switch (passenger side)	
DOOR SW-RR	Indicated [On/Off] condition of sliding door switch RH	N
DOOR SW-RL	Indicated [On/Off] condition of sliding door switch LH	IV
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	0
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	— Р

ACTIVE TEST

BCS-19 Revision: October 2015 2016 Quest

< 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)

NFOID:0000000013056777

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	Displays "Press (ON)/other (OFF)" status determined with the rear window defogger switch.	
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:0000000013056773

CONSULT APPLICATION ITEMS

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

DATA MONITOR

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

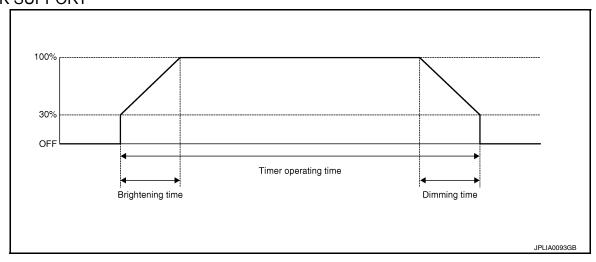
Display item [Unit]	Description
SEAT BELT WARN TEST	The seat belt warning chime operation can be checked by operating the relevant function (On/Off).
ID REGIST WARNING	The ID regist warning chime operation can be checked by operating the relevant function (On/Off).
LIGHT WARN ALM	The light warning chime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

INT LAMP

INT LAMP : CONSULT Function (BCM - INT LAMP)

INFOID:0000000013056770

WORK SUPPORT



Service item	Setting item	Setting	
	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.	
SET I/L D-UNLCK INTCON	On*	With the i	nterior room lamp timer function
SET I/E D-ONLOR INTOON	Off	Without th	ne interior room lamp timer function
	MODE 1	0.5 sec.	
	MODE 2*	1 sec.	
ROOM LAMP ON TIME SET	MODE 3	2 sec.	Sets the interior room lamp gradual brightening time.
	MODE 4	3 sec.	
	MODE 5	0 sec.	
	MODE 1	0.5 sec.	
	MODE 2*	1 sec.	
ROOM LAMP OFF TIME SET	MODE 3	2 sec.	Sets the interior room lamp gradual dimming time.
	MODE 4	3 sec.	
	MODE 5	0 sec.	

Revision: October 2015 BCS-21 2016 Quest

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< SYSTEM DESCRIPTION >

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

^{*:} 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]	The switch status input from door request switch (driver side)
REQ SW-AS [On/Off]	The switch status input from door request switch (passenger side)
REQ SW-RR [On/Off]	NOTE:
REQ SW-RL [On/Off]	The item is indicated, but not monitored.
PUSH SW [On/Off]	The switch status input from push-button ignition switch
UNLK SEN -DR [On/Off]	Driver door unlock status input from unlock sensor
DOOR SW-DR [On/Off]	The switch status input from front door switch (driver side)
DOOR SW-AS [On/Off]	The switch status input from front door switch (passenger side)
DOOR SW-RR [On/Off]	The switch status input from sliding door switch RH
DOOR SW- RL [On/Off]	The switch status input from sliding door switch LH
DOOR SW- BK [On/Off]	The switch status input from back door switch
CDL LOCK SW [On/Off]	Lock switch status input from door lock and unlock switch
CDL UNLOCK SW [On/Off]	Unlock switch status input from door lock and unlock switch
TRNK/HAT MNTR [On/Off]	NOTE: The item is indicated, but not monitored
KEY CYL LK-SW [On/Off]	Lock switch status received from door key cylinder switch
KEY CYL UN-SW [On/Off]	Unlock switch status received from door key cylinder switch
RKE-LOCK [On/Off]	Lock signal status received from remote keyless entry receiver
RKE-UNLOCK [On/Off]	Unlock signal status received from remote keyless entry receiver

ACTIVE TEST

< SYSTEM DESCRIPTION >

Test item	Operation	Description
INT LAMP	On	Outputs the interior room lamp control signal to turn the interior room lamps ON. [Map lamp, personal lamp (when applicable lamps switch is in DOOR position.)]
Off		Stops the interior room lamp control signal to turn the interior room lamps.
STEP LAMP TEST	On	Outputs the step lamp control signal to turn the step lamps ON.
Off Off		Stops the step lamp control signal to turn the step lamps ON.

HEADLAMP

HEADLAMP : CONSULT Function (BCM - HEADLAMP) (Xenon Type Headlamp)

NFOID:0000000013056762

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WORK SUPPORT

Service item	Setting item	Setting			
	MODE 1*	Normal	Normal		
CUSTOM A/LIGHT SETTING	MODE 2	More sensitive setting than normal setting (Turns ON earlier than normal operation)			
	MODE 3	More sensitive setting than MODE 2 (Turns ON earlier than MODE 2)			
	MODE 4	Less sensitiv	Less sensitive setting than normal setting (Turns ON later than normal operation.)		
BATTERY SAVER SET	On*	With the exte	rior lamp battery saver function		
DATTERT SAVER SET	Off	Without the e	exterior lamp battery saver function		
	MODE 1*	45 sec.			
	MODE 2	Without the function			
	MODE 3	30 sec.			
ILL DELAY SET	MODE 4	60 sec.	Sets delay timer function timer operation time.		
	MODE 5	90 sec.	(All doors closed)		
	MODE 6	120 sec.			
	MODE 7	150 sec.			
	MODE 8	180 sec.			
	MODE 1*	With twilight ON custom & with wiper INT, LO and HI			
	MODE 2	With twilight ON custom & with wiper LO and HI			
AUTO LIGHT LOGIC SET	MODE 3	With twilight ON custom & without			
AUTO LIGHT LOGIC SET	MODE 4	Without twilight ON custom & with wiper INT, LO and HI			
	MODE 5	Without twilight ON custom & with wiper LO and HI			
	MODE 6	Without twilight ON custom & without			

^{*:} 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 [On/Off]	The switch status input from push-button ignition switch
ENGINE STATE [Stop/Stall/Crank/Run]	The engine status received from ECM with CAN communication

Revision: October 2015 BCS-23 2016 Quest

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< SYSTEM DESCRIPTION >

Monitor item [Unit]	Description
VEH SPEED 1 [km/h]	The value of the vehicle speed received from combination meter via CAN communication
TURN SIGNAL R [On/Off]	
TURN SIGNAL L [On/Off]	
TAIL LAMP SW [On/Off]	
HI BEAM SW [On/Off]	
HEAD LAMP SW1 [On/Off]	Each switch status that BCM judges from the combination switch reading function
HEAD LAMP SW2 [On/Off]	
PASSING SW [On/Off]	
AUTO LIGHT SW [On/Off]	
FR FOG SW [On/Off]	
DOOR SW-DR [On/Off]	The switch status input from front door switch (driver side)
DOOR SW-AS [On/Off]	The switch status input from front door switch (passenger side)
DOOR SW-RR [On/Off]	The switch status input from sliding door switch RH
DOOR SW- RL [On/Off]	The switch status input from sliding door switch LH
DOOR SW-BK [On/Off]	The switch status input from back door switch
OPTICAL SENSOR [On/Off/NG]	NOTE: This item is indicated, but can not monitored
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

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 tail lamp ON
	Off	Stops the tail lamp request signal transmission
HEAD LAMP	Hi	Transmits the high beam request signal via CAN communication to turn the headlamp (HI)
	Lo	Transmits the low beam request signal via CAN communication to turn the headlamp (LO)
	Off	Stops the high & low beam request signal transmission
FR FOG LAMP	On	Transmits the front fog light request signal to IPDM E/R via CAN communication to turn the front fog lamp ON
	Off	Stops the front light request signal transmission

< SYSTEM DESCRIPTION >

Test item	Operation	Description
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

HEADLAMP: CONSULT Function (BCM - HEADLAMP) (Halogen Type Headlamp)

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WORK SUPPORT

Service item	Setting item		Setting		
	MODE 1*2	Normal	Normal		
CUSTOM A/LIGHT SET-	MODE 2	More sensitive setting than normal setting (Turns ON earlier than normal operation)			
TING	MODE 3	More sensitive setting than MODE 2 (Turns ON earlier than MODE 2)			
	MODE 4	Less sensitiv	Less sensitive setting than normal setting (Turns ON later than normal operation.)		
BATTERY SAVER SET	On* ²	With the exte	rior lamp battery saver function		
BATTER OAVEROLT	Off	Without the e	exterior lamp battery saver function		
	MODE 1*2	45 sec.			
	MODE 2	Without the function			
	MODE 3	30 sec.			
ILL DELAY SET*1	MODE 4	60 sec.	Sets delay timer function timer operation time. (All doors closed)		
	MODE 5	90 sec.	(All doors closed)		
	MODE 6	120 sec.			
	MODE 7	150 sec.			
	MODE 8	180 sec.			
	MODE 1*2	With twilight ON custom & with wiper INT, LO and HI			
	MODE 2	With twilight ON custom & with wiper LO and HI			
AUTO LIGHT LOGIC SET*1	MODE 3	With twilight ON custom & without			
AUTO LIGHT LOGIC SET	MODE 4	Without twilight ON custom & with wiper INT, LO and HI			
	MODE 5	Without twilight ON custom & with wiper LO and HI			
	MODE 6	Without twilig	ht ON custom & without		

^{*1:} For models without auto light system, 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]	The switch status input from push-button ignition switch
ENGINE STATE [Stop/Stall/Crank/Run]	The engine status received from ECM with CAN communication
VEH SPEED 1 [km/h]	The value of the vehicle speed received from combination meter via CAN communication

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^{*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 SW1 [On/Off]	Each switch status that BCM judges from the combination switch reading function
HEAD LAMP SW2 [On/Off]	
PASSING SW [On/Off]	
AUTO LIGHT SW* ¹ [On/Off]	
FR FOG SW* ² [On/Off]	
DOOR SW-DR [On/Off]	The switch status input from front door switch (driver side)
DOOR SW-AS [On/Off]	The switch status input from front door switch (passenger side)
DOOR SW-RR [On/Off]	The switch status input from sliding door switch RH
DOOR SW- RL [On/Off]	The switch status input from sliding door switch LH
DOOR SW-BK [On/Off]	The switch status input from back door switch
OPTICAL SENSOR [On/Off/NG]	NOTE: This item is indicated, but can not monitored
OPTI SEN (DTCT)* ¹ [V]	The value of outside brightness voltage input from the optical sensor
OPTI SEN (FILT)* ¹ [V]	The value of outside brightness voltage filtered by BCM

^{*1:} For models without auto light system, 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 tail lamp ON
	Off	Stops the tail lamp request signal transmission
HEAD LAMP	Hi	Transmits the high beam request signal via CAN communication to turn the headlamp (HI)
	Lo	Transmits the low beam request signal via CAN communication to turn the headlamp (LO)
	Off	Stops the high & low beam request signal transmission
FR FOG LAMP*	On	Transmits the front fog light request signal to IPDM E/R via CAN communication to turn the front fog lamp ON
	Off	Stops the front light request signal transmission

 $^{^{\}star 2}$: For models without front fog lamp, this item cannot be monitored.

< SYSTEM DESCRIPTION >

Test item	Operation	Description
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

^{*:} For models without front fog lamp, this item cannot be tested.

WIPER

WIPER: CONSULT Function (BCM - WIPER)

INFOID:0000000013056772

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WORK SUPPORT

Service item	Setting item	Description	_
WIPER SPEED	PIPER SPEED er intermittent dial position) ETTING Without vehicle speed	(Front wiper intermittent time linked with the vehicle speed and wip-	The setting of front wiper INT operation can be
SETTING		(Front wiper intermittent time linked with the wiper intermittent dial	changed

^{*:} 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]	
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]	
RR WIPER INT [Off/On]	Status of each switch judged by BCM using the combination switch reading function
RR WASHER SW [Off/On]	
RR WIPER STOP [Off/On]	Rear wiper motor (stop position) status input from the rear wiper motor

ACTIVE TEST

Revision: October 2015 BCS-27 2016 Quest

< SYSTEM DESCRIPTION >

Test item	Operation	Description	
	Hi	Transmits the front wiper request signal (HI) to IPDM E/R via CAN communication to operate the front wiper HI operation.	
FR WIPER	Lo	Transmits the front wiper request signal (LO) to IPDM E/R via CAN communication 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 WIPFR	On	Output the voltage to operate the rear wiper motor.	
IXIX VVIF LIX	Off	Stops the voltage to stop the rear wiper motor.	

FLASHER

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

INFOID:0000000013056768

WORK SUPPORT

Service item	Setting item		Setting
	Lock Only	With locking only	
HAZARD ANSWER BACK	Unlk Only	With unlocking only	Sets the hazard warning lamp answer back function when the door is lock/unlock with the request switch of
	Lock&Unlk* With locking/unlocking		the key fob.
	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.

Monitor item [Unit]	Description
REQ SW-DR [On/Off]	The switch status input from the request switch (driver side)
REQ SW-AS [On/Off]	The switch status input from the request switch (passenger side)
PUSH SW [On/Off]	The switch status input from the push-button ignition switch
TURN SIGNAL R [On/Off]	Each quitch status that DCM detacts from the combination quitch reading functi
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]	Lock signal status received from the remote keyless entry receiver
RKE-UNLOCK [On/Off]	Unlock signal status received from the remote keyless entry receiver
RKE-PANIC [On/Off]	Panic alarm signal status received from the remote keyless entry receiver

ACTIVE TEST

< SYSTEM DESCRIPTION >

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

FLASHER: CONSULT Function (BCM - FLASHER) (Halagen Type Headlamp)

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WORK SUPPORT

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

^{*:} 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]	The switch status input from the request switch (driver side)
REQ SW-AS [On/Off]	The switch status input from the request switch (passenger side)
PUSH SW [On/Off]	The switch status input from the push-button ignition switch
TURN SIGNAL R [On/Off]	Each switch status that BCM detects from the combination switch reading function
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]	Lock signal status received from the remote keyless entry receiver
RKE-UNLOCK [On/Off]	Unlock signal status received from the remote keyless entry receiver
RKE-PANIC [On/Off]	Panic alarm signal status received from the remote keyless entry receiver

ACTIVE TEST

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

AIR CONDITIONER

Revision: October 2015 BCS-29 2016 Quest

< SYSTEM DESCRIPTION >

AIR CONDITIONER: CONSULT Function (BCM - AIR CONDITIONER) (Auto A/C)

INFOID:0000000013056774

DATA MONITOR

NOTE:

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

Display Item List

Monitor Item [Unit]		Contents
FAN ON SIG	[On/Off]	Displays the status of blower fan ON signal received from A/C auto amp.
AIR COND SW	[On/Off]	Displays the status of A/C ON signal received from A/C auto amp.

AIR CONDITIONER: CONSULT Function (BCM - AIR CONDITIONER) (Manual A/C)

INFOID:0000000013056775

DATA MONITOR

NOTE:

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

Display Item List

Monitor Item [Unit]		Contents
FAN ON SIG	[On/Off]	Displays the status of blower fan ON signal received from A/C amp.
AIR COND SW	[On/Off]	Displays the status of A/C ON signal received from A/C amp.

INTELLIGENT KEY

INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)

INFOID:0000000013056756

WORK SUPPORT

Monitor item	Description
INSIDE ANT DIAGNOSIS	This function allows inside key antenna self-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	NOTE: This item is displayed, but cannot be used
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	NOTE: This item is displayed, but cannot be used
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

< SYSTEM DESCRIPTION >

Monitor item	Description			
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			

SELF-DIAG RESULT

Refer to BCS-64, "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		

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Revision: October 2015 BCS-31 2016 Quest

< SYSTEM DESCRIPTION >

Monitor Item	Condition		
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		
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		

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

ACTIVE TEST

< SYSTEM DESCRIPTION >

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 used. • 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 hazard warning lamp operation LH: LH side hazard warning lamps operate RH: RH side hazard warning lamps operate Off: Non-operation			
P RANGE	This test is able to check CVT shift selector power supply On: Operate Off: Non-operation			
ENGINE SW ILLUMI	This test is able to check push-button ignition switch illumination operation On: Operate Off: Non-operation			
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			
POWER SLIDE DOOR	This test is able to check automatic siding door operation RR PSD ON: Auto open/close operate RL PSD ON: Auto open/close operate			

Revision: October 2015 BCS-33 2016 Quest

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COMB SW

COMB SW: CONSULT Function (BCM - COMB SW)

INFOID:0000000012407006

DATA MONITOR

NOTE:

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

Monitor item [UNIT]	Description
FR WIPER HI [Off/On]	Displays the status of the FR WIPER HI switch in combination switch judged by BCM with the combination switch reading function.
FR WIPER LOW [Off/On]	Displays the status of the FR WIPER LOW switch in combination switch judged by BCM with the combination switch reading function.
FR WASHER SW [Off/On]	Displays the status of the FR WASHER switch in combination switch judged by BCM with the combination switch reading function.
FR WIPER INT [Off/On]	Displays the status of the FR WIPER INT switch in combination switch judged by BCM with the combination switch reading function.
INT VOLUME [1 - 7]	Displays the status of wiper intermittent dial position judged by BCM with the combination switch reading function.
RR WIPER ON [Off/On]	Displays the status of the RR WIPER ON switch in combination switch judged by BCM with the combination switch reading function.
RR WIPER INT [Off/On]	Displays the status of the RR WIPER INT switch in combination switch judged by BCM with the combination switch reading function.
RR WASHER SW [Off/On]	Displays the status of the RR WASHER switch in combination switch judged by BCM with the combination switch reading function.
TURN SIGNAL R [Off/On]	Displays the status of the TURN RH switch in combination switch judged by BCM with the combination switch reading function.
TURN SIGNAL L [Off/On]	Displays the status of the TURN LH switch in combination switch judged by BCM with the combination switch reading function.
TAIL LAMP SW [Off/On]	Displays the status of the TAIL LAMP switch in combination switch judged by BCM with the combination switch reading function.
HI BEAM SW [Off/On]	Displays the status of the HI BEAM switch in combination switch judged by BCM with the combination switch reading function.
HEAD LAMP SW 1 [Off/On]	Displays the status of the HEADLAMP 1 switch in combination switch judged by BCM with the combination switch reading function.
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.

BCM

BCM: CONSULT Function (BCM - BCM)

INFOID:0000000012407007

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

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IMMU: CONSULT Function (BCM - IMMU)

INFOID:0000000013056759

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WORK SUPPORT

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

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 igni-		
CONFIRM ID2	tion switch.		
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	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 is touched.	

BATTERY SAVER

BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)

INFOID:0000000013056771

WORK SUPPORT

Service item	Setting item	m Setting		
	MODE 1	30 min.	Sets the interior room lamp battery saver timer operating	
	MODE 2	60 min.	time.	
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		
	Off	Without the exterior lamp battery saver 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.

Revision: October 2015 BCS-35 2016 Quest

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Monitor item [Unit]	Description
REQ SW-DR [On/Off]	The switch status input from door request switch (driver side)
REQ SW-AS [On/Off]	The switch status input from door request switch (passenger side)
REQ SW-RR [On/Off]	NOTE:
REQ SW-RL [On/Off]	The item is indicated, but not monitored.
PUSH SW [On/Off]	The switch status input from push-button ignition switch
UNLK SEN -DR [On/Off]	Driver door unlock status input from unlock sensor
DOOR SW-DR [On/Off]	The switch status input from front door switch (driver side)
DOOR SW-AS [On/Off]	The switch status input from front door switch (passenger side)
DOOR SW-RR [On/Off]	The switch status input from sliding door switch RH
DOOR SW- RL [On/Off]	The switch status input from sliding door switch LH
DOOR SW- BK [On/Off]	The switch status input from back door switch
CDL LOCK SW [On/Off]	Lock switch status input from door lock and unlock switch
CDL UNLOCK SW [On/Off]	Unlock switch status input from door lock and unlock switch
TRNK/HAT MNTR [On/Off]	NOTE: The item is indicated, but not monitored
KEY CYL LK-SW [On/Off]	Lock switch status received from door key cylinder switch
KEY CYL UN-SW [On/Off]	Unlock switch status received from door key cylinder switch
RKE-LOCK [On/Off]	Lock signal status received from remote keyless entry receiver
RKE-UNLOCK [On/Off]	Unlock signal status received from remote keyless entry receiver

ACTIVE TEST

Test item	Operation	Description
BATTERY SAVER	Off	Cuts the interior room lamp power supply to turn interior room lamps OFF.
	On	Outputs the interior room lamp power supply to turn interior room lamps ON.*

^{*:} Each lamp switch is in ON position.

TRUNK

TRUNK: CONSULT Function (BCM - TRUNK)

NFOID:0000000013056757

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	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)

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WORK SUPPORT

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.

DATA MONITOR

NOTE:

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

Monitored Item	Description	
REQ SW -DR	Indicates [ON/OFF] condition of door request switch (driver side).	
REQ SW -AS	Indicates [ON/OFF] condition of door request switch (passenger side).	
REQ SW -RR	NOTE: This is displayed even when it is not equipped.	
REQ SW -RL	NOTE: This is displayed even when it is not equipped.	
REQ SW -BD/TR	Indicates [ON/OFF] condition of back door request switch.	
PUSH SW	Indicates [ON/OFF] condition of push-button ignition switch	
UNLK SEN -DR	Indicates [ON/OFF] condition of driver door UNLOCK status.	
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.	
CDL UNLOCK SW	Indicates [ON/OFF] condition of unlock signal from door lock/unlock switch.	
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 is displayed even when it is not equipped.	
RKE-LOCK	Indicates [ON/OFF] condition of LOCK signal from Intelligent Key.	

Revision: October 2015 BCS-37 2016 Quest

< SYSTEM DESCRIPTION >

Monitored Item	Description
RKE-UNLOCK	Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key.
RKE-TR/BD	NOTE: This is displayed even when it is not equipped.

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 horns operation. Horns are 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) (Front Window Antipinch)

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

RETAIND PWR: CONSULT Function (BCM - RETAINED PWR) (Driver Side Window Anti-pinch)

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
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:0000000012407014

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.

< SYSTEM DESCRIPTION >

ACTIVE TEST

Test item	Opera- tion	Description
OIL PRESSURE SW	Off	OFF
	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.

AIR PRESSURE MONITOR

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

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description	
Self Diagnostic Result	Retrieve DTC from ECU and display diagnostic items.	
Data Monitor	Monitor the input/output signal of the control unit in real time.	
Active Test	Send the drive signal from CONSULT to the actuator. The operation check can be performed.	
Work Support	This mode enables a technician to adjust some devices faster and more accurately.	

SELF DIAGNOSTIC RESULT

Refer to BCS-64, "DTC Index".

DATA MONITOR MODE

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)	Remarks	
AIR PRESS FL (kPa kg/cm2 or Psi)		
AIR PRESS FR (kPa, kg/cm2 or Psi)	Tire pressure	
AIR PRESS RR (kPa, kg/cm2 or Psi)		
AIR PRESS RL (kPa, kg/cm2 or Psi)		
ID REGST FL1 (Yet, Done)	Registration ID	E
ID REGST FR1 (Yet, Done)		
ID REGST RR1 (Yet, Done)		
ID REGST RL1 (Yet, Done)		
WARNING LAMP (On/Off)	Low tire pressure warning lamp	
BUZZER (On/Off)	NOTE: This item is displayed, but cannot be use this item.	

ACTIVE TEST MODE

NOTE:

After completing the work below, perform an active test.

1. Check ID registration state and perform self-diagnosis.

Revision: October 2015 BCS-39 2016 Quest

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2. Erase the self-diagnosis result history.

Item	Description
WARNING LAMP	Low tire pressure warning lamp can be turned ON arbitrarily.
ID REGIST WARNING	NOTE: Displayed but not used in TPMS.
RUN FLAT TIRE W/L	NOTE: Displayed but not used in TPMS.
RUN FLAT/T WARN BUZZER	NOTE: Displayed but not used in TPMS.
FLASHER	Turn signal lamps can be turned ON arbitrarily.
HORN	This test is able to check to check that the horn sounds.

WORK SUPPORT

Item	Description
ID READ	Registered tire pressure sensor ID can be displayed.
ID REGIST	Tire pressure sensor ID can be registered.

ECU DIAGNOSIS INFORMATION

BCM

Reference Value

INFOID:0000000012407016

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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.

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
TOWN LIVIN	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
I IX WIF LIX LOW	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
IN WASHEN SW	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT	Off
FR WIFER IN	Front wiper switch INT	On
FR WIPER STOP	Front wiper is not in STOP position	Off
FR WIFER STOP	Front wiper is in STOP position	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dia position
RR WIPER ON	Other than rear wiper switch ON	Off
RR WIPER ON	Rear wiper switch ON	On
	Other than rear wiper switch INT	Off
RR WIPER INT	Rear wiper switch INT	On
RR WASHER SW	Rear washer switch OFF	Off
	Rear washer switch ON	On
DD 144DED 070D	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
TUDNI CIONAL I	Other than turn signal switch LH	Off
TURN SIGNAL L	Turn signal switch LH	On
TAIL LAMP CIAL	Other than lighting switch 1ST and 2ND	Off
TAIL LAMP SW	Lighting switch 1ST or 2ND	On
III DE AM CW	Other than lighting switch HI	Off
HI BEAM SW	Lighting switch HI	On
LIFAD LAMB OWA	Other than lighting switch 2ND	Off
HEAD LAMP SW 1	Lighting switch 2ND	On
LIEAD LAMB OW O	Other than lighting switch 2ND	Off
HEAD LAMP SW 2	Lighting switch 2ND	On
	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
ALITO LIQUIT C'A'	Other than lighting switch AUTO	Off
AUTO LIGHT SW	Lighting switch AUTO	On

Revision: October 2015 BCS-41 2016 Quest

Monitor Item	Condition	Value/Status
FR FOG SW	Front fog lamp switch OFF	Off
11(1 00 0W	Front fog lamp switch ON	On
DOOR SW-DR	Driver door closed	Off
DOOK OW-DIX	Driver door opened	On
DOOR SW-AS	Passenger door closed	Off
DOOK SW-AS	Passenger door opened	On
DOOR SW-RR	Sliding door RH closed	Off
DOOK SW-KK	Sliding door RH opened	On
DOOR SW-RL	Sliding door LH closed	Off
DOOR SW-RL	Sliding door LH opened	On
DOOD SW DK	Back door closed	Off
DOOR SW-BK	Back door opened	On
CDL LOCK CW	Other than power door lock switch LOCK	Off
CDL LOCK SW	Power door lock switch LOCK	On
	Other than power door lock switch UNLOCK	Off
CDL UNLOCK SW	Power door lock switch UNLOCK	On
KEY OWLLK OW	Other than driver door key cylinder LOCK position	Off
KEY CYL LK-SW	Driver door key cylinder LOCK position	On
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off
	Driver door key cylinder UNLOCK position	On
LIAZADD OM	Hazard switch is OFF	Off
HAZARD SW	Hazard switch is ON	On
DEAD DEE OW	Rear window defogger switch OFF	Off
REAR DEF SW	Rear window defogger switch ON	On
TD/DD ODEN CM	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	Blower fan OFF	Off
FAN ON SIG	Blower fan ON	On
AID COND CW	Air conditioner OFF (A/C switch indicator OFF) (Automatic A/C) A/C switch OFF (Manual A/C)	Off
AIR COND SW	Air conditioner ON (A/C switch indicator ON) (Automatic A/C) A/C switch ON (Manual A/C)	On
RKE-LOCK	LOCK button of the key is not pressed	Off
RNE-LUCK	LOCK button of the key is pressed	On
DIVE LINII 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 DANIES	PANIC button of the key is not pressed	Off
RKE-PANIC	PANIC button of the key is pressed	On
DICE MODE CITE	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

Monitor Item	Condition	Value/Status
	Air bag signal (NORMAL) is detected.	NOMAL
HOCK SENSOR	Air bag signal (AIR BAG OPEN) is detected.	On
	Air bag signal is not detected.	Off
PTI SEN (DTCT)	Bright outside of the vehicle	Close to 5 V
OF 11 OE 14 (D 101)	Dark outside of the vehicle	Close to 0 V
ADTI CENI (EILT)	Bright outside of the vehicle (Lighting switch AUTO)	Close to 5 V
PTI SEN (FILT)	Dark outside of the vehicle (Lighting switch AUTO)	Close to 1.50 V
PTICAL SENSOR	NOTE: The item is indicated, but not monitored.	Off
AIN SENSOR	NOTE: The item is indicated, but not monitored.	Off
EQ SW -DR	Driver door request switch is not pressed	Off
EQ 3W -DR	Driver door request switch is pressed	On
EO SW. AS	Passenger door request switch is not pressed	Off
EQ SW -AS	Passenger door request switch is pressed	On
EQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
EQ SW -RL	NOTE: The item is indicated, but not monitored.	Off
EQ SW -BD/TR	Back door request switch is not pressed	Off
	Back door request switch is pressed	On
LICIT OM	Push-button ignition switch (push switch) is not pressed	Off
USH SW	Push-button ignition switch (push switch) is pressed	On
LUCH SW	NOTE: The item is indicated, but not monitored.	Off
DAKE OW 4	The brake pedal is not depressed	Off
RAKE SW 1	The brake pedal is depressed	On
	The brake pedal is depressed when No. 7 fuse is blown	Off
RAKE SW 2	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
ETE/CANICL CVA	Selector lever in P position	Off
ETE/CANCL SW	Selector lever in any position other than P	On
ET DN/N CW/	Selector lever in any position other than P and N	Off
FT PN/N SW	Selector lever in P or N position	On
/L -LOCK	NOTE: The item is indicated, but not monitored.	Off
/L -UNLOCK	NOTE: The item is indicated, but not monitored.	Off
/L RELAY-F/B	NOTE: The item is indicated, but not monitored.	Off
INLK SEN -DR	Driver door is locked	Off
INLIX OLIN -DIX	Driver door is unlocked	On
HCH CW IDDM	Push-button ignition switch (push-switch) is not pressed	Off
USH SW -IPDM	Push-button ignition switch (push-switch) is pressed	On
ON DIV4 F/D	Ignition switch in OFF or ACC position	Off
GN RLY1 -F/B	Ignition switch in ON position	On

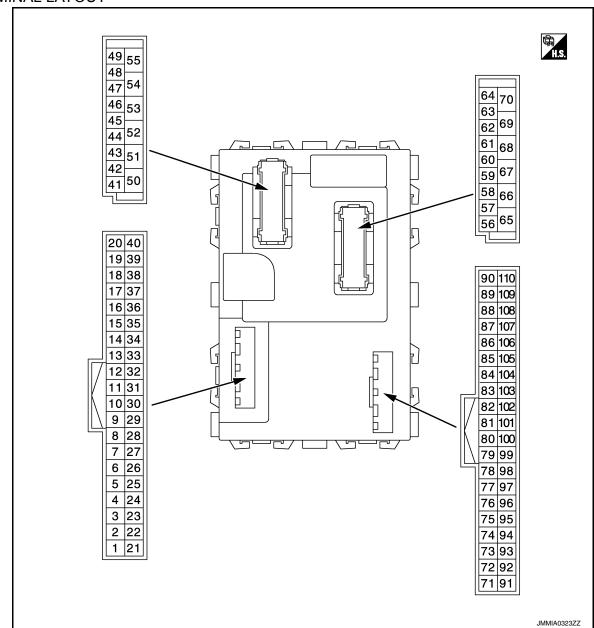
Monitor Item	Condition	Value/Status
DETE SW -IPDM	Selector lever in any position other than P	Off
DETE SW -IF DIVI	Selector lever in P position	On
SFT PN -IPDM	Selector lever in any position other than P and N	Off
SET EN -IPDIVI	Selector lever in P or N position	On
OFT D. MET	Selector lever in any position other than P	Off
SFT P -MET	Selector lever in P position	On
OFT N. 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
DDMT ENC CTDT	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 key slot receives is not recognized by any key ID registered to BCM.	Yet
CONFRM ID ALL	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done
CONFIRM ID4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
CONFINIVI ID4	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done

BCM

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status	Λ
CONFIRM ID3	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet	А
CONFIRMIDS	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done	В
CONFIRM ID2	The key ID that the key slot receives is not recognized by the second key ID registered to BCM.	Yet	
CONTINUID2	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done	С
OONEIDM ID4	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet	D
CONFIRM ID1	The key ID that the key slot 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
INOT REGISTERED	BCM detects non-registration key ID.	ID NG	=
TP 4	The ID of fourth key is not registered to BCM	Yet	F
174	The ID of fourth key is registered to BCM	Done	
TP 3	The ID of third key is not registered to BCM	Yet	-
1173	The ID of third key is registered to BCM	Done	G
TP 2	The ID of second key is not registered to BCM	Yet	-
	The ID of second key is registered to BCM	Done	Н
TP 1	The ID of first key is not registered to BCM	Yet	- 11
	The ID of first key is registered to BCM	Done	-
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire	
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire	J
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire	-
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire	K
ID REGST FL1	ID of front LH tire transmitter is registered	Done	=
ID NEGOTIET	ID of front LH tire transmitter is not registered	Yet	L
ID REGST FR1	ID of front RH tire transmitter is registered	Done	=
ID REGGI FRI	ID of front RH tire transmitter is not registered	Yet	DC
ID REGST RR1	ID of rear RH tire transmitter is registered	Done	BC
ID REGGI KIKI	ID of rear RH tire transmitter is not registered	Yet	
ID REGST RL1	ID of rear LH tire transmitter is registered	Done	Ν
ID NEGOT NET	ID of rear LH tire transmitter is not registered	Yet	-
WARNING LAMP	Tire pressure indicator OFF	Off	-
WARNING LAMP	Tire pressure indicator ON	On	0
BUZZER	Tire pressure warning alarm is not sounding	Off	-
DULLLIN	Tire pressure warning alarm is sounding	On	D

TERMINAL LAYOUT



PHYSICAL VALUES

	nal No.	Description				Value	
+ (vvire	color)	Signal name	Input/ Output	Condition		(Approx.)	
1	Ground	Rear window defog-	Input	Rear window	OFF	9 – 16 V	
(W)	Giodila	ger relay control	iriput	defogger	ON	0 – 0.6 V	

	inal No. e color)	Description	1		0 1111	Value	Α
+	-	Signal name	Input/ Output		Condition	(Approx.)	
					All switches OFF	0 V	В
					Turn signal switch RH		Ь
					Lighting switch HI	(V) 15	
2 (R)	Ground	Combination switch INPUT 5	Input	Combination switch (Wiper volume	Lighting switch 1ST	10 5 0 PKIB4958J	C
(R) Glound	INFOT 5		dial 4)	Lighting switch 2ND	(V) 15 10 5 0 ++10 ms JPMIA0342JP 2.0 V	E F G	
					All switches OFF	0 V	
					Turn signal switch LH		Н
					Lighting switch PASS	(V) 15	
3 (G)	Ground	Combination switch INPUT 4	Input	Combination switch (Wiper volume	Lighting switch 2ND	10 5 0 PKIB4958J	J
				dial 4)	Front fog lamp switch ON	(V) 15 10 5 0 ++10ms PKIB4956J 0.8 V	K
					All switches OFF	0.0 V	BCS
					Front wiper switch LO	• •	
					Front wiper switch MIST	(V) 15	Ν
4	_	Combination switch		Combination switch	Front wiper switch INT	10	
4 (BE) Ground	nd INPUT 3 Inpu	Input	(Wiper volume dial 4)	Lighting switch AUTO	0 → +10ms i	0	
						PKIB4958J 1.0 V	P

	nal No.	Description	1		0 111	Value
+ (vvire	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)
					Rear washer switch ON (Wiper volume dial 4)	10 10 10 10 10 10 10 10 10 10 10 10 10 1
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	PKIB4958J
					Rear wiper switch ON (Wiper volume dial 4)	(V) 15 10 5 0
						PKIB4956J 0.8 V
					All switches OFF (Wiper volume dial 4)	0 V
					Front wiper switch HI (Wiper volume dial 4)	(V) #
					Rear wiper switch INT (Wiper volume dial 4)	15 10 5 0
					Wiper volume dial 3 (All switches OFF)	PKIB4958J
6 (W)	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 ++10ms PKiB4952J 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

	nal No. color)	Description			O a saltitura	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
7* ¹ (W)	Ground	Door key cylinder switch UNLOCK	Input	Door key cylinder switch	NEUTRAL position	(V) 15 10 5 0 + 10ms PKIB4960J
					UNLOCK position	7.0 - 8.0 V 0 V
		Power window				(V) 15 10
		switch communica- tion (with automatic sliding door system)	Input/ Output	Ignition switch O	N	20ms PKIA7023E
8	0				T	9.0 - 10 V
(Y)* ¹ (GR)* ²	Ground	Door key cylinder switch LOCK (with-		Door key cylin-	NEUTRAL position	(V) 15 10 5 0
		out automatic sliding door system)	Input	der switch		+ 10ms PKIB4960J
					LOCK position	7.0 - 8.0 V 0 V
9				Stop lamp	OFF (Brake pedal is not depressed)	0 V
(GR)	Ground	Stop lamp switch 1	Input	switch	ON (Brake pedal is depressed)	9 – 16 V
						(V) 15
12* ¹ (GR)	Ground	Door lock and unlock switch LOCK	Input	Door lock and unlock switch	NEUTRAL position	10 5 0 10 ms
						JPMIA0012GB 1.0 - 1.5 V
					LOCK position	0 V
13* ¹ (BR)	Ground	Door lock and unlock switch UNLOCK	Input	Door lock and unlock switch	NEUTRAL position	(V) 15 10 5 0
					UNLOCK position	JPMIA0012GB 1.0 - 1.5 V 0 V
					ONLOCK POSITION	UV

	nal No.	Description				Value
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)
14	Ground	Optical sensor	Input	Ignition switch	When bright outside of the vehicle	Close to 5 V
(L)	Ground	Optical serisor	IIIput	ON	When dark outside of the vehicle	Close to 0 V
15 (W)	Ground	Rear window defog- ger switch	Input	Rear window defogger switch	Not pressed	(V) 15 10 5 0 10 ms JPMIA0012GB 1.0 - 1.5 V
					Pressed	0 V
16* ³ (Y)	Ground	Dimmer signal	Output	Ignition switch ON	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)	7.5 – 16 V
17	Ground	Sensor power sup-	Output	Ignition switch	OFF, ACC	0 V
(O)	Oround	ply	Output	igilition switch	ON	4.65 – 5.5 V
18 (R)	Ground	Receiver and sensor ground	Input	Ignition switch O	N	0 V
21 (GR)	Ground	NATS antenna amp.	Input/ Output	Intelligent Key: Intelligent Key battery is re- moved	Brake pedal: Depressed NOTE: Waveform varies each time when brake pedal is depressed	(V) 15 10 5 0 → 440ms JMKIA6232JP
					Brake pedal: Not de- pressed	9 – 16 V
-					ON	0 – 0.5 V
23 (W)	Ground	Security indicator lamp control	Output	Security indicator lamp	Blinking (Ignition switch OFF)	(V) ₁₅ 10 5 0 → 1s JPMIA0590GB
						12.0 V
					OFF	9 – 16 V

	nal No.	Description				Value	
(Wire +	color)	Signal name	Input/ Output		Condition	Value (Approx.)	
25 (P)	Ground	NATS antenna amp.	Input/ Output	During waiting	Brake pedal: Depressed NOTE: Waveform varies each time when brake pedal is depressed	(V) 15 10 5 0 →40ms JMKIA6233JP	
					Brake pedal: Not de- pressed	9 – 16 V	
27		A/C ON (Automatic air conditioner)		A/C	OFF (A/C switch indicator: OFF)	(V) 15 10 5 0	
(O)	Ground		Input			7.0 - 8.0 V	_
					ON (A/C switch indicator: ON)	0 V	
				Ignition switch	A/C switch OFF	12 V	5
		A/C ON (Manual c air conditioner)		ON and blower fan switch other than OFF	A/C switch ON	0 V	-
		Blower fan ON (Automatic air condition-		Fan switch	OFF	12 V	-
		er)		i ali switch	ON	0 V	
28 BR)	Ground	Blower fan ON (Manual air condi- tioner)	Input	Fan switch	OFF	(V) 15 10 5 0 + + 10ms PKIB4960J	
					Other than OFF	7.0 - 8.0 V 0 V	
29					OFF OFF	9 – 16 V	E
(P)	Ground	Hazard switch	Input	Hazard switch	ON	0 – 1.5 V	-
					Pressed	0 V	
30 (L)	Ground	Back door opener switch	Input	Back door opener switch	Not pressed	(V) 15 10 5 0	

	nal No.	Description				Value
+	color)	Signal name	Input/ Output		Condition	(Approx.)
31 (G)	Ground	Front door lock assembly driver side (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 10 5 0 ++10ms PKIB4960J 7.0 - 8.0 V
					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
32 (R)	Ground	Combination switch OUTPUT 5	Output	Combination switch	Front fog lamp switch ON (Wiper volume dial 4)	AN
					Rear wiper switch ON (Wiper volume dial 4)	(V) 15 10
					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 +10ms PKIB4956J
					All switches OFF (Wiper volume dial 4)	(V) 15 10 5 0 → 10ms PKIB4960J 7.0 - 8.0 V
33 (W)	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

	inal No.	Description				Value
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper volume dial 4)	(V) 15 10 5 0 PKIB4960J 7.0 - 8.0 V
34 (P)	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 1.2 V
			Combination	All switches OFF	(V) 15 10 5 0 PKIB4960J	
35 (GR)	Ground	Combination switch OUTPUT 2	Output	switch (Wiper volume dial 4)	1:1::	7.0 - 8.0 V
(OIV)		0011 01 2			Lighting switch 2ND Lighting switch PASS	(V) 15
					Front wiper switch INT	15
					Front wiper switch HI	PKIB4958J
36		Combination switch		Combination switch	All switches OFF	(V) 15 10 5 0 PKIB4960J 7.0 - 8.0 V
(R) Groun	Ground	OUTPUT 1	Output	(Wiper volume	Turn signal switch RH	
				dial 4)	Turn signal switch LH	(V) 15 10 5
					Front wiper switch LO	
					Front wiper switch MIST	0
					Front washer switch ON	PKIB4958J

	nal No.	Description				Value
+	color)	Signal name	Input/ Output		Condition	(Approx.)
07					P position (Release selector button)	0 – 1.5 V
37 (G)	Ground	Detention switch	Input	Selector lever	P position (Push selector button)	6 – 16 V
					Any position other than P	
					Waiting	12 V
				Ignition switch OFF (Remote keyless entry communication)	When operating either button on Intelligent Key	(V) 15 10 5 0 200 ms JMMIA0572GB
38 (BE)	Ground	Receiver communication	Input/ Output	Ignition switch ON (TPMS	Waiting	(V) 15 10 5 0 100 ms JMMIA0573GB
				communication)	When receiving signal from tire pressure sensor	(V) 15 10 5 0 100 ms
39 (L)	Ground	CAN-H	Input/ Output		_	_
40 (P)	Ground	CAN-L	Input/ Output		_	_
43 (P)	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
					ON (When back door opened)	0 V
44		Rear wiper stop po-	1. 1	Ignition switch	Rear wiper stop position	12 V
(GR)	Ground	sition	Input	ŎN	Any position other than rear wiper stop position	0 V

	inal No. e color)	Description			O a malitica m	Value (Approx.)	
+	-	Signal name	Input/ Output		Condition		
45 (W)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closed)	(V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V	
					ON (When passenger door opened)	0 V	
46 (R)	Ground	Sliding door RH switch	Input	Sliding door RH switch	OFF (When sliding door RH closed)	(V) 15 10 5 0 ++10ms PKIB4960J 7.0 - 8.0 V	
					ON (When sliding door RH opened)	0 V	
47 (G)	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 (BE)	Ground	Sliding door LH switch	Input	Sliding door LH switch	OFF (When sliding door LH closed)	(V) 15 10 5 0 ***10ms PKIB4960J 7.0 - 8.0 V	
					ON (When sliding door LH opened)	0 V	
49 (B)	Ground	Luggage room lamp control	Output	Luggage room lamp	OFF ON	9 – 16 V 0 – 1.0 V	
50* ² (V)	Ground	Selective unlock re- lay control (Sliding door LH UNLOCK	Input	Sliding door LH	UNLOCK (Actuator is activated) Other than UNLOCK (Ac-	0 – 0.6 V 9 – 16 V	
51	Ground	control) Back door request	Input	Back door re-	tuator is not activated) ON (Pressed)	0 – 1.5 V	
(G)	Jiodila	switch	put	quest switch	OFF (Not pressed)	9 – 16 V	

	nal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
53* ⁴	Ground	Back door open re-	Output	Back door	OFF (Actuator is not activated)	9 – 16 V
(BR)		quest	2 2 4	opener switch	ON (Actuator is activated)	0 – 1.5 V (Approx. 500m seconds)
54	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)	0 V
(R)	Ground	Real wiper	Output	rteal wiper	ON (Activated)	9 – 16 V
		Sliding door RH UN- LOCK (with auto-		Sliding door RH	UNLOCK (Actuator is activated)	9 – 16 V
55	Ground	matic sliding door system)	Output		Other than UNLOCK (Actuator is not activated)	0 V
(G)	J. Gara	Sliding door UN- LOCK (without auto-	Carpar	Sliding door	UNLOCK (Actuator is activated)	9 – 16 V
		matic sliding door system)		Onding door	Other than UNLOCK (Actuator is not activated)	0 V
				Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply)		0 V
56 (P)	Ground	Ground Interior room lamp power supply		vated.	p battery saver is not acti- rior room lamp power sup-	9 – 16 V
57 (Y)	Ground	Battery power sup- ply	Input	Ignition switch O	FF	9 – 16 V
-					OFF	5 V
58 (O)	Ground	Air bag signal	Input	Ignition switch	ON	(V) 15 10 5 0 1.0s JPMIA1034GB 2.5 V
59	Oracinad	Passenger door UN-	Outrant	December design	UNLOCK (Actuator is activated)	9 – 16 V
(SB)	Ground	LOCK	Output	Passenger door	Other than UNLOCK (Actuator is not activated)	0 V
					Turn signal switch OFF	0 V
60 (V)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 PKIC6370E 6.5 V (Turn signal lamp turn on: 9 - 16 V)

	nal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
					Turn signal switch OFF	0 V
61 (G)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10
62	0	0(0 1 1	01	ON	0 – 1.0 V
(W)	Ground	Step lamp	Output	Step lamp	OFF	9 – 16 V
63	Ground	Interior room lamp	Output	Interior room	OFF	9 – 16 V
(R)	Ciodila	control	Guipui	lamp	ON	0 – 1.0 V
					Engine stopped (Selector lever is in P position)	0 – 1.0 V
64 (W)	(iround (iranking request	Cranking request	input	Ignition switch ON	Engine stopped (Selector lever is not in P position)	9 – 16 V
				Engine running	9 – 16 V	
65	5	Output	All doors	LOCK (Actuator is activated)	9 – 16 V	
(V)	Ground	All doors LOCK Ou	Output		Other than LOCK (Actuator is not activated)	0 V
66	Ground	Driver door UN-	Output	Driver door, fuel	UNLOCK (Actuator is activated)	9 – 16 V
(G)	Ground	LOCK	Output	lid	Other than UNLOCK (Actuator is not activated)	0 V
67 (B)	Ground	Ground	Output	Ignition switch O	N	0 V
68	Ground	P/W power supply	Output	Ignition switch O	FF	0 V
(L)	Ciduid	(IGN)	Calput	Ignition switch O	N	9 – 16 V
69 (P)	Ground	P/W power supply (BAT)	Output	Ignition switch O	FF	9 – 16 V
70 (L)	Ground	Battery power sup- ply	Input	Ignition switch O	FF	9 – 16 V
73 (G)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	9 – 16 V
(3)					ON	0 – 1.5 V
75	Ground	Driver door request	Input	Driver door re-	ON (Pressed)	0 – 1.5 V
(G)		switch	L =	quest switch	OFF (Not pressed)	9 – 16 V
76	Ground	Push-button ignition	Input	Push-button ig- nition switch	Pressed	0 – 1.5 V
(V)	2.34114	switch (push switch)	pat	(push switch)	Not pressed	9 – 16 V

	nal No.	Description				Value
+	color)	Signal name	Input/ Output		Condition	(Approx.)
78	78 Ground Driver door antenn		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 50 S JMKIA5954GB
(B)	Joana	(+)	Сагра	switch is 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 0 500 ms JMKIA5955GB
79	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
(W)	Glound	(-)	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 0 500 ms JMKIA5955GB
80	Capital	Passenger door an-	Outout	When the passenger door re-	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
(GR)	Ground	tenna (+)	Output	quest switch is 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 0 500 ms JMKIA5955GB

	inal No. e color)	Description			O and it is a	Value	А
+	-	Signal name	Input/ Output		Condition	(Approx.)	
81	Ground	Passenger door an-	Output	When the passenger door re-	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	B C
(BE)	Glound	tenna (-)	Output	quest 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 JMKIA5955GB	E F
82		Rear bumper anten-		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 0 500 ms JMKIA5954GB	G H
(G)	Ground	na (+)	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	J K
83	Ground	Rear bumper anten-	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 50 MS JMKIA5954GB	BC N
(R)	Ground	na (-)	Output	switch is 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 0 500 ms JMKIA5955GB	O

	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
84	2	Room antenna 1 (+)	0.1.1	Ignition switch	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 11 1 s JMKIA5951GB
(GR)	Ground	(Instrument center)	Output	ON SWITCH	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB
85	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 JMKIA5951GB
(B)	Glodina				When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB
86	Ground	Room antenna 2 (+)	Output	lgnition switch	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA5951GB
(W)	Ground	(Console)	Output	ON	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB

	inal No. e color)	Description				Value	A
+	-	Signal name	Input/ Output		Condition	(Approx.)	
87	Constant	Room antenna 2 (–)	0.4.4	Ignition switch	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA5951GB	
(BE)	Ground	(Console)	Output	ON	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB	E
88	Ground	Luggage room an-	Output	Ignition switch	When Intelligent Key is not in the antenna detection area	(V) 15 10 1	F
(GR)	Glound	tenna (+)	Output	ON	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB	k L
89	Ground	Luggage room an-	Output	Ignition switch	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA5951GB	BO
(B)	Ground	tenna (-)	Output	ŎN	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s	F

	inal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
90		Push-button ignition	0	Push-button ig-	ON	9 – 16 V
(P)	Ground	switch illumination	Output	nition switch illu- mination	OFF	0 – 1.5 V
91	Ground	LOCK indicator lamp	Output	LOCK indicator	OFF (Ignition switch OFF)	9 – 16 V
(W)	0.00		- Catpat	lamp	ON	0 – 1.5 V
					OFF	0 V
92 (B)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	ON	When the illumination brightening/dimming level is in the neutral position (V) 15 10 5
				JPMIA1554GB 6.0 - 7.0 V		
93	Ground	Intelligent Key warn-	Output	Intelligent Key	Sounding	0 – 1.5 V
(R)	0.00	ing buzzer	- Catpat	warning buzzer	Not sounding	9 – 16 V
96	Ground	ACC relay control	Output	Ignition switch	OFF	0 – 0.5 V
(BE)		,		0	ACC or ON	9 – 16 V
97 (W)	Ground	Starter relay control	Output	Ignition switch	Other than engine crank- ing	9 – 16 V
(**)				0.1	Engine cranking	0 – 0.5 V
98	Ground	Ignition relay (IPDM	Output	Ignition switch	OFF or ACC	9 – 16 V
(P)		E/R) control	<u> </u>	0	ON	0 – 0.5 V
99	Ground	Ignition relay control	Output	Ignition switch	OFF or ACC	0 – 0.5 V
(G)				_	ON	9 – 16 V
100 (R)	Ground	Passenger door re- quest switch	Input	Passenger door request switch	ON (Pressed)	0 – 1.5 V
(11)		quest switch		request switch	OFF (Not pressed)	9 – 16 V
101 (R)	Ground	Ignition power sup- ply No. 2	Output	Ignition switch	OFF or ACC	0 V
		pry 140. 2			ON Don't notified	9 – 16 V
102 (P)	Ground	P/N position	Input	Selector lever	P or N position Except P and N positions	9 – 16 V 0 – 1.5 V
104 (L)	Ground	CVT shift selector (detention switch) power supply	Output	Ignition switch O		9 – 16 V
105 (R)	Ground	Stop lamp switch 2	Input	Ignition switch O	FF	9 – 16 V
106		Blower fan motor re-			OFF or ACC	0 – 0.5 V
(O)	Ground	lay control	Output	Ignition switch	ON	9 – 16 V
109	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	9 – 16 V
(R)			- 42		ACC	0 – 1.5 V
	1			<u> </u>	į .	

^{• *1:} Without automatic sliding door system

^{• *2:} With automatic sliding door system

^{• *3:} With rear entertainment

^{• *4:} Without automatic back door system

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 → OFF
B2196: DONGLE NG	Inhibit engine cranking	Erase DTC
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 Ignition switch changes to ACC Receives engine status signal (CAN)
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 sys- tem	When room antenna and luggage room antenna functions normally

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

- More than 1 minute is passed after the rear wiper stop.
- 2. Turn rear wiper switch OFF.
- 3. 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.

DTC Inspection Priority Chart

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

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INFOID:0000000012407018

Priority	DTC
1	B2562: LOW VOLTAGE
2	U1000: CAN COMM U1010: CONTROL UNIT (CAN)
3	 B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI-SCANNING B2196: DONGLE NG B2198: NATS ANTENNA AMP
4	 B2555: STOP LAMP B2556: PUSH-BTN IGN SW B2557: VEHICLE SPEED B2601: SHIFT POSITION B2602: SHIFT POSITION B2603: SHIFT POSI STATUS B2604: PNP/CLUTCH SW B2605: PNP/CLUTCH SW B2606: STARTER RELAY B2607: ENG STATE SIG LOST B2614: BCM B2615: BCM B2616: BCM B2616: BCM B2617: IGN RELAY OFF B2671: IGN RELAY OFF B2672: IGN RELAY ON B2673: START CONT RLY ON B2676: BCM B2676: BCM B2677: BCM B2678: START CONT RLY OFF B2679: CRANK REQ CIR SHORT B2679: CRANK REQ CIR OPEN B2670: KEY REGISTRATION C1729: VHCL SPEED SIG ERR U0415: VEHICLE SPEED
5	 C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR C1706: LOW PRESSURE RR C1707: LOW PRESSURE RL C1708: [NO DATA] FL C1709: [NO DATA] FR C1710: [NO DATA] RR C1711: [NO DATA] RL C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR C1718: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RR
5	 B2621: INSIDE ANTENNA B2622: INSIDE ANTENNA B2623: INSIDE ANTENNA
6	B2626: OUTSIDE ANTENNA B2627: OUTSIDE ANTENNA B2628: OUTSIDE ANTENNA

DTC Index

NOTE:

The details of time display are as follows.

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

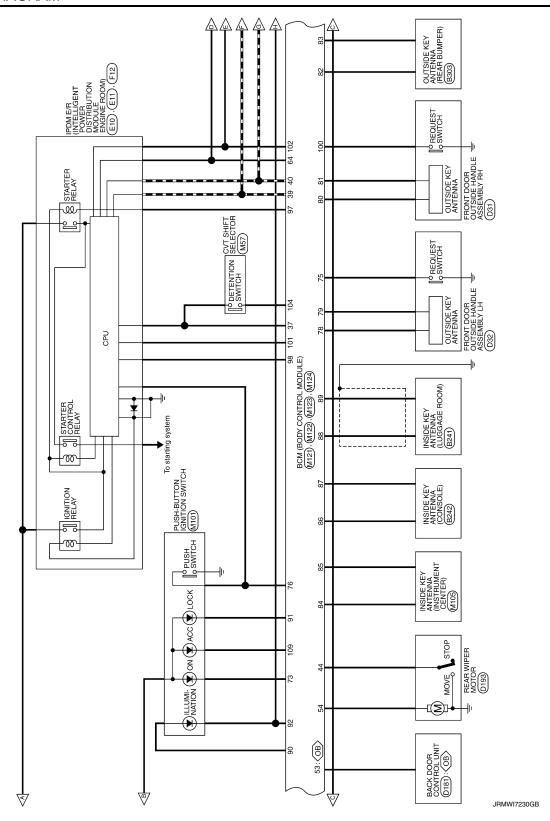
IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to BCS-17, "COM-MON ITEM: CONSULT Function (BCM - COMMON ITEM)".

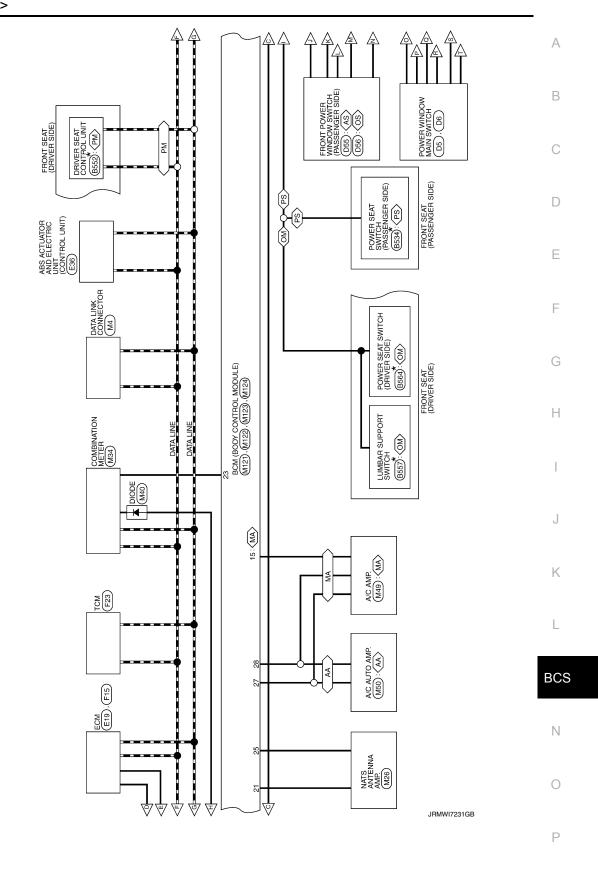
Α

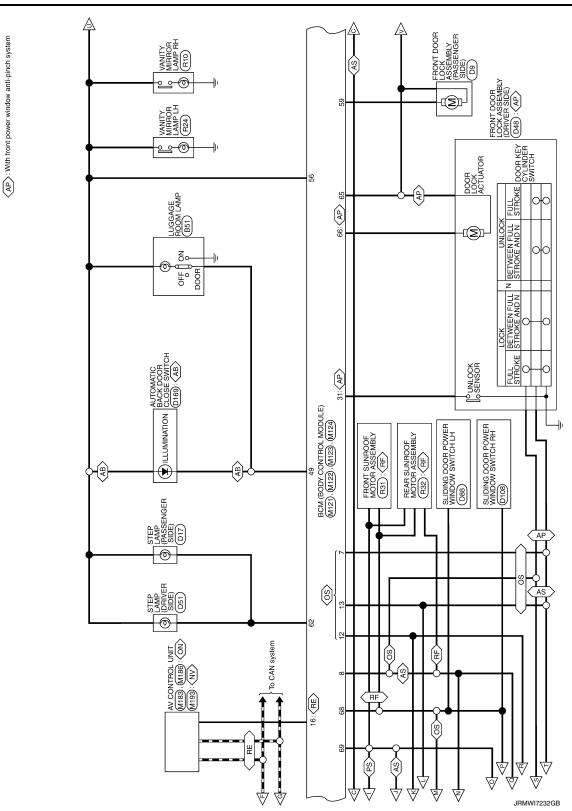
CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page	E
No DTC is detected. further testing may be required.	_	_	_	_	_	Ì
U1000: CAN COMM	_	_	_	_	BCS-88	
U1010: CONTROL UNIT (CAN)	_	_	_	_	BCS-89	
U0415: VEHICLE SPEED	_	_	×	_	BCS-90	Е
B2192: ID DISCORD BCM-ECM	×	_	_	_	SEC-65	
B2193: CHAIN OF BCM-ECM	×	_	_	_	SEC-66	
B2195: ANTI-SCANNING	×	_	_	_	SEC-67	F
B2196: DONGLE NG	×	_	_	_	SEC-68	
B2198: NATS ANTENNA AMP	×	_	_	_	SEC-70	(
B2555: STOP LAMP		×	×	_	SEC-73	`
B2556: PUSH-BTN IGN SW	_	×	×	_	SEC-76	
B2557: VEHICLE SPEED	_	×	×	_	SEC-78	ŀ
B2562: LOW VOLTAGE	_	×	_	_	BCS-91	
B2601: SHIFT POSITION	_	×	×	_	SEC-79	
B2602: SHIFT POSITION	_	×	×	_	SEC-81	
B2603: SHIFT POSI STATUS	_	×	×	_	SEC-84	
B2604: PNP/CLUTCH SW	_	×	×	_	SEC-89	
B2605: PNP/CLUTCH SW	_	×	×	_	SEC-92	
B2608: STARTER RELAY	×	×	×	_	SEC-95	
B260F: ENG STATE SIG LOST	×	×	×	_	SEC-97	
B2614: BCM	_	×	×	_	PCS-58	
B2615: BCM	_	×	×	_	PCS-60	
B2616: BCM	_	×	×	_	PCS-62	
B2618: BCM	_	×	×	_	PCS-64	
B261A: PUSH-BTN IGN SW	_	×	×	_	PCS-66	В
B2621: INSIDE ANTENNA		×	_	_	DLK-232	
B2622: INSIDE ANTENNA		×	_	_	DLK-234	
B2623: INSIDE ANTENNA	_	×	_	_	DLK-236	
B2626: OUTSIDE ANTENNA	_	×	_	_	DLK-240	
B2627: OUTSIDE ANTENNA	_	×	_	_	DLK-238	
B2628: OUTSIDE ANTENNA	_	×	_	_	DLK-242	
B26F1: IGN RELAY OFF	×	×	×	_	PCS-68	
B26F2: IGN RELAY ON	×	×	×	_	PCS-69	
B26F3: START CONT RLY ON	×	×	×	_	SEC-100	
B26F4: START CONT RLY OFF	×	×	×	_	SEC-101	
B26F6: BCM	_	×	×	_	PCS-71	
B26F7: BCM	×	×	×	_	SEC-102	

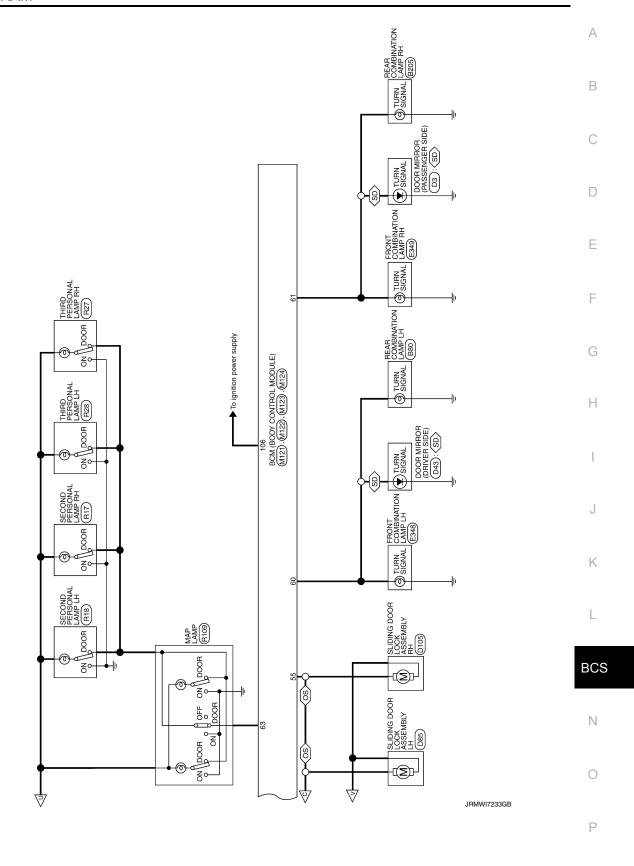
CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condi-	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
		tion			
B26F8: BCM		×	×	_	SEC-103
B26F9: CRANK REQ CIR SHORT	_	×	×	_	SEC-104
B26FA: CRANK REQ CIR OPEN	_	×	×	_	SEC-106
B26FC: KEY REGISTRATION	_	×	×	_	SEC-108
C1704: LOW PRESSURE FL	_	_	_	×	
C1705: LOW PRESSURE FR	_	_	_	×	WT-26
C1706: LOW PRESSURE RR	_	_	_	×	<u> </u>
C1707: LOW PRESSURE RL	_	_	_	×	
C1708: [NO DATA] FL	_	_	_	×	
C1709: [NO DATA] FR	_	_	_	×	WT-28
C1710: [NO DATA] RR	_	_	_	×	<u> </u>
C1711: [NO DATA] RL	_	_	_	×	
C1716: [PRESSDATA ERR] FL	_	_	_	×	
C1717: [PRESSDATA ERR] FR	_	_	_	×	WT-30
C1718: [PRESSDATA ERR] RR	_	_	_	×	<u> </u>
C1719: [PRESSDATA ERR] RL	_	_	_	×	
C1729: VHCL SPEED SIG ERR	_	_	_	×	<u>WT-32</u>

WIRING DIAGRAM Α **BCM** Wiring Diagram INFOID:0000000012407020 В ⟨RE⟩: With sunroof ⟨OM⟩: With out NAVI ⟨PS⟩: With power seat ⟨WO⟩: With optical sensor ⟨NV⟩: With NAVI ⟨RE⟩: With rear endertainment : With rear entertainn FUSE BLOCK (J/B) (M6), (M7), (M8), (E100) C OPTICAL SENSOR (M17): (WO) 8 BACK DOOR LOCK ASSEMBLY (D190) BACK DOOR SWITCH D ₹ [=] *: This connector is not shown in "Harness Layout". REMOTE KEYLESS ENTRY RECEIVER (R108) Е 10A (OS): Without automatic slide door (AB): With automatic back door (OB): Without automatic back door < F o∏ ACCESSORY -w 99 96 BCM (BODY CONTROL MODULE) (M12) (M122) (M123) (M124) ⟨PM⟩: With automatic drive positioner ⟨OM⟩: Without automatic drive positioner ⟨AS⟩: With automatic slide door Н SLIDING DOOR SWITCH RH (8221) **-**|b 용 IGNITION 용 RELAY 3 3 3 4 SUIDING BOOR SWITCH LH To ignition power supply J To exterior lighting system FRONT DOOR SWITCH (PASSENGER SIDE) (BZ35) : With side turn door mirror K AA⟩: With auto A/C (MA⟩: With manual A/C (SD⟩: With side turn door 10A FRONT DOOR SWITCH (DRIVER SIDE) 105 AIR BAG DIAGNOSIS SENSOR UNIT (M59) BCM (BODY CONTROL MODULE) BCS W35 Ν 36 35 34 33 32 6 5 4 3 2 COMBINATION SWITCH (M103) 50: AS 0 15A 6 40A 2015/09/04 Р BATTERY JRMWI7229GB









BCM (BODY CONTROL MODULE) Connector No. 835	Connector No. 871	Connector No. 8205	Connector No. 8235
Connector Name FRONT DOOR SWITCH (DRIVER SIDE)	Connector Name SLIDING DOOR SWITCH LH	Connector Name REAR COMBINATION LAMP RH	Connector Name FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type TH04FW-NH	Connector Type TH04FW-NH	Connector Type RS04FGY-PR	Connector Type TH04FW-NH
#S#	#3.	#8 #8	S.H.
Terminal Color Of Signal Name [Specification] No. Wire Signal Name [Specification]	Terminal Color Of Signal Name [Specification] No. Wife 3 GR	L CO	Terminal Color Of Signal Name [Specification] No. Wire 3 S8
Connector No. B51	Connector No. B80	3 B B	Connector No. B241
Connector Name LUGGAGE ROOM LAMP	Connector Name REAR COMBINATION LAMP LH		Connector Name INSIDE KEY ANTENNA (LUGGAGE ROOM)
Connector Type TK03FW	Connector Type RS04FGY-PR	Connector No. B221	Connector Type RK02FL
<u>□ 1</u> 8 8 8 8 8 8 8 8 8	HS.	Connector Name SUDING BOOR SWITCH RH Connector Type THG4FW-NH	#S.
Terminal Color Of Signal Name [Specification]	Terminal Color Of Signal Name [Specification] Wire Signal Name [Specification]		Terminal Color Of Signal Name [Specification] No. Wire
2 8	2 W	Terminal Color Of Cinnal Mama (Caparification)	2 B
	3 B	No. Wire orginal value (specification)	

JRMWI7234GB

	Н	IND-1		FRONT LIFTER SW (UPWARD) Connector No. D3		Connector Type TH24MW-NH		LUMBAR SUPPORT SWITCH	1 10	121110 / 6 5	[24/23/22/21/20/19/18/17]			43 33 46 45 Terminal Color Of	No. Wire	1 L		Signal Name (Specification)	7 P	-	\dashv	. 12 R	†	17 SHIELD .	+	61 50	POWER SEAT SWITCH (DRIVER SIDE)	52 23	23	╀		43 40 1 36 33	35 42 38 34 41 39				Signal Name (Specification)								
	22 W/L	23 W/R 24 V/W	4/B	26 Y/R FR 27 Y/L RI	o	38	Connector No. B557	Connector Name LUMBAR SUF	Connector Type NSOAEW.CS	add the same	£	ALT	S. T.				ŀ	hal Color Of	No. Wire	+	\dashv	+	46 BR		Same No.	Connector No.	27/28	Connector Type NS10FW-CS			· ·			ER)			Terminal Color Of	No. Wire			UPPLY 35 G	36	38 GR	FTER) 39 Y	
	r No. B534	r Name POWER SEAT SWITCH (PASSENGER SIDE)	r Type NS10FW-CS		43	35 38 34			Color Of		2	8	9	GR	Å	- 91			r No. B552	r Name DRIVER SEAT CONTROL UNIT	П	rType TH32FW-NH				12 4 6789	17 18 19 20 22 23 24 25 26			Color Of		R/Y CAN-H		PU	R/W ADDRESS 2		SB SLIDE SW (BACKWARD)	L RECLINER SW (BACKWARD)		RE	L/R SENSOR POWER SUPPLY		B/W PULSE (SLIDE)	B/R PULSE (FRONT LIFTER)	.311 av 30/ 35 1110
	Connector No.	Connector Name	Connector Type	Œ	Z I				Terminal	N N	33	34	35	38	39	43			Connector No.	Connector Name		Connector Type	Q	善	S :	[T		Terminal	No.	1	2	4	9	7	80	6	10	11	12	17	18	19	30
BCM (BODY CONTROL MODULE)	B242	INSIDE KEY ANTENNA (CONSOLE)	RKOZFL		«					Signal Name [Specification]					8303	OUTSIDE KEY ANTENNA (BEAR BLIMPER)		RK02FL		*	«						Signal Name [Specification]		,																
BCM (BODY	Connector No.	Connector Name	Connector Type	E	S. T.				Tarminal Color Of	No Wire	+	H			Connector No.	Connector Name		Connector Type	¢	厚	<u>ا</u>					100000	No Wire	$^{+}$. w	$\frac{1}{2}$															

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BCM (BODY CONTROL MODULE)				
Connector No. D5	Connector No. D9	Connector No. D31	Connector No. D43	
Connector Name POWER WINDOW MAIN SWITCH	Connector Name RROWT BOOR LOCK ASSEMBLY (PASSEMBLR SIDE)	Connector Name FRONT DOOR OUTSIDE HANDLE ASSEMBLY RH	Connector Name DOOR MIRROR (DRIVER SIDE)	
Connector Type NS16FW-CS	Connector Type E06FGY-RS	Connector Type RH04MB	Connector Type TH24MW-NH	
H.S. 1 2 3 4 5 6 7 8 9 10 111 12 13 14 15 16	HS.	#S.	H.S. 121110 7 6 5 1 2423222120120191817	13
Color Of Signal Name [Specification] No. Wire Signal Name [Specification]	Terminal Color Of Signal Name [Specification]	Terminal Color Of Signal Name [Specification] No. Wife	Terminal Golor Of Signal Name [Specification]	ation]
SLIDING DOOF	Н	Н	Н	
P ENCORDER GROUND	. 91 9	2 6		
Т		+	t	
SB SLIDING DOOR POWER WINDOW MOTOR RH DOWN SIGNAL	Connector No. D17		Н	
V SLIDING DOOR POWER WINDOW MOTOR RH UP SIGNAL	Connector Name STEP LAMP (PASSENGER SIDE)	Connector No. D32	12 P	
	Connector Type TK02FW	Connector Name FRONT DOOR OUTSIDE HANDLE ASSEMBLY LH	H	
ENCOR	a	Т	ž	
GR RETAINED POWER SIGNAL	HATT.	Connector Type RH04MB		
Leaves review miscoon inclose the second second	HS.		20 LG	
GR ENCORDER SIGNAL 1	2 1		21 р .	
]		Н	
G ENCORDER POWER SUPPLY		(12 3 4))	+	
	leu		, 8 8	
Connector No. D6	No. Wife	Terminal Color Of	Connector No. D48	
HOTTING MANAMAN WOOD AND THE HOTTING	2 6 .	No. Wire Signal Name [Specification]	۱,	500
		1 GR .		
Connector Type NS03FW-CS		2 G .	Connector Type E06FGY-RS	
H.S.		E B B	图	(
171819			(12345	ඛ
Terminal Color Of Signal Name [Specification]			Terminal Color Of Signal Name [Specification]	ation]
B GROUND			1 BR .	
			2 1.6	
Y BATTERY POWER SUPPLY			» × ×	T

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Connector No. D108 Connector Name Science Dools Powits Window switch 8H Connector Type NS/08FW/CS	⊘ lenin	No. Wire Japon Name phenomental 1 W V V V V V V V V V V V V V V V V V V	<u> </u>	Terminal Color Of Signal Name [Specification] No. Wire Specification Specification	
Connector No. D88 Connector Name SubNic DODR POWER WINDOW SWITCH LH Connector Type NS/08FW-C5	ζ	No Wire		Terminal Color Of Signal Name (Specification) 10 Wire 1 V	
Connector No. D55 Connector Name room rooms wroom sorror pussings srapl Connector Type NS12FW-C5	ζ. In	No. Wire Sign to the control of the control o	Connector No. 1085 Connector Name SLIDING DOOR LOCK ASSEMBLY LH Connector Type SCIOZFGY ASSEMBLY LH Connector Type SCIOZFGY	Terminal Color Of Signal Name (Specification) No. Wife Signal Name (Specification) 1 Y	
S		Terminal Color Of Signal Name (Specification) No. Wire W	<u>a</u> 0	Terminal Cobe Of Signal Name [Specification]	

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BCINI (BODY CONTROL MODULE) Connector No. D181	Connector No.		Connector No.	П	E10	Connector No.	П	11
BACK DOOR CONTROL UNIT NS10FW-CS	Connector Name	BACK DOOR LOCK ASSEMBLY NSORFW-CS	Connector Name		IPDM L'R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) TH20FW-CS12-M4-1V	Connector Name		IPON E/K (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) THOSEW-INH
12 3 4 5 6 7 18 10	H.S.	1 5 2 4 5 6 7 1 8	ほS.]		母 H.S.	1	42 41 40 83 46 46 44 43
Signal Name [Specification]	Terminal Color Of	Of Signal Name (Specification)	Terminal	Color Of Wire	Signal Name [Specification]	Terminal	Color Of Wire	Signal Name [Specification]
CLOSE	t	,	4	97		39	۵	,
HARF	2 V	,	2	>		40	٦	
8+	4 R		7	H8		41	8	
CLOSE	» «	,	10	۵	r	42	SB	
OPEN	9		12	8		43	91	•
OPEN SW	7 p		13	9		44	W	
DR LOCK STATUS	8		15	1		45	٨	
EARTH			16	æ		46	0	
OPEN			18	Ь				
	Connector No.	D193	19	^				
	Connector Name	REAR WIPER MOTOR	20	≥		Connector No.	١	E19
D186		Т	21	0		Connector Name		ECM
BACK DOOR OPENER SWITCH ASSEMBLY	connector Type	C004FW-1V	77	2 5			Τ	The state of the s
THE PROPERTY OF THE	€.		57	<u>*</u>		COLLINECTOR		H24FB-K28-L-LH
DAINWIND	至	[75	9 8		Œ		
	S		62	5 8		手		
		<u></u>	/7	ž,		S :		-
		3 4	28	U				g :
<u></u>			30	91				101 (4) (4) (4) (4)
1 2 3 4			34	0	•			
			35	۵				
	Terminal Color Of	Of Sinnal Namo (Specification)	36	9				
	No. Wire		38	GR		lal	Color Of	Signal Name [Specification]
Signal Name [Specification]	1 6					No.	wire	CONTRACTOR CONTRACTOR CONTRACTOR
	+					177	3 ,	EVAL CONTROL STSTEM PRESSORE SENSOR
	4 A5					123	a .	CAN COMMUNICATION LINE (CAN-L)
						124	-	CAN COMMUNICATION LINE (CAN-H)
						125	>	SENSOR POWER SUPPLY
						128	٨	FUEL TANK TEMPERATURE SENSOR
						133	BR	IGNITION SWITCH
						134	٨	ASCD STEERING SWITCH
						135	BR	SENSOR GROUND
						139	SB	STOP LAMP SWITCH
						140	BR	BRAKE PEDAL POSITION SWITCH
						141	^	EVAP CANISTER VENT CONTROL VALVE
						142	GR	SENSOR POWER SUPPLY

JRMWI7238GB

Connector No. 5240	Γ	Connector Name FRONT COMBINATION LAMP RH	Connector Type 203FBR	4				(3 2 1))				le l	0.		+	3 28		Connection No.	Т	Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)	Connector Tons THOOPIN COS MA	1			H.S. [83] [83] [83] [83] [83] [83] [83] [83]	48 48 51 52		Terminal Color Of		48 W	49 R/8		52 Y/G	H	t	t	t	╀	╁	8/M 69	╁	71 Р .	72 R/B .	H	H	┝	
Founsetor No 6136	l	Connector Name STOP LAMP SWITCH	Connector Type M04FB-LC	4			3 4	-	7				le le	No. Wire	d ====================================	+		. A		Connector No C248		Connector Name FRONT COMBINATION LAMP LH	Connector Tone 203599	1	Œ					Terminal Color Of		1 P	2 8	>														
V RADAK ELLIDLEVEI SMITCH SIGNAL	LG FRITH WHEEL SENSOE SIGNAL	FR	B G SENSOR GND	V RRRH WHEEL SENSOR POWER SUPPLY	P RR RH WHEEL SENSOE SIGNAL	B GROUND	G MOTOR BATTERY	SB STOP LAMP SWITCH SIGNAL		(c) TORROW (c)			BR VDC OFF SWITCH SIGNAL		G SEN	B GROUND		CO CO	I	Name FUSE BLOCK (J/B)	Down Motorist of	1			6F 4F 12F 1F	12F 11F 9F 8F		على عمادي	Signal Name [Specification]		^	SB			. 91		88											
_	- 00	6	10	11	12	13	14	16	10	2 2	7 1	17	22	23	25	56		Connector No	COIIIIECTO	Connector Name	Constant	Colliecto	Œ	季	H.S.			Tormina	N	11F	12F	11	2F	4F	99	ä	5											
BCM (BODY CONTROL MODULE)	SENSOR GROUND	POWER SUPPLY FOR ECM	SENSOR POWER SUPPLY	ECM GROUND	SENSOR GROUND	ECM GROUND	ACCELERATOR PEDAL POSITION SENSOR 1	SENSOR GROUND	FCMGROUND				E26	INTELLIGENT KEY WARNING BUZZER		RKO3FBR		<	«						Signal Name [Specification]			963		A6S ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)	AEZ22FB-AJZ4-LH				91 16	12 11 10 9 8 7 8 5 4 9 9	ıI،				Signs	VALVE BATTERY	RR LH WHEEL SENSOR SIGNAL	RR LH WHEEL SENSOR POWER SUPPLY	G SENSOR POWER SUPPLY	FR RH WHEEL SENSOR POWER SUPPLY	FR RH WHEEL SENSOR SIGNAL	
M (BOD)	╀	H	d 9t	17 8	148 V	19 B	150 W	9 1	a 63	1			Connector No.	Connector Name		Connector Type		_	S.	l				Tarminal Color Of		$^{+}$	3 GR	Connector No		Connector Name	Connector Type		•	J	H.S.					Terminal Color Of		H	>	3	4 6	L	H	
ည္	144	145	14	14	14	14	15	150	152	1		Į	5	Conn].	Con	q[季	4					Term	S	П	m	J		Con	Conn		Œ	Ē	4					Term	No.	[4	2	9	

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CM (BOD	BCM (BODY CONTROL MODULE)	116	W/L	POWER SUPPLY FOR ECM (BACK-UP)	Connector No.	M4	Connector No. M7
		117	∝ > :	INTAKE VALVE TIMING INTEMEDIATE LOCK CONTROL SOLENOID VALVE (BANK 1) INTAKE VALVE TIMING INTEMEDIATE LOCK CONTROL SOLENOID VALVE (BANK 1)	Connector Name		
Connector No.	F15 ECM	119	- #	INTAKE VALVE TIMING CONTROL SOLENOID VALVE (BANK 2) WHARE WALVE THANG INTERMEDIATE LOCK CONTROL SOLENOID WALVE (BANK 2)	Connector lype	e BD16FW	Connector type NS10FW-CS
Connector Type	MABS5FB-MEB10-LH	ol Washington	e N		SIE	111111111111111111111111111111111111111	Signal Brillian Brill
	91. 201.20	Connector Name	or No.	123 TCM			98 88 68 58
S.	21 11 11 11 11 11 11 11 11 11 11 11 11 1	Connector Type	r Type	RH40FB-RZ8-L-RH			
		優 H.S.		333436 37383840 47 48	Terminal Col	Color Of Signal Name [Specification]	Terminal Color Of Signal Name [Specification] No. Wire Signal Name [Specification]
Terminal Color Of	Of Signal Name [Specification]			11 12 14 16 17 2 4 1 42	4 1	GR	48 W
+	E-CVTC#1				+	1	+
W 09			- 1		Н		Н
9/9	SENSOR GROUND A/E CENSOR 1 (BANK 1)	Terminal	Color Of Wire	Signal Name [Specification]	80 5	9 8	98 GR
۵	A/F SENSOR 1 (BANK 1)	2	g.	L_RANGE_SW	+	- d	
*	BATTERY TEMPERATURE SENSOR	4	0/5	D_RANGE_SW	16		Connector No. M8
86		'n	P/L	N_RANGE_SW			Connector Name FUSE BLOCK (J/B)
S.	5	9	9/8	R_RANGE_SW		ſ	T
≥ α	THROTTLE POSITION SENSOR 1	7 :	BR/W	P_RANGE_SW SENSOR GROTIND	Connector No.	Т	Connector Type NS12FW-CS
: m	SENSOR GROUND	17	>	CVT FLUID TEMPERATURE SENSOR	Connector Name	ne FUSE BLOCK (J/B)	Œ
92		14	Μ	G SENSOR	Connector Type	e CS06FW-M2	
H	A/F SENS	16	M/A	SECONDARY PRESSURE SENSOR	ą		i i
g 4		17	9 4	PRIMARY PRESSURE SENSOR	事		120 110 100 90 80 70 90
× /W	CAMSHAET POSITION SENSOR (BANK 1)	62 22	a a	INPLIT SPEED SENSOR	H.S.	3A2A1A	
86 W/B	ECM RELAY (26	9	SENSOR POWER		84 7A 6A 5A 4A	
⊢	L	30	Š	LINE PRESSURE SOLENOID VALVE		Y.	Terminal Color Of Signal Name (Specification)
H	/ CAMSHAFT POSITION SENSOR (BANK 2)	33	1 0/5/	CAN-H			No. Wire olginal ranne [Specification]
92 G/W		32	91	PRIMARY SPEED SENSOR	Terminal Col	Color Of	╀
H	SENSORP	37	N/1	SELECT SOLENOID VALVE	No. N	Wire Signal Name [Specification]	12C Y -
Н	S	38	V/R	TORQUE CONVERTER CLUTCH SOLENOID VALVE	1A	٠.	Н
Н	VIAS	39	W/B	SECONDARY PRESSURE SOLENOID VALVE	2A	9	+
+		40	B/R	PRIMARY PRESSURE SOLENOID VALVE	+		. 9 28
104 GR/R	FOM GROLIND	41	20 ec	GROUND	+		
╀		45	9	BATTERY POWER SUPPLY	6A		
Ь	IGNITION SIGNAL No. 5	46	PT.	BATTERY POWER SUPPLY	Н	GR .	
>	VIAS CONTROL SOLENOID VALVE 1	47	*	IGNITION POWER SUPPLY	8A		
+		48	>	IGNITION POWER SUPPLY			
113 Y/R	IGNITION SIGNAL NO. 1						

JRMWI7240GB

Connector No.	M34	88	Connector No.	Τ
Connector Name	COMBINATION METER	۰ 0	Connector N	ime A/C AMP.
Connector Type	TH40FW-NH	BR -	Connector	pe TH40FW-NH
匮		- %	售	
H.S.	R		H.S.	C C C C C C C C C C
lec	Signal Name [Specification]		leu	Color Of Signal Name [Specification]
t	BATTERY POWER SUPPLY [With automatic drive positioner]		d	P BATTERY POWER SUPPLY
1 P	BATTERY POWER SUPPLY [Without automatic drive positioner]		2	
5 × G	IGNITION SIGNAL [Without automatic drive positioner]	[17]	4 0	SB DOOR MOTOR POWER SUPPLY RR I AN SIGNAL
3	GROUND		_	╀
Н	GROUND		00	ITTO
+	ILLIMITATION CONTROL SIGNAL [Without automatic drive positioner]		ο (GR ACC POWER SUPPLY W. EPONT PLOWER MOTOR CONTROL SIGNAL
╁	TRIP RESET SWITCH SIGNAL [Without automatic drive positioner]	t	12	╀
8 SB	TRIP RESET SWITCH SIGNAL [With automatic drive positioner]	2 B .	13	G A/CONSIGNAL
+	METER CONTROL SWITCH GROUND		17	ENGINE COOLA
+	ENTER SWITCH SIGNAL		21	
+	SELECT SWITCH SIGNAL [With automatic drive positioner]	Т	52 53	B GROUND
$^{+}$	SELECT SWITCH SIGNAL [WITHOUT automatic drive positioner] ILLUMINATION CONTROL SWITCH SIGNAL (+) [Without automatic drive positioner]		28	+
╀	ILLUMINATION CONTROL SWITCH SIGNAL (4) [Mith automatic drive positioner]	Connector Type TK04FW	30	F
14 G	ILLUMINATION CONTECT, SWITCH SIGNAL (-) (Without automatic drive positioner)		32	G COMM (A/CAUTO AMP.:->RR A/C CONT)
Н	ILLUMINATION CONTROL SWITCH SIGNAL [-) [With automatic drive positioner]	()	33	COMM
+	AIR BAG SIGNAL	Į.	37	BE INTAKE SENSOR SIGNAL
18 1	AMBIENT CONCLANT TEMPERATURE SIGNAL	2 1 2 2	40	G SENSOR GROUND
+	AMBIENT SENSOR SIGNAL [Without automatic grive positioner]	1 2 - 2		
ł	A/C AUTO AMP. CONNECTION RECOGNITION SIGNAL			
20 G	AMBIENT SENSOR GROUND [Without automatic drive positioner]			
20 Y	AMBIENT SENSOR GROUND [With automatic drive positioner]	Terminal Color Of Circul Manua (Specification)		
21 L	CAN-H	No. Wire Signal Mante [Specification]		
22 P	CAN-L			
23 B	GROUND	2 R -		
\dashv	FUEL LEVEL SENSOR GROUND	+		
+	ALTERNATOR SIGNAL [With automatic drive positioner]	4 B		
25 W	ALTERNATOR SIGNAL [Without automatic drive positioner]			
26 BR	PARKING BRAKE SWITCH SIGNAL			
27 BE	BRAKE FLUID LEVEL SAFFEH SIGNAL [Anthoon automatic drive positioner]			
27 Y	BRAKE FLUID LEVEL SWITCH SIGNAL [With automatic drive positioner]			
\dashv	SECURITY SIGNAL			
29 6	WASHER LEVEL SWITCH SIGNAL			
	Connector Name Connector Name Connector Type No. Wire No		THADPW-NH	Third Pay With Thir

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BCM	(BOD)	BCM (BODY CONTROL MODULE)	3	al Was	NATE OF	ŧ	5	arvarida da Carro	ŀ		
COLLINECTOR NO.	١	MSO	COLLINGTON INC.	ON INC.	/GIAI	Ç i	2	COLOFFIELDACE	۰		
Connector Name	. Name	A/C AUTO AMP.	Connect	Connector Name	CVT SHIFT SELECTOR	52	≥ ∞	SIDE SENS RH2+ SIDE SENS RH2-	N 8		
Connector Type	П	TH40FW-NH	Connect	Connector Type	TH12FW-NH	23	×	SIDE SENS LH2+			
Œ			Œ			54	ω ≥ –	SIDE SENS LH2- DEPLOYMENT INFORMATION OUTPUT CAN-H	Connector No.	П	
S		1 2 4 5 7 8 9 10 12 3 15 17 8 19 20 21 21 22 24 22 22 28 3 3 32 33 38 39 40	S	7 5	6 4 9 9 9 7 1	09	۵	CAN-L	Connector Name	COMBINATION SWITCH TH16FW-NH	
						Connector No.	or No.	M91	Œ		
Terminal No.	Color Of Wire	Signal Name [Specification]	Terminal No.	al Color Of Wire	Signal Name [Specification]	Connector Name	Connector Name	SELECTIVE UNLOCK RELAY MS03FB-M2-LC	S.	3 4	
-	Ь	BATTERY POWER SUPPLY	П	Ь		(7 8 9 10 11 12 13 14	
2	9	IGNITION POWER SUPPLY	4	8		F					
5 4	8 8	DOOR MOTOR POWER SUPPLY LAN SIGNAL	9 /	≥ 8		H.S.		<u> </u>	Terminal Color Of		
_	œ	REAR WINDOW DEFOGGER F/B SIGNAL	00	8						Wire Signal Name [Specification]	
89	Ь	ILLUMINATION POWER SUPPLY	6	9				2 4 1	1	R RR	
6	GR	ACC POWER SUPPLY							2 (G OUTPUT4	
10	W	FRONT BLOWER MOTOR CONTROL SIGNAL							3	P FR	
12	BE	BLOWER FAN ON SIGNAL	Connector No.	or No.	M59	Terminal	U	Signal Name [Specification]	4		
13	g	A/C ON SIGNAL	Connect	Connector Name	AIR BAG DIAGNOSIS SENSOR LINIT	S	Wire		2		
15	GR	IONIZER ON/OFF CONTROL SIGNAL				н	۵		9	B/Y GROUND	
17	G	ENGINE COOLANT TEMPERATURE SIGNAL	Connect	Connector Type	NH28FY-EX	2	۵		7	P INPUT3	
18	×	SUNLOAD SENSOR SIGNAL	þ			e	≥		80		
19	۵	FRONT IN-VEHICLE SENSOR SIGNAL	F			4	89		+		
20	~	A/C AUTO AMP. CONNECTION RECOGNITION SIGNAL	Į	-	8 0 7 6 7 9 5 4 3	S	۵		+	W INPUT 4	
21	8	GROUND		9					+		
23	9	GROUND			19 52 54 23 24 22	L			+		
24	38 18	VEHICLE SPEED SIGNAL			18 51 53 60 59 25 57 1	Connector No.	or No.	M101	13	R INPUTS	
28	38 89	ILLIMINATION GROUND				Connect	Connector Name	PUSH-BUTTON IGNITION SWITCH	1		
30	~	REAR BLOWER MOTOR CONTROL SIGNAL	Termina	al Color Of	5 5 6	Connector Type	or Type	TKOSFBR			
32	9	COMM (A/C AUTO AMP>RR A/C CONT)	No.	Wire	Signal Name [Specification]	[_		Connector No.	M105	
33	Α	COMM (RR A/C CONT>A/C AUTO AMP.)	1	9E	NSI	I			Consector Name	MICHE MEY ANTENNA (INSCTO) MARKET CONTED)	
36	ď	EXH GAS/OUTSIDE ODOR DETECTING SENSOR SIGNAL	2	GR	GROUND	ť			COLLINGTON MAIN		
37	H	INTAKE SENSOR SIGNAL	9	91	DR1 (+)	2	_		Connector Type	RK02FL	
38	GR	REAR IN-VEHICLE SENSOR SIGNAL	4	>	DR1 (-) DR2 (-)			4 5 6 7 8	4		
39	1	AMBIENT SENSOR SIGNAL	2	۸	DR 2 (+)				B		
40	9	SENSOR GROUND	9	>	AS1 (+)				É	<	
			7	91	AS1 (-)				ė V	«	
			œ	BR	AS 2 (+)	Terminal	I Color Of	Signal Nama (Specification)			
			6	>	AS 2 (-)	.oN	Wire	Consequence of the consequence o			
			18	89	ECZS (+)		æ				
			19	≯	ECZS (-)	2	В				
			22	æ	GROUND	m	۵				
			23	۳	AIRBAG W/L	4	>				
			24	91	SEATBELT W/L	'n	*				

JRMWI7242GB

CM (BOD	BCM (BODY CONTROL MODULE)								
le	f Signal Name [Specification]	37 6	DETENT SW	Terminal	Color Of	Signal Namo (Specification)	92	В	PUSH-BTN IGN SW ILL GND
No. Wire	ogual value [openination]	38 8E	RECEIVER COMM	No.	Wire	ognarivanie [opecinication]	66	æ	I-KEY WARN BUZZER
1 GR		39 1	CAN-H	99	d	INT ROOM LAMP PWR SPLY	96	38	ACC RELAY CONT OUTPUT
2 B		40 P	CAN-L	57	>	BAT	97	3	STARTER RELAY CONT
				28	0	AIR BAG	86	Ь	IGN RELAY (IPDM E/R) CONT
				65	SB	PASS DOOR UNLK OUTPUT	66	ŋ	IGN RELAY (F/B) CONT OUTPUT
Connector No.	M121	Connector No.	M122	09	۸	TURN SIG LH OUTPUT	100	В	PASS DOOR REQ SW
	CHINGON POOLINGS MAGGINATION		IT III DOWN TO CHANGE A PACK	61	9	TURN SIG RH OUTPUT	101	×	IGN PWR SPLY 2
CIOL NAME	BCIM (BOD) CONTROL MODOLE)	COULINGUING	BCIM (BODT CONTROL MODOLE)	62	×	STEP LAMP CONT	102		NOITION A
Connector Type	TH40FB-NH	Connector Type	FEA09FB-FHA6-SA	63	œ	INT ROOM LAMP CONT	104	_	CVT SHIFT SELECT PWR SPLY
		١		64	>	CRANK REQ	105	œ	STOP LAMP SW 2
_				65	^	ALL DOOR LOCK OUTPUT	106	0	BLWR RELAY CONT OUTPUT
			Ш	99	9	DR DOOR UNLK OUTPUT	109	œ	ACCIND
Ġ.	2 2 2 4 6 8 7 8 9 4 6 6 6 1	Ċ	43 44 45 46 47 48	29	8	GROUND			
	21 23 25 27 28 28 39 32 33 34 35 37 38 38 40		50 51 53 54 55	89	٦	PW PWR SPLY (IGN)			
				69	Ь	PW PWR SPLY (BAT)	Connector No.		M183
				70	_	BAT	Connector Name		AV CONTROL UNIT
Tarminal Indian		Torminal Color Of	-				Connector Tyne	Τ	NH18EW.CS3
	Signal Name [Specification]		Signal Name (Specification)	Connector No.	r No.	M124		1	Witten W-Coz
t	REAR WINDOW DEF RELAY CONT	t	BK DOOR SW				45		
æ	COMBI SW INPUT 5	44 GR	REAR WIPER STOP POSITION	Connector Name	r Name	BCM (BODY CONTROL MODULE)			<u> </u>
ŋ	COMBI SW INPUT 4	45 W	PASS DOOR SW	Connector Type	r Type	TH40FW-NH	?		
38	COMBI SW INPUT 3	46 R	SL DOOR RH SW	4					13 14 15 16
9	COMBI SW INPUT 2	47 G	DR DOOR SW	B				_	010141017111
Μ	COMBI SW INPUT 1	48 BE	SL DOOR LH SW	, T					
>	KEY CYL UNLOCK SW	49 B	LUGGAGE LAMP CONT	5		25 75 75 75 75 75 75 75 75 75 75 75 75 75			
g :	PW SW COMM [With automatic slide door]	+	SELECT UNLK RELAY CONT			91 82 83 86 97 86 98 110 111 112 110 118 108 108	leu	Color Of	Signal Name [Specification]
>	KEY CYL LOCK SW [Without automatic slide door]	+	BACK DOOR REQ SW				O	wire	
g		+	BK DOOR OPEN				2	9	SOUND SIGNAL FRONT SPEAKER LH (+)
eg.	DOOR LK & UNLK SW LOCK		REAR WIPER OUTPUT	Ĺ	H		3	>	SOUND SIGNAL FRONT SPEAKER LH (-)
BR	DOOR LK & UNLK SW UNLOCK	55 6	SL DOOR LH UNLK CONT	Terminal	_	Signal Name (Specification)	4	>	SOUND SIGNAL SLIDE DOOR SPEAKER LH (+)
_	OPTICAL SENS			No.	Wire		2	_	SOUND SIGNAL SLIDE DOOR SPEAKER LH (-)
Α	REAR WINDOW DEF SW			73	9	ONIND	9	BE	STEERING SWITCH SIGNAL A
>	DIMMER	Connector No.	M123	75	9	DR DOOR REQ SW	7	0	ACC POWER SUPPLY
17 0	SENS PWR SPLY	o market and a	In Indoor (Carried) yadda yada	76	>	PUSH SW	6	38	DIMMER SIGNAL
18 R	RECEIV/SENS GND	OOIIIIACIOI IAGIIIA	BCIN (BODT COINTROL MODOLE)	78	8	DR DOOR ANT+	11	٦	SOUND SIGNAL FRONT SPEAKER RH (+)
GR	NATS ANT AMP.	Connector Type	FEA09FW-FHA6-SA	79	W	DR DOOR ANT-	12	В	SOUND SIGNAL FRONT SPEAKER RH (-)
23 W	SECURITY IND CONT			80	GR	PASS DOOR ANT+	13	BR	SOUND SIGNAL SLIDE DOOR SPEAKER RH (+)
۵.	NATS ANT AMP.			81	38	PASS DOOR ANT-	14	8S	SOUND SIGNAL SLIDE DOOR SPEAKER RH (-)
27 0	A/C ON			82	9	REAR BMPR ANT+	15	*	STEERING SWITCH GROUND
æ	BLOWER FAN ON	Ź	F 5 57 58 59 60 61 62 63 64	83	~	REAR BMPR ANT-	16	۵	STEERING SWITCH SIGNAL B
29 P	HAZARD SW		02 00 00 00 00	84	g	ROOM ANT1+	19	SB	BATTERY POWER SUPPLY
30	BK DOOR OPNR SW		20	85	В	ROOM ANT1-	20	8	GROUND
31 G	DR DOOR UNLK SENS			98	×	ROOM ANT2+			
-	COMBI SW OUTPUT 5			87	H	ROOM ANT2-			
*	COMBI SW OUTPUT 4			88	S.	LAGGAGE ROOM ANT+			
۵	COMBI SW OUTPUT 3			68		LAGGAGE ROOM ANT-			
35 GR	COMBI SW OUTPUT 2			06	۵	PUSH-BTN IGN SW ILL PWR SPLY			
┞	COMBI SW OUTPUT 1			91	3	TOCK IND			

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JRMWI7243GB

BCM (BOI	ՃΠ	Connec	Connector No.	M193	Connector No.	R10		
Connector Name	AV CONTROL UNIT	Conne	Connector Name	AV CONTROL UNIT	Connector Name	VANITY MIRROR LAMP RH	Connector Name SECOND PERSONAL LAMP LH	
Connector Type	TH32FW-NH	Connet	Connector Type	TH32FW-NH	Connector Type	MCA02FW	Connector Type TK03FW	
E SH		E S	· v		···		\$ C	
	75 77 78 78 80 81 82 81 82 82 82 82 82 82 82 82 82 82 82 82 82		3	79 80 81 82 83 84 87 88 89 90 91 92		N-	312	
Terminal Color Of No. Wire	Of Signal Name [Specification]	Terminal No.	nal Color Of Wire	Signal Name (Specification)	Terminal Color Of No. Wire	Signal Name [Specification]	Terminal Color Of Signal Name [Specification] No. Wire	
92		65	æ	PARKING BRAKE SIGNAL	1 P		1 P	
V 77	AV COMMUNICATION SIGNAL (H)	-67	*	COMPOSITE IMAGE SIGNAL GROUND (FOR FRONT DISPLAY UNIT)	2 B		2 0 .	
97 82		89	ч	COMPOSITE IMAGE SIGNAL (FOR FRONT DISPLAY UNIT)			3 B	
79 SB	AV COMMUNICATION SIGNAL (H)	71	SHIELD	SHIELD				
80 P	CAN-L	72	W	MICROPHONE VCC	Connector No.	R17		
81 L	CAN-H	73	8	COMMUNICATION SIGNAL (CONT->DISP)	Connector Mamo	Ha days I shoosed droops	Connector No. R24	
82 R	SWITCH GROUND	74	Ь	CAN-L	COLLIECTOR INGINE	SECOND FEIGURAL DAME IN	Connector Name	
87 R	SOUND SIGNAL (TEL VOICE, VOICE GUIDANCE) (+)	75	97	AV COMMUNICATION SIGNAL (L)	Connector Type	TKO3FW		
W 88	Nos	9/	91	AV COMMUNICATION SIGNAL (L)	ŭ		Connector Type MCA02FW	
90 BR		79	H	DIMMER SIGNAL	ß			
91 Y	HEADPHONE SOUND SIGNAL RH (-)	80	9	IGNITION SIGNAL	Š			
92 P	VEHICLE SPEED SIGNAL (8-PULSE)	81	W	REVERSE SIGNAL	6.6		•	
93 R	PARKING BRAKE SIGNAL	82	Ь	VEHICLE SPEED SIGNAL (8-PULSE)		3 1 2	2	
94 W		83	SHIELD	SHIELD			<u> </u>	
95 6	IGNITION SIGNAL	84	8	COMPOSITE IMAGE SYNCHRONIZING SIGNAL]	
M 96		87	8	MICROPHONE SIGNAL				
102 W		88	SHIELD	SHIELD	Terminal Color Of	[moistailionas] amely lennis		
103 B	AUX SOUND SIGNAL LH (+)	88	W	COMMUNICATION SIGNAL (DISP->CONT)	No. Wire	Jighan Marine (Specification)	Terminal Color Of Signal Name (Specification)	
104 R	AUX SOUND SIGNAL RH (+)	90	7	CAN-H	1 P		No. Wire	
105 GR		91	SB	AV COMMUNICATION SIGNAL (H)	2 0		1 p	
106 P	HEADPHONE SOUND SIGNAL LH (+)	92	^	AV COMMUNICATION SIGNAL (H)	3 B		2 B	
107	HEADPHONE SOUND SIGNAL LH (-)							

JRMWI7244GB

BCM (BOD)	BCM (BODY CONTROL MODULE) Connector No. R27	Connector No.	. No.	R31	Connector No.		R108
Connector Name	THIRD PERSONAL LAMP RH	Connector Name	. Name	FRONT SUNROOF MOTOR ASSEMBLY	Connector Name		REMOTE KEYLESS ENTRY RECEIVER
Connector Type	TK03FW	Connector Type	Type	YEA10FGY	Connector Type	П	TH04FW-NH
	3112	EH.S.		8 3 10 10 10	H.S.		1 2 4
Color Of Wire	Signal Name [Specification]	Terminal	Color Of	Signal Name [Specification]	Terminal Col	Color Of Wire	Signal Name [Specification]
۵		T	8	GROUND	t	86	BAT
0		3	>	IGN(TIMER)	2	_	SIGNAL
ω		s	91	OPENSWBIT-0	4	91	GROUND
		9	L	BAT			
		80	٨	VEHICLE SPEED (8-PULSE)			
Connector No.	R28	10	>	CLOSESWBIT-1	Connector No.		R109
Connector Name	THIRD PERSONAL LAMP LH				Connector Name		MAP LAMP
Connector Type	TK03FW	Connector No.	. No.	R32	Connector Type	П	TKO6FGY
		Connector Name	. Name	REAR SUNROOF MOTOR ASSEMBLY	Œ		
		Connector Type	. Type	YEA10FGY	É		
	312	1			i.		123456
		H.S.		1 2 3 3			
Color Of	Signal Name [Specification]]	Terminal Col	Color Of	Signal Name [Specification]
۵					+	·	•
0		Terminal	Color Of	Classification (Cassification)	2	>	
œ		No.	Wire	signal Name (specification)	3	_	
		1	8	GROUND	4	В	
		8	^	IGN(TIMER)	2	BR	
		2	BR	OPEN SW(MAP)	9	SB	•
		9	٦	BAT			
		7	SB	COM			
		89	Υ	VEHICLE SPEED (8-PULSE)			
		10	88	CLOSE SW(MAP)			

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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

NFOID:0000000012407021

Perform the following operations when replacing BCM. (For details, refer to <u>BCS-84, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM): Work Procedure".</u>)

BEFORE REPLACEMENT

When replacing BCM, save or print current vehicle specification with CONSULT configuration before replacement.

NOTE:

If "Before Replace ECU" of "Read / Write Configuration" cannot be used, use the "Manual Configuration" after replacing BCM.

AFTER REPLACEMENT

CAUTION:

When replacing BCM, always perform "Read / Write Configuration" or "Manual Configuration" with CONSULT. Or not doing so, BCM control function does not operate normally.

- Complete the procedure of "Read / Write Configuration" in order.
- Configuration is different for each vehicle model. Confirm configuration of each vehicle model.
- If you set incorrect "Read / Write Configuration" or "Manual Configuration", incidents might occur. NOTE:

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

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

1. SAVING VEHICLE SPECIFICATION

(P)CONSULT Configuration

Perform "Before Replace ECU" of "Read / Write Configuration" to save or print current vehicle specification. Refer to BCS-85, "CONFIGURATION (BCM): Description".

NOTE:

If "Before Replace ECU" of "Read / Write Configuration" cannot be used, use the "Manual Configuration" after replacing BCM.

>> GO TO 2.

2.REPLACE BCM

Replace BCM. Refer to BCS-99, "Removal and Installation".

>> GO TO 3.

3. WRITING VEHICLE SPECIFICATION

© CONSULT Configuration

Perform "After Replace ECU" of "Read / Write Configuration" or "Manual Configuration" to write vehicle specification. Refer to BCS-85, "CONFIGURATION (BCM): Work Procedure".

>> GO TO 4.

4. INITIALIZE BCM (NATS) (IF EQUIPPED)

Perform BCM initialization. (NATS)

>> WORK END

CONFIGURATION (BCM)

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

CONFIGURATION (BCM): Description

INFOID:0000000012407023

Vehicle specification needs to be written with CONSULT because it is not written after replacing BCM. Configuration has three functions as follows. (For details, refer to BCS-85, "CONFIGURATION (BCM): Work Procedure.)

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

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NOTE:

Manual setting item: Items which need selection by vehicle specifications

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

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

CAUTION:

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

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

CONFIGURATION (BCM): Work Procedure

INFOID:0000000012407024

1. WRITING MODE SELECTION

CONSULT Configuration

Select "Re/programming, Configuration" of BCM.

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

 $oldsymbol{2}.$ PERFORM "AFTER REPLACE ECU" OF "READ / WRITE CONFIGURATION"

(P)CONSULT Configuration

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

>> WORK END

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

(P)CONSULT Configuration

- 1. Select "Manual Configuration".
- Identify the correct model and configuration list. Refer to <u>BCS-86, "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 "Next". Refer to <u>BCS-86, "CONFIGURATION (BCM)</u>: Configuration list" for written items and setting value.

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

CAUTION:

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

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

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Revision: October 2015 BCS-85 2016 Quest

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

>> GO TO 4.

4. OPERATION CHECK

Confirm that each function controlled by BCM operates normally.

>> WORK END

CONFIGURATION (BCM): Configuration list

INFOID:0000000012407025

CAUTION:

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

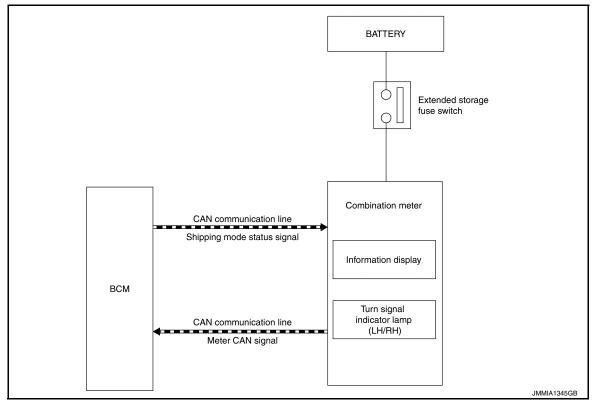
SET	TING ITEM	NOTE	
Items	Setting value	NOTE	
CAN CONNECTION UNIT	WITHOUT ⇔ MODE13 ⇔ MODE15	WITHOUT: Without automatic sliding door system and automatic back door system MODE13: With automatic sliding door system and automatic back door system MODE15: With automatic sliding door system, and without automatic back door system	
AUTO LIGHT WITH ⇔ WITHOUT		WITH: With auto light system WITHOUT: Without auto light system	
DTRL	WITH ⇔ WITHOUT	WITH: With daytime running light system WITHOUT: Without daytime running light system	

^{⇔:} Items which confirm vehicle specifications

SHIPPING MODE CANCEL OPERATION

Description INFOID:0000000012407026

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 functions are limited in shipping mode. Refer to BCS-98, "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 INFOID:0000000012407027

${f 1}$. SHIPPING MODE CANCEL OPERATION

- 1. Turn ignition switch OFF.
- 2. Push in (switch on) the extended storage fuse switch. Refer to PG-131, "How To Check".
- Turn ignition switch ON.
- Turn ignition switch OFF and wait at least 2 seconds.

>> GO TO 2.

2.SHIPPING MODE CANCEL CHECK

- Turn ignition switch ON.
- Check that extended storage fuse warning message is not displayed on odometer display. 2.

>> WORK END

BCS-87 Revision: October 2015 2016 Quest **BCS**

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DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM

Description INFOID:000000012407028

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H-line, CAN L-line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only. CAN Communication Signal Chart. Refer to LAN-32, "CAN COMMUNICATION SYSTEM: CAN Communication control units are control units."

tion Signal Chart".

DTC Logic

DTC DETECTION LOGIC

DTC	CONSULT display de- scription	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:0000000012407030

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-17, "Trouble Diagnosis Flow Chart".

NO >> Refer to GI-41, "Intermittent Incident".

U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

U1010 CONTROL UNIT (CAN)

DTC Logic INFOID:000000012407031

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:0000000012407032

1.REPLACE BCM

When DTC "U1010" is detected, replace BCM.

>> Replace BCM. Refer to BCS-99, "Removal and Installation".

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U0415 VEHICLE SPEED

< DTC/CIRCUIT DIAGNOSIS >

U0415 VEHICLE SPEED

Description INFOID:0000000012407033

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	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.
- 2. 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-90, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000012407035

$1.\mathsf{abs}$ 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-38</u>, "DTC Index".

Is any DTC detected?

YES >> Repair or replace the malfunctioning part.

NO >> Replace BCM. Refer to BCS-99, "Removal and Installation".

B2562 LOW VOLTAGE

< DTC/CIRCUIT DIAGNOSIS >

B2562 LOW VOLTAGE

DTC Logic INFOID:0000000012407036

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. DTC CONFIRMATION

- 1. Erase DTC.
- Turn ignition switch OFF. 2.
- 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-91, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

1. CHECK POWER SUPPLY CIRCUIT

Check BCM power supply circuit. Refer to BCS-92, "Diagnosis Procedure".

Is the circuit normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".

NO >> Repair the malfunctioning part.

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BCS-91 Revision: October 2015 2016 Quest

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000012407038

1. CHECK FUSE AND FUSIBLE LINK

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

Signal name	Fuse and fusible link No.	
Rattery power cumply	L (40 A)	
Battery power supply	10 (10 A)	

Is the fuse or fusible link blown (open)?

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

NO >> GO TO 2.

2. CHECK POWER SUPPLY CIRCUIT

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

	Voltage			
(
В	CM		(Approx.)	
Connector	Terminal	Ground		
M123	70	Glound	Battery voltage	
W1123	57			

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Connector Terminal		Continuity	
M123 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:0000000012407039

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1. CHECK OUTPUT 1 - 5 CIRCUIT FOR OPEN

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

System	ВСМ		Combination switch		Continuity
System	Connector	Terminal	Connector	Terminal	Continuity
OUTPUT 1		36		11	
OUTPUT 2		35		9	
OUTPUT 3	M121	34	M103	7	Existed
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	CM		Continuity	
System	Connector Terminal			Continuity	
OUTPUT 1		36			
OUTPUT 2		35	Ground		
OUTPUT 3	M121	34		Not existed	
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	
	BCM			(Approx.)	
	Connector	Terminal			
OUTPUT 1		36		(V) 15	
OUTPUT 2		35			
OUTPUT 3		34	Ground	10 10 10 10 10 10 10 10 10 10 10 10 10 1	
OUTPUT 4	M121	33		0	
OUTPUT 5		32		PKIB4960J 7.0 - 8.0 V	

Is the measurement value normal?

Revision: October 2015 BCS-93 2016 Quest

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COMBINATION SWITCH OUTPUT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

YES >> Replace combination switch.

NO >> Replace BCM. Refer to <u>BCS-99</u>, "Removal and Installation".

COMBINATION SWITCH INPUT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

COMBINATION SWITCH INPUT CIRCUIT

Diagnosis Procedure

INFOID:0000000012407040

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1. CHECK INPUT 1 - 5 CIRCUIT FOR OPEN

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

Custom	ВСМ		Combination switch		Continuity
System	Connector	Terminal	Connector	Terminal	Continuity
INPUT 1		6		12	
INPUT 2		5		14	
INPUT 3	M121	4	M103	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			
INPUT 1		6			
INPUT 2	M121	5	Ground	Not existed	
INPUT 3		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		
Gystein	BCM			(Approx.)		
	Connector	Terminal				
INPUT 1		6				
INPUT 2		5	Ground	Refer to BCS- 41, "Refer-		
INPUT 3	M121	4				
INPUT 4		3		ence Value".		
INPUT 5		2				

Is the measurement value normal?

Yes >> Replace BCM. Refer to BCS-99, "Removal and Installation".

Revision: October 2015 BCS-95 2016 Quest

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COMBINATION SWITCH INPUT CIRCUIT

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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.

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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
	×	×						×	×								Α
×			×									×		×			В
						×	×				×		×				С
					×		×			×					×		D
				×			×									×	Е
×					×		×										F
		×		×		×	×										G
	×		×												×		Н
									×				×	×		×	I
								×		×	×	×					J
All Items							К										
	If only one item is detected or the item is not applicable to the combinations A to K							L									

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 BCS-93, "Diagnosis Procedure".				
D	Combination switch OUTPUT 4 circuit	ang para rolo. to <u>200 to, Diagriodo Frocedoro</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-95, "Diagnosis Procedure".				
I	Combination switch INPUT 4 circuit					
J	Combination switch INPUT 5 circuit					
K	BCM	Replace BCM. Refer to BCS-99, "Removal and Installation".				
L	Combination switch	Replace combination switch.				

Revision: October 2015 BCS-97 2016 Quest

NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

NORMAL OPERATING CONDITION

Description INFOID:0000000012407042

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 <u>BCS-87</u>, "<u>Description</u>".

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 "Before Replace ECU" of "Read / Write Configuration" to save or print current vehicle specification. Refer to BCS-84, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM): Description".

REMOVAL

- 1. Remove combination meter. Refer to MWI-96, "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 "After Replace ECU" of "Read / Write Configuration" or "Manual Configuration" when replacing BCM. Refer to BCS-84, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM): Description".

NOTE:

Be sure to perform the system initialization (NATS) when replacing BCM. Refer to <u>BCS-84, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM): Work Procedure"</u>.

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Revision: October 2015 BCS-99 2016 Quest

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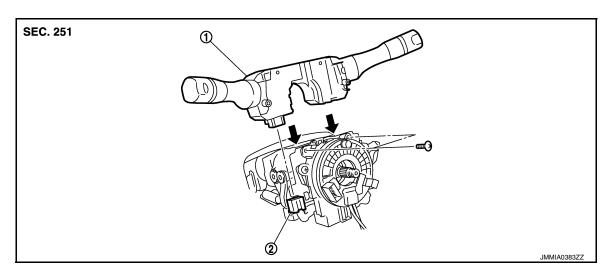
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COMBINATION SWITCH

Exploded View



1. Combination switch

2. Combination switch connector

Removal and Installation

INFOID:0000000012407045

REMOVAL

- 1. Remove steering column cover. Refer to IP-14, "Removal and Installation".
- 2. Remove screws.
- 3. Disconnect the connector.
- 4. Pull up the combination switch to remove it.

INSTALLATION

Install in the reverse order of removal.