SECTION SEC **SECURITY CONTROL SYSTEM**

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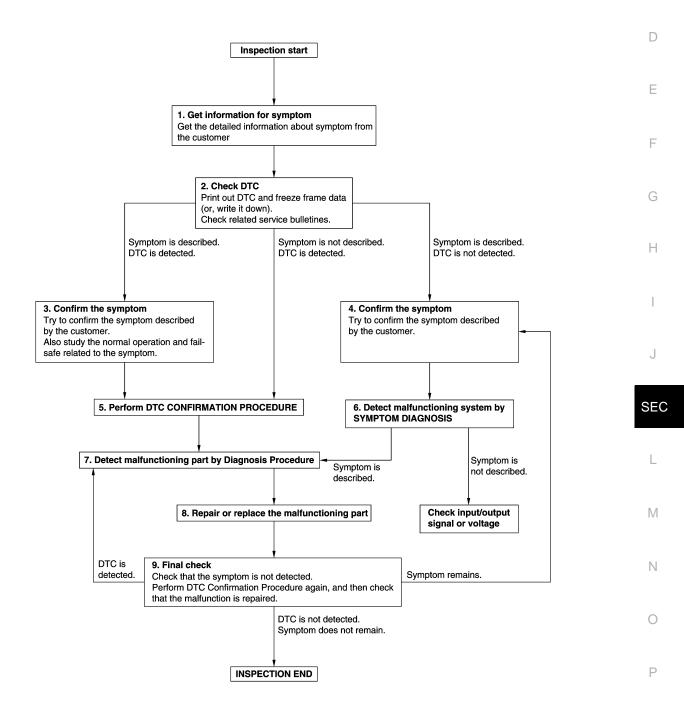
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BASIC INSPECTION

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 FOR 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.

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 self diagnostic results in real time. If two or more DTCs are detected, refer to <u>BCS-89</u>, "DTC Inspection Priority Chart" (BCM) or <u>PCS-30</u>, "DTC Index" (IPDM E/R), 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 >> Check according to GI-42, "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.

Is the symptom described?

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-42, "Intermittent Incident".

8.repair or replace the malfunctioning part

- Repair or replace the malfunctioning part.
- Reconnect parts or connectors disconnected during Diagnosis Procedure again after repair and replacement.
- 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 again, and then check that the malfunction is repaired securely.

When symptom is described by 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.

>> 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 RE-COMMUNICATING FUNCTION

ECM RE-COMMUNICATING FUNCTION: Description

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Performing following procedure can automatically perform re-communication of ECM and BCM, but only when the ECM has been replaced with a new one (*1).

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

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

NOTE:

- When registering new Key IDs or replacing the ECM that is not brand new, follow the instruction of CONSULT display.
- 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 RE-COMMUNICATING FUNCTION: Special Repair Requirement

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1.PERFORM ECM RE-COMMUNICATING FUNCTION

- 1. Install ECM.
- 2. Insert the registered Intelligent Key (*2), turn ignition switch to "ON".

 *2: To perform this step, use the key that has been used before performing ECM replacement.
- 3. Maintain ignition switch in "ON" position for at least 5 seconds.
- 4. Turn ignition switch to "OFF".
- 5. Start engine.

Can engine be started?

YES >> Procedure is completed.

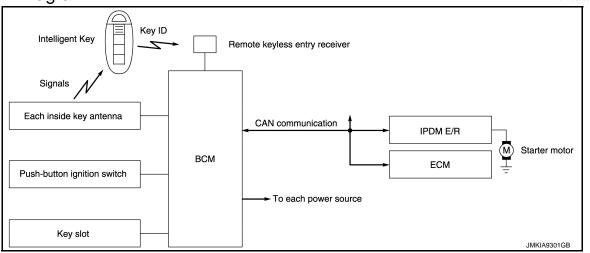
NO >> Initialize control unit.

[WITH INTELLIGENT KEY SYSTEM]

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 IVIS (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, perform the IVIS (NATS) ID verification. If it is used when the Intelligent Key is carried, perform the Intelligent Key ID verification.
- 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.
- Intelligent Key can be registered up to 4 keys (Including the standard Intelligent Key) on request from the owner.

NOTE:

• Refer to <u>DLK-15</u>, "<u>INTELLIGENT KEY SYSTEM</u>: <u>System Diagram</u>" 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 IVIS (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 IVIS (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

- 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.
- The BCM receives the Intelligent Key ID signal via the remote keyless entry receiver, and verifies it with the registered ID.

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INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

- 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 to start the ignition power supply.
- 6. BCM confirms that the shift position is P or N.
- 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.
- IPDM E/R turns the starter control relay ON when receiving the starter request signal.
- 9. Battery power is supplied through the starter relay and the starter control relay to operate the starter motor 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 indicating that the engine is started, 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 IVIS (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>.

POWER SUPPLY POSITION CHANGE TABLE BY PUSH-BUTTON IGNITION SWITCH OPERATION

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

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

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

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

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

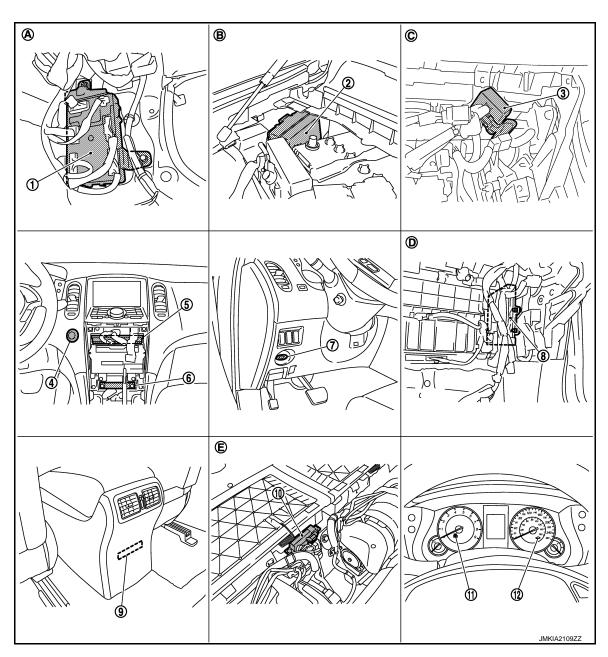
< SYSTEM DESCRIPTION >

Power supply position	Engine start/stop condition		Push-button ignition switch
i ower supply position	Selector lever position 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



- 1. BCM
- 4. Push-button ignition switch
- 7. Key slot

- 2. IPDM E/R
- 5. Unified meter and A/C amp.
- 8. ECM

- 3. Remote keyless entry receiver
- 6. Inside key antenna (instrument center)
- 9. Inside key antenna (console)

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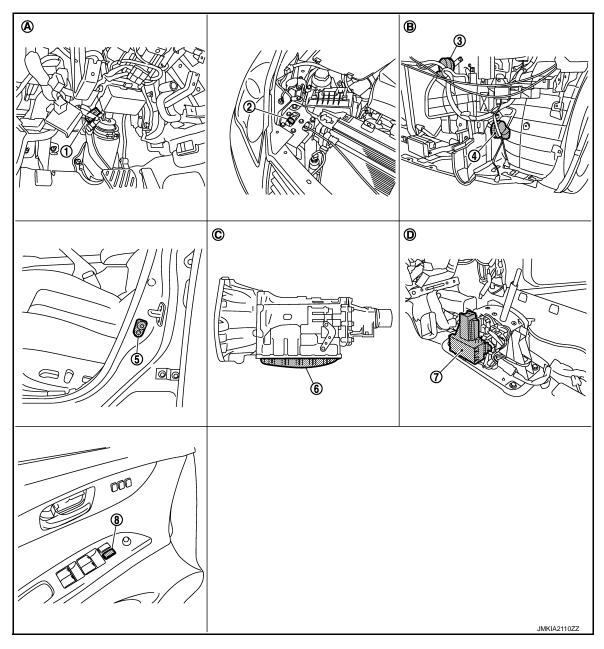
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INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION SCRIPTION > [WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

- 10. Inside key antenna (luggage room)
- A. Dash side lower (passenger side)

- 11. Combination meter (KEY warning lamp)
- B. Engine room dash panel (RH)
- D. Behind the instrument assist lower panel E. Under the rear seat seatback
- Combination meter (security indicator lamp)
- Behind the instrument assist lower panel



- 1. Stop lamp switch
- 4. Horn (low)
- 7. A/T shift selector (detention switch)
- A. Behind the instrument driver lower cover
- View with the center console assembly removed
- 2. Hood switch
- 5. Front door switch (driver side)
- Power window main switch (door lock and unlock switch)
- B. Behind the front bumper
- 3. Horn (high)
- 6. TCM (built into A/T assembly)
- ont bumper C. A/T assembly

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

< SYSTEM DESCRIPTION > Component Description

INFOID:0000000009059395

Component	Reference
Push-button ignition switch	<u>SEC-73</u>
Door switch	DLK-63
A/T shift selector (detention switch)	<u>SEC-53</u>
Inside key antenna	DLK-58
Remote keyless entry receiver	<u>DLK-78</u>
Stop lamp switch	<u>SEC-47</u>
Transmission range switch	<u>SEC-62</u>
Starter relay	<u>SEC-66</u>
Starter control relay	<u>SEC-52</u>
Security indicator lamp	<u>SEC-91</u>
Key warning lamp	<u>SEC-92</u>

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INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS

System Diagram

INFOID:0000000009059396 BAT Security indicator Push-button ignition switch Key slot всм (Built-in NATS antenna amp. and Intelligent Key key switch) (With transponder) **ECM** IPDM E/R Starter \overline{M} motor Key ID CAN communication JMKIA9302GB

System Description

INFOID:0000000009059397

SYSTEM DESCRIPTION

- The IVIS (NATS) is an anti-theft system by registering an Intelligent Key ID in to 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 IVIS (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 IVIS (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.
- Locate the security indicator lamp, that warns the IVIS (NATS) is on board the model.
- Security indicator lamp always blinks when the ignition switch is in any position except the ON position.
- Intelligent Key can be registered up to 4 keys (Including the standard ignition key) on request from the owner.
- The specified registration is required when replacing ECM, BCM or Intelligent Key. The registrations procedure for IVIS (NATS) and registration procedure for Intelligent Key when installing the BCM, follow the instruction of CONSULT display.
- Possible symptom of IVIS (NATS) malfunction is "Engine can not start". The engine can be started with the Intelligent Key system and IVIS (NATS). Identify the possible causes according to "Work Flow", Refer to SEC-5, "Work Flow".
- If ECM other than Genuine NISSAN is installed, the engine cannot be started. For ECM replacement procedure, refer to SEC-8, "ECM RE-COMMUNICATING FUNCTION: Special Repair Requirement".

PRECAUTIONS FOR KEY REGISTRATION

- The key registration is a procedure that erases the current IVIS (NATS) ID once, and then registers a new ID
 operation. 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 (IVIS
 "NATS" ID registration and Intelligent Key ID registration).
 - The IVIS (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 IVIS (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 IVIS (NATS).

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

< SYSTEM DESCRIPTION >

• Security indicator lamp always blinks when the ignition switch is in any position except the ON position. **NOTE:**

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

Component Parts Location

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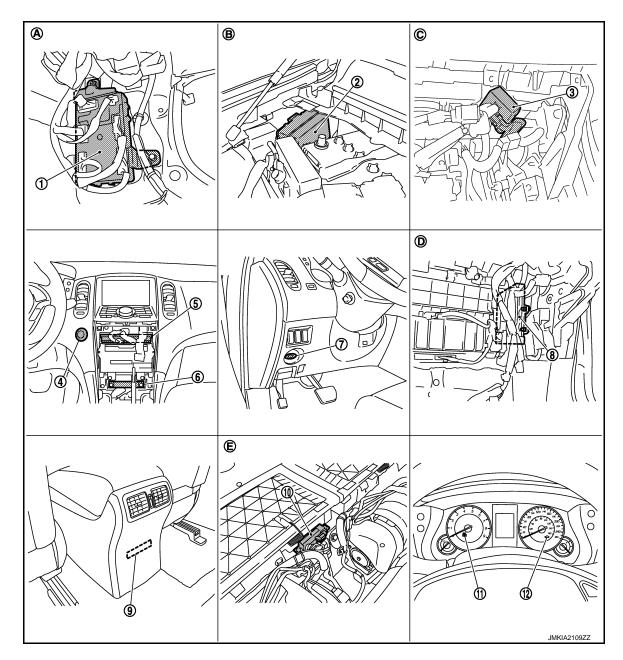
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- 1. BCM
- 4. Push-button ignition switch
- 7. Key slot
- 10. Inside key antenna (luggage room)
- A. Dash side lower (passenger side)
- D. Behind the instrument assist lower panel E.

- 2. IPDM E/R
- 5. Unified meter and A/C amp.
- 8. ECM
- 11. Combination meter (KEY warning lamp)
- B. Engine room dash panel (RH)
- Under the rear seat seatback

- 3. Remote keyless entry receiver
- 6. Inside key antenna (instrument center)
- 9. Inside key antenna (console)
- 12. Combination meter (security indicator lamp)
- C. Behind the instrument assist lower panel

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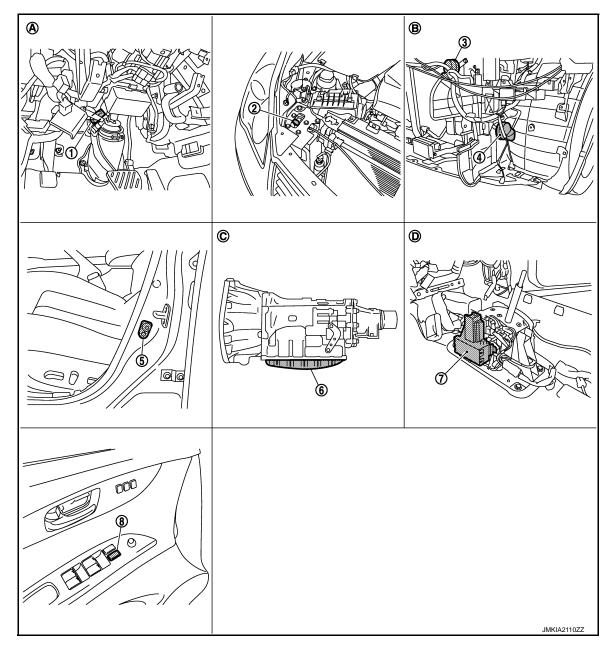
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- 1. Stop lamp switch
- 4. Horn (low)
- 7. A/T shift selector (detention switch)
- A. Behind the instrument driver lower cover
- D. View with the center console assembly removed
- 2. Hood switch
- 5. Front door switch (driver side)
 - Power window main switch (door lock and unlock switch)
- B. Behind the front bumper
- 3. Horn (high)
- 6. TCM (built into A/T assembly)
- C. A/T assembly

Component Description

INFOID:0000000009059399

Component	Reference
Push-button ignition switch	SEC-73, "Description"
Door switch	DLK-63, "Description"
key slot	DLK-95, "Description"
A/T shift selector (detention switch)	SEC-53, "Description"

INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS [WITH INTELLIGENT KEY SYSTEM]

SYSTEM DESCRIPTION > [WITH INTELLIGENT KEY SY	
Component	Reference
Inside key antenna	DLK-58, "Description"
Remote keyless entry receiver	DLK-78, "Description"
Stop lamp switch	SEC-47, "Description"
Transmission range switch	SEC-62, "Description"
Starter relay	SEC-66, "Description"
Starter control relay	SEC-52, "Description"
Security indicator lamp	SEC-91, "Description"
Key warning lamp	SEC-92, "Description"

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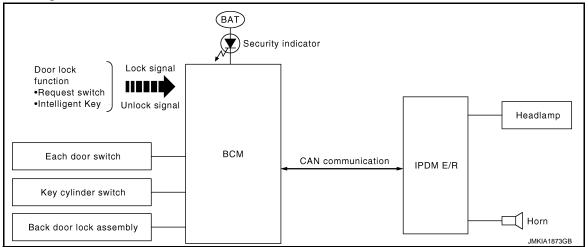
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VEHICLE SECURITY SYSTEM

System Diagram

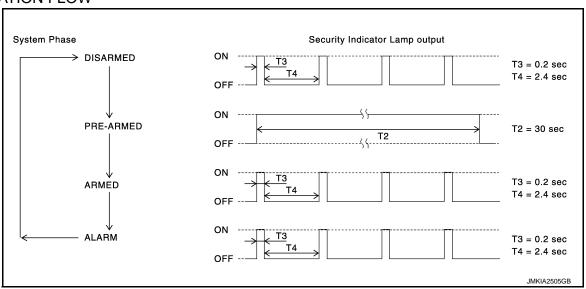
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System Description

INFOID:0000000009059401

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.
- When the vehicle security system is in the disarmed phase, 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. (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

VEHICLE SECURITY SYSTEM

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

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

- Unlock the all doors with the door request switch, Intelligent Key or door key cylinder.
- 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. (Security indicator lamp 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.

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

PANIC ALARM OPERATION

Intelligent Key system may or may not operate vehicle security system (horn and headlamps) as required. When the Intelligent Key system is triggered, ground is supplied intermittently to both headlamp relay and horn relav.

When headlamp relay and horn relay are energized, then power is supplied to headlamps (high beam and low beam) and horns (high and low).

The headlamps flash and the horn sounds intermittently.

The alarm automatically turns off after 50 seconds or when BCM receives any signal from Intelligent Key, door request switch or door key cylinder.

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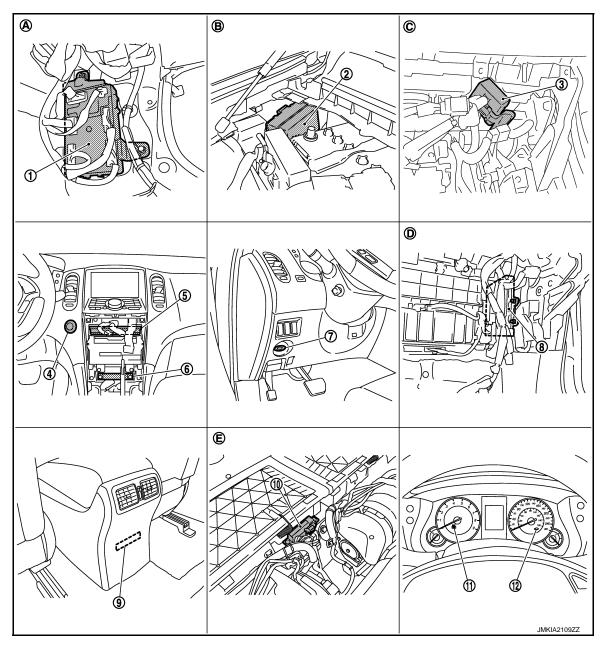
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Component Parts Location

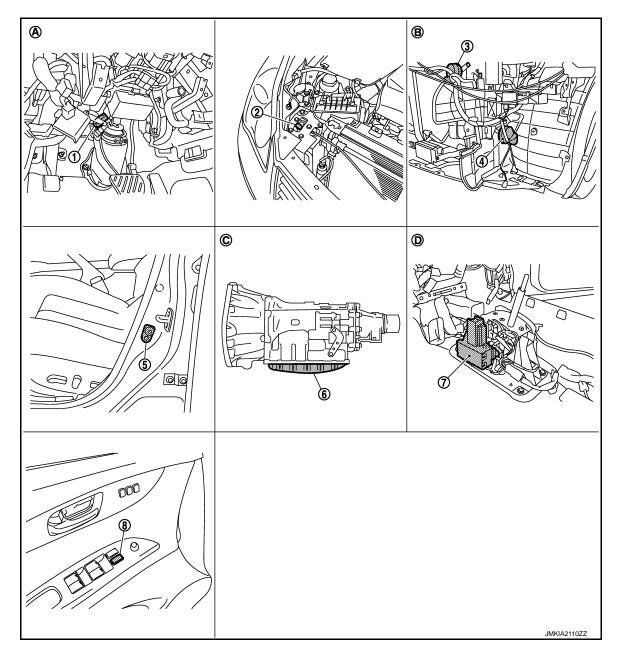
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- 1. BCM
- 4. Push-button ignition switch
- 7. Key slot
- 10. Inside key antenna (luggage room)
- A. Dash side lower (passenger side)
- D. Behind the instrument assist lower panel E.

- 2. IPDM E/R
- 5. Unified meter and A/C amp.
- 8. ECM
- 11. Combination meter (KEY warning lamp)
- B. Engine room dash panel (RH)
- Under the rear seat seatback

- 3. Remote keyless entry receiver
- 6. Inside key antenna (instrument center)
- 9. Inside key antenna (console)
- 12. Combination meter (security indicator lamp)
- C. Behind the instrument assist lower panel



- Stop lamp switch 1.
- Horn (low) 4.
- A/T shift selector (detention switch)
- Behind the instrument driver lower
- View with the center console assembly removed
- 2. Hood switch
- Front door switch (driver side)
- Power window main switch (door lock and unlock switch)
- B. Behind the front bumper
- Horn (high) 3.
- TCM (built into A/T assembly) 6.
- A/T assembly

Component Description

INFOID:0000000009059403

Component	Reference
Horn relay 1	DLK-99, "Description"
Horn relay 2	DLK-99, "Description"
Security indicator lamp	SEC-91, "Description"
Door switch	DLK-63, "Description"

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VEHICLE SECURITY SYSTEM

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Component	Reference
Hood switch	SEC-88, "Description"
Back door lock assembly (door witch)	DLK-63, "Description"
Door key cylinder switch	DLK-76, "Description"

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM: CONSULT Function (BCM - COMMON ITEM)

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APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

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

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

×: Applicable item

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

NOTE:

FREEZE FRAME DATA (FFD)

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

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

[WITH INTELLIGENT KEY SYSTEM]

CONSULT screen item	Indication/Unit	Description			
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected			
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected			
	SLEEP>LOCK		While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK"*)		
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)		
	LOCK>ACC		While turning power supply position from "LOCK"* to "ACC"		
	ACC>ON		While turning power supply position from "ACC" to "IGN"		
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Except emergency stop operation)		
	CRANK>RUN		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 1 : 1 O 15:	OFF>LOCK	Power supply position status of the moment a	While turning power supply position from "OFF" to "LOCK"*		
Vehicle Condition	OFF>ACC	particular DTC is de-	While turning power supply position from "OFF" to "ACC"		
	ON>CRANK	tected*	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 is 0 where The number increases whenever ignition switches.	at ignition switch is turned ON after DTC is detected in a malfunction is detected now. If a malfunction is detected now. If a malfunction is like $1 \rightarrow 2 \rightarrow 338 \rightarrow 39$ after returning to the normal condition to the OFF \rightarrow ON. If a part of 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:0000000009353603

WORK SUPPORT

[WITH INTELLIGENT KEY SYSTEM]

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

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

SELF-DIAG RESULT

Refer to SEC-165, "DTC Index".

DATA MONITOR

NOTE:

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

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

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

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

ACTIVE TEST

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

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< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

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

THEFT ALM

THEFT ALM: CONSULT Function (BCM - THEFT)

INFOID:0000000009059406

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

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

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)

INFOID:0000000009059407

DATA MONITOR

NOTE:

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

Monitor item	Content	_
CONFRM ID ALL		
CONFIRM ID4	Indicates [YET] at all time. Switch to [DONE] when a registered Intelligent Key is inserted into the key slot.	_
CONFIRM ID3		
CONFIRM ID2		
CONFIRM ID1		·
TP 4		
TP 3	Indicates the number of ID which has been registered.	
TP 2		
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.

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DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

BCM

BCM: Description

INFOID:0000000009059408

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H-line, CAN L-line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only. CAN Communication Signal Chart. Refer to LAN-25, "CAN Communication Signal Chart".

CAN Communication Signal Chart. Nelet to <u>LAN-23. CAN Communication Signal Chart.</u>

BCM : DTC Logic

INFOID:0000000009059409

DTC DETECTION LOGIC

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

BCM: Diagnosis Procedure

INFOID:0000000009059410

1.PERFORM SELF DIAGNOSTIC

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

Is "U1000: CAN COMM CIRCUIT" displayed?

YES >> Refer to LAN-16, "Trouble Diagnosis Flow Chart".

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

IPDM E/R

IPDM E/R: Description

INFOID:0000000009059411

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN-H line, CAN-L line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only. CAN Communication Signal Chart. Refer to LAN-25, "CAN Communication Signal Chart".

IPDM E/R: DTC Logic

INFOID:0000000009059412

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:0000000009059413

1. PERFORM SELF DIAGNOSTIC

U1000 CAN COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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

Is "CAN COMM CIRCUIT" displayed?

- YES >> Refer to LAN-16, "Trouble Diagnosis Flow Chart".
- NO >> Refer to <u>GI-42</u>, "Intermittent Incident".

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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:0000000009059415

1.REPLACE BCM

When DTC "U1010: CONTROL UNIT (CAN)" is detected, replace BCM.

>> Replace BCM. Refer to BCS-96, "Exploded View".

BCM: Special Repair Requirement

INFOID:0000000009059416

1. REQUIRED WORK WHEN REPLACING BCM

Initialize control unit, follow the instruction of CONSULT display.

>> Work end.

P1610 LOCK MODE

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

P1610 LOCK MODE

Description INFOID:0000000009059417

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 INFOID:0000000009059418

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

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

Is DTC detected?

YES >> Go to SEC-33, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

1. CHECK ENGINE START FUNCTION

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

>> INSPECTION END

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[WITH INTELLIGENT KEY SYSTEM]

P1611 ID DISCORD, IMMU-ECM

Description INFOID:0000000009059420

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:00000000009059421

DTC DETECTION LOGIC

NOTE:

- If DTC B1611 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-30, "BCM: DTC Logic".
- If DTC B1611 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-32, "BCM: DTC Logic".

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

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" with CONSULT.

Is DTC detected?

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

>> INSPECTION END NO

Diagnosis Procedure

INFOID:0000000009059422

1. PERFORM INITIALIZATION

Perform initialization with CONSULT. Register all Intelligent Keys.

For initialization and registration of Intelligent Key, follow the instruction of CONSULT display.

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-96, "Removal and Installation".
- Perform initialization with CONSULT.

For initialization, follow the instruction of CONSULT display.

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

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

P1612 CHAIN OF ECM-IMMU

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

P1612 CHAIN OF ECM-IMMU

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 P1612 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-30, "BCM: DTC Logic".

 If DTC P1612 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to <u>SEC-32, "BCM: DTC Logic"</u>.

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

- 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-35</u>, "<u>Diagnosis Procedure</u>".

NO >> INSPECTION END

Diagnosis Procedure

REPLACE BCM
 Replace BCM. Refer to BCS-96, "Removal and Installation".

2. Perform initialization with CONSULT.

For initialization, follow the instruction of CONSULT display.

Does the engine start?

YES >> INSPECTION END

NO >> GO TO 2.

2.REPLACE ECM

Replace ECM. Refer to SEC-8, "ECM RE-COMMUNICATING FUNCTION: Description".

>> INSPECTION END

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P1614 CHAIN OF IMMU-KEY

Description INFOID:0000000009059426

Performs ID verification through BCM and Intelligent Key when push-button ignition switch is pressed. Prohibits the start of engine when an unregistered ID of Intelligent Key is used.

DTC Logic INFOID:00000000009059427

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 (key slot circuit is open or shorted) Key slot BCM

DTC CONFIRMATION PROCEDURE

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-36, "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?

>> Go to SEC-36, "Diagnosis Procedure". YES

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009059428

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 KEY SLOT INPUT SIGNAL

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

(+) Key slot		(-)	Voltage (V) (Approx.)
Connector	Terminal		(44)
M22	2	Ground	Battery voltage

Is the inspection result normal?

>> Replace key slot. Refer to SEC-193, "Removal and Installation". YES

NO >> GO TO 3.

3.CHECK KEY SLOT CIRCUIT

Disconnect BCM connector.

P1614 CHAIN OF IMMU-KEY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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

Key slot		всм		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M22	2	M122	80	Existed

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

Key slot			Continuity
Connector	Connector Terminal		Continuity
M22	2		Not existed

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness or connector.

4. 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 5.

NO >> GO TO 7.

5. CHECK KEY SLOT COMMUNICATION SIGNAL

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

	(+)		V 16 0 0
Key slot		(–)	Voltage (V) (Approx.)
Connector	Terminal		(11 . 5)
M22	3	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace key slot. Refer to <u>SEC-193, "Removal and Installation"</u>.

NO >> GO TO 6.

6.CHECK KEY SLOT COMMUNICATION SIGNAL CIRCUIT

Disconnect BCM connector.

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

Key	Key slot		BCM	
Connector	Terminal	Connector	Terminal	Continuity
M22	3	M122	81	Existed

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

Key slot			Continuity
Connector Terminal		Ground	Continuity
M22	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.

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P1614 CHAIN OF IMMU-KEY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Key	Key slot		Continuity
Connector	Terminal	Ground	Continuity
M22	7		Existed

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness or connector.

8.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

P1615 DIFFRENCE OF KEY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

P1615 DIFFRENCE OF KEY Description

Performs ID verification through BCM and Intelligent Key when push-button ignition switch is pressed. Prohibits start of engine when an unregistered ID of Intelligent Key is used.

DTC Logic INFOID:00000000009059430

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P1615	DIFFERENCE OF KEY	The ID verification results between BCM and Intelligent Key are NG. The registration is necessary.	Intelligent Key

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Go to SEC-39, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

1. PERFORM INITIALIZATION

Perform initialization with CONSULT. Register all Intelligent Keys.

For initialization and registration of Intelligent Key, follow the instruction of CONSULT display.

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

Replace Intelligent Kev.

Perform initialization with CONSULT. For initialization and registration of Intelligent Key, follow the instruction of CONSULT display.

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

>> INSPECTION END YES

NO >> GO TO 3.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

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[WITH INTELLIGENT KEY SYSTEM]

B2190 NATS ANTENNA AMP.

Description INFOID:00000000009059432

Performs ID verification through BCM and Intelligent Key when push-button ignition switch is pressed. Prohibits start of engine when an unregistered ID of Intelligent Key is used.

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

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Go to SEC-40, "Diagnosis Procedure".

NO >> GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Go to <u>SEC-40, "Diagnosis Procedure"</u>.

NO >> INSPECTION END

Diagnosis Procedure

INFOID:00000000009059434

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 KEY SLOT INPUT SIGNAL

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

(+) Key slot		(-)	Voltage (V) (Approx.)
Connector	Terminal		(. pp. 5/11)
M22	2	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace key slot. Refer to <u>SEC-193, "Removal and Installation"</u>.

NO >> GO TO 3.

3. CHECK KEY SLOT CIRCUIT

B2190 NATS ANTENNA AMP.

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Disconnect BCM connector.

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

Key	slot	BCM		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M22	2	M122	80	Existed

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

Key	/ slot		Continuity
Connector	Terminal	Ground	Continuity
M22	2		Not existed

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness or connector.

4. 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 5.

NO >> GO TO 7.

5. CHECK KEY SLOT COMMUNICATION 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		(, 44, 2,)
M22	3	Ground	Battery voltage

Is the inspection result normal?

>> Replace key slot. Refer to SEC-193, "Removal and Installation".

NO >> GO TO 6.

6.CHECK KEY SLOT COMMUNICATION SIGNAL CIRCUIT

Disconnect BCM connector.

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

Key	Key slot		BCM	
Connector	Terminal	Connector	Terminal	Continuity
M22	3	M122	81	Existed

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

Key slot			Continuity
Connector Terminal		Ground	Continuity
M22	3		Not existed

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness or connector.

7.CHECK KEY SLOT GROUND CIRCUIT

- Turn ignition switch OFF.
- Disconnect key slot connector.

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B2190 NATS ANTENNA AMP.

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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

Key	slot		Continuity
Connector	Connector Terminal		Continuity
M22	7		Existed

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness or connector.

8. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

B2191 DIFFERENCE OF KEY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2191 DIFFERENCE OF KEY

Description INFOID:0000000009059435

Performs ID verification through BCM and Intelligent Key when push-button ignition switch is pressed. Prohibits start of engine when an unregistered ID of Intelligent Key is used.

DTC Logic INFOID:00000000009059436

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2191	DIFFERENCE OF KEY	The ID verification results between BCM and Intelligent Key are NG. The registration is necessary.	Intelligent Key

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Go to SEC-43, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

1. PERFORM INITIALIZATION

Perform initialization with CONSULT. Register all Intelligent Keys.

For initialization and registration of Intelligent Key, follow the instruction of CONSULT display.

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

Replace Intelligent Kev.

Perform initialization with CONSULT. For initialization and registration of Intelligent Key, follow the instruction of CONSULT display.

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

>> INSPECTION END YES

NO >> GO TO 3.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

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[WITH INTELLIGENT KEY SYSTEM]

INFOID:00000000009059440

B2192 ID DISCORD, IMMU-ECM

Description INFOID:00000000009059438

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-30, "BCM: DTC Logic".
- If DTC B2192 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to <u>SEC-32</u>, "BCM: DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2192	ID DISCORD, IMMU- ECM	The ID verification results between BCM and ECM are 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-44</u>, "<u>Diagnosis Procedure</u>".

NO >> INSPECTION END

Diagnosis Procedure

1. PERFORM INITIALIZATION

Perform initialization with CONSULT. Register all Intelligent Keys.

For initialization and registration of Intelligent Key, follow the instruction of CONSULT display.

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-96, "Removal and Installation".
- 2. Perform initialization with CONSULT.

For initialization, follow the instruction of CONSULT display.

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

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

B2193 CHAIN OF ECM-IMMU

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2193 CHAIN OF ECM-IMMU

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-30, "BCM: DTC Logic".

• If DTC B2193 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to <u>SEC-32</u>, "BCM: DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2193	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

- 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 SEC-45, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

1.REPLACE BCM

1. Replace BCM. Refer to BCS-96, "Removal and Installation".

2. Perform initialization with CONSULT.

For initialization, follow the instruction of CONSULT display.

Does the engine start?

YES >> INSPECTION END

NO >> GO TO 2.

2.REPLACE ECM

Replace ECM. Refer to <u>SEC-8</u>, "ECM RE-COMMUNICATING FUNCTION: Description".

>> INSPECTION END

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INFOID:0000000009059443

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B2195 ANTI-SCANNING

Description INFOID:0000000009059444

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:00000000009059445

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-46, "Diagnosis Procedure".

NO >> INSPECTION END.

Diagnosis Procedure

INFOID:0000000009059446

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

- Perform "Self-diagnostic result" of BCM using CONSULT.
- Erase DTC.
- Perform DTC Confirmation Procedure. Refer to SEC-46, "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-96, "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-46</u>, "DTC Logic".

Is DTC 2195 detected?

YES >> Replace BCM. Refer to BCS-96, "Removal and Installation".

NO >> INSPECTION END

[WITH INTELLIGENT KEY SYSTEM]

B2555 STOP LAMP

Description INFOID:0000000000059447

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.
- 2. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to <u>SEC-47</u>, "<u>Diagnosis Procedure</u>".

NO >> INSPECTION END

Diagnosis Procedure

1. CHECK STOP LAMP SWITCH INPUT SIGNAL

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

(+) Stop lamp switch		(-)	Voltage (V) (Approx.)	
Connector	Terminal		(44.5)	
E110	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

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B2555 STOP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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

Stop lan	Stop lamp switch		ВСМ	
Connector	Terminal	Connector	Terminal	Continuity
E110	2	M123	118	Existed

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

Stop lamp switch			Continuity
Connector	Terminal	Ground	Continuity
E110	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-48, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace stop lamp switch. Refer to <u>BR-18</u>, "Exploded View".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000009059450

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 Terminal		Condition		Continuity
ı	2	Біаке рецаі	Depressed	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace stop lamp switch. Refer to <u>BR-18</u>, "Exploded View".

B2556 PUSH-BUTTON IGNITION SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2556 PUSH-BUTTON IGNITION SWITCH

Description INFOID:0000000009059451

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 INFOID:00000000009059452

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2556	PUSH-BUTTON IG- NITION SWITCH	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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

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

>> INSPECTION END NO

Diagnosis Procedure

1. CHECK PUSH-BUTTON IGNITION SWITCH INPUT SIGNAL

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

	+) ignition switch	(–)	Voltage (V) (Approx.)
Connector	Terminal		
M50	4	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK PUSH-BUTTON IGNITION SWITCH CIRCUIT

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

Push-button ignition switch		BCM		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M50	4	M122	60	Existed	

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

Push-button ignition switch			Continuity
Connector	Terminal	Ground	Continuity
M50	4		Not existed

Is the inspection result normal?

>> Replace BCM. Refer to BCS-96, "Removal and Installation".

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B2556 PUSH-BUTTON IGNITION SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

NO >> Repair or replace harness or connector.

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	Terminal	Ground	Continuity
M50	1		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4. CHECK PUSH-BUTTON IGNITION SWITCH

Refer to SEC-50, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace push-button ignition switch. Refer to <u>SEC-194, "Removal and Installation"</u>.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000009059454

1. CHECK PUSH-BUTTON IGNITION SWITCH

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

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace push-button ignition switch. Refer to <u>SEC-194</u>, "Removal and Installation".

B2557 VEHICLE SPEED

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2557 VEHICLE SPEED

Description

BCM receives the 2 vehicle speed signals via CAN communication. 1 signal is transmitted by the "unified meter and A/C amp." 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-30, "BCM: DTC Logic".

• If DTC B2557 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to <u>SEC-32</u>, "BCM: DTC Logic".

DTC	Self-diagnosis name	DTC detecting condition	Possible causes
B2557	VEHICLE SPEED	BCM detects the following difference between the vehicle speed from "unified meter and A/C amp" and the one from "ABS actuator and electric 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 Unified meter and A/C amp. 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 and wait for at least 10 seconds.

2. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-51, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009059457

${f 1}.$ check dtc with "abs actuator and electric unit (control unit)"

Check "Self diagnostic result" with CONSULT. Refer to BRC-117, "DTC No. Index".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK DTC WITH "UNIFIED METER AND A/C AMP."

Check "Self diagnostic result" with CONSULT. Refer to MWI-109, "DTC Index".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

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B2560 STARTER CONTROL RELAY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2560 STARTER CONTROL RELAY

Description

Starter control relay, integrated in IPDM E/R, permits the starter relay operation when in N or P position. It is installed in parallel with the starter relay.

DTC Logic

DTC DETECTION LOGIC

NOTE:

- If DTC B2560 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-30, "BCM: DTC Logic"
- If DTC B2560 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to <u>SEC-32</u>, "BCM: DTC Logic".

DTC	Self-diagnosis name	DTC detecting condition	Possible causes
B2560	STARTER CONTROL 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

- 1. 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.
- 2. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

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

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009059460

1. CHECK DTC WITH IPDM E/R

Check "Self diagnostic result" with CONSULT. Refer to PCS-30, "DTC Index".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".

2.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident"

>> INSPECTION END

B2601 SHIFT POSITION

Description INFOID:0000000009059461

BCM confirms the shift position with the following 4 signals.

- Selector lever
- Transmission range switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic INFOID:0000000009059462

DTC DETECTION LOGIC

NOTE:

• If DTC B2601 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-30, "BCM: DTC Logic".

 If DTC B2601 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-32, "BCM: DTC Logic".

 If DTC B2601 is displayed with DTC B2603, first perform the trouble diagnosis for DTC B2603. Refer to SEC-64, "DTC Logic".

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 (A/T shift selector circuit is open or shorted.) A/T shift selector (detention switch)

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. 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.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-53, "Diagnosis Procedure".

>> INSPECTION END NO

Diagnosis Procedure

1. CHECK A/T SHIFT SELECTOR POWER SUPPLY

Turn ignition switch OFF.

- Disconnect A/T shift selector (detention switch) connector.
- Check voltage between A/T shift selector (detention switch) harness connector and ground.

A/T shift selector	+) (detention switch)	(–)	Voltage (V) (Approx.)	
Connector	Terminal		(11 - 7	
M137	10	Ground	Battery voltage	

Is the inspection result normal?

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

2.CHECK A/T SHIFT SELECTOR POWER SUPPLY CIRCUIT

- Disconnect BCM connector.
- 2. Check continuity between A/T shift selector (detention switch) harness connector and BCM harness connector.

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B2601 SHIFT POSITION

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

A/T shift selector	shift selector (detention switch) BCM		всм	
Connector	Terminal	Connector Terminal		Continuity
M137	10	M122	96	Existed

3. Check continuity between A/T shift selector (detention switch) harness connector and ground.

A/T shift selector (detention switch)			Continuity
Connector	Terminal	Ground	Continuity
M137	10		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-96, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.CHECK A/T SHIFT SELECTOR CIRCUIT (BCM)

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

A/T shift selector	A/T shift selector (detention switch)		CM	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M137	11	M122	99	Existed

3. Check continuity between A/T shift selector (detention switch) harness connector and ground.

A/T shift selector (detention switch)			Continuity
Connector	Terminal	Ground	Continuity
M137	11		Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4. CHECK A/T SHIFT SELECTOR CIRCUIT (IPDM E/R)

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

A/T shift selector	(detention switch)	IPDM E/R		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M137	11	E6	43	Existed	

2. Check continuity between A/T shift selector (detention switch) harness connector and ground.

A/T shift selector (detention switch)			Continuity
Connector	Terminal	Ground	Continuity
M137	11		Not existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness or connector.

5.CHECK A/T SHIFT SELECTOR (DETENTION SWITCH)

Refer to SEC-55, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace A/T shift selector. Refer to TM-183, "Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

B2601 SHIFT POSITION

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Refer to	GI-42.	"Intermittent	Incident".

>> INSPECTION END

Component Inspection

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- 1. check a/t shift selector (detention switch)
- 1. Turn ignition switch OFF.
- 2. Disconnect A/T shift selector connector.
- 3. Check continuity between A/T shift selector (detention switch) terminals.

A/T shift selector (detention switch)		Condition		Continuity	
Terr	minal	Con	dition	Continuity	
10	11	11 Selector lever		Not existed	
10	11	Selector level	Other than above	Existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace A/T shift selector (detention switch). Refer to TM-183, "Removal and Installation".

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B2602 SHIFT POSITION

Description INFOID:0000000009059465

BCM confirms the shift position with the following 4 signals.

- Selector lever
- Transmission range switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic INFOID:00000000009059466

DTC DETECTION LOGIC

NOTE:

- If DTC B2602 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-30, "BCM: DTC Logic".
- If DTC B2602 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-32, "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 (A/T shift selector circuit is open or shorted) A/T shift selector (detention switch) ABS actuator and electric unit (control unit)

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 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.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

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

>> INSPECTION END NO

Diagnosis Procedure

INFOID:0000000009059467

${f 1}$.CHECK DTC WITH "ABS ACTUATOR AND ELECTRIC UNIT"

Check "Self diagnostic result" with CONSULT. Refer to BRC-117, "DTC No. Index".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK A/T SHIFT SELECTOR POWER SUPPLY

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

A/T shift selector	(+) A/T shift selector (detention switch)		Voltage (V) (Approx.)
Connector	Terminal		(· + - · · · ·)
M137	10	Ground	Battery voltage

B2602 SHIFT POSITION

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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

3.CHECK A/T SHIFT SELECTOR POWER SUPPLY CIRCUIT

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

A/T shift selector	(detention switch)	В	CM	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M137	10	M122	96	Existed

3. Check continuity between A/T shift selector (detention switch) harness connector and ground.

A/T shift selector (detention switch)			Continuity
Connector	Connector Terminal		Continuity
M137	10		No existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-96, "Removal and Installation".

NO >> Repair or replace harness or connector.

4. CHECK A/T SHIFT SELECTOR CIRCUIT

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

A/T shift selector	(detention switch)	BCM Connector Terminal		Continuity
Connector	Terminal			Continuity
M137	11	M122	99	Existed

3. Check continuity between A/T shift selector (detention switch) harness connector and ground.

A/T shift selector (detention switch)			Continuity
Connector	Terminal	Ground	Continuity
M137	11		No existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness or connector.

CHECK A/T SHIFT SELECTOR (DETENTION SWITCH)

Refer to SEC-57, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace A/T shift selector. Refer to TM-183, "Removal and Installation".

6. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1. CHECK A/T SHIFT SELECTOR (DETENTION SWITCH)

- Turn ignition switch OFF.
- 2. Disconnect A/T shift selector connector.
- Check continuity between A/T shift selector (detention switch) terminals.

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B2602 SHIFT POSITION

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

A/T shift selector	A/T shift selector (detention switch)		Condition	
Teri	minal	Condition		Continuity
10	11	Selector lever	P position	Not existed
10	11	Selector level	Other than above	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace A/T shift selector (detention switch). Refer to TM-183, "Removal and Installation".

B2603 SHIFT POSITION STATUS

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2603 SHIFT POSITION STATUS

Description

BCM confirms the shift position with the following 4 signals.

- Selector lever
- Transmission range switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic (INFOID:00000000000059470

DTC DETECTION LOGIC

NOTE:

• If DTC B2603 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-30, "BCM: DTC Logic".

 If DTC B2603 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to <u>SEC-32</u>, "BCM: DTC Logic".

DTC	Self-diagnosis name	DTC detecting condition	Possible causes
B2603	SHIFT POSITION 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 A/T shift selector (detention switch): approx. 0V	Harness or connector (A/T shift selector circuit is open or shorted.) Harness or connectors (Transmission range switch circuit is open or shorted.) A/T shift selector (detention switch) Transmission range switch

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 position.
- Do not depress the brake pedal.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

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

NO >> INSPECTION END

Diagnosis Procedure

1. CHECK DTC WITH TCM

Check "Self diagnostic result" with CONSULT. Refer to TM-158, "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.
- Disconnect TCM connector and BCM connector.
- Check continuity between TCM harness connector and BCM harness connector.

TO	ТСМ		BCM	
Connector	Terminal	Connector	Terminal	Continuity
F51	9	M123	140	Existed

Check continuity between TCM harness connector and ground.

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B2603 SHIFT POSITION STATUS

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

TCM			Continuity
Connector	Terminal	Ground	Continuity
F51	9		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.check a/t shift selector power supply

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

(+) A/T shift selector (detention switch)		(-)	Voltage (V) (Approx.)
Connector	Terminal		(, 41, 2,)
M137	10	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4. CHECK A/T SHIFT SELECTOR POWER SUPPLY CIRCUIT

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

A/T shift selector	(detention switch)	BCM		Continuity
Connector	Terminal	Connector Terminal		Continuity
M137	10	M122	96	Existed

Check continuity between A/T shift selector (detention switch) harness connector and ground.

A/T shift selector (detention switch)			Continuity
Connector	Terminal	Ground	Continuity
M137	10		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-96, "Removal and Installation".

NO >> Repair or replace harness or connector.

5. CHECK A/T SHIFT SELECTOR CIRCUIT

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

A/T shift selector	(detention switch)	BCM		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M137	11	M122	99	Existed

3. Check continuity between A/T shift selector (detention switch) harness connector and ground.

A/T shift selector (detention switch)			Continuity
Connector	Terminal	Ground	Continuity
M137	11		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 STATUS

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

6. CHECK A/T SHIFT SELECTOR (DETENTION SWITCH)

Refer to SEC-61, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 7.

NO >> Replace A/T shift selector. Refer to TM-183, "Removal and Installation".

7. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000009059472

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1. CHECK A/T SHIFT SELECTOR (DETENTION SWITCH)

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

A/T shift selector (detention switch)		Condition		Continuity
Terminal				Continuity
10	11	Soloctor lover	P position	Not existed
10		Selector lever	Other than above	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace A/T shift selector (detention switch). Refer to TM-183, "Removal and Installation".

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B2604 PNP SWITCH

Description INFOID.0000000009059473

BCM confirms the shift position with the following 4 signals.

- Selector lever
- 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-30, "BCM: DTC Logic".
- If DTC B2604 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-32, "BCM: DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2604	PNP SWITCH	 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
- Do not depress the brake pedal
- 2. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-62, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009059475

1. CHECK DTC WITH TCM

Check "Self diagnostic result" with CONSULT. Refer to TM-158, "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	В	CM	Continuity
Connector	Terminal	Connector	Terminal	Continuity
F51	9	M123	140	Existed

Check continuity between TCM harness connector and ground.

B2604 PNP SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

T	CM		Continuity
Connector	Connector Terminal		Continuity
F51	9		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

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B2605 PNP SWITCH

Description INFOID.0000000009059476

BCM confirms the shift position with the following 4 signals.

- Selector lever
- 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-30, "BCM: DTC Logic".
- If DTC B2605 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-32, "BCM: DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2605	PNP SWITCH	 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. 	Transmission range switch

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-64, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009059478

1. CHECK DTC WITH IPDM E/R

Check "Self diagnostic result" with CONSULT. Refer to PCS-30, "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	В	CM	Continuity
Connector	Terminal	Connector	Terminal	Continuity
F51	9	M123	140	Existed

Check continuity between TCM harness connector and ground.

B2605 PNP SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

TO	CM		Continuity
Connector Terminal		Ground	Continuity
F51	9		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

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B2608 STARTER RELAY

Description INFOID.0000000009059479

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-30, "BCM: DTC Logic".
- If DTC B2608 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-32, "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-79, "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. Press the push-button ignition switch 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-66, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009059481

1.CHECK BCM POWER SUPPLY CIRCUIT

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

(+) BCM		(–) Condit		ndition	Voltage (V) (Approx.)	
Connector	Terminal				(* .pp. 3)	
M121	52	Ground	Selector lever	N or P position	Battery voltage	
IVITZT	52	Ground Selector level		Other than above	0	

Is the measurement value within the specification?

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.
- 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	В	CM	Continuity
Connector	Terminal	Connector	Terminal	Continuity
E 6	46	M121	52	Existed

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

IPDI	M E/R		Continuity	
Connector Terminal		Ground	Continuity	
E6	46		Not existed	

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".

NO >> Repair or replace harness or connector.

3. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

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B260F ENGINE STATUS

[WITH INTELLIGENT KEY SYSTEM]

B260F ENGINE STATUS

Description INFOID:000000000009059482

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-30, "BCM: DTC Logic"</u>.
- If DTC B260F is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-32, "BCM: DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B260F	INTERRUPTION OF ENGINE STATUS SIGNAL	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-68, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009059484

1. INSPECTION START

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

See SEC-68, "DTC Logic".

Is the DTC B260F displayed again?

YES >> GO TO 2.

NO >> GO TO 3.

2.REPLACE ECM

Replace ECM. Refer to SEC-8, "ECM RE-COMMUNICATING FUNCTION: Description".

>> INSPECTION END

3. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

B26E1 NO RECEPTION OF ENGINE STATUS SIGNAL

< DTC/CIRCUIT DIAGNOSIS >

2.replace ecm

>> INSPECTION END

3.CHECK INTERMITTENT INCIDENT
Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

[WITH INTELLIGENT KEY SYSTEM]

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B26E1 NO RECEPTION OF ENGINE STATUS SIGNAL Α Description INFOID:0000000009059485 BCM receives the engine status signal from ECM via CAN communication. В DTC Logic INFOID:0000000009059486 DTC DETECTION LOGIC NOTE: If DTC B26E1 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-30, "BCM : DTC Logic". D If DTC B26E1 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-32, "BCM: DTC Logic". Е DTC No. Trouble diagnosis name DTC detecting condition Possible cause BCM does not receive the engine status signal B26E1 NO RECEPTION OF ENGINE STATUS SIGNAL **ECM** from ECM when ignition switch is in ON position F 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. Н Check "Self diagnostic result" with CONSULT. Is DTC detected? >> Go to SEC-69, "Diagnosis Procedure". YES >> INSPECTION END NO Diagnosis Procedure INFOID:0000000009059487 1. INSPECTION START Turn ignition switch ON. 2. Check "Self diagnostic result" with CONSULT. SEC Touch "ERASE". Perform DTC Confirmation Procedure. See SEC-69, "DTC Logic". Is the DTC B26E1 displayed again? YES >> GO TO 2. NO >> GO TO 3. M

Replace ECM. Refer to SEC-8, "ECM RE-COMMUNICATING FUNCTION: Description".

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B26EA KEY REGISTRATION

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INFOID:0000000009059490

B26EA KEY REGISTRATION

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
B26EA	KEY REGISTRA- TION	Intelligent Key is not registered successfully.	Improper registration operationIntelligent KeyBCM

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Perform initialization with CONSULT. Register all Intelligent Keys.

 For initialization and registration of Intelligent Key, follow the instruction of CONSULT display.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

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

NO >> INSPECTION END

Diagnosis Procedure

1.PERFORM INITIALIZATION

- Perform initialization with CONSULT. Register all Intelligent Keys.
 For initialization and registration of Intelligent Key, follow the instruction of CONSULT display.
- 2. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> GO TO 2.

NO >> INSPECTION END

2. REPLACE INTELLIGENT KEY

- 1. Replace Intelligent Key. Register all Intelligent Keys
- 2. Perform initialization with CONSULT. For initialization, follow the instruction of CONSULT display.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Replace BCM. Refer to <u>BCS-96, "Removal and Installation"</u>.

NO >> INSPECTION END

B2617 STARTER RELAY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2617 STARTER RELAY CIRCUIT

Description INFOID:0000000000059491

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 B2617 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-30, "BCM: DTC Logic".
- If DTC B2617 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-32, "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-80, "DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B2617	STARTER RELAY CIRCUIT	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

- 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 brake pedal.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

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

NO >> INSPECTION END

Diagnosis Procedure

1. CHECK STARTER RELAY

1. 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	
IVITZT				Other than above	0	

Is the measurement value within the specification.

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.

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B2617 STARTER RELAY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

IPDM E/R		BCM		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
E6	46	M121	52	Existed	

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

IPDI	M E/R		Continuity
Connector	Terminal	Ground	Continuity
E6	46		Not existed

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".

NO >> Repair or replace harness or connector.

3. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

B261A PUSH-BUTTON IGNITION SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B261A PUSH-BUTTON IGNITION SWITCH

Description INFOID:0000000009059494

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:0000000009059495

DTC DETECTION LOGIC

NOTE:

- If DTC B261A is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-30, "BCM: DTC Logic".
- If DTC B261A is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-32, "BCM: DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B261A	PUSH-BUTTON IGNITION SWITCH	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-73, "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-73, "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)
Connector	Push-button ignition switch Connector Terminal		(Approx.)
M50	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
M50	4	M122	60	Existed

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

Push-button	ignition switch		Continuity
Connector Terminal		Ground	Continuity
M50	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.
- 3. Check voltage between push-button ignition switch harness connector and ground.

(Push-button	+) ignition switch	(-)	Voltage (V) (Approx.)
Connector Terminal			(* FF. ****)
M50	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		IPDI	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M50	4	E5	28	Existed

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

Push-button	ignition switch		Continuity
Connector Terminal		Ground	Continuity
M50	4		Not existed

Is the inspection result normal? YES >> GO TO 6. NO >> Repair or replace harness or connector. 6. CHECK INTERMITTENT INCIDENT Refer to Gi-42, "Intermittent Incident". >> INSPECTION END	< DTC/CIRCUIT DIAGNOSIS >	[WITH INTELLIGENT KEY SYSTEM]
NO >> Repair or replace harness or connector. 6. CHECK INTERMITTENT INCIDENT Refer to GI-42, "Intermittent Incident".	·	
Refer to GI-42, "Intermittent Incident".	NO >> Repair or replace harness or connector.	
	6.CHECK INTERMITTENT INCIDENT	
>> INSPECTION END	Refer to GI-42, "Intermittent Incident".	
	>> INSPECTION END	

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B261E VEHICLE TYPE

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B261E VEHICLE TYPE

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-30, "BCM: DTC Logic".
- If DTC B261E is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to <u>SEC-32</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-76, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009059499

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-76, "DTC Logic".

Is the 1st trip DTC B261E displayed again?

YES >> Replace BCM. Refer to BCS-96, "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. It is installed in parallel with the starter relay.

DTC Logic

DTC DETECTION LOGIC

NOTE:

If DTC B210B is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to <u>SEC-30, "BCM: DTC Logic"</u>.

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B210B	START CONT RLY ON	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

- 1. Turn the power supply position to start 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-77</u>, "<u>Diagnosis Procedure</u>".

NO >> INSPECTION END

Diagnosis Procedure

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-77, "DTC Logic".

Is the DTC B210B displayed again?

YES >> Replace IPDM E/R. Refer PCS-32, "Removal and Installation".

NO >> INSPECTION END

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B210C STARTER CONTROL RELAY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INFOID:00000000009059505

B210C STARTER CONTROL RELAY

Description

Starter control relay, integrated in IPDM E/R, permits the starter relay operation when in N or P position. It is installed in parallel with the starter relay.

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-30, "BCM: 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	START CONT RLY OFF	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. Turn the power supply position to start 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 SEC-78, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

1. INSPECTION START

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

See SEC-78, "DTC Logic".

Is the DTC B210C displayed again?

YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".

NO >> INSPECTION END

B210D STARTER RELAY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B210D STARTER RELAY

Description INFOID:0000000009059506

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:00000000009059507

DTC DETECTION LOGIC

NOTE:

- If DTC B210D is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-30, "BCM: DTC Logic".
- If DTC B210D is displayed with DTC B2617, first perform the trouble diagnosis for DTC B2617. Refer to SEC-71, "DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B210D	STARTER RELAY ON	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

- 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?

>> Go to SEC-79, "Diagnosis Procedure". YES

NO >> INSPECTION END

Diagnosis Procedure

1. INSPECTION START

- Turn ignition switch ON.
- Check "Self diagnostic result" for IPDM E/R with CONSULT. 2.
- Touch "ERASE". 3.

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Perform DTC Confirmation Procedure.

See SEC-79, "DTC Logic".

YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".

>> INSPECTION END NO

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Is the DTC B210D displayed again?

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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-30, "BCM: 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-84, "DTC Logic"</u>.
- If DTC B210E is displayed with DTC B2617 for BCM, first perform the trouble diagnosis for DTC B2617.
 Refer to <u>SEC-71</u>, "<u>DTC Logic</u>".
- 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 RELAY OFF	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. 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-80, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:00000000009059511

1. CHECK STARTER RELAY OUTPUT SIGNAL

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

(+) BCM connector		(–)	Condition		Voltage (V) (Approx.)	
Connector	Terminal		Ignition switch Brake pedal Selector lever		(
					P or N	Battery voltage
M121	52	Ground	ON Depressed		Other than above	0

Is the inspection result normal?

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

2.CHECK STARTER RELAY OUTPUT SIGNAL CIRCUIT

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

B210E STARTER RELAY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

В	ВСМ		IPDM E/R		
Connector	Terminal	Connector Terminal		Continuity	
M121	52	E6	46	Existed	

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector Terminal		Ground	Continuity	
M121	52		Not existed	

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.check starter relay power supply circuit

- Turn ignition switch OFF.
- Disconnect IPDM E/R connector.
- Check voltage between IPDM E/R harness connector and ground. Refer to PCS-25, "Wiring Diagram -IPDM E/R -".

	(+)		Voltage (V) (Approx.)	
IPD	M E/R	(–)		
Connector	Terminal			
E5	36	Ground	Battery voltage	

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".

NO >> Check harness for open or short between IPDM E/R and battery.

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B210F PNP/CLUTCH INTERLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B210F PNP/CLUTCH INTERLOCK SWITCH

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

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

DTC DETECTION LOGIC

NOTE:

If DTC B210F is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to <u>SEC-30</u>, "BCM: 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

- 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 brake pedal.
- Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-82, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009059514

1. CHECK DTC WITH BCM

Check "Self diagnostic result" with CONSULT. Refer to BCS-90, "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

- 1. Turn ignition switch OFF.
- Disconnect IPDM E/R connector.
- Turn ignition switch ON.
- 4. Check voltage between IPDM E/R harness connector and ground.

	+) M E/R	(-)	Condition		Condition		Voltage (V) (Approx.)
Connector	Terminal						
E5	30	Ground	Selector lever	P or N	Battery voltage		
E 3	30	Giodila	Selector level	Other than above	0		

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".

NO >> GO TO 3.

3. CHECK TRANSMISSION RANGE SWITCH CIRCUIT

1. Turn ignition switch OFF.

B210F PNP/CLUTCH INTERLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

2. Disconnect TCM connector.

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

IPDI	M E/R	T	Continuity		
Connector	Terminal	Connector Terminal		Continuity	
E5	30	F51	9	Existed	

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

IPDI	M E/R		Continuity	
Connector Terminal		Ground	Continuity	
E5	30		Not existed	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

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B2110 PNP/CLUTCH INTERLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2110 PNP/CLUTCH INTERLOCK SWITCH

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

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

DTC Logic

DTC DETECTION LOGIC

NOTE:

If DTC B2110 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to <u>SEC-30, "BCM: DTC Logic"</u>.

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

- 1. 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.
- 2. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to SEC-84, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009059517

1. CHECK DTC WITH TCM

Check "Self diagnostic result" with CONSULT. Refer to TM-158, "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 OFF.
- 2. Disconnect IPDM E/R connector.
- 3. Turn ignition switch ON.
- 4. Check voltage between IPDM E/R harness connector and ground.

`	+) M E/R	(–)	Condition		Voltage (V) (Approx.)
Connector	Terminal				() ()
E5	30	Ground	Selector lever	P or N	Battery voltage
L3	30	Ground	Selector level	Other than above	0

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".

NO >> GO TO 3.

B2110 PNP/CLUTCH INTERLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

$\overline{3}$.check transmission range switch circuit

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

IPDI	M E/R	T(Continuity		
Connector	Terminal	Connector Terminal		Continuity	
E5	30	F51	9	Existed	

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

IPDM E/R			Continuity
Connector	Terminal	Ground	Continuity
E5	30		Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM: Diagnosis Procedure

INFOID:0000000009059518

INFOID:0000000009059519

1. CHECK FUSE AND FUSIBLE LINK

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

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

Is the fuse fusing?

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

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

Terminals			
(+)		(-)	Voltage
BCM			(Approx.)
Connector	Terminal	Ground	
M118	1	Glound	Battery voltage
M119	11		Ballery Vollage

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

ВСМ			Continuity
Connector	Terminal	Ground	Continuity
M119	13		Existed

Does continuity exist?

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.
	С
Battery power supply	50
	51

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.

	Terminals		
(+)		(-)	Voltage (Approx.)
IPDN	IPDM E/R		
Connector	Terminal	Ground	
E4	1	Giodila	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/R			Continuity
Connector	Terminal	Ground	Continuity
E5	12	Ground	Existed
E6	41		LXISIEU

Does continuity exist?

YES >> INSPECTION END

NO >> Repair the harness or connector.

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< DTC/CIRCUIT DIAGNOSIS >

HOOD SWITCH

Description

Hood switch is built into hood lock (RH) and connected to IPDM E/R which detects the open/close condition of hood.

Component Function Check

INFOID:0000000009059521

1. CHECK FUNCTION

- 1. Select "HOOD SW" in "Data Monitor" mode with CONSULT.
- 2. Check the hood switch signal under the following condition.

Test item	Condition		Status
HOOD SW	Hood	Open	ON
HOOD 3W	11000	Close	OFF

Is the indication normal?

YES >> Hood switch is OK.

NO >> Go to <u>SEC-88</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:00000000009059522

1. CHECK HOOD SWITCH POWER SUPPLY

- Turn ignition switch OFF.
- Disconnect hood switch connector.
- 3. Check voltage between hood switch harness connector and ground.

(+) Hood switch		(-)	Voltage (V) (Approx.)
Connector	Terminal		(Αφρίσλ.)
E30	2	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK HOOD SWITCH CIRCUIT

- Disconnect IPDM E/R connector.
- Check continuity between IPDM E/R harness connector and hood switch harness connector.

IPDI	IPDM E/R Hood switch		Continuity	
Connector	Terminal	Connector	Terminal	Continuity
E9	104	E30	2	Existed

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

IPDM E/R			Continuity
Connector	Terminal	Ground	Continuity
E9	104		Not existed

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".

NO >> Repair or replace harness.

3.CHECK HOOD SWITCH GROUND CIRCUIT

Check continuity between hood switch harness connector and ground.

HOOD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Hood switch			Continuity
Connector	Terminal	Ground	Continuity
E30	1		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK HOOD SWITCH

Refer to SEC-89, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace hood lock (RH). Refer to <u>DLK-254, "Removal and Installation"</u>.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1. CHECK HOOD SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect hood switch connector.
- 3. Check continuity between hood switch terminals.

Hood	switch	Con	dition	Continuity
Terr	minal	0011	uition	Continuity
1	2	Hood	Close	Not existed
ı	2	ПООО	Open	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace hood lock (RH). Refer to <u>DLK-254, "Removal and Installation"</u>.

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HEADLAMP

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

HEADLAMP

Description

Headlamp lighting when vehicle security system is alarm phase.

Component Function Check

INFOID:0000000009059525

1. CHECK HEADLAMP OPERATION

Check if headlamp operate by lighting switch.

Does headlamp come on when turning switch "ON"?

YES >> Headlamp circuit is OK.

NO >> Go to <u>SEC-90</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000009059526

1. CHECK HEADLAMP OPERATION

Refer to SEC-90, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> repair or replace the malfunctioning parts.

2. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

SECURITY INDICATOR LAMP

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

SECURITY INDICATOR LAMP

Description

- · Security indicator lamp is built in combination meter.
- IVIS (Infinity 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

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

Test it	em	Descript	ion
THEFT IND	ON	Security indicator lamp	Illuminate
IIILI I IND	OFF	Security indicator lamp	Not illuminate

Is the inspection result normal?

YES >> INSPECTION END

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

Diagnosis Procedure

 $1.\mathsf{CHECK}$ DTC WITH "UNIFIED METER AND A/C AMP."

Perform "Self Diagnostic Result" for unified meter and A/C amp. Refer to MWI-109, "DTC Index".

Is the inspection result is normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

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KEY WARNING LAMP

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

KEY WARNING LAMP

Performs operation method guide and warning together with buzzer.

Component Function Check

INFOID:0000000009059531

1. CHECK FUNCTION

Check the operation with "INDICATOR" in "Active Test" mode with CONSULT.

Test item		Condition
INDICATOR	KEY ON	Key warning lamp illuminates
INDICATOR	KEY IND	Key warning lamp flashes

Is the inspection result normal?

YES >> Key warning lamp in combination meter is OK.

NO >> Refer to <u>SEC-92</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000009059532

1. CHECK KEY WARNING LAMP

Refer to DLK-103, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness.

2. CHECK INTERMITTENT INCIDENT

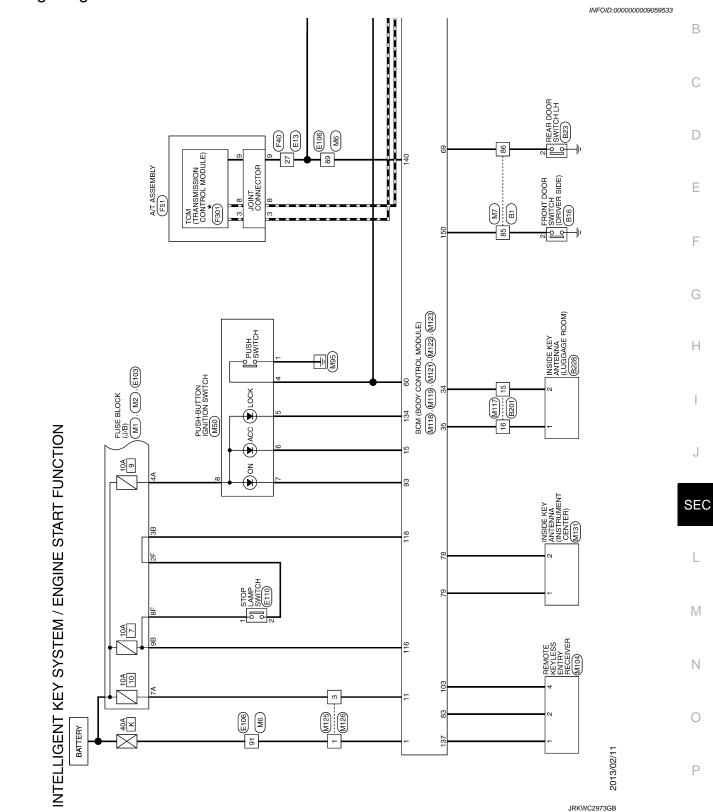
Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

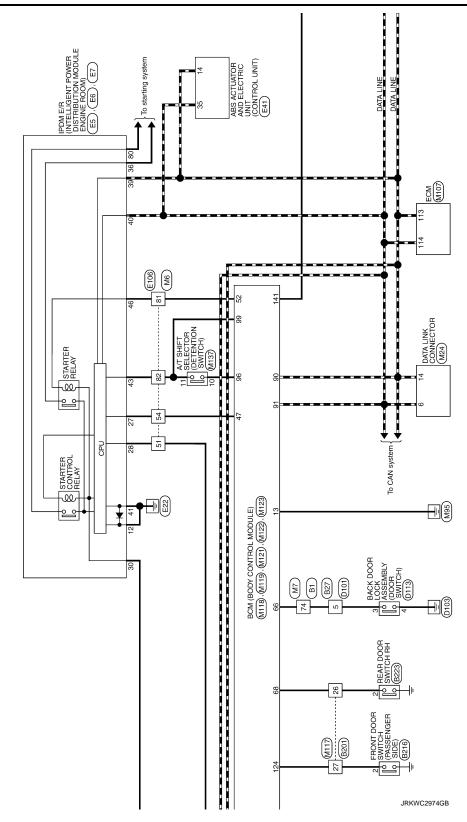
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INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

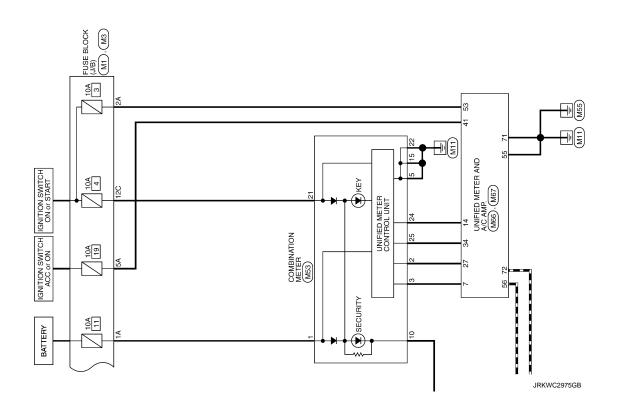
Wiring Diagram - INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION -



*: This connector is not shown in "Harness Layout".



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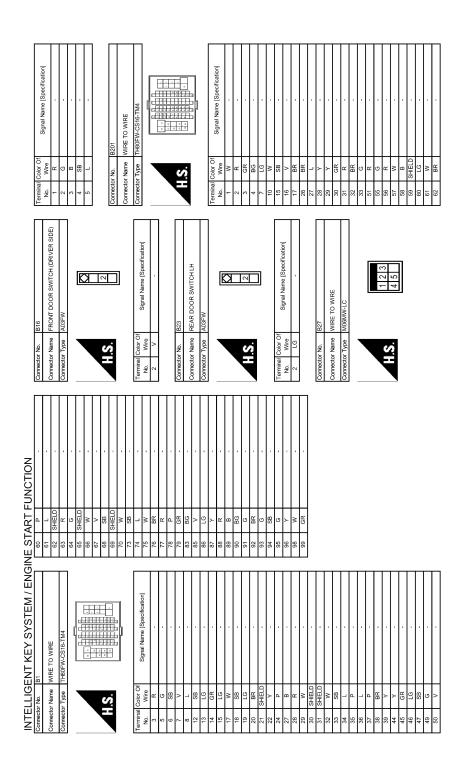
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63 P Connector No.	Connector Name REAR DOOR SWITCH RH	П	Connector Type A03FW			K		2						No. Wire Signal Name [Specification]	ı	1		Connector No B228	Т	Connector Name INSIDE KEY ANTENNA (LUGGAGE ROOM)	╗	Connector Type RK02FGY		•	<		3	(12))			a a	No. Wire Signal Name [Specification]	\ \ \	2 SB -			Connector No D101	Т	Connector Name WIRE TO WIRE	┪	Connector Type M06FW-LC			3 2 1	-14/2	5.4							
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Terminal Color Of	No. Wire	1 R	+	+	4 GR	t	9 BR	10 BG	Н	12 BG	+	15 P	٧ ا	17 SB	Н	20 BG	7	23 G	Н	26 V	+	31 BG	32 W	+	X 6	က်	37 V	38 BR	-	+	43 BR	t	49 L	50 P	51 L		H	Н	97 09	\dashv	62 SB	
SHIELD GROUND Ter			LG DP.FL		OZ DS RR	BLS	ΔΛ	CAN-H	B BUS-H		E103		FUSE BLOCK (J/B)	NS16FW-CS				Ι	9F 8F		Signal Name [Specification]	SB .							E106	Connector Name WIRE TO WIRE	TH80FW-CS16-TM4						2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			<u> </u>		
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	-		Connector No. F301
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COLLECCIO INC.	+		Signal Name [Specification]
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Connector Name WIRE TO WIRE	ł		
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	Connector Type	RK10FG-DGY	
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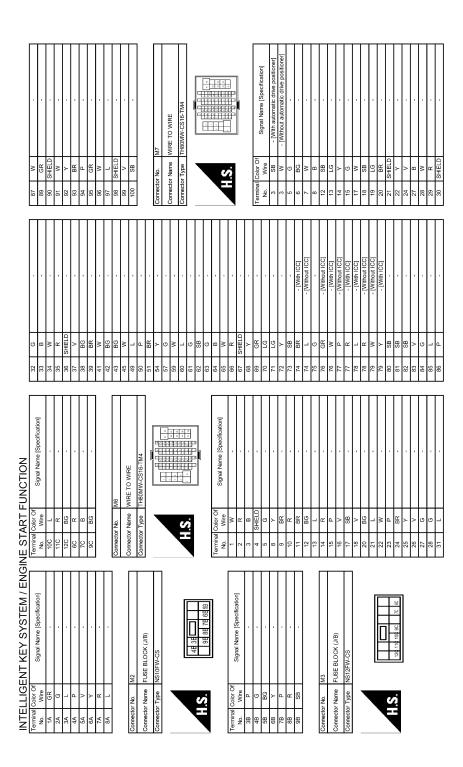
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Comment Comm	Fig. Corrector Name DATA LINK CONNECTOR Corrector Name DATA LINK CONNECTOR	3		34		for No	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Connector No M53	Connector No Mass
1 Corrector Name Dark LM LM COMBIGTOR Corrector Name Dark LM LM COMBIGTOR Corrector Name Corre	1 Corrector Name DATA LINK CONNECTOR 1 Corrector Name DATA LINK CONNECTOR 2 Corrector Name DATA LINK CONNECTOR 3 Corrector Name DATA LINK CONNECTOR 4 Corrector Name Correct	5 8	، ا		500	- 10	W12*	COLLINGUIO INC.	Τ
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Fig. 19 Fig.	H.S.	36	_			1			
Fig.	Fig.	37	а	•		•			
H.S.	H.S.	38	æ		_	Į	11 14 16		
Fig. 10 Converger Name Converger N	Commenter Comm	39	>		`	Š		1 2 3 5 6 7 10 15 18 19 20	5 7 8 9 10 11 14
10 10 10 10 10 10 10 10	Convector Name Conv	44	-			į	0 0 0 0	7 2 34 25 35 27 38 29 30 31 33 36	22 27 28 38 38
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W W Convector Type Trophen	W Corrector Type TKG9FBR Corrector Type	74	œ		Connec	tor Name	PUSH-BUILON IGNITION SWITCH	HH.	>
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Fig. 2 September 1 Ferritaria Color Of Signal Name Specification Fig. 2 Specification Fig. 3 Specification Signal Name Specification Fig. 4 Spe	F	2 8	*			adk i in	INVOLDER	- (L
Fig. 19 Corrector No. Fig. 19	F F F F F F F F F F	اه	\$					Y	
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W	No. Terminal Color Of Signal Name Specification 37 SB EMTER SWITCH SIGNAL Fig. Signal Name Specification 38 L TRIPAB PRESET SWITCH SIGNAL Fig. Signal Name Specification Signal Name	87	>					9	
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INTE	LLIGE	INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION	NE S.	E START	FUNCTION	omoodes No		MAAAZ	8	0	
4 4	2 0	SONEOND SENSON SIGNAL	500	101	_	000		7110	2 4	9 ≥	
- 22	0 (IGNITION POWER SUPPLY	Connec	Connector Name	ECM	Connecto	Connector Name V	WIRE TO WIRE	2 8	>	
24	>	BATTERY POWER SUPPLY	Connec	Connector Type	RH24FGY-RZ8-R-LH-Z	Connector Type	۲	TH80MW-CS16-TM4	8 5	. g	
22	6	GROUND					1		85	>	
26	_	CAN-H	_	1		_	7	999	83	۵	,
22	×	BRAKE FLUID LEVEL SWITCH SIGNAL		•	200 800 800 800 800 800		•	2 2 2 2 3 4 4 4 4 5 4 7 7 7 7 7 7 7 7 7 7 7 7 7 7	8	œ	
28	æ	FUEL LEVEL SENSOR GROUND	_	Į	123	_	Į	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	82	_	
59	GR	INTAKE SENSOR GROUND	1	Ċ.	126 122 (14 11) (15 122 (8	۶	ć	x x x	98	BG	
09	_	IN-VEHICLE SENSOR GROUND	•	į	125 121 TT 112 109 TG 101 SF	1	ä	2 2 2	87	_	
61	BR								88	Ь	
62	SB	SUNLOAD SENSOR GROUND]	91	۸	
63	œ	,	Terminal	al Color Of	J	Terminal	Color Of	G in a second	92	O	,
99	BG	ECV SIGNAL	2	Wire	orginal rearine [openitication]	ġ.	Wire	oignal rame [opecincation]	95	ჟ	
69	_	A/C LAN SIGNAL	6	œ	ACCELERATOR PEDAL POSITION SENSOR 1	-	-		92	>	
70	œ	EACH DOOR MOTOR POWER SUPPLY	86	a.	ACCELERATOR PEDAL POSITION SENSOR 2 [Without ICC]	2	ŋ		96	O	
71	В	GROUND	86	>	ACCELERATOR PEDAL POSITION SENSOR 2 [With ICC]	က	GR		97	>	
72	۵	CAN-L	66	ტ	SENSOR POWER SUPPLY [With ICC]	4	SB		86	æ	
			66	-	SENSOR POWER SUPPLY [Without ICC]	_	Α		66	а	- [Without BOSE audio]
			100	>	SENSOR GROUND	10	>		66	>	- [With BOSE audio]
Connector No.		M104	101	SB	ASCD/ICC STEERING SWITCH	15	SB		100	_	- [Without BOSE audio]
	l	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	102	PLG	EVAP CONTROL SYSTEM PRESS SENSOR	16	>		100	SB	- [With BOSE audio]
Connector Name			103	ტ	SENSOR POWER SUPPLY [Without ICC]	17	BR				
Connector Type	_	JAB04FB	103	_	SENSOR POWER SUPPLY [With ICC]	56	BR				
	1		104	BR	SENSOR GROUND [With ICC]	27	97		Connec	Connector No.	M118
_	7		104	GR	SENSOR GROUND [Without ICC]	28	٨			:	
	•		105	_	REFRIGERANT PRESS SENSOR	59	>		Connec	Connector Name	BCM (BODY CONTROL MODULE)
1		[106	۸	FUEL TANK TEMPERATURE SENSOR	30	>		Connec	tor Type	Connector Type M03FB-LC
Ę	e E	1 2	107	BG	SENSOR POWER SUPPLY	31	œ				
	į	11	108	\	SENSOR GROUND	32	BR	•	_	1	
			109	O	PNP SIGNAL	33	ဖ			•	
			110	œ	ENGINE SPEED OUTPUT SIGNAL	21	œ		_	Į	13
Terminal Color Of	Color Of	i i	112	>	SENSOR GROUND	22	8		\	Č	<u> </u>
ō.	Wire	Signal Name [Specification]	113	۵	CAN COMMUNICATION LINE	26	m		•	4	7
-	BG	GROUND	114	_	CAN COMMUNICATION LINE	25	ď				
2	>	SIGNAL OUTPUT	117	>	DATA LINK CONNECTOR	28	g				
4	97	BATTERY	121	97	EVAP CANISTER VENT CONTROL VALVE	29	SHIELD		Termin	Terminal Color Of	57.00
			122	۵	STOP LAMP SWITCH	09	>		Š	Wire	ognal Name [opecification]
			123	8	ECM GROUND	61	97		-	Μ	BAT (F/L)
			124	В	ECM GROUND	62	BR		2	٨	POWER WINDOW POWER SUPPLY(BAT)
			125	œ	POWER SUPPLY FOR ECM	63	-		m	>	POWER WINDOW POWER SUPPLY(RAP)
			126	æ	ASCD/ICC BRAKE SWITCH	64	9				
			127	а	ECM GROUND	92	æ				
			128	œ	ECM GROUND	99	œ				
						67	>				
						89	SHIELD				
						69	>				
						20	>				
						71	SB				
						72	*				

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M122 REAR TH DOOR SW THOSEN THOOP SW THOSEN	ctor Ng	BCM (BODY CONTROL MODULE)	on the same of the	
1 2 2 2 2 2 2 2 2 2	H.S.	7	H.S.	3 1
S S S S S S S S S S	erminal Color No. Win	10 10 10 10 10 10 10 10	Terminal Color Of Si Wire	Signal Name [Specification]
26 26 26 26 26 26 26 26 26 26 26 26 26 2	17%	Of Signal Name [Specification]	3 2 4	
		DRO		
Signal Name [Specification]	₩	$\!$	Connector Name WIRE TO WIRE Connector Type M03MW-LC	ı WIRE LC
PASSENGER DOOR ANT- PASSENGER DOOR ANT+	124 LG 132 BR	PASSENGER DOOR SW POWER WINDOW SW COMM	_	
DRIVER DOOR ANT- DRIVER DOOR ANT+	133 W	PUSH-BUTTON IGNITION SW ILL POWER LOCK IND		-
ROOM ANT1-	137 BG	RECEIVER/SENSOR GND	H.S.	2 3
NATS ANT AMP.	139 L	H		
IGN RELAY (F/B) CONT	Н	SE	hall Color Of	Signal Name [Specification]
KEYLESS ENTRY RECEIVER COMM COMBI SW INPUT 5	142 BG	COMBI SW OUTPUT 5 COMBI SW OUTPUT 1	No. Wire	-
COMBI SW INPUT 3	144 G		Н	
CAN-L	+		3 R	
KEY SLOT ILL CONT	146 150 LG	DRIVER DOOR SW		
ONIND	151 G	REAR WINDOW DEFOGGER RELAY CONT		
ACC RELAY CONT				
A/T SHIFT SELECTOR POWER SUPPLY SHIFT P				
PASSENGER DOOR REQUEST SW				
DRIVER DOOR REQUEST SW				
BLOWER FAN MOTOR RELAY CONT				
KEYLESS ENTRY RECEIVER POWER SUPPLY COMBI SW INPUT 1				
/ INPUT 4				
/ INPUT 2				
ER FAN MOTOR RELAY SENTRY RECEIVER POWER COMBI SW INPUT 1 COMBI SW INPUT 2 COMBI SW INPUT 2	ELAY CONT OWER SUPPLY T 1 T 4 T 2	ELAY CONT WER SUPPLY T 1 T 4	ELAY CONT TWE SUPPLY T 1 T 2	ELAY CONT WER SUPPLY T 1 T 2

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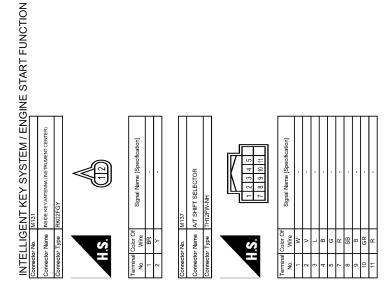
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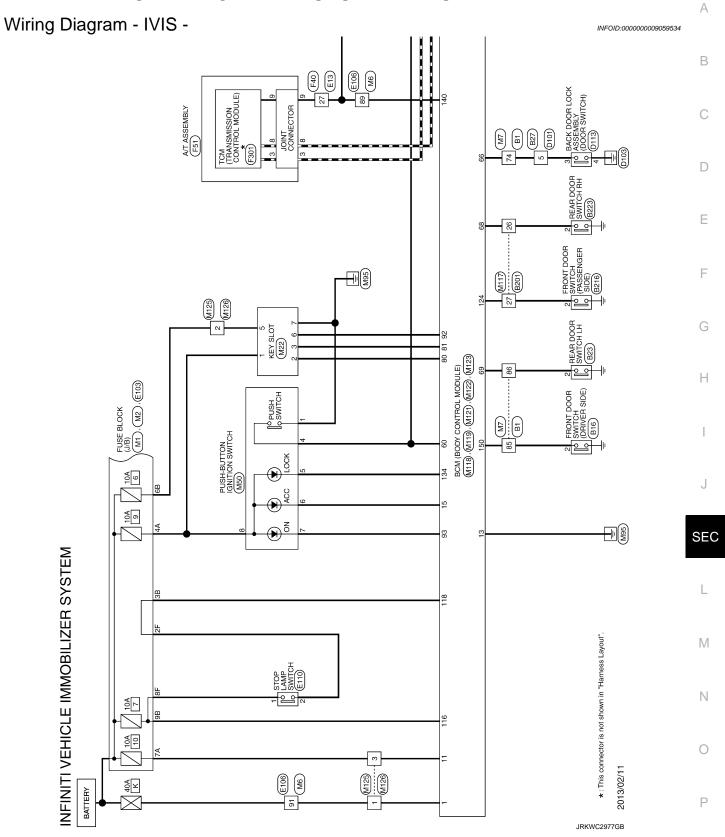
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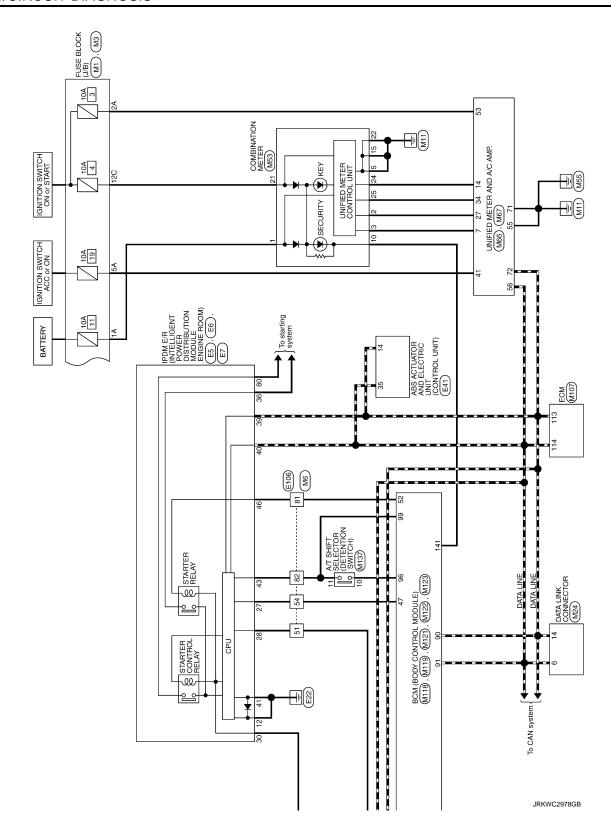


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[WITH INTELLIGENT KEY SYSTEM]

INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS





INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS (GNOSIS > [WITH INTELLIGENT KEY SYSTEM]

]	INFINITI VEHICLE IMMOBILIZER SYSTEM		_[- 1					
Connector No.	- 1	B1	9	۵.		Connector No. B16		Termina	Terminal Color Of	Signal Name [Specification]	
Connecto	Connector Name	WIRE TO WIRE	6	ZHE D		Connector Name FRONT [FRONT DOOR SWITCH (DRIVER SIDE)	ġ+	Wire		_
Connector Type	Т	TH80FW-CS16-TM4	8	~		Connector Type A03FW		- 2	: 0	1	
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_	7		65	SHIELD	-	_	Ē	4	SB	t	
	•		99	W			<u>X</u>	2	7		
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5	∀		89	SB		<u>ر</u>	2		- 1		
1	1		69	SHIELD	-	155		Connector No.		B201	
			02	≥]	Compet	Connector Name	WIRE TO WIRE	
			73	SB					. 1		_
Terminal	0	f Signal Name [Specification]	74	_		nal Color Of	Signal Name [Specification]	Connector Type		TH80FW-CS16-TM4	_,
No.	Wire		75	≥		Wire			,		
3	œ		9/	æ		2 \			•		
5	g		1	œ					•	3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
9	SB		78	Д				_		1 0 0 0	
7	>	-	79	GR	-	Connector No. B23		7	e/ =		
8	7		83	BG		on a la	THE PARTY OF THE P		i		
12	SB		89	>			JOR SWITCHEN				
13	9		98	97		Connector Type A03FW					
14	GR		87	>				Termina	Terminal Color Of	3	_
15	9		88	œ		_	[Ź	Wire	Signal Name [Specification]	
17	*		88	۵			$\overline{\Diamond}$	-	>	,	_
18	SB		6	BG	1			2	œ	1	
9	9 2		δ	2			ΰ	۳	: e		_
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24	۵.		8	ပ		nal Color Of	Signal Name (Specification)	5	8	•	
27	В		96	>		No. Wire	illumination Community	16	>		
28	ч		86	M		2 LG		17	BR	-	
53	Μ		66	GR				56	BR		
30	SHIELD	-						27	7	•	
31	SHIELD					Connector No. B27		28	>		_
32	۸					CH	L	58	>		_
33	SB					-	WINE	30	GR	•	
34	_					Connector Type M06MW-LC	27	31	ď		
35	Ь							32	BR	r	
98	_					_		33	O		_
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38	BR						0	22	ŋ		_
33	>					S II	1 2 3	26	œ	п	_
44	>					11:21	4 5	25	8		_
45	GR							28	В		
46	PT							29	SHIELD	-	_
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INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS AGNOSIS > [WITH INTELLIGENT KEY SYSTEM]

INFINITI VEHICLE IMMOBILIZER SYSTEM	-					
63 P	Connector No. B223	Connector No. D113		Connector No.	E6	
64 L -	Connector Name BEAR DOOR SWITCH BH	Connector Name BACK DOOR LOCK ASSEMBLY	OCK ASSEMBLY	Connector Name	POM E/R (INTELLIGENT POWER DISTRIBUTION MODULE	
- d 99	Connector Type A03FW	Connector Type NS04FW-CS		Connector Type	TH08FW-NH	
- 7 29						
68 SHIELD -		_		_		
^ 69	K	•			R	
- Y 02	-				1	
71 SB	2 2	S E	4 3 2 1	Ę	41 40 39	
72 W	The state of the s	11.5	1 2 2 1	1.2	07 07	
H					40 42 44 43	
75 Y						
^ 08	Terminal Color Of	Terminal Color Of	9	Terminal Color Of		
81 SB	No. Wire olguka rvanne jobecincationij	No. Wire Signik	ogrial value [opecification]	No. Wire	olgikal ivalite [opecification]	
82 LG -	2 BR -	>		39 P		
83 P		2 B		40 L		
L		> <		41 B/W		
- 1 98	Connector No. D101	4 B		H		
F				44 BR		
- T 28	Connector Name WIRE TO WIRE			┝		
d .	Connector Type M06FW-LC	Connector No. E5		46 R		
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92 R		Connector Name ENGINE ROOM	ENGINE ROOM)			
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Connector No. B216	2 G	al Color Of	Signal Name [Specification]			
Connector Name FRONT DOOR SWITCH (PASSENGER SIDE)	3 B -	No. Wire	financial characteristics and			
	4	4 ×	-			
Connector Type A03FW	- 2	2 F		Terminal Color Of	Participant Countries	
		7 R	-	No. Wire	oignal rame [opeomoatori]	
		12 B/W		48 L		
K		13 Y		49 BG		
		16 LG	,	51 Y	,	
2 E		W M	1	23 W		
		L		H		
]		26 R		SS SB	,	
		27 BG		26 LG		
Terminal Color Of		28 L	,	57 G	,	
No. Wire Signal Manne [Specification]		30 GR		H		
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Corrector Name Council Council	INFINITI VEHICLE IMMOBILIZER SYSTEM 76 [$^{-7}$] [$^{-37}$		SHELD		31	æ	VDC OFF SW	12	BG	
Fig. 10 Fig.		88	_		35	-	CAN-H	13	_	-
Fig. 10 Fig.		38	۵		45	H	BUS-H	41	œ	
Signature Corrector Name Corrector		40	ď	1				12	۵	
Mile To Wife Mile State M		41	Μ					16	>	
Signal Name Specification Corrector Name Co	ı	42	LG		Conne	ctor No.	E103	17	SB	-
Signature Specification Corrector Name Specification Signature Specification Specifi	we WIRE TO WIRE	43	o		Jung	otor Name	ELISE BLOCK (1/B)	18	>	
Synchrotic State Corrector Type Rolfs State Corrector Type Rolfs State Corrector Type Rolfs State Corrector Type Synchrotic Corrector Type Corrector		┪	BG		8		(a.c.)	20	BG	
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Corrector No. E41 No.		25	œ		•	į		27	≥	,
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Corrector Type BAA427E A-PC4-LHT 25F W Corrector Type BAA427E A-PC4-LHT 25F W Corrector Type BA4427E A-PC4-LHT 25F W Corrector Type BA427E A-PC4-LHT 25F BA427E A-P	olgnar Name	ď	Manage	MATERIAL POST CONTRACTOR OF THE PROPERTY OF TH	2	Wire	Signal Name [Specification]	33	В	
Corrector Type DAADSTEARD4.141 AFF C C C C C C C C C	· ·	Collector		ABS ACTORIOR AND ELECTRIC UNIT (CONTROL UNIT)	#	SB		34	œ	
Terminal Cotton Connector Name Con	HELD .	Connector		BAA42FB-AHZ4-LH	2F	M		32	9	
Corrector No. P. P. P. P. P. P. P.	NA				4	o		36	SHELD	-
Fig. 10 Fig.	HELD .		٦		99	BR		37	>	
Fig. 10 Fig.	BR .		•		R	_		88	Ж	,
Terminal Color Of Signal Name Specification Color Co	9	\			46	œ		39	BG	1
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2 G UBMR 1		-	а	GROUND				51	_	
1		2	O	UBMR	_	7		54	BG	,
1	- 9:	9	æ	UBVR		•		25	BR	
Color Of Price Colo	,	4	а	GROUND		Į	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	29	8	
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10 W DP FR Terminal Color Ol Signal Name [Specification] 65 W Color Ol Signal Name [Specification] 65 G Color Ol Signal	88	_	BR	DP RR				62	g	,
10 W DS FR Terminal Color Ol Sugral Name [Specification] 64 B Color Ol Sugral Name [Specification] 65 C C C C C C C C C	- ·	6	В	DP FR				63	8	,
12 L VVC V	- 1	10	Α	DSFR	Termi		3 3 3	29	В	
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15 SHELD GROUND 2 W - 67 SHELD 19 P UST 3 B - 68 Y 22 Y BUST 6 GR - 69 LG 27 GR DPFL 6 GR - 70 W 27 GR DSRL 9 B - 71 R 28 LG DSRR 10 BG - 72 Y 29 LG DSRR 10 BG - 72 B	9	4	۵	CAN-L	`	ω		99	2	
19 P UST 3 B CR CR Y	88	t	SHELD	GROUND	2	>		67	SHELL	
25 Y BUSL 4 GR . 69 LG PRI 26 LG DPFL 5 GR . 70 W 27 GR DSFR 8 Y . 77 R 28 G UZ 9 BR . 72 Y 29 LG DSFR 8 . 73 B		t	۵	UST	m	a		89	>	
26 LG DPFL S GR 70 W 27 GR DSRL 9 Y 77 R 28 G UZ 9 BK 72 Y 29 LG DSRR 10 BG 73 B 30 CG DSRR 10 BG 73 B	-	52	>	BUS-L	4	æ	,	69	9	,
27 GR DSRL 8 Y 71 R 28 G UZ 9 BR 77 Y 29 LG DSRR 10 BG 73 Y 20 CG DSRR 10 BG 73 B		56	97	DP FL	2	GR		20	8	
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29 LG DSRR 10 BG . 73 B	, .	28	9	20	6	BR		72	>	
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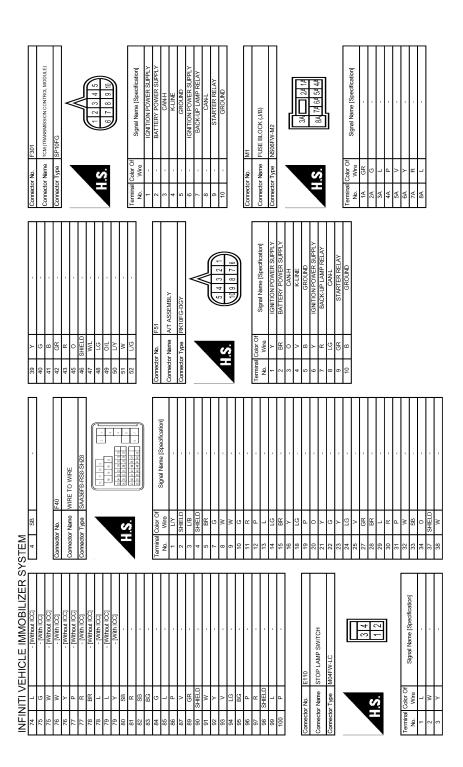
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INFINITI VEHICLE IMMOBILIZER SYSTEM	[Ş				i i	
Connector No. M2	Connector No. M6		£	BG		┪	SHIELD	
Compositor Nomo	Connector Name Milbe TO MIDE		45	Μ	-	66	^	-
CONTRACTOR INSTITUTE PLOCE BLOCK (3/B)			49	7		100	SB	
Connector Type NS10FW-CS	Connector Type TH80MW-CS16-TM4	LM4	20	۵				
			5	BR				
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90 00 10	<u> </u>	0 4	61	9				
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4B G .	2 R		29	SHIELD				
5B BG	9		89	>				
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	+		2	+		2 0	4	
4	8 X		-	FIG		3	SB	 [With automatic drive positioner]
- 8S 86	9 BR		72	>		9		 [Without automatic drive positioner]
	10 R		73	SB		2	ŋ	
	F		74	BR	- [With ICC]	Ģ	BG	
Compositor No.	45		7.4	-	DAGSPORT LOCAL	,	///	
COLLINGUE INC.	+		1 1	ا ر	[without loop	- 0	3 0	
Connector Name FUSE BLOCK (J/B)	+		?	9 ;		۰	٥	
(2.6)	_	-	9/	GR	- [Without ICC]	12	SB	
Connector Type NS12FW-CS	15 P	ì	9/	Μ	- [with ICC]	13	97	
	16 V		77	Ь	- [Without ICC]	14	Y	
	17 SB		77	œ	- [With ICC]	15	ŋ	1
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	21 L	i	Đ.	š	- [without ICC]	18	FG	
124 114 104 90 70 80	_	_	79	>	- [With ICC]		BR	
	23 P	1	8	SB		21	SHIELD	
	24 BR		8	SB		22	.	
	25 Y		85	SB		54	>	
No Wire Signal Name [Specification]	^ 96		č	>		22	α	
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	31 L	-	98	Ь	-		SHIELD	_
6C R -	32 G	ì	87	Μ		31	7	
7C B -	33 B		88	GR		32	Ы	
SG BG	34 W		6	SHIFLD		33	SB	
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l Specification)	E
WIRE TO WIRE THEOMAW-CS16-TM4 Signal Name (Specification)	F
Connector No. M1	G
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SYSTEM	SEC
AMP: Control Control	L
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NFINITI VE Corrector Name U Corrector Name	N
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SEC-113 Revision: 2013 March 2014 QX50

NFINITI VEHICLE IMMOBILIZER SYSTEM Corrector No. M119 65 Corrector Type NS16FW-CS 14 5 7 17 18 19 10 15 14 15 17 18 19 10 17 18 19 10 18 10 10 18 10 10 18 10 10	STEM		Corrector No.	Corrector Name Corrector Type	HAZARD SW M123 BCM (BODY CONTROL MODULE) THORFG-N-1	Corrector No. M125 Corrector Name WHEE TO WHEE Corrector Type M03FW±C 1 1 1 1 1 1 1 1 1 1 1 1 1
Signal Name (Specification) INTERIOR ROOM LAWP POWER RUPPLY PASSENER BOOK UN COK OUTPUT SITEP LAMP COMT ALL DOOR FEEL LID LOCK OUTPUT REAR DOOR JULIOR OUTPUT REAR DOOR JULIOR OUTPUT REAR DOOR LUCK OUTPUT	H.S.	17ge THAGEBANH	Terming No. 113 118 119	4 81111	Signal Name (Specification) Signal Name (Specification) OPLICAL SENSOR STOP LAMP SW 7 STOP LAMP SW 7 DR DOOR UALCOK SENSOR	Terminal Color Of Signal Name [Specification]
PUSHBUTTON IGNITION SWILL GND ACCIND TURN SIGNAL IRH (FRONT) TURN SIGNAL IRH (FRONT) INT ROOM LAMP CONT MIZ1 BOM (BODY CONTROL MODULE)	2	ο d d	121 123 132 133 138 140 140	W W BR BR C V V V V V V V V V V V V V V V V V V	KEY SLOT SW TONER WINDOW SW COMM POWER WINDOW SW COMM POWER WINDOW SW COMM PUSHBUTTON ISMITION SW ILL POWER LOCK IND RECEIVER/SENSOR GND RECEIVER/SENSOR GND TIRE PRESSURE RECEIVER COMM SHITTE WAS COMM SHOT WAS COMM SCHOLD AND AND COMM SCHOLD AND COM	
1440FGY-AN-1 121 121 121 121 121 121 121 1	88 88 87 89 89 89 89 89 89 89 89 89 89 89 89 89	R KEYLESS ENTER RECEIVER COMM	141 143 144 146 146 150	0 88 - 0 - 88 0	SECURITY IN LAMP CONTRIL COMBIS SWO OUTPOUT I COMBIS SWO OUTPOUT 3 COMBI	Terminal Codor Of Signal Name [Specification] No. Wire Y
Signal Name (Specification) LUGGAGE ROOM ANT- LUGGAGE ROOM ANT- BACK DOOR ANT- BACK DOOR ANT- IGN RELAY (FOM EN) CONT STARTER RELAY CONT PUSH SW	 	PASSEN DRIW BLOWER KEYLESS E				

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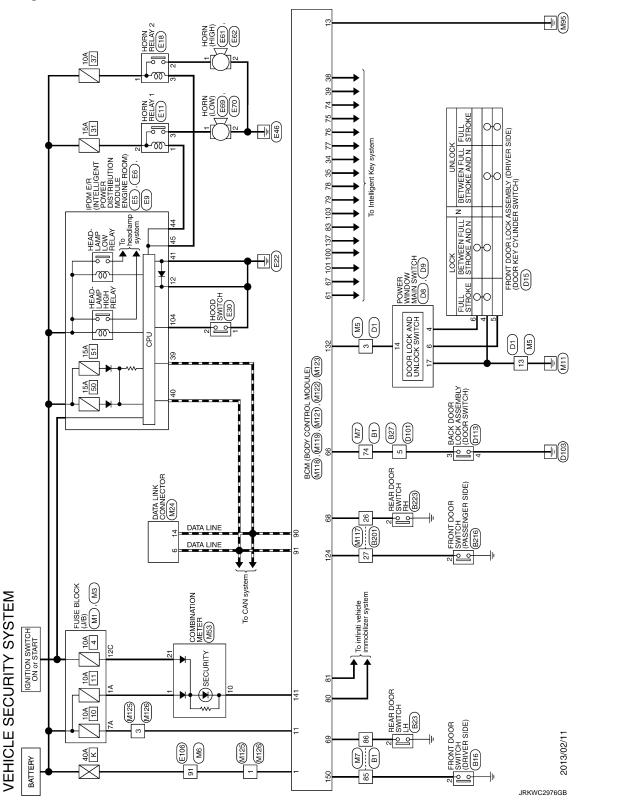
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INFINITI VEHICLE IMMOBILIZER SYSTEM	A/T SHIFT SELECTOR	H12FW-NH	1 2 3 4 5 10 11 2 8 9 11 12 12 13 14 15 14	Signal Name [Specification]				1						
ITI VEHICLE	е	Type TH12FW-NH	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	,	M	۸	7	В	9	æ	SB	8	GR	~
INFINIT	Connector Name	Connector Type		Terminal Color Of No. Wire	-	2	က	4	2	7	œ	6	10	11

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VEHICLE SECURITY SYSTEM

Wiring Diagram - VEHICLE SECURITY SYSTEM -



VE!	VEHICLE Connector No.	VEHICLE SECURITY SYSTEM Domestor No. B1	9	<u> </u>		Connector No. B16	Terminal Color Of			_
0	Connector Nome	WIBE TO WIBE	61		-	CBONT DOOR SWITCH (DRIVED SIDE)	No.	•	Signal Ivanne [Specincation]	
5	all Mallie		62	SHIELD	- OT		-	Я		
Connec	Connector Type	TH80FW-CS16-TM4	63	<u>د</u> (Connector Type A03FW	2	O	•	
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			70	Μ	-]	Connector Name	4	JAIW OT JAIW	
			73	SB) 	
Terminal		Of Signal Name (Specification)	74	_	1	=	Connector Type		TH80FW-CS16-TM4	7
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12	SB		89	>						
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14	æ		87	>			Terminal	Color Of		Г
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59	Μ		66	GF.			56	BR		
30	SHIELD						27	7	-	
31	SHIELD					Connector No. B27	28	٨		
32	Μ					Compared Name TO MIDE	59	Y	i	
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VEHICLE SECURITY SYSTEM	[
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ľ		No. Wire	Signal Name [Specification]	33	_	4	No. Wire	Signal Name [Specification]
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83 P	<u> </u>			35	œ		2 BR	
84 R				36	9		3 GR	
	8	Connector No.	Di	37	ď		^	
- BG BC			L C	38	۵		2	
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- A 88	8	Connector Type	TH40FW-CS15	40	BR		7 BR	
- ^ 16	 			4	_	,	8	
┝		•		42	GR		6	
- R				43	æ	- [With automatic drive positioner]	10	
- SB SB			5 14 13 12 11 12 2 3 8 7 6 5 4 3 2 1	43	0	- [Without automatic drive positioner]	11 G	
╀	Τ	Ų	2 C C C C C C C C C C C C C C C C C C C	44	╀	- [Without automatic drive positioner]	╀	
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- d 66	Τ			45	· >	- IWith automatic drive positioner	1	
ł	T	Torminal Color Of		46	ن .	- [With automatic drive positioner]		
1	1	No Wire	Signal Name [Specification]	46	>	- Without automatic drive positioner	Connector No	Dia
	1	t	,	49	. B	formed our care bound		
Connector No B216				£	, a		Connector Name	Connector Name POWER WINDOW MAIN SWITCH
	I	$^{+}$		8 6	0		Connector Type	NS03EW-CS
Connector Name FRONT DOOR SWITCH (PASSENGER SIDE)	DE)	+	,	2 2	£ 8%	,	odi monimo	٦.
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Connector No. E11 Connector Name HORN RELAY 1 Connector Type Relay_24381_7990A	H.S.	Terrincal Color Of Signal Name (Specification) 1
Corrector No. E6 Corrector Name Powers remission recovers OBTRB/monucond Corrector Type TH98FW-NH	H.S.	Terminal Color Of Signal Name (Specification) 29 P
Connector No. D113 Connector Name BACK DOOR LOOK ASSEMBLY Connector Type NSO4FW-CS	H.S. 4321	Terrninal Color Of Signal Name Specification 1
VEHICLE SECURITY SYSTEM Connector Name PROWT DORLOCK ASSENBLY URWERSUE) Connector Type E00F GV-RS	H.S. (123456)	Terminal Color Of Signal Name [Specification] 1

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SYSTEM Terminal Color Of	Signal Name (Specification)	No. Wire Grant Person Connector Name Mile TO WIPE	2 B	Connector Type TH80FW-CS16-TM4 50 P -	. 11 15	Connector No. [E69] 54		Connector Name HUKN (LOW)	# 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	19		E	20 20	Specification Signal Name (Specification) 04 B	No. Wire	1 R	. 67 SHELD .	3 B	4 GR	Signal Name [Specification] 5 GR - 70	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	9 RR - 777 Y		2.2 Z	Connector Name HORN (LOW) 42 1 1 15 15 15 15 15 15 15 15 15 15 15 15	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	. 75 W	15 P - 76 W	7 N 16 Y 76 Y 176	- T SB - T P - T SB - T S S S S S S S S S S S S S S S S S S	- 77 R	٦	-	22 V (Without ICC)	23 G - Part 100 - Part	24 P 80	No. Wire Signal Name (Specinication) 25 Y	2 B		27 W 83 BG	W 83 BG C C C C C C C C C C C C C C C C C C	W 83 BG 85 B	W 88 BG 84 G 85 L W W W W W W W W W W W W W W W W W W	27 W - 83 BG 31 BG - 84 G 31 BG - 85 H 4 B - 86 P 8 B - 86 P 9 B - 87 N	27 W . 83 BG 28 G . 84 G 31 W . 86 P 32 W . 86 P 34 G . 86 P 32 W . 86 P 34 G . 86 P 35 W . 86 P 36 P . 86 P 37 W . 86 P 36 P . 86 P 37 W . 86 P 38 B . 86 P 36 C . 86 P 37 W . 86 P 38 B . 86 P 39 B . 86 P 40 B . 86 P 50 F . 86 P 60 F . 86 P 70 F . 86 P 8 F . 86 P 8 <th>27 W 83 BG 28 BG 85 BG 31 BG 85 F 32 W 87 P 33 B 87 V 64 R 87 V 64 R 80 60</th> <th>27 W . 83 BG 31 BG . 84 G 31 W . 86 P 32 W . 86 P 34 B . 86 P 34 C . 89 CR 35 G . 89 CR</th> <th> M</th> <th>27 W . 83 BG 31 BG . . 84 G 31 W . . 86 P 32 W . . 86 P 34 R . . 89 GR 35 G . . 90 SHED 36 SHED . 91 SHED</th> <th>27 W . 83 BG BG<th>27 W . 83 BC 31 BC . . 84 C 31 BC 32 W 34 R . <td< th=""><th>27 W . 83 BC 31 BC . 84 C 31 BC . 85 L 32 W . 86 P 34 R . 89 CR 34 R . 89 CR 35 SMELD . 90 SHELD 37 V . 92 V 38 BR . 92 V 41 W . 95 BC</th><th>27 W 83 BC 31 BC BC BC 32 W BC P 33 B BC BC 34 R BC BC 36 SHELD BT V 39 BC BC V 42 BC BC BC 42 BC BC BC</th></td<></th></th>	27 W 83 BG 28 BG 85 BG 31 BG 85 F 32 W 87 P 33 B 87 V 64 R 87 V 64 R 80 60	27 W . 83 BG 31 BG . 84 G 31 W . 86 P 32 W . 86 P 34 B . 86 P 34 C . 89 CR 35 G . 89 CR	M	27 W . 83 BG 31 BG . . 84 G 31 W . . 86 P 32 W . . 86 P 34 R . . 89 GR 35 G . . 90 SHED 36 SHED . 91 SHED	27 W . 83 BG BG <th>27 W . 83 BC 31 BC . . 84 C 31 BC 32 W 34 R . <td< th=""><th>27 W . 83 BC 31 BC . 84 C 31 BC . 85 L 32 W . 86 P 34 R . 89 CR 34 R . 89 CR 35 SMELD . 90 SHELD 37 V . 92 V 38 BR . 92 V 41 W . 95 BC</th><th>27 W 83 BC 31 BC BC BC 32 W BC P 33 B BC BC 34 R BC BC 36 SHELD BT V 39 BC BC V 42 BC BC BC 42 BC BC BC</th></td<></th>	27 W . 83 BC 31 BC . . 84 C 31 BC 32 W 34 R . <td< th=""><th>27 W . 83 BC 31 BC . 84 C 31 BC . 85 L 32 W . 86 P 34 R . 89 CR 34 R . 89 CR 35 SMELD . 90 SHELD 37 V . 92 V 38 BR . 92 V 41 W . 95 BC</th><th>27 W 83 BC 31 BC BC BC 32 W BC P 33 B BC BC 34 R BC BC 36 SHELD BT V 39 BC BC V 42 BC BC BC 42 BC BC BC</th></td<>	27 W . 83 BC 31 BC . 84 C 31 BC . 85 L 32 W . 86 P 34 R . 89 CR 34 R . 89 CR 35 SMELD . 90 SHELD 37 V . 92 V 38 BR . 92 V 41 W . 95 BC	27 W 83 BC 31 BC BC BC 32 W BC P 33 B BC BC 34 R BC BC 36 SHELD BT V 39 BC BC V 42 BC BC BC 42 BC BC BC
VEHICLE SECURITY SYSTEM	Official INC. EDU	Connector Name HOTINS CIOCH		Connector Type RH02FB			K		Ē	() T)			Signal Name	6	1 B -	2 LG -			Connector No. E61		Connector Name HORN (HIGH)	Connector Type P01FB-BR-A		ı			<u>-</u>	_			16	No. Wire ognalivame [Specification]	٠.			Connector No. E62	ı	Connector Name HUKN (HIGH)			mector Type P01FB-A		P01FB-A	P01FB-A	P01FB-A	P01FB-A	P01FB.A	P01FB-A	PO1FB.A	POTFB-A	PO1FB.A	POTFB-A

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VEHICLE SECURITY SYSTEM									
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98 SHIELD -	Journal	Connector Name	WIRE TO WIRE	38	Ь		22	Λ	
	5	in indirect	WINCE TO WINCE	39	BG		23	Ь	
100 P	Connec	Connector Type	TH40MW-CS15	40	SB	-	54	BR	-
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Connector No. M3	1	۵					63	G	
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10C L	3	œ		14	œ		76	S.	- [Without ICC]
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VEHICLE	= SECURITY									
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80 SB		21	SHIELD		8	> (1	-	S.	BATTERY POWER SUPPLY
+		22	>		92	o		2	PC	COMMUNICATION SIGNAL (METER-AMP.)
		24	_	-	96	>	-	က	GR	COMMUNICATION SIGNAL (AMPMETER)
83 ^		27	ω		86	≽	,	S	ω	GROUND
84 G		28	M		66	В	4	9	d	ALTERNATOR SIGNAL
R2 F		59	~					7	BR	AIR BAG SIGNAL
L		30	SHIELD	-				10	9	SECURITY SIGNAL
87 W		3	-		Connector No.	l	M24	15	В	GROUND
89 GR		32	۵		į		C + C L = 4 + C C / 14 + - 4 + 4 C	16	В	METER CONTROL SWITCH GROUND
90 SHIELD	- q:	33	SB		Some	Connector Name	DATA LINK CONNECTOR	19	В	ILL GND
91 W		35	_	,	Connect	Connector Type	BD16FW	20	œ	III
H		32	۵.					21	BG	IGNITION SIGNAL
H		98	-		_	7		22	۵	GROUND
94 P		37	۵			•	-	24	BR	COMMUNICATION SIGNAL (LCD-AMP.)
╀		89	æ		_	Į		52	>	COMMUNICATION SIGNAL (AMPLCD)
ŀ		38	H		7	Ŀ	11 11 14 16	56	œ	VEHICLE SPEED SIGNAL (8-PULSE)
╀		4	-			į	3 4 5 6 7 8	27	>	PARKING BRAKE SWITCH SIGNAL
SHIFLD	-	45	GR.					28	≥	BRAKE FLUID LEVEL SWITCH SIGNAL
+		46	+					8	: Ø	SEATBELL BLOKE SWITCH SIGNAL ORBACING
400		2 2	+		Terminal	Solo O		2 8	3	Carry Carry Towns Control Carry Carr
4		ę	+		2	200	Signal Name [Specification]	8 8	-	WASHED FVEL SMITCH SCHOOL (PASSENGER)
		î	+		2	P C		5 8	،	WASHEN LEVEL SWITCH SIGNAL
		8	+		η.	<u>ء</u>		જ	9	ILLUMINATION CONTROL SIGNAL
Connector No.	M7	9	1		4	20	1	98	S E	SELECT SWITCH SIGNAL
Connector Name	Connector Name WIRE TO WIRE	9	┪		2	В		37	SB	ENTER SWITCH SIGNAL
		62	SHELD	-	9	٦		æ	٦	TRIP A/B RESET SWITCH SIGNAL
Connector Type	TH80MW-CS16-TM4	63	_		7	^		39	Ь	ILLUMINATION CONTROL SWITCH SIGNAL (-)
		64	П	-	8	9	-	40	BG	ILLUMINATION CONTROL SWITCH SIGNAL (+)
_		92	SHIELD	-	11	SB				
•		99	SB		14	۵				
•	2 7	29	>		16	>		Connector No.	tor No.	M117
Ę		89	9					į	A section	CHUGIN
	4 5	69	SHIELD	-				100		WINE IO WINE
		70	Α		Connector No.	or No.	M53	Connec	Connector Type	TH80MW-CS16-TM4
		73	9	•	0	A Nome	CLEANICH			
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No. Wire		75	W		Connect	Connector Type	TH40FW-NH		•	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
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[WITH INTELLIGENT KEY SYSTEM]

VEF		VEHICLE SECURITY SYSTEM									
10	Μ		66	>	- [With BOSE audio]	19	>	INT ROOM LAMP CONT	77	ΓG	DRIVER DOOR ANT+
15	SB		100	٦	 [Without BOSE audio] 				78	Υ	ROOM ANT1-
16	>	•	100	SB	 [With BOSE audio] 				79	BR	ROOM ANT1+
17	BR					Connector No.	П	M121	80	GR	NATS ANT AMP.
56	BR							CHICAN LOCATION MOCH	81	M	NATS ANT AMP.
27	9		Connector No.	or No.	M118	Cornector Name		BOM (BODT CONTROL MODULE)	82	œ	IGN RELAY (F/B) CONT
28	≻			:		Connecto	Connector Type	TH40FGY-NH	83	٨	KEYLESS ENTRY RECEIVER COMM
59	>		Collect	Connector Name	BOM (BODT CONTROL MODULE)				87	BR	COMBI SW INPUT 5
30	>		Connect	Connector Type	M03FB-LC	_	7		88	^	COMBI SW INPUT 3
31	œ						1		06	Ы	CAN-L
32	BR	1		7		_	į	K	91	7	CAN-H
33	S			•	<u></u>	5	Ċ	33 38 38 38 38 38	95	97	KEY SLOT ILL CONT
51	ď		•		133		ā	89 88 87 89 85 84 81 80	83	>	QNI NO
22	*		7	ď					8	Υ	PUDDLE LAMP CONT
26	ω		1	ä	7				92	BG	ACC RELAY CONT
25	ч]	Terminal	\sim	Signal Nama [Spacification]	96	GR	A/T SHIFT SELECTOR POWER SUPPLY
28	9					O	Wire	organia realite [opcomoducarj	66	œ	SHIFT P
69	SHIELD	-	Terminal	O	Sional Name [Specification]	34	SB	LUGGAGE ROOM ANT-	100	9	PASSENGER DOOR REQUEST SW
09	>		ġ.	Wire	figure region of chocampagna	35	>	LUGGAGE ROOM ANT+	101	SB	DRIVER DOOR REQUEST SW
61	97	•	-	Μ	BAT (F/L)	38	8	BACK DOOR ANT-	102	98	BLOWER FAN MOTOR RELAY CONT
62	BR		2	M	POWER WINDOW POWER SUPPLY(BAT)	39	Μ	BACK DOOR ANT+	103	97	KEYLESS ENTRY RECEIVER POWER SUPPLY
63	_		9	>	POWER WINDOW POWER SUPPLY(RAP)	47	>	IGN RELAY (IPDM E/R) CONT	107	97	COMBI SW INPUT 1
64	PT					25	SB	STARTER RELAY CONT	108	œ	COMBI SW INPUT 4
92	m					09	BR	PUSHSW	109	>	COMBI SW INPUT 2
99	œ		Connector No.	or No.	M119	9	Μ	BACK DOOR OPENER REQUEST SW	110	9	HAZARD SW
67	3					64	>	LKEY WARN RI 177ER (ENG ROOM)			
89	: HE		Connect	Connector Name	BCM (BODY CONTROL MODULE)	9	. U	REAR WIPER STOP POSITION			
3 8	2 >		Journal	Connector Type	NS46EW-CS	8	3 0	MS ACCULATION	Compositor No		M123
3 8	, ,		100	odk i		8 2	200	BACK DOOR OPENED SW	50	Т	22111
2 2	- 8			•		0 0	á	BEAD BUDOD SW	Connecto	Connector Name	BCM (BODY CONTROL MODULE)
-	9			•		8	Yo.	REAR RH DOOR SW		Ī	
72	*			•	7 7 0 0 10	69	ď	REAR LH DOOR SW	Connecto	Connector Type	TH40FG-NH
73	o :		7							,	
e e	≥ :		•	7	11 13 14 15 17 18 19		١			1	
8	>			1		Connector No.	-	IN 1.22	_	•	
S 03	g >					Connecto	Connector Name	BCM (BODY CONTROL MODULE)	*	ľ	
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8 8	٥				Signal Name [Specification]	00	a lybe	I HOLD-INI		I	
85	-		₹ 4	9 5	INTERIOR BOOM! AMP POWER SLIPPLY	_	7				
98	. 88		. 2	ŀ	PASSENGER DOOR UNLOCK OUTPUT		1		Terminal	erminal Color Of	
87	-		7	>	STEP I AMP CONT	_	į	[2	Wire	Signal Name [Specification]
88	۵			>	ALL DOOR, FUEL LID LOCK OUTPUT	7	Č	22 23 23 24 24 25 25 26 26 27 28 28 28 28 28 28 28 28 28 28 28 28 28	113	Ь	OPLICAL SENSOR
91	>		6	O	DRIVER DOOR, FUEL LID UNLOCK OUTPUT		ą	112 100 100 101 105 105 105 105 105 105 105	116	SB	STOP LAMP SW 1
95	9		10	BR	REAR DOOR UNLOCK OUTPUT				118	Ь	STOP LAMP SW 2
8	G		1	œ	BAT (FUSE)				119	SB	DR DOOR UNLOCK SENSOR
92	*		13	ш	GROUND	Terminal	\sim	9.00	121	BR	KEY SLOT SW
96	9		14	Μ	PUSH-BUTTON IGNITION SW ILL GND	ģ	Wire	oignai raime [opecindation]	123	Μ	IGN F/B
46	Υ		15	٨	ACC IND	74	SB	PASSENGER DOOR ANT-	124	97	PASSENGER DOOR SW
86	BR		17	Μ	TURN SIGNAL RH (FRONT)	75	GR	PASSENGER DOOR ANT+	132	BR	POWER WINDOW SW COMM
66	Ь	- [Without BOSE audio]	18	BG	TURN SIGNAL LH (FRONT)	9/	۸	DRIVER DOOR ANT-	133	Μ	PUSH-BUTTON IGNITION SW ILL POWER

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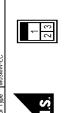
Signal Name [Specification]		•	
Color Of Wire	Μ	>	œ
Terminal No.	-	2	3

	GND	ER SUPPLY	ER COMM		CONT	Т5	П1	П 2	13	П 4	W	RELAY CONT	
TOCK IND	RECEIVER/SENSOR GND	RECEIVER/SENSOR POWER SUPPLY	TIRE PRESSURE RECEIVER COMM	NHIFT NP	SECURITY IND LAMP CONT	COMBI SW OUTPUT 5	COMBI SW OUTPUT 1	COMBI SW OUTPUT 2	COMBI SW OUTPUT 3	COMBI SW OUTPUT 4	DRIVER DOOR SW	REAR WINDOW DEFOGGER RELAY CONT	
GR	BG	Υ	٦	GR	9	BG	Ь	9	7	SB	97	9	
134	137	138	139	140	141	142	143	144	145	146	150	151	

M125	WIRE TO WIRE	M03FW-LC
Connector No.	Connector Name WIRE TO WIRE	Connector Type

Connector Name WIRE TO WIRE	M03FW-LC	31	Simpl Nome (Secontine)	ognal Name [opecation]			
r Name	r Type	Si	Terminal Color Of	Wire	W	Υ	ĸ
Connecto	Connector Type		Terminal	ġ	1	2	3

	Signal Name (Specification)			-	M126	
Terminal Color Of	Wire	Μ	Υ	В	r No.	
Terminal	ò	1	2	3	Connector No.	



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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value

VALUES ON THE DIAGNOSIS TOOL

NOTE:

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

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
FR WIPER TI	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
FR WIPER INT	Other than front wiper switch INT	Off
FR WIPER IN I	Front wiper switch INT	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
DD WIDED INT	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
RR WIPER STOP	Rear wiper is in STOP position	Off
RR WIPER STOP	Rear wiper is not in STOP position	On
TUDNI CIONAL D	Other than turn signal switch RH	Off
TURN SIGNAL R	Turn signal switch RH	On
TUDNI CIONAL I	Other than turn signal switch LH	Off
TURN SIGNAL L	Turn signal switch LH	On
TAIL LAND CVV	Other than lighting switch 1ST and 2ND	Off
TAIL LAMP SW	Lighting switch 1ST or 2ND	On
LILDE AM CW	Other than lighting switch HI	Off
HI BEAM SW	Lighting switch HI	On
LIEAD LAMB CW/A	Other than lighting switch 2ND	Off
HEAD LAMP SW 1	Lighting switch 2ND	On
LIEAD LAMD CW/ 2	Other than lighting switch 2ND	Off
HEAD LAMP SW 2	Lighting switch 2ND	On
DA CCINIC CIVI	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
AUTO LICHT CW	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
FR FOG SW	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
DOOR SW-DR	Driver door opened	On
DOOR SW-AS	Passenger door closed	Off
DOOK SW-AS	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
DOOK SW-KK	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
DOOK SW-KL	Rear LH door opened	On
DOOR SW-BK	Back door closed	Off
JOOK SW-BK	Back door opened	On
CDL LOCK SW	Other than power door lock switch LOCK	Off
ODL LOCK SW	Power door lock switch LOCK	On
CDL TIMI OCK 6M	Other than power door lock switch UNLOCK	Off
CDL UNLOCK SW	Power door lock switch UNLOCK	On
VEV CVI LIZ CW	Other than driver door key cylinder LOCK position	Off
KEY CYL LK-SW	Driver door key cylinder LOCK position	On
ALM CAN TIME CAN	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
IAZADD CM	Hazard switch is OFF	Off
HAZARD SW	Hazard switch is ON	On
REAR DEF SW	NOTE: The item is indicated, but not monitored.	Off
TR CANCEL SW	NOTE: The item is indicated, but not monitored.	Off
TR/BD OPEN SW	Back door opener switch OFF	Off
HADD OF EN SW	While the back door opener switch is turned ON	On
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
REVERSE SW	NOTE: The item is indicated, but not monitored.	Off
DKE I OCK	LOCK button of the key is not pressed	Off
RKE-LOCK	LOCK button of the key is pressed	On
DKE TINI OCK	UNLOCK button of the key is not pressed	Off
RKE-UNLOCK	UNLOCK button of the key is pressed	On
RKE-TR/BD	NOTE: The item is indicated, but not monitored.	Off
DKE DVIIC	PANIC button of the key is not pressed	Off
RKE-PANIC	PANIC button of the key is pressed	On
	UNLOCK button of the key is not pressed	Off
RKE-P/W OPEN	UNLOCK button of the key is pressed and held	On

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status
KE-MODE CHG	LOCK/UNLOCK button of the key is not pressed and held simultaneously	Off
	LOCK/UNLOCK button of the key is pressed and held simultaneously	On
PTICAL SENSOR	Bright outside of the vehicle	Close to 5 V
PHICAL SENSOR	Dark outside of the vehicle	Close to 0 V
EO CW DD	Driver door request switch is not pressed	Off
EQ SW -DR	Driver door request switch is pressed	On
REQ SW -AS	Passenger door request switch is not pressed	Off
.EQ 3VV -A3	Passenger door request switch is pressed	On
EQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Back door request switch is not pressed	Off
ILQ SW -DD/TK	Back door request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
OOI I OVV	Push-button ignition switch (push switch) is pressed	On
GN RLY2 -F/B	NOTE: The item is indicated, but not monitored.	Off
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off
CLUCH SW	NOTE: The item is indicated, but not monitored.	Off
	The brake pedal is depressed when No. 7 fuse is blown	Off
RAKE SW 1	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
RAKE SW 2	The brake pedal is not depressed	Off
NAINE OW Z	The brake pedal is depressed	On
ETE/CANCL SW	Selector lever in P position	Off
LIL/OANOL SW	Selector lever in any position other than P	On
FT PN/N SW	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On
/L -LOCK	NOTE: The item is indicated, but not monitored.	Off
S/L -UNLOCK	NOTE: The item is indicated, but not monitored.	Off
s/L RELAY-F/B	NOTE: The item is indicated, but not monitored.	Off
JNLK SEN -DR	Driver door is unlocked	Off
INDIX ODIN DIX	Driver door is locked	On
JSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
	Push-button ignition switch (push-switch) is pressed	On
GN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
NAUCTI I/D	Ignition switch in ON position	On
PETE SW -IPDM	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT PN -IPDM	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On

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< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
CET D MET	Selector lever in any position other than P	Off
SFT P -MET	Selector lever in P position	On
SFT N -MET	Selector lever in any position other than N	Off
SFI IN -IVIET	Selector lever in N position	On
	Engine stopped	Stop
ENGINE STATE	While the engine stalls	Stall
ENGINE STATE	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	NOTE: The item is indicated, but not monitored.	Off
S/L UNLK-IPDM	NOTE: The item is indicated, but not monitored.	Off
S/L RELAY-REQ	NOTE: The item is indicated, but not monitored.	Off
VEH SPEED 1	While driving	Equivalent to speed- ometer reading
VEH SPEED 2	While driving	Equivalent to speed- ometer reading
	Driver door is locked	LOCK
DOOR STAT-DR	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLOCK
	Passenger door is locked	LOCK
DOOR STAT-AS	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLOCK
D OK FLAG	Driver side door is open after ignition switch is turned OFF (Shift position is in the P position)	Reset
	Ignition switch ON	Set
PRMT ENG STRT	The engine start is prohibited	Reset
FRIVIT ENG STRT	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
VEV CW CLOT	The key is not inserted into key slot	Off
KEY SW -SLOT	The key is inserted into key slot	On
RKE OPE COUN1	During the operation of the key	Operation frequency of the key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	_
CONEDMID ALL	The key ID that the key slot receives does not accord with any key ID registered to BCM.	Yet
CONFRM ID ALL	The key ID that the key slot receives accords with any key ID registered to BCM.	Done
CONFIDM ID4	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	Yet
CONFIRM ID4	The key ID that the key slot receives accords with the fourth key ID registered to BCM.	Done
	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	Yet
CONFIRM ID3	ib registered to bow.	

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status
CONFIRM ID2	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	Yet
CONFIRM ID2	The key ID that the key slot receives accords with the second key ID registered to BCM.	Done
CONFIRM ID1	The key ID that the key slot receives does not accord with the first key ID registered to BCM.	Yet
CONFIRMIDI	The key ID that the key slot receives accords with the first key ID registered to BCM.	Done
TD 4	The ID of fourth key is not registered to BCM	Yet
TP 4	The ID of fourth key is registered to BCM	Done
TD 0	The ID of third key is not registered to BCM	Yet
TP 3	The ID of third key is registered to BCM	Done
TP 2	The ID of second key is not registered to BCM	Yet
17.2	The ID of second key is registered to BCM	Done
TP 1	The ID of first key is not registered to BCM	Yet
IF I	The ID of first key is registered to BCM	Done
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID DECCT EL 4	ID of front LH tire transmitter is registered	Done
ID REGST FL1	ID of front LH tire transmitter is not registered	Yet
ID DECCE ED4	ID of front RH tire transmitter is registered	Done
ID REGST FR1	ID of front RH tire transmitter is not registered	Yet
ID DECCE DD4	ID of rear RH tire transmitter is registered	Done
ID REGST RR1	ID of rear RH tire transmitter is not registered	Yet
ID DECCT DL4	ID of rear LH tire transmitter is registered	Done
ID REGST RL1	ID of rear LH tire transmitter is not registered	Yet
MADNING LAMP	Tire pressure indicator OFF	Off
WARNING LAMP	Tire pressure indicator ON	On
DUZZED	Tire pressure warning alarm is not sounding	Off
BUZZER	Tire pressure warning alarm is sounding	On

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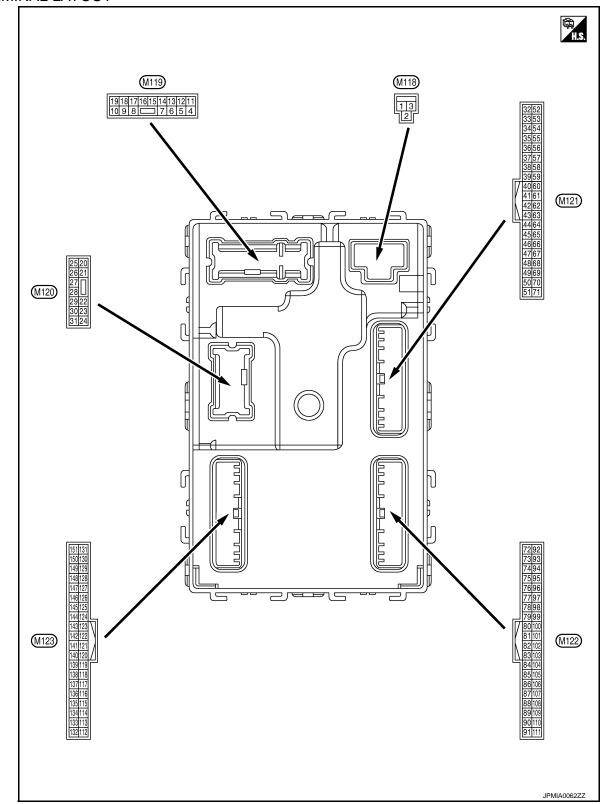
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TERMINAL LAYOUT



PHYSICAL VALUES

< ECU DIAGNOSIS INFORMATION >

Term	inal No.	Description					А
- (Wire	e color) –	Signal name	Input/ Output		Condition	Value (Approx.)	
1 (W)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage	В
2 (W)	Ground	P/W power supply (BAT)	Output	Ignition switch OF	F	Battery voltage	С
3 (Y)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		Battery voltage	
4		Interior room lamp			battery saver is activated. oom lamp power supply)	0 V	D
4 (LG)	Ground	power supply	Output	ed.	battery saver is not activat- or room lamp power supply)	Battery voltage	Е
5	Ground	Passenger door UN-	Output	Passenger door	UNLOCK (Actuator is activated)	Battery voltage	F
(L)	Giouria	LOCK	Output	rasseriger door	Other than UNLOCK (Actuator is not activated)	0 V	Г
7	Ground	Step lamp	Output	Step lamp	ON	0 V	G
(Y)	Giodila	этер таптр	Output	Step lamp	OFF	Battery voltage	0
8	8 (V) Ground All doors, fuel lid LOCK	Output	All doors	LOCK (Actuator is activated)	Battery voltage	Н	
(V)		LOCK	Output	All doors	Other than LOCK (Actuator is not activated)	0 V	
9	9 Ground Driver door	Driver door, fuel lid	Output	Driver door	UNLOCK (Actuator is activated)	Battery voltage	I
(G)	Orouna	UNLOCK	σαιραί		Other than UNLOCK (Actuator is not activated)	0 V	J
10	Ground	Rear RH door and rear LH door UN-	Output	Rear RH door	UNLOCK (Actuator is activated)	Battery voltage	
(BR)	Ciodila	LOCK	Output	and rear LH door	Other than UNLOCK (Actuator is not activated)	0 V	SEC
11 (R)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage	
13 (B)	Ground	Ground	I	Ignition switch ON		0 V	_
					OFF	0 V	M
14		Push-button ignition				NOTE: When the illumination brightening/dimming level is in the neutral position	N
(W)	Ground	switch illumination ground	Output	Tail lamp	ON	10 0 2 ms	O P
					OFF or ON	JSNIA0010GB Battery voltage	1
15 (Y)	Ground	ACC indicator lamp	Output	Ignition switch	ACC	0 V	
١٠/				ACC		U V	i

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value
+ (Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)
					Turn signal switch OFF	0 V
17 (W)	Ground	Turn signal RH (Front)	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 (BG)	Ground	Turn signal LH (Front)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
19		Room lamp timer	_	Interior room	OFF	Battery voltage
(V)	Ground	control	Output	lamp	ON	0 V
					Turn signal switch OFF	0 V
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
23	Consumed	Double do a servicio	Output	De de de es	OPEN (Back door opener actuator is activated)	Battery voltage
(G)	Ground	Back door open		Back door	Other than OPEN (Back door opener actuator is not activated)	0 V
					Turn signal switch OFF	0 V
25 (G)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
26					OFF (Stopped)	0.5 V
(G)	Ground	Rear wiper	Output	Rear wiper	ON (Operated)	Battery voltage
					` ' '	

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
34	Ground	Luggage room anten-	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB
(SB) Ground	Clound	na (–)		OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB
35 Crowd	Luggage room anten-		Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	
(V)	Ground	na (+)	Output	ŎFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 10 1 s JMKIA0063GB
38 (B) Ground	Ground	nd Back door antenna (–	Output	When the back door opener re- quest switch is operated with ig- nition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB
	2.53.13				When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
39	Ground	und Back door antenna Output When the back door opener re-		When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB	
(W)	Glound	(+)	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
47	Ground	Ignition relay (IPDM	Output	Ignition switch	OFF or ACC	Battery voltage
(Y)	0.000	E/R) control	- Carpar		ON	0 V
52	Ground	Starter relay control	Output	Ignition switch ON	When selector lever is in P or N position	Battery voltage
(SB)	Cround	Clartor rolly control	Output		When selector lever is not in P or N position	0 V
60	0	Push-button ignition	1	Push-button igni-	Pressed	0 V
(BR)	Ground	switch (Push switch)	Input	tion switch (push switch)	Not pressed	Battery voltage
					ON (Pressed)	0 V
61 (W)	Ground	Back door opener request switch	Input	Back door opener request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB
		Intelligent Key warn-		Intelligent Key	Sounding	1.0 V 0 V
64 (V)	Ground	ing buzzer (Engine	Output	warning buzzer	Not sounding	Battery voltage
		room)		(Engine room)	110t 30dildilig	Dattery voltage
65 (BG)	Ground	Rear wiper stop position	Input	Rear wiper	In stop position	(V) 15 10 5 0 10 ms JPMIA0016GB
					Not in stop position	1.0 V 0 V
					14οι 111 σιορ ροσιαστί	O V

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

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

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< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
74	Ground	Passenger door an-	enna (–) quest switch is operated with ig-		When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB
(SB)	Ciodila	tenna (–)		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
75	Ground	Passenger door antenna (+)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 11 1 s JMKIA0062GB
(GR)	Ground				When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB
76	Ground	nd Driver door antenna (-)	Output	When the driver door request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB
(V)	Sisund				When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value	٨
	e color)	Signal name	Input/ Output		Condition	(Approx.)	А
77		Driver door antenna	Output	When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 1	В
(LG)	(LG) Ground	(+)	Cupu	switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB	E
78	78 (Y) Ground	Room antenna 1 (–) (Instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB	G H
(Y)					When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB	SE(
79	Ground	Room antenna 1 (+)	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB	M
(BR)	Giound	(Instrument panel)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB	P

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value	
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.	
81 (W)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.	
82	Ground	Ignition relay [Fuse	Output	Ignition switch	OFF or ACC	0 V	
(R)	Ground	block (J/B)] control	Output	ignition switch	ON	Battery voltage	
83 Ground		Remote keyless entry receiver communica-	Input/	During waiting		(V) 15 10 5 0 1 ms JMKIA0064GB	
(Y)		tion	Output	When operating e	ither button on the key	(V) 15 10 5 1 ms JMKIA0065GB	

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

	inal No.	Description				Value	۸
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	А
		Combination switch INPUT 5	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	B C
					Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB	E
87 (BR)	Ground				Rear wiper switch ON (Wiper intermittent dial 4)	1.3 V (V) 15 10 2 ms JPMIA0039GB 1.3 V	G H
					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	SEC

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< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value
+ (VVire	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 HI (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V
88 (V)	Ground	Combination switch INPUT 3	Input	Combination switch	Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 10 0 2 ms JPMIA0037GB 1.3 V
					Rear washer switch ON (Wiper intermittent dial 4)	(V) 15 10 0 2 ms JPMIA0039GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	(V) 15 10 5 0 2 ms JPMIA0040GB
90 (P)	Ground	CAN-L	Input/ Output	_		_
91 (L)	Ground	CAN-H	Input/ Output	_		_

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value	
+ (Wire	e color)	Signal name	Input/ Output		Condition	Value (Approx.)	Α
			-		OFF	Battery voltage	В
92 (LG)	Ground	Key slot illumination	Output	Key slot illumina-	Blinking	(V) 15 10 5 0	С
						1 s JPMIA0015GB	D
					ON	0 V	Е
93	Ground	ON indicator lamp	Output	Ignition switch	OFF or ACC	Battery voltage	
(V)	Giodila	ON indicator lamp	Output	ignition switch	ON	0 V	
94	Ground	Puddle lamp control	Output	Puddle lamp	OFF	Battery voltage	F
(Y)	Giodila	Fuddle lamp control	Output	Fudule lamp	ON	0 V	
95	Ground	ACC relay control	Output	Ignition switch	OFF	0 V	
(BG)	Giodila	ACC relay control	Output	ignition switch	ACC or ON	Battery voltage	G
96 (GR)	Ground	A/T shift selector (Detention switch) power supply	Output	_		Battery voltage	Н
99	Ground	Selector lever P posi-	Input	Selector lever	P position	0 V	
(R)	Giodila	tion switch	Input	Selector level	Any position other than P	Battery voltage	ı
					ON (Pressed)	0 V	
100 (G)	Ground	Passenger door request switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms	SE
						1.0 V	L
					ON (Pressed)	0 V	
101 (SB)	Ground	Driver door request switch	Input	Driver door request switch	OFF (Not pressed)	(V) 15 10 5 0	M
							0
102 (BG)	Ground	Blower fan motor re- lay control	Output	Ignition switch	OFF or ACC	0 V	-
103 (LG)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OF	ON F	Battery voltage Battery voltage	Р

< ECU DIAGNOSIS INFORMATION >

	inal No. e color)	Description	ı			Value
+	- COIOT)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
					Turn signal switch LH	(V) 15 10 2 ms 1.3 V
107 (LG)	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
					Front wiper switch LO	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V
					Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description				Value	
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	Α
108 (R)	Ground	Combination switch INPUT 4	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	B C
					Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V	E F
					Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V	G H
					Rear wiper switch INT (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0040GB 1.3 V	SEC
					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	M
						1.3 V	0

Terminal No. (Wire color)		Description				Value	
+ (Wire	e color)	Signal name Inpu		Condition		(Approx.)	
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB	
					Lighting switch PASS	(V) 15 10 5 0 2 ms JPMIA0037GB	
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	Lighting switch 2ND	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V	
					Front wiper switch INT	(V) 15 10 5 0 2 ms JPMIA0038GB	
					Front wiper switch HI	(V) 15 10 5 0 2 ms JPMIA0040GB	
					ON	0 V	
110 (G)	Ground	Hazard switch	Input	Hazard switch	OFF	(V) 15 10 5 0 10 ms JPMIA0012GB	

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

	inal No.	Description				Value	
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)	А
113	0			Ignition switch	When bright outside of the vehicle	Close to 5 V	В
(P)	Ground	Optical sensor	Input	ŎN	When dark outside of the vehicle	Close to 0 V	
116 (SB)	Ground	Stop lamp switch 1	Input	_		Battery voltage	С
		Stop lamp switch 2		Stop lamp switch	OFF (Brake pedal is not depressed)	0 V	D
118	Ground	(Without ICC)	Input	Otop lamp switch	ON (Brake pedal is depressed)	Battery voltage	
(P)	Oround	Stop lamp switch 2	mput		OFF (Brake pedal is not de- brake hold relay OFF	0 V	Е
		(With ICC)			ON (Brake pedal is de- rake hold relay ON	Battery voltage	F
119 (SB)	Ground	Front door lock assembly driver side (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 10 5 0 10 ms	G
					UNLOCK status (Unlock switch sensor ON)	1.1 V 0 V	I
121	Ground	Key slot switch	Input	When the key is in	serted into key slot	Battery voltage	
(BR)	Cround	ricy diot switch	mpat	When the key is n	ot inserted into key slot	0 V	J
123	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V	
(W)	0.00.10			ig.men emien	ON	Battery voltage	SEC
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V	L
					ON (Door open)	0 V	Ν
132 (BR)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		(V) 15 10 5 0 10 ms	O P
						10.2 V	
				Ignition switch OF	F or ACC	Battery voltage	

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Signal name		inal No.	Description				Value
133 Ground Push-button ignition witch illumination Output ON (Tail lamps ON) ON (Tail l			Signal name			Condition	Value (Approx.)
133 Ground Push-button ignition witch illumination Output Push-button ignition switch illumination Output Push-button ignition switch illumination Output Push-button ignition switch illumination On (Tail Iamps ON) On (-+	_		Output		ON (T. There of OFF)	0.5.\/
Security indicator Securit						ON (Tail lamps OFF)	NOTE: The pulse width of this wave is varied by the illumination bright-
134 (GR) Ground LOCK indicator lamp Output LOCK indicator lamp OV 137 Ground Receiver and sensor ground Input graition switch ON OV 138 Ground Receiver and sensor power supply Input graition switch ON OV 139 Ground Ground Ground Ground Input graition switch ON Ov 139 Ground Tire pressure receiver communication Input graition switch ON 139 Ground Ground Ground Ground ground Input graition switch ON 140 Ground Ground Ground Ground ground Input graition switch ON 141 Ground Ground Ground ground Ground ground		Ground		Output	tion switch illumi-	ON (Tail lamps ON)	10 1777777777777
Company Comp							
137 Ground Receiver and sensor ground Input gnition switch ON OV		Ground	LOCK indicator lamp	Output			
Company Comp					атр	ON	0 V
Cround C		Ground		Input	Ignition switch ON		
ACC or ON Standby state Standby state Fire pressure receiver communication Ground Ground		Ground		Output	Ignition switch		
Standby state Standby state	(Y)		power supply			ACC or ON	5.0 V
When receiving the signal from the transmitter Volume		Ground				Standby state	6 4 2 0
Ground Security indicator Output Selector lever Except P and N positions 0 V ON ON OV Security indicator Output Security indicator Blinking Security indicator Blinking Security indicator Blinking Security indicator Blinking Security indicator Security indicator Security indicator Blinking Security indicator Security	(L)		er communication	Output	ON		6 4 2 0
ON 0 V 141 (G) Ground Security indicator Output Security indicator Blinking Document and repeated 11.3 V 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 10		Ground		Input	Selector lever	-	
Ground Security indicator Output Security indicator Blinking Security indicator Blinking			•			· ·	
		Ground	Security indicator	Output	Security indicator		(V) 15 10 5 0 JPMIA0014GB
						OFF	

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

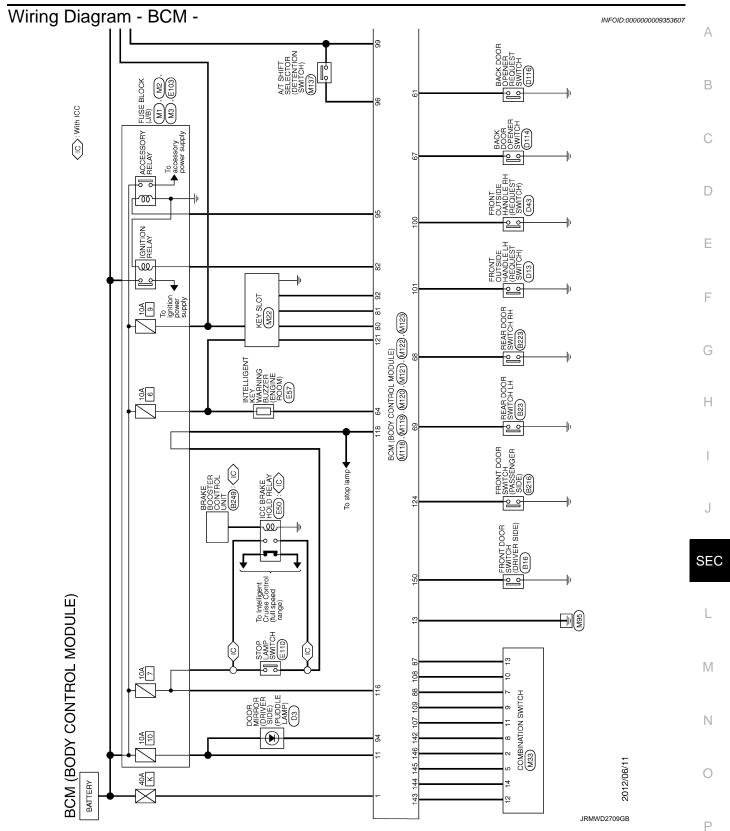
	inal No.	Description				Value
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	0 V
					Lighting switch 1ST	
				Combination	Lighting switch HI	(V)
142	Ground	Combination switch	Output	switch	Lighting switch 2ND	10
(BG)	Glodina	OUTPUT 5	Output	(Wiper intermit- tent dial 4)	Turn signal switch RH	2 ms JPMIA0031GB 10.7 V
					All switches OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4)	
143	Ground	Combination switch	Output	Combination	Rear wiper switch INT (Wiper intermittent dial 4)	(V) 15 10
(P)	Giodila	OUTPUT 1	Output	switch	Any of the conditions below with all switches OFF	5
					Wiper intermittent dial 1	2 ms
					Wiper intermittent dial 2Wiper intermittent dial 3	JPMIA0032GB
					Wiper intermittent dial 6Wiper intermittent dial 7	10.7 V
					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
(G)	Ground	OUTPUT 2	Output	switch	Rear washer switch ON (Wiper intermittent dial 4)	0
					Any of the conditions below with all switches OFF	2 ms
					Wiper intermittent dial 1	JPMIA0033GB
					Wiper intermittent dial 5Wiper intermittent dial 6	10.7 V
					All switches OFF	0 V
					Front wiper switch INT	4.0
				Combination	Front wiper switch LO	(V) 15
145 (L)	Ground	Combination switch OUTPUT 3	Output	switch (Wiper intermit-		10 5 0
(L)		0011013		tent dial 4)	Lighting switch AUTO	-
					Lighting Switch AUTO	2 ms
						JPMIA0034GB 10.7 V

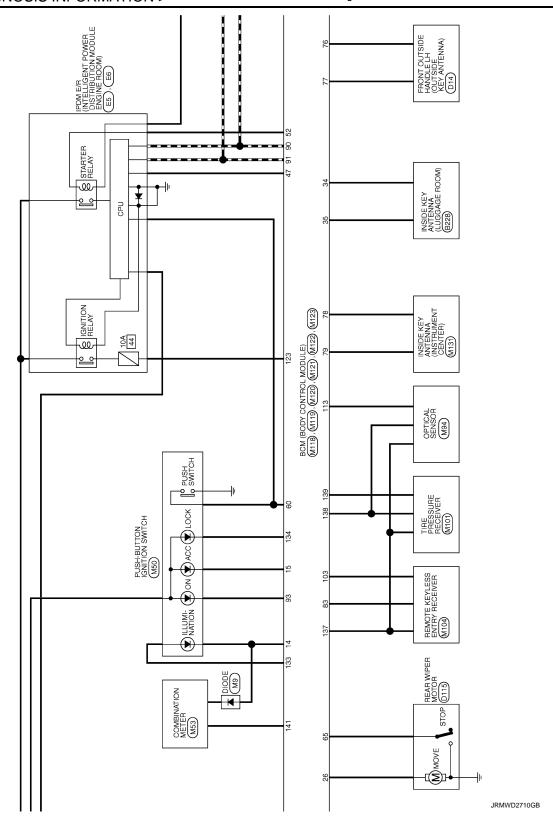
Revision: 2013 March SEC-147 2014 QX50

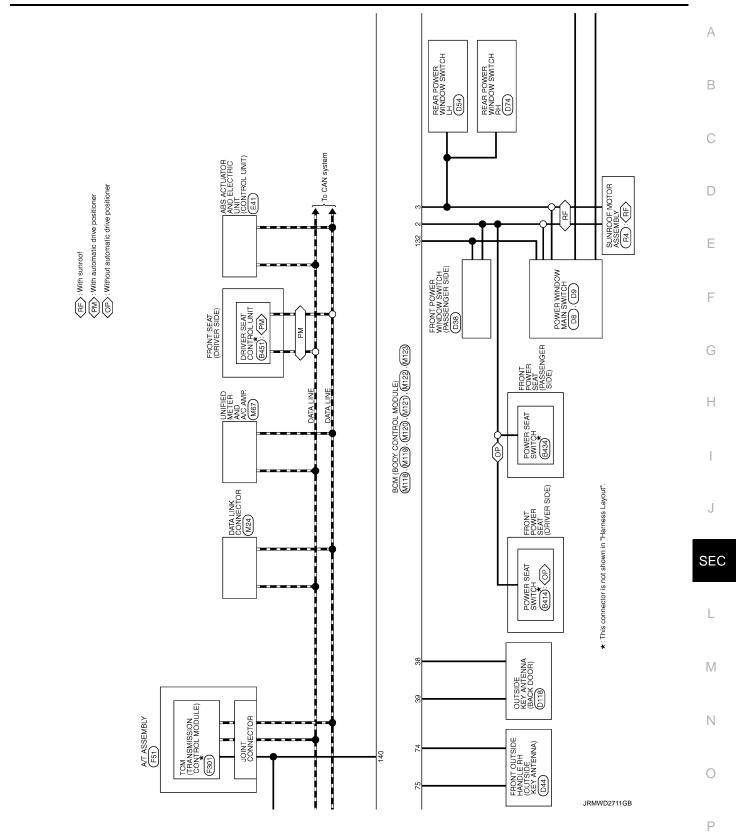
< ECU DIAGNOSIS INFORMATION >

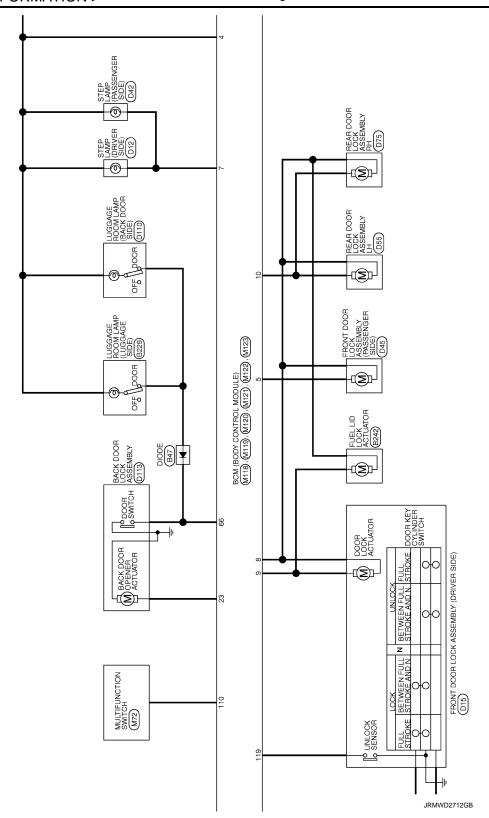
[WITH INTELLIGENT KEY SYSTEM]

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

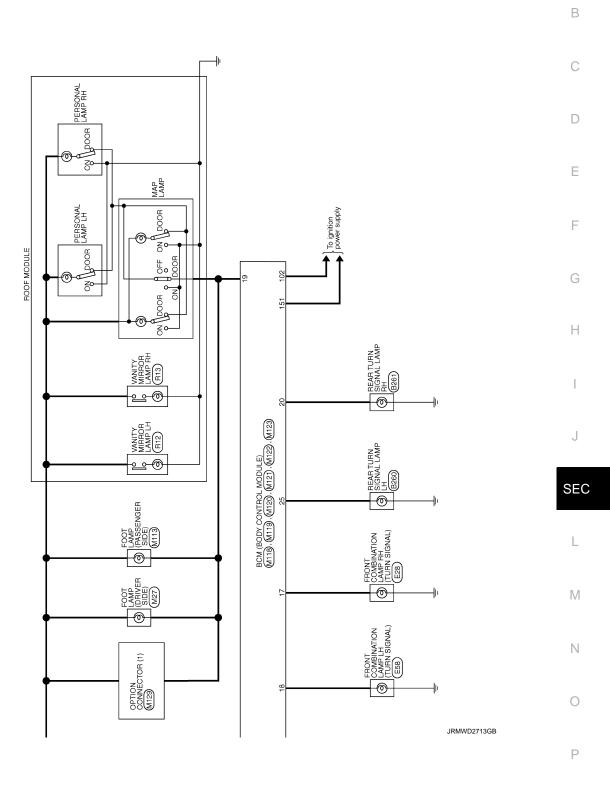








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Corrector No. B242 Corrector Name FUEL LID LOCK ACTUATOR Corrector Type MO4FW-LC	H.S.	Terminal Color Of Signal Name (Specification) No. Wire 1 R 2 V	Corrector No. B249 Corrector Name BRAKE BOOSTER CONTROL UNIT Corrector Type TK24FGY	H.S.	ial Color Of Signal N Wire BR SB	42 G IGNITON 46 B GROUND 47 V BRAKE HOLD RLY DRIVE SIGNAL	
Corrector No. B228 Corrector Name INSDE KEY ANTENA, (L/GGA/GE ROOM) Corrector Type RK/QZ/G/Y	H.S.	Terminal Color Of Signal Name Specification No. Wire	Cornector No. B229 Cornector Name LUGGAGE ROOM LAMP (LUGGAGE SDE) Cornector Type TK03FW	H.S.	Terminal Color Of Signal Name [Specification] No. Wire Signal Name [Specification] 2 L		
Terminal Color Of Signal Name Specification No. Wire Signal Name Specification	Corrector No. 6216 Corrector Name FRONT DOOR SWITCH (PASSENGER SDE) Corrector Type A03FW	H.S.	Terminal Color Of Signal Name [Specification] No. Wree Signal Name [Specification]	Corrector No. R223 Corrector Name REAR DOOR SWITCH RH Corrector Type A/03FW	H.S.	Terminal Color Of Signal Name [Specification] No. Wree 2 BR	
BCM (BODY CONTROL MODULE) Connector Name FRONT DOOR SWITCH (DRIVER SIDE) Connector Type A03FW	H.S.	Terminal Color Of Signal Name [Specification] No. Wire 2 V	Connector Name REAR DOOR SWITCH LH Connector Type A03FW	H.S.	٥ ۵	Connector No. 847 Connector Name DIODE Connector Type 24335, C9900	H.S.

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[WITH INTELLIGENT KEY SYSTEM]

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ÆR SIDE)	3 2 3 4 4	T H COMM NAME SIGNAL DOWER SUPPLY NAME OF SIGNAL ALLIGND ALLIGND ALLIGND NAMTCH	[3] 44 [5] [6] [7] [9] [9] [9] [9] [9] [9] [9] [9] [9] [9	В
D3 DOOR MIRROR (DRIVER SIDE) TH24MW-NH	12 11 10 7 6 8 4 23 22 21 19 18	Signal Name (Specification) SIDE CAMERA LH INAGE SIGNAL SIDE CAMERA LH INAGE GNO SIDE CAMERA LH INAGE GNO SIDE CAMERA LH MAGE GNO SIDE CAMERA LH MAGE GNO SIDE CAMERA LH MAGE GNO SIDE CAMERA LH GNO	Signal Name (Specification)	С
Connector No. Connector Name Connector Type 1	H.S.	Termical Color Of No. Wire No. Wire 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Terminal Color Of No. Wire 1 Wire 2 BR 4 V	D
L UNIT	10 11 12 13 14 16 18 18 18 18 18 18 18 18 18 18 18 18 18	eofication ININGS FTING) GWANARD) DOWNWARD) DOWNWARD) DOWNWARD) SWA		Е
B451 DRIVER SEAT CONTROL UNIT TH32FW	2 6 8 8	Signal Name [Specification] RX RX RX FCANH PLUSE (FECNINIS) SLIDINA SIV (BACKWARD) SLIDINA SIV (BACKWARD) RECLIINAS SIV (BACKWARD) RECLIINAS SIV (BACKWARD) RECLIINAS SIV (BACKWARD) FROM ILETTING SIV (BACKWARD) PLUSE (SLIDINS) PLUSE (SLIDINS) PLUSE (SLIDINS) PLUSE (SLIDINS) FROM ILETING SIV (PRWARD)		F
Connector No. B451 Connector Name DRIV Connector Type TH32	H.S.	Terminal Color Of No. Wine No. Wine 10 PiB 11 SB 12 SB 13 LGR 14 CGR 17 V/R 19 V 19 V/R 10 V/R 10 V/R 11 V/R 12 CGR 13 CGR 14 CGR 15 CGR 16 CG 17 V/R 18 CGR 19 CGR 10 CGR 10 CGR 11 CGR 12 CGR 13 CGR 14 CGR 15 CGR 16 CGR 17 CGR 18 CGR 19 CGR 10 CGR 11 CGR 12 CGR 13 CGR 14 CGR 15 CGR 16 CGR 17 CGR 18 CGR 18 CGR 18 CGR 19 CGR 10 CGR 10 CGR 10 CGR 11 CGR 12 CGR 13 CGR 14 CGR 15 CGR 16 CGR 17 CGR 18 CGR		G H
	109	seffication)	offication)	1
B414 POWER SEAT SWITCH NS10FW-CS	2 1 4 3 6 5	Sgral Name (Spra)	Signal Name (Specification)	J
Connector No. B414 Connector Name POWI Connector Type NS108	H.S.	Terminal Color Of No. Wee No. Week No. Wee No. Week No.	Terminal Color Of No. Wire No. Wire No. No.	SEC
DOLLE)				L
NTROL IN SIGNAL LA		Signal Name (Specification) E261 REAR TURN SIGNAL LAMP RH HS02FG-W Signal Name (Specification)		M
BCM (BODY CONTROL MO Connector No. B280 Connector Name REAR TURN SIGNAL LAMP LH Connector Type HS02FG-W	H.S.	1		N
		CII PIVE TEIL		0
			IDMM/DO4540D	

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Connector No. D42	Connector Name STEP LAMP (PASSENGER SIDE)	Connector Type TR02EW	7				0 E		<u>_</u>	No. Wire ognerine controlling	2 SB	┪		Connector No. D43	Connector Name FRONT OUTSIDE HANDLE RH (REQUEST SWITCH)	H-covid	Commedial lype RAUZFL				(12)		<u></u>		2 B									
Connector No. D15	Connector Name FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE)	Connector Type F06FGY-RS				ΙĿ	((1 2 3 4 5 6))		Terminal Color Of	No. Wire olgital realite [Specification]) d		4 B	5 Y	- · · · · · 9		Connector No. 1D38	Т	Connector Name FRONT POWER WINDOW SWITCH (PASSENGER SIDE)	Connector Type NS16FW-CS	•		_	8 9 10 11 17		lar	No. Wire	 	9 6	10 W	11 B	Н	 16 V -	
Connector No. D13	Connector Name FRONT OUTSIDE HANDLE LH (REQUEST SWITCH)	Connector Type RK02FI		<					Terminal Color Of Simple Color Of	No. Wire Signal Name [Specimoauou]		┨		Connector No. D14	Connector Name FRONT CUTSIDE HANDLE LH (OUTSIDE KEY ANTENNA)	Comment of the Control of the Contro	Connector Type KNUZMGY		✓		(1 2) (1 2)		la Ia	1	2 SB									
BCM (BODY CONTROL MODULE)	- Y 9	, BX	0 6	10 Y	11 G	13 P -	14 V -	15 B -	Connector No. D9	Connector Name POWER WINDOW MAIN SWITCH	Connector Type NS03FW-CS				₹ -	17 19			Terminal Color Of	No. Wire Signal Name [Specification]	17 B -	+	Connector No. D12	Connector Name STEP LAMP (DRIVER SIDE)	Connector Type TB02FW	•		1 F				ā	1 R	2 SB -

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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

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		A
D110 Wedake Room LAMP (BACK DOOR SDE) TK03FW	Signal Name (Specification) VCS Signal Name (Specification)	В
	NSO4FP	C
Connector No. Connector Name Connector Type	Terminal Color Of No. Water	
CH RH	ool Hall A	Е
D74 REAR POWER WINDOW SWITCH RH INSIGHW.CS 23451	Signal Name [Specification] D75 REAR DOOR LOCK ASSEMBLY RH E06FGY-RS Signal Name [Specification]	F
	Terminal Color Of Signary Wile	G
Connector No. Connector Type H.S.	Terminal Color Of No. Wire 5	Н
DE4 NS08FW-CS T T T T T T T T T T T T T T T T T T T	Signal Name (Specification) Signal Name (Specification) Signal Name (Specification)	I
	Signar Si	J
Connector No. Connector Name Connector Type	Terminal Color Of No. Wife No. Wife No.	SEC
(ODULE)	Totalcon	L
NTROL M E HWULE BHICUTSOE 12	Signal Name (Speci Poor cook Lock Assetter Priss FB6FGY-RS Signal Name (Speci	M
BCM (BODY CO Connector Ne. D44 Connector Neme Incort cursus Connector Type IRKGZMOY H.S.	Clor Name Clor Type Write P P P P P P P P P P P P P P P P P P P	N
BC Conne	Termin No. Come 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	^
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BCM (BODY CONTROL MODULE) Corrector No. D114 Corrector Name BACK DOOR OPENER SWITCH Corrector Type TK02MBR-P	Corrector No. D116 Corrector Name BACK DOOR OPENER REQUEST Corrector Name SWINTCH Corrector Type TK02MBR-P	Cornector No. E5 Connector Name River (Refuser) Frower Demourba woods Ensure Scott (1997) Propriet (1997) Prop	MODULE CONTRECTOR No. CONTRECTOR Name CONTRECTOR Type	to E28 Weine FRONT COMBINATION LAMP RH Type RS08FB-PR
H.S.	H.S.	H.S.	H.S.	\$ (2 3 4 4 4 4 4 4 4 4 4
Terminal Color Of Signal Name Specification No. Wire GR	Terminal Color Of Signal Name (Specification) No. Wire 1 W	<u>a</u>	Terminal No. 2 2 3 3 4 4	Ocior Of Signal Name (Specification) Wire B - B - B - B - B - B - B - B - B - B
Connector No. D115 Connector Name REAR WIPER MOTOR Connector Type CJUMFW-1V	Corrector No. D116 Corrector Name OUTSIDE KEY ANTENNA (BACK DOOR) Corrector Type RK02FGY	12 B/W	w - w	P
H.S.	H.S.	$+H^{-}$	Connector No. Connector Name Connector Type	Vo. E41 Name Ass ACTANTOR AND ELECTRIC UNIT (CONTROL UNIT) Type BAA42FB-AHZ4-LH
Ferminal Color Of Signal Name (Specification) No. Wife Signal Name (Specification) 3 0 .	Terminal Color Of	Connector No. E6 Featurest Fower ostheumonoous Connector Name Peule Revolution Connector Type TH08FW.NH	MODULE H.S.	
4		H.S.	Terminal Color Of No. Wire 1 B B 2 G G G G G G G G G G G G G G G G G	olor Ol Signal Neme [Specification] Wire Signal Neme [Specification] B G GROUND G LBM/R R B GROUND
		Terminal Color Of Signal Name (Specification) 29 P 40 41 BW SB 44 BR 45 45 46 R C C C 46 C C C 46 C C C C C C C C C	6 6 6 7 7 7 7 7 10 10 11 11 11 11 11 11 11 11 11 11 11	

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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Corrector No. F301 Corrector Name Town travasmisson control Module) Corrector Type SPT0FG 1 2 3 4 5	Terminal Color Of Signal Name (Specification) No. Wire Wire Wind Wi	ector No. M1 ector Name FUSE BLOC	H.S. Share Share Specification Share Shar	5A V 7 7 7 8 8 4 L L
Corrector No. E110 Corrector Type MOAPW-LC STATE 3 4 1 2	Terrninal Color Of Signal Name (Specification) No. Wire	Comector Type RK10FG-DGV RK10FG-DGV	Terrinea Color Of Signal Name Specification No. Wire Signal Name Specification 1 Y IGNTION POWER SUPPLY 2 B BATTER POWER SUPPLY 3 O CANH 4 V CANH CANH 5 B IGNTION POWER SUPPLY 7 R BACK-UP LAMP RELAY 6 LG CANH 1 CANTON POWER SUPPLY 7 R BACK-UP LAMP RELAY 6 LG CANH 1 CANTON POWER SUPPLY 7 R CANTON POWER SUPPLY 7 R CANTON POWER SUPPLY 7 R CANTON POWER SUPPLY 7 CANTON POWER SUPPLY 7	
Corrector No. E58 Corrector Type RS00FB-PR LS. (5 0 7 8)	Terminal Color Of Signal Name Specification No. Wire	Connector No. E103 Connector Name FUSE BLOCK (J/B) Connector Type NS18FW-CS	al Name (Specifici	
히네네네	Connector No. E50 Connector Name Icc BRAVE HOLD RELAY Connector Type MOGFGY-R-US 2 1	Terminal Color Of Signal Name Specification No. Wire V	Connector No. E57 Connector Name Intellectric vivaewor Biczeri (Biccon) Connector Type RWGGFBR H.S.	Terminal Color Of Signal Name (Specification) No. Wire 1 Y

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Revision: 2013 March SEC-159 2014 QX50

BCM (BODY CONTROL MODULE)	Connector No. M9	Connector No. M24	Connector No.	M33
Connector Name FUSE BLOCK (J/B)	Connector Name DIODE	Connector Name DATA LINK CONNECTOR	Connector Name	Connector Name COMBINATION SWITCH
Connector Type NS10FW-CS	Connector Type 24335_C9900	Connector Type BD16FW	Connector Type TH16FW-NH	TH16FW-NH
44 38 12 66 58 14 15.	H.S.	H.S.	H.S.	7 8 9 9 10 11 12 13 14
Terminal Color Of Signal Name (Specification)	Terminal Color Of Signal Name [Specification]	Terminal Color Of Signal Name [Specification]	Terminal Color Of	Signal Name [Specification]
38 P	+	+	+	FR WASHER(-)
H	2 W -	4 B	2 SB	OUTPUT 4
Н		Н	H	FR WASHER(+)
	Connector No M22	- 2	4 r	IGN
$^{+}$	$\overline{}$		+	GROUND
- SB	Connector Name KEY SLOT	- 11 SB	╁	INPUT 3
┨	Connector Type TH12FW-NH	╁	8 BG	OUTPUT 5
		16 Y -	≻	INPUT 2
Connector No. M3			10 R	INPUT 4
Commondate Microsoft College			11 LG	INPUT 1
COUNTING LOSE BLOCK (3/B)		Connector No. M27	12 P	OUTPUT 1
Connector Type NS12FW-CS	1 2 3 5 6	Consector Name FOOT AMP (DRIVER SIDE)	13 BR	INPUT 5
•	7	. T	14 G	OUTPUT 2
		Connector Type Auzhvv		
	Terminal Color Of Signal Name [Specification]		Connector No.	M50 PUSH-BUTTON IGNITION SWITCH
	2 GR CLOCK	NE CONTRACTOR	Connector Type TK08FBR	TK08FBR
)	3 W DATA		_	
Signal Name [Specification] No. Wire	_ 9J			
11C L 11C R - 12C BG	BR KEY SWI	Terminal Color Of Signal Name [Specification] No. Wire 1	H.S.	4 5 6 7 8
+		2 BR -		
Д			Terminal Color Of No. Wire	Signal Name [Specification]
			1 B	
			+	,
			4 r	
			t	

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BCM (BODY CONTROL MODULE)						
+	Connector No.	П	M67	Connector No.	M72	Connector No. M101
8 P	Connector Name		UNIFIED METER AND A/C AMP.	Connector Name	MULTIFUNCTION SWITCH	Connector Name TIRE PRESSURE RECEIVER
	Connector Type	\top	TH32FW-NH	Connector Type	TH16FW-NH	Connector Type TK04FW
Connector No. M53		1				1
Connector Name COMBINATION METER		7				
Connector Type TH40FW-NH	_	<u> </u>		•	_[/ \ 	
			47 83	SH	4 6 8 14 16	12 4
		='	5/38/38/90/60/62/63/98/99/99/99/99/99/99/99/99/99/99/99/99/		1 3 5 9	
26 27 38 29	Terminal	Color Of Wire	Signal Name [Specification]	Terminal Color Of	Signal Name [Specification]	Terminal Color Of Signal Name [Specification]
	$^{+}$	} >	ACC POWER SUPPLY	$^{+}$	GROUND	t
	42	>	FUEL LEVEL SENSOR SIGNAL	3	ACC	2 L SIGNAL
Terminal Color Of Signal Name (Specifical	43	œ	INTAKE SENSOR SIGNAL	4 R	ILL	4 Y BATTERY
olgilal Malle	44	PC	IN-VEHICLE SENSOR SIGNAL	5 Y	ILL CONT	
1 GR BATTERY POWER SUPPLY	45	۵	AMBIENT SENSOR SIGNAL	\dashv	AV COMM (H)	١
9	46	BG	SUNLOAD SENSOR SIGNAL	_	AV COMM (L)	Connector No. M104
GR COMMUNICATION SIG	47	<u>ن</u>	EXHAUST GAS / OUTSIDE COOR DETECTING SENSOR SIGNAL	+	SW GND	Connector Name REMOTE KEYLESS ENTRY RECEIVER
20 0	2	: و	IGNITION POWER SUPPLY	+	DISK EJECT SIGNAL	
6 P ALIERNATOR SIGNAL	\$	<u> </u>	BALLERY POWER SUPPLY	16 G	HAZARD ON	Connector Type JAB04FB
¥ °	ရှိ	<u>.</u>	GROUND			•
G SECURITY	96	_ ;	CAN-H			
m (20	≥ 6	BRAKE FLUID LEVEL SWITCH SIGNAL	Connector No.	M94	
B METER CON	20 00	¥ 6	FUEL LEVEL SENSOR GROUND	Connector Name	Connector Name OPTICAL SENSOR	1
B ILL G	e e	<u>¥</u> .	INIAKE SENSOR GROUND		MILLOOPHIA	112 4
X	09	ا ر	IN-VEHICLE SENSOR GROUND	Connector Type	I KU3FW	
BG IGNITION	61	¥ 6	AMBIENI SENSOR GROUND	•		
m (62	88 4	SUNLOAD SENSOR GROUND	,		
¥ :	2	r į				g E
25 Y COMMUNICATION SIGNAL (AMPLCD)	65	BG	ECV SIGNAL		£	
ď	69	_	A/C LAN SIGNAL	٧ :	1 2 3	BG
V PARKING BRAKE S	20	œ	EACH DOOR MOTOR POWER SUPPLY			> SIC
W BRAKE FLUID LEVEL	71	ω	GROUND			4 LG BATTERY
SB	72	۵	CAN-L			
30 G SEAT BELT BUCKLE SWITCH SIGNAL (PASSENGER SIDE)				Ja	Of Signal Name [Specification]	
٦				No. Wire		
B ILLUMINATION CC				-	POWER	
SELECT SWIT				2 P	OUTPUT	
37 SB ENTER SWITCH SIGNAL				3 B	GROUND	
L TRIP A/B RESET S						
40 BG ILLUMINATION CONTROL SWITCH SIGNAL (+)						

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BCM (BODY CONTROL MODULE)	Consider No.	Į.	мася	S	6	TAN TAN TAN
COIIIRCIOI INC.	1	COLLING:	IVI IZ I	8	5	INTO AINI AINIF.
Connector Name FOOT LAMP (PASSENGER SIDE)	Connector Name BCM (BODY CONTROL MODULE)	Connector Name	BCM (BODY CONTROL MODULE)	ē &	≥ α	IGN BELAY (F/B) CONT
Connector Type A02FW	Connector Type NS16FW-CS	Connector Type	TH40FGY-NH	83	: >	KEYLESS ENTRY RECEIVER COMM
	1			87	BR	COMBI SW INPUT 5
		_		88	>	COMBI SW INPUT 3
				06	Д	CAN-L
	4 5 7 8 9 10		7	91	_	CAN-H
16	11 13 14 15 17 18 19	Ų.		95	PT	KEY SLOT ILL CONT
	01 11		(8) (8) (1) (1) (1) (1) (1) (1)	93	>	ON IND
				94	> 2	PUDDLE LAMP CONT
				s s	29 6	ACC RELAY CONI
Terminal Color Of Signal Name [Specification]	Terminal Color Of Signal Name [Specification] No. Wire	Terminal Color Of No. Wire	Signal Name [Specification]	9 66	<u> </u>	ALI SHIFT SELECTOR POWER SUPPLY SHIFT P
+	t	t	LUGGAGE ROOM ANT-	100	U	PASSENGER DOOR REQUEST SW
2 BR -	5 L PASSENGER DOOR UNLOCK OUTPUT	H	LUGGAGE ROOM ANT+	101	SB	DRIVER DOOR REQUEST SW
	7 Y STEP LAMP CONT	38 B	BACK DOOR ANT-	102	BG	BLOWER FAN MOTOR RELAY CONT
	8 V ALL DOOR, FUEL LID LOCK OUTPUT	39 W	BACK DOOR ANT+	103	P	KEYLESS ENTRY RECEIVER POWER SUPPLY
Connector No. M118	9 G DRIVER DOOR, FUEL LID UNLOCK OUTPUT	47 Y	IGN RELAY (IPDM E/R) CONT	107	PI	COMBI SW INPUT 1
THE STATE OF THE S	10 BR REAR DOOR UNLOCK OUTPUT	52 SB	STARTER RELAY CONT	108	œ	COMBI SW INPUT 4
Connector Name BCM (BODY CONTROL MODULE)	11 R BAT (FUSE)	60 BR	PUSH SW	109	>	COMBI SW INPUT 2
Connector Type M03FB-LC	13 B GROUND	61 W	BACK DOOR OPENER REQUEST SW	110	O	HAZARD SW
	14 W PUSH-BUTTON IGNITION SW ILL GND	64 V	I-KEY WARN BUZZER (ENG ROOM)			
	15 Y ACC IND		REAR WIPER STOP POSITION			
Ī	M	96 R	BACK DOOR SW	Connector No.	or No.	M123
13	BG T	Н	BACK DOOR OPENER SW	Connect	Connector Name	BCM (BODY CONTROL MOBILE)
	19 V INT ROOM LAMP CONT	_	REAR RH DOOR SW	50	o light to	DOM (BOD) COMMOD MODEL
		69 R	REAR LH DOOR SW	Connector Type	or Type	TH40FG-NH
]						
	Connector No. M120	- 1	00011		1	
æ	Connector Name BCM (BODY CONTROL MODULE)	Connector No.	M122		•	
No. Wire	Occupanty Type NS43EW-CS	Connector Name	BCM (BODY CONTROL MODULE)	7	ľ	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
2 W POWER WINDOW POWER SLIPPLY (BAT)		Connector Type	TH40FB-NH		į	20 CC
: >-	•	odí lossillos	5			
		_				
				Terminal	כ	Signal Name [Specification]
		•		ġ.	Wire	financia del accessor del
	29 26	\ \ \	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	113	۵.	OPLICAL SENSOR
			75 63 65 65 65 65 65 65 65 65 65 65 65 65 65	116	SB	STOP LAMP SW 1
	-			118	Ы	STOP LAMP SW 2
	<u>aa</u>			119	SB	DR DOOR UNLOCK SENSOR
	Wire	Terminal Color Of	Signal Namo [Socoification]	121	BR	KEY SLOT SW
		_	oignal tarrie [opecincation]	123	Μ	IGN F/B
	e B	74 SB	PASSENGER DOOR ANT-	124	PC	PASSENGER DOOR SW
	25 G TURN SIGNAL LH (REAR)	75 GR	PASSENGER DOOR ANT+	132	BR	POWER WINDOW SW COMM
	26 G REAR WIPER OUTPUT	76 V	DRIVER DOOR ANT-	133	Μ	PUSH-BUTTON IGNITION SW ILL POWER
		27 LG	DRIVER DOOR ANT+	134	GR	LOCK IND
		Н	ROOM ANT1-	137	BG	RECEIVER/SENSOR GND
		79 BB	BOOM ANT1+	420	>	V IDDI IS BOWER SUBDI V

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Connector No. R12 Connector Vame VANITY MIRROR LAMP LH Connector Type MCAUZEW L1.S.	Terminal Color Of Signal Name [Specification] 1	
M137 THIZPWANH T 2 3 4 5 T 8 9 10 11	Nure Signal Name [Specification] W W V V V V V V V V	Wire Signal Name (Specification) GR SW-BIT1 P SW-BIT0 BR +B L SPEED SENSOR(2P) Y TIMER(4-ION) GROUND GROUND
Connector No. Connector Name Connector Type	Terminal Calor Of Terminal Calor Of Terminal Calor Of Terminal Calor Of Terminal Calor Cal	Terminal Color Of No. Wire 1 GR 5 P 7 BR 8 L 9 Y 10 G
BCM (BODY CONTROL MODULE) 139 L THE PRESSIVE RECEIVER COMM 140 GR SHETT NAP COMB SW OUTPUT 142 BG COMB SW OUTPUT 144 G COMB SW OUTPUT COMB SW OUTP	M129 OPTION CONNECTOR (1) THOBMW-NH Signal Name [Specification] Signal Name [Specification] NSIGNAL NATE NA (NSTRUMENT CENTER) RKG2FGY	Signal Name [Specification]
BCM (BOL 139 L 140 GR 141 G 142 BG 143 P 144 C 146 SB 146 SB 146 SB 150 LG	H.S. Connector Type Connector Type Terminal Color Of No. Wire Of S. 3 G R Connector No. Ornector No. Ornector No.	Terminal Color Of No. Wire 1 BR 2 Y

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INFOID:0000000009353608

FAIL-SAFE CONTROL BY DTC

Fail-safe

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

< ECU DIAGNOSIS INFORMATION >

[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

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 stops.
- 2. Turn rear wiper switch OFF.
- 3. Operate the rear wiper switch or rear washer switch.

DTC Inspection Priority Chart

INFOID:0000000009353609

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

Priority	DTC
1	B2562: LOW VOLTAGE
2	U1000: CAN COMM CIRCUIT 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

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

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Priority	DTC	
	B2553: IGNITION RELAY B2555: STOP LAMP B2556: PUSH-BTN IGN SW B2557: VEHICLE SPEED B2560: STARTER CONT RELAY	В
	 B2601: SHIFT POSITION B2602: SHIFT POSITION B2603: SHIFT POSI STATUS B2604: PNP SW B2605: PNP SW 	С
4	 B2608: STARTER RELAY B260A: IGNITION RELAY B260F: ENG STATE SIG LOST B2614: ACC RELAY CIRC 	D
	 B2615: BLOWER RELAY CIRC B2616: IGN RELAY CIRC B2617: STARTER RELAY CIRC B2618: BCM 	Е
	 B261A: PUSH-BTN IGN SW B261E: VEHICLE TYPE B26EA: KEY REGISTRATION C1729: VHCL SPEED SIG ERR U0415: VEHICLE SPEED SIG 	F G
	C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR C1706: LOW PRESSURE RR C1707: LOW PRESSURE RL C1708: [NO DATA] FL	Н
5	 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] RL C1734: CONTROL UNIT 	J
6	B2621: INSIDE ANTENNA B2623: INSIDE ANTENNA	SEC

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>SEC-23, "COM-MON ITEM"</u>.

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

Revision: 2013 March SEC-165 2014 QX50

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

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CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2191: DIFFERENCE OF KEY	×	_	_	_	SEC-43
B2192: ID DISCORD BCM-ECM	×	_	_	_	SEC-44
B2193: CHAIN OF BCM-ECM	×	_	_	_	SEC-45
B2195: ANTI SCANNING	×	_	_	_	SEC-46
B2553: IGNITION RELAY	_	×	_	_	PCS-48
B2555: STOP LAMP	_	×	_	_	SEC-47
B2556: PUSH-BTN IGN SW	_	×	×	_	SEC-49
B2557: VEHICLE SPEED	×	×	×	_	SEC-51
B2560: STARTER CONT RELAY	×	×	×	_	SEC-52
B2562: LOW VOLTAGE	_	×	_	_	BCS-44
B2601: SHIFT POSITION	×	×	×	_	SEC-53
B2602: SHIFT POSITION	×	×	×	_	SEC-56
B2603: SHIFT POSI STATUS	×	×	×	_	SEC-59
B2604: PNP SW	×	×	×	_	SEC-62
B2605: PNP SW	×	×	×	_	SEC-64
B2608: STARTER RELAY	×	×	×	_	SEC-66
B260A: IGNITION RELAY	×	×	×	_	PCS-50
B260F: ENG STATE SIG LOST	×	×	×		SEC-68
B2614: ACC RELAY CIRC	_	×	×	_	PCS-52
B2615: BLOWER RELAY CIRC	_	×	×	_	PCS-55
B2616: IGN RELAY CIRC	_	×	×	_	PCS-58
B2617: STARTER RELAY CIRC	×	×	×	_	SEC-71
B2618: BCM	×	×	×	_	PCS-61
B261A: PUSH-BTN IGN SW		×	×	_	SEC-73
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	SEC-76
B2621: INSIDE ANTENNA	_	×	_	_	DLK-58
B2623: INSIDE ANTENNA	_	×	_	_	DLK-60
B26E1: ENG STATE NO RES	×	×	×	_	SEC-69
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	_	SEC-70
C1704: LOW PRESSURE FL	_	_	_	×	
C1705: LOW PRESSURE FR	_	_	_	×	WT 00
C1706: LOW PRESSURE RR	_	_	_	×	<u>WT-23</u>
C1707: LOW PRESSURE RL	_	_	_	×	1
C1708: [NO DATA] FL	_	_	_	×	
C1709: [NO DATA] FR	_	_	_	×	W.T.OF
C1710: [NO DATA] RR	_	_	_	×	<u>WT-25</u>
C1711: [NO DATA] 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 page
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-30</u>
C1734: CONTROL UNIT	_	_	_	×	WT-32

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< ECU DIAGNOSIS INFORMATION >

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

Reference Value INFOID:0000000009353611

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
RAD FAN REQ	Engine idle speed	Changes depending on engine coolant temperature, air conditioner operation status, vehicle speed, etc.	0 – 100 %
		A/C switch OFF	Off
AC COMP REQ	Engine running	A/C switch ON (Compressor is operating)	On
TAIL&CLR REQ	Lighting switch OFF		Off
TAIL&CLR REQ	Lighting switch 1ST, 2ND, HI or	AUTO (Light is illuminated)	On
III I O DEO	Lighting switch OFF		Off
HL LO REQ	Lighting switch 2ND HI or AUTO	(Light is illuminated)	On
UI UI DEO	Lighting switch OFF		Off
HL HI REQ	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
		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
IGN RLY1 -REQ	Ignition switch OFF or ACC		Off
ION KLT I -KEQ	Ignition switch ON		On
ICN PLV	Ignition switch OFF or ACC		Off
IGN RLY	Ignition switch ON		On
PUSH SW	Release the push-button ignition	switch	Off
1 0011 000	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 INEL CONT	At engine cranking		On

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Cor	ndition	Value/Status
IHBT RLY -REQ	Ignition switch ON		Off
INDI KLI -KEQ	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 	Off
	Release the selector button with se	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 OW	Ignition switch OFF, ACC or engine	running	Open
OIL P SW	Ignition switch ON		Close
LICOD CW	Close the hood		Off
HOOD SW	Open the hood		On
HL WASHER REQ	NOTE: The item is indicated, but not monit	ored.	Off
	Not operation		Off
THFT HRN REQ	Panic alarm is activated Horn is activated with VEHICLE \$ TEM	On	
LIODAL CLUDD	Not operating		Off
HORN CHIRP	Door locking with Intelligent Key (he	orn chirp mode)	On
CRNRNG LMP REQ	NOTE: The item is indicated, but not monit	ored.	Off

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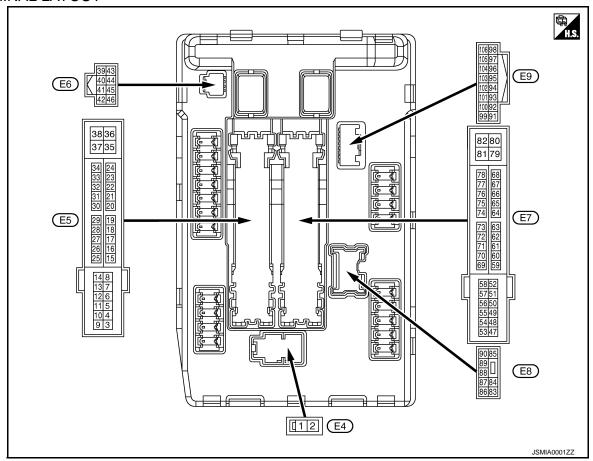
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< ECU DIAGNOSIS INFORMATION >

TERMINAL LAYOUT



PHYSICAL VALUES

	nal No.	Description				Value
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)
1 (W)	Ground	Battery power supply	Input	Ignition swi	itch OFF	Battery voltage
2 (L)	Ground	Battery power supply	Input	Ignition swi	itch OFF	Battery voltage
4	Craund	Frant win as I O	Outrout	Ignition	Front wiper switch OFF	0 V
(V)	Ground	Front wiper LO	Output	switch ON	Front wiper switch LO	Battery voltage
5	0	Frant win on III	0	Ignition Front wiper switch OFF switch ON Front wiper switch HI		0 V
(L)	Ground	Front wiper HI	Output			Battery voltage
7	0	Tail, license plate lamps &	0	Ignition	Lighting switch OFF	0 V
(R)	Ground	interior lamps	Output	switch ON	Lighting switch 1ST	Battery voltage
12 (B/W)	Ground	Ground	_	Ignition swi	itch ON	0 V
13					tely 1 second or more after ignition switch ON	0 V
(Y)	Ground	Fuel pump power supply	Output	 Approximately 1 second after turning the ignition switch ON Engine running 		Battery voltage
16				lanition	Front wiper stop position	0 V
(LG)	Ground	Front wiper auto stop	Input	switch ON	Any position other than front wiper stop position	Battery voltage

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) < ECU DIAGNOSIS INFORMATION > [WITH INTELLIGENT KEY SYSTÉM]

	inal No. e color)	Description			Conditi	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
19	Ground	Ignition relay power supply	Output	Ignition sw	itch OFF	0 V
(W)	Ground	ignition relay power supply	Output	Ignition sw	itch ON	Battery voltage
25	Ground	lanition rolay nower supply	Output	Ignition sw	itch OFF	0 V
(G)	Ground	Ignition relay power supply	Output	Ignition sw	itch ON	Battery voltage
26*	Ground	Ignition relay power supply	Output	Ignition sw	itch OFF	0 V
(R)	Ground	ignition relay power supply	Output	Ignition sw	itch ON	Battery voltage
27	Ground	Ignition relay monitor	Input	Ignition sw	itch OFF or ACC	Battery voltage
(BG)	Ground	Ignition relay monitor	iliput	Ignition sw	itch ON	0 V
28	Ground	Push-button ignition	Input	Press the p	oush-button ignition switch	0 V
(L)	Ground	switch	iliput	Release th	e push-button ignition switch	Battery voltage
30 (GR)	Ground	Starter relay control	Input	Ignition switch ON	Selector lever in any position other than P or N	0 V
(GR)				SWILCH ON	Selector lever P or N	Battery voltage
36 (G)	Ground	Battery power supply	Input	Ignition sw	itch OFF	Battery voltage
39 (P)	_	CAN-L	Input/ Output	_		_
40 (L)	_	CAN-H	Input/ Output		_	_
41 (B/W)	Ground	Ground	_	Ignition sw	itch ON	0 V
42	Ground	Cooling fan relay control	Input	Ignition sw	itch OFF or ACC	0 V
(Y)	Cround	Cooming fair rolay control	при	Ignition sw	itch ON	0.7 V
43 (SB)	Ground	A/T 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
(BR)	Giodila	Hom relay control	Input	The horn is	activated	0 V
45	Ground	Anti theft horn relay control	Input	The horn is	deactivated	Battery voltage
(G)	Ground	Talli trielt from relay Control	mput	The horn is	activated	0 V
46 (R)	Ground	Starter relay control	Input	Ignition switch ON	Selector lever in any position other than P or N	0 V
(11)				SWILOT ON	Selector lever P or N	Battery voltage
					A/C switch OFF	0 V
48 (L)	Ground	A/C relay power supply	Output	Engine running	A/C switch ON (A/C compressor is operating)	Battery voltage
40				Ignition sw (More than ignition sw	a few seconds after turning	0 V
49 (BG)	Ground	ECM relay power supply	Output	Ignition sIgnition s(For a fe tion swite	switch OFF w seconds after turning igni-	Battery voltage

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< ECU DIAGNOSIS INFORMATION >

Terminal No. Description (Wire color)					Value		
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	
51	Cround	lanition relevance comple	0	Ignition sw	itch OFF	0 V	
(Y)	(Y) Ground Ignition relay power supply O		Output	Ignition switch ON		Battery voltage	
53			Output	Ignition sw (More than ignition sw	a few seconds after turning	0 V	
(W)	Ground	d ECM relay power supply		Ignition s	w seconds after turning igni-	Battery voltage	
54		Throttle control motor re- lay power supply	Output	Ignition sw (More than ignition sw	a few seconds after turning	0 V	
(P)	Ground			Ignition s	w seconds after turning igni-	Battery voltage	
55 (SB)	Ground	ECM power supply	Output	Ignition switch OFF		Battery voltage	
56	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V	
(LG)	Ground			Ignition switch ON		Battery voltage	
57	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V	
(G)	Cround	ignition roley power supply	Catput	Ignition sw	itch ON	Battery voltage	
58	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V	
(V)	Oroana	igiliadii idiay powol dappiy	Catpat	Ignition sw	itch ON	Battery voltage	
69			Output	Ignition sw (More than ignition sw	a few seconds after turning	Battery voltage	
(BR)	Ground	ECM relay control		Ignition s Ignition s (For a fe tion swite)	switch OFF w seconds after turning igni-	0 – 1.5 V	
70 (BG)	Ground	Throttle control motor re- lay control	Output	Ignition switch ON $ ightarrow$ OFF		0 − 1.0 V ↓ Battery voltage ↓ 0 V	
			F	Ignition switch ON		0 – 1.0 V	
74	Ground	Ignition relay newer cure!	Outout	Ignition switch OFF		0 V	
(P)	Giouna	Ignition relay power supply	Output	Ignition sw	itch ON	Battery voltage	
75	Ground	Oil pressure switch	Input	Ignition Engine stopped switch ON Engine running		0 V	
(SB)	Ciouna	On product awiton	πραι			Battery voltage	

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description				Value
+	e color)	Signal name	Input/ Output	Condition		(Approx.)
		Power generation command signal		Ignition switch ON 40% is set on "ACTIVE TEST", "ALTERNATOR DUTY" of "ENGINE"		(V) 6 4 2 0 2ms JPMIA0001GB
76 (Y)	Ground		Output			6.3 V (V) 6 4 2 0 JPMIA0002GB 3.8 V
					on "ACTIVE TEST", "AL- R DUTY" of "ENGINE"	(V) 6 4 2 0 2 0 2 1.4 V
77 (R)	Ground	Fuel pump relay control	Output	Approximately 1 second after turning the ignition switch ON Engine running Approximately 1 second or more after turning the ignition switch ON		0 – 1.0 V Battery voltage
80 (W)	Ground	Starter motor	Output	At engine cranking		Battery voltage
83 BG)	Ground	Headlamp LO (RH)	Output	Ignition switch ON	Lighting switch OFF Lighting switch 2ND	0 V Battery voltage
84 (V)	Ground	Headlamp LO (LH)	Output	Ignition switch ON	Lighting switch OFF Lighting switch 2ND	0 V Battery voltage
86 (W)	Ground	Front fog lamp (RH)	Output	Lighting switch 2ND	Front fog lamp switch OFF Front fog lamp switch ON Daytime running light activated (Only for Canada)	0 V Battery voltage
					Front fog lamp switch OFF	0 V
87 (L)	Ground	Front fog lamp (LH)	Output	Lighting switch 2ND	 Front fog lamp switch ON Daytime running light activated (Only for Canada) 	Battery voltage
88 GR)	Ground	Washer pump power supply	Output	Ignition switch ON		Battery voltage

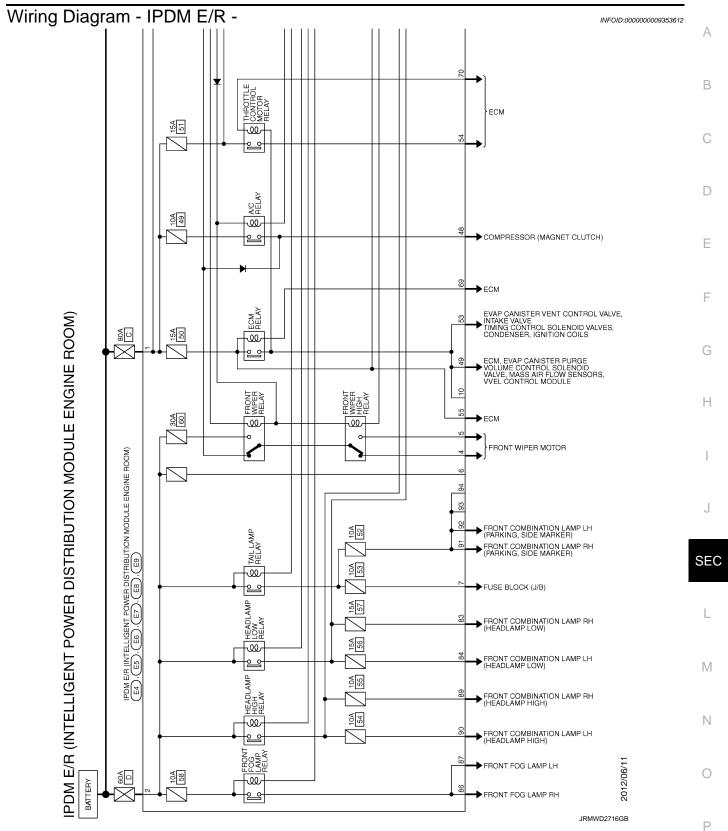
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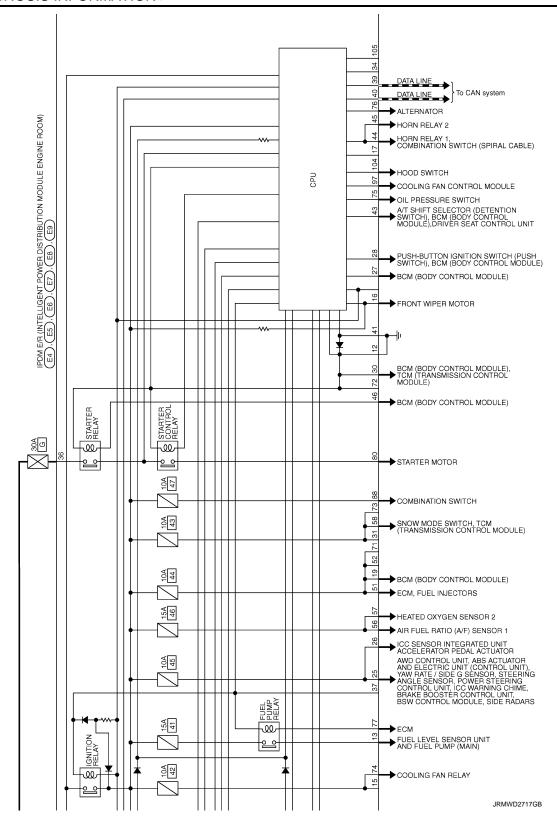
< ECU DIAGNOSIS INFORMATION >

Terminal No.		Description				Value
(Wire	e color)	Signal name	Input/ Output	Condition		(Approx.)
89				Ignition	Lighting switch OFF	0 V
(BR)	Ground	Headlamp HI (RH)	Output	Ignition switch ON	Lighting switch HI Lighting switch PASS	Battery voltage
00		Headlamp HI (LH)	Output	Ignition switch ON	Lighting switch OFF	0 V
90 (P)	Ground				Lighting switch HI Lighting switch PASS	Battery voltage
91	Cround	Darking Jamp (DU)	Output	Ignition switch ON	Lighting switch OFF	0 V
(P)	Ground	Parking lamp (RH)	Output		Lighting switch 1ST	Battery voltage
92	Ground	Parking Jamp (LH)	Output	Ignition	Lighting switch OFF	0 V
(BG)	Ground	Parking lamp (LH)	Output	switch ON	Lighting switch 1ST	Battery voltage
97 (V)	Ground	Cooling fan control	Output	Engine idling		0 – 5 V
104	Ground	und Hood switch	Input	Close the hood		Battery voltage
(LG)	Giodila	TIOOG SWILGIT	mput	Open the h	ood	0 V

^{*:} Only for the models with ICC system

< ECU DIAGNOSIS INFORMATION >



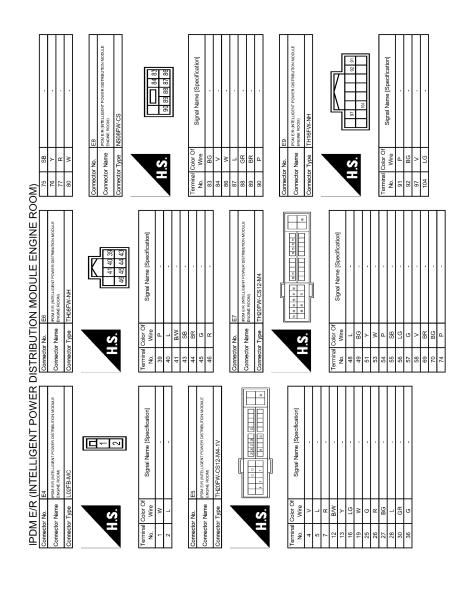


< ECU DIAGNOSIS INFORMATION >

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JRMWD8171GB

Fail-safe INFOID:0000000009353613

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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IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) < ECU DIAGNOSIS INFORMATION > [WITH INTELLIGENT KEY SYSTEM]

Control part	Fail-safe operation
Cooling fan	 Outputs the pulse duty signal (PWM signal) 100% when the ignition switch is turned ON Outputs the pulse duty signal (PWM signal) 0% when the ignition switch is turned OFF
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 mode and the front wiper motor is operating.
Front fog lamps	Front fog lamp relay OFF
Horn	Horn relay 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		Operation	
Ignition relay contact side	Ignition relay excitation coil side	IPDM E/R judgment		
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 stop position 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	ON	The front wiper stop position 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:0000000009353614

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	Reference
No DTC is detected. further testing may be required.	_	_
U1000: CAN COMM CIRCUIT	×	PCS-14
B2098: IGN RELAY ON	×	PCS-15
B2099: IGN RELAY OFF	_	PCS-16
B210B: START CONT RLY ON	_	<u>SEC-77</u>
B210C: START CONT RLY OFF	_	SEC-78
B210D: STARTER RELAY ON	_	<u>SEC-79</u>
B210E: STARTER RELAY OFF	_	SEC-80
B210F: INTRLCK/PNP SW ON	_	<u>SEC-82</u>
B2110: INTRLCK/PNP SW OFF	_	<u>SEC-84</u>

ENGINE DOES NOT START WITH INTELLIGENT KEY

< SYMPTOM DIAGNOSIS >

Description

[WITH INTELLIGENT KEY SYSTEM]

SYMPTOM DIAGNOSIS

ENGINE DOES NOT START WITH INTELLIGENT KEY

 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)

- "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

1.PERFORM WORK SUPPORT

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

Refer to DLK-51. "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

>> GO TO 2.

2.PERFORM SELF DIAGNOSTIC RESULT

Perform "BCM" Self Diagnostic Result.

Is DTC detected?

YES >> Refer to DLK-58, "DTC Logic" (instrument center), or DLK-60, "DTC Logic" (luggage room).

>> GO TO 3. NO

3.CHECK PUSH-BUTTON IGNITION SWITCH

Check push-button ignition switch.

Refer to PCS-65, "Component Function Check".

Is the inspection normal?

YES >> GO TO 4.

NO >> Repair or replace malfunctioning parts.

4. CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection normal?

YES >> Check intermittent incident, Refer to GI-42, "Intermittent Incident",

NO >> GO TO 1. SEC

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ENGINE DOES NOT START WHEN INTELLIGENT KEY IS INSERTED INTO KEY SLOT

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

ENGINE DOES NOT START WHEN INTELLIGENT KEY IS INSERTED INTO KEY SLOT

Description INFOID:00000000009059547

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

Diagnosis Procedure

INFOID:0000000009059548

1. PERFORM INITIALIZATION

Perform initialization with CONSULT. Register all Intelligent Keys.

For initialization and registration of Intelligent Key, follow the instruction of CONSULT display.

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

YES >> INSPECTION END

NO >> GO TO 2.

2. CHECK KEY SLOT

Check key slot.

Refer to DLK-95, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.confirm the operation

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

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:0000000009059549

- 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

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?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

NO >> GO TO 1.

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VEHICLE SECURITY SYSTEM CAN NOT BE SET

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM CAN NOT BE SET

INTELLIGENT KEY

INTELLIGENT KEY: Description

INFOID:0000000009059551

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:0000000009059552

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

Lock/unlock door with Intelligent Key.

Refer to DLK-28, "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-185, "Diagnosis Procedure".</u>

2.check hood switch

Check hood switch.

Refer to SEC-88, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

NO >> GO TO 1.

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH: Description

INFOID:0000000009059553

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

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.

DOOR REQUEST SWITCH: Diagnosis Procedure

INFOID:0000000009059554

1. CHECK INTELLIGENT KEY SYSTEM (DOOR LOCK FUNCTION)

Lock/unlock door with door request switch.

Refer to <u>DLK-19</u>, "<u>DOOR LOCK FUNCTION</u>: <u>System Description</u>".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check Intelligent Key system (door lock function). Refer to <u>DLK-182, "ALL DOOR : Diagnosis Procedure".</u>

2. CHECK HOOD SWITCH

VEHICLE SECURITY SYSTEM CAN NOT BE SET		
< SYMPTOM DIAGNOSIS > [WITH INTELLIGENT KEY SYSTEM]		
Check hood switch.		
Refer to <u>SEC-88, "Component_Function_Check"</u> . Is the inspection result normal?		
YES >> GO TO 3.		
NO >> Repair or replace the malfunctioning parts.		
3.confirm the operation		
Confirm the operation again.		
Is the result normal?		
YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident". NO >> GO TO 1.		
DOOR KEY CYLINDER		
DOOR KEY CYLINDER : Description		
Armed phase is not activated when door is locked using mechanical 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.		
DOOR KEY CYLINDER: Diagnosis Procedure		
1.CHECK POWER DOOR LOCK SYSTEM		
Lock/unlock door with mechanical key. Refer to <u>DLK-11, "System Description"</u> .		
Is the inspection result normal?		
YES >> GO TO 2. NO >> Check power door lock system. Refer to <u>DLK-181, "Diagnosis Procedure"</u> .		
2.CHECK HOOD SWITCH		
Check hood switch.		
Refer to SEC-88, "Component Function Check".	9	
s the inspection result normal?		
YES >> GO TO 3.		
NO >> Repair or replace the malfunctioning parts.		
3.CONFIRM THE OPERATION		
Confirm the operation again.		
Is the result normal? YES >> Check intermittent incident. Refer to GI-42, "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

Before performing the diagnosis in the following table, check "Work Flow". Refer to SEC-5, "Work Flow".

Diagnosis Procedure

INFOID:0000000009059558

1. CHECK DOOR SWITCH

Check door switch.

Refer to DLK-63, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the malfunctioning door switch

2. CHECK HOOD SWITCH

Check hood switch.

Refer to SEC-88, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace the malfunctioning door switch

3.CHECK HEADLAMP ALARM

Check headlamp operation.

Refer to SEC-90, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace malfunctioning parts.

4.CHECK HORN

Check horn.

Refer to DLK-99, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace malfunctioning parts.

5.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

VEHICLE SECURITY SYSTEM CA < SYMPTOM DIAGNOSIS >	N NOT CANCELED [WITH INTELLIGENT KEY SYSTEM]
VEHICLE SECURITY SYSTEM CAN NOT CA	
INTELLIGENT KEY	
INTELLIGENT KEY: Description	INFOID:000000000905955
•	
Before performing the diagnosis in the following table, check "Wo	ork Flow". Refer to <u>SEC-5, "Work Flow"</u> .
INTELLIGENT KEY : Diagnosis Procedure	INFOID:000000000905956
1. CHECK INTELLIGENT KEY	
Check Intelligent Key. Refer to DLK-94, "Component Inspection".	
Is the inspection result normal?	
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts. 2.CHECK INTELLIGENT KEY SYSTEM	
Check Intelligent Key system.	
Refer to <u>SEC-9</u> , "System Description".	
Is the inspection result normal? YES >> GO TO 3.	
NO >> Refer to SEC-5, "Work Flow".	
3.CONFIRM THE OPERATION	
Confirm the operation again.	
Is the result normal?	and be side of
YES >> Check intermittent incident. Refer to GI-42, "Intermitt NO >> GO TO 1.	ent incident".
DOOR REQUEST SWITCH	
DOOR REQUEST SWITCH : Description	INFOID:000000000905956
Before performing the diagnosis in the following table, check "Wo	ork Flow". Refer to SEC-5. "Work Flow".
DOOR REQUEST SWITCH : Diagnosis Procedure	
	,,, 5,5,6666666666
1. CHECK DOOR REQUEST SWITCH	
Check door request switch. Refer to <u>DLK-83</u> , "Component Function Check".	
Is the inspection normal?	
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	
2.CHECK INTELLIGENT KEY SYSTEM	
Check Intelligent Key system.	
Refer to DLK-15, "INTELLIGENT KEY SYSTEM: System Descri	ption".
Is the inspection result normal?	

YES >> GO TO 3.

>> Refer to DLK-7, "Work Flow". NO

3. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

>> GO TO 1. NO

DOOR KEY CYLINDER

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VEHICLE SECURITY SYSTEM CAN NOT CANCELED

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DOOR KEY CYLINDER: Description

INFOID:0000000009059563

Before performing the diagnosis in the following table, check "Work Flow". Refer to SEC-5, "Work Flow".

DOOR KEY CYLINDER: Diagnosis Procedure

INFOID:0000000009059564

1. CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.

Refer to DLK-76, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK INTELLIGENT KEY SYSTEM

Check power door lock system.

Refer to DLK-15, "INTELLIGENT KEY SYSTEM: System Description".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Refer to <u>DLK-7</u>, "Work Flow".

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

INTELLIGENT KEY INSERT INFORMATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY INSERT INFORMATION DOES NOT OPERATE Description

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-38, "WARNING FUNCTION: System Description".

Diagnosis Procedure

1. CHECK POWER POSITION

Check if ignition switch position is changing or not.

Does ignition switch position change?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK PUSH-BUTTON IGNITION SWITCH

Check push-button ignition switch.

Refer to PCS-65, "Component Function Check".

Is the inspection result normal?

YES >> Check BCM for DTC. Refer to BCS-90, "DTC Index".

NO >> Repair or replace the malfunctioning parts.

3.check door switch

Check door switch.

Refer to DLK-63, "Component Function Check".

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-95, "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-101, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6.CHECK KEY SLOT INDICATOR

Check key slot indicator.

Refer to DLK-97, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

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INTELLIGENT KEY INSERT INFORMATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

YES >> Check intermittent incident. Refer to GI-42. "Intermittent Incident".

PRECAUTION

PRECAUTIONS

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

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

WARNING:

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, 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

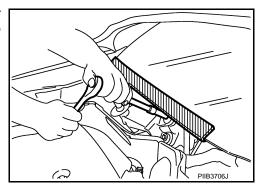
WARNING:

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.

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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PREPARATION

< PREPARATION >

[WITH INTELLIGENT KEY SYSTEM]

PREPARATION

PREPARATION

Commercial Service Tools

INFOID:0000000009059569

Tool name		Description
Remover tool	PIIB7923J	Removes the clip and pawl and metal clip

[WITH INTELLIGENT KEY SYSTEM]

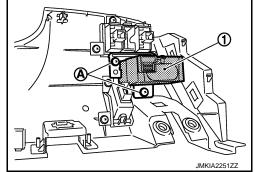
REMOVAL AND INSTALLATION

KEY SLOT

Removal and Installation

REMOVAL

- 1. Remove the instrument driver lower panel. Refer to <u>IP-13.</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 driver lower panel.



INSTALLATION

Install in the reverse order of removal.

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PUSH-BUTTON IGNITION SWITCH

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

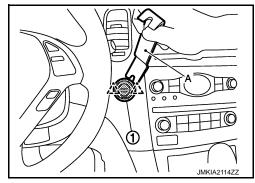
PUSH-BUTTON IGNITION SWITCH

Removal and Installation

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REMOVAL

Remove the push-button ignition switch fixing pawl using a remover tool (A), and then remove push-button ignition switch (1).



INSTALLATION

Install in the reverse order of removal.