SECTION SEC SECURITY CONTROL SYSTEM

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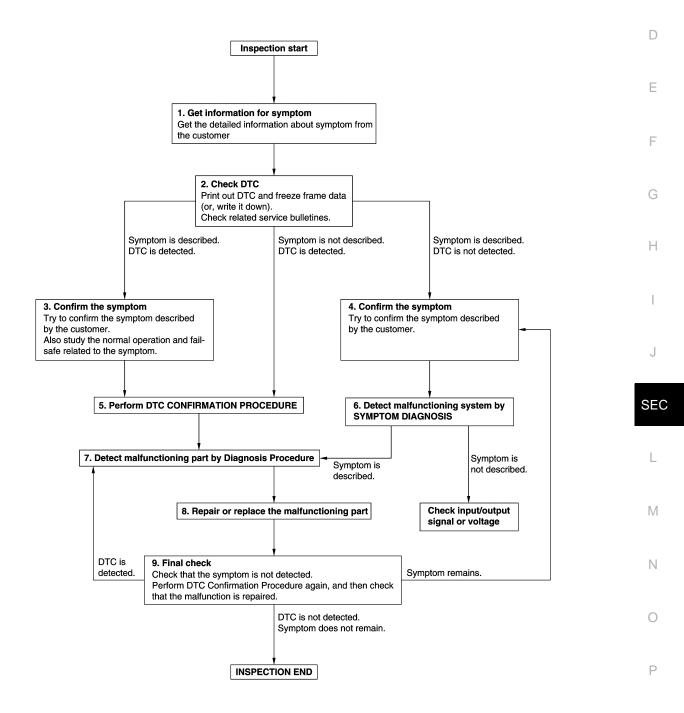
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BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

OVERALL SEQUENCE



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DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

1.GET INFORMATION ABOUT SYMPTOM

- 1. Get detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurs).
- 2. Check operation condition of the function that is malfunctioning.

>> GO TO 2.

2. CHECK DTC

- 1. Check DTC.
- 2. Perform the following procedure if DTC is detected.
- Record DTC and freeze frame data (Print them out using CONSULT.)
- Erase DTC
- Study the relationship between the cause detected by DTC and the symptom described by the customer.
- 3. Check related service bulletins for information.

Are any symptoms described and any DTC detected?

Symptom is described, DTC is detected>>GO TO 3.

Symptom is described, DTC is not detected>>GO TO 4.

Symptom is not described, DTC is detected>>GO TO 5.

3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

Also study the normal operation and fail-safe related to the symptom.

Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5.

4. CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 6.

5. PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC CONFIRMATION PROCEDURE for the detected DTC, and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle, and check diagnostic results in real time. If two or more DTCs are detected, refer to BCS-90, "DTC Inspection Priority Chart" (BCM), and determine trouble diagnosis order.

NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC CONFIRMATION PROCEDURE is not included on Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check.

If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC CONFIR-MATION PROCEDURE.

Is DTC detected?

YES >> GO TO 7.

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

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

Detect malfunctioning system according to SYMPTOM DIAGNOSIS based on the confirmed symptom in step 4, and determine the trouble diagnosis order based on possible causes and symptom.

YES >> GO TO 7.

NO >> Monitor input data from related sensors or check voltage of related module terminals using CON-SULT.

7. DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.

NO >> Check according to GI-44. "Intermittent Incident".

8.repair or replace the malfunctioning part

- 1. Repair or replace the malfunctioning part.
- Reconnect parts or connectors disconnected during Diagnosis Procedure again after repair and replacement.
- 3. Check DTC. If DTC is detected, erase it.

>> GO TO 9.

9. FINAL CHECK

When DTC is detected in step 2, perform DTC CONFIRMATION PROCEDURE, and then check that the malfunction is repaired securely.

When symptom is described from the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Is DTC detected and does symptom remain?

YES-1 >> DTC is detected: GO TO 7.

YES-2 >> Symptom remains: GO TO 4.

NO >> Before returning the vehicle to the customer, always erase DTC.

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INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

INSPECTION AND ADJUSTMENT ECM RECOMMUNICATING FUNCTION

ECM RECOMMUNICATING FUNCTION: Description

INFOID:0000000009722694

Performing following procedure can automatically perform re-communication of ECM and BCM, but only when the ECM has been replaced with a new one*.

*: New one means a virgin ECM which has never been energized on-board.

(In this step, initialization procedure using CONSULT is not necessary)

NOTE:

- When the replaced ECM is not a brand new, the specific procedure (initializing of BCM and registration of all Intelligent Keys) using CONSULT is necessary.
- If multiple keys are attached to the key holder, separate them before work.
- Distinguish keys with unregistered key ID from those with registered ID.

ECM RECOMMUNICATING FUNCTION: Special Repair Requirement

INFOID:0000000009722695

1.PERFORM ECM RECOMMUNICATING FUNCTION

- Install ECM.
- 2. Insert the registered Intelligent Key*, and turn ignition switch ON.
 - *: To perform this step, use the key that has been used before performing ECM replacement.
- 3. Maintain ignition switch in the ON position for at least 5 seconds.
- 4. Turn ignition switch OFF.
- 5. Check that the engine starts.

>> GO TO 2.

2.PERFORM ADDITIONAL SERVICE WHEN REPLACING ECM

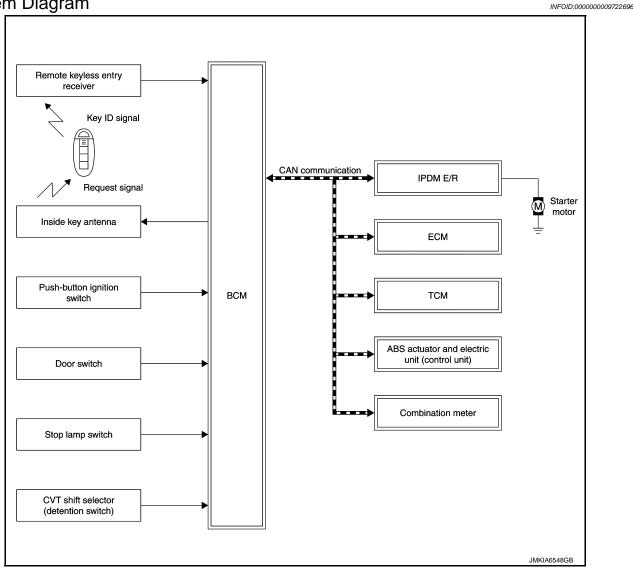
Perform <u>EC-16</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

>> END

SYSTEM DESCRIPTION

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

System Diagram



System Description

SYSTEM DESCRIPTION

The engine start function of Intelligent Key system is a system that makes it possible to start and stop the
engine without removing the key. It verifies the electronic ID using two-way communications when pressing
the push-button ignition switch while carrying the Intelligent Key, which operates based on the results of
electronic ID verification for Intelligent Key using two-way communications between the Intelligent Key and
the vehicle.

NOTE:

The driver should carry the Intelligent Key at all times.

- Intelligent Key has 2 IDs [for Intelligent Key and for NVIS (NATS)]. It can perform the door lock/unlock operation and the push-button ignition switch operation when the registered Intelligent Key is carried.
- When the Intelligent Key battery is discharged, it can be used as emergency back-up by inserting the Intelligent Key to the key slot. At that time, the NVIS (NATS) ID verification is performed. If it is used when the Intelligent Key is carried, the Intelligent Key ID verification is performed.
- If the door lock/unlock operation is performed when the Intelligent Key battery is discharged, all doors lock/ unlock can be performed by operating the driver door key cylinder using the mechanical key set in the Intelligent Key.

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INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

• Intelligent Key can be registered up to 4 keys (Including the standard Intelligent Key) on request from the owner.

NOTE:

 Refer to <u>DLK-18</u>, "INTELLIGENT KEY SYSTEM: System Description" for any functions other than engine start function of Intelligent Key system.

PRECAUTIONS FOR INTELLIGENT KEY SYSTEM

In the Intelligent Key system, the transponder [the chip for NVIS (NATS) ID verification] is integrated
into the Intelligent Key. (For the conventional models, it is integrated into the mechanical key.) Therefore, the mechanical key cannot perform the ID verification, and thus it cannot start the engine.
Instead, the NVIS (NATS) ID verification can be performed by inserting the Intelligent Key into the key
slot, and then it can start the engine.

OPERATION WHEN INTELLIGENT KEY IS CARRIED

- 1. When the push-button ignition switch is pressed, the BCM activates the inside key antenna and transmits the request signal to the Intelligent Key.
- The Intelligent Key receives the request signal and transmits the Intelligent Key ID signal to the BCM.
- 3. The BCM receives the Intelligent Key ID signal via remote keyless entry receiver, and verifies it with the registered ID.
- 4. BCM turns ACC relay ON and transmits the ignition power supply ON signal to IPDM E/R.
- 5. IPDM E/R turns the ignition relay ON and starts the ignition power supply.
- 6. BCM confirms that the shift position is P or N.
- 7. BCM transmits the starter request signal via CAN communication to IPDM E/R and turns the starter relay in IPDM E/R ON if BCM judges that the engine start condition is satisfied.
- 8. IPDM E/R turns the starter control relay ON when receiving the starter request signal.
- Battery power is supplied through the starter relay and the starter control relay to operate the starter motor and to start the cranking.

CAUTION:

If a malfunction is detected in the Intelligent Key system, the "KEY" warning lamp in the combination meter illuminates. At that time, the engine cannot be started.

10. When BCM received feedback signal from ECM acknowledging the engine has been initiated, the BCM transmits a stop signal to IPDM E/R and stops the cranking by turning OFF the starter motor relay. (If the engine initiating has failed, the cranking will stop automatically within 5 seconds.)

CAUTION:
When the Intelligent Key is carried outside of the vehicle (inside key antenna detection area) with the power supply in ACC or ON position, even if the engine start condition* is satisfied, the engine cannot be started.

*: For the engine start condition, refer to "POWER SUPPLY POSITION CHANGE TABLE BY PUSH-BUTTON IGNITION SWITCH OPERATION".

OPERATION RANGE

Engine can be started when Intelligent Key is inside the vehicle. However, sometimes engine might not start when Intelligent Key is on instrument panel or in glove box.

OPERATION WHEN KEY SLOT IS USED

When the Intelligent Key battery is discharged, it performs the NVIS (NATS) ID verification between the integrated transponder and BCM by inserting the Intelligent Key into the key slot, and then the engine can be started.

For details relating to starting the engine using key slot, refer to <u>SEC-14, "System Description"</u>.

BATTERY SAVER SYSTEM

When all the following conditions are met for 60 minutes, the battery saver system will cut off the power supply to prevent battery discharge.

- The ignition switch is in the ACC position
- All doors are closed
- Selector lever is in the P position

Reset Condition of Battery Saver System

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION SCRIPTION > [WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

In order to prevent the battery from discharging, the battery saver system will cut off the power supply when all doors are closed, the selector lever is in P position and the ignition switch is left on ACC position for 60 minutes. If any of the following conditions are met the battery saver system is released.

- Opening any door
- Operating with request switch on door lock
- Operating with Intelligent Key on door lock

Press push-button ignition switch and ignition switch will change to ACC position from OFF position.

POWER SUPPLY POSITION CHANGE TABLE BY PUSH-BUTTON IGNITION SWITCH OPERA-TION

The power supply position changing operation can be performed with the following operations.

NOTE:

- When an Intelligent Key is within the detection area of inside key antenna and when it is inserted to the key slot, it is equivalent to the operations below.
- When starting the engine, BCM checks the following conditions and then changes the power supply position.
- Brake pedal operating condition
- Selector lever position
- Vehicle speed
- This models do not have the steering lock system. However, power supply position changes to the LOCK position without steering lock operation when the following conditions are fulfilled.
- Ignition switch: OFF
- Shift lever position: P
- Any of the following condition is met
- Opening door
- Closing door
- Door is locked by request switch operation
- Door is locked by Intelligent Key operation

Vehicle speed: less than 4 km/h (2.5 MPH)

	Engine start/stop condition		Push-button ignition switch	
Power supply position	Selector lever	Brake pedal operation condition	operation frequency	
$LOCK \to ACC$	_	Not depressed	1	
$LOCK \to ACC \to ON$	_	Not depressed	2	
$LOCK \to ACC \to ON \to OFF$	_	Not depressed	3	
$\begin{array}{c} LOCK \to START \\ ACC \to START \\ ON \to START \end{array}$	P or N position	Depressed	1	
Engine is running \rightarrow OFF	_	_	1	

Vehicle speed: 4 km/h (2.5 MPH) or more

	Engine start/s	Push-button ignition switch		
Power supply position	Selector lever Brake pedal operation condition		operation frequency	
Engine is running \rightarrow ACC	_	_	Emergency stop operation	
Engine stall return operation while driving	N position	Not depressed	1	

Emergency stop operation

- Press and hold the push-button ignition switch for 2 seconds or more.
- Press the push-button ignition switch 3 times or more within 1.5 seconds.

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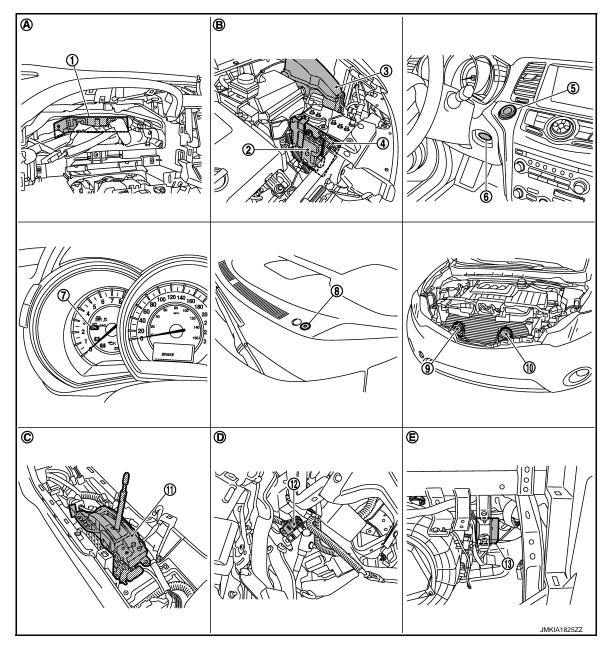
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Component Parts Location

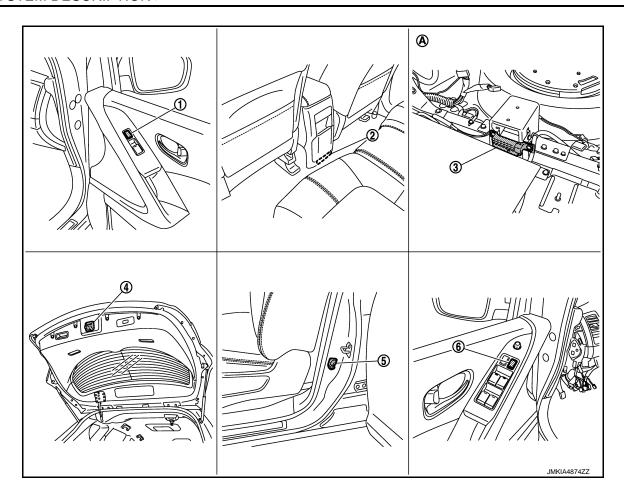
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- 1. BCM
- 4. ECM
- 7. Combination meter (key warning lamp)
- 10. Horn (low)
- 13. Remote keyless entry receiver
- A. Behind the combination meter
- D. Behind the instrument lower panel LH

- 2. TCM
- 5. Push-button ignition switch
- 8. Security indicator lamp
- 11. CVT shift selector (detention switch)
- B. Engine room (LH)
- E. Behind the instrument lower panel RH

- 3. IPDM E/R
- 6. Key slot
- 9. Horn (high)
- 12. Stop lamp switch
- View with the center console assembly removed



Front power window switch (passen- 2. ger side)

Under the rear seat seatback

Back door lock assembly (back door 5. Front door switch (driver side)

Inside key antenna (console)

- 3. Inside key antenna (luggage room)
- power window main switch (door lock and unlock switch)

Component Description

switch)

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Component	Reference
BCM	<u>SEC-74</u>
Push-button ignition switch	<u>SEC-75</u>
Door switch	<u>DLK-97</u>
CVT shift selector (detention switch)	<u>SEC-56</u>
Inside key antenna	DLK-91
Remote keyless entry receiver	<u>DLK-112</u>
Stop lamp switch	<u>SEC-50</u>
Transmission range switch	<u>SEC-64</u>
Starter relay	<u>SEC-68</u>
Starter control relay	<u>SEC-79</u>
Security indicator lamp	SEC-91
Key warning lamp	<u>SEC-93</u>

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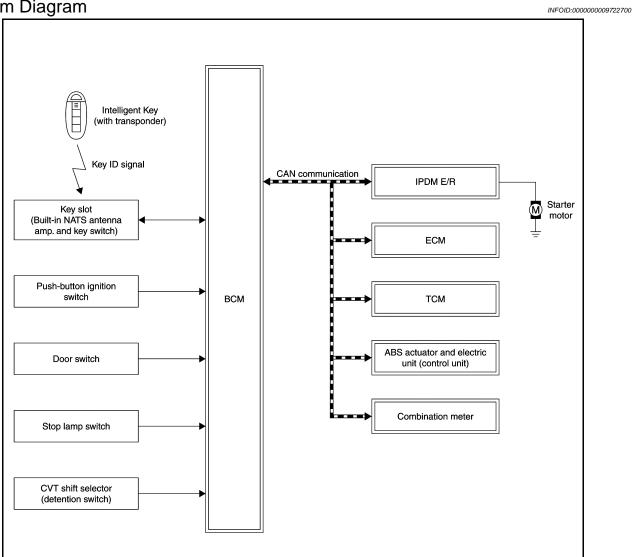
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NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

System Diagram



System Description

INFOID:0000000009722701

SYSTEM DESCRIPTION

- The NVIS (NATS) is an anti-theft system by registering an Intelligent Key ID into the vehicle and prevents the engine being started by an unregistered Intelligent Key. It has a higher protection against auto thefts that duplicate mechanical key.
- It performs the ID verification when starting the engine in the same way as the Intelligent Key system. But, it performs the NVIS (NATS) ID verification when inserting the Intelligent Key and performs the Intelligent Key ID verification when carrying the Intelligent Key.
- The mechanical key integrated in the Intelligent Key cannot start the engine. When the Intelligent Key battery is discharged, the NVIS (NATS) ID verification memorized to the transponder integrated with Intelligent Key is performed by inserting the Intelligent Key into the key slot. If the verification results are OK, the engine start operation can be performed by the push-button ignition switch operation.
- Security indicator lamp always blinks when the power supply position is in any position except ON, to warn that the NVIS (NATS) is on board the model.
- Intelligent Key can be registered up to 4 keys (Including the standard ignition key) on request from the owner.
- When replacing ECM, BCM or Intelligent Key, the specified procedure (Initializing and registration) using CONSULT is required.

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

- When NVIS (NATS) has a malfunction, Engine may not start. However, the engine can not be started because of other than NATS malfunction. So, start the trouble diagnosis according to SEC-5, "Work Flow".
- If ECM other than Genuine NISSAN is installed, the engine cannot be started. For ECM replacement procedure, refer to <u>SEC-8</u>, "ECM RECOMMUNICATING FUNCTION: Special Repair Requirement".

PRECAUTIONS FOR KEY REGISTRATION

- The key registration is a procedure that erases the current NATS ID once, and then re-registers a new ID.
 Therefore the registered Intelligent Key is necessary for this procedure. Before starting the registration operation collect all registered Intelligent Keys from the customer
- When registering the Intelligent Key, performs only one procedure to register simultaneously both ID (NVIS
 "NATS" ID registration and Intelligent Key ID registration).
- The NVIS (NATS) ID registration is the procedure that registers the ID stored into the transponder (integrated in Intelligent Key) to BCM.
- The Intelligent key ID registration is the procedure that registers the ID to BCM.
- When performing the Intelligent Key system registration only, the engine cannot be started by inserting the key into the key slot. When performing the NVIS (NATS) registration only, the engine cannot be started by the operation when carrying the key. The registrations of both systems should be performed.

SECURITY INDICATOR LAMP

- Warns that the vehicle is equipped with NVIS (NATS).
- The security indicator lamp always blinks when the ignition switch is in any position except ON.

NOTE:

Because security indicator lamp is highly efficient, the battery is barely affected.

POWER SUPPLY POSITION CHANGE TABLE BY PUSH-BUTTON IGNITION SWITCH OPERA-TION

The power supply position changing operation can be performed with the following operations.

NOTE:

- When an Intelligent Key is within the detection area of inside key antenna and when it is inserted to the key slot, it is equivalent to the operations below.
- When starting the engine, the BCM monitors under the engine start conditions,
- Brake pedal operating condition
- Selector lever position
- Vehicle speed
- This models do not have the steering lock system. However, power supply position changes to the LOCK position without steering lock operation when the following conditions are fulfilled.
- Ignition switch: OFF
- Shift lever position: P
- Any of the following condition is met
- Opening door
- Closing door
- Door is locked by request switch operation
- Door is locked by Intelligent Key operation

Vehicle speed: less than 4 km/h (2.5 MPH)

Power supply position		Engine start/stop condition		Push-button ignition	
With steering lock unit	Without steering lock unit	Selector lever	Brake pedal operation condition	switch operation frequency	
$LOCK \to ACC$	$OFF \to ACC$	_	Not depressed	1	
$LOCK \to ACC \to ON$	$OFF \to ACC \to ON$	_	Not depressed	2	
$LOCK \to ACC \to ON \to OFF$	$OFF \to ACC \to ON \to OFF$	_	Not depressed	3	
LOCK → START ACC → START ON → START	$\begin{array}{c} OFF \to START \\ ACC \to START \\ ON \to START \end{array}$	P or N position	Depressed	1	
Engine is running → OFF	Engine is running → OFF	_	_	1	

Vehicle speed: 4 km/h (2.5 MPH) or more

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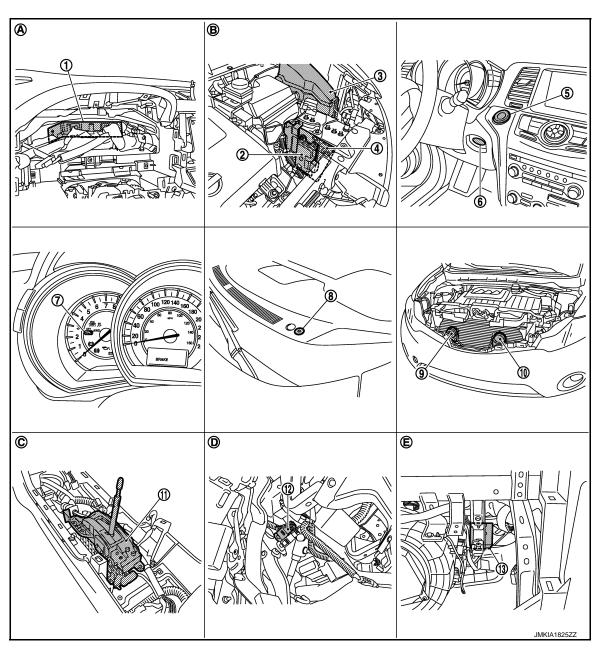
	Engine start/	Push-button ignition switch	
Power supply position Selector lever		Brake pedal operation condition	operation frequency
Engine is running → ACC	_	_	Emergency stop operation
Engine stall return operation while driving	N position	Not depressed	1

Emergency stop operation

- Press and hold the push-button ignition switch for 2 seconds or more.
- Press the push-button ignition switch 3 times or more within 1.5 seconds.

Component Parts Location

INFOID:0000000009722702



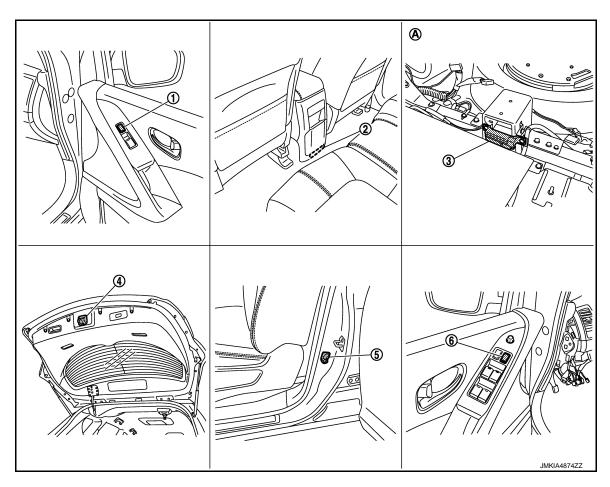
- 1. BCM
- 4. ECN
- 7. Combination meter (key warning lamp)
- 10. Horn (low)
- 13. Remote keyless entry receiver
- 2. TCM
- 5. Push-button ignition switch
- 8. Security indicator lamp
- 11. CVT shift selector (detention switch)
- 3. IPDM E/R
- 6. Key slot
- 9. Horn (high)
- 12. Stop lamp switch

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS PTION > [WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

- Behind the combination meter B. Engine room (LH)
- C. View with the center console assembly removed

- D. Behind the instrument lower panel LH
- E. Behind the instrument lower panel RH



- Front power window switch (passen- 2. ger side)
- Inside key antenna (console)
- 3. Inside key antenna (luggage room)

- Back door lock assembly (back door 5. switch)
- Front door switch (driver side)
- power window main switch (door lock and unlock switch)

A. Under the rear seat seatback

Component Description

INFOID:0000000009722703				

Component	Reference	
BCM	<u>SEC-74</u>	
Push-button ignition switch	<u>SEC-75</u>	
Door switch	<u>DLK-97</u>	
key slot	DLK-129	
CVT shift selector (detention switch)	<u>SEC-56</u>	
Inside key antenna	<u>DLK-91</u>	
Remote keyless entry receiver	<u>DLK-112</u>	
Stop lamp switch	<u>SEC-50</u>	
Transmission range switch	SEC-64	
Starter relay	SEC-68	
Starter control relay	<u>SEC-55</u>	

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NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Component	Reference	
Security indicator lamp	<u>SEC-91</u>	
Key warning lamp	<u>SEC-93</u>	

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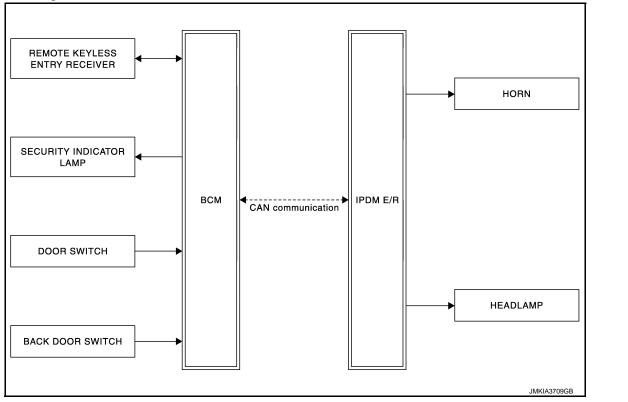
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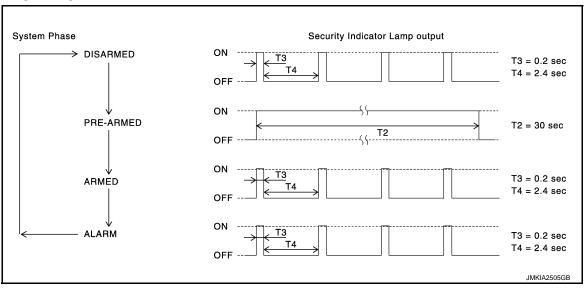
VEHICLE SECURITY SYSTEM

System Diagram



System Description

OPERATION FLOW



SETTING THE VEHICLE SECURITY SYSTEM

Initial Condition

• Ignition switch is in OFF position.

Disarmed Phase

 When any door or back door is open, the vehicle security system is set in the disarmed phase on the assumption that the owner is inside or near the vehicle.

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VEHICLE SECURITY SYSTEM

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

When the vehicle security system is in the disarmed phase, the security indicator lamp blinks every 2.4 seconds.

Pre-armed Phase and Armed Phase

When the following operation is performed, the vehicle security system turns into the "pre-armed" phase. (The security indicator lamp illuminates.)

- BCM receives LOCK signal from front door request switch, Intelligent Key or door key cylinder, after back door and all doors are closed.
- Security indicator lamp illuminates for 30 seconds. Then, the system automatically shifts into the "armed" phase.

CANCELING THE SET VEHICLE SECURITY SYSTEM

When one of the following operations is performed, the armed phase is canceled.

- 1. Unlock the all doors with the door request switch, Intelligent Key or door key cylinder.
- 2. Turn ignition switch "ON" or "ACC" position.

CANCELING THE ALARM OPERATION OF THE VEHICLE SECURITY SYSTEM

When unlocking the all doors with the door request switch, Intelligent Key or door key cylinder switch the alarm operation is canceled.

ACTIVATING THE ALARM OPERATION OF THE VEHICLE SECURITY SYSTEM

Check that the system is in the armed phase. (The security indicator lamp blinks every 2.4 seconds.) When the following operation 1 or 2 is performed, the system sounds the horns and flashes the headlamps for about 50 seconds.

- 1. Back door or any door is opened during armed phase.
- 2. Disconnecting and connecting the battery connector before canceling armed phase.

Component Parts Location

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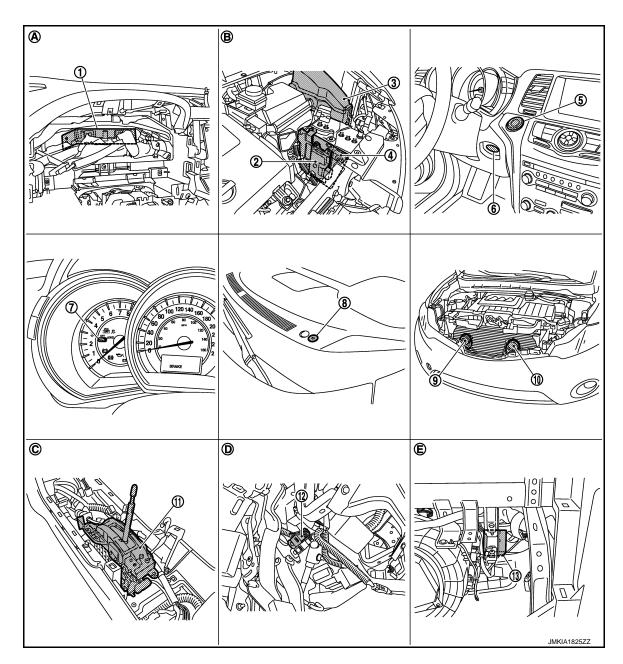
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- 1. BCM
- 4. ECM
- 7. Combination meter (key warning lamp)
- 10. Horn (low)
- 13. Remote keyless entry receiver
- A. Behind the combination meter
- D. Behind the instrument lower panel LH

- 2. TCM
- 5. Push-button ignition switch
- 8. Security indicator lamp
- 11. CVT shift selector (detention switch)
- B. Engine room (LH)
- E. Behind the instrument lower panel RH

- 3. IPDM E/R
- 6. Key slot
- 9. Horn (high)
- 12. Stop lamp switch
- View with the center console assembly removed

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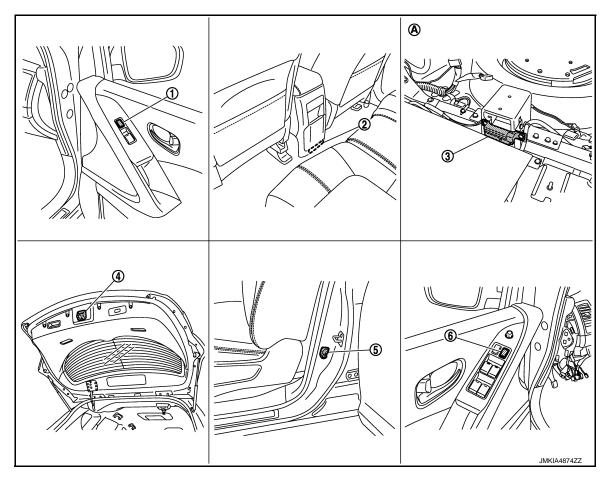
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- Front power window switch (passen- 2. ger side)
- Back door lock assembly (back door 5. Front door switch (driver side) switch)
- Under the rear seat seatback
- Inside key antenna (console)
- Inside key antenna (luggage room)
- power window main switch (door lock and unlock switch)

Component Description

INFOID:0000000009722707

Component	Reference
BCM	<u>SEC-74</u>
Horn relay 1	DLK-133
Horn relay 2	DLK-133
Security indicator lamp	<u>SEC-91</u>
Door switch	DLK-97
Back door lock assembly (back door witch)	<u>DLK-98</u>
Door key cylinder switch	DLK-110

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM: CONSULT Function (BCM - COMMON ITEM)

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x: Applicable item

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APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

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

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

Diagnosis mode System Sub system selection item Work Support **Data Monitor** Active Test Door lock DOOR LOCK × X X REAR DEFOGGER Rear window defogger X X Warning chime **BUZZER** × × Interior room lamp timer INT LAMP × × × Exterior lamp **HEAD LAMP** × × × Wiper and washer **WIPER** ×*1 X X **FLASHER** Turn signal and hazard warning lamps × \times \times AIR CONDITONER*2 · Intelligent Key system INTELLIGENT KEY × × × Engine start system Combination switch COMB SW × Body control system **BCM** × **NVIS - NATS IMMU** Interior room lamp battery saver **BATTERY SAVER** X \times X

NOTE:

TPMS

• *1: For models with rain sensor this mode is displayed, but is not used.

TRUNK

THEFT ALM

RETAINED PWR

SIGNAL BUFFER

TPMS (AIR PRESSURE MONITOR)

• *2: This item is displayed, but is not used.

FREEZE FRAME DATA (FFD)

Back door opener system

Vehicle security system

Signal buffer system

RAP system

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

CONSULT screen item	Indication/Unit	Description	
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected	
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected	
	SLEEP>LOCK		While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK"*)
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)
	LOCK>ACC		While turning power supply position from "LOCK" to "ACC"
	ACC>ON		While turning power supply position from "ACC" to "IGN"
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.)
	CRANK>RUN		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)
	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emergency stop operation)
	ACC>OFF		While turning power supply position from "ACC" to "OFF"
V I : I O I''	OFF>LOCK	Power position status of	While turning power supply position from "OFF" to "LOCK"*
Vehicle Condition	OFF>ACC	the moment a particular DTC is detected	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".

INTELLIGENT KEY

INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)

INFOID:0000000010037856

BCM CONSULT FUNCTION

CONSULT performs the following functions via CAN communication with BCM.

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

ELF-DIAG RESULTS Displays the diagnosis results judged by BCM. ATA MONITOR The BCM input/output signals are displayed. The signals used to activate each device are forcibly supplied from BCM. ORK SUPPORT Monitor item Monitor item EMO CONT ID CONFIR It can be checked whether Intelligent Key ID code is registered or not in this mode. Auto door lock time can be changed in this mode. **MODE 1: 1 minute** **MODE 3: 30 seconds** **MODE 3: 5 minutes** **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. **MODE 3: 5 minutes** **MODE 3: 5 minutes** **BUNK/GLASS HATCH OPEN **BUNK/GLASS HATCH OPEN **BUNK/GLASS HATCH OPEN **Panic alarm button pressing time on Intelligent Key remote control button can be selected from the following with this mode. **MODE 3: 5 sec.* **MODE 3: 15 sec.* **MODE 3: 5 s	Diagnosis mode	Function Description
ATA MONITOR The BCM input/output signals are displayed. CTIVE TEST The signals used to activate each device are forcibly supplied from BCM. ORK SUPPORT Monitor item Description It can be checked whether Intelligent Key ID code is registered or not in this mode. Auto door lock time can be changed in this mode. MODE 2: 5 minutes MODE 3: 30 seconds MODE 4: 2 minutes MODE 3: 30 seconds MODE 4: 2 minutes MODE 5: 4 minutes MODE 5: 4 minutes MODE 6: 4 minutes MODE 7: 4 minutes MODE 7: 4 minutes MODE 7: 4 minutes MODE 8: 4 minutes MODE 9: 4 minutes	WORK SUPPORT	Changes the setting for each system function.
The signals used to activate each device are forcibly supplied from BCM. ORK SUPPORT Monitor item EMO CONT ID CONFIR It can be checked whether Intelligent Key ID code is registered or not in this mode. Auto door lock time can be changed in this mode. **MODE 1: 1 minute** **MODE 3: 30 seconds* **MODE 3: 30 seconds* **MODE 3: 30 seconds* **MODE 4: 2 minutes* **MODE 3: 30 seconds* **MODE 4: 2 minutes* **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. **Principle of the standard function mode by back door request switch can be changed to operate (ON) or not operate (OFF) with this mode. **W DOWN SET** **W DOWN SET** **W DOWN SET** **W DOWN SET** **Intelligent Key low battery warning mode can be changed to operate (ON) or not operate (OFF) with this mode. **Intelligent Key low battery warning mode can be changed to operate (ON) or not operate (OFF) with this mode. **Intelligent Key low battery warning mode by door request switch (driver side and passenger side) can be selected from the following with this mode. **Intelligent Key low battery warning house on the supported.** **Intelligent Key low battery warning buzzer of the supported operate (ON) or not ope	SELF-DIAG RESULTS	Displays the diagnosis results judged by BCM.
Monitor item Monitor item EMO CONT ID CONFIR It can be checked whether Intelligent Key ID code is registered or not in this mode. Auto door lock time can be changed in this mode. Auto door lock time can be changed in this mode. Auto door lock time can be changed in this mode. MODE 1: 1 minute MODE 3: 50 seconds MODE 4: 2 minutes 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. RUNK/GLASS HATCH OPEN Buzzer reminder function mode can be changed to operate (OFF) with this mode. Panic alarm button pressing time on Intelligent Key remote control button can be selected from the following with this mode. ANIC ALARM SET ANIC ALARM SET Unlock button pressing time on Intelligent Key button can be selected from the following with this mode. MODE 1: 0.5 sec. MODE 2: Non-operation MODE 3: 1.5 sec. MODE 1: Sec. MODE 3: 5 sec. MODE 2: Non-operation MODE 3: 5 sec. MODE 3: 5 sec. MODE 3: 5 sec. MODE 4: Non-operation MODE 3: 5 sec. MODE 5: Sec. MODE 5: Sec. MODE 5: Sec. MODE 6: MODE 6: Sec. MODE 6: MODE 6: Moreoperation MODE 6: Moreoperation MODE 7: Moreoperation MODE 7: Moreoperation MODE 8: Moreoperation MODE 8: Moreoperation MODE 8: Moreoperation MODE 9: Moreoperation MODE 9	DATA MONITOR	The BCM input/output signals are displayed.
Monitor item EMO CONT ID CONFIR It can be checked whether Intelligent Key ID code is registered or not in this mode. Auto door lock time can be changed in this mode. Auto door lock time can be changed in this mode. **MODE 1: 1 minute** **MODE 3: 50 seconds* **MODE 4: 2 minutes* **DOCK/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. **BUZZET reminder function mode can be changed to operate (OFF) with this mode. **BUZZET reminder function mode by back door request switch can be changed to operate (ON) or not operate (OFF) with this mode. **BUZZET reminder function mode by back door request switch can be changed to operate (ON) or not operate (OFF) with this mode. **BUZZET reminder function mode by back door request switch can be changed to operate (ON) or not operate (OFF) with this mode. **ANIC ALARM SET **PART of Sec.** **INODE 1: 0.5 sec.** **INODE 1: 0.5 sec.** **INODE 2: Non-operation* **NODE 2: Non-operation* **NODE 3: Non-operation* **NODE 3: Non-operation* **NODE 3: Sec.** **INODE 3: Sec.** **INODE 4: Sec.** **INODE 4: Sec.** **INODE 3: Sec.** **INODE 4: Sec.** **INODE 5: Non-operation* **INODE 5: Non-oper	ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.
EMO CONT ID CONFIR It can be checked whether Intelligent Key ID code is registered or not in this mode. 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 **MODE 3: 30 seconds **MODE 4: 2 minutes **MODE 5: 4 minutes **MODE 5: 4 minutes **MODE 5: 4 minutes **MODE 5: 4 minutes **MODE 6: 5 minutes **MODE 6: 5 minutes **MODE 7: 5 minutes **MODE 7: 5 minutes **MODE 7: 5 minutes **MODE 8: 5 minutes **MODE 9: 5	VORK SUPPORT	
Auto door lock time can be changed in this mode. MODE 1: 1 minute MODE 3: 30 seconds MODE 3: 30 seconds MODE 3: 2 minutes OCK/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 (OFF) in this mode. Engline start function mode can be changed to operate (ON) or not operate (OFF) with this mode. Buzzer reminder function mode by back door request switch can be changed to operate (ON) or not operate (OFF) with this mode. Buzzer reminder function mode by back door request switch can be changed to operate (ON) or not operate (OFF) with this mode. ANIC ALARM SET Buzzer reminder function mode by back door request switch can be changed to operate (ON) or not operate (OFF) with this mode. MODE 1: 0.5 sec. MODE 1: 0.5 sec. MODE 1: 0.5 sec. MODE 2: Non-operation MODE 3: 1.5 sec. MODE 2: Non-operation MODE 3: 1.5 sec. MODE 2: Non-operation MODE 3: 1.5 sec. MODE 3: 1.5 sec. MODE 3: 1.5 sec. MODE 3: 1.5 sec. MODE 3: Non-operation MODE 3: Non-oper	Monitor item	Description
. MODE 1: 1 minute . MODE 2: 5 minutes . MODE 3: 30 seconds . MODE 4: 2 minutes . MODE 3: 30 seconds . MODE 4: 2 minutes . MODE 4: 2 minutes . MODE 4: 2 minutes . MODE 5: 30 seconds . MODE 4: 2 minutes . MODE 5: 30 seconds . MODE 4: 2 minutes . MODE 5: 30 seconds . MODE 4: 2 minutes . MODE 7: MODE 6: 20 minutes . MODE 6: 2 minutes . MODE 7:	REMO CONT ID CONFIR	It can be checked whether Intelligent Key ID code is registered or not in this mode.
an be changed to operate (ON) or not operate (OFF) in this mode. NGINE START BY I-KEY Engine start function mode can be changed to operate (ON) or not operate (OFF) with this mode. Buzzer reminder function mode by back door request switch can be changed to operate (ON) or not operate (OFF) with this mode. **MODE 1: 3 sec.** **MODE 3: 5 sec.** **MODE 2: Non-operation* **MODE 3: 5 sec.** **MODE 4: MOTE:** This item is displayed, but cannot be supported. **Intelligent Key low battery warning mode can be changed to operate (ON) or not operate (OFF) with this mode. **NOTE:** This item is displayed, but cannot be supported. **Intelligent Key low battery warning mode can be changed to operate (ON) or not operate (OFF) with this mode. **LOCK ONLY: Door lock operation only operate (ON) or not operate (OFF) with this mode. **LOCK ONLY: Door lock operation only operate (ON) or not operate (ON) or not operate (ON) or operate (ON) or not operate (ON)	AUTO LOCK SET	MODE 1: 1 minuteMODE 2: 5 minutesMODE 3: 30 seconds
Buzzer reminder function mode by back door request switch can be changed to operate (ON) or not operate (OFF) with this mode. 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 3: 1.5 sec. Unlock button pressing time on Intelligent Key button can be selected from the following with this mode. • MODE 3: 1.5 sec. Unlock button pressing time on Intelligent Key button can be selected from the following with this mode. • MODE 3: 3 sec. • MODE 1: 3 sec. • MODE 3: 5 sec. **MODE 3: 5 sec. **MODE 3: 5 sec. **MODE 3: 5 sec. **Intelligent Key low battery warning mode can be changed to operate (ON) or not operate (OFF) with this mode. **Intelligent Key low battery warning mode can be changed to operate (ON) or not operate (OFF) with this mode. **AZARD ANSWER BACK** **AZARD ANSWER BACK** **AZARD ANSWER BACK** **BUZZER Teminder function mode can be selected from the following with this mode. • LOCK ONLY: Door lock operation only • UNLOCK ONLY: Door lock operation only • UNLOCK ONLY: Door unlock operation only • Buzzer reminder function (lock operation) mode by door request switch (driver side and passenger side) can be selected from the following with this mode. **Hom chirp: Sound horn** • Buzzer: Sound Intelligent Key warning buzzer • OFF: Non-operation **Starter motor can operate (OFF) with this mode. **Starter motor can operate during the times below. • 70 msec • 100 msec • 200 msec	LOCK/UNLOCK BY I-KEY	· · · · · · · · · · · · · · · · · · ·
not operate (OFF) with this mode. 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. Unlock button pressing time on Intelligent Key button can be selected from the following with this mode. MODE 3: 1.5 sec. Unlock button pressing time on Intelligent Key button can be selected from the following with this mode. MODE 3: 3 sec. MODE 3: 5 sec. MODE 3: 5 sec. NOTE: This item is displayed, but cannot be supported. Intelligent Key low battery warning mode can be changed to operate (ON) or not operate (OFF) with this mode. MITI KEY LOCK IN FUNCTI Key reminder function mode can be changed to operate (ON) or not operate (OFF) with this mode. AZARD ANSWER BACK AZARD ANSWER BACK NS BACK I-KEY LOCK NS BACK I-KEY LOCK NS BACK I-KEY UNLOCK Suzzer 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 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 reminder function (unlock operation) mode by door request switch can be changed to operate (ON) or not operate (OFF) with this mode. Starter motor can operate during the times below. 70 msec 100 msec 200 msec	ENGINE START BY I-KEY	Engine start function mode can be changed to operate (ON) or not operate (OFF) with this mode.
ANIC ALARM SET following with this mode.	TRUNK/GLASS HATCH OPEN	
mode. MODE 1: 3 sec. MODE 2: Non-operation MODE 3: 5 sec. RUNK OPEN DELAY NOTE: This item is displayed, but cannot be supported. Intelligent Key low battery warning mode can be changed to operate (ON) or not operate (OFF) with this mode. NTI KEY LOCK IN FUNCTI Key reminder function mode can be changed to operate (ON) or not operate (OFF) with this mode. 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 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 Buzzer reminder function (unlock operation) mode by door request switch can be changed to operate (ON) or not operate (OFF) with this mode. Starter motor can operate during the times below. 70 msec 100 msec 200 msec	PANIC ALARM SET	following with this mode.MODE 1: 0.5 sec.MODE 2: Non-operation
This item is displayed, but cannot be supported. O- BATT OF KEY FOB WARN Intelligent Key low battery warning mode can be changed to operate (ON) or not operate (OFF) with this mode. NTI KEY LOCK IN FUNCTI Key reminder function mode can be changed to operate (ON) or not operate (OFF) with this mode. 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 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 Buzzer reminder function (unlock operation) mode by door request switch can be changed to operate (ON) or not operate (OFF) with this mode. Starter motor can operate during the times below. 70 msec 100 msec 200 msec	PW DOWN SET	mode. • MODE 1: 3 sec. • MODE 2: Non-operation
with this mode. NTI KEY LOCK IN FUNCTI Key reminder function mode can be changed to operate (ON) or not operate (OFF) with this mode. 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 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 Buzzer reminder function (unlock operation) mode by door request switch can be changed to operate (ON) or not operate (OFF) with this mode. Starter motor can operate during the times below. 70 msec 100 msec 200 msec	TRUNK OPEN DELAY	
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 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 Buzzer reminder function (unlock operation) mode by door request switch can be changed to operate (ON) or not operate (OFF) with this mode. Starter motor can operate during the times below. 70 msec 100 msec 100 msec 200 msec	LO- BATT OF KEY FOB WARN	
LOCK ONLY: Door lock operation only UNLOCK ONLY: Door unlock operation only LOCK/UNLOCK: Lock/unlock operation OFF: Non-operation 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 Buzzer reminder function (unlock operation) mode by door request switch can be changed to operate (ON) or not operate (OFF) with this mode. Starter motor can operate during the times below. 70 msec 100 msec 200 msec	ANTI KEY LOCK IN FUNCTI	Key reminder function mode can be changed to operate (ON) or not operate (OFF) with this mode.
side) can be selected from the following with this mode. • Horn chirp: Sound horn • Buzzer: Sound Intelligent Key warning buzzer • OFF: Non-operation Buzzer reminder function (unlock operation) mode by door request switch can be changed to operate (ON) or not operate (OFF) with this mode. Starter motor can operate during the times below. • 70 msec • 100 msec • 200 msec	HAZARD ANSWER BACK	 LOCK ONLY: Door lock operation only UNLOCK ONLY: Door unlock operation only LOCK/UNLOCK: Lock/unlock operation
erate (ON) or not operate (OFF) with this mode. Starter motor can operate during the times below. 70 msec 100 msec 200 msec	ANS BACK I-KEY LOCK	side) can be selected from the following with this mode.Horn chirp: Sound hornBuzzer: Sound Intelligent Key warning buzzer
+ 70 msec 100 msec 200 msec	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.
NSIDE ANT DIAGNOSIS This function allows inside key antenna self-diagnosis.	SHORT CRANKING OUTPUT	70 msec100 msec
	INSIDE ANT DIAGNOSIS	This function allows inside key antenna self-diagnosis.
ORN WITH KEYLESS LOCK Horn reminder function mode by Intelligent Key button can be changed to operate (ON) or not operate (OFF) with this mode.	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 BCS-91, "DTC Index".

DATA MONITOR

NOTE:

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

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

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Monitor Item	Condition
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.
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 screen is touched.	
PW REMOTO DOWN SET	This test is able to check power window down operation. The power window down will be activated after "ON" on CONSULT screen is touched.	
INSIDE BUZZER	This test is able to check warning chime in combination meter operation. • Take away warning chime sounds when "TAKE OUT" on CONSULT screen is touched. • Key warning chime sounds when "KEY WARN" on CONSULT screen is touched. • P position warning chime sounds when "P RNG WARN" on CONSULT screen is touched. • ACC warning chime sounds when "ACC WARN" on CONSULT screen is touched.	SI
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation. The Intelligent Key warning buzzer will be activated after "ON" on CONSULT screen is touched.	
INDICATOR	This test is able to check warning lamp operation. • "KEY" Warning lamp illuminates when "KEY ON" on CONSULT screen is touched. • "KEY" Warning lamp flashes when "KEY IND" on CONSULT screen is touched.	
INT LAMP	This test is able to check interior room lamp operation. The interior room lamp will be activated after "ON" on CONSULT screen is touched.	-
	This test is able to check meter display information • Engine start information displays when "BP N" on CONSULT screen is touched. • Engine start information displays when "BP I" on CONSULT screen is touched. • Key ID warning displays when "ID NG" on CONSULT screen is touched.	(
LCD	 Steering lock information displays when "ROTAT" on CONSULT 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 screen is touched. Intelligent Key insert information displays when "INSRT" on CONSULT screen is touched. Intelligent Key low battery warning displays when "BATT" on CONSULT screen is touched. Take away through window warning displays when "NO KY" on CONSULT screen is touched. Take away warning display when "OUTKEY" on CONSULT screen is touched. OFF position warning display when "LK WN" on CONSULT screen is touched. 	F

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< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Test item	Description
TRUNK/GLASS HATCH	This test is able to check back door opener actuator open operation. This actuator opens when "ON" on CONSULT screen is touched.
FLASHER	This test is able to check hazard warning lamp operation. The hazard warning lamps will be activated after "ON" on CONSULT screen is touched.
HORN	This test is able to check horn operation. The horn will be activated after "ON" on CONSULT screen is touched.
IGN CONT2	This test is able to check ignition relay operation. The ignition relay will be activated after "ON" on CONSULT 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 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 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 screen is touched.
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 screen is touched.
KEY SLOT ILLUMI	This test is able to check key slot illumination operation. Key slot illumination flash when "ON" on CONSULT screen is touched.
AUTOMATIC BACK DOOR	NOTE: This item is displayed, but cannot be tested.
AUTOMATIC SLIDING DOOR	NOTE: This item is displayed, but cannot be tested.

THEFT ALM

THEFT ALM: CONSULT Function (BCM - THEFT)

INFOID:0000000009722710

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

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

DATA MONITOR

NOTE:

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

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.

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Monitored Item	Description	
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch LH.	_ A
DOOR SW-AS	Indicates [ON/OFF] condition of front door switch RH.	
DOOR SW-RR	Indicates [ON/OFF] condition of rear door switch RH.	В
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.	_ C
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.	– F
RKE-LOCK	Indicates [ON/OFF] condition of LOCK signal from Intelligent Key.	
RKE-UNLOCK	Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key.	
RKE-TR/BD	NOTE: This is displayed even when it is not equipped.	

WORK SUPPORT

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

ACTIVE TEST

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

IMMU

IMMU: CONSULT Function (BCM - IMMU)

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

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

DATA MONITOR

NOTE:

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< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

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

Monitor item	Content	
CONFRM ID ALL		
CONFIRM ID4		
CONFIRM ID3	Indicates [YET] at all time. Switch to [DONE] when a registered Intelligent Key is inserted into the key slot.	
CONFIRM ID2	emisir to [5 cm2] mion a registerea mionigent rey to meetica mio tile toy diet.	
CONFIRM ID1		
TP 4		
TP 3	Indicates the number of ID which has been registered	
TP 2	Indicates the number of ID which has been registered.	
TP 1		
PUSH SW	Indicates [ON/OFF] condition of push-button ignition switch.	
KEY SW -SLOT	Indicates [ON/OFF] condition of key slot.	

ACTIVE TEST

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

[WITH INTELLIGENT KEY SYSTEM]

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

BCM

BCM: Description

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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-29, "CAN Communication Signal Chart".

BCM: DTC Logic

INFOID:0000000009722713

DTC DETECTION LOGIC

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

BCM: Diagnosis Procedure

INFOID:0000000009722714

PERFORM SELF DIAGNOSTIC

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

Is DTC "U1000" displayed?

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

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

IPDM E/R

INFOID:0000000009722715

IPDM E/R: Description

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN-H line, CAN-L line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only. CAN Communication Signal Chart. Refer to <u>LAN-29, "CAN Communication Signal Chart"</u>.

IPDM E/R: DTC Logic

INFOID:0000000009722716

DTC DETECTION LOGIC

DTC	CONSULT display de- scription	DTC Detection Condition	Possible cause
U1000	CAN COMM CIRCUIT	When IPDM E/R cannot communicate CAN communication signal continuously for 2 seconds or more	CAN communication system

IPDM E/R: Diagnosis Procedure

INFOID:0000000009722717

1.PERFORM SELF DIAGNOSTIC

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U1000 CAN COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

- 1. Turn the ignition switch ON and wait for 2 seconds or more.
- Check "Self Diagnostic Result" of IPDM E/R.

Is DTC "U1000" displayed?

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

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

U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

U1010 CONTROL UNIT (CAN)

BCM

BCM : DTC Logic

DTC DETECTION LOGIC

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

BCM : Diagnosis Procedure

INFOID:0000000009722719

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1.REPLACE BCM

When DTC "U1010" is detected, replace BCM.

>> Replace BCM. Refer to BCS-98. "Exploded View".

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[WITH INTELLIGENT KEY SYSTEM]

P1610 LOCK MODE

Description

When the starting operation is carried more than five times consecutively under the following conditions, NATS will shift to the mode which prevents the engine from being started.

- Unregistered Intelligent Key is used.
- · BCM or ECM is malfunctioning.

DTC Logic

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P1610	LOCK MODE	When the starting operation is carried out five or more times consecutively under the following conditions. • Unregistered Intelligent Key • BCM or ECM is malfunctioning.	_

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-34, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009722722

1. CHECK ENGINE START FUNCTION

- 1. Perform the check for DTC except DTC P1610.
- Use CONSULT to erase DTC after fixing.
- 3. Turn ignition switch OFF.
- 4. Turn ignition switch ON when registered Intelligent Key is inserted into key slot and wait for 5 seconds.
- 5. Return the ignition switch OFF and wait 5 seconds.
- 6. Repeat steps 4 and 5 twice (total of 3 cycles).
- 7. Check that engine can start when registered Intelligent Key insert into key slot.

>> INSPECTION END

P1611 ID DISCORD, IMMU-ECM

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

P1611 ID DISCORD, IMMU-ECM

Description INFOID:0000000009722723

BCM performs the ID verification with ECM that allows the engine to start. Start the engine if the ID is OK. ECM prevents the engine from starting if the ID is not registered. BCM starts the communication with ECM if ignition switch is turned ON.

DTC Logic INFOID:0000000009722724

DTC DETECTION LOGIC

NOTE:

- If DTC B1611 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM: DTC Logic".
- If DTC B1611 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM: DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P1611	ID DISCORD, IMMU- ECM	The ID verification result between BCM and ECM is NG. The registration is necessary.	• BCM • ECM

DTC CONFIRMATION PROCEDURE

PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON under the following conditions.
- Selector lever is in the P or N position.
- Do not depress brake pedal.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-35, "Diagnosis Procedure".

>> INSPECTION END NO

Diagnosis Procedure

1.PERFORM INITIALIZATION

Perform initialization of BCM and registration of Intelligent Key using CONSULT.

Can the system be initialized and can the engine be started with registered Intelligent Key?

YES >> INSPECTION END

NO >> GO TO 2.

2.REPLACE BCM

- Replace BCM. Refer to BCS-98, "Removal and Installation".
- Perform initialization of BCM and registration of Intelligent Key using CONSULT.

Can the system be initialized and can the engine be started with registered Intelligent Key?

YES >> INSPECTION END

NO >> GO TO 3.

3.replace ecm

- Replace ECM. Refer to EC-16, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".
- Perform initialization of BCM and registration of Intelligent Key using CONSULT.

Can the system be initialized and can the engine be started with registered Intelligent Key?

YES >> INSPECTION END

NO >> GO TO 4.

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4. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

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P1611 ID DISCORD, IMMU-ECM

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

>> INSPECTION END

P1612 CHAIN OF ECM-IMMU

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

P1612 CHAIN OF ECM-IMMU

Description INFOID:0000000009722726

BCM performs the ID verification with ECM that allows the engine to start. Start the engine if the ID is OK. ECM prevents the engine from starting if the ID is not registered. BCM starts the communication with ECM if ignition switch is turned ON.

DTC Logic INFOID:0000000009722727

DTC DETECTION LOGIC

NOTE:

 If DTC P1612 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM: DTC Logic".

 If DTC P1612 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM: DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
P1612	CHAIN OF ECM-IMMU	Inactive communication between ECM and BCM	Harness or connectors (The CAN communication line is open or shorted) BCM ECM	

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON under the following conditions.
- Selector lever is in the P or N position.
- Do not depress brake pedal.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-37, "Diagnosis Procedure".

>> INSPECTION END NO

Diagnosis Procedure

1.REPLACE BCM Replace BCM. Refer to BCS-98, "Removal and Installation".

Perform initialization of BCM and registration of Intelligent Key using CONSULT.

Does the engine start?

YES >> INSPECTION END

NO >> GO TO 2.

2.replace ecm

Replace ECM. Refer to EC-16, "ADDITIONAL SERVICE WHEN REPLACING CONTROL Repair Requirement".

>> INSPECTION END

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INFOID:0000000009722728

[WITH INTELLIGENT KEY SYSTEM]

P1614 CHAIN OF IMMU-KEY

Description INFOID:0000000009722729

Performs ID verification through BCM and Intelligent Key when push-button ignition switch is pressed. Prohibits the release of steering lock (models with steering lock unit) or start of engine when an unregistered ID of Intelligent Key is used.

DTC Logic INFOID:00000000009722730

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P1614	CHAIN OF IMMU- KEY	Inactive communication between key slot and BCM.	Harness or connectors (The key slot circuit is open or shorted) Key slot BCM

DTC CONFIRMATION PROCEDURE

${f 1}$.PERFORM DTC CONFIRMATION PROCEDURE 1

- 1. Insert Intelligent Key into the key slot.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-38, "Diagnosis Procedure".

NO >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE 2

- Press the push-button ignition switch.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-38, "Diagnosis Procedure".

>> INSPECTION END NO

Diagnosis Procedure

INFOID:00000000009722731

1. INSPECTION START

Perform inspection in accordance with procedure that confirms DTC.

Which procedure confirms DTC?

DTC confirmation procedure 1>>GO TO 2.

DTC confirmation procedure 2>>GO TO 6.

2.CHECK PUSH-BUTTON IGNITION SWITCH OPERATION

Press push-button ignition switch and check if it turns ON.

Does ignition switch turn to ON?

YES >> GO TO 3.

NO >> GO TO 5.

3.CHECK KEY SLOT COMMUNICATION SIGNAL

- Turn ignition switch OFF.
- Disconnect key slot connector.
- Check voltage between key slot harness connector and ground.

P1614 CHAIN OF IMMU-KEY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

	+)	()	Voltage (V)	
Key slot Connector Terminal		()	(Approx.)	
M99	3	Ground	Battery voltage	

Is the inspection result normal?

YES >> Replace key slot. Refer to <u>SEC-190, "Removal and Installation"</u>.

NO >> GO TO 4.

4. CHECK KEY SLOT COMMUNICATION SIGNAL CIRCUIT

Disconnect BCM connector.

Check continuity between key slot harness connector and BCM harness connector.

Key slot		BCM		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M99	3	M122	81	Existed

3. Check continuity between key slot harness connector and ground.

Key	/ slot		Continuity	
Connector Terminal		Ground	Continuity	
M99	3		Not existed	

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness or connector.

5. CHECK KEY SLOT GROUND CIRCUIT

Turn ignition switch OFF.

2. Disconnect key slot connector.

3. Check continuity between key slot harness connector and ground.

Key	/ slot		Continuity	
Connector Terminal		Ground	Continuity	
M99	7		Existed	

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness or connector.

6.CHECK KEY SLOT INPUT SIGNAL

Turn ignition switch OFF.

2. Disconnect key slot connector.

3. Check voltage between key slot harness connector and ground.

	(+)			
Key	y slot	(–)	Voltage (V) (Approx.)	
Connector	Terminal			
M99	2	Ground	Battery voltage	

Is the inspection result normal?

YES >> Replace key slot. Refer to <u>SEC-190, "Removal and Installation"</u>.

NO >> GO TO 7.

.CHECK KEY SLOT CIRCUIT

- Disconnect BCM connector.
- 2. Check continuity between key slot harness connector and BCM harness connector.

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P1614 CHAIN OF IMMU-KEY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Key slot		В	Continuity		
Connector	Terminal	Connector Terminal		Continuity	
M99	2	M122	80	Existed	

3. Check continuity between key slot harness connector and ground.

Key	v slot		Continuity
Connector Terminal		Ground	Continuity
M99	2		Not existed

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness or connector.

8. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

P1615 DIFFRENCE OF KEY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

P1615 DIFFRENCE OF KEY Α Description INFOID:0000000009722732 Performs ID verification through BCM and Intelligent Key when push-button ignition switch is pressed. Prohibits the release of steering lock (models with steering lock unit) or start of engine when an unregistered ID of Intelligent Key is used. **DTC Logic** INFOID:0000000009722733 DTC DETECTION LOGIC D DTC No. Trouble diagnosis name DTC detecting condition Possible cause The ID verification result between BCM and Intelligent Key P1615 DIFFERENCE OF KEY Intelligent Key is NG. The registration is necessary. DTC CONFIRMATION PROCEDURE 1. PERFORM DTC CONFIRMATION PROCEDURE F Press the push-button ignition switch. Check "Self diagnostic result" with CONSULT. Is DTC detected? YES >> Go to SEC-41, "Diagnosis Procedure". >> INSPECTION END NO Diagnosis Procedure INFOID:0000000009722734 1. PERFORM INITIALIZATION Perform initialization of BCM and registration of Intelligent Key using CONSULT. Can the system be initialized and can the engine be started with registered Intelligent Key? YES >> INSPECTION END NO >> GO TO 2. 2. REPLACE INTELLIGENT KEY **SEC** Replace Intelligent Kev. Perform initialization of BCM and registration of Intelligent Key using CONSULT. Can the system be initialized and can the engine be started with registered Intelligent Key? YES >> INSPECTION END NO >> GO TO 3. 3.CHECK INTERMITTENT INCIDENT M Refer to GI-44, "Intermittent Incident". >> INSPECTION END N Р

[WITH INTELLIGENT KEY SYSTEM]

B2190 NATS ANTENNA AMP.

Description INFOID:0000000009722735

Performs ID verification through BCM and Intelligent Key when push-button ignition switch is pressed. Prohibits the release of steering lock (models with steering lock unit) or start of engine when an unregistered ID of Intelligent Key is used.

DTC Logic INFOID:00000000009722736

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2190	NATS ANTENNA AMP	Inactive communication between key slot and BCM.	Harness or connectors (The key slot circuit is open or shorted) Key slot BCM

DTC CONFIRMATION PROCEDURE

${f 1}$.PERFORM DTC CONFIRMATION PROCEDURE

- 1. Insert Intelligent Key into the key slot.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-42, "Diagnosis Procedure".

NO >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE

- Press the push-button ignition switch.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-42, "Diagnosis Procedure".

>> INSPECTION END NO

Diagnosis Procedure

INFOID:0000000009722737

INSPECTION START

Perform inspection in accordance with procedure that confirms DTC.

Which procedure confirms DTC?

DTC confirmation procedure 1>>GO TO 2.

DTC confirmation procedure 2>>GO TO 6.

2.CHECK PUSH-BUTTON IGNITION SWITCH OPERATION

Press push-button ignition switch and check if it turns ON.

Does ignition switch turn to ON?

YES >> GO TO 3.

NO >> GO TO 5.

3.CHECK KEY SLOT COMMUNICATION SIGNAL

- Turn ignition switch OFF.
- Disconnect key slot connector.
- Check voltage between key slot harness connector and ground.

B2190 NATS ANTENNA AMP.

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

(+) Key slot		(-)	Voltage (V) (Approx.)
Connector Terminal			
M99	3	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace key slot. Refer to <u>SEC-190</u>, "Removal and Installation".

NO >> GO TO 4.

4. CHECK KEY SLOT COMMUNICATION SIGNAL CIRCUIT

Disconnect BCM connector.

Check continuity between key slot harness connector and BCM harness connector.

Key	slot	BCM		Continuity
Connector Terminal		Connector	Terminal	Continuity
M99	3	M122	81	Existed

3. Check continuity between key slot harness connector and ground.

Key	/ slot		Continuity
Connector Terminal		Ground	Continuity
M99	3		Not existed

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness or connector.

CHECK KEY SLOT GROUND CIRCUIT

- Turn ignition switch OFF.
- Disconnect key slot connector.
- Check continuity between key slot harness connector and ground.

Key	slot / slot		Continuity
Connector Terminal		Ground	Continuity
M99	7		Existed

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness or connector.

6.CHECK KEY SLOT INPUT SIGNAL

- Turn ignition switch OFF.
- Disconnect key slot connector. 2.
- Check voltage between key slot harness connector and ground.

(+) Key slot			Voltage (V) (Approx.)	
		(–)		
Connector	Terminal			
M99	2	Ground	Battery voltage	

Is the inspection result normal?

YES >> Replace key slot. Refer to <u>SEC-190</u>, "Removal and Installation".

NO >> GO TO 7.

.CHECK KEY SLOT CIRCUIT

- Disconnect BCM connector.
- Check continuity between key slot harness connector and BCM harness connector.

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B2190 NATS ANTENNA AMP.

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Key slot		ВСМ		Continuity
Connector	Terminal	Connector Terminal		Continuity
M99	2	M122	80	Existed

3. Check continuity between key slot harness connector and ground.

Key	v slot		Continuity
Connector	Terminal	Ground	Continuity
M99	2		Not existed

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness or connector.

8. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

B2191 DIFFERENCE OF KEY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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B2191 DIFFERENCE OF KEY Α Description INFOID:0000000009722738 Performs ID verification through BCM and Intelligent Key when push-button ignition switch is pressed. Prohibits the release of steering lock (models with steering lock unit) or start of engine when an unregistered ID of Intelligent Key is used. **DTC Logic** INFOID:0000000009722739 DTC DETECTION LOGIC D DTC No. Trouble diagnosis name DTC detecting condition Possible cause The ID verification result between BCM and Intelligent Key B2191 DIFFERENCE OF KEY Intelligent Key is NG. The registration is necessary. DTC CONFIRMATION PROCEDURE ${f 1}$.PERFORM DTC CONFIRMATION PROCEDURE F Press the push-button ignition switch Check "Self diagnostic result" with CONSULT. Is DTC detected? YES >> Go to SEC-45, "Diagnosis Procedure". >> INSPECTION END NO Diagnosis Procedure INFOID:0000000009722740 1. PERFORM INITIALIZATION Perform initialization of BCM and registration of Intelligent Key using CONSULT. Can the system be initialized and can the engine be started with registered Intelligent Key? YES >> INSPECTION END NO >> GO TO 2. 2. REPLACE INTELLIGENT KEY **SEC** Replace Intelligent Kev. Perform initialization of BCM and registration of Intelligent Key using CONSULT. Can the system be initialized and can the engine be started with registered Intelligent Key? YES >> INSPECTION END NO >> GO TO 3. 3.CHECK INTERMITTENT INCIDENT M Refer to GI-44, "Intermittent Incident". >> INSPECTION END N

[WITH INTELLIGENT KEY SYSTEM]

B2192 ID DISCORD, IMMU-ECM

Description INFOID:000000009722741

BCM performs the ID verification with ECM that allows the engine to start. Start the engine if the ID is OK. ECM prevents the engine from starting if the ID is not registered. BCM starts the communication with ECM if ignition switch is turned ON.

DTC Logic

DTC DETECTION LOGIC

NOTE:

- If DTC B2192 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM: DTC Logic".
- If DTC B2192 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to <u>SEC-33, "BCM: DTC Logic"</u>.

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2192	ID DISCORD, BCM- ECM	The ID verification result between BCM and ECM is NG. The registration is necessary.	• BCM • ECM

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON under the following conditions.
- Selector lever is in the P or N position.
- Do not depress brake pedal.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to <u>SEC-46, "Diagnosis Procedure"</u>.

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009722743

1. PERFORM INITIALIZATION

Perform initialization of BCM and registration of Intelligent Key using CONSULT.

Can the system be initialized and can the engine be started with registered Intelligent Key?

YES >> INSPECTION END

NO >> GO TO 2.

2.REPLACE BCM

- 1. Replace BCM. Refer to BCS-98, "Removal and Installation".
- 2. Perform initialization of BCM and registration of Intelligent Key using CONSULT.

Can the system be initialized and can the engine be started with registered Intelligent Key?

YES >> INSPECTION END

NO >> GO TO 3.

3.replace ecm

- 1. Replace ECM. Refer to EC-16, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement".
- Perform initialization of BCM and registration of Intelligent Key using CONSULT.

Can the system be initialized and can the engine be started with registered Intelligent Key?

YES >> INSPECTION END

NO >> GO TO 4.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

B2192 ID DISCORD, IMMU-ECM

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Α >> INSPECTION END

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[WITH INTELLIGENT KEY SYSTEM]

B2193 CHAIN OF ECM-IMMU

Description INFOID:0000000009722744

BCM performs the ID verification with ECM that allows the engine to start. Start the engine if the ID is OK. ECM prevents the engine from starting if the ID is not registered. BCM starts the communication with ECM if ignition switch is turned ON.

DTC Logic

DTC DETECTION LOGIC

NOTE:

- If DTC B2193 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM: DTC Logic".
- If DTC B2193 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM: DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2193	CHAIN OF BCM- ECM	Inactive communication between ECM and BCM	Harness or connectors (The CAN communication line is open or shorted) BCM ECM

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON under the following conditions.
- Selector lever is in the P or N position.
- Do not depress brake pedal.
- 2. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to <u>SEC-48</u>, "<u>Diagnosis Procedure</u>".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009722746

1.REPLACE BCM

- 1. Replace BCM. Refer to BCS-98, "Removal and Installation".
- Perform initialization of BCM and registration of Intelligent Key using CONSULT.

Does the engine start?

YES >> INSPECTION END

NO >> GO TO 2.

2.replace ecm

Replace ECM. Refer to <u>EC-16</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

>> INSPECTION END

B2195 ANTI-SCANNING

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2195 ANTI-SCANNING

Description INFOID:0000000009722747

When ignition switch is turned ON, BCM performs ID verification with ECM. If ID verification that is out of the specified specification is detected, BCM prohibits further ID verification and engine cranking.

DTC Logic INFOID:00000000009722748

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2195	ANTI-SCANNING	ID verification between BCM and ECM that is out of the specified specification is detected	ID verification request out of the specified specification

DTC CONFIRMATION PROCEDURE

${f 1}$.PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON under the following conditions.
- Selector lever is in the P or N position
- Do not depress brake pedal
- Check "Self-diagnostic result" using CONSULT.

Is DTC detected?

YES >> Refer to SEC-49, "Diagnosis Procedure".

NO >> INSPECTION END.

Diagnosis Procedure

 ${f 1}$.CHECK SELF-DIAGNOSTIC RESULT-1

- Perform "Self-diagnostic result" of BCM using CONSULT.
- 2. Erase DTC.
- Perform DTC Confirmation Procedure. Refer to SEC-49, "DTC Logic".

Is DTC 2195 detected?

YES >> GO TO 2.

NO >> INSPECTION END

2.CHECK EQUIPMENT OF THE VEHICLE

Check that unspecified accessory part related to engine start is not installed.

Is unspecified accessory part related to engine start installed?

YES >> GO TO 3.

NO >> Replace BCM. Refer to BCS-98, "Removal and Installation".

3.CHECK SELF-DIAGNOSTIC RESULT-2

- Obtain the customers approval to remove unspecified accessory part related to engine start, and then remove it.
- Perform "Self-diagnostic result" of BCM using CONSULT.
- Erase DTC.
- Perform DTC Confirmation Procedure. Refer to <u>SEC-49</u>, "DTC Logic".

Is DTC 2195 detected?

YES >> Replace BCM. Refer to BCS-98, "Removal and Installation".

NO >> INSPECTION END SEC

INFOID:0000000009722749

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INFOID:0000000009722752

B2555 STOP LAMP

Description INFOID:000000009722750

BCM detects the stop lamp status and confirms the stop lamp switch ON/OFF status. BCM confirms the engine start condition according to the stop lamp switch ON/OFF status.

DTC Logic

DTC DETECTION LOGIC

DTC No.	Trouble diagno- sis name	DTC detecting condition	Possible cause
B2555	STOP LAMP	BCM makes a comparison between the upper voltage and lower voltage of stop lamp switch. It judges from their values to detect the malfunctioning circuit.	Harness or connectors (Stop lamp switch circuit is open or shorted) Stop lamp switch Fuse

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Depress the brake pedal and wait for at least 1 second.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to <u>SEC-50</u>, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

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1. CHECK STOP LAMP SWITCH INPUT SIGNAL

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

(+) BCM		(-)	Voltage (V) (Approx.)	
Connector	Terminal			
M123	116	Ground	Battery voltage	

Is the inspection normal?

YES >> GO TO 2.

NO-1 >> Check 10A fuse [No. 7, located in the fuse block (J/B)].

NO-2 >> Check harness for open or short between BCM and fuse.

2.check stop lamp switch power supply circuit

- 1. Disconnect stop lamp switch connector.
- Check voltage between stop lamp harness connector and ground.

(+) Stop lamp switch		(-)	Voltage (V) (Approx.)
Connector	Terminal		(· + - · · · · · · · · · · · · · · · · ·
E116	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness for open or short between stop lamp switch and fuse.

3. CHECK STOP LAMP SWITCH CIRCUIT

B2555 STOP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

1. Check continuity between stop lamp switch harness connector and BCM harness connector.

Stop lamp switch		всм		Continuity
Connector	Terminal	Connector Terminal		Continuity
E116	2	M123	118	Existed

2. Check continuity between stop lamp switch harness connector and ground.

Stop lamp switch			Continuity
Connector Terminal		Ground	Continuity
E116	2		Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4. CHECK STOP LAMP SWITCH

Refer to SEC-51, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace stop lamp switch. Refer to <u>BR-20, "Removal and Installation"</u>.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1. CHECK STOP LAMP SWITCH

1. Turn ignition switch OFF.

- 2. Disconnect stop lamp switch connector.
- 3. Check continuity between stop lamp switch terminals.

Stop lamp switch		Condition		Continuity
Terminal				Continuity
1 2		Brake pedal	Not depressed	Not existed
ı	2	brake pedar	Depressed	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace stop lamp switch. Refer to <u>BR-20, "Removal and Installation"</u>.

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B2556 PUSH-BUTTON IGNITION SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2556 PUSH-BUTTON IGNITION SWITCH

Description

The switch that changes the power supply position. BCM maintains the power supply position status. BCM changes the power supply position with the operation of the push-button ignition switch.

DTC Logic

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2556	PUSH-BTN IGN SW	BCM detects the push-button ignition switch stuck to ON for 100 seconds or more	 Harness or connectors (Push-button ignition switch circuit is shorted.) Push-button ignition switch BCM

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Start the engine and wait for at least 100 seconds.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-52, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009722756

1. CHECK PUSH-BUTTON IGNITION SWITCH INPUT SIGNAL

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

(+) Push-button ignition switch		(-)	Voltage (V) (Approx.)
Connector Terminal			
M101	4	Ground	Battery voltage

Is the inspection normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK PUSH-BUTTON IGNITION SWITCH CIRCUIT

- 1. Disconnect BCM connector and IPDM E/R connector.
- 2. Check continuity between push-button ignition switch harness connector and BCM harness connector.

Push-button ignition switch		BCM		Continuity
Connector	Terminal	Connector Terminal		Continuity
M101	4	M121	60	Existed

3. Check continuity between push-button ignition switch harness connector and ground.

Push-button ignition switch			Continuity
Connector Terminal		Ground	Continuity
M101	4		Not existed

Is the inspection normal?

B2556 PUSH-BUTTON IGNITION SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

YES >> Replace BCM. Refer to BCS-98, "Removal and Installation".

NO >> Repair or replace harness or connector.

${f 3}.$ CHECK PUSH-BUTTON IGNITION SWITCH GROUND CIRCUIT

Check continuity between push-button ignition switch harness connector and ground.

Push-button ignition switch			Continuity
Connector	Connector Terminal		Continuity
M101	1		Existed

Is the inspection normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

f 4.CHECK PUSH-BUTTON IGNITION SWITCH

Refer to SEC-53, "Component Inspection".

Is the inspection normal?

YES >> GO TO 5.

NO >> Replace push-button ignition switch. Refer to SEC-191, "Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1. CHECK PUSH-BUTTON IGNITION SWITCH

- Turn ignition switch OFF.
- 2. Disconnect push-button ignition switch connector.
- Check continuity between push-button ignition switch terminals.

Push-button ignition switch		Condition	Continuity
Terminals			
1	4	Pressed	Existed
, 		Not pressed	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace push-button ignition switch. Refer to SEC-191, "Removal and Installation". SEC

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[WITH INTELLIGENT KEY SYSTEM]

B2557 VEHICLE SPEED

Description

BCM receives the 2 vehicle speed signals via CAN communication. 1 signal is transmitted by the combination meter. Another signal is transmitted by "ABS actuator and electric unit (control unit)". BCM compares both signals to detect the vehicle speed.

DTC Logic

DTC DETECTION LOGIC

NOTE:

- If DTC B2557 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM: DTC Logic".
- If DTC B2557 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to <u>SEC-33, "BCM: DTC Logic"</u>.

DTC	Self-diagnosis name	DTC detecting condition	Possible causes
B2557	VEHICLE SPEED	BCM detects the following difference between the vehicle speed from combination meter and the one from "ABS actuator and electric unit (control unit)" for 10 seconds continuously One is 10 km/h (6.2 MPH) or more and the other is 4 km/h (2.5 MPH) or less.	Wheel sensor Combination meter ABS actuator and electric unit (control unit)

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Drive the vehicle at the vehicle speed of 10 km/h (6.2 MPH) or more for at least 10 seconds.
- 2. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-54, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009722760

1. CHECK DTC WITH "ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)"

Check "Self diagnostic result" with CONSULT. Refer to BRC-111, "DTC No. Index".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK DTC WITH COMBINATION METER

Check "Self diagnostic result" with CONSULT. Refer to MWI-77, "DTC Index".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

${f 3.}$ CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

B2560 STARTER CONTROL RELAY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2560 STARTER CONTROL RELAY

Description INFOID:0000000009722761

Starter control relay, integrated in IPDM E/R, permits the starter relay operation when in N or P position and the steering is locked or unlocked (models with steering lock unit). It is installed in parallel with the starter relay.

DTC Logic INFOID:0000000009722762

DTC DETECTION LOGIC

NOTE:

- If DTC B2560 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM: DTC Logic".
- If DTC B2560 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM: DTC Logic".

DTC	Self-diagnosis name	DTC detecting condition	Possible causes
B2560	STARTER CONT RELAY	BCM detects a mismatch between the OFF request of starter control relay to IPDM E/R and the feedback. (The feedback is ON instead of OFF.)	IPDM E/R

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON under the following conditions and wait for at least 2 seconds.
- Selector lever is in the P or N position.
- Do not depress brake pedal.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

>> Go to SEC-55, "Diagnosis Procedure". YES

>> INSPECTION END

1. CHECK DTC WITH IPDM E/R

Diagnosis Procedure

Check "Self diagnostic result" with CONSULT. Refer to PCS-34, "DTC_Index".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".

2.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident"

>> INSPECTION END

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B2601 SHIFT POSITION

Description INFOID:0000000009722764

BCM confirms the shift position with the following 4 signals.

- CVT shift selector (detention switch)
- Transmission range switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic

DTC DETECTION LOGIC

NOTE:

- If DTC B2601 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM: DTC Logic".
- If DTC B2601 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM: DTC Logic".
- If DTC B2601 is displayed with DTC B2603, first perform the trouble diagnosis for DTC B2603. Refer to <u>SEC-66, "DTC Logic"</u>.

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2601	SHIFT POSITION	BCM detects when a difference between the shift P input signal and the shift position signal received from IPDM E/R via CAN communication continues for 2 seconds or more	Harness or connectors (CVT shift selector circuit is open or shorted.) CVT shift selector (detention switch)

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON under the following conditions, and wait for at least 2 seconds.
- Selector lever is in the P position.
- Do not depress the brake pedal.
- 2. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-56, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009722766

1. CHECK CVT SHIFT SELECTOR POWER SUPPLY

- Turn ignition switch OFF.
- Disconnect CVT shift selector (detention switch) connector.
- Check voltage between CVT shift selector (detention switch) harness connector and ground.

(+) CVT shift selector (detention switch)		(-)	Voltage (V) (Approx.)
Connector	Terminal		(11 - 7
M57	8	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3. NO >> GO TO 2.

2.CHECK CVT SHIFT SELECTOR POWER SUPPLY CIRCUIT

- Disconnect BCM connector.
- Check continuity between CVT shift selector (detention switch) harness connector and BCM harness connector.

CVT shift selector	(detention switch)	В	ВСМ	
Connector	Terminal	Connector	Terminal	Continuity
M57	8	M122	96	Existed

Check continuity between CVT shift selector (detention switch) harness connector and ground.

CVT shift selector (detention switch)			Continuity
Connector	Terminal	Ground	Continuity
M57	8		Not existed

Is the inspection result normal?

>> Replace BCM. Refer to BCS-98, "Removal and Installation". YES

NO >> Repair or replace harness or connector.

3.CHECK CVT SHIFT SELECTOR CIRCUIT (BCM)

Disconnect BCM connector and IPDM E/R connector.

Check continuity between CVT shift selector (detention switch) harness connector and BCM harness connector.

CVT shift selector	(detention switch)	ВСМ		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M57	9	M122	99	Existed

Check continuity between CVT shift selector (detention switch) harness connector and ground.

CVT shift selector (detention switch)			Continuity
Connector	Connector Terminal		Continuity
M57	9		Not existed

Is the inspection result normal?

>> GO TO 4. YES

NO >> Repair or replace harness or connector.

$oldsymbol{4}.$ CHECK CVT SHIFT SELECTOR CIRCUIT (IPDM E/R)

Check continuity between CVT shift selector (detention switch) harness connector and IPDM E/R harness connector.

CVT shift selector	(detention switch)	IPDM E/R		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M57	9	E11	43	Existed

2. Check continuity between CVT shift selector (detention switch) harness connector and ground.

CVT shift selector (detention switch)			Continuity
Connector	Terminal	Ground	Continuity
M57	9		Not existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness or connector.

CHECK CVT SHIFT SELECTOR (DETENTION SWITCH)

Refer to SEC-58, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace CVT shift selector. Refer to TM-167, "Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

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B2601 SHIFT POSITION

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000009722767

1. check cvt shift selector (detention switch)

- 1. Turn ignition switch OFF.
- 2. Disconnect CVT shift selector connector.
- 3. Check continuity between CVT shift selector (detention switch) terminals.

CVT shift selector (detention switch) Terminal		Condition		Continuity
	9	Selector lever	Other than above	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace CVT shift selector. Refer to TM-167, "Removal and Installation".

B2602 SHIFT POSITION

Description INFOID:0000000009722768

BCM confirms the shift position with the following 4 signals.

- CVT shift selector (detention switch)
- Transmission range switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic

DTC DETECTION LOGIC

NOTE:

- If DTC B2602 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM: DTC Logic".
- If DTC B2602 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to <u>SEC-33</u>, "BCM: DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2602	SHIFT POSITION	BCM detects the following status for 10 seconds. • Shift position is in P position • Vehicle speed is 4 km/h (2.5 MPH) or more • Ignition switch is in the ON position	Harness or connectors (CVT shift selector circuit is open or shorted) CVT shift selector (detention switch) ABS actuator and electric unit (control unit) BCM

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Start the engine under the following conditions and wait for at least 10 seconds.
- Selector lever is in the P or N position
- Depress the brake pedal.
- 2. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to <u>SEC-59</u>, "<u>Diagnosis Procedure</u>".

NO >> INSPECTION END

Diagnosis Procedure

1. CHECK DTC WITH "ABS ACTUATOR AND ELECTRIC UNIT"

Check "Self diagnostic result" with CONSULT. Refer to BRC-111, "DTC No. Index".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK CVT SHIFT SELECTOR POWER SUPPLY

- 1. Turn ignition switch OFF.
- Disconnect CVT shift selector (detention switch) connector.
- 3. Check voltage between CVT shift selector (detention switch) harness connector and ground.

	(Approx.)	
	() [] ()	
Ground	Battery voltage	
	Ground	

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INFOID:0000000009722770

B2602 SHIFT POSITION

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Is the inspection result normal?

YES >> GO TO 4. NO >> GO TO 3.

3.check cvt shift selector power supply circuit

- Disconnect BCM connector.
- Check continuity between CVT shift selector (detention switch) harness connector and BCM harness connector.

CVT shift selector	(detention switch)	ВСМ		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M57	8	M122	96	Existed	

3. Check continuity between CVT shift selector (detention switch) harness connector and ground.

CVT shift selector (detention switch)			Continuity
Connector	Terminal	Ground	Continuity
M57	8		No existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-98, "Removal and Installation".

NO >> Repair or replace harness or connector.

4. CHECK CVT SHIFT SELECTOR CIRCUIT

- 1. Disconnect BCM connector and IPDM E/R connector.
- Check continuity between CVT shift selector (detention switch) harness connector and BCM harness connector.

CVT shift selector	(detention switch)	BCM Connector Terminal		Continuity	
Connector	Terminal			Continuity	
M57	9	M122	99	Existed	

3. Check continuity between CVT shift selector (detention switch) harness connector and ground.

CVT shift selector	(detention switch)		Continuity	
Connector Terminal		Ground	Continuity	
M57	9		No existed	

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness or connector.

5.CHECK CVT SHIFT SELECTOR (DETENTION SWITCH)

Refer to SEC-58, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace CVT shift selector. Refer to TM-167, "Removal and Installation".

6. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

B2603 SHIFT POSITION

Description INFOID:0000000009722771

BCM confirms the shift position with the following 4 signals.

- CVT shift selector (detention switch)
- Transmission range switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic INFOID:0000000009722772

DTC DETECTION LOGIC

NOTE:

• If DTC B2603 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM: DTC Logic".

• If DTC B2603 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM: DTC Logic".

DTC	Self-diagnosis name	DTC detecting condition	Possible causes
B2603	SHIFT POSI STATUS	BCM detects the followings status for 500 ms or more when shift is in P position, and ignition switch is in ON position. • Transmission range switch: approx. 0V • CVT shift selector (detention switch): approx. 0V	Harness or connector (CVT shift selector circuit is open or shorted.) Harness or connectors (Transmission range switch circuit is open or shorted.) CVT shift selector (detention switch) Transmission range switch BCM

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- Start the engine under the following conditions and wait for at least 1 second.
- Selector lever is in the P position.
- Depress the brake pedal.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-61, "Diagnosis Procedure".

>> INSPECTION END NO

Diagnosis Procedure

1. CHECK DTC WITH TCM

Check "Self diagnostic result" with CONSULT. Refer to TM-128, "DTC Index".

Is the inspection result normal?

YES >> GO TO 2.

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NO >> Repair or replace the malfunctioning parts.

2.check transmission range switch circuit

- Turn ignition switch OFF.
- 2. Disconnect TCM connector and BCM connector.
- Check continuity between TCM harness connector and BCM harness connector.

TCM		ВСМ		Continuity
Connector	Terminal	Connector	Terminal	Continuity
F23	20	M123	140	Existed

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B2603 SHIFT POSITION

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

TCM			Continuity
Connector Terminal		Ground	Continuity
F23	20		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

${f 3.}$ CHECK CVT SHIFT SELECTOR POWER SUPPLY

- 1. Disconnect CVT shift selector (detention switch) connector.
- 2. Check voltage between CVT shift selector (detention switch) harness connector and ground.

(+) CVT shift selector (detention switch)		(-)	Voltage (V) (Approx.)	
Connector	Terminal		(· +F.•///)	
M57	8	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4. CHECK CVT SHIFT SELECTOR POWER SUPPLY CIRCUIT

- 1. Disconnect BCM connector.
- Check continuity between CVT shift selector (detention switch) harness connector and BCM harness connector.

CVT shift selector (detention switch)		BCM		Continuity
Connector	Terminal	Connector Terminal		Continuity
M57	8	M122	96	Existed

3. Check continuity between CVT shift selector (detention switch) harness connector and ground.

CVT shift selector	(detention switch)		Continuity
Connector Terminal		Ground	Continuity
M57	8		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-98, "Removal and Installation".

NO >> Repair or replace harness or connector.

CHECK CVT SHIFT SELECTOR CIRCUIT

- 1. Disconnect BCM connector and IPDM E/R connector.
- Check continuity between CVT shift selector (detention switch) harness connector and BCM harness connector.

CVT shift selector	CVT shift selector (detention switch)		ВСМ	
Connector	Terminal	Connector Terminal		Continuity
M57	9	M122	99	Existed

3. Check continuity between CVT shift selector (detention switch) harness connector and ground.

CVT shift selector	(detention switch)		Continuity	
Connector Terminal		Ground	Continuity	
M57	9		Not existed	

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness or connector.

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B2603 SHIFT POSITION

< DTC/CIRCUIT DIAGNOSIS > [WITH INTEL!	LIGENT KEY SYSTEM]
6.CHECK CVT SHIFT SELECTOR (DETENTION SWITCH)	Α
Refer to SEC-58, "Component Inspection".	
Is the inspection result normal? YES >> GO TO 7.	В
_NO >> Replace CVT shift selector. Refer to <u>TM-167</u> , "Removal and Installation"	
7.CHECK INTERMITTENT INCIDENT	
Refer to GI-44, "Intermittent Incident".	
>> INSPECTION END	
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B2604 SHIFT POSITION

Description INFOID:000000009722774

BCM confirms the shift position with the following 4 signals.

- CVT shift selector (detention switch)
- Transmission range switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic

DTC DETECTION LOGIC

NOTE:

- If DTC B2604 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM: DTC Logic".
- If DTC B2604 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM: DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2604	PNP/CLUTCH SW	 BCM detects the following status for 500 ms or more when the ignition switch is in the ON position. N position input signal exists. Shift position signal from TCM does not exist. N position input signal does not exist. Shift position signal from TCM exists. 	(Transmission range switch circuit is open or shorted.)

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Start the engine under the following conditions and wait for at least 1 second.
- Selector lever is in the P or N position
- Depress the brake pedal
- 2. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-64, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009722776

1. CHECK DTC WITH TCM

Check "Self diagnostic result" with CONSULT. Refer to TM-128, "DTC Index".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.check transmission range switch circuit 1

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

TCM		всм		Continuity
Connector	Terminal	Connector Terminal		Continuity
F23	20	M123	140	Existed

Is the inspection result normal?

YES >> GO TO 5. NO >> GO TO 3.

B2604 SHIFT POSITION

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

${\bf 3.}{\tt CHECK}~{\tt TRANSMISSION}~{\tt RANGE}~{\tt SWITCH}~{\tt CIRCUIT}~{\tt 2}$

- 1. Disconnect IPDM E/R connector.
- 2. Check continuity between IPDM E/R harness connector and BCM harness connector.

IPEN	M E/R	ВСМ		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
E10	30	M123	140	Existed	

3. Check continuity between IPDM E/R harness connector and ground.

IPDM E/R			Continuity
Connector	Terminal	Ground	Continuity
E10	30		Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4. CHECK TRANSMISSION RANGE SWITCH CIRCUIT 3

1. Check continuity between IPDM E/R harness connector and TCM harness connector.

IPEN	M E/R	TCM		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
E10	72	F23	20	Existed	

2. Check continuity between IPDM E/R harness connector and ground.

IPDM E/R			Continuity
Connector	Terminal	Ground	Continuity
E10	72		Not existed

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".

NO >> Repair or replace harness or connector.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

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B2605 SHIFT POSITION

Description

BCM confirms the shift position with the following 4 signals.

- CVT shift selector (detention switch)
- Transmission range switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic

DTC DETECTION LOGIC

NOTE:

- If DTC B2605 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM: DTC Logic".
- If DTC B2605 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM: DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2605	PNP/CLUTCH SW	 BCM detects the following status for 500 ms or more when the ignition switch is in ON position N position input signal exists. Shift position signal from IPDM E/R does not exist. N position input signal does not exist. Shift position signal from IPDM E/R exists. 	Harness or connectors (Transmission range switch circuit is open or shorted.) Transmission range switch IPDM E/R

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON under the following conditions and wait for at least 1 second.
- Selector lever is in the P or N position
- Do not depress the brake pedal.
- 2. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-66, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009722779

1. CHECK DTC WITH IPDM E/R

Check "Self diagnostic result" with CONSULT. Refer to PCS-34, "DTC Index".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK TRANSMISSION RANGE SWITCH CIRCUIT

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

TO	CM	BCM Connector Terminal		Continuity
Connector	Terminal			Continuity
F23	20	M123	140	Existed

Check continuity between TCM harness connector and ground.

B2605 SHIFT POSITION

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

TCM			Continuity	
Connector	Terminal	Ground	Continuity	
F23	20		Not existed	
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Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

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B2608 STARTER RELAY

Description INFOID.000000009722780

Located in IPDM E/R, it runs the starter motor. The starter relay is turned ON by the BCM when the ignition switch is in START position. IPDM E/R transmits the starter relay ON signal to BCM via CAN communication.

DTC Logic

DTC DETECTION LOGIC

NOTE:

- If DTC B2608 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM: DTC Logic".
- If DTC B2608 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to <u>SEC-33</u>, "BCM: DTC Logic".
- If DTC B2608 is displayed with DTC B210D for IPDM E/R, first perform the trouble diagnosis for DTC B210D. Refer to SEC-81, "DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2608	STARTER RELAY	BCM receives starter relay ON signal (CAN) from IPDM E/R even if BCM turns the starter relay OFF.	Harness or connectors (starter relay circuit is open or shorted.) IPDM E/R

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON under the following conditions.
- Selector lever is in the P or N position.
- Do not depress brake pedal.
- 2. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-68, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009722782

1. CHECK BCM POWER SUPPLY CIRCUIT

- 1. Turn ignition switch ON.
- Check voltage between BCM harness connector and ground.

	+) CM	(-)	Condition		Voltage (V) (Approx.)
Connector	Terminal				(
M121	52	Ground	Selector lever	N or P position	Battery voltage
IVITZT	52	Ground	Selector level	Other than above	0

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK STARTER RELAY CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect BCM connector and IPDM E/R connector.
- 3. Check continuity between IPDM E/R harness connector and BCM harness connector.

B2608 STARTER RELAY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

IPDI	И E/R	всм		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
E11	46	M121	52	Existed	

4. Check continuity between IPDM E/R harness connector and ground.

IPDM E/R			Continuity
Connector	Terminal	Ground	Continuity
E11	46		Not existed

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".

NO >> Repair or replace harness or connector.

3. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

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[WITH INTELLIGENT KEY SYSTEM]

B260F ENGINE STATUS

Description

BCM receives the engine status signal from ECM via CAN communication.

DTC Logic

DTC DETECTION LOGIC

NOTE:

- If DTC B260F is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to <u>SEC-31, "BCM: DTC Logic"</u>.
- If DTC B260F is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM: DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B260F	ENG STATE SIG LOST	BCM is not yet received the engine status signal from ECM when ignition switch is in ON position	ECM

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON under the following conditions.
- Selector lever is in the P or N position.
- Do not depress brake pedal.
- 2. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-70, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009722785

1. INSPECTION START

- 1. Turn ignition switch ON.
- 2. Check "Self diagnostic result" with CONSULT.
- 3. Touch "ERASE".
- 4. Perform DTC Confirmation Procedure.

See SEC-70, "DTC Logic".

Is the DTC B260F displayed again?

YES >> GO TO 2.

NO >> GO TO 3.

2.REPLACE ECM

Replace ECM. Refer to <u>EC-16</u>, "<u>ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT</u>: <u>Special Repair Requirement</u>".

>> INSPECTION END

3. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

B26EA KEY REGISTRATION

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B26EA KEY REGISTRATION

Description

When the registered Intelligent Key is carried, the door lock/unlock operation and the push-button ignition switch operation become possible.

DTC Logic

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause Improper registration operation Intelligent Key BCM	
B26EA	KEY REGISTRA- TION	Intelligent Key is not registered successfully.		

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Perform initialization of BCM and registration of Intelligent Key using CONSULT.
- 2. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-71, "Diagnosis Procedure"

NO >> INSPECTION END

Diagnosis Procedure

1.PERFORM INITIALIZATION

- Perform initialization of BCM and registration of Intelligent Key using CONSULT.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> GO TO 2.

NO >> INSPECTION END

2.REPLACE INTELLIGENT KEY

- Replace Intelligent Key.
- 2. Perform initialization of BCM and registration of Intelligent Key using CONSULT.
- 3. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Replace BCM. Refer to BCS-98, "Removal and Installation".

NO >> INSPECTION END

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B2617 STARTER RELAY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2617 STARTER RELAY CIRCUIT

Description INFOID:0000000009722789

Located in IPDM E/R, it runs the starter motor. The starter relay is turned ON by the BCM when the ignition switch is in START position. IPDM E/R transmits the starter relay ON signal to BCM via CAN communication.

DTC Logic INFOID:0000000009722790

DTC DETECTION LOGIC

NOTE:

- If DTC B2617 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM: DTC Logic".
- If DTC B2617 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM: DTC Logic".
- If DTC B2617 is displayed with DTC B210E for IPDM E/R, first perform the trouble diagnosis for DTC B210E. Refer to SEC-83, "DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B2617		An immediate operation of starter relay is requested by BCM, but there is no response for more than 1 second	Harness or connectors (Starter relay circuit is open or shorted.) IPDM E/R	

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON under the following conditions and wait for at least 1 second.
- Selector lever is in the P or N position.
- Do not depress brake pedal.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-72, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009722791

1. CHECK STARTER RELAY

- Turn ignition switch ON.
- Check voltage between BCM harness connector and ground.

(+) BCM		(-)	Condition		Voltage (V) (Approx.)
Connector	Terminal				(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
M121	52	Ground	Selector lever	N or P position	Battery voltage
				Other than above	0

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK STARTER RELAY CIRCUIT

- 1. Turn ignition switch OFF.
- Disconnect BCM connector and IPDM E/R connector.
- Check continuity between IPDM E/R harness connector and BCM harness connector.

B2617 STARTER RELAY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

IPDM E/R		BCM		Continuity
Connector	Terminal	Connector	Terminal	Continuity
E11	46	M121	52	Existed

4. Check continuity between IPDM E/R harness connector and ground.

IPDM E/R			Continuity
Connector Terminal		Ground	Continuity
E11	46		Not existed

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".

NO >> Repair or replace harness or connector.

3. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

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[WITH INTELLIGENT KEY SYSTEM]

B2619 BCM

Description INFOID:000000009722792

BCM requests IPDM E/R to supply power to steering lock unit. After receiving the power, the steering lock unit transmits an ON signal to BCM.

DTC Logic

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2619	ВСМ	BCM detects a mismatch between the power supplied to the steering lock unit and the feedback for one second or more.	ВСМ

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Press the push-button ignition switch under the following conditions and wait for at least 1 second.
- Selector lever is in the P or N position.
- Do not depress brake pedal.
- 2. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to <u>SEC-74</u>, "<u>Diagnosis Procedure</u>".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009722794

1. INSPECTION START

- Turn ignition switch ON.
- Check "Self diagnostic result" with CONSULT.
- 3. Touch "ERASE".
- 4. Perform DTC Confirmation Procedure.

See SEC-74, "DTC Logic".

Is the DTC B2619 displayed again?

YES >> Replace BCM. Refer to BCS-98, "Removal and Installation".

NO >> INSPECTION END

B261A PUSH-BUTTON IGNITION SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B261A PUSH-BUTTON IGNITION SWITCH

Description INFOID:0000000009722795

BCM transmits the change in the power supply position with the push-button ignition switch to IPDM E/R via the CAN communication. IPDM E/R transmits the power supply position status via CAN communication to BCM.

DTC Logic INFOID:0000000009722796

DTC DETECTION LOGIC

NOTE:

 If DTC B261A is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM: DTC Logic".

 If DTC B261A is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM: DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B261A	PUSH-BTN IGN SW	BCM detects the mismatch between the following for 1 second or more • Power supply position with push-button ignition switch • Power supply position from IPDM E/R (CAN)	Harness or connectors (Push-button ignition switch circuit is open or shorted) Between BCM and push-button ignition switch Between IPDM E/R and push-button ignition switch

DTC CONFIRMATION PROCEDURE

${f 1}$.PERFORM DTC CONFIRMATION PROCEDURE 1

- Press push-button ignition switch for 1 second under the following condition.
- Selector lever is in the P or N position.
- Do not depress brake pedal.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-75, "Diagnosis Procedure"

NO >> GO TO 2.

2.perform dtc confirmation procedure $\scriptscriptstyle 2$

- Insert Intelligent Key into the key slot.
- Press the push-button ignition switch under the following conditions and wait for at least 1 second.
- Selector lever is in the P or N position.
- Do not depress brake pedal.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-75, "Diagnosis Procedure".

>> INSPECTION END NO

Diagnosis Procedure

1.INSPECTION START

Perform inspection in accordance with procedure that confirms DTC.

Which procedure confirms DTC?

DTC confirmation procedure 1>>GO TO 2.

DTC confirmation procedure 2>>GO TO 4.

2 . CHECK PUSH-BUTTON IGNITION SWITCH OUTPUT SIGNAL 1

- Turn ignition switch OFF.
- Disconnect push-button ignition switch connector and IPDM E/R connector.

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B261A PUSH-BUTTON IGNITION SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

3. Check voltage between push-button ignition switch harness connector and ground.

(+)			Voltage (V)
Push-button ignition switch		(–)	(Approx.)
Connector Terminal			
M101	4	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 6. NO >> GO TO 3.

3.CHECK PUSH-BUTTON IGNITION SWITCH CIRCUIT 1

- 1. Disconnect BCM connector.
- 2. Check continuity between push-button ignition switch harness connector and BCM harness connector.

Push-button ignition switch		всм		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M101	4	M121	60	Existed

3. Check continuity between push-button ignition switch harness connector and ground.

Push-button	Push-button ignition switch		Continuity
Connector Terminal		Ground	Continuity
M101	4		Not existed

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness or connector.

4. CHECK PUSH-BUTTON IGNITION SWITCH OUTPUT SIGNAL 2

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

(+) Push-button ignition switch		(-)	Voltage (V) (Approx.)	
Connector	Terminal		(· .pp/o/)	
M101	4	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

${f 5.}$ CHECK PUSH-BUTTON IGNITION SWITCH CIRCUIT 2

- 1. Disconnect IPDM E/R connector.
- Check continuity between push-button ignition switch harness connector and IPDM E/R harness connector.

Push-button ignition switch		IPDM E/R		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
M101	4	E10	28	Existed	

3. Check continuity between push-button ignition switch harness connector and ground.

Push-button ignition switch			Continuity
Connector Terminal		Ground	Continuity
M101	4		Not existed

	/ITH INTELLIGENT KEY SYSTEM]
the inspection result normal? YES >> GO TO 6.	
NO >> Repair or replace harness or connector. • CHECK INTERMITTENT INCIDENT	
efer to GI-44, "Intermittent Incident".	
>> INSPECTION END	

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B261E VEHICLE TYPE

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B261E VEHICLE TYPE

Description INFOID:000000009722798

There are two types of vehicle.

- HEV
- Conventional

DTC Logic

DTC DETECTION LOGIC

NOTE:

- If DTC B261E is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM: DTC Logic".
- If DTC B261E is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to <u>SEC-33</u>, "BCM: DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B261E	VEHICLE TYPE	Difference of BCM configuration	BCM

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-78, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009722800

1.INSPECTION START

- Turn ignition switch ON.
- Check "Self diagnostic result" with CONSULT.
- 3. Touch "ERASE".
- 4. Perform DTC Confirmation Procedure.

See SEC-78, "DTC Logic".

Is the 1st trip DTC B261E displayed again?

YES >> Replace BCM. Refer to BCS-98, "Removal and Installation".

NO >> INSPECTION END

B210B STARTER CONTROL RELAY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B210B STARTER CONTROL RELAY

Description

Starter control relay, integrated in IPDM E/R, permits the starter relay operation when in N or P position and the steering is locked or unlocked (models with steering lock unit).

DTC Logic

DTC DETECTION LOGIC

NOTE:

If DTC B210B is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "IPDM E/R: DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B210B	STR CONT RLY ON CIRC	IPDM E/R detects that the relay is stuck at ON position even if the followings condition are met for about 1 second. • Starter control relay ON/OFF signal from BCM • Transmission range switch input signal	IPDM E/R

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON.
- 2. Turn ignition switch OFF and wait for 1 second or more.
- 3. Check DTC in "Self Diagnostic Result" mode of "IPDM E/R" using CONSULT.

Is DTC detected?

YES >> Refer to <u>SEC-79</u>, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

1. CHECK SELF DIAGNOSTIC RESULT

Check DTC using CONSULT.

What is the display history of DTC "B210B"?

"CRNT">>> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".

"PAST" >> GO TO 2.

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2.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident"

>> INSPECTION END

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B210C STARTER CONTROL RELAY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B210C STARTER CONTROL RELAY

Description INFOID:000000009722804

Starter control relay, integrated in IPDM E/R, permits the starter relay operation when in N or P position and the steering is locked or unlocked (models with steering lock unit).

DTC Logic

DTC DETECTION LOGIC

NOTE:

- If DTC B210C is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "IPDM E/R: DTC Logic".
- When IPDM E/R power supply voltage is low (Approx. 7 8 V for about 1 second), the DTC B210C may be detected.

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B210C	STR CONT RLY OFF CIRC	IPDM E/R detects that the relay is stuck at OFF position even if the followings condition are met for about 1 second. • Starter control relay ON/OFF signal from BCM • Transmission range switch input signal	IPDM E/R Battery

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Press push-button ignition switch to start engine, and wait 1 second or more.
- 2. Check DTC in "Self Diagnostic Result" mode of "IPDM E/R" using CONSULT.

Is DTC detected?

YES >> Refer to <u>SEC-80, "Diagnosis Procedure"</u>.

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009722806

1.INSPECTION START

- Turn ignition switch ON.
- Check "Self diagnostic result" for IPDM E/R with CONSULT.
- 3. Touch "ERASE".
- 4. Perform DTC Confirmation Procedure.

See SEC-80, "DTC Logic".

Is the DTC B210C displayed again?

YES >> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".

NO >> INSPECTION END

B210D STARTER RELAY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B210D STARTER RELAY

Description INFOID:0000000009722807

Located in IPDM E/R, it runs the starter motor. The starter relay is turned ON by the BCM when the ignition switch is in START position. IPDM E/R transmits the starter relay ON signal to BCM via CAN communication.

DTC Logic INFOID:0000000009722808

DTC DETECTION LOGIC

NOTE:

- If DTC B210D is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "IPDM E/R: DTC Logic".
- If DTC B210D is displayed with DTC B2617, first perform the trouble diagnosis for DTC B2617. Refer to SEC-72, "DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B210D	STARTER RLY ON CIRC	IPDM E/R detects that the relay is stuck at ON position even if the followings condition are met for about 1 second. • Starter control relay ON/OFF signal from BCM • Transmission range switch input	IPDM E/R

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

Turn ignition switch ON.

- Turn ignition switch OFF and wait for 1 second or more.
- Check DTC in "Self Diagnostic Result" mode of "IPDM E/R" using CONSULT.

Is DTC detected?

>> Refer to SEC-81, "Diagnosis Procedure". YFS

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009722809

1. CHECK SELF DIAGNOSTIC RESULT

Check DTC in "Self Diagnostic Result" mode of "IPDM E/R" using CONSULT.

What is the display history of DTC "B210D"?

"CRNT">> GO TO 2.

"PAST" >> GO TO 4.

2.CHECK STARTER RELAY CONTROL SIGNAL CIRCUIT VOLTAGE

Check the voltage between IPDM E/R harness connector and ground.

(+) IPDM E/R		(-)	Condition	Voltage (Approx.)
Connector	Terminal			,
E11	46	Ground	Other than at engine cranking	Battery voltage

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".

NO >> GO TO 3.

3.check starter relay control signal circuit

- Turn ignition switch OFF
- Disconnect IPDM E/R connector and BCM connector. 2.
- Check continuity between IPDM E/R harness connector and ground.

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B210D STARTER RELAY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

IPDI	M E/R		Continuity
Connector Terminal		Ground	Continuity
E11	46		Not existed

Is the inspection result normal?

YES >> Perform the diagnosis procedure for DTC B2608 of BCM. Refer to <u>SEC-68</u>, "DTC Logic".

NO >> Repair or replace harness.

4. CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

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INFOID:0000000009722812

B210E STARTER RELAY

Description

Located in IPDM E/R, it runs the starter motor. The starter relay is turned ON by the BCM when the ignition switch is in START position. IPDM E/R transmits the starter relay ON signal to BCM via CAN communication.

DTC Logic

DTC DETECTION LOGIC

NOTE:

- If DTC B210E is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "IPDM E/R: DTC Logic".
- If DTC B210E is displayed with DTC B2110 for IPDM E/R, first perform the trouble diagnosis for DTC B2110.
 Refer to <u>SEC-87</u>. "DTC Logic".
- If DTC B210E is displayed with DTC B2617 for BCM, first perform the trouble diagnosis for DTC B2617. Refer to SEC-72, "DTC Logic".
- When IPDM E/R power supply voltage is low (Approx. 7 8 V for about 1 second), the DTC B210F may be detected.

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B210E	STARTER RLY OFF CIRC	IPDM E/R detects that the relay is stuck at OFF position even if the followings condition are met for about 1 second. • Starter control relay ON/OFF signal from BCM • Transmission range switch input	IPDM E/R Battery

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Press push-button ignition switch to start engine, and wait 1 seconds or more.
- 2. Check DTC in "Self Diagnostic Result" mode of "IPDM E/R" using CONSULT.

Is DTC detected?

YES >> Refer to <u>SEC-83</u>, "<u>Diagnosis Procedure</u>".

NO >> INSPECTION END

Diagnosis Procedure

1. CHECK SELF DIAGNOSTIC RESULT

Check DTC in "Self Diagnostic Result" mode of "IPDM E/R" using CONSULT.

What is the display history of DTC "B210E"?

"CRNT">> GO TO 3.

"PAST" >> GO TO 2.

2.CHECK BATTERY VOLTAGE

Check the battery voltage.

Which is the measurement result?

More than 12.4 V>>GO TO 5.

Less than 12.4 V>>Perform battery inspection. Refer to PG-3. "How to Handle Battery".

3.CHECK STARTER RELAY CONTROL SIGNAL

Check voltage between IPDM E/R harness connector and ground.

(+) IPDM E/R		(-)	Condition	Voltage (Approx.)
Connector	Terminal			(11 /
E11	46	Ground	Other than at engine cranking	Battery voltage

Is the inspection result normal?

B210E STARTER RELAY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

YES >> GO TO 4.

NO >> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".

4. CHECK STARTER RELAY CONTROL SIGNAL CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect BCM connector and IPDM E/R connector.
- 3. Check continuity between BCM harness connector and IPDM E/R harness connector.

В	ВСМ		IPDM E/R		
Connector	Terminal	Connector	Terminal	Continuity	
M121	52	E11	46	Existed	

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-98. "Removal and Installation".

NO >> Repair or replace harness.

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

B210F SHIFT POSITION/CLUTCH INTERLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B210F SHIFT POSITION/CLUTCH INTERLOCK SWITCH

Description INFOID:0000000009722813

IPDM E/R confirms the shift position with the following signals.

- Transmission range switch
- Shift position signal from BCM (CAN)

DTC Logic INFOID:0000000009722814

DTC DETECTION LOGIC

NOTE:

If DTC B210F is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "IPDM E/R: DTC Logic"

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B210F	INTER LOCK/PNP SW ON	IPDM E/R detects a mismatch between the signals below for 1 second or more. Transmission range switch input signal Shift position signal from BCM (CAN)	Harness or connectors (Transmission range switch circuit is open or shorted) Transmission range switch

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON under the following conditions and wait for at least 1 second.
- Selector lever is in the P or N position.
- Do not depress brake pedal.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-85, "Diagnosis Procedure".

>> INSPECTION END NO

Diagnosis Procedure

1. CHECK DTC WITH BCM

Check "Self diagnostic result" with CONSULT. Refer to BCS-91, "DTC Index".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK TRANSMISSION RANGE SWITCH INPUT SIGNAL

- Turn ignition switch ON.
- 2. Check voltage between IPDM E/R harness connector and ground.

(+) IPDM E/R		(-)	Condition		Voltage (V) (Approx.)	
Connector	Terminal				(11 - 7	
E10	30	Ground	Selector lever	P or N	Battery voltage	
LIO	30	Ground	Selector level	Other than above	0	

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".

NO >> GO TO 3.

${f 3.}$ CHECK TRANSMISSION RANGE SWITCH CIRCUIT

- Turn ignition switch OFF.
- Disconnect TCM connector and IPDM E/R connector. 2.
- Check continuity between IPDM E/R harness connector and TCM harness connector.

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B210F SHIFT POSITION/CLUTCH INTERLOCK SWITCH T DIAGNOSIS > [WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

IPDN	IPDM E/R		TCM	
Connector	Terminal	Connector	Terminal	Continuity
E10	72	F23	20	Existed

4. Check continuity between IPDM E/R harness connector and ground.

IPDN	M E/R		Continuity
Connector Terminal		Ground	Continuity
E10	72		Not existed

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".

NO >> Repair or replace harness or connector.

B2110 SHIFT POSITION/CLUTCH INTERLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2110 SHIFT POSITION/CLUTCH INTERLOCK SWITCH

Description INFOID:0000000009722816

IPDM E/R confirms the shift position with the following signals.

- Transmission range switch
- Shift position signal from BCM (CAN)

DTC Logic INFOID:0000000009722817

DTC DETECTION LOGIC

NOTE:

If DTC B2110 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "IPDM E/R: DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2110	INTER LOCK/PNP SW	IPDM E/R detects mismatch between the signals below for 1 second or more. • Transmission range switch input signal • Shift position signal from BCM (CAN)	Harness or connectors (Transmission range switch circuit is open or shorted) Transmission range switch IPDM E/R BCM

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- Turn the ignition switch ON under the following conditions and wait for at least 1 second.
- Selector lever is in the P or N position.
- Do not depress brake pedal.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-87, "Diagnosis Procedure".

>> INSPECTION END NO

Diagnosis Procedure

1. CHECK DTC WITH TCM

Check "Self diagnostic result" with CONSULT. Refer to TM-128, "DTC Index".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK TRANSMISSION RANGE SWITCH INPUT SIGNAL

- Turn ignition switch ON.
- 2. Check voltage between IPDM E/R harness connector and ground.

(+) IPDM E/R		(–)	Condition		Voltage (V) (Approx.)
Connector	Terminal				() [
E10	30	Ground	Selector lever	P or N	Battery voltage
LIU	30	Ground	Selector level	Other than above 0	0

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".

NO >> GO TO 3.

3.check transmission range switch circuit

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B2110 SHIFT POSITION/CLUTCH INTERLOCK SWITCH DIAGNOSIS > [WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

- . Turn ignition switch OFF.
- 2. Disconnect TCM connector and IPDM E/R connector.
- 3. Check continuity between IPDM E/R harness connector and TCM harness connector.

IPDI	M E/R	TO	Continuity	Continuity
Connector	Terminal	Connector Terminal		Continuity
E10	72	F23	20	Existed

4. Check continuity between IPDM E/R harness connector and ground.

IPDI	M E/R		Continuity	
Connector Terminal		Ground	Continuity	
E10	72		Not existed	

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".

NO >> Repair or replace harness or connector.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM: Diagnosis Procedure

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1. CHECK FUSE AND FUSIBLE LINK

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

Signal name	Fuse and fusible link No.
Ratton, power cumby	L
Battery power supply	10

Is the fuse fusing?

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

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

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

Is the measurement value normal?

>> GO TO 3. YES

NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector Terminal		Ground	Continuity	
M119 13			Existed	

Does continuity exist?

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YES >> INSPECTION END

NO >> Repair harness or connector.

IPDM E/R

IPDM E/R : Diagnosis Procedure

1. CHECK FUSES AND FUSIBLE LINK

Check that the following IPDM E/R fuses or fusible links are not blown.

Signal name	Fuses and fusible link No.
	E
Battery power supply	50
	51

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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 the ignition switch OFF.
- 2. Disconnect IPDM E/R connector.
- 3. Check voltage between IPDM E/R harness connector and the ground.

(1	+)	(-)	Voltage (Approx.)
IPDN	И E/R		
Connector Terminal		Ground	
E9 1		Glound	Battery voltage

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair the harness or connector.

3. CHECK GROUND CIRCUIT

Check continuity between IPDM E/R harness connectors and the ground.

IPDM E	E/R		Continuity
Connector Terminal		Ground	Continuity
E10	12	Giodila	Existed
E11	41		Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair the harness or connector.

SECURITY INDICATOR LAMP

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

SECURITY INDICATOR LAMP

Description

- Security indicator lamp is located on instrument panel assembly.
- NVIS (Nissan Vehicle Immobilizer System-NATS) and vehicle security system conditions are indicated by blink or illumination of security indicator lamp.

Component Function Check

1. CHECK FUNCTION

- Perform "THEFT IND" in the "ACTIVE TEST" mode with CONSULT.
- 2. Check security indicator lamp operation.

Test item		Description	
THEFT IND	ON	Socurity indicator lamp	Illuminate
THEFTIND	OFF	Security indicator lamp	Not illuminate

Is the inspection result normal?

YES >> INSPECTION END

NO >> Go to SEC-91, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK SECURITY INDICATOR LAMP POWER SUPPLY CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect security indicator lamp connector.
- 3. Check voltage between security indicator lamp harness connector and ground.

(+) Security indicator lamp		(-)	Voltage (V) (Approx.)
Connector Terminal			(11 - 7
M100	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 2.

NO-1 >> Check 10A fuse [No. 9, located in the fuse block (J/B)].

NO-2 >> Check harness for open or short between security indicator lamp and fuse.

2.CHECK SECURITY INDICATOR LAMP SIGNAL

- 1. Connect security indicator lamp connector.
- 2. Disconnect BCM connector.
- Check voltage between BCM harness connector and ground.

	(+)		\/oltogo (\/\
В	CM	(–)	Voltage (V) (Approx.)
Connector	Terminal		, , ,
M123	141	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-98, "Removal and Installation".

NO >> GO TO 3.

${f 3}$. CHECK SECURITY INDICATOR LAMP SIGNAL CIRCUIT

- Disconnect security indicator lamp connector.
- Check continuity between security indicator lamp harness connector and BCM harness connector.

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SECURITY INDICATOR LAMP

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Security in	dicator lamp	В	CM	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M100	2	M123	141	Existed

3. Check continuity between security indicator lamp harness connector and ground.

Security in	dicator lamp		Continuity
Connector	Terminal	Ground	Continuity
M100	2		Not existed

Is the inspection result normal?

YES >> Replace security indicator lamp. Refer to <u>SEC-192</u>, "Removal and Installation".

NO >> Repair or replace harness.

KEY WARNING LAMP

DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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KEY WARNING LAM	P		Δ.
Description		INFOID:0000000009722	A 22824
Performs operation method gu	ide and wa	rning together with buzzer.	В
Component Function C	heck	INFOID:000000009722	
1.CHECK FUNCTION			
Check the operation with "INDI	CATOR" in	"Active Test" mode with CONSULT.	
Test item		Condition	
INDICATOR	KEY ON	Key warning lamp illuminates	
INDIO/NOIX	KEY IND	Key warning lamp flashes	Е
Is the inspection result normal? YES >> Key warning lamp NO >> Refer to SEC-93, " Diagnosis Procedure	in combina		F 22826
1. CHECK KEY WARNING LA	MP		G
Refer to MWI-4. "Work flow". Is the inspection result normal? Yes >> GO TO 2. No >> Repair or replace I	_	a lamp circuit.	 -
2.CHECK INTERMITTENT IN	, ,	, .ap	1
Refer to GI-44, "Intermittent Inc	<u>cident"</u> .		
>> INSPECTION END)		J
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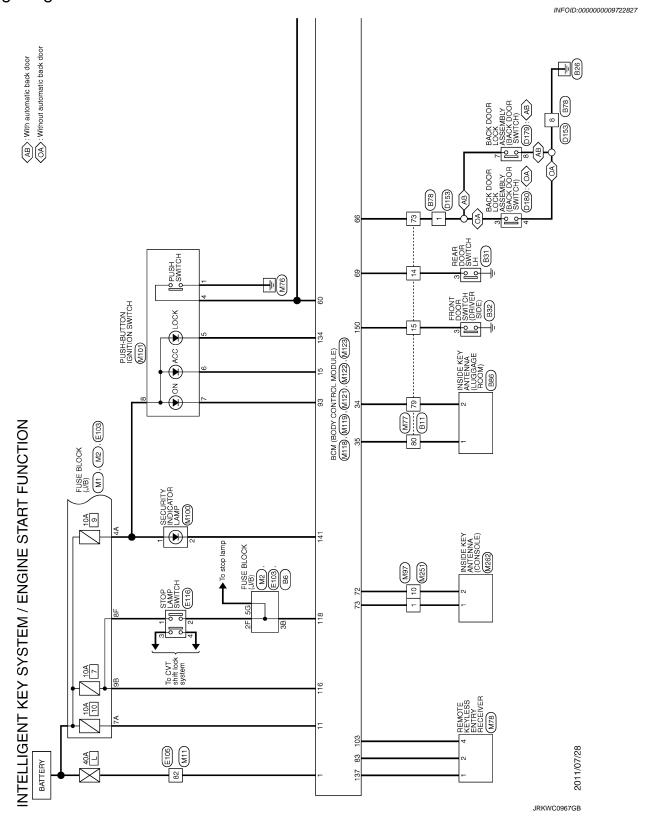
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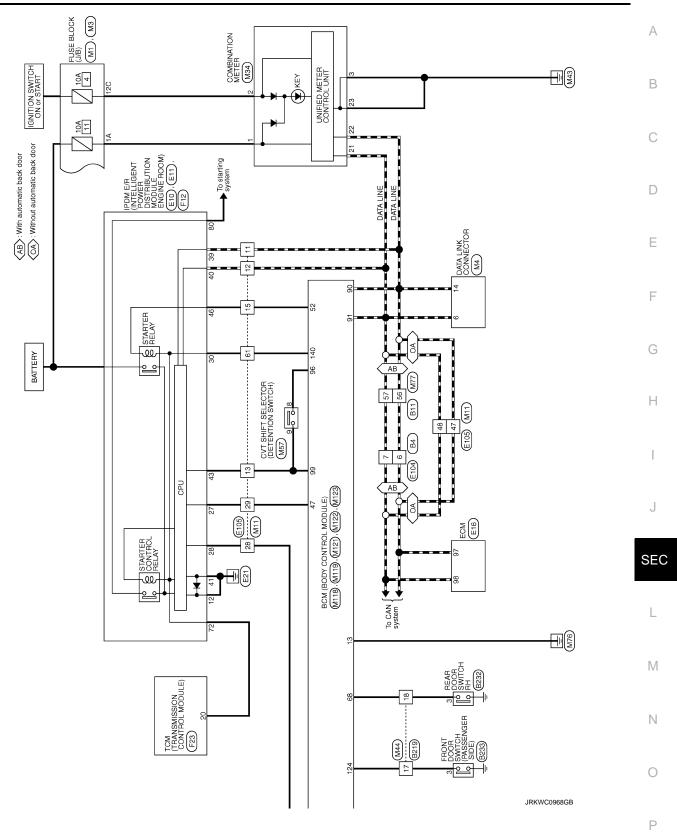
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INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

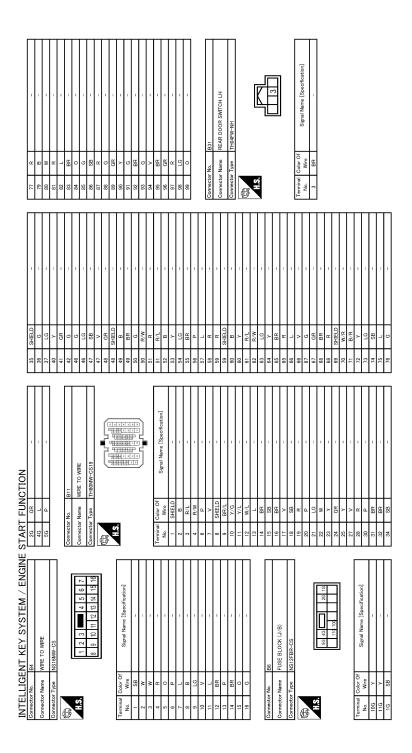
Wiring Diagram - INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION -



INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION IT DIAGNOSIS > [WITH INTELLIGENT KEY SYSTEM]



INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION T DIAGNOSIS > [WITH INTELLIGENT KEY SYSTEM]



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INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION T DIAGNOSIS > [WITH INTELLIGENT KEY SYSTEM]

Connector Nume WIRE TO WIRE Connector Type NISI 6FW-CS 1 2 3 4 5 7 8 7 8 9 10 111 151 14 15	Terminal Color Of Signal Name (Specification] 1
30 P -	Terminal Code Of Signal Name (Specification) 3 Wre E233 Connector Name PRONT DOOR SWITCH (PASSENGER SIGE) Connector Type Priod/PV-AH No. Wive Signal Name (Specification) 3 R R Signal Name (Specification)
Connector Nume 1886 Connector Nume 1886 Connector Nume 1886 Connector Type RKUZFGY A.S. A.S. A.S. A.S. A.S. A.S. A.S. A.S	Ferminal Color Of Signal Name [Specification] Ferminal Connector No. R219 Connector No. R220MV-NH Connector No. Con
INTELLIGENT KEY SYSTEM / ENGINE Connector No. 822 Connector Nume FRONT DOOR SWITCH (DRIVER SIDE) Connector Type THOIFIN-HH (4.8)	Connector No. B78 Connector No. Connec

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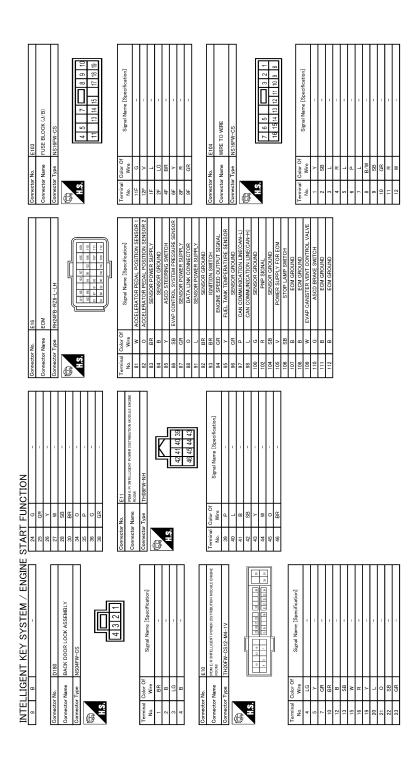
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INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION IT DIAGNOSIS > [WITH INTELLIGENT KEY SYSTEM]



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INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION T DIAGNOSIS > [WITH INTELLIGENT KEY SYSTEM]

14 V 15 Y 16 L	,							25	TRANSMISSION RANGE SWITCH 3 (MONITOR)
Н	_	9	R	-		IPOM E/R (INTELLICENT POWER DISTRIBUTION MODULE ENGINE	2	8	GROUND
_		62	0	-	Connector Name	RODM	7	*	SENSOR GROUND
	1	63	2	1	Connector Type	TH20FW-CS12-M4	00	M/9	CLOCK (SEL 2)
		64	SHELD	,	(6	ΓR	CHIP SELECT (SEL 1)
		99	*	1	B		10	BR/R	DATA I/O (SEL 3)
Connector No.	E105	67	BR	,	٠ -		Ξ	BR/W	TRANSMISSION RANGE SWITCH 1
2	CE JOHN	89	>	1	11.0	2 2 2 3 3 3	13	>	CVT FLUID TEMPERATURE SENSOR
cor Name	WINE TO WINE	69	SB	-		8 2 2	4	R/W	PRIMARY PRESSURE SENSOR
Connector Type	TH70MW-CS10-M3	70	GR	-			15	W/W	SECONDARY PRESSURE SENSOR
		71	SB				19	G/B	REVERSE LAMP RELAY
		72	>				50	R/B	STARTER RELAY
Ě		73	_	-	Terminal Color (Of Size 18, [8	52	W/R	SENSOR GROUND
7	111	74	>	1	No. Wire		56	ς/	SENSOR POWER
	1113 41 × 1113 1113	75	ä	1	48 W	1	27	B/G	STEP MOTOR D
	2 3 3 7 3 4 4	9/	GR	-	49 R/B	-	28	ď	STEP MOTOR C
		7.7	0	-	51 LG	-	59	0/B	STEP MOTOR B
		78	9	- [With iPod without navigation system]	52 Y/G	-	30	G/R	STEP MOTOR A
Terminal Color Of	J	78	>	- [Without iPod and navigation system]	53 R/W		31	۵	CAN-L
Wire	Olgran Ivania Lopecincation	78	۰	- [With navigation system]	54 G/W	-	32	7	CAN-H
>	-	79	>	-	22 M/L	-	33	PI	PRIMARY SPEED SENSOR
ΓC	-	80	œ	_	56 R/Y	-	34	LG/R	SECONDARY SPEED SENSOR
GR	-	81	W	-	57 0	-	37	N/R	LOCK-UP SELECT SOLENOID VALVE
9	-	82	57	-	58 Y	-	38	M/T	TORQUE CONVERTER CLUTCH SOLENOID VALVE
Ь	-	83	0		8/M 69		38	W/B	SECONDARY PRESSURE SOLENOID VALVE
٦	-				70 0	-	40	R/Y	LINE PRESSURE SOLENOID VALVE
Υ	-				72 R/B	-	42	В	GROUND
0	-	Connector No.	r No.	E116	75 LG	-	46	٨	POWER SUPPLY
BR	-	Connector Name	- Mama	STOP I AMP SMITCH	76 SB	-	47	L/R	POWER SUPPLY (MEMORY BACK-UP)
>	-		2		_	1	48	>	POWER SUPPLY
BR	1	Connector Type	r Type	M04FW-LC	80 B				
۵	1	Q							-
_	1	MH					Connector No.	or No.	Mī
0		S		ŀ	Connector No.	F23	Connec	Connector Name	FUSE BLOCK (J/B)
8 :	-		_	3 4	Connector Name	TCM (TRANSMISSION CONTROL MODULE)		,	
*	'			1 2			Connec	Connector Type	NS06FW-M2
>	1			7	Connector Type	RH40FB-RZ8-L-RH	ą		
œ .					Q.		李		
4	1				distrib		(S)		3A T 2A 1A
ω	1	Terminal	<u> </u>	Signal Name [Specification]	S	31 32 33 34 37 38 39 40 47 48			
۵	1	O	Wire	,		8			84 7A 6A 5A 4A
-	1	-	œ	1		11 13 14 15 19 20			
SB	_	2	FG	_		1 2 3 4 5 7 8 9 10 42]
GR		3	9						
Ρ		4	>				Terminal	Color Of	3
>	-				Terminal Color Of		ò	Wire	olgnal Name [opecification]
g	,				No. Wire	Signal Name [Specification]	4	>	
ä					1 P/B	TRANSMISSION RANGE SWITCH 2	2A	o	
>					2 D/I	Ĺ	3.4	>	
///					t	L	44	g	1
					┨	4	F	5	

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INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION	START FUNCTION Connector No. M4	50	>	-[With colour display]	Connector No.		M34
+	Т	8	- 8	_[with colour display]	200	ı	MOT
8A Y ==	Connector Name DATA LINK CONNECTOR	7 20	H 0		Connector Name	or Name	COMBINATION METER
	Connector Type BD16FW	27	2 >		Connector Type	r Type	THADEW:NH
Connector No. M2		25	-	1			
Т		28	BR		Œ		
Connector Name FUSE BLOCK (J/B)		50	i -				
Consector Time Metodal-ne		9			2		<u> </u>
7		3 8	2 0				1 2 3 4 5 8 9 10 11 12 13 14 15 18 19 20
1	0 4 9 9 7	3 8	-				2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
至五	_	S .	_	1			
		9		1			
		47	a				
10 7 8 5	la O	48		1	Terminal	0_	Signal Name [Specification]
200	No. Wire	49	×	1	o N	Wire	
	3 LG -	20	GR	-	-	≻	BATTERY POWER SUPPLY
	4 B -	21	FG	-	2	FG	IGN SIGNAL
Terminal Color Of	- B	25		1	8	В	GROUND
No. Wire Signal Name [Specification]	7 9	23	>		4	В	GROUND
- N	7 BR -	54	SB		ß	SB	ILLUMINATION CONTROL SIGNAL
38	9	22	۵.		00	SB	TRIP RESET SIGNAL
- u	- 88	25	5	1	σ	W	SW II I POWER
1 22	- d	9	>		ç	2	METER CONTROL SWITCH GROUND
3 g	+	2	. 0		2 =	3 -	ENTED SIGNAL
+		5 8	6		- 5	،	CALLOS CONTROL COLOR
- R		70	H :	1	7 0,	r :	SELECT SWITCH SIGNAL
+	ſ	7	>	1	5	>	ILLUMINATION CONTROL SWITCH SOCIAL (+) (Fifth autematic drive positionary)
9B GR -	Connector No. M11	┪	SHIELD	1	14	GR	ILLUMINATION CONTROL SWITCH SIGNAL (-)
	Connector Name WIRE TO WIRE	99	M	1	15	æ	AIR BAG SIGNAL
	П	29	œ	-	18	_	AMBIENT SENSOR SIGNAL
Connector No. M3	Connector Type TH70FW-CS10-M3	89	W	1	19	۵	AMBIENT SENSOR POWER
Connector Name FLISE BLOCK (1/B)	ó	69	Ь	-	50	>	AMBIENT SENSOR GROUND
	d	70	G	-	21	٦	CAN-H
Connector Type NS12FW-CS	F. B.	71	5		22	۵	CAN-L
	## ## ## ## ## ##	72	BR	1	23	8	GROUND
B	H	73			54	Α	FUEL LEVEL SENSOR GROUND
		74	W		25	ä	ALTERNATOR SIGNAL
	1	75	BR.	1	56	9	PARKING BRAKE SWITCH SIGNAL
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	_	76	œ	-	27	>	BRAKE FLUID LEVEL SWITCH SIGNAL
7 10616 1	Terminal Color Of	7.7	5		59	œ	WASHER LEVEL SWITCH SIGNAL
	No. Wire Signal Name [Specification]	78	>-	1	30	۵	VEHICLE SPEED SIGNAL (2-PULSE)
	3 b	79	ŋ	1	31	>	VEHICLE SPEED SIGNAL (8-PULSE)
Terminal Color Of Size Name [Sacrification]	5 BR -	80	а	1	32	PΠ	OVERDRIVE CONTROL SWITCH SIGNAL
No. Wire Signal Name [Specification]	2	81	W	-	34	9	FUEL LEVEL SENSOR SIGNAL
10C SB -	- 5 9	82	W	1	32	SB	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)
11C R -	- B	83	BG		36	ч	SEAT BELT BUCKLE SWITCH SIGNAL (PASSENGER SIDE)
┡	- b						
F	12 L						
H							
H	14 Y –						
- GR	15 R						
\cdot	H						

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INTELLIGENT KEY SYSTEM/ENGINE < DTC/CIRCUIT DIAGNOSIS >	START FUNCTION [WITH INTELLIGENT KEY SYS
Without automatic drive positioner	
65	
	ПППП

-	1		_				1	_	1	-						1							'	1		_	1		1	1			1		1	1	1	1	1			1		ı	1	1	1	_		1		1		-
۵	: >	,	۵	۵	-	3	>	BR	DT	SB	>	,	-	œ	>	W	æ	>	α	c	,	- 6	ž	LG	SB	g	97	SB	>	GR	SHELD	H	œ	Ρ	œ	œ	>		BR		c	0	ŀ	, ,	2	œ	SHELD	В	>	œ	W	PP	>	٥
16	1		18	19	ç	3	21	22	23	24	25	-6	/7	28	30	31	32	34	35	36	3 8	ò	40	4	42	46	46	47	47	48	48	49	49	20	20	51	51	52	23	5.5	ų	3 4	22	5 6	8	28	29	9	9	61	62	63	64	8.

焸	START		UNCTION
_	Connector	r No.	M57
	Connector Name	- Name	CVT SHIFT SELECTOR
_	Connector Type	r Type	TK10FW
1 —	H.S.		1 4 6 8 9 9
_	Terminal No.	Color Of Wire	Signal Name [Specification]
_	-	57	1
_	4	_	1
_	9	۵	1
_	7	В	
_	80	٨	
_	6	۸	-
_	Connector No.	r No.	M77
	Connector Name	r Name	WIRE TO WIRE
_			1
_	Connector	r Type	TH80FW-CS19
	H.S.		
_	Terminal	Color Of	Signal Name [Specification]
	No.	Wire	1
	-	SHIELD	
	2	8	1
	9	*	1
	4	ď	1
	9	Α	ı
	7	g	1
	80	SHIELD	ı
	6	۸	
	0 :	œ (
	= 6	5 a	
	5		1
	4	α	1
	15	SB	

TEM / ENGIN		1
NAT KEY SYS Meta Meta Thrasewath Thrasewath Signal Name Signal Name	1	
No.	>	
INTELLIC Commercion No. Commercion Types Color Color	32	

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INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION T DIAGNOSIS > [WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION Connector No. M73	E START FUNCTION Connector No. M100	Connector No. M118	Connector No. M121	
	Connector Name SECURITY INDICATOR LAMP	Connector Name BCM (BODY CONTROL MODULE)	Connector Name BCM (BODY CONTROL MODULE)	JLE)
Connector Type JAB04FB	Connector Type TK02FBR	Connector Type M03FB-LC	Connector Type TH40FGY-NH	
\[\frac{1}{4} \]	H.S.	S. T.	H.S.	35 19
		7	(2) (2) (2) (3) (3) (4) (4) (4) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5	28
Ferminal Color Of Signal Name [Specification] Nire Nire Signal Name Specification Signal Name Specification Nire Specification Nire Specification Nire Specification Nire Specification Specification	Terminal Color Of Signal Name [Specification]	Terminal Golor Of Signal Name [Specification] No. Wire	Terminal Golor Of Signal Name [Specification] No.	ication]
П	Н	*	8	ANT-
2 P SIGNAL +12V	2 0 2	3 I POWER WINDOW POWER SUPPLY (BAT)	38 LUGGAGE RUMPER ANT-	ANI+
			BR	NT+
N	Connector No. M101	N	101	R) CONT
_	Connector Name PUSH-BUTTON IGNITION SWITCH	Т	60 BR PISH SW	CON
Connector Name WIRE TO WIRE	Connector Type TK08FBR	Connector Name BCM (BODY CONTROL MODULE)	R BACK	EQUEST SW
Connector Type TH18FW-CS2	1	Connector Type NS16FW-CS	GR	ZER
		1	65 O REAR WIPER STOP POSITION	NOTTION
	1 1 2 3	ditth	65 T BACK DOOR OPENED SW	ED CW
	2 7 2 2 7	H.S.	} ≥	SW
2 3 4 5 6 7 9	200	200 00000000000000000000000000000000000	Н	SW
19 11 12 13 14 15 16 20		71 01 +		
	le C		Connector No. M122	
Terminal Color Of Signal Name [Specification] No. Wire	No. Wire	Terminal Color Of Signal Name [Specification] No. Wire	Connector Name BCM (BODY CONTROL MODULE)	(a)
$^{+}$	2 0 -	+	Connector Type TH40FB-NH	
M	3 W	PASSENC	Ó	
SHELD -	7 BR	7 W STEP LAMP CONT		
1	t	9 G DRIVER DOOR, FUEL LID UNLOCK OUTPUT	E S	
H	- d /	t		22 22 22 24 24 25 26
10 B	8 GR	11 LG BAT (FUSE)	110 120 120 120 120 120 120 120 120 120	*
13 SHIELD -		13 B GROUND		
+		O PUSH-BUTTO	-	
15 B		15 L ACC IND	Terminal Color Of Signal Name [Specification]	ication]
Т		P. B.	$^{+}$	
		\ NI	W	
			٨	S ANT-
			75 LG PASSENGER DOOR ANT	ANT+
				- IN

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INTE	LLIGE	NTELLIGENT KEY SYSTEM / ENGINE	STAR	T FU	START FUNCTION		
80	SB	NATS ANT AMP.	138	۸	RECEIVER/SENSOR POWER SUPPLY	Connector No. M262	
81	0	NATS ANT AMP.	139	0	TIRE PRESS RECEIVER COMM	Canada Name New ANTENNA (CONSOLE)	ú
82	BR	IGN RELAY (F/B) CONT	140	GR	SHIFT N/P		, TE
83	۵	KEYLESS ENTRY RECEIVER COMM	141	0	SECURITY IND LAMP CONT	Connector Type RK02FGY	
87	ч	COMBI SW INPUT 5	145	_	COMBI SW OUTPUT 5	4	
88	GR	COMBI SW INPUT 3	143	٨	COMBI SW OUTPUT 1	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
90	Ь	CAN-L	144	Ь	COMBI SW OUTPUT 2	≪	
91	٦	CAN-H	145	>	COMBI SW OUTPUT 3		
95	œ	KEY SLOT ILL CONT	146	>-	COMBI SW OUTPUT 4		
93	Ь	ON IND	120	SB	DRIVER DOOR SW		
92	1	ACC RELAY CONT	151	9	REAR WINDOW DEFOGGER RELAY CONT		
96	>	CVT SHIFT SELECTOR POWER SUPPLY					
66	>	SHIFT P				lal C	ation
100	Р	PASSENGER DOOR REQUEST SW	Connector No.	or No.	M251	No. Wire	hione
101	W	DRIVER DOOR REQUEST SW		Occupant None	3dM OT 3dM	1 W	
102	٨	BLOWER RELAY CONT	00	a Marine	WINE IO WINE	2 B -	
103		KEYLESS ENTRY RECEIVER POWER SUPPLY	Connect	Connector Type	TH18MW-CS2		
107	0	COMBI SW INPUT 1	ı				
108	Ь	COMBI SW INPUT 4	B				
109	SB	COMBI SW INPUT 2	, T				
110	g	HAZARD SW	2	_			
					1 4 5 6 8 9 T		
					12 18 18		
Connector No.		M123			2		
Connector Name	r Name	BCM (BODY CONTROL MODULE)					
F			l erminal	Solor C	Signal Name [Specification]		
Connect	adki	I H40FG-NH	NO.	MILE			
Œ			- -	* }	1		
ます			7 (E 10			
S .		[. ء	SHELD	1		
			œ	Μ			
		22 St.	80	SHELD	1		
		20 00 00 00 00 00 00 00 00 00 00 00 00 0	6	ŋ	1		
			10	В	-		
			13	SHIELD	-		
Terminal	Color Of	[14	ď	-		
No.	Wire	Olgon Ivalic Coperingation	15	В			
112	ч	RAIN SENSOR SERIAL LINK	11	SHIELD			
113	B/B	OPTICAL SENSOR	18	ď	1		
116	GR	STOP LAMP SW 1					
118		STOP LAMP SW 2					
119	Μ	DR DOOR UNLOCK SENSOR					
121	>	KEY SLOT SW					
123	9	IGN F/B					
124	ď	PASSENGER DOOR SW					
130	BR	REAR DEFOGGER SW					
132	ŋ	POWER WINDOW SW COMM					
133	W	PUSH-BUTTON IGNITION SW ILL POWER					
134	ď	LOCK IND					
137	Р	RECEIVER/SENSOR GND					

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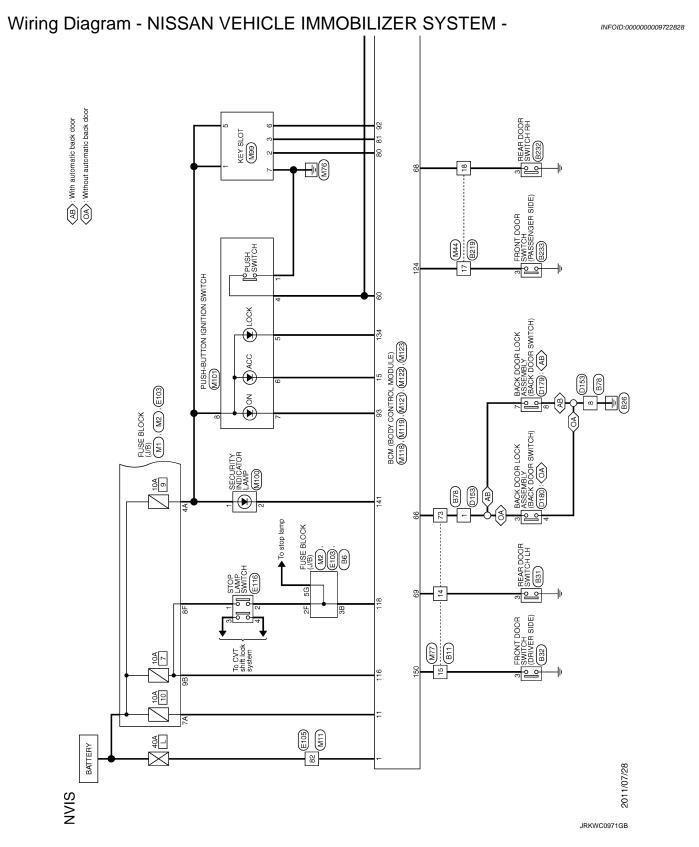
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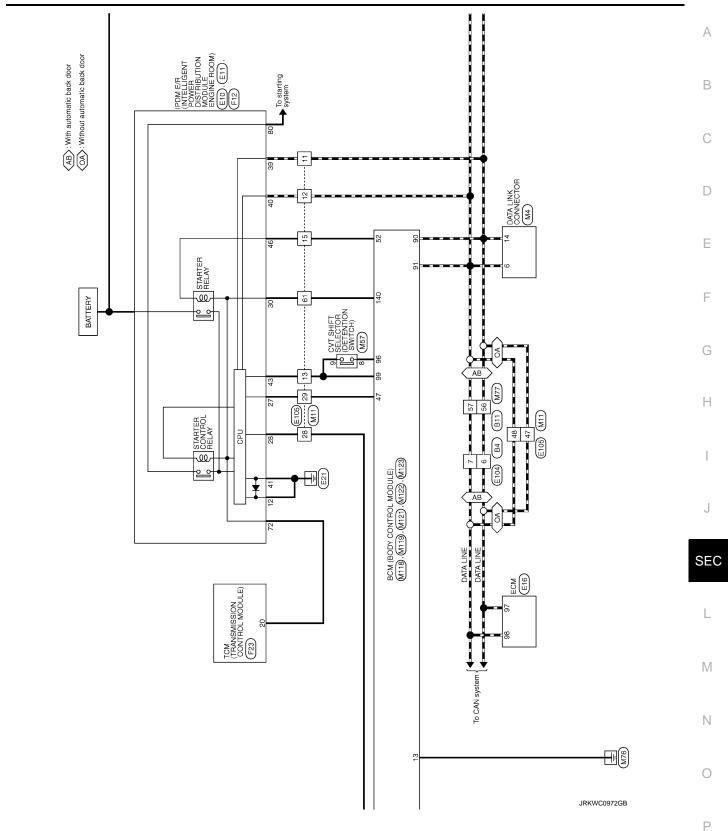
Revision: 2013 August SEC-103 2014 MURANO

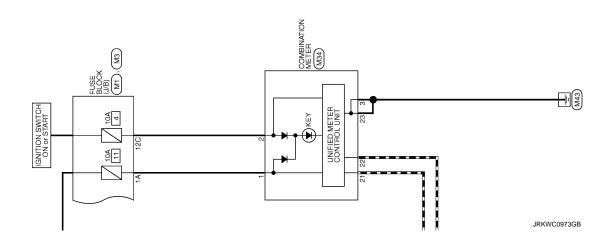
NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS



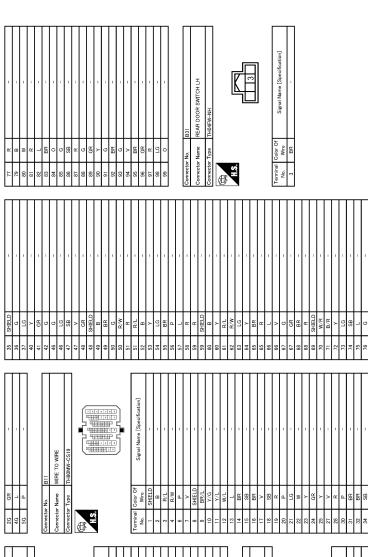
NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

[WITH INTELLIGENT KEY SYSTEM]





NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS < DTC/CIRCUIT DIAGNOSIS > [WITH INTELLIGENT KEY SYSTEM]



1	ļ				Ē					L			L			L		l	⅃				\perp	L	L	Ш			L	l
	Signal Name [Specification]	1	1	1			-	-	-	-		1		-	-	1	-	0	89	FUSE BLOCK (J/B)	NS12FBR-CS			56 46	116 106		Signal Name [Specification]	-	1	
	Color Of Wire	SS SS	*	>	œ	0	а	٦	В	PT	>	٦	BR	Д	BR	0	9	N.	No.	. Name	Type						Color Of Wire	٨	۰	ŀ
	Terminal No.	-	2	9	4	2	9	7	8	6	10	11	12	13	14	12	16	Connection	Confriector No.	Connector Name	Connector	Œ	H.S.				Terminal No.	10G	116	

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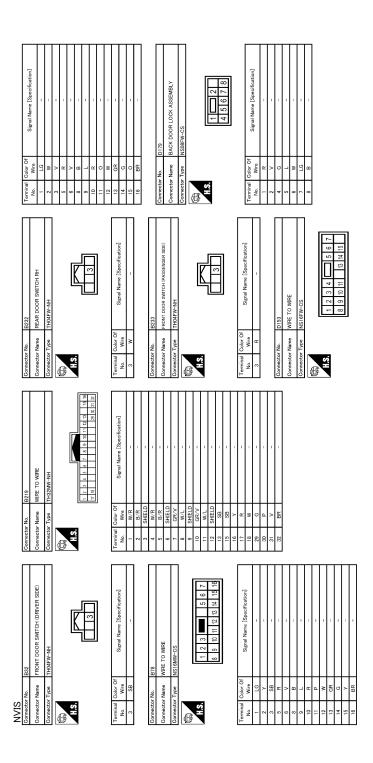
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NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS (WITH INTELLIGENT KEY SYSTEM)

Oometter No. E104 Connector Name WIRE	Connector Type INST IETH-CS 14 15 12 11 10 9 8	Terminal Color Of Signal Name [Specification] No. Wire Signal Name [Specification]	8 8 8 W	Connector No. E103
84 B SENSOR GROUND 85 Y ASOD STREERING SWITCH 86 SB EVAP CONTROL SYSTEM PRESSURE SENSOR	97 QR SERISOR POUNE SUPPLY	_ O & 88 > 88 a a ≥	ttor Type NS	H S T
27 W - 28 SB - 30 BR -	34 0	Commercior Type ThisBFW-NH H.S. 42 41 40 33 45 44 43 45 45 45 45 45 45 45 45 45 45 45 45 45	Terrinal Coler Of Signal Name [Specification] Wire Wire Signal Name [Specification]	Commetor Name EOM
NVIS Connector No. D180 Connector Name BACK DOOR LOOK ASSEMBLY	Commetter Type INSO4FW-CS	Terminal Ware Signal Name (Specification) 1	9 0	Reminal Color Of Signal Name [Specification] Color Of Signal Name [Specification] Color Of Signal Name [Specification] Color Of Color Of

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X add to dimod	POWER SUPPLY	POWER SUPPLY (MEMORY BACK-UP)	11110001		M1	FIISE BLOCK (1/B)		NS06FW-M2				0.0 PM	8A 7A 6A 5A 4A				Signal Name [Specification]		1		1	1	,			M2	FUSE BLOCK (J/B)	NS10FW-CS				1 2 1	7 8 7	1		3 3 3	Signal Name [Specification]	1	1	-	-	1	1	-	
,	, (۲,	-			Connector Name	2	Connector Type	•		,,	9					al Color Of)	- 0	>	GR	DΠ	>			Connector No.	Connector Name	Connector Type	1			9				al Color Of		W	1	9	_	>	œ	œ	GR
	40	47	P		Connector No.	Connec	í	Connec	ģ	厚	S 11/					ļ	Ierminal	-	¥ ₹	34	4 _A	A7	8A			Connec	Connec	Connec		修	Sil	Ĭ				Terminal	No	#	38	48	2B	99 9	<u>e</u>	88	9B
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9	3 8	88 89	6			П		П									2		B/B	/d	0/5	GR	В	*	W/S	2	BR/R	>	R/W	W/W	G/B	R/B	W/R	92	2 0	9/0	G/R	a.	_	PΠ	LG/R	N/R	N S	W/B	ΡV
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ŀ	23 0 2		Connector No. E116	LICTING GIAN LICETS		Connector Type M04FW-LC			Ī	3 4	4	7 1			Ferminal Color Of Signal Name [Specification]	+	x :					Connector No. F12	Connector Name IPOM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE	П	Connector Type TH20FW-CS12-M4			N 00 00 00 00 00 00 00 00 00 00 00 00 00					la In	Wire	48 W =	t	Ĺ	┝	54 G/W -	Н	R/Y	2	+	7	- 0 02
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NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS (WITH INTELLIGENT KEY SYSTEM)

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Connector Type	NS12FW-CS	Connector Type	r Type	TH70FW-CS10-M3	89	H	1	23	8	GROUND
		4			69	۵		24	۸	FUEL LEVEL SENSOR GROUND
B		B			70	5	1	25	BR	ALTERNATOR SIGNAL
Ę	Ę	ŧ		F F F F	7.1	9		56	9	PARKING BRAKE SWITCH SIGNAL
ė	1 3 6 9	2	_		72	F		27	>	BRAKE FLUID LEVEL SWITCH SIGNAL
	4 5 0 2 2			11 	73	-		59	α	WASHER LEVEL SWITCH SIGNAL
	0				17	3		S	۵	VEHICLE SPEED SIGNAL (9-PLILSE)
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					(2)	+		5	>	VEHICLE SPEED SIGNAL (8-PULSE)
					⁷⁶	-		35	PC	OVERDRIVE CONTROL SWITCH SIGNAL
<u>в</u>	Of Signal Name [Specification]	Terminal	0	Signal Name [Specification]	77		1	34	9	FUEL LEVEL SENSOR SIGNAL
_	Company of the Compan	No.	Wire	District Color of the Color of	78	X	_	35	SB	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)
10C SB	-	8	Д	-	79	9	-	36	œ	SEAT BELT BUCKLE SWITCH SIGNAL (PASSENGER SIDE)
11C R	-	ı,	BR		80	œ	1			
12C 0	-	2	0	-	18	W				
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No	Signal Name [Specification]	2			ľ		TON STOWN		: La	
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9		23	>	-	10	97	METER CONTROL SWITCH GROUND	12	SHIELD	1
11 SB	1	54	SB		Ξ	٦	ENTER SWITCH SIGNAL	13	۵	
14 P		22	a	1	12	α	SELECT SWITCH SIGNAL	15	ŊΠ	1
7	1	26	PΠ	ı	13	>	ILLUMINATION CONTROL SMITCH SIGNAL (+) [With subsensitic drive positioner]	16	_	ı
		09	>		1.4	GR	ILLUMINATION CONTROL SWITCH SIGNAL (=)	17	œ	
		61	GR		15	╀	AIR BAG SIGNAL	82	*	1
		62	æ	-	2	┝	AMBIENT SENSOR SIGNAL	58	-	•
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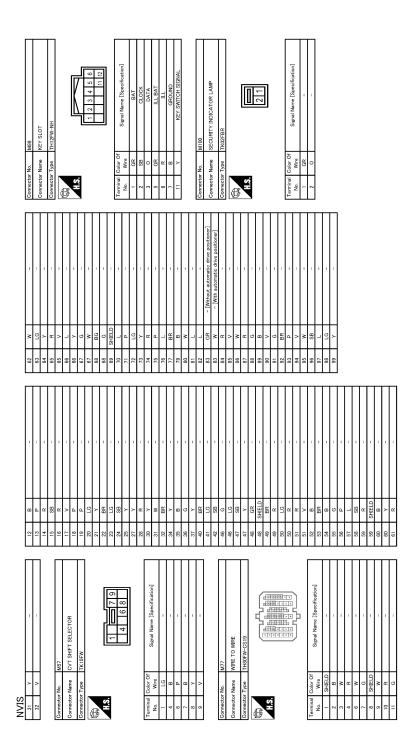
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13 6 PUSH-BUTTON STORM LOND 170 170 18 171 18 18 171 18 18
14 0 PLISH-BUTTON LOWILL GND 72 W FOOM ARTI- 132 G R 15 L TURK SIGNAL, RH 74 W PASSENGE DOOR ARTI- 132 G 18 Y TURK SIGNAL, RH 74 Y PASSENGE DOOR ARTI- 134 R 19 Y TURK SIGNAL, RH 74 Y PASSENGE DOOR ARTI- 134 R 10 Connector Name BOM BOOY CONTROL MODULE) 89 C C C C 10 Connector Name BOM BOOY CONTROL MODULE) 89 C C C C 10 Connector Name BOM BOOY CONTROL MODULE) 89 C C C C 11 Connector Name BOM BOOY CONTROL MODULE) 89 C C C C 12 C TURK SIGNAL RH 142 C 13 Y PASSENGE DOOR ARTI- 139 V 14 C C C C C 15 C C C C 15 C C C C 16 C C C C 17 C TURK SIGNAL RH 142 C 18 C C C C C 19 Y PASSENGE DOOR ARTI- 139 V 10 C C C C C 10 C C C C C 11 C C C C 12 C C C C 13 C C C C 14 C C C 15 C C C 15 C C C 16 C C C C 17 C TURK SIGNAL RH 134 R 18 C C C C 19 Y PASSENGE DOOR ARTI- 139 V 10 C C C C 10 C C C C 11 C C C 12 C C C 13 C C C C 14 C C C 15 C C C 15 C C C 16 C C C C 17 C C C C 18 C C C C 19 C C C 10 C C C C 10 C C C C C C C
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18 BR TURNS SIGNAL LH 74 PASSENGER DOOR ANT- 1138 R R
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Commercior No. Mil21 Commercior No. Mil22 Commercior No. Mil22 Commercior No. Mil22 ANT AMP. 140 CORP.
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B LUGGAGE ROOM ANT* 101 W W W LUGGAGE ROOM ANT* 102 Y V LUGGAGE ROOM ANT* 103 L L L LUGGAGE ROOM ANT* 103 L L L L L L L L L L
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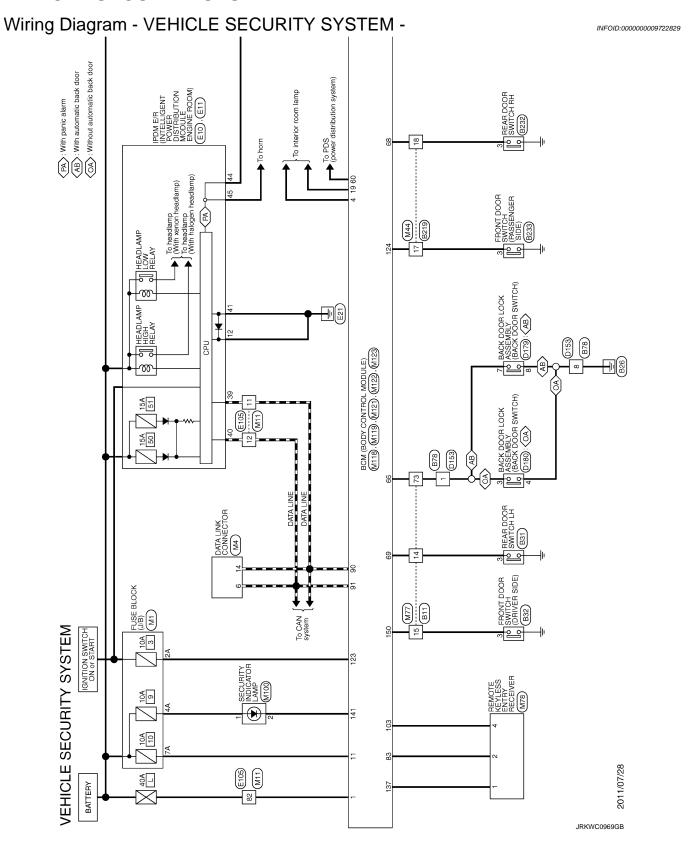
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VEHICLE SECURITY SYSTEM



FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE) (DOOR KEY CYLINDER SWITCH) (D9) BETWEEN FULL STROKE AND N DOOR LOCK AND UNLOCK SWITCH BCM (BODY CONTROL MODULE) (M118), (M119), (M123), (M123) 021 To Intelligent Key system JRKWC0970GB В

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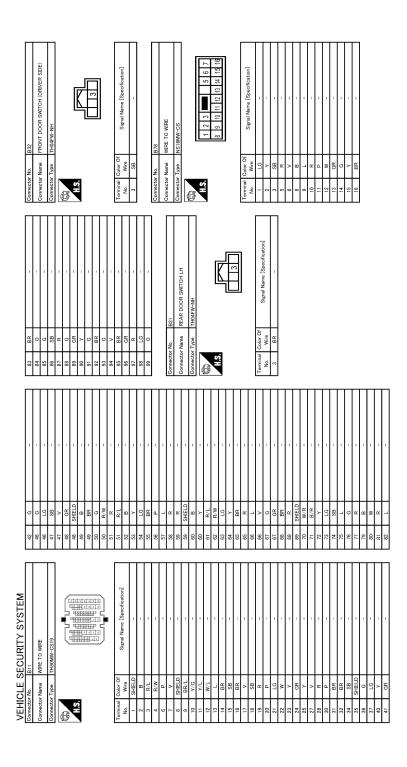
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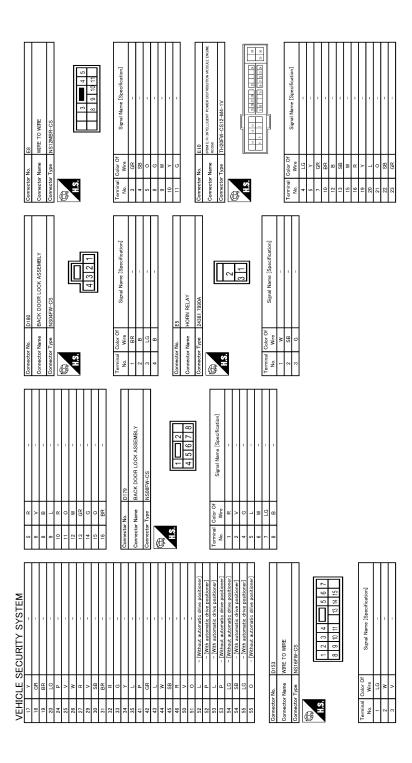
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FROM DOOR LOCK ASSEMBLY (DRIVER SIDE) Signal Name (Specification) Signal Name (Specification) Signal Name (Specification)	В
Connector Name Front	D
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Signal Name (Specification) Bostoners Window MAIN SWITCH NSOSTW-CS Signal Name (Specification)	F
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Signal Name (Specification)	L
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SEC-117 Revision: 2013 August 2014 MURANO



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Connector Num Wife TO Wife	
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			Connector Type	Type BD16FW		24	>	1	်	Connector Type	TH40MW-CS15
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Connector No.		E343	13			28	BR	1	I	_	
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	1			3 4 5 6 7 8		8 8	†	1	_		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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Š	Wire	Signal Name [Specification]	,	- 68	Ī	2	a		_	0	t
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Connector No. MIT Connector No. MIT Connector Name MIRE To	- 1	$\boldsymbol{\dashv}$	$^{-}$	+	+	+	Н	т	т	+	+	t	╅	┪		$\overline{}$	т	t	т	т	т	т	т	т	т	т	т	L	┞	L	╀	╀	╀	+	+	Ping	SUIECD	+	+	+	> 1	x 1	+	+	+	+	+	1	-	ag :	×													
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	VEHICLE SECURITY SYSTEM	50 V	51 BG – [With automatic drive positioner]	52 GR - [Without automatic drive positioner]	53 - [With automatic drive positioner]	53 V - [Without automatic drive positioner]	54 G - [Without automatic drive positioner]	54 LG - [With automatic drive positioner]	55 GR - [Without automatic drive positioner]	55 SB - [With automatic drive positioner]			1	-			Type					48 50 52 54	43 47 49 53					- 0	Г	SHELD		Т	Т	-	10	Sur Contract	SHIELD	> 9	F.C.	SHIELD	a !	97		x :	w -	7	BG	+	٦.															

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VEHICLE SECURITY SYSTEM							
Connector No. M100	Connector No.	M119	19	ď	BACK DOOR OPENER REQUEST SW	Connector No.	M123
Connector Name SECURITY INDICATOR LAMP	Connector Name	BCM (BODY CONTROL MODULE)	64	GR	I-KEY WARN BUZZER	Connector Name	BCM (BODY CONTROL MODULE)
П		╗	92	٥	REAR WIPER STOP POSITION		
Connector Type TK02FBR	Connector Type	NS16FW-CS	99	>	BACK DOOR SW	Connector Type	TH40FG-NH
d)	Q		67	FG	BACK DOOR OPENER SW	Q	
HH5)	生		89	*	REAR RH DOOR SW	Meth	
	S		69	œ	REAR LH DOOR SW	S	
		3 2 1					
		15 14 13 12 11 10 9 8	Connector No.	Г	M122		12 000 00 00 00 00 00 00 00 00 00 00 00 0
				Γ			
			Connect	Connector Name	BCM (BODY CONTROL MODULE)		
Terminal Color Of	Terminal Color Of		Connect	Connector Type	TH40FB-NH	Terminal Color Of	
No. Wire Signal Name [Specification]		Signal Name [Specification]					Signal Name [Specification]
1 GR -	4 P/W	V INTERIOR ROOM LAMP POWER SUPPLY	B			112 R	RAIN SENSOR SERIAL LINK
2 0 -	5 G	PASSEN	1			113 P/B	OPTICAL SENSOR
	7 W	STEP LAMP CONT	2	-	7	116 GR	STOP LAMP SW 1
	8	ALL DOOR, FUEL LID LOCK OUTPUT			25 E	118 L	STOP LAMP SW 2
Connector No. M118	5 6	DRIVER DOOR, FUEL LID UNLOCK OUTPUT			10 to 50 to 70 to 100 to 100 to 50 to 100 to	W 011	DR DOOR UNLOCK SENSOR
(3 II IdoM TodINOO Xdod) MOd	10 P	REAR DOOR UNLOCK OUTPUT				121 Y	KEY SLOT SW
	11 17	BAT (FUSE)				123 G	IGN F/B
Connector Type M03FB-LC	13 B	GROUND	Terminal	I Color Of	3 3	124 R	PASSENGER DOOR SW
	14	PUSH-BUTTON IGNITION SW ILL GND	No.	Wire	Signal Name [Specification]	F	REAR DEFOGGER SW
	15 L	ACCIND	72	В	ROOM ANT-	╀	POWER WINDOW SW COMM
	17 G	TURN SIGNAL RH	73	۸	ROOM ANT+	133 W	PUSH-BUTTON IGNITION SW ILL POWER
13	18 BR	TURN SIGNAL LH	74	>	PASSENGER DOOR ANT-	134 R	LOCK IND
	H	INT ROOM LAMP CONT	75	97	PASSENGER DOOR ANT+	H	RECEIVER/SENSOR GND
7			92	>	DRIVER DOOR ANT-	138	RECEIVER/SENSOR POWER SUPPLY
]			17	۵	DRIVER DOOR ANT+	139 0	TIRE PRESS RECEIVER COMM
	Connector No.	M121	8	SB	NATS ANT AMP.	140 GR	SHIFT N/P
Terminal Color Of State of Sta	2	(2 II INCOM INCOME NACIONAL MACIONAL MA	8	0	NATS ANT AMP.	H	SECURITY IND LAMP CONT
No. Wire olgnar vame Lopecincation	Confidence IName		85	BR	IGN RELAY (F/B) CONT	142 L	COMBI SW OUTPUT 5
8	Connector Type	TH40FGY-NH	83	а	KEYLESS ENTRY RECEIVER COMM	143 W	COMBI SW OUTPUT 1
	q		87	В	COMBI SW INPUT 5	144 P	COMBI SW OUTPUT 2
3 L POWER WINDOW POWER SUPPLY (IGN)	厚		88	GR	COMBI SW INPUT 3	145 V	COMBI SW OUTPUT 3
	Ě		96	д	CAN-L	146 Y	COMBI SW OUTPUT 4
	e e		91	-	CAN-H	150 SB	DRIVER DOOR SW
		9	95	ď	KEY SLOT ILL CONT	151 G	REAR WINDOW DEFOGGER RELAY CONT
		(2) (3) (3) (4) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5	93	Ь	GNI NO		
			98	_	ACC RELAY CONT		
			96	>	CVT SHIFT SELECTOR POWER SUPPLY		
	Terminal Color Of	JO	66	>	SHIFT P		
	No. Wire		901	۵	PASSENGER DOOR REQUEST SW		
	34 B	LUGGAGE ROOM ANT-	101	W	DRIVER DOOR REQUEST SW		
	35 W	LUGGAGE ROOM ANT+	102	>	BLOWER RELAY CONT		
	38 F	REAR BUMPER ANT-	103	_	KEYLESS ENTRY RECEIVER POWER SUPPLY		
	39 BR		107	0	COMBI SW INPUT 1		
	47 L	IGN RELAY (IPDM E/R) CONT	108	Р	COMBI SW INPUT 4		
	52 R	STARI	109	SB	COMBI SW INPUT 2		
	60 BR	PUSH SW	110	g	HAZARD SW		

JRKWC8125GB

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value INFOID:0000000010037982

VALUES ON THE DIAGNOSIS TOOL

NOTE:

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

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
FR WIPER DI	Front wiper switch HI	On
ED WIDED LOW	Other than front wiper switch LO	Off
FR WIPER LOW	Front wiper switch LO	On
FR WASHER SW	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 INT	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 dia position
DD WIDED ON	Other than rear wiper switch ON	Off
RR WIPER ON	Rear wiper switch ON	On
	Other than rear wiper switch INT	Off
RR WIPER INT	Rear wiper switch INT	On
	Rear washer switch OFF	Off
RR WASHER SW	Rear washer switch ON	On
	Rear wiper is in STOP position	Off
RR WIPER STOP	Rear wiper is not in STOP position	On
TUDNI CIONAL D	Other than turn signal switch RH	Off
TURN SIGNAL R	Turn signal switch RH	On
TUDNI CIONIAL I	Other than turn signal switch LH	Off
TURN SIGNAL L	Turn signal switch LH	On
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	Off
TAIL LAIMP 5W	Lighting switch 1ST or 2ND	On
LU DEAM CM	Other than lighting switch HI	Off
HI BEAM SW	Lighting switch HI	On
LIEAD LAMB CIALA	Other than lighting switch 2ND	Off
HEAD LAMP SW 1	Lighting switch 2ND	On
JEAD LAMD SW 2	Other than lighting switch 2ND	Off
HEAD LAMP SW 2	Lighting switch 2ND	On
DA CCINIC CVV	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
ALITO LIGHT OV	Other than lighting switch AUTO	Off
AUTO LIGHT SW	Lighting switch AUTO	On

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< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
ED 500 0W	Front fog lamp switch OFF	Off
FR FOG SW	Front fog lamp switch ON	On
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off
DOOR SW-DR	Driver door closed	Off
SOOK SW-BK	Driver door opened	On
DOOR SW-AS	Passenger door closed	Off
500K 3W-A3	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
SOOK SW-KK	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
DOOK SW-KE	Rear LH door opened	On
DOOR SW-BK	Back door closed	Off
SOOK SW-BK	Back door opened	On
CDL LOCK SW	Other than power door lock switch LOCK	Off
CDL LOCK 3W	Power door lock switch LOCK	On
CDL UNLOCK SW	Other than power door lock switch UNLOCK	Off
CDE UNEOCK SW	Power door lock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
VET CIL LK-SW	Driver door key cylinder LOCK position	On
ZEV CVI LINI CW	Other than driver door key cylinder UNLOCK position	Off
KEY CYL UN-SW	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
HAZARD SW	Hazard switch is OFF	Off
HAZARD SW	Hazard switch is ON	On
REAR DEF SW	Rear window defogger switch OFF	Off
NOTE: 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
TD/DD ODEN SW	Back door opener switch OFF	Off
TR/BD OPEN SW	While the back door opener switch is turned ON	On
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
DVE LOCK	LOCK button of Intelligent Key is not pressed	Off
RKE-LOCK	LOCK button of Intelligent Key is pressed	On
DIVE LINI OOK	UNLOCK button of Intelligent Key is not pressed	Off
RKE-UNLOCK	UNLOCK button of Intelligent Key is pressed	On
01/5 TD/DD	BACK DOOR OPEN button of Intelligent Key is not pressed	Off
RKE-TR/BD	BACK DOOR OPEN button of Intelligent Key is pressed	On
DIVE BANIO	PANIC button of Intelligent Key is not pressed	Off
RKE-PANIC	PANIC button of Intelligent Key is pressed	On
	UNLOCK button of Intelligent Key is not pressed	Off
RKE-P/W OPEN	UNLOCK button of Intelligent Key is pressed and held	On

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status	
DIVE MODE CHO	LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	Off	_
KNE-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	Close to 0 V	_
DEO CW. DD	Driver door request switch is not pressed	Off	_
REQ SW -DR	Driver door request switch is pressed	On	_
DEO SW. AS	Passenger door request switch is not pressed	Off	_
REQ SW -AS	Passenger door request switch is pressed	On	_
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off	_
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off	_
EE-MODE CHG PTICAL SENSOR EQ SW -DR EQ SW -AS EQ SW -RR EQ SW -BD/TR ESH SW N RLY2 -F/B CC RLY -F/B UCH SW EAKE SW 1 EAKE SW 2 ETE/CANCL SW T PN/N SW - LOCK - UNLOCK	Back door request switch is not pressed	Off	_
	Back door request switch is pressed	On	
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off	
	Push-button ignition switch (push switch) is pressed	On	
E-MODE CHG PTICAL SENSOR Q SW -DR Q SW -AS Q SW -RR Q SW -RR Q SW -BD/TR SH SW N RLY2 -F/B CC RLY -F/B UCH SW AKE SW 1 AKE SW 2 TE/CANCL SW T PN/N SW LOCK UNLOCK RELAY-F/B ILK SEN -DR SH SW -IPDM N RLY1 -F/B	Ignition switch in OFF or ACC position	Off	_
	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	_
BRAKE SW 2	The brake pedal is not depressed	Off	
DIVAILE OW 2	Stop lamp switch 1 signal circuit is normal	On	
DETE/CANCL SW	Selector lever in P position	Off	_
DETE/CANCE SW	Selector lever in any position other than P	On	
SET PN/N SW	Selector lever in any position other than P and N	Off	_
<u> </u>	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	_
LINI K SEN -DR	Driver door is unlocked	Off	_
ONLIN DIN	Driver door is locked	On	_
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off	_
	Push-button ignition switch (push-switch) is pressed	On	_
IGN RI Y1 -F/R	Ignition switch in OFF or ACC position	Off	_
	Ignition switch in ON position	On	
DETE SW -IPDM	Selector lever in any position other than P	Off	
DETECT II DIVI	Selector lever in P position	On	•

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< ECU DIAGNOSIS INFORMATION >

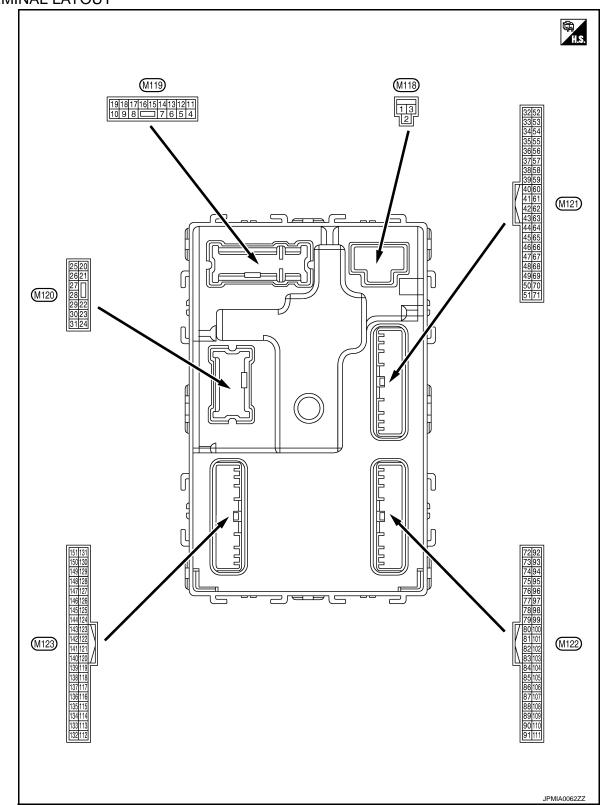
Monitor Item	Condition	Value/Status
CET DN IDDM	Selector lever in any position other than P and N	Off
SFT PN -IPDM	Selector lever in P or N position	On
SFT P -MET	Selector lever in any position other than P	Off
SFIF-WEI	Selector lever in P position	On
SFT N -MET	Selector lever in any position other than N	Off
SFT IN -IVIET	Selector lever in N position	On
	Engine stopped	Stop
ENGINE STATE	While the engine stalls	Stall
ENGINE STATE	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	NOTE: The item is indicated, but not monitored.	Off
S/L UNLK-IPDM	NOTE: The item is indicated, but not monitored.	Off
S/L RELAY-REQ	NOTE: The item is indicated, but not monitored.	Off
VEH SPEED 1	While driving	Equivalent to speed- ometer reading
VEH SPEED 2	While driving	Equivalent to speed- ometer reading
	Driver door is locked	LOCK
OOR STAT-DR	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLOCK
	Passenger door is locked	LOCK
DOOR STAT-AS	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK ELAC	Power supply position in LOCK position	Reset
ID OK FLAG	Power supply position in any position other than LOCK	Set
DDMT FNO OTDT	The engine start is prohibited	Reset
PRMT ENG STRT	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
	Intelligent Key is not inserted into key slot	Off
KEY SW -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 41	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
	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

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

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
CONTINUID2	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
CONFINITION	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
IF 4	The ID of fourth Intelligent Key is registered to BCM	Done
TP 3	The ID of third Intelligent Key is not registered to BCM	Yet
ir s	The ID of third Intelligent Key is registered to BCM	Done
TP 2	The ID of second Intelligent Key is not registered to BCM	Yet
IF	The ID of second Intelligent Key is registered to BCM	Done
TD 1	The ID of first Intelligent Key is not registered to BCM	Yet
ГР 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 LH tire
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire
D REGST FL1	ID of front LH tire transmitter is registered	Done
D REGOTTET	ID of front LH tire transmitter is not registered	Yet
D REGST FR1	ID of front RH tire transmitter is registered	Done
DICEGGIINI	ID of front RH tire transmitter is not registered	Yet
D REGST RR1	ID of rear RH tire transmitter is registered	Done
D WEGOLIKKI	ID of rear RH tire transmitter is not registered	Yet
D REGST RL1	ID of rear LH tire transmitter is registered	Done
D NEGOT KET	ID of rear LH tire transmitter is not registered	Yet
WARNING LAMP	Tire pressure indicator OFF	Off
VVAININING LAIVIE	Tire pressure indicator ON	On
RI 177ED	Tire pressure warning alarm is not sounding	Off
BUZZER	Tire pressure warning alarm is sounding	On

TERMINAL LAYOUT



PHYSICAL VALUES

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value
(Wire	e color) –	Signal name	Input/ Output		Condition	(Approx.)
1 (W)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage
2 (GR)	Ground	P/W power supply (BAT)	Output	Ignition switch OF	F	Battery voltage
3 (L)	Ground	P/W power supply (IGN)	Output	Ignition switch ON		Battery voltage
					battery saver is activated. oom lamp power supply)	0 V
4 (P/W)	Ground	Interior room lamp power supply	Output	ed.	battery saver is not activat- or room lamp power supply)	Battery voltage
5	01	Passenger door UN-	0 1 1		UNLOCK (Actuator is activated)	Battery voltage
(G)	Ground	LOCK	Output	Passenger door	Other than UNLOCK (Actuator is not activated)	0 V
7	Ground	Step lamp control	Output	Step lamp	ON	0 V
(W)	Ciound	Glep lamp control	Cuthut	Step lattip	OFF	Battery voltage
8	Ground	All doors LOCK	Output	All doors	LOCK (Actuator is activated)	Battery voltage
(V)	Giouria	All doors LOCK	Output	All doors	Other than LOCK (Actuator is not activated)	0 V
9		D: 1 1011 0014	.		UNLOCK (Actuator is activated)	Battery voltage
(G)	Ground	Driver door UNLOCK	Output	Driver door	Other than UNLOCK (Actuator is not activated)	0 V
10		Rear RH door and		Rear RH door	UNLOCK (Actuator is activated)	Battery voltage
(P)	Ground	rear LH door UN- LOCK	Output	and rear LH door	Other than UNLOCK (Actuator is not activated)	0 V
11 (LG)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage
13 (B)	Ground	Ground	_	Ignition switch ON		0 V
					OFF	0 V
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
15 (L)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK and ON indicator lamps are not illuminated.)	Battery voltage
•					ACC	0 V

< ECU DIAGNOSIS INFORMATION >

	inal No. e color)	Description	In		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 5 0 1 s PKID0926E 6.5 V	
19	Crownd	Interior room lamp	Outnut	Interior room	OFF	Battery voltage	
(Y)	Ground	control	Output	lamp	ON	0 V	
23						OPEN (Back door opener actuator is activated)	Battery voltage
(BR)	Ground	Back door open	Output	Back door	Other than OPEN (Back door opener actuator is not activated)	0 V	
26	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)	0 V	
(G)	Ground	ixeai wipei	Output	iteal wiper	ON (Operated)	Battery voltage	
34	Ground	Luggage room anten-	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	
(B)	Ground	d Luggage room anten- na (-)	Output	ŎFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB	

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value	
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	F
35	Crownd	Luggage room anten-	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB)
(W) Ground	Ground	na (+)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB	
38	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	-
(L)	Ground	na (-)	Output	switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area		S
39 (BR) Ground	Ground	Rear bumper anten-	Qutput	When the back door request	CK	10 5 0	
	Ground	na (+)	Output	switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB	-
47	Ground	Ignition relay (IPDM	Output	Ignition switch	OFF or ACC	Battery voltage	<u>.</u>
(L)	Ciound	E/R) control	Juiput	iginaon switch	ON	0 V	

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value
+ (Wire	e color)	Signal name	Input/ Output		Condition	Value (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	Innut	Push-button igni- tion switch (push	Pressed	0 V
(BR)	Ground	switch (push switch)	Input	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	Ground	Intelligent key warn-	Output	Warning buzzer	Sounding	0 V
(GR)	Orodria	ing buzzer control	Output	Warring 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 10 ms 11.8 V
					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
						11.0 V

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

	inal No.	Description	1			Value	А
+	e color)	Signal name	Input/ Output	Condition (Approx		(Approx.)	A
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	_
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB	F G
					ON (When rear LH door opens)	0 V	Н
72		Room entenne ()		Imition quitab	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	J
72 (B)	Ground	Room antenna (-) (Center console)	Output	Ignition switch OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB	L M

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< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
73	Ground	Room antenna (+)	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 11 1 s JMKIA0062GB
(W)	Clound	(Center console)	Cutput	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB
74	Ground	Passenger door an-	Output	When the passenger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(Y)	Glodina	tenna (-)	Guipui	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 JMKIA0063GB
75	Ground	Passenger door an-	When the passenger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	
(LG)	Ground	tenna (+)	Output	quest switch is operated with ig- nition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

	inal No.	Description				Value	А		
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	A		
76		Driver door antenna		When the driver	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	B C		
(V)	Ground	(-)	Output	ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB	E		
77	Ground	Driver door antenna	Outout	When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB	G H		
(P)	Ground	(+)	Output door request switch is open	ed with ignition switch OFF When Intelligent	ed with ignition	ed with ignition	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	SE
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.	M		
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			
(BR)		block (J/B)] control	·		ON	Battery voltage			

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	inal No.	Description				Value
+ (Wire	e color)	Signal name	Input/ Output		Condition	value (Approx.)
83	Ground	Remote keyless entry receiver communica-	Input/	During waiting		(V) 15 10 5 0 1 ms
(P)	Glouliu	tion	Output	When operating either button on Intelligent Key		(V) 15 10 5 0 1 ms JMKIA0065GB
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB
87	Ground	Combination switch	Input	Combination	Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 2 ms JPMIA0037GB
(R)	Glound	INPUT 5	три	switch	Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0039GB
					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

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value	Λ
(Wire	e color) –	Signal name	Input/ Output		Condition	value (Approx.)	А
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	B C D
					Lighting switch HI (Wiper intermittent dial 4)	(V) 15 10 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
					Rear washer switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V	SEC
					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	M
90 (P)	Ground	CAN-L	Input/ Output		'	_	0
91 (L)	Ground	CAN-H	Input/ Output		_	_	Р

< ECU DIAGNOSIS INFORMATION >

	ninal No.	Description				Value
+	re 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 6.5 V
					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 (L)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
(L)		0) (7 1 1 1 1 1 1 1 1 1			ACC or ON	Battery voltage
96 (Y)	Ground	CVT shift selector (detention switch) power supply	Output		_	Battery voltage
99	Ground	Selector lever P posi-	Innut	Selector lever	P position	0 V
(V)	Ground	tion switch	Input	Selector lever	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
					ON (Pressed)	0 V
101 (W)	Ground	Driver door request switch	Input	Driver door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V
102 (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	E	Battery voltage

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description				Value	٨
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)	А
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	С
					Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB	E F
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 SEC
					Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V	M

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< ECU DIAGNOSIS INFORMATION >

	Terminal No. Description (Wire color)					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 2 ms JPMIA0038GB 1.3 V					
108 (P)	Ground	Combination switch INPUT 4		Combination switch	Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V					
										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				

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description				Value	
(Wire	e color) –	Signal name	Input/ Output		Condition	(Approx.)	Α
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	B C
					Lighting switch PASS	(V) 15 10 5 0 2 ms JPMIA0037GB	E F
109 (SB)	Ground	Combination switch INPUT 2	Input	tent dial 4)	Lighting switch 2ND	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V	G H
					Front wiper switch INT/ AUTO	(V) 15 10 5 0 2 ms JPMIA0038GB	J SEC
					Front wiper switch HI	(V) 15 10 5 0 2 ms JPMIA0040GB 1.3 V	M
					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

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value
+ (VVire	e color)	Signal name	Input/ Output		Condition	(Approx.)
112 (R)	Ground	Rain sensor serial link	Input/ Output	Ignition switch ON		(V) 15 10 5 0 10ms JPMIA0156GB 8.7 V
113	Ground	Optical sensor	Input	Ignition switch	When bright outside of the vehicle	Close to 5 V
(P/B)	Ground	Optical serisor	Прис	ON	When dark outside of the vehicle	Close to 0 V
116 (GR)	Ground	Stop lamp switch 1	Input		_	Battery voltage
118	Ground	Stop lamp switch 2	Input	t Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
(L)	Ground		Input		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	When Intelligent K	ey is inserted into key slot	Battery voltage
(Y)		.,	1	When Intelligent K	ey is not inserted into key slot	0 V
123 (G)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
					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 >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description				Value	^
+ (Wire	e color) –	Signal name	Input/ Output		Condition	(Approx.)	Α
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	B C
					Rear window defogger switch ON	0 V	E
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
						NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level.	I
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON (When tail lamps ON)	(V) 15 10 5 0 JPMIA0159GB	SE
					OFF	0 V	
134 (R)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF (ACC and ON indicator lamps are not illuminated.)	Battery voltage	L
					ON	0 V	M
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)	2.34.14	power supply	- Lipat	-3	ACC or ON	5.0 V	1

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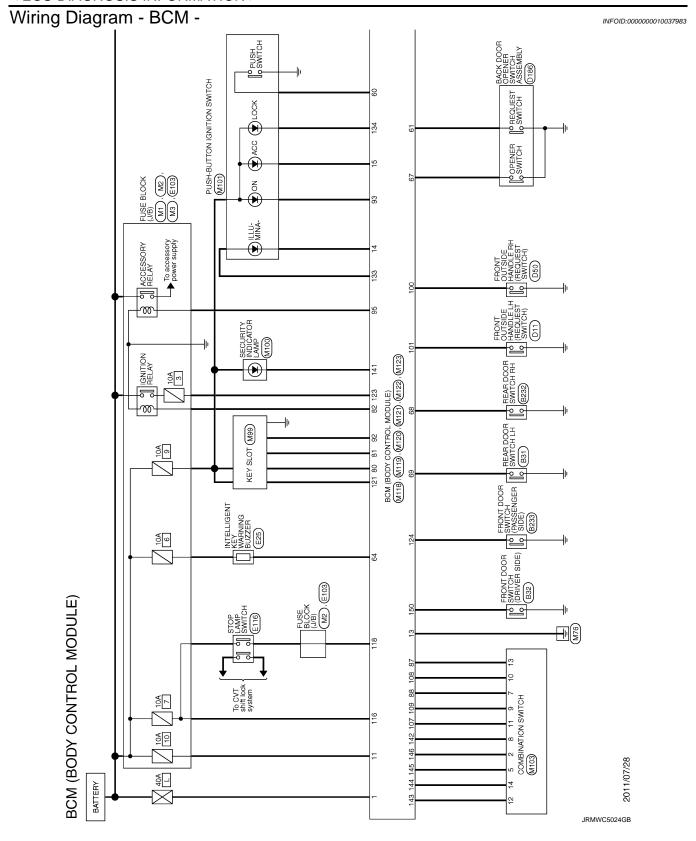
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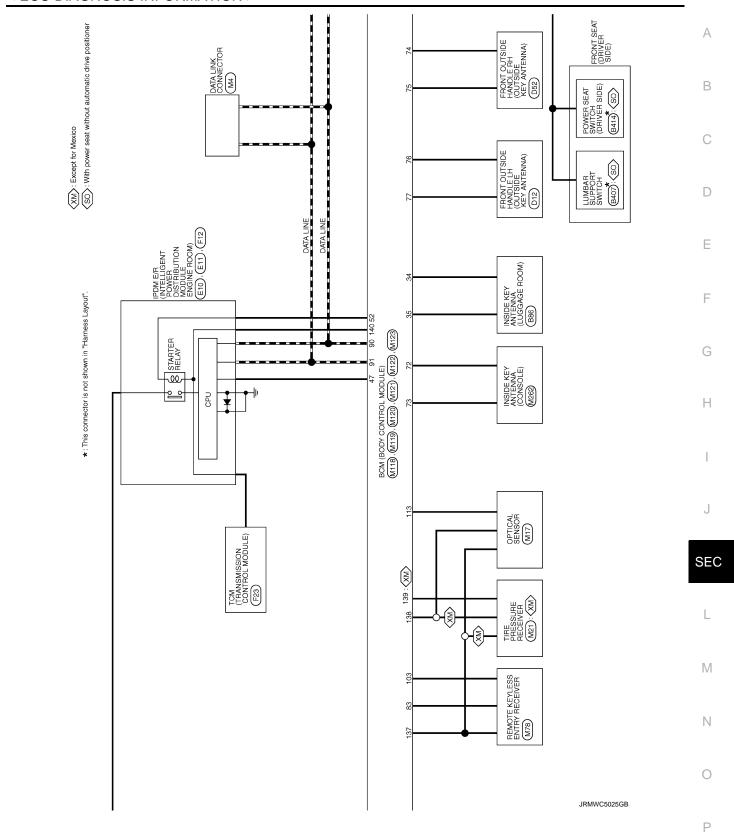
	inal No.	Description				Value
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)
139	Ground	Tire pressure receiver communication	Input/ Output		Standby state	(V) 6 4 2 0 • • 0.2s
(O)	Glound				When receiving the signal from the transmitter	(V) 6 4 2 0
140	Ground	Selector lever P/N	Input	Selector lever	P or N position	Battery voltage
(GR)	Ground	position	mpat	Colocial level	Except P and N positions ON	0 V
141 (O)	Ground	Security indicator	Output	Security indicator	Blinking	(V) 15 10 5 0 11.3 V
					OFF	Battery voltage
142 (L)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF Lighting switch 1ST Lighting switch HI Lighting switch 2ND Turn signal switch RH	0 V (V) 15 10 5 0 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 15 10 2 ms JPMIA0032GB 10.7 V

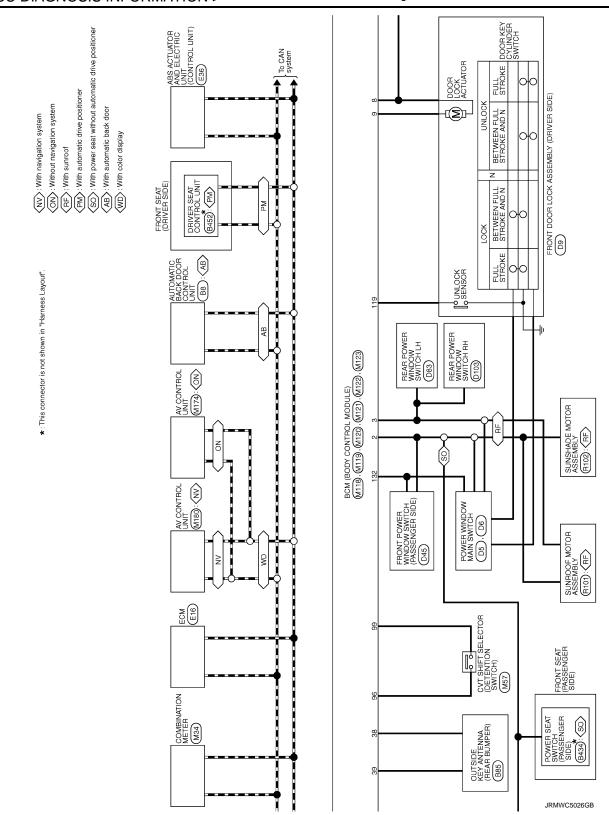
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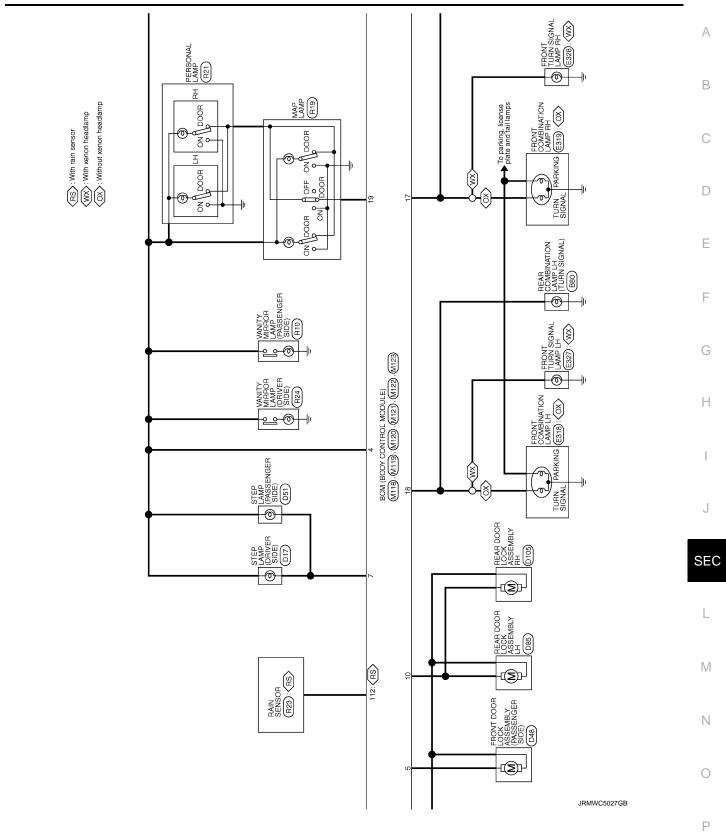
[WITH INTELLIGENT KEY SYSTEM]

	inal No.	Description				Value
(Wir	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)	5 0
					Any of the conditions below with all switches OFF	2 ms
					Wiper intermittent dial 1Wiper intermittent dial 5Wiper intermittent dial 6	JРМIA0033GB 10.7 V
					All switches OFF	0 V
					Front wiper switch INT/ AUTO	(V)
145		Combination switch		Combination switch	Front wiper switch LO	15
(V)	Ground	OUTPUT 3	Output	(Wiper intermit-		0
				tent dial 4)	Lighting switch AUTO	2 ms
						JPMIA0034GB 10.7 V
					All switches OFF	0 V
					Front fog lamp switch ON	00
				Combination	Lighting switch 2ND	(V) 15 10
146 (Y)	Ground	Combination switch OUTPUT 4	Output	switch (Wiper intermit-	Lighting switch PASS	5 0
				tent dial 4)	Turn signal switch LH	2 ms
					rum signal switch LFI	JPMIA0035GB
						10.7 V
						(V)
					OFF (When driver door	15 10 5
150	Ground	Driver door switch	Input	Driver door	closes)	0
(SB)	Giouria	Driver door switch	Input	switch		10 ms
						JPMIA0011GB 11.8 V
					ON (When driver door opens)	0 V
151	Ground	Rear window defog-	Output	Rear window de-	Active	0 V
(G)	Giodila	ger relay control	Output	fogger	Not activated	Battery voltage

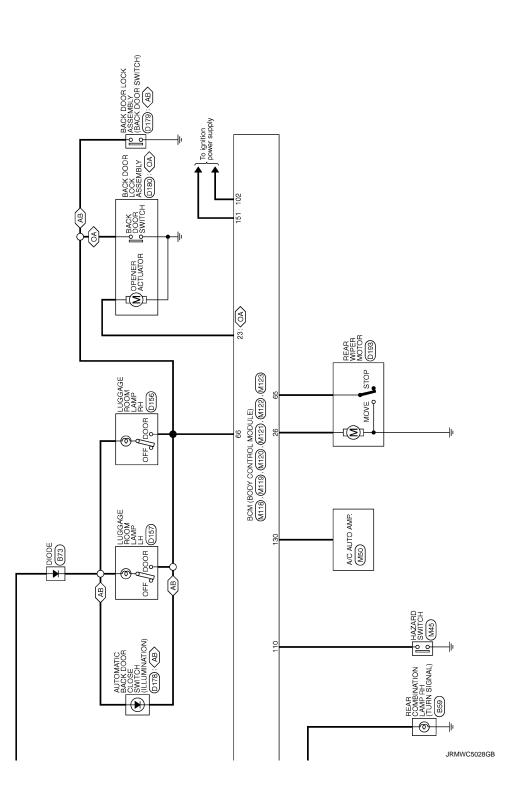












Connector No R85	9	Connector Type RK02FGY		\$ P.		*	No. Wire Signal Name [Specification]	α.	2 6 –		Connector No. B86	Connector Name INSIDE KEY ANTENNA (LUGGAGE ROOM)	Connector Type RK02FGY	ı	人	≪		27)		nal C			2 B =											
Terminal Color Of	Norman Signal Name [Specification] Norman - [Without rear view camera]	D7	2 BR 4 L		Connector No. B73 Connector Name DIODE	Т	1	Ľ		1 2			Terminal Color Of	No. Wire Signal Name [Specification]		2		Connector No.	Τ	Connector Name REAR COMBINATION LAMP LH	Connector Type NS04MW-CS	Q	The state of the s		1 3 2 1	1 2 6 4			Terminal Color Of Signal Name [Specification]		2 ×	+			
Connector No R31	9	Connector Type TH04FW-NH				+	No. Wire Signal Name [Specification]	3 BR -		Connector No. B32	Connector Name FRONT DOOR SWITCH (DRIVER SIDE)	т		E	K		3			180		3 SB -		1	Т	Connector Name REAR COMBINATION LAMP RH	Connector Type NS04MW-CS	á		_	4 3 2 1				
BCM (BODY CONTROL MODULE)	AUTOMATIC BACK DOOR CONTROL UNIT	TH20FW-TB6		7 6 4	28 25 24 23 22 21 21 20 T19 T19 T1 16 T5 M	2	Signal Name [Specification]	BUZZER	ABD SW ABD CLOSE SW	CAN-H	CAN-L	HALF LATCH SW	BAT	CLOSURE MTR (CLOSE)	CLOSURE MTR (OPEN)	TOUCH SENS LH	TOUCH SENS GND	TOUCH SENS RH	WS NICH	OPEN SW	GROUND	GROUND	GROUND	ENCODER B	ENCODER A	CINCODELL THE									
BCM (BOD	g.	Connector Type	E C	ž		le o	No. Wire	HB.	2 4 7 ×	9 P	+	5 B	10 SB	Н	\dashv	+	+	9 C	+	╁	21 B	\dashv	+	24 BR	Z2 - 4	┨									
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, Connector No. D5	T	Connector Type NS16FW-CS		()	1.5.		9 6 0 1 1 7 5 9 5 5 6		20 1-0	No. Wire Signal Name [Specification]	1 GR -	2 W -	3 BR	- 28 S	- B		200	01	11 LG	\dashv	14 0	+		Connector No. D6	Connector Name POWER WINDOW MAIN SWITCH	Connector Type NS03FW-CS	ı	国						No. Wire Signal Name [Specification]	Н	- O-
.5	Signal Name [Specification]	1	,	-				B452	DRIVER SEAT CONTROL UNIT	TH32FW				23 32 20 31 28 26 11 13 17 15 33	24 19 22 21 30 27 25 12 14 18 16 29			Signal Name [Specification]			1	1	1		1		1	,	1		1	1	1			
Terminal Color Of	No. Wire	- a	0	G/R	> ;	I W		Connector No.	Connector Name	Connector Type			E.			J	Terminal Color Of		11 G/B	Н	13 P./G	+	16 Y/R	Н	18 LG/R	20 EV	21 L/Y	-	7 0	+	26 L/O	Н	+	30 BR	H	DW 00
Terminal Color Of	No. Wire Signal Name [Specification]	+	M/A	14 Y -		Connector No. B414	L	POWER SEAT SWITCH (DRIVER SIDE)	Connector Type NS10FW-CS			国 112	3 4 65			ler C	No. WIFE	2 B = -	3 6	G/R	> 20	2 -	8 L/W -	Н	10 1/8 -		Connector No. B434	Connector Name POWER SEAT SWITCH (PASSENGER SIDE)	Commenction Types MC10EM-00	OCHROCOL 1900 INCIDENT CO			1 -	5 6 3 4 9 10		
BCM (BODY CONTROL MODULE) Connector No. 1822	Connector Name REAR DOOR SWITCH RH	Connector Type TH04FW-NH				-[3		201.0	Wire Signal Name [Specification]	-		18233	1		Connector Type TH04FW-NH			K	c c			Terminal Color Of Simul Manua [Sacaiffaction]	Wire Signal Name [Specification]	1		B407	Connector Name LUMBAR SUPPORT SWITCH	Commenter Tone MCOAEDB-00	Nootley Co				11 12 13 14		

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Signal Name (Specification) Signal Name (Specification) Signal Name (Specification)	В
Connector Nume FROST OUTS	D
2 3 4	E F
Name Prior Poor	G
Terminal Terminal Terminal Terminal No. 15 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	Н
Signal Name [Specification] Signal Name [Specification] Signal Name [Specification] Signal Name [Specification] Signal Name [Specification]	I J
Commetter No. D12	SEC
NI KOL MODULE) RS Signal Name (Specification)	L
PO CO PO	M
BCM (BCD) Generator Name Connector Name Connector Name 1 V V 2 C C C C C C C C C C C C C C C C C	N
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Connector No. D157	Connector Name LUGGAGE ROOM LAMP LH Connector Type CJ04FW	H.S.	Terminal Color Of Signal Name (Specification No. Wire 2 W 4 LG -	Connector Name Aufforking BACK DOOR CLOSE SWITCH Connector Type TYGEFGY	H.S. 314 1152	Terminal Color Of Signal Name [Specification] No. Wire 1 0	2 B	
Connector No. D105	Connector Name REAR DOOR LOCK ASSEMBLY RH Connector Type E06FGY-RS	HS,	Terminal Golor Of Signal Name [Specification] No. Wire Signal Name [Specification] 5 V -	Connector No. D156 Connector Name LUGGAGE ROOM LAMP RH Connector Type Connector Type Connector Type	HS,	Terminal Color Of Signal Name [Specification] No. Wire 2 W	- LG -	
Connector No. D85	Connector Name REAR DOOR LOCK ASSEMBLY LH Connector Type E06FGY-RS	H.S. (123456)	Terminal Golor Of Signal Name [Specification] No. Wire V V	Connector No. D103 Connector Nume REAR POWER WINDOW SWITCH RH Connector Type NSSBFW-CS	H3.	Terminal Color Of Signal Name [Specification] No. Wire 1 R	2 P	2
BCM (BODY CONTROL MODULE) Connector No. D52	Connector Type RR02MGY	H.S. (12)	Terminal Color Of Signal Name [Specification]	Connector No. D83 Connector Nume REAR POWER WINDOW SWITCH LH Connector Type INSIBEW-CS	H.S. 23451	Terminal Color Of Signal Name [Specification] No. Wire R	2 P	5 L

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Signal Name [Specification] Signal Name [Specification] Signal Name [Specification]	I
8 9 50 s 2 m m p > 8 9 50 s	Ü
Commettor Nume Commettor Type Terminal Color O Nume Terminal Color O Termi	SEC
MODULE) BABILY Predication 21 21 21 21 21 21 21 21 21 2	L
BECM (BODY CONTROL MODULE) Commetter Name BICK DOOR LOOK ASSEMBLY	M
Connector Name Conn	N
	0
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SEC-155 Revision: 2013 August 2014 MURANO

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	Connector No. E319	Connector Name FRONT COMBINATION LAMP RH	╗	Connector Type Z03FBR	¢	ほ	[((3 2 1))				lar O	No. Wire	т С	2 B -	3 6			Connector No. E327	Connector Name FRONT THRN SIGNAL LAMP LH	Т	Connector Type RS02FGY	Ó	this						Terminal Color Of	No. Wire Signal Name Lopecification.	→	2 B -												
	Connector No. E116	Connector Name STOP LAMP SWITCH	П	Connector Type M04FW-LC	4		<u> </u>	3 4		1 2			la O		т ш	2 LG -	3 C	- × +			Connector No. E318	Connector Name FRONT COMBINATION LAMP LH	П	Connector Type Z03FBR	đị.	AFIG		(321)				Terminal Color Of Simulation 18, 19, 19, 19, 19, 19, 19, 19, 19, 19, 19		PT	2 B -	3 ×										
	Color Of Signal Name [Specification]		R VALVE / ECU SUPPLY	Y WSS RL SIG (-)	L WSS RL PWR (+)	GR CLUSTER SUPPLY	B WSS FR PWR (+)	W WSS FR SIG (-)	SIT	V WSS FL SIG (-)	W WSS FL PWR (+)		P WSS RR PWR (+)			MOTO		S		P CAN 1 L	Y VDC OFF SW	L CAN 1 H	W CAN 2 L	B/W VALVE / ECU GND			No. E103	- Name FUSE BLOCK (J/B)	Type	1			4 5 7	11 13 14 15 17 18 19			Color Of	Wire Signal Name [Specification]				- 57	BR -	·		GR -
	ler	V	-	2	3	4	2	9	7		6	10	Ξ	12	5	4	16	19	20	21	22	23	25	26			Connector No.	Connector Name	Connector Tyne			Ę					Tominor		115	12F	۳	2F	4F	- 6F	ı,	<u>в</u>
BCM (BODY CONTROL MODULE)	4	R SENSOR GROUND	\dashv	CAN COMMUNICATION LINE(CAN-H)	G SENSOR GROUND		SB SENSOR GROUND	ă	SB STOP LAMP SWITCH			EVAP CA	ASCD BF	ECM	B ECM GROUND	_1		E25	INTELLIGENT KEY WARNING BLIZZER	П	e RK03FBR			<	$\left\{ \right.$	الله الله				Signal Name [Specification]	5	1			E36	ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)	AC203EB-A 124-1 IJ	1		26 24 24 24 24 24 24 24 24 24 24 24 24 24	en en en en m	12 11 10 9 8 7 6 5 4 3 2				
M (B)	+	96 GR	97 P	38	_	02 R		۸ 20	H	L	108 B	W 601	4	4	112 B			Connector No.	Connector Name		Connector Type		_	Š	1				Terminal Color Of	No. Wire	L	3 GR			Connector No.	Connector Name	Connector Type	riector i ypt	_	ľ	2					
ăĮ	3)	3"	~	u)	-	-	Ĺ	اً	Ĺ	Ľ	ľ	Í	-	_			Ĺ	S	Co		Con	Q	\$	7	•				F	2		Ĺ		Ĺ	S	Con	È	5	Œ	•	4					

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Corrector No. M3 Corrector Type NST2FW-CS Corrector Type NST2FW-CS Type NST2FW-CS Type Type		Terminal Color Of No. Wire Signal Name [Specification] 1
Connector No. MII Connector Type NSORFW-M2 M.S. SA MI MI MI MI MI MI MI M	Terminal Color Of Signal Name Specification No. Wife No. Wife No. Wife No. Wife No. Wife No. No. Wi	Terminal Color Of Signal Name (Specification) 1 No. Wire 1 No. Wire 2 B C C 5 Signal Name (Specification) 2 B C C 5 Signal Name (Specification) 2 C C 5 Signal Name (Specification) 2 C C 5 Signal Name (Specification) 2 Signal Name (Specification) 3 Signal Name (Specification) 4 Signal Name (Specification) 5 Signal Name (Specification) 5 Signal Name (Specification) 6 Signal Name (Specification) 7 Signal Name (Specification)
Connector No. F733 Connector Type RH407E-R29-L-RH Sign Sign Sign Sign Sign Sign Sign Sign	No. No.	1
BCM (BODY CONTROL MODULE) Commetter No. E228 Commetter Name FRONT TURN SGNAL LAMP RH Commetter Type RSIZEGY Commetter Type RSIZEGY Commetter Type RSIZEGY	Terminal Color Of Signal Name [Specification] No. Wire No. Signal Name [Specification] 1 0 1 0 1 0 0 0 0 0	Color Of Signal Mann [Specification]

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AND DOMED Disks as a feeded.	\ \ \	35 G AMB SENS [With colour display]	97	SBS	Y SENS G	39 B GND (POWER)	- -		Connector No. M57	GOTON BY THIS TOO		Connector Type TK10FW	Į (1000		1					Terminal Color Of Simal Nama [Spacification]	No. Wire Signal Name Capeting	1 LG -	4 B	- d 9	7 B -	- × 8	- ^ 6			Connector No. M78	Connector Name REMOTE KEYLESS ENTRY RECEIVER	П	Connector Type JAB04FB	ģ	厚	0 E		4 2 4	1 7 1			Terminal Color Of	No. Wire Signal Name [Specification]	1 P GROUND	2 P SIGNAL	4 L +12V	
Connoctor No MAS	Ι	Connector Name HAZARD SWITCH	Connector Type TK04FW	1	Huth		1321				Terminal Color Of Simul Mana [Specification]	No. Wire Ognering Experimental	1 8 -	2 G -	3 B -	4 R/Y -			Connector No. M50	Connector Name A /C ALITO AMP		Connector Type SAB40FW	4	I			20 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	A 10 10 10 10 10 10 10 10 10 10 10 10 10			lar C	No. Wire	1 L CAN-H	2 P CAN-L	6 L TX (AMP SW & DISP)	7 P RX (SW AMP)	10 G LAN SIG [Without colour display]	10 L LAN SIG [With colour display]	11 R VACTR	15 BR SUN SENS	16 G INTAKE SENS [With colour display]	~	8	0	GR RR	27 BR RR DEF ON	32 L FAN PWM	34 P AMB POWER [With colour display]
Connoctor No Max	Ι	Connector Name COMBINATION METER	Connector Type TH40FW-NH	Ð.	(trip)	¥\$	1 2 3 4 5 8 8 9 10 11 12 13 14 15 18 18 18 10	21 22 23 24 25 27 29 30 31 22 34 35 36			Terminal Color Of Simal Mana [Specification]	No. Wire Ognan Marine Copecinication	1 Y BATTERY POWER SUPPLY	2 LG IGN SIGNAL	3 B GROUND	4 B GROUND	5 SB ILLUMINATION CONTROL SIGNAL	8 SB TRIP RESET SIGNAL	9 W SWILL POWER	10 LG METER CONTROL SWITCH GROUND	11 L ENTER SWITCH SIGNAL	12 R SELECT SWITCH SIGNAL	13 V ILLUMINATION CONTROL SWITCH SIGNAL (+) [With automatic drive positioned]	14 GR ILLUMINATION CONTROL SWITCH SIGNAL (-)	BR	18 L AMBIENT SENSOR SIGNAL	19 P AMBIENT SENSOR POWER	20 Y AMBIENT SENSOR GROUND	21 L CAN-H	22 P CAN-L		W FUEI	BR	9	27 V BRAKE FLUID LEVEL SWITCH SIGNAL	В	30 P VEHICLE SPEED SIGNAL (2-PULSE)	31 V VEHICLE SPEED SIGNAL (8-PULSE)	32 LG OVERDRIVE CONTROL SWITCH SIGNAL	34 G FUEL LEVEL SENSOR SIGNAL	35 SB SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)	æ						
BCM (BODY CONTROL MODULE)	Collidated No.	Connector Name OPTICAL SENSOR	Connector Type TK03FW	đ	MATERIAL	E S		71.			le O	No. Wire Ogna rang Openication	1 V -	2 Y =	3 P			Connector No. M21	Capacita and School and The Capacita and Cap		Connector Type TK04FW	¢	ほ			101				le O	No. Wire Ognal wante Openingstord	+		4 V POWER														

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Connector No. M120	Connector Name BCM (BODY CONTROL MODULE)	Connector Type NS12FW-CS	H.S. [5 4 1 3 2 1	12 11 10 9 8 7		±	BR BA	26 G REAR WIPER OUTPUT		Connector No. M121	Connector Name BCM (BODY CONTROL MODULE)	Connector Type TH40FGY-NH			Z Z	2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3			Terminal Color Of Signal Name [Specification]	$^{+}$	*	38 L REAR BUMPER ANT-	BR.	62 D CTADTED BELAY (IPDM E/R) CONT	BR	R BACK	64 GR I-KEY WARN BUZZER	65 O REAR WIPER STOP POSITION		LG B/	м	69 R REAR LH DOOR SW				
13 R INPUT 5	14 P OUTPUT 2	Connector No M118	9 4		13]	Terminal Color Of		Н	2 GR POWER WINDOW POWER SUPPLY (BAT)	S L POWER WINDOW POWER SUPPLY (LGN)	Connector No. M119	١,	_ [Connector Type NS16FW-CS	Œ		3 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	15 14 13 12 11 10 8 8			la D	No. Wire INTERIOR BOOM I AND DOWER STIDE V	╀	H	8 V ALL DOOR, FUEL LID LOCK OUTPUT	9 G DRIVER DOOR, FUEL LID UNLOCK OUTPUT	P REARDO	LG	В	14 O PUSH-BUTTON IGNITION SWILL GND		9	18 BR TURN SIGNAL LH	-
Gonnector No. M101	Connector Name PUSH-BUTTON IGNITION SWITCH	Connector Type TK08FBR	13. [1] [1] [1] [1]	45678		Terminal Color Of Signal Name [Specification] No. Wire		3 W = =		- L	- C			Connector No. M103	Connector Name COMBINATION SWITCH	Т	٦		/	1 2 7 8	9 10 11 14 16			Signal Name [Specification]	t	2 Y 0UTPUT 4	3 BG FR	4 W IGN			7 GR INPUT 3	8 L OUTPUT 5	88		ITUNII 0 III	M
BCM (BODY CONTROL MODULE) Connector No. M99	Connector Name KEY SLOT	Connector Type TH12FW-NH	IV D	1 2 3 4 5 6	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Terminal Color Of Signal Name [Specification] No. Wire	GR	2 SB CLOCK 3 O DATA	H		7 B GROUND	NET SWILLON SIGNAL	Connector No. M100	Ι,	SECURIT INDICATOR	Connector Type TK02FBR		v	<u> </u>				Terminal Color Of Signal Name [Specification]		2 0 5	ł										

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BCM	(B0I	BCM (BODY CONTROL MODULE)									
Connector No.	r No.	M122	Connector No.	П	M123	Connector No.	or No.	M174	Terminal	0	Sional Name [Sneoification]
Connector Name	r Name	BCM (BODY CONTROL MODULE)	Connector Name		BCM (BODY CONTROL MODULE)	Connect	Connector Name	AV CONTROL UNIT	Š 8	- Wire	DANGE CHARGE
Connector Type	r Type	TH40FB-NH	Connector Type		THADEG=NH	Connect	Connector Type	THROSEM-INH	3 5	3 -	
ſ		1	(89	97	1
修			F			修			71	SHIELD	SHIELD
Ę			Ę			Ę		[72	В	MICROPHONE VCC
2	_		2	L	7	4	_	8 8	73	œ	COMM (CONT-DISP)
		20 00 00 10 E E E E E E E E E E E E E E E		15	25 12 12 12 12 12 12 12 12 12 12 12 12 12			200	74	۵	CAN-L
		10 10 10 10 10 10 10 10 10 10 10 10 10 1					_	8 / 6 5 1	75	P	AV COMM (L)
									9/	P	AV COMM (L)
									79	œ	ILLUMINATION SIGNAL
Terminal	Ferminal Color Of	Of Signal Name [Specification]	ler	Color Of	Signal Name [Specification]	Terminal	0	Signal Name [Specification]	8	ŋ	IGNITION
No.	Wire		┥	Wire		No.	Wire		<u></u>	SB	REVERSE
72	8	ROOM ANT-	112	œ	RAIN SENSOR SERIAL LINK	76	ΓC	AV COMM (L)	82	>	VEHICLE SPEED SIGNAL (8-PULSE)
73	Μ	ROOM ANT+	113 P	B/8	OPTICAL SENSOR	7.7	SB	AV COMM (H)	83	В	1
74	>	PASSENGER DOOR ANT-	116	GR	STOP LAMP SW 1	78	PT	AV COMM (L)	87	>	MICROPHONE SIGNAL
75	57	PASSENGER DOOR ANT+	118	_	STOP LAMP SW 2	79	SB	AV COMM (H)	88	В	
16	>	DRIVER DOOR ANT-	119	*	DR DOOR UNLOCK SENSOR	8	а	CAN-L	68	*	1
77	۵	DRIVER DOOR ANT+	121	>	KEY SLOT SW	18	_	CAN-H	96	_	CAN-H
80	SB		123	9	IGN F/B	88	>	SW GND	91	SB	AV COMM (H)
18	0	NATS ANT AMP.	124	œ	PASSENGER DOOR SW	98	SHELD	SHIELD	95	88	AV COMM (H)
82	ä		130	HH.	REAR DEFOGGER SW	87	œ	TEL VOICE SIGNAL (+)			
83	۵	KEYLESS EN	132	5	POWER WINDOW SW COMM	88	_	TEL VOICE SIGNAL (-)			
87	œ	COMBI SW INPUT 5	133	*	PUSH-BUTTON IGNITION SW ILL POWER	95	>	VEHICLE SPEED SIGNAL (8-PULSE)	Connector No.	or No.	M262
88	GR	COMBI SW INPUT 3	134	œ	LOCK IND	93	9	PARKING BRAKE [Without BOSE system]	(2	CLICOTECO CONTRACTOR CLICATOR
06	۵	CAN-L	137	۵	RECEIVER/SENSOR GND	94	SB	REVERSE	Connect	connector Name	INSIDE RET ANTENNA (CONSOLE)
91	_	CAN-H	138	>	RECEIVER/SENSOR POWER SUPPLY	92	9	IGNITION	Connector Type	or Type	RK02FGY
92	œ	KEY SLOT ILL CONT	139	0	TIRE PRESS RECEIVER COMM	96	۸	DISK EJECT SIGNAL	ָ ב		
93	۵	DNI NO	140	GR	SHIFT N/P	102	*	AUX SOUND SIGNAL GND	B		<
98	_	ACC RELAY CONT	141	0	SECURITY IND LAMP CONT	103	В	AUX SOUND SIGNAL LH (+)	<u> </u>		«
96	>	CVT SHIFT SELECTOR POWER SUPPLY	142	_	COMBI SW OUTPUT 5	104	а	AUX SOUND SIGNAL RH (+)		_	
66	>	SHIFT P	143	۸	COMBI SW OUTPUT 1						(1)
100	۵	PASSENGER DOOR REQUEST SW	144	۵	COMBI SW OUTPUT 2						
101	۸	DRIVER DOOR REQUEST SW	145	>	COMBI SW OUTPUT 3	Connector No.		M180			
102	>	BLOWER RELAY CONT	146	>	COMBI SW OUTPUT 4		N	Tital logitico ita			
103	_	KEYLESS ENTRY RECEIVER POWER SUPPLY	120	SB	DRIVER DOOR SW	Connec	Connector Name	AV CONTROL UNIT	Termina	Ferminal Color Of	The state of the s
107	0	COMBI SW INPUT 1	151	9	REAR WINDOW DEFOGGER RELAY CONT	Connect	Connector Type	TH32FW-NH	No.	Wire	olgran Ivame [opecinication]
108	Ь	COMBI				ģ	-		-	W	-
109	SB	ö				ほ			2	В	1
9	5	HAZARD SW				H.S.	_	19 12 12 12 12 12 12 12 12 12 12 12 12 12			
								2 2 2 2 2 2 2 2 2 2			

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Connector No. R102 Connector Name SUNSHADE MOTOR ASSEMBLY Connector Type YEA10FGY 1	No. Wire Signal Mane [Specification] No. Wire Signal Mane [Specification] No. No		
Connector No. R24 Connector Name WARTY MISOR LAMP (DRIVER SIDE) Connector Type MICAUZEW 1.3.	Terrina Cader Of Signal Name Specification] No. Wire Specification]	Terminal Coder Of Signal Name Specification	
Gornector No. R21 Connector Name PERSONAL LAMP Gonnector Type THIGHPW-NH M.3.	Terminal Color Of Signal Name [Specification] Wire Wire Dr.W Dr.W	Terminal Color Of Signal Name Specification Nime 1 V/R	
BCM (BODY CONTROL MODULE) Cornector None (AMITY MIRROR LAW) (PASSENGER SIDE) Cornector Type (MOAUZPW)	Terminal Color Of Signal Name [Snecrication] 1 1 2 2 2 2 2 2 2 2	Terminal Color Of Signal Name [Sneoffcation]	

Fail-safe

FAIL-SAFE CONTROL BY DTC

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

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[WITH INTELLIGENT KEY SYSTEM]

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

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

- 1. 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.

DTC Inspection Priority Chart

INFOID:0000000010037985

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

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

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 B2606: STARTER RELAY B260A: IGNITION RELAY B260A: IGNITION RELAY B260F: ENG STATE SIG LOST B2614: ACC RELAY CIRC B2615: BLOWER RELAY CIRC B2616: IGN RELAY CIRC B2616: IGN RELAY CIRC B2617: STARTER RELAY CIRC B2618: BCM B2614: PUSH-BTN IGN SW B2615: BLOWER RELAY CIRC B2616: 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 	S
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 Function (BCM - COMMON ITEM)".

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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condi-	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
No DTO is data at a		tion			
No DTC is detected. further testing may be required.	_	_	_	_	_
U1000: CAN COMM	_	_	_	_	BCS-42
U1010: CONTROL UNIT(CAN)	_	_	_	_	BCS-43
U0415: VEHICLE SPEED SIG	_	_	_	_	BCS-44
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-50
B2555: STOP LAMP	_	×	_	_	SEC-50
B2556: PUSH-BTN IGN SW	_	×	×	_	SEC-52
B2557: VEHICLE SPEED	×	×	×	_	SEC-54
B2560: STARTER CONT RELAY	×	×	×	_	SEC-55
B2562: LOW VOLTAGE	_	×	_	_	BCS-45
B2601: SHIFT POSITION	×	×	×	_	SEC-56
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-52
B260F: ENG STATE SIG LOST	×	×	×	_	SEC-70
B2614: ACC RELAY CIRC	_	×	×	_	PCS-54
B2615: BLOWER RELAY CIRC	_	×	×	_	PCS-57
B2616: IGN RELAY CIRC	_	×	×	_	PCS-60
B2617: STARTER RELAY CIRC	×	×	×	_	SEC-72
B2618: BCM	×	×	×	_	PCS-63
B261A: PUSH-BTN IGN SW	_	×	×	_	SEC-75
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	SEC-78
B2622: INSIDE ANTENNA		×	_		DLK-91
B2623: INSIDE ANTENNA		×	_	_	DLK-93
B26EA: KEY REGISTRATION		×	× (Turn ON for 15 seconds)	_	SEC-71
C1704: LOW PRESSURE FL				×	
C1705: LOW PRESSURE FR		_	_	×	_
C1706: LOW PRESSURE RR			_	×	WT-23
C1707: LOW PRESSURE RL			_	×	-

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

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
C1708: [NO DATA] FL	_	_	_	×	
C1709: [NO DATA] FR	_	_	_	×	MT 25
C1710: [NO DATA] RR	_	_	_	×	<u>WT-25</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	_	_	_	×	WT-30

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< ECU DIAGNOSIS INFORMATION >

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

Reference Value INFOID:0000000010037998

VALUES ON THE DIAGNOSIS TOOL

NOTE:

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

Monitor Item	(Condition	Value/Status
MOTOR FAN REQ	Engine idle speed	Changes depending on engine coolant temperature, air conditioner operation status, vehicle speed, etc.	1/2/3/4
		A/C switch OFF	Off
AC COMP REQ	Engine running	A/C switch ON (Compressor is operating)	On
TAIL OCUD DEO	Lighting switch OFF		Off
TAIL&CLR REQ	Lighting switch 1ST, 2ND, HI or	AUTO (Light is illuminated)	On
LI LO DEO	Lighting switch OFF		Off
HL LO REQ	Lighting switch 2ND HI or AUTO) (Light is illuminated)	On
HL HI REQ	Lighting switch OFF		Off
nl ni keQ	Lighting switch HI	On	
		Front fog lamp switch OFF	Off
FR FOG REQ	Lighting switch 2ND or AUTO (Light is illuminated)	 Front fog lamp switch ON Daytime running light activated (Only for Canada) 	On
		Front wiper switch OFF	Stop
FR WIP REQ	Ignition switch ON	Front wiper switch INT	1LOW
FR WIP REQ		Front wiper switch LO	Low
		Front wiper switch HI	Hi
		Front wiper stop position	STOP P
WIP AUTO STOP	Ignition switch ON	Any position other than front wiper stop position	ACT P
		Front wiper operates normally	Off
WIP PROT	Ignition switch ON	Front wiper stops at fail-safe operation	BLOCK
ION DIVA DEO	Ignition switch OFF or ACC		Off
IGN RLY1 -REQ	Ignition switch ON		On
ICN DI V	Ignition switch OFF or ACC		Off
IGN RLY	Ignition switch ON		On
PUSH SW	Release the push-button ignition	n switch	Off
F 03F1 3VV	Press the push-button ignition s	witch	On
INTER/NP SW	Ignition switch ON	Selector lever in any position other than P or N	Off
		Selector lever in P or N position	On
ST RLY CONT	Ignition switch ON		Off
OT IVEL OOM	At engine cranking		On

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Cor	Value/Status		
IHBT RLY -REQ	Ignition switch ON		Off	
IIIDI ILLI -ILLQ	At engine cranking		On	
	Ignition switch ON		Off	
	At engine cranking		INHI ON \rightarrow ST ON	
ST/INHI RLY		control relay cannot be recognized by . when the starter relay is ON and the	UNKWN	
DETENT SW	Ignition switch ON	Press the selector button with selector lever in P position Selector lever in any position other than P		
	Release the selector button with se	elector lever in P position	On	
S/L RLY -REQ	NOTE: The item is indicated, but not monit	Off		
S/L STATE	NOTE: The item is indicated, but not monit	UNLOCK		
DTRL REQ	NOTE: The item is indicated, but not monit	Off		
OIL D CW	Ignition switch OFF, ACC or engine	running	Open	
OIL P SW	Ignition switch ON		Close	
HOOD SW	NOTE: The item is indicated, but not monit	ored.	Off	
HL WASHER REQ	NOTE: The item is indicated, but not monit	ored.	Off	
	Not operating		Off	
THFT HRN REQ	Panic alarm is activated Horn is activated with VEHICLE S TEM	On		
HORN CHIRP	Not operating	Off		
HONN CHIRP	Door locking with Intelligent Key (he	On		
CRNRNG LMP REQ	NOTE: The item is indicated, but not monit	ored.	Off	

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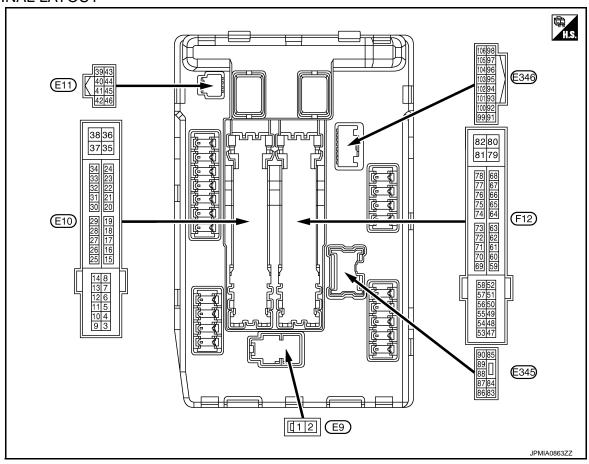
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< ECU DIAGNOSIS INFORMATION >

TERMINAL LAYOUT



PHYSICAL VALUES

	inal No.	Description				Value
+ (Wire	e color) –	Signal name	Input/ Output		Condition	(Approx.)
1 (R)	Ground	Battery power supply	Input	Ignition swi	tch OFF	Battery voltage
2 (L)	Ground	Battery power supply	Input	Ignition swi	tch OFF	Battery voltage
4	Ground	Front wiper LO	Output	Ignition	Front wiper switch OFF	0 V
(LG)	Ground	Front wiper LO	Output	switch ON	Front wiper switch LO	Battery voltage
5	Ground	Front wiper HI	Output	Output Ignition switch ON	Front wiper switch OFF	0 V
(Y)	Ground	Tourid Front wiper Hi Out	Output		Front wiper switch HI	Battery voltage
7	Ground	Tail, license plate lamps &	Output	Ignition	Lighting switch OFF	0 V
(GR)	Giodila	illuminations	Output	switch ON	Lighting switch 1ST	Battery voltage
10				Ignition swi (More than ignition swi	a few seconds after turning	0 V
(BR)	Ground	Ground ECM relay power supply		 Ignition switch ON Ignition switch OFF (For a few seconds after turning ignition switch OFF) 		Battery voltage
12 (B)	Ground	Ground	_	Ignition swi	tch ON	0 V

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value
+ (VVire	e color)	Signal name	Input/ Output		Condition	(Approx.)
13					tely 1 second or more after ignition switch ON	0 V
(SB)	Ground	Fuel pump power supply	Output		nately 1 second after turning on switch ON unning	Battery voltage
15	Cravind	lanition relevance comple	Outsut	Ignition swi	itch OFF	0 V
(W)	Ground	Ignition relay power supply	Output	Ignition sw	itch ON	Battery voltage
16 (R)	Ground	Front wiper auto stop	Input	Ignition switch ON	Front wiper stop position Any position other than	0 V Battery voltage
					front wiper stop position	
19 (Y)	Ground	Ignition relay power supply	Output	Ignition swi		0 V Battery voltage
20 (L)	Ground	Ambient sensor ground	Output	Ignition sw	itch ON	0 V
21 (O)	Ground	Ambient sensor	Input	Ignition swi NOTE: Changes d perature	itch ON epending to ambient tem-	(V) 4 3 2 1 0 -10 0 10 20 30 40 1cc 144 (32) (50) (68) (86) (104) ['F] JSNIA0014GB
22 (SB)	Ground	Refrigerant pressure sensor ground	Output	Engine running	Warm-up conditionIdle speed	0 V
23 (GR)	Ground	Refrigerant pressure sensor	Output	Engine running	Warm-up condition Both A/C switch and blower fan motor switch ON (Compressor operates)	1.0 - 4.0 V
24	Ground	Refrigerant pressure sen-	Input	Ignition swi	itch OFF	0 V
(G)	Ground	sor power supply	Input	Ignition swi	itch ON	5.0 V
25	Ground	Ignition relay power supply	Output	Ignition swi	itch OFF	0 V
(GR)	0.00	ig.iii.oii roia) potroi cappi)		Ignition sw		Battery voltage
26 ^{*1}	Ground	Ignition relay power supply	Output	Ignition swi		0 V
(Y)				Ignition sw		Battery voltage
27 (W)	Ground	Ignition relay monitor	Input	_	itch OFF or ACC	Battery voltage
				Ignition swi	oush-button ignition switch	0 V 0 V
28 (SB)	Ground	Push-button ignition switch	Input		e push-button ignition switch	Battery voltage
				Troicase tri	Selector lever in any posi-	
30 (BR)	Ground	Starter relay control	Input	Ignition switch ON	tion other than P or N	0 V
				0 " 1	Selector lever P or N	Battery voltage
34 (O)	Ground	Cooling fan relay-3 control	Input	_		Battery voltage
				_	-	
35 (P)	Ground	Cooling fan relay-1 power supply	Input			
36	Ground	Battery power supply	Input			Battery voltage
35 (P)	Ground	Cooling fan relay-1 power supply	Input	Cooling fan stopped Cooling fan at HI operation Cooling fan stopped Cooling fan at LO operation Ignition switch OFF		0 V Battery voltage 6.0 V

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< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value			
+ (Wire	e color)	Signal name	Input/ Output	Condition		(Approx.)			
38	Ground	Cooling fan relay-1 power	Output	Cooling far	n not operating	0 V			
(GR)	Glodila	supply	Output	Cooling far	at LO operation	6.0 V			
39 (P)	_	CAN-L	Input/ Output		_	_			
40 (L)	_	CAN-H	Input/ Output		_	_			
41 (B)	Ground	Ground	_	Ignition sw	itch ON	0 V			
42				Cooling far	n stopped	Battery voltage			
(SB)	Ground	Cooling fan relay-2 control	Input		fan MID operating fan HI operating	0 V			
43 (Y)	Ground	CVT shift selector (Detention switch)	Input	Ignition switch ON	Press the selector button (selector lever P) Selector lever in any position other than P	Battery voltage			
					Release the selector but- ton (selector lever P)	0 V			
44	Ground	Horn relay control	Input	The horn is	deactivated	Battery voltage			
(W)	Giodila	Hom relay control	iriput	The horn is	activated	0 V			
45	Ground	Horn switch	Input	The horn is	deactivated	Battery voltage			
(G)	Giodila	HOIH SWILCH	iriput	The horn is	activated	0 V			
46 (BR)	Ground	Starter relay control	Starter relay control	Starter relay control	Starter relay control	Input	Ignition switch ON	Selector lever in any position other than P or N	0 V
(DIX)				SWILCH OIL	Selector lever P or N	Battery voltage			
					A/C switch OFF	0 V			
48 (W)	Ground	A/C relay power supply	Output	Engine running	A/C switch ON (A/C compressor is operating)	Battery voltage			
40				Ignition swi (More than ignition swi	a few seconds after turning	0 V			
49 (R/B)	Ground	ECM relay power supply	Output	Ignition s	w seconds after turning igni-	Battery voltage			
51	Ground	Ignition relay power supply	Outros	Ignition sw	itch OFF	0 V			
(LG)	Ground	ignition relay power supply	Output	Ignition sw	itch ON	Battery voltage			
52	Ground	lanition relay power supply	Outros	Ignition sw	itch OFF	0 V			
(Y/G)	Ground	Ignition relay power supply	Output	Ignition sw	itch ON	Battery voltage			
53				Ignition switch OFF (More than a few seconds after turning ignition switch OFF)		0 V			
(R/W)	Ground	ECM relay power supply	Output	 Ignition s Ignition s (For a fe tion switch 	switch OFF w seconds after turning igni-	Battery voltage			

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< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value
+ (Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)
54		Throttle control motor re-		Ignition swi (More than ignition swi	a few seconds after turning	0 V
(G/W)	Ground	lay power supply	Output	Ignition s	switch ON switch OFF w seconds after turning igni- ch OFF)	Battery voltage
55 (W/L)	Ground	ECM power supply	Output	Ignition swi	itch OFF	Battery voltage
56	Ground	Ignition relay power supply	Output	Ignition swi	itch OFF	0 V
(R/Y)	Ground	ignition relay power supply	Output	Ignition sw	itch ON	Battery voltage
57	Ground	Ignition relay power supply	Output	Ignition swi	tch OFF	0 V
(O)	Ground	ignition relay power supply	Odipai	Ignition swi	itch ON	Battery voltage
58	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
(Y)	Cround	ignition rolay power supply	Odipai	Ignition swi	itch ON	Battery voltage
69				Ignition swi (More than ignition swi	a few seconds after turning	Battery voltage
(W/B)	Ground	ECM relay control	Output	 Ignition switch ON Ignition switch OFF (For a few seconds after turning ignition switch OFF) 		0 - 1.5 V
70 (O)	Ground	Throttle control motor re- lay control	Output	Ignition switch $ON \rightarrow OFF$ Ignition switch ON		0 -1.0 V ↓ Battery voltage ↓ 0 V
						0 - 1.0 V
72 (R/B)	Ground	Starter relay control	Input	Ignition switch ON	Selector lever in any position other than P or N	0 V
(r\/D)				SWILCH ON	Selector lever P or N	Battery voltage
75	Ground	Oil pressure switch	Input	Ignition	Engine stopped	0 V
(LG)	Giodila	On pressure switch	iriput	switch ON	Engine running	Battery voltage

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< ECU DIAGNOSIS INFORMATION >

	Terminal No. Des					Value
+ (Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)
				Ignition switch ON		(V) 6 4 2 0 2 2ms JPMIA0001GB
76 (SB)	Ground	Power generation command signal	Output	40% is set on "ACTIVE TEST", "ALTERNATOR DUTY" of "ENGINE"		(V) 6 4 2 0 2ms JPMIA0002GB 3.8 V
				80% is set on "ACTIVE TEST", "ALTERNATOR DUTY" of "ENGINE"		(V) 6 4 2 0 2 2ms JPMIA0003GB 1.4 V
77 (GR)	Ground	Fuel pump relay control	Output	the ignition • Engine ru Approximation	tely 1 second or more after	0 - 1.5 V Battery voltage
80		0	0		ignition switch ON	
(B)	Ground	Starter motor	Output	At engine of		Battery voltage
83 (Y)	Ground	Headlamp LO (RH)	Output	Ignition switch ON	Lighting switch OFF	0 V
-					Lighting switch 2ND Lighting switch OFF	Battery voltage 0 V
84 (L)	Ground	Headlamp LO (LH)	Output	Ignition switch ON	Lighting switch 2ND	Battery voltage
					Front fog lamp switch OFF	0 V
86 (SB)	Ground	Front fog lamp (RH)	Output	Lighting switch 2ND	Front fog lamp switch ON Daytime running light activated (Only for Canada)	Battery voltage
					Front fog lamp switch OFF	0 V
87 (GR)	Ground	Front fog lamp (LH)	Output	Lighting switch 2ND	 Front fog lamp switch ON Daytime running light activated (Only for Canada) 	Battery voltage
88 (W)	Ground	Washer pump power supply	Output	Ignition swi	tch ON	Battery voltage

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value	
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	
89				Ignition	Lighting switch OFF	0 V	
(L)	Ground	Headlamp HI (RH)	Output	switch ON	Lighting switch HI Lighting switch PASS	Battery voltage	
90				Ignition	Lighting switch OFF	0 V	
(G)	Ground	Headlamp HI (LH)	Output	switch ON	Lighting switch HI Lighting switch PASS	Battery voltage	
91	Ground	Parking lamp (RH)	Output	Ignition	Lighting switch OFF	0 V	
(R)	Oround	r arking lamp (IXII)	Output	switch ON	Lighting switch 1ST	Battery voltage	
92	Ground	Parking lamp (LH)	Output	Ignition	Lighting switch OFF	0 V	
(LG)	Oround	Tarking lamp (LIT)	Odiput	switch ON	Lighting switch 1ST	Battery voltage	
99 (BR)	Ground	Ambient sensor ground	Input	Ignition switch ON		0 V	
100 (SB)	Ground	Ambient sensor	Output	Ignition swi NOTE: Changes d perature	itch ON epending to ambient tem-	(V) 4 3 2 1 0 -10 0 10 20 30 40 1°C (14) (32) (50) (68) (86) (104) ("F) JSNIA0014GB	
101 (L)	Ground	Refrigerant pressure sensor ground	Input	Engine running	Warm-up conditionIdle speed	0 V	
102 (B)	Ground	Refrigerant pressure sensor	Input	Engine running	Warm-up condition Both A/C switch and blower fan motor switch ON (Compressor operates)	1.0 - 4.0 V	
103	Ground	Refrigerant pressure sen-	Output	Ignition switch OFF		0 V	
(P)	Giouna	sor power supply	Output	Ignition swi	itch ON	5.0 V	

^{*1:} AWD models only

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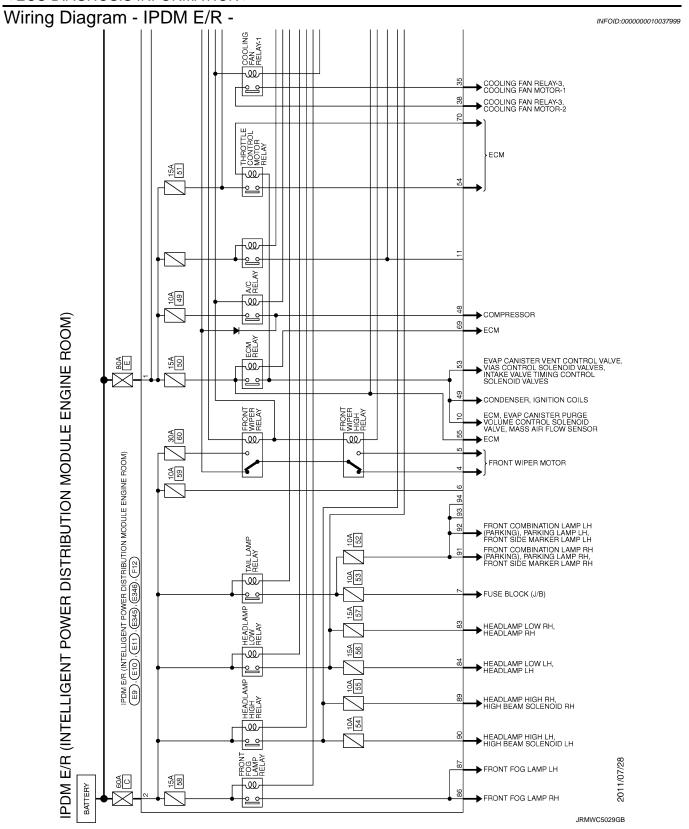
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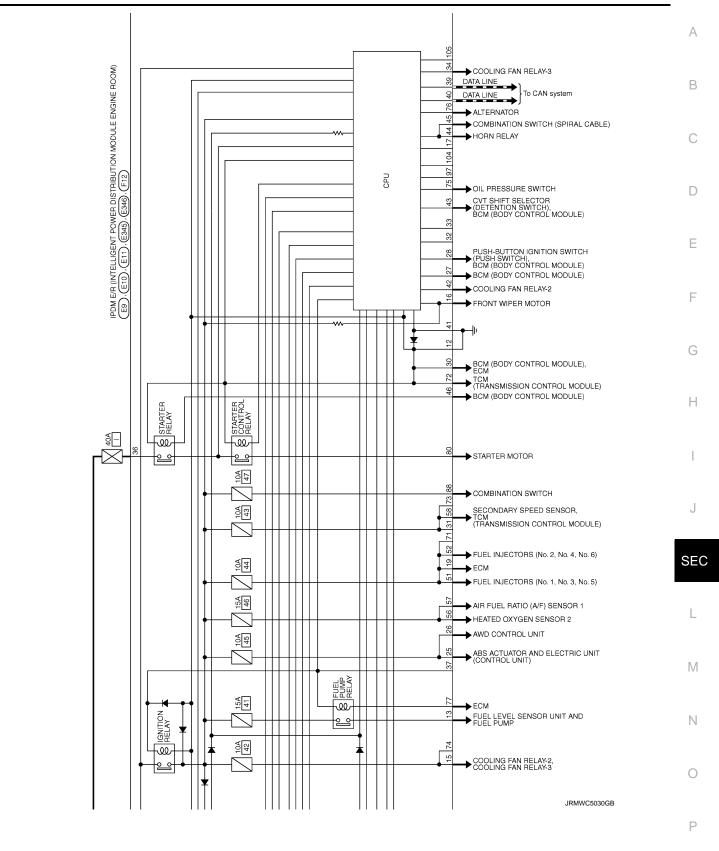
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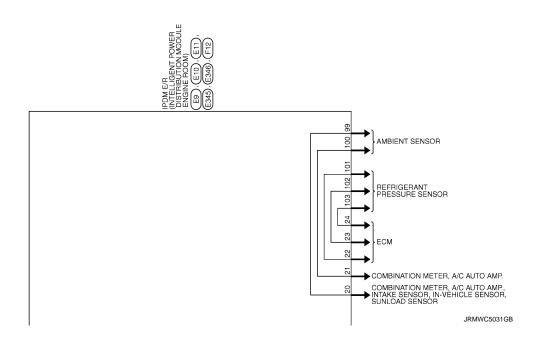
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< ECU DIAGNOSIS INFORMATION >



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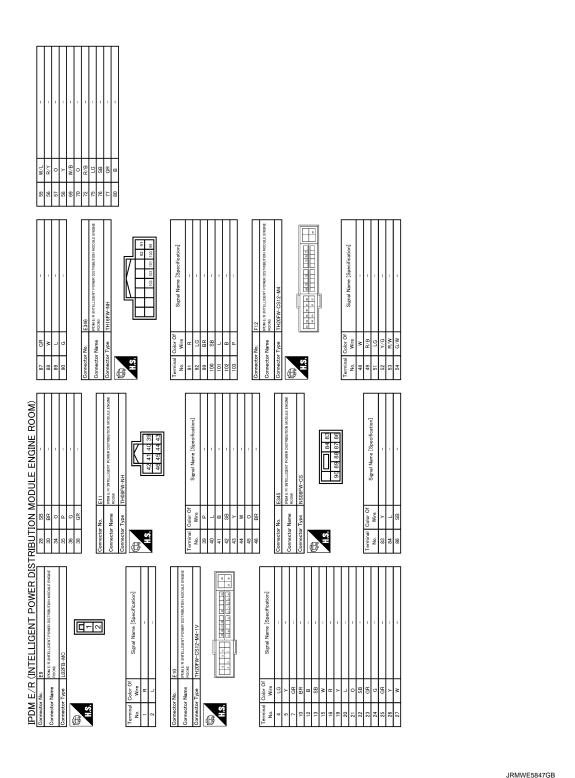
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Р Fail-safe INFOID:0000000010038000

CAN COMMUNICATION CONTROL

When CAN communication with ECM and BCM is impossible, IPDM E/R performs fail-safe control. After CAN communication recovers normally, it also returns to normal control.

If No CAN Communication Is Available With ECM

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< ECU DIAGNOSIS INFORMATION >

Control part	Fail-safe operation	
Cooling fan	 Turns ON the cooling fan relay-2 and the cooling fan relay-3 when ignition switch is turned ON (Cooling fan operates at HI) Turns OFF the cooling fan relay-1, the cooling fan relay-2 and the cooling fan relay-3 when the ignition switch is turned OFF (Cooling fan does not operate) 	
A/C compressor	A/C relay OFF	
Alternator	Outputs the power generation command signal (PWM signal) 0%	

If No CAN Communication Is Available With BCM

Control part	Fail-safe operation	
Headlamp	 Turns ON the headlamp low relay when the ignition switch is turned ON Turns OFF the headlamp low relay when the ignition switch is turned OFF Headlamp high relay OFF 	
Parking lampsLicense plate lampsSide maker lampsIlluminationsTail lamps	 Turns ON the tail lamp relay when the ignition switch is turned ON Turns OFF the tail lamp relay when the ignition switch is turned OFF 	
Front wiper	 The status just before activation of fail-safe control is maintained until the ignition switch is turned OFF while the front wiper is operating at LO or HI speed. The wiper is operated at LO speed until the ignition switch is turned OFF if the fail-safe control is activated while the front wiper is set in the INT/AUTO mode and the front wiper motor is operating. 	
Front fog lamps	Front fog lamp relay OFF	
Horn	Horn OFF	
Ignition relay	The status just before activation of fail-safe is maintained.	
Starter motor	Starter control relay OFF	

IGNITION RELAY MALFUNCTION DETECTION FUNCTION

- IPDM E/R monitors the voltage at the contact circuit and excitation coil circuit of the ignition relay inside it.
- IPDM E/R judges the ignition relay error if the voltage differs between the contact circuit and the excitation coil circuit.
- If the ignition relay cannot turn OFF due to contact seizure, it activates the tail lamp relay for 10 minutes to alert the user to the ignition relay malfunction when the ignition switch is turned OFF.

Voltage judgment				
Ignition relay contact side	Ignition relay excitation coil side	IPDM E/R judgment	Operation	
ON	ON	Ignition relay ON normal	_	
OFF	OFF	Ignition relay OFF normal	_	
ON	OFF	Ignition relay ON stuck	Detects DTC "B2098: IGN RELAY ON" Turns ON the tail lamp relay for 10 minutes	
OFF	ON	Ignition relay OFF stuck	Detects DTC "B2099: IGN RELAY OFF"	

FRONT WIPER CONTROL

IPDM E/R detects front wiper stop position by a front wiper auto stop signal.

When a front wiper stop position signal is in the conditions listed below, IPDM E/R stops power supply to wiper after repeating a front wiper 10 seconds activation and 20 seconds stop five times.

Ignition switch	Front wiper switch	Front wiper stop position signal
ON	OFF	The front wiper stop position signal (stop position) cannot be input for 10 seconds.
	ON	The front wiper auto stop signal does not change for 10 seconds.

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< ECU DIAGNOSIS INFORMATION >

NOTE:

This operation status can be confirmed on the IPDM E/R "Data Monitor" that displays "BLOCK" for the item "WIP PROT" while the wiper is stopped.

STARTER MOTOR PROTECTION FUNCTION

IPDM E/R turns OFF the starter control relay to protect the starter motor when the starter control relay remains active for 90 seconds.

DTC Index INFOID:0000000010038001

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 FFD (Freeze Frame data).
- The number is 0 when is detected now.
- The number increases like 1 ightarrow 2 \cdots 38 ightarrow 39 after returning to the normal condition whenever IGN OFF ightarrow
- The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.

		×: Applicable
CONSULT display	Fail-safe	Refer to
No DTC is detected. further testing may be required.	_	_
U1000: CAN COMM CIRCUIT	×	PCS-15
B2098: IGN RELAY ON CIRC	×	PCS-16
B2099: IGN RELAY OFF CIRC	_	PCS-18
B210B: STR CONT RLY ON CIRC	_	<u>SEC-79</u>
B210C: STR CONT RLY OFF CIRC	_	<u>SEC-80</u>
B210D: STARTER RLY ON CIRC	_	SEC-81
B210E: STARTER RLY OFF CIRC	_	SEC-83
B210F: INTRLCK/PNP SW ON	_	<u>SEC-85</u>
B2110: INTRLCK/PNP SW OFF	_	<u>SEC-87</u>

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ENGINE DOES NOT START WHEN INTELLIGENT KEY IS INSIDE OF VEHICLE [WITH INTELLIGENT KEY SYSTEM]

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

ENGINE DOES NOT START WHEN INTELLIGENT KEY IS INSIDE OF VE-HICLE

Description INFOID:0000000009722839

Engine does not start when push-button ignition switch is pressed while carrying Intelligent Key.

- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
- The engine start function, door lock function, power distribution system, and NATS-IVIS/NVIS in the Intelligent Key system are closely related to each other regarding control. The vehicle security function can operate only when the door lock and power distribution system are operating normally.

Conditions of Vehicle (Operating Conditions)

- "ENGINE START BY I-KEY" in "WORK SUPPORT" is ON when setting on CONSULT.
- Intelligent Key is not inserted in key slot.
- One or more of Intelligent Keys with registered Intelligent Key ID is in the vehicle.

Diagnosis Procedure

INFOID:0000000009722840

1. PERFORM WORK SUPPORT

Perform "INSIDE ANT DIAGNOSIS" on Work Support in "INTELLIGENT KEY".

Refer to SEC-24, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

>> GO TO 2.

2.PERFORM SELF-DIAGNOSTIC RESULT

Perform Self-Diagnostic Result in "BCM", and check whether or not DTC of inside key antenna is detected.

Is DTC detected?

YES >> Refer to <u>DLK-91</u>, "<u>DTC Logic</u>" (console) or <u>DLK-93</u>, "<u>DTC Logic</u>" (luggage room).

NO >> GO TO 3.

3.check push-button ignition switch

Check push-button ignition switch.

Refer to PCS-67, "Component Function Check".

Is the operation normal?

YES >> GO TO 4.

NO >> Repair or replace malfunctioning parts.

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection normal?

>> Check intermittent incident. Refer to GI-44, "Intermittent Incident". YES

NO >> GO TO 1.

SECURITY INDICATOR LAMP DOES NOT TURN ON OR BLINK

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

SECURITY INDICATOR LAMP DOES NOT TURN ON OR BLINK

Description INFOID:0000000009722841

Security indicator lamp does not blink when ignition switch is in a position other than ON NOTE:

- Before performing the diagnosis in the following table, check "Work Flow". Refer to <u>SEC-5, "Work Flow".</u>
- · Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)

- Intelligent Key is not inserted in key slot.
- Ignition switch position is not in the ON position.

Diagnosis Procedure

INFOID:0000000009722842

1. CHECK SECURITY INDICATOR LAMP

Check security indicator lamp. Refer to SEC-91, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

>> Check intermittent incident. Refer to GI-44, "Intermittent Incident". YES

NO >> GO TO 1.

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VEHICLE SECURITY SYSTEM CANNOT BE SET

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM CANNOT BE SET

INTELLIGENT KEY

INTELLIGENT KEY: Description

INFOID:0000000009722843

Armed phase is not activated when door is locked using Intelligent Key.

NOTE:

Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

CONDITION OF VEHICLE (OPERATING CONDITION)

Confirm the setting of "SECURITY ALARM SET" in "WORK SUPPORT" in "THEFT ALM" using CONSULT.

INTELLIGENT KEY: Diagnosis Procedure

INFOID:0000000009722844

1. CHECK INTELLIGENT KEY SYSTEM (REMOTE KEYLESS ENTRY FUNCTION)

Lock/unlock door with Intelligent Key.

Refer to DLK-30, "REMOTE KEYLESS ENTRY FUNCTION: System Description".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check Intelligent Key system (remote keyless entry function). Refer to <u>DLK-264, "Diagnosis Procedure".</u>

2.confirm the operation

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH: Description

INFOID:0000000009722845

Armed phase is not activated when door is locked using door request switch.

NOTE:

NO

Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

CONDITION OF VEHICLE (OPERATING CONDITION)

Confirm the setting of "SECURITY ALARM SET" in "WORK SUPPORT" in "THEFT ALM" using CONSULT.

DOOR REQUEST SWITCH: Diagnosis Procedure

INFOID:0000000009722846

1. CHECK INTELLIGENT KEY SYSTEM (DOOR LOCK FUNCTION)

Lock/unlock door with door request switch.

Refer to <u>DLK-21</u>, "DOOR LOCK FUNCTION: System Description".

Is the inspection result normal?

YES >> GO TO 2.

>> Check Intelligent Key system (door lock function). Refer to <u>DLK-271, "DRIVER SIDE : Diagnosis</u> Procedure".

2.confirm the operation

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

DOOR KEY CYLINDER

VEHICLE SECURITY SYSTEM CANNOT BE SET

[WITH INTELLIGENT KEY SYSTEM]

< SYMPTOM DIAGNOSIS > DOOR KEY CYLINDER: Description INFOID:0000000009722847 Α Before performing the diagnosis in the following table, check "Work Flow". Refer to SEC-5, "Work Flow". DOOR KEY CYLINDER: Diagnosis Procedure INFOID:0000000009722848 В 1. CHECK POWER DOOR LOCK SYSTEM

Lock/unlock door with mechanical key. Refer to DLK-14, "System Description".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check power door lock system. Refer to <u>DLK-259</u>, "Diagnosis Procedure".

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

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VEHICLE SECURITY ALARM DOES NOT ACTIVATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY ALARM DOES NOT ACTIVATE

Description INFOID:000000009722849

Alarm does not operate when alarm operating condition is satisfied.

NOTE:

Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

CONDITIONS OF VEHICLE (OPERATING CONDITIONS)

"SECURITY ALARM SET" in "WORK SUPPORT" of "THEFT ALM" is ON when setting on CONSULT.

Diagnosis Procedure

INFOID:0000000009722850

1. CHECK DOOR SWITCH

Check door switch.

Refer to <u>DLK-97, "WITH AUTOMATIC BACK DOOR: Component Function Check"</u> (with automatic back door) or <u>DLK-99, "WITHOUT AUTOMATIC BACK DOOR: Component Function Check"</u> (without automatic back door).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the malfunctioning door switch

2.CHECK HEADLAMP

Check headlamp.

Refer to EXL-36, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CHECK HORN

Check horn.

Refer to HRN-2, "Wiring Diagram - HORN -".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

INTELLIGENT KEY INSERT INFORMATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY INSERT INFORMATION DOES NOT OPERATE

Description INFOID:0000000009722851

Intelligent Key insert information does not operate when push-button ignition switch is operated while Intelligent Key is not inside vehicle.

NOTE:

Warning functions operating condition is extremely complicated. During operation confirmation reconfirm the list above twice in order to ensure proper operation. Refer to DLK-37, "WARNING FUNCTION: System Description".

Diagnosis Procedure

1. CHECK POWER POSITION

Check if ignition switch position is changing or not.

Does ignition switch position change?

YFS >> GO TO 3.

NO >> GO TO 2.

2.CHECK PUSH-BUTTON IGNITION SWITCH

Check push-button ignition switch.

Refer to PCS-67, "Component Function Check".

Is the inspection result normal?

>> Check BCM for DTC. Refer to BCS-91, "DTC Index". YES

NO >> Repair or replace the malfunctioning parts.

3.check door switch

Check door switch.

Refer to DLK-97, "WITH AUTOMATIC BACK DOOR: Component Function Check" (with automatic back door) or <u>DLK-99</u>. "<u>WITHOUT AUTOMATIC BACK DOOR</u>: <u>Component Function Check"</u> (without automatic back door).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK KEY SLOT

Check key slot.

Refer to DLK-129, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

${f 5}.$ CHECK COMBINATION METER DISPLAY

Check combination meter display.

Refer to DLK-135, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

O.CHECK KEY SLOT INDICATOR

Check key slot indicator.

Refer to DLK-131, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

7.CONFIRM THE OPERATION

Confirm the operation again.

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INFOID:0000000009722852

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INTELLIGENT KEY INSERT INFORMATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

PRECAUTION

PRECAUTIONS FOR USA AND CANADA

FOR USA AND CANADA: Precautions for Removing of Battery Terminal INFOID.000000010038031

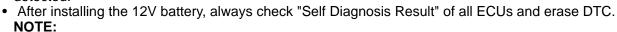
When removing the 12V battery terminal, turn OFF the ignition

switch and wait at least 30 seconds. NOTE:

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

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

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



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

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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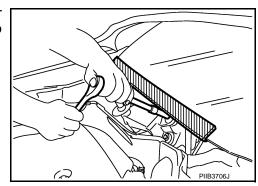
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FOR USA AND CANADA: Precaution for Procedure without Cowl Top Cover

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When performing the procedure after removing cowl top cover, cover the lower end of windshield with urethane, etc to prevent damage to windshield.



FOR MEXICO

FOR MEXICO: Precautions for Removing of Battery Terminal

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

NOTE:

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

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

NOTE:

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

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

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

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the
ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with
a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing
serious injury.

PRECAUTIONS

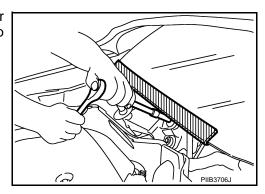
< PRECAUTION >

[WITH INTELLIGENT KEY SYSTEM]

• 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: Precaution for Procedure without Cowl Top Cover

When performing the procedure after removing cowl top cover, cover the lower end of windshield with urethane, etc to prevent damage to windshield.



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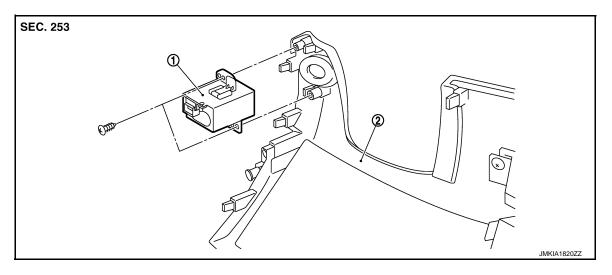
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REMOVAL AND INSTALLATION

KEY SLOT

Exploded View



Key slot

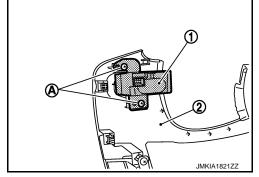
2. Instrument lower panel LH

Removal and Installation

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REMOVAL

- 1. Remove the instrument lower panel LH (2). Refer to <u>IP-15.</u> "Removal and Installation".
- 2. Disconnect key slot connector.
- 3. Remove the key slot mounting screw (A), and then remove key slot (1) from instrument lower panel LH (2).

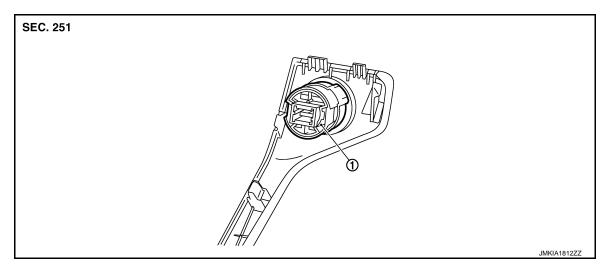


INSTALLATION

Install in the reverse order of removal.

PUSH-BUTTON IGNITION SWITCH

Exploded View



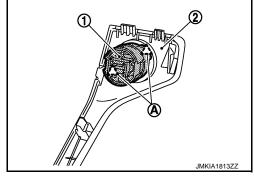
1. Push-button ignition switch

Removal and Installation

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REMOVAL

- 1. Remove the instrument stay cover LH. Refer to IP-15, "Removal and Installation".
- 2. Remove the push-button ignition switch (1) from instrument stay cover LH, after removing pawl (A). Press push-button ignition switch (1) back to disengage from instrument stay cover LH (2).



INSTALLATION

Install in the reverse order of removal.

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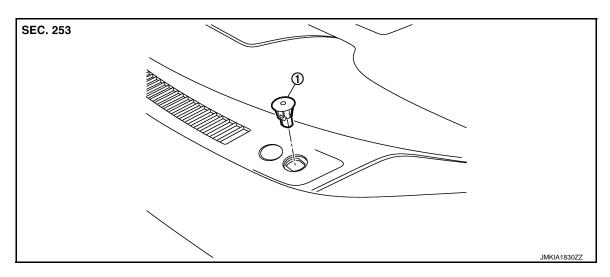
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SECURITY INDICATOR LAMP

Exploded View



Security indicator lamp

Removal and Installation

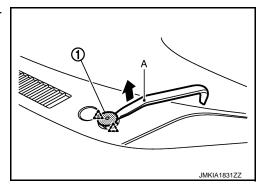
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REMOVAL

Remove the security indicator lamp (1).

Disengage pawls with tool (A) and pull up the security indicator lamp.





INSTALLATION

Install in the reverse order of removal.