SECTION SEC
SECURITY CONTROL SYSTEM

CONTENTS

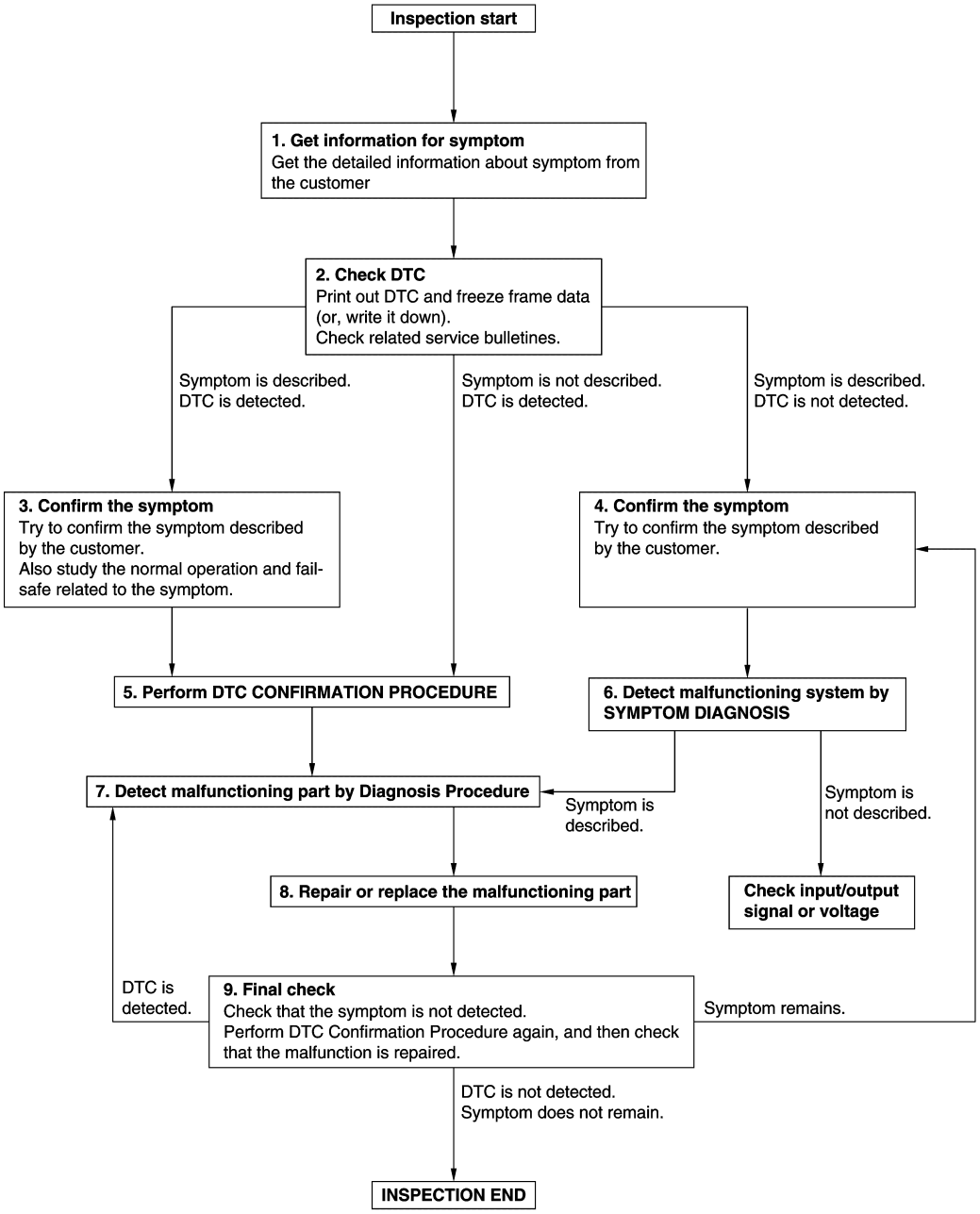
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000011489142

OVERALL SEQUENCE



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DETAILED FLOW

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 BCS-83, "DTC Inspection Priority Chart" (BCM), PCS-32, "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-39, "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

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.
NO >> Check according to GI-39, "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.

INSPECTION AND ADJUSTMENT
ECM RE-COMMUNICATING FUNCTION

ECM RE-COMMUNICATING FUNCTION : Description

INFOID:0000000011489143

Performing the 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 beginning work.**
- **Distinguish keys with unregistered key IDs from those with registered IDs.**

ECM RE-COMMUNICATING FUNCTION : Work Procedure

INFOID:0000000011489144

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 the “ON” position for at least 5 seconds.
4. Turn ignition switch to “OFF”.
5. Start engine.

Can engine be started?

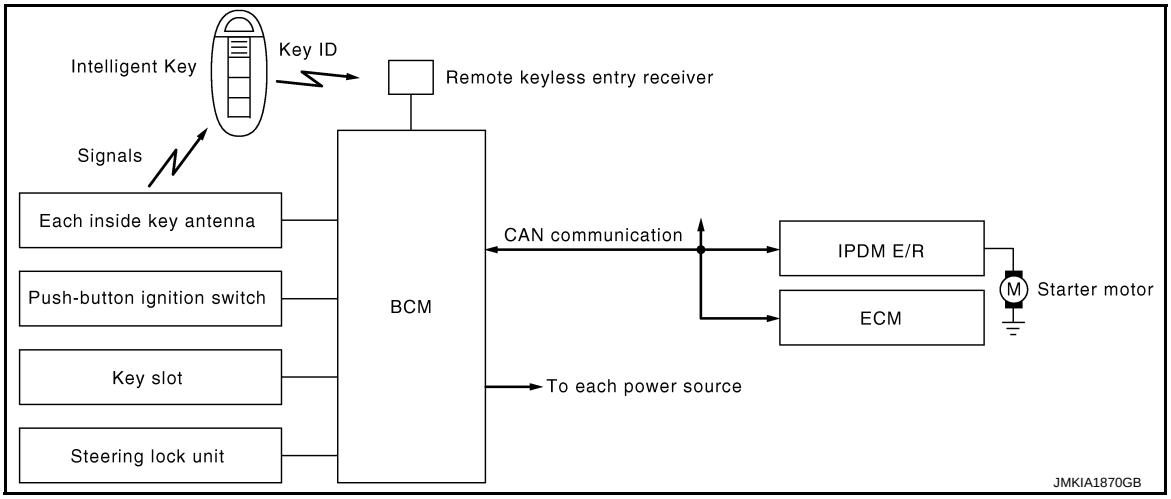
YES >> Procedure is completed.
NO >> Initialize control unit.

SYSTEM DESCRIPTION

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

System Diagram

INFOID:0000000011489145



System Description

INFOID:0000000011489146

- 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 communication 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 communication between the Intelligent Key and the vehicle.
  NOTE:
  The driver should carry the Intelligent Key at all times.
- Intelligent Key has 2 IDs [for Intelligent Key and for NVIS (NATS)]. It can perform the door lock/unlock operation and the push-button ignition switch operation when the registered Intelligent Key is carried.
- When the Intelligent Key battery is discharged, it can be used as emergency back-up by inserting the Intelligent Key to the key slot. At that time, perform the NVIS (NATS) ID verification. If it is used when the Intelligent Key is carried, perform the Intelligent Key ID verification.
- If the ID is successfully verified, and when push-button ignition switch is pressed, steering lock will be released and starting the engine will be possible.
- 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.
- Up to 4 Intelligent Keys can be registered (Including the standard Intelligent Key) on request from the owner.
  NOTE:
  - Refer to SEC-9, "System Description" for any functions other than engine start function of Intelligent Key system.

PRECAUTIONS FOR INTELLIGENT KEY SYSTEM

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

OPERATION WHEN INTELLIGENT KEY IS CARRIED

1. When the push-button ignition switch is pressed, the BCM signals the inside key antenna and transmits the request signal to the Intelligent Key.
2. The Intelligent Key receives the request signal and transmits the Intelligent Key ID signal to the BCM via the remote keyless entry receiver.
3. The BCM receives the Intelligent Key ID signal and verifies it with the registered ID.

4. BCM transmits the steering lock unlock signal to steering lock unit and IPDM E/R if the verification results are OK.
5. IPDM E/R turns the steering lock relay ON and supplies power to the steering lock unit.
6. Release of the steering lock.
7. BCM transmits the power supply stop signal to IPDM E/R when it confirms that the steering lock is in the unlock condition.
8. IPDM E/R turns the steering lock relay OFF and stops power supply to the steering lock unit.
9. BCM turns ACC relay ON and transmits the ignition power supply ON signal to IPDM E/R.
10. IPDM E/R turns the ignition relay ON and starts the ignition power supply.
11. BCM confirms that the shift position is P or N.
12. 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.
13. IPDM E/R turns the starter control relay ON when receiving the starter request signal.
14. Battery power is supplied through the starter relay and the starter control relay to operate the starter motor and to start the cranking.
    CAUTION:
    If a malfunction is detected in the Intelligent Key system, the “KEY” warning lamp in the combination meter illuminates. At that time, the engine cannot be started.
15. When BCM receives feedback signal from ECM acknowledging the engine has been initiated, the BCM transmits a stop signal to IPDM E/R and stops the cranking by turning OFF the starter motor relay. (If the engine initiating has failed, the cranking will stop automatically within 5 seconds.)
    CAUTION:
    When the Intelligent Key is carried outside of the vehicle (inside key antenna detection area) with the power supply in the ACC or ON position, even if the engine start condition* is satisfied, the engine cannot be started.

*: For the engine start condition, refer to “PUSH-BUTTON IGNITION SWITCH OPERATION PROCEDURE”.

OPERATION RANGE

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

OPERATION WHEN KEY SLOT IS USED

When the Intelligent Key battery is discharged, it performs the NVIS (NATS) ID verification between the integrated transponder and BCM by inserting the Intelligent Key into the key slot, and then the engine can be started.
For details relating to starting the engine using key slot, refer to SEC-15, "System Description".

BATTERY SAVER SYSTEM

When all the following conditions are met for 60 minutes, the battery saver system will cut off the power supply to prevent battery discharge.
- The ignition switch is in the ACC position
- All doors are closed
- Shift lever is in the P position

Reset Condition of Battery Saver System

If any of the following conditions are met the battery saver system is released and the steering will change automatically to the lock position from the OFF position.
- Opening any door
- Operating with request switch on door lock
- Operating with Intelligent Key on door lock

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

STEERING LOCK OPERATION

Steering is locked by steering lock unit when ignition switch is in the OFF position, shift lever is in the P position and any of the following conditions are met.
- Opening door
- Closing door
- Door is locked with request switch
- Door is locked with Intelligent Key

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
- Shift 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
	Shift lever position	Brake pedal operation condition	
LOCK → ACC	—	Not depressed	1
LOCK → ACC → ON	—	Not depressed	2
LOCK → ACC → ON → OFF	—	Not depressed	3
LOCK → 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

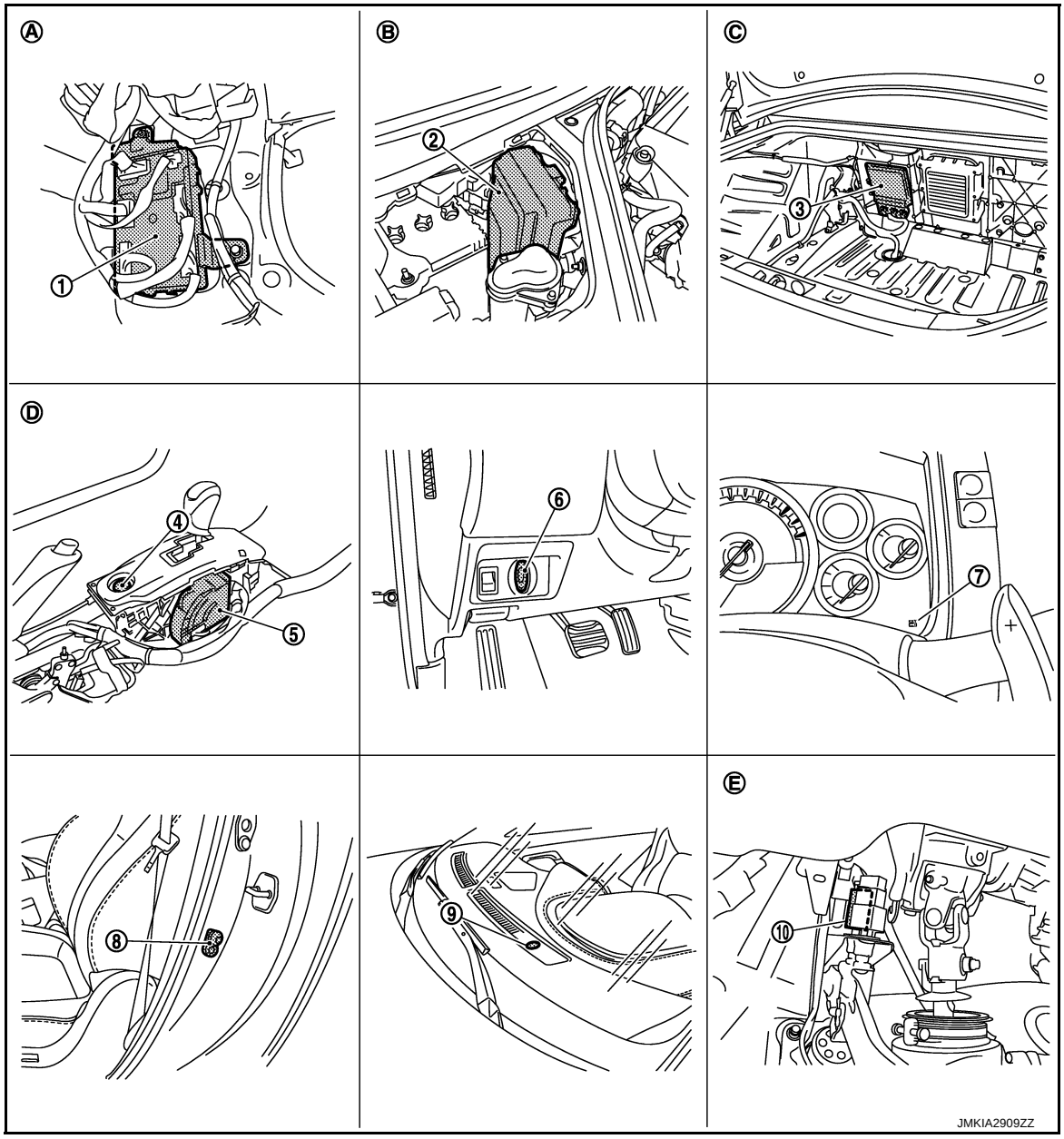
Power supply position	Engine start/stop condition		Push-button ignition switch operation frequency
	Shift lever position	Brake pedal operation condition	
Engine is running → ACC	—	—	Emergency stop operation
Engine stall return operation while driving	N position	Not depressed	1

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.

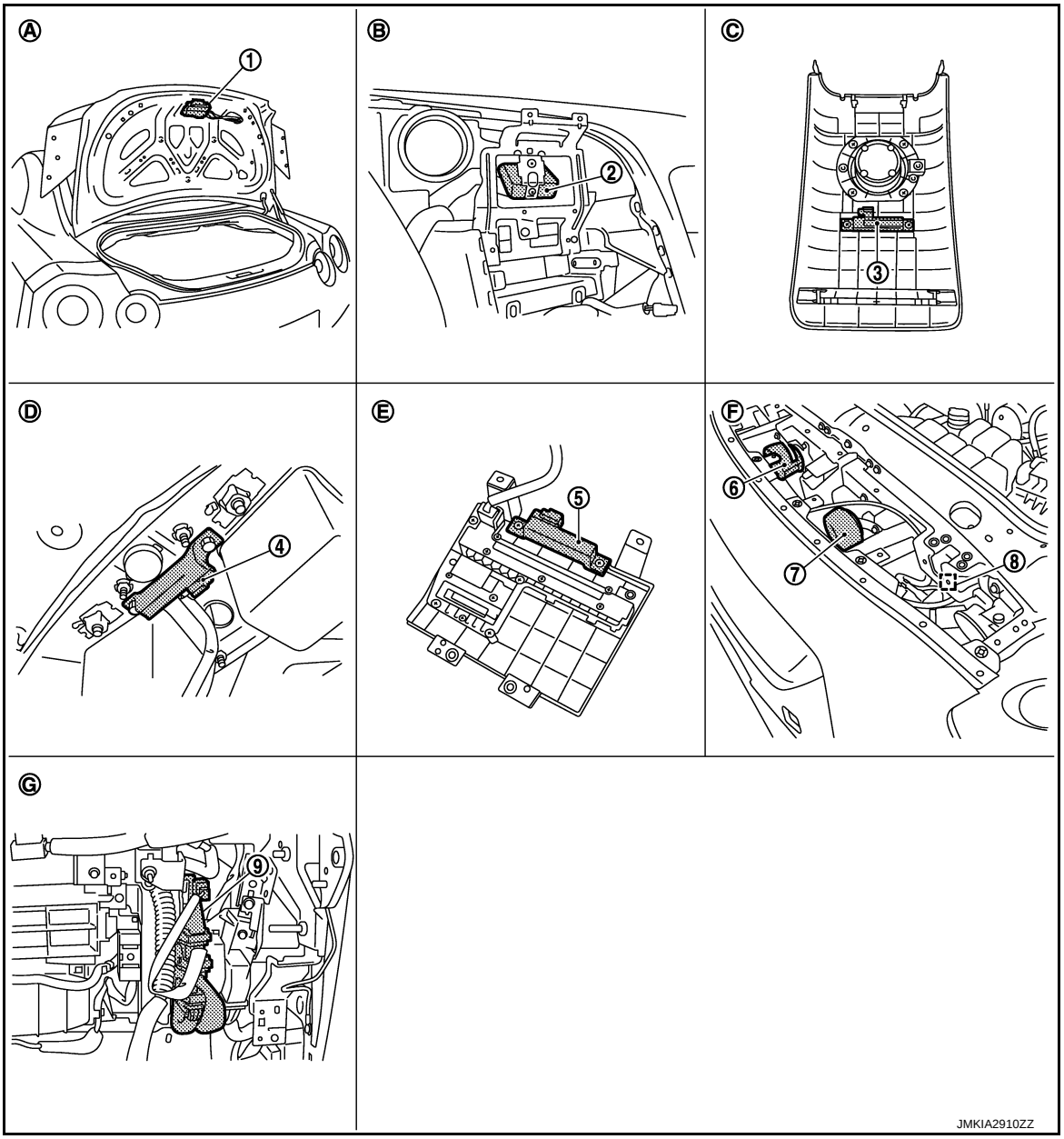
Component Parts Location

INFOID:0000000011489147



1. BCM M118, M119, M121, M122, M123
2. IPDM E/R E4, E5, E6, E7
3. TCM B45
4. Push-button ignition switch M131
5. A/T shift selector (detention switch) B20
6. Key slot M60
7. Combination meter (Key warning lamp) M53
8. Driver side door switch B21
9. Security indicator lamp M29
10. Stop lamp switch E110

A. Behind the instrument lower panel RH
B. Engine room dash panel (RH)
C. View with trunk front finisher removed
D. View with center console assembly removed
E. View with instrument lower panel (driver) removed



1. Trunk lid lock assembly (trunk room lamp switch) B352
2. Remote keyless entry receiver M134
3. Inside key antenna (console) M146
4. Inside key antenna (trunk room) B41
5. Inside key antenna (instrument center) M75
6. Horn (high) E79, E80
7. Horn (low) E81, E82
8. Hood switch E83
9. ECM M107
- A. View with trunk lid finisher removed
- B. Behind the display unit
- C. Back of the rear console assembly
- D. Behind the trunk front finisher
- E. Back of the cluster kid C (lower)
- F. Behind the front bumper
- G. Behind the instrument lower panel (assist)

Component Description

INFOID:0000000011489148

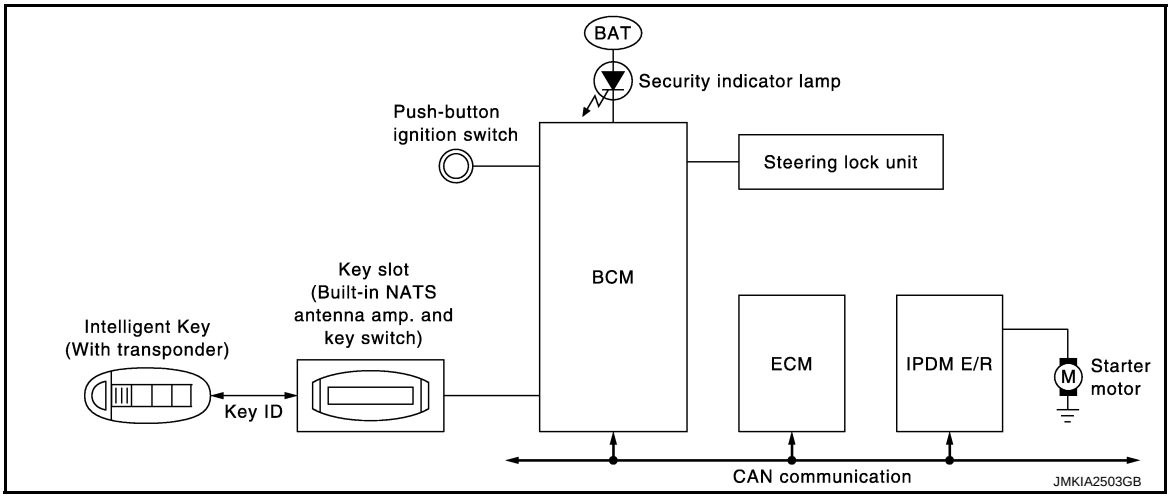
Component	Reference
BCM	SEC-90
Steering lock unit	SEC-78
Push-button ignition switch	SEC-91

Component	Reference
Door switch	DLK-63
A/T shift selector (detention switch)	SEC-58
Inside key antenna	DLK-56
Remote keyless entry receiver	DLK-74
Stop lamp switch	SEC-52
TCM	SEC-65
Steering lock relay	SEC-69
Starter relay	SEC-102
Starter control relay	SEC-100
Security indicator lamp	SEC-114
Key warning lamp	SEC-116

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

System Diagram

INFOID:0000000011489149



System Description

INFOID:0000000011489150

- The NVIS (NATS) is an anti-theft system by registering an Intelligent Key ID in to the vehicle and prevents the engine being started by an unregistered Intelligent Key. It has a higher protection against auto thefts that duplicate mechanical key.
- It performs the ID verification when starting the engine in the same way as the Intelligent Key system. But, it performs the NVIS (NATS) ID verification when inserting the Intelligent Key and performs the Intelligent Key ID verification when carrying the Intelligent Key.
- The mechanical key integrated in the Intelligent Key cannot start the engine. When the Intelligent Key battery is discharged, the NVIS (NATS) ID verification memorized to the transponder integrated with Intelligent Key is performed by inserting the Intelligent Key into the key slot. If the verification results are OK, the engine start operation can be performed by the push-button ignition switch operation.
- Locate the security indicator and apply the anti-theft system equipment sticker, forewarn that the NVIS (NATS) is onboard with the model.
- The security indicator always blinks when the power supply position is in any position except the ON position.
- Up to 4 Intelligent Keys can be registered (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 NVIS (NATS) and registration procedure for Intelligent Key when installing the BCM, follow the instruction of CONSULT display.
- Possible symptom of NVIS (NATS) malfunction is “Engine can not start”. The engine can be started with the Intelligent Key system and NVIS (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 : Work Procedure".

PRECAUTIONS FOR KEY REGISTRATION

- The key registration is a procedure that erases the current NVIS (NATS) ID once, and then re-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 IDs (NVIS “NATS” ID registration and Intelligent Key ID registration).
  The NVIS (NATS) ID registration is the procedure that registers the IDs stored into the transponder (integrated in Intelligent Key) to BCM.
  The Intelligent Key ID registration is the procedure that registers the ID to BCM.
- When performing the Intelligent Key system registration only, the engine cannot be started by inserting the key into the key slot. When performing the NVIS (NATS) registration only, the engine cannot be started by pressing the push-button ignition switch when carrying the Intelligent Key. The registrations of both systems should be performed.

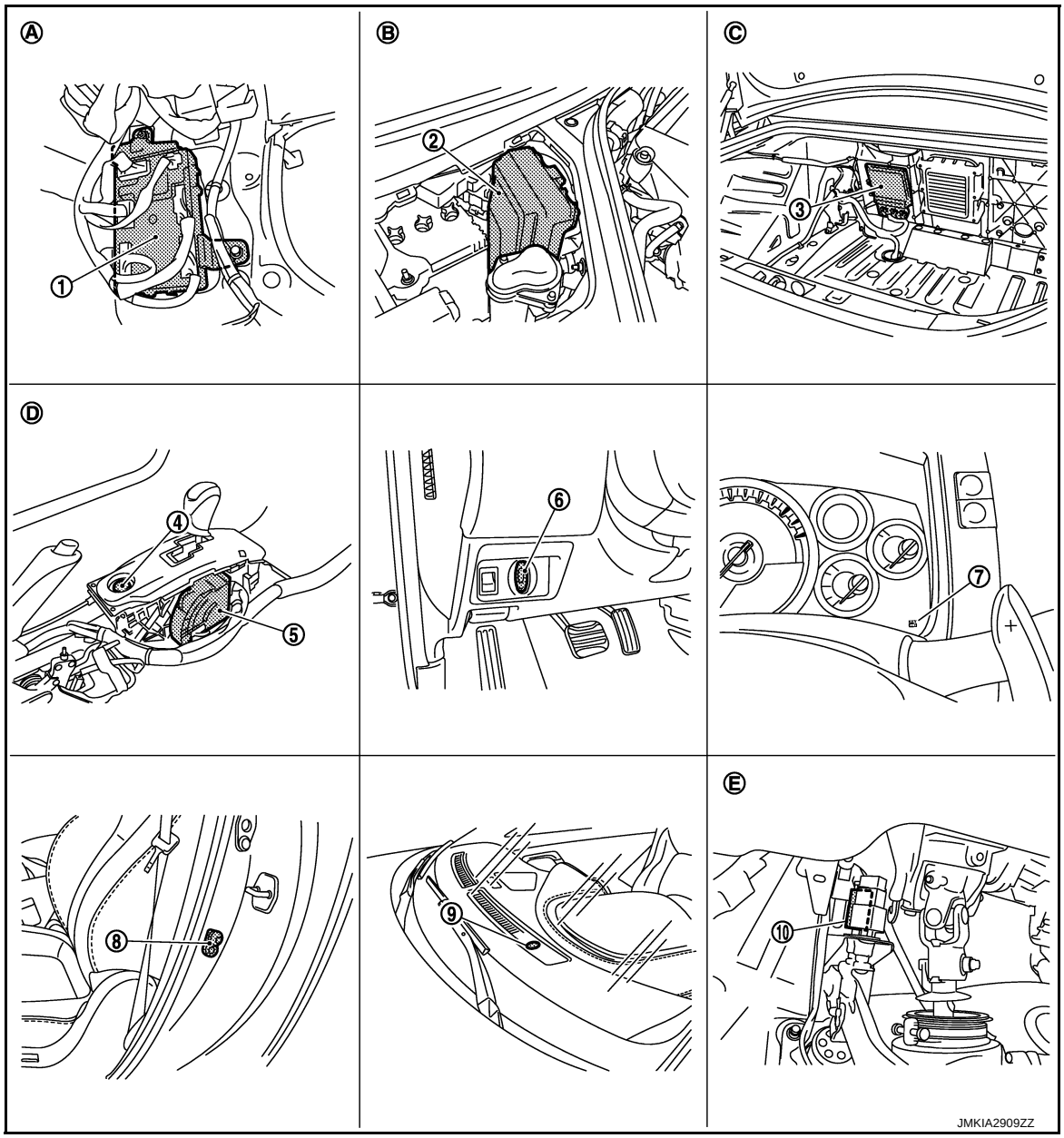
SECURITY INDICATOR LAMP

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

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

Component Parts Location

INFOID:0000000011489151



1.	BCM M118, M119, M121, M122, M123	2.	IPDM E/R E4, E5, E6, E7	3.	TCM B45
4.	Push-button ignition switch M131	5.	A/T shift selector (detention switch) B20	6.	Key slot M60
7.	Combination meter (Key warning lamp) M53	8.	Driver side door switch B21	9.	Security indicator lamp M29
10.	Stop lamp switch E110				
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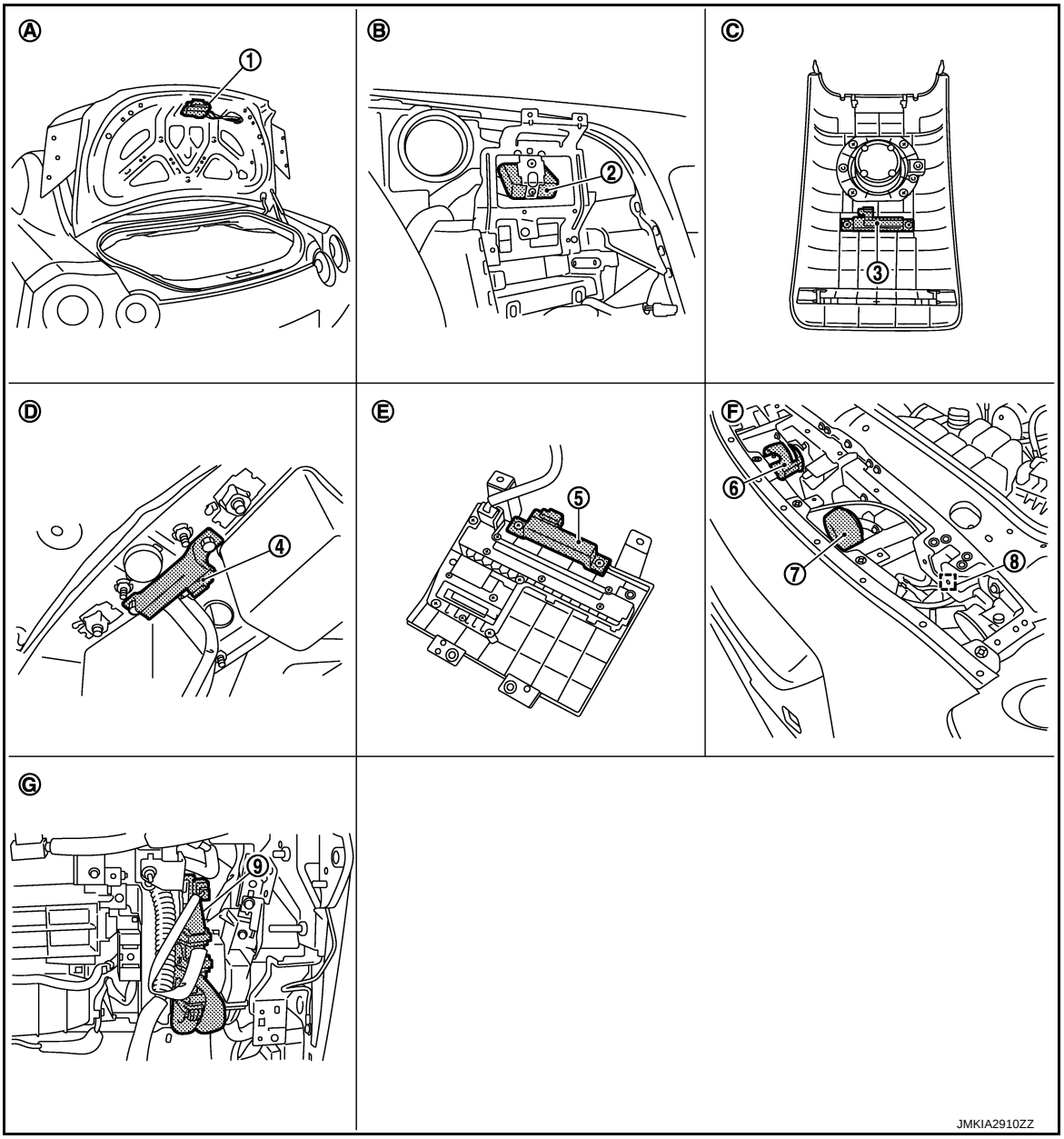

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- A. View with trunk lid finisher removed
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- E. Back of the cluster kid C (lower)
- F. Behind the front bumper
- G. Behind the instrument lower panel (assist)

Component Description

INFOID:0000000011489152

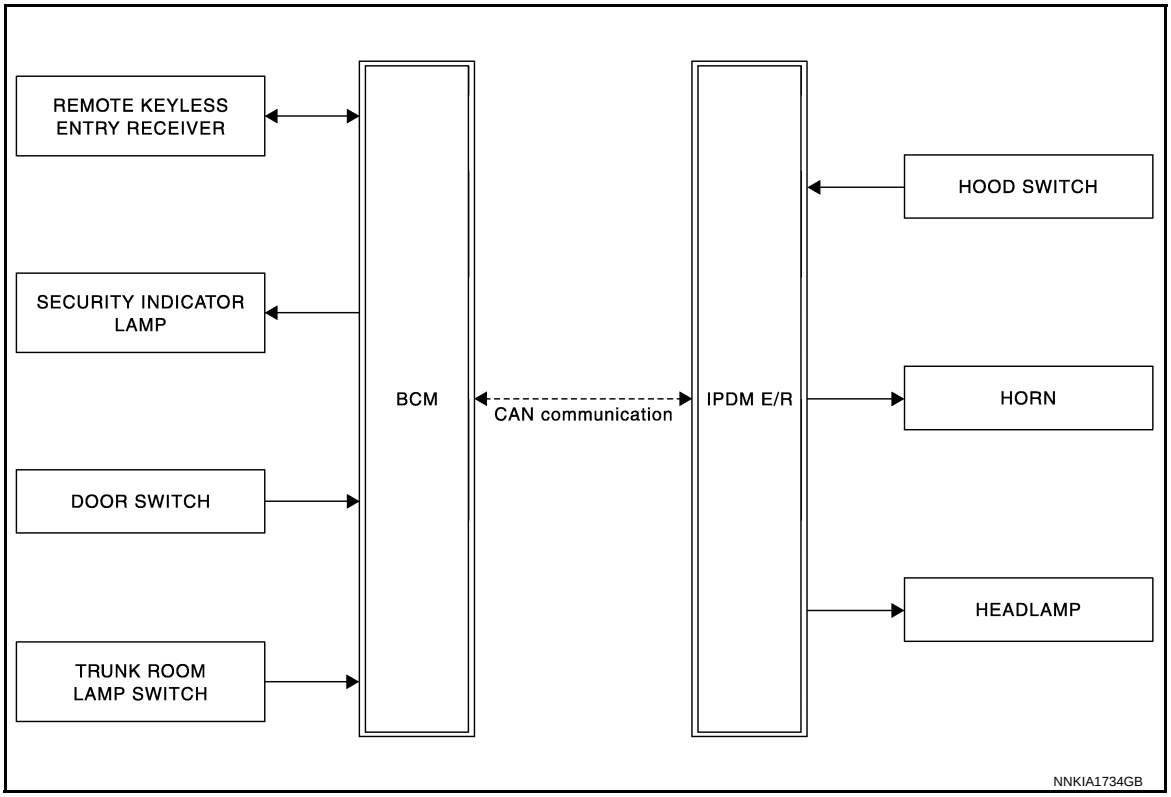
Component	Reference
BCM	SEC-90
Steering lock unit	SEC-78
Push-button ignition switch	SEC-54

Component	Reference
Door switch	DLK-63
Key slot	DLK-94
A/T shift selector (detention switch)	SEC-58
Stop lamp switch	SEC-52
TCM	SEC-65
Steering lock relay	SEC-69
Starter relay	SEC-72
Starter control relay	SEC-100
Security indicator lamp	SEC-114
Key warning lamp	SEC-116

VEHICLE SECURITY SYSTEM

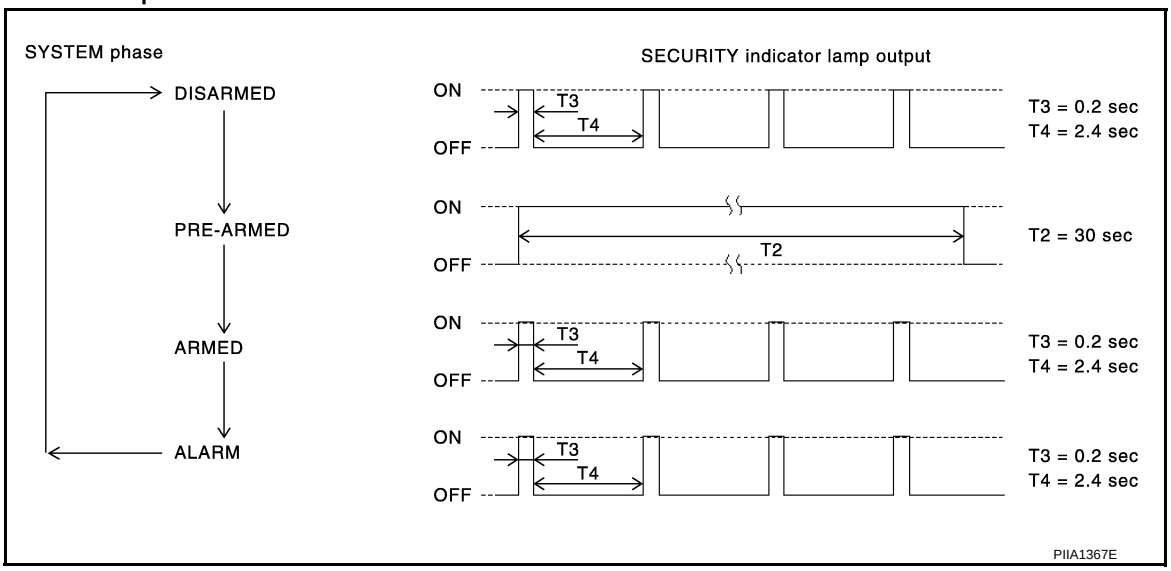
System Diagram

INFOID:0000000011489153



System Description

INFOID:0000000011489154



SETTING THE VEHICLE SECURITY SYSTEM

Initial Condition

- Ignition switch is in OFF position.

Disarmed Phase

- When any door or trunk 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, the security indicator lamp blinks every 2.4 seconds.

Pre-armed Phase and Armed Phase

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

1. BCM receives LOCK signal from front door request switch, Intelligent Key, after trunk and all doors are closed.
2. The security indicator lamp illuminates for 30 seconds. Then, the system automatically shifts into the “armed” phase.

CANCELING THE SET VEHICLE SECURITY SYSTEM

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

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

CANCELING THE ALARM OPERATION OF THE VEHICLE SECURITY SYSTEM

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

ACTIVATING THE ALARM OPERATION OF THE VEHICLE SECURITY SYSTEM

Check that the system is in the armed phase. (The security indicator lamp blinks every 2.4 seconds.)

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

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

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

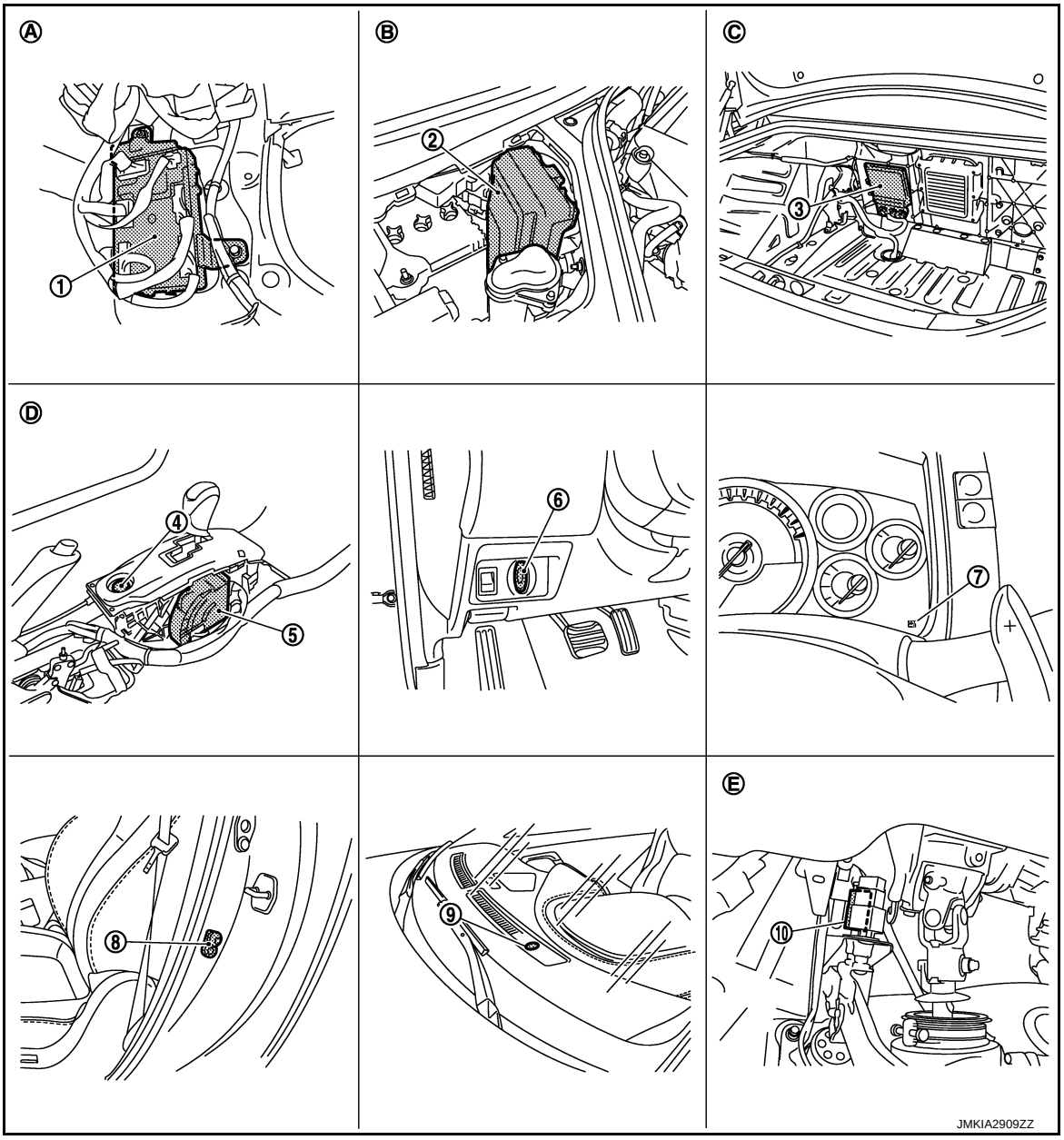
When headlamp relay and horn relay are energized, then power is supplied to headlamps (high beam and low beam) and horns (high, low and vehicle security horn).

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.

Component Parts Location

INFOID:0000000011489155



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2. IPDM E/R E4, E5, E6, E7
3. TCM B45
4. Push-button ignition switch M131
5. A/T shift selector (detention switch) B20
6. Key slot M60
7. Combination meter (Key warning lamp) M53
8. Driver side door switch B21
9. Security indicator lamp M29
10. Stop lamp switch E110

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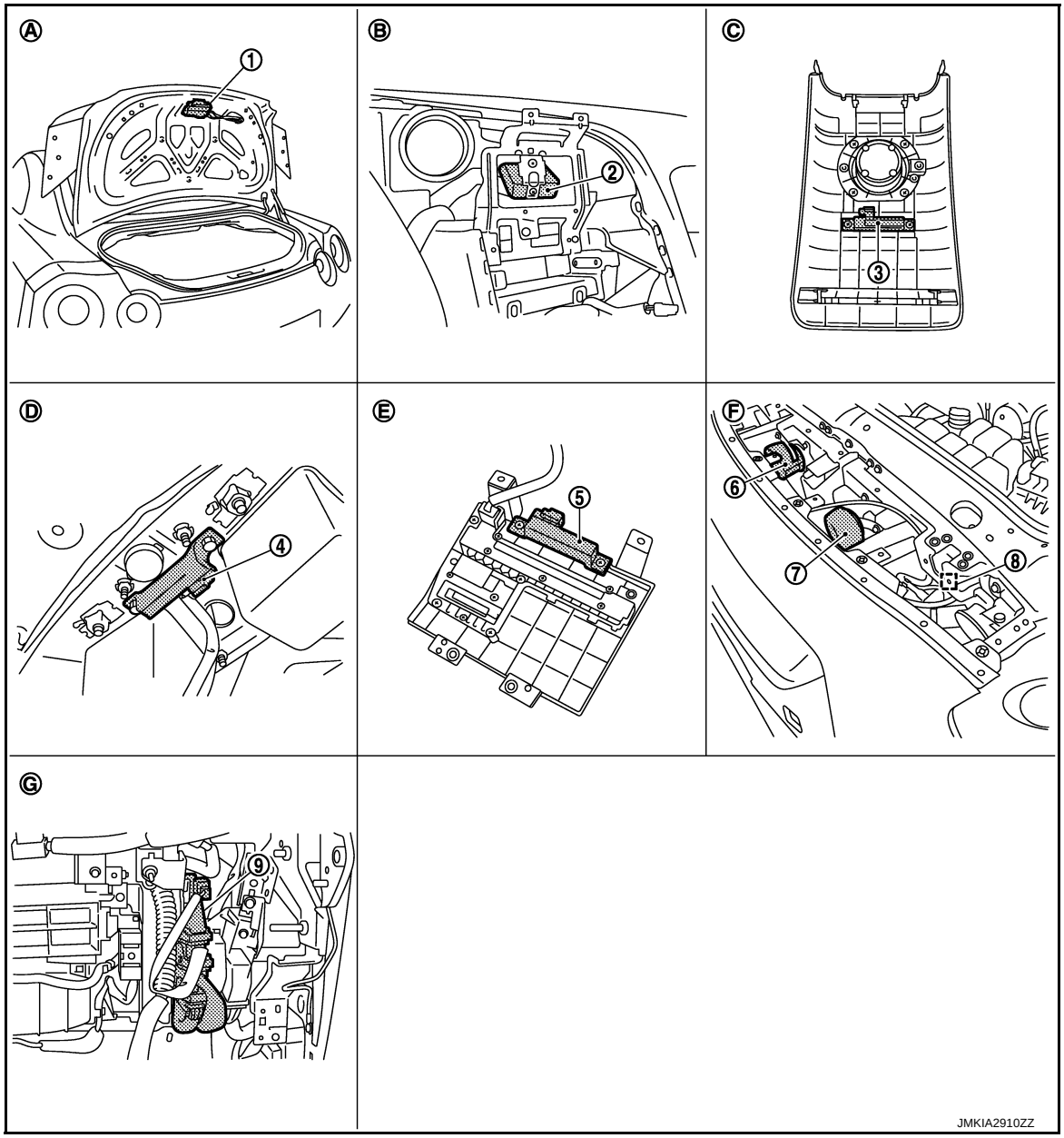

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- D. Behind the trunk front finisher
- E. Back of the cluster kid C (lower)
- F. Behind the front bumper
- G. Behind the instrument lower panel (assist)

Component Description

INFOID:0000000011489156

Component	Reference
BCM	BCS-7
Horn relay 1	SEC-117
Horn relay 2	SEC-117

Component	Reference
Security indicator lamp	SEC-114
Door switch	DLK-63
Trunk lid lock assembly (trunk room lamp switch)	DLK-63

DIAGNOSIS SYSTEM (BCM)
COMMON ITEM
COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000011802305

APPLICATION ITEM
CONSULT performs the following functions via CAN communication with BCM.

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

SYSTEM APPLICATION
BCM can perform the following functions for each system.
NOTE:
It can perform the diagnosis modes except the following for all sub system selection items.

×: Applicable item

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

*: 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.

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	Power position status of the moment a particular DTC is detected	While turning BCM status from low power consumption mode to normal mode (Power supply position is “LOCK”)
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is “OFF”.)
	LOCK>ACC		While turning power supply position from “LOCK” to “ACC”
	ACC>ON		While turning power supply position from “ACC” to “IGN”
	RUN>ACC		While turning power supply position from “RUN” to “ACC” (Vehicle is stopping and shift lever is except P position.)
	CRANK>RUN		While turning power supply position from “CRANKING” to “RUN” (From cranking up the engine to run it)
	RUN>URGENT		While turning power supply position from “RUN“ to “ACC” (Emergency stop operation)
	ACC>OFF		While turning power supply position from “ACC” to “OFF”
	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” (Ignition switch OFF with steering is locked.)
	OFF		Power supply position is “OFF” (Ignition switch OFF with steering is unlocked.)
	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.	

INTELLIGENT KEY

INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)

INFOID:0000000011802306

BCM CONSULT FUNCTION

CONSULT performs the following functions via CAN communication with BCM.

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

WORK SUPPORT

Monitor item	Description
REMO CONT ID CONFIR	It can be checked whether Intelligent Key ID code is registered or not in this mode.
AUTO LOCK SET	Auto door lock time can be changed in this mode. • MODE 1: 1 minute • MODE 2: 5 minutes • MODE 3: 30 seconds • MODE 4: 2 minutes
LOCK/UNLOCK BY I-KEY	Door lock/unlock function by door request switch (driver side and passenger side) mode can be changed to operate (WITH) or not operate (WITHOUT) in this mode.
ENGINE START BY I-KEY	Engine start function mode can be changed to operate (WITH) or not operate (WITHOUT) in this mode.
TRUNK/GLASS HATCH OPEN	Buzzer reminder function mode by trunk lid opener request switch can be changed to operate (WITH) or not operate (WITHOUT) in this mode.
PANIC ALARM SET	Panic alarm button pressing time on Intelligent Key remote control button can be selected from the following wit this mode. • MODE 1: 0.5 sec. • MODE 2: OFF: Non-operation • MODE 3: 1.5 sec.
PW DOWN SET	This item is displayed, but cannot be used.
TRUNK OPEN DELAY	Trunk button pressing on Intelligent Key button can be selected as per the following in this mode. • MODE 1: Press and hold • MODE 2: Press twice • MODE 3: Press and hold, or press twice
LO-BATT OF KEY FOB WARN	Intelligent Key low battery warning mode can be changed to operate (WITH) or not operate (WITHOUT) in this mode.
ANTI KEY LOCK IN FUNCTI	Key reminder function mode can be changed to operate (WITH) or not operate (WITHOUT) in this mode.
HAZARD ANSWER BACK	Hazard reminder function mode can be selected from the following in this mode. • LOCK ONLY: Door lock operation only • UNLOCK ONLY: Door unlock operation only • LOCK/UNLOCK: Lock/unlock operation • OFF: Non-operational
ANS BACK I-KEY LOCK	Buzzer reminder function (lock operation) mode by door request switch (driver side and passenger side) can be selected from the following is this mode. • Horn chirp: Sound horn • Buzzer: Sound Intelligent Key warning buzzer • OFF: Non-operational
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) in this mode.
SHORT CRANKING OUTPUT	Starter motor can operate during the times below. • 70 msec • 100 msec • 200 msec
INSIDE ANT DIAGNOSIS	This function allows inside key antenna self-diagnosis.
HORN WITH KEYLESS LOCK	Horn reminder function mode by Intelligent Key button can be changed to operate (ON) or not operate (OFF) in this mode.

SELF-DIAG RESULT

Refer to BCS-84, "DTC Index".

DATA MONITOR

NOTE:

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

Monitor Item	Condition
REQ SW -DR	Indicates [ON/OFF] condition of door request switch (driver side).
REQ SW -AS	Indicates [ON/OFF] condition of door request switch (passenger side).
REQ SW -BD/TR	Indicates [ON/OFF] condition of trunk opener request switch.
PUSH SW	Indicates [ON/OFF] condition of push-button ignition switch.
IGN RLY2 -F/B	Indicates [ON/OFF] condition of ignition relay 2.
ACC RLY-FB	**NOTE:** This item is displayed, but cannot be monitored.
CLUTCH SW	**NOTE:** This item is displayed, but cannot be monitored.
BRAKE SW 1	Indicates [ON/OFF]* condition of brake switch power supply.
BRAKE SW 2	Indicates [ON/OFF] condition of brake switch.
DETE/CANCL SW	Indicates [ON/OFF] condition of P position.
SFT PN/N SW	Indicates [ON/OFF] condition of P or N position.
S/L -LOCK	Indicates [ON/OFF] condition of steering lock unit (LOCK).
S/L -UNLOCK	Indicates [ON/OFF] condition of steering lock unit (UNLOCK).
S/L RELAY -F/B	Indicates [ON/OFF] condition of steering lock relay.
UNLK SEN -DR	Indicates [ON/OFF] condition of driver door UNLOCK status.
PUSH SW -IPDM	Indicates [ON/OFF] condition of push-button ignition switch.
IGN RLY1 -F/B	Indicates [ON/OFF] condition of ignition relay 1.
DETE SW -IPDM	Indicates [ON/OFF] condition of P position.
SFT PN -IPDM	Indicates [ON/OFF] condition of P or N position.
SFT P -MET	Indicates [ON/OFF] condition of P position.
SFT N -MET	Indicates [ON/OFF] condition of N position.
ENGINE STATE	Indicates [STOP/STALL/CRANK/RUN] condition of engine states.
S/L LOCK-IPDM	Indicates [ON/OFF] condition of steering lock unit (LOCK).
S/L UNLK-IPDM	Indicates [ON/OFF] condition of steering lock unit (UNLOCK).
S/L RELAY-REQ	Indicates [ON/OFF] condition of steering lock relay.
VEH SPEED 1	Display the vehicle speed signal received from combination meter by numerical value [Km/h].
VEH SPEED 2	Display the vehicle speed signal received from ABS or VDC or TCM by numerical value [Km/h].
DOOR STAT-DR	Indicates [LOCK/READY/UNLOCK] condition of driver side door status.
DOOR STAT-AS	Indicates [LOCK/READY/UNLOCK] condition of passenger side door status.
ID OK FLAG	Indicates [SET/RESET] condition of key ID.
PRMT ENG STRT	Indicates [SET/RESET] condition of engine start possibility.
PRMT RKE STRT	**NOTE:** This item is displayed, but cannot be monitored.
KEY SW -SLOT	Indicates [ON/OFF] condition of key slot.
TRNK/HAT MNTR	Indicates [ON/OFF] condition of trunk lid.
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	Indicates [ON/OFF] condition of TRUNK OPEN signal from Intelligent Key.
RKE-PANIC	Indicates [ON/OFF] condition of PANIC button of Intelligent Key.
RKE-P/W OPEN	**NOTE:** This item is displayed, but cannot be monitored.
RKE-MODE CHG	Indicates [ON/OFF] condition of MODE CHANGE signal from Intelligent Key.

Monitor Item	Condition
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.
REVERSE SWITCH	**NOTE:** This item is displayed, but cannot be monitored.

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

ACTIVE TEST

Test item	Description
BATTERY SAVER	This test is able to check interior room lamp operation. The interior room lamp will be activated when “ON” on CONSULT screen is touched.
PW REMOTO DOWN SET	**NOTE:** This item is displayed, but cannot be used.
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation. The Intelligent Key warning buzzer will be activated when “ON” on CONSULT screen is touched.
INSIDE BUZZER	This test is able to check warning chime in combination meter operation. • Take away warning chime sounds when “TAKE OUT” on CONSULT screen is touched. • Key warning chime sounds when “KEY” on CONSULT screen is touched. • P position warning chime sounds when “KNOB” on CONSULT screen is touched.
INDICATOR	This test is able to check warning lamp operation. • “KEY” Warning lamp illuminates when “KEY ON” on CONSULT screen is touched. • “KEY” Warning lamp blinks 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 when “ON” on CONSULT screen is touched.
LCD	This test is able to check meter display information • Engine start information displays when “BP N” on CONSULT screen is touched. • Engine start information displays when “BP I” on CONSULT screen is touched. • Key ID warning displays when “ID NG” on CONSULT screen is touched. • Steering lock information displays when “ROTAT” on CONSULT screen is touched. • 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 warning displays when “OUTKEY” on CONSULT screen is touched. • OFF position warning displays when “LK WN” on CONSULT screen is touched.
TRUNK/GLASS HATCH	This test is able to check trunk lid opener actuator open operation. This actuator opens when “OPEN” on CONSULT screen is touched.
FLASHER	This test is able to check security hazard lamp operation. The hazard lamps will be activated when “RH” or “LH”on CONSULT screen is touched.
HORN	This test is able to check horn operation. The horn will be activated when “ON” on CONSULT screen is touched.
P RANGE	This test is able to check control device power supply Control device power is supplied when “ON” on CONSULT screen is touched.
ENGINE SW ILLUMI	This test is able to check push-ignition switch illumination operation. Push-ignition switch illumination illuminates when “ON” on CONSULT screen is touched.
LOCK INDICATOR	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. ACC 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. ON indicator in push-ignition switch illuminates when “ON” on CONSULT screen is touched.

Test item	Description
KEY SLOT ILLUMI	This test is able to check key slot illumination operation. Key slot illumination illuminates when “ON” on CONSULT screen is touched.
TRUNK/BACK DOOR	This test is able to check trunk lid opener actuator open operation. This actuator opens when “OPEN” on CONSULT screen is touched.

THEFT ALM

THEFT ALM : CONSULT Function (BCM - THEFT)

INFOID:0000000011489159

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

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

DATA MONITOR

NOTE:

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

Monitored Item	Description
REQ SW -DR	Indicates [ON/OFF] condition of door request switch (driver side).
REQ SW -AS	Indicates [ON/OFF] condition of door request switch (passenger side).
REQ SW -RR	**NOTE:** This is displayed even when it is not equipped.
REQ SW -RL	**NOTE:** This is displayed even when it is not equipped.
REQ SW -BD/TR	Indicates [ON/OFF] condition of trunk lid opener 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	**NOTE:** This is displayed even when it is not equipped.
DOOR SW-RL	**NOTE:** This is displayed even when it is not equipped.
DOOR SW-BK	**NOTE:** This is displayed even when it is not equipped.
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	**NOTE:** This is displayed even when it is not equipped.
KEY CYL UN-SW	**NOTE:** This is displayed even when it is not equipped.
KEY CYL SW-TR	**NOTE:** This is displayed even when it is not equipped.
TR/BD OPEN SW	Indicates [ON/OFF] condition of trunk lid opener switch.
TRNK/HAT MNTR	Indicates [ON/OFF] condition of trunk lid.

Monitored Item	Description
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	Indicates [ON/OFF] condition of TRUNK OPEN signal from Intelligent Key.

WORK SUPPORT

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

ACTIVE TEST

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

IMMU

IMMU : CONSULT Function (BCM - IMMU)

INFOID:0000000011489160

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

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

DATA MONITOR

NOTE:

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

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

ACTIVE TEST

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

DTC/CIRCUIT DIAGNOSIS

P1610 LOCK MODE

Description

INFOID:0000000011489161

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:0000000011489162

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-32, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489163

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 is inserted into key slot and wait for 5 seconds.
5. Turn 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 is inserted into key slot.

>> INSPECTION END

P1611 ID DISCORD, IMMU-ECM

Description

INFOID:0000000011489164

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:0000000011489165

DTC DETECTION LOGIC

NOTE:

- If DTC B1611 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-36, "DTC Logic".
- If DTC B1611 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-37, "DTC Logic".

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.
- Shift 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-33, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489166

1.PERFORM INITIALIZATION

Perform initialization with CONSULT. Reregister 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 reregistered Intelligent Key?

YES >> INSPECTION END
NO >> GO TO 2.

2.REPLACE BCM

1. Replace BCM. Refer to BCS-89, "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 reregistered Intelligent Key?

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

3.REPLACE ECM

1. Replace ECM. Refer to EC-20, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement (GT-R certified NISSAN dealer)".
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 reregistered Intelligent Key?

YES >> INSPECTION END
NO >> GO TO 4.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

P1612 CHAIN OF ECM-IMMU

Description

INFOID:0000000011489167

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:0000000011489168

DTC DETECTION LOGIC

NOTE:

- If DTC P1612 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-36, "DTC Logic".
- If DTC P1612 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-37, "DTC Logic".

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.
- Shift 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:0000000011489169

1.REPLACE BCM

1. Replace BCM. Refer to BCS-89, "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-20, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement (GT-R certified NISSAN dealer)".

>> INSPECTION END

P1614 CHAIN OF IMMU-KEY

Description

INFOID:0000000011489170

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

DTC Logic

INFOID:0000000011489171

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

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:0000000011489172

1. INSPECTION START

Perform inspection in accordance with DTC Confirmation procedure. Refer to SEC-40, "DTC Logic".

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.

(+)		(–)	Voltage (V) (Approx.)
Key slot			
Connector	Terminal		
M60	2	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace key slot. Refer to DLK-264, "Removal and Installation".
NO >> GO TO 3.

3.CHECK KEY SLOT 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	
M60	2	M122	80	Existed

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

Key slot		Ground	Continuity
Connector	Terminal		
M60	2		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> Repair or replace harness.

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.

(+)		(–)	Voltage (V) (Approx.)
Key slot			
Connector	Terminal		
M60	3	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace key slot. Refer to DLK-264, "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	
M60	3	M122	81	Existed

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

Key slot		Ground	Continuity
Connector	Terminal		
M60	3		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> Repair or replace harness.

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.

Key slot		Ground	Continuity
Connector	Terminal		
M60	7		Existed

Is the inspection result normal?

YES >> GO TO 8.
NO >> Repair or replace harness.

8. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

P1615 DIFFRENCE OF KEY

Description

INFOID:0000000011489173

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

DTC Logic

INFOID:0000000011489174

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P1615	DIFFERENCE OF KEY	The ID verification result between BCM and Intelligent Key is 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:0000000011489175

1.PERFORM INITIALIZATION

Perform initialization with CONSULT. Reregister 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 reregistered 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 reregistered Intelligent Key?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

B2190 NATS ANTENNA AMP.

Description

INFOID:0000000011489176

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

DTC Logic

INFOID:0000000011489177

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Go to SEC-40, "Diagnosis Procedure".
NO >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Go to SEC-40, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489178

1. INSPECTION START

Perform inspection in accordance with DTC Confirmation procedure. Refer to SEC-40, "DTC Logic".

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.

(+)		(–)	Voltage (V) (Approx.)
Key slot			
Connector	Terminal		
M60	2	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace key slot. Refer to DLK-264, "Removal and Installation".
NO >> GO TO 3.

3.CHECK KEY SLOT 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	
M60	2	M122	80	Existed

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

Key slot		Ground	Continuity
Connector	Terminal		
M60	2		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> Repair or replace harness.

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.

(+)		(–)	Voltage (V) (Approx.)
Key slot			
Connector	Terminal		
M60	3	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace key slot. Refer to DLK-264, "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	
M60	3	M122	81	Existed

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

Key slot		Ground	Continuity
Connector	Terminal		
M60	3		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> Repair or replace harness.

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.

Key slot		Ground	Continuity
Connector	Terminal		
M60	7		Existed

Is the inspection result normal?

YES >> GO TO 8.
NO >> Repair or replace harness.

8. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

B2191 DIFFERENCE OF KEY

Description

INFOID:0000000011489179

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

DTC Logic

INFOID:0000000011489180

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2191	DIFFERENCE OF KEY	The ID verification result between BCM and Intelligent Key is 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:0000000011489181

1.PERFORM INITIALIZATION

Perform initialization with CONSULT. Reregister 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 reregistered 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 reregistered Intelligent Key?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

B2192 ID DISCORD, IMMU-ECM

Description

INFOID:0000000011489182

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:0000000011489183

DTC DETECTION LOGIC

NOTE:

- If DTC B2192 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-36, "DTC Logic".
- If DTC B2192 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-37, "DTC Logic".

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.
- Shift 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:0000000011489184

1.PERFORM INITIALIZATION

Perform initialization with CONSULT. Reregister 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 reregistered Intelligent Key?

YES >> INSPECTION END
NO >> GO TO 2.

2.REPLACE BCM

1. Replace BCM. Refer to BCS-89, "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 reregistered Intelligent Key?

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

3.REPLACE ECM

1. Replace ECM. Refer to EC-20, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement (GT-R certified NISSAN dealer)".
2. Perform initialization with CONSULT.

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

YES >> INSPECTION END
NO >> GO TO 4.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

B2193 CHAIN OF ECM-IMMU

Description

INFOID:0000000011489185

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:0000000011489186

DTC DETECTION LOGIC

NOTE:

- If DTC B2193 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-36, "DTC Logic".
- If DTC B2193 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-37, "DTC Logic".

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.
- Shift 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-46, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489187

1.REPLACE BCM

1. Replace BCM. Refer to BCS-89, "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-20, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement (GT-R certified NISSAN dealer)".

>> INSPECTION END

B2195 ANTI-SCANNING

Description

INFOID:0000000011489188

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:0000000011489189

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.
- Shift 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-47, "Diagnosis Procedure".
NO >> INSPECTION END.

Diagnosis Procedure

INFOID:0000000011489190

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-47, "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-89, "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-47, "DTC Logic".

Is DTC 2195 detected?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> INSPECTION END

B2013 STEERING LOCK UNIT

Description

INFOID:0000000011489191

BCM performs the ID verification with the steering lock unit and releases the steering lock if both BCM and steering lock unit ID are same. BCM starts the communication with the steering lock unit when Intelligent Key is carried into the passenger compartment and the push-button ignition switch is pressed.

DTC Logic

INFOID:0000000011489192

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2013	ID DISCORD BCM-S/L	The ID verification result between BCM and steering lock unit is NG. The registration is necessary.	Steering lock unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Lock steering.
2. Press the push-button ignition switch.
3. Check “Self diagnostic result” with CONSULT.

Is DTC detected?

YES >> Go to SEC-48, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489193

1.PERFORM INITIALIZATION

Perform initialization with CONSULT.
For initialization, follow the instruction of CONSULT display.

Does steering lock operate?

YES >> INSPECTION END
NO >> GO TO 2.

2.REPLACE STEERING LOCK UNIT

1. Replace steering lock unit.
2. Perform initialization with CONSULT.
   For initialization, follow the instruction of CONSULT display.

Does steering lock operate?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

B2014 CHAIN OF STRG-IMMU

Description

INFOID:0000000011489194

BCM performs the ID verification with the steering lock unit to release the steering. BCM starts the communication with the steering lock unit when Intelligent Key is carried into the passenger compartment and the push-button ignition switch is pressed.

DTC Logic

INFOID:0000000011489195

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2014	CHAIN OF S/L-BCM	Inactive communication between steering lock unit and BCM	• Harness or connectors (Steering lock unit circuit is open or shorted) • Steering lock unit • BCM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Lock steering.
2. Press the push-button ignition switch.
3. Check “Self diagnostic result” with CONSULT.

Is DTC detected?

YES >> Go to SEC-49, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489196

1.CHECK STEERING LOCK UNIT POWER SUPPLY

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

(+)		(–)	Condition		Voltage (V) (Approx.)
Steering lock unit					
Connector	Terminal				
M40	7	Ground	Ignition switch	OFF or ACC	Battery voltage
				ON	0

Is the inspection normal?

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

2.CHECK STEERING LOCK UNIT POWER SUPPLY CIRCUIT

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

Steering lock unit		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M40	7	M122	106	Existed

4. Check continuity between steering lock unit harness connector and ground.

Steering lock unit		Ground	Continuity
Connector	Terminal		
M40	7		Not existed

Is the inspection normal?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK STEERING LOCK UNIT GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between steering lock unit and ground.

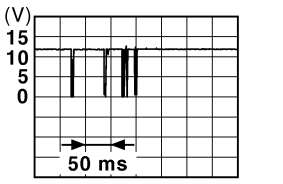
Steering lock unit		Ground	Continuity
Connector	Terminal		
M40	5		Existed
	6		

Is the inspection normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4.CHECK STEERING LOCK UNIT COMMUNICATION SIGNAL

1. Connect steering lock unit connector.
2. Read voltage signal between steering lock unit harness connector and ground.

(+) Steering lock unit		(–)	Condition		Voltage (V) (Approx.)
Connector	Terminal				
M40	2	Ground	Steering lock unit	Lock status	Battery voltage
				Lock or unlock	 JMKIA0066GB
				For 15 seconds after unlock	Battery voltage
				15 seconds or later after unlock.	0

Steering is locked : Opening the door when ignition switch is ON to OFF.
Steering is unlocked : Ignition switch is OFF to ACC.

Is the inspection normal?

YES >> Replace steering lock unit.
NO >> GO TO 5.

5.CHECK STEERING LOCK UNIT COMMUNICATION CIRCUIT

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

Steering lock unit		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M40	2	M122	111	Existed

4. Check continuity between steering lock unit harness connector and ground.

Steering lock unit		Ground	Continuity
Connector	Terminal		
M40	2		Not existed

Is the inspection normal?

YES >> GO TO 6.
NO >> Repair or replace harness.

6. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

B2555 STOP LAMP

Description

INFOID:0000000011489197

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:0000000011489198

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.	• 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-52, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489199

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

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.

4.CHECK STOP LAMP SWITCH

Refer to SEC-53, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace stop lamp switch. Refer to BR-21, "Removal and Installation (GT-R certified NISSAN dealer)".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000011489200

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	Not existed
			Depressed	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace stop lamp switch. Refer to BR-21, "Removal and Installation (GT-R certified NISSAN dealer)".

B2556 PUSH-BUTTON IGNITION SWITCH

Description

INFOID:0000000011489201

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:0000000011489202

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Go to SEC-54, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489203

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.

(+)		(–)	Voltage (V) (Approx.)
Push-button ignition switch			
Connector	Terminal		
M131	4	Ground	Battery voltage

Is the inspection normal?

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

2.CHECK PUSH-BUTTON IGNITION SWITCH CIRCUIT (BCM)

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

BCM		Push-button ignition switch		Continuity
Connector	Terminal	Connector	Terminal	
M122	89	M131	4	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M122	89		Not existed

Is the inspection normal?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK PUSH-BUTTON IGNITION SWITCH

Refer to SEC-55, "Component Inspection".

Is the inspection normal?

YES >> GO TO 4.
NO >> Replace push-button ignition switch. Refer to PCS-120, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000011489204

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 PCS-120, "Removal and Installation".

B2557 VEHICLE SPEED

Description

INFOID:0000000011489205

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

DTC Logic

INFOID:0000000011489206

DTC DETECTION LOGIC

NOTE:

- If DTC B2557 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-36, "DTC Logic".
- If DTC B2557 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-37, "DTC Logic".

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Go to SEC-56, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489207

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

Check “Self diagnostic result” with CONSULT. Refer to BRC-133, "DTC No. Index (GT-R certified NISSAN dealer)".

Is the inspection result normal?

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

2.CHECK DTC WITH “COMBINATION METER”

Check “Self diagnostic result” with CONSULT. Refer to MWI-100, "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-39, "Intermittent Incident".

>> INSPECTION END

B2560 STARTER CONTROL RELAY

Description

INFOID:0000000011489208

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

DTC Logic

INFOID:0000000011489209

DTC DETECTION LOGIC

NOTE:

- If DTC B2560 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-36, "DTC Logic"
- If DTC B2560 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-37, "DTC Logic".

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait for at least 2 seconds.
- Shift 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-57, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489210

1.CHECK DTC WITH IPDM E/R

Check “Self diagnostic result” with CONSULT. Refer to PCS-32, "DTC Index".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

2.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident"

>> INSPECTION END

B2601 SHIFT POSITION

Description

INFOID:0000000011489211

BCM confirms the shift position with the following 4 signals.
- A/T shift selector (detention switch) signal
- P/N position switch from TCM
- P position signal from IPDM E/R (CAN)
- P/N position signal from TCM (CAN)

DTC Logic

INFOID:0000000011489212

DTC DETECTION LOGIC

NOTE:
- If DTC B2601 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-36, "DTC Logic".
- If DTC B2601 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-37, "DTC Logic".

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions, and wait for at least 2 seconds.
- Shift 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-58, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489213

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	Terminal		
B20	1	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK A/T SHIFT SELECTOR POWER SUPPLY CIRCUIT

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	
B20	1	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		
B20	1		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> Repair or replace harness.

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	
B20	2	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		
B20	2		Not existed

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

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	
B20	2	E11	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		
B20	2		Not existed

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace harness.

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

Refer to SEC-60, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace A/T shift selector. Refer to TM-375, "Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000011489214

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				
1	2	Shift lever	P position	Not existed
			Other than above	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace A/T shift selector. Refer to TM-375, "Removal and Installation".

B2602 SHIFT POSITION

Description

INFOID:0000000011489215

BCM confirms the shift position with the following 4 signals.
- A/T shift selector (detention switch) signal
- P/N position switch from TCM
- P position signal from IPDM E/R (CAN)
- P/N position signal from TCM (CAN)

DTC Logic

INFOID:0000000011489216

DTC DETECTION LOGIC

NOTE:
- If DTC B2602 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-36, "DTC Logic".
- If DTC B2602 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-37, "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 the P position • Vehicle speed is 4 km/h (2.5 MPH) or more • Ignition switch is in the ON position	• Harness or connectors (A/T shift selector circuit is open or shorted) • A/T shift selector (detention switch) • ABS actuator and electric unit (control unit) • BCM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Start the engine under the following conditions and wait for at least 10 seconds.
- Shift 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-61, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489217

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

Check “Self diagnostic result” with CONSULT. Refer to BRC-133, "DTC No. Index (GT-R certified NISSAN dealer)".

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.

(+)		(–)	Voltage (V) (Approx.)
A/T shift selector (detention switch)			
Connector	Terminal		
B20	1	Ground	Battery voltage

Is the inspection result normal?

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	
B20	1	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		
B20	1		No existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> Repair or replace harness.

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	
B20	2	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		
B20	2		No existed

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace harness.

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

Refer to SEC-60, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace A/T shift selector. Refer to TM-375, "Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

B2603 SHIFT POSITION

Description

INFOID:0000000011489218

BCM confirms the shift position with the following 4 signals.
- A/T shift selector (detention switch) signal
- P/N position switch from TCM
- P position signal from IPDM E/R (CAN)
- P/N position signal from TCM (CAN)

DTC Logic

INFOID:0000000011489219

DTC DETECTION LOGIC

NOTE:
- If DTC B2603 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-36, "DTC Logic".
- If DTC B2603 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-37, "DTC Logic".
- If DTC B2603 is displayed with DTC B210F for IPDM E/R, first perform the trouble diagnosis for DTC B210F. Refer to SEC-105, "DTC Logic".
- If DTC B2603 is displayed with DTC B2601 for IPDM E/R, first perform the trouble diagnosis for DTC B2601. Refer to SEC-58, "DTC Logic".

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Start the engine under the following conditions and wait for at least 1 second.
- Shift 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-63, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489220

1.CHECK DTC WITH TCM

Check “Self diagnostic result” with CONSULT for TCM.

Are any DTC detected?

YES >> Refer to SEC-105, "DTC Logic".
NO >> GO TO 2.

2.CHECK TCM 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	
B45	19	M122	140	Existed

4. Check continuity between TCM harness connector and ground.

TCM		Ground	Continuity
Connector	Terminal		
B45	19		Not existed

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness.

3.CHECK TCM OUTPUT

1. Connect TCM connector.
2. Check voltage between BCM harness connector and ground.

(+)		(–)	Condition		Voltage (V) (Approx.)
BCM					
Connector	Terminal				
M122	140	Ground	Shift lover	P or N position	Battery voltage
				Other than above	0

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-89, "Exploded View".
NO >> Replace TCM. Refer to TM-373, "Removal and Installation (GT-R certified NISSAN dealer)".

B2604 SHIFT POSITION

Description

INFOID:0000000011489221

BCM confirms the shift position with the following 4 signals.
- A/T shift selector (detention switch) signal
- P/N position switch from TCM
- P position signal from IPDM E/R (CAN)
- P/N position signal from TCM (CAN)

DTC Logic

INFOID:0000000011489222

DTC DETECTION LOGIC

NOTE:
- If DTC B2604 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-36, "DTC Logic".
- If DTC B2604 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-37, "DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2604	PNP SW	BCM detects the following status for 500 ms or more when the ignition switch is in the ON position. • N position input signal exists. Shift position signal from TCM does not exist. • N position input signal does not exist. Shift position signal from TCM exists.	• Harness or connectors [TCM circuit is open or shorted] • TCM • BCM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Start the engine under the following conditions and wait for at least 1 second.
- Shift 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-65, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489223

1.CHECK DTC WITH TCM

Check “Self diagnostic result” with CONSULT for TCM.

Are any DTC detected?

YES >> Refer to SEC-105, "DTC Logic".
NO >> GO TO 2.

2.CHECK TCM 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	
B45	19	M122	140	Existed

4. Check continuity between TCM harness connector and ground.

TCM		Ground	Continuity
Connector	Terminal		
B45	19		Not existed

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness.

3.CHECK TCM OUTPUT

1. Connect TCM connector.
2. Check voltage between BCM harness connector and ground.

(+)		(–)	Condition		Voltage (V) (Approx.)
BCM					
Connector	Terminal				
M122	140	Ground	Shift lover	P or N position	Battery voltage
				Other than above	0

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-89, "Exploded View".
NO >> Replace TCM. Refer to TM-373, "Removal and Installation (GT-R certified NISSAN dealer)".

B2605 SHIFT POSITION

Description

INFOID:0000000011489224

BCM confirms the shift position with the following 4 signals.
- A/T shift selector (detention switch) signal
- P/N position switch from TCM
- P position signal from IPDM E/R (CAN)
- P/N position signal from TCM (CAN)

DTC Logic

INFOID:0000000011489225

DTC DETECTION LOGIC

NOTE:
- If DTC B2605 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-36, "DTC Logic".
- If DTC B2605 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-37, "DTC Logic".
- If DTC B2605 is displayed with DTC U1010, first perform the trouble diagnosis for DTC B2603. Refer to SEC-63, "DTC Logic".

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait for at least 1 second.
- Shift 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-67, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489226

1.CHECK TCM CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect IPDM E/R 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	B45	19	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 >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".
NO >> Repair or replace harness.

B2606 STEERING LOCK RELAY

Description

INFOID:0000000011489227

The steering lock relay ON signal is transmitted to IPDM E/R by BCM via CAN communication.
IPDM E/R turns the steering lock relay ON and transmits the release of the steering to BCM.

DTC Logic

INFOID:0000000011489228

DTC DETECTION LOGIC

NOTE:

- If DTC B2606 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-36, "DTC Logic".
- If DTC B2606 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-37, "DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2606	S/L RELAY	BCM detects that there is a mismatch between the following statuses. • Steering lock unit ON signal transmitted by IPDM E/R • The steering lock unit status feedback	Steering lock relay (Built into IPDM E/R)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.
- Shift lever is in the P or N position.
- Do not depress brake pedal.
2. Turn ignition switch OFF.
3. Press driver side door switch and wait for at least 1 second.
4. Check “Self diagnostic result” with CONSULT.

Is DTC detected?

YES >> Go to SEC-69, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489229

1.CHECK DTC WITH IPDM E/R

Check “Self diagnostic result” with CONSULT. Refer to PCS-32, "DTC Index".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

2.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

B2607 STEERING LOCK RELAY

Description

INFOID:0000000011489230

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

DTC Logic

INFOID:0000000011489231

DTC DETECTION LOGIC

NOTE:

- If DTC B2607 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-36, "DTC Logic".
- If DTC B2607 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-37, "DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2607	S/L RELAY	BCM detects that there is a difference between the following statuses. • Steering lock unit ON signal transmitted by IPDM E/R • The steering lock unit status feedback	• Harness or connectors (Steering lock unit power supply circuit is open or shorted) • Steering lock relay (Built into IPDM E/R)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.
- Shift lever is in the P or N position.
- Do not depress brake pedal.
2. Turn ignition switch OFF.
3. Press driver side door switch and wait for at least 1 second.
4. Check “Self diagnostic result” with CONSULT.

Is DTC detected?

YES >> Go to SEC-70, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489232

1.CHECK DTC WITH IPDM E/R

Check “Self diagnostic result” with CONSULT. Refer to PCS-32, "DTC Index".

Is the inspection result normal?

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

2.CHECK STEERING LOCK UNIT POWER SUPPLY CIRCUIT

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

(+)		(–)	Condition	Voltage (V) (Approx.)
Steering lock unit				
Connector	Terminal			
M40	1	Ground	Press push-button ignition switch when steering lock is in lock condition.	Battery voltage

Is the inspection result normal?

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

3.CHECK STEERING LOCK UNIT CIRCUIT

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

Steering lock unit		IPDM E/R		Continuity
Connector	Terminal	Connector	Terminal	
M40	1	E5	11	Existed

4. Check continuity between steering lock unit harness connector and ground.

Steering lock unit		Ground	Continuity
Connector	Terminal		
M40	1		Not existed

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".
NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

B2608 STARTER RELAY

Description

INFOID:0000000011489233

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

DTC Logic

INFOID:0000000011489234

DTC DETECTION LOGIC

NOTE:

- If DTC B2608 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-36, "DTC Logic".
- If DTC B2608 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-37, "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-102, "DTC Logic".

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.
- Shift 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-72, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489235

1.CHECK BCM POWER SUPPLY CIRCUIT

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

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

Is the inspection result normal?

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

2.CHECK STARTER RELAY CIRCUIT

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

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-35, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

B2609 STEERING STATUS

Description

INFOID:0000000011489236

There are 2 switches in the steering lock unit (steering lock/unlock switch 1 and 2). BCM compares those 2 switches conditions to judge the present steering status.

DTC Logic

INFOID:0000000011489237

DTC DETECTION LOGIC

NOTE:

- If DTC B2609 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-36, "DTC Logic".
- If DTC B2609 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-37, "DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2609	S/L STATUS	BCM detects the malfunction of steering lock unit switches for 1 second.	• Harness or connectors [Steering lock unit circuit (BCM side) is open or shorted] • Harness or connectors [Steering lock unit circuit (IPDM E/R side) is open or shorted] • Steering lock unit • IPDM E/R • BCM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE 1

1. Turn ignition switch ON under the following conditions and wait for at least 1 second.
- Shift 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-74, "Diagnosis Procedure".
NO >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE 2

1. Turn ignition switch ON.
2. Turn ignition switch OFF.
3. Press driver side door switch and wait for at least 1 second.
4. Check “Self diagnostic result” with CONSULT.

Is DTC detected?

YES >> Go to SEC-74, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489238

1. INSPECTION START

Perform inspection in accordance with DTC Confirmation procedure. Refer to SEC-40, "DTC Logic".

Which procedure confirms DTC?

DTC confirmation procedure 1>>GO TO 2.
DTC confirmation procedure 2>>GO TO 6.

2.CHECK BCM OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect steering lock unit connector and IPDM E/R connector.

3. Check voltage between steering lock unit harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
Steering lock unit			
Connector	Terminal		
M40	8	Ground	Battery voltage

Is the inspection result normal?

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

3. CHECK STEERING LOCK UNIT CIRCUIT-1

1. Disconnect BCM connector.
2. Check continuity between steering lock unit harness connector and BCM harness connector.

Steering lock unit		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M40	8	M122	98	Existed

3. Check continuity between steering lock unit harness connector and ground.

Steering lock unit		Ground	Continuity
Connector	Terminal		
M40	8		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> Repair or replace harness.

4. CHECK IPDM E/R OUTPUT SIGNAL

1. Connect IPDM E/R connector.
2. Disconnect BCM connector.
3. Check voltage between steering lock unit harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
Steering lock unit			
Connector	Terminal		
M40	8	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace steering lock unit.
NO >> GO TO 5.

5. CHECK STEERING LOCK UNIT CIRCUIT-2

1. Disconnect IPDM E/R connector.
2. Check continuity between steering lock unit harness connector and IPDM E/R harness connector.

Steering lock unit		IPDM E/R		Continuity
Connector	Terminal	Connector	Terminal	
M40	8	E5	33	Existed

3. Check continuity between steering lock unit harness connector and ground.

Steering lock unit		Ground	Continuity
Connector	Terminal		
M40	8		Not existed

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-32, "DTC Index".
NO >> Repair or replace harness.

6.CHECK BCM OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect steering lock unit connector and IPDM E/R connector.
3. Check voltage between steering lock unit harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
Steering lock unit			
Connector	Terminal		
M40	3	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 8.
NO >> GO TO 7.

7.CHECK STEERING LOCK UNIT CIRCUIT-3

1. Disconnect BCM connector.
2. Check continuity between steering lock unit harness connector and BCM harness connector.

Steering lock unit		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M40	3	M122	97	Existed

3. Check continuity between steering lock unit harness connector and ground.

Steering lock unit		Ground	Continuity
Connector	Terminal		
M40	3		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> Repair or replace harness.

8.CHECK IPDM E/R OUTPUT SIGNAL

1. Connect IPDM E/R connector.
2. Disconnect BCM connector.
3. Check voltage between steering lock unit harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
Steering lock unit			
Connector	Terminal		
M40	3	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace steering lock unit.
NO >> GO TO 9.

9.CHECK STEERING LOCK UNIT CIRCUIT-4

1. Disconnect IPDM E/R connector.
2. Check continuity between steering lock unit harness connector and IPDM E/R harness connector.

Steering lock unit		IPDM E/R		Continuity
Connector	Terminal	Connector	Terminal	
M40	3	E5	32	Existed

3. Check continuity between steering lock unit harness connector and ground.

Steering lock unit		Ground	Continuity
Connector	Terminal		
M40	3		Not existed

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".
NO >> Repair or replace harness.

B260B STEERING LOCK UNIT

Description

INFOID:0000000011489239

The steering lock unit performs the check by itself according to the steering status.

DTC Logic

INFOID:0000000011489240

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B260B	STEERING LOCK UNIT	BCM detects malfunctioning of steering lock unit before steering unlocking.	Steering lock unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Press the push-button ignition switch, when steering is locked.
2. Check “Self diagnostic result” with CONSULT.

Is DTC detected?

YES >> Go to SEC-78, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489241

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-78, "DTC Logic".

Is the DTC B260B displayed again?

YES >> Replace steering lock unit.
NO >> INSPECTION END

B260C STEERING LOCK UNIT

Description

INFOID:0000000011489242

The steering lock unit performs the check by itself according to the steering status.

DTC Logic

INFOID:0000000011489243

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B260C	STEERING LOCK UNIT	BCM detects malfunctioning of steering lock unit before steering locking.	Steering lock unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn ignition switch OFF.
3. Press driver side door switch.
4. Check “Self diagnostic result” with CONSULT.

Is DTC detected?

YES >> Go to SEC-79, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489244

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-79, "DTC Logic".

Is the DTC B260C displayed again?

YES >> Replace steering lock unit.
NO >> INSPECTION END

B260D STEERING LOCK UNIT

Description

INFOID:0000000011489245

The steering lock unit performs the check by itself according to the steering lock status (before lock, after lock and unlock).

DTC Logic

INFOID:0000000011489246

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B260D	STEERING LOCK UNIT	BCM detects malfunctioning of steering lock unit after steering locking.	Steering lock unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn ignition switch OFF.
3. Press driver side door switch.
4. Check “Self diagnostic result” with CONSULT.

Is DTC detected?

YES >> Go to SEC-80, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489247

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-80, "DTC Logic".

Is the DTC B260D displayed again?

YES >> Replace steering lock unit.
NO >> INSPECTION END

B260F ENGINE STATUS

Description

INFOID:0000000011489248

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

DTC Logic

INFOID:0000000011489249

DTC DETECTION LOGIC

NOTE:

- If DTC B260F is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-36, "DTC Logic".
- If DTC B260F is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-37, "DTC Logic".

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.
- Shift 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-81, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489250

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-81, "DTC Logic".

Is the DTC B260F displayed again?

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

2.REPLACE ECM

Replace ECM. Refer to EC-20, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement (GT-R certified NISSAN dealer)".

>> INSPECTION END

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

B26E9 STEERING STATUS

Description

INFOID:0000000011489251

There are 2 switches in the steering lock unit (steering lock/unlock switch 1 and 2). BCM compares those 2 switches conditions to judge the present steering status.

DTC Logic

INFOID:0000000011489252

DTC DETECTION LOGIC

NOTE:

- If DTC B26E9 is displayed with DTC B2609, first perform the trouble diagnosis for DTC B2609. Refer to SEC-74, "DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B26E9	S/L STATUS	BCM requests lock to steering lock unit, then steering lock unit transmits a recognition signal to BCM, but steering lock unit remains unlocked.	Steering lock unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn ignition switch OFF.
3. Press driver side door switch and wait for at least 1 second.
4. Turn ignition switch ON.
5. Check “Self diagnostic result” with CONSULT.

Is DTC detected?

YES >> Refer to SEC-82, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489253

1.INSPECTION START

1. Turn ignition switch ON.
2. Check “Self diagnostic result” with CONSULT.
3. Touch “ERASE”.
4. Perform DTC Confirmation Procedure.
   Refer to SEC-82, "DTC Logic".

Is the DTC B26E9 displayed again?

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

2.REPLACE STEERING LOCK UNIT

1. Replace steering lock unit.
2. Perform DTC confirmation procedure. Refer to SEC-82, "DTC Logic".

Is the DTC B26E9 displayed again?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

B26EA KEY REGISTRATION

Description

INFOID:0000000011489254

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

DTC Logic

INFOID:0000000011489255

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Perform initialization with CONSULT. Reregister 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-83, "Diagnosis Procedure"
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489256

1.PERFORM INITIALIZATION

1. Perform initialization with CONSULT. Reregister 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. Reregister 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-89, "Removal and Installation".
NO >> INSPECTION END

B2612 STEERING STATUS

Description

INFOID:0000000011489257

There are 2 switches in the steering lock unit. IPDM E/R compares those 2 switch conditions to judge the present steering status and transmit the result to BCM via CAN communication.

DTC Logic

INFOID:0000000011489258

DTC DETECTION LOGIC

NOTE:

- If DTC B2612 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-36, "DTC Logic".
- If DTC B2612 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-37, "DTC Logic".

DTC	Self-diagnosis name	DTC detecting condition	Possible causes
B2612	S/L STATUS	BCM detects the difference between the following status for 1 second • Steering lock or unlock • Feedback of steering lock status from IPDM E/R (CAN)	• Harness or connectors [Steering lock unit circuit (BCM side) is open or shorted] • Harness or connectors [Steering lock unit circuit (IPDM E/R side) is open or shorted] • Steering lock unit • IPDM E/R • BCM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE 1

1. Press the push-button ignition switch under the following conditions and wait for at least 1 second.
- Shift 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 >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE 2

1. Turn ignition switch ON.
2. Turn ignition switch OFF.
3. Press door switch.
4. Check “Self diagnostic result” with CONSULT.

Is DTC detected?

YES >> Go to SEC-84, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489259

1. INSPECTION START

Perform inspection in accordance with DTC Confirmation procedure. Refer to SEC-40, "DTC Logic".

Which procedure confirms DTC?

DTC confirmation procedure 1>>GO TO 2.
DTC confirmation procedure 2>>GO TO 6.

2.CHECK BCM OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect steering lock unit connector and IPDM E/R connector.
3. Check voltage between steering lock unit harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
Steering lock unit			
Connector	Terminal		
M40	8	Ground	Battery voltage

Is the inspection result normal?

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

3. CHECK STEERING LOCK UNIT CIRCUIT-1

1. Disconnect BCM connector.
2. Check continuity between steering lock unit harness connector and BCM harness connector.

Steering lock unit		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M40	8	M122	98	Existed

3. Check continuity between steering lock unit harness connector and ground.

Steering lock unit		Ground	Continuity
Connector	Terminal		
M40	8		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> Repair or replace harness.

4. CHECK IPDM E/R OUTPUT SIGNAL

1. Connect IPDM E/R connector.
2. Disconnect BCM connector.
3. Check voltage between steering lock unit harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
Steering lock unit			
Connector	Terminal		
M40	8	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace steering lock unit.
NO >> GO TO 5.

5. CHECK STEERING LOCK UNIT CIRCUIT-2

1. Disconnect IPDM E/R connector.
2. Check continuity between steering lock unit harness connector and IPDM E/R harness connector.

Steering lock unit		IPDM E/R		Continuity
Connector	Terminal	Connector	Terminal	
M40	8	E5	33	Existed

3. Check continuity between steering lock unit harness connector and ground.

Steering lock unit		Ground	Continuity
Connector	Terminal		
M40	8		Not existed

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

NO >> Repair or replace harness.

6.CHECK BCM OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect steering lock unit connector and IPDM E/R connector.
3. Check voltage between steering lock unit harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
Steering lock unit			
Connector	Terminal		
M40	3	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 8.
NO >> GO TO 7.

7.CHECK STEERING LOCK UNIT CIRCUIT-3

1. Disconnect BCM connector.
2. Check continuity between steering lock unit harness connector and BCM harness connector.

Steering lock unit		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M40	3	M122	97	Existed

3. Check continuity between steering lock unit harness connector and ground.

Steering lock unit		Ground	Continuity
Connector	Terminal		
M40	3		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation"
NO >> Repair or replace harness.

8.CHECK IPDM E/R OUTPUT SIGNAL

1. Connect IPDM E/R connector.
2. Disconnect BCM connector.
3. Check voltage between steering lock unit harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
Steering lock unit			
Connector	Terminal		
M40	3	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace steering lock unit.
NO >> GO TO 9.

9.CHECK STEERING LOCK UNIT CIRCUIT-4

1. Disconnect IPDM E/R connector.
2. Check continuity between steering lock unit harness connector and IPDM E/R harness connector.

Steering lock unit		IPDM E/R		Continuity
Connector	Terminal	Connector	Terminal	
M40	3	E5	32	Existed

3. Check continuity between steering lock unit harness connector and ground.

Steering lock unit		Ground	Continuity
Connector	Terminal		
M40	3		Not existed

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".
NO >> Repair or replace harness.

B2617 STARTER RELAY CIRCUIT

Description

INFOID:0000000011489260

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 the START position. IPDM E/R transmits the starter relay ON signal to BCM via CAN communication.

DTC Logic

INFOID:0000000011489261

DTC DETECTION LOGIC

NOTE:

- If DTC B2617 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-36, "DTC Logic".
- If DTC B2617 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-37, "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-103, "DTC Logic".

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait for at least 1 second.
- Shift 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-88, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489262

1.CHECK STARTER RELAY

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

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

Is the inspection result normal?

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

2.CHECK STARTER RELAY CIRCUIT

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

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-35, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

B2619 BCM

Description

INFOID:0000000011489263

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

DTC Logic

INFOID:0000000011489264

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Press the push-button ignition switch under the following conditions and wait for at least 1 second.
- Shift 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-90, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489265

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-90, "DTC Logic".

Is the DTC B2619 displayed again?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> INSPECTION END

B261A PUSH-BUTTON IGNITION SWITCH

Description

INFOID:0000000011489266

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:0000000011489267

DTC DETECTION LOGIC

NOTE:

- If DTC B261A is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-36, "DTC Logic".
- If DTC B261A is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-37, "DTC Logic".

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Press the push-button ignition switch under the following conditions and wait for at least 1 second.
- Shift 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-91, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489268

1.CHECK BCM OUTPUT

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

(+)		(–)	Voltage (V) (Approx.)
IPDM E/R			
Connector	Terminal		
E5	28	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".
NO >> GO TO 2.

2.CHECK PUSH-BUTTON IGNITION SWITCH CIRCUIT

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

BCM		IPDM E/R		Continuity
Connector	Terminal	Connector	Terminal	
M122	89	E5	28	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M122	89		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> Repair or replace harness.

B261E VEHICLE TYPE

Description

INFOID:0000000011489269

There are two types of vehicles.
- HEV
- Conventional

DTC Logic

INFOID:0000000011489270

DTC DETECTION LOGIC

NOTE:
- If DTC B261E is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-36, "DTC Logic".
- If DTC B261E is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-37, "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-93, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489271

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-93, "DTC Logic".

Is the 1st trip DTC B261E displayed again?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> INSPECTION END

B2108 STEERING LOCK RELAY

Description

INFOID:0000000011489272

The steering lock relay ON signal is transmitted to IPDM E/R by BCM via CAN communication.
IPDM E/R turns the steering lock relay ON and transmits the release of the steering to BCM.

DTC Logic

INFOID:0000000011489273

DTC DETECTION LOGIC

NOTE:
If DTC B2108 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to PCS-14, "DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2108	STRG LCK RELAY ON	IPDM E/R detects that the relay is stuck in the ON position for about 1 second even if the IPDM E/R receives steering lock relay ON/OFF signal from BCM.	IPDM E/R

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Press the push-button ignition switch under the following conditions and wait for at least 1 second.
- Shift 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-94, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489274

1.CHECK STEERING LOCK RELAY

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

(+)		(–)	Condition		Voltage (V) (Approx.)
IPDM E/R					
Connector	Terminal				
E5	11	Ground	Ignition switch OFF	A few seconds after opening the driver door	Battery voltage
			Ignition switch LOCK	Press the push-button ignition switch	Battery voltage
			Ignition switch ACC or ON		0

Is the inspection normal?

YES >> GO TO 2.
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

2.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

B2109 STEERING LOCK RELAY

Description

INFOID:0000000011489275

The steering lock relay ON signal is transmitted to IPDM E/R by BCM via CAN communication.
IPDM E/R turns the steering lock relay ON and transmits the release of the steering to BCM.

DTC Logic

INFOID:0000000011489276

DTC DETECTION LOGIC

NOTE:

- If DTC B2109 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to PCS-14, "DTC Logic".
- When IPDM E/R power supply voltage is low (Approx. 7 - 8 V for about 1 second), the DTC B2109 may be detected.

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2109	STRG LCK RELAY OFF	IPDM E/R detects that the relay is stuck in the OFF position for about 1 second even if the IPDM E/R receives steering lock relay ON/OFF signal from BCM.	• Harness or connector (Power supply circuit) • IPDM E/R • Battery

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Press the push-button ignition switch under the following conditions and wait for at least 1 second.
- Shift 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-95, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489277

1.CHECK POWER SUPPLY CIRCUIT

Check IPDM E/R power supply circuit. Refer to SEC-109, "IPDM E/R : Diagnosis Procedure".

Is the circuit normal?

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

2.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10 A fuse (No. 48, located in IPDM E/R).

Is the inspection normal?

YES >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".
NO >> Check the following.
- Harness for open or short between IPDM E/R and battery
- Fuse

B210A STEERING LOCK UNIT

Description

INFOID:0000000011489278

There are 2 switches in the steering lock unit. IPDM E/R compares those 2 switches conditions to judge the present steering status and transmit the result to BCM via CAN communication.

DTC Logic

INFOID:0000000011489279

DTC DETECTION LOGIC

NOTE:
If DTC B210A is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to PCS-14, "DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B210A	STRG LCK STATE SW	IPDM E/R detects the difference between steering condition switches 1 and 2 for 1 second	• Harness or connectors [Steering lock unit circuit (BCM side) is open or shorted] • Harness or connectors [Steering lock unit circuit (IPDM E/R side) is open or shorted] • Steering lock unit • IPDM E/R

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE 1

1. Press the push-button ignition switch under the following conditions and wait for at least 1 second.
- Shift 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-96, "Diagnosis Procedure".
NO >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE 2

1. Turn ignition switch ON.
2. Turn ignition switch OFF.
3. Press driver side door switch and wait for at least 1 second.
4. Check “Self diagnostic result” with CONSULT.

Is DTC detected?

YES >> Go to SEC-96, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489280

1.INSPECTION START

Check the case in which DTC is detected.
- Case1: It is detected after ignition switch is changed from OFF to ON
- Case2: It is detected after ignition switch is changed from ON to OFF and door switch is pressed

In which case is DTC detected?

Case1 >> GO TO 2.
Case2 >> GO TO 6.

2.CHECK BCM OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect steering lock unit connector and IPDM E/R connector.
3. Check voltage between steering lock unit harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
Steering lock unit			
Connector	Terminal		
M40	8	Ground	Battery voltage

Is the inspection result normal?

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

3. CHECK STEERING LOCK UNIT CIRCUIT-1

1. Disconnect BCM connector.
2. Check continuity between steering lock unit harness connector and BCM harness connector.

Steering lock unit		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M40	8	M122	98	Existed

3. Check continuity between steering lock unit harness connector and ground.

Steering lock unit		Ground	Continuity
Connector	Terminal		
M40	8		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> Repair or replace harness.

4. CHECK IPDM E/R OUTPUT SIGNAL

1. Connect IPDM E/R connector.
2. Disconnect BCM connector.
3. Check voltage between steering lock unit harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
Steering lock unit			
Connector	Terminal		
M40	8	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace steering lock unit.
NO >> GO TO 5.

5. CHECK STEERING LOCK UNIT CIRCUIT-2

1. Disconnect IPDM E/R connector.
2. Check continuity between steering lock unit harness connector and IPDM E/R harness connector.

Steering lock unit		IPDM E/R		Continuity
Connector	Terminal	Connector	Terminal	
M40	8	E5	33	Existed

3. Check continuity between steering lock unit harness connector and ground.

Steering lock unit		Ground	Continuity
Connector	Terminal		
M40	8		Not existed

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation"

NO >> Repair or replace harness.

6.CHECK BCM OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect steering lock unit connector and IPDM E/R connector.
3. Check voltage between steering lock unit harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
Steering lock unit			
Connector	Terminal		
M40	3	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 8.
NO >> GO TO 7.

7.CHECK STEERING LOCK UNIT CIRCUIT-3

1. Disconnect BCM connector.
2. Check continuity between steering lock unit harness connector and BCM harness connector.

Steering lock unit		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M40	3	M122	97	Existed

3. Check continuity between steering lock unit harness connector and ground.

Steering lock unit		Ground	Continuity
Connector	Terminal		
M40	3		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> Repair or replace harness.

8.CHECK IPDM E/R OUTPUT SIGNAL

1. Connect IPDM E/R connector.
2. Disconnect BCM connector.
3. Check voltage between steering lock unit harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
Steering lock unit			
Connector	Terminal		
M40	3	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace steering lock unit.
NO >> GO TO 9.

9.CHECK STEERING LOCK UNIT CIRCUIT-4

1. Disconnect IPDM E/R connector.
2. Check continuity between steering lock unit harness connector and IPDM E/R harness connector.

Steering lock unit		IPDM E/R		Continuity
Connector	Terminal	Connector	Terminal	
M40	3	E5	32	Existed

3. Check continuity between steering lock unit harness connector and ground.

Steering lock unit		Ground	Continuity
Connector	Terminal		
M40	3		Not existed

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".
NO >> Repair or replace harness.

B210B STARTER CONTROL RELAY

Description

INFOID:0000000011489281

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

DTC Logic

INFOID:0000000011489282

DTC DETECTION LOGIC

NOTE:
If DTC B210B is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to PCS-14, "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 in the ON position even if the followings conditions are met for about 1 second. • Starter control relay ON/OFF signal from BCM • P/N position signal from TCM	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.
- Shift 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-100, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489283

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 PCS-32, "DTC Index".

Is the DTC B210B displayed again?

YES >> Replace IPDM E/R. Refer PCS-35, "Removal and Installation".
NO >> INSPECTION END

B210C STARTER CONTROL RELAY

Description

INFOID:0000000011489284

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

DTC Logic

INFOID:0000000011489285

DTC DETECTION LOGIC

NOTE:

- If DTC B210C is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to PCS-14, "DTC Logic".
- When IPDM E/R power supply voltage is low (Approx. 7 - 8 V for about 1 second), the DTC B210C may be detected.

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B210C	START CONT RLY OFF	IPDM E/R detects that the relay is stuck in the OFF position even if the followings conditions are met for about 1 second. • Starter control relay ON/OFF signal from BCM • P/N position signal from TCM	• 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.
- Shift 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-101, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489286

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-101, "DTC Logic".

Is the DTC B210C displayed again?

YES >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".
NO >> INSPECTION END

B210D STARTER RELAY

Description

INFOID:0000000011489287

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 the START position. IPDM E/R transmits the starter relay ON signal to BCM via CAN communication.

DTC Logic

INFOID:0000000011489288

DTC DETECTION LOGIC

NOTE:

- If DTC B210D is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to PCS-14, "DTC Logic".
- If DTC B210D is displayed with DTC B2617, first perform the trouble diagnosis for DTC B2617. Refer to SEC-88, "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 in the ON position even if the followings conditions are met for about 1 second. • Starter control relay ON/OFF signal from BCM • P/N position signal from TCM	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.
- Shift 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-102, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489289

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-102, "DTC Logic".

Is the DTC B210D displayed again?

YES >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".
NO >> INSPECTION END

B210E STARTER RELAY

Description

INFOID:0000000011489290

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 the START position. IPDM E/R transmits the starter relay ON signal to BCM via CAN communication.

DTC Logic

INFOID:0000000011489291

DTC DETECTION LOGIC

NOTE:

- If DTC B210E is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to PCS-14, "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-107, "DTC Logic".
- If DTC B210E is displayed with DTC B2617 for BCM, first perform the trouble diagnosis for DTC B2617. Refer to SEC-88, "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 in the OFF position even if the followings conditions are met for about 1 second. • Starter control relay ON/OFF signal from BCM • P/N position signal from TCM	• Harness or connector (Starter relay circuit is open or short) • IPDM E/R • Battery

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait for at least 1 second.
- Shift 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-103, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489292

1.CHECK STARTER RELAY OUTPUT SIGNAL

1. Check voltage between BCM harness connector and ground.

(+)		(–)	Condition			Voltage (V) (Approx.)
BCM						
Connector	Terminal		Ignition switch	Brake pedal	Shift 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

1. Turn ignition switch OFF.
2. Disconnect IPDM E/R connector.
3. Disconnect BCM connector.

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

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

5. 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-35, "Removal and Installation".
NO >> Repair or replace harness.

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.

(+)		(–)	Voltage (V) (Approx.)
IPDM E/R			
Connector	Terminal		
E6	36	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.
NO >> Check harness for open or short between IPDM E/R and battery.

4.REPLACE BCM

1. Replace BCM. Refer to BCS-3, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM) : Work Procedure".
2. Perform DTC CONFIRMATION PROCEDIURE. Refer to SEC-103, "DTC Logic".

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

B210F SHIFT POSITION/CLUTCH INTERLOCK SWITCH

Description

INFOID:0000000011489293

IPDM E/R confirms the shift position with the following signals.
- P/N position signal from TCM
- Shift position signal from BCM (CAN)

DTC Logic

INFOID:0000000011489294

DTC DETECTION LOGIC

NOTE:
If DTC B210F is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to PCS-14, "DTC Logic"

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B210F	INTER LOCK/PNP SW ON	IPDM E/R detects the difference between the signals below for 1 second or more. • P/N position signal from TCM • Shift position signal from BCM (CAN)	• Harness or connectors (TCM circuit is open or shorted) • TCM • BCM • 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.
- Shift 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-105, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489295

1.CHECK BCM INPUT SIGNAL

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

(+)		(–)	Condition		Voltage (V) (Approx.)
BCM					
Connector	Terminal				
M123	140	Ground	Shift lever	P or N position	Battery voltage
				Other than above	0

Is the inspection normal?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> GO TO 2.

2.CHECK PNP SWITCH CIRCUIT

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

IPDM E/R		BCM		Continuity
Connector	Terminal	Connector	Terminal	
E5	30	M123	140	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 >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".
NO >> Repair or replace harness.

B2110 SHIFT POSITION/CLUTCH INTERLOCK SWITCH

Description

INFOID:0000000011489296

IPDM E/R confirms the shift position with the following signals.
- P/N position signal from TCM
- Shift position signal from BCM (CAN)

DTC Logic

INFOID:0000000011489297

DTC DETECTION LOGIC

NOTE:
If DTC B2110 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to PCS-15, "DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2110	INTER LOCK/PNP SW	IPDM E/R detects the difference between the signals below for 1 second or more. • P/N position signal from TCM • Shift position signal from BCM (CAN)	• Harness or connectors (TCM circuit is open or shorted) • TCM • 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.
- Shift 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-107, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011489298

1.CHECK BCM INPUT SIGNAL

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

(+)		(–)	Condition		Voltage (V) (Approx.)
BCM					
Connector	Terminal				
M123	140	Ground	Shift lever	P or N position	Battery voltage
				Other than above	0

Is the inspection normal?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> GO TO 2.

2.CHECK PNP SWITCH CIRCUIT

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

IPDM E/R		BCM		Continuity
Connector	Terminal	Connector	Terminal	
E5	30	M123	140	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 >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".
NO >> Repair or replace harness.

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:0000000011489299

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	I
	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		Ground	
Connector	Terminal		
M118	1		Battery voltage
M119	11		

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:0000000011489300

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

Is the fuse fusing?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit if a fuse or fusible link is blown.
NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

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

Is the measurement value normal?

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

3.CHECK GROUND CIRCUIT

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

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

Does continuity exist?

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

HOOD SWITCH

Description

INFOID:0000000011489301

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:0000000011489302

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-111, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011489303

1.CHECK HOOD SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect IPDM E/R connector E9 and hood switch connector.
3. 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	E83	2	Existed

4. 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 >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK IPDM E/R OUTPUT

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

(+)		(–)	Voltage (V) (Approx.)
IPDM E/R			
Connector	Terminal		
E9	104	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

3.CHECK HOOD SWITCH

Refer to SEC-112, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace hood switch.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000011489304

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 switch	Press	Not existed
			Release	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace hood switch. (Built is hood lock RH.)

HEADLAMP

Description

INFOID:0000000011489305

Headlamp lighting when vehicle security system is alarm phase.

Component Function Check

INFOID:0000000011489306

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-113, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011489307

1.CHECK HEADLAMP OPERATION

Refer to SEC-113, "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-39, "Intermittent Incident".

>> INSPECTION END

SECURITY INDICATOR LAMP

Description

INFOID:0000000011489308

NVIS (Nissan Vehicle Immobilizer System-NATS) and vehicle security system conditions are indicated by blink or illumination of security indicator lamp.

Component Function Check

INFOID:0000000011489309

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	Vehicle security indicator	Illuminates
	OFF		Does not illuminate

Is the inspection result normal?

YES >> INSPECTION END
NO >> Go to SEC-114, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011489310

1.CHECK SECURITY INDICATOR LAMP POWER SUPPLY CIRCUIT

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

(+)		(–)	Voltage (V) (Approx.)
Security indicator lamp			
Connector	Terminal		
M29	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 2.
NO >> Check the following.
- 10 A fuse [No. 6, located in the fuse block (J/B)]
- Harness for open or short between security indicator lamp and fuse.

2.CHECK SECURITY INDICATOR LAMP CIRCUIT

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

Security indicator lamp		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M29	2	M123	141	Existed

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

Security indicator lamp		Ground	Continuity
Connector	Terminal		
M29	2		Not existed

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness.

3.CHECK SECURITY INDICATOR LAMP

Refer to SEC-115, "Component Inspection".

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> Replace security indicator lamp. Refer to SEC-209, "Removal and Installation".

Component Inspection

INFOID:0000000011489311

1. CHECK SECURITY INDICATOR LAMP

1. Disconnect security indicator lamp connector.
2. Check continuity between security indicator lamp terminals.

Terminal		Continuity
Security indicator lamp		
(+)	(–)	
1	2	Existed
2	1	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace security indicator lamp.

KEY WARNING LAMP

Description

INFOID:0000000011489312

- Key warning lamp is located on combination meter.
- Performs operation method guide and warning together with buzzer.

Component Function Check

INFOID:0000000011489313

1.CHECK FUNCTION

Check the operation with “INDICATOR” in “Active Test” mode with CONSULT.

Test item	Condition	
INDICATOR	KEY ON	Key warning lamp (red) illuminates
	KEY IND	Key warning lamp (red) blinks

Is the inspection result normal?

YES >> Key warning lamp in combination meter is OK.
NO >> Refer to SEC-116, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011489314

1.CHECK KEY WARNING LAMP

Refer to DLK-100, "Component Function Check".

Is the inspection result normal?

Yes >> GO TO 2.
No >> Repair or replace key warning lamp circuit.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

HORN

Description

INFOID:0000000011489315

Perform answer-back for each operation with horn.

Component Function Check

INFOID:0000000011489316

1.CHECK FUNCTION

1. Select “HORN” in “ACTIVE TEST” mode with CONSULT.
2. Check the horn (high/low) operation.

Test item		Description	
HORN	ON	Horn relay	ON (for 20 ms)

Is the operation normal?

YES >> Horn function is OK.
NO >> Go to SEC-117, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011489317

1.CHECK HORN FUNCTION

Check horn function with horn switch.

Do the horns sound?

YES >> GO TO 2.
NO >> Refer to HRN-2, "Wiring Diagram - HORN -".

2.CHECK HORN RELAY 1 POWER SUPPLY

1. Turn ignition switch ON.
2. Perform “ACTIVE TEST” (“HORN”) with CONSULT.
3. Check voltage between horn relay 1 connector and ground.

Horn relay 1		Ground	Test item		Voltage (V) (Approx.)
Connector	Terminal				
E11	1		HORN	ON	Battery voltage → 0 → Battery voltage
				Other than above	Battery voltage

Is the inspection result normal?

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

3.CHECK HORN RELAY 1 CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect horn relay 1 connector and diode connector.
3. Check continuity between horn relay 1 harness connector and diode harness connector.

Horn relay 1		Diode		Continuity
Connector	Terminal	Connector	Terminal	
E11	1	E107	3	Existed

4. Check continuity between horn relay 1 harness connector and ground.

Horn relay 1		Ground	Continuity
Connector	Terminal		
E11	1		Not existed

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4.CHECK HORN RELAY 1 CIRCUIT 2

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

IPDM E/R		Diode		Continuity
Connector	Terminal	Connector	Terminal	
E6	44	E107	2	Existed

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
E6	44		Not existed

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace harness.

5.CHECK DIODE

Refer to SEC-118, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace diode.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

Is the inspection result normal?

>> INSPECTION END

Component Inspection

INFOID:0000000011489318

1.CHECK DIODE

1. Turn ignition switch OFF.
2. Disconnect diode.
3. Check the continuity between diode terminals under the following conditions.

Terminal		Continuity
(+)*	(-)*	
3	2	Existed
2	3	Not existed

*: For a digital tester.

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace diode.

VEHICLE SECURITY HORN

Description

INFOID:0000000011489319

Perform answer-back for each operation with horn.

Component Function Check

INFOID:0000000011489320

1.CHECK FUNCTION

1. Select “HORN” in “ACTIVE TEST” mode with CONSULT.
2. Check the vehicle security horn operation.

Test item		Description	
HORN	ON	Horn relay	ON (for 20 ms)

Is the operation normal?

YES >> Vehicle security horn function is OK.
NO >> Go to SEC-119, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011489321

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check that the following fuse are not fusing.

- 10A fuse [No.10 located in fuse block (J/B)]

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

2.CHECK HORN RELAY 2 POWER SUPPLY

1. Disconnect horn relay 2 connector.
2. Check voltage between horn relay 2 connector and ground.

Horn relay 2		Ground	Voltage (V) (Approx.)
Connector	Terminal		
E18	1		Battery voltage

Is the inspection result normal?

YES >> GO TO 3.
NO >> Check horn relay 2 power supply circuit.

3.CHECK VEHICLE SECURITY HORN POWER SUPPLY

1. Connect horn relay 2 connector.
2. Turn ignition switch ON.
3. Perform “ACTIVE TEST” (“HORN”) with CONSULT.
4. Check voltage between vehicle security horn connector and ground.

Vehicle security horn		Ground	Test item		Voltage (V) (Approx.)
Connector	Terminal				
E32	1		HORN	ON	Battery voltage → 0 → Battery voltage
				Other than above	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.
NO >> GO TO 5.

4.CHECK VEHICLE SECURITY HORN GROUND

1. Turn ignition switch OFF.
2. Disconnect vehicle security horn connector.
3. Check continuity between vehicle security horn connector and ground.

Vehicle security horn		Ground	Continuity
Connector	Terminal		
E33	2		Existed

Is the inspection result normal?

YES >> Replace vehicle security horn.
NO >> Repair or replace harness.

5. CHECK HORN RELAY 2 CIRCUIT

1. Disconnect horn relay 2 connector.
2. Check continuity between vehicle security horn harness connector and horn relay 2 connector.

Vehicle security horn		Horn relay 2		Continuity
Connector	Terminal	Connector	Terminal	
E32	1	E18	2	Existed

3. Check continuity between driver seat control unit harness connector and ground.

Vehicle security horn		Ground	Continuity
Connector	Terminal		
E32	1		Not existed

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace harness.

6. CHECK HORN RELAY 2

Check horn relay 2.
Refer to SEC-121, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 7.
NO >> Replace horn relay 2.

7. CHECK HORN RELAY 2 CIRCUIT 1

1. Disconnect diode connector.
2. Check continuity between diode harness connector and horn relay 2 harness connector.

Diode		Horn relay 2		Continuity
Connector	Terminal	Connector	Terminal	
E107	1	E18	3	Existed

3. Check continuity between diode harness connector and ground.

Diode		Ground	Continuity
Connector	Terminal		
E107	1		Not existed

Is the inspection result normal?

YES >> GO TO 8.
NO >> Repair or replace harness.

8. CHECK HORN RELAY 2 CIRCUIT 2

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

Diode		IPDM E/R		Continuity
Connector	Terminal	Connector	Terminal	
E107	2	E6	44	Existed

3. Check continuity between diode harness connector and ground.

Diode		Ground	Continuity
Connector	Terminal		
E107	2		Not existed

Is the inspection result normal?

YES >> GO TO 9.
NO >> Repair or replace harness.

9.CHECK DIODE

Check diode.
Refer to SEC-121, "Component Inspection".

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".
NO >> Replace diode.

Component Inspection

INFOID:0000000011489322

HORN RELAY 2

1.CHECK HORN RELAY 2

1. Turn ignition switch OFF.
2. Disconnect horn relay 2.
3. Check horn relay 2.

Horn relay 2	Condition	Voltage (Approx.)
Terminal		
2	12 V direct current supply between terminals 1 and 3.	12 V
	No current supply	0 V

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace horn relay 2.

DIODE

1.CHECK DIODE

1. Turn ignition switch OFF.
2. Disconnect diode.
3. Check the continuity between diode terminals under the following conditions.

Terminal		Continuity
(+)*	(-)*	
1	2	Existed
2	1	Not existed

*: For a digital tester.

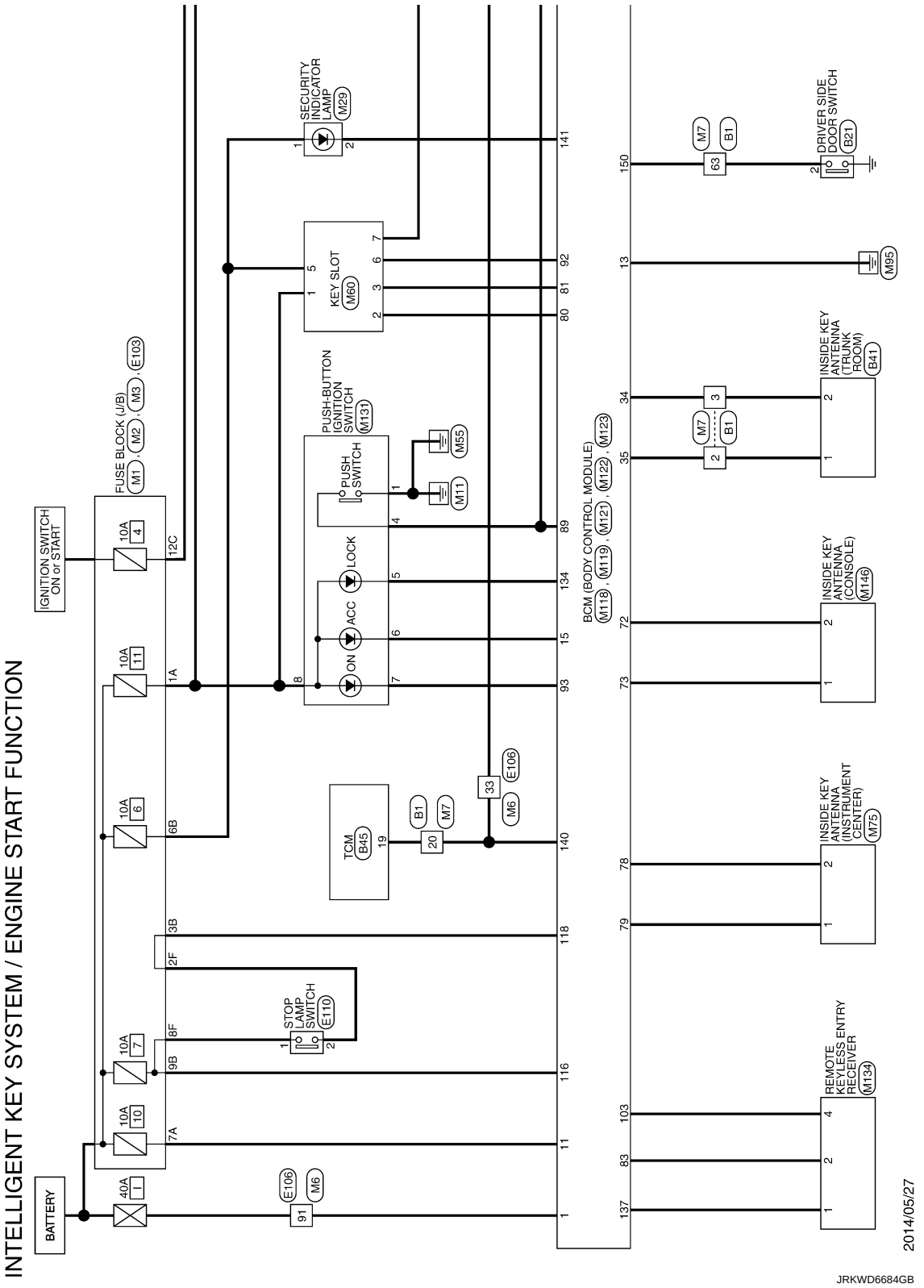
Is the inspection result normal?

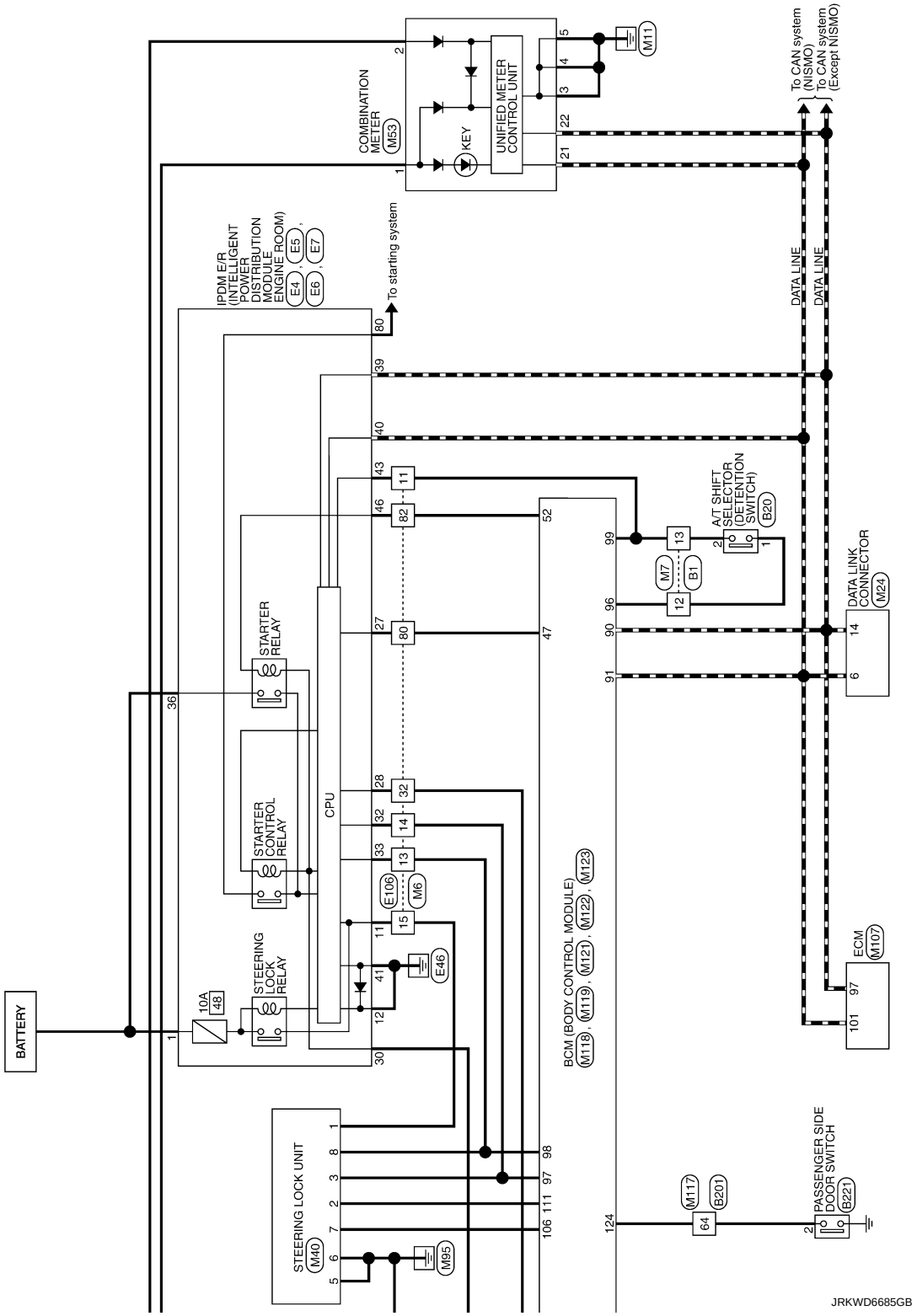
YES >> INSPECTION END
NO >> Replace diode.

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

Wiring Diagram - INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION -

INFOID:0000000011489323




BATTERY
10A
48
STEERING LOCK RELAY
STARTER CONTROL RELAY
STARTER RELAY
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E4, E5, E6, E7
CPU
To starting system
COMBINATION METER
M53
KEY
UNIFIED METER CONTROL UNIT
M11
To CAN system (NISMO)
To CAN system (Except NISMO)
DATA LINE
DATA LINE
A/T SHIFT SELECTOR DETENTION SWITCH
B20
M7
B1
DATA LINK CONNECTOR
M24
ECM
M107
BCM (BODY CONTROL MODULE)
M118, M119, M121, M122, M123
E106
M6
E46
STEERING LOCK UNIT
M40
M95
M117
B201
PASSENGER SIDE DOOR SWITCH
B221
JRKWD6685GB

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
3	P	-
6	V	-
7	W	-
8	W	-
9	Y	-
10	R	-
11	Y	-
12	GR	-
13	BG	-
14	Y	-
15	BR	-
16	R	-
17	W	-
18	BR	-
20	GR	-
21	SB	-
22	W	-
23	G	-
24	BG	-
25	L	-
26	P	-
27	GR	-
28	BG	-
31	GR	-
32	L	-
33	V	-
34	BG	-
39	G	-
40	LG	-
41	Y	-
42	SB	-
43	P	-
47	R	-
48	B	-
49	W	-
50	SHIELD	-
51	SB	-
52	B	-
53	R	-
54	B	-
56	R	-
57	G	-
58	G	-
59	R	-
60	BR	-
61	Y	-
62	SHIELD	-
63	LG	-
64	R	-
65	G	-
66	BR	-
67	BG	-
69	P	-
70	L	-
71	SHIELD	-
72	SHIELD	- [Without active noise control unit]
72	V	- [With active noise control unit]
73	SB	-
76	R	-
77	SB	-
78	G	-
79	Y	-
80	R	-
81	G	-
82	BR	- [Without active noise control unit]
82	G	- [With active noise control unit]
83	R	- [With active noise control unit]
83	Y	- [Without active noise control unit]
84	SHIELD	-
85	V	-
86	SB	- [Without active noise control unit]
86	W	- [With active noise control unit]
87	L	-
88	P	-
89	SHIELD	-
90	V	-
92	BR	-
93	SB	-
94	GR	-
95	BG	-
96	Y	-
97	Y	-
98	LG	-
99	R	-
100	G	-

Connector No.	B20
Connector Name	A/T SHIFT SELECTOR
Connector Type	TH24FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	BCM VCC IN
2	BG	KEY I/LOCK(P)
3	B	GROUND
5	G	RANGE SENSOR No.- SIGNAL
6	B	GROUND
8	V	RANGE SENSOR No.1 SIGNAL
10	G	RANGE SENSOR No.3 SIGNAL
12	GR	RANGE SENSOR No.5 SIGNAL
13	Y	VIGN
14	W	SHIFT LOCK SOLENOID CONTROL SIGNAL
15	LG	RANGE SENSOR POWER SOURCE 2
16	L	RANGE SENSOR POWER SOURCE 1
17	R	ILLUMINATION
18	B	GROUND
20	BR	AUTO-MANUAL RANGE CHANGE SWITCH 1 SIGNAL
21	P	RANGE SENSOR No.4 SIGNAL
22	BR	ILLUMINATION GND
23	R	RANGE SENSOR No.2 SIGNAL
24	V	AUTO-MANUAL RANGE CHANGE SWITCH 2 SIGNAL

Connector No.	B21
Connector Name	DRIVER SIDE DOOR SWITCH
Connector Type	A03FW

H.S.

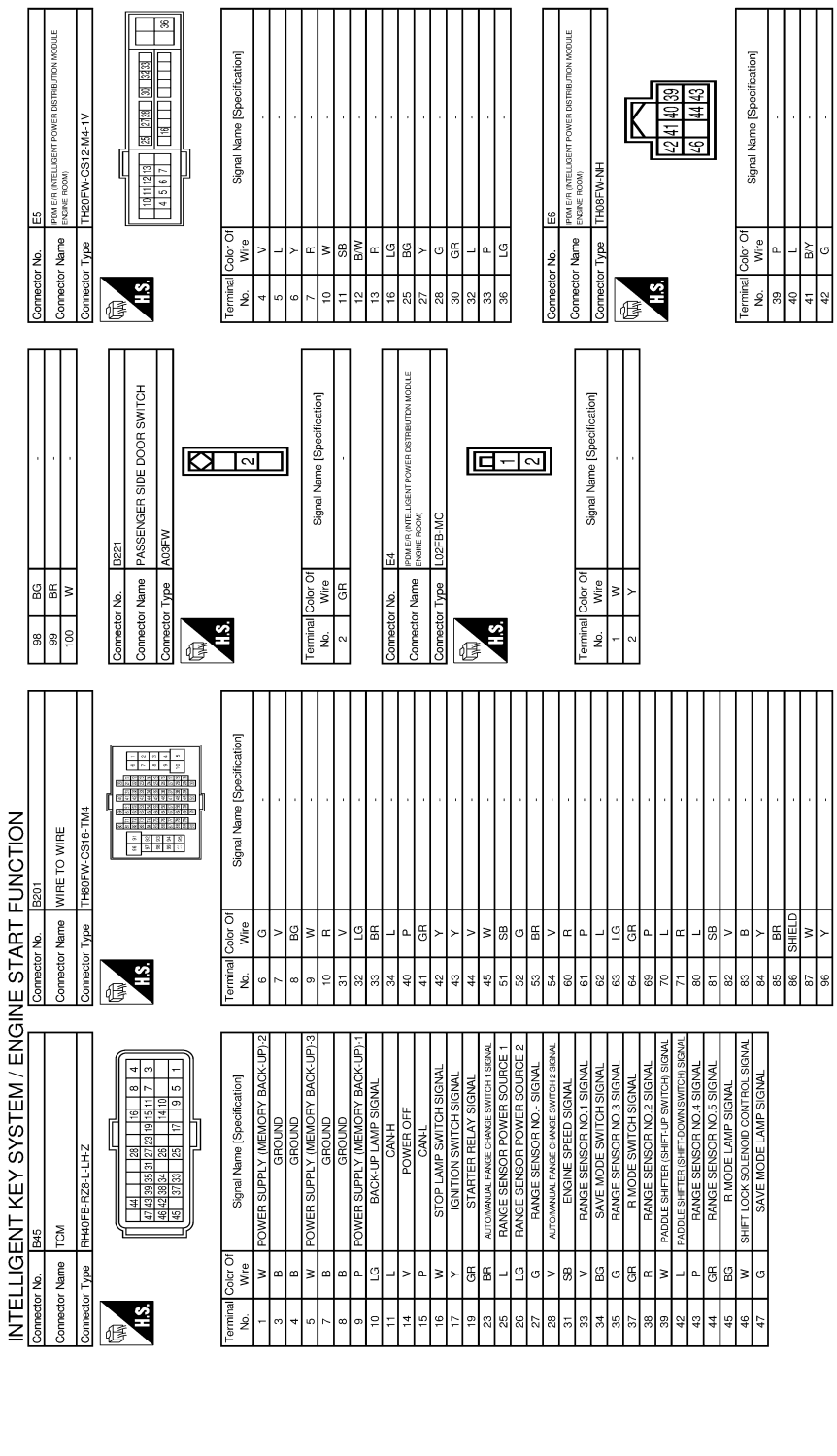
Terminal No.	Color Of Wire	Signal Name [Specification]
2	LG	-

Connector No.	B41
Connector Name	INSIDE KEY ANTENNA (TRUNK ROOM)
Connector Type	FR02FGY

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	P	-

JRKWE4473GB



JRKWE4474GB

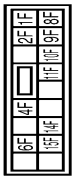
INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION

43	SB
44	W
46	BG

Connector No.	E7
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH20FW-CS12-M4

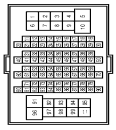
Terminal No.	Color Of Wire	Signal Name [Specification]
48	L	-
49	P	-
51	LG	-
53	SB	-
54	W	-
55	BG	-
56	R	-
57	G	-
58	Y	-
69	BG	-
70	G	-
71	SB	-
74	LG	-
76	P	-
77	B/W	-
80	W	-

Connector No.	E103
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS16FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
10F	GR	-
11F	Y	-
14F	LG	-
15F	P	-
1F	W	-
2F	W	-
4F	G	-
6F	BG	-
8F	L	-
9F	R	-

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

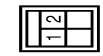


Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
3	BG	-
4	BG	-
5	R	-
6	P	-
7	BG	-
8	P	-
9	W	-
10	Y	-
11	SB	-

12	BG
13	P
14	L
15	SB
16	BG
17	SHIELD
18	L
19	P
20	B
21	Y
22	V
23	Y
24	V
25	BR
26	L
27	SHIELD
28	G
29	R
30	W
31	V
32	G
33	GR
34	P
35	LG
36	G
37	Y
38	SB
39	GR
40	G
41	V
42	V
43	L
44	BR
45	G
46	SB
48	BG
49	L
50	R
51	SHIELD
60	P
61	L
71	LG
72	SB
74	P
75	BR
76	LG
77	V
78	BR
79	W
80	Y

81	GR
82	BG
84	P
85	P
86	GR
87	R
88	L
89	BG
90	G
91	GR
92	R
93	R
94	LG
95	G
96	GR
97	L
98	LG
99	BG
100	L

Connector No.	E110
Connector Name	STOP LAMP SWITCH
Connector Type	M04FW-LC



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

JRKWE4475GB

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION

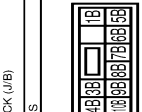
Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1A	V	-
2A	G	-
3A	L	-
4A	LG	-
5A	SB	-
6A	Y	-
7A	R	-
8A	L	-

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FW-CS

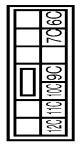
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
10B	Y	-
1B	R	-
3B	P	-
4B	G	-
5B	BG	-
6B	Y	-
7B	R	-
8B	R	-
9B	SB	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS

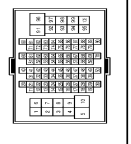
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
10C	L	-
11C	R	-
12C	W	-
6C	R	-
7C	B	-
9C	BR	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.



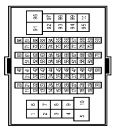
Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
3	R	-
4	G	-
5	Y	-
6	P	-
7	W	-
8	V	-
9	L	-
10	Y	-
11	G	-
12	BG	-
13	R	-
14	L	-
15	BR	-

16	R	-
17	SHIELD	-
18	L	-
19	P	-
20	B	-
21	W	-
22	GR	-
23	L	-
24	V	-
25	BR	-
26	G	-
27	SHIELD	-
28	G	-
29	R	-
30	W	-
31	V	-
32	G	-
33	GR	-
34	LG	-
35	P	-
36	L	-
37	W	-
38	Y	-
39	GR	-
40	BG	-
41	W	-
42	R	-
43	Y	-
44	BR	-
45	G	-
46	LG	-
48	W	-
49	L	-
50	R	-
51	SHIELD	-
60	SB	-
61	V	-
71	W	-
72	LG	-
74	R	-
75	BR	-
76	LG	-
77	R	-
78	BR	-
79	W	-
80	Y	-
81	BG	-
82	SB	-
84	Y	-
85	P	-

86	GR	-
87	R	-
88	L	-
89	G	-
90	P	-
91	W	-
92	R	-
93	LG	-
94	W	-
95	SB	-
96	L	-
97	L	-
98	Y	-
99	BG	-
100	L	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
3	P	-
6	L	-
7	W	-
8	W	-
9	G	-
10	R	-
11	W	-
12	SB	-
13	G	-
14	W	-
15	BR	-
16	R	-
17	BG	-
18	SB	-
20	GR	-
21	L	-
22	R	-
23	G	-

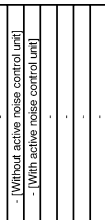
JRKWE4476GB

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION

24	BR	-
25	L	-
26	LG	-
27	W	-
28	R	-
31	GR	-
32	L	-
33	V	-
34	BG	-
39	W	-
40	BG	-
41	R	-
42	V	-
43	W	-
47	G	-
48	R	-
49	W	-
50	SHIELD	-
51	SB	-
52	B	-
53	R	-
54	B	-
56	R	-
57	G	-
58	G	-
59	R	-
60	BR	-
61	Y	-
62	SHIELD	-
63	GR	-
64	R	-
65	G	-
66	BR	-
67	BG	-
69	P	-
70	L	-
71	SHIELD	- [Without active noise control unit]
72	SHIELD	- [With active noise control unit]
72	V	- [With active noise control unit]
73	LG	-
76	R	-
77	SB	-
78	G	-
79	Y	-
80	R	-
81	G	-
82	BR	- [Without active noise control unit]
82	G	- [With active noise control unit]
83	R	- [With active noise control unit]
83	Y	- [Without active noise control unit]
84	SHIELD	-
85	V	-
86	LG	- [Without active noise control unit]
86	W	- [With active noise control unit]
87	L	-
88	P	-
89	SHIELD	-
90	V	-
92	LG	-
93	Y	-
94	G	-
95	R	-
96	Y	-
97	R	-
98	G	-
99	L	-
100	W	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW

H.S.



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

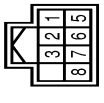
Connector No.	M29
Connector Name	SECURITY INDICATOR LAMP
Connector Type	TK02FBR

H.S.

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

Connector No.	M40
Connector Name	STEERING LOCK UNIT
Connector Type	TH08FW-NH

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	S/L 12V (MECHANICAL)
2	Y	S/L (K LINE)
3	L	S/L CONDLTLON1
5	B	GND
6	B	GND
7	P	S/L 12V(CPU)
8	R	S/L CONDLTLON2

Connector No.	M53
Connector Name	COMBINATION METER
Connector Type	SAB40FW

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	BATTERY POWER SUPPLY
2	W	IGNITION POWER SUPPLY
3	B	GROUND
4	B	ILLUMINATION GROUND
5	B	GROUND
6	W	METER CONTROL SWITCH GROUND
7	Y	A/C AUTO AMP. CONNECTION RECOGNITION SIGNAL
8	SB	AMBIENT SENSOR GROUND
9	P	AMBIENT SENSOR SIGNAL
12	L	VEHICLE SPEED SIGNAL (2-PULSE)
13	V	VEHICLE SPEED SIGNAL (8-PULSE)
14	B	OIL PRESSURE SENSOR GROUND
15	R	AIR BAG SIGNAL
16	R	LED HEAD LAMP (RH) WARNING SIGNAL
18	L	FUEL LEVEL SENSOR GROUND
19	R	OIL LEVEL SENSOR GROUND
20	W	OIL LEVEL SENSOR SIGNAL
21	L	CAN-H
22	P	CAN-L
23	LG	ILLUMINATION CONTROL SWITCH SIGNAL (-)
24	BR	ILLUMINATION CONTROL SWITCH SIGNAL (+)
25	G	TRIP A/B RESET SWITCH SIGNAL
26	BG	ENTER SWITCH SIGNAL
27	SB	SELECT SWITCH SIGNAL
28	BR	ALTERNATOR
29	G	SEAT BELT BUCKLE SWITCH SIGNAL (PASSENGER SIDE)
30	LG	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)
31	V	PARKING BRAKE SWITCH SIGNAL
32	V	BRAKE FLUID LEVEL SWITCH SIGNAL
33	L	WASHER LEVEL SWITCH SIGNAL
34	GR	OIL PRESSURE SENSOR POWER
35	W	OIL PRESSURE SENSOR SIGNAL
38	BG	FUEL LEVEL SENSOR SIGNAL
39	Y	LED HEAD LAMP (LH) WARNING SIGNAL
40	V	ILLUMINATION CONTROL

JRKWE4477GB

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION

Connector No.	M60
Connector Name	KEY SLOT
Connector Type	TH12FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	BAT
2	GR	CLOCK
3	L	DATA
5	Y	ILL BAT
6	LG	ILL
7	B	GND
11	R	KEY SWITCH SIGNAL

Connector No.	M75
Connector Name	INSIDE KEY ANTENNA (INSTRUMENT CENTER)
Connector Type	RK02FGY

H.S.

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

Connector No.	M107
Connector Name	ECM
Connector Type	RH24FGY-RZ8-R-LH-Z

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
97	P	CAN COMMUNICATION LINE
99	SB	SENSOR POWER SUPPLY
100	BR	SENSOR POWER SUPPLY
101	L	CAN COMMUNICATION LINE
102	G	ASCD STEERING SWITCH
103	GR	SENSOR GROUND
104	P	ACCELERATOR PEDAL POSITION SENSOR 1
105	W	ECM RELAY (SELF SHUT-OFF)
106	LG	IGNITION SWITCH
107	BG	SENSOR GROUND
108	L	ACCELERATOR PEDAL POSITION SENSOR 2
109	L	SAVALVERLY
110	P	STOP LAMP SWITCH
111	GR	PNP SIGNAL
113	SB	ENGINE SPEED OUTPUT SIGNAL
114	V	DATA LINK CONNECTOR
117	R	ASCD BRAKE SWITCH
118	W	POWER SUPPLY FOR ECM (BACK-UP)
120	BR	SAPM/PRLY
121	P	POWER SUPPLY FOR ECM
122	V	POWER SUPPLY FOR ECM
124	B	ECM GROUND
126	L	FUEL PUMP RELAY
127	G	THROTTLE CONTROL MOTOR RELAY
128	B	ECM GROUND

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
6	G	-
7	V	-
8	G	-
9	W	-
10	L	-
31	Y	-
32	LG	-
33	BR	-
34	L	-
40	G	-
41	R	-
42	SB	-
43	L	-
44	R	-
45	G	-
51	SB	-
52	BG	-
53	R	-
54	GR	-
60	L	-
61	P	-
62	L	-
63	Y	-
64	LG	-
69	P	-
70	L	-
71	Y	-
80	L	-
81	G	-
82	BR	-
83	B	-
84	V	-
85	SB	-
86	SHIELD	-
87	W	-
96	Y	-
98	G	-
99	V	-
100	W	-

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	R	POWER WINDOW POWER SUPPLY(BAT)
3	W	POWER WINDOW POWER SUPPLY(RAP)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FW-CS

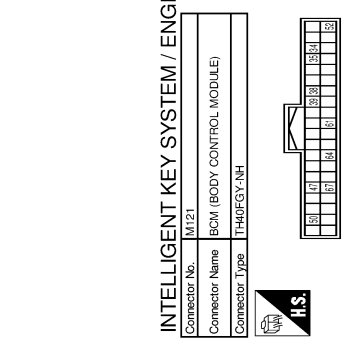
H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
4	R	INTERIOR ROOM LAMP POWER SUPPLY
5	G	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP
8	V	ALL DOOR, FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR, FUEL LID UNLOCK OUTPUT
11	R	BAT (FUSE)
13	B	GND
14	P	PUSH-BUTTON IGNITION SW ILL GND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT) OUTPUT
18	BG	TURN SIGNAL LH (FRONT) OUTPUT
19	V	ROOM LAMP TIMER CONTROL

JRKWE4478GB

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION

Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FGY-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
34	P	TRUNK ROOM ANT-
35	L	TRUNK ROOM ANT+
38	R	REAR BUMPER ANT-
39	BR	REAR BUMPER ANT+
47	Y	IGN RELAY (IPDM E/R) CONT
50	R	TRUNK ROOM LAMP SW
52	SB	STARTER RELAY CONT
61	W	TRUNK LID REQUEST SW
64	BG	I-KEY WARN BUZZER (ENG ROOM)
67	G	TRUNK LID OPENER SW

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2-
73	G	ROOM ANT2+
74	SB	PASSENGER DOOR ANT-
75	BR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT1-
79	BR	ROOM ANT1+
80	GR	IMMOBI ANTENNA CONTROL
81	L	IMMOBI ANTENNA SIGNAL
82	R	IGN RELAY (F/B) CONT
83	Y	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
89	BR	PUSH SW
90	P	CAN-L
91	L	CAN-H
92	LG	KEY SLOT ILL OUTPUT
93	V	ON IND
95	BG	ACC RELAY CONT
96	SB	A/T SHIFT SELECTOR POWER SUPPLY
97	L	S/L CONDITION 1
98	R	S/L CONDITION 2
99	G	SHIFT P
100	W	PASSENGER DOOR REQUEST SW
101	V	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
106	P	S/L UNIT POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW
111	Y	S/L UNIT COMM

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
113	P	OPTICAL SENSOR
116	SB	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	R	KEY SLOT SW
123	BR	IGN F/B
124	LG	PASSENGER DOOR SW
128	P	DOOR LOCK/UNLOCK SW LOCK
129	BG	TRUNK CANCEL SW
131	BR	DOOR LOCK/UNLOCK SW UNLOCK
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND
137	L	RECEIVER GND
138	Y	RECEIVER/SENSOR POWER SUPPLY
140	BR	SHIFT N/P
141	G	SECURITY INDICATOR
142	BG	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
150	GR	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

Connector No.	M131
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Type	TK08FBR

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

Connector No.	M134
Connector Name	REMOTE KEYLESS ENTRY RECEIVER
Connector Type	JAB04FB

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	GND
2	Y	SIGNAL OUTPUT
4	LG	BATTERY

Connector No.	M146
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Type	RK02FGY

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

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NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

Wiring Diagram - NVIS -

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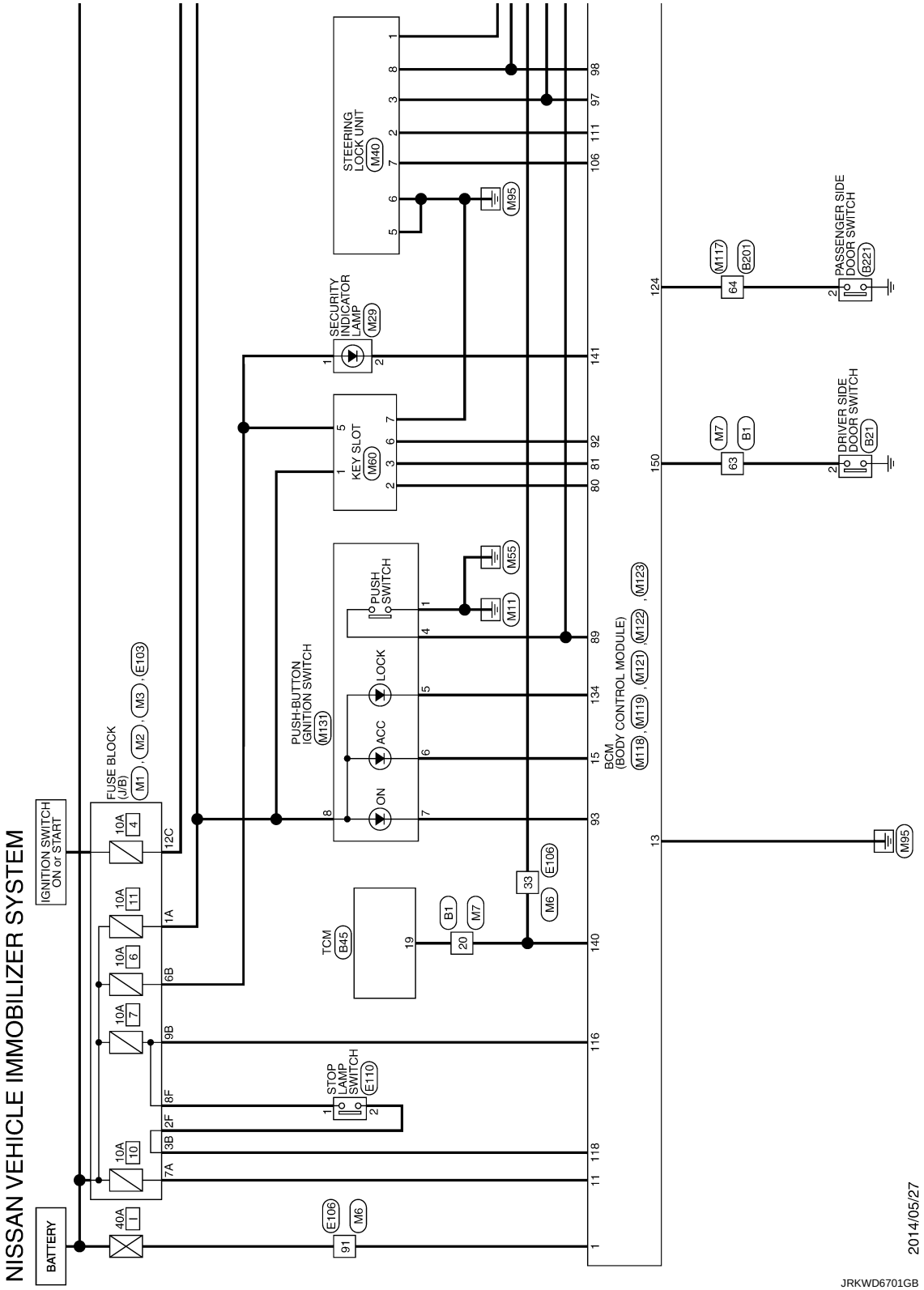

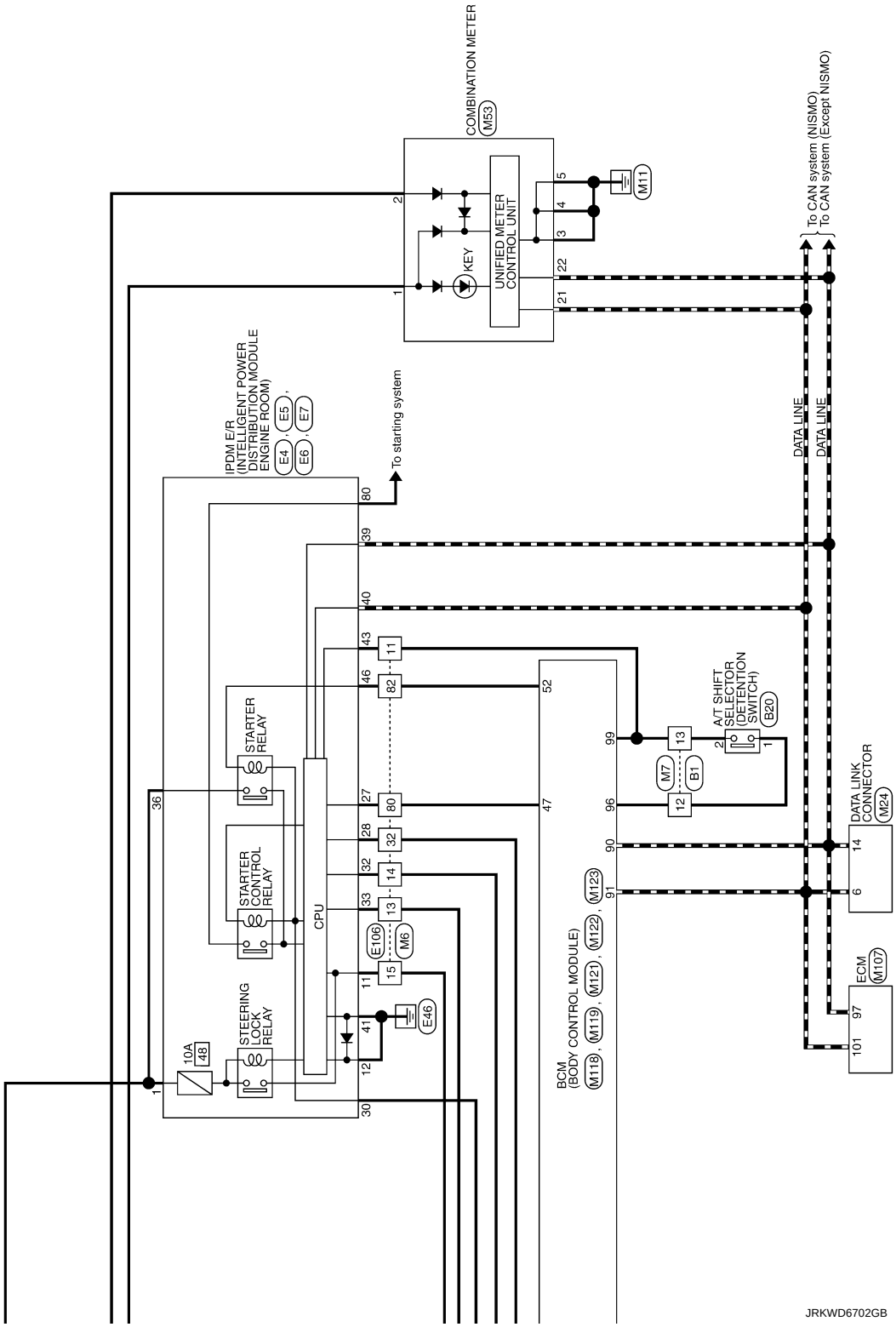
COMBINATION METER
M53
UNIFIED METER CONTROL UNIT
KEY
M11
To CAN system (NISMO)
To CAN system (Except NISMO)
DATA LINE
DATA LINE
IPDM E/R
(INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E4, E5, E6, E7
To starting system
STARTER RELAY
STARTER CONTROL RELAY
STEERING LOCK RELAY
10A
48
CPU
E106
M6
E46
A/T SHIFT SELECTOR (DETENTION SWITCH)
B20
M7
B1
DATA LINK CONNECTOR
M24
ECM
M107
BCM
(BODY CONTROL MODULE)
M118, M119, M121, M122, M123
JRKWD6702GB

NISSAN VEHICLE IMMOBILIZER SYSTEM

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
3	P	-
6	V	-
7	W	-
8	W	-
9	Y	-
10	R	-
11	Y	-
12	GR	-
13	BG	-
14	Y	-
15	BR	-
16	R	-
17	W	-
18	BR	-
20	GR	-
21	SB	-
22	W	-
23	G	-
24	BG	-
25	L	-
26	P	-
27	GR	-
28	BG	-
31	GR	-
32	L	-
33	V	-
34	BG	-
39	G	-
40	LG	-
41	Y	-
42	SB	-
43	P	-
47	R	-
48	B	-
49	W	-
50	SHIELD	-
51	SB	-
52	B	-
53	R	-
54	B	-
56	R	-
57	G	-
58	G	-
59	R	-
60	BR	-
61	Y	-
62	SHIELD	-
63	LG	-
64	R	-
65	G	-
66	BR	-
67	BG	-
69	P	-
70	L	-
71	SHIELD	-
72	SHIELD	- [Without active noise control unit]
72	V	- [With active noise control unit]
73	SB	-
76	R	-
77	SB	-
78	G	-
79	Y	-
80	R	-
81	G	-
82	BR	- [Without active noise control unit]
82	G	- [With active noise control unit]
83	R	- [With active noise control unit]
83	Y	- [Without active noise control unit]
84	SHIELD	-
85	V	-
86	SB	- [Without active noise control unit]
86	W	- [With active noise control unit]
87	L	-
88	P	-
89	SHIELD	-
90	V	-
92	BR	-
93	SB	-
94	GR	-
95	BG	-
96	Y	-
97	Y	-
98	LG	-
99	R	-
100	G	-

Connector No.	B20
Connector Name	A/T SHIFT SELECTOR
Connector Type	TH24FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	BCM VCC IN
2	BG	KEY I/LOCK(P)
3	B	GROUND
5	G	RANGE SENSOR No.- SIGNAL
6	B	GROUND
8	V	RANGE SENSOR No.1 SIGNAL
10	G	RANGE SENSOR No.3 SIGNAL
12	GR	RANGE SENSOR No.5 SIGNAL
13	Y	VIGN
14	W	SHIFT LOCK SOLENOID CONTROL SIGNAL
15	LG	RANGE SENSOR POWER SOURCE 2
16	L	RANGE SENSOR POWER SOURCE 1
17	R	ILLUMINATION
18	B	GROUND
20	BR	AUTO/MANUAL RANGE CHANGE SWITCH 1 SIGNAL
21	P	RANGE SENSOR No.4 SIGNAL
22	BR	ILLUMINATION GND
23	R	RANGE SENSOR No.2 SIGNAL
24	V	AUTO/MANUAL RANGE CHANGE SWITCH 2 SIGNAL

Connector No.	B21
Connector Name	DRIVER SIDE DOOR SWITCH
Connector Type	A03FW

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	LG	-

Connector No.	B45
Connector Name	TCM
Connector Type	RH40FB-RZ8-L-LH-Z

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	POWER SUPPLY (MEMORY BACK-UP)-2
3	B	GROUND
4	B	GROUND
5	W	POWER SUPPLY (MEMORY BACK-UP)-3
7	B	GROUND
8	B	GROUND
9	P	POWER SUPPLY (MEMORY BACK-UP)-1
10	LG	BACK-UP LAMP SIGNAL
11	L	CAN-H
14	V	POWER OFF
15	P	CAN-L
16	W	STOP LAMP SWITCH SIGNAL
17	Y	IGNITION SWITCH SIGNAL
19	GR	STARTER RELAY SIGNAL
23	BR	AUTO/MANUAL RANGE CHANGE SWITCH 1 SIGNAL
25	L	RANGE SENSOR POWER SOURCE 1
26	LG	RANGE SENSOR POWER SOURCE 2
27	G	RANGE SENSOR NO.- SIGNAL

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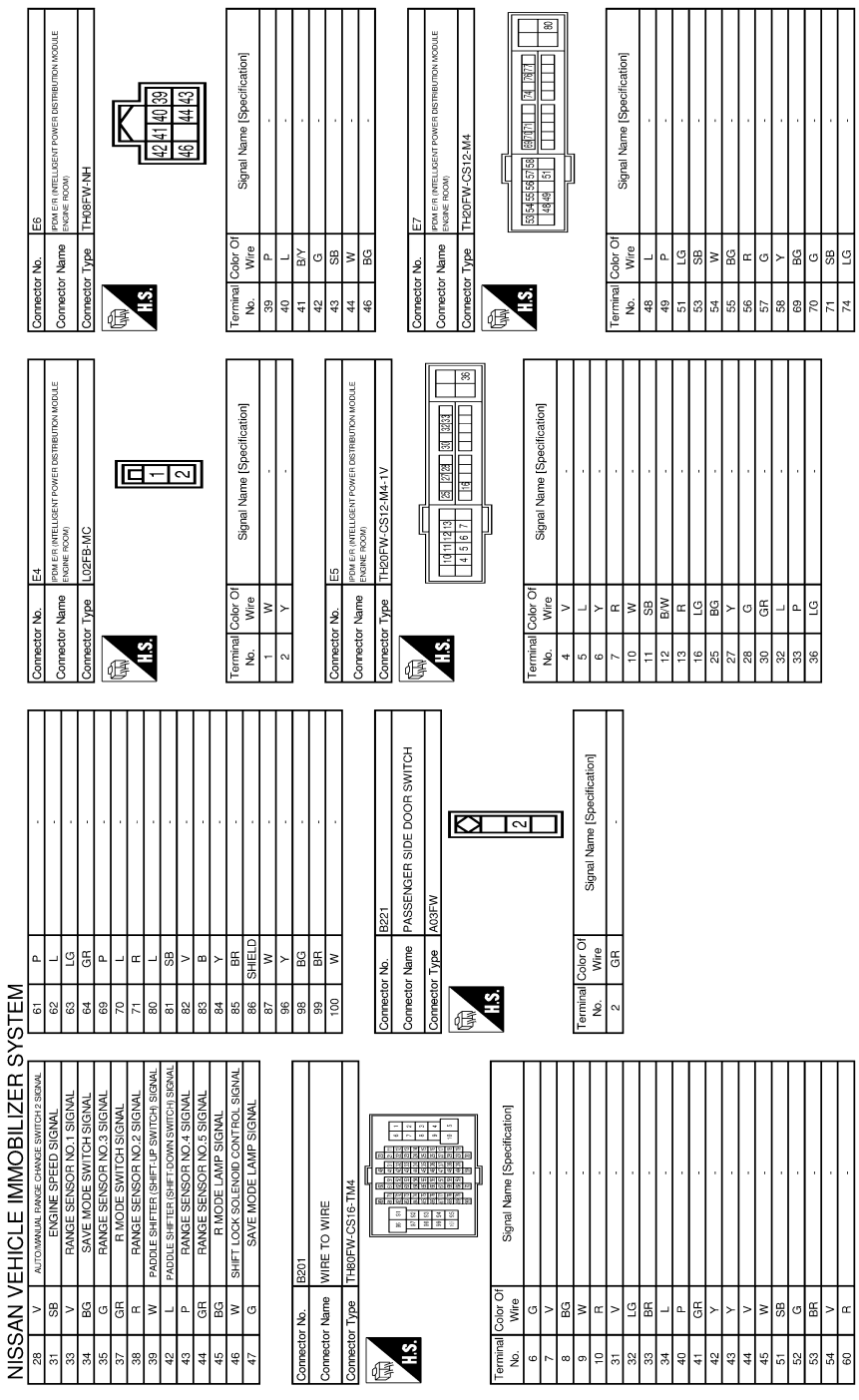

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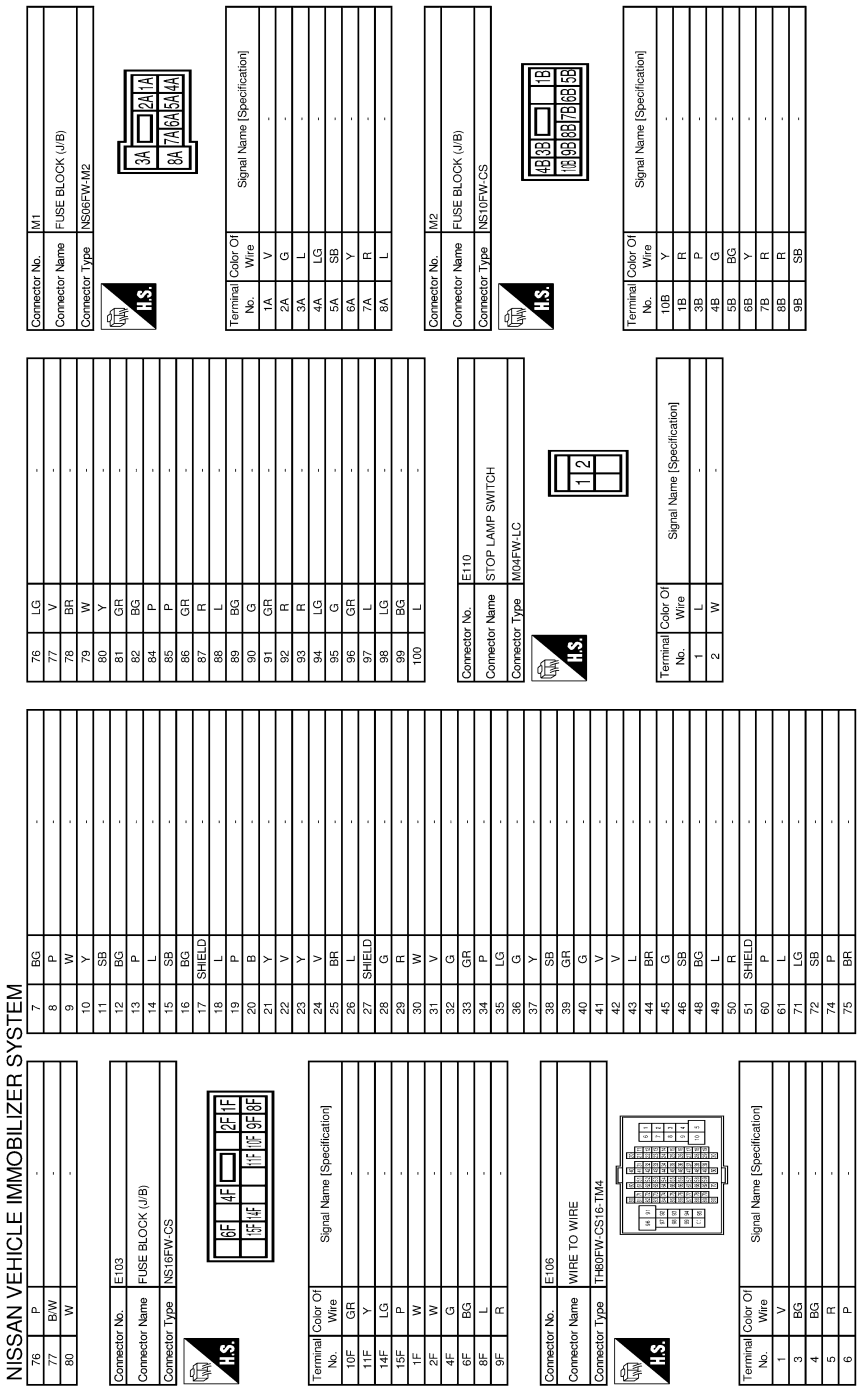
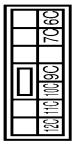

NISSAN VEHICLE IMMOBILIZER SYSTEM
Connector No. M1
Connector Name FUSE BLOCK (J/B)
Connector Type NS06FW-M2
Connector No. M2
Connector Name FUSE BLOCK (J/B)
Connector Type NS10FW-CS
Connector No. E103
Connector Name FUSE BLOCK (J/B)
Connector Type NS16FW-CS
Connector No. E110
Connector Name STOP LAMP SWITCH
Connector Type M04FW-LC
Connector No. E106
Connector Name WIRE TO WIRE
Connector Type TH80FW-CS16-TM4
H.S.
JRKWE4489GB

NISSAN VEHICLE IMMOBILIZER SYSTEM

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
10C	L	-
11C	R	-
12C	W	-
6C	R	-
7C	B	-
9C	BR	-

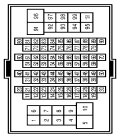
Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
3	R	-
4	G	-
5	Y	-
6	P	-
7	W	-
8	V	-
9	L	-
10	Y	-
11	G	-
12	BG	-
13	R	-
14	L	-
15	BR	-
16	R	-
17	SHIELD	-
18	L	-
19	P	-
20	B	-
21	W	-
22	GR	-
23	L	-
24	V	-
25	BR	-
26	G	-
27	SHIELD	-
28	G	-
29	R	-
30	W	-
31	V	-
32	G	-
33	GR	-
34	LG	-
35	P	-
36	L	-
37	W	-
38	Y	-
39	GR	-
40	BG	-
41	W	-
42	R	-
43	Y	-
44	BR	-
45	G	-
46	LG	-
48	W	-
49	L	-
50	R	-
51	SHIELD	-
60	SB	-
61	V	-
71	W	-
72	LG	-
74	R	-
75	BR	-
76	LG	-
77	R	-
78	BR	-
79	W	-
80	Y	-
81	BG	-
82	SB	-
84	Y	-
85	P	-
86	GR	-
87	R	-
88	L	-
89	G	-
90	P	-
91	W	-
92	R	-
93	LG	-
94	W	-
95	SB	-
96	L	-
97	L	-
98	Y	-
99	BG	-
100	L	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.



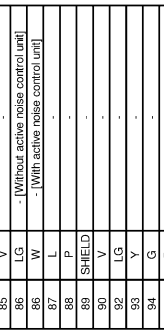
Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
3	P	-
6	L	-
7	W	-
8	W	-
9	G	-
10	R	-
11	W	-
12	SB	-
13	G	-
14	W	-
15	BR	-
16	R	-
17	BG	-
18	SB	-
20	GR	-
21	L	-
22	R	-
23	G	-
24	BR	-
25	L	-
26	LG	-
27	W	-
28	R	-
31	GR	-
32	L	-
33	V	-
34	BG	-
39	W	-
40	BG	-
41	R	-
42	V	-
43	W	-
47	G	-
48	R	-
49	W	-
50	SHIELD	-
51	SB	-
52	B	-
53	R	-
54	B	-
56	R	-
57	G	-
58	G	-
59	R	-
60	BR	-
61	Y	-
62	SHIELD	-
63	GR	-
64	R	-
65	G	-
66	BR	-
67	BG	-
69	P	-
70	L	-
71	SHIELD	-
72	SHIELD	- [Without active noise control unit]
72	V	- [With active noise control unit]
73	LG	-
76	R	-
77	SB	-
78	G	-
79	Y	-
80	R	-
81	G	-
82	BR	- [Without active noise control unit]
82	G	- [With active noise control unit]
83	R	- [With active noise control unit]
83	Y	- [Without active noise control unit]

JRKWE4490GB

NISSAN VEHICLE IMMOBILIZER SYSTEM

84	SHIELD	-
85	V	-
86	LG	- [Without active noise control unit]
86	W	- [With active noise control unit]
87	L	-
88	P	-
89	SHIELD	-
90	V	-
92	LG	-
93	Y	-
94	G	-
95	R	-
96	Y	-
97	R	-
98	G	-
99	L	-
100	W	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



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

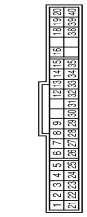
Connector No.	M29
Connector Name	SECURITY INDICATOR LAMP
Connector Type	TK02FBR

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

Connector No.	M40
Connector Name	STEERING LOCK UNIT
Connector Type	TH08FW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	S/L 12V (MECHANICAL)
2	Y	S/L (K LINE)
3	L	S/L CONDLTLON1
5	B	GND
6	B	GND
7	P	S/L 12V(CPU)
8	R	S/L CONDLTLON2

Connector No.	M53
Connector Name	COMBINATION METER
Connector Type	SAB40FW

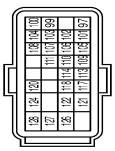


Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	BATTERY POWER SUPPLY
2	W	IGNITION POWER SUPPLY
3	B	GROUND
4	B	ILLUMINATION GROUND
5	B	GROUND
6	W	METER CONTROL SWITCH GROUND
7	Y	A/C AUTO AMP. CONNECTION RECOGNITION SIGNAL
8	SB	AMBIENT SENSOR GROUND
9	P	AMBIENT SENSOR SIGNAL
12	L	VEHICLE SPEED SIGNAL (2-PULSE)
13	V	VEHICLE SPEED SIGNAL (8-PULSE)
14	B	OIL PRESSURE SENSOR GROUND
15	R	AIR BAG SIGNAL
16	R	LED HEAD LAMP (RH) WARNING SIGNAL
18	L	FUEL LEVEL SENSOR GROUND
19	R	OIL LEVEL SENSOR GROUND
20	W	OIL LEVEL SENSOR SIGNAL
21	L	CAN-H
22	P	CAN-L
23	LG	ILLUMINATION CONTROL SWITCH SIGNAL (-)
24	BR	ILLUMINATION CONTROL SWITCH SIGNAL (+)
25	G	TRIP A/B RESET SWITCH SIGNAL
26	BG	ENTER SWITCH SIGNAL
27	SB	SELECT SWITCH SIGNAL
28	BR	ALTERNATOR
29	G	SEAT BELT BUCKLE SWITCH SIGNAL (PASSENGER SIDE)
30	LG	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)
31	V	PARKING BRAKE SWITCH SIGNAL
32	V	BRAKE FLUID LEVEL SWITCH SIGNAL
33	L	WASHER LEVEL SWITCH SIGNAL
34	GR	OIL PRESSURE SENSOR POWER
35	W	OIL PRESSURE SENSOR SIGNAL
38	BG	FUEL LEVEL SENSOR SIGNAL
39	Y	LED HEAD LAMP (LH) WARNING SIGNAL
40	V	ILLUMINATION CONTROL

Connector No.	M60
Connector Name	KEY SLOT
Connector Type	TH12FW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	BAT
2	GR	CLOCK
3	L	DATA
5	Y	ILL BAT
6	LG	ILL
7	B	GND
11	R	KEY SWITCH SIGNAL

Connector No.	M107
Connector Name	ECM
Connector Type	RH24FGY-RZ8-R-LH-Z



Terminal No.	Color Of Wire	Signal Name [Specification]
97	P	CAN COMMUNICATION LINE
99	SB	SENSOR POWER SUPPLY
100	BR	SENSOR POWER SUPPLY
101	L	CAN COMMUNICATION LINE
102	G	ASCD STEERING SWITCH
103	GR	SENSOR GROUND
104	P	ACCELERATOR PEDAL POSITION SENSOR 1
105	W	ECM RELAY (SELF SHUT-OFF)
106	LG	IGNITION SWITCH
107	BG	SENSOR GROUND
108	L	ACCELERATOR PEDAL POSITION SENSOR 2
109	L	SAYALVERLY
110	P	STOP LAMP SWITCH

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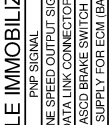
NISSAN VEHICLE IMMOBILIZER SYSTEM

111	GR	PNP SIGNAL
113	SB	ENGINE SPEED OUTPUT SIGNAL
114	Y	DATA LINK CONNECTOR
117	R	ASCD BRAKE SWITCH
118	W	POWER SUPPLY FOR ECM (BACK-UP)
120	BR	SAPM/PRLY
121	P	POWER SUPPLY FOR ECM
122	V	POWER SUPPLY FOR ECM
124	B	ECM GROUND
126	L	FUEL PUMP RELAY
127	G	THROTTLE CONTROL MOTOR RELAY
128	B	ECM GROUND

63	Y	-
64	LG	-
69	P	-
70	L	-
71	Y	-
80	L	-
81	G	-
82	BR	-
83	B	-
84	V	-
85	SB	-
86	SHIELD	-
87	W	-
96	Y	-
98	G	-
99	V	-
100	W	-

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

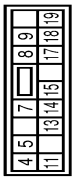


Terminal No.	Color Of Wire	Signal Name [Specification]
6	G	-
7	V	-
8	G	-
9	W	-
10	L	-
31	Y	-
32	LG	-
33	BR	-
34	L	-
40	G	-
41	R	-
42	SB	-
43	L	-
44	R	-
45	G	-
51	SB	-
52	BG	-
53	R	-
54	GR	-
60	L	-
61	P	-
62	L	-

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	R	POWER WINDOW POWER SUPPLY(BAT)
3	W	POWER WINDOW POWER SUPPLY(RAP)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
4	R	INTERIOR ROOM LAMP POWER SUPPLY
5	G	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP
8	V	ALL DOOR, FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR, FUEL LID UNLOCK OUTPUT
11	R	BAT (FUSE)
13	B	GND
14	P	PUSH-BUTTON IGNITION SW ILL GND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT) OUTPUT
18	BG	TURN SIGNAL LH (FRONT) OUTPUT
19	V	ROOM LAMP TIMER CONTROL

Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FGY-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
34	P	TRUNK ROOM ANT-
35	L	TRUNK ROOM ANT+
38	R	REAR BUMPER ANT-
39	BR	REAR BUMPER ANT+
47	Y	IGN RELAY (IPDM E/R) CONT
50	R	TRUNK ROOM LAMP SW
52	SB	STARTER RELAY CONT
61	W	TRUNK LID REQUEST SW

64	BG
67	G

I-KEY WARN BUZZER (ENG ROOM)	
TRUNK LID OPENER SW	

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2+
73	G	ROOM ANT2-
74	SB	PASSENGER DOOR ANT-
75	BR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT1-
79	BR	ROOM ANT1+
80	GR	IMMOBI ANTENNA CONTROL
81	L	IMMOBI ANTENNA SIGNAL
82	R	IGN RELAY (F/B) CONT
83	Y	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
89	BR	PUSH SW
90	P	CAN-L
91	L	CAN-H
92	LG	KEY SLOT ILL OUTPUT
93	V	ON IND
95	BG	ACC RELAY CONT
96	SB	A/T SHIFT SELECTOR POWER SUPPLY
97	L	S/L CONDITION 1
98	R	S/L CONDITION 2
99	G	SHIFT P
100	W	PASSENGER DOOR REQUEST SW
101	V	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
106	P	S/L UNIT POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2

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NISSAN VEHICLE IMMOBILIZER SYSTEM

110	G	HAZARD SW
111	Y	S/L UNIT COMM

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH

H.S.

Connector No.	M131
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Type	TK08FBR

H.S.

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

Terminal No.	Color Of Wire	Signal Name [Specification]
113	P	OPTICAL SENSOR
116	SB	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	R	KEY SLOT SW
123	BR	IGN F/B
124	LG	PASSENGER DOOR SW
128	P	DOOR LOCK/UNLOCK SW LOCK
129	BG	TRUNK CANCEL SW
131	BR	DOOR LOCK/UNLOCK SW UNLOCK
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND
137	L	RECEIVER GND
138	Y	RECEIVER/SENSOR POWER SUPPLY
140	BR	SHIFT NP
141	G	SECURITY INDICATOR
142	BG	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
150	GR	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

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VEHICLE SECURITY SYSTEM

Wiring Diagram - VEHICLE SECURITY SYSTEM -

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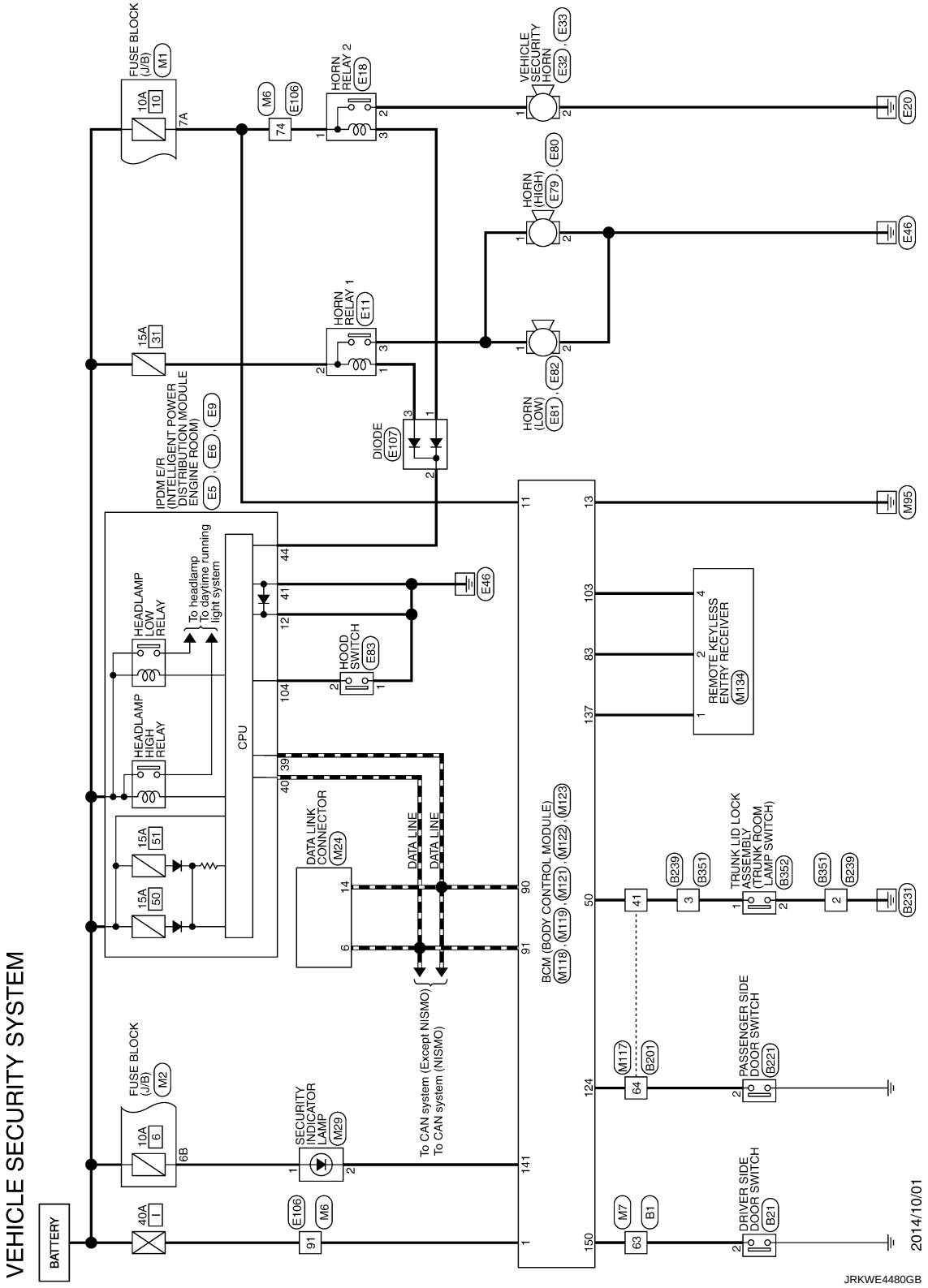

VEHICLE SECURITY SYSTEM

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
3	P	-
6	V	-
7	W	-
8	W	-
9	Y	-
10	R	-
11	Y	-
12	GR	-
13	BG	-
14	Y	-
15	BR	-
16	R	-
17	W	-
18	BR	-
20	GR	-
21	SB	-
22	W	-
23	G	-
24	BG	-
25	L	-
26	P	-
27	GR	-
28	BG	-
31	GR	-
32	L	-
33	V	-
34	BG	-
39	G	-
40	LG	-
41	Y	-
42	SB	-
43	P	-
47	R	-
48	B	-
49	W	-
50	SHIELD	-
51	SB	-
52	B	-
53	R	-
54	B	-
56	R	-
57	G	-
58	G	-
59	R	-
60	BR	-
61	Y	-
62	SHIELD	-
63	LG	-
64	R	-
65	G	-
66	BR	-
67	BG	-
69	P	-
70	L	-
71	SHIELD	-
72	SHIELD	- [Without active noise control unit]
72	V	- [With active noise control unit]
73	SB	-
76	R	-
77	SB	-
78	G	-
79	Y	-
80	R	-
81	G	-
82	BR	- [Without active noise control unit]
82	G	- [With active noise control unit]
83	R	- [With active noise control unit]
83	Y	- [Without active noise control unit]
84	SHIELD	-
85	V	-
86	SB	- [Without active noise control unit]
86	W	- [With active noise control unit]
87	L	-
88	P	-
89	SHIELD	-
90	V	-
92	BR	-
93	SB	-
94	GR	-
95	BG	-
96	Y	-
97	Y	-
98	LG	-
99	R	-
100	G	-

Connector No.	B21
Connector Name	DRIVER SIDE DOOR SWITCH
Connector Type	A03FW

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	LG	-

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
6	G	-
7	V	-
8	BG	-
9	W	-
10	R	-
31	V	-
32	LG	-
33	BR	-
34	L	-
40	P	-
41	GR	-
42	Y	-
43	Y	-
44	V	-
45	W	-
51	SB	-
52	G	-
53	BR	-
54	V	-
60	R	-
61	P	-
62	L	-
63	LG	-
64	GR	-
69	P	-
70	L	-
71	R	-
80	L	-
81	SB	-
82	V	-
83	B	-
84	Y	-
85	BR	-
86	SHIELD	-
87	W	-
96	Y	-
98	BG	-
99	BR	-
100	W	-

Connector No.	B221
Connector Name	PASSENGER SIDE DOOR SWITCH
Connector Type	A03FW

H.S.

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

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VEHICLE SECURITY SYSTEM

Connector No.	B239
Connector Name	WIRE TO WIRE
Connector Type	TH04FW-NH

H.S.

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

Connector No.	B351
Connector Name	WIRE TO WIRE
Connector Type	TH04MW-NH

H.S.

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

Connector No.	B352
Connector Name	TRUNK LID LOCK ASSEMBLY
Connector Type	TB03FW-1V

H.S.

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

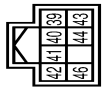
Connector No.	E5
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH20FW-CS12-M4-1V

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
4	V	-
5	L	-
6	Y	-
7	R	-
10	W	-
11	SB	-
12	B/W	-
13	R	-
16	LG	-
25	BG	-
27	Y	-
28	G	-
30	GR	-
32	L	-
33	P	-
36	LG	-

Connector No.	E6
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH08FW-NH

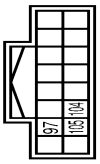
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B/Y	-
42	G	-
43	SB	-
44	W	-
46	BG	-

Connector No.	E9
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH16FW-NH

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
97	Y	-
104	LG	-
105	GR	-

Connector No.	E11
Connector Name	HORN RELAY 1
Connector Type	Relay_24381_7990A

H.S.

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

Connector No.	E18
Connector Name	HORN RELAY 2
Connector Type	M03FW-R-LC

H.S.

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

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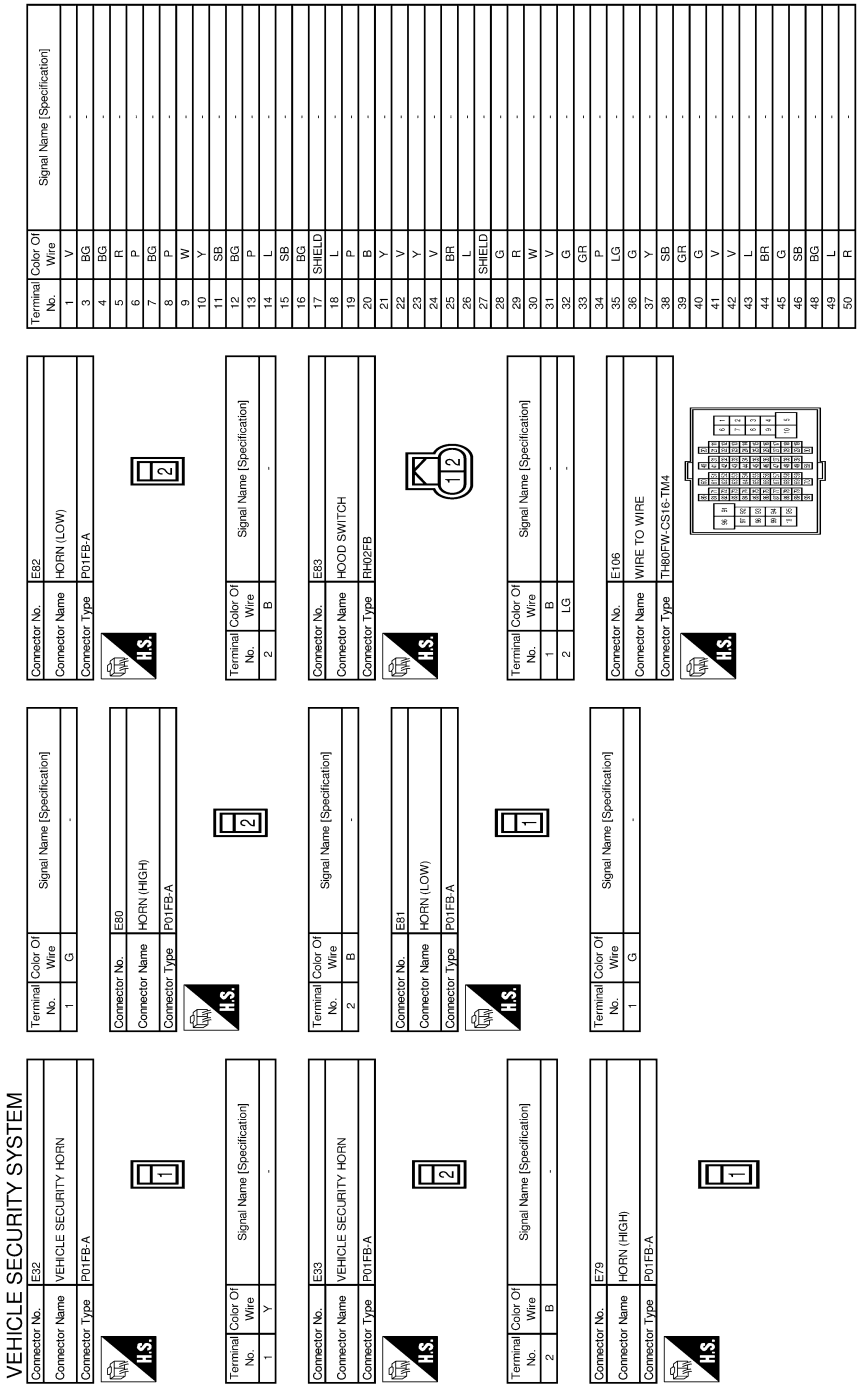

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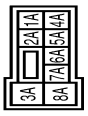
VEHICLE SECURITY SYSTEM

51	SHIELD
60	P
61	L
71	LG
72	SB
74	P
75	BR
76	LG
77	V
78	BR
79	W
80	Y
81	GR
82	BG
84	P
85	P
86	GR
87	R
88	L
89	BG
90	G
91	GR
92	R
93	R
94	LG
95	G
96	GR
97	L
98	LG
99	BG
100	L

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2

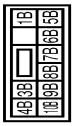
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1A	V	-
2A	G	-
3A	L	-
4A	LG	-
5A	SB	-
6A	Y	-
7A	R	-
8A	L	-

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FW-CS

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
10B	Y	-
1B	R	-
3B	P	-
4B	G	-
5B	BG	-
6B	Y	-
7B	R	-
8B	R	-
9B	SB	-

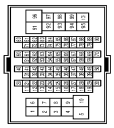
Connector No.	E107
Connector Name	DIODE
Connector Type	24335_C9903

H.S.

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

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
3	R	-
4	G	-
5	Y	-
6	P	-
7	W	-
8	V	-
9	L	-
10	Y	-
11	G	-
12	BG	-
13	R	-
14	L	-
15	BR	-
16	R	-
17	SHIELD	-
18	L	-
19	P	-
20	B	-
21	W	-
22	GR	-
23	L	-
24	V	-
25	BR	-
26	G	-
27	SHIELD	-
28	G	-
29	R	-
30	W	-
31	V	-
32	G	-
33	GR	-
34	LG	-
35	P	-
36	L	-
37	W	-
38	Y	-
39	GR	-
40	BG	-
41	W	-
42	R	-
43	Y	-
44	BR	-
45	G	-
46	LG	-
48	W	-
49	L	-
50	R	-
51	SHIELD	-
60	SB	-
61	V	-
71	W	-
72	LG	-
74	R	-
75	BR	-
76	LG	-
77	R	-
78	BR	-
79	W	-
80	Y	-
81	BG	-
82	SB	-
84	Y	-
85	P	-
86	GR	-
87	R	-
88	L	-
89	G	-
90	P	-
91	W	-
92	R	-
93	LG	-
94	W	-
95	SB	-
96	L	-
97	L	-
98	Y	-
99	BG	-
100	L	-

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VEHICLE SECURITY SYSTEM

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
3	P	-
6	L	-
7	W	-
8	W	-
9	G	-
10	R	-
11	W	-
12	SB	-
13	G	-
14	W	-
15	BR	-
16	R	-
17	BG	-
18	SB	-
20	GR	-
21	L	-
22	R	-
23	G	-
24	BR	-
25	L	-
26	LG	-
27	W	-
28	R	-
31	GR	-
32	L	-
33	V	-
34	BG	-
39	W	-
40	BG	-
41	R	-
42	V	-
43	W	-
47	G	-
48	R	-
49	W	-
50	SHIELD	-
51	SB	-
52	B	-
53	R	-
54	B	-
56	R	-
57	G	-
58	G	-
59	R	-
60	BR	-
61	Y	-
62	SHIELD	-
63	GR	-
64	R	-
65	G	-
66	BR	-
67	BG	-
69	P	-
70	L	-
71	SHIELD	-
72	SHIELD	- [Without active noise control unit]
73	V	- [With active noise control unit]
76	LG	-
77	R	-
78	SB	-
79	G	-
80	Y	-
81	R	-
82	G	-
83	BR	- [Without active noise control unit]
84	R	- [With active noise control unit]
85	SHELD	- [Without active noise control unit]
86	V	- [With active noise control unit]
87	LG	-
88	L	-
89	P	-
90	SHELD	-
92	V	-
93	LG	-
94	Y	-
95	G	-
96	R	-
97	Y	-
98	R	-
99	G	-
100	L	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW

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

Connector No.	M29
Connector Name	SECURITY INDICATOR LAMP
Connector Type	TK02FBR

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

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

Terminal No.	Color Of Wire	Signal Name [Specification]
6	G	-
7	V	-
8	G	-
9	W	-
10	L	-
31	Y	-
32	LG	-
33	BR	-
34	L	-
40	G	-
41	R	-
42	SB	-
43	L	-
44	R	-
45	G	-
51	SB	-
52	BG	-
53	R	-
54	GR	-
60	L	-
61	P	-
62	L	-
63	Y	-
64	LG	-
69	P	-
70	L	-
71	Y	-
80	L	-
81	G	-
82	BR	-
83	B	-
84	V	-
85	SB	-
86	SHIELD	-
87	W	-
96	Y	-

JRKWE4485GB

VEHICLE SECURITY SYSTEM

98	G	-
99	V	-
100	W	-

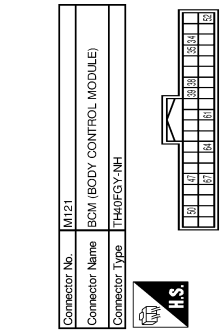
Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	R	POWER WINDOW POWER SUPPLY(BAT)
3	W	POWER WINDOW POWER SUPPLY(RAP)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FW-CS

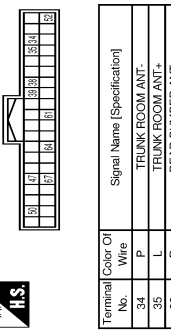
Terminal No.	Color Of Wire	Signal Name [Specification]
4	R	INTERIOR ROOM LAMP POWER SUPPLY
5	G	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP
8	V	ALL DOOR, FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR, FUEL LID UNLOCK OUTPUT
11	R	BAT (FUSE)
13	B	GND
14	P	PUSH-BUTTON IGNITION SW ILL GND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT) OUTPUT
18	BG	TURN SIGNAL LH (FRONT) OUTPUT
19	V	ROOM LAMP TIMER CONTROL

Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FGY-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
34	P	TRUNK ROOM ANT-
35	L	TRUNK ROOM ANT+
38	R	REAR BUMPER ANT-
39	BR	REAR BUMPER ANT+
47	Y	IGN RELAY (IPDM E/R) CONT
50	R	TRUNK ROOM LAMP SW
52	SB	STARTER RELAY CONT
61	W	TRUNK LID REQUEST SW
64	BG	I-KEY WARN BUZZER (ENG ROOM)
67	G	TRUNK LID OPENER SW

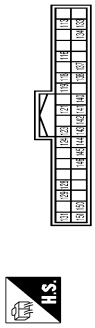
Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2-
73	G	ROOM ANT2+
74	SB	PASSENGER DOOR ANT-
75	BR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT1-
79	BR	ROOM ANT1+
80	GR	IMMOBI ANTENNA CONTROL
81	L	IMMOBI ANTENNA SIGNAL

82	R	IGN RELAY (F/B) CONT
83	Y	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
89	BR	PUSH SW
90	P	CAN-L
91	L	CAN-H
92	LG	KEY SLOT ILL OUTPUT
93	V	ON IND
95	BG	ACC RELAY CONT
96	SB	A/T SHIFT SELECTOR POWER SUPPLY
97	L	S/L CONDITION 1
98	R	S/L CONDITION 2
99	G	SHIFT P
100	W	PASSENGER DOOR REQUEST SW
101	V	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
106	P	S/L UNIT POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW
111	Y	S/L UNIT COMM

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
113	P	OPTICAL SENSOR
116	SB	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	R	KEY SLOT SW
123	BR	IGN F/B
124	LG	PASSENGER DOOR SW
128	P	DOOR LOCK/UNLOCK SW LOCK
129	BG	TRUNK CANCEL SW
131	BR	DOOR LOCK/UNLOCK SW UNLOCK
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND
137	L	RECEIVER GND
138	Y	RECEIVER/SENSOR POWER SUPPLY
140	BR	SHIFT N/P
141	G	SECURITY INDICATOR
142	BG	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
150	GR	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

Connector No.	M134
Connector Name	REMOTE KEYLESS ENTRY RECEIVER
Connector Type	JAB04FB

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	GND
2	Y	SIGNAL OUTPUT
4	LG	BATTERY

JRKWE4486GB

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000011867265

VALUES ON THE DIAGNOSIS TOOL

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

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
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
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	**NOTE:** The item is indicated, but not monitored.	Off

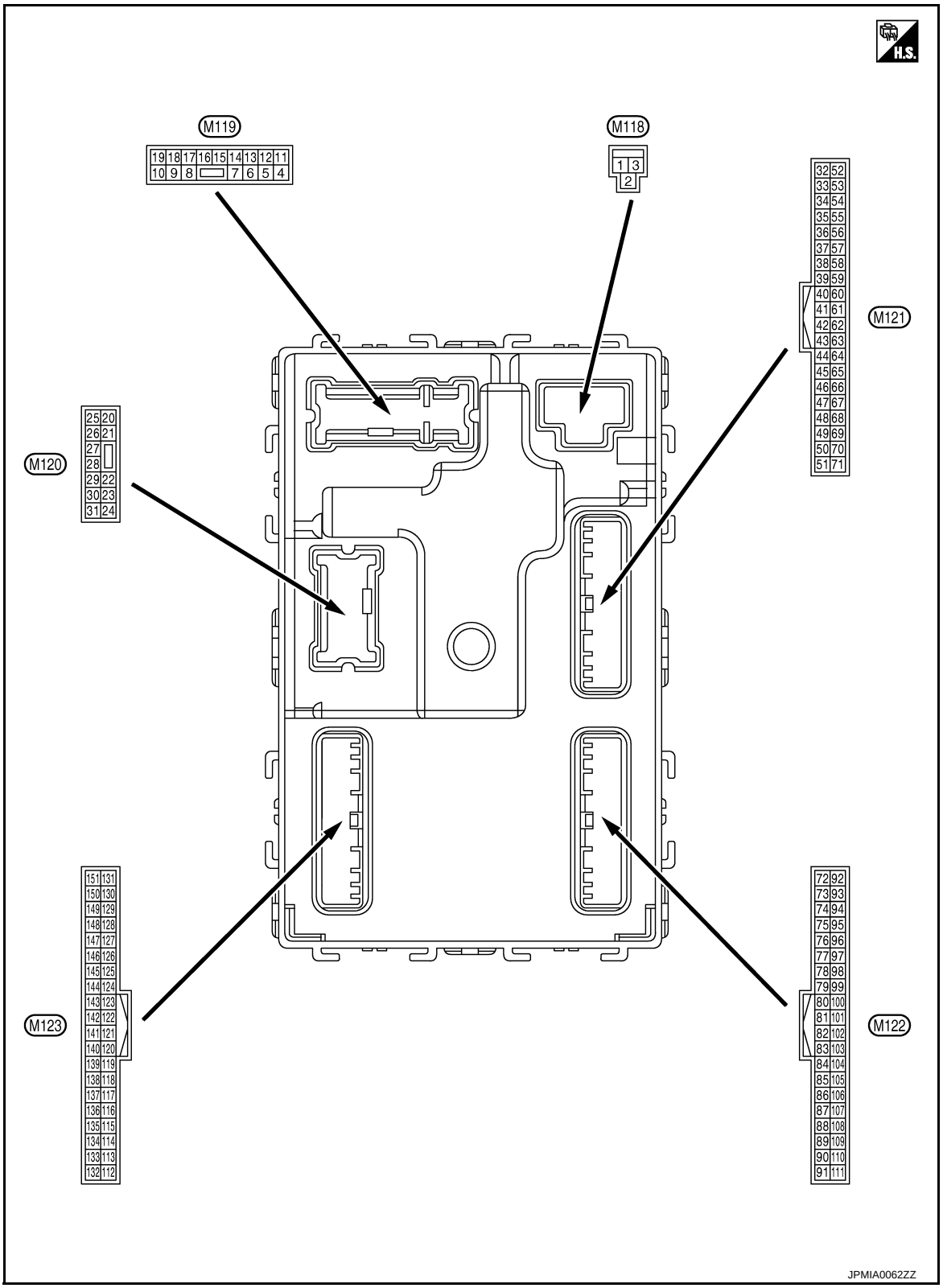
Monitor Item	Condition	Value/Status
DOOR SW-RL	**NOTE:** The item is indicated, but not monitored.	Off
DOOR SW-BK	**NOTE:** The item is indicated, but not monitored.	Off
CDL LOCK SW	Other than power door lock switch LOCK	Off
	Power door lock switch LOCK	On
CDL UNLOCK SW	Other than power door lock switch UNLOCK	Off
	Power door lock switch UNLOCK	On
KEY CYL LK-SW	**NOTE:** The item is indicated, but not monitored.	Off
KEY CYL UN-SW	**NOTE:** The item is indicated, but not monitored.	Off
KEY CYL SW-TR	**NOTE:** The item is indicated, but not monitored.	Off
HAZARD SW	Hazard switch is not pressed	Off
	Hazard switch is pressed	On
REAR DEF SW	**NOTE:** The item is indicated, but not monitored.	Off
H/L WSR SW	**NOTE:** The item is indicated, but not monitored.	Off
TR CANCEL SW	Trunk lid opener cancel switch OFF	Off
	Trunk lid opener cancel switch ON	On
TR/BD OPEN SW	Trunk lid opener switch OFF	Off
	While the trunk lid opener switch is turned ON	On
TRNK/HAT MNTR	Trunk lid closed	Off
	Trunk lid opened	On
REVERSE SW	**NOTE:** The item is indicated, but not monitored.	Off
RKE-LOCK	LOCK button of Intelligent Key is not pressed	Off
	LOCK button of Intelligent Key is pressed	On
RKE-UNLOCK	UNLOCK button of Intelligent Key is not pressed	Off
	UNLOCK button of Intelligent Key is pressed	On
RKE-TR/BD	TRUNK OPEN button of Intelligent Key is not pressed	Off
	TRUNK OPEN button of Intelligent Key is pressed	On
RKE-PANIC	PANIC button of Intelligent Key is not pressed	Off
	PANIC button of Intelligent Key is pressed	On
RKE-P/W OPEN	UNLOCK button of Intelligent Key is not pressed	Off
	UNLOCK button of Intelligent Key is pressed and held	On
RKE-MODE CHG	LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	Off
	LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	On
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

Monitor Item	Condition	Value/Status
REQ SW-RL	**NOTE:** The item is indicated, but not monitored.	Off
REQ SW-RR	**NOTE:** The item is indicated, but not monitored.	Off
REQ SW-BD/TR	Trunk lid opener request switch is not pressed	Off
	Trunk lid opener 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	Shift lever in P position	Off
	Shift lever in any position other than P	On
SFT PN/N SW	Shift lever in any position other than P and N	Off
	Shift lever in P or N position	On
S/L -LOCK	Steering is unlocked	Off
	Steering is locked	On
S/L -UNLOCK	Steering is locked	Off
	Steering is unlocked	On
S/L RELAY-F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
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	Shift lever in any position other than P	Off
	Shift lever in P position	On
SFT PN -IPDM	Shift lever in any position other than P and N	Off
	Shift lever in P or N position	On
SFT P -MET	Shift lever in any position other than P	Off
	Shift lever in P position	On
SFT N -MET	Shift lever in any position other than N	Off
	Shift lever in N position	On

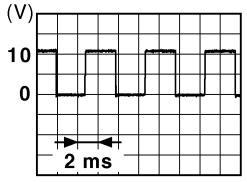
Monitor Item	Condition	Value/Status
ENGINE STATE	Engine stopped	Stop
	While the engine stalls	Stall
	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	Steering is unlocked	Off
	Steering is locked	On
S/L UNLK-IPDM	Steering is locked	Off
	Steering is unlocked	On
S/L RELAY-REQ	Steering lock system is not the LOCK condition and the changing condition from LOCK to UNLOCK	Off
	Steering lock system is the LOCK condition or the changing condition from LOCK to UNLOCK	On
VEH SPEED 1	While driving	Equivalent to speed-ometer reading
VEH SPEED 2	While driving	Equivalent to speed-ometer 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	Steering is locked	Reset
	Steering is unlocked	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	Intelligent Key is not inserted into key slot	Off
	Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
RKE OPE COUN2	**NOTE:** The item is indicated, but not monitored.	—
CONFRM ID ALL	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done
CONFIRM ID4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done
CONFIRM ID3	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done

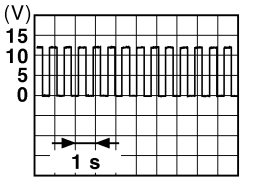
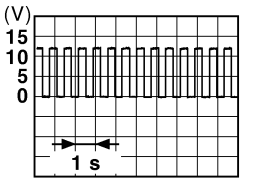
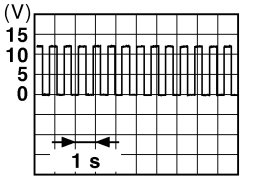
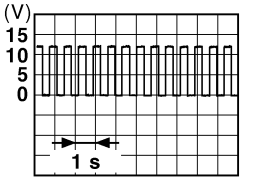
Monitor Item	Condition	Value/Status
CONFIRM ID2	The key ID that the key slot receives is not recognized by the second key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done
CONFIRM ID1	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done
TP 4	The ID of fourth Intelligent Key is not registered to BCM	Yet
	The ID of fourth Intelligent Key is registered to BCM	Done
TP 3	The ID of third Intelligent Key is not registered to BCM	Yet
	The ID of third Intelligent Key is registered to BCM	Done
TP 2	The ID of second Intelligent Key is not registered to BCM	Yet
	The ID of second Intelligent Key is registered to BCM	Done
TP 1	The ID of first Intelligent Key is not registered to BCM	Yet
	The ID of first Intelligent Key is registered to BCM	Done

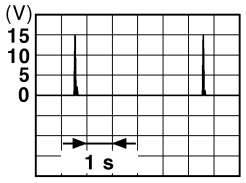
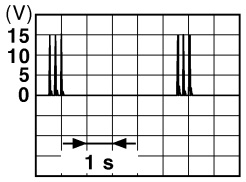
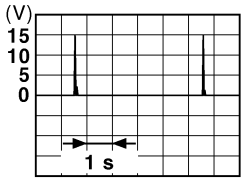
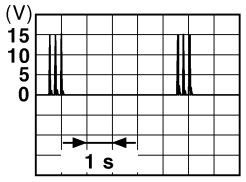
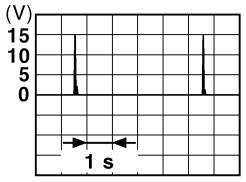
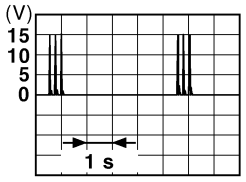
TERMINAL LAYOUT

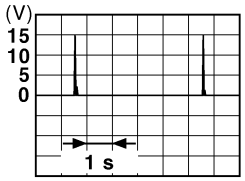
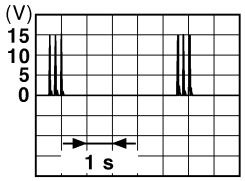
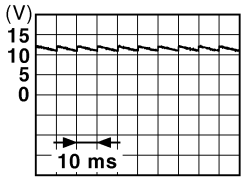
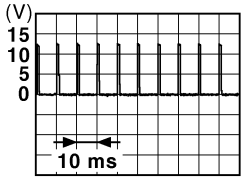


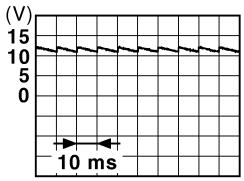
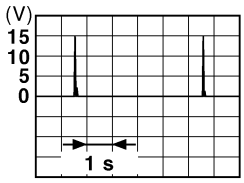
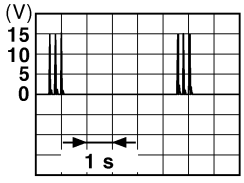
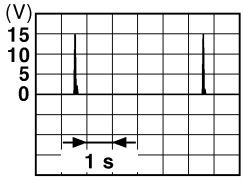
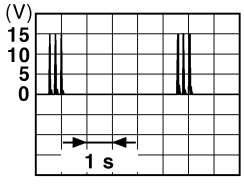
PHYSICAL VALUES

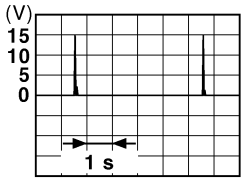
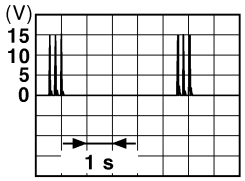
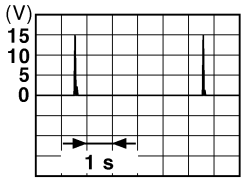
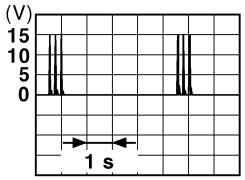
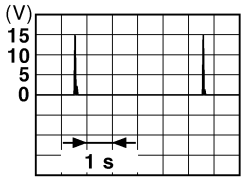
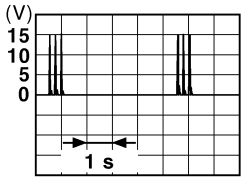
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (R)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		Battery voltage
3 (W)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		Battery voltage
4 (R)	Ground	Interior room lamp power supply	Output	After passing the interior room lamp battery saver operation time		0 V
				Any other time after passing the interior room lamp battery saver operation time		Battery voltage
5 (G)	Ground	Passenger door UNLOCK	Output	Passenger door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
7 (Y)	Ground	Step lamp control signal	Output	Step lamp	ON	0 V
					OFF	Battery voltage
8 (V)	Ground	All doors, fuel lid LOCK	Output	All doors, fuel lid	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, fuel lid	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 (P)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	OFF	0 V
					ON	**NOTE:** When the illumination brightening/dimming level is in the neutral position  JSNIA0010GB
15 (Y)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
					ACC or ON	0 V

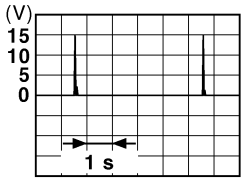
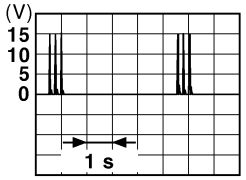
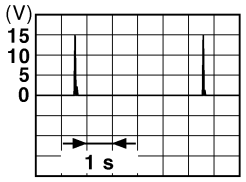
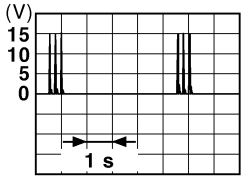
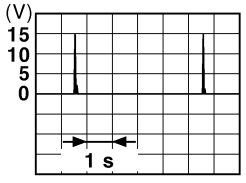
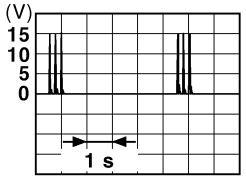
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
17 (W)	Ground	Turn signal RH (Front)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 PKID0926E 6.5 V
18 (BG)	Ground	Turn signal LH (Front)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 PKID0926E 6.5 V
19 (V)	Ground	Interior room lamp control signal	Output	Interior room lamp	OFF	Battery voltage
					ON	0 V
20 (SB)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 PKID0926E 6.5 V
23 (G)	Ground	Trunk lid open	Output	Trunk lid	Open (Trunk lid opener actuator is activated)	Battery voltage
					Close (Trunk lid opener actuator is not activated)	0 V
25 (V)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 PKID0926E 6.5 V
30 (BG)	Ground	Trunk room lamp control signal	Output	Trunk room lamp	ON	0 V
					OFF	Battery voltage

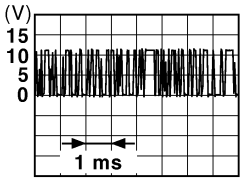
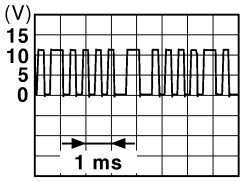
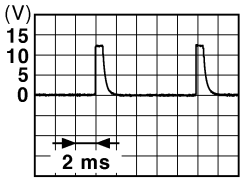
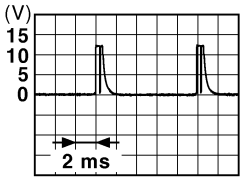
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
34 (P)	Ground	Trunk room antenna (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
35 (L)	Ground	Trunk 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 (R)	Ground	Rear bumper antenna (-)	Output	When the trunk lid 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

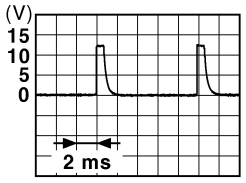
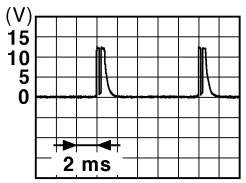
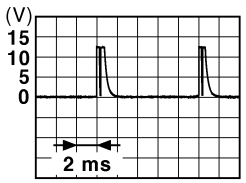
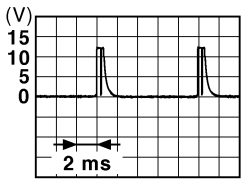
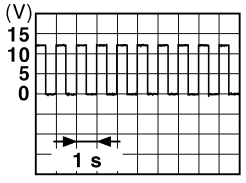
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
39 (BR)	Ground	Rear bumper antenna (+)	Output	When the trunk lid opener request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
47 (Y)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0 V
50 (R)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (Trunk is closed)	 JPMIA0011GB 11.8 V
					ON (Trunk is open)	0 V
52 (SB)	Ground	Starter relay control	Output	Ignition switch ON	When shift lever is in P or N position	Battery voltage
					When shift lever is not in P or N position	0 V
61 (W)	Ground	Trunk lid opener request switch	Input	Trunk lid opener request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
64 (BG)	Ground	Intelligent Key warning buzzer (Engine room)	Output	Intelligent Key warning buzzer (Engine room)	Sounding	0 V
					Not sounding	Battery voltage

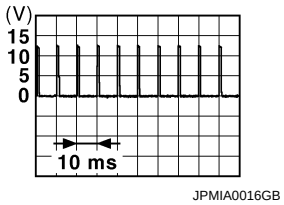
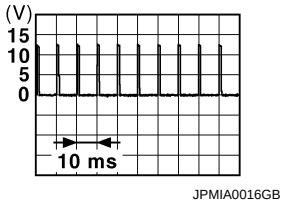
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
67 (G)	Ground	Trunk lid opener switch	Input	Trunk lid opener switch	Pressed	0 V
					Not pressed	 JPMIA0011GB 11.8 V
72 (R)	Ground	Room antenna 2 (-) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
73 (G)	Ground	Room antenna 2 (+) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

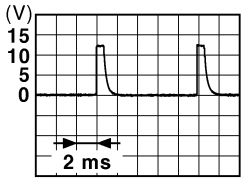
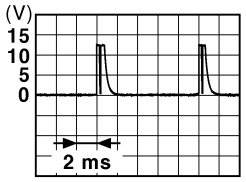
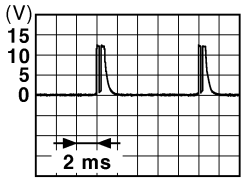
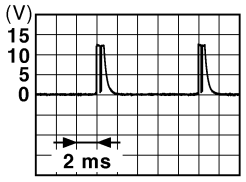
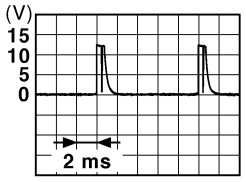
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
74 (SB)	Ground	Passenger door antenna (-)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
75 (BR)	Ground	Passenger door antenna (+)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
76 (V)	Ground	Driver door antenna (-)	Output	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

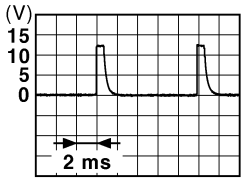
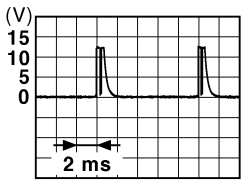
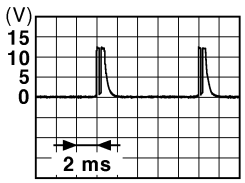
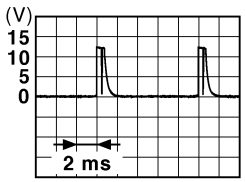
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
77 (LG)	Ground	Driver door antenna (+)	Output	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
78 (Y)	Ground	Room antenna 1 (-) (Instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
79 (BR)	Ground	Room antenna 1 (+) (Instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

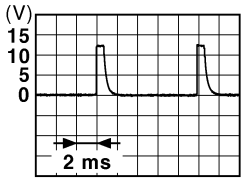
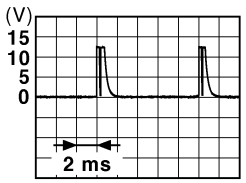
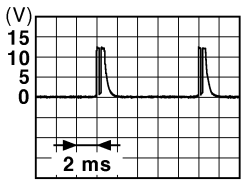
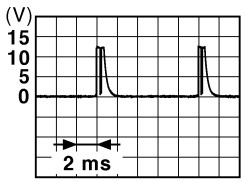
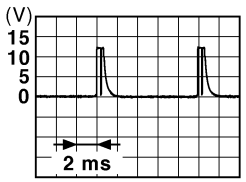
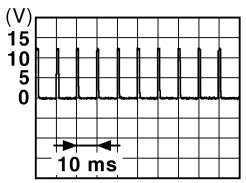
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (L)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (R)	Ground	Ignition relay [fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
83 (Y)	Ground	Remote keyless entry receiver communication	Input/ Output	During waiting		 JMKIA0064GB
				When operating either button on Intelligent Key		 JMKIA0065GB
87 (BR)	Ground	Combination switch INPUT 5	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	 JPMIA0040GB 1.3 V

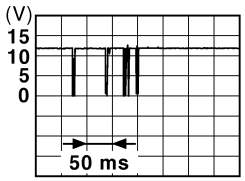
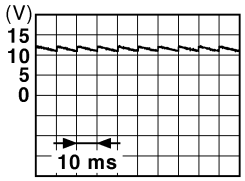
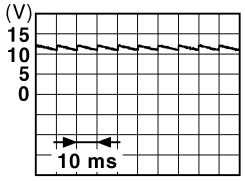
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
88 (V)	Ground	Combination switch INPUT 3	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Lighting switch HI (Wiper intermittent dial 4)	 JPMIA0036GB 1.3 V
					Lighting switch 2ND (Wiper intermittent dial 4)	 JPMIA0037GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	 JPMIA0040GB 1.3 V
89 (BR)	Ground	Push-button ignition switch (push switch)	Input	Push-button ignition switch (push switch)	Pressed	0 V
					Not pressed	Battery voltage
90 (P)	Ground	CAN - L	Input/ Output	—		—
91 (L)	Ground	CAN - H	Input/ Output	—		—
92 (LG)	Ground	Key slot illumination	Output	Key slot illumination	OFF	Battery voltage
					Blinking	 JPMIA0015GB 6.5 V
					ON	0 V

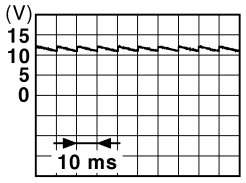
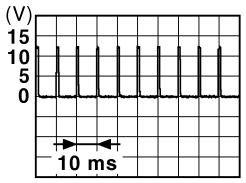
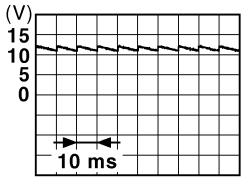
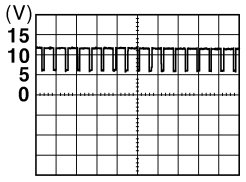
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
93 (V)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
					ON or ACC	0 V
95 (BG)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	Battery voltage
96 (SB)	Ground	A/T shift selector (detention switch) power supply	Output	—		Battery voltage
97 (L)	Ground	Steering lock condition No. 1	Input	Steering lock	LOCK status	0 V
					UNLOCK status	Battery voltage
98 (R)	Ground	Steering lock condition No. 2	Input	Steering lock	LOCK status	Battery voltage
					UNLOCK status	0 V
99 (G)	Ground	Shift lever P position switch	Input	Shift lever	P position	0 V
					Any position other than P	Battery voltage
100 (W)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
101 (V)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
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
106 (P)	Ground	Steering lock unit power supply	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0 V

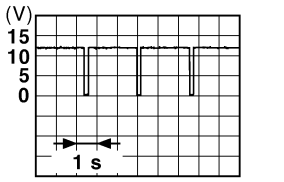
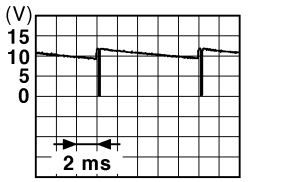
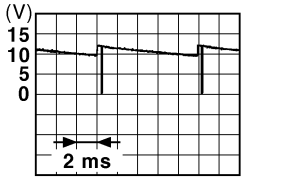
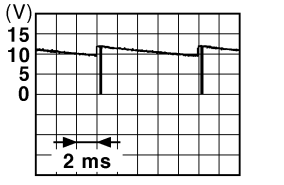
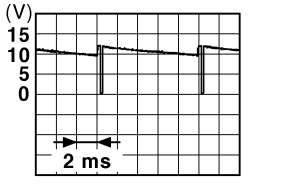
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 JPMIA0041GB 1.4 V
					Turn signal switch LH	 JPMIA0037GB 1.3 V
					Turn signal switch RH	 JPMIA0036GB 1.3 V
					Front wiper switch LO	 JPMIA0038GB 1.3 V
					Front washer switch ON	 JPMIA0039GB 1.3 V

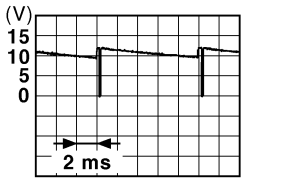
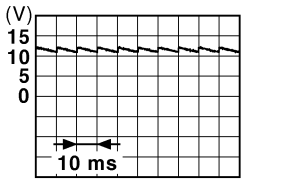
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
108 (R)	Ground	Combination switch INPUT 4	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Lighting switch AUTO (Wiper intermittent dial 4)	 JPMIA0038GB 1.3 V
					Lighting switch 1ST (Wiper intermittent dial 4)	 JPMIA0036GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	 JPMIA0039GB 1.3 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 JPMIA0041GB 1.4 V
					Lighting switch PASS	 JPMIA0037GB 1.3 V
					Lighting switch 2ND	 JPMIA0036GB 1.3 V
					Front wiper switch INT	 JPMIA0038GB 1.3 V
					Front wiper switch HI	 JPMIA0040GB 1.3 V
110 (G)	Ground	Hazard switch	Input	Hazard switch	Pressed	0 V
					Not pressed	 JPMIA0012GB 1.1 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
111 (Y)	Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK status	Battery voltage
					LOCK or UNLOCK	 JMKIA0066GB
					For 15 seconds after UNLOCK	Battery voltage
					15 seconds or later after UNLOCK	0 V
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	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
					ON (Brake pedal is depressed)	Battery voltage
119 (SB)	Ground	Driver side door lock actuator (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	 JPMIA0011GB 11.8 V
					UNLOCK status (Unlock sensor switch ON)	0 V
121 (R)	Ground	Key slot switch	Input	When Intelligent Key is inserted into key slot		Battery voltage
				When Intelligent Key is not inserted into key slot		0 V
123 (BR)	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 (When passenger door closes)	 JPMIA0011GB 11.8 V
					ON (When passenger door opens)	0 V

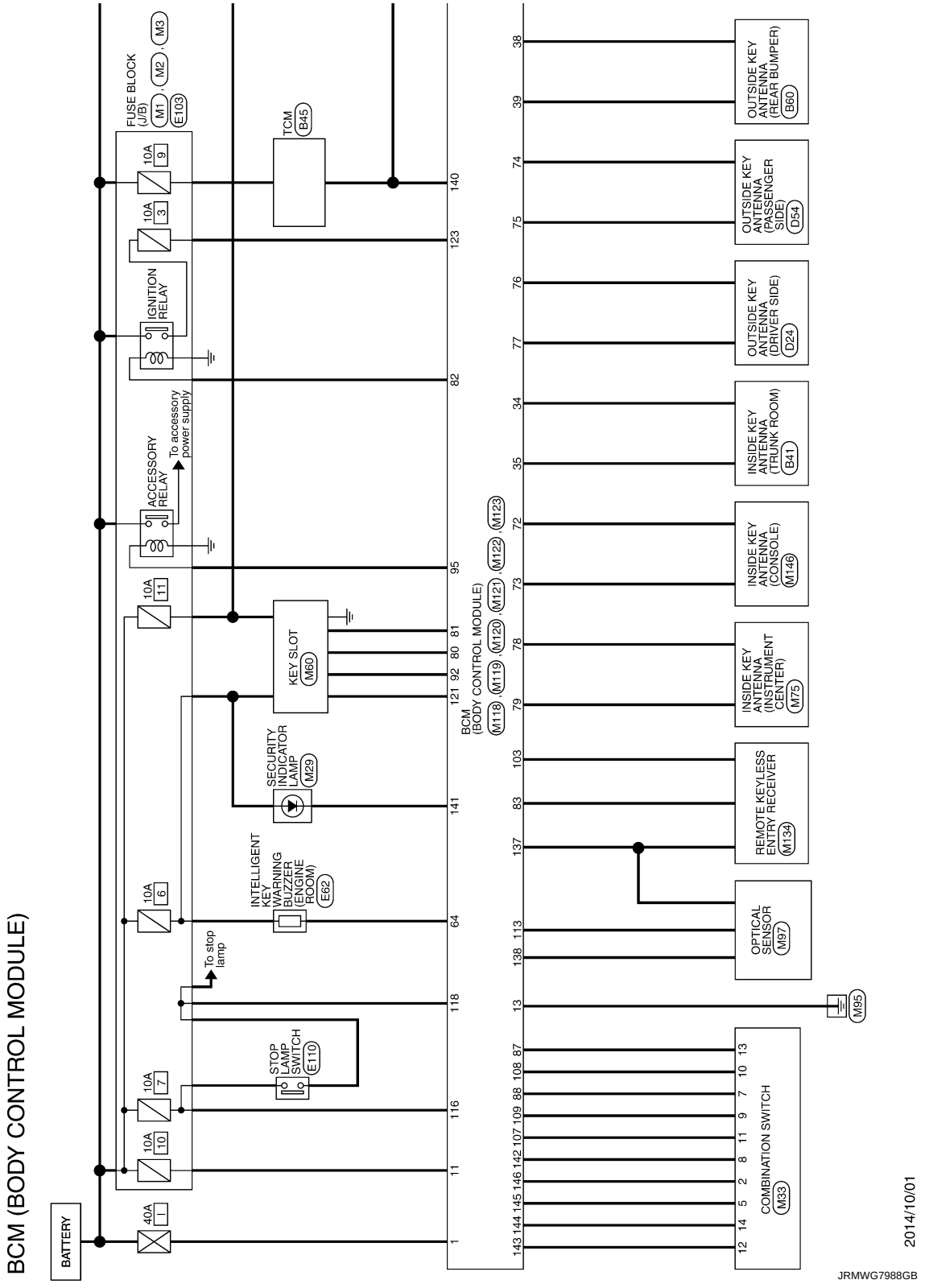
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
128 (P)	Ground	Door lock and unlock switch LOCK	Input	Door lock and unlock switch (power window main switch or power window sub-switch)	NEUTRAL position	 JPMIA0011GB 11.8 V
					LOCK position	0 V
129 (BG)	Ground	Trunk lid opener cancel switch	Input	Trunk lid opener cancel switch	CANCEL	 JPMIA0012GB 1.1 V
					ON	0 V
131 (BR)	Ground	Door lock and unlock switch UNLOCK	Input	Door lock and unlock switch (power window main switch or power window sub-switch)	NEUTRAL position	 JPMIA0011GB 11.8 V
					LOCK position	0 V
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON (When tail lamps OFF)	5.5 V
					ON (When tail lamps ON)	**NOTE:** The pulse width of this wave is varied by the illumination brightening/dimming level.  JPMIA0159GB
					OFF	0 V
134 (GR)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	ON	0 V
					OFF	Battery voltage
137 (L)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V
138 (Y)	Ground	Sensor power supply	Output	Ignition switch	OFF	0 V
					ACC or ON	5.0 V
140 (BR)	Ground	Shift lever P/N position	Input	Shift lever	P or N position	12 V
					Except P and N positions	0 V

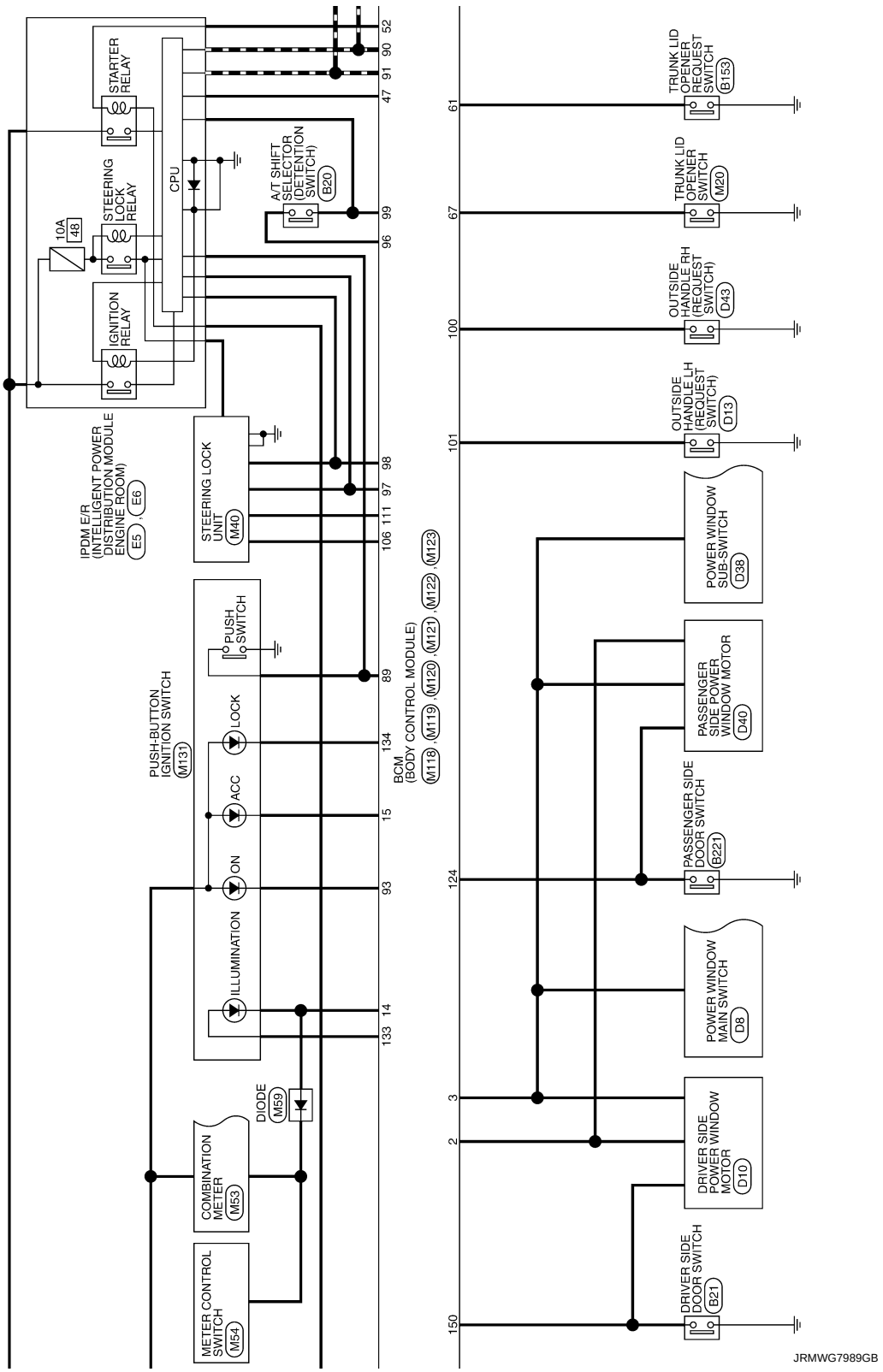
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
141 (G)	Ground	Security indicator	Output	Security indicator	ON	0 V
					Blinking	 JPMIA0014GB 11.3 V
					OFF	Battery voltage
142 (BG)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit-tent dial 4)	All switches OFF	0 V
					Lighting switch 1ST	 JPMIA0031GB 10.7 V
					Lighting switch HI	
					Lighting switch 2ND	
					Turn signal switch RH	
143 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4)	 JPMIA0032GB 10.7 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	 JPMIA0033GB 10.7 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	
145 (L)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermit-tent dial 4)	All switches OFF	0 V
					Front wiper switch INT	 JPMIA0034GB 10.7 V
					Front wiper switch LO	
					Lighting switch AUTO	

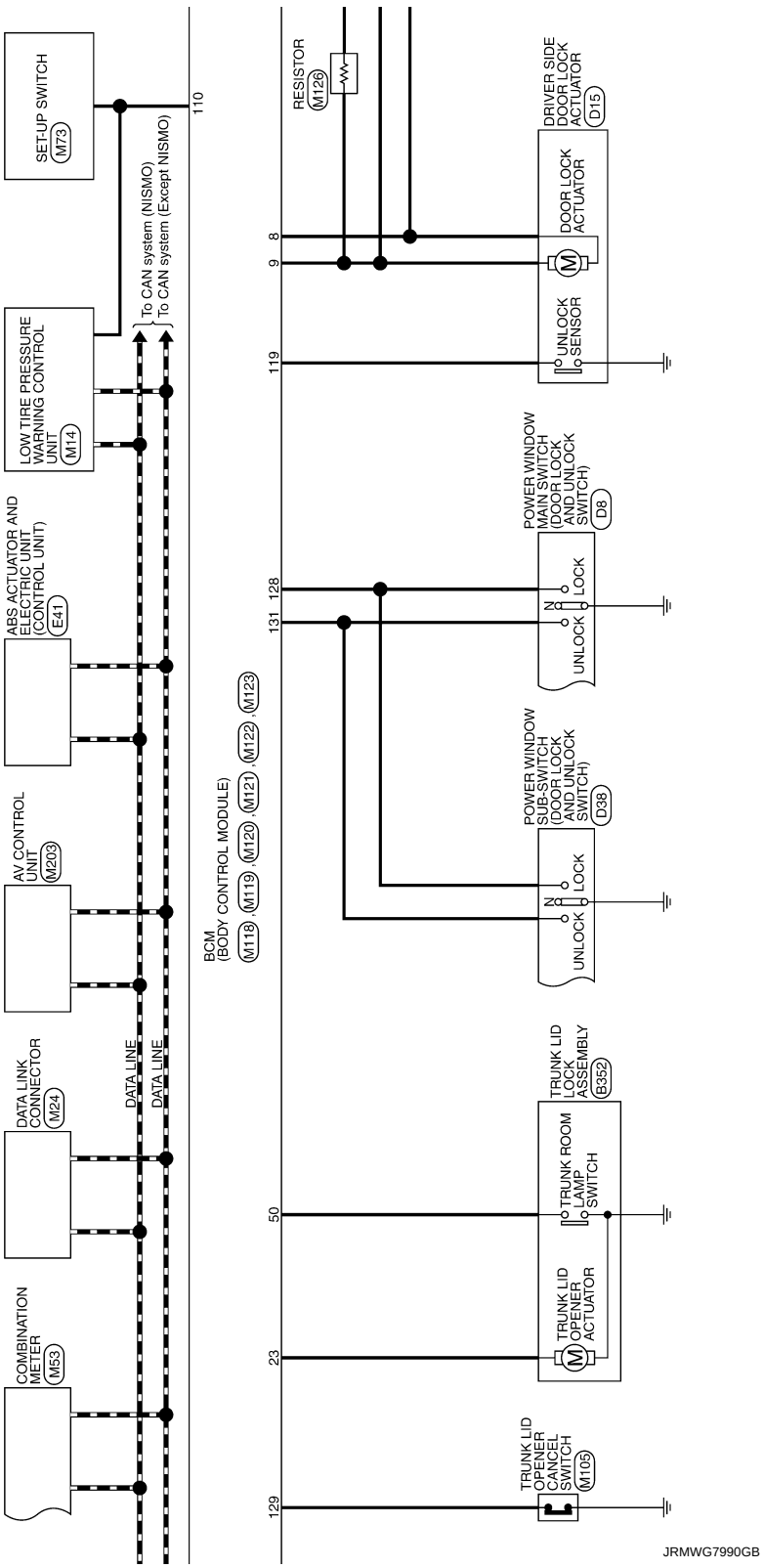
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
146 (SB)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Lighting switch 2ND	 JPMIA0035GB 10.7 V
					Lighting switch PASS	
					Turn signal switch LH	
150 (GR)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closes)	 JPMIA0011GB 11.8 V
					ON (When driver door opens)	0 V
151 (G)	Ground	Rear window defogger relay control	Output	Rear window defogger	Active	0 V
					Not activated	Battery voltage

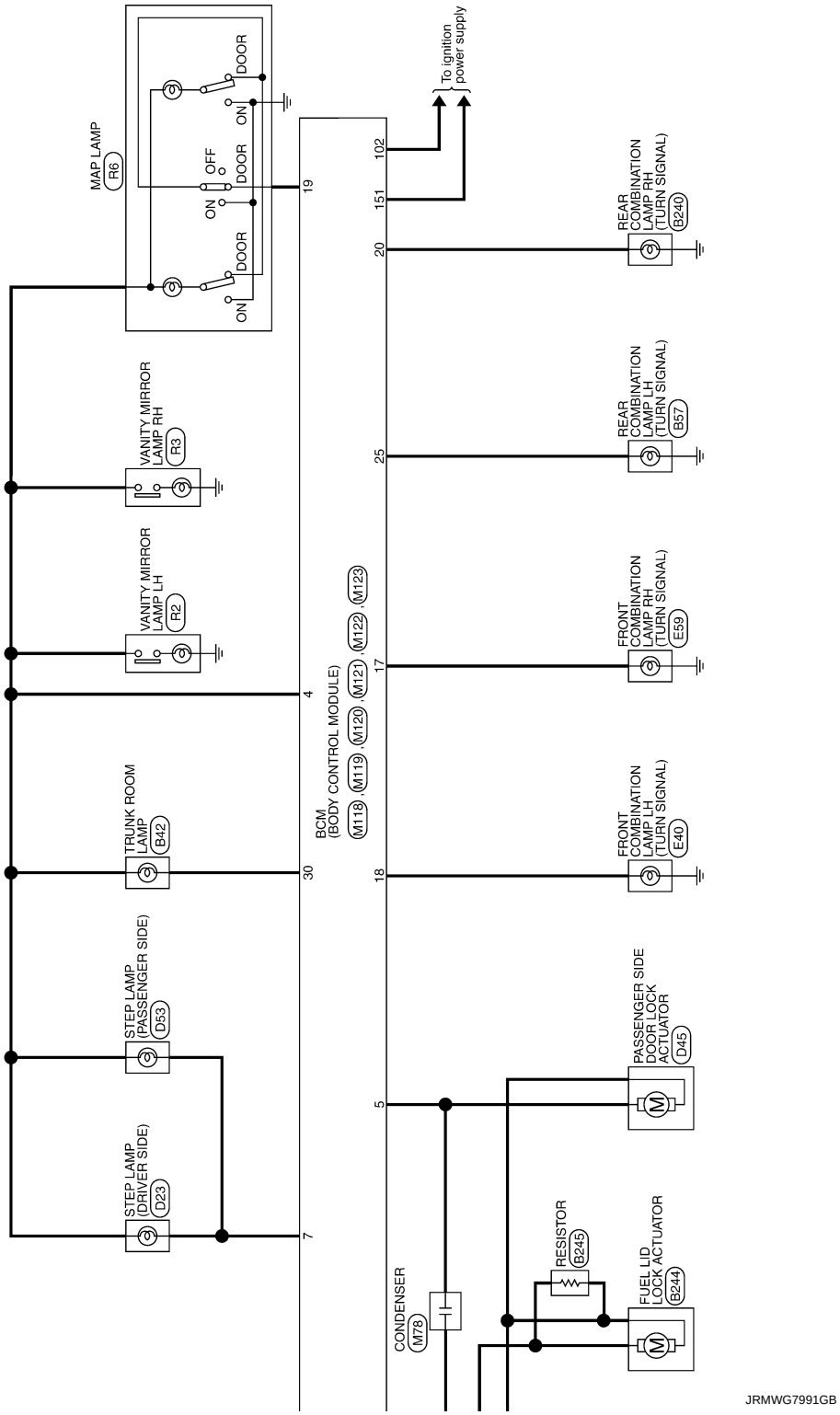
Wiring Diagram - BCM -

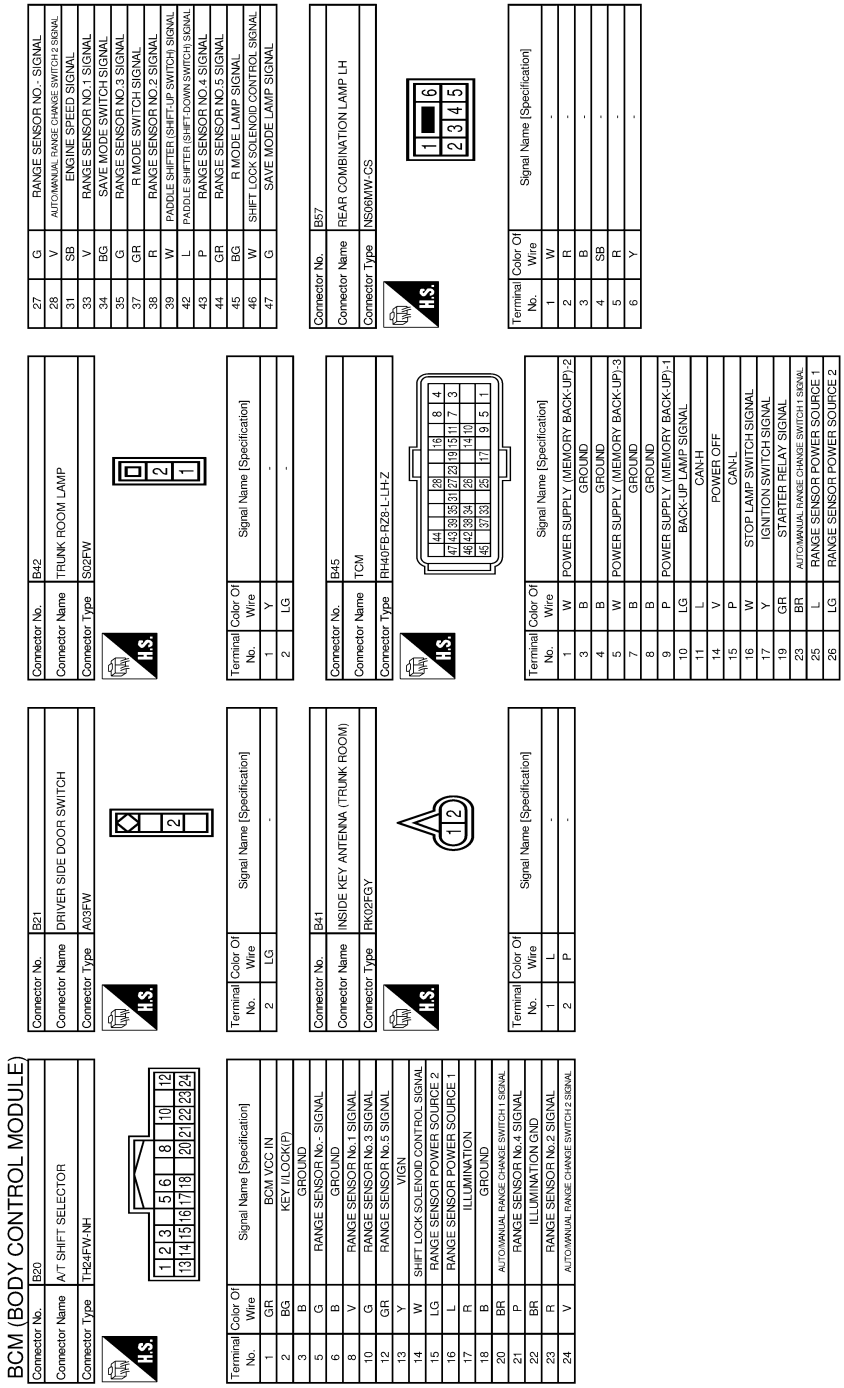
INFOID:0000000011867266



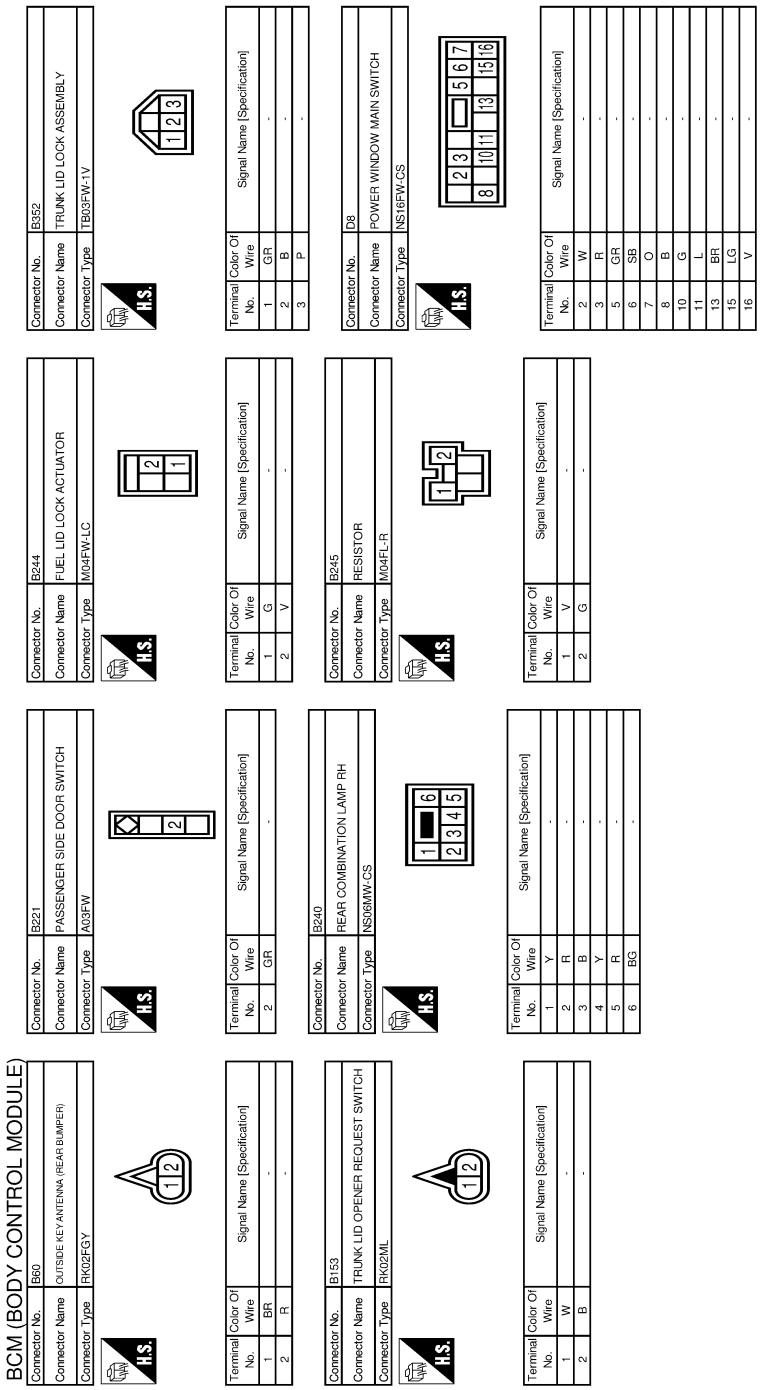

STARTER RELAY
CPU
STEERING LOCK RELAY
10A 48
IGNITION RELAY
A/T SHIFT SELECTOR (DETENTION SWITCH) B20
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) E5, E6
STEERING LOCK UNIT M40
PUSH-BUTTON IGNITION SWITCH M131
PUSH SWITCH
LOCK
ACC
ON
ILLUMINATION
DIODE M59
COMBINATION METER M53
METER CONTROL SWITCH M54
BCM (BODY CONTROL MODULE) M118, M119, M120, M121, M122, M123
TRUNK LID OPENER REQUEST SWITCH B153
TRUNK LID OPENER SWITCH M20
OUTSIDE HANDLE RH (REQUEST SWITCH) D43
OUTSIDE HANDLE LH (REQUEST SWITCH) D13
POWER WINDOW SUB SWITCH D38
PASSENGER SIDE POWER WINDOW MOTOR D40
PASSENGER SIDE DOOR SWITCH B221
POWER WINDOW MAIN SWITCH D8
DRIVER SIDE POWER WINDOW MOTOR D10
DRIVER SIDE DOOR SWITCH B21
JRMWG7989GB


SET-UP SWITCH M73
LOW TIRE PRESSURE WARNING CONTROL UNIT M14
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) E41
AV CONTROL UNIT M203
DATA LINK CONNECTOR M24
COMBINATION METER M53
DATA LINE
DATA LINE
To CAN system (NISMO)
To CAN system (Except NISMO)
110
BCM (BODY CONTROL MODULE)
M118 M119 M120 M121 M122 M123
RESISTOR M126
DRIVER SIDE DOOR LOCK ACTUATOR D15
DOOR LOCK ACTUATOR
UNLOCK SENSOR
POWER WINDOW MAIN SWITCH (DOOR LOCK AND UNLOCK SWITCH) D8
POWER WINDOW SUB-SWITCH (DOOR LOCK AND UNLOCK SWITCH) D38
UNLOCK
LOCK
TRUNK LID LOCK ASSEMBLY B352
TRUNK ROOM LAMP SWITCH
TRUNK LID OPENER ACTUATOR
TRUNK LID OPENER CANCEL SWITCH M105
8
9
119
128
131
50
23
129
JRMWG7990GB


MAP LAMP
R6
DOOR
ON
OFF
DOOR
ON
DOOR
ON
To ignition power supply
VANITY MIRROR LAMP RH
R3
VANITY MIRROR LAMP LH
R2
TRUNK ROOM LAMP
B42
STEP LAMP (PASSENGER SIDE)
D53
STEP LAMP (DRIVER SIDE)
D23
BCM (BODY CONTROL MODULE)
M118, M119, M120, M121, M122, M123
4
7
30
19
102
151
20
25
17
18
5
REAR COMBINATION LAMP RH (TURN SIGNAL)
B240
REAR COMBINATION LAMP LH (TURN SIGNAL)
B57
FRONT COMBINATION LAMP RH (TURN SIGNAL)
E59
FRONT COMBINATION LAMP LH (TURN SIGNAL)
E40
PASSENGER SIDE DOOR LOCK ACTUATOR
D45
CONDENSER
M78
RESISTOR
B245
FUEL LID LOCK ACTUATOR
B244
JRMWG7991GB



JRMWG7992GB



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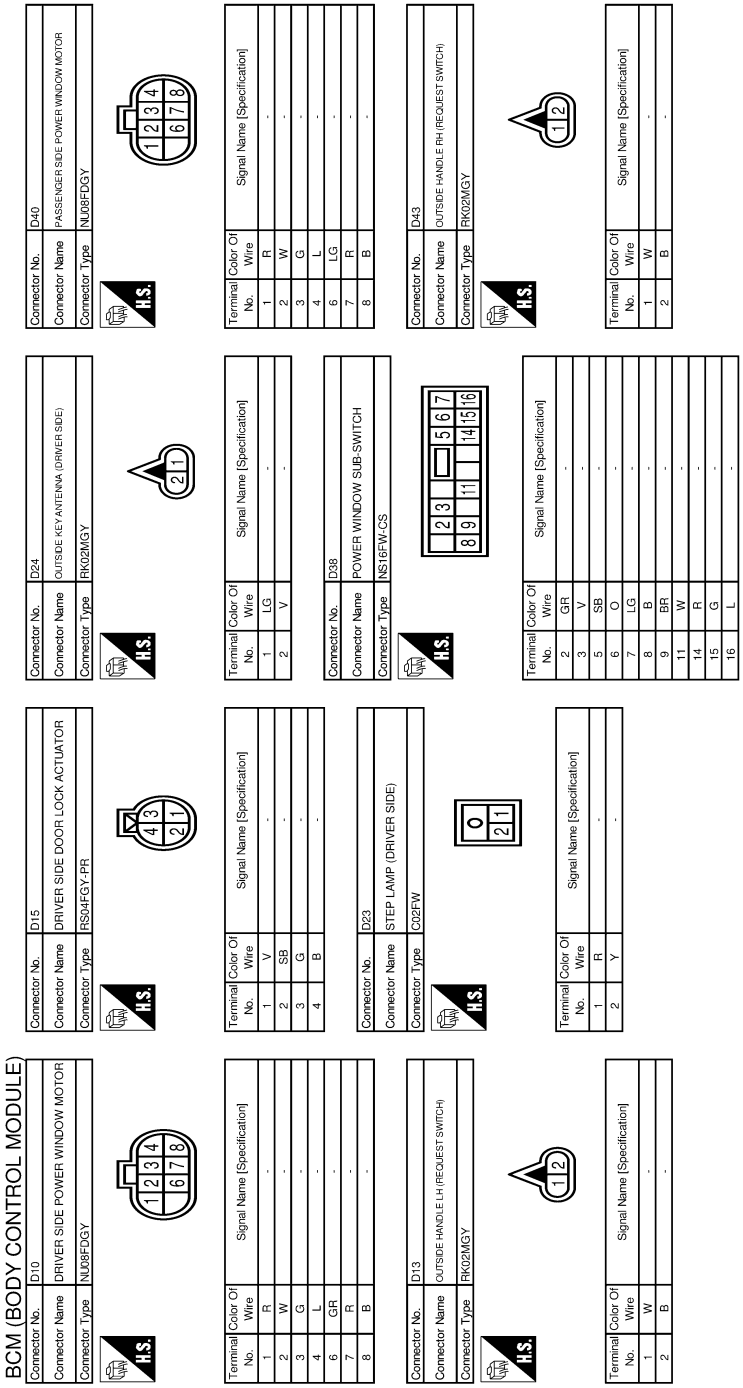

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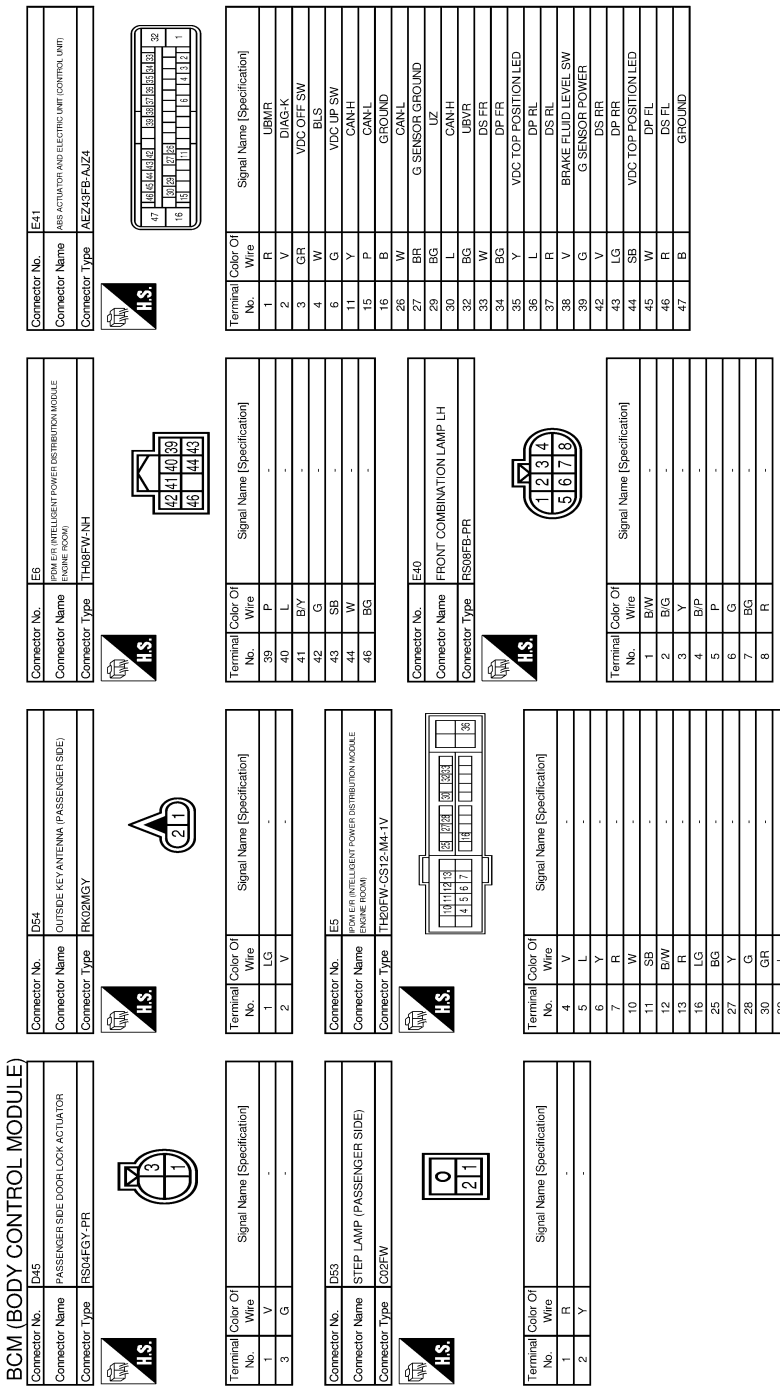

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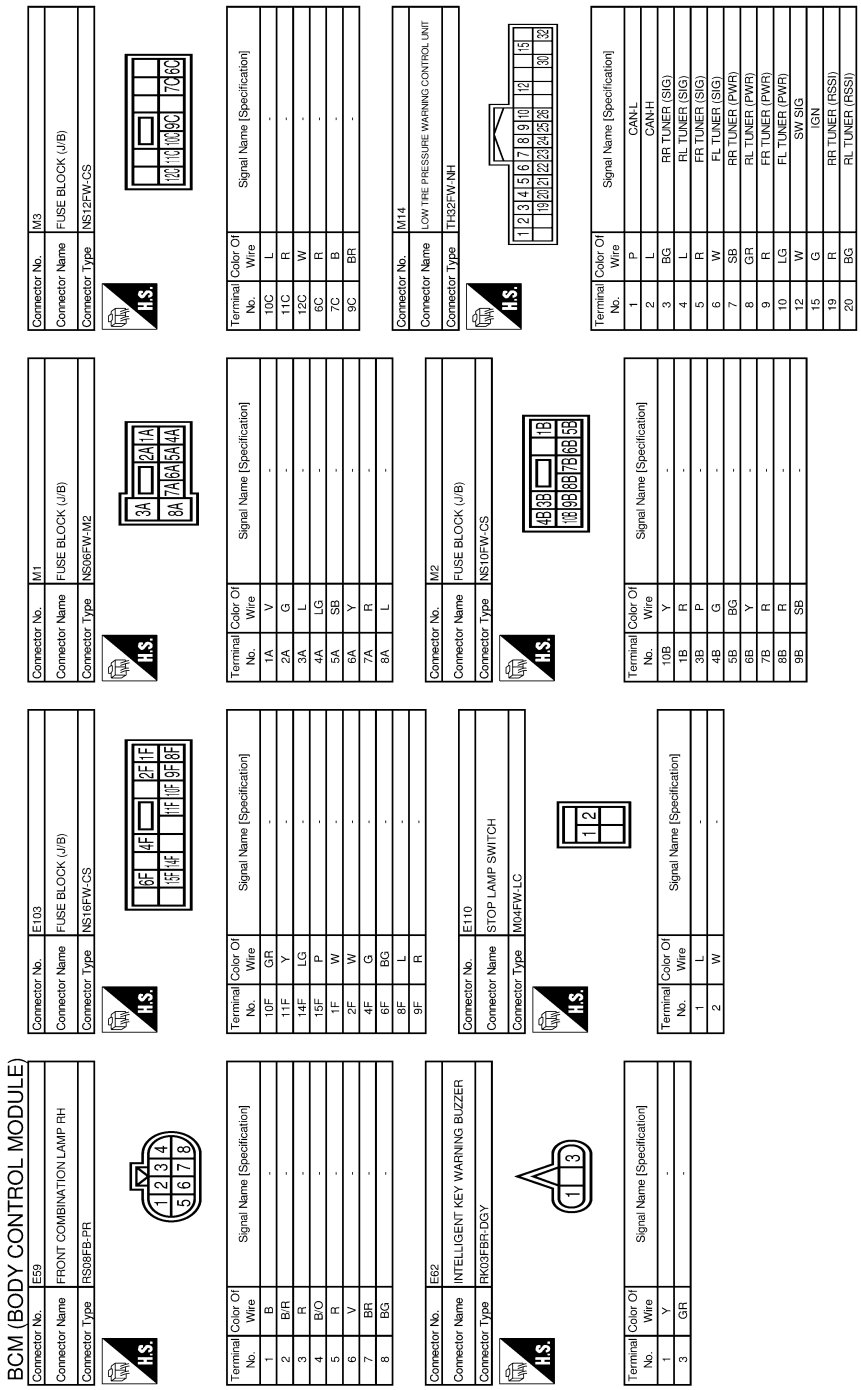

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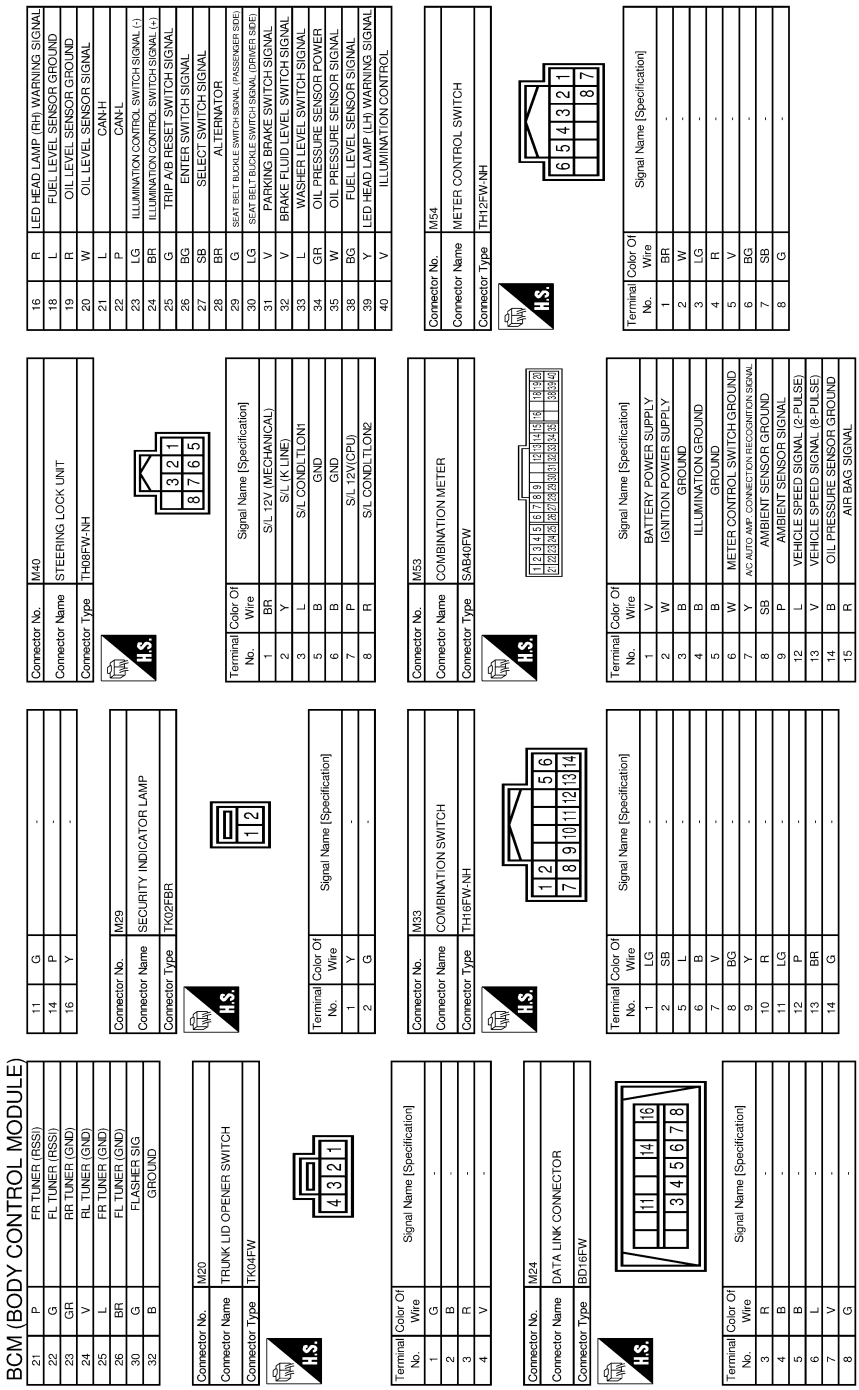


JRMWG7997GB

BCM (BODY CONTROL MODULE)

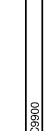
Connector No.	M59
Connector Name	DIODE
Connector Type	24335_C9900

H.S.

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

Connector No.	M60
Connector Name	KEY SLOT
Connector Type	TH12FW-NH

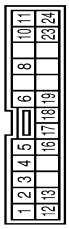
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	BAT
2	GR	CLOCK
3	L	DATA
5	Y	ILL BAT
6	LG	ILL
7	B	GND
11	R	KEY SWITCH SIGNAL

Connector No.	M73
Connector Name	SET-UP SWITCH
Connector Type	TK24FW-1V

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	VDC TOP POSITION LED
2	R	ILL+
3	W	VDC TOP POSITION LED
4	V	ILL GND
5	L	VDC UP SW
6	P	E-SUS R MODE SW SIG
8	LG	E-SUS COMF MODE LAMP SIG
10	G	SAVE MODE LAMP SIGNAL
11	W	R MODE SWITCH SIGNAL
12	GR	VDC DN SW
13	G	HAZARD SW
16	R	R MODE LAMP SIGNAL
17	B	SW GND
18	G	IGN
19	BG	E-SUS R MODE LAMP SIG
23	BR	SAVE MODE SWITCH SIGNAL
24	R	E-SUS COMF MODE SW SIG

Connector No.	M75
Connector Name	INSIDE KEY ANTENNA (INSTRUMENT CENTER)
Connector Type	RK02FGY

H.S.

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

Connector No.	M78
Connector Name	CONDENSER
Connector Type	M02FW-LC

H.S.

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

Connector No.	M97
Connector Name	OPTICAL SENSOR
Connector Type	TK03FW

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	POWER
2	P	OUTPUT
3	V	GROUND

Connector No.	M105
Connector Name	TRUNK LID OPENER CANCEL SWITCH
Connector Type	S02FW

H.S.

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

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC

H.S.

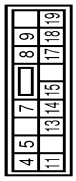
Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	R	POWER WINDOW POWER SUPPLY(BAT)
3	W	POWER WINDOW POWER SUPPLY(RAP)

JRMWG7998GB

BCM (BODY CONTROL MODULE)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FW-CS

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
4	R	INTERIOR ROOM LAMP POWER SUPPLY
5	G	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP
8	V	ALL DOOR, FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR, FUEL LID UNLOCK OUTPUT
11	R	BAT (FUSE)
13	B	GND
14	P	PUSH-BUTTON IGNITION SW ILL GND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT) OUTPUT
18	BG	TURN SIGNAL LH (FRONT) OUTPUT
19	V	ROOM LAMP TIMER CONTROL

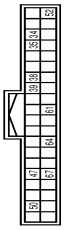
Connector No.	M120
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS12FW-CS

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
20	SB	TURN SIGNAL RH (REAR) OUTPUT
23	G	TRUNK LID OPEN OUTPUT
25	V	TURN SIGNAL LH (REAR) OUTPUT
30	BG	TRUNK ROOM LAMP OUTPUT

Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FGY-NH

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
34	P	TRUNK ROOM ANT-
35	L	TRUNK ROOM ANT+
38	R	REAR BUMPER ANT-
39	BR	REAR BUMPER ANT+
47	Y	IGN RELAY (PDM E/R) CONT
50	R	TRUNK ROOM LAMP SW
52	SB	STARTER RELAY CONT
61	W	TRUNK LID REQUEST SW
64	BG	I-KEY WARN BUZZER (ENG ROOM)
67	G	TRUNK LID OPENER SW

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH

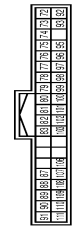
H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2-
73	G	ROOM ANT2+
74	SB	PASSENGER DOOR ANT-
75	BR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT1-
79	BR	ROOM ANT1+
80	GR	IMMOBI ANTENNA CONTROL
81	L	IMMOBI ANTENNA SIGNAL

82	R	IGN RELAY (F/B) CONT
83	Y	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
89	BR	PUSH SW
90	P	CAN-L
91	L	CAN-H
92	LG	KEY SLOT ILL OUTPUT
93	V	ON IND
95	BG	ACC RELAY CONT
96	SB	A/T SHIFT SELECTOR POWER SUPPLY
97	L	S/L CONDITION 1
98	R	S/L CONDITION 2
99	G	SHIFT P
100	W	PASSENGER DOOR REQUEST SW
101	V	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
106	P	S/L UNIT POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW
111	Y	S/L UNIT COMM

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
113	P	OPTICAL SENSOR
116	SB	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	R	KEY SLOT SW
123	BR	IGN F/B
124	LG	PASSENGER DOOR SW
128	P	DOOR LOCK/UNLOCK SW LOCK
129	BG	TRUNK CANCEL SW
131	BR	DOOR LOCK/UNLOCK SW UNLOCK

133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND
137	L	RECEIVER GND
138	Y	RECEIVER/SENSOR POWER SUPPLY
140	BR	SHIFT N/P
141	G	SECURITY INDICATOR
142	BG	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
150	GR	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

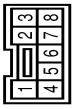
Connector No.	M126
Connector Name	RESISTOR
Connector Type	M04FL-R

H.S.

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

Connector No.	M131
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Type	TK08FBR

H.S.



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

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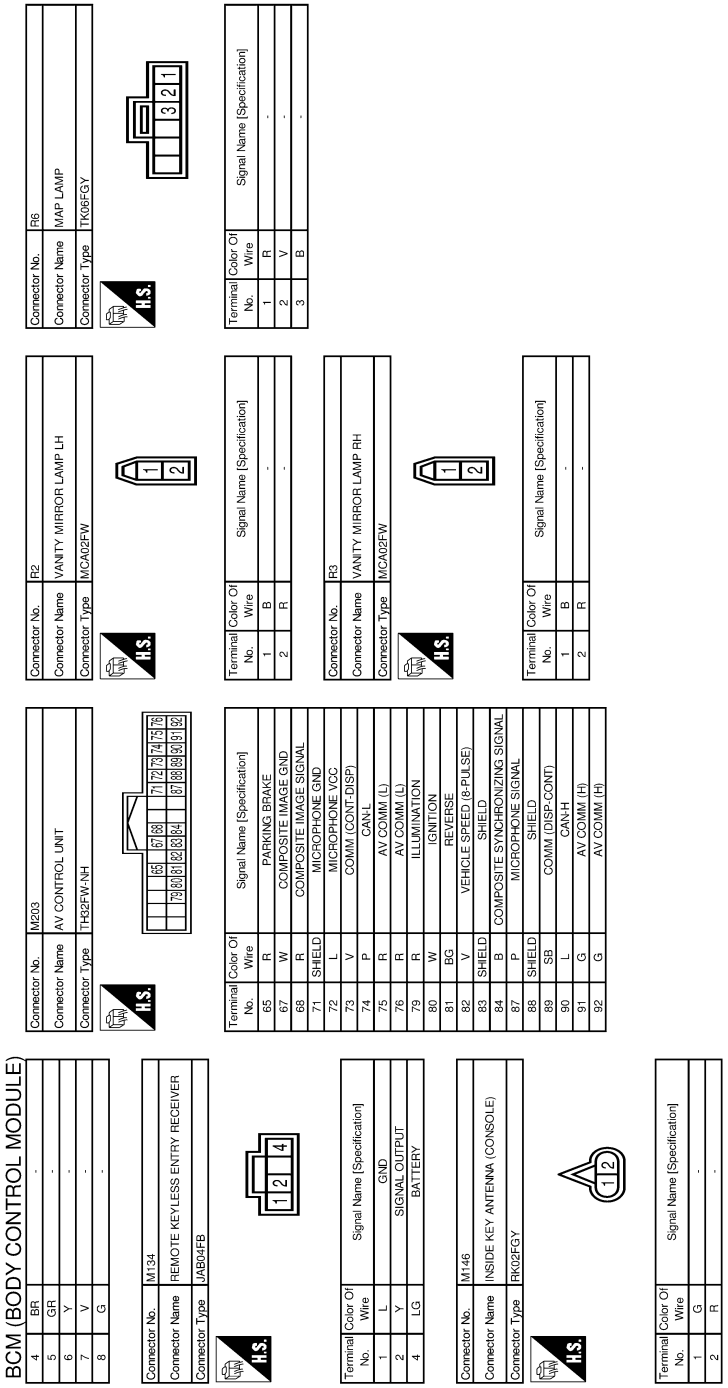

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Fail-safe

INFOID:0000000011867267

FAIL-SAFE CONTROL BY DTC

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

Display contents of CONSULT	Fail-safe	Cancellation
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC
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
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals are received from ABS actuator and electric unit (control unit) for 500 ms
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Starter control relay signal • Starter relay status signal
B2601: SHIFT POSITION	Inhibit steering lock	500 ms after the following signal reception status becomes consistent • Shift lever P position switch signal • P range signal (CAN)
B2602: SHIFT POSITION	Inhibit steering lock	5 seconds after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Shift lever P position switch signal: Except P position (Battery voltage) • Vehicle speed: 4 km/h (2.5 MPH) or more
B2603: SHIFT POSI STATUS	Inhibit steering lock	500 ms after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Shift lever P position switch signal: Except P position (Battery voltage) • Shift lever P/N position signal: Except P and N positions (0 V)
B2604: PNP/CLUTCH SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions are fulfilled • Status 1 - Ignition switch is in the ON position - Shift lever P/N position signal: P and N position (Battery voltage) - P range signal or N range signal (CAN): ON • Status 2 - Ignition switch is in the ON position - Shift lever P/N position signal: Except P and N positions (0 V) - P range signal and N range signal (CAN): OFF
B2605: PNP/CLUTCH SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position - Power position: IGN - Shift lever P/N position signal: Except P and N positions (0 V) - Interlock/PNP switch signal (CAN): OFF • Status 2 - Ignition switch is in the ON position - Shift lever P/N position signal: P or N position (Battery voltage) - PNP switch signal (CAN): ON
B2606: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)
B2607: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)

Display contents of CONSULT	Fail-safe	Cancellation
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent • Starter motor relay control signal • Starter relay status signal (CAN)
B2609: S/L STATUS	• Inhibit engine cranking • Inhibit steering lock	When the following steering lock conditions agree • BCM steering lock control status • Steering lock condition No. 1 signal status • Steering lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit engine cranking	500 ms after the following conditions are fulfilled • IGN relay (IPDM E/R) control signal: OFF (Battery voltage) • Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) • Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
B2612: S/L STATUS	• Inhibit engine cranking • Inhibit steering lock	When any of the following conditions are fulfilled • Steering lock unit status signal (CAN) is received normally • The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R)
B2617: BCM	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
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E9: S/L STATUS	• Inhibit engine cranking • Inhibit steering lock	When BCM transmits the LOCK request signal to steering lock unit, and receives LOCK response signal from steering lock unit, the following conditions are fulfilled • Steering condition No. 1 signal: LOCK (0 V) • Steering condition No. 2 signal: LOCK (Battery voltage)

DTC Inspection Priority Chart

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

Priority	DTC
1	B2562: LOW VOLTAGE
2	• U1000: CAN COMM • U1010: CONTROL UNIT (CAN)
3	• B2190: NATS ANTENNA AMP • B2191: DIFFERENCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2195: ANTI-SCANNING

Priority	DTC
4	• B2013: ID DISCORD BCM-S/L • B2014: CHAIN OF S/L-BCM • 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/CLUTCH SW • B2605: PNP/CLUTCH SW • B2606: S/L RELAY • B2607: S/L RELAY • B2608: STARTER RELAY • B2609: S/L STATUS • B260A: IGNITION RELAY • B260B: STEERING LOCK UNIT • B260C: STEERING LOCK UNIT • B260D: STEERING LOCK UNIT • B260F: ENG STATE SIG LOST • B2612: S/L STATUS • B2614: BCM • B2615: BCM • B2616: BCM • B2617: BCM • B2618: BCM • B2619: BCM • B261A: PUSH-BTN IGN SW • B261E: VEHICLE TYPE • B26E9: S/L STATUS • B26EA: KEY REGISTRATION • U0415: VEHICLE SPEED
5	• B2621: INSIDE ANTENNA • B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA
6	B26E7: TPMS CAN COMM

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-17, "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	Reference page
No DTC is detected. Further testing may be required.	—	—	—	—
U1000: CAN COMM	—	—	—	BCS-36
U1010: CONTROL UNIT (CAN)	—	—	—	BCS-37
U0415: VEHICLE SPEED	—	—	—	BCS-38
B2013: ID DISCORD BCM-S/L	×	×	—	SEC-48
B2014: CHAIN OF S/L-BCM	×	×	—	SEC-49
B2190: NATS ANTENNA AMP	×	—	—	SEC-40

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Reference page
B2191: DIFFERENCE OF KEY	×	—	—	SEC-43
B2192: ID DISCORD BCM-ECM	×	—	—	SEC-44
B2193: CHAIN OF BCM-ECM	×	—	—	SEC-46
B2195: ANTI-SCANNING	×	—	—	SEC-47
B2553: IGNITION RELAY	—	×	—	PCS-50
B2555: STOP LAMP	—	×	—	SEC-52
B2556: PUSH-BTN IGN SW	—	×	×	SEC-54
B2557: VEHICLE SPEED	×	×	×	SEC-56
B2560: STARTER CONT RELAY	×	×	×	SEC-57
B2562: LOW VOLTAGE	—	×	—	BCS-39
B2601: SHIFT POSITION	×	×	×	SEC-58
B2602: SHIFT POSITION	×	×	×	SEC-61
B2603: SHIFT POSI STATUS	×	×	×	SEC-63
B2604: PNP/CLUTCH SW	×	×	×	SEC-65
B2605: PNP/CLUTCH SW	×	×	×	SEC-67
B2606: S/L RELAY	×	×	×	SEC-69
B2607: S/L RELAY	×	×	×	SEC-70
B2608: STARTER RELAY	×	×	×	SEC-72
B2609: S/L STATUS	×	×	×	SEC-74
B260A: IGNITION RELAY	×	×	×	PCS-52
B260B: STEERING LOCK UNIT	—	×	×	SEC-78
B260C: STEERING LOCK UNIT	—	×	×	SEC-79
B260D: STEERING LOCK UNIT	—	×	×	SEC-80
B260F: ENG STATE SIG LOST	×	×	×	SEC-81
B2612: S/L STATUS	×	×	×	SEC-84
B2614: BCM	—	×	×	PCS-54
B2615: BCM	—	×	×	PCS-56
B2616: BCM	—	×	×	PCS-58
B2617: BCM	×	×	×	SEC-88
B2618: BCM	×	×	×	PCS-60
B2619: BCM	×	×	×	SEC-90
B261A: PUSH-BTN IGN SW	—	×	×	SEC-91
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	SEC-93
B2621: INSIDE ANTENNA	—	×	—	DLK-56
B2622: INSIDE ANTENNA	—	×	—	DLK-58
B2623: INSIDE ANTENNA	—	×	—	DLK-60
B26E7: TPMS CAN COMM	—	—	—	BCS-40
B26E9: S/L STATUS	×	×	× (Turn ON for 15 seconds)	SEC-82
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	SEC-83

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

Reference Value

INFOID:0000000011867270

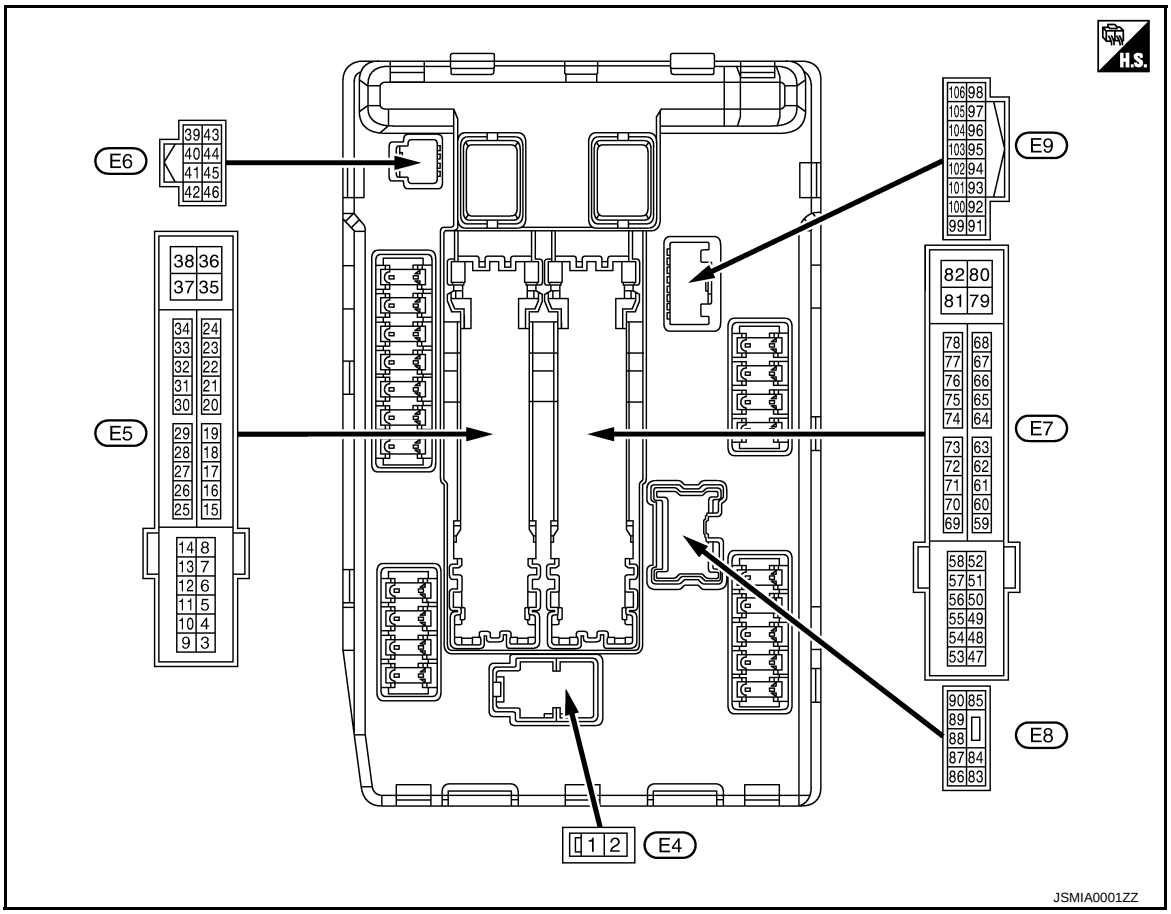
VALUES ON THE DIAGNOSIS TOOL

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

Monitor Item	Condition		Value/Status
RAD FAN REQ	Engine idle speed	Changes depending on engine coolant temperature, air conditioner operation status, vehicle speed, etc.	0 - 100 %
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 or HI		On
HL LO REQ	Lighting switch OFF		Off
	Lighting switch 2ND or HI		On
HL HI REQ	Lighting switch OFF		Off
	Lighting switch HI		On
FR FOG REQ	Daytime running light system is not operated		Off
	Daytime running light system is operated		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	Shift lever in any position other than P or N	Off
	Ignition switch ON	Shift 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

Monitor Item	Condition		Value/Status
ST/INHI RLY	Ignition switch ON		Off
	At engine cranking		INHI → 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	• Press the knob button with shift lever in P position • Shift lever in any position other than P	Off
	Release the knob button with shift lever in P position		On
S/L RLY -REQ	None of the conditions below are present		Off
	• Open the driver door after the ignition switch is turned OFF (for a few seconds) • Press the push-button ignition switch when the steering lock is activated		On
S/L STATE	Steering lock is activated		LOCK
	Steering lock is deactivated		UNLOCK
	[DTC: B210A] is detected		UNKWN
DTRL REQ	Lighting switch OFF		Off
	Lighting switch 1ST, 2ND, HI or AUTO (Light is illuminated)		On
OIL P SW	**NOTE:** The item is indicated, but not monitored.		Open
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 operating		Off
	• 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) • Door locking with key fob (horn chirp mode)		On
CRNRNG LMP REQ	**NOTE:** The item is indicated, but not monitored.		Off

TERMINAL LAYOUT

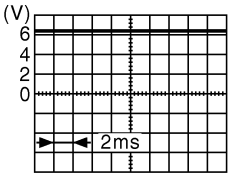
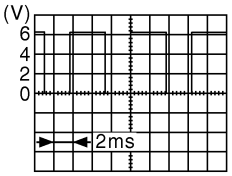
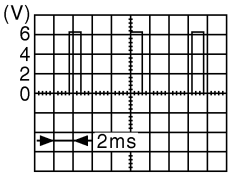


PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (Y)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
4 (V)	Ground	Front wiper LO	Output	Ignition switch ON	Front wiper switch OFF	0 V
					Front wiper switch LO	Battery voltage
5 (L)	Ground	Front wiper HI	Output	Ignition switch ON	Front wiper switch OFF	0 V
					Front wiper switch HI	Battery voltage
6 (Y)	Ground	Daytime running light relay power supply	Input	Ignition switch ON	Lighting switch OFF	Battery voltage
					Lighting switch 1ST	0 V
7 (R)	Ground	Illuminations	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 1ST	Battery voltage
10 (W)	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

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
11 (SB)	Ground	Steering lock unit power supply	Output	Ignition switch OFF	A few seconds after opening the driver door	Battery voltage
				Ignition switch LOCK	Press the push-button ignition switch	Battery voltage
				Ignition switch ACC or ON		0 V
12 (B/W)	Ground	Ground	—	Ignition switch ON		0 V
13 (R)	Ground	Fuel pump power supply	Output	Ignition switch OFF		0 V
				• Ignition switch ON • Engine running		Battery voltage
16 (LG)	Ground	Front wiper stop position	Input	Ignition switch ON	Front wiper stop position	0 V
					Any position other than front wiper stop position	Battery voltage
25 (O)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
27 (Y)	Ground	Ignition relay monitor	Input	Ignition switch OFF or ACC		Battery voltage
				Ignition switch ON		0 V
28 (G)	Ground	Push-button ignition switch	Input	Press the push-button ignition switch		0 V
				Release the push-button ignition switch		Battery voltage
30 (GR)	Ground	Starter relay control	Input	Shift lever in any position other than P or N (Ignition switch ON)		0.4 V
				Shift lever P or N (Ignition switch ON)		Battery voltage
32 (L)	Ground	Steering lock unit condition-1	Input	Steering lock is activated		0 V
				Steering lock is deactivated		Battery voltage
33 (P)	Ground	Steering lock unit condition-2	Input	Steering lock is activated		Battery voltage
				Steering lock is deactivated		0 V
36 (LG)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
39 (P)	—	CAN-L	Input/ Output	—		—
40 (L)	—	CAN-H	Input/ Output	—		—
41 (B/Y)	Ground	Ground	—	Ignition switch ON		0 V
42 (G)	Ground	Cooling fan relay control	Input	Ignition switch OFF or ACC		Battery voltage
				Ignition switch ON		0.7 V
43 (SB)	Ground	A/T shift selector (Detention switch)	Input	Ignition switch ON	• Press the knob button (Shift lever P) • Shift lever in any position other than P	Battery voltage
					Release the knob button (Shift lever P)	0 V
44 (W)	Ground	Horn relay control	Input	The horn is deactivated		Battery voltage
				The horn is activated		0 V
46 (O)	Ground	Starter relay control	Input	Shift lever in any position other than P or N (Ignition switch ON)		0 V
				Shift lever P or N (Ignition switch ON)		Battery voltage

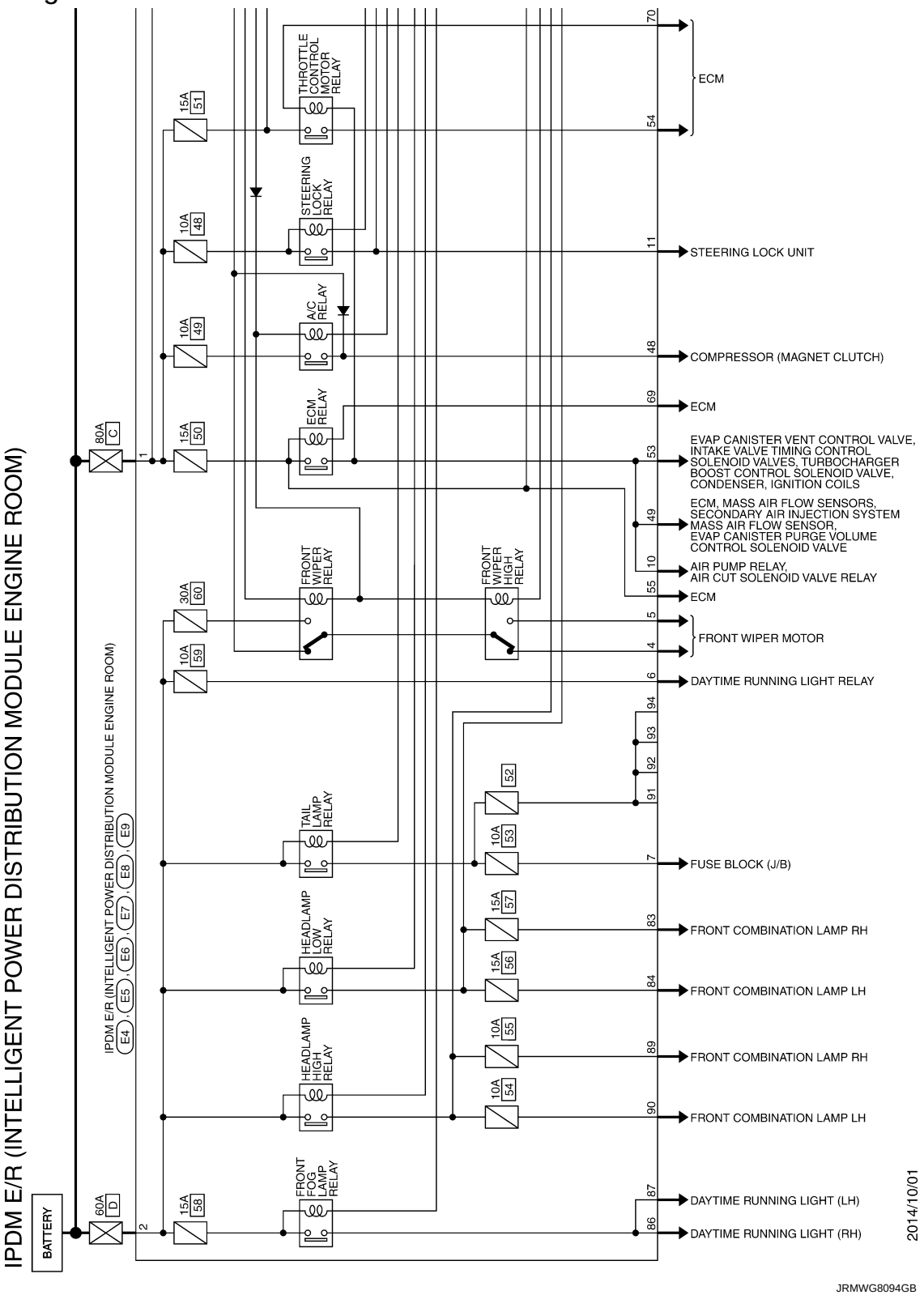
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
48 (L)	Ground	A/C relay power supply	Output	Engine running	A/C switch OFF	0 V
					A/C switch ON (A/C compressor is operating)	Battery voltage
49 (P)	Ground	ECM relay power supply	Output	Ignition switch 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
51 (LG)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
53 (SB)	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
54 (W)	Ground	Throttle control motor 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
55 (O)	Ground	ECM power supply	Output	Ignition switch OFF		Battery voltage
56 (R)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
57 (G)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
58 (Y)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
69 (O)	Ground	ECM relay control	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)		Battery voltage
				• Ignition switch ON • Ignition switch OFF (For a few seconds after turning ignition switch OFF)		0 - 1.5 V
70 (G)	Ground	Throttle control motor relay control	Output	Ignition switch ON → OFF		0 -1.0 V ↓ Battery voltage ↓ 0 V
				Ignition switch ON		0 - 1.0 V
71 (SB)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage

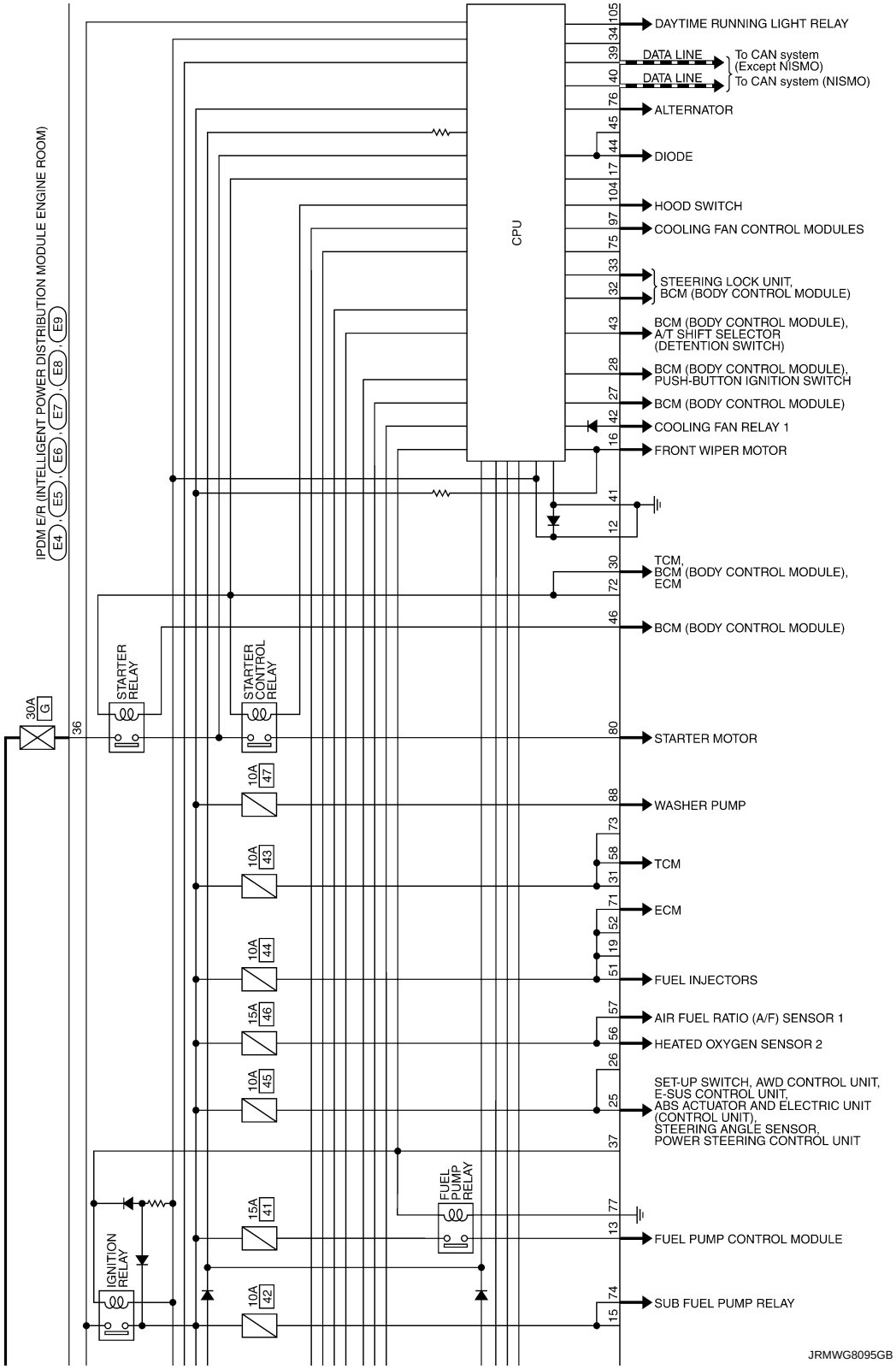
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
74 (LG)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
76 (P)	Ground	Power generation command signal	Output	Ignition switch ON		 JPMIA0001GB 6.3 V
				40% is set on “ACTIVE TEST”, “ALTERNATOR DUTY” of “ENGINE”		 JPMIA0002GB 3.8 V
				80% is set on “ACTIVE TEST”, “ALTERNATOR DUTY” of “ENGINE”		 JPMIA0003GB 1.4 V
77 (B/W)	Ground	Fuel pump relay control	Output	• Ignition switch ON • Engine running		0 V
80 (W)	Ground	Starter motor	Output	At engine cranking		Battery voltage
83 (R)	Ground	Headlamp LO (RH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 2ND	Battery voltage
84 (P)	Ground	Headlamp LO (LH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 2ND	Battery voltage
86* (W)	Ground	Daytime running light (RH)	Output	Daytime running light system	Not operated	0 V
					Operated	Battery voltage
87* (L)	Ground	Daytime running light (LH)	Output	Daytime running light system	Not operated	0 V
					Operated	Battery voltage
88 (G)	Ground	Washer pump power supply	Output	Ignition switch ON		Battery voltage
89 (BR)	Ground	Headlamp HI (RH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					• Lighting switch HI • Lighting switch PASS	Battery voltage
90 (O)	Ground	Headlamp HI (LH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					• Lighting switch HI • Lighting switch PASS	Battery voltage

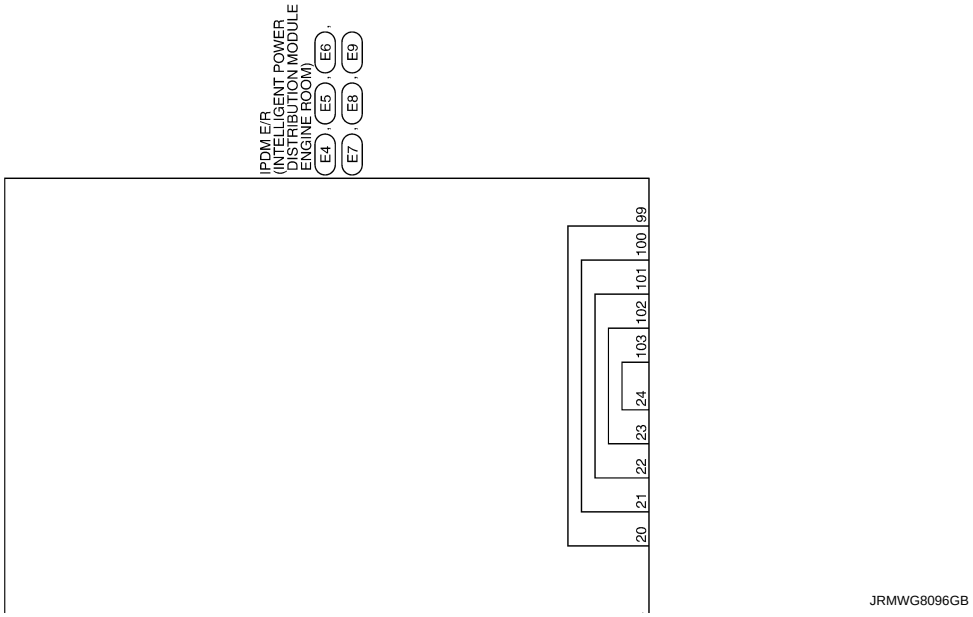
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
97 (Y)	Ground	Cooling fan control	Output	Engine idling		0 - 5 V
104 (LG)	Ground	Hood switch	Input	Close the hood		Battery voltage
				Open the hood		0 V
105 (GR)	Ground	Daytime running light relay control	Input	Ignition switch ON	Lighting switch OFF	Battery voltage
					Lighting switch 1ST	0 V

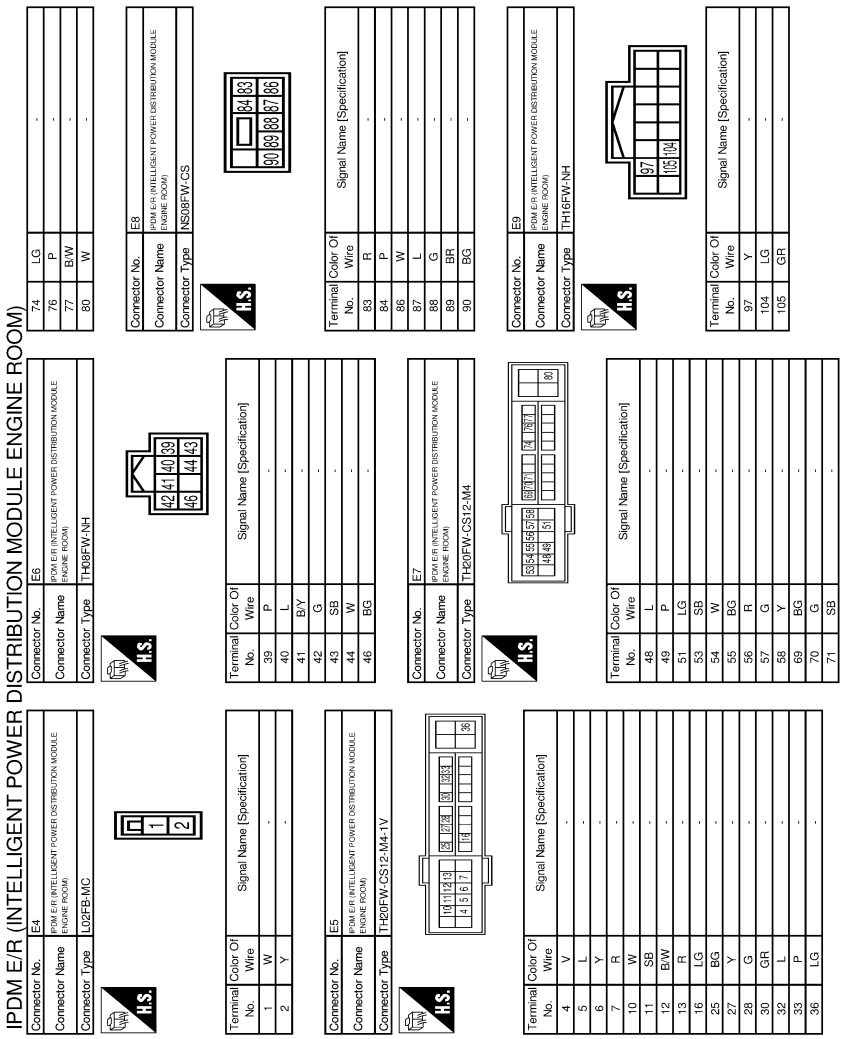
Wiring Diagram - IPDM E/R -

INFOID:0000000011867271




IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E4, E5, E6, E7, E8, E9
CPU
105 DAYTIME RUNNING LIGHT RELAY
34
39 DATA LINE To CAN system (Except NISMO)
40 DATA LINE To CAN system (NISMO)
76 ALTERNATOR
45
44 DIODE
17
104 HOOD SWITCH
97 COOLING FAN CONTROL MODULES
75
33 STEERING LOCK UNIT,
32 BCM (BODY CONTROL MODULE)
43 BCM (BODY CONTROL MODULE), A/T SHIFT SELECTOR (DETENTION SWITCH)
28 BCM (BODY CONTROL MODULE), PUSH-BUTTON IGNITION SWITCH
27 BCM (BODY CONTROL MODULE)
42 COOLING FAN RELAY 1
16 FRONT WIPER MOTOR
41
12
30 TCM, BCM (BODY CONTROL MODULE), ECM
72
46 BCM (BODY CONTROL MODULE)
30A G
36
STARTER RELAY
STARTER CONTROL RELAY
80 STARTER MOTOR
10A 47
88 WASHER PUMP
73
10A 43
58 TCM
31
71 ECM
52
19
10A 44
51 FUEL INJECTORS
15A 46
57 AIR FUEL RATIO (A/F) SENSOR 1
56 HEATED OXYGEN SENSOR 2
26
10A 45
25 SET-UP SWITCH, AWD CONTROL UNIT, E-SUS CONTROL UNIT, ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT), STEERING ANGLE SENSOR, POWER STEERING CONTROL UNIT
37
FUEL PUMP RELAY
77
15A 41
13 FUEL PUMP CONTROL MODULE
IGNITION RELAY
10A 42
74 SUB FUEL PUMP RELAY
15
JRMWG8095GB


IPDM E/R
(INTELLIGENT POWER
DISTRIBUTION MODULE
ENGINE ROOM)
E4
E5
E6
E7
E8
E9
99
100
101
102
103
24
23
22
21
20
JRMWG8096GB



JRMWG8015GB

Fail-safe

INFOID:0000000011867272

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

Control part	Fail-safe operation
Cooling fan	• Outputs the pulse duty signal (PWM signal) 100% when the ignition switch is turned ON • Outputs the pulse duty signal (PWM signal) 0% when the ignition switch is turned OFF
A/C compressor	A/C relay OFF

If No CAN Communication Is Available With BCM

Control part	Fail-safe operation
Headlamp	• Turns ON the headlamp low relay when the ignition switch is turned ON • Turns OFF the headlamp low relay when the ignition switch is turned OFF • Headlamp high relay OFF
Illuminations	• Turns ON the tail lamp relay when the ignition switch is turned ON • Turns OFF the tail lamp relay when the ignition switch is turned OFF
Front wiper	• The status just before activation of fail-safe control is maintained until the ignition switch is turned OFF while the front wiper is operating at LO or HI speed. • The wiper is operated at LO speed until the ignition switch is turned OFF if the fail-safe control is activated while the front wiper is set in the INT mode and the front wiper motor is operating.
Horn	Horn OFF
Ignition relay	The status just before activation of fail-safe is maintained.
Starter motor	Starter control relay OFF
Steering lock unit	Steering lock relay OFF
• Parking lamps • License plate lamps • Side marker lamps • Tail lamps	Daytime running light relay OFF
Daytime running light	Front fog lamp 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 and daytime running light 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	• Detects DTC “B2098: IGN RELAY ON CIRC” • Turns ON the tail lamp relay and daytime running light relay* for 10 minutes
OFF	ON	Ignition relay OFF stuck	Detects DTC “B2099: IGN RELAY OFF CIRC”

*: With daytime running light system

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:0000000011867273

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.

×: Applicable

CONSULT display	Fail-safe	Refer to
No DTC is detected. further testing may be required.	—	—
U1000: CAN COMM CIRCUIT	×	PCS-14
B2098: IGN RELAY ON CIRC	×	PCS-15
B2099: IGN RELAY OFF CIRC	—	PCS-17
B2108: S/L RELAY ON	—	SEC-94
B2109: S/L RELAY OFF	—	SEC-95
B210A: S/L STATE SW	—	SEC-96
B210B: STR CONT RLY ON CIRC	—	SEC-100
B210C: STR CONT RLY OFF CIRC	—	SEC-101
B210D: STARTER RLY ON CIRC	—	SEC-102
B210E: STARTER RLY OFF CIRC	—	SEC-103
B210F: INTRLCK/PNP SW ON	—	SEC-105
B2110: INTRLCK/PNP SW OFF	—	SEC-107

SYMPTOM DIAGNOSIS

ENGINE DOES NOT START WHEN INTELLIGENT KEY IS INSIDE OF VEHICLE

Description

INFOID:0000000011489335

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

NOTE:

The engine start function, door lock function, power distribution system and NATS-IVIS/NVIS in the Intelligent Key system are closely related to each other regarding control. The vehicle security function can operate only when the door lock and power distribution system are operating normally.

Conditions of Vehicle (Operating Conditions)

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

Diagnosis Procedure

INFOID:0000000011489336

1.CHECK DOOR LOCK FUNCTION

Lock/unlock door with door request switch.

Refer to DLK-20, "DOOR LOCK FUNCTION : System Description".

Is the operation normal?

YES >> GO TO 2.

NO >> Check door lock function. Refer to DLK-175, "DRIVER SIDE : Diagnosis Procedure".

2.PERFORM WORK SUPPORT

Perform “INSIDE ANT DIAGNOSIS” on “Work Support” of “INTELIGENT KEY”.

Refer to DLK-52, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

>> GO TO 3.

3.PERFORM SELF DIAGNOSTIC RESULT

Perform Self Diagnostic result of “INTELIGENT KEY”.

Refer to DLK-52, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is DTC detected?

YES >> Refer to DLK-56, "DTC Logic" (instrument center), refer to DLK-58, "DTC Logic" (console), refer to DLK-60, "DTC Logic" (trunk room).

NO >> GO TO 4.

4.CHECK PUSH-BUTTON IGNITION SWITCH

Check push-button ignition switch.

Refer to PCS-64, "Component Function Check".

Is the inspection normal?

YES >> GO TO 5.

NO >> Repair or replace malfunctioning parts.

5.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

NO >> GO TO 1.

STEERING DOES NOT LOCK

Description

INFOID:0000000011489337

If door switch is malfunctioning, BCM cannot lock the steering. If BCM does not detect DTC, steering lock unit is normal.

Diagnosis Procedure

INFOID:0000000011489338

1.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-64, "Component Inspection".

Is the inspection normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

SECURITY INDICATOR LAMP DOES NOT TURN ON OR FLASH

Description

INFOID:0000000011489339

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

Conditions of Vehicle (Operating Conditions)

Ignition switch position is not in ON position.

Diagnosis Procedure

INFOID:0000000011489340

1.CHECK SECURITY INDICATOR LAMP

Check security indicator lamp.
Refer to SEC-114, "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-39, "Intermittent Incident".
NO >> GO TO 1.

VEHICLE SECURITY SYSTEM CAN NOT BE SET

INTELLIGENT KEY

INTELLIGENT KEY : Description

INFOID:0000000011489341

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

Conditions of Vehicle (Operating Conditions)
“SECURITY ALARM SET” in “WORK SUPPORT” is ON when setting on CONSULT.

INTELLIGENT KEY : Diagnosis Procedure

INFOID:0000000011489342

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

Lock/unlock door with Intelligent Key.
Refer to DLK-29, "REMOTE KEYLESS ENTRY FUNCTION : System Description".

Is the inspection normal?

YES >> GO TO 2.
NO >> Check Intelligent Key system. Refer to DLK-177, "Diagnosis Procedure".

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH : Description

INFOID:0000000011489343

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

Conditions of Vehicle (Operating Conditions)
“SECURITY ALARM SET” in “WORK SUPPORT” is ON when setting on CONSULT.

DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:0000000011489344

1.CHECK INTELLIGENT KEY SYSTEM (DOOR LOCK FUNCTION)

Lock/unlock door with door request switch.
Refer to DLK-20, "DOOR LOCK FUNCTION : System Description".

Is the inspection normal?

YES >> GO TO 2.
NO >> Check Intelligent Key system. Refer to DLK-175, "DRIVER SIDE : Diagnosis Procedure".

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

VEHICLE SECURITY ALARM DOES NOT ACTIVATE

Description

INFOID:0000000011489345

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

Conditions of Vehicle (Operating Conditions)

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

Diagnosis Procedure

INFOID:0000000011489346

1.CHECK CONDITION OF ALARM

Operate alarm.

Which alarm does not operate?

Headlamp and horn>>GO TO 2.
Headlamp>>GO TO 3.
Horn >> GO TO 4.

2.CHECK DOOR SWITCH

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

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace the malfunctioning door switch

3.CHECK HEADLAMP

Check headlamp operation.
Refer to SEC-113, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace malfunctioning parts.

4.CHECK HORN

Check horn.
Refer to SEC-117, "Component Function Check".

Is the inspection result normal?

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

5.CHECK VEHICLE SECURITY HORN

Check vehicle security horn.
Refer to SEC-119, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace malfunctioning parts.

6.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

KEY SLOT INDICATOR DOES NOT ILLUMINATE

Diagnosis Procedure

INFOID:0000000011489347

1.CHECK KEY SLOT INDICATOR

Check key slot indicator.
Refer to DLK-96, "Component Function Check".

Is the inspection normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

PANIC ALARM FUNCTION DOES NOT OPERATE

Description

INFOID:0000000011489348

NOTE:
- Before performing the diagnosis following procedure, 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 (OPERATION CONDITIONS)
- Ignition switch is in OFF or LOCK position.
- Intelligent Key is removed from key slot.

Diagnosis Procedure

INFOID:0000000011489349

1.CHECK REMOTE KEYLESS ENTRY FUNCTION

Check remote keyless entry function.

Does door lock/unlock with Intelligent key button?

YES >> GO TO 2.
NO >> Go to DLK-29, "REMOTE KEYLESS ENTRY FUNCTION : System Description".

2.CHECK VEHICLE SECURITY ALARM OPERATION

Check vehicle security alarm operation.

Does alarm (headlamp and horn) active?

YES >> GO TO 3.
NO >> Go to SEC-19, "System Description".

3.CHECK “PANIC ALARM SET” SETTING IN “WORK SUPPORT”

Check “PANIC ALARM SET” setting in “WORK SUPPORT”.
Refer to DLK-52, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Set “PANIC ALARM SET” setting in “WORK SUPPORT”.

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

PRECAUTION

PRECAUTIONS

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

INFOID:0000000011802301

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.**

Precautions Necessary for Steering Wheel Rotation After Battery Disconnection

INFOID:0000000011802302

CAUTION:

Comply with the following cautions to prevent any error and malfunction.

- **Before removing and installing any control units, first turn the ignition switch to the LOCK position, then disconnect both battery cables.**
- **After finishing work, confirm that all control unit connectors are connected properly, then re-connect both battery cables.**
- **Always use CONSULT to perform self-diagnosis as a part of each function inspection after finishing work. If a DTC is detected, perform trouble diagnosis according to self-diagnosis results.**

For vehicle with steering lock unit, if the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.
If turning the steering wheel is required with the battery disconnected or discharged, follow the operation procedure below before starting the repair operation.

OPERATION PROCEDURE

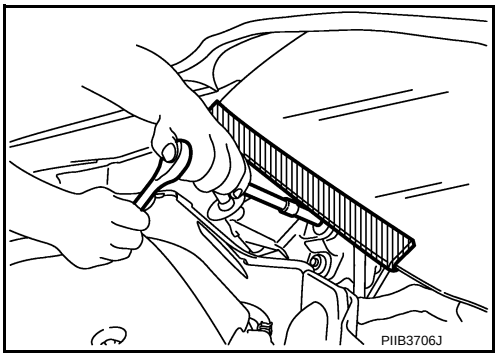
1. Connect both battery cables.
   NOTE:
   Supply power using jumper cables if battery is discharged.
2. Turn the ignition switch to ACC position.
   (At this time, the steering lock will be released.)
3. Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.

4. Perform the necessary repair operation.
5. When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the ignition switch is turned to LOCK position.)
6. Perform self-diagnosis check of all control units using CONSULT.

Precaution for Procedure without Cowl Top Cover

INFOID:0000000011802303

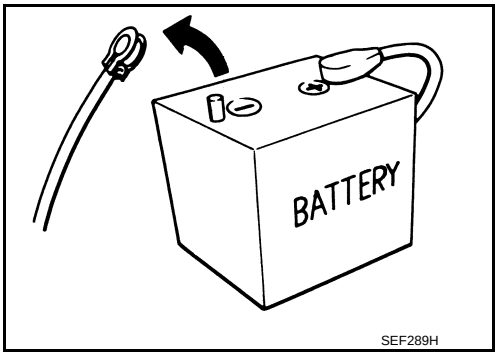
When performing the procedure after removing cowl top cover, cover the lower end of windshield with urethane, etc to prevent damage to windshield.



Precautions for Removing Battery Terminal

INFOID:0000000011802304

- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.
  NOTE:
  ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.
- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.
  NOTE:
  If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.



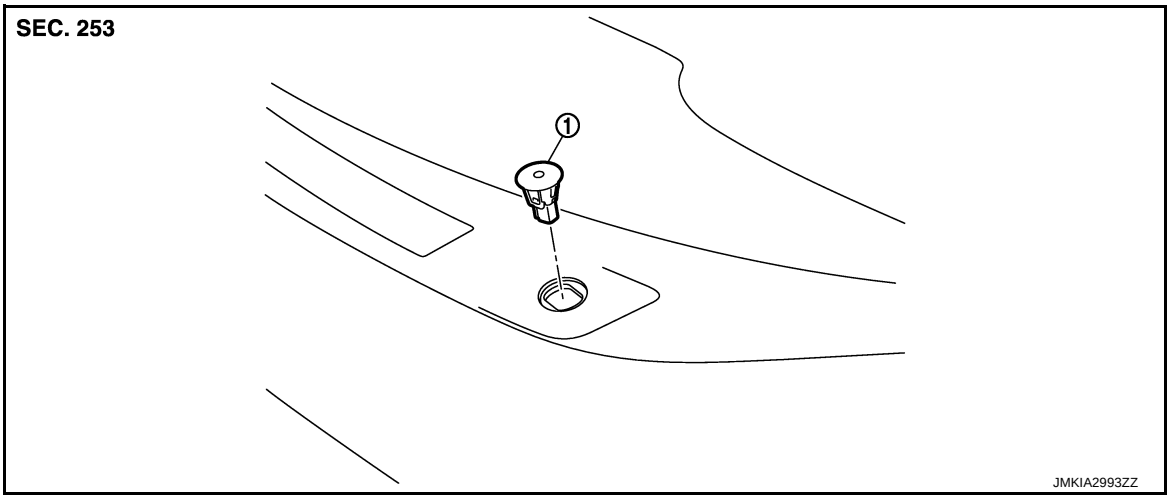
- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.
  NOTE:
  The removal of 12V battery may cause a DTC detection error.

REMOVAL AND INSTALLATION

SECURITY INDICATOR LAMP

Exploded View

INFOID:0000000011489354



1. Security indicator lamp

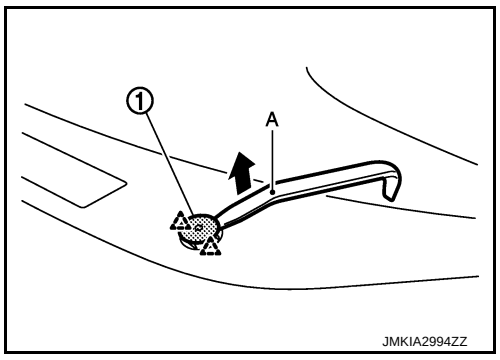
Removal and Installation

INFOID:0000000011489355

REMOVAL

Disengage pawls with remover tool (A) and pull up the security indicator lamp (1).

△: **Pawl**



INSTALLATION

Install in the reverse order of removal.