

SECTION **SEC**

SECURITY CONTROL SYSTEM

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DIAGNOSIS AND REPAIR WORK FLOW

[WITH INTELLIGENT KEY SYSTEM]

< BASIC INSPECTION >

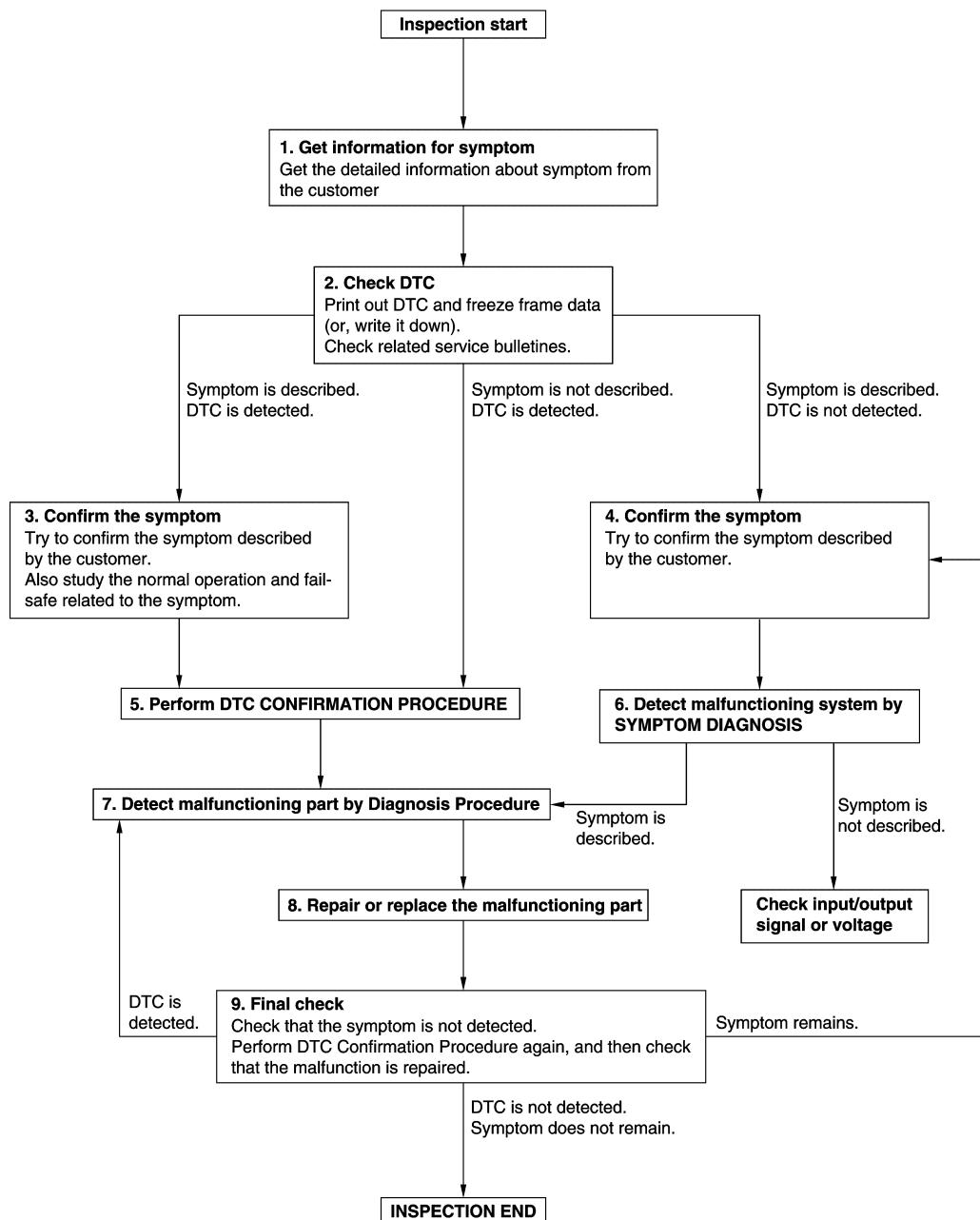
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000007689869

OVERALL SEQUENCE



DETAILED FLOW

DIAGNOSIS AND REPAIR WORK FLOW

[WITH INTELLIGENT KEY SYSTEM]

< BASIC INSPECTION >

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.

5. PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC CONFIRMATION PROCEDURE for the detected DTC, and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle, and check self diagnostic results in real time.

If two or more DTCs are detected, refer to [SEC-162, "DTC Inspection Priority Chart"](#) (BCM) or [SEC-178, "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 CONFIRMATION 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 CONSULT.

7. DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

DIAGNOSIS AND REPAIR WORK FLOW

[WITH INTELLIGENT KEY SYSTEM]

< BASIC INSPECTION >

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

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

>> GO TO 9.

9.FINAL CHECK

When DTC is detected in step 2, perform DTC CONFIRMATION PROCEDURE 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.

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

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INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

INSPECTION AND ADJUSTMENT

ECM RE-COMMUNICATING FUNCTION

ECM RE-COMMUNICATING FUNCTION : Description

INFOID:000000007456981

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

INFOID:000000007456982

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.

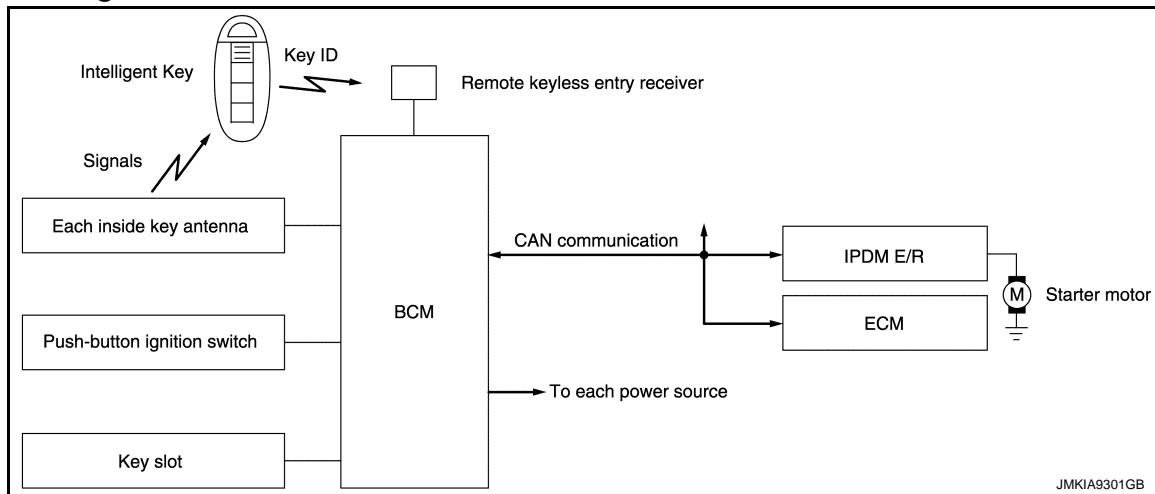
NO >> Initialize control unit.

SYSTEM DESCRIPTION

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

System Diagram

INFOID:000000007456983



System Description

INFOID:000000007456984

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 [DLK-15. "INTELLIGENT KEY SYSTEM : System Diagram"](#) 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.

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.
7. BCM transmits the starter request signal via CAN communication to IPDM E/R and turns the starter relay in IPDM E/R ON if BCM judges that the engine start condition is satisfied.
8. IPDM E/R turns the starter control relay ON when receiving the starter request signal.
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 [SEC-14, "System Description"](#).

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)

Power supply position	Engine start/stop condition		Push-button ignition switch operation frequency
	Selector lever position	Brake pedal operation condition	
OFF → ACC	—	Not depressed	1
OFF → ACC → ON	—	Not depressed	2
OFF → ACC → ON → OFF	—	Not depressed	3
OFF → START ACC → START ON → START	P or N position	Depressed	1
Engine is running → OFF	—	—	1

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

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

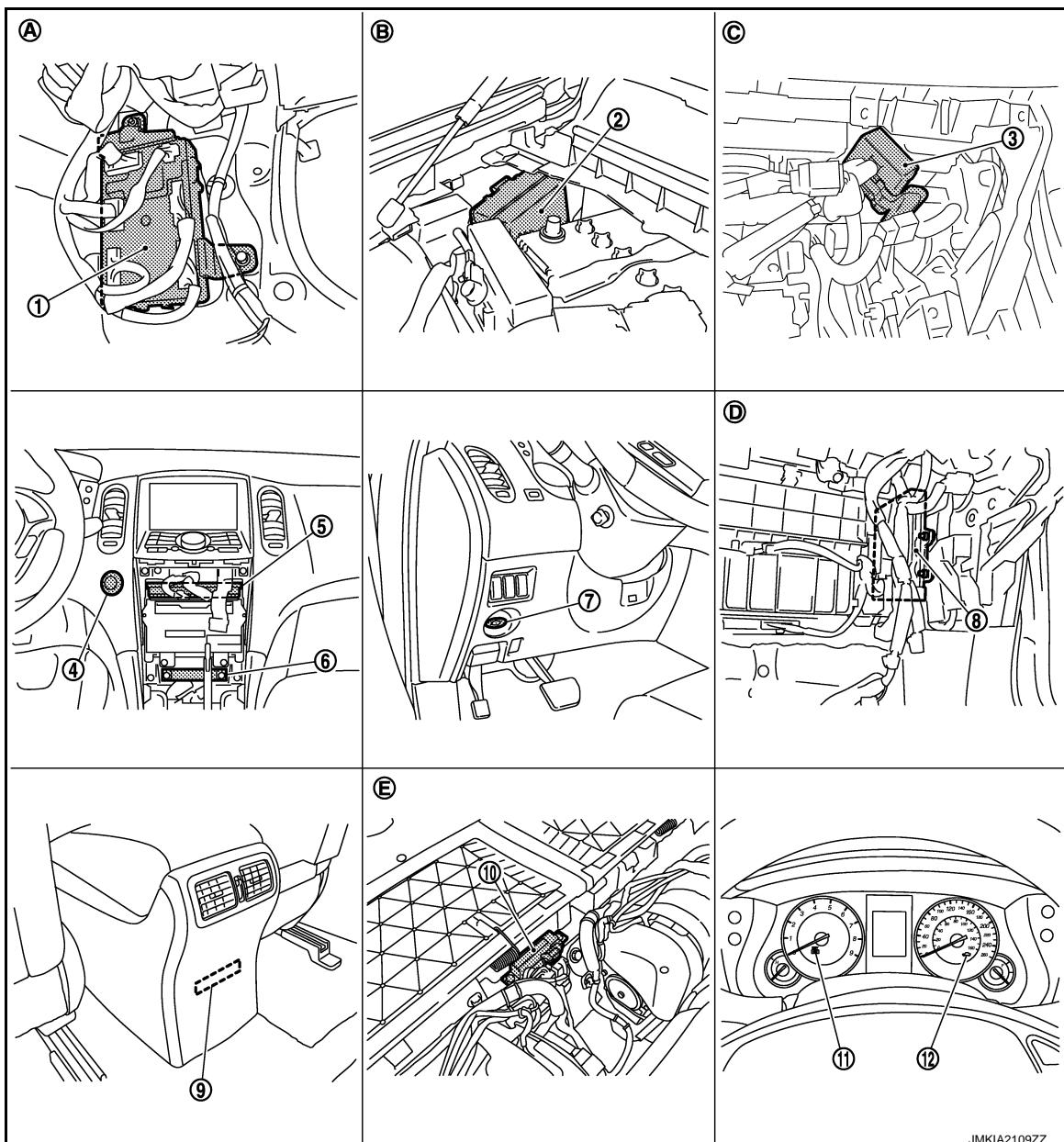
Power supply position	Engine start/stop condition		Push-button ignition switch operation frequency
	Selector lever position	Brake pedal operation condition	
Engine is running → ACC	—	—	Emergency stop operation
Engine stall return operation while driving	N position	Not depressed	1

Emergency stop operation

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

Component Parts Location

INFOID:000000007456985



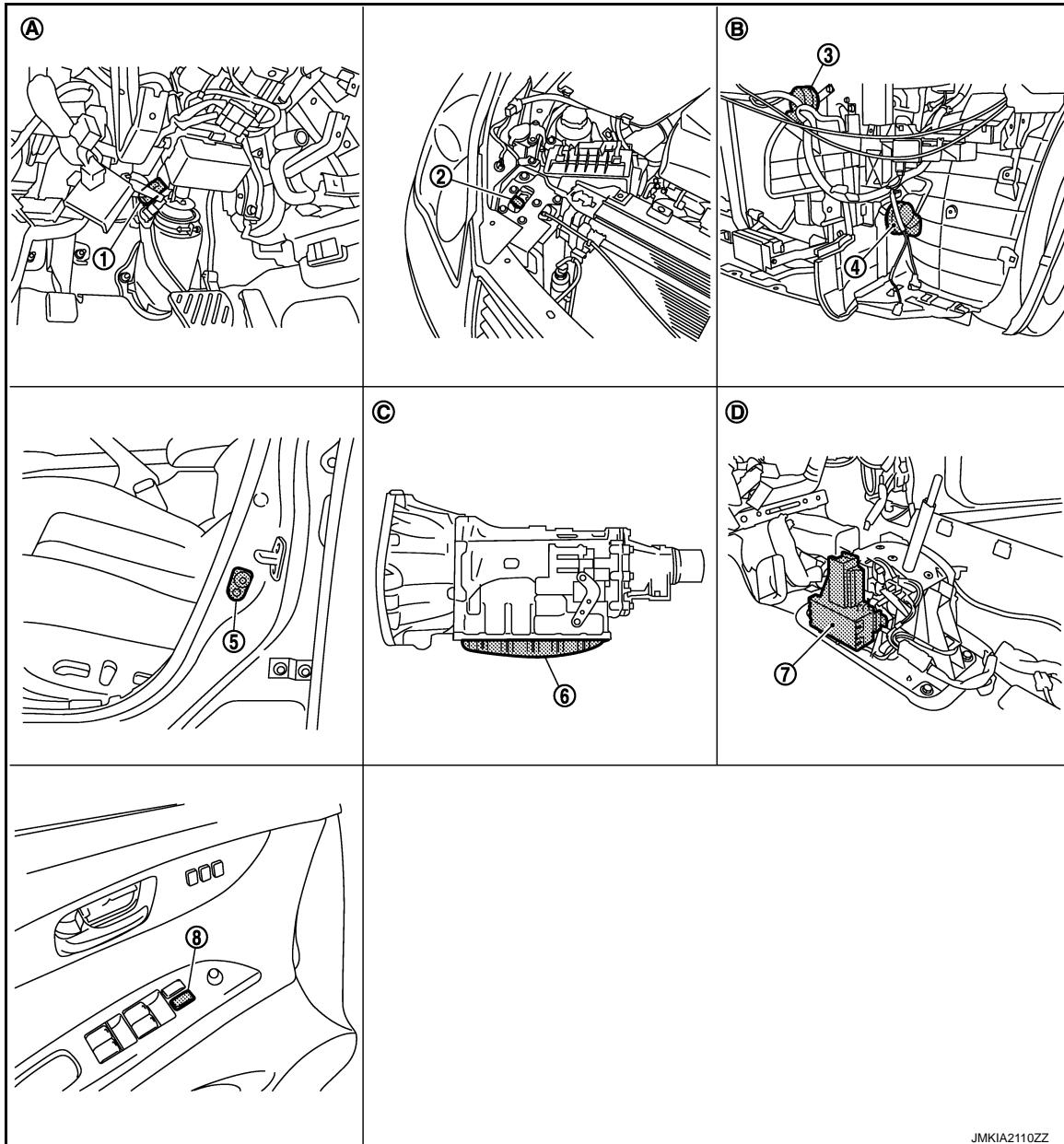
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| 1. BCM | 2. IPDM E/R | 3. Remote keyless entry receiver |
| 4. Push-button ignition switch | 5. Unified meter and A/C amp. | 6. Inside key antenna (instrument center) |
| 7. Key slot | 8. ECM | 9. Inside key antenna (console) |

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

- | | | |
|---|--|---|
| 10. Inside key antenna (luggage room) | 11. Combination meter (KEY warning lamp) | 12. Combination meter (security indicator lamp) |
| A. Dash side lower (passenger side) | B. Engine room dash panel (RH) | C. Behind the instrument assist lower panel |
| D. Behind the instrument assist lower panel | E. Under the rear seat seatback | |



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| 1. Stop lamp switch | 2. Hood switch | 3. Horn (high) |
| 4. Horn (low) | 5. Front door switch (driver side) | 6. TCM (built into A/T assembly) |
| 7. A/T shift selector (detention switch) | 8. Power window main switch (door lock and unlock switch) | |
| A. Behind the instrument driver lower cover | B. Behind the front bumper | C. A/T assembly |
| D. View with the center console assembly removed | | |

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

< SYSTEM DESCRIPTION >

Component Description

INFOID:000000007456986

Component	Reference
Push-button ignition switch	SEC-73
Door switch	DLK-67
A/T shift selector (detention switch)	SEC-53
Inside key antenna	DLK-60
Remote keyless entry receiver	DLK-82
Stop lamp switch	SEC-47
Transmission range switch	SEC-62
Starter relay	SEC-66
Starter control relay	SEC-52
Security indicator lamp	SEC-91
Key warning lamp	SEC-92

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INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS

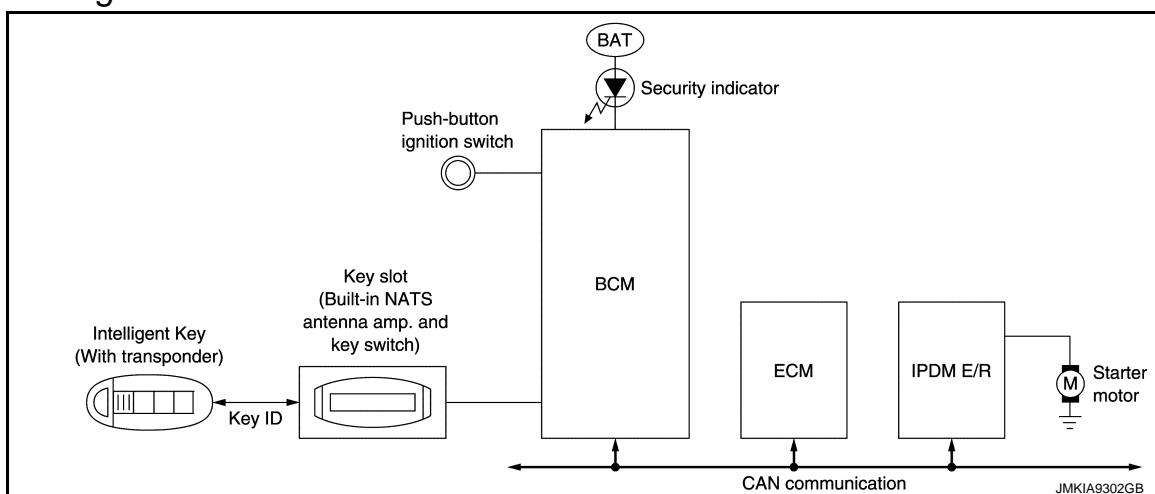
< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS

System Diagram

INFOID:0000000007456987



System Description

INFOID:0000000007456988

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 than 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

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

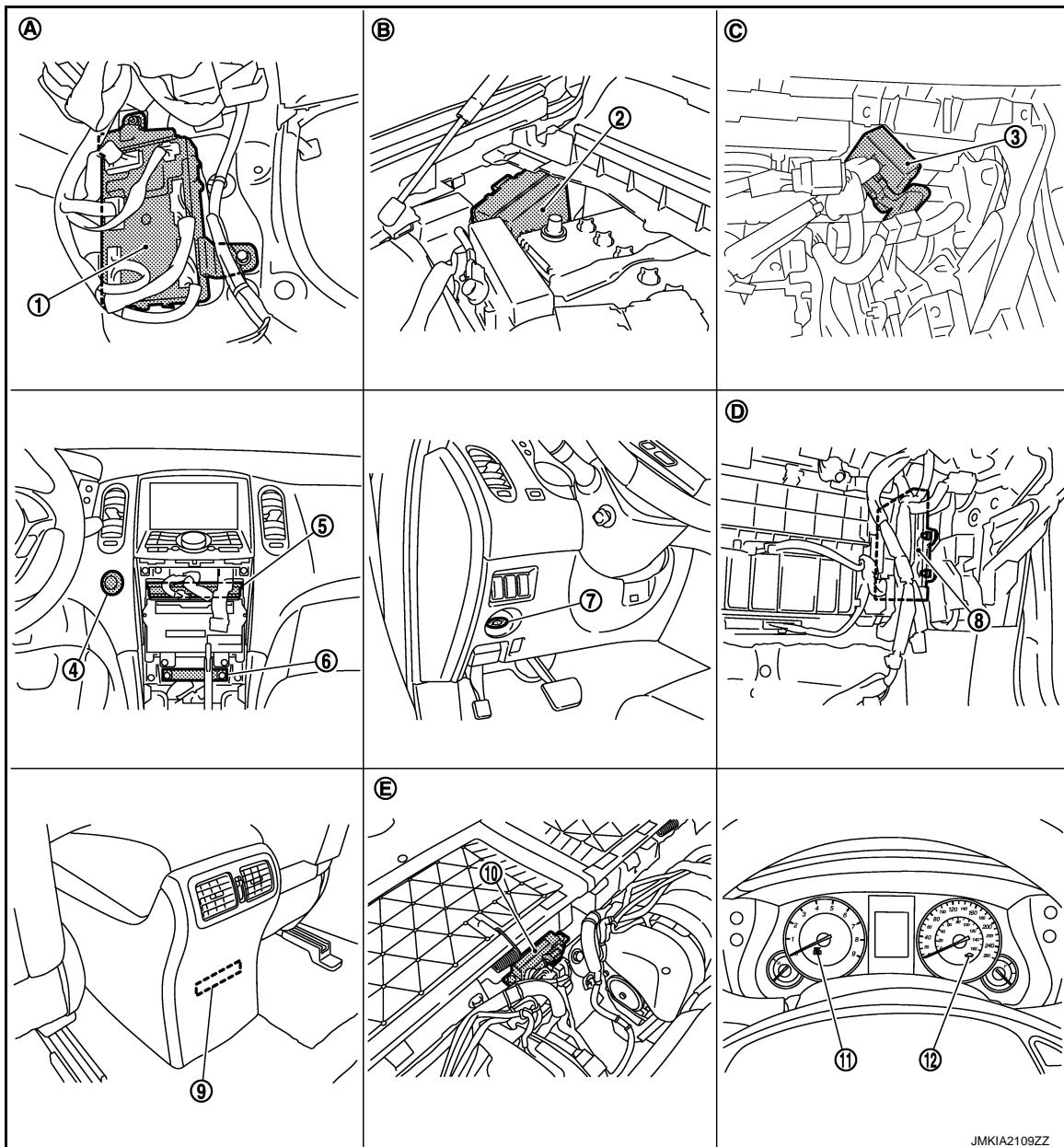
- Security indicator lamp always blinks when the ignition switch is in any position except the ON position.

NOTE:

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

Component Parts Location

INFOID:0000000007689854



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- | | | |
|---|--|---|
| 1. BCM | 2. IPDM E/R | 3. Remote keyless entry receiver |
| 4. Push-button ignition switch | 5. Unified meter and A/C amp. | 6. Inside key antenna (instrument center) |
| 7. Key slot | 8. ECM | 9. Inside key antenna (console) |
| 10. Inside key antenna (luggage room) | 11. Combination meter (KEY warning lamp) | 12. Combination meter (security indicator lamp) |
| A. Dash side lower (passenger side) | B. Engine room dash panel (RH) | C. Behind the instrument assist lower panel |
| D. Behind the instrument assist lower panel | E. Under the rear seat seatback | |

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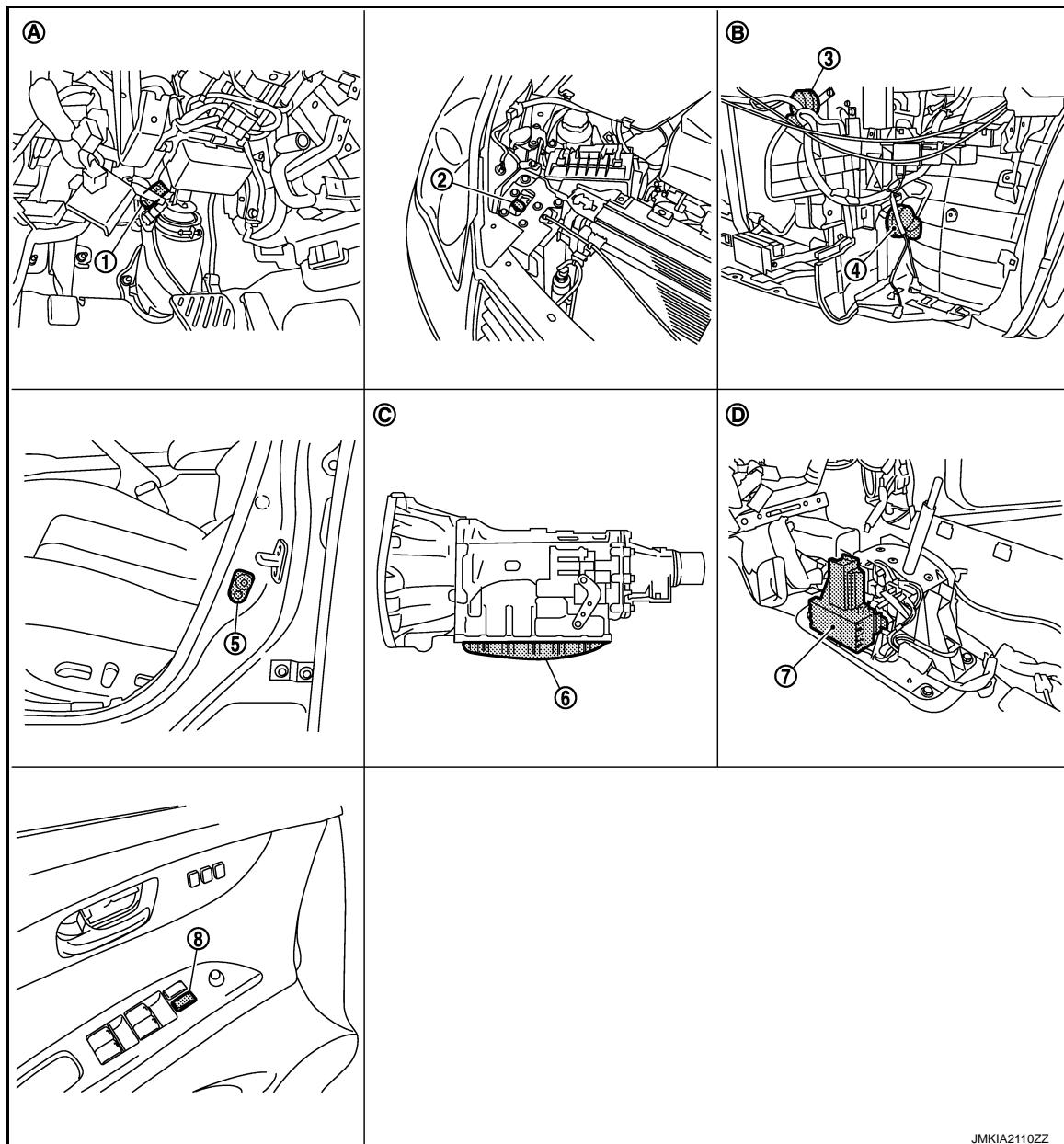
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INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]



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|--|---|----------------------------------|
| 1. Stop lamp switch | 2. Hood switch | 3. Horn (high) |
| 4. Horn (low) | 5. Front door switch (driver side) | 6. TCM (built into A/T assembly) |
| 7. A/T shift selector (detention switch) | 8. Power window main switch (door lock and unlock switch) | C. A/T assembly |
| A. Behind the instrument driver lower cover | B. Behind the front bumper | |
| D. View with the center console assembly removed | | |

Component Description

INFOID:0000000007698225

Component	Reference
Push-button ignition switch	SEC-73, "Description"
Door switch	DLK-67, "Description"
key slot	DLK-99, "Description"
A/T shift selector (detention switch)	SEC-53, "Description"

INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Component	Reference
Inside key antenna	DLK-60, "Description"
Remote keyless entry receiver	DLK-82, "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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VEHICLE SECURITY SYSTEM

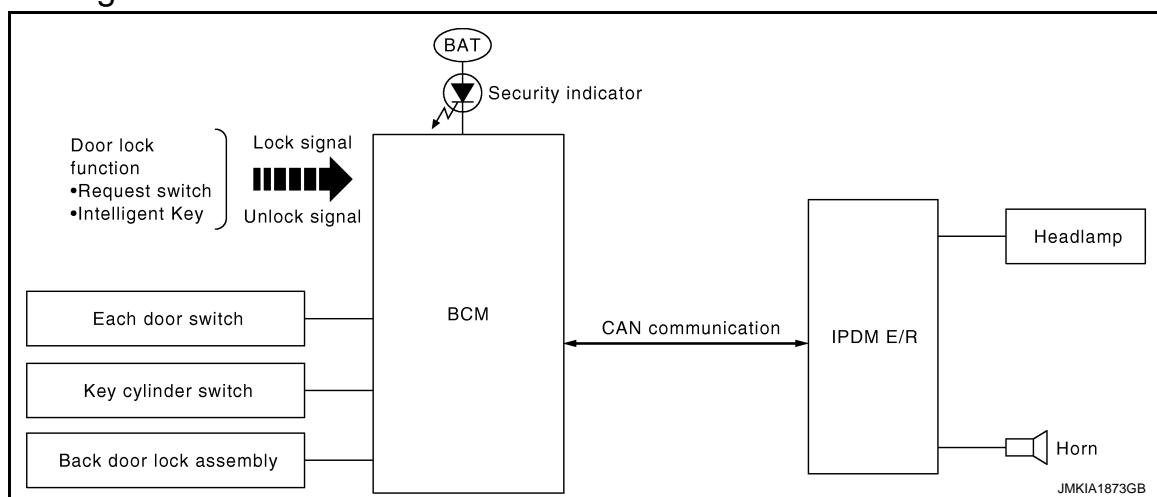
< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM

System Diagram

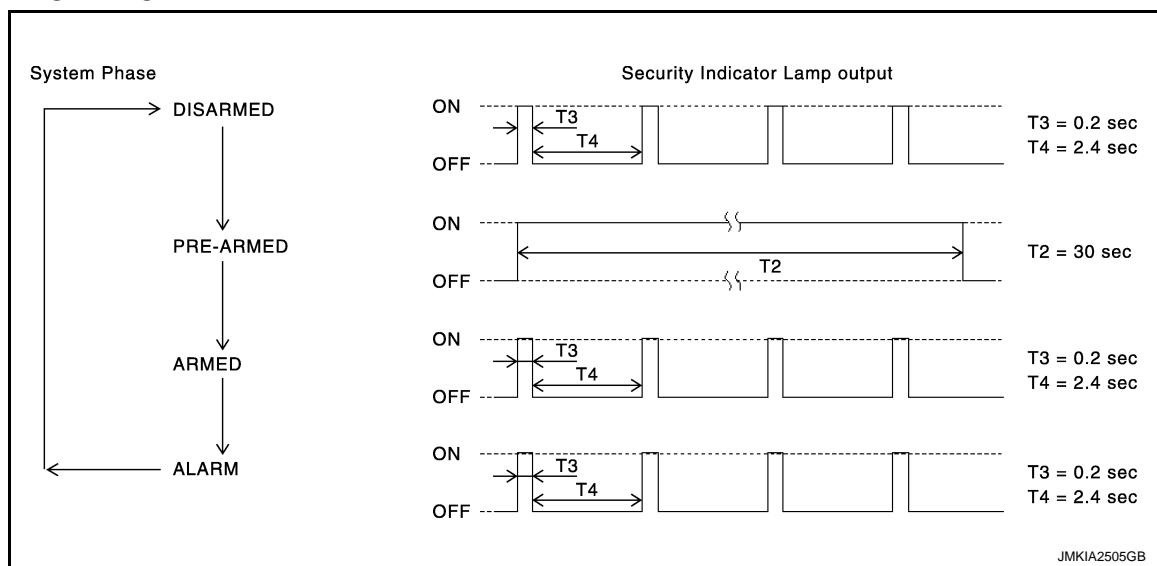
INFOID:0000000007456991



System Description

INFOID:0000000007456992

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

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

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

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

A

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.

B

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.)

C

When the following operation 1 or 2 is performed, the system sounds the horns and flashes the headlamps for about 50 seconds.

D

1. Back door or any door is opened during armed phase.

E

2. 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.

F

When the Intelligent Key system is triggered, ground is supplied intermittently to both headlamp relay and horn relay.

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

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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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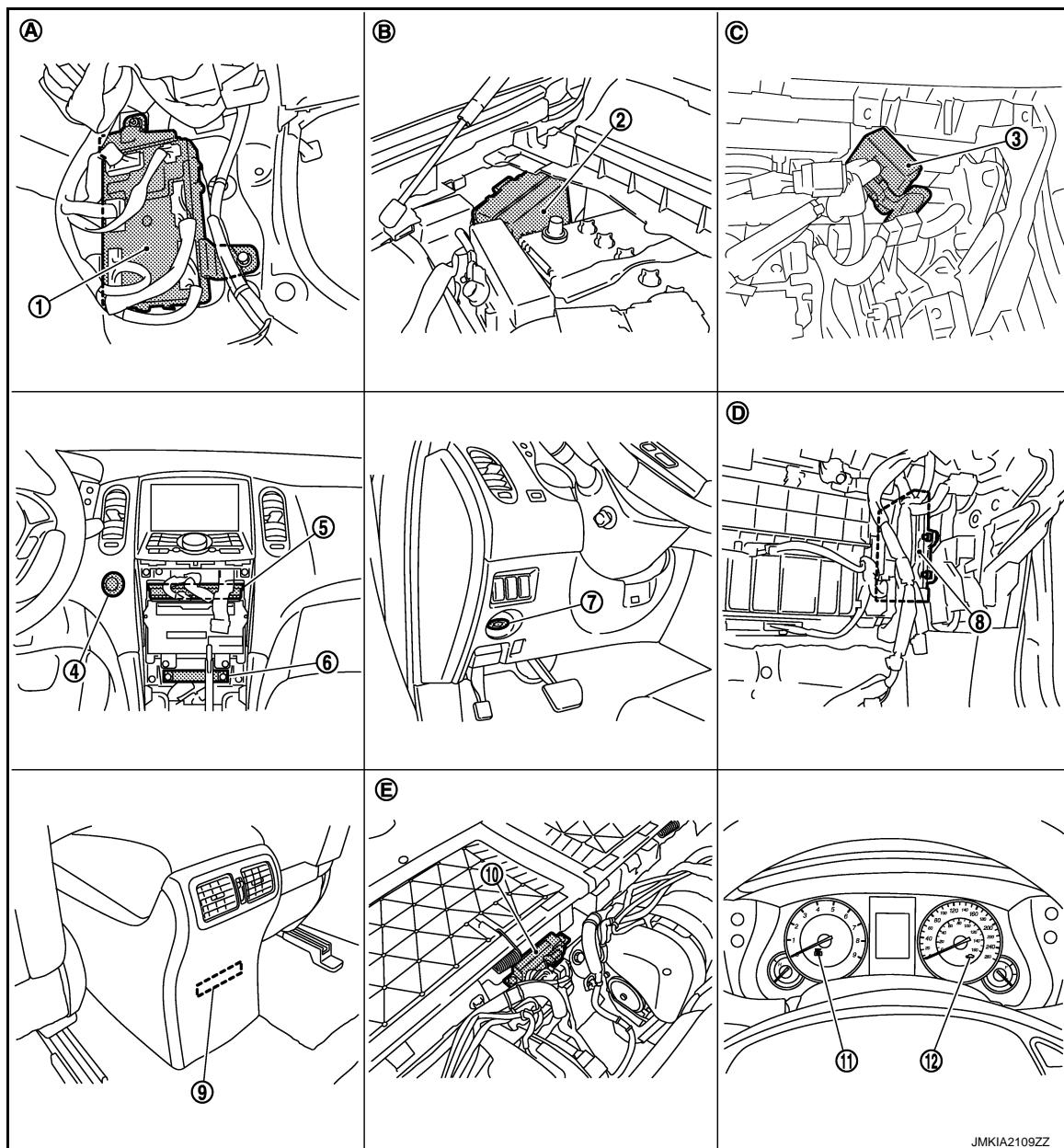
VEHICLE SECURITY SYSTEM

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Component Parts Location

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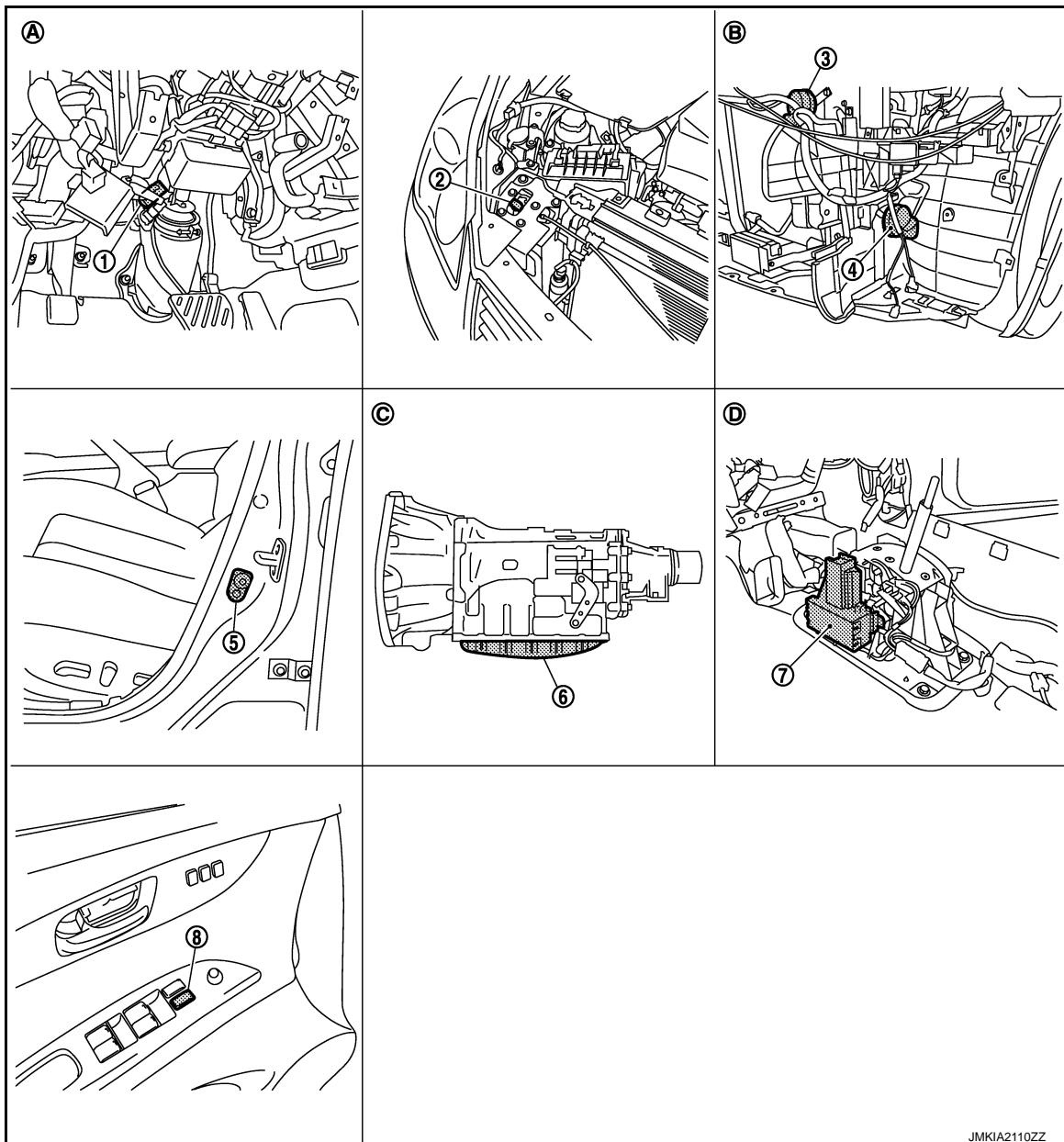
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- | | | |
|---|--|---|
| 1. BCM | 2. IPDM E/R | 3. Remote keyless entry receiver |
| 4. Push-button ignition switch | 5. Unified meter and A/C amp. | 6. Inside key antenna (instrument center) |
| 7. Key slot | 8. ECM | 9. Inside key antenna (console) |
| 10. Inside key antenna (luggage room) | 11. Combination meter (KEY warning lamp) | 12. Combination meter (security indicator lamp) |
| A. Dash side lower (passenger side) | B. Engine room dash panel (RH) | C. Behind the instrument assist lower panel |
| D. Behind the instrument assist lower panel | E. Under the rear seat seatback | |

VEHICLE SECURITY SYSTEM

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]



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|--|---|----------------------------------|
| 1. Stop lamp switch | 2. Hood switch | 3. Horn (high) |
| 4. Horn (low) | 5. Front door switch (driver side) | 6. TCM (built into A/T assembly) |
| 7. A/T shift selector (detention switch) | 8. Power window main switch (door lock and unlock switch) | C. A/T assembly |
| A. Behind the instrument driver lower cover | B. Behind the front bumper | |
| D. View with the center console assembly removed | | |

Component Description

INFOID:0000000007698226

Component	Reference
Horn relay 1	DLK-103, "Description"
Horn relay 2	DLK-103, "Description"
Security indicator lamp	SEC-91, "Description"
Door switch	DLK-67, "Description"

VEHICLE SECURITY SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

Component	Reference
Hood switch	SEC-88, "Description"
Back door lock assembly (door witch)	DLK-67, "Description"
Door key cylinder switch	DLK-80, "Description"

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000007689858

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	<ul style="list-style-type: none"> • Read and save the vehicle specification. • Write the vehicle specification when replacing BCM.

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

x: Applicable item

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

NOTE:

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

FREEZE FRAME DATA (FFD)

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

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[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
Vehicle Condition	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"
	OFF>LOCK	While turning power supply position from "OFF" to "LOCK"**
	OFF>ACC	While turning power supply position from "OFF" to "ACC"
	ON>CRANK	While turning power supply position from "IGN" to "CRANKING"
	OFF>SLEEP	While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode
	LOCK>SLEEP	While turning BCM status from normal mode (Power supply position is "LOCK"**.) to low power consumption mode
	LOCK	Power supply position is "LOCK"**
	OFF	Power supply position is "OFF" (Ignition switch OFF)
	ACC	Power supply position is "ACC" (Ignition switch ACC)
	ON	Power supply position is "IGN" (Ignition switch ON with engine stopped)
	ENGINE RUN	Power supply position is "RUN" (Ignition switch ON with engine running)
	CRANKING	Power supply position is "CRANKING" (At engine cranking)
IGN Counter	0 - 39	The number of times that ignition switch is turned ON after DTC is detected • The number is 0 when a malfunction is detected now. • The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. • The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.

NOTE:

*: Power supply position shifts to "LOCK" from "OFF", when ignition switch is in the OFF position, selector lever is in the P position, and any of the following conditions are met.

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

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

INTELLIGENT KEY

INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)

INFOID:0000000007689859

WORK SUPPORT

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[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	<p>Auto door lock time can be changed in this mode.</p> <ul style="list-style-type: none"> • 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	<p>Panic alarm button pressing time on Intelligent Key remote control button can be selected from the following with this mode.</p> <ul style="list-style-type: none"> • MODE 1: 0.5 sec. • MODE 2: Non-operation • MODE 3: 1.5 sec.
PW DOWN SET	<p>Unlock button pressing time on Intelligent Key button can be selected from the following with this mode.</p> <ul style="list-style-type: none"> • MODE 1: 3 sec. • MODE 2: Non-operation • MODE 3: 5 sec.
TAKE OUT FROM WIN WARN	<p>NOTE: This item is displayed, but cannot be supported.</p>
TRUNK OPEN DELAY	<p>NOTE: This item is displayed, but cannot be supported.</p>
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	<p>Hazard reminder function mode can be selected from the following with this mode.</p> <ul style="list-style-type: none"> • 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	<p>Buzzer reminder function (lock operation) mode by door request switch (driver side and passenger side) can be selected from the following with this mode.</p> <ul style="list-style-type: none"> • 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	<p>Starter motor can operate during the times below.</p> <ul style="list-style-type: none"> • 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.
	<ul style="list-style-type: none"> • Without room lamp • With room lamp • Without paddle lamp • With paddle lamp

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DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

SELF-DIAG RESULT

Refer to [BCS-86, "DTC Index"](#).

DATA MONITOR

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

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Monitor Item	Condition
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. <ul style="list-style-type: none"> • 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. <ul style="list-style-type: none"> • "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 <ul style="list-style-type: none"> • 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. • P position warning displays when "SFT P" on CONSULT screen is touched. • Intelligent Key insert information displays when "INSRT" on CONSULT screen is touched. • Intelligent Key low battery warning displays when "BATT" on CONSULT screen is touched. • Take away through window warning displays when "NO KY" on CONSULT screen is touched. • Take away warning display when "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.
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.

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DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Test item	Description
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:000000007456997

DATA MONITOR

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.

WORK SUPPORT

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

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:000000007456998

DATA MONITOR

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

ACTIVE TEST

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

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

BCM

BCM : Description

INFOID:0000000007456999

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"](#).

BCM : DTC Logic

INFOID:0000000007457000

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:0000000007457001

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:0000000007457002

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:0000000007457003

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:0000000007457004

1. PERFORM SELF DIAGNOSTIC

U1000 CAN COMM CIRCUIT

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

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 [GI-42, "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

INFOID:000000007457005

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:000000007457006

1. REPLACE BCM

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

>> Replace BCM. Refer to [BCS-92, "Exploded View"](#).

BCM : Special Repair Requirement

INFOID:000000007457007

1. REQUIRED WORK WHEN REPLACING BCM

Initialize control unit, follow the instruction of CONSULT display.

>> Work end.

P1610 LOCK MODE**Description**

INFOID:0000000007457008

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:0000000007457009

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE**1. PERFORM DTC CONFIRMATION PROCEDURE**

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

Is DTC detected?

YES >> Go to [SEC-33, "Diagnosis Procedure"](#).

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000007457010

1. CHECK ENGINE START FUNCTION

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

>> INSPECTION END

SEC

P1611 ID DISCORD, IMMU-ECM

Description

INFOID:0000000007457011

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:0000000007457012

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.	<ul style="list-style-type: none">• 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 [SEC-34, "Diagnosis Procedure"](#).

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000007457013

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-92, "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

< DTC/CIRCUIT DIAGNOSIS >

P1612 CHAIN OF ECM-IMMU

Description

INFOID:0000000007457014

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:0000000007457015

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 [SEC-32, "BCM : DTC Logic"](#).

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P1612	CHAIN OF ECM-IMMU	Inactive communication between ECM and BCM	<ul style="list-style-type: none"> • 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 [SEC-35, "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000007457016

1. REPLACE BCM

1. Replace BCM. Refer to [BCS-92, "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 [EC-17, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description"](#).

>> INSPECTION END

P1614 CHAIN OF IMMU-KEY**Description**

INFOID:0000000007457017

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:0000000007457018

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.	<ul style="list-style-type: none"> • Harness or connectors (key slot circuit is open or shorted) • Key slot • BCM

DTC CONFIRMATION PROCEDURE**1. PERFORM DTC CONFIRMATION PROCEDURE 1**

1. Insert Intelligent Key into the key slot.
2. 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

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

Is DTC detected?

- YES >> Go to [SEC-36, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000007457019

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

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

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

Is the inspection result normal?

- YES >> Replace key slot. Refer to [SEC-191, "Removal and Installation"](#).
NO >> GO TO 3.

3. CHECK KEY SLOT CIRCUIT

1. Disconnect BCM connector.

P1614 CHAIN OF IMMU-KEY

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

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

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

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

Key slot		Ground	Continuity
Connector	Terminal		
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.

(+) Key slot		(-)	Voltage (V) (Approx.)
Connector	Terminal		
M22	3	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace key slot. Refer to [SEC-191, "Removal and Installation"](#).

NO >> GO TO 6.

6. CHECK KEY SLOT COMMUNICATION SIGNAL CIRCUIT

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

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

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

Key slot		Ground	Continuity
Connector	Terminal		
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

1. Turn ignition switch OFF.
2. Disconnect key slot connector.
3. 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 slot		Ground	Continuity
Connector	Terminal		
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

< DTC/CIRCUIT DIAGNOSIS >

P1615 DIFFRENCE OF KEY**Description**

INFOID:0000000007457020

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:0000000007457021

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**

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

Is DTC detected?

- YES >> Go to [SEC-39, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000007457022

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

1. Replace Intelligent Key.

2. 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?

- YES >> INSPECTION END
NO >> GO TO 3.

3.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

SEC

B2190 NATS ANTENNA AMP.**Description**

INFOID:0000000007457023

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:0000000007457024

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2190	NATS ANTENNA AMP	Inactive communication between key slot and BCM.	<ul style="list-style-type: none"> • 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.
2. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to [SEC-40, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000007457025

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

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

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

Is the inspection result normal?

YES >> Replace key slot. Refer to [SEC-191, "Removal and Installation"](#).
NO >> GO TO 3.

3. CHECK KEY SLOT CIRCUIT

B2190 NATS ANTENNA AMP.

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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

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

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

Key slot		Ground	Continuity
Connector	Terminal		
M22	2		

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.

(+) Key slot		(-)	Voltage (V) (Approx.)
Connector	Terminal		
M22	3	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace key slot. Refer to [SEC-191, "Removal and Installation"](#).

NO >> GO TO 6.

6.CHECK KEY SLOT COMMUNICATION SIGNAL CIRCUIT

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

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

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

Key slot		Ground	Continuity
Connector	Terminal		
M22	3		

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness or connector.

7.CHECK KEY SLOT GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect key slot connector.

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B2190 NATS ANTENNA AMP.

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

- Check continuity between key slot harness connector and ground.

Key slot		Ground	Continuity
Connector	Terminal		
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

< DTC/CIRCUIT DIAGNOSIS >

B2191 DIFFERENCE OF KEY**Description**

INFOID:0000000007457026

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:0000000007457027

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**

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

Is DTC detected?

- YES >> Go to [SEC-43, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000007457028

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

1. Replace Intelligent Key.
2. 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?

- YES >> INSPECTION END
NO >> GO TO 3.

3. CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

SEC

B2192 ID DISCORD, IMMU-ECM**Description**

INFOID:0000000007457029

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:0000000007457030

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 [SEC-32, "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.	<ul style="list-style-type: none">• 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 [SEC-44, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000007457031

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-92, "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

< DTC/CIRCUIT DIAGNOSIS >

B2193 CHAIN OF ECM-IMMU**Description**

INFOID:0000000007457032

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:0000000007457033

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 [SEC-32, "BCM : DTC Logic"](#).

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2193	CHAIN OF ECM-IMMU	Inactive communication between ECM and BCM	<ul style="list-style-type: none"> • 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 [SEC-45, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000007457034

1. REPLACE BCM

1. Replace BCM. Refer to [BCS-92, "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 [EC-17, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description"](#).

>> INSPECTION END

B2195 ANTI-SCANNING**Description**

INFOID:0000000007457035

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:0000000007457036

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**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" using CONSULT.

Is DTC detected?YES >> Refer to [SEC-46, "Diagnosis Procedure"](#).

NO >> INSPECTION END.

Diagnosis Procedure

INFOID:0000000007457037

1. CHECK SELF-DIAGNOSTIC RESULT-1

1. Perform "Self-diagnostic result" of BCM using CONSULT.
2. Erase DTC.
3. 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-92, "Removal and Installation"](#).**3. CHECK SELF-DIAGNOSTIC RESULT-2**

1. Obtain the customers approval to remove unspecified accessory part related to engine start, and then remove it.
2. Perform "Self-diagnostic result" of BCM using CONSULT.
3. Erase DTC.
4. Perform DTC Confirmation Procedure. Refer to [SEC-46, "DTC Logic"](#).

Is DTC 2195 detected?YES >> Replace BCM. Refer to [BCS-92, "Removal and Installation"](#).

NO >> INSPECTION END

B2555 STOP LAMP**Description**

INFOID:0000000007457044

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

INFOID:0000000007457045

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis 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.	<ul style="list-style-type: none"> • 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 [SEC-47, "Diagnosis Procedure"](#).

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000007457046

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.

(+)		(-)	Voltage (V) (Approx.)
BCM			
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.

(+)		(-)	Voltage (V) (Approx.)
Stop lamp switch			
Connector	Terminal		
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 lamp switch		BCM		Continuity
Connector	Terminal	Connector	Terminal	
E110	2	M123	118	Existed

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

Stop lamp switch		Ground	Continuity
Connector	Terminal		
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 [BR-18, "Exploded View"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000007457047

1.CHECK STOP LAMP SWITCH

1. Turn ignition switch OFF.
2. Disconnect stop lamp switch connector.
3. Check continuity between stop lamp switch terminals.

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace stop lamp switch. Refer to [BR-18, "Exploded View"](#).

B2556 PUSH-BUTTON IGNITION SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2556 PUSH-BUTTON IGNITION SWITCH

Description

INFOID:0000000007457048

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:0000000007457049

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2556	PUSH-BUTTON IGNITION SWITCH	BCM detects the push-button ignition switch stuck to ON for 100 seconds or more	<ul style="list-style-type: none">• Harness or connectors (Push-button ignition switch circuit is shorted.)• Push-button ignition switch

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Go to [SEC-49, "Diagnosis Procedure"](#).

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000007457050

1. CHECK PUSH-BUTTON IGNITION SWITCH INPUT SIGNAL

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

(+) Push-button ignition switch		(-)	Voltage (V) (Approx.)
Connector	Terminal		
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

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

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

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

Push-button ignition switch		Ground	Continuity
Connector	Terminal		
M50	4		

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-92, "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		Ground	Continuity
Connector	Terminal		
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 [SEC-192, "Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000007457051

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		Condition	Continuity
Terminals			
1	4	Pressed	Existed
		Not pressed	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace push-button ignition switch. Refer to [SEC-192, "Removal and Installation"](#).

B2557 VEHICLE SPEED**Description**

INFOID:0000000007457052

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

INFOID:0000000007457053

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 [SEC-32, "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 <ul style="list-style-type: none"> • One is 10 km/h (6.2 MPH) or more and the other is 4 km/h (2.5 MPH) or less. 	<ul style="list-style-type: none"> • 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:0000000007457054

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

Check “Self diagnostic result” with CONSULT. Refer to [BRC-109, "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-107, "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

B2560 STARTER CONTROL RELAY

Description

INFOID:0000000007457055

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

INFOID:0000000007457056

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 [SEC-32, "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:0000000007457057

1. CHECK DTC WITH IPDM E/R

Check "Self diagnostic result" with CONSULT. Refer to [SEC-163, "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:0000000007457058

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:0000000007457059

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	<ul style="list-style-type: none"> • 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.
2. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

- YES >> Go to [SEC-53, "Diagnosis Procedure"](#).
 NO >> INSPECTION END

SEC

Diagnosis Procedure

INFOID:0000000007457060

1. CHECK A/T SHIFT SELECTOR POWER SUPPLY

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

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

Is the inspection result normal?

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

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2. CHECK A/T SHIFT SELECTOR POWER SUPPLY CIRCUIT

1. 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 (detention switch)		BCM		Continuity
Connector	Terminal	Connector	Terminal	
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)		Ground	Continuity
Connector	Terminal		Not existed
M137	10		

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-92, "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.
2. 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	
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)		Ground	Continuity
Connector	Terminal		Not existed
M137	11		

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	
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)		Ground	Continuity
Connector	Terminal		Not existed
M137	11		

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-179, "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

INFOID:000000007457061

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			Selector lever	P position
10	11	Selector lever	P position	Not existed
			Other than above	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace A/T shift selector (detention switch). Refer to [TM-179, "Removal and Installation"](#).

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B2602 SHIFT POSITION**Description**

INFOID:0000000007457062

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:0000000007457063

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	<ul style="list-style-type: none"> • 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**

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

Is DTC detected?

- YES >> Go to [SEC-56, "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000007457064

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

Check "Self diagnostic result" with CONSULT. Refer to [BCR-109, "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

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

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

Is the inspection result normal?

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

1. Disconnect BCM connector.
2. 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	
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)		Ground	Continuity
Connector	Terminal		
M137	10		No existed

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-92, "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.
2. 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	
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)		Ground	Continuity
Connector	Terminal		
M137	11		No 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-57, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace A/T shift selector. Refer to [TM-179, "Removal and Installation"](#).

6.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000007771332

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.

B2602 SHIFT POSITION

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

A/T shift selector (detention switch)		Condition	Continuity		
Terminal			Selector lever	P position	Not existed
10	11	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-179, "Removal and Installation"](#).

B2603 SHIFT POSITION STATUS**Description**

INFOID:0000000007457065

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:0000000007457066

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 [SEC-32, "BCM : DTC Logic"](#).

DTC	Self-diagnosis name	DTC detecting condition	Possible causes
B2603	SHIFT POSITION STATUS	<p>BCM detects the followings status for 500 ms or more when shift is in P position, and ignition switch is in ON position.</p> <ul style="list-style-type: none"> • Transmission range switch: approx. 0V • A/T shift selector (detention switch): approx. 0V 	<ul style="list-style-type: none"> • 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.
2. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

- YES >> Go to [SEC-59, "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000007457067

1. CHECK DTC WITH TCM

Check "Self diagnostic result" with CONSULT. Refer to [TM-154, "DTC Index"](#).

Is the inspection result normal?

- YES >> GO TO 2.
 NO >> Repair or replace the malfunctioning parts.

2. CHECK TRANSMISSION RANGE SWITCH CIRCUIT

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

TCM		BCM		Continuity
Connector	Terminal	Connector	Terminal	
F51	9	M123	140	Existed

4. Check continuity between TCM harness connector and ground.

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B2603 SHIFT POSITION STATUS

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

TCM		Ground	Continuity
Connector	Terminal		
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		
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.
2. 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	
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)		Ground	Continuity
Connector	Terminal		
M137	10		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-92, "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.
2. 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	
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)		Ground	Continuity
Connector	Terminal		
M137	11		Not existed

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness or connector.

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-179, "Removal and Installation"](#).

7.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000007771416

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		Selector lever	P position	Not existed
10	11		Other than above	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace A/T shift selector (detention switch). Refer to [TM-179, "Removal and Installation"](#).

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B2604 PNP SWITCH**Description**

INFOID:0000000007457068

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:0000000007457069

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. <ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Harness or connectors (Transmission range switch circuit is open or shorted.) • 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 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:0000000007457070

1. CHECK DTC WITH TCM

Check "Self diagnostic result" with CONSULT. Refer to [TM-154, "DTC Index"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK TRANSMISSION RANGE SWITCH CIRCUIT

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

TCM		BCM		Continuity
Connector	Terminal	Connector	Terminal	
F51	9	M123	140	Existed

4. Check continuity between TCM harness connector and ground.

B2604 PNP SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

TCM		Ground	Continuity
Connector	Terminal		Not existed
F51	9		

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:0000000007457071

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:0000000007457072

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 <ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Harness or connectors (Transmission range switch circuit is open or shorted.) • Transmission range switch • IPDM E/R

DTC CONFIRMATION PROCEDURE**1. PERFORM DTC CONFIRMATION PROCEDURE**

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

Is DTC detected?

- YES >> Go to [SEC-64, "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000007457073

1. CHECK DTC WITH IPDM E/R

Check "Self diagnostic result" with CONSULT. Refer to [SEC-178, "DTC Index"](#).

Is the inspection result normal?

- YES >> GO TO 2.
 NO >> Repair or replace the malfunctioning parts.

2. CHECK TRANSMISSION RANGE SWITCH CIRCUIT

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

TCM		BCM		Continuity
Connector	Terminal	Connector	Terminal	
F51	9	M123	140	Existed

4. Check continuity between TCM harness connector and ground.

B2605 PNP SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

TCM		Ground	Continuity
Connector	Terminal		Not existed
F51	9		

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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< DTC/CIRCUIT DIAGNOSIS >

B2608 STARTER RELAY

Description

INFOID:0000000007457080

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:0000000007457081

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.	<ul style="list-style-type: none">• 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:0000000007457082

1. CHECK BCM POWER SUPPLY CIRCUIT

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

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

B2608 STARTER RELAY

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

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

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
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

Description

INFOID:0000000007457095

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

DTC Logic

INFOID:0000000007457096

DTC DETECTION LOGIC

NOTE:

- If DTC B260F is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-30, "BCM : DTC Logic"](#).
- 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:0000000007457097

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-68, "DTC Logic"](#).

Is the DTC B260F displayed again?

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

2. REPLACE ECM

Replace ECM. Refer to [EC-17, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description"](#).

>> INSPECTION END

3. CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

B26E1 NO RECEPTION OF ENGINE STATUS SIGNAL

Description

INFOID:0000000007457098

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

DTC Logic

INFOID:0000000007457099

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"](#).
- If DTC B26E1 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
B26E1	NO RECEPTION OF ENGINE STATUS SIGNAL	BCM does not receive 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-69, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000007457100

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-69, "DTC Logic"](#).

Is the DTC B26E1 displayed again?

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

2. REPLACE ECM

Replace ECM. Refer to [EC-17, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description"](#).

>> INSPECTION END

3. CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

B26EA KEY REGISTRATION

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B26EA KEY REGISTRATION

Description

INFOID:0000000007457104

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

DTC Logic

INFOID:0000000007457105

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B26EA	KEY REGISTRATION	Intelligent Key is not registered successfully.	<ul style="list-style-type: none">• Improper registration operation• Intelligent Key• BCM

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

Is DTC detected?

YES >> Go to [SEC-70, "Diagnosis Procedure"](#)

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000007457106

1. PERFORM INITIALIZATION

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

Is DTC detected?

YES >> Replace BCM. Refer to [BCS-92, "Removal and Installation"](#).

NO >> INSPECTION END

B2617 STARTER RELAY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2617 STARTER RELAY CIRCUIT

Description

INFOID:0000000007457110

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:0000000007457111

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	<ul style="list-style-type: none">• 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.
2. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to [SEC-71, "Diagnosis Procedure"](#).

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000007457112

SEC

1. CHECK STARTER RELAY

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

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

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.

B2617 STARTER RELAY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
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:0000000007457116

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:0000000007457117

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 <ul style="list-style-type: none">• 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) <ul style="list-style-type: none">• Between BCM and push-button ignition switch• Between IPDM E/R and push-button ignition switch

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE 1

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.
2. 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 2

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

Is DTC detected?

YES >> Go to [SEC-73, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000007457118

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

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

B261A PUSH-BUTTON IGNITION SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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

(+) Push-button ignition switch		(-)	Voltage (V) (Approx.)
Connector	Terminal		
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

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

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

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

Push-button ignition switch		Ground	Continuity
Connector	Terminal		
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

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

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

Is the inspection result normal?

YES >> GO TO 6.
NO >> GO TO 5.

5.CHECK PUSH-BUTTON IGNITION SWITCH CIRCUIT 2

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

Push-button ignition switch		IPDM E/R		Continuity
Connector	Terminal	Connector	Terminal	
M50	4	E5	28	Existed

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

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

B261A PUSH-BUTTON IGNITION SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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

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< DTC/CIRCUIT DIAGNOSIS >

B261E VEHICLE TYPE

Description

INFOID:0000000007457119

There are two types of vehicle.

- HEV
- Conventional

DTC Logic

INFOID:0000000007457120

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 [SEC-32, "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:0000000007457121

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-92, "Removal and Installation"](#).

NO >> INSPECTION END

B210B STARTER CONTROL RELAY

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

B210B STARTER CONTROL RELAY

Description

INFOID:0000000007457131

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

INFOID:0000000007457132

DTC DETECTION LOGIC

NOTE:

If DTC B210B is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-30, "BCM : DTC Logic".](#)

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. <ul style="list-style-type: none">• 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 [SEC-77, "Diagnosis Procedure".](#)
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000007457133

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-77, "DTC Logic".](#)

Is the DTC B210B displayed again?

- YES >> Replace IPDM E/R. Refer [PCS-32, "Removal and Installation".](#)
NO >> INSPECTION END

B210C STARTER CONTROL RELAY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B210C STARTER CONTROL RELAY

Description

INFOID:0000000007457134

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

INFOID:0000000007457135

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	<p>IPDM E/R detects that the relay is stuck at OFF position even if the followings condition are met for about 1 second.</p> <ul style="list-style-type: none">• Starter control relay ON/OFF signal from BCM• Transmission range switch input signal	<ul style="list-style-type: none">• 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

INFOID:0000000007457136

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

< DTC/CIRCUIT DIAGNOSIS >

B210D STARTER RELAY

Description

INFOID:0000000007457137

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:0000000007457138

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. <ul style="list-style-type: none"> 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?

- YES >> Go to [SEC-79, "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000007457139

SEC

1. INSPECTION START

- Turn ignition switch ON.
- Check "Self diagnostic result" for IPDM E/R with CONSULT.
- Touch "ERASE".
- Perform DTC Confirmation Procedure.**
See [SEC-79, "DTC Logic"](#).

Is the DTC B210D displayed again?

- YES >> Replace IPDM E/R. Refer to [PCS-32, "Removal and Installation"](#).
 NO >> INSPECTION END

< DTC/CIRCUIT DIAGNOSIS >

B210E STARTER RELAY

Description

INFOID:0000000007457140

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:0000000007457141

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 [SEC-84, "DTC Logic"](#).
- If DTC B210E is displayed with DTC B2617 for BCM, first perform the trouble diagnosis for DTC B2617. Refer to [SEC-71, "DTC Logic"](#).
- When IPDM E/R power supply voltage is low (Approx. 7 - 8 V for about 1 second), the DTC B210F may be detected.

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B210E	STARTER 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	<ul style="list-style-type: none"> IPDM E/R Battery

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?YES >> Go to [SEC-80, "Diagnosis Procedure"](#).

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000007457142

1. CHECK STARTER RELAY OUTPUT SIGNAL

- Turn ignition switch OFF.
- 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	
M121	52	Ground	ON	Depressed	P or N	Battery voltage
					Other than above	0

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK STARTER RELAY OUTPUT SIGNAL CIRCUIT

- 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]

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

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
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

1. Turn ignition switch OFF.
2. Disconnect IPDM E/R connector.
3. Check voltage between IPDM E/R harness connector and ground. Refer to [PCS-25, "Wiring Diagram - IPDM E/R -"](#).

(+) IPDM E/R		(-)	Voltage (V) (Approx.)
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

Description

INFOID:0000000007457143

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

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

DTC Logic

INFOID:0000000007457144

DTC DETECTION LOGIC

NOTE:

If DTC B210F is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-30, "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. <ul style="list-style-type: none">• Transmission range switch input signal• Shift position signal from BCM (CAN)	<ul style="list-style-type: none">• 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.
2. Check "Self diagnostic result" with CONSULT.

Is DTC detected?

YES >> Go to [SEC-82, "Diagnosis Procedure"](#).

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000007457145

1. CHECK DTC WITH BCM

Check "Self diagnostic result" with CONSULT. Refer to [SEC-163, "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.
2. Disconnect IPDM E/R connector.
3. Turn ignition switch ON.
4. Check voltage between IPDM E/R harness connector and ground.

(+) IPDM E/R		(-)	Condition	Voltage (V) (Approx.)					
Connector	Terminal			E5	30	Selector lever	Other than above	Battery voltage	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

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

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

IPDM E/R		TCM		Continuity
Connector	Terminal	Connector	Terminal	
E5	30	F51	9	Existed

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
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

Description

INFOID:0000000007457146

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

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

DTC Logic

INFOID:0000000007457147

DTC DETECTION LOGIC

NOTE:

If DTC B2110 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-30, "BCM : DTC Logic".](#)

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2110	INTER LOCK/PNP SW	IPDM E/R detects mismatch between the signals below for 1 second or more. <ul style="list-style-type: none">• Transmission range switch input signal• Shift position signal from BCM (CAN)	<ul style="list-style-type: none">• 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:0000000007457148

1. CHECK DTC WITH TCM

Check "Self diagnostic result" with CONSULT. Refer to [TM-154, "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.
2. Disconnect IPDM E/R connector.
3. Turn ignition switch ON.
4. Check voltage between IPDM E/R harness connector and ground.

(+)		(-)	Condition	Voltage (V) (Approx.)	
IPDM E/R	Connector				P or N
E5	30	Ground	Selector lever	Battery voltage	Battery voltage
				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]

3.CHECK TRANSMISSION RANGE SWITCH CIRCUIT

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

IPDM E/R		TCM		Continuity
Connector	Terminal	Connector	Terminal	
E5	30	F51	9	Existed

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
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:000000007697953

1.CHECK FUSE AND FUSIBLE LINK

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

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

Is the fuse fusing?

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

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

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

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M119	13		Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

IPDM E/R

IPDM E/R : Diagnosis Procedure

INFOID:000000007697956

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.
Battery power supply	C
	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.

A

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.

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Terminals		Voltage (Approx.)	
IPDM E/R			
Connector	Terminal		
E4	1	Ground	Battery voltage

D

E

F

Is the measurement value normal?

G

- YES >> GO TO 3.
NO >> Repair the harness or connector.

H

3.CHECK GROUND CIRCUIT

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

I

IPDM E/R		Continuity
Connector	Terminal	
Ground		
E5	12	Existed
E6	41	

J

Does continuity exist?

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- YES >> INSPECTION END
NO >> Repair the harness or connector.

HOOD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

HOOD SWITCH

Description

INFOID:0000000007457151

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:0000000007457152

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
		Close	OFF

Is the indication normal?

YES >> Hood switch is OK.

NO >> Go to [SEC-88, "Diagnosis Procedure".](#)

Diagnosis Procedure

INFOID:0000000007457153

1.CHECK HOOD SWITCH POWER SUPPLY

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

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK HOOD SWITCH CIRCUIT

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

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

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
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		Ground	Continuity
Connector	Terminal		
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 [DLK-258, "Removal and Installation"](#).

5. CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000007457154

1. CHECK HOOD SWITCH

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

Hood switch		Condition	Continuity
Terminal			
1	2	Hood	Close
			Open

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace hood lock (RH). Refer to [DLK-258, "Removal and Installation"](#).

SEC

HEADLAMP

Description

INFOID:0000000007457155

Headlamp lighting when vehicle security system is alarm phase.

Component Function Check

INFOID:0000000007457156

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 [SEC-90, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000007457157

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

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

SECURITY INDICATOR LAMP

Description

INFOID:0000000007457158

- 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

INFOID:0000000007457159

1.CHECK FUNCTION

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

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Go to [SEC-91, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000007457160

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

Perform "Self Diagnostic Result" for unified meter and A/C amp. Refer to [MWI-107, "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

SEC

KEY WARNING LAMP

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

KEY WARNING LAMP

Description

INFOID:0000000007457161

Performs operation method guide and warning together with buzzer.

Component Function Check

INFOID:0000000007457162

1.CHECK FUNCTION

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

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

Is the inspection result normal?

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

NO >> Refer to [SEC-92, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000007457163

1.CHECK KEY WARNING LAMP

Refer to [DLK-107, "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

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

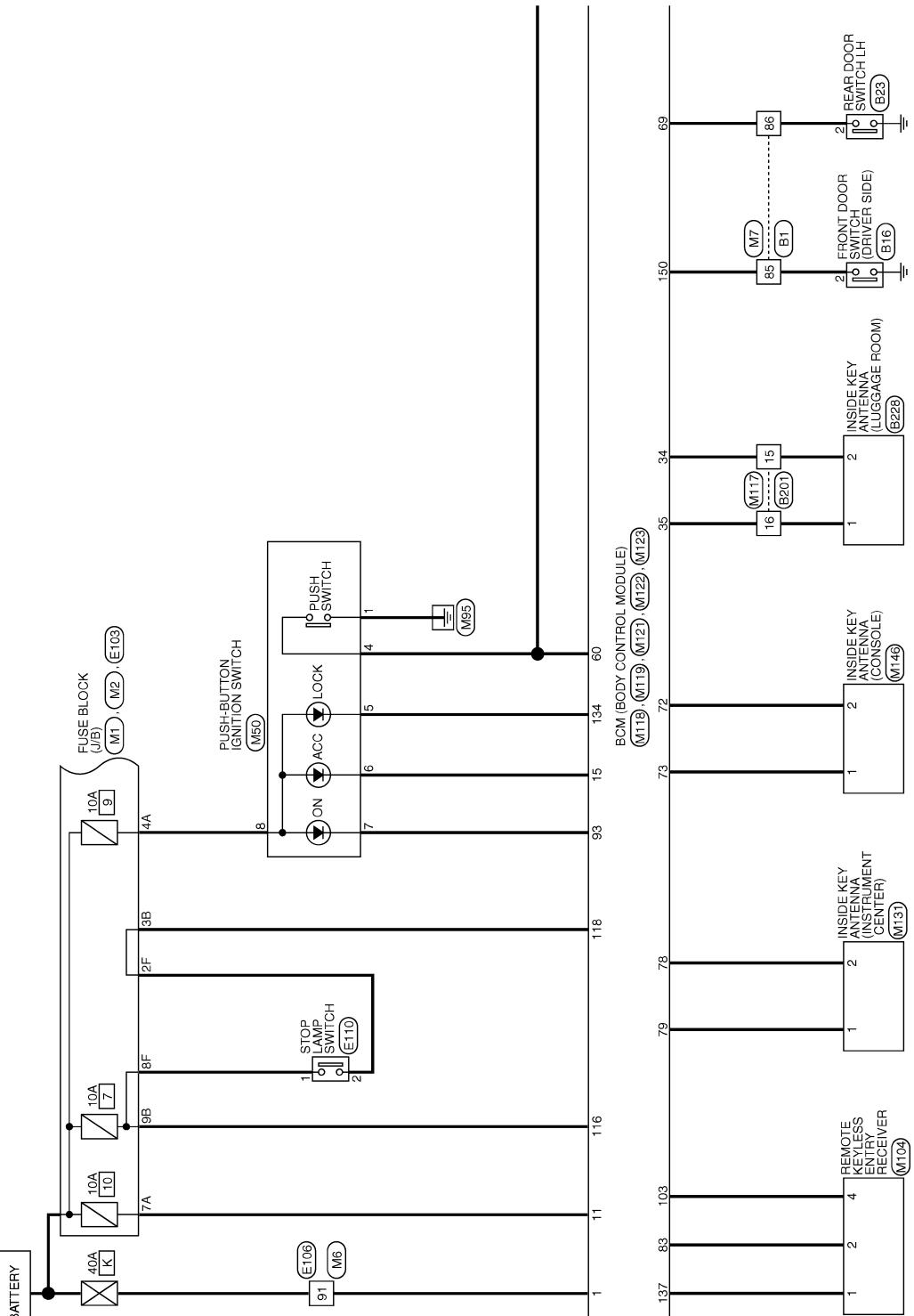
< DTC/CIRCUIT DIAGNOSIS >

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

Wiring Diagram - INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION -

INFOID:0000000007457164

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION



2011/06/24

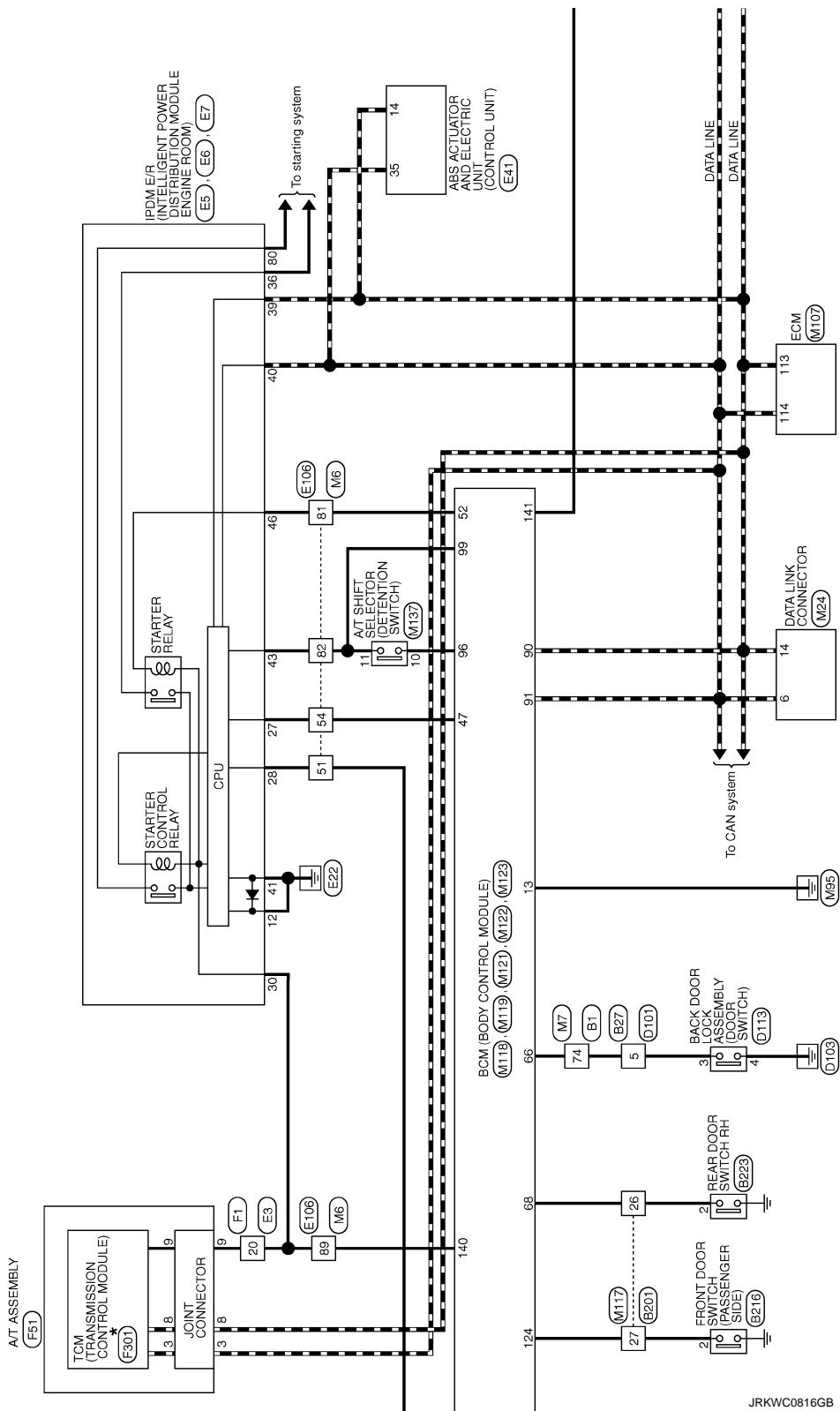
JRKWC0815GB

SEC

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

< DTC/CIRCUIT DIAGNOSIS >

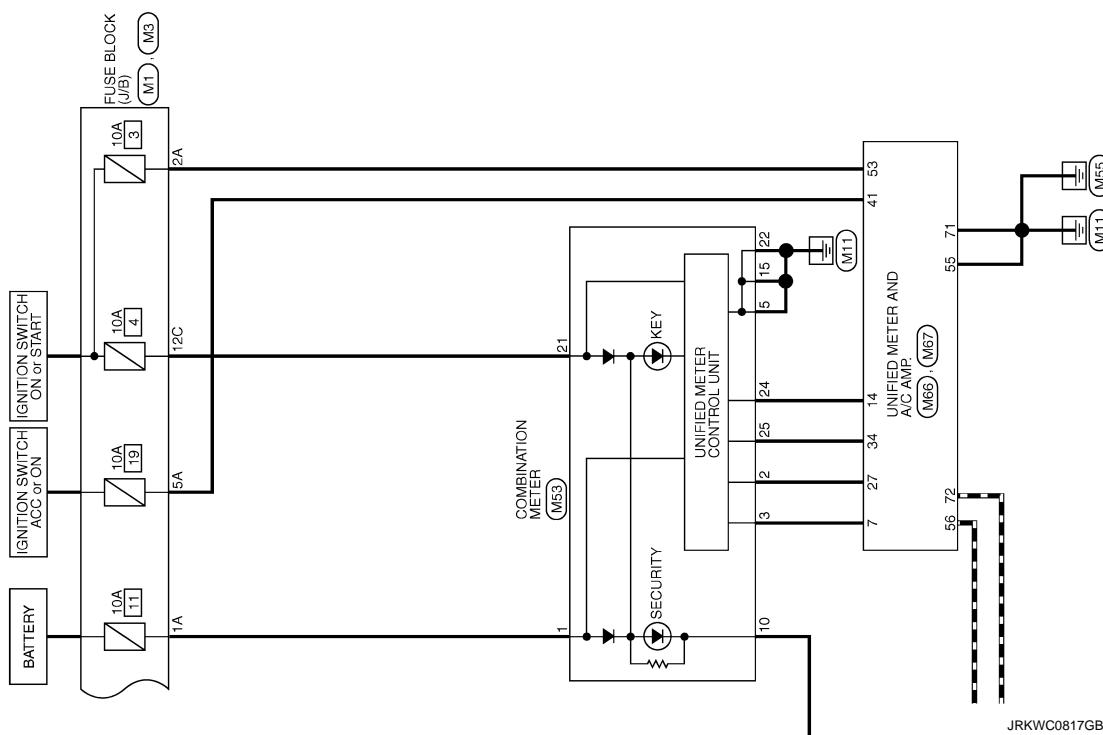
* This connector is not shown in "Harness Layout".



JRKWC0816GB

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

< DTC/CIRCUIT DIAGNOSIS >



JRKWC0817GB

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION

Connector No.	B1	Signal Name [Specification]
Connector Name	WIRE TO WIRE	
Connector Type	THB08W-CS16-TMA4	



Terminal No.	B16	Signal Name [Specification]
60	P	-
61	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	W	-
67	V	-
68	SB	-
69	SHIELD	-
70	W	-
73	Sb	-
74	L	-
75	BR	-
76	R	-
77	BR	-
78	O	-
79	GR	-
83	BS	-
85	V	-
86	LG	-
87	Y	-
88	R	-
89	B	-
90	BG	-
91	G	-
92	BR	-
93	G	-
94	SB	-
95	G	-
96	Y	-
98	W	-
99	GR	-

Connector No.	B16	Signal Name [Specification]
Connector Name	FRONT DOOR SWITCH(DRIVER SIDE)	
Connector Type	A03FW	



Terminal No.	B201	Signal Name [Specification]
1	WIRE TO WIRE	
2	THB08W-CS16-TMA4	
3	HS	

Terminal No.	B23	Signal Name [Specification]
1	WIRE TO WIRE	
2	V	-
3	REAR DOOR SWITCH LH	
4	A03FW	

Terminal No.	B23	Signal Name [Specification]
1	WIRE TO WIRE	
2	V	-
3	REAR DOOR SWITCH LH	
4	A03FW	

Terminal Color Of No. Wire	Signal Name [Specification]
3 R	-
5 G	-
6 GR	-
7 V	-
8 L	-
12 SB	-
13 LG	-
14 GR	-
15 LG	-
17 W	-
18 SB	-
19 LG	-
20 FR	-
21 SHIELD	-
22 Y	-
24 P	-
27 B	-
28 R	-
29 W	-
30 SHIELD	-
31 SHIELD	-
32 W	-
33 SB	-
34 L	-
35 P	-
36 L	-
37 P	-
38 BR	-
39 Y	-
44 Y	-
45 GR	-
46 LG	-
47 SB	-
49 G	-
50 V	-

Connector No.	B27	Signal Name [Specification]
Connector Name	WIRE TO WIRE	
Connector Type	M036AW/LC	



Terminal No.	B27	Signal Name [Specification]
1	WIRE TO WIRE	
2	V	-
3	Y	-
4	GR	-
5	LG	-
6	SB	-
7	LG	-
10	W	-
15	SB	-
16	V	-
17	BR	-
26	BR	-
27	L	-
28	Y	-
29	GR	-
30	GR	-
31	R	-
32	BR	-
33	G	-
51	R	-
52	V	-
55	G	-
56	R	-
57	W	-
58	B	-
59	SHIELD	-
60	LG	-
61	W	-

JRKWE4520GB

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION

Connector No.			Terminal Color Of Wire			Signal Name [Specification]		
62	BR	-	1	R	-	P	-	-
63	P	-	2	G	-	L	-	-
64	L	-	3	B	-	LG	-	-
65	G	-	4	Y	-	LG	-	-
66	P	-	5	V	-	R	-	-
67	L	-	28	P	-	P	-	-
68	SHIELD	-	29	W	-	W	-	-
69	V	-	30	S8	-	S8	-	-
70	Y	-	31	S8	-	S8	-	-
71	S8	-	32	R	-	R	-	-
72	W	-	33	P	-	P	-	-
73	BR	-	34	S8	-	S8	-	-
75	Y	-	35	S8	-	S8	-	-
80	V	-	36	S8	-	S8	-	-
81	S8	-	40	BG	-	BG	-	-
82	LG	-	41	G	-	G	-	-
83	P	-	42	Y	-	Y	-	-
84	R	-	43	BR	-	BR	-	-
85	L	-	44	BG	-	BG	-	-
86	EG	-	45	LG	-	LG	-	-
87	L	-	46	W	-	W	-	-
88	P	-	47	S8	-	S8	-	-
91	V	-	48	S8	-	S8	-	-
92	R	-	49	S8	-	S8	-	-
94	R	-	50	S8	-	S8	-	-
95	S8	-	51	S8	-	S8	-	-
96	G	-	52	S8	-	S8	-	-
97	G	-	53	S8	-	S8	-	-
98	R	-	54	S8	-	S8	-	-
99	P	-	55	S8	-	S8	-	-
100	L	-	56	S8	-	S8	-	-
			57	R	-	R	-	-
			58	W	-	W	-	-
			59	GR	-	GR	-	-
			60	Y	-	Y	-	-
			61	G	-	G	-	-
			62	S8	-	S8	-	-
			63	S8	-	S8	-	-
			64	S8	-	S8	-	-
			65	S8	-	S8	-	-
			66	S8	-	S8	-	-
			67	S8	-	S8	-	-
			68	S8	-	S8	-	-
			69	S8	-	S8	-	-
			70	S8	-	S8	-	-
			71	S8	-	S8	-	-
			72	S8	-	S8	-	-
			73	S8	-	S8	-	-
			74	S8	-	S8	-	-
			75	S8	-	S8	-	-
			76	S8	-	S8	-	-
			77	S8	-	S8	-	-
			78	S8	-	S8	-	-
			79	S8	-	S8	-	-
			80	S8	-	S8	-	-
			81	S8	-	S8	-	-
			82	S8	-	S8	-	-
			83	S8	-	S8	-	-
			84	S8	-	S8	-	-
			85	S8	-	S8	-	-
			86	S8	-	S8	-	-
			87	S8	-	S8	-	-
			88	S8	-	S8	-	-
			89	S8	-	S8	-	-
			90	S8	-	S8	-	-
			91	S8	-	S8	-	-
			92	S8	-	S8	-	-
			93	S8	-	S8	-	-
			94	S8	-	S8	-	-
			95	S8	-	S8	-	-
			96	S8	-	S8	-	-
			97	S8	-	S8	-	-
			98	S8	-	S8	-	-
			99	S8	-	S8	-	-
			100	S8	-	S8	-	-

JRKWE4521GB

A B C D M T G I SEC Z P

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

< DTC/CIRCUIT DIAGNOSIS >

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION

Connector No.	F1	Connector No.	F51
Connector Name	WIRE TO WIRE	Connector Name	A/T ASSEMBLY
Connector Type	SA434FB510-SU2	Connector Name	BK10FG-NCV
Terminal No.	Signal Name [Specification]	Terminal No.	Signal Name [Specification]
19	W	1	Y
20	GR	2	BR
21	P	3	L
22	G	4	V
23	W	5	B
25	P	6	Y
26	BR	7	R
28	R	8	P
29	L	9	GR
30	Y	10	B
31	V		
32	LG		
33	GR		
34	G		
35	Y		
40	BG		
41	SB		
42	P		
43	BR		
44	BG		

Connector No.	E110	Connector No.	F301
Connector Name	STOP LAMP SWITCH	Connector Name	TCM(TRANSMISSION CONTROL MODULE)
Connector Type	M04FW-LC	Connector Type	SPI10FG
Terminal No.	Signal Name [Specification]	Terminal No.	Signal Name [Specification]
1	-	1	VIGN
2	-	2	BATT
3	-	3	CASH
4	-	4	K LINE
5	-	5	GROUND
6	-	6	VIGN
7	-	7	REVAMP RLY
8	-	8	CAUL
9	-	9	START RLY
10	-	10	GROUND

SEC

JRKWE4523GB

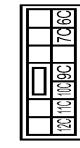
INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS321W CS



15	G	-	-
17	Sb	-	-
18	V	-	-
20	BG	-	-
21	L	-	-
22	W	-	-
23	P	-	-
24	BR	-	-
25	Y	-	-
26	V	-	-
27	G	-	-
28	G	-	-
31	L	-	-
32	G	-	-
33	B	-	-
34	W	-	-
35	R	-	-
36	SHIELD	-	-
37	V	-	-
38	BG	-	-
39	BR	-	-
41	W	-	-
42	BG	-	-
43	BG	-	-
45	W	-	-
49	L	-	-
50	P	-	-
51	BR	-	-
54	Y	-	-
57	G	-	-
59	W	-	-
60	L	-	-
61	G	-	-
62	Sb	-	-
63	G	-	-
64	B	-	-
65	W	-	-
66	R	-	-
67	SHIELD	-	-
68	T	-	-
69	GR	-	-
70	LG	-	-
71	LG	-	-
72	Y	-	-
73	SB	-	-
74	BR	-	-
74	BR	-	-
74	L	-	-
75	G	-	-
76	GR	-	-
76	W	-	-
76	W	-	-
77	P	-	-
77	V	-	-

77	R	-	-
78	L	-	-
78	R	-	-
79	W	-	-
79	Y	-	-
80	Sb	-	-
81	Sb	-	-
82	Sb	-	-
83	V	-	-
84	G	-	-
85	L	-	-
86	P	-	-
87	W	-	-
89	GR	-	-
90	SHIELD	-	-
91	W	-	-
92	Y	-	-
93	BR	-	-
94	P	-	-
95	GR	-	-
96	W	-	-
97	L	-	-
98	SHIELD	-	-
99	V	-	-
100	Sb	-	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80/NW/CS16/TM4



Terminal Color Of No.	Wire	Signal Name [Specification]	Terminal Color Of No.	Wire	Signal Name [Specification]
1	W	-	1	S	-
2	R	-	2	S	-
3	B	-	3	S	-
4	SHIELD	-	4	S	-
5	G	-	5	S	-
8	Y	-	6	W	-
9	BR	-	7	W	-
10	R	-	8	B	-
11	BR	-	9	G	-
12	EG	-	10	BR	-
13	L	-	11	EG	-
14	R	-	12	GR	-
15	P	-	13	Sb	-
16	V	-	14	Y	-
17	P	-	15	W	-

JRKWE4524GB

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION

				Connector No.	H467
				Connector Name	UNIFIED METER AND A/C/AMP.
				Connector Type	H32P-WH
					
					
				22	B GROUND
				24	BR COMMUNICATION SIGNAL (LCD-AMP)
				25	Y COMMUNICATION SIGNAL (AMP-&CD)
				26	R VEHICLE SPEED PULSE
				27	V PARKING BRAKE SWITCH SIGNAL
				28	W BRAKE FLUID LEVEL SWITCH SIGNAL
				29	SB SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER'S SIDE)
				30	G SEAT BELT BUCKLE SWITCH SIGNAL (PASSENGER'S SIDE)
				31	L WASHER LEVEL SWITCH SIGNAL
				33	B ILLUMINATION CONTROL SIGNAL
					
				1	
				2	
				3	
				4	
				5	
				6	
				7	
				8	
					



Terminal No.	Color Of Wire	Signal Name [Specification]
41	V	ACC POWER SUPPLY
42	Y	FUEL LEVEL SENSOR SIGNAL
43	R	INTAKE SENSOR SIGNAL
44	LG	IN-VEHICLE SENSOR SIGNAL
45	P	AMBIENT SENSOR SIGNAL
46	BG	SUNROOF SENSOR SIGNAL
47	G	EXHAUST GAS CONDENSING SENSOR SIGNAL
53	G	IGNITION POWER SUPPLY
54	Y	BATTERY POWER SUPPLY
55	B	GROUND
56	L	CAN-H
57	W	BRAKE FLUID LEVEL SWITCH SIGNAL
58	BR	FUEL LEVEL SENSOR GROUND
59	GR	INTAKE SENSOR GROUND
60	L	IN-VEHICLE SENSOR GROUND
61	BB	AMBIENT SENSOR GROUND
62	SB	SUNROOF SENSOR GROUND
63	R	-
65	BC	ECU SIGNAL
69	L	AC/LAN SIGNAL
70	R	EACH DOOR MOTOR POWER SUPPLY GROUND
71	B	CAN-L
72	R	-



44	LG		IN VEHICLE SENSOR SIGNAL
45	P		AIRBAG SENSOR SIGNAL
46	BG		SUNROOF SENSOR SIGNAL
47	G		EXHAUST GAS (CO) SENSING SIGNAL/RECIEVING SENSORS SIGNAL
53	G		IGNITION POWER SUPPLY
54	Y		BATTERY POWER SUPPLY
55	B	GROUND	
56	L	CANH	
57	W	CANL	BRAKE FLUID LEVEL SWITCH SIGNAL
58	BB	FUEL LINE SENSOR GROUND	
59	GR	INTAKE AIR TEMP GROUND	
60	L	IN-VEHICLE SENSOR GROUND	
61	BR	AMBIENT SENSOR GROUND	
62	S8	SURFACE SENSOR GROUND	
63	R	-	
65	BG	ECU SIGNAL	
69	L	AI CAN SIGNAL	
70	R	EACH DOOR MOTOR POWER SUPPLY	
71	B	GROUND	
72	P	CANL	



60	L	IN-VEHICLE SENSOR GROUND	
61	B8	AMBIENT SENSOR GROUND	
62	S8	SUNLOAD SENSOR GROUND	
63	R	-	
65	W6	ECU SIGNAL	
69	L	AFC LAN SIGNAL	
70	R	EACH DOOR MOTOR POWER SUPPLY	
71	B	GROUND	
72	P	CAN_L	



Connector No.	M66	Color Of Wire	Signal Name [Specification]
Connector Name	UNIFIED METER AND A/C AMP.	L	MANUAL MODE SHIFT UP SIGNAL
Connector Type	T-40FW-NH	G	COMMUNICATION SIGNAL (AMP->AMP)
		R	VEHICLE SPEED SIGNAL (Z-PULSE)
		B	SAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)
		W	MANUAL MODE SIGNAL
		Y	NON MANUAL MODE SIGNAL
		BR	COMMUNICATION SIGNAL (LCD->AMP)
		L	IGNITION SIGNAL
		Z	AT SNOW SWITCH SIGNAL
		V	MANUAL MODE SHIFT DOWN SIGNAL
		G	COMMUNICATION SIGNAL (METER->AMP)
		R	VEHICLE SPEED SIGNAL (A-PULSE)
		Y	PARKING BRAKE SWITCH SIGNAL
		BR	COMMUNICATION SIGNAL (AMP->CANBUS)
		Z	BLOWN FUSE ADVICE SIGNAL



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	W	-
4	BH	-
5	GR	-
6	Y	-
7	V	-
8	P	-

HS: 

MSD 

Push-BUTTON IGNITION SWITCH

Connector Type: M50

Connector Name: TWS09BR



Connector No.	M24	Terminal No.	Color Of Wire	Signal Name [Specification]
Connector Name	DATA LINK CONNECTOR			
Connector Type	B16FW			
 HS.				
		3	LG	-
		4	B	-
		5	B	-
		6	L	-
		7	V	-
		8	G	-
		11	SB	-
		14	P	-
		16	Y	-



Terminal No.	Color Of Wire	Signal Name [Specification]
3	IG	-
4	B	-
5	B	-
6	L	-
7	V	-
8	G	-
9	S8	-
11	P	-
14	P	-
16	Y	-



JRKWE4525GB

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION

Connector No.		Signal Name [Specification]		Terminal No.		Signal Name [Specification]		Terminal No.		Signal Name [Specification]	
Connector No.	M104	REMOTE KEYLESS ENTRY RECEIVER		110	R	ENGINE SPEED OUTPUT SIGNAL		55	W	-	
Connector Name				111	BG	SENSOR POWER SUPPLY (REFRIGERANT PRESS SEN)		56	B	-	
Connector Type	JAE04FB			112	V	SESN GND (EVAP CONTROL SYSTEM PRESS SEN)		57	R	-	
				113	P	CAN COMMUNICATION LINE		58	G	-	
				114	L	CAN COMMUNICATION LINE		59	SHIELD	-	
				115	W	SESN GND (REFRIGERANT PRESS SEN)		60	V	-	
				117	V	DATA LINING CONNECTOR		61	LG	-	
				121	LG	EVAP CANISTER VENT CONTROL VALVE		62	BR	-	
				122	P	STOP LAMP SWITCH		63	L	-	
				123	B	ECM GROUND		64	LG	-	
				124	B	ECM GROUND		65	B	-	
				125	R	POWER SUPPLY FOR ECM		66	R	-	
				126	BR	AC/DO BRAKE SWITCH		67	W	-	
				127	B	ECM GROUND		68	SHIELD	-	
				128	B	ECM GROUND		69	V	-	
				71	SB	-		70	Y	-	
				72	W	-		73	G	-	
				75	W	-		76	Y	-	
				80	V	-		81	SB	-	
				83	P	-		82	V	-	
				84	R	-		85	L	-	
				86	BG	-		87	L	-	
				88	P	-		89	Y	-	
				91	V	-		92	G	-	
				94	G	-		95	W	-	
				96	G	-		97	Y	-	
				98	BR	-		99	P	-	
				99	Y	-		100	Y	-	
				101	W	-		102	Y	-	
				103	LG	-		104	Y	-	
				105	GR	-		106	Y	-	
				107	LG	-		108	Y	-	
				109	G	-		110	Y	-	

JRKWE4526GB

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

< DTC/CIRCUIT DIAGNOSIS >

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION

Connector No.	Signal Name [Specification]	Terminal Color Of Wire No.	Wire	Signal Name [Specification]	Terminal Color Of Wire No.	Wire	Signal Name [Specification]
M121	BCM (BODY CONTROL MODULE)	78	Y	ROOM ANTI- ROOM ANTI+	137	BG	RECEIVER/SENSOR POWER SUPPLY
Connector Name	TH401GY-NH	79	GR	NAT'S ANTI AMP.	138	Y	TIRE PRESSURE RECEIVER/COMAM
Connector Type		80	W	IGN RELAY/ECU CONT.	139	L	SHUT/NP
		81	R	KEYLESS ENTRY RECEIVER/COMM	140	GR	SECURITY/INDICATOR
		82	Y	COMBI SW INPUTS	141	G	COMBI SW OUTPUTS
		83	BR	COMBI SW INPUT 3	142	BG	COMBI SW OUTPUT 2
		87	P	CAN-H	143	P	COMBI SW OUTPUT 1
		88	V	CAN-L	144	G	COMBI SW INPUT 3
		90	P	KEY SLOT/LILL' CONT	145	L	COMBI SW OUTPUT 4
		91	L	DRIVED DOOR SW	146	SB	DRIVEN DOOR SW
		92	LG	ON IND.	150	LG	REAR WINDOW DEFOGGER RELAY CONT
		93	V	PUDDLE LAMP CONT	151	G	
		94	Y	ACC RELAY/CONT			
		95	GR	SHIFT TR.			
		96	R	PASSENGER DOOR REQUEST SW			
		99	BR	A/T SHIFT SELECTOR POWER SUPPLY			
		100	S	DRIVER DOOR REQUEST SW			
		101	SB	IGN RELAY/POWER/ELEC. CONT.			
		102	BR	BLOWER FAN MOTOR RELAY/CONT			
		103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY			
		107	LG	COMBI SW INPUT 1			
		108	R	COMBI SW INPUT 4			
		109	Y	COMBI SW INPUT 2			
		110	G	HAZARD SW			
		65	BR	REAR WIPER/STOP POSITION			
		66	R	BACK DOOR OPEN/RW			
		67	GR	BACK DOOR OPEN/RW			
		68	BR	REAR RH DOOR SW			
		69	R	REAR LH DOOR SW			
Connector No.	BCM (BODY CONTROL MODULE)	113	P	OPTICAL SENSOR	116	SB	STOP LAMP SW 1
Connector Name	TH401B-NH	116	SB	STOP LAMP SW 2	118	P	DR DOOR UNLOCK SENSOR
Connector Type		119	SB	KEY SLOT/SW	123	W	IGN/F/B
		121	BR	PASSENGER DOOR ANTI-	124	LG	PASSENGER DOOR SW
		73	G	PASSENGER DOOR ANTI-	132	BR	POWER WINDOW SW COMM
		74	SB	PASSENGER DOOR ANTI-	133	W	PUSH-BUTTON (UNITOR'S) SW/POWER
		75	GR	DRIED DOOR ANTI-	134	GR	LOCK/IND.
		77	V	DRIED DOOR ANTI-			

JRKWE4527GB

INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS

< DTC/CIRCUIT DIAGNOSIS >

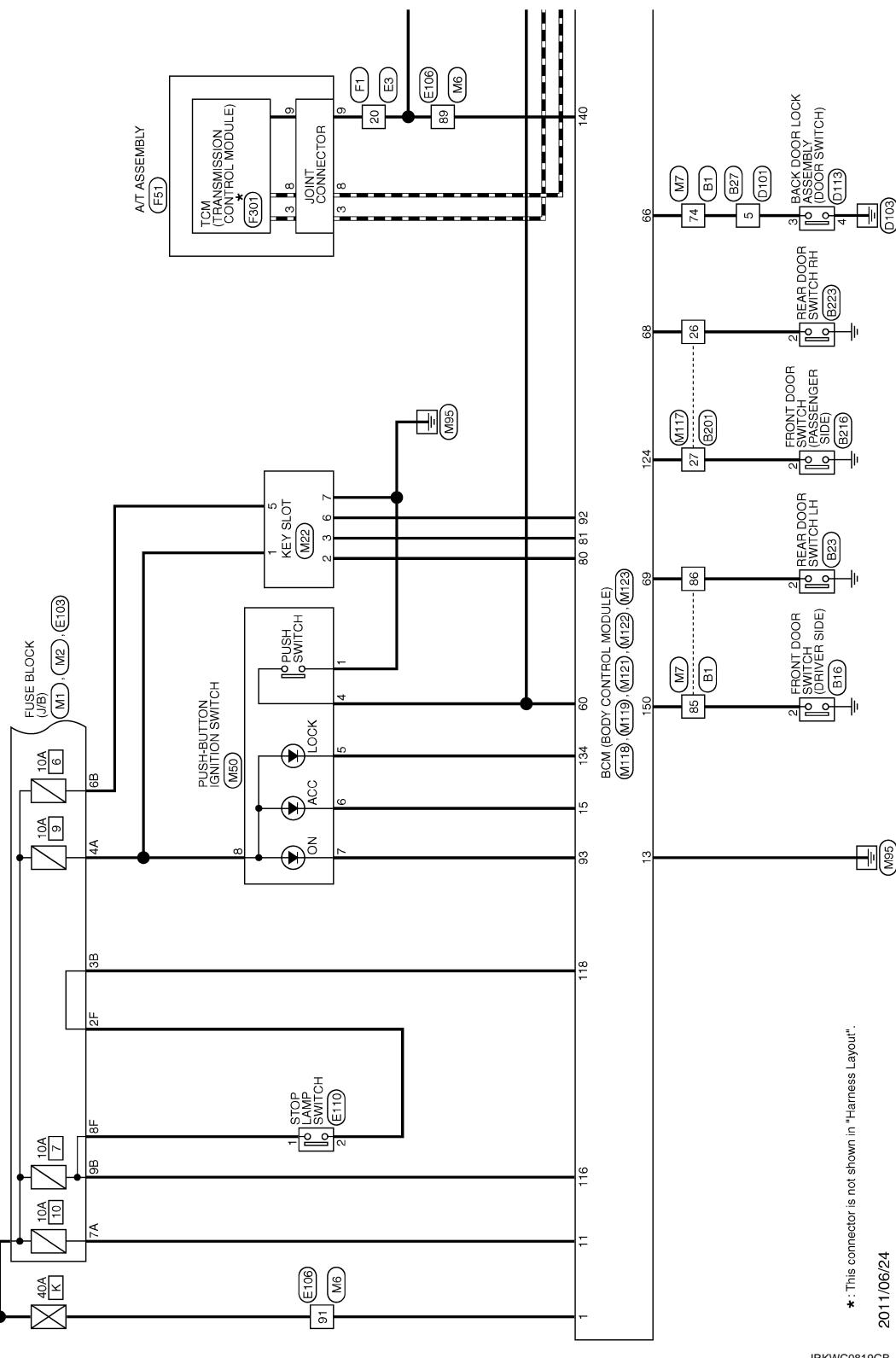
[WITH INTELLIGENT KEY SYSTEM]

INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS

Wiring Diagram - IVIS -

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INFINITI VEHICLE IMMOBILIZER SYSTEM



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

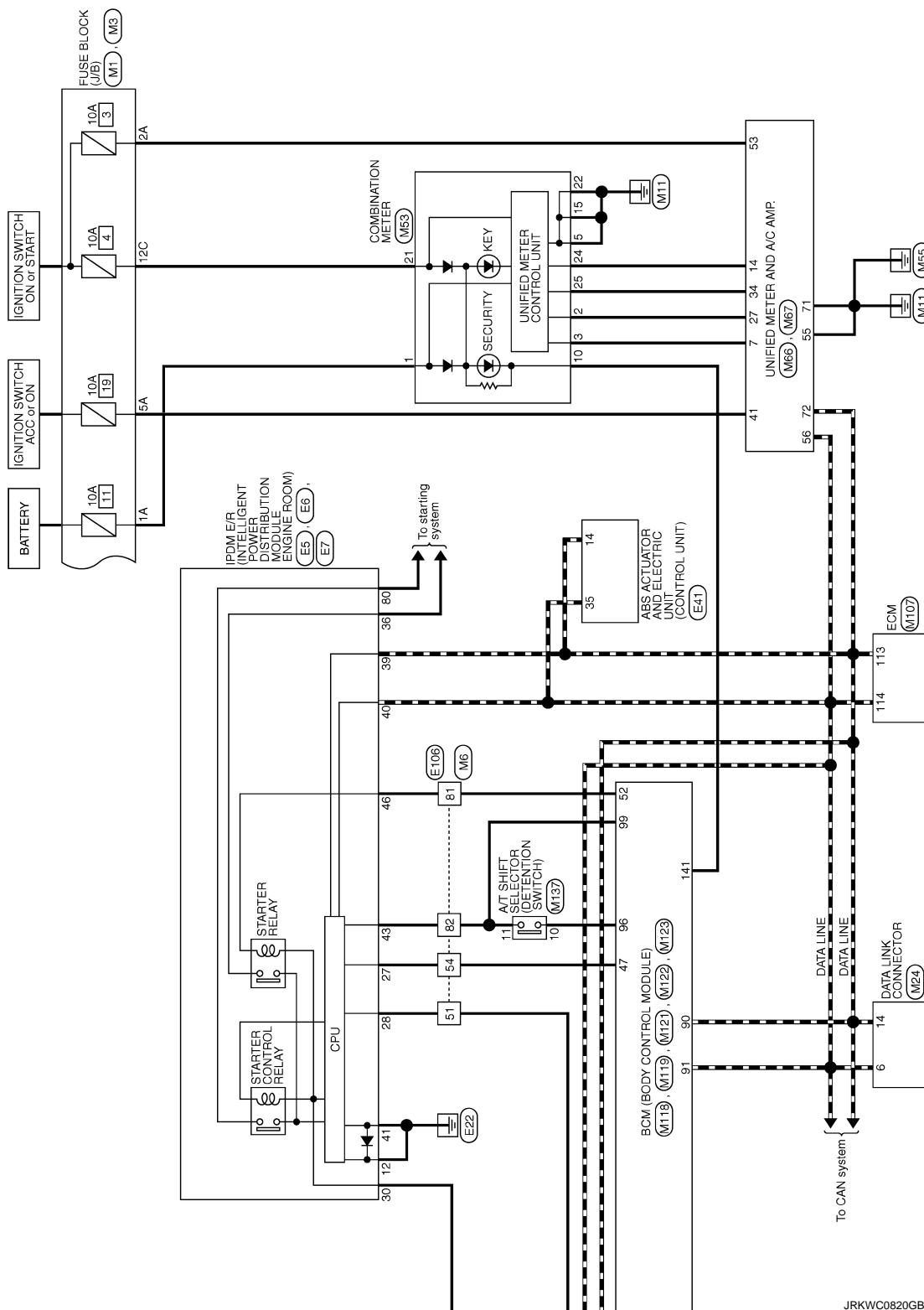
2011/06/24

JRKWC0819GB

INFINITI VEHICLE IMMobilizer SYSTEM-NATS

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]



JRKWC0820GB

A
B
C
D
E
F
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H
I
J
K
L
M
N
O
P
SEC

INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Connector No.	B11	Terminal No.	Color Of Wire	Signal Name [Specification]	Terminal No.	Color Of Wire	Signal Name [Specification]
Connector Name	WIRE TO WIRE	1	P	-	1	R	-
Connector Type	THBDFW-CS16-1M4	2	I	-	2	G	-
		3	SHEILD	-	3	B	-
		4	SHEILD	-	4	S	-
		5	SHEILD	-	5	L	-
		6	W	-			
		7	V	-			
		8	SB	-			
		9	BR	-			
		10	R	-			
		11	P	-			
		12	GR	-			
		13	Y	-			
		14	LG	-			
		15	GR	-			
		16	IG	-			
		17	W	-			
		18	SB	-			
		19	LG	-			
		20	BR	-			
		21	SHEILD	-			
		22	Y	-			
		23	P	-			
		24	SB	-			
		25	G	-			
		26	B	-			
		27	W	-			
		28	SB	-			
		29	Y	-			
		30	GR	-			
		31	LG	-			
		32	W	-			
		33	SB	-			
		34	L	-			
		35	P	-			
		36	L	-			
		37	P	-			
		38	BR	-			
		39	Y	-			
		40	Y	-			
		41	GR	-			
		42	LG	-			
		43	SB	-			
		44	G	-			
		45	W	-			
		46	LG	-			
		47	SB	-			
		48	G	-			
		49	LG	-			
		50	W	-			
		51	LG	-			
		52	Y	-			
		53	G	-			
		54	W	-			
		55	LG	-			
		56	R	-			
		57	W	-			
		58	B	-			
		59	SHIELD	-			
		60	LG	-			
		61	W	-			

JRKWE4536GB

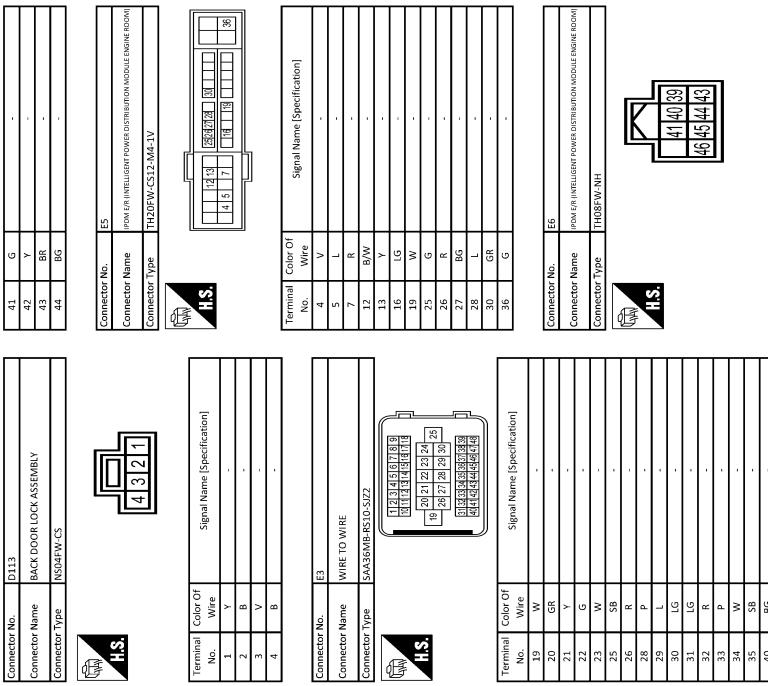
INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INFINITI VEHICLE IMMobilizer SYSTEM

Connector No.	B2.16	Terminal	Color Of Wire	Signal Name (Specification)
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)	No.	-	-
Connector Type	ADFW	2	-	-



JRKWF4537GB

INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

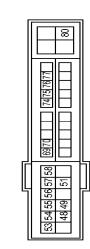
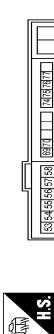
Terminal No.	Color Of Wire	Signal Name [Specification]	Terminal No.	Color Of Wire	Signal Name [Specification]
39	P	-	1F	SB	-
40	L	-	2F	W	-
41	B/NW	-	4F	G	-
43	S/B	-	6F	BR	-
44	BR	-	8F	L	-
45	G	-	9F	R	-
46	R	-	42	G	-
47	-	-	43	BR	-
48	-	-	45	W	-
49	-	-	49	L	-
50	-	-	50	P	-
51	-	-	51	L	-
52	-	-	54	BG	-
53	-	-	57	BR	-
55	-	-	59	W	-
56	-	-	60	LG	-
57	-	-	61	G	-
58	-	-	62	SB	-
59	-	-	63	W	-
64	-	-	65	B	-
66	-	-	66	R	-
67	-	-	67	SHIELD	-
68	-	-	68	Y	-
69	-	-	69	LG	-
70	-	-	70	W	-
71	-	-	71	R	-
72	-	-	72	Y	-
73	-	-	73	BR	-
74	-	-	74	L	-
75	-	-	75	G	-
76	-	-	76	W	-
77	-	-	77	Y	-
78	-	-	78	BR	-
79	-	-	79	L	-
80	-	-	79	Y	-
81	-	-	80	SB	-
82	-	-	81	R	-
83	-	-	82	SB	-
84	-	-	83	BR	-
85	-	-	84	G	-
86	-	-	85	L	-

Terminal No.	Color Of Wire	Signal Name [Specification]	Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GROUND	1	BR	WIRE TO WIRE
2	G	UBAR	2	G	THB01W-CS16-TM4
3	R	UBAR	3	R	H.S.
4	B	GROUND	4	Y	THB01W-CS12-MA
5	Y	DS FL	5	BR	H.S.
6	BG	DP RL	6	BR	THB01W-CS12-MA
7	BR	DP RR	7	BR	H.S.
9	B	DS FR	8	Y	THB01W-CS12-MA
10	W	DS FR	10	W	DS FR
14	P	CAN-L	14	Y	DS/L
25	Y	DS/L	25	LG	DP FL
26	LG	DS RL	26	LG	DS RL
27	GR	DS UZ	27	GR	DS RR
28	G	DS RR	28	UZ	DS RR
29	LG	BL/S	29	LG	BL/S
30	SB	Y/OFF/SW	30	SB	Y/OFF/SW
31	R	CAN-H	31	R	CAN-H
35	L	BUS-H	35	LG	BUS-H
45	B	-	45	B	-
48	L	-	48	Y	-
49	EG	-	49	BR	-
51	Y	-	51	G	-
53	W	-	53	BR	-
54	P	-	54	LG	-
55	SB	-	55	W	-
56	LG	-	56	Y	-
57	G	-	57	BR	-
58	V	-	58	BR	-
69	BR	-	69	LG	-
70	EG	-	70	W	-
74	P	-	74	Y	-
75	SB	-	75	LG	-
76	Y	-	76	W	-
77	I	-	77	Y	-
78	R	-	78	BR	-
79	L	-	79	L	-
80	P	-	80	Y	-
81	P	-	81	BR	-
82	Y	-	82	SB	-
83	W	-	83	BR	-
84	G	-	84	G	-
85	SB	-	85	L	-

Terminal No.	Color Of Wire	Signal Name [Specification]	Terminal No.	Color Of Wire	Signal Name [Specification]
18	V	-	18	V	-
20	BR	-	20	BR	-
21	L	-	21	L	-
22	V	-	22	V	-
23	G	-	23	G	-
24	P	-	24	P	-
25	Y	-	25	Y	-
26	V	-	26	V	-
27	W	-	27	W	-
28	G	-	28	G	-
31	SB	-	31	SB	-

INFINITI VEHICLE IMMOBILIZER SYSTEM

Connector No.	Color Of Wire	Signal Name [Specification]
41	P	INFINITI INTELLIGENT KEY SYSTEM
42	BR	INFINITI INTELLIGENT KEY SYSTEM
43	G	INFINITI INTELLIGENT KEY SYSTEM
44	LG	INFINITI INTELLIGENT KEY SYSTEM
45	W	INFINITI INTELLIGENT KEY SYSTEM
46	Y	INFINITI INTELLIGENT KEY SYSTEM
47	BR	INFINITI INTELLIGENT KEY SYSTEM
48	LG	INFINITI INTELLIGENT KEY SYSTEM
49	W	INFINITI INTELLIGENT KEY SYSTEM
50	R	INFINITI INTELLIGENT KEY SYSTEM
51	Y	INFINITI INTELLIGENT KEY SYSTEM
52	BR	INFINITI INTELLIGENT KEY SYSTEM
53	LG	INFINITI INTELLIGENT KEY SYSTEM
54	W	INFINITI INTELLIGENT KEY SYSTEM
55	R	INFINITI INTELLIGENT KEY SYSTEM
56	Y	INFINITI INTELLIGENT KEY SYSTEM
57	BR	INFINITI INTELLIGENT KEY SYSTEM
58	LG	INFINITI INTELLIGENT KEY SYSTEM
59	W	INFINITI INTELLIGENT KEY SYSTEM
60	R	INFINITI INTELLIGENT KEY SYSTEM
61	Y	INFINITI INTELLIGENT KEY SYSTEM
62	BR	INFINITI INTELLIGENT KEY SYSTEM
63	LG	INFINITI INTELLIGENT KEY SYSTEM
64	W	INFINITI INTELLIGENT KEY SYSTEM
65	P	INFINITI INTELLIGENT KEY SYSTEM
66	Y	INFINITI INTELLIGENT KEY SYSTEM
67	BR	INFINITI INTELLIGENT KEY SYSTEM
68	LG	INFINITI INTELLIGENT KEY SYSTEM
69	W	INFINITI INTELLIGENT KEY SYSTEM
70	R	INFINITI INTELLIGENT KEY SYSTEM
71	Y	INFINITI INTELLIGENT KEY SYSTEM
72	BR	INFINITI INTELLIGENT KEY SYSTEM
73	LG	INFINITI INTELLIGENT KEY SYSTEM
74	W	INFINITI INTELLIGENT KEY SYSTEM
75	P	INFINITI INTELLIGENT KEY SYSTEM
76	Y	INFINITI INTELLIGENT KEY SYSTEM
77	BR	INFINITI INTELLIGENT KEY SYSTEM
78	LG	INFINITI INTELLIGENT KEY SYSTEM
79	W	INFINITI INTELLIGENT KEY SYSTEM
80	R	INFINITI INTELLIGENT KEY SYSTEM
81	Y	INFINITI INTELLIGENT KEY SYSTEM
82	BR	INFINITI INTELLIGENT KEY SYSTEM
83	LG	INFINITI INTELLIGENT KEY SYSTEM
84	W	INFINITI INTELLIGENT KEY SYSTEM
85	P	INFINITI INTELLIGENT KEY SYSTEM



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INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS

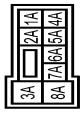
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[WITH INTELLIGENT KEY SYSTEM]

INFINITI VEHICLE IMMOBILIZER SYSTEM

Terminal Color Of Wire No.	Signal Name [Specification]	Terminal Color Of Wire No.	Signal Name [Specification]	Terminal Color Of Wire No.	Signal Name [Specification]	Terminal Color Of Wire No.	Signal Name [Specification]
86 P	-	19 W	-	1 Y	-	36 P	-
87 V	-	20 GR	-	2 BR	-	37 G	-
89 GR	-	21 L	-	3 -	-	38 G	-
90 SHIELD	-	22 C	-	4 V	-	39 -	-
91 N	-	23 W	-	5 B	-	40 P	-
92 Y	-	24 P	-	6 Y	-	54 -	-
93 V	-	25 BR	-	7 R	-	55 Y	-
94 LG	-	26 R	-	8 P	-	56 -	-
95 BG	-	27 L	-	9 GR	-	57 -	-
96 P	-	28 Y	-	10 B	-	58 -	-
97 R	-	29 V	-				
98 SHIELD	-	30 GR	-				
99 L	-	31 V	-				
100 P	-	32 LG	-				
		33 GR	-				
		34 G	-				
		35 Y	-				
		40 BG	-				
		41 SB	-				
		42 P	-				
		43 BR	-				
		44 BG	-				

Connector No.	F1	Connector No.	F51
Connector Name	WIRE TO WIRE	Connector Name	A/T ASSEMBLY
Connector Type	SA43HB510-SU2	Connector Type	BK10FG-NATY



Connector No.	F1	Connector No.	F51
Connector Name	STOP/LAMP SWITCH	Connector Name	TCM(TRANSMISSION CONTROL MODULE)
Connector Type	MID4FW-LC	Connector Type	SP10FG



Connector No.	F1	Connector No.	F51
Connector Name	INFINITI VEHICLE IMMOBILIZER SYSTEM	Connector Name	INFINITI VEHICLE IMMOBILIZER SYSTEM
Connector Type	NS50FW-MZ	Connector Type	NS50FW-CS



Terminal Color Of Wire No.	Signal Name [Specification]	Terminal Color Of Wire No.	Signal Name [Specification]
19 W	-	1 Y	-
20 GR	-	2 BR	-
21 P	-	3 -	-
22 C	-	4 V	-
23 W	-	5 B	-
24 P	-	6 Y	-
25 BR	-	7 R	-
26 R	-	8 P	-
27 L	-	9 GR	-
28 Y	-	10 B	-

Terminal Color Of Wire No.	Signal Name [Specification]	Terminal Color Of Wire No.	Signal Name [Specification]
19 W	-	1 Y	-
20 GR	-	2 BR	-
21 P	-	3 -	-
22 C	-	4 V	-
23 W	-	5 B	-
24 P	-	6 Y	-
25 BR	-	7 R	-
26 R	-	8 P	-
27 L	-	9 GR	-
28 Y	-	10 B	-



Terminal Color Of Wire No.	Signal Name [Specification]	Terminal Color Of Wire No.	Signal Name [Specification]
19 W	-	1 Y	-
20 GR	-	2 BR	-
21 P	-	3 -	-
22 C	-	4 V	-
23 W	-	5 B	-
24 P	-	6 Y	-
25 BR	-	7 R	-
26 R	-	8 P	-
27 L	-	9 GR	-
28 Y	-	10 B	-

Terminal Color Of Wire No.	Signal Name [Specification]	Terminal Color Of Wire No.	Signal Name [Specification]
19 W	-	1 Y	-
20 GR	-	2 BR	-
21 P	-	3 -	-
22 C	-	4 V	-
23 W	-	5 B	-
24 P	-	6 Y	-
25 BR	-	7 R	-
26 R	-	8 P	-
27 L	-	9 GR	-
28 Y	-	10 B	-



Terminal Color Of Wire No.	Signal Name [Specification]	Terminal Color Of Wire No.	Signal Name [Specification]
19 W	-	1 Y	-
20 GR	-	2 BR	-
21 P	-	3 -	-
22 C	-	4 V	-
23 W	-	5 B	-
24 P	-	6 Y	-
25 BR	-	7 R	-
26 R	-	8 P	-
27 L	-	9 GR	-
28 Y	-	10 B	-

Terminal Color Of Wire No.	Signal Name [Specification]	Terminal Color Of Wire No.	Signal Name [Specification]
19 W	-	1 Y	-
20 GR	-	2 BR	-
21 P	-	3 -	-
22 C	-	4 V	-
23 W	-	5 B	-
24 P	-	6 Y	-
25 BR	-	7 R	-
26 R	-	8 P	-
27 L	-	9 GR	-
28 Y	-	10 B	-



Terminal Color Of Wire No.	Signal Name [Specification]	Terminal Color Of Wire No.	Signal Name [Specification]
19 W	-	1 Y	-
20 GR	-	2 BR	-
21 P	-	3 -	-
22 C	-	4 V	-
23 W	-	5 B	-
24 P	-	6 Y	-
25 BR	-	7 R	-
26 R	-	8 P	-
27 L	-	9 GR	-
28 Y	-	10 B	-



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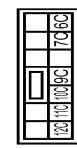
INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INFINITI VEHICLE IMMOBILIZER SYSTEM

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS321W CS



Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH800WW-CS16-TM4

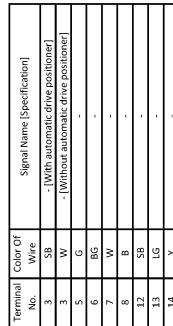


Terminal Color Of No.	Signal Name [Specification]
10C L	G
11C B	-
12C EG	-
6C R	V
7C B	-
9C EG	-

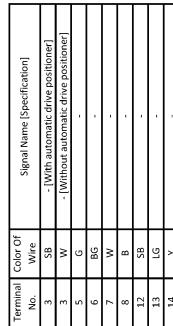
Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH800WW-CS16-TM4



Terminal Color Of No.	Signal Name [Specification]
17 SB	-
18 V	-
20 BG	-
21 L	-
22 W	-
23 P	-
24 BR	-
25 Y	-
26 V	-
27 G	-
28 G	-
31 L	-
32 G	-
33 B	-
34 W	-
35 R	-
36 SHIELD	-
37 V	-
38 BG	-
39 BR	-
41 W	-
42 BG	-
43 BG	-
45 W	-
49 L	-
50 P	-
51 BR	-
54 Y	-
57 G	-
59 W	-
60 L	-
61 G	-
62 SB	-
63 G	-
64 B	-
65 R	-
66 W	-
67 SHIELD	-
68 T	-
69 GR	-
70 LG	-
71 LG	-
72 Y	-
73 SB	-
74 BR	-
74 L	-
75 G	-
76 GR	-
76 W	-
78 W	-
77 P	-
83 V	-
77 R	- (With I/C)
78 L	- (With I/C)
79 W	- (Without I/C)
79 Y	- (Without I/C)
80 SB	- (Without I/C)
81 SB	-
82 SB	-
83 V	-
84 G	-
85 L	-
86 P	-
87 W	-
89 GR	-
90 SHIELD	-
91 W	-
92 Y	-
93 BR	-
94 P	-
95 GR	-
96 W	-
97 L	-
98 SHIELD	-
99 V	-
100 SB	-
101 SB	-
102 SB	-
103 SB	-
104 SB	-
105 SB	-
106 SB	-
107 SB	-
108 SB	-
109 SB	-
110 SB	-
111 SB	-
112 SB	-
113 SB	-
114 SB	-
115 SB	-
116 SB	-
117 SB	-
118 SB	-
119 SB	-
120 SB	-
121 SB	-
122 SB	-
123 SB	-
124 SB	-
125 SB	-
126 SB	-
127 SB	-
128 SB	-
129 SB	-
130 SB	-
131 SB	-
132 SB	-
133 SB	-
134 Y	-
135 V	-



Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH800WW-CS15-TM4



INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INFINITI VEHICLE IMMOBILIZER SYSTEM

Connector No.		Signal Name [Specification]		Terminal Color Of Wire No.		Signal Name [Specification]		Terminal Color Of Wire No.		Signal Name [Specification]		Terminal Color Of Wire No.		Signal Name [Specification]		Terminal Color Of Wire No.		Signal Name [Specification]		Terminal Color Of Wire No.		Signal Name [Specification]	
89	BR	-	-	3	LG	-	-	1	GR	BATTERY/POWER SUPPLY	-	5	L	MANUAL MODE SHIFT UP SIGNAL	-	17	GR	ACC POWER SUPPLY	-	41	V	ACC POWER SUPPLY	-
90	EG	-	-	4	B	-	-	2	LG	COMMUNICATION SIGNAL (AMP->AMP)	-	6	R	COMMUNICATION SIGNAL (AMP->METER)	-	18	Y	FUEL LEVEL SENSOR SIGNAL	-	42	Y	FUEL LEVEL SENSOR SIGNAL	-
91	G	-	-	5	B	-	-	3	GR	COMMUNICATION SIGNAL (AMP->AMP)	-	7	GR	VEHICLE SPEED SIGNAL (PULSE)	-	19	R	WIPER SWITCH SIGNAL (PULSE)	-	43	R	WIPER SWITCH SIGNAL (PULSE)	-
92	V	-	-	6	L	-	-	4	GR	COMMUNICATION SIGNAL (AMP->AMP)	-	8	L	SEAT BELT FAULT SWITCH SIGNAL (DRIVER SIDE)	-	20	Y	WASH LEVEL SWITCH SIGNAL (PASSENGER SIDE)	-	44	LG	WASH LEVEL SWITCH SIGNAL (PASSENGER SIDE)	-
93	BR	-	-	7	V	-	-	5	B	GROUND	-	9	SB	MANUAL MODE SIGNAL	-	21	LG	WASH LEVEL SWITCH SIGNAL (DRIVER SIDE)	-	45	P	AMBIENT SENSORS SIGNAL	-
94	Y	-	-	8	G	-	-	6	P	ALTERNATOR SIGNAL	-	10	W	NON-MANUAL MODE SIGNAL	-	22	LG	WASH LEVEL SWITCH SIGNAL (PASSENGER SIDE)	-	46	—	—	-
95	G	-	-	9	SB	-	-	7	BR	AIR BAG SIGNAL	-	11	G	COMMUNICATION SIGNAL (CD->AMP)	-	23	Y	AT SNOW SWITCH SIGNAL	-	47	—	—	-
96	W	-	-	10	Y	-	-	8	BR	SECURITY SIGNAL	-	12	BR	ON/OFF SIGNAL	-	24	Y	MANUAL MODE SHIFT DOWN SIGNAL	-	48	—	—	-
98	W	-	-	11	SB	-	-	9	BR	GROUND	-	13	BR	MANUAL MODE SHIFT DOWN SIGNAL	-	25	Y	MANUAL MODE SHIFT DOWN SIGNAL	-	49	—	—	-
99	R	-	-	12	P	-	-	10	BR	METER CONTROL SWITCH GROUND	-	14	BR	IGNITION SIGNAL	-	26	Y	MANUAL MODE SHIFT DOWN SIGNAL	-	50	—	—	-
		-	-	13	Y	-	-	11	BR	ILL.GND	-	15	B	ILL.GND	-	27	LG	VEHICLE SPEED SIGNAL (B-PULSE)	-	51	—	—	-
		-	-	14	Y	-	-	12	BR	ILL.GND	-	16	B	ILL.GND	-	28	W	VEHICLE SPEED SIGNAL (B-PULSE)	-	52	—	—	-
		-	-	15	Y	-	-	13	BR	ILL.GND	-	17	BR	ILL.GND	-	29	SB	SEAT BELT FAULT SWITCH SIGNAL (DRIVER SIDE)	-	53	—	—	-
		-	-	16	Y	-	-	14	BR	ILL.GND	-	18	BR	ILL.GND	-	30	G	SEAT BELT FAULT SWITCH SIGNAL (PASSENGER SIDE)	-	54	—	—	-
		-	-	17	Y	-	-	15	BR	ILL.GND	-	19	BR	ILL.GND	-	31	L	WASH LEVEL SWITCH SIGNAL	-	55	—	—	-
		-	-	18	Y	-	-	16	BR	ILL.GND	-	20	BR	ILL.GND	-	32	LG	ILLUMINATION CONTROL SIGNAL	-	56	—	—	-
		-	-	19	Y	-	-	17	BR	ILL.GND	-	21	BR	ILL.GND	-	33	B	ILLUMINATION CONTROL SIGNAL	-	57	—	—	-
		-	-	20	Y	-	-	18	BR	ILL.GND	-	22	BR	ILL.GND	-	34	LG	ILLUMINATION CONTROL SIGNAL	-	58	—	—	-
		-	-	21	Y	-	-	19	BR	ILL.GND	-	23	BR	ILL.GND	-	35	LG	ILLUMINATION CONTROL SIGNAL	-	59	—	—	-
		-	-	22	Y	-	-	20	BR	ILL.GND	-	24	BR	ILL.GND	-	36	LG	ILLUMINATION CONTROL SIGNAL	-	60	—	—	-
		-	-	23	Y	-	-	21	BR	ILL.GND	-	25	BR	ILL.GND	-	37	LG	ENTER SWITCH SIGNAL	-	61	—	—	-
		-	-	24	Y	-	-	22	BR	ILL.GND	-	26	BR	ILL.GND	-	38	L	TRUNK ABS RELEASE SWITCH SIGNAL	-	62	—	—	-
		-	-	25	Y	-	-	23	BR	ILL.GND	-	27	BR	ILL.GND	-	39	P	ILLUMINATION CONTROL SWITCH SIGNAL (-)	-	63	—	—	-
		-	-	26	Y	-	-	24	BR	ILL.GND	-	28	BR	ILL.GND	-	40	BG	ILLUMINATION CONTROL SWITCH SIGNAL (+)	-	64	—	—	-

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INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INFINITI VEHICLE IMMOBILIZER SYSTEM

Terminal No.	Wire	Signal Name [Specification]	Terminal Color Of	Wire	Signal Name [Specification]
46	BG	SUNLOAD SENSOR SIGNAL	52	L	-
47	G	EXHAUST GAS OUTSIDE AIR DETECTING SENSOR SIGNAL	55	W	-
53	G	IGNITION POWER SUPPLY	56	B	-
54	Y	BATTERY POWER SUPPLY	57	R	-
55	B	GROUND	58	G	-
56	L	CAN-H	59	SHIELD	-
57	W	BRAKE FLUID LEVEL SWITCH SIGNAL	60	V	-
58	BR	FUEL LEVEL SENSOR GROUND	61	LG	-
59	GR	INTAKE SENSOR GROUND	62	BR	-
60	L	IN-VEHICLE SENSOR GROUND	63	L	-
61	BR	AMBIENT SENSOR GROUND	64	LG	-
62	SB	SUNLOAD SENSOR GROUND	65	B	-
63	R	-	66	R	-
65	BG	ECU SIGNAL	67	W	-
69	L	AUXILIARY MOTOR POWER SUPPLY	68	SHIELD	-
70	R	EACH DOOR MOTOR POWER SUPPLY	69	V	-
71	B	GROUND	70	Y	-
72	P	CRH-L	71	SB	-
			72	W	-
			73	G	-
			75	W	-
			80	V	-
			81	SB	-
			82	Y	-
			83	P	-
			84	R	-
			85	L	-
			86	BG	-
			87	L	-
			88	P	-
			91	V	-
			92	G	-
			94	G	-
			95	W	-
			96	G	-
			97	Y	-
			98	BR	-
			99	P	[Without BOSE audio]
			99	P	[With BOSE audio]
			99	V	-
			100	L	-
			100	SB	-
			100	SB	-
			101	BR	-
			102	LG	-
			103	BR	-
			104	BR	-
			105	BR	-
			105	LG	-
			105	W	-
			105	BR	-
			107	BR	-
			108	Y	-

JRKWE4542GB

INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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INFINITI VEHICLE IMMOBILIZER SYSTEM

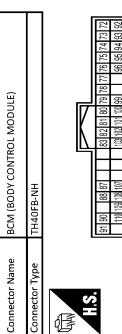
Connector No.	M121
Connector Name	BCM(BODY CONTROL MODULE)
Connector Type	TH40F-GNM



Signal Name [Specification]

Terminal No.	78	Y	ROOM ANTI- ROOM ANTI+
	79	BR	NATS ANTI AMP.
	80	GR	NATS ANTI AMP.
	81	W	IGN RELAY/ECU CONT.
	82	R	KEYLESS ENTRY RECEIVER COMM
	83	Y	COMBI SW INPUTS
	87	BR	COMBI SW INPUT 3
	88	V	CANL
	90	P	COMBI SW INPUT 3
	91	L	CATH
	92	LG	KEY SLOT TLL CONT
	93	V	ON IND
	94	Y	PUDDLE LAMP CONT
	95	BR	A/C HEAT/AC SELECTOR POWER SUPPLY
	96	GR	SHIFT TR.
	97	R	PASSENGER DOOR REQUEST SW
	100	S	DRIVER DOOR REQUEST SW
	101	SB	DRIVER FAN MOTOR RELAY CONT
	102	IG	BLOWER FAN MOTOR RECEIVER POWER SUPPLY
	103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
	107	LG	COMBI SW INPUT 1
	108	R	COMBI SW INPUT 4
	109	Y	COMBI SW INPUT 2
	110	G	HAZARD SW
	65	IG	REAR WIPER STOP POSITION
	66	R	BACK DOOR OPEN/RW
	67	GR	BACK DOOR OPEN/RW
	68	BR	REAR RH DOOR SW
	69	R	REAR LH DOOR SW

Terminal No.	M122
Connector Name	BCM(BODY CONTROL MODULE)
Connector Type	TH40F-BNH



Terminal No.	M123
Connector Name	BCM(BODY CONTROL MODULE)
Connector Type	TH40F-GNH



Terminal No.	1	W	Signal Name Specification
	2	V	
	3	L	
	4	B	
	5	G	
	7	R	
	8	SB	
	9	B	
	10	GR	
	11	R	

Terminal No.	137	BR	RECEIVER/SENSOR GND
	138	Y	TIRE PRESSURE RECEIVER/COMP
	139	L	SHFT N/P
	140	GR	SECURITY/IND LAMP/CONT
	141	G	COMBI SW OUTPUT 5
	142	IG	COMBI SW OUTPUT 1
	143	P	COMBI SW OUTPUT 2
	144	G	COMBI SW OUTPUT 3
	145	L	COMBI SW OUTPUT 4
	146	SB	DRIVER DOOR SW
	150	LG	REAR WINDOW DEFOGGER RELAY/CONT
	151	G	

Terminal No.	1	W	Signal Name Specification
	2	V	
	3	L	
	4	B	
	5	G	
	7	R	
	8	SB	
	9	B	
	10	GR	
	11	R	

Terminal No.	137	BR	RECEIVER/SENSOR GND
	138	Y	TIRE PRESSURE RECEIVER/COMP
	139	L	SHFT N/P
	140	GR	SECURITY/IND LAMP/CONT
	141	G	COMBI SW OUTPUT 5
	142	IG	COMBI SW OUTPUT 1
	143	P	COMBI SW OUTPUT 2
	144	G	COMBI SW OUTPUT 3
	145	L	COMBI SW OUTPUT 4
	146	SB	DRIVER DOOR SW
	150	LG	REAR WINDOW DEFOGGER RELAY/CONT
	151	G	

Terminal No.	1	W	Signal Name Specification
	2	V	
	3	L	
	4	B	
	5	G	
	7	R	
	8	SB	
	9	B	
	10	GR	
	11	R	

Terminal No.	1	W	Signal Name Specification
	2	V	
	3	L	
	4	B	
	5	G	
	7	R	
	8	SB	
	9	B	
	10	GR	
	11	R	

Terminal No.	1	W	Signal Name Specification
	2	V	
	3	L	
	4	B	
	5	G	
	7	R	
	8	SB	
	9	B	
	10	GR	
	11	R	

Terminal No.	1	W	Signal Name Specification
	2	V	
	3	L	
	4	B	
	5	G	
	7	R	
	8	SB	
	9	B	
	10	GR	
	11	R	

Terminal No.	1	W	Signal Name Specification
	2	V	
	3	L	
	4	B	
	5	G	
	7	R	
	8	SB	
	9	B	
	10	GR	
	11	R	

Terminal No.	1	W	Signal Name Specification
	2	V	
	3	L	
	4	B	
	5	G	
	7	R	
	8	SB	
	9	B	
	10	GR	
	11	R	

Terminal No.	1	W	Signal Name Specification
	2	V	
	3	L	
	4	B	
	5	G	
	7	R	
	8	SB	
	9	B	
	10	GR	
	11	R	

Terminal No.	1	W	Signal Name Specification
	2	V	
	3	L	
	4	B	
	5	G	
	7	R	
	8	SB	
	9	B	
	10	GR	
	11	R	

Terminal No.	1	W	Signal Name Specification
	2	V	
	3	L	
	4	B	
	5	G	
	7	R	
	8	SB	
	9	B	
	10	GR	
	11	R	

Terminal No.	1	W	Signal Name Specification
	2	V	
	3	L	
	4	B	
	5	G	
	7	R	
	8	SB	
	9	B	
	10	GR	
	11	R	

Terminal No.	1	W	Signal Name Specification
	2	V	
	3	L	
	4	B	
	5	G	
	7	R	
	8	SB	
	9	B	
	10	GR	
	11	R	

Terminal No.	1	W	Signal Name Specification
	2	V	
	3	L	
	4	B	
	5	G	
	7	R	
	8	SB	
	9	B	
	10	GR	
	11	R	

Terminal No.	1	W	Signal Name Specification
	2	V	
	3	L	
	4	B	
	5	G	

VEHICLE SECURITY SYSTEM

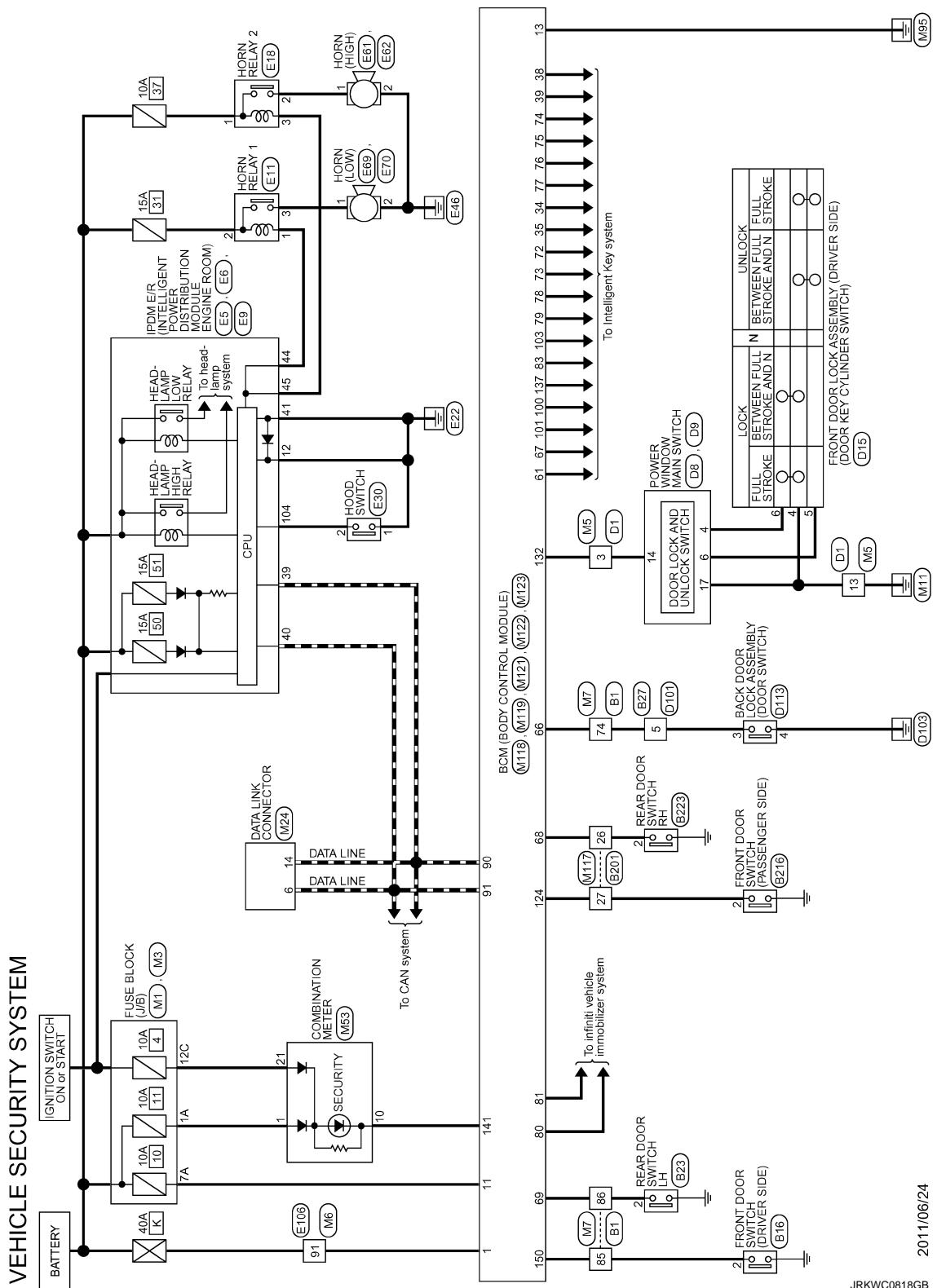
< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM

Wiring Diagram - VEHICLE SECURITY SYSTEM -

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VEHICLE SECURITY SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM									
Connector No.	Signal Name [Specification]	Terminal Color Of Wire	No.	Color Of Wire	No.	Signal Name [Specification]	Terminal Color Of Wire	No.	Signal Name [Specification]
161	WIRE TO WIRE	P	60	P	-				
		L	61	L	-				
		SHIELD	62	-	-				
		R	63	R	-				
	THIGHW-CS16-TM4								
			64	G	-				
			65	SHIELD	-				
			66	W	-				
			67	V	-				
			68	SB	-				
			69	SHIELD	-				
			70	W	-				
			73	SB	-				
			74	L	-				
			75	W	-				
			76	BR	-				
			77	R	-				
			78	P	-				
			79	GR	-				
			83	BS	-				
			85	V	-				
			86	LG	-				
			87	Y	-				
			88	R	-				
			89	B	-				
			90	BG	-				
			91	G	-				
			92	BR	-				
			93	G	-				
			94	SB	-				
			95	G	-				
			96	Y	-				
			98	W	-				
			99	GR	-				
			31	SHIELD	-				
			32	W	-				
			33	SB	-				
			34	L	-				
			35	P	-				
			36	L	-				
			37	P	-				
			38	BP	-				
			39	Y	-				
			40	Y	-				
			45	GR	-				
			46	LG	-				
			47	SB	-				
			49	G	-				
			50	V	-				
			51	R	-				
			52	Y	-				
			55	G	-				
			56	R	-				
			57	W	-				
			58	B	-				
			59	SHIELD	-				
			60	LG	-				
			61	W	-				

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VEHICLE SECURITY SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM

Connector No.		Signal Name [Specification]		Terminal Color Of Wire No.		Signal Name [Specification]	
62	BR	-	-	20	W	-	-
63	P	-	-	21	O	-	-
64	L	-	-	22	P	-	-
65	G	-	-	23	BR	-	-
66	P	-	-	24	V	-	-
67	L	-	-	25	GR	-	-
68	SHIELD	-	-	26	Y	-	-
69	V	-	-	27	B	-	-
70	Y	-	-	28	SHIELD	-	-
71	S8	-	-	29	LG	-	-
72	W	-	-	30	G	-	-
73	BR	-	-	31	W	-	-
75	Y	-	-	32	G	-	-
80	V	-	-	33	L	-	-
81	S8	-	-	34	SB	-	-
82	LG	-	-	35	R	-	-
83	P	-	-	36	LG	-	-
84	R	-	-	37	R	-	-
85	L	-	-	38	P	-	-
86	EG	-	-	39	O	-	-
87	L	-	-	40	BR	-	-
88	P	-	-	41	L	-	-
91	V	-	-	42	GR	-	-
92	R	-	-	43	BR	-	-
94	R	-	-	43	O	-	-
95	S8	-	-	44	GR	-	-
96	G	-	-	44	D	-	-
97	G	-	-	45	W	-	-
98	R	-	-	45	G	-	-
99	P	-	-	46	Y	-	-
100	L	-	-	46	G	-	-
		-	-	46	V	-	-
		-	-	49	GR	-	-
		-	-	50	B	-	-
		-	-	52	R	-	-
		-	-	53	SB	-	-
		-	-	54	O	-	-
		-	-	55	Y	-	-
		-	-				

Connector No.		Signal Name [Specification]		Terminal Color Of Wire No.		Signal Name [Specification]	
8223	BR	-	-	20	W	-	-
	P	-	-	21	O	-	-
	L	-	-	22	P	-	-
	G	-	-	23	BR	-	-
	P	-	-	24	V	-	-
	L	-	-	25	GR	-	-
	SHIELD	-	-	26	Y	-	-
	V	-	-	27	B	-	-
	Y	-	-	28	SHIELD	-	-
	S8	-	-	29	LG	-	-
	W	-	-	30	G	-	-
	BR	-	-	31	W	-	-
	Y	-	-	32	G	-	-
	V	-	-	33	L	-	-
	SB	-	-	34	SB	-	-
	R	-	-	35	R	-	-
	LG	-	-	36	LG	-	-
	P	-	-	37	R	-	-
	O	-	-	38	P	-	-
	BR	-	-	39	O	-	-
	L	-	-	40	BR	-	-
	GR	-	-	41	L	-	-
	Y	-	-	42	GR	-	-
	B	-	-	43	BR	-	-
	GR	-	-	43	O	-	-
	D	-	-	44	GR	-	-
	WIRE TO WIRE	-	-	44	D	-	-
	THDfW-CS15	-	-	45	W	-	-
		-	-	45	G	-	-
		-	-	46	Y	-	-
		-	-	46	G	-	-
		-	-	46	V	-	-
		-	-	49	GR	-	-
		-	-	50	B	-	-
		-	-	52	R	-	-
		-	-	53	SB	-	-
		-	-	54	O	-	-
		-	-	55	Y	-	-
		-	-				

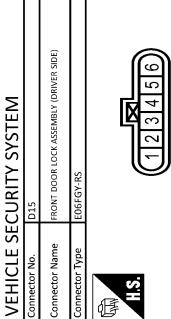
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VEHICLE SECURITY SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM



Connector No.	D113
Connector Name	FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE)
Connector Type	MOFET45S



Terminal No.	Color Of Wire	Signal Name [Specification]
1	IG	-
2	P	-
3	L	-
4	B	-
5	Y	-
6	V	-

Connector No.	E6
Connector Name	HORN RELAY 1
Connector Type	Relay_24VSL_7990A

Terminal No.	Color Of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	BW	-
43	Sb	-
44	BR	-
45	G	-
46	R	-

Connector No.	E5
Connector Name	POWER INTELLIGENT POWER SYSTEM/HORN MODULE ENGINE ROOM
Connector Type	TH10FW-CS12-14A-IV

Terminal No.	Color Of Wire	Signal Name [Specification]
1	2	-
2	3	-
3	4	-
4	5	-
5	6	-
6	7	-
7	8	-
8	9	-
9	10	-
10	11	-
11	12	-
12	13	-
13	14	-
14	15	-
15	16	-
16	17	-
17	18	-
18	19	-
19	20	-
20	21	-
21	22	-
22	23	-
23	24	-
24	25	-
25	26	-
26	27	-
27	28	-
28	29	-
29	30	-
30	31	-
31	32	-
32	33	-
33	34	-
34	35	-

Connector No.	E9
Connector Name	POWER INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH15FW-NHN

Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
2	Y	-
3	G	-

Connector No.	E10
Connector Name	WIRE TO WIRE
Connector Type	MOFETW-LC

Terminal No.	Color Of Wire	Signal Name [Specification]
4	Y	-
5	L	-
6	R	-
7	B	-
8	BW	-
9	Y	-
10	W	-
11	G	-
12	BR	-
13	LG	-
14	W	-
15	R	-
16	LG	-
17	W	-
18	R	-
19	LG	-
20	W	-
21	R	-
22	LG	-
23	W	-
24	R	-
25	LG	-
26	W	-
27	R	-
28	LG	-
29	W	-
30	R	-
31	LG	-

Terminal No.	Color Of Wire	Signal Name [Specification]
91	P	-
92	BS	-
97	V	-

Connector No.	E11
Connector Name	HORN RELAY 1
Connector Type	Relay_24VSL_7990A

Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
2	Y	-
3	G	-

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VEHICLE SECURITY SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM			
Connector No.	E80	Terminal Color Of Wire	Signal Name [Specification]
Connector Name	HORN SWITCH	2	B
Connector Type	RH021B		
Connector No.	E69	Terminal Color Of Wire	Signal Name [Specification]
Connector Name	HORN (LOW)	1	R
Connector Type	POTFRA	2	W
Terminal Color Of Wire	Signal Name [Specification]		
1	G		
2	LG		
Connector No.	E61	Terminal Color Of Wire	Signal Name [Specification]
Connector Name	HORN (HIGH)	1	G
Connector Type	POTFRA		
Terminal Color Of Wire	Signal Name [Specification]		
1			
2			
Connector No.	E70	Terminal Color Of Wire	Signal Name [Specification]
Connector Name	HORN (LOW)	1	R
Connector Type	POTFRA	2	W
Terminal Color Of Wire	Signal Name [Specification]		
1	Y		
2			
Connector No.	E62	Terminal Color Of Wire	Signal Name [Specification]
Connector Name	HORN (HIGH)	1	Y
Connector Type	POTFRA	2	B
Connector No.	E106	Terminal Color Of Wire	Signal Name [Specification]
Connector Name	WHITE TO WIRE	1	
Connector Type	THB01W-CS16/IM4	2	
43	BR	45	W
49	L	50	P
51	L	52	
54	BG	55	W
56	BR	57	
60	LG	61	
62	SB	63	W
64	B	65	
66	G	67	
68	Y	69	
70	LG	71	
72	R	73	
74	B	75	
76	BR	77	
78	L	79	
79	LG	80	
81	R	82	
83	SB	84	
85	G	86	
87	P	88	
89	GR	90	
91	SHIELD	92	
93	W	94	
95	Y	96	
97	V	98	
99	LG	100	
101	BG	102	
103	W	104	
105	G	106	
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VEHICLE SECURITY SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

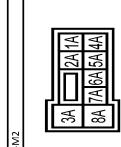
[WITH INTELLIGENT KEY SYSTEM]

Connector No.	M5	Wire To Wire	Color Of Wire	Signal Name (Specification)	Terminal No.	Wire To Wire	Color Of Wire	Signal Name (Specification)
97 R SHIELD	-	-	-	-	37 BR	-	-	-
98 L	-	-	-	-	38 P	-	-	-
99 P	-	-	-	-	39 BG	-	-	-
100	-	-	-	-	40 SB	-	-	-
Connector No.	TH40NMW-CS15				41 L	-	-	-
Connector Name	M1				42 R	-	-	-
Connector Type	FUSE BLOCK (J/B)				43 BR	-	-	-
Connector No.	M5				44 V	-	-	-
Connector Name	NS56FW-M2				45 G	-	-	-
Connector Type					46 G	SB	-	-
					46 V	-	-	-
					47 P	-	-	-
					48 B	-	-	-
					49 R	-	-	-
					50 B	-	-	-
					51 Y	-	-	-
					52 LG	-	-	-
					53 RG	-	-	-
					54 BG	-	-	-
					55 SB	-	-	-
					56 BR	-	-	-
					57 BG	-	-	-
					58 W	-	-	-
					59 L	-	-	-
					60 GR	-	-	-
					61 R	-	-	-
					62 G	-	-	-
					63 SB	-	-	-
					64 B	-	-	-
					65 W	-	-	-
					66 R	-	-	-
					67 SHIELD	-	-	-
					68 Y	-	-	-
					69 GR	-	-	-
					70 LG	-	-	-
					71 LG	-	-	-
					72 Y	-	-	-
					73 SB	-	-	-
					74 BR	-	-	-
					75 G	-	-	-
					76 GR	-	-	-
					77 W	-	-	-
					78 R	-	-	-
					79 Y	-	-	-
					80 L	-	-	-
					81 V	-	-	-
					82 BG	-	-	-
					83 SB	-	-	-
					84 Y	-	-	-
					85 P	-	-	-
					86 BG	-	-	-

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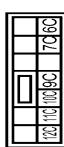
VEHICLE SECURITY SYSTEM

97 R SHIELD	-	-	-	-
98 L	-	-	-	-
99 P	-	-	-	-
100	-	-	-	-



Terminal No.	Color Of Wire	Signal Name (Specification)
1A GR	-	-
2A G	-	-
3A L	-	-
4A P	-	-
5A V	-	-
6A Y	-	-
7A R	-	-
8A L	-	-

Terminal No.	Color Of Wire	Signal Name (Specification)
19 Y	-	-
20 L	-	-
21 LG	-	-
22 L	-	-
23 G	-	-
24 Y	-	-
25 GR	-	-
26 R	-	-
27 W	-	-
28 SHIELD	-	-
29 Y	-	-
30 Y	-	-
31 R	-	-
32 BR	-	-
33 SB	-	-
34 Y	-	-
35 P	-	-
36 BG	-	-



Terminal No.	Color Of Wire	Signal Name (Specification)
1 W	-	-
2 R	-	-
3 B	-	-
4 SHIELD	-	-
5 G	-	-
6 Y	-	-
7 BR	-	-
8 LG	-	-
9 BR	-	-
10 R	-	-
11 BR	-	-
12 BG	-	-
13 L	-	-
14 R	-	-
15 P	-	-
16 V	-	-
17 SB	-	-
18 V	-	-
19 BG	-	-

Terminal No.	Color Of Wire	Signal Name (Specification)
20 P	-	-
21 SB	-	-
22 L	-	-
23 R	-	-
24 Y	-	-
25 V	-	-
26 BR	-	-
27 SB	-	-
28 R	-	-
29 Y	-	-
30 P	-	-
31 BG	-	-
32 SB	-	-
33 BR	-	-
34 Y	-	-
35 P	-	-
36 BG	-	-

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VEHICLE SECURITY SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM

Terminal No.		Color Of Wire	Signal Name [Specification]	Terminal No.	Color Of Wire	Signal Name [Specification]
79	W	-	-	92	V	-
79	Y	-	-	93	BR	-
80	S8	-	SHIELD	94	V	-
81	S8	-	21	95	G	-
82	S8	-	22	96	Y	-
83	V	-	24	98	Y	-
84	G	-	27	98	W	-
85	L	-	28	W	-	-
86	P	-	29	R	-	-
87	W	-	30	SHIELD	-	-
89	GR	-	31	L	-	-
90	SHIELD	-	32	P	-	-
91	W	-	33	S8	-	-
92	Y	-	34	L	-	-
93	BR	-	35	P	-	-
94	P	-	36	L	-	-
95	GR	-	37	P	-	-
96	W	-	38	BR	-	-
97	L	-	39	Y	-	-
98	SHIELD	-	44	L	-	-
99	V	-	45	GR	-	-
100	S8	-	46	LG	-	-
			47	S8	-	-
			49	V	-	-
			50	R	-	-
			60	P	-	-
			61	L	-	-
			62	SHIELD	-	-
			63	A	-	-
			64	G	-	-
			65	SHIELD	-	-
			66	S8	-	-
			67	V	-	-
			68	LG	-	-
			69	SHIELD	-	-
			70	W	-	-
			73	G	-	-
			74	R	-	-
			75	W	-	-
			76	W	-	-
			77	B	-	-
			78	P	-	-
			79	GR	-	-
			83	BR	-	-
			85	LG	-	-
			86	R	-	-
			87	Y	-	-
			88	W	-	-
			89	BR	-	-
			90	EG	-	-
			91	G	-	-
			13	LG	-	-
			14	Y	-	-
			15	G	-	-
			17	W	-	-
			18	S8	-	-

JRKWE4533GB

VEHICLE SECURITY SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM

Terminal [Color Of Wire]			Signal Name [Specification]		
10 W	P	-	TURN SIGNAL LH (FRONT)		
15 SB	V	-	(Without BOSE audio)		
16 V	L	-	(With BOSE audio)		
17 BR	Sb	-	(Without BOSE audio)		
26 BR	-	-	(With BOSE audio)		
27 LG	-	-			
28 T	-	-			
29 Y	-	-			
30 V	-	-			
31 R	-	-			
32 BR	-	-			
33 G	-	-			
51 R	-	-			
52 L	-	-			
55 W	-	-			
56 B	-	-			
57 A	-	-			
58 G	-	-			
59 SHIELD	-	-			
60 V	-	-			
61 LG	-	-			
62 BR	-	-			
63 L	-	-			
64 LG	-	-			
65 B	-	-			
66 R	-	-			
67 W	-	-			
68 SHIELD	-	-			
69 V	-	-			
70 Y	-	-			
71 SB	-	-			
72 W	-	-			
73 G	-	-			
75 W	-	-			
80 V	-	-			
81 SB	-	-			
82 Y	-	-			
83 P	-	-			
84 R	-	-			
85 L	-	-			
86 EG	-	-			
87 L	-	-			
88 P	-	-			
91 V	-	-			
92 G	-	-			
94 G	-	-			
95 W	-	-			
95 G	-	-			
97 Y	-	-			
98 BR	-	-			
99 P	-	-			
100 V	-	-			
101 L	-	-			
102 Sb	-	-			
103 R	-	-			
104 W	-	-			
105 B	-	-			
106 G	-	-			
107 Y	-	-			
108 BR	-	-			
109 R	-	-			
110 G	-	-			
111 W	-	-			
112 B	-	-			
113 G	-	-			
114 Y	-	-			
115 BR	-	-			
116 Sb	-	-			
117 R	-	-			
118 Y	-	-			
119 BR	-	-			
120 Sb	-	-			
121 R	-	-			
122 G	-	-			
123 Y	-	-			
124 BR	-	-			
125 Sb	-	-			
126 R	-	-			
127 G	-	-			
128 Y	-	-			
129 BR	-	-			
130 Sb	-	-			
131 R	-	-			
132 G	-	-			
133 Y	-	-			
134 BR	-	-			
135 Sb	-	-			
136 R	-	-			
137 G	-	-			
138 Y	-	-			
139 BR	-	-			
140 Sb	-	-			
141 R	-	-			
142 G	-	-			
143 Y	-	-			
144 BR	-	-			
145 Sb	-	-			
146 R	-	-			
147 G	-	-			
148 Y	-	-			
149 BR	-	-			
150 Sb	-	-			
151 R	-	-			
152 G	-	-			
153 Y	-	-			
154 BR	-	-			
155 Sb	-	-			
156 R	-	-			
157 G	-	-			
158 Y	-	-			
159 BR	-	-			
160 Sb	-	-			
161 R	-	-			
162 G	-	-			
163 Y	-	-			
164 BR	-	-			
165 Sb	-	-			
166 R	-	-			
167 G	-	-			
168 Y	-	-			
169 BR	-	-			
170 Sb	-	-			
171 R	-	-			
172 G	-	-			
173 Y	-	-			
174 BR	-	-			
175 Sb	-	-			
176 R	-	-			
177 G	-	-			
178 Y	-	-			
179 BR	-	-			
180 Sb	-	-			
181 R	-	-			
182 G	-	-			
183 Y	-	-			
184 BR	-	-			
185 Sb	-	-			
186 R	-	-			
187 G	-	-			
188 Y	-	-			
189 BR	-	-			
190 Sb	-	-			
191 R	-	-			
192 G	-	-			
193 Y	-	-			
194 BR	-	-			
195 Sb	-	-			
196 R	-	-			
197 G	-	-			
198 Y	-	-			
199 BR	-	-			
200 Sb	-	-			
201 R	-	-			
202 G	-	-			
203 Y	-	-			
204 BR	-	-			
205 Sb	-	-			
206 R	-	-			
207 G	-	-			
208 Y	-	-			
209 BR	-	-			
210 Sb	-	-			
211 R	-	-			
212 G	-	-			
213 Y	-	-			
214 BR	-	-			
215 Sb	-	-			
216 R	-	-			
217 G	-	-			
218 Y	-	-			
219 BR	-	-			
220 Sb	-	-			
221 R	-	-			
222 G	-	-			
223 Y	-	-			
224 BR	-	-			
225 Sb	-	-			
226 R	-	-			
227 G	-	-			
228 Y	-	-			
229 BR	-	-			
230 Sb	-	-			
231 R	-	-			
232 G	-	-			
233 Y	-	-			
234 BR	-	-			
235 Sb	-	-			
236 R	-	-			
237 G	-	-			
238 Y	-	-			
239 BR	-	-			
240 Sb	-	-			
241 R	-	-			
242 G	-	-			
243 Y	-	-			
244 BR	-	-			
245 Sb	-	-			
246 R	-	-			
247 G	-	-			
248 Y	-	-			
249 BR	-	-			
250 Sb	-	-			
251 R	-	-			
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253 Y	-	-			
254 BR	-	-			
255 Sb	-	-			
256 R	-	-			
257 G	-	-			
258 Y	-	-			
259 BR	-	-			
260 Sb	-	-			
261 R	-	-			
262 G	-	-			
263 Y	-	-			
264 BR	-	-			
265 Sb	-	-			
266 R	-	-			
267 G	-	-			
268 Y	-	-			
269 BR	-	-			
270 Sb	-	-			
271 R	-	-			
272 G	-	-			
273 Y	-	-			
274 BR	-	-			
275 Sb	-	-			
276 R	-	-			
277 G	-	-			
278 Y	-	-			
279 BR	-	-			
280 Sb	-	-			
281 R	-	-			
282 G	-	-			
283 Y	-	-			
284 BR	-	-			
285 Sb	-	-			
286 R	-	-			
287 G	-	-			
288 Y	-	-			
289 BR	-	-			
290 Sb	-	-			
291 R	-	-			
292 G	-	-			
293 Y	-	-			
294 BR	-	-			
295 Sb	-	-			
296 R	-	-			
297 G	-	-			
298 Y	-	-			
299 BR	-	-			
300 Sb	-	-			
301 R	-	-			
302 G	-	-			
303 Y	-	-			
304 BR	-	-			
305 Sb	-	-			
306 R	-	-			
307 G	-	-			
308 Y	-	-			
309 BR	-	-			
310 Sb	-	-			
311 R	-	-			
312 G	-	-			
313 Y	-	-			
314 BR	-	-			
315 Sb	-	-			
316 R	-	-			
317 G	-	-			
318 Y	-	-			
319 BR	-	-			
320 Sb	-	-			
321 R	-	-			
322 G	-	-			
323 Y	-	-			
324 BR	-	-			
325 Sb	-	-			
326 R	-	-			
327 G	-	-			
328 Y	-	-			
329 BR	-	-			
330 Sb	-	-			
331 R	-	-			
332 G	-	-			
333 Y	-	-			
334 BR	-	-			
335 Sb	-	-			
336 R	-	-			
337 G	-	-			
338 Y	-	-			
339 BR	-	-			
340 Sb	-	-			
341 R	-	-			
342 G	-	-			
343 Y	-	-			
344 BR	-	-			
345 Sb	-	-			
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347 G	-	-			
348 Y	-	-			
349 BR	-	-			
350 Sb	-	-			
351 R	-	-			
352 G	-	-			
353 Y	-	-			
354 BR	-	-			
355 Sb	-	-			
356 R	-	-			
357 G	-	-			
358 Y	-	-	</		

VEHICLE SECURITY SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM		
Terminal No.	Color of Wire	Signal Name (Specification)
113	P	OPICAL SENSOR
116	S8	STOP LAMP SW1
118	P	STOP LAMP SW2
119	S8	DR DOOR UNLOCK SENSOR
121	BR	REF SOFT SW
123	W	IGN F/B
124	LG	PASSENGER DOOR SW
132	BR	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW/LIPOWER
134	GR	LOCK IND
137	EG	RECEIVER/SENSOR GRID
138	Y	RECEIVER/SENSOR POWER SUPPLY
139	L	TIRE PRESSURE RECEIVER COMM
140	GR	SHUTT/N/P
141	G	SECURITY AND TAMPER
142	EG	COMBI SW OUTPUTS
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	S8	COMBI SW OUTPUT 4
150	LG	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

JRKWE4535GB

ECU DIAGNOSIS INFORMATION

BCM

Reference Value

INFOID:000000007689860

VALUES ON THE DIAGNOSIS TOOL

CONSULT MONITOR ITEM

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT	Off
	Front wiper switch INT	On
FR WIPER STOP	Front wiper is not in STOP position	Off
	Front wiper is in STOP position	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
RR WIPER ON	Other than rear wiper switch ON	Off
	Rear wiper switch ON	On
RR WIPER INT	Other than rear wiper switch INT	Off
	Rear wiper switch INT	On
RR WASHER SW	Rear washer switch OFF	Off
	Rear washer switch ON	On
RR WIPER STOP	Rear wiper is in STOP position	Off
	Rear wiper is not in STOP position	On
TURN SIGNAL R	Other than turn signal switch RH	Off
	Turn signal switch RH	On
TURN SIGNAL L	Other than turn signal switch LH	Off
	Turn signal switch LH	On
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	Off
	Lighting switch 1ST or 2ND	On
HI BEAM SW	Other than lighting switch HI	Off
	Lighting switch HI	On
HEAD LAMP SW 1	Other than lighting switch 2ND	Off
	Lighting switch 2ND	On
HEAD LAMP SW 2	Other than lighting switch 2ND	Off
	Lighting switch 2ND	On
PASSING SW	Other than lighting switch PASS	Off
	Lighting switch PASS	On
AUTO LIGHT SW	Other than lighting switch AUTO	Off
	Lighting switch AUTO	On
FR FOG SW	Front fog lamp switch OFF	Off
	Front fog lamp switch ON	On

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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off
DOOR SW-DR	Driver door closed	Off
	Driver door opened	On
DOOR SW-AS	Passenger door closed	Off
	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
	Rear LH door opened	On
DOOR SW-BK	Back door closed	Off
	Back door opened	On
CDL LOCK SW	Other than power door lock switch LOCK	Off
	Power door lock switch LOCK	On
CDL UNLOCK SW	Other than power door lock switch UNLOCK	Off
	Power door lock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
	Driver door key cylinder LOCK position	On
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off
	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
HAZARD SW	Hazard switch is OFF	Off
	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
	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
RKE-LOCK	LOCK button of the key is not pressed	Off
	LOCK button of the key is pressed	On
RKE-UNLOCK	UNLOCK button of the key is not pressed	Off
	UNLOCK button of the key is pressed	On
RKE-TR/BD	NOTE: The item is indicated, but not monitored.	Off
RKE-PANIC	PANIC button of the key is not pressed	Off
	PANIC button of the key is pressed	On
RKE-P/W OPEN	UNLOCK button of the key is not pressed	Off
	UNLOCK button of the key is pressed and held	On
RKE-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

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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V
	Dark outside of the vehicle	Close to 0 V
REQ SW -DR	Driver door request switch is not pressed	Off
	Driver door request switch is pressed	On
REQ SW -AS	Passenger door request switch is not pressed	Off
	Passenger door request switch is pressed	On
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Back door request switch is not pressed	Off
	Back door request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
	Push-button ignition switch (push switch) is pressed	On
IGN 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
BRAKE SW 1	The brake pedal is depressed when No. 7 fuse is blown	Off
	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
BRAKE SW 2	The brake pedal is not depressed	Off
	The brake pedal is depressed	On
DETE/CANCL SW	Selector lever in P position	Off
	Selector lever in any position other than P	On
SFT PN/N SW	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On
S/L -LOCK	NOTE: The item is indicated, but not monitored.	Off
S/L -UNLOCK	NOTE: The item is indicated, but not monitored.	Off
S/L RELAY-F/B	NOTE: The item is indicated, but not monitored.	Off
UNLK SEN -DR	Driver door is unlocked	Off
	Driver door is locked	On
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
	Push-button ignition switch (push-switch) is pressed	On
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
DETE SW -IPDM	Selector lever in any position other than P	Off
	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
SFT P -MET	Selector lever in any position other than P	Off
	Selector lever in P position	On

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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status
SFT N -MET	Selector lever in any position other than N	Off
	Selector lever in N position	On
ENGINE STATE	Engine stopped	Stop
	While the engine stalls	Stall
	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 speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
DOOR STAT-DR	Driver door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLOCK
DOOR STAT-AS	Passenger door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Driver side door is open after ignition switch is turned OFF (Shift position is in the P position)	Reset
	Ignition switch ON	Set
PRMT ENG STRT	The engine start is prohibited	Reset
	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
KEY SW -SLOT	The key is not inserted into key slot	Off
	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.	—
CONFIRM ID ALL	The key ID that the key slot receives does not accord with any key ID registered to BCM.	Yet
	The key ID that the key slot receives accords with any key ID registered to BCM.	Done
CONFIRM ID4	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	Yet
	The key ID that the key slot receives accords with the fourth key ID registered to BCM.	Done
CONFIRM ID3	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	Yet
	The key ID that the key slot receives accords with the third key ID registered to BCM.	Done

BCM

< 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
	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
	The key ID that the key slot receives accords with the first key ID registered to BCM.	Done
TP 4	The ID of fourth key is not registered to BCM	Yet
	The ID of fourth key is registered to BCM	Done
TP 3	The ID of third key is not registered to BCM	Yet
	The ID of third key is registered to BCM	Done
TP 2	The ID of second key is not registered to BCM	Yet
	The ID of second key is registered to BCM	Done
TP 1	The ID of first key is not registered to BCM	Yet
	The ID of first key is registered to BCM	Done
AIR PRESS FL	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 REGST FL1	ID of front LH tire transmitter is registered	Done
	ID of front LH tire transmitter is not registered	Yet
ID REGST FR1	ID of front RH tire transmitter is registered	Done
	ID of front RH tire transmitter is not registered	Yet
ID REGST RR1	ID of rear RH tire transmitter is registered	Done
	ID of rear RH tire transmitter is not registered	Yet
ID REGST RL1	ID of rear LH tire transmitter is registered	Done
	ID of rear LH tire transmitter is not registered	Yet
WARNING LAMP	Tire pressure indicator OFF	Off
	Tire pressure indicator ON	On
BUZZER	Tire pressure warning alarm is not sounding	Off
	Tire pressure warning alarm is sounding	On

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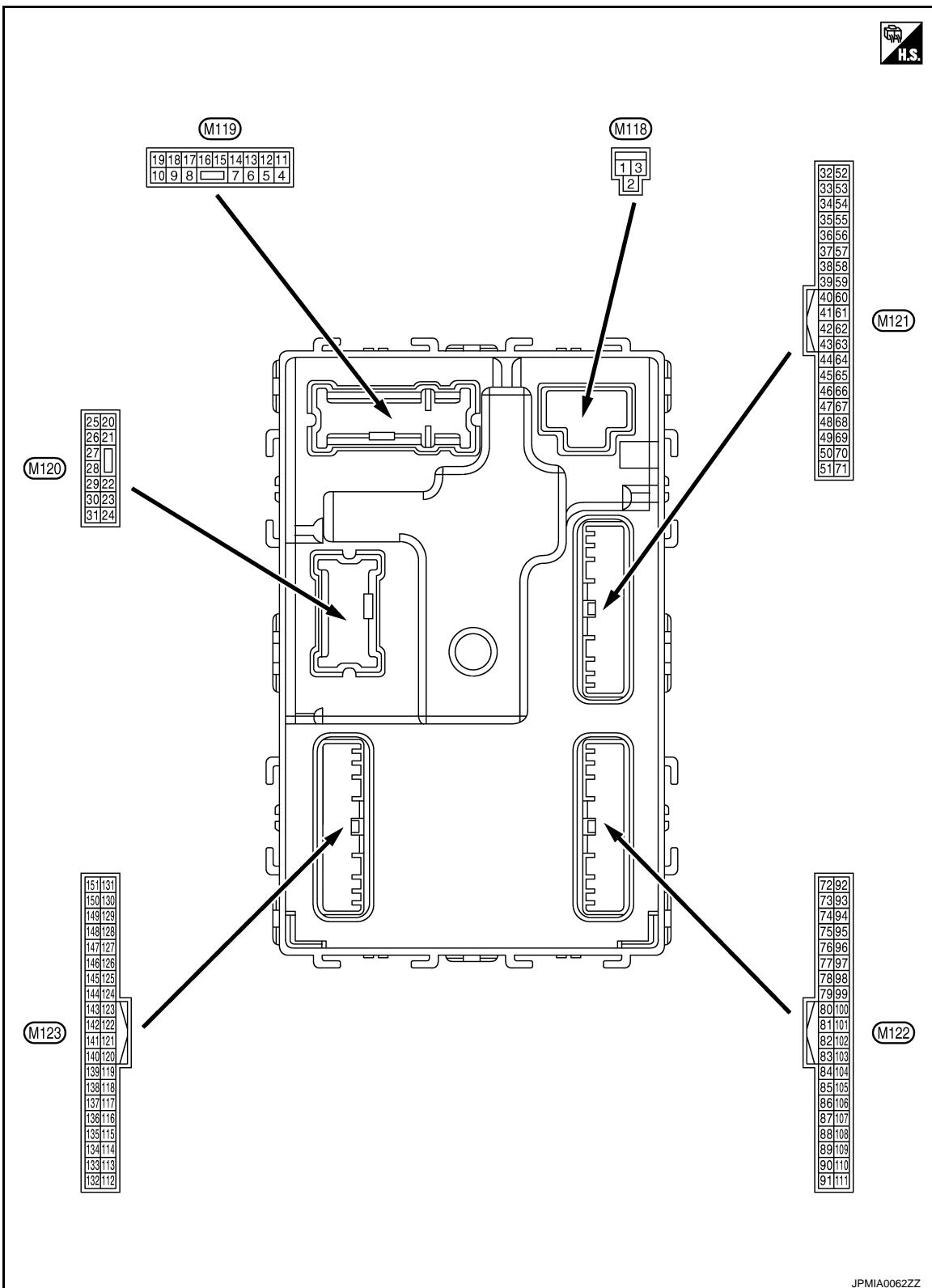
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TERMINAL LAYOUT

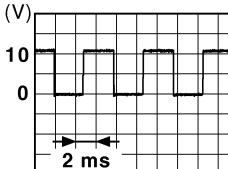


PHYSICAL VALUES

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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (W)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		Battery voltage
3 (Y)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		Battery voltage
4 (LG)	Ground	Interior room lamp power supply	Output	Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply)		0 V
				Interior room lamp battery saver is not activated. (Outputs the interior room lamp power supply)		Battery voltage
5 (L)	Ground	Passenger door UN- LOCK	Output	Passenger door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
7 (Y)	Ground	Step lamp	Output	Step lamp	ON	0 V
					OFF	Battery voltage
8 (V)	Ground	All doors, fuel lid LOCK	Output	All doors	LOCK (Actuator is activated)	Battery voltage
					Other than LOCK (Actuator is not activated)	0 V
9 (G)	Ground	Driver door, fuel lid UNLOCK	Output	Driver door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
10 (BR)	Ground	Rear RH door and rear LH door UN- LOCK	Output	Rear RH door and rear LH door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
11 (R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0 V
14 (W)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	OFF	0 V
					ON	<p>NOTE: When the illumination brightening/dimming level is in the neutral position</p>  <p>JSNIA0010GB</p>
15 (Y)	Ground	ACC indicator lamp	Output	Ignition switch	OFF or ON	Battery voltage
					ACC	0 V

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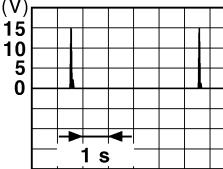
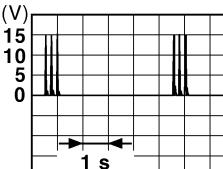
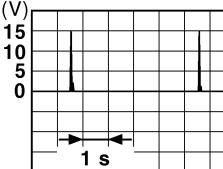
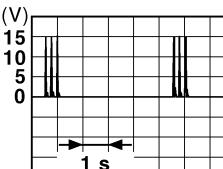
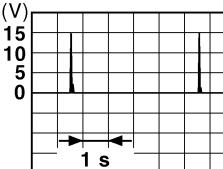
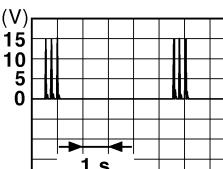
[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)	Description		Condition	Value (Approx.)
	Signal name	Input/ Output		
+	-			
17 (W)	Ground	Turn signal RH (Front)	Output	Ignition switch ON
18 (BG)	Ground	Turn signal LH (Front)	Output	Ignition switch ON
19 (V)	Ground	Room lamp timer control	Output	Interior room lamp
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON
23 (G)	Ground	Back door open	Output	Back door
25 (G)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON
26 (G)	Ground	Rear wiper	Output	Rear wiper

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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)	Description		Condition	Value (Approx.)		
	+	-	Signal name	Input/ Output		
34 (SB)	Ground	Luggage room antenna (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
35 (V)	Ground	Luggage room antenna (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
38 (B)	Ground	Back door antenna (-)	Output	When the back door opener request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

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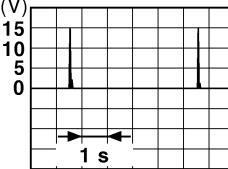
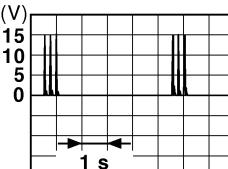
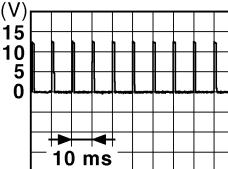
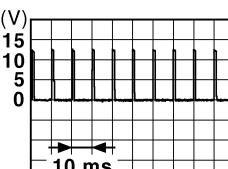
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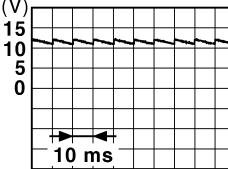
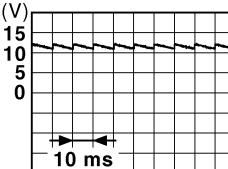
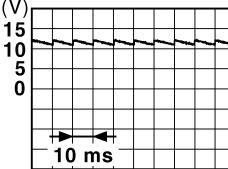
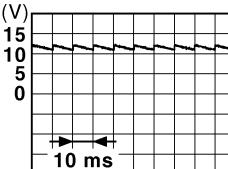
[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
39 (W)	Ground	Back door antenna (+)	Output	When the back door opener request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 (V) 15 10 5 0 1 s <small>JMKIA0062GB</small>
					When Intelligent Key is not in the antenna detection area	 (V) 15 10 5 0 1 s <small>JMKIA0063GB</small>
47 (Y)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0 V
52 (SB)	Ground	Starter relay control	Output	Ignition switch ON	When selector lever is in P or N position	Battery voltage
					When selector lever is not in P or N position	0 V
60 (BR)	Ground	Push-button ignition switch (Push switch)	Input	Push-button ignition switch (push switch)	Pressed	0 V
					Not pressed	Battery voltage
61 (W)	Ground	Back door opener request switch	Input	Back door opener request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 (V) 15 10 5 0 10 ms <small>JPMIA0016GB</small> 1.0 V
64 (V)	Ground	Intelligent Key warning buzzer (Engine room)	Output	Intelligent Key warning buzzer (Engine room)	Sounding	0 V
					Not sounding	Battery voltage
65 (BG)	Ground	Rear wiper stop position	Input	Rear wiper	In stop position	 (V) 15 10 5 0 10 ms <small>JPMIA0016GB</small> 1.0 V
					Not in stop position	0 V

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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)	Description		Condition	Value (Approx.)		
	+	-				
66 (R)	Ground	Back door switch	Input	Back door switch	OFF (Door close)	 JPMIA0011GB 11.8 V
					ON (Door open)	0 V
67 (GR)	Ground	Back door opener switch	Input	Back door opener switch	Pressed	0 V
					Not pressed	 JPMIA0011GB 11.8 V
68 (BR)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (Door close)	 JPMIA0011GB 11.8 V
					ON (Door open)	0 V
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (Door close)	 JPMIA0011GB 11.8 V
					ON (Door open)	0 V

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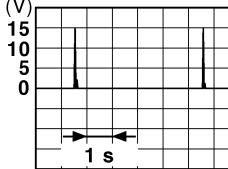
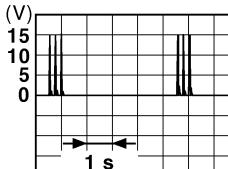
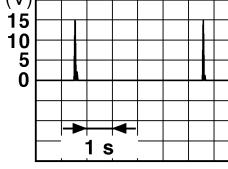
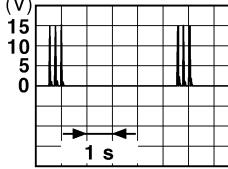
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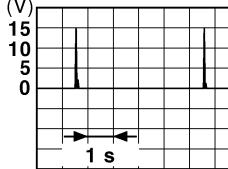
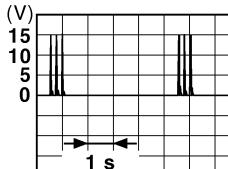
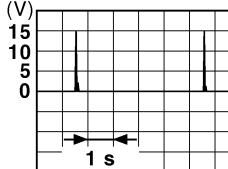
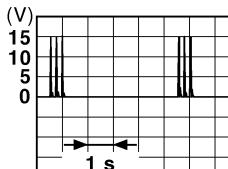
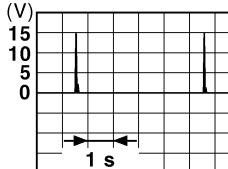
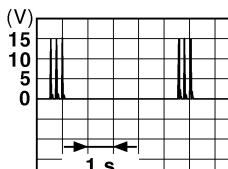
[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)	Description		Condition	Value (Approx.)			
	Signal name	Input/ Output					
+	-						
72 (R)	Ground	Room antenna 2 (-) (Center console)	Output Ignition switch OFF	When Intelligent Key is in the passenger compart- ment			
				 JKMIA0062GB			
73 (G)	Ground	Room antenna 2 (+) (Center console)	Output Ignition switch OFF	When Intelligent Key is not in the passenger compart- ment			
				 JKMIA0063GB			
74 (SB)	Ground	Passenger door anten- na (-)	Output When the pas- senger door re- quest switch is operated with ig- nition switch OFF	When Intelligent Key is in the antenna detection area			
				 JKMIA0062GB			
				When Intelligent Key is not in the antenna detection area			
				 JKMIA0063GB			

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[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)	Description		Condition	Value (Approx.)	
	+	-	Signal name	Input/ Output	
75 (GR)	Ground	Passenger door antenna (+)	Output	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
				When the passenger door request switch is operated with ignition switch OFF	 JMKIA0063GB
76 (V)	Ground	Driver door antenna (-)	Output	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
				When the driver door request switch is operated with ignition switch OFF	 JMKIA0063GB
77 (LG)	Ground	Driver door antenna (+)	Output	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
				When the driver door request switch is operated with ignition switch OFF	 JMKIA0063GB

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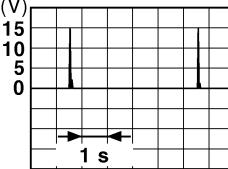
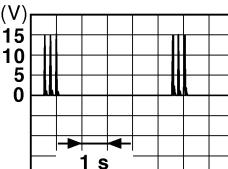
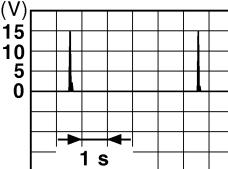
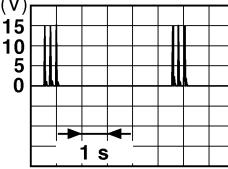
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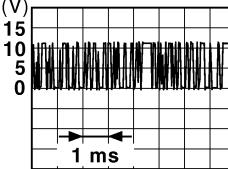
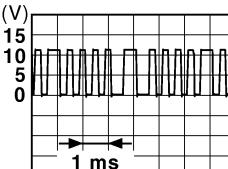
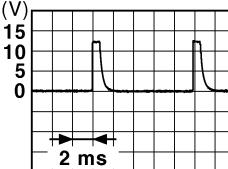
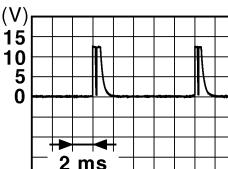
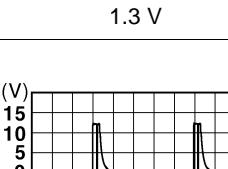
[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)	Description		Condition	Value (Approx.)
	Signal name	Input/ Output		
+	-			
78 (Y)	Ground	Room antenna 1 (-) (Instrument panel)	Output Ignition switch OFF	When Intelligent Key is in the passenger compart- ment
				 JMKA0062GB
79 (BR)	Ground	Room antenna 1 (+) (Instrument panel)	Output Ignition switch OFF	When Intelligent Key is not in the passenger compart- ment
				 JMKA0063GB
80 (GR)	Ground	NATS antenna amp.	Input/ Output	When Intelligent Key is in the passenger compart- ment
				 JMKA0062GB
81 (W)	Ground	NATS antenna amp.	Input/ Output	When Intelligent Key is not in the passenger compart- ment
				 JMKA0063GB
82 (R)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch
				OFF or ACC
				ON
				0 V
				Battery voltage

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[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)	Description		Condition	Value (Approx.)
	+	-		
83 (Y)	Ground	Remote keyless entry receiver communication	Input/ Output	During waiting
				 JMKA0064GB
87 (BR)	Ground	Combination switch INPUT 5	Input	When operating either button on the key
				 JMKA0065GB
				All switches OFF (Wiper intermittent dial 4)
				 JPMIA0041GB 1.4 V
			Combination switch	Front fog lamp switch ON (Wiper intermittent dial 4)
				 JPMIA0037GB 1.3 V
				Rear wiper switch ON (Wiper intermittent dial 4)
				Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7
				 JPMIA0040GB 1.3 V

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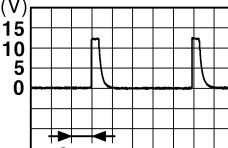
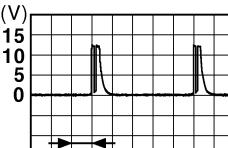
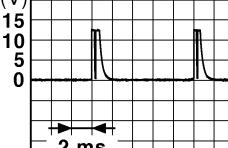
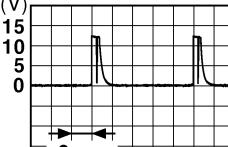
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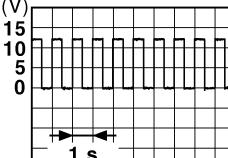
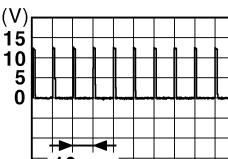
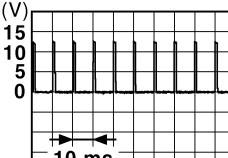
[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)	Description		Condition	Value (Approx.)
	Signal name	Input/ Output		
+	-			
88 (V)	Ground	Combination switch INPUT 3	Input	 All switches OFF (Wiper intermittent dial 4) JPMIA0041GB 1.4 V
90 (P)	Ground	CAN-L	Input/ Output	 Lighting switch HI (Wiper intermittent dial 4) JPMIA0036GB 1.3 V
91 (L)	Ground	CAN-H	Input/ Output	 Lighting switch 2ND (Wiper intermittent dial 4) JPMIA0037GB 1.3 V
				 Rear washer switch ON (Wiper intermittent dial 4) JPMIA0039GB 1.3 V
				 Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 JPMIA0040GB 1.3 V

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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
92 (LG)	Ground	Key slot illumination	Output	Key slot illumination	OFF	Battery voltage
					Blinking	 <small>JPMIA0015GB</small>
					ON	6.5 V
93 (V)	Ground	ON indicator lamp	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0 V
94 (Y)	Ground	Puddle lamp control	Output	Puddle lamp	OFF	Battery voltage
					ON	0 V
95 (BG)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	Battery voltage
96 (GR)	Ground	A/T shift selector (Detention switch) power supply	Output	—		Battery voltage
99 (R)	Ground	Selector lever P position switch	Input	Selector lever	P position	0 V
					Any position other than P	Battery voltage
100 (G)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 <small>JPMIA0016GB</small>
101 (SB)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 <small>JPMIA0016GB</small>
102 (BG)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
103 (LG)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF		Battery voltage

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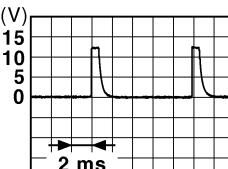
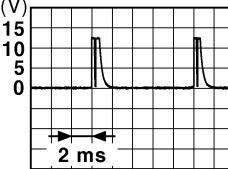
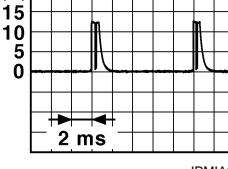
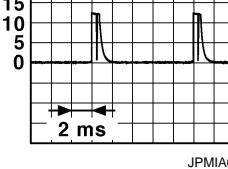
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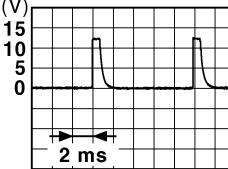
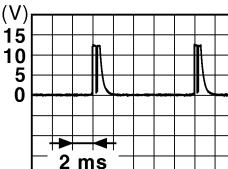
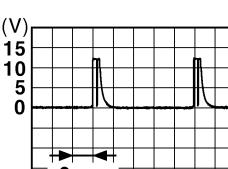
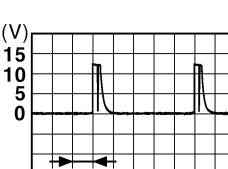
[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)	Description		Condition	Value (Approx.)
	Signal name	Input/ Output		
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107 (LG)	Ground	Combination switch INPUT 1	Combination switch (Wiper intermit- tent dial 4)	All switches OFF  1.4 V
				Turn signal switch LH  1.3 V
				Turn signal switch RH  1.3 V
				Front wiper switch LO  1.3 V
				Front washer switch ON  1.3 V

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[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)	Description		Condition	Value (Approx.)		
	Signal name	Input/ Output				
+	-					
108 (R)	Ground	Combination switch INPUT 4	Input	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V	A
				Lighting switch AUTO (Wiper intermittent dial 4)	 JPMIA0038GB 1.3 V	B
				Lighting switch 1ST (Wiper intermittent dial 4)	 JPMIA0036GB 1.3 V	C
				Rear wiper switch INT (Wiper intermittent dial 4)	 JPMIA0040GB 1.3 V	D
				Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6 	 JPMIA0039GB 1.3 V	E

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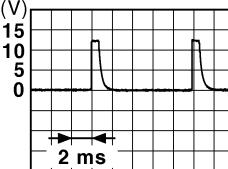
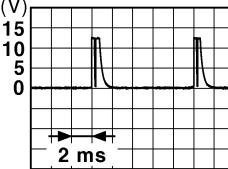
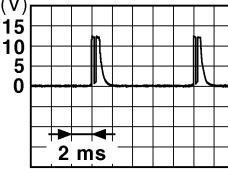
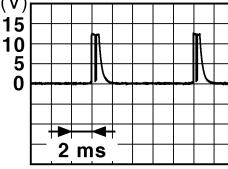
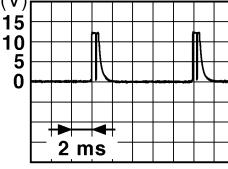
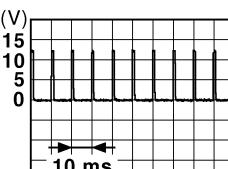
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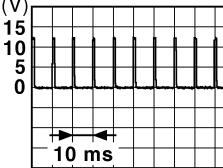
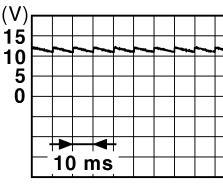
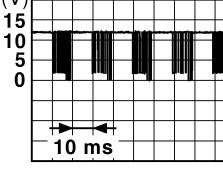
[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)	Description		Condition	Value (Approx.)
	Signal name	Input/ Output		
+	-			
109 (Y)	Ground	Combination switch INPUT 2	Combination switch (Wiper intermittent dial 4)	All switches OFF
				 1.4 V <small>JPMIA0041GB</small>
				 1.3 V <small>JPMIA0037GB</small>
				 1.3 V <small>JPMIA0036GB</small>
				 1.3 V <small>JPMIA0038GB</small>
110 (G)	Ground	Hazard switch	Hazard switch	ON
				 0 V
			OFF	 1.1 V <small>JPMIA0012GB</small>

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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)	
+	-	Signal name	Input/ Output				
113 (P)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle	Close to 5 V	
					When dark outside of the vehicle	Close to 0 V	
116 (SB)	Ground	Stop lamp switch 1	Input	—		Battery voltage	
118 (P)	Ground	Stop lamp switch 2 (Without ICC)	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V	
					ON (Brake pedal is depressed)	Battery voltage	
		Stop lamp switch 2 (With ICC)		Stop lamp switch OFF (Brake pedal is not depressed) and ICC brake hold relay OFF		0 V	
				Stop lamp switch ON (Brake pedal is depressed) or ICC brake hold relay ON		Battery voltage	
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 1.1 V <small>JPMIA0012GB</small>	
					UNLOCK status (Unlock switch sensor ON)	0 V	
121 (BR)	Ground	Key slot switch	Input	When the key is inserted into key slot		Battery voltage	
				When the key is not inserted into key slot		0 V	
123 (W)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V	
					ON	Battery voltage	
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	 (V) 15 10 5 0 11.8 V <small>JPMIA0011GB</small>	
					ON (Door open)	0 V	
132 (BR)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		 (V) 15 10 5 0 10.2 V <small>JPMIA0013GB</small>	
				Ignition switch OFF or ACC		Battery voltage	

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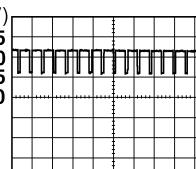
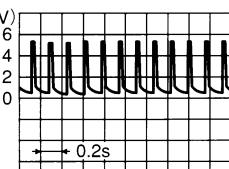
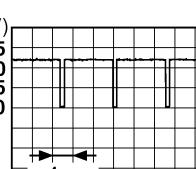
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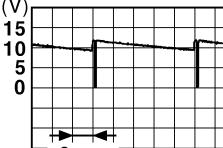
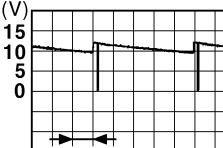
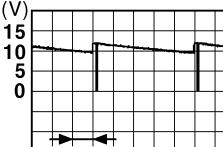
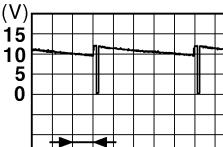
[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON (Tail lamps OFF)	9.5 V
					ON (Tail lamps ON)	<p>NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level.</p>  <p>JPMIA0159GB</p>
					OFF	0 V
134 (GR)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF	Battery voltage
					ON	0 V
137 (BG)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V
138 (Y)	Ground	Receiver and sensor power supply	Output	Ignition switch	OFF	0 V
					ACC or ON	5.0 V
139 (L)	Ground	Tire pressure receiver communication	Input/ Output	Ignition switch ON	Standby state	 <p>OCC3881D</p>
					When receiving the signal from the transmitter	 <p>OCC3880D</p>
140 (GR)	Ground	Selector lever P/N position	Input	Selector lever	P or N position	Battery voltage
					Except P and N positions	0 V
141 (G)	Ground	Security indicator	Output	Security indicator	ON	0 V
					Blinking	 <p>JPMIA0014GB</p>
					OFF	Battery voltage

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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

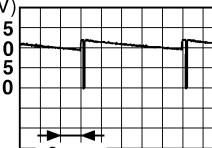
Terminal No. (Wire color)	Description		Condition	Value (Approx.)	
	Signal name	Input/ Output			
+	-				
142 (BG)	Ground	Combination switch OUTPUT 5	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
				Lighting switch 1ST	
				Lighting switch HI	
				Lighting switch 2ND	
				Turn signal switch RH	 <small>JPMIA0031GB</small> 10.7 V
143 (P)	Ground	Combination switch OUTPUT 1	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
				Front wiper switch HI (Wiper intermittent dial 4)	
				Rear wiper switch INT (Wiper intermittent dial 4)	
				Any of the conditions below with all switches OFF	
				<ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7 	
				 <small>JPMIA0032GB</small> 10.7 V	
144 (G)	Ground	Combination switch OUTPUT 2	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
				Front washer switch ON (Wiper intermittent dial 4)	
				Rear wiper switch ON (Wiper intermittent dial 4)	
				Rear washer switch ON (Wiper intermittent dial 4)	
				Any of the conditions below with all switches OFF	
				<ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6 	
				 <small>JPMIA0033GB</small> 10.7 V	
145 (L)	Ground	Combination switch OUTPUT 3	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
				Front wiper switch INT	
				Front wiper switch LO	
				Lighting switch AUTO	 <small>JPMIA0034GB</small> 10.7 V

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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)	Description		Condition	Value (Approx.)
	Signal name	Input/ Output		
+	-			
146 (SB)	Ground	Combination switch OUTPUT 4	Combination switch (Wiper intermit- tent dial 4)	All switches OFF
				Front fog lamp switch ON
				Lighting switch 2ND
				Lighting switch PASS
				Turn signal switch LH
150 (LG)	Ground	Driver door switch	Driver door switch	(V)  JPMIA0035GB 10.7 V
				OFF (Door close)
				ON (Door open)
151 (G)	Ground	Rear window defog- ger relay control	Rear window de- fogger	Active
				Battery voltage

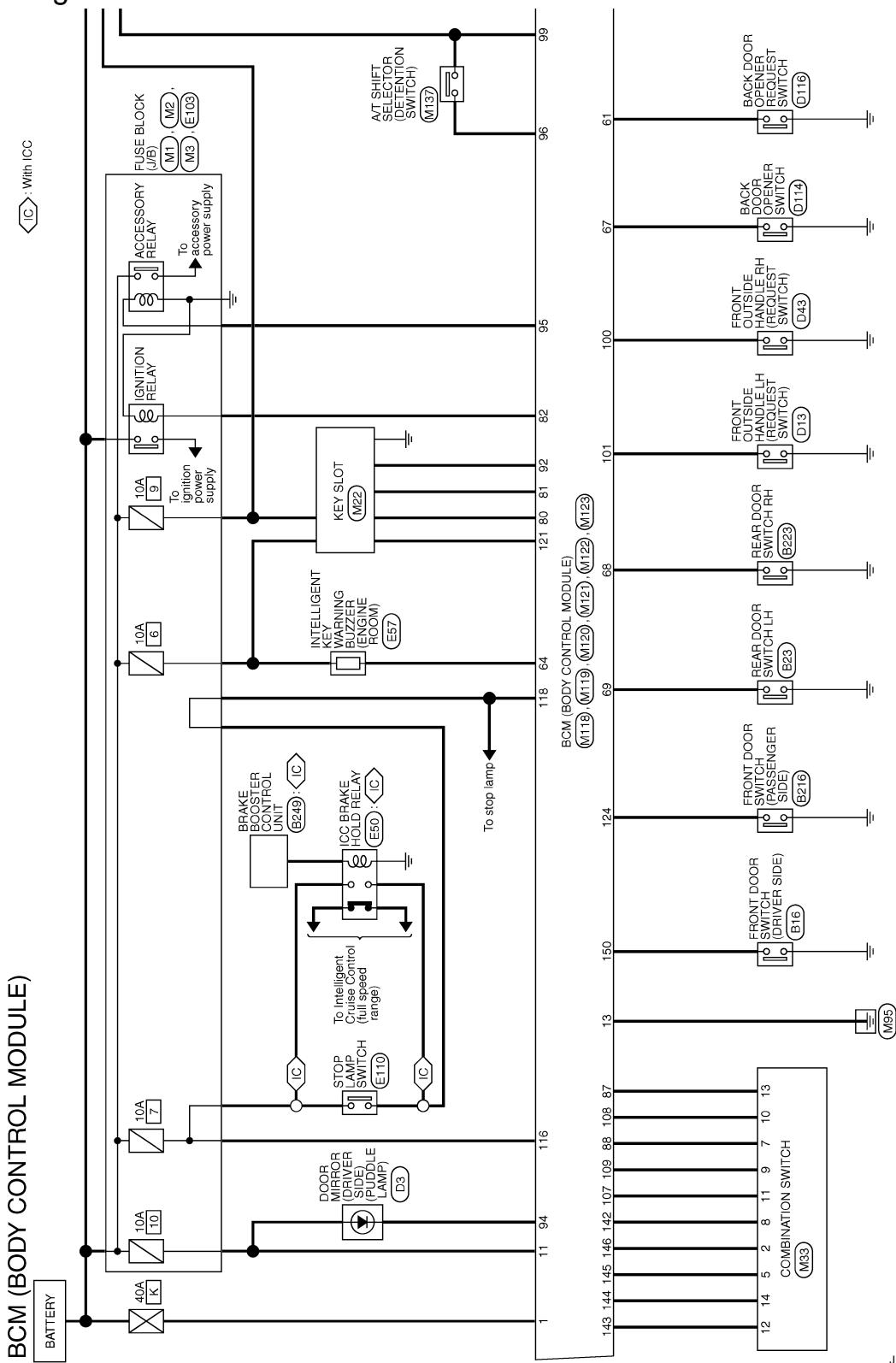
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[WITH INTELLIGENT KEY SYSTEM]

Wiring Diagram - BCM -

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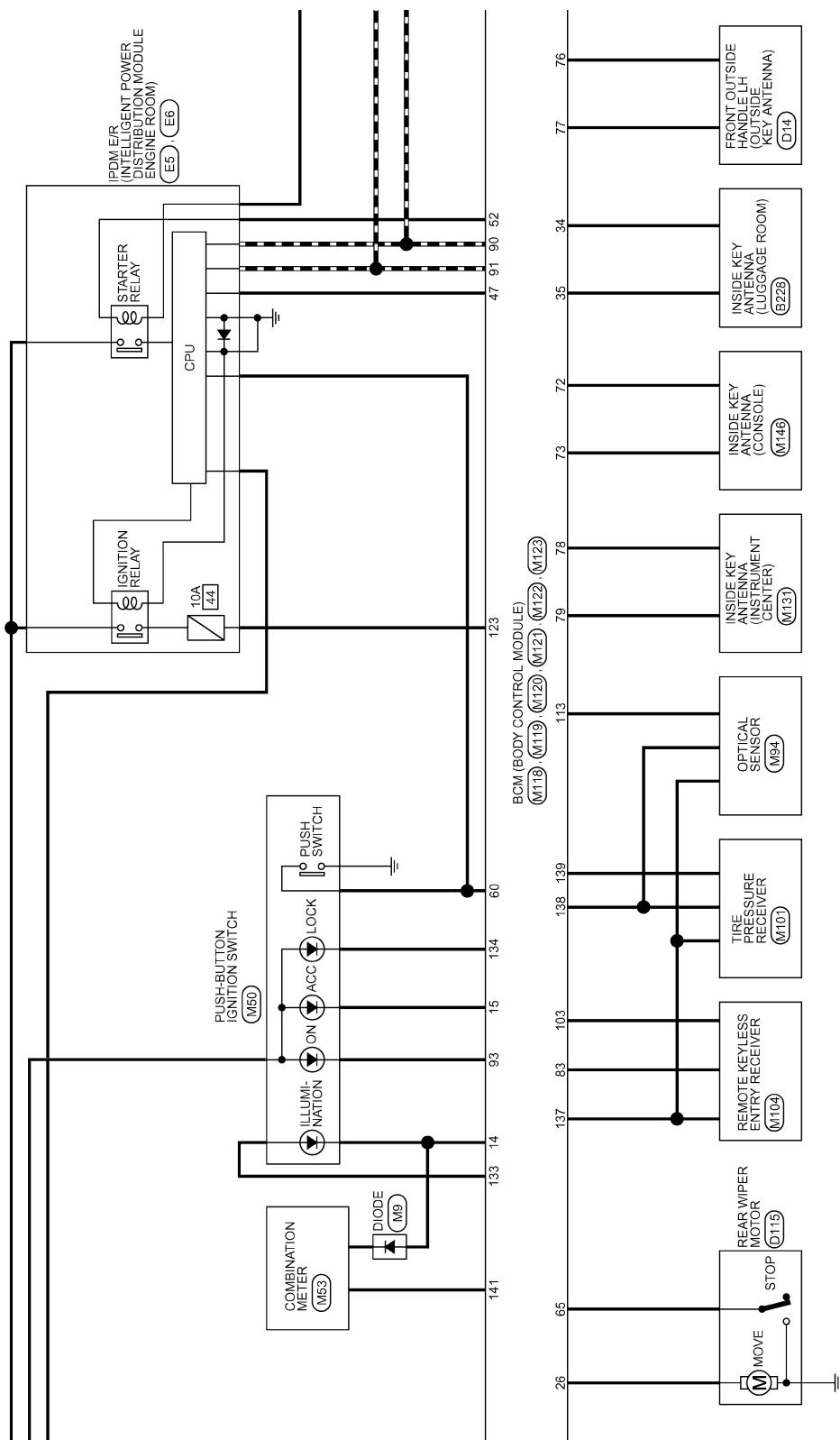
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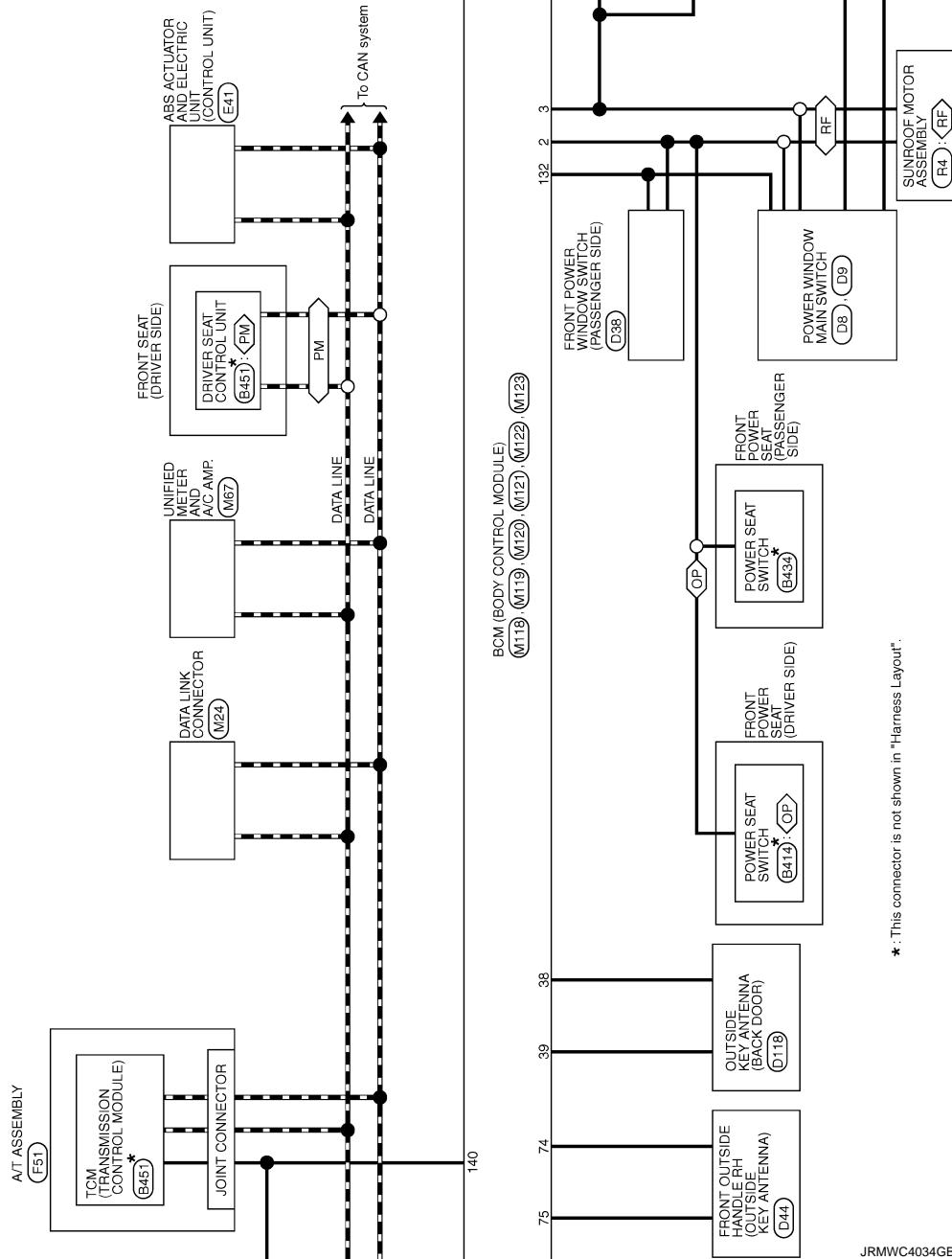
< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]



JRMWC4033GB

◀RF▶ : With sunroof
 ◀PM▶ : With automatic drive positioner
 ◀OP▶ : Without automatic drive positioner



JRMWC4034GB

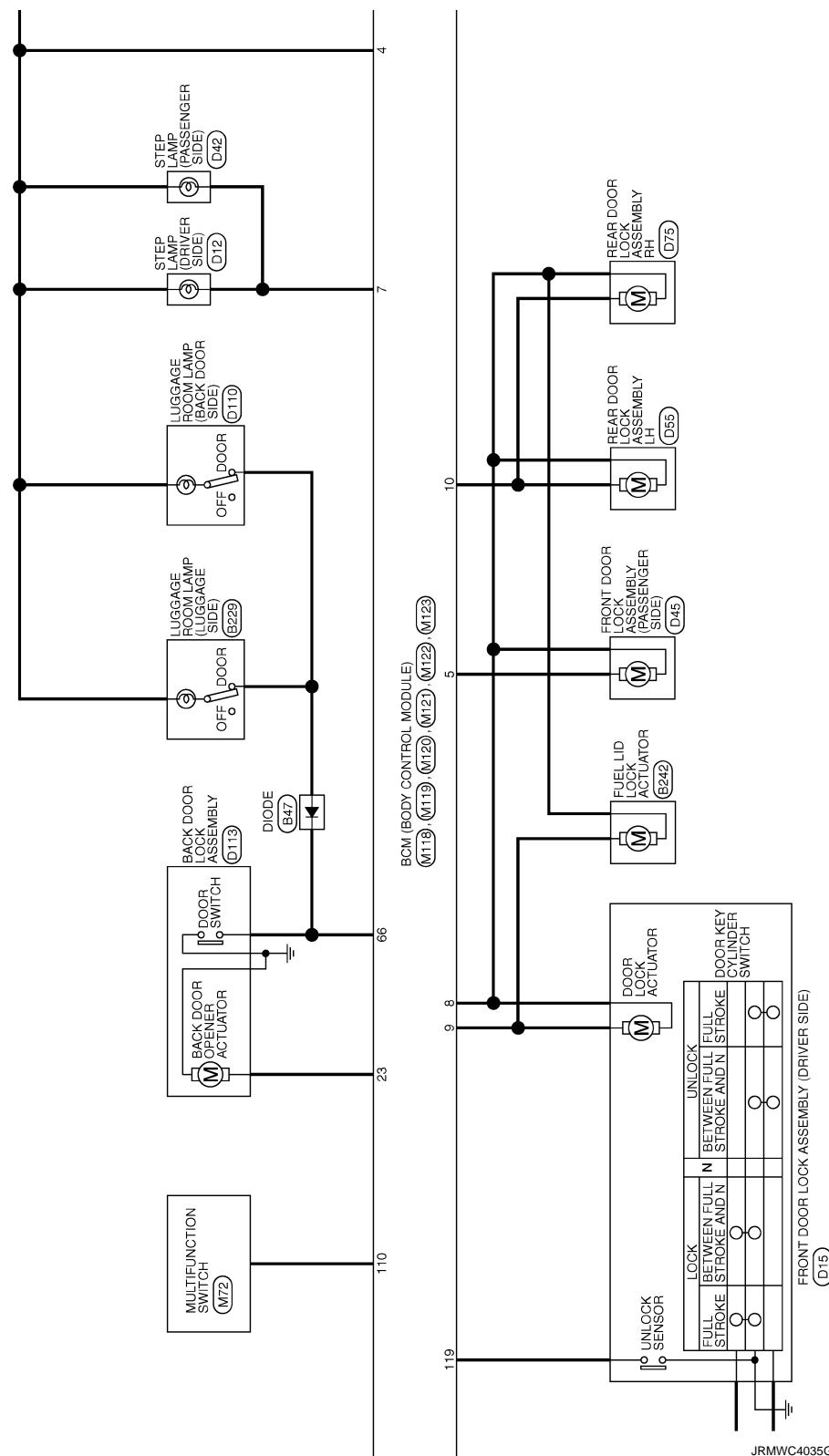
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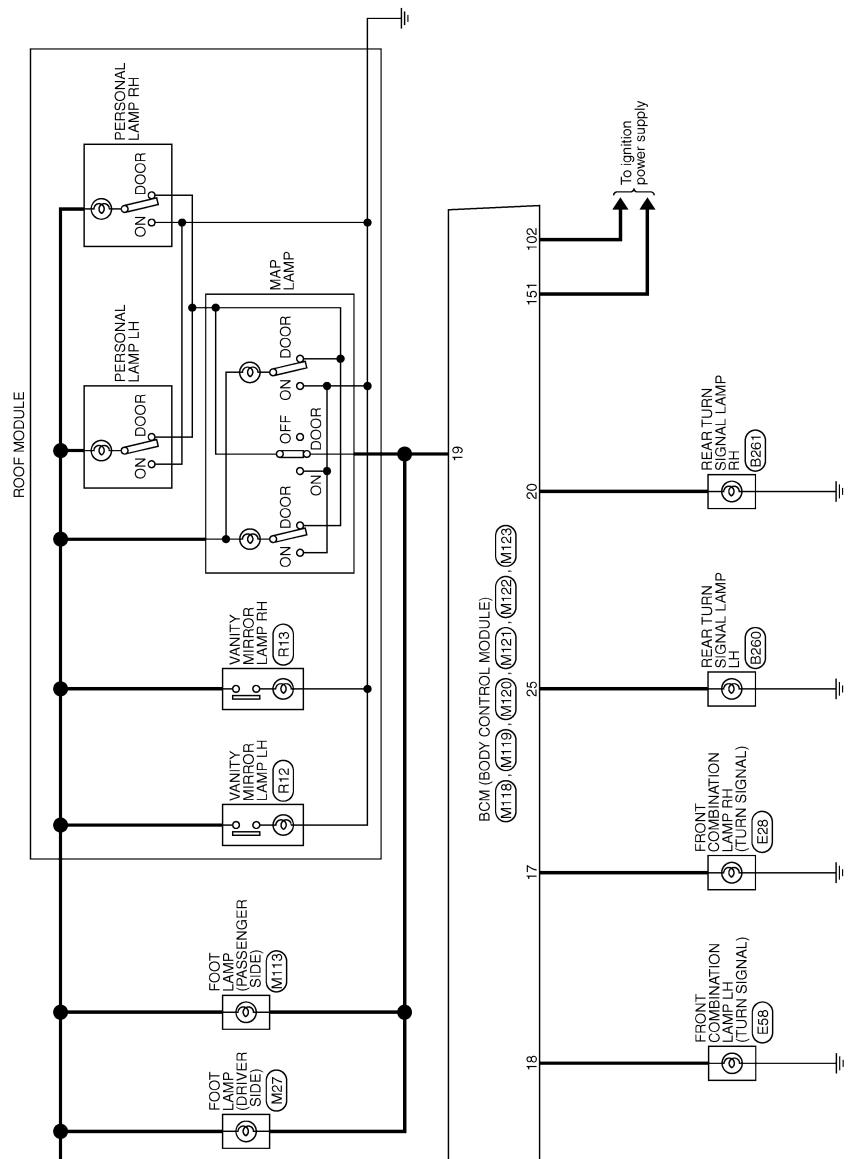
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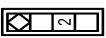
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JRMWC4036GB

BCM (BODY CONTROL MODULE)

Connector No.	B16	Terminal Color Of Wire No.	Signal Name [Specification]
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)	1 B	-
Connector Type	A05FW	2 L	-

































































































































































































































































































































< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Connector No.	B250	Connector No.	D3
Connector Name	REAR TURN SIGNAL LAMP LH	Connector Name	DOOR MIRROR (DRIVER SIDE)
Connector Type	HS21G-W	Connector Type	TH24WW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	B	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	B	-
3	G/Y	-
4	P	-
5	W	-
6	V	-
7	L/Y	-
8	L	-
9	L/R	-
10	G/W	-
11	Y/R	-
12	Y	-
13	Y/R	-
14	Y/G	-
15	O	-
16	VCC	-
17	Y/R	TX
18	W	SIDE CAMERA IMAGE GRID
19	V	CANL
20	Y	PULSE(SW)
21	U/Y	RANGE SW
22	R	PULSE(SLIDING)
23	Y/B	PULSE(FLIFTING)
24	Y	SLIDING SW(BACKWARD)
25	Y/B	FRONT LIFTING SW(DOWNWARD)
26	Y	REAR LIFTING SW(DOWNWARD)
27	R/G	RECLINING SW(FORWARD)
28	W/B	FRONT LIFTING SW(UPWARD)
29	P/L	REAR LIFTING SW(UPWARD)
30	GR	SENSE GND
31	GR	POWER WINDOW MAIN SWITCH
32	B/W	GND(SIGNAL)

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	B	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	B	-
3	G/Y	-
4	P	-
5	W	-
6	V	-
7	L/Y	-
8	—	-
9	U/R	-
10	G/W	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	O	-
2	B	-
3	B	SIDE CAMERA IMAGE GRID
4	Y	SIDE CAMERA LH IMAGE SIGNAL
5	Y	SIDE CAMERA RH IMAGE SIGNAL
6	R	SIDE CAMERA LH POWER SUPPLY
7	W	-
8	—	-
9	U	-
10	G	-
11	W	-
12	SB	SLIDING SW(BACKWARD)
13	SB	RECLINING SW(BACKWARD)
14	G/R	FRONT LIFTING SW(DOWNWARD)
15	O	REAR LIFTING SW(DOWNWARD)
16	—	-
17	LG	SIDE CAMERA IMAGE GRID
18	W	SIDE CAMERA LH GRID
19	B	-
20	—	-
21	GR	-
22	BR	-
23	Y	-
24	V	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	DB	-
2	—	-
3	DB	-
4	—	-
5	—	-
6	—	-
7	—	-
8	—	-
9	—	-
10	—	-
11	—	-
12	—	-
13	—	-
14	—	-
15	—	-
16	—	-
17	—	-
18	—	-
19	—	-
20	—	-
21	—	-
22	—	-
23	—	-
24	—	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	DB	-
2	—	-
3	DB	-
4	—	-
5	—	-
6	—	-
7	—	-
8	—	-
9	—	-
10	—	-
11	—	-
12	—	-
13	—	-
14	—	-
15	—	-
16	—	-
17	—	-
18	—	-
19	—	-
20	—	-
21	—	-
22	—	-
23	—	-
24	—	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	DB	-
2	—	-
3	DB	-
4	—	-
5	—	-
6	—	-
7	—	-
8	—	-
9	—	-
10	—	-
11	—	-
12	—	-
13	—	-
14	—	-
15	—	-
16	—	-
17	—	-
18	—	-
19	—	-
20	—	-
21	—	-
22	—	-
23	—	-
24	—	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	DB	-
2	—	-
3	DB	-
4	—	-
5	—	-
6	—	-
7	—	-
8	—	-
9	—	-
10	—	-
11	—	-
12	—	-
13	—	-
14	—	-
15	—	-
16	—	-
17	—	-
18	—	-
19	—	-
20	—	-
21	—	-
22	—	-
23	—	-
24	—	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	DB	-
2	—	-
3	DB	-
4	—	-
5	—	-
6	—	-
7	—	-
8	—	-
9	—	-
10	—	-
11	—	-
12	—	-
13	—	-
14	—	-
15	—	-
16	—	-
17	—	-
18	—	-
19	—	-
20	—	-
21	—	-
22	—	-
23	—	-
24	—	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	DB	-
2	—	-
3	DB	-
4	—	-
5	—	-
6	—	-
7	—	-
8	—	-
9	—	-
10	—	-
11	—	-
12	—	-
13	—	-
14	—	-
15	—	-
16	—	-
17	—	-
18	—	-
19	—	-
20	—	-
21	—	-
22	—	-
23	—	-
24	—	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	DB	-
2	—	-
3	DB	-
4	—	-
5	—	-
6	—	-
7	—	-
8	—	-
9	—	-
10	—	-
11	—	-
12	—	-
13	—	-
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17	—	-
18	—	-
19	—	-
20	—	-
21	—	-
22	—	-
23	—	-
24	—	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	DB	-
2	—	-
3	DB	-
4	—	-
5	—	-
6	—	-
7	—	-
8	—	-
9	—	-
10	—	-
11	—	-
12	—	-
13	—	-
14	—	-
15	—	-
16	—	-
17	—	-
18	—	-
19	—	-
20	—	-
21	—	-
22	—	-
23	—	-
24	—	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	DB	-
2	—	-
3	DB	-
4	—	-
5	—	-
6	—	-
7	—	-
8	—	-
9	—	-
10	—	-
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16	—	-
17	—	-
18	—	-
19	—	-
20	—	-
21	—	-
22	—	-
23	—	-
24	—	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	DB	-
2	—	-
3	DB	-
4	—	-
5	—	-
6	—	-
7	—	-
8	—	-
9	—	-
10	—	-
11	—	-
12	—	-
13	—	-
14	—	-
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23	—	-
24	—	-

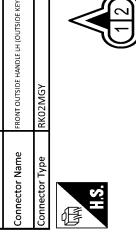
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BCM (BODY CONTROL MODULE)

Connector No.	D9	Signal Name [Specification]
Connector Name	POWER WINDOW MAIN SWITCH	-
Connector Type	NS31W.CS	-
Terminal Color Of Wire	Y	1
Terminal No.	-	LG
Terminal Color Of Wire	B	2
Terminal No.	-	P
Terminal Color Of Wire	Y	3
Terminal No.	-	L
Terminal Color Of Wire	G	4
Terminal No.	-	B
Terminal Color Of Wire	P	5
Terminal No.	-	Y
Terminal Color Of Wire	V	6
Terminal No.	-	V



Connector No.	D10	Signal Name [Specification]
Connector Name	POWER DOOR LOCK REQUEST SWITCH	-
Connector Type	RG02TL	-
Terminal Color Of Wire	Y	1
Terminal No.	-	LG
Terminal Color Of Wire	B	2
Terminal No.	-	P
Terminal Color Of Wire	Y	3
Terminal No.	-	L
Terminal Color Of Wire	G	4
Terminal No.	-	B
Terminal Color Of Wire	P	5
Terminal No.	-	Y
Terminal Color Of Wire	V	6
Terminal No.	-	V



Connector No.	D11	Signal Name [Specification]
Connector Name	FRONT OUTSIDE HANDLE LH (OUTSIDE KEY ANTENNA)	-
Connector Type	RG02MGY	-
Terminal Color Of Wire	Y	1
Terminal No.	-	LG
Terminal Color Of Wire	B	2
Terminal No.	-	P
Terminal Color Of Wire	Y	3
Terminal No.	-	L
Terminal Color Of Wire	G	4
Terminal No.	-	B
Terminal Color Of Wire	P	5
Terminal No.	-	Y
Terminal Color Of Wire	V	6
Terminal No.	-	V



Connector No.	D13	Signal Name [Specification]
Connector Name	FRONT OUTSIDE HANDLE LH (REQUEST SWITCH)	-
Connector Type	RG02TL	-
Terminal Color Of Wire	Y	1
Terminal No.	-	LG
Terminal Color Of Wire	B	2
Terminal No.	-	P
Terminal Color Of Wire	Y	3
Terminal No.	-	L
Terminal Color Of Wire	G	4
Terminal No.	-	B
Terminal Color Of Wire	P	5
Terminal No.	-	Y
Terminal Color Of Wire	V	6
Terminal No.	-	V



Connector No.	D15	Signal Name [Specification]
Connector Name	FRONT DOOR LOCK REQUEST (DRIVER SIDE)	-
Connector Type	EDHFGY-HS	-
Terminal Color Of Wire	R	1
Terminal No.	-	LG
Terminal Color Of Wire	Sb	2
Terminal No.	-	P



Connector No.	D42	Signal Name [Specification]
Connector Name	STEP LAMP (PASSENGER SIDE)	-
Connector Type	TB02IW	-
Terminal Color Of Wire	R	1
Terminal No.	-	LG
Terminal Color Of Wire	Sb	2
Terminal No.	-	P



Connector No.	D43	Signal Name [Specification]
Connector Name	FRONT OUTSIDE HANDLE RH (REQUEST SWITCH)	-
Connector Type	RG02FL	-
Terminal Color Of Wire	R	1
Terminal No.	-	LG
Terminal Color Of Wire	Sb	2
Terminal No.	-	P



Connector No.	D43	Signal Name [Specification]
Connector Name	FRONT OUTSIDE HANDLE RH (REQUEST SWITCH)	-
Connector Type	RG02FL	-
Terminal Color Of Wire	R	1
Terminal No.	-	LG
Terminal Color Of Wire	Sb	2
Terminal No.	-	P



Connector No.	D38	Signal Name [Specification]
Connector Name	REAR DOOR LOCK REQUEST (PASSENGER SIDE)	-
Connector Type	NS16IW.CS	-
Terminal Color Of Wire	Y	1
Terminal No.	-	LG
Terminal Color Of Wire	B	2
Terminal No.	-	P
Terminal Color Of Wire	Y	3
Terminal No.	-	L
Terminal Color Of Wire	G	4
Terminal No.	-	B
Terminal Color Of Wire	P	5
Terminal No.	-	Y
Terminal Color Of Wire	V	6
Terminal No.	-	V



Connector No.	D38	Signal Name [Specification]
Connector Name	REAR DOOR LOCK REQUEST (PASSENGER SIDE)	-
Connector Type	NS16IW.CS	-
Terminal Color Of Wire	Y	1
Terminal No.	-	LG
Terminal Color Of Wire	B	2
Terminal No.	-	P
Terminal Color Of Wire	Y	3
Terminal No.	-	L
Terminal Color Of Wire	G	4
Terminal No.	-	B
Terminal Color Of Wire	P	5
Terminal No.	-	Y
Terminal Color Of Wire	V	6
Terminal No.	-	V



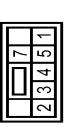
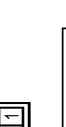
Connector No.	D12	Signal Name [Specification]
Connector Name	STEP LAMP (DRIVER SIDE)	-
Connector Type	TB02IW	-
Terminal Color Of Wire	R	1
Terminal No.	-	LG
Terminal Color Of Wire	Sb	2
Terminal No.	-	P



Connector No.	D12	Signal Name [Specification]
Connector Name	STEP LAMP (DRIVER SIDE)	-
Connector Type	TB02IW	-
Terminal Color Of Wire	R	1
Terminal No.	-	LG
Terminal Color Of Wire	Sb	2
Terminal No.	-	P



JRMWG8100GB

BCM (BODY CONTROL MODULE)	
Connector No. D44	DS4 Front door control module (B) (DRIVER SIDE)
Connector Name REAR POWER WINDOW SWITCH LH	
Connector Type IS02NGY	
	
Terminal Color Of Wire No.	Signal Name [Specification]
1 P	-
2 V	-
3 G	-
4 L	-
5 W	-
7 B	-
Connector No. D45	REAR DOOR LOCK ASSEMBLY (R) (PASSENGER SIDE)
Connector Name	
Connector Type EDIFEGY-HS	
	
Terminal Color Of Wire No.	Signal Name [Specification]
1 P	-
2 LG	-
Connector No. D74	REAR POWER WINDOW SWITCH RH
Connector Name NS08IW-CS	
	
Terminal Color Of Wire No.	Signal Name [Specification]
1 W	-
2 Y	-
3 G	-
4 P	-
5 O	-
7 B	-
Connector No. D110	LOGIC BOARD (B) (SUNROOF SIDE)
Connector Name K03FW	
	
Terminal Color Of Wire No.	Signal Name [Specification]
1 Y	-
2 P	-
3 V	-
4 -	-
5 -	-
6 -	-
7 -	-
Connector No. D113	BACK DOOR LOCK ASSEMBLY
Connector Name NS04FW-CS	
	
Terminal Color Of Wire No.	Signal Name [Specification]
1 Y	-
2 B	-
3 V	-
4 B	-
Connector No. D75	REAR DOOR LOCK ASSEMBLY RH
Connector Name EDIFEGY-HS	
	
Terminal Color Of Wire No.	Signal Name [Specification]
1 Y	-
2 B	-
3 V	-
4 B	-
Connector No. D55	REAR DOOR LOCK ASSEMBLY LH
Connector Name EDIFEGY-HS	
	
Terminal Color Of Wire No.	Signal Name [Specification]
1 P	-
2 LG	-
Connector No. D60	FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE)
Connector Name NS04FW-CS	
	
Terminal Color Of Wire No.	Signal Name [Specification]
1 V	-
2 G	-

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A B C D M T G H — — SEC

— — — — — — — — — —

O P

BCM (BODY CONTROL MODULE)

Connector No.	D114	Connector No.	E28
Connector Name	BACK DOOR OPENER SWITCH	Connector Name	FRONT COMBINATION LAMP RH
Connector Type	TK02MBRP	Connector Type	HS0818 PR



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
2	B	-

Connector No.	D115	Connector No.	D118
Connector Name	REAR WIPER MOTOR	Connector Name	OUTSIDE KEY ANTENNA (BACK DOOR)
Connector Type	CJDFW-1V	Connector Type	RK02GY

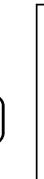


Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	B	-

Terminal No.	Color Of Wire	Signal Name [Specification]
7	R	-
12	BYW	-
13	Y	-
16	LG	-
19	W	-
25	G	-
27	BG	-
28	L	-
30	GR	-
36	G	-

Terminal No.	Color Of Wire	Signal Name [Specification]
4	V	-
5	L	-
8	BYW	-
9	BR	-
10	V	-
11	BR	-
14	P	-
15	Y	-
16	LG	-
17	GR	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	Y	-
3	BR	-
4	GR	-



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	B	-

Terminal No.	Color Of Wire	Signal Name [Specification]
3	Y	-
4	BR	-
5	GR	-
6	LG	-
7	GR	-
8	GR	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	Y	-
4	BR	-
5	GR	-
6	LG	-
7	GR	-
8	GR	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	Y	-
4	BR	-
5	GR	-
6	LG	-
7	GR	-
8	GR	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	Y	-
4	BR	-
5	GR	-
6	LG	-
7	GR	-
8	GR	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	Y	-
4	BR	-
5	GR	-
6	LG	-
7	GR	-
8	GR	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	Y	-
4	BR	-
5	GR	-
6	LG	-
7	GR	-
8	GR	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	Y	-
4	BR	-
5	GR	-
6	LG	-
7	GR	-
8	GR	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	Y	-
4	BR	-
5	GR	-
6	LG	-
7	GR	-
8	GR	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	Y	-
4	BR	-
5	GR	-
6	LG	-
7	GR	-
8	GR	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	Y	-
4	BR	-
5	GR	-
6	LG	-
7	GR	-
8	GR	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	Y	-
4	BR	-
5	GR	-
6	LG	-
7	GR	-
8	GR	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	Y	-
4	BR	-
5	GR	-
6	LG	-
7	GR	-
8	GR	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	Y	-
4	BR	-
5	GR	-
6	LG	-
7	GR	-
8	GR	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	Y	-
4	BR	-
5	GR	-
6	LG	-
7	GR	-
8	GR	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	Y	-
4	BR	-
5	GR	-
6	LG	-
7	GR	-
8	GR	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	Y	-
4	BR	-
5	GR	-
6	LG	-
7	GR	-
8	GR	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	Y	-
4	BR	-
5	GR	-
6	LG	-
7	GR	-
8	GR	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	Y	-
4	BR	-
5	GR	-
6	LG	-
7	GR	-
8	GR	-

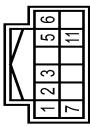
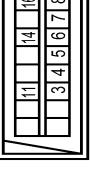
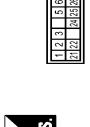
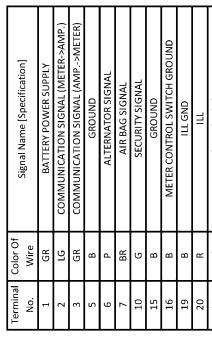
Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	B	-

BCM

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

BCM (BODY CONTROL MODULE)

<table border="1"> <tr><td>Connector No.</td><td>M3</td></tr> <tr><td>Connector Name</td><td>FUSE BLOCK (J/B)</td></tr> <tr><td>Connector Type</td><td>NS121W CS</td></tr> </table> 	Connector No.	M3	Connector Name	FUSE BLOCK (J/B)	Connector Type	NS121W CS	<table border="1"> <tr><td>Connector No.</td><td>M22</td></tr> <tr><td>Connector Name</td><td>KEY SLOT</td></tr> <tr><td>Connector Type</td><td>TH121W NH</td></tr> </table> 	Connector No.	M22	Connector Name	KEY SLOT	Connector Type	TH121W NH	<table border="1"> <tr><td>Connector No.</td><td>M27</td></tr> <tr><td>Connector Name</td><td>FOOT LAMP (DRIVER SIDE)</td></tr> <tr><td>Connector Type</td><td>AQ9FW</td></tr> </table> 	Connector No.	M27	Connector Name	FOOT LAMP (DRIVER SIDE)	Connector Type	AQ9FW	<table border="1"> <tr><td>Terminal</td><td>Color Of Wire</td><td>Signal Name [Specification]</td></tr> <tr><td>No.</td><td></td><td></td></tr> <tr><td>10C</td><td>R</td><td>BAT</td></tr> <tr><td>11C</td><td>-</td><td>CLOCK</td></tr> <tr><td>12C</td><td>GR</td><td>DATA</td></tr> <tr><td>6C</td><td>W</td><td>ILL.BAT</td></tr> <tr><td>7C</td><td>Y</td><td>ILL</td></tr> <tr><td>9C</td><td>LG</td><td>GROUND</td></tr> <tr><td>11</td><td>BR</td><td>KEY SWITCH SIGNAL</td></tr> </table> 	Terminal	Color Of Wire	Signal Name [Specification]	No.			10C	R	BAT	11C	-	CLOCK	12C	GR	DATA	6C	W	ILL.BAT	7C	Y	ILL	9C	LG	GROUND	11	BR	KEY SWITCH SIGNAL																																									
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Terminal	Color Of Wire	Signal Name [Specification]																																																																																							
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21	RG	IGNITION SIGNAL																																																																																							

JRMWG8104GB

BCM (BODY CONTROL MODULE)			
22	B	GROUND	
24	BR	COMMUNICATION SIGNAL (LCD->AMP)	69 L A/C LAN SIGNAL
25	Y	VEHICLE SPEED SIGNAL (PULSED)	70 R EACH DOOR MOTOR POWER SUPPLY
26	R	PARKING BRAKE SWITCH SIGNAL	71 B GROUND
27	V	SEAT BELT BUCKLE SWITCH SIGNAL	72 P CAN-L
28	W	WASHER LEVEL SWITCH SIGNAL	Connector No. M113 Connector Name FOOT LAMP (PASSENGER SIDE) Connector Type ADJFW
29	SB	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)	
30	G	SEATBELT BUCKLE SWITCH SIGNAL (PASSENGER SIDE)	
31	L	WASHER LEVEL SWITCH SIGNAL	
33	B	ILLUMINATION CONTROL SIGNAL	
36	IG	SELECT SWITCH SIGNAL	
37	SB	ENTER SWITCH SIGNAL	
38	L	TRIM A/B/RESET SWITCH SIGNAL	
39	P	ILLUMINATION CONTROL SWITCH SIGNAL (+)	
40	EG	ILLUMINATION CONTROL SWITCH SIGNAL (-)	
Connector No. M467		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name UNIFIED METER AND A/C AMP		1 B GROUND	
Connector Type TH32FW-NH		3 V	
		4 R ACC	
		5 Y ILL CONT	
		6 SB AV COMM(H)	
		7 LG AV COMM(L)	
		8 G SW(AND)	
		9 B SW(AND)	
		10 Y DISK REC SIGNAL	
		11 G HAZARD ON	
Connector No. M567		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name UNIFIED METER AND A/C AMP		1 B GROUND	
Connector Type TH32FW-NH		3 V	
		4 R ACC	
		5 Y ILL CONT	
		6 SB AV COMM(H)	
		7 LG AV COMM(L)	
		8 G SW(AND)	
		9 B SW(AND)	
		10 Y DISK REC SIGNAL	
		11 G HAZARD ON	
Connector No. M564		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name OPTICAL SENSOR		1 B GROUND	
Connector Type TK03FW		2 Y SIGNAL OUTPUT	
		3 G BATTERY	
Connector No. M594		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name FUEL LEVEL SENSOR SIGNAL		1 B GROUND	
Connector Type TK03FW		2 Y POWER	
		3 G OUTPUT	
Connector No. M595		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name INTAKE SENSOR SIGNAL		1 B GROUND	
Connector Type TK03FW		2 Y POWER	
		3 G OUTPUT	
Connector No. M596		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name AMBIENT SENSOR SIGNAL		1 B GROUND	
Connector Type TK03FW		2 Y POWER	
		3 G OUTPUT	
Connector No. M597		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name BRAKE FLUID LEVEL SWITCH SIGNAL		1 B GROUND	
Connector Type TK03FW		2 Y POWER	
		3 G OUTPUT	
Connector No. M598		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name INTAKE SENSOR GROUND		1 B GROUND	
Connector Type TK03FW		2 Y POWER	
		3 G OUTPUT	
Connector No. M599		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name AMBIENT SENSOR GROUND		1 B GROUND	
Connector Type TK03FW		2 Y POWER	
		3 G OUTPUT	
Connector No. M600		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name SUNROD SENSOR GROUND		1 B GROUND	
Connector Type TK03FW		2 Y POWER	
		3 G OUTPUT	
Connector No. M601		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name THE PRESSURE RECEIVER		1 B GROUND	
Connector Type TK04FW		2 Y POWER	
		3 G OUTPUT	
Connector No. M602		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name REMOTE KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M603		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name BCM (BODY CONTROL MODULE)		1 B GROUND	
Connector Type MO3FBL-C		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M604		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name REMOTE KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M605		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M606		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M607		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M608		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M609		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M610		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M611		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M612		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M613		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M614		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M615		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M616		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M617		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M618		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name BCM (BODY CONTROL MODULE)		1 B GROUND	
Connector Type MO3FBL-C		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M619		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M620		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M621		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M622		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M623		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M624		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M625		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M626		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M627		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M628		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M629		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	
Connector No. M630		Terminal [Color Of Wire No.] Signal Name [Specification]	
Connector Name KEYLESS ENTRY RECEIVER		1 B GROUND	
Connector Type JAB04FB		2 Y SIGNAL	
		3 G BATTERY	

BCM (BODY CONTROL MODULE)

Connector No.	M119	Connector No.	M221
Connector Name	BCM(BODY CONTROL MODULE)	Connector Name	BCM(BODY CONTROL MODULE)
Connector Type	NS16FW CS	Connector Type	TH40FGYNN
			
Terminal Color Of No.	Signal Name [Specification]	Terminal Color Of No.	Signal Name [Specification]
4 LG	INTRIOR ROOM LAMP POWER SUPPLY V	34 SB	LOADAGE ROOM ANT.
5 L	PASSENGER DOOR UNLOCK OUTPUT	35 V	LOADAGE ROOM ANT.*
7 V	STEAM AMB. CONT	36 B	BACK DOOR ANT.
8 V	ALL DOOR FUEL LID LOCK OUTPUT	39 W	BACK DOOR ANT.*
9 G	DRIVER DOOR FUEL LID UNLOCK OUTPUT	47 Y	IGNITERAY (FROM ECU) CONT
10 BR	REAR DOOR UNLOCK OUTPUT	52 SB	STARTER RELAY CONT
11 R	BAT.(USE)	60 BR	PUSH SW
13 B	GROUND	61 W	BACK DOOR OPENER REQUEST SW
14 W	PUSH-BUTTON IGNITION SW/L/GND	64 V	COMBI SW INPUT 4
15 Y	ACC IND	65 BG	COMBI SW INPUT 2
17 W	TURN SIGNAL RH(FRONT)	66 R	REAR WIPER STOP POSITION
18 EG	TURN SIGNAL LH(FRONT)	67 GR	BACK DOOR OPEN/R SW
19 V	INT ROOM LAMP CONT	68 BR	REAR LH DOOR SW
		69 A	REAR RH DOOR SW
Connector No.	M120	Connector No.	M122
Connector Name	BCM(BODY CONTROL MODULE E)	Connector Name	SCM(BODY CONTROL MODULE)
Connector Type	NS12FW CS	Connector Type	TH40FB-NH
			
Terminal Color Of No.	Signal Name [Specification]	Terminal Color Of No.	Signal Name [Specification]
20 V	TURN SIGNAL RH(REAR)	72 R	ROOM ANT2-
23 G	BACK DOOR OPEN OUTPUT	73 G	ROOM ANT2+
25 G	TURN SIGNAL LH(REAR)	74 GR	PASSENGER DOOR ANT.
26 G	REAR WIPER OUTPUT	75 GR	PASSENGER DOOR ANT.
		76 V	DRIVER DOOR ANT.
		77 LG	DRIVER DOOR ANT.
			DRIVER DOOR SW

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BCM (BODY CONTROL MODULE)		
Connector No.	R12	
5 G	-	
7 R	-	
8 SB	-	VANITY MIRROR LAMP LH
9 B	-	
10 GR	-	
11 R	-	MCA02FW

INSIDE KEY ANTENNA (CONSOLE)		
Connector No.	M146	
Connector Name	INSIDE KEY ANTENNA (CONSOLE)	
Connector Type	RK02RGY	

R12		
Terminal No.	Color Of Wire	Signal Name [Specification]
1 G	-	
2 R	-	

R13		
Terminal No.	Color Of Wire	Signal Name [Specification]
1 G	-	VANITY MIRROR LAMP RH
2 R	-	MCA02FW

R4		
Terminal No.	Color Of Wire	Signal Name [Specification]
1 G	-	SUNROOF MOTOR ASSEMBLY
2 R	-	YEAR10GY

R10		
Terminal No.	Color Of Wire	Signal Name [Specification]
1 G	-	
2 R	-	
3 Y	-	
4 B	-	
5 W	-	
6 L	-	
7 BR	-	
8 P	-	
9 SW-BIT1	-	
10 GND	-	

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Fail-safe

FAIL-SAFE CONTROL BY DTC

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

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 <ul style="list-style-type: none"> • Starter control relay signal • Starter relay status signal
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent <ul style="list-style-type: none"> • Starter motor relay control signal • Starter relay status signal (CAN)
B260A: IGNITION RELAY	Inhibit engine cranking	500 ms after the following conditions are fulfilled <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 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

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

Priority	DTC
1	B2562: LOW VOLTAGE
2	<ul style="list-style-type: none"> • U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN)
3	<ul style="list-style-type: none"> • B2190: NATS ANTENNA AMP • B2191: DIFFERENCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2195: ANTI SCANNING

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Priority	DTC	
4	<ul style="list-style-type: none"> • B2553: IGNITION RELAY • B2555: STOP LAMP • B2556: PUSH-BTN IGN SW • B2557: VEHICLE SPEED • B2560: STARTER CONT RELAY • B2601: SHIFT POSITION • B2602: SHIFT POSITION • B2603: SHIFT POSI STATUS • B2604: PNP SW • B2605: PNP SW • B2608: STARTER RELAY • B260A: IGNITION RELAY • B260F: ENG STATE SIG LOST • B2614: ACC RELAY CIRC • B2615: BLOWER RELAY CIRC • B2616: IGN RELAY CIRC • B2617: STARTER RELAY CIRC • B2618: BCM • B261A: PUSH-BTN IGN SW • B261E: VEHICLE TYPE • B26EA: KEY REGISTRATION • C1729: VHCL SPEED SIG ERR • U0415: VEHICLE SPEED SIG 	A B C D E F G
5	<ul style="list-style-type: none"> • C1704: LOW PRESSURE FL • C1705: LOW PRESSURE FR • C1706: LOW PRESSURE RR • C1707: LOW PRESSURE RL • C1708: [NO DATA] FL • C1709: [NO DATA] FR • C1710: [NO DATA] RR • C1711: [NO DATA] RL • C1716: [PRESSDATA ERR] FL • C1717: [PRESSDATA ERR] FR • C1718: [PRESSDATA ERR] RR • C1719: [PRESSDATA ERR] RL • C1734: CONTROL UNIT 	H I J
6	<ul style="list-style-type: none"> • B2621: INSIDE ANTENNA • B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA 	SEC

DTC Index

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NOTE:

The details of time display are as follows.

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

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to [BCS-18, "COMMON ITEM : CONSULT Function \(BCM - COMMON ITEM\)".](#)

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-37
U1010: CONTROL UNIT (CAN)	—	—	—	—	BCS-38
U0415: VEHICLE SPEED SIG	—	—	—	—	BCS-39

BCM

< 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
B2190: NATS ANTENNA AMP	×	—	—	—	SEC-40
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-40
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-60
B2622: INSIDE ANTENNA	—	×	—	—	DLK-62
B2623: INSIDE ANTENNA	—	×	—	—	DLK-64
B26E1: ENG STATE NO RES	×	×	×	—	SEC-69
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	—	SEC-70
C1704: LOW PRESSURE FL	—	—	—	×	WT-23
C1705: LOW PRESSURE FR	—	—	—	×	
C1706: LOW PRESSURE RR	—	—	—	×	
C1707: LOW PRESSURE RL	—	—	—	×	
C1708: [NO DATA] FL	—	—	—	×	WT-25
C1709: [NO DATA] FR	—	—	—	×	
C1710: [NO DATA] RR	—	—	—	×	
C1711: [NO DATA] RL	—	—	—	×	

BCM

< 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	—	—	—	×	WT-28
C1717: [PRESSDATA ERR] FR	—	—	—	×	
C1718: [PRESSDATA ERR] RR	—	—	—	×	
C1719: [PRESSDATA ERR] RL	—	—	—	×	
C1729: VHCL SPEED SIG ERR	—	—	—	×	WT-30
C1734: CONTROL UNIT	—	—	—	×	WT-32

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IPDM E/R

Reference Value

INFOID:0000000007689865

VALUES ON THE DIAGNOSIS TOOL

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 %
AC COMP REQ	Engine running	A/C switch OFF	Off
		A/C switch ON (Compressor is operating)	On
TAIL&CLR REQ	Lighting switch OFF		Off
	Lighting switch 1ST, 2ND, HI or AUTO (Light is illuminated)		On
HL LO REQ	Lighting switch OFF		Off
	Lighting switch 2ND HI or AUTO (Light is illuminated)		On
HL HI REQ	Lighting switch OFF		Off
	Lighting switch HI		On
FR FOG REQ	Lighting switch 2ND or AUTO (Light is illuminated)	Front fog lamp switch OFF	Off
		• Front fog lamp switch ON • Daytime running light activated (Only for Canada)	On
FR WIP REQ	Ignition switch ON	Front wiper switch OFF	Stop
		Front wiper switch INT	1LOW
		Front wiper switch LO	Low
		Front wiper switch HI	Hi
WIP AUTO STOP	Ignition switch ON	Front wiper stop position	STOP P
		Any position other than front wiper stop position	ACT P
WIP PROT	Ignition switch ON	Front wiper operates normally	Off
		Front wiper stops at fail-safe operation	BLOCK
IGN RLY1 -REQ	Ignition switch OFF or ACC		Off
	Ignition switch ON		On
IGN RLY	Ignition switch OFF or ACC		Off
	Ignition switch ON		On
PUSH SW	Release the push-button ignition switch		Off
	Press the push-button ignition switch		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
	At engine cranking		On
IHBT RLY -REQ	Ignition switch ON		Off
	At engine cranking		On

IPDM E/R

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status
ST/INHI RLY	Ignition switch ON	Off
	At engine cranking	INHI ON → ST ON
	The status of starter relay or starter control relay cannot be recognized by the battery voltage malfunction, etc. when the starter relay is ON and the starter control relay is OFF	UNKWN
DETENT SW	Ignition switch ON	<ul style="list-style-type: none"> • Press the selector button with selector lever in P position • Selector lever in any position other than P
	Release the selector button with selector lever in P position	On
S/L RLY -REQ	NOTE: The item is indicated, but not monitored.	Off
S/L STATE	NOTE: The item is indicated, but not monitored.	UNLOCK
DTRL REQ	NOTE: The item is indicated, but not monitored.	Off
OIL P SW	Ignition switch OFF, ACC or engine running	Open
	Ignition switch ON	Close
HOOD SW	Close the hood	Off
	Open the hood	On
HL WASHER REQ	NOTE: The item is indicated, but not monitored.	Off
THFT HRN REQ	Not operation	Off
	<ul style="list-style-type: none"> • Panic alarm is activated • Horn is activated with VEHICLE SECURITY (THEFT WARNING) SYSTEM 	On
HORN CHIRP	Not operating	Off
	Door locking with Intelligent Key (horn chirp mode)	On
CRNRNG LMP REQ	NOTE: The item is indicated, but not monitored.	Off

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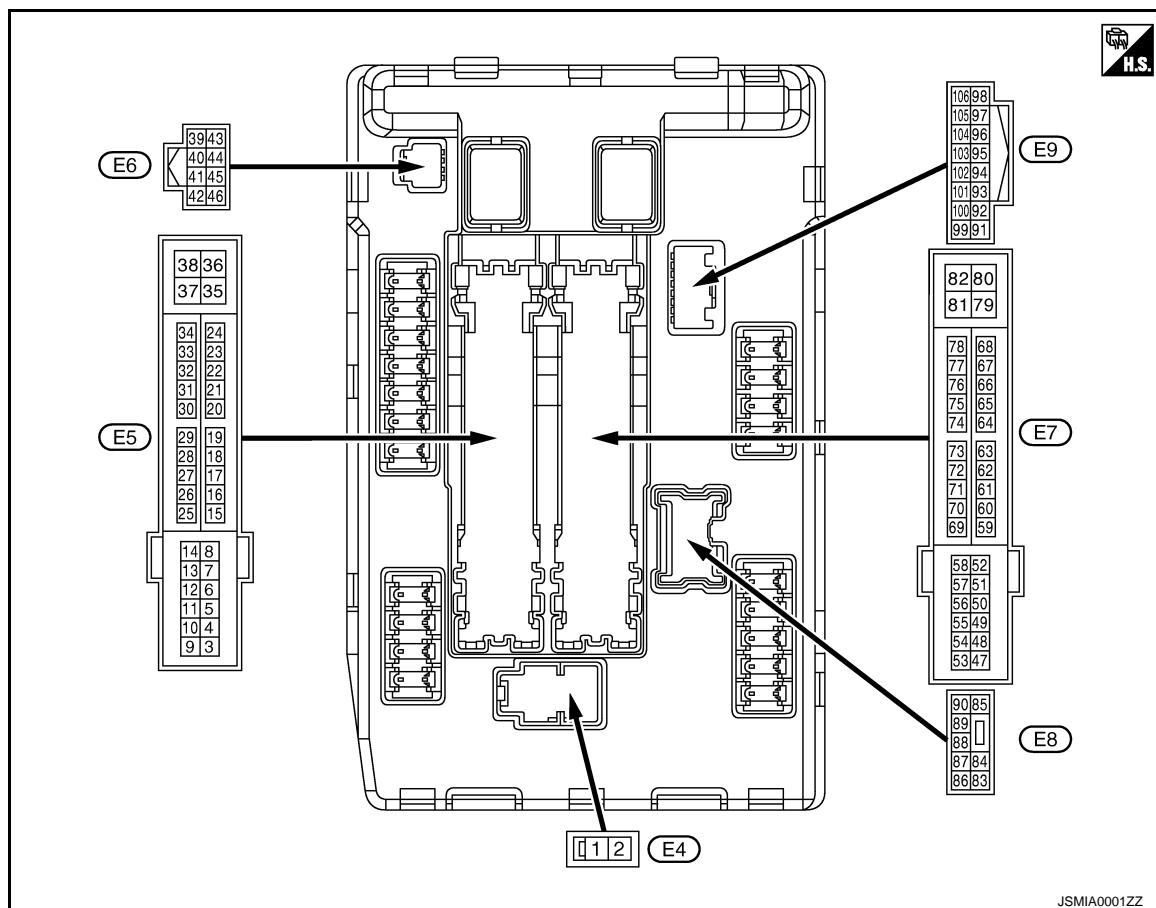
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TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)	Description		Condition	Value (Approx.)
	Signal name	Input/ Output		
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF
2 (L)	Ground	Battery power supply	Input	Ignition switch OFF
4 (V)	Ground	Front wiper LO	Output	Front wiper switch OFF
				Front wiper switch LO
5 (L)	Ground	Front wiper HI	Output	0 V
				Battery voltage
7 (R)	Ground	Tail, license plate lamps & interior lamps	Output	0 V
				Battery voltage
12 (B/W)	Ground	Ground	—	Ignition switch ON
13 (Y)	Ground	Fuel pump power supply	Output	0 V
				Battery voltage
16 (LG)	Ground	Front wiper auto stop	Input	Front wiper stop position
				Any position other than front wiper stop position

IPDM E/R

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)	Description		Condition	Value (Approx.)	
	Signal name	Input/ Output			
19 (W)	Ground	Ignition relay power supply	Output	Ignition switch OFF	
				Battery voltage	
25 (G)	Ground	Ignition relay power supply	Output	Ignition switch OFF	
				Battery voltage	
26* (R)	Ground	Ignition relay power supply	Output	Ignition switch OFF	
				Battery voltage	
27 (BG)	Ground	Ignition relay monitor	Input	Ignition switch OFF or ACC	
				0 V	
28 (L)	Ground	Push-button ignition switch	Input	Press the 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	
				Battery voltage	
36 (G)	Ground	Battery power supply	Input	Ignition switch OFF	Battery voltage
39 (P)	—	CAN-L	Input/ Output	—	—
40 (L)	—	CAN-H	Input/ Output	—	—
41 (B/W)	Ground	Ground	—	Ignition switch ON	0 V
42 (Y)	Ground	Cooling fan relay control	Input	Ignition switch OFF or ACC	0 V
				Ignition switch 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
				Release the selector button (selector lever P)	Battery voltage 0 V
44 (BR)	Ground	Horn relay control	Input	The horn is deactivated	Battery voltage
				The horn is activated	0 V
45 (G)	Ground	Anti theft horn relay control	Input	The horn is deactivated	Battery voltage
				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
				Selector lever P or N	0 V Battery voltage
48 (L)	Ground	A/C relay power supply	Output	Engine running	A/C switch OFF
				A/C switch ON (A/C compressor is operating)	Battery voltage
49 (BG)	Ground	ECM relay power supply	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)	0 V
				• Ignition switch ON • Ignition switch OFF (For a few seconds after turning ignition switch OFF)	Battery voltage

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IPDM E/R

< ECU DIAGNOSIS INFORMATION >

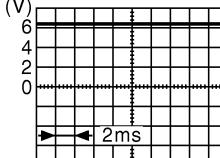
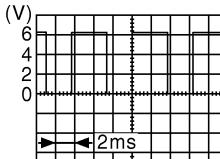
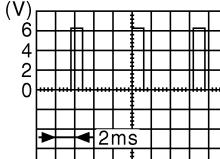
[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)	Description		Condition	Value (Approx.)
	+	-		
51 (Y)	Ground	Ignition relay power supply	Output	Ignition switch OFF
				0 V
53 (W)	Ground	ECM relay power supply	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)
				0 V
54 (P)	Ground	Throttle control motor relay power supply	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)
				0 V
55 (SB)	Ground	ECM power supply	Output	Ignition switch OFF
56 (LG)	Ground	Ignition relay power supply	Output	Ignition switch OFF
				0 V
57 (G)	Ground	Ignition relay power supply	Output	Ignition switch ON
				Battery voltage
58 (V)	Ground	Ignition relay power supply	Output	Ignition switch OFF
				0 V
69 (BR)	Ground	ECM relay control	Output	Ignition switch ON
				Battery voltage
70 (BG)	Ground	Throttle control motor relay control	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)
				0 – 1.5 V
74 (P)	Ground	Ignition relay power supply	Output	Ignition switch ON
				0 V
75 (SB)	Ground	Oil pressure switch	Input	Ignition switch ON
				Engine stopped
				0 V
				Engine running
				Battery voltage

IPDM E/R

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)	Description		Condition	Value (Approx.)
	Signal name	Input/ Output		
+	-			
76 (Y)	Ground	Power generation com-mand signal	Output	Ignition switch ON
				 JPMIA0001GB 6.3 V
				 JPMIA0002GB 3.8 V
77 (R)	Ground	Fuel pump relay control	Output	40% is set on "ACTIVE TEST", "AL-TERNATOR DUTY" of "ENGINE"
				 JPMIA0003GB 1.4 V
				80% is set on "ACTIVE TEST", "AL-TERNATOR DUTY" of "ENGINE"
80 (W)	Ground	Starter motor	Output	<ul style="list-style-type: none"> • Approximately 1 second after turning the ignition switch ON • Engine running
				Approximately 1 second or more after turning the ignition switch ON
83 (BG)	Ground	Headlamp LO (RH)	Output	Lighting switch OFF
				Lighting switch 2ND
84 (V)	Ground	Headlamp LO (LH)	Output	Lighting switch OFF
				Lighting switch 2ND
86 (W)	Ground	Front fog lamp (RH)	Output	Front fog lamp switch OFF
				<ul style="list-style-type: none"> • Front fog lamp switch ON • Daytime running light activated (Only for Can-ada)
87 (L)	Ground	Front fog lamp (LH)	Output	Front fog lamp switch OFF
				<ul style="list-style-type: none"> • Front fog lamp switch ON • Daytime running light activated (Only for Can-ada)
88 (GR)	Ground	Washer pump power sup- ply	Output	Ignition switch ON
				Battery voltage

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IPDM E/R

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

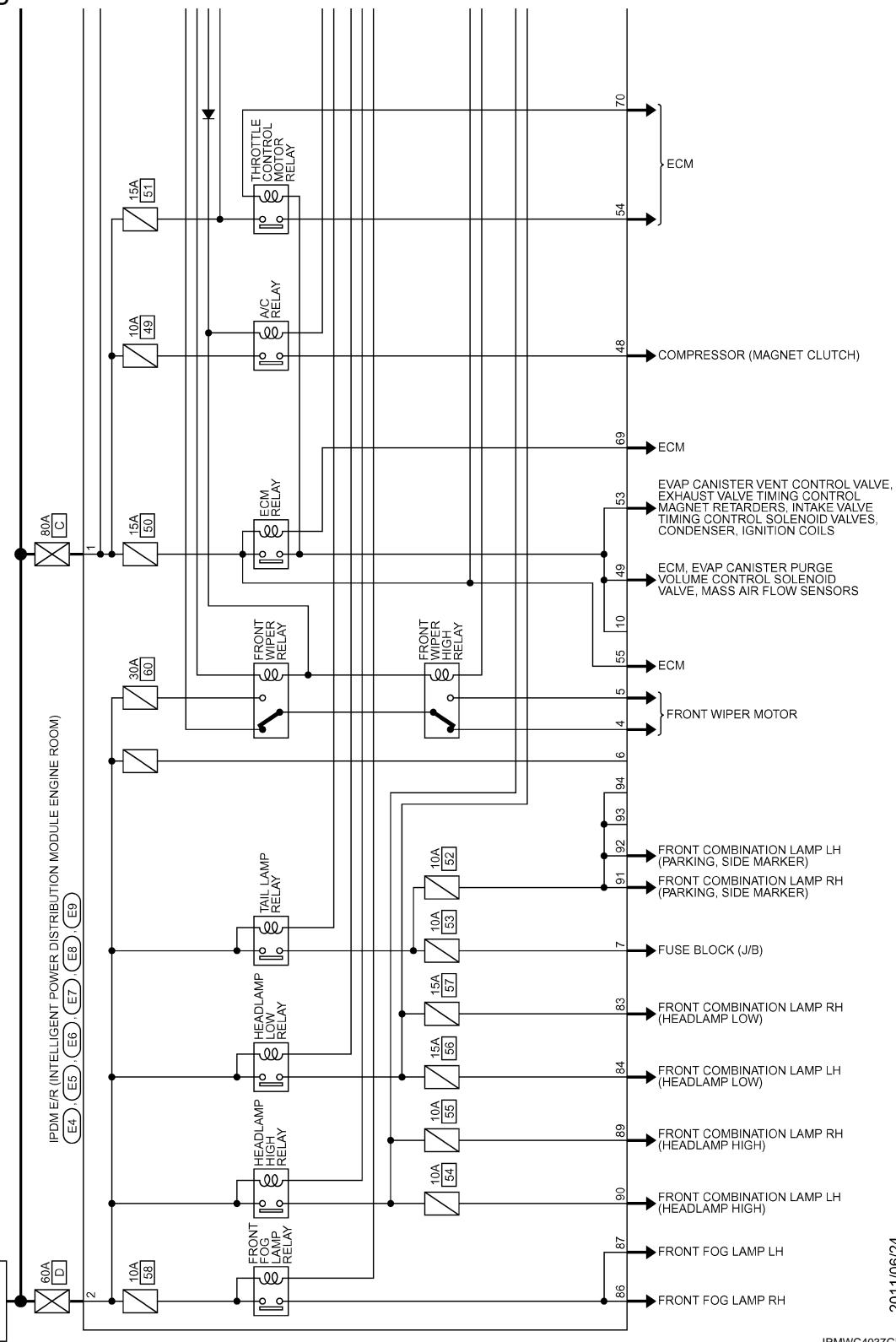
Terminal No. (Wire color)	Description		Condition	Value (Approx.)	
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89 (BR)	Ground	Headlamp HI (RH)	Output	Ignition switch ON	Lighting switch OFF • Lighting switch HI • Lighting switch PASS
				Ignition switch ON	Lighting switch OFF • Lighting switch HI • Lighting switch PASS
90 (P)	Ground	Headlamp HI (LH)	Output	Ignition switch ON	Lighting switch OFF • Lighting switch HI • Lighting switch PASS
				Ignition switch ON	Lighting switch OFF Lighting switch 1ST
91 (P)	Ground	Parking lamp (RH)	Output	Ignition switch ON	Lighting switch OFF Lighting switch 1ST
				Ignition switch ON	Lighting switch OFF Lighting switch 1ST
92 (BG)	Ground	Parking lamp (LH)	Output		0 V
97 (V)	Ground	Cooling fan control	Output	Engine idling	
104 (LG)	Ground	Hood switch	Input	Close the hood	
				Open the hood	

*: Only for the models with ICC system

Wiring Diagram - IPDM E/R -

INFOID:000000007689866

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



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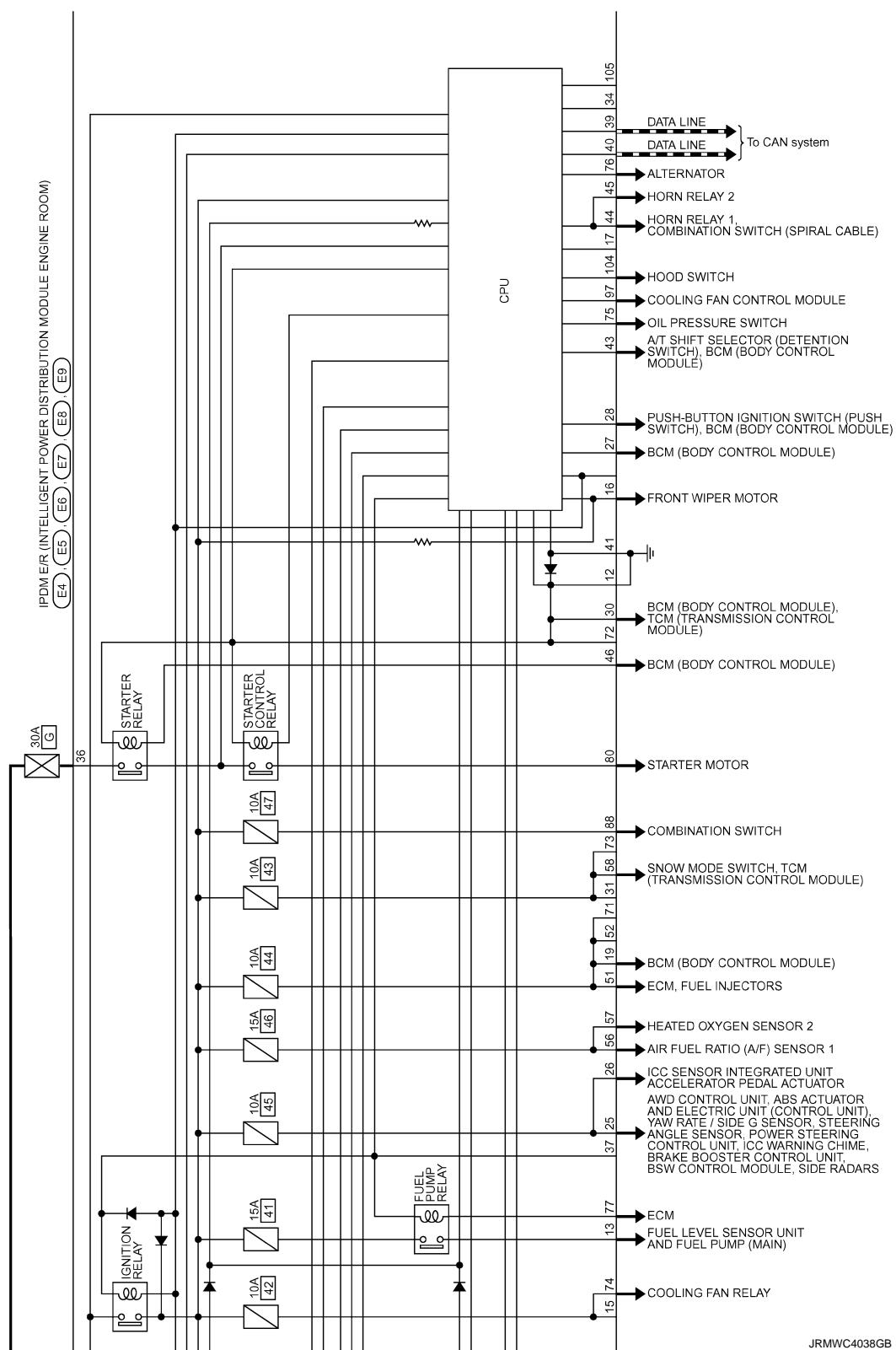
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IPDM E/R

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]



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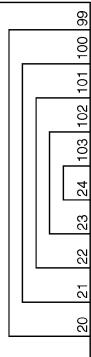
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IPDM E/R
(INTELLIGENT POWER
DISTRIBUTION MODULE
ENGINE ROOM)
E4 (E5), E6
E7 (E8), E9



JRMWC4039GB

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)		
Connector No.	Signal Name [Specification]	
E4		
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM	
Connector Type	TH07FBMC	
Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	L	-
39	P	-
40	L	-
41	BW	-
43	SB	-
44	BR	-
45	G	-
46	R	-

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)		
Connector No.	Signal Name [Specification]	
E5		
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM	
Connector Type	TH120PW-CS12-MA1V	
Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	L	-
3	BW	-
4	SB	-
5	BR	-
6	G	-
7	R	-
8	P	-
9	V	-
10	Y	-
11	GR	-
12	LG	-
13	Y	-
14	GR	-
15	LG	-
16	W	-
17	L	-
18	BW	-
19	SB	-
20	BR	-
21	G	-
22	R	-
23	P	-
24	V	-
25	Y	-
26	GR	-
27	LG	-
28	W	-
29	L	-
30	BW	-
31	SB	-
32	BR	-
33	G	-
34	R	-
35	P	-
36	V	-
37	Y	-
38	GR	-
39	LG	-
40	W	-
41	L	-
42	BW	-
43	SB	-
44	BR	-
45	G	-
46	R	-
47	P	-
48	V	-
49	Y	-
50	GR	-
51	LG	-
52	W	-
53	L	-
54	BW	-
55	SB	-
56	BR	-
57	G	-
58	R	-
59	P	-
60	V	-
61	Y	-
62	GR	-
63	LG	-
64	W	-
65	L	-
66	BW	-
67	SB	-
68	BR	-
69	G	-
70	R	-
71	P	-
72	V	-
73	Y	-
74	GR	-
75	LG	-

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)		
Connector No.	Signal Name [Specification]	
E6		
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM	
Connector Type	TH08RW-NH	
Terminal No.	Color Of Wire	Signal Name [Specification]
75	SB	-
76	Y	-
77	R	-
78	W	-
79	P	-
80	V	-

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)		
Connector No.	Signal Name [Specification]	
E8		
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM	
Connector Type	NS38FW-CS	
Terminal No.	Color Of Wire	Signal Name [Specification]
84	SB	-
85	Y	-
86	R	-
87	W	-
88	P	-
89	V	-
90	Y	-
91	GR	-
92	LG	-
93	W	-

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)		
Connector No.	Signal Name [Specification]	
E9		
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM	
Connector Type	TH161PW-NH	
Terminal No.	Color Of Wire	Signal Name [Specification]
97	Y	-
98	GR	-
99	LG	-
100	W	-
101	L	-
102	BW	-
103	SB	-
104	BR	-
105	G	-
106	R	-
107	P	-
108	V	-
109	Y	-
110	GR	-
111	LG	-
112	W	-
113	L	-
114	BW	-
115	SB	-
116	BR	-
117	G	-
118	R	-
119	P	-
120	V	-

JRMWG8116GB

INFOID:0000000007689867

Fail-safe

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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Control part	Fail-safe operation
Cooling fan	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> Parking lamps License plate lamps Side maker lamps Illuminations Tail lamps 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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		IPDM E/R judgment	Operation
Ignition relay contact side	Ignition relay excitation coil side		
ON	ON	Ignition relay ON normal	—
OFF	OFF	Ignition relay OFF normal	—
ON	OFF	Ignition relay ON stuck	<ul style="list-style-type: none"> 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	The front wiper stop position signal does not change for 10 seconds.

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:000000007689868

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 → 2 … 38 → 39 after returning to the normal condition whenever IGN OFF → ON.
- The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.

x: 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	—	SEC-77
B210C: START CONT RLY OFF	—	SEC-78
B210D: STARTER RELAY ON	—	SEC-79
B210E: STARTER RELAY OFF	—	SEC-80
B210F: INTRLCK/PNP SW ON	—	SEC-82
B2110: INTRLCK/PNP SW OFF	—	SEC-84

SYMPTOM DIAGNOSIS

ENGINE DOES NOT START WITH INTELLIGENT KEY

Description

INFOID:000000007457176

- 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.

Conditions of Vehicle (Operating Conditions)

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

Diagnosis Procedure

INFOID:000000007457177

1. PERFORM WORK SUPPORT

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

Refer to [SEC-24, "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-60, "DTC Logic"](#) (instrument center), [DLK-62, "DTC Logic"](#) (console) or [DLK-64, "DTC Logic"](#) (luggage room).

NO >> GO TO 3.

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.

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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:0000000007457180

- 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:0000000007457181

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-99, "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.

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:0000000007457182

- 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.

Conditions of Vehicle (Operating Conditions)

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

Diagnosis Procedure

INFOID:0000000007457183

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:000000007457184

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:000000007457185

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 [DLK-189, "Diagnosis Procedure"](#).

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:000000007457186

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:000000007457187

1. CHECK INTELLIGENT KEY SYSTEM (DOOR LOCK FUNCTION)

Lock/unlock door with door request switch.

Refer to [DLK-19, "DOOR LOCK FUNCTION : System Description"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check Intelligent Key system (door lock function). Refer to [DLK-186, "ALL DOOR : Diagnosis Procedure"](#).

2. CHECK HOOD SWITCH

VEHICLE SECURITY SYSTEM CAN NOT BE SET

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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 KEY CYLINDER

DOOR KEY CYLINDER : Description

INFOID:000000007457188

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

INFOID:000000007457189

1.CHECK POWER DOOR LOCK SYSTEM

Lock/unlock door with mechanical key.

Refer to [DLK-11, "System Description"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check power door lock system. Refer to [DLK-185, "Diagnosis Procedure"](#).

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.

SEC

VEHICLE SECURITY ALARM DOES NOT ACTIVATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY ALARM DOES NOT ACTIVATE

Description

INFOID:0000000007457190

Before performing the diagnosis in the following table, check "Work Flow". Refer to [SEC-5, "Work Flow"](#).

Diagnosis Procedure

INFOID:0000000007457191

1.CHECK DOOR SWITCH

Check door switch.

Refer to [DLK-67, "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-103, "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"](#).

NO >> GO TO 1.

VEHICLE SECURITY SYSTEM CAN NOT CANCELED

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM CAN NOT CANCELED INTELLIGENT KEY

INTELLIGENT KEY : Description

INFOID:000000007457192

Before performing the diagnosis in the following table, check "Work Flow". Refer to [SEC-5, "Work Flow"](#).

INTELLIGENT KEY : Diagnosis Procedure

INFOID:000000007457193

1.CHECK INTELLIGENT KEY

Check Intelligent Key.

Refer to [DLK-98, "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 [SEC-9, "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?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH : Description

INFOID:000000007457194

Before performing the diagnosis in the following table, check "Work Flow". Refer to [SEC-5, "Work Flow"](#).

DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:000000007457195

SEC

1.CHECK DOOR REQUEST SWITCH

Check door request switch.

Refer to [DLK-87, "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 Description"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Refer to [DLK-7, "Work Flow"](#).

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

VEHICLE SECURITY SYSTEM CAN NOT CANCELED

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DOOR KEY CYLINDER : Description

INFOID:0000000007457196

Before performing the diagnosis in the following table, check "Work Flow". Refer to [SEC-5, "Work Flow"](#).

DOOR KEY CYLINDER : Diagnosis Procedure

INFOID:0000000007457197

1.CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.

Refer to [DLK-80, "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 [DLK-7, "Work Flow"](#).

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.

INTELLIGENT KEY INSERT INFORMATION DOES NOT OPERATE**Description**

INFOID:0000000007457198

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-39, "WARNING FUNCTION : System Description".](#)

Diagnosis Procedure

INFOID:0000000007457199

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 [SEC-163, "DTC Index".](#)
- NO >> Repair or replace the malfunctioning parts.

3.CHECK DOOR SWITCH

Check door switch.

Refer to [DLK-67, "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-99, "Component Function Check".](#)

Is the inspection result normal?

- YES >> GO TO 5.
- NO >> Repair or replace the malfunctioning parts.

5.CHECK COMBINATION METER DISPLAY

Check combination meter display.

Refer to [DLK-105, "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-101, "Component Function Check".](#)

Is the inspection result normal?

- YES >> GO TO 7.
- NO >> Repair or replace the malfunctioning parts.

7.CONFIRM THE OPERATION

Confirm the operation again.

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"](#).

NO >> GO TO 1.

PRECAUTION

PRECAUTIONS

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

INFOID:0000000007457200

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:

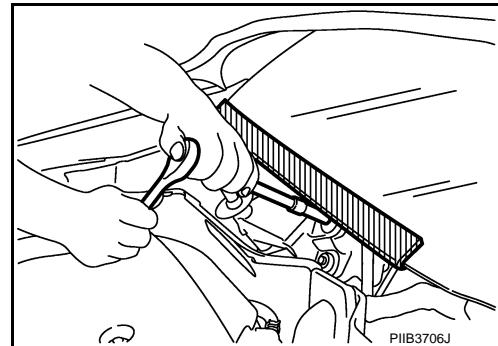
Always observe the following items for preventing accidental activation.

- 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

INFOID:0000000007457201

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



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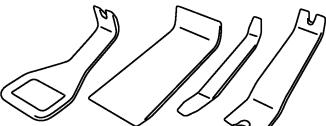
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PREPARATION**PREPARATION**

Commercial Service Tools

INFOID:000000007697949

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

REMOVAL AND INSTALLATION

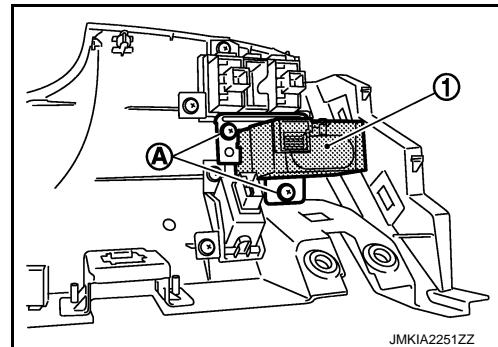
KEY SLOT

Removal and Installation

INFOID:000000007457204

REMOVAL

1. Remove the instrument driver lower panel. Refer to [IP-13, "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]

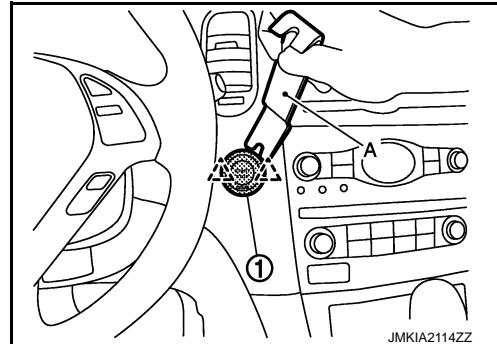
PUSH-BUTTON IGNITION SWITCH

Removal and Installation

INFOID:0000000007457205

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.