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< BASIC INSPECTION >

BASIC INSPECTION

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM)

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM): Description

INFOID:0000000006262697

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BEFORE REPLACEMENT

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

NOTE:

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

AFTER REPLACEMENT

CAUTION:

- When replacing BCM, you must perform "WRITE CONFIGURATION" with CONSULT-III.
- Complete the procedure of "WRITE CONFIGURATION" in order.
- If you set incorrect "WRITE CONFIGURATION", incidents might occur.
- Configuration is different for each vehicle model. Confirm configuration of each vehicle model.
- When replacing BCM, perform the system initialization (NATS).

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM): Special Repair Requirement

INFOID:0000000006262698

1. SAVING VEHICLE SPECIFICATION

(P)CONSULT-III Configuration

Perform "READ CONFIGURATION" to save or print current vehicle specification. Refer to BCS-3, "CONFIGU-RATION (BCM): Description".

NOTE:

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

>> GO TO 2.

2.replace $_{
m BCM}$

Replace BCM. Refer to BCS-85, "Exploded View".

>> GO TO 3.

3.writing vehicle specification

(P)CONSULT-III Configuration

Perform "WRITE CONFIGURATION - Config file" or "WRITE CONFIGURATION - Manual selection" to write vehicle specification. Refer to BCS-4, "CONFIGURATION (BCM): Special Repair Requirement".

>> GO TO 4.

4. INITIALIZE BCM (NATS)

Perform BCM initialization. (NATS)

>> WORK END

CONFIGURATION (BCM)

CONFIGURATION (BCM): Description

Vehicle specification needs to be written with CONSULT-III because it is not written after replacing BCM.

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< BASIC INSPECTION >

Configuration has three functions as follows

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

NOTE:

Manual setting item: Items which need selection by vehicle specifications

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

CAUTION:

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

CONFIGURATION (BCM): Special Repair Requirement

INFOID:0000000006262700

1. WRITING MODE SELECTION

CONSULT-III Configuration

Select "CONFIGURATION" of BCM.

When writing saved data>>GO TO 2.

When writing manually>>GO TO 3.

2.PERFORM "WRITE CONFIGURATION - CONFIG FILE"

CONSULT-III Configuration

Perform "WRITE CONFIGURATION - Config file".

>> WORK END

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

CONSULT-III Configuration

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

CAUTION:

Thoroughly read and understand the vehicle specification. Incorrect settings may result in abnormal control of ECU.

4. Select "SETTING".

CAUTION:

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

When "COMMAND FINISHED", select "END".

>> GO TO 4.

4. OPERATION CHECK

Confirm that each function controlled by BCM operates normally.

>> WORK END

< BASIC INSPECTION >

CONFIGURATION (BCM): Configuration list

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CAUTION:

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

EXCEPT FOR MEXICO

MANUAL SETTING ITEM		NOTE	
Items	Setting value	NOTE	
AUTO LIGHT	WITH ⇔ WITHOUT	_	
DTRL	WITH ⇔ WITHOUT	WITH: With daytime running light system WITHOUT: Without daytime running light system	
AV C/U	WITH ⇔ WITHOUT	_	
AUTO BACK DOOR	WITH ⇔ WITHOUT	_	
THEFT ALM AREA	WITHOUT ⇔ MODE2	WITHOUT: Without vehicle security system MODE2: With vehicle security system	
RAIN SENSOR	WITH ⇔ WITHOUT	_	
Key Fob Type	MODE7 ⇔ MODE9	MODE7: With automatic back door system MODE9: Without automatic back door system	

⇔: Items which confirm vehicle specifications

AUTO SET	TING ITEM	NOTE
Items	Setting value	NOTE
H/L BULB	DEFAULT	_
FR FOG LAMP	WITH	_
RR FOG LAMP	WITH	Even on a vehicle without rear fog lamp. It displays "WITH".
TRANSMISSION	AT with ABS	_
TPMS	WITH	_
TIRE PRESSURE	230kPa	-
TR OPEN SW (INT)	MODE1	_
BATTERY SAVER FUNCTION	MODE1	_
DI LMP VARIAT	MODE2	-
LIGHT RECOG	MODE7	
HAZARD SW TYPE	MODE1	_
BCM AC CONTROL	MODE1	_
Trunk/Glass Hatch select	Glass Hatch	Even on a vehicle without glass hatch. It displays "Glass Hatch".
REAR WIPER	WITH	_
TRUNK ACT OUTPUT	MODE2	_
RAIN SEN TYPE	MODE2	_
TR CANCEL SW	WITHOUT	_
FOG ON WITH AUTO LIGHT	WITHOUT	_

FOR MEXICO

Revision: 2011 November BCS-5 2011 MURANO

< BASIC INSPECTION >

MANUAL SE	ETTING ITEM	NOTE	
Items	Setting value	NOTE	
AUTO LIGHT	WITH ⇔ WITHOUT	_	
DTRL	WITHOUT	_	
AV C/U	WITH	_	
AUTO BACK DOOR	WITHOUT	_	
THEFT ALM AREA	MODE2	_	
HAZARD SW TYPE	MODE1	_	
RAIN SENSOR	WITH ⇔ WITHOUT	_	

 $[\]Leftrightarrow : Items \ which \ confirm \ vehicle \ specifications$

AUTO SET	TING ITEM	NOTE	
Items	Setting value	NOTE	
H/L BULB	DEFAULT	_	
FR FOG LAMP	WITH	_	
RR FOG LAMP	WITH	Even on a vehicle without rear fog lamp. It displays "WITH".	
TRANSMISSION	AT with ABS	_	
TPMS	WITHOUT	_	
TR OPEN SW (INT)	MODE1	_	
BATTERY SAVER FUNCTION	MODE1	_	
DI LMP VARIAT	MODE2	_	
LIGHT RECOG	MODE7		
BCM AC CONTROL	MODE1	_	
Trunk/Glass Hatch select	Glass Hatch	Even on a vehicle without glass hatch. It displays "Glass Hatch".	
REAR WIPER	WITH	_	
TRUNK ACT OUTPUT	MODE2	_	
RAIN SEN TYPE	MODE2	_	
Key Fob Type	MODE9	_	
TR CANCEL SW	WITHOUT	_	
FOG ON WITH AUTO LIGHT	WITHOUT	_	

TRANSIT MODE CANCEL OPERATION

< BASIC INSPECTION >

TRANSIT MODE CANCEL OPERATION

Description INFOID:0000000007949734

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

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

Work Procedure INFOID:0000000007949735

1. TRANSIT MODE CANCEL OPERATION

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

>> GO TO 2.

2.transit mode cancel check

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

>> WORK END

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BCS

SYSTEM DESCRIPTION

BODY CONTROL SYSTEM

System Description

INFOID:0000000006262702

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-III and various settings.

BCM CONTROL FUNCTION LIST

System	Reference		
Combination switch reading system	BCS-10, "System Diagram"		
Signal buffer system	BCS-14, "System Diagram"		
Power consumption control system	BCS-15, "System Diagram"		
Auto light system	EXL-13, "System Diagram"		
Turn signal and hazard warning lamp system	EXL-17, "System Diagram" (Xenon type headlamp) EXL-193, "System Diagram" (Halogen type headlamp)		
Headlamp system	EXL-8. "System Diagram" (Xenon type headlamp) EXL-185. "System Diagram" (Halogen type headlamp)		
Parking, license plate and tail lamps system	EXL-19. "System Diagram" (Xenon type headlamp) EXL-195. "System Diagram" (Halogen type headlamp)		
Front fog lamp system	 <u>EXL-15, "System Diagram"</u> (Xenon type headlamp) <u>EXL-191, "System Diagram"</u> (Halogen type headlamp) 		
Exterior lamp battery saver system	 <u>EXL-21, "System Diagram"</u> (Xenon type headlamp) <u>EXL-197, "System Diagram"</u> (Halogen type headlamp) 		
Daytime running light system	 <u>EXL-11, "System Diagram"</u> (Xenon type headlamp) <u>EXL-187, "System Diagram"</u> (Halogen type headlamp) 		
Interior room lamp control system	- INL-5, "System Diagram"		
Step lamp system			
Interior room lamp battery saver system	INL-8, "System Diagram"		
Front wiper and washer system	WW-5, "WITH RAIN SENSOR : System Diagram" (With rain sensor) WW-9, "WITHOUT RAIN SENSOR : System Diagram" (Without rain sensor)		
Rear wiper and washer system	WW-14, "System Diagram"		
Warning chime system	WCS-5, "WARNING CHIME SYSTEM : System Diagram"		
Door lock system	DLK-14, "System Diagram"		
Automatic back door system	DLK-44, "System Diagram"		
Automatic drive positioner system	ADP-12, "AUTOMATIC DRIVE POSITIONER SYSTEM: System Diagram"		
Nissan Vehicle Immobilizer System (NVIS) - NATS	SEC-14, "System Diagram"		
Vehicle security system	SEC-19, "System Diagram"		
Panic alarm	SEC-19, System Diagram		

BODY CONTROL SYSTEM

< SYSTEM DESCRIPTION >

System	Reference	
Rear window defogger system	DEF-4, "WITH BOSE SYSTEM: System Diagram" (With BOSE system) DEF-6, "WITHOUT BOSE SYSTEM: System Diagram" (Without BOSE system)	
Intelligent Key system/engine start system	DLK-18, "INTELLIGENT KEY SYSTEM : System Diagram"	
Power window system	PWC-7, "System Diagram"	
Retained accessory power (RAP) system	PWC-7, "System Description"	
Tire pressure monitor system (TPMS) - AIR PRESSURE MONITOR	WT-8, "System Description"	

Component Parts Location

INFOID:0000000006262703

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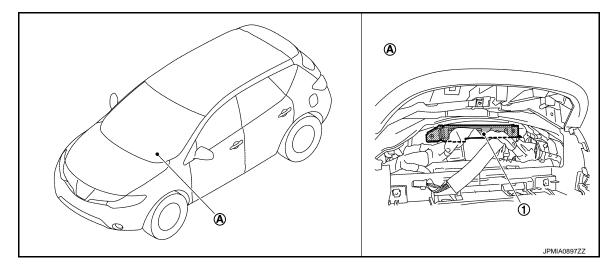
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1. BCM

A. Behind of combination meter

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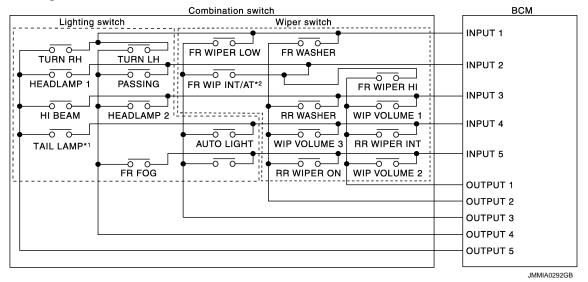
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System Diagram

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NOTE:

- *1: TAIL LAMP switch links lighting switch 1ST position.
- *2: "FR WIP INT/AT" is FR WIPER INT/AUTO.

System Description

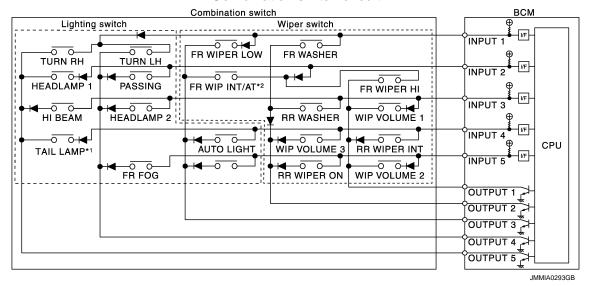
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OUTLINE

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

COMBINATION SWITCH MATRIX

Combination switch circuit



NOTE:

- *1: TAIL LAMP switch links lighting switch 1ST position.
- *2: "FR WIP INT/AT" is FR WIPER INT/AUTO.

< SYSTEM DESCRIPTION >

Combination switch INPL	JT-OUTPUT system list				
System	OUTPUT 1	OUTPUT 2	OUTPUT 3	OUTPUT 4	OUTPUT 5
INPUT 1	_	FR WASHER	FR WIPER LOW	TURN LH	TURN RH
INPUT 2	FR WIPER HI	_	FR WIPER INT/ AUTO	PASSING	HEADLAMP 1
INPUT 3	WIP VOLUME 1	RR WASHER	_	HEADLAMP 2	HI BEAM
INPUT 4	RR WIPER INT	WIP VOLUME 3	AUTO LIGHT	_	TAIL LAMP
INPUT 5	WIP VOLUME 2	RR WIPER ON	_	FR FOG	_

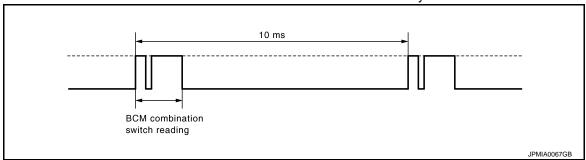
NOTE:

Headlamp has a dual system switch.

COMBINATION SWITCH READING FUNCTION

Description

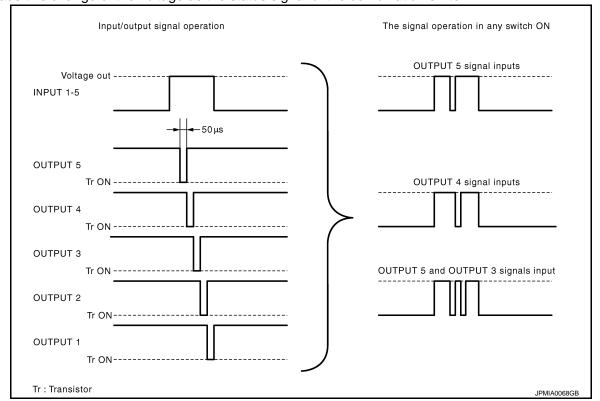
BCM reads the status of the combination switch at 10 ms interval normally.



NOTE:

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

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



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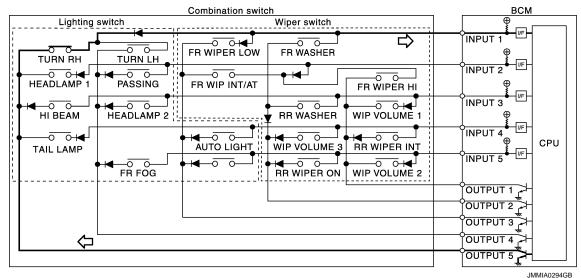
< SYSTEM DESCRIPTION >

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".

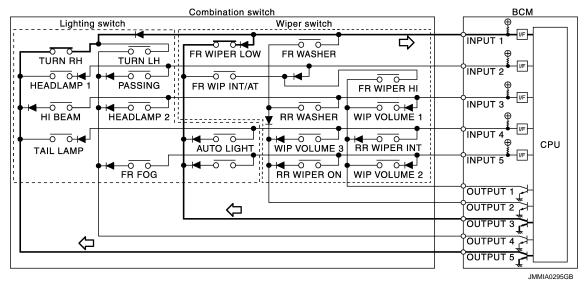
Example 1: When a switch (TURN RH switch) is turned ON

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



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

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



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

WIPER VOLUME DIAL POSITION

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

Wiper volume dial position		Switch status	
wiper volume diai position	WIP VOLUME 1	WIP VOLUME 2	WIP VOLUME 3
1	ON	ON	ON
2	ON	ON	OFF

< SYSTEM DESCRIPTION >

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

NOTE:

For details of wiper volume dial position, refer to <u>WW-5, "WITH RAIN SENSOR: System Description"</u> (with rain sensor), <u>WW-9, "WITH-OUT RAIN SENSOR: System Description"</u> (without rain sensor).

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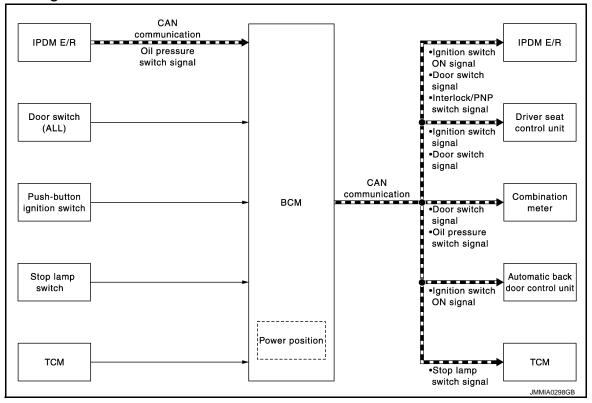
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SIGNAL BUFFER SYSTEM

System Diagram

INFOID:0000000006262706



System Description

INFOID:0000000006262707

OUTLINE

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

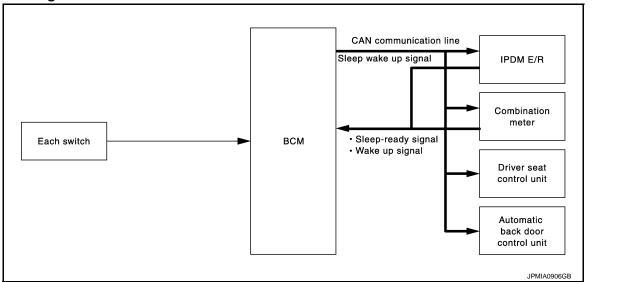
Signal name	Input	Output	Description
 Ignition switch ON signal Ignition switch signal	Push-button ignition switch (Push switch)	IPDM E/R (CAN) Driver seat control unit (CAN) Automatic back door control unit (CAN)	Inputs the push-button ignition switch (push switch) signal and transmits the ignition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

POWER CONSUMPTION CONTROL SYSTEM

< SYSTEM DESCRIPTION >

POWER CONSUMPTION CONTROL SYSTEM

System Diagram



System Description

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OUTLINE

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

Normal mode (wake-up)

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

CAN communication sleep mode (CAN sleep)

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

Low power consumption mode (BCM sleep)

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

LOW POWER CONSUMPTION CONTROL WITH BCM

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

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

Sleep mode activation

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

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POWER CONSUMPTION CONTROL SYSTEM

< SYSTEM DESCRIPTION >

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

Wake-up operation

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

Wake-up condition

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

POWER CONSUMPTION CONTROL SYSTEM

< SYSTEM DESCRIPTION >

Component Parts Location

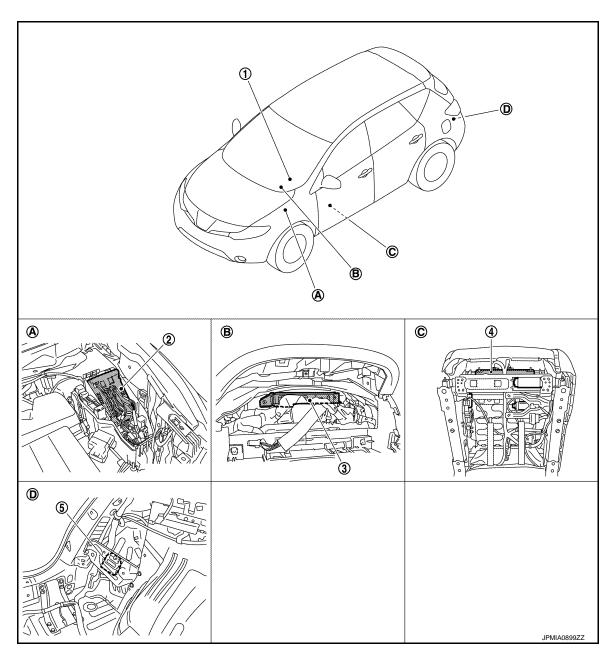
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- 1. Combination meter
- 4. Driver seat control unit
- A. Engine room (LH)
- D. Dash side lower (Passenger side)
- 2. IPDM E/R
- 5. Automatic back door control unit
- B. Behind of combination meter
- B. BCM
- C. Backside of the seat cushion (driver seat)

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< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

INFOID:0000000006262711

APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with BCM.

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

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

×: Applicable item

System	Sub system selection item	Diagnosis mode		
System	Sub system selection item	Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×*1	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
_	AIR CONDITONER*2			
Intelligent Key system Engine start system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
NVIS - NATS	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door opener system	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×

NOTE:

- *1: For models with rain sensor this mode is displayed, but is not used.
- *2: This item is displayed, but is not used.

FREEZE FRAME DATA (FFD)

< SYSTEM DESCRIPTION >

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

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

NOTE

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

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

DOOR LOCK

DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)

INFOID:0000000006891418

BCM CONSULT-III FUNCTION

CONSULT-III performs the following functions via CAN communication with BCM.

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< SYSTEM DESCRIPTION >

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

WORK SUPPORT

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

DATA MONITOR

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

ACTIVE TEST

< SYSTEM DESCRIPTION >

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

REAR WINDOW DEFOGGER

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

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Data monitor

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

ACTIVE TEST

Test Item	Description
REAR DEFOGGER	This test is able to check rear window defogger operation. Rear window defogger operates when "ON" on CONSULT-III screen is touched.

BUZZER

BUZZER: CONSULT-III Function (BCM - BUZZER)

INFOID:0000000006891435

CONSULT-III APPLICATION ITEMS

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

DATA MONITOR

Display item [Unit]	Description			
PUSH SW [On/Off]	Status of push button ignition switch judged by BCM.	N		
UNLK SEN-DR [On/Off]	Status of unlock sensor judged by BCM.	_		
VEH SPEED 1 [Km/h]	Value of vehicle speed signal received from ABS actuator and electric unit (control unit) with CAN communication line.	0		
KEY SW-SLOT [On/Off]	Status of key slot judged by BCM.	Р		
TAIL LAMP SW [On/Off]	Status of each switch judged by BCM using the combination switch readout function.	_		
FR FOG SW [On/Off]	Status of front fog lamp switch judged by BCM.	_		
DOOR SW-DR [On/Off]	Status of driver side door switch judged by BCM.	_		

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ACTIVE TEST

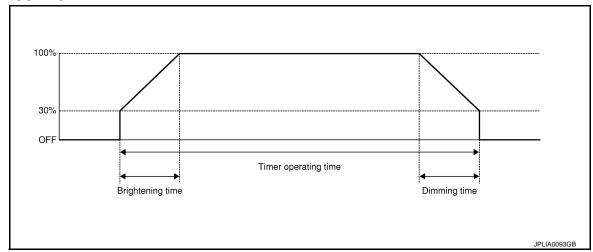
Display item [Unit]	Description
IGN KEY WARN ALM	The key warning chime operation can be checked by operating the relevant function (On/Off).
SEAT BELT WARN TEST	The seat belt warning chime operation can be checked by operating the relevant function (On/Off).
ID REGIST WARNING	The ID regist warning chime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

INT LAMP

INT LAMP : CONSULT-III Function (BCM - INT LAMP)

INFOID:0000000006891427

WORK SUPPORT



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

< SYSTEM DESCRIPTION >

Monitor item [Unit]	Description
REQ SW-DR [On/Off]	The switch status input from request switch (driver side)
REQ SW-AS [On/Off]	The switch status input from front request switch (passenger side)
PUSH SW [On/Off]	The switch status input from push-button ignition switch
KEY SW-SLOT [On/Off]	Key switch status input from key slot
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 rear door switch RH
DOOR SW-RL [On/Off]	The switch status input from rear door switch LH
DOOR SW-BK [On/Off]	NOTE: The item is indicated, but not monitored.
CDL LOCK SW [On/Off]	Lock switch status received from door lock/unlock switch by power window switch serial link
CDL UNLOCK SW [On/Off]	Unlock switch status received from door lock/unlock switch by power window switch serial link
KEY CYL LK-SW [On/Off]	Lock switch status received from key cylinder lock/unlock switch by power window switch serial link
KEY CYL UN-SW [On/Off]	Unlock switch status received from key cylinder lock/unlock switch by power window switch serial link
BACK DOOR SW [On/Off]	The switch status input from back door 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
INT LAMP	On	Outputs the interior room lamp control signal to turn map lamp and personal lamp ON (Map lamp switch is in DOOR position).
	Off	Stops the interior room lamp control signal to turn map lamp and personal lamp OFF.
STEP LAMP TEST	On	Outputs the step lamp control signal to turn step lamp ON.
STEF LAWF TEST	Off	Stops the step lamp control signal to turn step lamp OFF.
LUGGAGE LAMP TEST	On	NOTE:
	Off	The item is displayed, but cannot be tested.

HEADLAMP

HEADLAMP: CONSULT-III Function (BCM - HEAD LAMP)

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WORK SUPPORT

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< SYSTEM DESCRIPTION >

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

^{*:} Factory setting

DATA MONITOR

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 with CAN communication			
KEY SW-SLOT [On/Off]	Key switch status input from key slot			
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 detects from the combination switch reading function			
HEAD LAMP SW2 [On/Off]				
PASSING SW [On/Off]				
AUTO LIGHT SW [On/Off]				
FR FOG SW [On/Off]				
RR FOG SW [On/Off]	NOTE: The item is indicated, but not monitored.			

< SYSTEM DESCRIPTION >

Monitor item [Unit]	Description
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 rear door switch RH
DOOR SW-RL [On/Off]	The switch status input from rear door switch LH
DOOR SW-BK [On/Off]	NOTE: The item is indicated, but not monitored.
OPTICAL SENSOR [V]	The value of exterior brightness voltage input from the optical sensor

ACTIVE TEST

Test item	Operation	Description		
TAIL LAMP	On	Transmits the position light request signal to IPDM E/R with CAN communication to turn the tail lamp ON.		
	Off	Stops the position light request signal transmission.		
	Hi	Transmits the high beam request signal with CAN communication to turn the headlamp (HI).		
HEAD LAMP	Low	Transmits the low beam request signal with CAN communication to turn the headlamp (LO).		
	Off	Stops the high & low beam request signal transmission.		
FR FOG LAMP	On	Transmits the front fog light request signal to IPDM E/R with CAN communication to turn the front fog lamp ON.		
	Off	Stops the front fog light request signal transmission.		
RR FOG LAMP	On	NOTE:		
RR FOG LAWIP	Off	The item is indicated, but cannot be tested.		
DAYTIME RUNNING LIGHT	On	NOTE:		
DAYTIME RUNNING LIGHT	Off	The item is indicated, but cannot be tested.		
	RH			
CORNERING LAMP	LH	NOTE: The item is indicated, but cannot be tested.		
	Off	The term is maleated, but earned be tested.		
III DIM CIONAL	On	NOTE:		
ILL DIM SIGNAL	Off	The item is indicated, but cannot be tested.		

WIPER

WIPER : CONSULT-III Function (BCM - WIPER)

WORK SUPPORT

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

^{*:}Factory setting

NOTE:

Work support item is not indicated when the vehicle with rain sensor.

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DATA MONITOR

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

ACTIVE TEST

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

FLASHER

FLASHER: CONSULT-III Function (BCM - FLASHER)

INFOID:0000000006891426

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

< SYSTEM DESCRIPTION >

DATA MONITOR

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 PCM detects from the combination quitch 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 blink the right side turn signal lamps.
FLASHER	LH	Outputs the voltage to blink the left side turn signal lamps.
	Off	Stops the voltage to turn the turn signal lamps OFF.

INTELLIGENT KEY

INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY) INFOID:000000008891419

BCM CONSULT-III FUNCTION

CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF-DIAG RESULTS	Displays the diagnosis results judged by BCM.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.

WORK SUPPORT

Monitor item	Description	
REMO CONT ID CONFIR	It can be checked whether Intelligent Key ID code is registered or not in this mode.	
AUTO LOCK SET	Auto door lock time can be changed in this mode. • MODE 1: 1 minute • MODE 2: 5 minutes • MODE 3: 30 seconds • MODE 4: 2 minutes	
LOCK/UNLOCK BY I-KEY	Door lock/unlock function by door request switch (driver side, passenger side and back door) mode can be changed to operate (ON) or not operate (OFF) in this mode.	
ENGINE START BY I-KEY	Engine start function mode can be changed to operate (ON) or not operate (OFF) with this mode.	

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< SYSTEM DESCRIPTION >

Monitor item	Description
TRUNK/GLASS HATCH OPEN	Buzzer reminder function mode by back door request switch can be changed to operate (ON) or not operate (OFF) with this mode.
PANIC ALARM SET	Panic alarm button pressing time on Intelligent Key remote control button can be selected from the following with this mode. • MODE 1: 0.5 sec. • MODE 2: Non-operation • MODE 3: 1.5 sec.
PW DOWN SET	Unlock button pressing time on Intelligent Key button can be selected from the following with this mode. • MODE 1: 3 sec. • MODE 2: Non-operation • MODE 3: 5 sec.
TRUNK OPEN DELAY	NOTE: This item is displayed, but cannot be supported.
LO- BATT OF KEY FOB WARN	Intelligent Key low battery warning mode can be changed to operate (ON) or not operate (OFF) with this mode.
ANTI KEY LOCK IN FUNCTI	Key reminder function mode can be changed to operate (ON) or not operate (OFF) with this mode.
HAZARD ANSWER BACK	Hazard reminder function mode can be selected from the following with this mode. • LOCK ONLY: Door lock operation only • UNLOCK ONLY: Door unlock operation only • LOCK/UNLOCK: Lock/unlock operation • OFF: Non-operation
ANS BACK I-KEY LOCK	Buzzer reminder function (lock operation) mode by door request switch (driver side and passenger side) can be selected from the following with this mode. • Horn chirp: Sound horn • Buzzer: Sound Intelligent Key warning buzzer • OFF: Non-operation
ANS BACK I-KEY UNLOCK	Buzzer reminder function (unlock operation) mode by door request switch can be changed to operate (ON) or not operate (OFF) with this mode.
SHORT CRANKING OUTPUT	Starter motor can operate during the times below. • 70 msec • 100 msec • 200 msec
INSIDE ANT DIAGNOSIS	This function allows inside key antenna self-diagnosis.
HORN WITH KEYLESS LOCK	Horn reminder function mode by Intelligent Key button can be changed to operate (ON) or not operate (OFF) with this mode.

SELF-DIAG RESULT

Refer to DLK-233, "DTC Index".

DATA MONITOR

Monitor Item	Condition
REQ SW -DR	Indicates [ON/OFF] condition of door request switch (driver side).
REQ SW -AS	Indicates [ON/OFF] condition of door request switch (passenger side).
REQ SW -RR	NOTE: This item is displayed, but cannot be monitored.
REQ SW -RL	NOTE: This item is displayed, but cannot be monitored.
REQ SW -BD/TR	Indicates [ON/OFF] condition of back door request switch.
PUSH SW	Indicates [ON/OFF] condition of push-button ignition switch.
IGN RLY2 -F/B	Indicates [ON/OFF] condition of ignition relay 2.
ACC RLY-FB	NOTE: This item is displayed, but cannot be monitored.

< SYSTEM DESCRIPTION >

Monitor Item	Condition	
CLUCH SW	NOTE: This item is displayed, but cannot be monitored.	
BRAKE SW 1	Indicates [ON/OFF]* condition of brake switch power supply.	
BRAKE SW 2	Indicates [ON/OFF] condition of brake switch.	
DETE/CANCL SW	Indicates [ON/OFF] condition of P position.	
SFT PN/N SW	Indicates [ON/OFF] condition of P or N position.	
S/L -LOCK	Indicates [ON/OFF] condition of steering lock unit (LOCK). NOTE: For models without steering lock unit this item is not displayed.	
S/L -UNLOCK	Indicates [ON/OFF] condition of steering lock unit (UNLOCK). NOTE: For models without steering lock unit this item is not displayed.	
S/L RELAY -F/B	Indicates [ON/OFF] condition of ignition switch. NOTE: For models without steering lock unit this item is not displayed.	
UNLK SEN -DR	Indicates [ON/OFF] condition of driver door UNLOCK status.	
PUSH SW -IPDM	Indicates [ON/OFF] condition of push-button ignition switch.	
IGN RLY1 -F/B	Indicates [ON/OFF] condition of ignition relay 1.	
DETE SW -IPDM	Indicates [ON/OFF] condition of P position.	
SFT PN -IPDM	Indicates [ON/OFF] condition of P or N position.	
SFT P -MET	Indicates [ON/OFF] condition of P position.	
SFT N -MET	Indicates [ON/OFF] condition of N position.	
ENGINE STATE	Indicates [STOP/START/CRANK/RUN] condition of engine states.	
S/L LOCK-IPDM	Indicates [ON/OFF] condition of steering lock unit (LOCK). NOTE: For models without steering lock unit this item is not displayed.	
S/L UNLK-IPDM	Indicates [ON/OFF] condition of steering lock unit (UNLOCK). NOTE: For models without steering lock unit this item is not displayed.	
S/L RELAY-REQ	Indicates [ON/OFF] condition of steering lock relay. NOTE: For models without steering lock unit this item is not displayed.	
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 CVT by numerical value [Km/h].	
DOOR STAT-DR	Indicates [LOCK/READY/UNLOCK] condition of driver side door status.	
DOOR STAT-AS	Indicates [LOCK/READY/UNLOCK] condition of passenger side door status.	
ID OK FLAG	Indicates [SET/RESET] condition of key ID.	
PRMT ENG STRT	Indicates [SET/RESET] condition of engine start possibility.	
PRMT RKE STRT	NOTE: This item is displayed, but cannot be monitored.	
KEY SW -SLOT	Indicates [ON/OFF] condition of key slot.	
TRNK/HAT MNTR	NOTE: This item is displayed, but cannot be monitored.	
RKE-LOCK	Indicates [ON/OFF] condition of LOCK signal from Intelligent Key.	
RKE-UNLOCK	Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key.	
RKE-TR/BD	NOTE: This item is displayed, but cannot be monitored.	
RKE-PANIC	Indicates [ON/OFF] condition of PANIC button of Intelligent Key.	
RKE-P/W OPEN	Indicates [ON/OFF] condition of P/W DOWN signal from Intelligent Key.	

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< SYSTEM DESCRIPTION >

Monitor Item	Condition
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

Test item	Description
BATTERY SAVER	This test is able to check interior room lamp operation. The interior room lamp will be activated after "ON" on CONSULT-III screen is touched.
PW REMOTO DOWN SET	This test is able to check power window down operation. The power window down will be activated after "ON" on CONSULT-III screen is touched.
INSIDE BUZZER	This test is able to check warning chime in combination meter operation. • Take away warning chime sounds when "TAKE OUT" on CONSULT-III screen is touched. • Key warning chime sounds when "KEY WARN" on CONSULT-III screen is touched. • P position warning chime sounds when "P RNG WARN" on CONSULT-III screen is touched. • ACC warning chime sounds when "ACC WARN" on CONSULT-III screen is touched.
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation. The Intelligent Key warning buzzer will be activated after "ON" on CONSULT-III screen is touched.
INDICATOR	This test is able to check warning lamp operation. • "KEY" Warning lamp illuminates when "KEY ON" on CONSULT-III screen is touched. • "KEY" Warning lamp flashes when "KEY IND" on CONSULT-III screen is touched.
INT LAMP	This test is able to check interior room lamp operation. The interior room lamp will be activated after "ON" on CONSULT-III screen is touched.
LCD	 This test is able to check meter display information Engine start information displays when "BP N" on CONSULT-III screen is touched. Engine start information displays when "BP I" on CONSULT-III screen is touched. Key ID warning displays when "ID NG" on CONSULT-III screen is touched. Steering lock information displays when "ROTAT" on CONSULT-III screen is touched. NOTE: For models without steering lock unit, "ROTAT" is displayed, but cannot be tested. P position warning displays when "SFT P" on CONSULT-III screen is touched. Intelligent Key insert information displays when "INSRT" on CONSULT-III screen is touched. Intelligent Key low battery warning displays when "BATT" on CONSULT-III screen is touched. Take away through window warning displays when "NO KY" on CONSULT-III screen is touched. Take away warning display when "OUTKEY" on CONSULT-III screen is touched. OFF position warning display when "LK WN" on CONSULT-III screen is touched.
TRUNK/GLASS HATCH	This test is able to check back door opener actuator open operation. This actuator opens when "ON" on CONSULT-III screen is touched.
FLASHER	This test is able to check hazard warning lamp operation. The hazard warning lamps will be activated after "ON" on CONSULT-III screen is touched.
HORN	This test is able to check horn operation. The horn will be activated after "ON" on CONSULT-III screen is touched.
IGN CONT2	This test is able to check ignition relay operation. The ignition relay will be activated after "ON" on CONSULT-III screen is touched.
P RANGE	This test is able to check CVT shift selector power supply CVT shift selector power is supplied when "ON" on CONSULT-III screen is touched.
ENGINE SW ILLUMI	This test is able to check push-ignition switch illumination operation. Push-ignition switch illumination illuminates when "ON" on CONSULT-III screen is touched.
LOCK INDICATOR	NOTE: This item is displayed, but cannot be tested.
ACC INDICATOR	This test is able to check indicator in push-ignition switch operation. Indicator in push-button ignition switch illuminates when "ON" on CONSULT-III screen is touched.

< SYSTEM DESCRIPTION >

Test item	Description
IGNITION ON IND	This test is able to check indicator in push-ignition switch operation. Indicator in push-button ignition switch illuminates when "ON" on CONSULT-III screen is touched.
KEY SLOT ILLUMI	This test is able to check key slot illumination operation. Key slot illumination flash when "ON" on CONSULT-III screen is touched.
AUTOMATIC BACK DOOR	NOTE: This item is displayed, but cannot be tested.
AUTOMATIC SLIDING DOOR	NOTE: This item is displayed, but cannot be tested.

COMB SW

COMB SW: CONSULT-III Function (BCM - COMB SW)

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DATA MONITOR

[Off/On]

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

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switch reading function.

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< SYSTEM DESCRIPTION >

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

BCM

BCM: CONSULT-III Function (BCM - BCM)

FOID:00000000006262721

WORK SUPPORT

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

IMMU

IMMU: CONSULT-III Function (BCM - IMMU)

INFOID:0000000006891422

APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with BCM.

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

DATA MONITOR

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

ACTIVE TEST

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

BATTERY SAVER

BATTERY SAVER : CONSULT-III Function (BCM - BATTERY SAVER)

INFOID:0000000006891428

WORK SUPPORT

< SYSTEM DESCRIPTION >

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

^{*:} Factory setting

DATA MONITOR

Monitor item [Unit]	Description
REQ SW-DR [On/Off]	The switch status input from request switch (driver side)
REQ SW-AS [On/Off]	The switch status input from front 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
KEY SW-SLOT [On/Off]	Key switch status input from key slot
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 rear door switch RH
DOOR SW-RL [On/Off]	The switch status input from rear door switch LH
DOOR SW-BK [On/Off]	NOTE: The item is indicated, but not monitored.
CDL LOCK SW [On/Off]	Lock switch status received from door lock/unlock switch by power window switch serial link
CDL UNLOCK SW [On/Off]	Unlock switch status received from door lock/unlock switch by power window switch serial link
KEY CYL LK-SW [On/Off]	Lock switch status received from key cylinder lock/unlock switch by power window switch serial link
KEY CYL UN-SW [On/Off]	Unlock switch status received from key cylinder lock/unlock switch by power window switch serial link
BACK DOOR SW [On/Off]	The switch status input from back door 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

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< SYSTEM DESCRIPTION >

ACTIVE TEST

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

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

TRUNK

TRUNK: CONSULT-III Function (BCM - TRUNK)

INFOID:0000000006891420

BCM CONSULT-III FUNCTION

CONSULT-III performs the following functions via CAN communication with BCM.

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

DATA MONITOR

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

^{*:} With back door opener system

ACTIVE TEST

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

THEFT ALM

THEFT ALM: CONSULT-III Function (BCM - THEFT)

INFOID:0000000006891421

APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with BCM.

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

DATA MONITOR

< SYSTEM DESCRIPTION >

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

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

ACTIVE TEST

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

RETAINED PWR

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< SYSTEM DESCRIPTION >

RETAINED PWR: CONSULT-III Function (BCM - RETAINED PWR)

INFOID:0000000006891424

Data monitor

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-III Function (BCM - SIGNAL BUFFER)

INFOID:0000000006262727

DATA MONITOR

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

ACTIVE TEST

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

AIR PRESSURE MONITOR

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

APPLICATION ITEMS

CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
Self Diagnostic Result	Displays the diagnosis results judged by BCM.
Data Monitor	The BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Work Support	Components can be quickly and accurately adjusted.

SELF DIAGNOSTIC RESULT

Refer to BCS-78, "DTC Index".

When "CRNT" is displayed on self-diagnosis result,

The system is presently malfunctioning.

When "PAST" is displayed on self-diagnosis result,

System malfunction in the past is detected, but the system is presently normal.

DATA MONITOR MODE

Screen of data monitor mode is displayed.

NOTE:

When malfunction is detected, CONSULT-III perform REAL-TIME DIAGNOSIS.

Also, any malfunction detected while in this mode will be displayed at real time.

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

Monitor item (Unit)	Remark	А
AIR PRESS FL (kPa//kg/cm²/Psi)		
AIR PRESS FR (kPa//kg/cm²/Psi)	Tire procedure	В
AIR PRESS RR (kPa//kg/cm²/Psi)	Tire pressure	
AIR PRESS RL (kPa//kg/cm²/Psi)		
ID REGST FL1 (Green/Red)		C
ID REGST FR1 (Green/Red)	Desired D	
ID REGST RR1 (Green/Red)	Registration ID	D
ID REGST RL1 (Green/Red)		
WARNING LAMP (On/Off)	Low tire pressure warning lamp	
BUZZER (On/Off)	NOTE: This item is displayed, but cannot be use this item.	E

NOTE:

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

ACTIVE TEST MODE

NOTE:

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

TEST ITEM LIST

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

WORK SUPPORT MODE

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

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DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM

Description INFOID:00000000062622730

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-25, "CAN Communication Signal Chart".

DTC Logic

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:0000000006262732

1.PERFORM SELF DIAGNOSTIC

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

Is DTC "U1000" displayed?

YES >> Refer to LAN-15, "Trouble Diagnosis Flow Chart".

NO >> Refer to GI-44, "Intermittent Incident".

U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

U1010 CONTROL UNIT (CAN)

DTC Logic

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:0000000006262734

1.REPLACE BCM

When DTC "U1010" is detected, replace BCM.

>> Replace BCM. Refer to BCS-85, "Exploded View".

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U0415 VEHICLE SPEED SIG

< DTC/CIRCUIT DIAGNOSIS >

U0415 VEHICLE SPEED SIG

Description INFOID:00000000002622735

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

DTC Logic

DTC DETECTION LOGIC

DTC	CONSULT-III 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 CONSULT-III, when passed 2 seconds or more after the ignition switch is turned ON.

Is any DTC detected?

YES >> Refer to BCS-40, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000006262737

$1.\mathsf{abs}$ actuator and electric unit (control unit) self-diag results

Perform "Self-Diagnostic Result" of ABS actuator and electric unit (control unit) with CONSULT-III. Refer to BRC-28, "CONSULT-III Function".

Is any DTC detected?

YES >> Repair or replace the malfunctioning part.

NO >> Replace BCM. Refer to BCS-85, "Exploded View".

B2562 LOW VOLTAGE

< DTC/CIRCUIT DIAGNOSIS >

B2562 LOW VOLTAGE

DTC Logic

DTC DETECTION LOGIC

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

Is any DTC detected?

YES >> Refer to BCS-41, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

1. CHECK POWER SUPPLY CIRCUIT

Check BCM power supply circuit. Refer to BCS-42, "Diagnosis Procedure".

Is the circuit normal?

YES >> Replace BCM. Refer to BCS-85, "Exploded View".

NO >> Repair the malfunctioning part.

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000006262740

1. CHECK FUSE AND FUSIBLE LINK

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

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

Is the fuse fusing?

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

NO >> GO TO 2.

2. CHECK POWER SUPPLY CIRCUIT

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

(Voltage		
В	СМ		(Approx.)
Connector	Terminal	Ground	
M118	1	Giodila	Battery voltage
M119	11		Dattery Voltage

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Connector Terminal		Continuity
M119	13		Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

COMBINATION SWITCH INPUT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

COMBINATION SWITCH INPUT CIRCUIT

Diagnosis Procedure

INFOID:0000000006262741

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1. CHECK INPUT 1 - 5 SYSTEM CIRCUIT FOR OPEN

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

System	ВС	BCM		Combination switch	
System	Connector	Terminal	Connector	Terminal	Continuity
INPUT 1		107		11	
INPUT 2		109		9	
INPUT 3	M122	88	M103	7	Existed
INPUT 4		108		10	
INPUT 5		87		13	

Does continuity exist?

YES >> GO TO 2.

NO >> Repair the harnesses or connectors.

2.CHECK INPUT 1 - 5 SYSTEM CIRCUIT FOR SHORT

Check for continuity between BCM harness connector and ground.

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

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> GO TO 3.

3.CHECK BCM OUTPUT VOLTAGE

1. Connect the BCM connector.

2. Check voltage between BCM harness connector and ground.

System	(+)		(+)		(-)	Voltage
	BC	CM		(Approx.)		
	Connector	Terminal				
INPUT 1		107	Ground	Refer to BCS-		
INPUT 2		109				
INPUT 3	M122	88		47, "Refer-		
INPUT 4		108		ence Value".		
INPUT 5		87				

Is the measurement value normal?

YES >> GO TO 4.

NO >> Replace BCM. Refer to BCS-85, "Exploded View".

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COMBINATION SWITCH INPUT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

4. CHECK BCM INPUT SIGNAL

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

System	(+)		(-)	Voltage	
System	ВС	M		(Approx.)	
	Connector	Terminal			
INPUT 1		107	Ground	Refer to BCS-	
INPUT 2		109			
INPUT 3	M122	88		47, "Refer-	
INPUT 4		108		ence Value".	
INPUT 5		87			

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

YES >> Replace BCM. Refer to BCS-85, "Exploded View".

NO >> Replace the combination switch.

COMBINATION SWITCH OUTPUT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

COMBINATION SWITCH OUTPUT CIRCUIT

Diagnosis Procedure

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1. CHECK OUTPUT 1 - 5 SYSTEM CIRCUIT FOR OPEN

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

NOTE:

BCM connector disconnects M123 only.

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

System	ВСМ		Combinat	Continuity	
	Connector	Terminal	Connector	Terminal	Continuity
OUTPUT 1	M123	143		12	
OUTPUT 2		144		14	
OUTPUT 3		145	M103	5	Existed
OUTPUT 4		146		2	
OUTPUT 5		142		8	

Does continuity exist?

YES >> GO TO 2.

NO >> Repair the harnesses or connectors.

2.CHECK OUTPUT 1 - 5 SYSTEM CIRCUIT FOR SHORT

Check for continuity between BCM harness connector and ground.

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

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> GO TO 3.

${f 3.}$ check combination switch internal circuit

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

NOTE:

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

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COMBINATION SWITCH OUTPUT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

		Terminals			
System	(+)		(-)	Value (Approx.)	
	Combination switch			Value (Approx.)	
	Connector	Connector Terminal			
OUTPUT 1		12			
OUTPUT 2		14		(V) 15	
OUTPUT 3		5	Ground	10	
OUTPUT 4	M103	2		0	
OUTPUT 5		8		2 ms JPMIA0041GB	

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

YES

NO

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value

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VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
ED WIDED UI	Other than front wiper switch HI	Off
FK WIFEK III	Front wiper switch HI	On
ER WIPER HI ER WIPER LOW ER WASHER SW ER WIPER INT ER WIPER STOP NT VOLUME ER WIPER ON ER WIPER INT ER WASHER SW ER WIPER STOP TURN SIGNAL R TURN SIGNAL L TAIL LAMP SW HEAD LAMP SW 1	Other than front wiper switch LO	Off
FR WIPER LOW	Front wiper switch LO	On
ED WACHED OW	Front washer switch OFF	Off
FR WASHER SW	Front washer switch ON	On
ED WIDED INT	Other than front wiper switch INT/AUTO	Off
FR WIPER IN I	Front wiper switch INT/AUTO	On
ED WIDED STOD	Front wiper is not in STOP position	Off
FR WIPER STOP	Front wiper is in STOP position	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
RR WIPER ON	Other than rear wiper switch ON	Off
KK WIFEK ON	Rear wiper switch ON	On
DD WIDED INT	Other than rear wiper switch INT	Off
KK WIPEK INI	Rear wiper switch INT	On
DD WACHED CW	Rear washer switch OFF	Off
KK WASHEK SW	Rear washer switch ON	On
DD WIDED STOD	Rear wiper is in STOP position	Off
RK WIPER STOP	Rear wiper is not in STOP position	On
TUDNI SICNAL D	Other than turn signal switch RH	Off
TURN SIGNAL R	Turn signal switch RH	On
TUDN SIGNAL I	Other than turn signal switch LH	Off
TORN SIGNAL L	Turn signal switch LH	On
TAIL LAMD SW	Other than lighting switch 1ST and 2ND	Off
TAIL LAWIP SW	Lighting switch 1ST or 2ND	On
LI DEAM CW	Other than lighting switch HI	Off
HI DEAIN SW	Lighting switch HI	On
HEAD LAMP SW 1	Other than lighting switch 2ND	Off
HEAD LAIVIP SW 1	Lighting switch 2ND	On
HEAD LAMP SW 2	Other than lighting switch 2ND	Off
HEAD LAIVIP SW 2	Lighting switch 2ND	On
DV SSING SW	Other than lighting switch PASS	Off
FASSING SW	Lighting switch PASS	On
ALITO LICHT SW	Other than lighting switch AUTO	Off
AUTO LIGHT SW	Lighting switch AUTO	On
ED EOC SW	Front fog lamp switch OFF	Off
RR WIPER INT RR WASHER SW RR WIPER STOP 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	Front fog lamp switch ON	On

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Monitor Item	Condition	Value/Status
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off
	Driver door closed	Off
DOOR SW-DR	Driver door opened	On
2002 014 40	Passenger door closed	Off
DOOR SW-AS	Passenger door opened	On
DOOD OW DD	Rear RH door closed	Off
JOOR SW-RR	Rear RH door opened	On
200D OW DI	Rear LH door closed	Off
JOOR SW-RL	Rear LH door opened	On
DOOD SW.RK	Back door closed	Off
DOOK SW-BK	Back door opened	On
SDL LOCK SW	Other than power door lock switch LOCK	Off
POOR SW-DR DOOR SW-AS DOOR SW-RR DOOR SW-RL DOOR SW-BK DL LOCK SW DL UNLOCK SW EY CYL LK-SW EY CYL UN-SW EY CYL SW-TR AZARD SW EAR DEF SW DTE: or models with BOSE audio system is item is not monitored. R CANCEL SW R/BD OPEN SW	Power door lock switch LOCK	On
CDL LINII OCK SW	Other than power door lock switch UNLOCK	Off
EY CYL UN-SW	Power door lock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
NET CTL LK-SW	Driver door key cylinder LOCK position	On
ZEV CVI LINI SW/	Other than driver door key cylinder UNLOCK position	Off Off Off On Off
XET CTE ON-SW	Driver door key cylinder UNLOCK position	
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
JAZADD CW	Hazard switch is OFF	Off
TAZARD SW	Hazard switch is ON	On
REAR DEF SW NOTE:	Rear window defogger switch OFF	Off
For models with BOSE audio system this item is not monitored.	Rear window defogger switch ON	On
TR CANCEL SW	NOTE: The item is indicated, but not monitored.	Off
TR/BD OPEN SW	Back door opener switch OFF	Off
TIVE OF EN OW	While the back door opener switch is turned ON	On
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
SKE-I OCK	LOCK button of Intelligent Key is not pressed	Off
WE-LOOK	LOCK button of Intelligent Key is pressed	On
SKE-I INI OCK	UNLOCK button of Intelligent Key is not pressed	Off
ANL-UNLOUN	UNLOCK button of Intelligent Key is pressed	On
RKE-TR/RD	BACK DOOR OPEN button of Intelligent Key is not pressed	Off
	BACK DOOR OPEN button of Intelligent Key is pressed	On
RKE-PANIC	PANIC button of Intelligent Key is not pressed	Off
TALL LAND	PANIC button of Intelligent Key is pressed	On
RKE-P/W OPEN	UNLOCK button of Intelligent Key is not pressed	Off
IXIL I /VV OI LIN	UNLOCK button of Intelligent Key is pressed and held	On

Monitor Item	Condition	Value/Status
DIVE MODE OUG	LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	Off
RKE-MODE CHG	LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	On
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V
OPTICAL SENSOR	Dark outside of the vehicle	Off On
DEO SW. DD	Driver door request switch is not pressed	Off
REQ SW -DR	Driver door request switch is pressed	Off On Close to 5 V Close to 0 V Off On Off On Off Off Off Off On Off Off
DEO SW. AS	Passenger door request switch is not pressed	Off On Close to 5 V Close to 0 V Off On Off On Off Off Off On Off On Off On Off On Off On Off On Off Off
NEQ 3W -A3	Passenger door request switch is pressed	On
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RR REQ SW -BD/TR PUSH SW GN RLY2 -F/B ACC RLY -F/B CLUCH SW	Back door request switch is not pressed	Off
VEM OM -DD/ IK	Back door request switch is pressed	On
	Push-button ignition switch (push switch) is not pressed	Off
202H 2W	Push-button ignition switch (push switch) is pressed	On
SN RLY2 -F/B	Ignition switch in OFF or ACC position	Off
IGN RLY2 -F/B	Ignition switch in ON position	On
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off
CLUCH SW	NOTE: The item is indicated, but not monitored.	Off
	The brake pedal is depressed when No. 7 fuse is blown	Off
BRAKE SW 1	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
DDAKE OM O	The brake pedal is not depressed	Off
SRAKE SW 2	Stop lamp switch 1 signal circuit is normal	On
DETE/OANOL OW	Selector lever in P position	Off
DETE/CANCL SW	Selector lever in any position other than P	On
OFT DAVALOW	Selector lever in any position other than P and N	Off
SET PIN/IN SVV	Selector lever in P or N position	On
S/L -LOCK	NOTE: The item is indicated, but not monitored.	Off
S/L -UNLOCK	NOTE: The item is indicated, but not monitored.	Off
S/L RELAY-F/B	NOTE: The item is indicated, but not monitored.	Off
JNLK SEN -DR	Driver door is unlocked	Off
JINLK SEIN -UK	Driver door is locked	On
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
OOLLOW -IEDIN	Push-button ignition switch (push-switch) is pressed	On
GN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
ON INELL -1/D	Ignition switch in ON position	On
DETE SW -IPDM	Selector lever in any position other than P	Off
DE LE OVV -IEDIVI	Selector lever in P position	On

Monitor Item	Condition	Value/Status
CET DN IDDM	Selector lever in any position other than P and N	Off
SFT PN -IPDM	Selector lever in P or N position	On
SFT P -MET	Selector lever in any position other than P	Off
SFI P-IVIET	Selector lever in P position	On
OCT N. MCT	Selector lever in any position other than N	Off
SFT N -MET	Selector lever in N position	On
	Engine stopped	Stop
ENGINE STATE	While the engine stalls	Stall
ENGINE STATE	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	NOTE: The item is indicated, but not monitored.	Off
S/L UNLK-IPDM	NOTE: The item is indicated, but not monitored.	Off
S/L RELAY-REQ	NOTE: The item is indicated, but not monitored.	Off
VEH SPEED 1	While driving	Equivalent to speed- ometer reading
VEH SPEED 2	While driving	Equivalent to speed- ometer reading
	Driver door is locked	LOCK
DOOR STAT-DR	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLOCK
	Passenger door is locked	LOCK
DOOR STAT-AS	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLOCK
D OK FLAG	Power supply position in LOCK position	Reset
D OK FLAG	Power supply position in any position other than LOCK	Set
PRMT ENG STRT	The engine start is prohibited	Reset
FRIMIT LING STRT	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
KEY SW -SLOT	Intelligent Key is not inserted into key slot	Off
AET 3W -SLOT	Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	_
CONEDMID ALL	The Intelligent Key ID that the key slot receives is not recognized by any Intelligent Key ID registered to BCM.	Yet
CONFRM ID ALL	The Intelligent Key ID that the key slot receives is recognized by any Intelligent Key ID registered to BCM.	Done
CONFIDM ID4	The Intelligent Key ID that the key slot receives is not recognized by the fourth Intelligent Key ID registered to BCM.	Yet
CONFIRM ID4	The Intelligent Key ID that the key slot receives is recognized by the fourth Intelligent Key ID registered to BCM.	Done

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Monitor Item	Condition	Value/Status
CONFIRM ID3	The Intelligent Key ID that the key slot receives is not recognized by the third Intelligent Key ID registered to BCM.	Yet
CONFIRM IDS	The Intelligent Key ID that the key slot receives is recognized by the third Intelligent Key ID registered to BCM.	Done
CONFIRM ID2	The Intelligent Key ID that the key slot receives is not recognized by the second Intelligent Key ID registered to BCM.	Yet
COM INWIDE	The Intelligent Key ID that the key slot receives is recognized by the second Intelligent Key ID registered to BCM.	Done
CONFIRM ID1	The Intelligent Key ID that the key slot receives is not recognized by the first Intelligent Key ID registered to BCM.	Yet
CONTINUIDI	The Intelligent Key ID that the key slot receives is recognized by the first Intelligent Key ID registered to BCM.	Done
TP 4	The ID of fourth Intelligent Key is not registered to BCM	Yet
17 4	The ID of fourth Intelligent Key is registered to BCM	Done
TD 0	The ID of third Intelligent Key is not registered to BCM	Yet
TP 3	The ID of third Intelligent Key is registered to BCM	Done
TD 2	The ID of second Intelligent Key is not registered to BCM	Yet
TP 2	The ID of second Intelligent Key is registered to BCM	Done
TD 4	The ID of first Intelligent Key is not registered to BCM	Yet
TP 1	The ID of first Intelligent Key is registered to BCM	Done
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LF tire
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID DECCT EL4	ID of front LH tire transmitter is registered	Done
ID REGST FL1	ID of front LH tire transmitter is not registered	Yet
ID DECOT ED4	ID of front RH tire transmitter is registered	Done
ID REGST FR1	ID of front RH tire transmitter is not registered	Yet
ID DECOT DD4	ID of rear RH tire transmitter is registered	Done
ID REGST RR1	ID of rear RH tire transmitter is not registered	Yet
ID DECCE DI 4	ID of rear LH tire transmitter is registered	Done
ID REGST RL1	ID of rear LH tire transmitter is not registered	Yet
WARNING LAMP	Tire pressure indicator OFF	Off
WARNING LAMP	Tire pressure indicator ON	On
DUZZED	Tire pressure warning alarm is not sounding	Off
BUZZER	Tire pressure warning alarm is sounding	On

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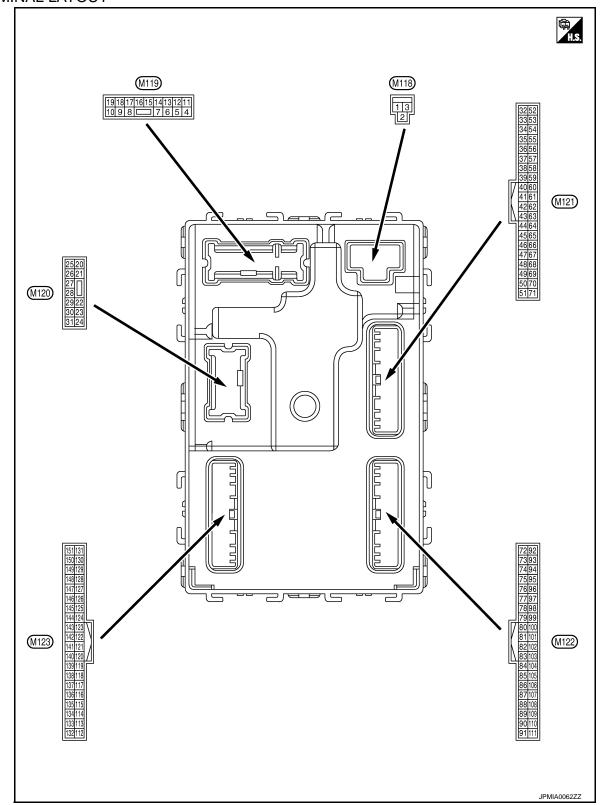
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TERMINAL LAYOUT



PHYSICAL VALUES

Term	inal No.	Description					Α				
(Wire	e color)	Signal name	Input/ Output		Condition	Value (Approx.)					
1 (W)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage	В				
2 (GR)	Ground	P/W power supply (BAT)	Output	Ignition switch OF	F	Battery voltage	С				
3 (L)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		Battery voltage					
4		Interior room lamp			battery saver is activated. oom lamp power supply)	0 V	D				
(P)	Ground	power supply	Output	ed.	battery saver is not activat- or room lamp power supply)	Battery voltage	Е				
5	Ground	Passenger door UN-	Output	Passenger door	UNLOCK (Actuator is activated)	Battery voltage	F				
(G)	Orouna	LOCK	Output	r assenger door	Other than UNLOCK (Actuator is not activated)	0 V	Г				
7	Ground	Step lamp	Output	Step lamp	ON	0 V	G				
(Y)	Cround	Ctop lamp	Output	Ctop lamp	OFF	Battery voltage					
8	Ground	All doors LOCK	Output	All doors	LOCK (Actuator is activated)	Battery voltage	Н				
(V)	Giodila	All doors Lock	Output	Output	Output	Output	Culput	All doors	Other than LOCK (Actuator is not activated)	0 V	
9	Ground	Driver door UNLOCK	(Outrut D	Output	Driver door	UNLOCK (Actuator is activated)	Battery voltage				
(G)	Giodila	Driver door onlock	Output	Output Driver door	Other than UNLOCK (Actuator is not activated)	0 V	J				
10	Ground	Rear RH door and rear LH door UN-	Output	Rear RH door	UNLOCK (Actuator is activated)	Battery voltage					
(P)	Cround	LOCK	Output	and rear LH door	Other than UNLOCK (Actuator is not activated)	0 V	K				
11 (LG)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage	L				
13 (B)	Ground	Ground	_	Ignition switch ON		0 V					
					OFF	0 V	BCS				
14 (O)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	ON	NOTE: When the illumination brightening/dimming level is in the neutral position (V) 10 2 ms JSNIA0010GB	N O				
15 (L)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK and ON indicator lamps are not illuminated.)	Battery voltage					
(L)				ACC	0 V						

	inal No. e color)	Description			Condition	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
					Turn signal switch OFF	0 V
17 (G)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
					Turn signal switch OFF	0 V
18 (BR)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 1 s PKID0926E 6.5 V
19	Ground	Room lamp timer	Output	Interior room	OFF	Battery voltage
(Y)	Ground	control	()I ITO I IT	lamp	ON	0 V
23		Back door open	Output		OPEN (Back door opener actuator is activated)	Battery voltage
(BR)	Ground			Back door	Other than OPEN (Back door opener actuator is not activated)	0 V
26	Ground	Door winer	Output	Boor winer	OFF (Stopped)	0 V
(G)	Ground	Rear wiper	Output	Rear wiper	ON (Operated)	Battery voltage
34	Ground	Luggage room antenna (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(B)					When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB

	inal No.	Description	ı			Value	A
+ (vvire	e color)	Signal name	Input/ Output		Condition	(Approx.)	A
					When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	В
	Luggage room anten- na (+)	Output	Ignition switch OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB	E F	
38	Ground	Rear bumper anten-	Output	When the back door request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB	G H
(L)	Glound	na (-)			When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	J K
39	Ground	Rear bumper anten-	Output	When the back door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB	BO
(BR)	(BR) Glound	na (+)	Carput	switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	P
47 (L)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage	

	inal No.	Description				Value
+ (VVire	e color)	Signal name	Input/ Output		Condition	(Approx.)
				Ignition switch	When selector lever is in P or N position	Battery voltage
52 (R)	Ground	Starter relay control	Output	ON	When selector lever is not in P or N position	0.3 V
				Ignition switch OF	F	0 V
60	Ground	Push-button ignition	Input	Push-button ignition switch (push	Pressed	0 V
(BR)	Orodria	switch (push switch)	mput	switch)	Not pressed	Battery voltage
					ON (Pressed)	0 V
61 (R)	Ground	Back door request switch	Input	Back door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V
64			2		Sounding	0 V
(GR)	Ground	Warning buzzer	Output	Warning buzzer	Not sounding	Battery voltage
65 (O)	Ground	Rear wiper stop position	Input	Rear wiper	In stop position	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V
					Not in stop position	0 V
66 (Y)	Ground	Back door switch	Input	Back door switch	OFF (When back door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB
					ON (When back door opens)	0 V
					Pressed	0 V
67 (LG)	Ground	Back door opener switch	Input	Back door opener switch	Not pressed	(V) 15 10 5 0 10 ms JPMIA0011GB

< ECU DIAGNOSIS INFORMATION >

	ninal No. e color)	Description	ı			Value	А
+	-	Signal name	Input/ Output		Condition	(Approx.)	/ \
68 (W)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB	B C D
					ON (When rear RH door opens)	0 V	Е
69 (R)	Ground	Rear LH door switch	Inniit	Input Rear LH door switch	OFF (When rear LH door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V	F
					ON (When rear LH door opens)	0 V	Н
72		Room antenna (-)		Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 S S S S S S S S S	J
(B) Ground	(Center console) Out	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB	K L	

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	ninal No. e color)	Description			Condition	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
73		Room antenna (+)		lanition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(W) Ground	(Center console)	Output	ŎFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB	
74	74 Cround Passenger door an-	Output	When the passenger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 11 1 s JMKIA0062GB	
(Y)	Ground	tenna (-)	Сара	quest switch is operated with ig- nition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 11 1 s JMKJA0063GB
75	Ground	Passenger door an-	songer door an	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB
(LG)	Giouria	tenna (+)	Output		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB

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	inal No.	Description				Value	А
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	^
76	Canada	Driver door antenna	Outout	When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	С
(V) Ground	(-)	Output	switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB	E	
							G
77		Driver door antenna		Output When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	Н
(P)	Ground	(+)	Output		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	J K L
80 (SB)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.	BCS
81 (O)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.	N
82	Ground	Ignition relay [fuse	Output Ignition switch	OFF or ACC	0 V	. 4	
(BR)		block (J/B)] control	1	J - 1-1	ON	Battery voltage	

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	ninal No. e color)	Description			Condition	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
		Remote keyless entry	Input/ Output	During waiting		(V) 15 10 5 0 1 ms JMKIA0064GB
83 (P)	Ground	receiver communication		When operating ei	ther button on Intelligent Key	(V) 15 10 5 0 1 ms JMKIA0065GB
		Combination switch INPUT 5	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB
87	Ground				Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3 V
(R)	Gloand				Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	(V) 15 10 5 0 2 ms JPMIA0040GB

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

	inal No.	Description				Value
+ (vvire	e color)	Signal name	Input/ Output		Condition	(Approx.)
					OFF	0 V
92 (R)	Ground	Key slot illumination	Output	Key slot illumina- tion	Blinking	(V) 15 10 5 0 1 s JPMIA0015GB
					ON	Battery voltage
93 (P)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK and ACC indicator lamps are not illuminated.)	Battery voltage
					ON	0 V
95	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
(L)	Ciodila	7.00 Telay control	Output	ignition switch	ACC or ON	Battery voltage
96 (Y)	Ground	CVT shift selector (detention switch) power supply	Output		_	Battery voltage
99	Ground	Selector lever P posi-	Input	Selector lever	P position	0 V
(V)	Ground	tion switch	iliput	Selector level	Any position other than P	Battery voltage
					ON (Pressed)	0 V
100 (P)	Ground	Passenger door request switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V
					ON (Pressed)	0 V
101 (W)	Ground	Driver door request switch	Input	Driver door request switch	OFF (Not pressed)	(V) 15 10 10 ms JPMIA0016GB
					OFF 27 ACC	1.0 V
102 (Y)	Ground	Blower fan motor re- lay control	Output	Ignition switch	OFF or ACC	0 V Battery voltage
103 (L)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OF	F	Battery voltage

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value	Λ
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)	А
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	B C
					Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3 V	E
107 (O)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	Turn signal switch RH	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V	G H
					Front wiper switch LO	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V	J K L
					Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB	BCS N
						1.3 V	0

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

	inal No.	Description				Value	Λ
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)	Α
					All switches OFF	(V) 15 10 0 2 ms JPMIA0041GB 1.4 V	В С
					Lighting switch PASS	(V) 15 10 5 0 2 ms JPMIA0037GB	E F
109 (SB)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	(V) 15 10 5 0 2 ms JPMIA0036GB	G H
					Front wiper switch INT/ AUTO	(V) 15 10 5 0 2 ms JPMIA0038GB	J K L
					Front wiper switch HI	(V) 15 10 5 0 2 ms JPMIA0040GB 1.3 V	B C S
					ON	0 V	0
110 (G)	Ground	Hazard switch	Input	Hazard switch	OFF	(V) 15 10 5 0 10 ms JPMIA0012GB 1.1 V	Ρ

	inal No.	Description				Value
(Wire	e color)	Signal name	Input/ Output		Condition	Value (Approx.)
112 (R)	Ground	Rain sensor serial link	Input/ Output	Ignition switch ON		(V) 15 10 5 0 10ms JPMIA0156GB 8.7 V
113 (O)	Ground	Optical sensor	Input	Ignition switch	When bright outside of the vehicle When dark outside of the	Close to 5 V
116 (GR)	Ground	Stop lamp switch 1	Input		vehicle —	Battery voltage
118	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
(L)	Ground	Stop lamp switch 2	Input	Stop lamp switch	ON (Brake pedal is depressed)	Battery voltage
119 (W)	Ground	Front door lock assembly driver side (Unlock sensor)	Input	Driver door	LOCK status (unlock sensor switch OFF)	(V) 15 10 5 0 10 ms JPMIA0012GB 1.1 V
					UNLOCK status (unlock sensor switch ON)	0 V
121	Ground	Key slot switch	Input		ey is inserted into key slot	Battery voltage
(Y)		-		When Intelligent K	ey is not inserted into key slot OFF or ACC	0 V 0 V
123 (G)	Ground	IGN feedback	Input	Ignition switch	ON ON	Battery voltage
124 (R)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB
					ON (When passenger door opens)	0 V

< ECU DIAGNOSIS INFORMATION >

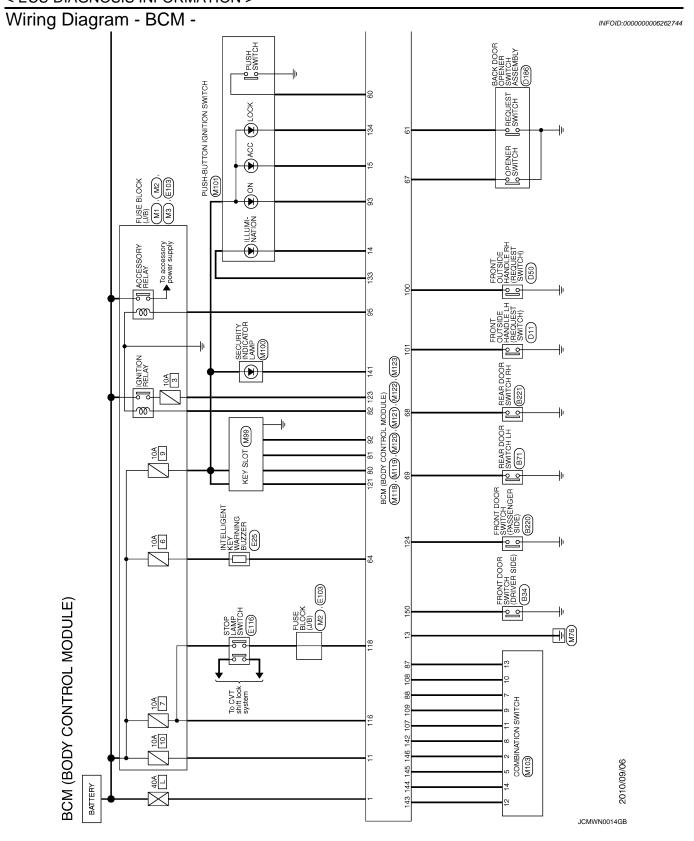
	inal No.	Description				Value	А
+	e color)	Signal name	Input/ Output	Condition		(Approx.)	A
130 (BR)	Ground	Rear window defog- ger switch	Input	Ignition switch ON	Rear window defogger switch OFF	(V) 15 10 5 0 10 ms JPMIA0012GB 1.1 V	B C D
					Rear window defogger switch ON	0 V	Е
132 (G)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		(V) 15 10 5 0 10 ms JPMIA0013GB	F
				Ignition switch OFF or ACC		Battery voltage	
					ON (When tail lamps OFF)	9.5 V	Н
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON (When tail lamps ON)	NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level. (V) 15 10 5 0 JPMIA0159GB	J K
					OFF	0 V	
134 (R)	Ground	LOCK indicator lamp Outpu	Output	Output LOCK indicator lamp	OFF (ACC and ON indicator lamps are not illuminated.)	Battery voltage	L
					ON	0 V	BCS
137 (P)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V	
138	Ground	Receiver and sensor	Output	Ignition switch	OFF	0 V	Ν
(V)	Cidana	power supply	Caipai	igindon switch	ACC or ON	5.0 V	

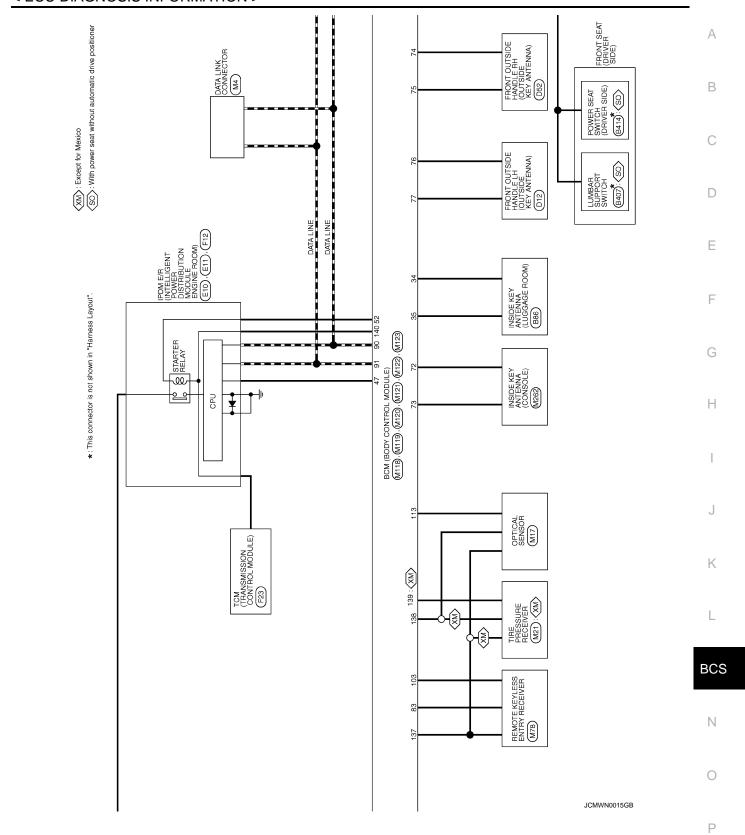
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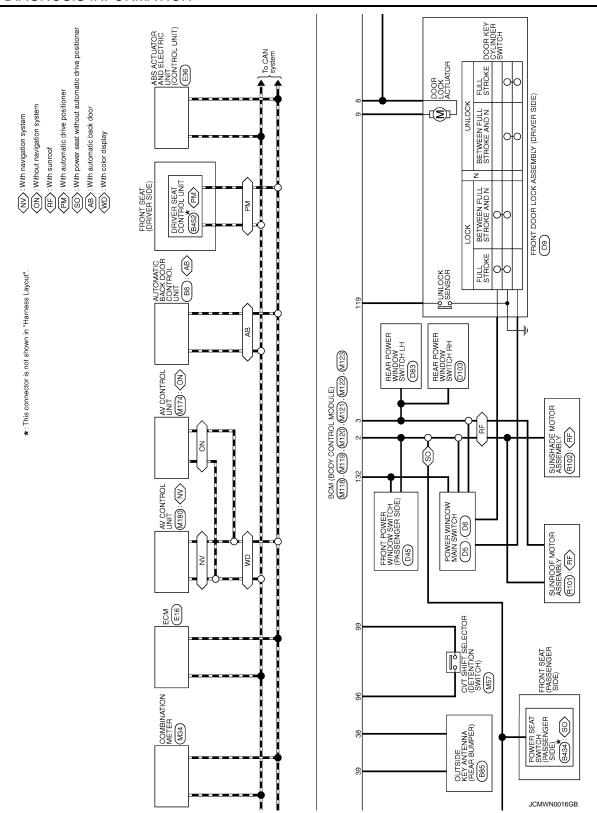
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	inal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
139	Ground	Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 4 2 0
(O)		er communication	Output	ON	When receiving the signal from the transmitter	(V) 6 4 2 0 + 0.2s OCC3880D
140	Craund	Selector lever P/N	lanut	Coloator layer	P or N position	Battery voltage
(GR)	Ground	position	Input	Selector lever	Except P and N positions	0 V
141 (O)	Ground	Security indicator	Output	Security indicator	ON Blinking	0 V (V) 15 10 5 0 JPMIA0014GB 11.3 V
142 (L)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit- tent dial 4)	OFF All switches OFF Lighting switch 1ST Lighting switch HI Lighting switch 2ND Turn signal switch RH	Battery voltage 0 V (V) 15 10 2 ms JPMIA0031GB 10.7 V
143 (W)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switches OFF (Wiper intermittent dial 4) Front wiper switch HI (Wiper intermittent dial 4) Rear wiper switch INT (Wiper intermittent dial 4) Any of the conditions below with all switches OFF Wiper intermittent dial 1 Wiper intermittent dial 2 Wiper intermittent dial 3 Wiper intermittent dial 6 Wiper intermittent dial 7	0 V (V) 15 10 2 ms JPMIA0032GB 10.7 V

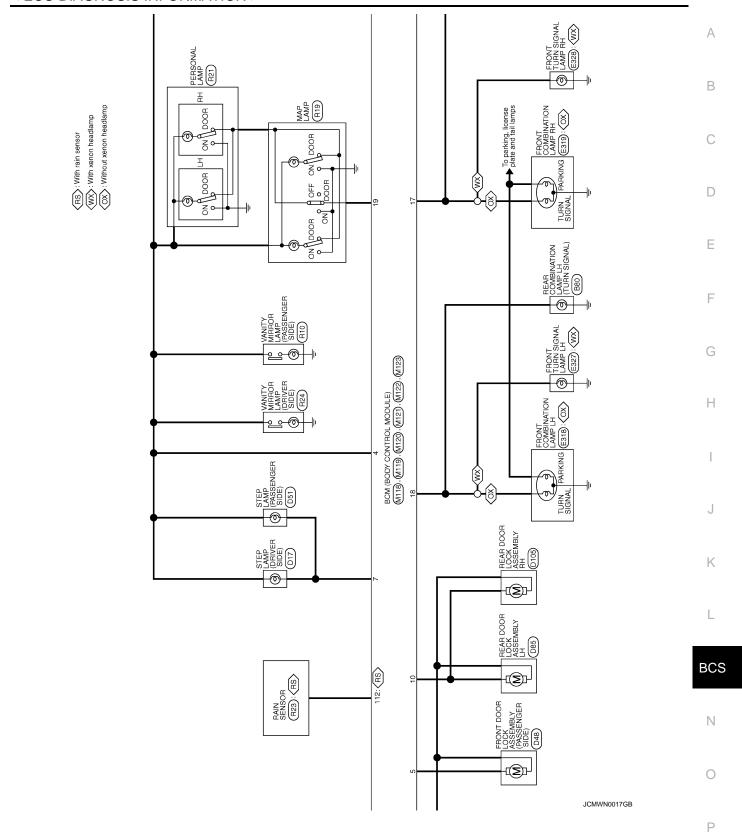
	inal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	
144		Combination switch		Combination	Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10
(P)	Ground	OUTPUT 2	Output	switch	Rear washer switch ON (Wiper intermittent dial 4)	0
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	2 ms JPMIA0033GB
					All switches OFF	0 V
					Front wiper switch INT/ AUTO	(V)[
145	Ground	Combination switch	Output	Combination switch	Front wiper switch LO	15
(V)	Ground	OUTPUT 3	Output	(Wiper intermit- tent dial 4)	Lighting switch AUTO	0 JPMIA0034GB 10.7 V
					All switches OFF	0 V
					Front fog lamp switch ON	00
146		Combination switch		Combination switch	Lighting switch 2ND Lighting switch PASS	(V) 15 10
(Y)	Ground	OUTPUT 4	Output	(Wiper intermit- tent dial 4)		5 0
					Turn signal switch LH	JPMIA0035GB
						10.7 V
150 (SB)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closes)	(V) 15 10 10 ms JPMIA0011GB
					ON (When driver door	11.8 V
					opens)	0 V
151 (G)	Ground	Rear window defog- ger relay control	Output	Rear window de- fogger	Active	0 V
(0)		gor relay control		10ggei	Not activated	Battery voltage



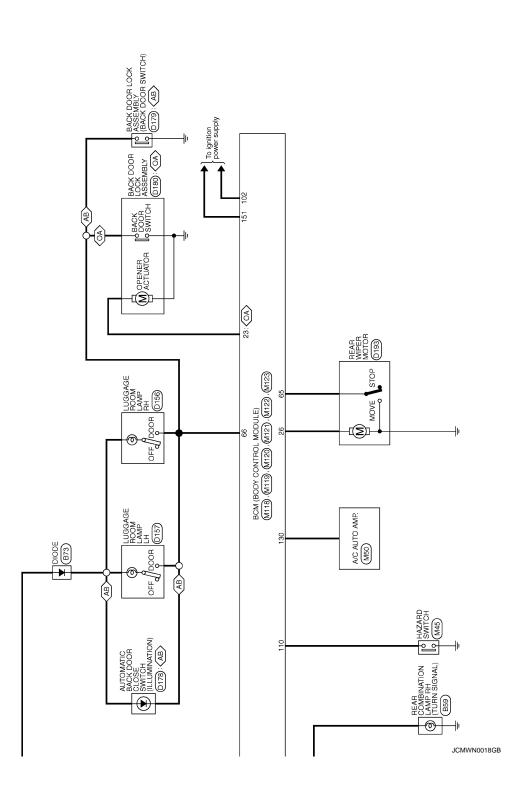




< ECU DIAGNOSIS INFORMATION >



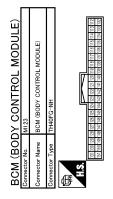




< ECU DIAGNOSIS INFORMATION >

NIT 8 SIGNAL EST SW EST SW AY CONT WER SUPPLY 1 T SW WER SUPPLY 1 T SW AY CONT WER SUPPLY	А
IGN RELAY (F/B) CONT OMBIS SWINPUT 5 COMBIS SWINPUT 5 ON IND ACC RELAY CONT SHIFT P PASSENGER DOOR REQUEST SW BLOWER FAN MOTOR RELAY CONT COMBIS SWINPUT 4 COMBIS SWINPUT 2 COMBIS SWINPUT 2 COMBIS SWINPUT 2 COMBIS SWINPUT 3 HAZARD SW	В
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Signal Name [Specification]	RAIN SENSOR SERIAL LINK	OPTICAL SENSOR	FUSE CHECK	STOP LAMP SW	DR DOOR UNLOCK SENSOR	KEY SLOT SW	IGN F/B	PASSENGER DOOR SW	REAR DEFOGGER SW	POWER WINDOW SW COMM	PUSH-BUTTON IGNITION SWILL POWER	LOCK IND	RECEIVER / SENSOR GND	RECEIVER / SENSOR POWER SUPPLY	TIRE PRESS RECEIVER SIGNAL	SHIFT N/P	SECURITY INDICATOR OUTPUT	COMBI SW OUTPUT 5	COMBI SW OUTPUT 1	COMBI SW OUTPUT 2	COMBI SW OUTPUT 3	COMBI SW OUTPUT 4	DRIVER DOOR SW	REAR WINDOW DEFOGGER RELAY
Color of Wire	ď	0	GR	٦	W	Υ	9	ď	BR	9	W	ď	Ь	^	0	GR	0	٦	М	Ь	۸	Υ	SB	5
Terminal No.	112	113	116	118	119	121	123	124	130	132	133	134	137	138	139	140	141	142	143	144	145	146	150	151

JCMWN0020GB

INFOID:0000000006262745

FAIL-SAFE CONTROL BY DTC

Fail-safe

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

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch $ON \rightarrow OFF$
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent Starter control relay signal Starter relay status signal
B2607: S/L RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status becomes consistent Steering lock relay signal (Request signal) Steering lock relay signal (Condition signal)
B2608: STARTER RELAY	Inhibit engine cranking	 500 ms after the following signal communication status becomes consistent Starter motor relay control signal Starter relay status signal (CAN)
B260A: IGNITION RELAY	Inhibit engine cranking	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (Battery voltage) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization

HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status by the current value.

BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:

The blinking speed is normal while activating the hazard warning lamp.

FAIL-SAFE CONTROL BY RAIN SENSOR MALFUNCTION

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

NOTE:

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

REAR WIPER MOTOR PROTECTION

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

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

Condition of cancellation

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

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< ECU DIAGNOSIS INFORMATION >

DTC Inspection Priority Chart

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

Priority	DTC
1	B2562: LOW VOLTAGE
2	U1000: CAN COMM U1010: CONTROL UNIT(CAN)
3	B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI SCANNING
4	 B2553: IGNITION RELAY B2555: STOP LAMP B2556: PUSH-BTN IGN SW B2557: VEHICLE SPEED B2560: STARTER CONT RELAY B2601: SHIFT POSITION B2602: SHIFT POSITION B2603: SHIFT POSI STATUS B2604: PNP SW B2605: PNP SW B2605: PNP SW B2606: IGNITION RELAY B2607: ENG STATE RICAY B2607: ENG STATE SIG LOST B2614: ACC RELAY CIRC B2615: BLOWER RELAY CIRC B2615: BLOWER RELAY CIRC B2616: IGN RELAY CIRC B2617: STARTER RELAY CIRC B2618: BCM B2614: PUSH-BTN IGN SW B2614: VEHICLE TYPE B26EA: KEY REGISTRATION C1729: VHCL SPEED SIG ERR U0415: VEHICLE SPEED SIG
5	 C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR C1706: LOW PRESSURE RR C1707: LOW PRESSURE RL C1708: [NO DATA] FL C1709: [NO DATA] FR C1710: [NO DATA] RR C1711: [NO DATA] RL C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR C1718: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RR C1734: CONTROL UNIT
6	B2622: INSIDE ANTENNA B2623: INSIDE ANTENNA

DTC Index

NOTE:

The details of time display are as follows.

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

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

< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	_	_	_	_	_
U1000: CAN COMM		_	_		BCS-38
U1010: CONTROL UNIT(CAN)		_	_		BCS-39
U0415: VEHICLE SPEED SIG		_		_	BCS-40
B2190: NATS ANTENNA AMP	×	_	_	_	SEC-42
B2191: DIFFERENCE OF KEY	×	_	_	_	SEC-45
B2192: ID DISCORD BCM-ECM	×	_	_	_	SEC-46
B2193: CHAIN OF BCM-ECM	×	_	_	_	SEC-48
B2195: ANTI SCANNING	×	_	_	_	SEC-49
B2553: IGNITION RELAY	_	×	_	_	PCS-48
B2555: STOP LAMP		×	_	_	SEC-50
B2556: PUSH-BTN IGN SW	_	×	×	_	<u>SEC-52</u>
B2557: VEHICLE SPEED	×	×	×	_	<u>SEC-54</u>
B2560: STARTER CONT RELAY	×	×	×	_	<u>SEC-55</u>
B2562: LOW VOLTAGE	_	×	_	_	BCS-41
B2601: SHIFT POSITION	×	×	×	_	<u>SEC-56</u>
B2602: SHIFT POSITION	×	×	×	_	SEC-59
B2603: SHIFT POSI STATUS	×	×	×	_	SEC-61
B2604: PNP SW	×	×	×	_	SEC-64
B2605: PNP SW	×	×	×	_	SEC-66
B2608: STARTER RELAY	×	×	×	_	SEC-68
B260A: IGNITION RELAY	×	×	×	_	PCS-50
B260F: ENG STATE SIG LOST	×	×	×	_	SEC-70
B2614: ACC RELAY CIRC	_	×	×	_	PCS-52
B2615: BLOWER RELAY CIRC		×	×		PCS-55
B2616: IGN RELAY CIRC	_	×	×		PCS-58
B2617: STARTER RELAY CIRC	×	×	×		<u>SEC-72</u>
B2618: BCM	×	×	×	_	PCS-61
B261A: PUSH-BTN IGN SW	_	×	×	_	<u>SEC-75</u>
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	<u>SEC-78</u>
B2622: INSIDE ANTENNA	<u> </u>	×	_	_	DLK-91
B2623: INSIDE ANTENNA	_	×	_	_	DLK-93
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	_	<u>SEC-71</u>
C1704: LOW PRESSURE FL	-	_	_	×	
C1705: LOW PRESSURE FR	_	_	_	×	WT-23
C1706: LOW PRESSURE RR		_	_	×	<u>vv 1-23</u>
C1707: LOW PRESSURE RL	_	_	_	×	

< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
C1708: [NO DATA] FL	_	_	_	×	
C1709: [NO DATA] FR	_	_	_	×	WT-25
C1710: [NO DATA] RR	_	_	_	×	<u> </u>
C1711: [NO DATA] RL	_	_	_	×	
C1716: [PRESSDATA ERR] FL	_	_	_	×	
C1717: [PRESSDATA ERR] FR	_	_	_	×	WT-28
C1718: [PRESSDATA ERR] RR	_	_	_	×	<u>vv 1-20</u>
C1719: [PRESSDATA ERR] RL	_	_	_	×	
C1729: VHCL SPEED SIG ERR	_	_	_	×	<u>WT-29</u>
C1734: CONTROL UNIT	_	_	_	×	<u>WT-30</u>

COMBINATION SWITCH SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

COMBINATION SWITCH SYSTEM SYMPTOMS

Symptom Table INFOID:0000000006262748

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

								Doto	monito	w i4 a ma					iviai	lunction	item: ×
		I		1	ı	1	1	Data	monito	ritem	ı			ı	ı	ı	
Malfunction combination	FR WIPER HI	FR WIPER LOW	FR WASHER SW	FR WIPER INT	RR WIPER ON	RR WIPER INT	RR WASHER SW	INT VOLUME	TURN SIGNAL R	TURN SIGNAL L	TAIL LAMP SW	HI BEAM SW	HEAD LAMP SW 1	HEAD LAMP SW 2	PASSING SW	AUTO LIGHT SW	FR FOG SW
Α		×	×						×	×							
В	×			×									×		×		
С							×	×				×		×			
D						×		×			×					×	
Е					×			×									×
F	×					×		×									
G			×		×		×	×									
Н		×		×												×	
I										×				×	×		×
J									×		×	×	×				
K			•	•		•	•		All Item	S		•	•				
L			lf	only or	ne item	is dete	cted or	the iter	m is not	applica	able to	the con	nbinatio	ons A to	κ		

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

Malfunction combination	Malfunctioning part	Repair or replace						
Α	Combination switch INPUT 1 circuit							
В	Combination switch INPUT 2 circuit							
С	Combination switch INPUT 3 circuit	Inspect the combination switch input circuit applicable to the malfunctioning part. Refer to BCS-43, "Diagnosis Procedure".						
D	Combination switch INPUT 4 circuit	part. Note: to <u>bee 40, blaghood i roccadio</u> .						
Е	Combination switch INPUT 5 circuit							
F	Combination switch OUTPUT 1 circuit							
G	Combination switch OUTPUT 2 circuit							
Н	Combination switch OUTPUT 3 circuit	Inspect the combination switch output circuit applicable to the malfunctioning part. Refer to BCS-45, "Diagnosis Procedure".						
I	Combination switch OUTPUT 4 circuit	ing part. Note: to <u>Dec 10, Diagnosio i recodure</u> .						
J	Combination switch OUTPUT 5 circuit							
K	ВСМ	Replace BCM. Refer to BCS-85, "Exploded View".						
L	Combination switch	Replace the combination switch.						

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NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

NORMAL OPERATING CONDITION

Description INFOID:000000007949789

TRANSIT MODE

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

NOTE:

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

PRECAUTION

PRECAUTIONS FOR USA AND CANADA

FOR USA AND CANADA: Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER" INFOID:0000000006262749

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

FOR MEXICO

FOR MEXICO: Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER" INFOID:0000000006262750

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

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:

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PRECAUTIONS

< PRECAUTION >

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.

< REMOVAL AND INSTALLATION >

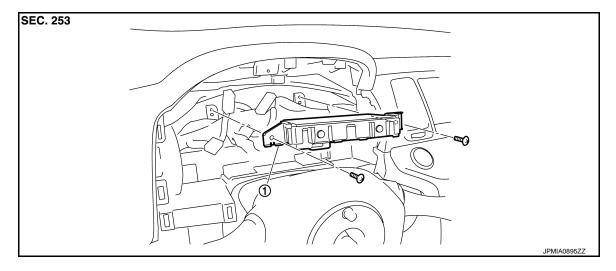
REMOVAL AND INSTALLATION

BCM (BODY CONTROL MODULE)

Exploded View INFOID:00000000006262751

CAUTION:

Before replacing BCM, perform "READ CONFIGURATION" to save or print current vehicle specification. Refer to BCS-3, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM): Description".



1. BCM

Removal and Installation

CAUTION:

Before replacing BCM, perform "READ CONFIGURATION" to save or print current vehicle specification. Refer to BCS-3, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM): Description".

REMOVAL

- 1. Remove combination meter. Refer to MWI-105, "Exploded View".
- 2. Remove screws.
- Remove BCM and disconnect the connector.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Be sure to perform "WRITE CONFIGURATION" when replacing BCM.
- Be sure to perform the system initialization (NATS) when replacing BCM. Refer to BCS-3, "ADDI-TIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM): Special Repair Requirement".

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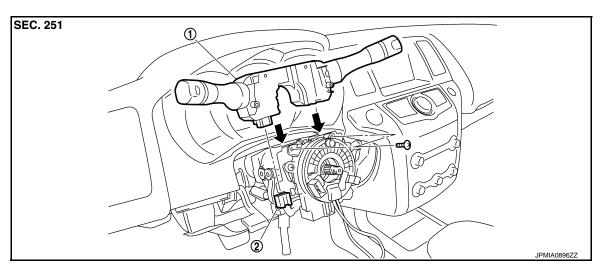
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BCS

COMBINATION SWITCH

Exploded View



- 1. Combination switch
- 2. Combination switch connector

Removal and Installation

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REMOVAL

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

INSTALLATION

Install in the reverse order of removal.