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< BASIC INSPECTION >

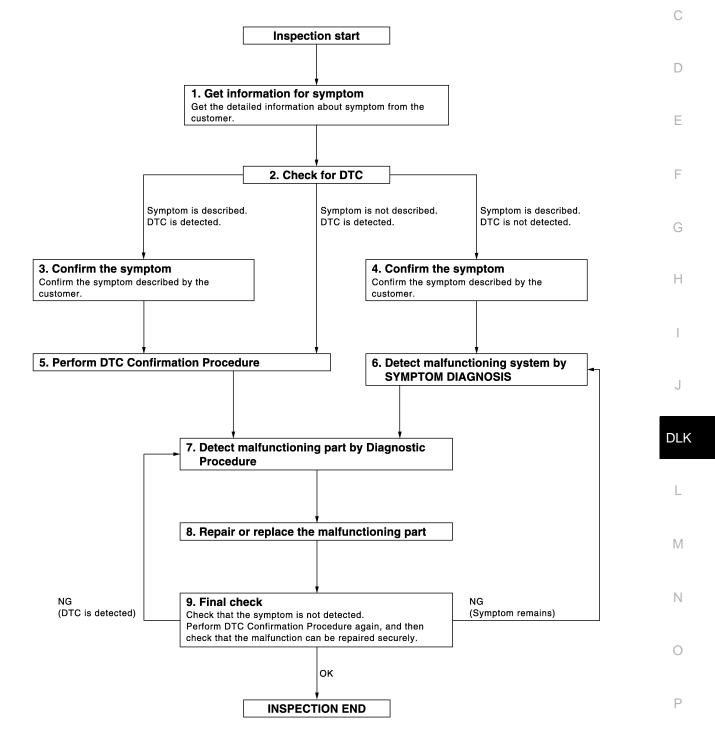
# BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

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**OVERALL SEQUENCE** 



### DETAILED FLOW

Revision: 2009 November

JMKIA3620GB

< BASIC INSPECTION >

## **1.**GET INFORMATION FOR SYMPTOM

Get detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurred).

#### >> GO TO 2.

## 2.CHECK FOR DTC

- 1. Check BCM for DTC.
- 2. Perform the following procedure if DTC is displayed.
- Record DTC and freeze frame data (print them out with CONSULT-III).
- 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 or any DTC detected?

Symptom is described, DTC is displayed>>GO TO 3. Symptom is described, DTC is not displayed>>GO TO 4. Symptom is not described, DTC is displayed>>GO TO 5.

**3.**CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.

Connect CONSULT-III to the vehicle in the "DATA MONITOR" mode and check real time diagnosis results. Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5.

**4.**CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.

Connect CONSULT-III to the vehicle in the "DATA MONITOR" mode and check real time diagnosis results. 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 displayed DTC, and then check that DTC is detected again. At this time, always connect CONSULT-III to the vehicle, and check diagnostic results in real time. If two or more DTCs are detected, refer to <u>DLK-164</u>, "<u>DTC Inspection Priority Chart</u>" (BCM) determine trouble diagnosis order.

#### NOTE:

Perform Component Function Check if DTC Confirmation Procedure is not included in 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 >> Refer to GI-38, "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 symptoms.

>> GO TO 7.

**1.**DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the system. **NOTE:** 

The Diagnostic Procedure described is based on open circuit inspection. A short circuit inspection is also required for the circuit check in the Diagnostic Procedure.

## DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >	
<u>Is malfunctioning part detected?</u> YES >> GO TO 8.	А
NO >> Check voltage of related BCM terminals using CONSULT-III.	
8. REPAIR OR REPLACE THE MALFUNCTIONING PART	В
<ol> <li>Repair or replace the malfunctioning part.</li> <li>Reconnect parts or connectors disconnected during Diagnostic Procedure again after repair and replacement.</li> </ol>	D
3. Check for DTC. If DTC is displayed, erase it.	С
>> GO TO 9.	
9. FINAL CHECK	D
When DTC is detected in step 2, perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunction is completely repaired. When symptom is described by the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.	Е
Does the symptom reappear?	F
YES (DTC is detected)>>GO TO 7. YES (Symptom remains)>>GO TO 6. NO >> INSPECTION END	I
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### **INSPECTION AND ADJUSTMENT**

< BASIC INSPECTION >

## INSPECTION AND ADJUSTMENT ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

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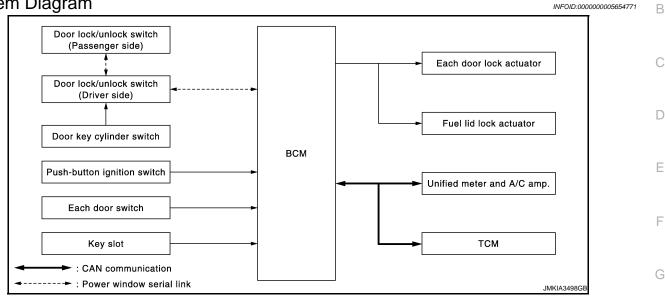
Perform the system initialization when replacing BCM, replacing Intelligent Key or registering an additional Intelligent Key.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

Refer to CONSULT-III operation manual for the NATS-IVIS/NVIS.

## SYSTEM DESCRIPTION > SYSTEM DESCRIPTION POWER DOOR LOCK SYSTEM

### System Diagram



### System Description

### DOOR LOCK FUNCTION

Door Lock and Unlock Switch

- The door lock and unlock switch (driver side) is build into power window main switch.
- The door lock and unlock switch (passenger side) is build into power window sub-switch.
- Interlocked with the locking operation of door lock and unlock switch, door lock actuators of all doors and fuel lid lock actuator are locked.
- Interlocked with the unlocking operation of door lock and unlock switch, door lock actuators of all doors and fuel lid lock actuator are unlocked.

Door Key Cylinder Switch

- With the door key inserted in the door key cylinder on driver side, turning it to "LOCK", locks door lock actuator of all doors and fuel lid lock actuator.
- With the door key inserted in the door key cylinder on driver side, turning it to "UNLOCK" once unlocks the driver side door, turning it to "UNLOCK" again within 60 seconds after the first unlock operation unlocks all of the other doors actuator and fuel lid lock actuator. - (SELECTIVE UNLOCK OPERATION)

Selective unlock operation mode can be changed using "DOOR LOCK-UNLOCK SET" mode in "WORK SUP- M PORT". Refer to <u>DLK-47, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)"</u>.

### KEY REMINDER FUNCTION

When door lock and unlock switch are operated while Intelligent Key is inserted into key slot and any door is open, door locks once but immediately unlocks. This operation prevents Intelligent Key from being left in the vehicle.

DOOR KEY CYLINDER SWITCH POWER WINDOW FUNCTION

Driver side key cylinder LOCK/UNLOCK operation can activate driver side and passenger side power window UP/DOWN operation. Refer to <u>PWC-7, "System Description"</u>.

### AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (LOCK OPERATION)

The interlock door lock function is the function that locks all doors linked with the vehicle speed or shift position. It has 2 types as per the following items.

Vehicle Speed Sensing Auto Door Lock\*1

All doors are locked when the vehicle speed reaches 24 km/h (15 MPH) or more.

## **DLK-11**

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### POWER DOOR LOCK SYSTEM

#### < SYSTEM DESCRIPTION >

BCM outputs the lock signal to all door lock actuators when it detects that the ignition switch is turned ON, all doors are closed and the vehicle speed received from the combination meter via CAN communication becomes 15 MPH (24 km/h) or more.

#### P Range Interlock Door Lock\*<sup>2</sup>

All doors are locked when shifting the selector lever from the P position to any position other than P. BCM outputs the lock signal to all door lock actuators when it detects that the ignition switch is in the ON position and the shift signal received from the TCM via CAN communication is shifted from the P position to any position other than P.

Setting change of Automatic Door Lock/Unlock Function

The lock operation setting of the automatic door lock/unlock function can be changed.

#### NOTE:

P range interlock door lock can be selected for M/T models, but automatic door lock/unlock function does not operate.

#### (I) With CONSULT-III

The ON/OFF switching of the automatic door lock function and the type selection of the automatic door lock/ unlock function can be performed at the WORK SUPPORT setting of CONSULT-III.

#### **Without CONSULT- III**

The automatic door lock function ON/OFF can be switched by performing the following operation.

- 1. Close all doors (door switch OFF)
- 2. Turn ignition switch ON
- 3. Press and hold the door lock and unlock switch for 5 seconds or more in the lock direction within 20 seconds after turning the ignition switch ON.
- 4. The switching is complete when the hazard lamp blinks.

\*<sup>1</sup>: This function is set to ON before delivery.

\*<sup>2</sup>: This function does not operate on M/T models.

### AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (UNLOCK OPERATION)

The automatic door lock/unlock function is the function that unlocks all doors linked with the key position or shift position. It has 2 types as per the following items.

#### IGN OFF Interlock Door Unlock\*1

All doors are unlocked when the power supply position is changed from ON to OFF.

BCM outputs the unlock signal to all door lock actuators when it detects that the power supply position is changed from ignition switch ON to OFF.

P Range Interlock Door Unlock\*2

All doors are unlocked when shifting the selector lever from any position other than the P to P position. BCM outputs the unlock signal to all door lock actuators when it detects that the ignition switch is in the ON position and the shift signal received from TCM via CAN communication is shifted from any position other than the P to P position.

Setting change of Automatic Door Lock/Unlock Function

The unlock operation setting of the automatic door lock/unlock function can be changed.

### NOTE:

P range interlock door lock can be selected for M/T models, but automatic door lock/unlock function does not operate.

#### With CONSULT- III

The ON/OFF switching of the automatic door lock/unlock function and the type selection of the automatic door lock/unlock function can be performed at the WORK SUPPORT setting of CONSULT-III.

#### **Without CONSULT- III**

The automatic door lock/unlock function ON/OFF can be switched by performing the following operation.

- 1. Close all doors below (door switch OFF)
- 2. Turn ignition switch ON

### POWER DOOR LOCK SYSTEM

### < SYSTEM DESCRIPTION >

- 3. Press and hold the door lock and unlock switch for 5 seconds or more in the unlock direction within 20 seconds after turning the ignition switch ON.
- 4. The switching is complete when the hazard lamp blinks.

 $\mathsf{OFF}\to\mathsf{ON}$ : 2 blinks  $\mathsf{ON}\to\mathsf{OFF}$ : 1 blink

- \*1: This function is set to ON before delivery.
- \*<sup>2</sup>: This function does not operate on M/T models.

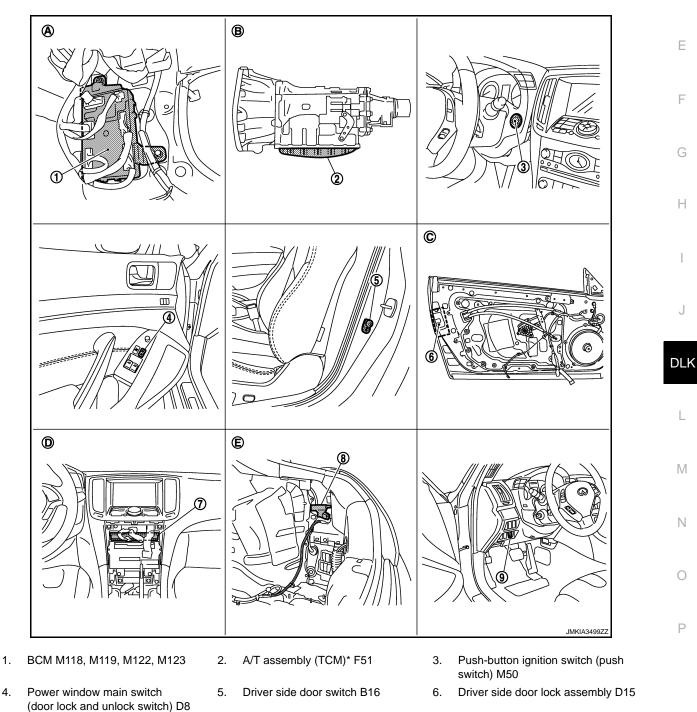
### **Component Parts Location**



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- Unified meter and A/C amp. M67 7.
- Fuel lid lock actuator B242 8.
- 9. Key slot M22

4.

### **POWER DOOR LOCK SYSTEM**

### < SYSTEM DESCRIPTION >

- Dash side lower (passenger side) Α.
- View with cluster lid C removed D.
- A/T assembly (TCM is built in A/T as- C. View with driver side door finisher re-Β. sembly)
- View with trunk side finisher re-Ε. moved

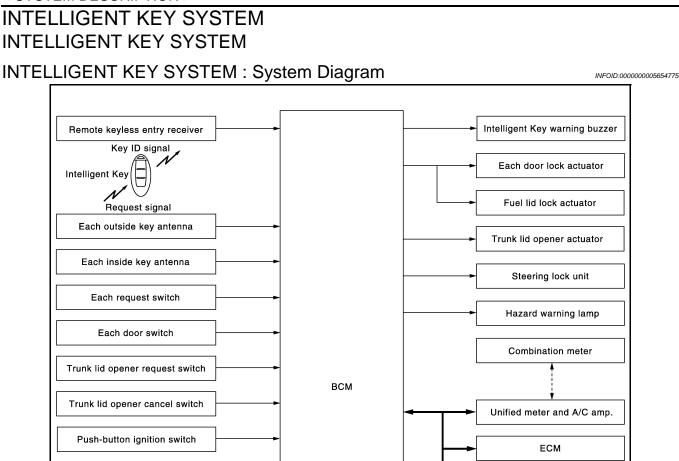
moved

#### \*:With A/T models

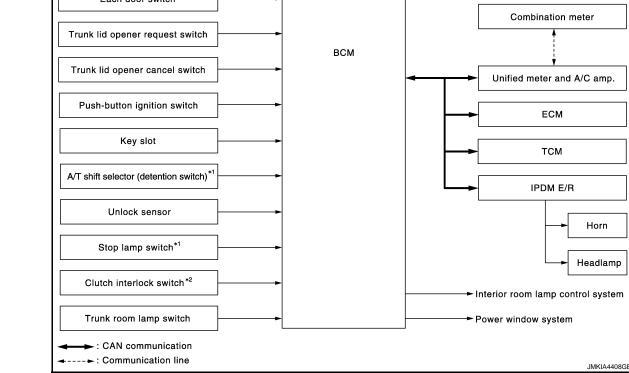
## **Component Description**

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Item	Function
BCM	Controls the door lock function.
Door lock and unlock switch	Inputs lock or unlock signal to BCM.
Door lock actuator	Outputs lock/unlock signal from BCM and locks/unlocks each door.
Door key cylinder switch	<ul> <li>Built-in driver side door lock assembly</li> <li>Inputs lock or unlock signal to power window main switch.</li> <li>Power window main switch trasmits door lock/unlock signal to BCM.</li> </ul>
Door switch	Inputs door open/close condition to BCM.
Key slot	Inputs key insert/remove signal to BCM.
Unified meter and A/C amp.	Transmits vehicle speed signal to CAN communication line.
ТСМ	Transmits shift position signal to BCM via CAN communication line.
Fuel lid lock actuator	Performs lock/unlock of the fuel lid.
Push-button ignition switch	Inputs push-button ignition switch ON/OFF condition to BCM.



## < SYSTEM DESCRIPTION > INTELLIGENT KEY SYSTEM



\*1: With A/T models

\*2: With M/T models

# **INTELLIGENT KEY SYSTEM : System Description**

 The Intelligent Key system is a system that makes it possible to lock and unlock the door locks (door lock/ unlock function) by carrying the Intelligent Key, which operates based on the results of electronic ID verification using two-way communication between the Intelligent Key and the vehicle (BCM). CAUTION:

### The driver should always carry the Intelligent Key

- The settings for each function can be changed with CONSULT-III.
- If an Intelligent Key is lost, a new Intelligent Key can be registered. A maximum of 4 Intelligent Keys can be registered.
- It is possible to perform a diagnosis on the system and register an Intelligent Key with CONSULT-III.

### Revision: 2009 November

## **DLK-15**

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### < SYSTEM DESCRIPTION >

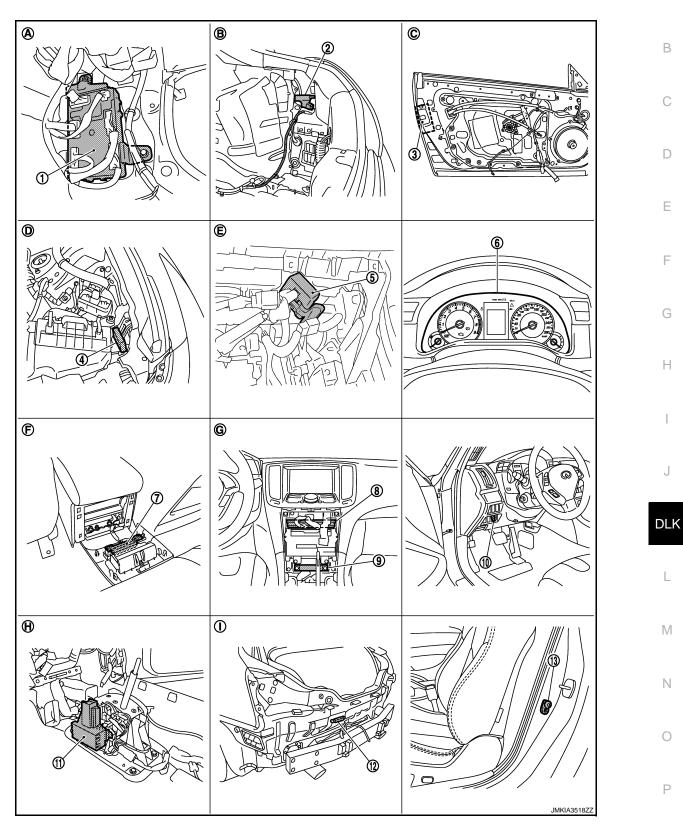
Function	Description	Refer
Door lock function	Lock/unlock can be performed by pressing the request switch.	<u>DLK-19</u>
Remote keyless entry func- tion	Lock/unlock can be performed by pressing the remote controller button of the In- telligent Key.	<u>DLK-28</u>
Trunk open function	The trunk lid can be opened by carrying the Intelligent Key and pressing the trunk lid opener request switch.	<u>DLK-24</u>
Key reminder function	The key reminder buzzer sounds a warning if the door is locked with the key left inside the vehicle.	<u>DLK-34</u>
Warning function	If an action that does not meet the operating condition of the Intelligent Key system is taken, the buzzer sounds to inform the driver.	<u>DLK-36</u>
Engine start function	The engine can be turned on while carrying the Intelligent Key.	<u>SEC-9</u>

### < SYSTEM DESCRIPTION >

### **INTELLIGENT KEY SYSTEM : Component Parts Location**

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А



1. BCM M118, M119, M120, M121, M122, M123

Intelligent Key warning buzzer E57

Inside key antenna (console) M146

2. Fuel lid lock actuator B242

5.

8.

- Remote keyless entry receiver M1046.Unified meter and A/C amp. M66,9.M67
- 3. Driver side door lock assembly D15
  - Combination meter M53
  - Inside key antenna (instrument center) M131

4.

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### < SYSTEM DESCRIPTION >

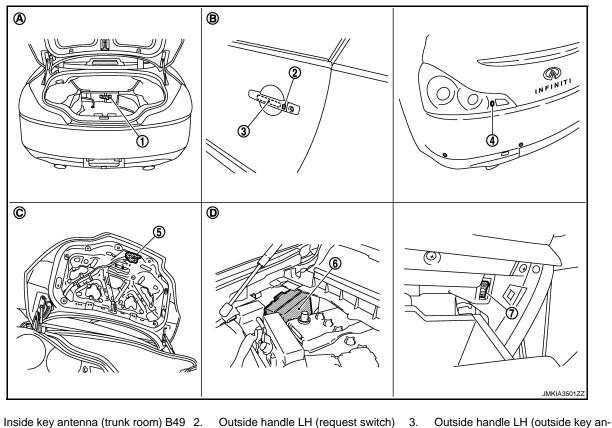
- 10. Key slot M22
- 13. Driver side door switch B16
- Α. Dash side lower (passenger side)
- D. View with hood seal assembly removed
- G. View with cluster lid C removed
- \*: With A/T models

- 11. A/T shift selector (detention switch)\* M137
- View with trunk side finisher re-Β. moved
  - Engine room dash panel

Ε.

- View with center console assembly Η. removed
- 12. Outside key antenna (rear bumper) B63
- C. View with driver side door finisher removed
- F. View with console rear finisher removed
  - View with rear bumper removed

I.



- Inside key antenna (trunk room) B49 2. 1.
- Rear combination lamp LH (trunk lid 5. 4. opener request switch) B60
- 7. Trunk lid opener cancel switch M105
- View with trunk front finisher re-Α. moved
- D. Engine room dash panel (RH)
- Outside handle LH (request switch) D13
- Trunk lid lock assembly B303
- View with driver side door
- C. View with trunk lid finisher removed

tenna) D14

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IPDM E/R E5, E6

## **INTELLIGENT KEY SYSTEM : Component Description**

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INFOID:000000005654778

Item	Function
BCM	Controls the Intelligent Key system.
IPDM E/R	Sounds horn and blinks head lamp via CAN communication between BCM.
Door lock actuator	Outputs lock/unlock signal from BCM and locks/unlocks each door.
Fuel lid lock actuator	Performs lock/unlock of the fuel lid.
Door switch	Inputs door open/close condition to BCM.
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM.

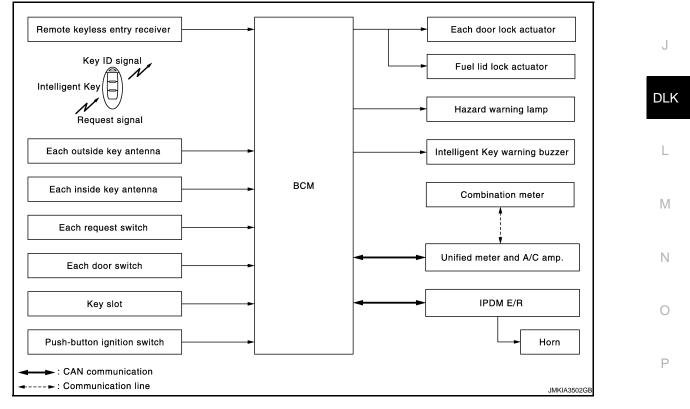
### < SYSTEM DESCRIPTION >

Item	Function
Request switch	Inputs lock/unlock operation to BCM.
Key slot	Inputs key insert/remove signal to BCM.
Intelligent Key	Transmits button operation to remote keyless entry receiver.
Outside key antenna	Detects if Intelligent Key is outside the vehicle.
Inside key antenna	Detects if Intelligent Key is inside the vehicle.
Unlock sensor	Detects door lock condition of driver door.
A/T shift selector (detention switch)*	Detects the P range position of A/T selector lever.
Unified meter and A/C amp.	Transmits vehicle seep signal to CAN communication line.
Combination meter	Display, buzzer (combination meter) and KEY warning lamp are installed to combination meter.
Trunk lid opener actuator	Transmits trunk open operation to BCM.
Trunk lid opener request switch	Inputs lock/unlock operation to BCM.
Trunk lid opener cancel switch	Cancels the trunk open operation.
Trunk room lamp switch	Inputs trunk lid open/close condition to BCM.
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound.
Hazard warning lamp	Warns the user of the door and trunk lid open/close condition and inappropriate operations with the lamps blink.
TCM*	Transmits shift position signal to BCM via CAN communication line.
Push-button ignition switch	Inputs push-button ignition switch ON/OFF condition to BCM.

\*: With A/T models

## DOOR LOCK FUNCTION

## DOOR LOCK FUNCTION : System Diagram



## DOOR LOCK FUNCTION : System Description

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INFOID:000000005654779

Only when pressing the request switch, it is possible to lock and unlock the door by carrying the Intelligent Key.

### < SYSTEM DESCRIPTION >

### **OPERATION DESCRIPTION**

- When the BCM detects that each door request switch is pressed, it starts the outside key antenna and inside key antenna corresponding to the pressed door request switch and transmits the request signal to the Intelligent Key. Then check that the Intelligent Key is near the door.
- If the Intelligent Key is within the outside key antenna detection area, it receives the request signal and transmits the key ID signal to the BCM via remote keyless entry receiver.
- BCM receives the key ID signal and compares it with the registered key ID.
- BCM lock/unlock each door and fuel lid and sounds Intelligent Key buzzer warning (lock: 2 times, unlock: 1 time) at the same time as a reminder.

#### **OPERATION CONDITION**

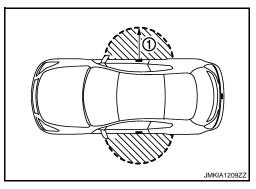
If the following conditions are satisfied, door lock/unlock operation is performed if the request switch is operated.

Each request switch operation	Operation condition
Lock operation	<ul> <li>All doors are closed</li> <li>P position warning is not activated</li> <li>Panic alarm is not activated</li> <li>Intelligent Key is outside the vehicle</li> <li>Intelligent Key is within outside key antenna detection area</li> </ul>
Unlock operation	<ul> <li>Panic alarm is not activated</li> <li>Intelligent Key is outside the vehicle</li> <li>Intelligent Key is within outside key antenna detection area *</li> </ul>

\*: Even with a registered Intelligent Key remaining inside the vehicle, door locks can be unlocked from outside of the vehicle with a spare Intelligent Key as long as key IDs are different.

### OUTSIDE KEY ANTENNA DETECTION AREA

The outside key antenna detection area of door lock/unlock function is in the range of approximately 80 cm (31.50 in) surrounding the driver, passenger door handles (1) . However, this operating range depends on the ambient conditions.



### SELECTIVE UNLOCK FUNCTION

#### Lock Operation

When an LOCK signal is sent from door request switch (driver side or passenger side), all doors and fuel lid are locked.

#### Unlock Operation

- When an UNLOCK signal from driver side door request switch is transmitted, driver side door and fuel lid unlocks. When another UNLOCK signal is transmitted within 60 seconds, passenger side door unlocks.
- When an UNLOCK signal from passenger side door request switch is transmitted, passenger side door unlock. When another UNLOCK signal is transmitted within 60 seconds, driver side door and fuel lid unlocks.

Selective unlock operation mode can be changed using "DOOR LOCK-UNLOCK SET" mode in "WORK SUP-PORT". Refer to <u>DLK-47, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)"</u>.

#### HAZARD AND BUZZER REMINDER FUNCTION

During lock, unlock, operation by each request switch, the hazard warning lamps and Intelligent Key warning buzzer blinks or honk as a reminder.

When doors are locked, unlocked by each request switch, BCM honks Intelligent Key warning buzzer as a reminder and blinks.

Operating Function of Hazard and Buzzer Reminder

### < SYSTEM DESCRIPTION >

Operation	Hazard warning lamp blinks	Intelligent Key warning buzzer honk	A
Unlock	Once	Once	
Lock	Twice	Twice	
			• 6

Hazard and buzzer reminder does not operate if ignition switch ON position.

#### How to Change Hazard and Buzzer Reminder Mode

Refer to DLK-49, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

#### AUTO DOOR LOCK FUNCTION

When all doors are locked, ignition switch is in the OFF position and key switch is OFF (Intelligent Key is not inserted in key slot), doors are unlocked with door request switch

When BCM does not receive the following signals within 60 seconds, all doors and fuel lid are locked.

- Door switch is ON (door is opene)
- Door is locked
- Ignition switch is ON (ignition switch is pressed)
- Key switch is ON (Intelligent Key is inserted in key slot)

Auto door lock mode can be changed by the "AUTO LOCK SET" mode in "WORK SUPPORT". Refer to <u>DLK-</u> 49, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

#### INTERIOR ROOM LAMP CONTROL

Intelligent Key system turns on interior lamp by receiving UNLOCK signal from door request switch. For detailed description. Refer to <u>INL-5, "System Description"</u>.

### LIST OF OPERATION RELATED PARTS

Parts marked with  $\times$  are the parts related to operation.

Door lock function	Intelligent Key	Key slot	Remote keyless entry receiver	Door switch	Door request switch	Door lock actuator and fuel lid lock actuator	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	CAN communication system	BCM	Hazard warning lamp	Push-button ignition switch	Combination meter	l J DLK
Door lock/unlock function by request switch	×	×	×	×	Х	×	×	×			×				
Hazard and buzzer reminder function for door lock/ unlock operation									×	×	×	×		×	L
Selective unlock function by request switch	×				×	×	×	×			×				
Auto door lock function	×	×		×	×	×					×		×		M

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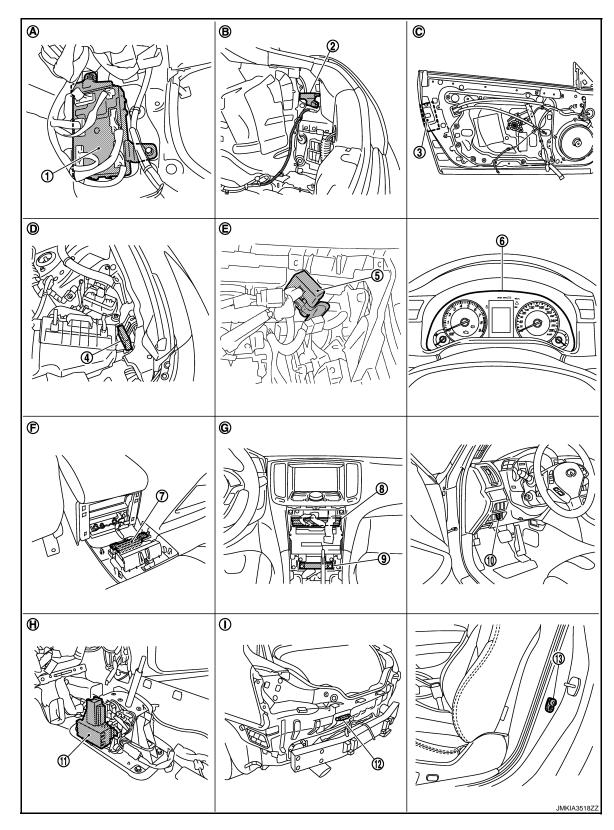
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### < SYSTEM DESCRIPTION >

### DOOR LOCK FUNCTION : Component Parts Location

INFOID:000000005654781



1. BCM M118, M119, M120, M121, M122, M123

Intelligent Key warning buzzer E57

Inside key antenna (console) M146

2. Fuel lid lock actuator B242

5.

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- Remote keyless entry receiver M104 6. Unified meter and A/C amp. M66, 9. M67
- 3. Driver side door lock assembly D15
  - Combination meter M53
  - Inside key antenna (instrument center) M131

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7.

### < SYSTEM DESCRIPTION >

- 10. Key slot M22
- 13. Driver side door switch B16
- A. Dash side lower (passenger side)
- D. View with hood seal assembly removed
- G. View with cluster lid C removed
- \*: With A/T models

- 11. A/T shift selector (detention switch)\* M137
- B. View with trunk side finisher removed
  - Engine room dash panel

Ε.

H. View with center console assembly removed

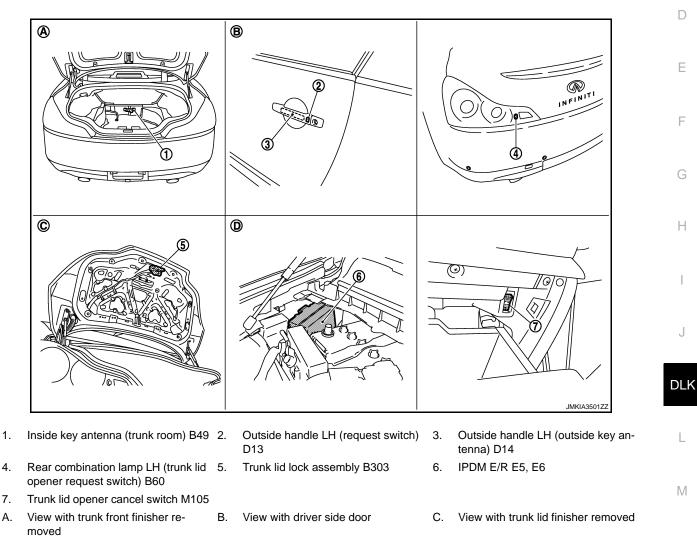
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 Outside key antenna (rear bumper) B63
 View with driver side door finisher removed
 View with console rear finisher removed

А

В

View with rear bumper removed



# DOOR LOCK FUNCTION : Component Description

Engine room dash panel (RH)

Item	Function	
BCM	Controls the door lock function.	
IPDM E/R	Sounds horn and blinks head lamp via CAN communication between BCM.	
Door lock actuator	Outputs lock/unlock signal from BCM and locks/unlocks each door.	
Door switch	Inputs door open/close condition to BCM.	
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM.	
Request switch	Inputs lock/unlock operation to BCM.	

Revision: 2009 November

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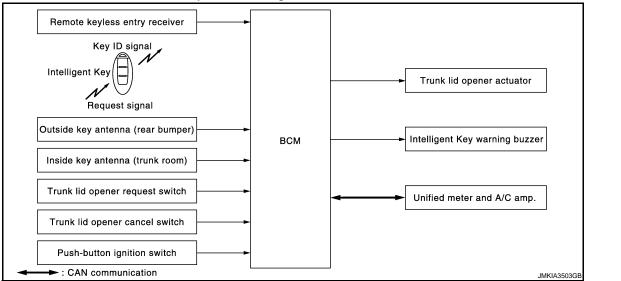
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### < SYSTEM DESCRIPTION >

ltem	Function
Intelligent Key	Transmits button operation to remote keyless entry receiver.
Outside key antenna	Detects if Intelligent Key is outside the vehicle.
Inside key antenna	Detects if Intelligent Key is inside the vehicle.
Fuel lid lock actuator	Outputs lock/unlock signal from BCM and lock/unlocks fuel filler lid.
Combination meter	Hazard warning lamp is installed to combination meter.
Unified meter and A/C amp.	Transmits hazard warning lamp signal to BCM via CAN communication line.
Push-button ignition switch	Inputs push-button ignition switch ON/OFF condition to BCM.
Key slot	Inputs key insert/remove signal to BCM.
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound.
Hazard warning lamp	Warns the user of the door lock/unlock condition and in appropriate operations with the lamps blink.

## TRUNK OPEN FUNCTION

## TRUNK OPEN FUNCTION : System Diagram



## TRUNK OPEN FUNCTION : System Description

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### TRUNK LID OPENER

- When the BCM detects that trunk lid opener request switch is pressed, it activates the outside key antenna (rear bumper) and inside key antenna and transmits the request signal to the Intelligent Key. And then, checks that the Intelligent Key is near the trunk lid.
- If the Intelligent Key is within the outside key antenna detection area, it receives the request signal and transmits the key ID signal to the BCM via remote keyless entry receiver.
- BCM receives the key ID signal and compares it with the registered key ID.
- BCM transmits the trunk open request signal and sounds Intelligent Key warning buzzer 4 times at the same time (buzzer reminder). However, buzzer reminder does not operate when ignition switch is in the ON position.
- When BCM receives the trunk open request signal, it operates the trunk lid opener actuator and opens the trunk.

### How to change buzzer reminder mode

With CONSULT-III

Refer to DLK-49, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

### **OPERATION CONDITION**

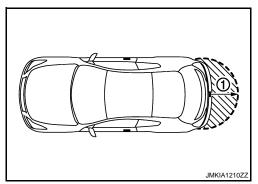
If the following conditions are not satisfied, trunk open operation is not performed even if the trunk lid opener request switch is operated.

### < SYSTEM DESCRIPTION >

Trunk lid opener request switch operation	Operation condition	А
Trunk open operation	<ul> <li>Vehicle speed is less than 5 km/h (3 MPH)</li> <li>Intelligent Key is within outside key antenna (rear bumper) detection area</li> <li>Trunk cancel switch is ON</li> <li>Key reminder functions operate (trunk)</li> <li>Vehicle security system is disarmed or in the per-armed phase.</li> </ul>	В

### OUTSIDE KEY ANTENNA DETECTION AREA

The outside key antenna detection area of trunk open function is in the range of approximately 80 cm (31.50 in) surrounding trunk opener request switch (1). However, this operating range depends on the ambient conditions.



### LIST OF OPERATION RELATED PARTS

Parts marked with  $\times$  are the parts related to operation.

Trunk open function	Intelligent Key	Remote keyless entry receiver	Trunk room lamp switch	Trunk opener request switch	Trunk lid opener actuator	Inside key antenna (trunk)	Outside key antenna (rear bumper)	Intelligent Key warning buzzer	CAN communication system	BCM	Hazard warning lamp	Trunk lid opener cancel switch
Trunk open function by the trunk opener request switch	×	×	×	×	×	Х	Х		×	×		×
Buzzer reminder for trunk open operation								×	×	×		

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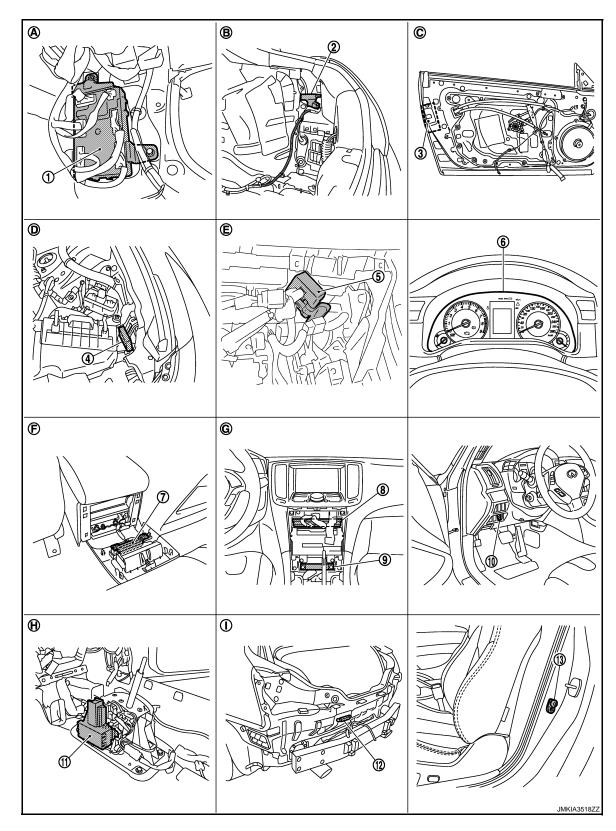
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### < SYSTEM DESCRIPTION >

### TRUNK OPEN FUNCTION : Component Parts Location

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1. BCM M118, M119, M120, M121, M122, M123

Intelligent Key warning buzzer E57

Inside key antenna (console) M146

2. Fuel lid lock actuator B242

5.

8.

- Remote keyless entry receiver M104 6. Unified meter and A/C amp. M66, 9. M67
- 3. Driver side door lock assembly D15
  - Combination meter M53
  - Inside key antenna (instrument center) M131

4.

7.

### < SYSTEM DESCRIPTION >

- 10. Key slot M22
- 13. Driver side door switch B16
- Α. Dash side lower (passenger side)
- D. View with hood seal assembly removed
- G. View with cluster lid C removed
- \*: With A/T models

- 11. A/T shift selector (detention switch)\* M137
- View with trunk side finisher re-Β. moved
  - Engine room dash panel

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- Η. View with center console assembly removed
- 12. Outside key antenna (rear bumper) B63 C. View with driver side door finisher removed F. View with console rear finisher re-

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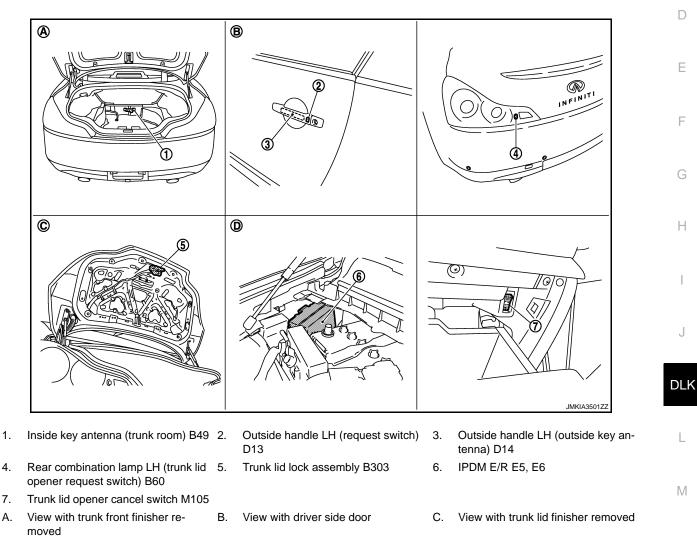
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- moved
  - View with rear bumper removed

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# **TRUNK OPEN FUNCTION : Component Description**

Engine room dash panel (RH)

Item	Function	
BCM	Controls the trunk open function.	F
Trunk lid opener actuator	Transmits trunk open operation to BCM.	
Unified meter and A/C amp.	Transmits vehicle seep signal to CAN communication line.	
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM.	
Trunk lid opener request switch	Inputs lock/unlock operation to BCM.	
Intelligent Key	Transmits button operation to remote keyless entry receiver.	

Revision: 2009 November

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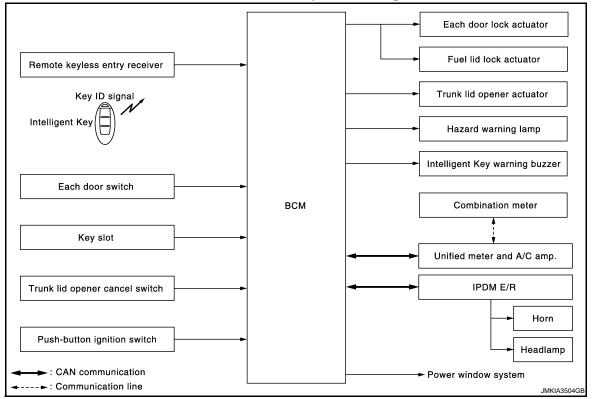
### < SYSTEM DESCRIPTION >

Item	Function
Outside key antenna (rear bumper)	Detects if Intelligent Key is outside the vehicle.
Inside key antenna (trunk room)	Detects if Intelligent Key is inside the vehicle.
Trunk lid opener cancel switch	Cancels the trunk open operation.
Intelligent Key warning buzzer	Warns the user of the open condition and inappropriate operations with the buzzer sound.
Push-button ignition switch	Inputs push-button ignition switch ON/OFF condition to BCM.

## REMOTE KEYLESS ENTRY FUNCTION

## REMOTE KEYLESS ENTRY FUNCTION : System Diagram

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## **REMOTE KEYLESS ENTRY FUNCTION : System Description**

INFOID:000000005654788

The Intelligent Key has the same functions as the remote control entry system. Therefore, it can be used in the same manner as the remote controller by operating the door lock/unlock button.

### OPERATION

Remote keyless entry system controls operation of the following items.

- Door lock/unlock
- Selective unlock
- Trunk lid open
- Hazard and horn reminder
- Auto door lock
- Panic alarm
- Power window down
- Interior lamp

### **OPERATION AREA**

To check that the Intelligent Key works normally, use within 1 m (3 ft) range of each doors, however the operable range may differ according to surroundings.

### DOOR LOCK/UNLOCK FUNCTION

• When door lock/unlock button of the Intelligent Key is pressed, lock signal or unlock signal transmitted from Intelligent Key to BCM via remote keyless entry receiver.

### < SYSTEM DESCRIPTION >

- When BCM receives the door lock/unlock signal, it operates all door lock actuators and fuel lid lock actuator the hazard lamp (lock: 2 times, unlock: 1 time) and horn chirp signal to IPDM E/R at the same time as a reminder.
- IPDM E/R honks horn (lock: 2 times) as a reminder

### OPERATION CONDITION

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Remote controller operation	Operation condition	Operation	
Unlock	More than 3 seconds are passed since intelligent Key is removed from key slot.	All doors and fuel lid unlock	(

#### SELECTIVE UNLOCK FUNCTION

- When an LOCK signal is transmitted from Intelligent Key, all doors and fuel lid are locked.
- When an UNLOCK signal is transmitted from Intelligent Key once, driver side door and fuel lid are unlocked.
  Then, if an UNLOCK signal is transmitted from Intelligent Key again within 60 seconds, all other doors are unlocked.

Selective unlock operation mode can be changed using "DOOR LOCK-UNLOCK SET" mode in "WORK SUP-PORT". Refer to <u>DLK-47, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)"</u>.

#### TRUNK OPEN FUNCTION

- When trunk button of the Intelligent Key is pressed, the trunk open signal is transmitted from the Intelligent Key to the BCM via remote keyless entry receiver.
- When BCM receives the trunk open request signal, it operates the trunk lid opener actuator and opens the trunk.

### OPERATION CONDITION

Remote controller operation	Remote controller operation Operation condition				
Trunk open	<ul> <li>Press and hold the trunk open button for 0.5 second or more*</li> <li>Ignition switch is except the ON position</li> <li>Trunk lid opener cancel switch is ON</li> <li>Vehicle speed is less than 5 km/h (3 MPH)</li> </ul>	Trunk open	I		

\*: Pattern of trunk open button can be selected using CONSULT-III. Refer to <u>DLK-49, "INTELLIGENT KEY :</u> J <u>CONSULT-III Function (BCM - INTELLIGENT KEY)"</u>.

### HAZARD AND HORN REMINDER FUNCTION

When doors are locked or unlocked by Intelligent Key, BCM blinks hazard warning lamps as a reminder and transmits horn chirp signal to IPDM E/R. IPDM E/R sounds horn as a reminder.

The hazard and horn reminder has a horn chirp mode (C mode) and a non-horn chirp mode (S mode).

Operating Function of Hazard and Horn Reminder

		C mode		S mode			
Intelligent Key operation	Lock	Unlock	Trunk open	Lock	Unlock	Trunk open	M
Hazard warning lamp blinks	Twice	Once	—	Twice	_	—	
Horn sound	Once	—	_	_		_	N

Hazard and horn reminder does not operate in the following condition.

- Ignition switch position is ON
- Door is open

#### How to change hazard and horn reminder mode

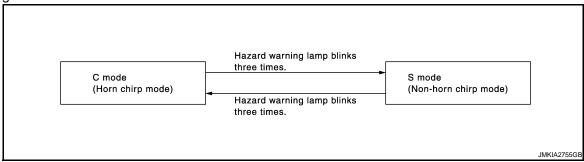
With CONSULT-III

Refer to DLK-49, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

**Without CONSULT-III** 

### < SYSTEM DESCRIPTION >

When LOCK and UNLOCK signals are sent from the Intelligent Key for more than 2 seconds at the same time, the hazard and horn reminder mode is changed and hazard warning lamp blinks and horn sounds as per the following items:



### AUTO DOOR LOCK FUNCTION

When all doors and fuel lid are locked, ignition switch is OFF (ignition switch is not pressed) and key switch is OFF (Intelligent Key is not inserted in key slot), doors and fuel lid are unlocked with Intelligent Key button. When BCM does not receive the following signals within 60 seconds, all doors and fuel lid are locked.

- Door switch is ON (door is opene)
- Door is locked
- Ignition switch is ON
- Key switch is ON (Intelligent Key is inserted in key slot)

Auto door lock mode can be changed by the "AUTO LOCK SET" mode in "WORK SUPPORT". Refer to <u>DLK-49, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)"</u>.

### PANIC ALARM FUNCTION

When ignition switch is OFF (ignition switch is not pressed) and key switch is OFF (Intelligent Key is not inserted in key slot), BCM receives PANIC ALARM signal from Intelligent Key.

BCM turns on and off headlamp intermittently and transmits theft warning horn signal to IPDM E/R. Then, IPDM E/R turns on and off horn intermittently.

The headlamp blinks and the horn sounds intermittently.

- The alarm automatically turns off:
- After 25 seconds
- When BCM receives any signal from Intelligent Key

Panic alarm function mode can be changed by "PANIC ALARM SET" mode in "WORK SUPPORT". Refer to <u>DLK-49, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)"</u>.

### **KEYLESS POWER WINDOW DOWN (OPEN) FUNCTION**

Driver side and passenger side power windows open when the unlock button on Intelligent Key is activated and kept pressed for more than 3 seconds with the ignition switch OFF. The windows keep opening if the unlock button is continuously pressed.

The power window opening stops when the following operations are performed:

- When the unlock button is kept pressed more than 15 seconds.
- When the ignition switch is turned ON while the power window opening is operated.
- When the unlock button is released.

Keyless power window down operation mode can be changed by "PW DOWN SET" mode in "WORK SUP-PORT". Refer to <u>DLK-49</u>, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

### INTERIOR ROOM LAMP CONTROL

Intelligent Key system turns on interior lamp by receiving UNLOCK signal from Intelligent Key. For detailed description, refer to <u>INL-5. "System Description"</u>.

### LIST OF OPERATION RELATED PARTS

Parts marked with  $\times$  are the parts related to operation.

### < SYSTEM DESCRIPTION >

Remote keyless entry functions	Intelligent Key	Key slot	Door request switch (Driver, Passenger)	Door switch	Door lock actuator	Intelligent Key warning buzzer	CAN communication system	BCM	Combination meter	Unified meter and A/C amp.	Hazard warning lamp	Horn	IPDM E/R	Head lamp	Trunk lid opener actuator	A B C D
Door lock/unlock function by remote control button	×	×		×	×		×	×								E
Trunk open function by remote control button	×					×	×	×		×					×	
Hazard and horn reminder function	×					×	×	×	×		×	×	×			_
Selective unlock function	×			×	×		×	×								F
Keyless power window down (open) function	×	×					×	×								
Auto door lock function	×	×		×			×	×								G
Panic alarm function	×		×				×	×				×	×	×		

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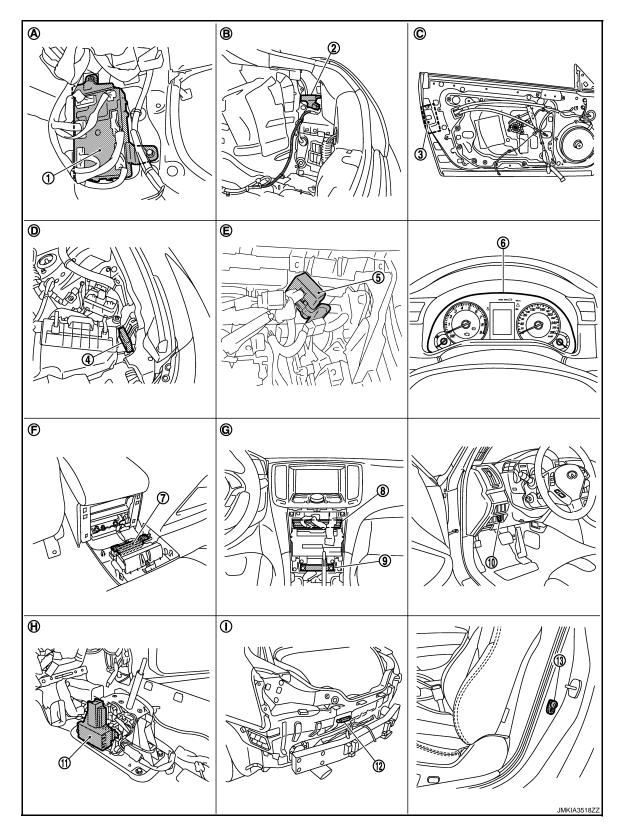
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### < SYSTEM DESCRIPTION >

### **REMOTE KEYLESS ENTRY FUNCTION : Component Parts Location**

INFOID:000000005654789



BCM M118, M119, M120, M121, 1. M122, M123

Intelligent Key warning buzzer E57

Inside key antenna (console) M146

2. Fuel lid lock actuator B242

8.

- Remote keyless entry receiver M104 6. 5. Unified meter and A/C amp. M66, 9. M67
- Driver side door lock assembly D15 3.
  - Combination meter M53
  - Inside key antenna (instrument center) M131

4.

7.

### < SYSTEM DESCRIPTION >

- 10. Key slot M22
- 13. Driver side door switch B16
- Α. Dash side lower (passenger side)
- D. View with hood seal assembly removed
- G. View with cluster lid C removed
- \*: With A/T models

- 11. A/T shift selector (detention switch)\* M137
- View with trunk side finisher re-Β. moved
  - Engine room dash panel

Ε.

- Η. View with center console assembly removed
- 12. Outside key antenna (rear bumper) B63 C. View with driver side door finisher removed F. View with console rear finisher re-

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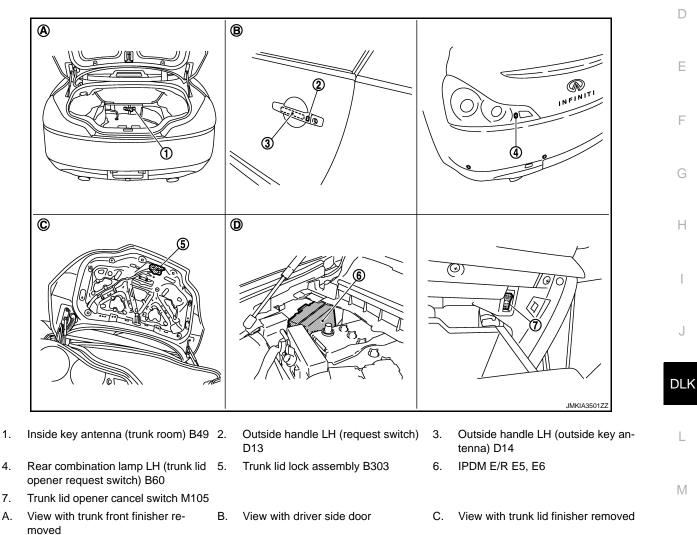
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- moved
  - View with rear bumper removed

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## **REMOTE KEYLESS ENTRY FUNCTION : Component Description**

Item	Function	
BCM	Controls the door lock function and trunk open function.	
IPDM E/R	Sounds horn and blinks head lamp via CAN communication between BCM.	
Door lock actuator	Outputs lock/unlock signal from BCM and locks/unlocks each door.	
Door switch	Inputs door open/close condition to BCM.	
Key slot	Inputs key insert/remove signal to BCM.	
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM.	

Revision: 2009 November

D.

Engine room dash panel (RH)

INFOID:000000005654790

### < SYSTEM DESCRIPTION >

Item	Function
Combination meter	Hazard warning lamp is installed to combination meter.
Unified meter and A/C amp.	Transmits vehicle seep signal to CAN communication line.
Intelligent Key	Transmits button operation to remote keyless entry receiver.
Trunk lid opener actuator	Transmits trunk lid open operation to BCM.
Trunk lid opener cancel switch	Cancels the trunk open operation.
Fuel lid lock actuator	Performs lock/unlock of the fuel lid.
Push-button ignition switch	Input push-button ignition switch ON/OFF condition to BCM.
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound.
Hazard warning lamp	Warns the user of the door lock/unlock condition and in appropriate operations with the lamps blink.

## KEY REMINDER FUNCTION

### KEY REMINDER FUNCTION : System Diagram

Each inside key antenna Signals Intelligent Key Each door lock actuator Fuel lid lock actuator Fuel lid lock actuator Trunk lid opener actuator Trunk room lamp switch Unlock sensor Unlock sensor MKIA3500CB

## KEY REMINDER FUNCTION : System Description

INFOID:000000005654792

INFOID:000000005654791

Key reminder is the function that prevents the key from being left in the vehicle. Key reminder has the following 3 functions.

Key remainder function	Operation condition	Operation
Driver door closed*	<ul> <li>Right after driver side door is closed under the following conditions</li> <li>Door lock operation is performed</li> <li>Driver side door is opene</li> <li>Driver side door is in unlock state</li> </ul>	All doors unlock
Door is open or closed	<ul> <li>Right after all doors are closed under the following conditions</li> <li>Intelligent Key is inside the vehicle</li> <li>Any door is opene</li> <li>All doors are locked by door lock and unlock switch or door lock knob</li> </ul>	<ul> <li>All doors unlock</li> <li>Honk Intelligent Key warning buzzer</li> </ul>
Trunk is closed	<ul><li>Right after trunk is closed under the following conditions</li><li>Intelligent Key is inside trunk room</li><li>All doors are closed</li><li>All doors are locked</li></ul>	<ul> <li>Trunk open</li> <li>Honk Intelligent Key warning buzzer</li> </ul>

\*: If the door closing impact shocks the door lock knob, or contacts against baggage with the door lock knob might activate the door locks accidentally but unlock operation is perform in these cases.

#### CAUTION:

• The above function operates when the Intelligent Key is inside the vehicle. However, there may be times when the Intelligent Key cannot be detected, and this function does operate when the Intelli-

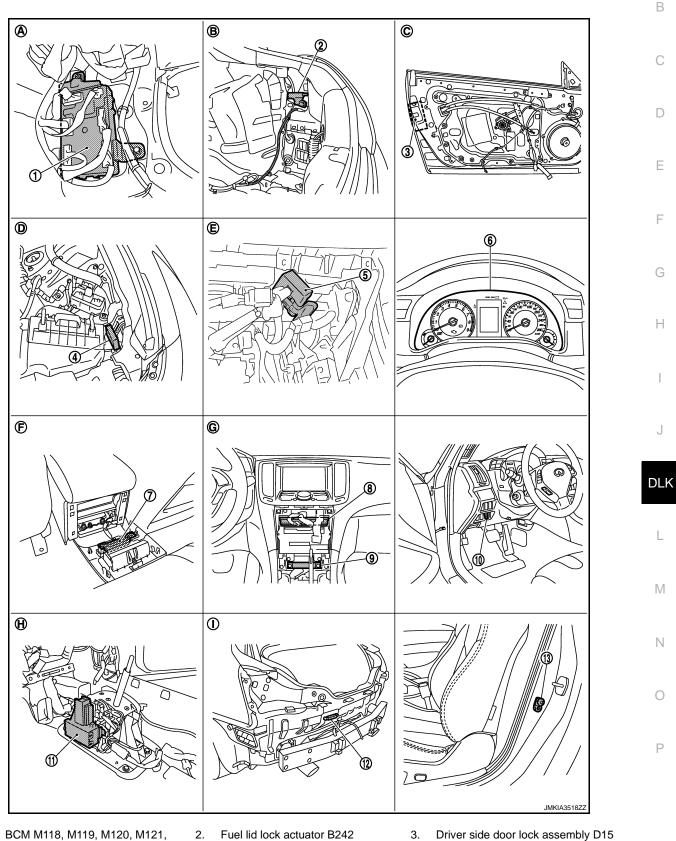
### < SYSTEM DESCRIPTION >

gent Key is on the instrument panel, rear parcel shelf, or in the glove box. Also, this system some-times does not operate if the Intelligent Key is in the door pocket for the open door.

**KEY REMINDER FUNCTION : Component Parts Location** 

INFOID:000000005654793

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- 1. M122, M123 4.
  - Intelligent Key warning buzzer E57 5.
- Remote keyless entry receiver M104 6.
- Combination meter M53

**DLK-35** 

2010 G37 Coupe

### < SYSTEM DESCRIPTION >

- 7. Inside key antenna (console) M146
- 10. Key slot M22

\*: With A/T models

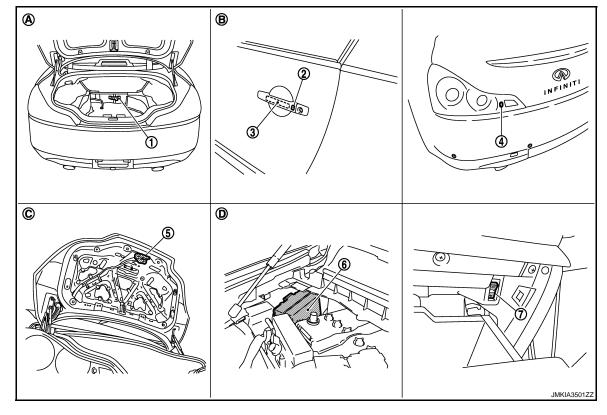
- 13. Driver side door switch B16
- A. Dash side lower (passenger side)
- D. View with hood seal assembly removed
- G. View with cluster lid C removed

- 8. Unified meter and A/C amp. M66, M67
- 11. A/T shift selector (detention switch)\* M137
- B. View with trunk side finisher removed
- E. Engine room dash panel
- H. View with center console assembly I. removed

Inside key antenna (instrument center) M131

9.

- 12. Outside key antenna (rear bumper) B63
- C. View with driver side door finisher removed
- F. View with console rear finisher removed
  - View with rear bumper removed



- 1. Inside key antenna (trunk room) B49 2.
- 4. Rear combination lamp LH (trunk lid 5. opener request switch) B60
- 7. Trunk lid opener cancel switch M105
- View with trunk front finisher removed
- D. Engine room dash panel (RH)

## WARNING FUNCTION

### WARNING FUNCTION : System Description

R

### **OPERATION DESCRIPTION**

The warning function are as per the following items and are given to the user as warning information and warnings using combinations of Intelligent Key warning buzzer, KEY warning lamp, key slot indicator and information display in combination meter.

- Intelligent Key system malfunction
- OFF position warning
- P position warning

#### Outside handle LH (request switch) D13

- Trunk lid lock assembly B303
- View with driver side door
- Outside handle LH (outside key antenna) D14
- 6. IPDM E/R E5, E6
- C. View with trunk lid finisher removed

INFOID:000000005654794

### < SYSTEM DESCRIPTION >

- ACC warning • Take away warning А Door lock operation warning Key warning
  Intelligent Key insert information
  Engine start information В Steering lock information • Intelligent Key low battery warning С
- Key ID warning

#### **OPERATION CONDITION**

Once the following condition from below is established, alert or warning is executed.

Warning/Inform	mation functions	Operation procedure
Intelligent Key system ma	lfunction	When a malfunction is detected on BCM, "KEY" warning lamp illuminates.
	For internal	<ul><li>Ignition switch: ACC position.</li><li>Door switch (driver side): ON (Door is open).</li></ul>
OFF position warning	For external*	OFF position warning (For internal) is in active mode, driver side door is closed. <b>NOTE:</b> OFF position (For external) active only when each of the sequence occurs as below: P position warning $\rightarrow$ ACC warning $\rightarrow$ OFF position warning (For internal) $\rightarrow$ OFF position warning (For internal)
D position worning*	For internal	<ul><li>Shift position: Except P position.</li><li>Engine is running to stopped (Ignition switch is ON to OFF).</li></ul>
P position warning*	For external	Warning is activated when driver door is closed from the open position while the P position warning (for inside vehicle) is ON.
ACC warning*		<ul> <li>When P position warning is in active mode, shift position changes P position.</li> <li>Ignition switch: ACC position.</li> </ul>
	Door is open to close	<ul> <li>Ignition switch: Except LOCK position.</li> <li>Door switch: ON to OFF (Door is open to close).</li> <li>Intelligent Key cannot be detected inside the vehicle.</li> </ul>
Take away warning	Door is open	<ul> <li>Door switch: ON (Door is open).</li> <li>Key ID verification every 5 seconds when registered Intelligent Key cannot be detected inside the vehicle.</li> </ul>
	Push button-ignition switch operation	<ul> <li>Ignition switch: Except LOCK position.</li> <li>Press push-button ignition switch.</li> <li>Intelligent Key cannot be detected inside the vehicle.</li> </ul>
	Intelligent Key is removed from key slot	• When Intelligent Key is removed from key slot, Intelligent Key cannot be detected inside the vehicle.
Door lock operation warni	ng	When door lock operation is requested while door lock operating condition of door request switch not satisfied.
Key warning		<ul> <li>Ignition switch is OFF position.</li> <li>Driver side door switch: ON (Driver side door is open).</li> <li>Intelligent Key is inserted in key slot.</li> </ul>
Intelligent Key insert information		<ul> <li>Door switch: ON to OFF (Door is open to close).</li> <li>Intelligent Key is out of key slot.</li> <li>Intelligent Key cannot be detected inside the vehicle.</li> </ul>
	Ignition switch is ON posi- tion	<ul> <li>Ignition switch: ON position.</li> <li>Shift position: P position.*</li> <li>Engine is stopped.</li> </ul>
Engine start information	Ignition switch is except ON position	<ul> <li>Ignition switch: Except ON position.</li> <li>Shift position: P position.*</li> <li>Intelligent Key is inserted in key slot or Intelligent Key can be detected inside the vehicle.</li> </ul>
Steering lock information	1	When steering lock cannot be released after ignition switch is turned ON.

D

#### < SYSTEM DESCRIPTION >

Warning/Information functions	Operation procedure
Intelligent Key low battery warning	When Intelligent Key is low battery, BCM is detected after ignition switch is turned ON.
Key ID warning	When registered intelligent Key cannot be detected inside the vehicle after ig- nition switch is turned ON.

\*: M/T models do not apply.

### WARNING METHOD

The following table shows the alarm or warning methods with chime. Information display (combination meter), "KEY" indicator or key slot indicator when the warning conditions are met.

					Warning chime			
Warning/Information functions		"KEY" warn- ing lamp	Information display (combination meter)	Key slot in- dicator	Combination meter buzzer	Intelligent Key warning buzzer		
Intelligent Key syster	m malfunction	Illuminate	uminate —		—	—		
OFF position warn-	For internal	_	_	—	Activate	_		
ing	For external*	_	_	—	—	Activate		
	For internal			_	Activate	—		
P position warning*	For external	_	BI SHIFT	_		Active		
ACC warning*			PUSH JMKIA0047GB					
	Door is open to close	_		Blink	Activate	Activate		
	Door is open	_		Blink	—	_		
Take away warning	Push-ignition switch operation	_		Blink	Activate	_		
	Intelligent Key is removed from key slot	_	JMKIA0036GB	Blink	_	_		
Door lock operation warning	Request switch operation	_	_	_	_	Activate		
Key ID warning			NO KEY	_		_		

### < SYSTEM DESCRIPTION >

		"KEY" warn-			Warning chime			
Warning/Inform	Warning/Information functions		Information display (combination meter)	Key slot in- dicator	Combination meter buzzer	Intelligent Key warning buzzer		
Key warning		_	JMKIA0035GB	Blink	Activate	_		
Intelligent Key inser	t information		JMKIA0034GB	Indicate	_			
Engine start infor-	Automatic trans mission models		BRAKE BRAKE	_	_			
mation	Manual trans- mission models		CLUCH MIKIA0049GB		_			
Steering lock inform	nation				_			
Intelligent Key low b	pattery warning		JMKIA0048GB	_				

\*: M/T models do not apply.

LIST OF OPERATION RELATED PARTS

Parts marked with  $\times$  are the parts related to operation.

### < SYSTEM DESCRIPTION >

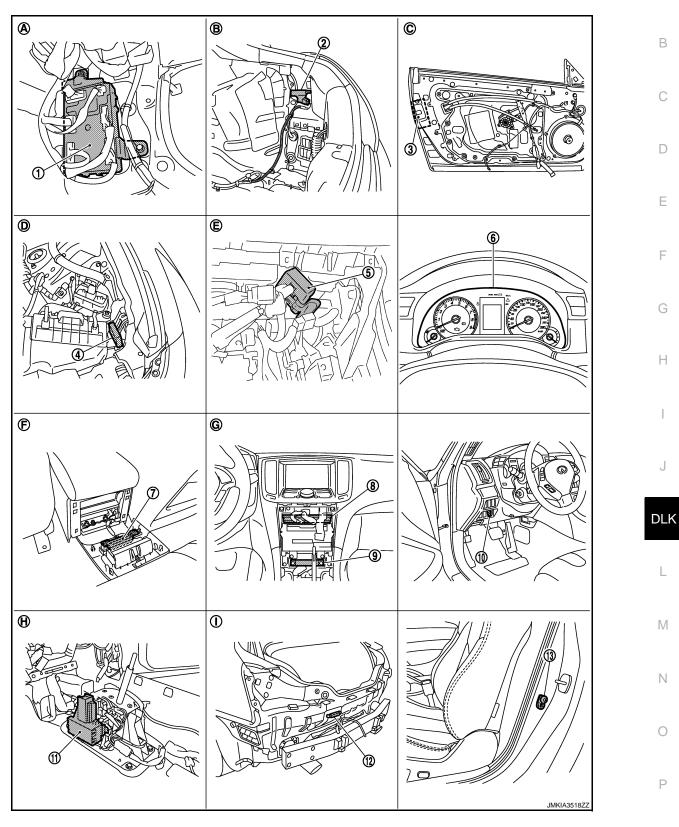
Warning function		Intelligent Key	Key slot	Ignition switch	Door switch	Door request switch	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	Combination meter warning buzzer	CAN communication system	BCM	Combination meter display	Key slot indicator	Detention switch	"KEY" warning lamp
Intelligent Key system mal	function										×	×				×
OFF position warning	For internal				×					×	×	×				
g	For external				×				×			×				
P position warning	P position warning			×						×	×	×	×		×	
ACC warning				×						×	×	×	×		×	
	Door is open or close	×			×		×		×	×	×	×	×	×		
	Door is open	×			×		×				×	×	×	×		
Take away warning	Push-button ignition switch operation	×		×			×			×	×	×	×	×		
	Intelligent Key is removed from key slot	×	×				×				×	×	×	×		
Door lock operation warnin	ng	×	×		×	×	×	×	×			×				
Key ID warning			×	×			×				×	×	×			
Key warning		×	×		×					×	×	×	×	×		
Intelligent Key insert inform	nation	×	×	×	×		×				×	×	×	×		
	Ignition switch is ON posi- tion	×	×	×			×				×	×	×		×	
Engine start information	Ignition switch is except ON position	×	×	×			×				×	×	×			
Steering lock information				×							×	×	×			
Intelligent Key low battery	warning	×					×				×	×	×			

### < SYSTEM DESCRIPTION >

## WARNING FUNCTION : Component Parts Location

INFOID:000000005654795

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1. BCM M118, M119, M120, M121, M122, M123

Intelligent Key warning buzzer E57

2. Fuel lid lock actuator B242

5.

8.

- Remote keyless entry receiver M104 6. Unified meter and A/C amp. M66, 9. M67
- 3. Driver side door lock assembly D15
  - Combination meter M53
  - Inside key antenna (instrument center) M131

7. Inside key antenna (console) M146

4.

**DLK-41** 

### < SYSTEM DESCRIPTION >

- 10. Key slot M22
- 13. Driver side door switch B16
- A. Dash side lower (passenger side)
- D. View with hood seal assembly removed
- G. View with cluster lid C removed
- \*: With A/T models

- A/T shift selector (detention switch)\*
   M137
- B. View with trunk side finisher removed
  - Engine room dash panel

Ε.

- H. View with center console assembly removed
- 12. Outside key antenna (rear bumper) B63
- C. View with driver side door finisher removed
- F. View with console rear finisher removed
  - View with rear bumper removed

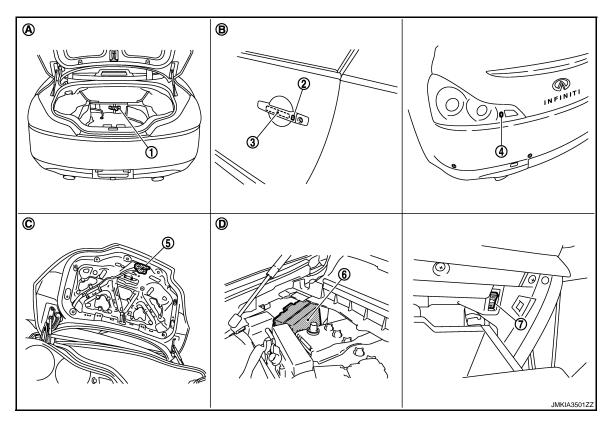
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tenna) D14

IPDM E/R E5, E6



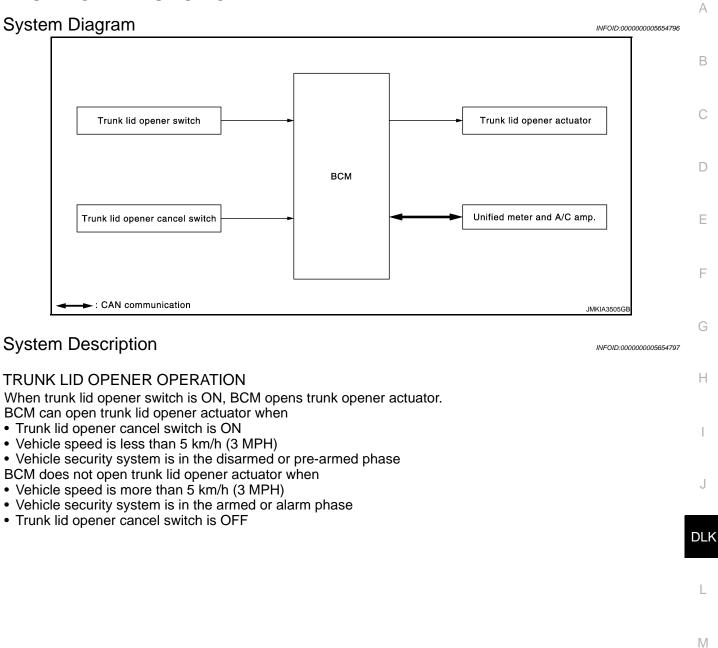
- 1. Inside key antenna (trunk room) B49 2.
- 4. Rear combination lamp LH (trunk lid 5. opener request switch) B60
- 7. Trunk lid opener cancel switch M105
- A. View with trunk front finisher removed
- D. Engine room dash panel (RH)
- Outside handle LH (request switch) D13
- Trunk lid lock assembly B303
- B. View with driver side door
- C. View with trunk lid finisher removed

Outside handle LH (outside key an-

## TRUNK OPEN FUNCTION

### < SYSTEM DESCRIPTION >

## TRUNK OPEN FUNCTION



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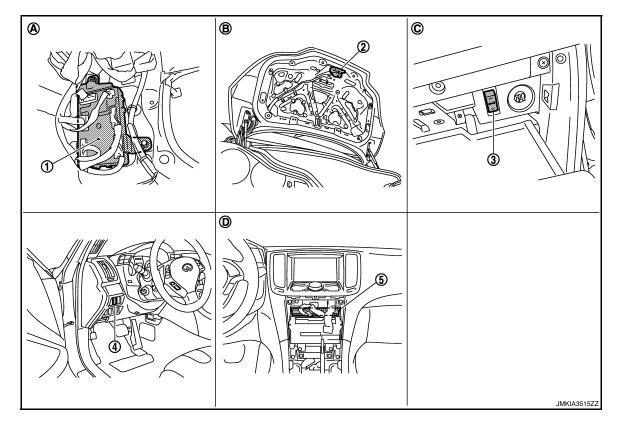
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## **TRUNK OPEN FUNCTION**

### < SYSTEM DESCRIPTION >

## **Component Parts Location**

INFOID:000000005654798



- 1. BCM M118, M119, M120, M121, M122, M123
- 2. Trunk lid lock assembly (trunk lid opener actuator) B303

Unified meter and A/C amp. M67

View with trunk lid finisher removed

C.

5.

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3. Trunk lid opener cancel switch M105

View with glove box open

- 4. Trunk lid opener switch M20
- A. Dash side lower (passenger side)
- D. View with cluster lid C removed

## **Component Description**

Item	Function
BCM	Controls trunk lid open operation.
Trunk lid opener switch	Transmits trunk open operation to BCM.
Trunk lid opener actuator	Opens the trunk after receiving the open signal from BCM.
Trunk lid opener cancel switch	Cancels the trunk open operation.
Unified meter and A/C amp.	Transmits vehicle speed signal to CAN communication line.

## INTEGRATED HOMELINK TRANSMITTER

### < SYSTEM DESCRIPTION >

## INTEGRATED HOMELINK TRANSMITTER

## **Component Description**

Item	Function
Integrated homelink transmitter	A maximum of 3 radio signals can be stored and transmitted to operate the garage door, etc.

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## DIAGNOSIS SYSTEM (BCM) COMMON ITEM

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

INFOID:000000005889909

## APPLICATION ITEM

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

Diagnosis mode	Function Description
Work Support	Changes the setting for each system function.
Self Diagnostic Result	Displays the diagnosis results judged by BCM.
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM. Refer to CONSULT-III opera- tion manual.
Data Monitor	The BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Ecu Identification	The BCM part number is displayed.
Configuration	This function is not used even though it is displayed.

#### 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.

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

#### NOTE:

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

### FREEZE FRAME DATA (FFD)

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

## **DLK-46**

#### < SYSTEM DESCRIPTION >

CONSULT screen item	Indication/Unit	Description					
Vehicle Speed	km/h	Vehicle speed of the mo	ment a particular DTC is detected				
Odo/Trip Meter	km	Total mileage (Odomete	r value) of the moment a particular DTC is detected				
	SLEEP>LOCK		While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK")				
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)				
	LOCK>ACC		While turning power supply position from "LOCK" to "ACC"				
	ACC>ON		While turning power supply position from "ACC" to "IGN"				
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.)				
	CRANK>RUN		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)				
	RUN>URGENT	Power position status of the moment a particular DTC is detected	While turning power supply position from "RUN" to "ACC" (Emer- gency stop operation)				
	ACC>OFF		While turning power supply position from "ACC" to "OFF"				
	OFF>LOCK		While turning power supply position from "OFF" to "LOCK"				
Vehicle Condition	OFF>ACC		While turning power supply position from "OFF" to "ACC"				
	ON>CRANK		While turning power supply position from "IGN" to "CRANKING"				
	OFF>SLEEP		While turning BCM status from normal mode (Power supply posi- tion is "OFF".) to low power consumption mode				
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply posi- tion is "LOCK".) to low power consumption mode				
	LOCK		Power supply position is "LOCK" (Ignition switch OFF with steer- ing 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	<ul> <li>The number is 0 wher</li> <li>The number increases whenever ignition swit</li> </ul>	t ignition switch is turned ON after DTC is detected a malfunction is detected now. If like $1 \rightarrow 2 \rightarrow 338 \rightarrow 39$ after returning to the normal condition the OFF $\rightarrow$ ON.				

## DOOR LOCK

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

### BCM CONSULT-III FUNCTION

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

Diagnosis mode	Function Description	
WORK SUPPORT	Changes the setting for each system function.	
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

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### < SYSTEM DESCRIPTION >

Monitor item	Description
DOOR LOCK-UNLOCK SET	Selective unlock function mode can be changed to operate (ON) or not operate (OFF) with this mode.
AUTOMATIC DOOR LOCK SE- LECT	<ul> <li>Automatic door lock function mode can be selected from the following in this mode.</li> <li>VH SPD: All doors are locked when vehicle speed more than 24km/h (15MPH)</li> <li>P RANGE*: All doors are locked when shifting the selector lever from P position to other than the P position</li> </ul>
AUTOMATIC DOOR UNLOCK SELECT	<ul> <li>Automatic door unlock function mode can be selected from the following in the mode.</li> <li>MODE 1: All doors are unlocked when the power supply position is changed from ON to OFF</li> <li>MODE 2*: All doors are unlocked when shifting the selector lever from any position other than the P to P position</li> <li>MODE 3: Driver side door is unlocked when the power supply position is changed from ON to OFF</li> <li>MODE 4*: Driver side door is unlocked when shifting the selector lever from any position other than the P to P position</li> </ul>
AUTOMATIC LOCK/UNLOCK SET	<ul> <li>Automatic door lock/unlock function mode can be selected from the following in this mode.</li> <li>Off: non-operational</li> <li>Unlock Only: door unlock operation only</li> <li>Lock Only: door lock operation only</li> <li>Lock/Unlock: lock/unlock operation</li> </ul>

\*: P range interlock door lock can be selected for M/T models, but automatic door lock/unlock function does not operate.

### DATA MONITOR

Monitor Item	Contents
REQ SW-DR	Indicated [ON/OFF] condition of door request switch (driver side).
REQ SW-AS	Indicated [ON/OFF] condition of door request switch (passenger side).
REQ SW-BD/TR	Indicated [ON/OFF] condition of trunk lid opener request switch.
DOOR SW-DR	Indicated [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS	Indicated [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR	NOTE: This item is displayed, but cannot be monitored.
DOOR SW-RL	NOTE: This item is displayed, but cannot be monitored.
DOOR SW-BK	NOTE: This item is displayed, but cannot be monitored.
CDL LOCK SW	Indicated [ON/OFF] condition of lock signal from door lock unlock switch.
CDL UNLOCK SW	Indicated [ON/OFF] condition of unlock signal from door lock unlock switch.
KEY CYL LK-SW	Indicated [ON/OFF] condition of lock signal from door key cylinder.
KEY CYL UN-SW	Indicated [ON/OFF] condition of unlock signal from door key cylinder.

### ACTIVE TEST

Test item	Description
DOOR LOCK	<ul> <li>This test is able to check door lock/unlock operation.</li> <li>The all door lock actuators are locked when "ALL LCK" on CONSULT-III screen is touched.</li> <li>The all door lock actuators are unlocked when "ALL UNLK" on CONSULT-III screen is touched.</li> <li>The door lock actuator (driver side) is unlocked when "DR UNLK" on CONSULT-III screen is touched.</li> <li>The door lock actuator (passenger side) is unlocked when "AS UNLK" on CONSULT- III screen is touched.</li> <li>The door lock actuator (passenger side) is unlocked when "AS UNLK" on CONSULT- III screen is touched.</li> <li>"OTR ULK" item is displayed, but cannot be monitored.</li> </ul>

### INTELLIGENT KEY

### < SYSTEM DESCRIPTION >

## **DIAGNOSIS SYSTEM (BCM)**

## INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY) INFOLD:000000005554803

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## WORK SUPPORT

Monitor item	Description	
CONFIRM KEY FOB ID	It can be checked whether Intelligent Key ID code is registered or not in this mode.	
AUTO LOCK SET	Auto door lock time can be changed in this mode. • MODE 1: 1 minute • MODE 2: 5 minutes • MODE 3: 30 seconds • MODE 4: 2 minutes	
LOCK/UNLOCK BY I-KEY	Door lock/unlock function by door request switch (driver side and passenger side) mode can be changed to operate (ON) or not operate (OFF) in this mode.	
ENGINE START BY I-KEY	Engine start function mode can be changed to operate (ON) or not operate (OFF) with this mode.	
TRUNK/GLASS HATCH OPEN	Buzzer reminder function mode by trunk opener request switch can be changed to operate (ON) or not operate (OFF) with this mode.	
PANIC ALARM SET	<ul> <li>Panic alarm button pressing time on Intelligent Key remote control button can be selected from the following with this mode.</li> <li>MODE 1: 0.5 sec.</li> <li>MODE 2: Non-operation</li> <li>MODE 3: 1.5 sec.</li> </ul>	
PW DOWN SET	<ul> <li>Unlock button pressing time on Intelligent Key button can be selected from the following with this mode.</li> <li>MODE 1: 3 sec.</li> <li>MODE 2: Non-operation</li> <li>MODE 3: 5 sec.</li> </ul>	
TRUNK OPEN DELAY	k button pressing on Intelligent Key button can be selected as per the following in this e. ODE 1: Press and hold ODE 2: Press twice ODE 3: Press and hold, or press twice	
LO- BATT OF KEY FOB WARN	Intelligent Key low battery warning mode can be changed to operate (ON) or not operate (OFF) with this mode.	
ANTI KEY LOCK IN FUNCTI	Key reminder function mode can be changed to operate (ON) or not operate (OFF) with this mode.	
HAZARD ANSWER BACK	<ul> <li>Hazard reminder function mode can be selected from the following with this mode.</li> <li>LOCK ONLY: Door lock operation only</li> <li>UNLOCK ONLY: Door unlock operation only</li> <li>LOCK/UNLOCK: Lock/unlock operation</li> <li>OFF: Non-operation</li> </ul>	
ANS BACK I-KEY LOCK	<ul> <li>Buzzer reminder function (lock operation) mode by door request switch (driver side and passenger side) can be selected from the following with this mode.</li> <li>Horn chirp: Sound horn</li> <li>Buzzer: Sound Intelligent Key warning buzzer</li> <li>OFF: Non-operation</li> </ul>	
ANS BACK I-KEY UNLOCK	Buzzer reminder function (unlock operation) mode by door request switch can be changed to operate (ON) or not operate (OFF) with this mode.	
SHORT CRANKING OUTPUT	Starter motor can operate during the times below. <ul> <li>70 msec</li> <li>100 msec</li> <li>200 msec</li> </ul>	
INSIDE ANT DIAGNOSIS	This function allows inside key antenna self-diagnosis.	
HORN WITH KEYLESS LOCK	Horn reminder function mode by Intelligent Key button can be changed to operate (ON) or not operate (OFF) with this mode.	

## < SYSTEM DESCRIPTION >

## DATA MONITOR

Monitor Item	Condition	
REQ SW -DR	Indicates [ON/OFF] condition of door request switch (driver side).	
REQ SW -AS	Indicates [ON/OFF] condition of door request switch (passenger side).	
REQ SW -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*1	Indicates [ON/OFF] condition of clutch switch.	
BRAKE SW 1	Indicates [ON/OFF]* <sup>2</sup> 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	licates [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	Indicates [ON/OFF] condition of P/W DOWN signal from Intelligent Key.	
RKE-MODE CHG	Indicates [ON/OFF] condition of MODE CHANGE signal from Intelligent Key.	

### < SYSTEM DESCRIPTION >

Monitor Item	Condition	
RKE OPE COUN1	When remote keyless entry receiver receives the signal transmitted while operating on Intelli- gent Key, the numerical value start changing.	A
RKE OPE COUN2	NOTE: This item is displayed, but cannot be monitored.	В

\*1: It is displayed but does not operate on M/T models.

\*<sup>2</sup>: 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 is activated after "ON" on CONSULT-III screen is touched.	
PW REMOTO DOWN SET	This test is able to check power window down operation. The power window down is activated after "ON" on CONSULT-III screen is touched.	
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation. The Intelligent Key warning buzzer is activated after "ON" on CONSULT-III screen is touched.	
INSIDE BUZZER	<ul> <li>This test is able to check warning chime in combination meter operation.</li> <li>Take away warning chime sounds when "TAKE OUT" on CONSULT-III screen is touched.</li> <li>Key warning chime sounds when "KEY" on CONSULT-III screen is touched.</li> <li>OFF position warning chime sounds when "KNOB" on CONSULT-III screen is touched.</li> </ul>	
INDICATOR	<ul> <li>This test is able to check warning lamp operation.</li> <li>"KEY" Warning lamp illuminates when "KEY ON" on CONSULT-III screen is touched.</li> <li>"KEY" Warning lamp blinks when "KEY IND" on CONSULT-III screen is touched.</li> </ul>	
INT LAMP	This test is able to check interior room lamp operation. The interior room lamp is activated after "ON" on CONSULT-III screen is touched.	
LCD	is test is able to check meter display information Engine start information displays when "BP N" on CONSULT-III screen is touched. Engine start information displays when "BP I" on CONSULT-III screen is touched. Key ID warning displays when "ID NG" on CONSULT-III screen is touched. Steering lock information displays when "ROTAT" on CONSULT-III screen is touched. Position warning displays when "SFT P" on CONSULT-III screen is touched. ntelligent Key insert information displays when "INSRT" on CONSULT-III screen is touched. Intelligent Key low battery warning displays when "BATT" on CONSULT-III screen is touched. Take away through window warning displays when "NO KY" on CONSULT-III screen is ouched. Take away warning display when "OUTKEY" on CONSULT-III screen is touched. DFF position warning display when "LK WN" on CONSULT-III 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-III screen is touched.	
FLASHER	This test is able to check security hazard lamp operation. The hazard lamps are activated after "LH/RH/OFF" on CONSULT-III screen is touched.	
HORN	This test is able to check horn operation. The horn is activated after "ON" on CONSULT-III screen is touched.	
P RANGE	This test is able to check A/T shift selector power supply A/T shift selector power is supplied when "ON" on CONSULT-III screen is touched.	
ENGINE SW ILLUMI	This test is able to check push-ignition switch illumination operation. Push-ignition switch illumination illuminates when "ON" on CONSULT-III screen is touched.	
LOCK INDICATOR	This test is able to check LOCK indicator in push-ignition switch operation. LOCK indicator in push-ignition switch illuminates when "ON" on CONSULT-III 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-III 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-III screen is touched	

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### < SYSTEM DESCRIPTION >

Test item	Description	
KEY SLOT ILLUMI	This test is able to check key slot illumination operation. Key slot illumination blinks when "ON" on CONSULT-III 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-III screen is touched.	

## TRUNK

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## TRUNK : CONSULT-III Function (BCM - TRUNK)

INFOID:000000005654804

### BCM CONSULT-III FUNCTION

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

Diagnosis mode	Function Description
DATA MONITOR	The BCM input/output signals are displayed.

#### DATA MONITOR

Monitor Item	Contents
PUSH SW	Indicates [ON/OFF] condition of push switch.
UNLK SEN -DR	Indicates [ON/OFF] condition of unlock sensor.
VEH SPEED 1	Indicates [Km/h] condition of vehicle speed signal from combination meter.
KEY CYL SW-TR	NOTE: This item is displayed, but cannot be monitored.
TR CANCEL SW	Indicates [ON/OFF] condition of trunk lid opener cancel switch.
TR/BD OPEN SW	Indicates [ON/OFF] condition of trunk lid opener switch.
TRNK/HAT MNTR	Indicates [ON/OFF] condition of trunk room lamp switch.
RKE-TR/BD	Indicates [ON/OFF] condition of trunk open signal from Intelligent Key remote controller button.
TRUNK/GLASS HATCH	This test is able to check trunk lid opener actuator open operation.

#### ACTIVE TEST

Test item	Description
TRUNK/GLASS HATCH	This test is able to check trunk lid opener actuator open operation. This actuator opens when "OPEN" on CONSULT-III screen is touched.

## DTC/CIRCUIT DIAGNOSIS U1000 CAN COMM CIRCUIT

### Description

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

## **DTC Logic**

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### DTC DETECTION LOGIC

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

### **Diagnosis Procedure**

### **1.**PERFORM SELF DIAGNOSTIC

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

#### Is "CAN COMM CIRCUIT" displayed?

- YES >> Refer to LAN-18, "Trouble Diagnosis Flow Chart".
- NO >> Refer to <u>GI-38, "Intermittent Incident"</u>.

## U1010 CONTROL UNIT (CAN)

### < DTC/CIRCUIT DIAGNOSIS >

## U1010 CONTROL UNIT (CAN)

## DTC Logic

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### DTC DETECTION LOGIC

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

## **Diagnosis Procedure**

**1.**REPLACE BCM

When DTC [U1010] is detected, replace BCM.

>> Replace BCM. Refer to <u>BCS-78, "Removal and Installation"</u>

### Special Repair Requirement

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## 1.REQUIRED WORK WHEN REPLACING BCM

Initialize control unit. Refer to CONSULT-III operation manual NATS-IVIS/NVIS.

>> INSPECTION END

1. Disconnect BCM connector and inside key antenna (instrument center) connector.

# < DTC/CIRCUIT DIAGNOSIS >

## **B2621 INSIDE ANTENNA**

## Description

Detects whether Intelligent Key is inside the vehicle. Installed in the instrument center.

## DTC Logic

### DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC detecting condition	Possible cause	D
B2621	INSIDE ANTENNA	An excessive high or low voltage from inside anten- na is sent to BCM.	<ul> <li>Inside key antenna (instrument center)</li> <li>Between BCM ~ Inside key antenna (instrument center)</li> </ul>	E

### DTC CONFIRMATION PROCEDURE

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

- Perform inside key antenna ("INSIDE ANT DIAGNOSIS") on "Work Support" of "INTELLIGENT KEY". 1.
- Perform "INTELLIGENT KEY" Self Diagnostic Result. 2.

Is inside key antenna DTC detected?

- YES >> Refer to DLK-55, "Diagnosis Procedure".
- >> Inside key antenna (instrument center) is OK. NO

## **Diagnosis Procedure**

## 1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

- Turn ignition switch OFF. 1.
- Check signal between BCM harness connector and ground using oscilloscope. 2.

	(+) BCM		(—)	Condition	Signal (Reference value)
Connecto	or	Terminal			
Instrument center	M122	78 70	Ground	Place Intelligent Key inside the vehicle.	(V) 15 10 5 0 1 s JMKIA0062GB
Instrument center	M122	78, 79	Ground	Place Intelligent Key outside the vehicle.	(V) 15 10 5 0 •••••••••••••••••••••••••••••
					JMKIA0063GB

the inspection result normal?

YES	>> GO TO 4.
NO	>> GO TO 2.

Revision: 2009 November

2.CHECK INSIDE KEY ANTENNA CIRCUIT

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## **B2621 INSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

2. Check continuity between BCM harness connector and inside key antenna (instrument center) harness connector.

B	BCM		Inside key antenna (instrument center)		
Connector	Terminal	Connector	Terminal	Continuity	
M122	78	M131	2	Existed	
	79	IVITOT	1	LAISIEU	

3. Check continuity between BCM harness connector and ground.

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M122	78	Ground	Not existed
IVITZZ	79		NOT EXISTED

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

**3.**CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

- 1. Replace inside key antenna (instrument center). (New antenna or other antenna)
- 2. Connect BCM connector and inside key antenna (instrument center) connector.
- 3. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM		()	Condition	Signal (Reference value)	
Connect	or	Terminal			
Instrument center	M122	78, 79	Ground	Place Intelligent Key inside the vehicle.	(V) 15 10 5 0 1 s JMKIA0062GB
		10,10	Cround	Place Intelligent Key outside the vehicle.	(V) 15 0 0 15 0 15 0 15 10 5 0 15 15 10 5 0 15 15 10 5 0 15 15 15 15 15 15 15 15 15 15 15 15 15

#### Is the inspection result normal?

YES >> Replace inside key antenna (instrument center). Refer to <u>DLK-242, "INSTRUMENT CENTER :</u> <u>Removal and Installation"</u>.

NO >> Replace BCM. Refer to <u>BCS-78</u>, "Removal and Installation".

### **4.**CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

### < DTC/CIRCUIT DIAGNOSIS > B2622 INSIDE ANTENNA

## Description

Detects whether Intelligent Key is inside the vehicle. Installed in the console.

## DTC Logic

## DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC detecting condition	Possible cause	D
B2622	INSIDE ANTENNA	An excessive high or low voltage from inside anten- na is sent to BCM.	<ul> <li>Inside key antenna (console)</li> <li>Between BCM ~ Inside key antenna (console)</li> </ul>	E

## DTC CONFIRMATION PROCEDURE

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

- 1. Perform inside key antenna ("INSIDE ANT DIAGNOSIS") on "Work Support" of "INTELLIGENT KEY".
- 2. Perform "INTELLIGENT KEY" Self Diagnostic Result.

### Is inside key antenna DTC detected?

- YES >> Refer to <u>DLK-57, "Diagnosis Procedure"</u>.
- NO >> Inside key antenna (console) is OK.

## **Diagnosis Procedure**

## 1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

- 1. Turn ignition switch OFF.
- 2. Check signal between BCM harness connector and ground using oscilloscope.

	(+) BCM		()	Condition	Signal
Conr	nector	Terminal			(Reference value)
Quereale	Mico	70 70	Oreard	Place Intelligent Key inside the vehicle.	(V) 15 10 5 0 1 5 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 10 10 10 10 10 10 10 10 10 10 10 10
Console	M122	72, 73	Ground		
				Place Intelligent Key outside the vehicle.	
					JMKIA0063GB

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

2. CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and inside key antenna (console) connector.

2. Check continuity between BCM harness connector and inside key antenna (console) harness connector.

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## **B2622 INSIDE ANTENNA**

### < DTC/CIRCUIT DIAGNOSIS >

BCM		Inside key ant	Inside key antenna (console)	
Connector	Terminal	Connector	Terminal	Continuity
M122	72	- M146	2	Existed
IVI 122	73	101140	1	Existed

#### 3. Check continuity between BCM harness connector and ground.

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M122	72	Ground	Not existed
101122	73	1	NUL EXISIEU

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## **3.**CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

- 1. Replace inside key antenna (console). (New antenna or other antenna)
- 2. Connect BCM connector and inside key antenna (console) connector.
- 3. Check signal between BCM harness connector and ground using oscilloscope.

	(+) BCM		()	Condition	Signal (Reference value)
Con	nector	Terminal			
Console	M122	72, 73	Ground	Place Intelligent Key inside the vehicle.	(V) 15 0 5 0 1 s JMKIA0062GB
				Place Intelligent Key outside the vehicle.	(V) 15 10 5 0 15 10 5 0 15 15 10 5 0 15 15 10 5 0 15 15 15 15 15 15 15 15 15 15 15 15 15

#### Is the inspection result normal?

YES >> Replace inside key antenna (console). Refer to <u>DLK-242, "CONSOLE : Removal and Installation"</u>.
 NO >> Replace BCM. Refer to <u>BCS-78, "Removal and Installation"</u>.

### **4.**CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

# < DTC/CIRCUIT DIAGNOSIS > B2623 INSIDE ANTENNA

## Description

Detects whether Intelligent Key is inside the vehicle. Installed in the trunk room.

## DTC Logic

### DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC detecting condition	Possible cause	D
B2623	INSIDE ANTENNA	An excessive high or low voltage from inside anten- na is sent to BCM.	<ul> <li>Inside key antenna (trunk room)</li> <li>Between BCM – Inside key antenna (trunk room)</li> </ul>	E

### DTC CONFIRMATION PROCEDURE

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

- 1. Perform inside key antenna ("INSIDE ANT DIAGNOSIS") on "Work Support" of "INTELLIGENT KEY".
- 2. Perform "INTELLIGENT KEY" Self Diagnostic Result.

### Is inside key antenna DTC detected?

- YES >> Refer to <u>DLK-59, "Diagnosis Procedure"</u>.
- NO >> Inside key antenna (trunk room) is OK.

### **Diagnosis Procedure**

## 1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

- 1. Turn ignition switch OFF.
- 2. Check signal between BCM harness connector and ground using oscilloscope.

	(+) BCM Connector Terminal		BCM (-)		Condition	Signal (Reference value)	
Conn							
Truck	Mad	24.25	Ground	Place Intelligent Key inside the vehicle.	(V) 15 0 5 0 1 s J J J J J J J J J J J J J		
Trunk room	M121	34, 35	Ground				
				Place Intelligent Key outside the vehicle.	(V) 15 10 5 0 1 s JMKIA0063GB		

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

2. CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and inside key antenna (trunk room) connector.

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## **B2623 INSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

2. Check continuity between BCM harness connector and inside key antenna (trunk room) harness connector.

В	BCM		Inside key antenna (trunk room)		
Connector	Terminal	Connector	Terminal	Continuity	
M121	34	B49	2	Existed	
	35	649	1		

3. Check continuity between BCM harness connector and ground.

B	CM			
Connector	Terminal	Ground	Continuity	
M121	34	Ground	Not existed	
IVI 12 I	35		NUL EXISIEU	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## **3.**CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace inside key antenna (trunk room). (New antenna or other antenna)

2. Connect BCM and inside key antenna (trunk room) connector.

3. Check signal between BCM harness connector and ground using oscilloscope.

	(+) BCM Connector Terminal		(–) Condition		Signal (Reference value)
		Terminai		Place Intelligent Key inside the vehicle.	(V) 15 10 5 0 •••••••
Trunk room	M121	34, 35	Ground	Place Intelligent Key outside the vehicle.	(V) 15 10 5 0 1 s JMKIA0063GB

Is the inspection result normal?

YES >> Replace inside key antenna (trunk room). Refer to <u>DLK-243, "TRUNK ROOM : Removal and</u> <u>Installation"</u>.

NO >> Replace BCM. Refer to <u>BCS-78. "Removal and Installation"</u>.

**4.**CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

<b>POWEF</b> < DTC/CIRCUIT DIAGNOSIS >	R SUPPLY ANI	D GROUND CIR	CUIT	
POWER SUPPLY AND G	ROUND CIR	CUIT		_
BCM (BODY CONTROL M	ODULE)			A
BCM (BODY CONTROL MC	DULE) : Diagn	osis Procedure	INFOID:0000000565482	20 B
1. CHECK FUSE AND FUSIBLE LI	NK			D
Check that the following fuse and fu	sible link are not fue	sing.		С
Terminal No.	Signal	name	Fuse and fusible link No.	
1	Battery pov	wer supply	K (40 A)	D
11 Is the inspection result normal?			10 (10 A)	
YES >> GO TO 2. NO >> Replace the blown fuse blown. 2.CHECK POWER SUPPLY CIRCU 1. Turn ignition switch OFF. 2. Disconnect BCM connector.		repairing the affecte	d circuit if a fuse or fusible link is	E S F
3. Check voltage between BCM ha	arness connector ar	nd ground.		G
(+)			Voltage	
BCM Connector	Terminal	()	(Approx.)	Н
	1			
M119	11	Ground	Battery voltage	I
Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace harne <b>3.</b> CHECK GROUND CIRCUIT	SS.			J
Check continuity between BCM harr	ness connector and	ground.		- DLK
BCM				
Connector	Terminal	Ground	Continuity	L
M119	13		Existed	
Is the inspection result normal? YES >> INSPECTION END NO >> Repair or replace harne	SS.			Μ
				Ν
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## < DTC/CIRCUIT DIAGNOSIS >

## DOOR SWITCH

### Description

Detects door open/close condition.

### **Component Function Check**

## **1.**CHECK FUNCTION

Check ("DOOR SW-DR" or "DOOR SW-AS") in "Data Monitor" mode using CONSULT-III.

Monitor item		Condition	
DOOR SW-DR	Driver side door	Open	ON
DOOR SW-DR	Driver side door	Closed	OFF
DOOR SW-AS Passer	Passenger side door	Open	ON
	Fassenger side door	Closed	OFF

### Is the inspection result normal?

YES >> Door switch is OK.

NO >> Refer to <u>DLK-62, "Diagnosis Procedure"</u>.

## **Diagnosis Procedure**

1. CHECK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.

2. Disconnect malfunctioning door switch connector.

3. Check signal between malfunctioning door switch harness connector and ground using oscilloscope.

(+) Door switch			(—)	Signal (Reference value)
Coni	nnector Terminal			
Driver side	B16	2	Ground	(V) 15 10 5 0 10 ms JPMIA0011GB
Passenger side	B216	2		(V) 15 0 0 10 ms JPMIA0011GB

### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector.

2. Check continuity between door switch harness connector and BCM harness connector.

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## **DOOR SWITCH**

### < DTC/CIRCUIT DIAGNOSIS >

	Door switch			BC	Continuity		
Conne	ector	Terminal	Connee	ctor	Terminal	Continuity	
Driver side	B16	2	M12	2	150	Existed	
Passenger side	B216	Z	IVI 12	з -	124	Existed	
6. Check continuity	between door switch	harness coi	nnector and	d groun	d.		
	Door switch					Continuity	
Connector		Ter	minal		Ground	Continuity	
Driver side	B16		2	- Ground -		Not existed	
Passenger side	B216		2			NUL EXISTED	
s the inspection rest YES >> GO TO 4 NO >> Replace CHECK INTERM	4. malfunctioning door s	witch. Refe	r to <u>DLK-24</u>	<u>1, "Ren</u>	noval and Inst	allation".	
efer to <u>GI-38, "Inter</u>							
>> INSPEC	-						
Component Insp	pection					INFOID:000000005654824	
CHECK DOOR S	WITCH						
	tch OFF. unctioning door switch / between door switch						

	Terminal		Condition		L
	Door switch				
2	Ground part of door switch	Door switch	Pressed	Not existed	
2	Ground part of door Switch		Released	Existed	NЛ

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace malfunction door switch. Refer to <u>DLK-241, "Removal and Installation"</u>.

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### DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

## DOOR LOCK AND UNLOCK SWITCH DRIVER SIDE

**DRIVER SIDE : Description** 

Transmits door lock/unlock operation to BCM.

## **DRIVER SIDE : Component Function Check**

## **1.**CHECK FUNCTION

Check ("CDL LOCK SW ", "CDL UNLOCK SW") in "Data Monitor" mode using CONSULT-III.

Monitor item	Condition		Status
CDL LOCK SW		Lock	ON
CDL LOCK SW	Door lock and unlock switch	Unlock	OFF
CDL UNLOCK SW	DOUT TOCK AND UTTOCK SWITCH	Lock	OFF
		Unlock	ON

### Is the inspection result normal?

YES >> Door lock and unlock switch is OK.

>> Refer to DLK-64, "DRIVER SIDE : Diagnosis Procedure". NO

## **DRIVER SIDE : Diagnosis Procedure**

## 1.CHECK POWER WINDOW SWITCH

1. Turn ignition switch ON.

Check power window operation. 2.

Does power window (driver side) operate?

>> Replace power window main switch. Refer to PWC-97, "Removal and Installation". YES

>> Refer to PWC-84, "Diagnosis Procedure". NO

### PASSENGER SIDE

PASSENGER SIDE : Description

Transmits door lock/unlock operation to BCM.

## PASSENGER SIDE : Component Function Check

## **1.**CHECK FUNCTION

Check ("CDL LOCK SW ", "CDL UNLOCK SW") in "Data Monitor" mode using CONSULT-III.

Monitor item	Cor	ndition	Status
CDL LOCK SW		Lock	ON
ODE LOCK SW	Door lock and unlock switch	Unlock	OFF
CDL UNLOCK SW	Door lock and unlock switch	Lock	OFF
CDL UNLOCK SW		Unlock	ON

### Is the inspection result normal?

YES >> Door lock and unlock switch is OK.

>> Refer to DLK-64, "PASSENGER SIDE : Diagnosis Procedure". NO

## PASSENGER SIDE : Diagnosis Procedure

## 1.CHECK POWER WINDOW SWITCH

1. Turn ignition switch ON.

Check passenger side power window operation. 2.

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INFOID:000000005654828

INFOID:000000005654829

INFOID:000000005654830

INFOID:000000005654826

INEOID:000000005654825

## DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Does po	wer window (passenger side) operate?	
YES	>> Replace power window sub-switch. Refer to <u>PWC-97, "Removal and Installation"</u> .	А
NO	>> Refer to PWC-85, "WHEN POWER WINDOW SUB-SWITCH IS OPERATED : Diagnosis Proce-	
	dure".	
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< DTC/CIRCUIT DIAGNOSIS >

## DOOR LOCK ACTUATOR DRIVER SIDE

**DRIVER SIDE : Description** 

Locks/unlocks the door with the signal from BCM.

## DRIVER SIDE : Component Function Check

## **1.**CHECK FUNCTION

1. Use CONSULT-III to perform Active Test ("DOOR LOCK").

2. Touch "ALL LCK" or "ALL UNLK" to check that it works normally.

### Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to <u>DLK-66, "DRIVER SIDE : Diagnosis Procedure"</u>.

### **DRIVER SIDE : Diagnosis Procedure**

## 1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

### 1. Turn ignition switch OFF.

- 2. Disconnect driver side door lock assembly connector.
- 3. Check voltage between driver side door lock assembly harness connector and ground.

(+) Driver side door lock assembly		()	Condition	Voltage (V)			
Connector	Terminal	()	Condition		(Approx.)		(Approx.)
D15	1	Ground	Door lock and unlock switch	Lock	$0 \rightarrow Battery \ voltage \rightarrow 0$		
- 510	2	Ground	Door lock and unlock Switch	Unlock	$0 \rightarrow Battery \ voltage \rightarrow 0$		

### Is the inspection result normal?

YES	>> Replace driver side door lock assembly. Refer to DLK-232, "DOOR LOCK : Removal and Installa-
	tion".

NO >> GO TO 2.

2. CHECK DOOR LOCK ACTUATOR CIRCUIT

- 1. Disconnect BCM connector.
- 2. Check continuity between BCM harness connector and driver side door lock assembly harness connector.

E	BCM	Driver side doc	Continuity		
Connector	Terminal	Connector	Terminal	Continuity	
M119	8	D15	1	Existed	
101113	9		2		

### 3. Check continuity between BCM harness connector and ground.

B	CM		Continuity	
Connector	Terminal	Ground	Continuity	
M119	8	Ground	Not existed	
	9		Not existed	

### Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-78, "Removal and Installation"</u>.

NO >> Repair or replace harness.

PASSENGER SIDE

INFOID:000000005654831

INFOID:000000005654832

## DOOR LOCK ACTUATOR

< DTC/CIRCUIT	DIAGNOS	S>			n			
PASSENGER						INF0ID:000000005654834		
Locks/unlocks the	e door with t	he signal from	n BCM.					
PASSENGER		-		Check		INF0ID:000000005654835		
1.CHECK FUNC								
		orm Active Te	st ("DOOR LO	CK").				
			eck that it work	s normally.				
Is the inspection r YES >> Door	lock actuate							
			R SIDE : Diagr	nosis Proced	<u>ure"</u> .			
PASSENGER	SIDE : D	Diagnosis P	rocedure			INFOID:00000005654836		
1.CHECK DOOF			UT SIGNAL					
1. Turn ignition								
			e door lock ass		ss connecto	r and ground.		
	(+)							
Passenger side of		mbly (–)		Condition		Voltage (V) (Approx.)		
Connector	Termina	al						
D45	1	Ground	d Door lock an	d unlock switch	Unlock	$0 \rightarrow Battery \ voltage \rightarrow 0$		
Is the inspection r	2	10			Lock	$0 \rightarrow Battery \ voltage \rightarrow 0$		
			lock assembly	. Refer to D	LK-232, "DC	OR LOCK : Removal and		
	lation"	-						
2.CHECK DOOF		TUATOR CIR	CUIT					
1. Disconnect B	CM connec	tor.						
<ol> <li>Check continue nector.</li> </ol>	uity betwee	n BCM harnes	ss connector ar	nd passenge	r side door lo	ock assembly harness con-		
	DOM		Desser	ger side door loo				
Connector	BCM	Terminal	Connect	5	Terminal	Continuity		
		5			1	Exists d		
M119		8	— D45		2	Existed		
3. Check continu	uity betwee	n BCM harnes	ss connector ar	nd ground.				
	BC	M				Continuity		
		Termi		Groun	d	Continuity		
Connec	ctor		5					
Connec M119						Not existed		
M119	) -	8				Not existed		
M119 <u>Is the inspection r</u> YES >> Repla	esult norma	8 al? efer to <u>BCS-7</u>		nd Installation	<u>ı"</u> .	Not existed		

### < DTC/CIRCUIT DIAGNOSIS >

## FUEL LID LOCK ACTUATOR

### Description

Locks/unlocks the fuel filler lid with the signal from BCM.

### **Component Function Check**

## **1.**CHECK FUNCTION

1. Use CONSULT-III to perform Active Test ("DOOR LOCK").

2. Touch "ALL LOCK" or "ALL UNLOCK" to check that it works normally.

#### Is the inspection result normal?

YES >> Fuel lid lock actuator is OK.

NO >> Refer to <u>DLK-68, "Diagnosis Procedure"</u>.

### Diagnosis Procedure

## 1. CHECK FUEL LID LOCK ACTUATOR INPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect fuel lid lock actuator connector.
- 3. Check voltage between fuel lid lock actuator harness connector and ground.

(+) Fuel lid lock actuator			Condition		Voltage (V)
	ck actuator	()	Condition		(Approx.)
Connector	Terminal				
B242	1	Ground	round Door lock and unlock switch		$0 \rightarrow Battery \ voltage \rightarrow 0$
B242	2	Gibunu	DODI TOCK AND UNIOCK SWITCH	Lock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$

Is the inspection result normal?

YES >> Replace fuel lid lock actuator. Refer to <u>DLK-240, "Removal and Installation"</u>.

NO >> GO TO 2.

### 2.CHECK FUEL LID LOCK ACTUATOR CIRCUIT

1. Disconnect BCM connector.

2. Check continuity between BCM harness connector and fuel lid lock actuator harness connector.

E	CM	Fuel lid lo	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M119	8	P242	B242 2	
101119	9	- D242	1	Existed

3. Check continuity between BCM harness connector and ground.

B	CM		Continuity	
Connector	Terminal	Ground		
M119	8	Ground	Not existed	
101113	9			

#### Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-78, "Removal and Installation"</u>.

NO >> Repair or replace harness.

INFOID:000000005654837

INFOID:000000005654838

## TRUNK LID OPENER ACTUATOR

< DTC/CIRCUIT DIA	GNOSIS	S>			TUATC	ЛК	
TRUNK LID OF	PENE	R ACTUA	TOR				
Description							INFOID:00000005654840
Performs trunk lid op	en with s	ignal from BCI	M.				
Component Fun	ction (	Check					INFOID:00000005654841
1.CHECK TRUNK L		IER CANCEL	SWITCH				
Check trunk lid opene	r cancel	switch positio	n.				
<u>Does trunk lid opene</u>	cancel s	switch turn OF	F (CANCE	<u>L)?</u>			
YES >> Turn on t NO >> GO TO 2		pener cancel	switch.				
	N						
1. Use CONSULT-I 2. Touch "OPEN" to				GLASS H	ATCH").		
s the inspection resu			innairy.				
YES >> Trunk lid	opener a	ctuator is OK.					
NO >> Refer to	<u> 2LK-69.</u>	"Diagnosis Pro	<u>ocedure"</u> .				
Diagnosis Proce	dure						INFOID:000000005654842
.CHECK TRUNK L		IER ACTUATO		SIGNAL			
. Turn ignition swit 2. Disconnect trunk 3. Check voltage be	lid lock a	assembly conr unk lid lock as	nector. sembly har	ness conn	ector and	l ground.	
(+) Trunk lid lock ass	embly	()		Condit	ion		Voltage (V)
	erminal			Contait			(Approx.)
B303	3	Ground	Trunk lid op	ener switch	Pres	sed	$0 \rightarrow Battery \ voltage \rightarrow 0$
s the inspection resures the inspection resures YES >> GO TO 3 NO >> GO TO 2 CHECK TRUNK L		_	OR CIRCUI	т			Ι
. Disconnect BCM	connect	or.			lid lock a	ssembly	harness connector.
	BCM			Trunk lid loo	ck assembly	/	Continuity
Connector	_	Terminal		nector	Te	rminal	
M120 Check continuity	between	23 BCM harness		and grour	nd.	3	Existed
Connector	BCN		al		Ground		Continuity
M120		23		· · · · · · · · · · · · · · · · · · ·			Not existed
	lt normal						
the inspection resu	BCM. Re	Termin 23 ? efer to <u>BCS-78</u>			Ground		-

3. CHECK TRUNK LID OPENER ACTUATOR GROUND CIRCUIT

Check continuity between trunk lid lock assembly harness connector and ground.

## TRUNK LID OPENER ACTUATOR

#### < DTC/CIRCUIT DIAGNOSIS >

Trunk lid loo	ck assembly		Continuity	
Connector	Terminal	Ground	Continuity	
B303	2		Existed	

Is the inspection result normal?

YES >> Replace trunk lid lock assembly. Refer to <u>DLK-239</u>, "TRUNK LID LOCK : Removal and Installation".

NO >> Repair or replace harness.

## **TRUNK ROOM LAMP SWITCH**

<pre>&lt; DTC/CIRCUIT DIAG TRUNK ROOM</pre>								
Description					А			
					INF0ID:000000005654843			
Detects trunk open/clos	_				В			
Component Funct					INFOID:000000005654844			
<b>1.</b> CHECK FUNCTION					С			
Check ("TRNK/HAT MN	ITR") in "Data Moni	tor" mode us	sing CONS	SULT-III.				
Monitor item	Monitor item Condition Status							
TRNK/HAT MNTR	Trunk lid		Open		ON			
Is the inspection result	normal?		Closed		OFF E			
YES >> Trunk room	lamp switch is OK							
	<u>K-71, "Diagnosis F</u>	<u>Procedure</u> ".			F			
Diagnosis Procedu	ure				INFOID:000000005654845			
1.CHECK TRUNK RO	OM LAMP SWITCH	H INPUT SIC	GNAL		G			
<ol> <li>Turn ignition switch</li> <li>Disconnect trunk lid</li> <li>Check signal between</li> </ol>	d lock assembly cor		ness conne	ector and ground	using oscilloscope.			
(+)	)							
Trunk lid lock	< assembly	()	(-) Signal (Reference value)		Signal   erence value)			
Connector	Terminal							
B303	1	Ground						
Is the inspection result YES >> GO TO 3. NO >> GO TO 2. 2.CHECK TRUNK RO		H CIRCUIT			L			
<ol> <li>Disconnect BCM co</li> <li>Check continuity be</li> </ol>		ss connecto	r and trunk	lid lock assembl	y harness connector.			
	CM			ock assembly	Continuity			
Connector M121	Terminal 50		nector 303	Terminal 1				
3. Check continuity be					Existed			
					P			
Connector	BCM	inal	-	Ground	Continuity			
M121	50		-		Not existed			
Is the inspection result	normal?			11 - C - P				

YES >> Replace BCM. Refer to <u>BCS-78, "Removal and Installation"</u>.

## DLK-71

## **TRUNK ROOM LAMP SWITCH**

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair harness or connector.

## 3. CHECK TRUNK ROOM LAMP SWITCH GROUND CIRCUIT

Check continuity between trunk lid lock assembly harness connector and ground.

	ak accombly		
Trunk lid lock assembly Connector Terminal		Ground	Continuity
B303	2	Ground	Existed
Is the inspection result norma	_		
YES >> GO TO 4. NO >> Repair or replace			
4.CHECK TRUNK ROOM L	AMP SWITCH		
Refer to DLK-72, "Componer	nt Inspection".		
Is the inspection result norma	<u>al?</u>		
YES >> GO TO 5. NO >> Replace trunk liv Installation".	d lock assembly. Refer to	DLK-225, "TRUNK LID	ASSEMBLY : Removal and
5. CHECK INTERMITTENT	INCIDENT		
Refer to GI-38, "Intermittent I	ncident".		
>> INSPECTION EI	ND		
Component Inspection	I		INFOID:00000005654846
1.CHECK TRUNK ROOM L	AMP SWITCH		

1. Turn ignition switch OFF.

2. Disconnect trunk lid lock assembly connector.

3. Check continuity between trunk lid lock assembly terminals.

Terminal		Condition		Continuity
Trunk lid lock assembly				
1	2	Trunk lid	Open	Existed
			Closed	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace trunk lid lock assembly. Refer to <u>DLK-225, "TRUNK LID ASSEMBLY : Removal and</u> <u>Installation"</u>.

#### DOOR KEY CYLINDER SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

### DOOR KEY CYLINDER SWITCH

#### Description

Power window main switch detects condition of the door key cylinder switch and transmits to BCM as the LOCK or UNLOCK signals.

#### **Component Function Check**

### 1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

Check ("KEY CYL LK-SW", "KEY CYL UN-SW") in "Data Monitor" mode using CONSULT-III.

Monitor item	Co	Condition		_
		Lock	ON	_
KEY CYL LK-SW	Driver eide de se bay adiadas	Neutral / Unlock	OFF	
	Driver side door key cylinder	Unlock	ON	
KEY CYL UN-SW		Neutral / Lock	OFF	

#### Is the inspection result normal?

YES >> Door key cylinder switch is OK.

NO >> Refer to <u>DLK-73, "Diagnosis Procedure"</u>.

#### Diagnosis Procedure

### **1.**CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.

2. Disconnect driver side door lock assembly connector.

3. Check voltage between driver side door lock assembly harness connector and ground.

	(+)			J
Driver side do	or lock assembly	()	Voltage (V) (Approx.)	
Connector	Terminal		(Approx.)	DLK
D15	5	Ground	5	
015	6	Ground	5	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

### 2.check door key cylinder switch signal circuit

1. Disconnect power window main switch connector.

 Check continuity between power window main switch harness connector and driver side door lock assembly harness connector.

Continuity	or lock assembly	Driver side doo	w main switch	Power windo
Continuity	Terminal	Connector	Terminal	Connector
Existed	6	D15	6	D8
Existed	5	015	7	Do

3. Check continuity between power window main switch harness connector and ground.

-	Power windo	w main switch		Continuity
-	Connector	Terminal	Ground	Continuity
-	D8	6	Ground	Not existed
	Do	7		NOT EXISTED

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### DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

#### Is the inspection result normal?

- YES >> Replace power window main switch. Refer to PWC-97, "Removal and Installation".
- NO >> Repair or replace harness.

# **3.**CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

Check continuity between driver side door lock assembly harness connector and ground.

Driver side doo	r lock assembly		Continuity
Connector	Connector Terminal		Continuity
D15	4		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

#### **4.**CHECK DOOR KEY CYLINDER SWITCH

Refer to DLK-74, "Component Inspection".

#### Is the inspection result normal?

- YES >> GO TO 5.
- NO >> Replace driver side door lock assembly. Refer to <u>DLK-232, "DOOR LOCK : Removal and Installa-</u> tion".

#### **5.**CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

#### >> INSPECTION END

#### **Component Inspection**

#### COMPONENT INSPECTION

### 1. CHECK DOOR KEY CYLINDER SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect driver side door lock assembly terminal.
- 3. Check continuity between driver side door lock assembly terminals.

Driver side door Term		Condition		Continuity
5			Unlock	Existed
5	5	Driver side door key cylinder	Neutral / Lock	Not existed
6	4		Lock	Existed
6			Neutral / Unlock	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace driver side door lock assembly. Refer to <u>DLK-232, "DOOR LOCK : Removal and Installa-</u> tion".

### **REMOTE KEYLESS ENTRY RECEIVER**

#### < DTC/CIRCUIT DIAGNOSIS >

REMOTE K	EYLESS	ENTRY	RECEIVER		
Description					INFOID:000000005654851
Receives Intellig	jent Key oper	ation and trar	nsmits to BCM.		
Component	Function	Check			INFOID:000000005654852
CHECK FUN	CTION				
Check ("RKE OF	PE COUN1")	in "Data Moni	tor" mode using CONSULT-III.		
	Monitor item		Co	ndition	
RKE OPE COU			Checks whether value changes when		gent Key.
	note keyless	al? entry receiver "Diagnosis P			
Diagnosis Pr	ocedure				INFOID:000000005654853
.CHECK REM	IOTE KEYLE	SS ENTRY R	ECEIVER OUTPUT SIGNAL		
Turn ignition	switch OFF.				
Check signa	al between re	mote keyless	entry receiver harness connec	tor and grour	nd using oscilloscope.
(+					Signal
Remote keyless	s entry receiver	()	Condition	(Re	ference value)
M104	2	Ground	During waiting	(V) 15 10 5 10 10 10 10 10 10 10 10 10 10 10 10 10	MANUAL AND
IVI I 04	Z	Ground	When operating either button on the Intelligent Key		ms
the inspection		<u>al?</u>		1	
YES >> GO NO >> GO					
CHECK REM	IOTE KEYLE	SS ENTRY R	ECEIVER CIRCUIT 1		
			e keyless entry receiver conners ss connector and remote keyles		iver harness connector.
	BCM		Remote keyless entry rec	ceiver	Continuit
Connecto	or	Terminal	Connector T	erminal	Continuity

-	Connector	Terminal	Connector	Terminal	Continuity
-	M122	83	M104	2	Existed
~ '			· · ·		

3. Check continuity between BCM harness connector and ground.

### **REMOTE KEYLESS ENTRY RECEIVER**

#### < DTC/CIRCUIT DIAGNOSIS >

B	CM		Continuity	
Connector	Connector Terminal		Continuity	
M122	83		Not existed	

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-78, "Removal and Installation"</u>.

NO >> Repair or replace harness.

# 3. check remote keyless entry receiver power supply

1. Disconnect remote keyless entry receiver.

2. Check voltage between remote keyless entry receiver harness connector and ground.

(+) Remote keyless entry receiver Connector Terminal		()	Voltage (V) (Approx.)	
M104	4	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

### **4.**CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 2

1. Disconnect BCM connector.

2. Check continuity between BCM harness connector and remote keyless entry receiver harness connector.

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M122	103	M104	4	Existed

#### 3. Check continuity between BCM harness connector and ground.

BC	CM		Continuity
Connector	Connector Terminal		Continuity
M122	103		Not existed

Is the inspection result normal?

#### YES >> Replace BCM. Refer to <u>BCS-78, "Removal and Installation"</u>.

NO >> Repair or replace harness.

#### 5.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 3

1. Disconnect BCM connector.

2. Check continuity between BCM harness connector and remote keyless entry receiver harness connector.

BCM		Remote keyles	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M123	137	M104	1	Existed

3. Check continuity between BCM harness connector and ground.

ВС	CM		Continuity
Connector	Terminal	Ground	Continuity
M123	137		Existed

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

**O.**CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

### **REMOTE KEYLESS ENTRY RECEIVER**

#### < DTC/CIRCUIT DIAGNOSIS >

#### 1. Connect BCM connector.

2. Check continuity between BCM harness connector and ground.

BCM			Continuity	
Connector	Terminal	Ground	Continuity	В
M123	137		Existed	

Is the inspection result normal?

>> Replace remote keyless entry receiver. Refer to <u>DLK-250, "Removal and Installation"</u>. >> Replace BCM. Refer to <u>BCS-78, "Removal and Installation"</u>. YES

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< DTC/CIRCUIT DIAGNOSIS >

### TRUNK LID OPENER SWITCH

### Description

Transmits trunk lid open signal to BCM.

**Component Function Check** 

1. CHECK TRUNK LID OPENER CANCEL SWITCH

Check trunk lid opener cancel switch position.

Does trunk lid opener cancel switch turn ON (CANCEL)?

YES >> Turn off trunk lid opener cancel switch.

- NO >> GO TO 2.
- 2. CHECK FUNCTION

Check ("TR/BD OPEN SW") in "Data Monitor" mode using CONSULT-III.

Monitor item	Condition		Status
TR/BD OPEN SW	Trunk lid opener switch	Pressed	ON
		Released	OFF

#### Is the inspection result normal?

- YES >> Trunk lid opener switch is OK.
- NO >> Refer to <u>DLK-78, "Diagnosis Procedure"</u>.

### **Diagnosis Procedure**

**1.**CHECK TRUNK LID OPENER SWITCH INPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect trunk lid opener switch connector.
- 3. Check signal between trunk lid opener switch harness connector and ground using oscilloscope.

	(+) Trunk lid opener switch		Signal (Reference value)	
Connector	Terminal	_	(Reference value)	
M20	1	Ground	(V) 15 10 5 0 10 ms JPMIA0011GB	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK TRUNK LID OPENER SWITCH CIRCUIT

1. Disconnect BCM connector.

2. Check continuity between BCM harness connector and trunk lid opener switch harness connector.

B	BCM		Trunk lid opener switch	
Connector	Terminal	Connector	Terminal	Continuity
M121	67	M20	1	Existed

3. Check continuity between BCM harness connector and ground.

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### TRUNK LID OPENER SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

<b>O</b>	BCM Continuity		-		
Connector	Termina	al Gro	bund		
M121	67			Not existed	
NO >> Repair harne CHECK TRUNK LID (	M. Refer to <u>BCS-78</u> ess or connector. DPENER SWITCH (				
heck continuity betwee	n trunk lid opener sv	witch harness connecto	r and ground.		
Trunk	id opener switch			Continuity	
Connector	Termina	al Gro	bund	Continuity	
M20	2			Existed	
NO >> Repair or rep CHECK TRUNK LID ( efer to <u>DLK-79, "Comp</u>	DPENER SWITCH				
CHECK INTERMITTE	k lid opener switch. NT INCIDENT	Refer to <u>DLK-248, "Re</u>	moval and Instal	lation".	
efer to <u>GI-38, "Intermitte</u>	ent Incident".				
>> INSPECTIO	N END				
component Inspect	ion			INF01D:0000000056548	
.CHECK TRUNK LID					
<ul> <li>Turn ignition switch (</li> <li>Disconnect trunk lid</li> <li>Check continuity bet</li> </ul>	opener switch conn				
	nal	Conditio	on		
Termi				Continuity	
Termi Trunk lid ope				Continuity	
		Trunk lid opener switch	Pressed	Existed Not existed	

### TRUNK LID OPENER REQUEST SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

### TRUNK LID OPENER REQUEST SWITCH

#### Description

Performs trunk lid open request when it is pressed.

**Component Function Check** 

1. CHECK TRUNK LID OPENER CANCEL SWITCH

Check trunk lid opener cancel switch position.

Does trunk lid opener cancel switch turn ON (CANCEL)?

>> Turn off trunk lid opener cancel switch. YES NO >> GO TO 2.

- 2. CHECK FUNCTION

Check ("REQSW-BD/TR") in "Data Monitor" mode using CONSULT-III.

Monitor item	Condition		Status
REQSW-BD/TR	Trunk lid opener request switch	Pressed	ON
		Released	OFF

#### Is the inspection result normal?

YES >> Trunk lid opener request switch is OK.

>> Refer to DLK-80, "Diagnosis Procedure". NO

#### Diagnosis Procedure

1.CHECK TRUNK LID OPENER REQUEST SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.

2. Disconnect rear combination lamp LH connector.

Check signal between rear combination lamp LH harness connector and ground using oscilloscope. 3.

	+) ation lamp LH Terminal	()	Signal (Reference value)
B60	5	Ground	(V) 15 10 5 0 10 ms JPMIA0016GB

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

### 2.check trunk lid opener request switch circuit

1. **Disconnect BCM connector.** 

2. Check continuity between BCM harness connector and rear combination lamp LH harness connector.

BCM		Rear combination lamp LH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M121	61	B60	5	Existed

Check continuity between BCM harness connector and ground. 3.

#### **DLK-80**

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### TRUNK LID OPENER REQUEST SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

Connector	BCM			Continuity
	Termina	al Ground	Ł	Continuity
M121	61			Not existed
NO >> Repair harne CHECK TRUNK LID C	<i>I</i> . Refer to <u>BCS-78</u> ss or connector. DPENER REQUES	"Removal and Installation	CUIT	
neck continuity betweer	r rear combination i	amp LH harness connecto	r and ground.	
Rear con	nbination lamp LH			Continuity
Connector	Termina	al Ground	k	Continuity
B60	3			Existed
CHECK TRUNK LID C refer to <u>DLK-81, "Compo</u> the inspection result no YES >> GO TO 5. NO >> Replace trun CHECK INTERMITTE refer to <u>GI-38, "Intermitte</u> >> INSPECTION	onent Inspection". ormal? k lid opener reques NT INCIDENT ent Incident".	t switch. Refer to <u>DLK-247</u>	, "Removal an	d Installation".
Component Inspect				INFOID:00000000565486
. CHECK TRUNK LID C		I SWIICH		
. Disconnect rear com	bination lamp LH co	onnector. ion lamp LH terminals.		
	ion lamp I H			
Rear combinat		Condition		Continuity
Rear combinat Termir	-	Condition		Continuity
	-	Condition Trunk lid opener request switch	Pressed Released	Continuity Existed Not existed

Ρ

### **TRUNK LID OPENER CANCEL SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

### TRUNK LID OPENER CANCEL SWITCH

#### Description

Cancels trunk lid open operation.

**Component Function Check** 

### 1. CHECK FUNCTION

Check ("TR CANCEL SW") in "Data Monitor" mode using CONSULT-III.

Monitor item	Con	Status	
TR CANCEL SW	Trunk lid oponor cancol switch	ON	ON
TR CANCEL SW	Trunk lid opener cancel switch	OFF (Cancel)	OFF

Is the inspection result normal?

YES >> Trunk lid opener cancel switch is OK.

NO >> Refer to <u>DLK-82, "Diagnosis Procedure"</u>.

#### Diagnosis Procedure

INFOID:000000005654864

# 1. CHECK TRUNK LID OPENER CANCEL SWITCH INPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect trunk lid opener cancel switch connector.
- 3. Check signal between trunk lid opener cancel switch harness connector and ground using oscilloscope.

	+) er cancel switch Terminal	()	Signal (Reference value)
M105	1	Ground	(V) 15 10 5 0 10 ms JPMIA0012GB

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.check trunk lid opener cancel switch circuit

1. Disconnect BCM connector.

2. Check continuity between BCM harness connector and trunk lid opener cancel switch harness connector.

BCM		Trunk lid opener cancel switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M123	129	M105	1	Existed

#### 3. Check continuity between BCM harness connector and ground.

_	BC	CM		Continuity
	Connector	Terminal	Ground	Continuity
	M123	129		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-78. "Removal and Installation"</u>.

#### **DLK-82**

INFOID:000000005654862

# TRUNK LID OPENER CANCEL SWITCH

	•	ancel switch harness conn	ector and groun	u.
	opener cancel switch			Continuity
Connector	Termin	al Groun	d	
M105 s the inspection result r	2			Existed
YES >> GO TO 4.	eplace harness.	SWITCH		
Refer to <u>DLK-83, "Com</u> p				
s the inspection result r YES >> GO TO 5.	normal?			
	nk lid opener cancel	switch. Refer to DLK-249,	"Removal and I	nstallation".
<b>5.</b> CHECK INTERMITT	ENT INCIDENT			
Refer to <u>GI-38, "Intermit</u>	ttent Incident".			
>> INSPECTIO				
Component Inspec	ction			INFOID:000000005654865
1.CHECK TRUNK LID	OPENER CANCEL	SWITCH		
<b>1.</b> CHECK TRUNK LID 1. Turn ignition switch	OFF.			
<b>1</b> .CHECK TRUNK LID 1. Turn ignition switch 2. Disconnect trunk lid	OFF. I opener cancel swite	ch connector.		
<b>1.</b> CHECK TRUNK LID 1. Turn ignition switch 2. Disconnect trunk lid 3. Check continuity be	OFF. I opener cancel switc tween trunk lid open			
1.CHECK TRUNK LID 1. Turn ignition switch 2. Disconnect trunk lid 3. Check continuity be Trunk lid opene	OFF. I opener cancel switc etween trunk lid open er cancel switch	ch connector.		Continuity
<b>1.</b> CHECK TRUNK LID 1. Turn ignition switch 2. Disconnect trunk lid 3. Check continuity be	OFF. I opener cancel switc etween trunk lid open er cancel switch	ch connector. er cancel switch terminals		
1.CHECK TRUNK LID 1. Turn ignition switch 2. Disconnect trunk lid 3. Check continuity be Trunk lid opene	OFF. I opener cancel switc etween trunk lid open er cancel switch	ch connector. er cancel switch terminals	ON	Existed
I. CHECK TRUNK LID I. Turn ignition switch 2. Disconnect trunk lid 3. Check continuity be Trunk lid opene Tern 1	OFF. I opener cancel switc etween trunk lid open er cancel switch ninal 2	ch connector. ier cancel switch terminals - Condition		
CHECK TRUNK LID Turn ignition switch Disconnect trunk lid Check continuity be Trunk lid opene Tern	OFF. I opener cancel switce etween trunk lid open er cancel switch ninal 2 <u>normal?</u>	ch connector. ier cancel switch terminals - Condition	ON	Existed

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< DTC/CIRCUIT DIAGNOSIS >

### DOOR REQUEST SWITCH

### Description

Transmits lock/unlock operation to BCM.

#### Component Function Check

### **1.**CHECK FUNCTION

Check ("REQ SW -DR" or "REQ SW -AS") in "Data Monitor" mode using CONSULT-III.

Monitor item	Condition		Status
REQ SW -DR	Driver side door request switch	Pressed	ON
REQ 3W -DR	Driver side door request switch	Released	OFF
REQ SW -AS	Passenger side door request switch	Pressed	ON
REQ OW -AO		Released	OFF

#### Is the inspection result normal?

YES >> Door request switch is OK.

NO >> Refer to <u>DLK-84, "Diagnosis Procedure"</u>.

### **Diagnosis Procedure**

1. CHECK DOOR REQUEST SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.

2. Disconnect malfunctioning outside handle connector.

3. Check signal between malfunctioning outside handle harness connector and ground using oscilloscope.

(+) Outside handle			()	Signal
Connector Terminal		_	(Reference value)	
LH	D13	1	Ground	(V) 15 10 5 0 10 10 10 10 10 10 10 10 10
RH	D43			(V) 15 0 5 0 10 ms JPMIA0016GB

#### Is the inspection result normal?

YES >> GO TO 3.

2. CHECK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect BCM connector.

2. Check continuity between malfunctioning outside handle harness connector and BCM harness connector.

INFOID:000000005654866

### DOOR REQUEST SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

	Outside handle			BCM	Continuity	
Conn		Terminal	Connector	Terminal		
LH	D13	1	M122	101	Existed	
RH	D43		dle harness connector a			
Check continuity	/ between maifuncti	oning outside hand	le harness co	onnector and g	ound.	
	Outside handle				Continuity	
Con	nector	Terminal	Ground		Continuity	
LH	D13	1			Not existed	
RH	D43					
the inspection res						
/ES >> Replace	BCM. Refer to BCS or replace harness.	S-78, "Removal and	Installation'			
•	EQUEST SWITCH		т			
neck continuity bet	ween malfunctionin	g outside handle ha	arness conne	ector and groun	d.	
	Outside handle	9				
(	Connector	Terminal		Ground	Continuity	
LH	D13	2		Glound	Existed	
RH	D43	2			Existed	
CHECK DOOR R	or replace harness. EQUEST SWITCH	n"				
(ES >> GO TO NO >> Repair of CHECK DOOR R efer to <u>DLK-85, "Co</u> the inspection res (ES >> GO TO NO >> Replace Installat	or replace harness. EQUEST SWITCH omponent Inspectio ult normal? 5. e malfunctioning out ion".		to <u>DLK-236</u>	, "OUTSIDE H	ANDLE : Removal	
(ES >> GO TO         NO >> Repair of         .CHECK DOOR R         efer to DLK-85, "Control         the inspection res         (ES >> GO TO         NO >> Replace         Installati         .CHECK INTERM	or replace harness. EQUEST SWITCH omponent Inspectio ult normal? 5. e malfunctioning out ion". ITTENT INCIDENT		to <u>DLK-236</u>	, "OUTSIDE H	ANDLE : Removal	
(ES >> GO TO NO >> Repair of CHECK DOOR R efer to <u>DLK-85, "Co</u> the inspection res (ES >> GO TO NO >> Replace Installat	or replace harness. EQUEST SWITCH omponent Inspectio ult normal? 5. e malfunctioning out ion". ITTENT INCIDENT		to <u>DLK-236</u>	, "OUTSIDE H	ANDLE : Removal	
<pre>/ES &gt;&gt; GO TO NO &gt;&gt; Repair of CHECK DOOR R efer to <u>DLK-85. "Contect</u> the inspection res /ES &gt;&gt; GO TO NO &gt;&gt; Replace Installati .CHECK INTERM efer to <u>GI-38, "Intec</u></pre>	or replace harness. EQUEST SWITCH omponent Inspectio ult normal? 5. a malfunctioning out ion". ITTENT INCIDENT rmittent Incident".		to <u>DLK-236</u>	, "OUTSIDE H	ANDLE : Removal	
<pre>/ES &gt;&gt; GO TO NO &gt;&gt; Repair of .CHECK DOOR R efer to <u>DLK-85, "Continue of the inspection reservance</u> /ES &gt;&gt; GO TO NO &gt;&gt; Replace <u>Installati</u> .CHECK INTERM efer to <u>GI-38, "Internation</u> &gt;&gt; INSPEC</pre>	or replace harness. EQUEST SWITCH omponent Inspectio ult normal? 5. a malfunctioning out ion". ITTENT INCIDENT rmittent Incident".		to <u>DLK-236</u>	, "OUTSIDE H	ANDLE : Removal	
<pre>/ES &gt;&gt; GO TO NO &gt;&gt; Repair of CHECK DOOR R efer to <u>DLK-85. "Contect</u> the inspection res /ES &gt;&gt; GO TO NO &gt;&gt; Replace Installati .CHECK INTERM efer to <u>GI-38, "Intec</u></pre>	or replace harness. EQUEST SWITCH omponent Inspectio ult normal? 5. a malfunctioning out ion". ITTENT INCIDENT rmittent Incident".		to <u>DLK-236</u>	, "OUTSIDE H.	ANDLE : Removal	
<pre>/ES &gt;&gt; GO TO NO &gt;&gt; Repair of CHECK DOOR R efer to <u>DLK-85. "Contect</u> the inspection res /ES &gt;&gt; GO TO NO &gt;&gt; Replace Installati .CHECK INTERM efer to <u>GI-38, "Intect</u> &gt;&gt; INSPEC omponent Insp</pre>	or replace harness. EQUEST SWITCH omponent Inspectio ult normal? 5. a malfunctioning out ion". ITTENT INCIDENT rmittent Incident".		to <u>DLK-236</u>	, "OUTSIDE H		
<pre>/ES &gt;&gt; GO TO NO &gt;&gt; Repair of .CHECK DOOR R efer to <u>DLK-85, "Contect</u> the inspection res /ES &gt;&gt; GO TO NO &gt;&gt; Replace Installati .CHECK INTERM efer to <u>GI-38, "Intect</u> &gt;&gt; INSPEC omponent Insp .CHECK DOOR R Turn ignition swi Disconnect malf</pre>	or replace harness. EQUEST SWITCH omponent Inspectio ult normal? 5. e malfunctioning out ion". ITTENT INCIDENT rmittent Incident". CTION END Dection EQUEST SWITCH itch OFF. functioning outside h	nandle connector.		, "OUTSIDE H		
<pre>/ES &gt;&gt; GO TO NO &gt;&gt; Repair of .CHECK DOOR R efer to <u>DLK-85, "Contect</u> the inspection res /ES &gt;&gt; GO TO NO &gt;&gt; Replace Installati .CHECK INTERM efer to <u>GI-38, "Intect</u> &gt;&gt; INSPEC omponent Insp .CHECK DOOR R Turn ignition swi Disconnect malf</pre>	or replace harness. EQUEST SWITCH omponent Inspectio ult normal? 5. e malfunctioning out ion". ITTENT INCIDENT rmittent Incident". CTION END Dection EQUEST SWITCH itch OFF.	nandle connector.		, "OUTSIDE H.		
<pre>/ES &gt;&gt; GO TO NO &gt;&gt; Repair of .CHECK DOOR R efer to <u>DLK-85, "Contect</u> the inspection rese /ES &gt;&gt; GO TO NO &gt;&gt; Replace Installat .CHECK INTERM efer to <u>GI-38, "Intect</u> &gt;&gt; INSPEC omponent Insp .CHECK DOOR R Turn ignition swi Disconnect malf Check continuity</pre>	or replace harness. EQUEST SWITCH omponent Inspectio ult normal? 5. e malfunctioning out ion". ITTENT INCIDENT rmittent Incident". CTION END Dection EQUEST SWITCH itch OFF. functioning outside h	nandle connector.	le terminals.	, "OUTSIDE H	INFOID:0000000	
<pre>/ES &gt;&gt; GO TO NO &gt;&gt; Repair of .CHECK DOOR R efer to <u>DLK-85, "Contect</u> the inspection res /ES &gt;&gt; GO TO NO &gt;&gt; Replace Installati .CHECK INTERM efer to <u>GI-38, "Intect</u> &gt;&gt; INSPEC omponent Insp .CHECK DOOR R Turn ignition swi Disconnect malf Check continuity</pre>	or replace harness. EQUEST SWITCH omponent Inspection ult normal? 5. a malfunctioning out ion". ITTENT INCIDENT ITTENT INCIDENT ITTENT INCIDENT ITTENT INCIDENT ITTENT INCIDENT CON END Dection EQUEST SWITCH itch OFF. functioning outside h	nandle connector.		. "OUTSIDE H		
<pre>/ES &gt;&gt; GO TO NO &gt;&gt; Repair of .CHECK DOOR R efer to <u>DLK-85, "Contect</u> the inspection res /ES &gt;&gt; GO TO NO &gt;&gt; Replace Installati .CHECK INTERM efer to <u>GI-38, "Intect</u> &gt;&gt; INSPEC omponent Insp .CHECK DOOR R Turn ignition swi Disconnect malf Check continuity</pre>	or replace harness. EQUEST SWITCH omponent Inspectio ult normal? 5. e malfunctioning out ion". ITTENT INCIDENT rmittent Incident". CTION END Dection EQUEST SWITCH itch OFF. functioning outside h / between malfuncti	nandle connector.	le terminals. Condition		INFOID:0000000	

NO >> Replace malfunctioning outside handle. Refer to <u>DLK-236, "OUTSIDE HANDLE : Removal and</u> <u>Installation"</u>.

### **DLK-85**

### < DTC/CIRCUIT DIAGNOSIS >

### UNLOCK SENSOR

### Description

Detects door lock condition of driver side door.

#### Component Function Check

### 1. CHECK FUNCTION

Check ("UNLK SEN -DR") in "Data Monitor" mode using CONSULT-III.

Monitor item	Condition		Status
UNLK SEN -DR	Driver side door	Lock	OFF
		Unlock	ON

Is the inspection result normal?

YES >> Unlock sensor is OK.

NO >> Refer to <u>DLK-86, "Diagnosis Procedure"</u>.

#### **Diagnosis Procedure**

# 1.CHECK UNLOCK SENSOR INPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect driver side door lock assembly connector.
- 3. Check signal between driver side door lock assembly harness connector and ground using oscilloscope.

	(+) Driver side door lock assembly		Signal (Reference value)
Connector	Terminal		(
D15	3	Ground	(V) 15 10 5 0 10 ms JPMIA0012GB

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK UNLOCK SENSOR CIRCUIT

1. Disconnect BCM connector.

2. Check continuity between BCM harness connector and driver side door lock assembly harness connector.

В	BCM		or lock assembly	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M123	119	D15	3	Existed

3. Check continuity between BCM harness connector and ground.

BC	CM		Continuity
Connector	Terminal	Ground	Continuity
M123	119		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-78. "Removal and Installation"</u>.

#### **DLK-86**

INFOID:000000005654870

INFOID:000000005654871

### **UNLOCK SENSOR**

< DTC/CIRCUIT DIAGNOS		INLUCK SENS		
NO >> Repair or replac				
<b><math>B.CHECK UNLOCK SENS</math></b>	OR GROUND C	CIRCUIT		
Check continuity between di	river side assen	hbly harness conne	ctor and ground.	
Driver side doo	or lock assembly			Continuity
Connector	Termir	nal	Ground	
D15 the inspection result norm	4			Existed
YES >> GO TO 4. NO >> Repair or replace CHECK UNLOCK SENSE efer to <u>DLK-87, "Compone</u> the inspection result norm YES >> GO TO 5. NO >> Replace driver s tion". CHECK INTERMITTENT efer to <u>GI-38, "Intermittent</u> >> INSPECTION E	OR <u>nt Inspection"</u> . al? side door lock a INCIDENT Incident".	ssembly. Refer to [	0 <u>LK-232,</u> "DOOR	LOCK : Removal and Installa-
CHECK UNLOCK SENSE Turn ignition switch OFF Disconnect driver side of Check continuity betwee	- loor lock assem		erminals.	
Driver side door lock	assembly	(	Condition	Continuity
Terminal				
3	4	Driver side door	Unlock Lock	Existed Not existed
<u>s the inspection result norm</u> YES >> INSPECTION E NO >> Replace driver s <u>tion"</u> .	ND	ssembly.Refer to [	9 <u>LK-232. "DOOR</u>	LOCK : Removal and Installa-

### **OUTSIDE KEY ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

### OUTSIDE KEY ANTENNA

#### Description

Detects whether Intelligent Key is outside the vehicle. Integrated in outside handle (driver side, passenger side) and installed in rear bumper.

### **Component Function Check**

### 1. CHECK OUT SIDE KEY ANTENNA FUNCTION

Check that intelligent key is in each outside key antenna detection range. Does door lock/unlock when each request switch is pressed?

YES >> Outside key antenna is OK.

NO >> Refer to <u>DLK-88, "Diagnosis Procedure"</u>.

#### Diagnosis Procedure

1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

#### 1. Turn ignition switch OFF.

2. Check signal between BCM harness connector and ground using oscilloscope.

(+) Signal BCM (-) Condition (Reference value) Connector Terminal LH 76, 77 (V 15 When Intelligent Key 10 M122 is in the antenna de-RH 74.75 tection area. 1 s Door request JMKIA0062GB switch is Ground pressed 15 10 When Intelligent Key Rear M121 38, 39 is not in the antenna n bumper detection area. 1 s IMKIA0063GB

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-78. "Removal and Installation"</u> NO >> GO TO 2.

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and malfunctioning outside key antenna connector.

2. Check continuity between malfunctioning outside handle or outside key antenna harness connector and BCM harness connector.

INFOID:000000005654874

INFOID:000000005654875

### **OUTSIDE KEY ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

Outside handle/outside key antenna			BCM		
Connector		Connector	Terminal	Continuity	
D14	1		77		
D14 -	2	M122	76		
D44	1		75	Eviated	
D44 -	2		74	Existed	
DC2	1	M404	39		
B03	2	IVI 121	38		
		Terminal           D14         1           D44         1           D44         1           B63         1	Terminal         Connector           D14         1           2         M122           D44         2           B63         1	Terminal         Connector         Terminal           D14         1         77           D14         2         M122         76           D44         1         75         74           B63         1         M121         39	$ \begin{array}{c c c c c c c } \hline \hline Terminal & \hline Connector & \hline Terminal & \hline Continuity \\ \hline \\ D14 & 1 & & & & \\ \hline \\ D14 & 2 & & & & & \\ \hline \\ D44 & 1 & & & & & \\ \hline \\ D44 & 1 & & & & & \\ \hline \\ D44 & 2 & & & & & & \\ \hline \\ B63 & 1 & & & & & \\ \hline \\ B63 & & & & & & & \\ \hline \\ \hline \\ B63 & & & & & & \\ \hline \\ \hline \\ \hline \\ Continuity & & & \\ \hline \\ \hline \\ \hline \\ Continuity & & & \\ \hline \\ \hline \\ \hline \\ Existed & & & \\ \hline \\$

3. Check continuity between malfunctioning outside handle or outside key antenna harness connector and ground.

Ou	tside handle/outside key ante		Continuity		
Co	nnector	Terminal		Continuity	
LH	D14	1	-		
LN	D14 -	2	Ground		I
RH	D44	1	Giouna	Not existed	
ΝП	D44 -	2		NOT EXISTED	(
Rear bumper	B63 –	1			
	603	2			

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

**3.**CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace malfunctioning outside key antenna. (New antenna or other antenna)

2. Connect BCM connector and malfunctioning outside key antenna (New antenna or other antenna) connector.

3. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM			(–) Condition		Signal (Reference value)	
		(-)				
Con	nector	Terminal				
LH		76, 77				
RH	M122	74, 75	Ground	Door request switch is	When Intelligent Key is in the antenna de- tection area.	(V) 15 10 5 0 1 s JMKIA0062GB
Rear bumper	M121	38, 39	Ground	pressed	When Intelligent Key is not in the antenna detection area.	(V) 15 10 5 0 15 10 10 10 10 10 10 10 10 10 10
						JMKIA0063GB

Is the inspection result normal?

YES-1 >> Replace outside key antenna LH (driver side). Refer to <u>DLK-244, "DRIVER SIDE : Removal and</u> <u>Installation"</u>.

#### **DLK-89**

### OUTSIDE KEY ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

- YES-2 >> Replace outside key antenna RH (passenger side). Refer to <u>DLK-244. "PASSENGER SIDE :</u> <u>Removal and Installation"</u>.
- YES-3 >> Replace outside key antenna (rear bumper). Refer to <u>DLK-244, "REAR BUMPER : Removal and</u> <u>Installation"</u>.
- NO >> Replace BCM. Refer to <u>BCS-78, "Removal and Installation"</u>.

### INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNO	SIS >	NIKET	WARNI	NG BUZZER	
INTELLIGENT KEY		BUZZE	ER		
Description					INFOID:00000005654877
Answers back and warns for	or an inappropriat	e operation	n.		
Component Function					INFOID:000000005654878
1.CHECK FUNCTION	rform Active Too			D"\	
<ol> <li>Use CONSULT-III to perform to check the constraint of the constraint of</li></ol>				к).	
Is the inspection result norr	nal?				
YES >> Intelligent Key NO >> Refer to <u>DLK-9</u>	warning buzzer is	s OK.			
Diagnosis Procedure					INFOID:000000005654879
<b>1.</b> CHECK FUSE					
1. Turn ignition switch OF	F				
2. Check 10 A fuse, [No.6		block (J/B)	].		
Is the inspection result norr	nal?				
YES >> GO TO 2. NO >> Replace the blo	own fuse after rei	nairing the	affected ci	rcuit if a fuse is	hlown
2.CHECK INTELLIGENT	-	-			
1. Disconnect Intelligent k					
2. Check voltage betweer				ss connector ar	d ground.
	(+)				
Intelligent Ke	/ warning buzzer			(-)	Voltage (V) (Approx.)
Connector	Termina	al			(Approx.)
E57	1		G	Ground	Battery voltage
Is the inspection result norr	nal?				D
YES >> GO TO 3. NO >> Repair or repla	ce harness				_
3. CHECK INTELLIGENT		BUZZER C	IRCUIT		
1. Disconnect BCM connect					
		connector	and Intelli	gent Key warnir	g buzzer harness connector.
BCM		In	ntelligent Kev	warning buzzer	
Connector	Terminal		nector	Terminal	Continuity
M121	64	E	57	3	Existed
3. Check continuity betwee	en BCM harness	connector	r and grour	nd.	
I	ВСМ				Continuity
Connector	Termin	al		Ground	Continuity
M121	64				Not existed
Is the inspection result norr	nal?				
YES >> GO TO 4. NO >> Repair or repla	ce harness.				
4.CHECK INTELLIGENT		BUZZER			

Refer to DLK-92, "Component Inspection".

### INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

- YES >> Replace BCM. Refer to <u>BCS-78, "Removal and Installation"</u>.
- NO >> Replace Intelligent Key warning buzzer. Refer to <u>DLK-245, "Removal and Installation"</u>.

#### Component Inspection

INFOID:000000005654880

# 1.CHECK INTELLIGENT KEY WARNING BUZZER

1. Turn ignition switch OFF.

- 2. Disconnect Intelligent Key warning buzzer connector.
- 3. Connect battery power supply directly to Intelligent Key warning buzzer terminals and check the operation.

Terminal		
Intelligent Key warnir	Operation	
(+)	(-)	
1	3	Buzzer sounds

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace Intelligent Key warning buzzer. Refer to <u>DLK-245, "Removal and Installation"</u>.

### INTELLIGENT KEY

### < DTC/CIRCUIT DIAGNOSIS >

### INTELLIGENT KEY

### Description

The following functions are available when having and carrying electronic ID.

- Door lock/unlock
- Engine start

Remote control entry function and panic alarm function are available when operating on button.

#### Component Function Check

### 1.CHECK FUNCTION

Check ("RKE OPE COUN1") in Data Monitor mode using CONSULT-III.

Monitor item	Condition
RKE OPE COUN1	Check that the numerical value is changing while operating on the Intelligent Key.
s the inspection result normal?	

#### is the inspection result normal?

YES >> Intelligent Key is OK.

NO >> Refer to <u>DLK-93</u>, "Diagnosis Procedure".

#### Diagnosis Procedure

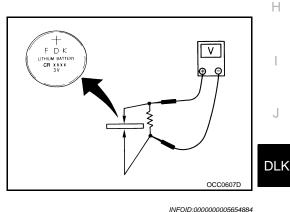
#### 1.CHECK INTELLIGENT KEY BATTERY

Check by connecting a resistance (approximately  $300\Omega$ ) so that the current value becomes about 10 mA.

#### Standard : Approx. 2.5 - 3.0V

Is the measurement value within the specification?

- YES >> Replace Intelligent Key.
- NO >> Replace Intelligent Key battery. Refer to <u>DLK-93, "Com-</u> ponent Inspection".



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INFOID:000000005654881

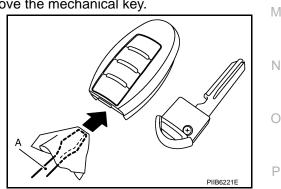
INFOID:000000005654882

INFOID:000000005654883

Component Inspection



- 1. Release the lock knob at the back of the Intelligent Key and remove the mechanical key.
- Insert a flat-blade screwdriver (A) wrapped with a cloth into the slit of the corner and twist it to separate the upper part from the lower part.
   CAUTION:
  - Do not touch the circuit board or battery terminal.
  - The key fob is water-resistant. However, if it does get wet, immediately wipe it dry.



3. Replace the battery with new one.

### INTELLIGENT KEY

#### < DTC/CIRCUIT DIAGNOSIS >

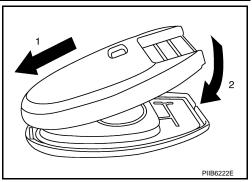
- Align the tips of the upper and lower parts, and then push them together until it is securely closed.
   CAUTION:
  - When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.
  - After replacing the battery, check that all Intelligent Key functions work normally.

Is the inspection result normal?

- YES >> Intelligent Key is OK.
- NO >> Check remote keyless entry receiver. Refer to <u>DLK-75.</u> <u>"Component Function Check"</u>.

### Special Repair Requirement

Refer to CONSULT-III Operation Manual NATS-IVIS/NVIS.



INFOID:000000005654885

### **KEY SLOT**

# < DTC/CIRCUIT DIAGNOSIS > KEY SLOT

Description	INFOID:000000005654886		
Detects whether Intelligent Immobilizer antenna amp o		ransponder.	
Component Function	INFOID:000000005654887		
1. CHECK FUNCTION			
Check ("KEY SW -SLOT")	in "Data Monitor" mode	e using CONSULT-III.	
Monitor item		Condition	Status
		Condition	Olalus
		Inserted in key slot	ON
KEY SW-SLOT	Intelligent Key		

### Diagnosis Procedure

#### 1.CHECK FUSE

- 1. Turn ignition switch OFF.
- 2. Check 10 A fuse, [No.9, 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 KEY SLOT POWER SUPPLY CIRCUIT

#### 1. Disconnect key slot connector.

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

(•	+)		Voltage (V/)	DLK	
 Key slot Connector Terminal		()	Voltage (V) (Approx.)		
 M22	1	Ground	Battery voltage	L	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK KEY SLOT CIRCUIT

1. Disconnect BCM connector.

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

BCM		Key slot		Continuity	(
Connector	Terminal	Connector	Terminal	Continuity	
M123	121	M22	11	Existed	

3. Check continuity between BCM harness connector and ground.

BC	CM		Continuity	
Connector	Connector Terminal		Continuity	
M123	121	-	Not existed	

Is the inspection result normal?

YES >> GO TO 4.

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INFOID:000000005654888

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#### < DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness.

### 4.CHECK KEY SLOT

Refer to DLK-96, "Component Inspection".

#### Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-78</u>, "<u>Removal and Installation</u>". NO >> Replace key slot. Refer to <u>DLK-246</u>, "<u>Removal and Installation</u>".

### Component Inspection

INFOID:000000005654889

### 1.CHECK KEY SLOT

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

Key slot		Con	Continuity	
Ter	minal			Continuity
1	11	Intelligent Key	Inserted in key slot	Existed
	i intelligen		Removed in key slot	Not existed

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace key slot. Refer to <u>DLK-246, "Removal and Installation"</u>.

### **KEY SLOT INDICATOR**

< DTC/CIRCUIT DIAGNOS		02011				
KEY SLOT INDICAT	OR					
Description						INFOID:000000005654890
Blinks when Intelligent Key ir	nsertion is requi	red.				
Component Function						INFOID:000000005654891
1. CHECK FUNCTION						
1. Use CONSULT-III to per	form Activo Tos			<b>I</b> "\		
2. Touch "ON" to check that				ı <i>)</i> .		
Is the inspection result norma	al?					
YES >> Key slot is OK. NO >> Refer to <u>DLK-97</u>	. "Diagnosis Pro	ocedure".				
Diagnosis Procedure	· · · · · · · · · · · · · · · · · · ·					INFOID:000000005654892
1.CHECK FUSE						
<ol> <li>Turn ignition switch OFF</li> <li>Check 10 A fuse, [No. 6,</li> </ol>		block (J/B	)].			
Is the inspection result norma	al?					(
YES >> GO TO 2. NO >> Replace the blov	wn fuse after rer	airing the	affected ci	rcuit if a fuse is	blown	
2.CHECK KEY SLOT POW		-			blown.	
<ol> <li>Disconnect key slot conr</li> <li>Check voltage between</li> </ol>		s connecto	r and grou	nd.		
(1	-)					
Key	-			()		tage (V) pprox.)
Connector	Termina	al			(7)	
M22	5		0	Ground	Batte	ry voltage
Is the inspection result norma YES >> GO TO 3.	<u>al?</u>					D
NO >> Repair or replace	e harness.					
3. CHECK KEY SLOT CIRC	UIT					
1. Disconnect BCM connect						
2. Check continuity betwee	n BCM harness	connector	and key s	lot harness con	nector.	I
BCM			Key	/ slot		Continuity
Connector	Terminal		nector	Terminal		
M122	92		22	6		Existed
3. Check continuity betwee	n BCIVI narness	connector	and grour	10.		
BC	CM				C	ontinuity
Connector	Termin	al		Ground		- 
M122	92				No	t existed
Is the inspection result norma YES >> GO TO 4.	<u>al?</u>					
NO >> Repair or replace	e harness.					
4.CHECK KEY SLOT						

Refer to DLK-98, "Component Inspection".

### **KEY SLOT INDICATOR**

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

- YES >> Replace BCM. Refer to <u>BCS-78, "Removal and Installation"</u>.
- NO >> Replace key slot. Refer to <u>DLK-246, "Removal and Installation"</u>.

#### **Component Inspection**

INFOID:000000005654893

# 1. CHECK KEY SLOT INDICATOR

- 1. Turn ignition switch OFF.
- 2. Disconnect key slot connector.
- 3. Connect battery power supply directly to key slot terminals and check the operation.

Term		
Кеу	Operation	
(+)	-	
5	6	Key slot illuminates

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace key slot. Refer to <u>DLK-246, "Removal and Installation"</u>.

### HORN FUNCTION

< DTC/CIRCUIT DIAG						
HORN FUNCTIC	<b>DN</b>					
Description INFOID:000000056548						
Performs answer-back f	for each o	peration w	ith horn.			
Component Funct	ion Che	eck				INFOID:000000005654895
<b>1</b> .CHECK FUNCTION						
1. Use CONSULT-III to	o perform	Active Tes	st ("HORN	J").		
2. Touch "ON" to chec		orks norm	ally.			
Is the operation normal? YES >> Horn function						
NO >> Refer to <u>DL</u>		agnosis Pi	rocedure"			
Diagnosis Procedu	ure					INFOID:000000005654896
1.CHECK HORN SWIT	ТСН					
Check horn function wit	h horn swi	itch				
Do the horns sound?						
YES >> GO TO 2. NO >> Refer to <u>HR</u>	<u>RN-2, "Wiri</u>	ing Diagra	<u>m - HORI</u>	<u>N -"</u> .		
2. CHECK HORN REL						
1. Turn ignition switch			00110			
<ol> <li>Perform "ACTIVE T</li> <li>Check voltage betw</li> </ol>					tor and ground.	
5		0	•			
(1)						
(+) Horn relay		(-)		Test item		Voltage (V)
	Terminal	()		Test item		Voltage (V) (Approx.)
Horn relay	Terminal 1	(–) Ground	HORN	Test item		
Horn relayConnectorLowE11HighE18	1		HORN		Battery voltag	(Approx.)
Horn relay Connector Low E11 High E18 Is the inspection result r	1		HORN	ON	Battery voltag	(Approx.) ge $\rightarrow 0 \rightarrow$ Battery voltage
Horn relayConnectorLowE11HighE18Is the inspection result rYES>> GO TO 4.NO>> GO TO 3.	1 3 normal?	Ground	HORN	ON	Battery voltag	(Approx.) ge $\rightarrow 0 \rightarrow$ Battery voltage
Horn relay Connector Low E11 High E18 Is the inspection result r YES >> GO TO 4.	1 3 normal?	Ground	HORN	ON	Battery voltag	(Approx.) ge $\rightarrow 0 \rightarrow$ Battery voltage
Horn relay         Connector         Low       E11         High       E18         Is the inspection result r       YES         YES       >> GO TO 4.         NO       >> GO TO 3.         3.CHECK HORN REL/       1.	1 3 normal? AY CIRCU OFF.	Ground		ON	Battery voltag	(Approx.) ge $\rightarrow 0 \rightarrow$ Battery voltage
Horn relay         Connector         Low       E11         High       E18         Is the inspection result r       YES         YES       >> GO TO 4.         NO       >> GO TO 3.         3.CHECK HORN REL/         1. Turn ignition switch         2. Disconnect IPDM E	1 3 hormal? AY CIRCU OFF. //R connec	Ground IIT ctor and ho	orn relay.	ON Other than above	Battery voltag	(Approx.) ge $\rightarrow 0 \rightarrow$ Battery voltage
Horn relay         Connector         Low       E11         High       E18         Is the inspection result r         YES       >> GO TO 4.         NO       >> GO TO 3.         3.CHECK HORN REL/         1. Turn ignition switch         2. Disconnect IPDM E         3. Check continuity be	1 3 hormal? AY CIRCU OFF. //R connec	Ground IIT ctor and ho	orn relay.	ON Other than above	Battery voltage B	(Approx.) $ge \rightarrow 0 \rightarrow Battery voltage$ attery voltage elay terminal connector.
Horn relay         Connector         Low       E11         High       E18         Is the inspection result r         YES       >> GO TO 4.         NO       >> GO TO 3.         3.CHECK HORN REL/         1. Turn ignition switch         2. Disconnect IPDM E         3. Check continuity be	1 3 hormal? AY CIRCU OFF. //R connec etween IPE	Ground IIT ctor and ho	orn relay. Irness cor	ON Other than above	Battery voltage B	(Approx.) $ge \rightarrow 0 \rightarrow Battery voltage$ attery voltage
Horn relay         Connector         Low       E11         High       E18         Is the inspection result r         YES       >> GO TO 4.         NO       >> GO TO 3.         3.CHECK HORN REL/         1. Turn ignition switch         2. Disconnect IPDM E         3. Check continuity be	1 3 hormal? AY CIRCU OFF. //R connec etween IPE	Ground JIT ctor and ho DM E/R ha erminal	orn relay. Irness cor	ON Other than above	Battery voltage Battery voltage Battery voltage Battery Batter	(Approx.) $ge \rightarrow 0 \rightarrow Battery voltage$ attery voltage elay terminal connector.
Horn relay         Connector         Low       E11         High       E18         Is the inspection result r         YES       >> GO TO 4.         NO       >> GO TO 3.         3.CHECK HORN REL/         1. Turn ignition switch         2. Disconnect IPDM E         3. Check continuity be         IPD         Connector         E6	1 3 hormal? AY CIRCU OFF. /R connec tween IPE M E/R	Ground IIT Ctor and he DM E/R ha	orn relay.	ON Other than above	A Battery voltage B Battery voltage B B B B B B B B B B B B B B B B B B B	(Approx.) $ge \rightarrow 0 \rightarrow Battery voltage$ attery voltage elay terminal connector. Continuity
Horn relay Connector Low E11 High E18 Is the inspection result r YES >> GO TO 4. NO >> GO TO 3. CHECK HORN REL/ Disconnect IPDM E Disconnect IPDM E Connector E6	1 3 hormal? AY CIRCU OFF. /R connec tween IPE M E/R	Ground IIT Ctor and he DM E/R ha	orn relay.	ON Other than above	A Battery voltage B Battery voltage B B B B B B B B B B B B B B B B B B B	(Approx.) $ge \rightarrow 0 \rightarrow Battery voltage$ attery voltage elay terminal connector. Continuity
$\begin{tabular}{ c c c c } \hline Horn relay \\ \hline Connector \\ \hline Low & E11 \\ \hline High & E18 \\ \hline Is the inspection result r YES >> GO TO 4. \\ NO >> GO TO 3. \\ \hline 3. CHECK HORN REL/ \\ \hline 1. Turn ignition switch \\ \hline 2. Disconnect IPDM E \\ \hline 3. Check continuity be \\ \hline IPD \\ \hline Connector \\ \hline E6 \\ \hline 4. Check continuity be \\ \hline \end{tabular}$	1 3 hormal? AY CIRCU OFF. /R connec tween IPE M E/R	Ground IIT Ctor and he DM E/R ha erminal 44 45 DM E/R ha	orn relay. Irness cor	ON Other than above	A Battery voltage B Battery voltage B B B B B B B B B B B B B B B B B B B	(Approx.) $ge \rightarrow 0 \rightarrow Battery voltage$ attery voltage elay terminal connector. Continuity
Horn relay         Connector         Low       E11         High       E18         Is the inspection result r         YES       >> GO TO 4.         NO       >> GO TO 3.         3.CHECK HORN REL/         1. Turn ignition switch         2. Disconnect IPDM E         3. Check continuity be         IPD         Connector         E6	1 3 hormal? AY CIRCU OFF. //R connect tween IPE	Ground JIT ctor and ho DM E/R ha erminal 44 45 DM E/R ha R Terr	orn relay.	ON Other than above	Anctioning horn r y Terminal 1 3 ind.	(Approx.) ge → 0 → Battery voltage attery voltage elay terminal connector. Continuity Existed

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

### **HORN FUNCTION**

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

Is the inspection result normal? >> INSPECTION END

### **COMBINATION METER DISPLAY FUNCTION**

< DTC/CIRCUIT DIAGNOSIS >	
COMBINATION METER DISPLAY FUNCTION	^
Description	A
Displays each operation method guide and warning for system malfunction. Component Function Check	В
1.CHECK FUNCTION	С
Use CONSULT-III to perform Active Test ("LCD").	
Is each warning displayed on meter display?	D
<u>Is the inspection result normal?</u> YES >> Combination meter display function is OK. NO >> Refer to <u>DLK-101, "Diagnosis Procedure"</u> .	E
Diagnosis Procedure	
1.CHECK COMBINATION METER	F
Refer to <u>MWI-82, "DTC Index"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 2.	G
NO >> Check combination meter. Refer to <u>MWI-4, "Work flow"</u> . 2.CHECK INTERMITTENT INCIDENT	Н
Refer to GI-38, "Intermittent Incident".	1
>> INSPECTION END	I

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< DTC/CIRCUIT DIAGNOSIS >

### **BUZZER (COMBINATION METER)**

### Description

Performs operation method guide and warning with buzzer.

**Component Function Check** 

**1.**CHECK FUNCTION

1. Use CONSULT-III to perform Active Test ("INSIDE BUZZER").

2. Touch "TAKE OUT", "KNOB" or "KEY" to check that it works normally.

Is the inspection result normal?

Yes >> Warning buzzer into combination meter is OK.

No >> Refer to <u>DLK-102</u>, "Diagnosis Procedure".

Diagnosis Procedure

**1.**CHECK METER BUZZER CIRCUIT

Refer to WCS-23, "Component Function Check".

Is the inspection result normal?

Yes >> GO TO 2.

No >> Repair or replace harness.

2. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

INFOID:000000005654900

INFOID:000000005654901

### **KEY WARNING LAMP**

< DTC/CIRCUIT DIAGNOSIS >	-
KEY WARNING LAMP	А
Description	
Performs operation method guide and warning together with buzzer.	В
Component Function Check	1
1.CHECK FUNCTION	С
<ol> <li>Use CONSULT-III to perform Active Test ("INDICATOR").</li> <li>Touch "KEY IND" or "KEY ON" to check that it works normally.</li> </ol>	D
<u>Is the inspection result normal?</u> YES >> Key warning lamp is OK. NO >> Refer to <u>DLK-103, "Diagnosis Procedure"</u> .	
Diagnosis Procedure	5 5
1.CHECK KEY WARNING LAMP	F
Refer to WCS-3, "Work Flow".	
<u>Is the inspection result normal?</u> YES >> GO TO 2. NO >> Repair or replace harness.	G
2. CHECK INTERMITTENT INCIDENT	н
Refer to GI-38, "Intermittent Incident".	• • • •
>> INSPECTION END	I

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### HAZARD FUNCTION

# < DTC/CIRCUIT DIAGNOSIS >

# HAZARD FUNCTION

### Description

Performs answer-back for each operation with number of blinks.

**Component Function Check** 

1.CHECK FUNCTION

1. Use CONSULT-III to perform Active Test ("FLASHER").

2. Touch "LH" or "RH" to check that it works normally.

Is the inspection result normal?

YES >> Hazard warning lamp circuit is OK.

NO >> Refer to <u>DLK-104</u>, "Diagnosis Procedure".

Diagnosis Procedure

**1.**CHECK HAZARD SWITCH CIRCUIT

Refer to EXL-82, "Wiring Diagram - TURN AND HAZARD WARNING LAMPS -".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness.

2. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

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INFOID:000000005654907

### INTEGRATED HOMELINK TRANSMITTER

< DTC/CIRCUIT DIAGNOSIS >
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# INTEGRATED HOMELINK TRANSMITTER

Description				INFOID:000000005654909
Allows operation of	garage doors, ga transmitter powe	ites, home and of er supply uses ve	t a maximum of 3 radio signals. ffice lighting, entry door locks and se hicle battery, which enables it to mai	
Component Fu	nction Check	K		INFOID:000000005654910
1.CHECK FUNCT	ON			
Is the inspection res YES >> GO TO	sult normal? 2. er or hand-held tr	door opener, etc.	) operates with original hand-held tra unctioning.	ansmitter.
<ol> <li>Turn ignition sw</li> <li>Does red light of light</li></ol>	ritch OFF. of transmitter illun sult normal? 3.		transmitter button is pressed?	
NO >> Refer to 3.CHECK TRANSI		nosis Procedure"		
Check transmitter u *:For details, refer to <u>Is the inspection res</u> YES >> Receive NO >> Replace	sing Tool*. 5 Technical Servi <u>sult normal?</u> er or hand-held tr	ansmitter malfund ling inside mirro	ction, not vehicle related. r (integrated homelink transmitter)	. Refer to <u>MIR-17.</u>
Diagnosis Proc	edure			INFOID:000000005654911
1.CHECK POWER	SUPPLY			
	o anti-dazzling in: petween auto ant		rated homelink transmitter) connecto mirror (integrated homelink transmitt	
Auto anti-dazzl (Integrated hom	+) ing inside mirror elink transmitter)	()	Condition	Voltage (V) (Approx.)
Connector	Terminal			

Connector	Terminal				
R6	10	Ground	Ignition switch position	OFF	Battery voltage
KU	10	Ground	Ignition switch position	ON	Ballery vollage

#### Is the inspection result normal?

YES >> GO TO 2.

- NO-1 >> Check 10A fuse [No. 6 located in the fuse block (J/B)].
- NO-2 >> Harness for open or short between fuse and auto anti-dazzling inside mirror (integrated homelink transmitter).

# 2. CHECK GROUND CIRCUIT

Check continuity between auto anti-dazzling inside mirror (integrated homelink transmitter) harness connector and ground.

### DLK-105

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### INTEGRATED HOMELINK TRANSMITTER

#### < DTC/CIRCUIT DIAGNOSIS >

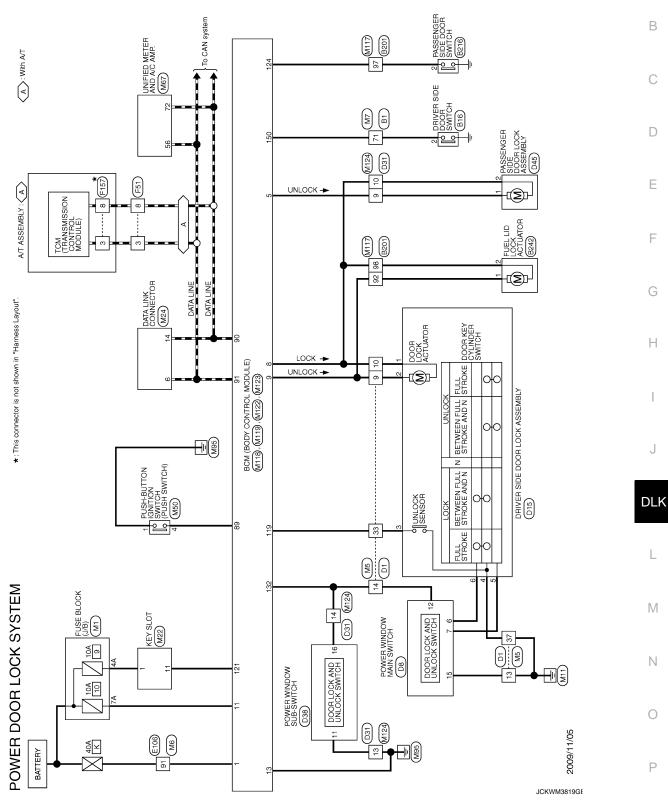
Auto anti-dazzlin (Integrated homel	5		Continuity		
Connector	Terminal	Ground			
R6 8			Existed		
Is the inspection result normal	<u>?</u>				
YES >> GO TO 3.					
NO >> Repair or replace harness.					
3. CHECK INTERMITTENT II	NCIDENT				
Refer to GI-38, "Intermittent Incident".					

>> INSPECTION END

< DTC/CIRCUIT DIAGNOSIS >

## POWER DOOR LOCK SYSTEM

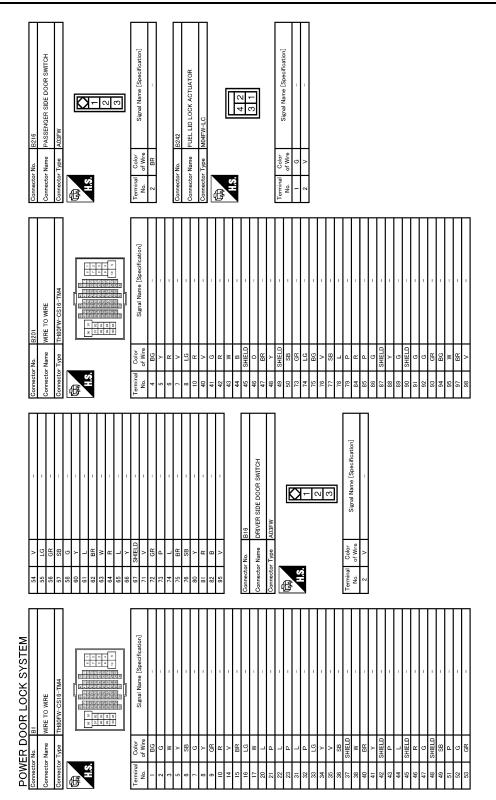
Wiring Diagram - POWER DOOR LOCK SYSTEM -



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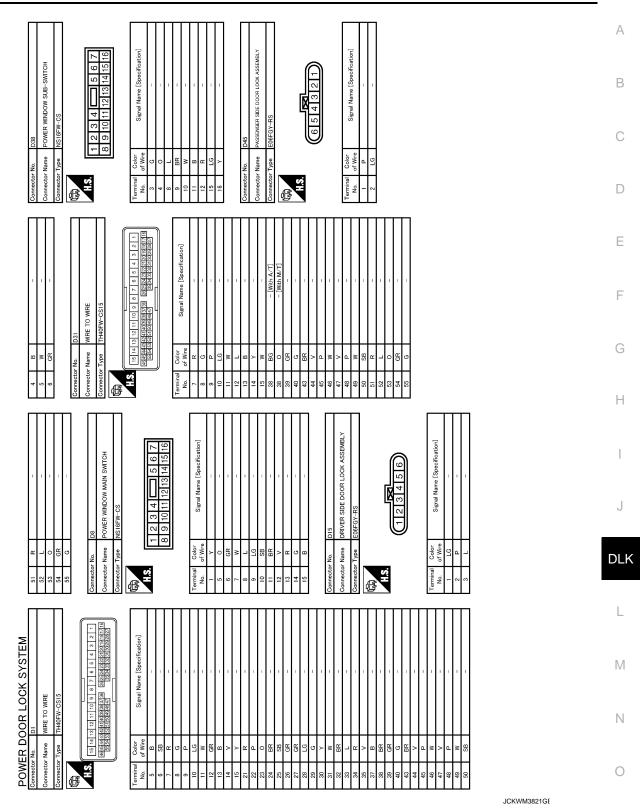
### POWER DOOR LOCK SYSTEM

#### < DTC/CIRCUIT DIAGNOSIS >

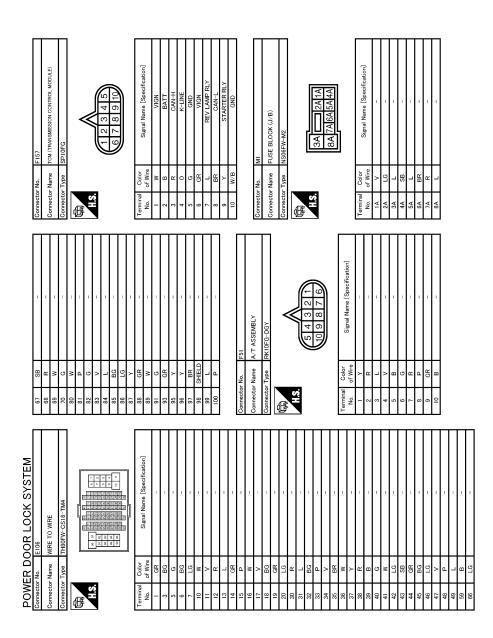


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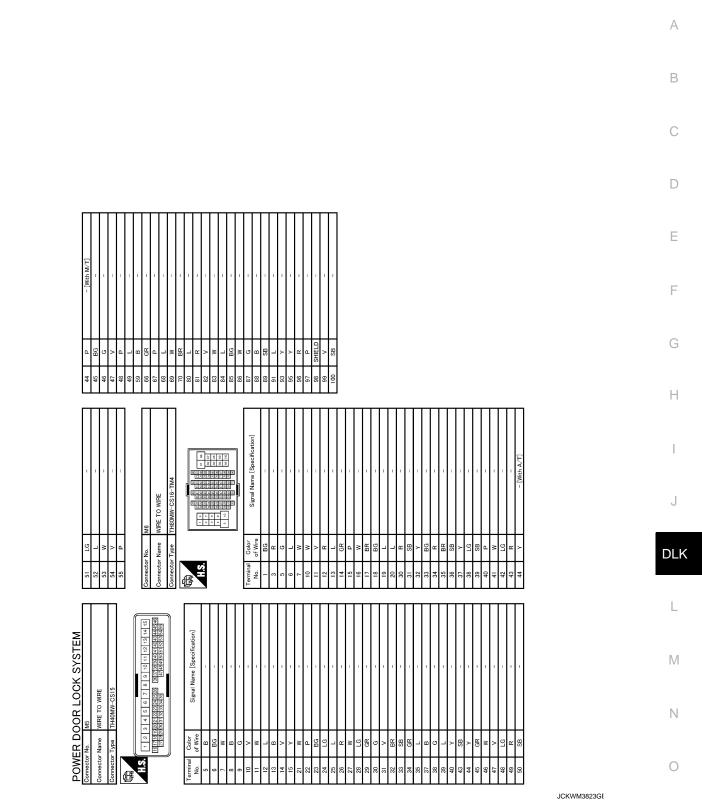


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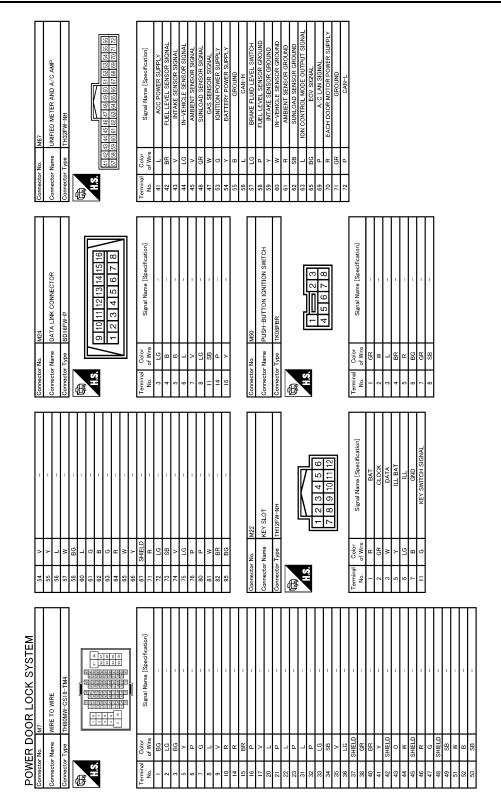


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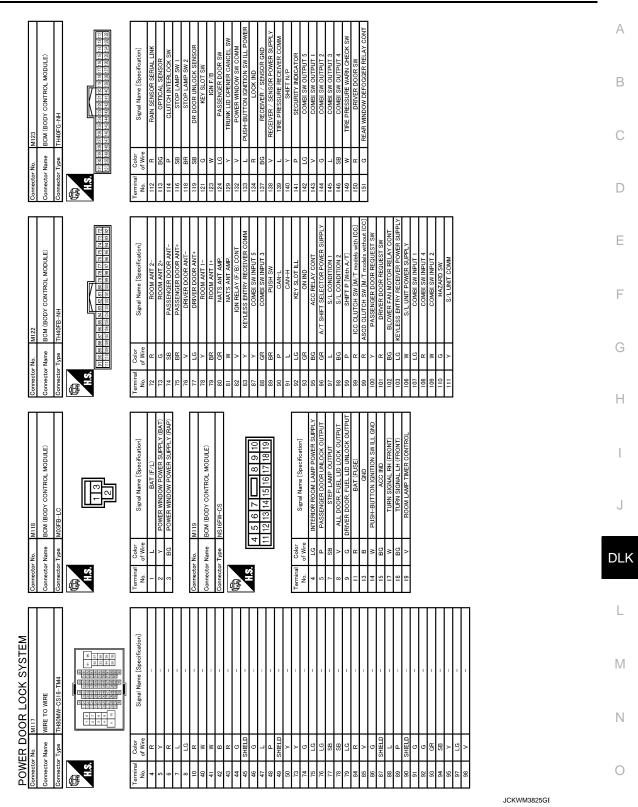


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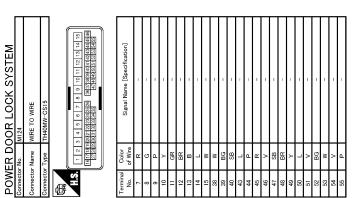


JCKWM3824GE

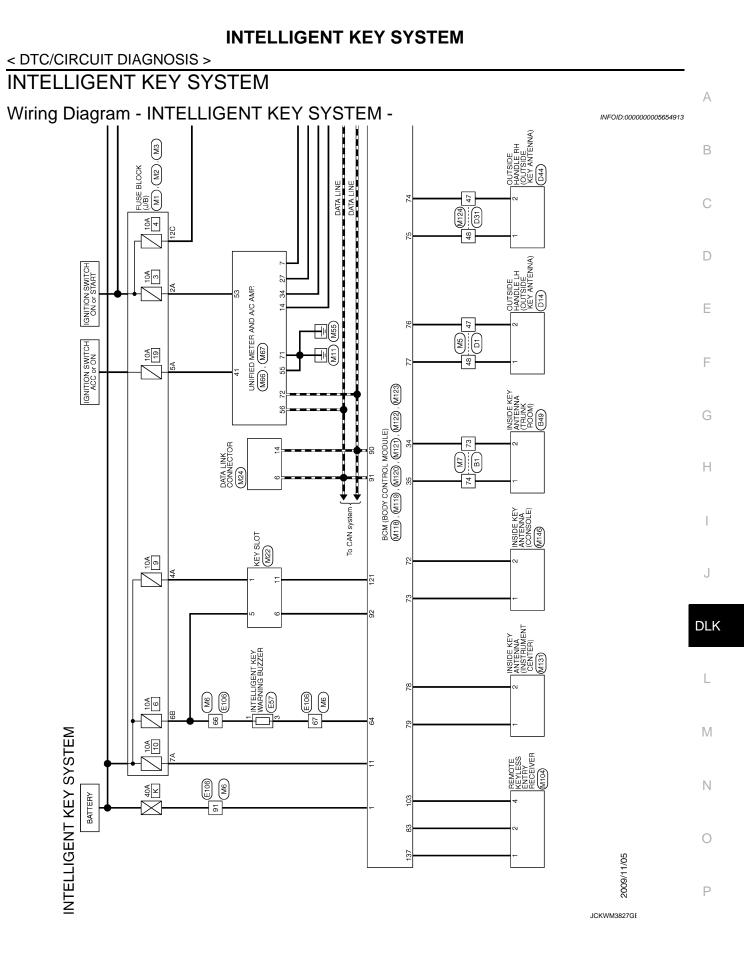
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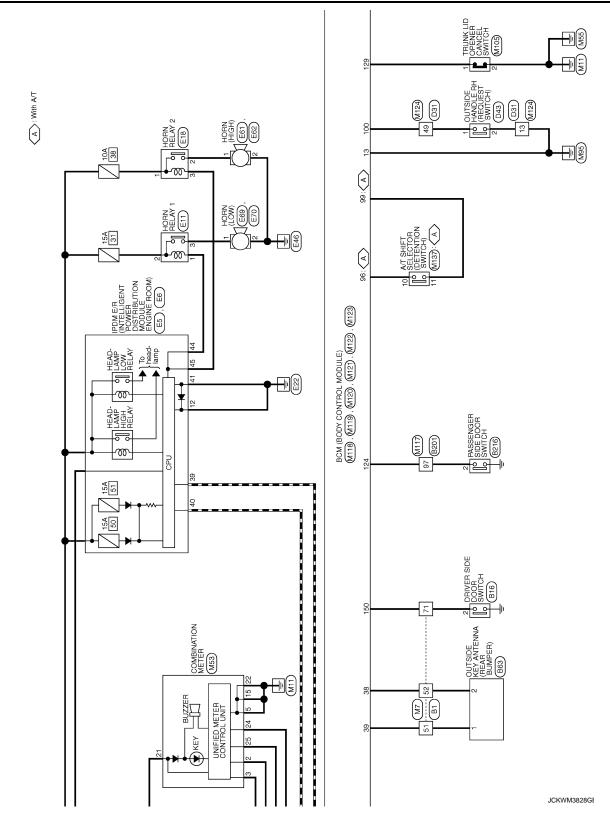
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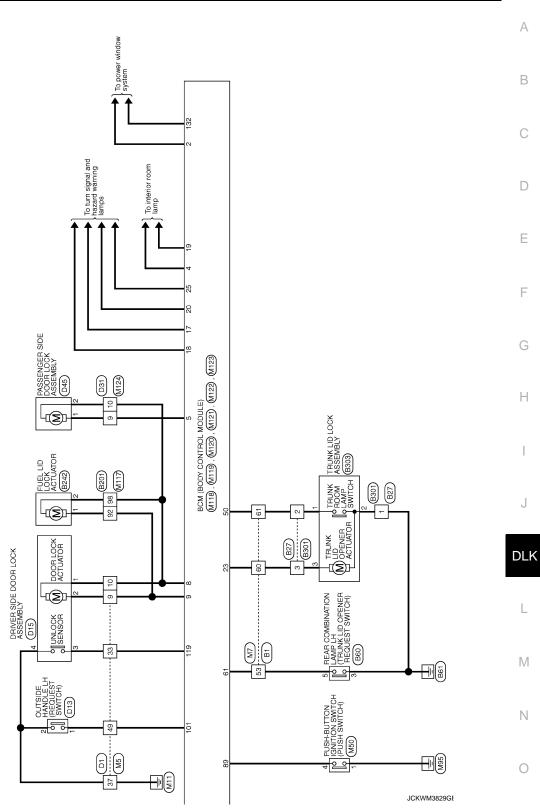
JCKWM3826GE



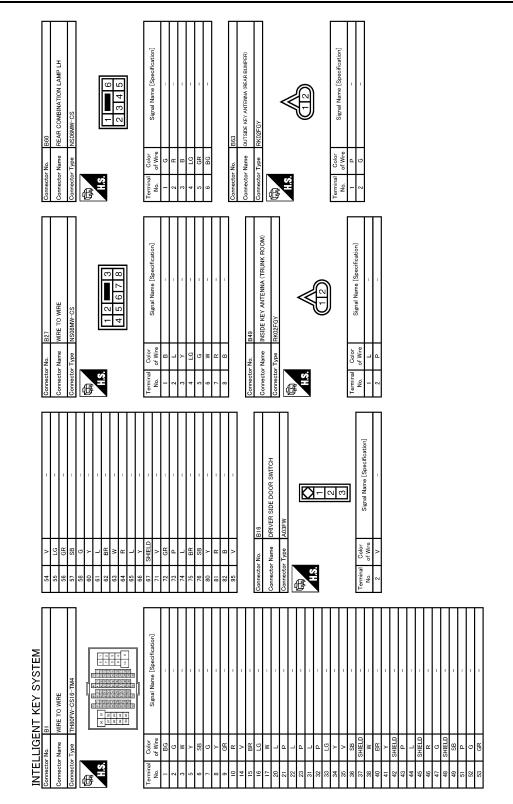
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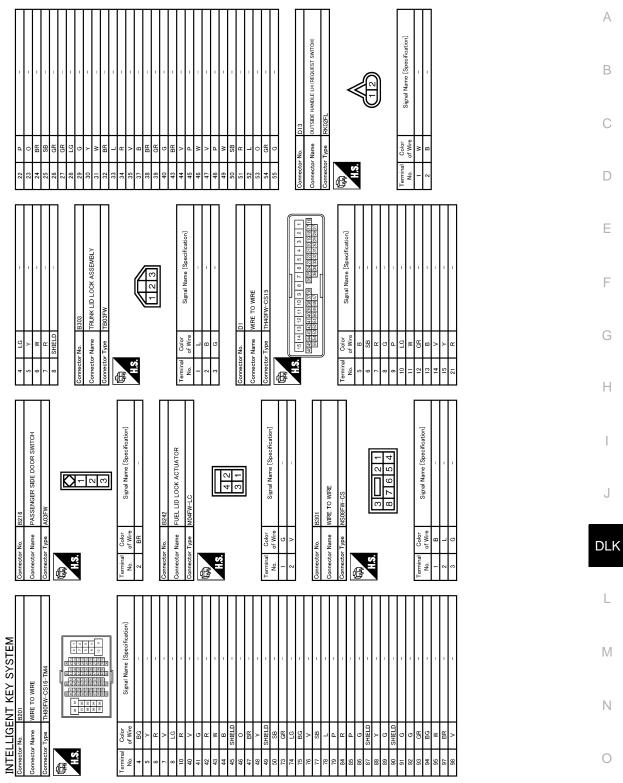


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#### < DTC/CIRCUIT DIAGNOSIS >



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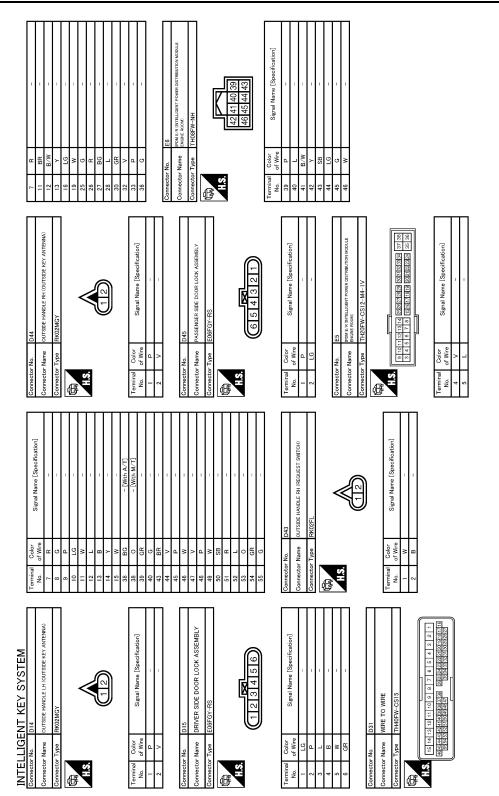
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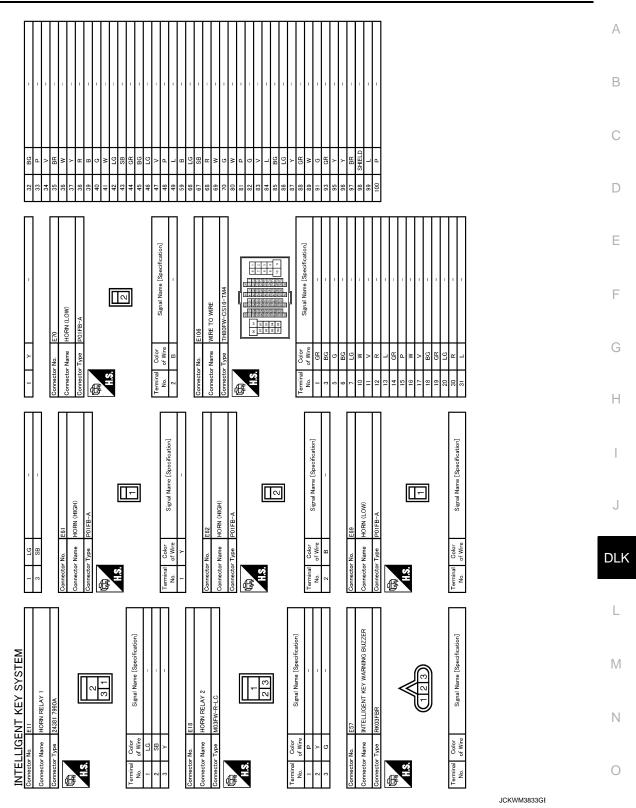
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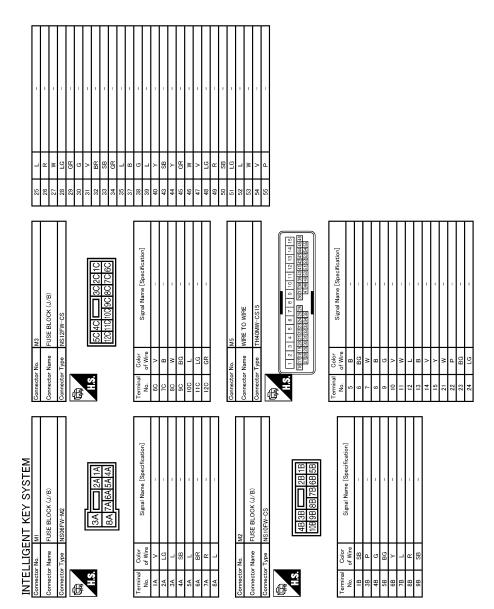


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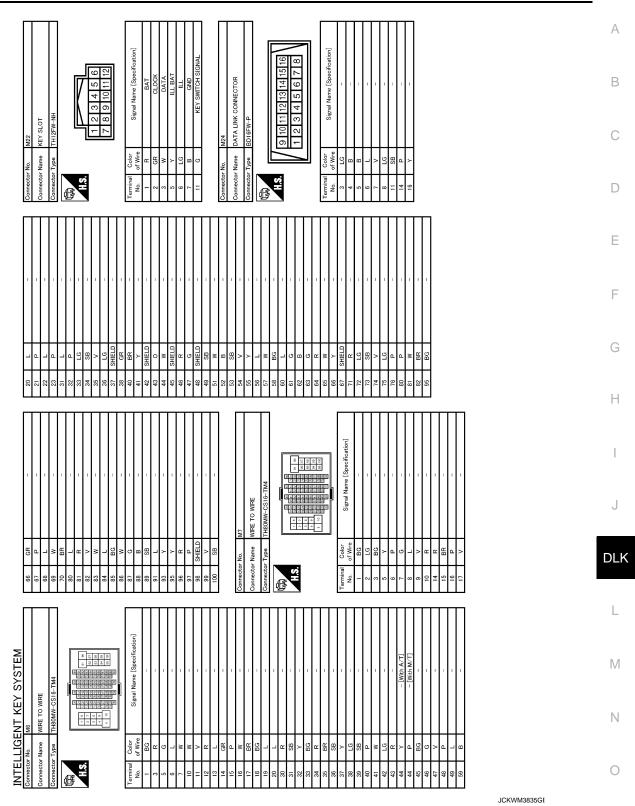


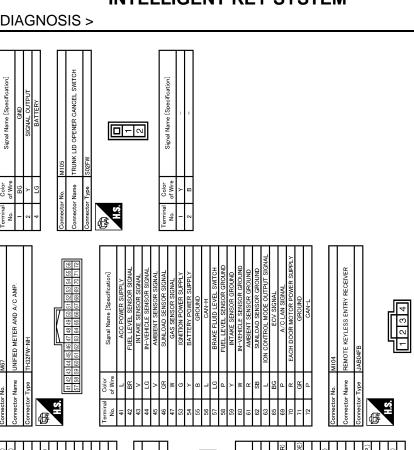
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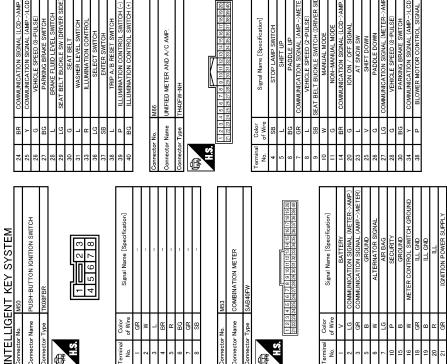


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#### < DTC/CIRCUIT DIAGNOSIS >







Color of Wire

erminal No.

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Connector Name

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Revision: 2009 November

Type

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Connector Name

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Color of Wire

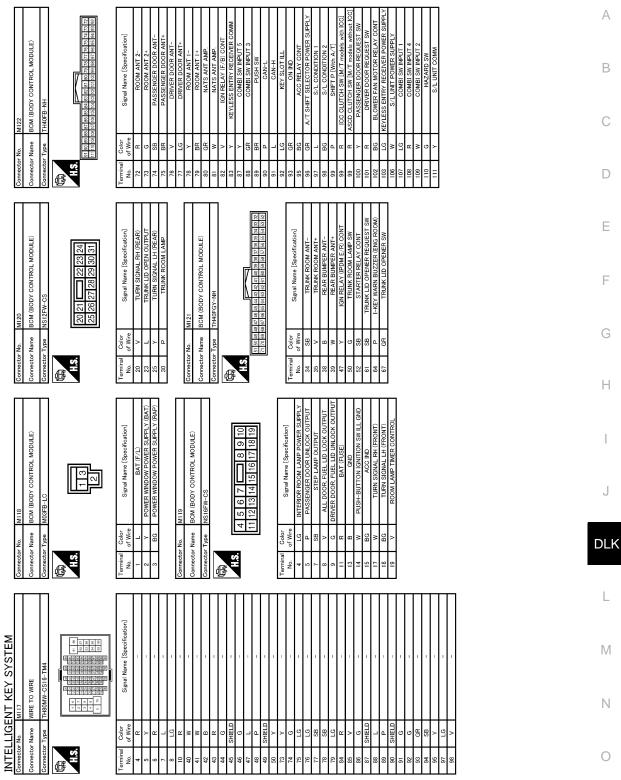
Ferminal No.

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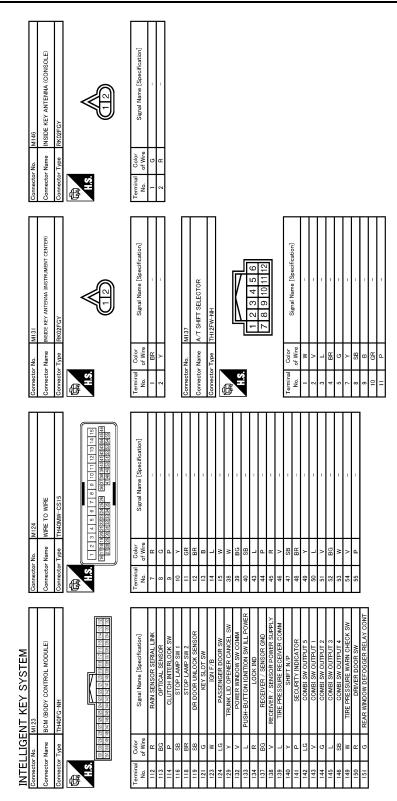
K GR R GR

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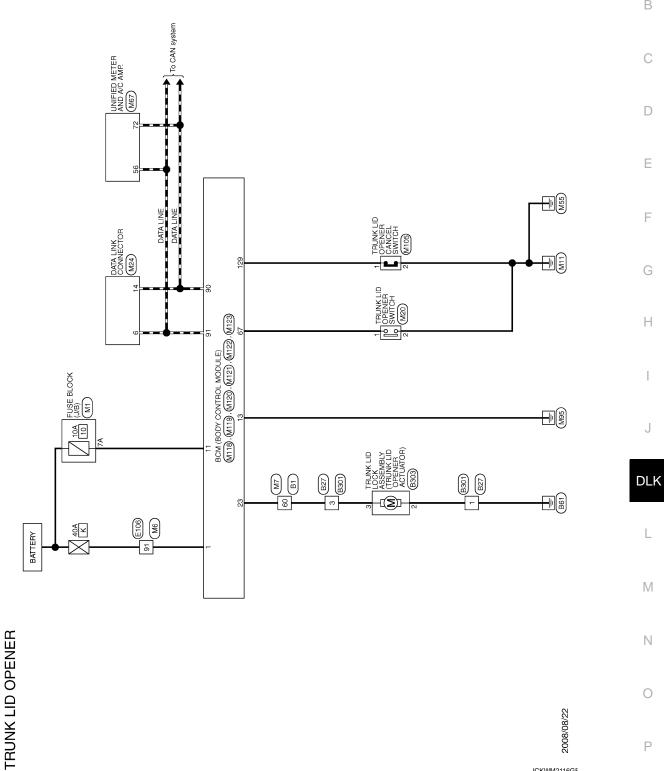


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< DTC/CIRCUIT DIAGNOSIS >

# TRUNK LID OPENER

Wiring Diagram - TRUNK LID OPENER -



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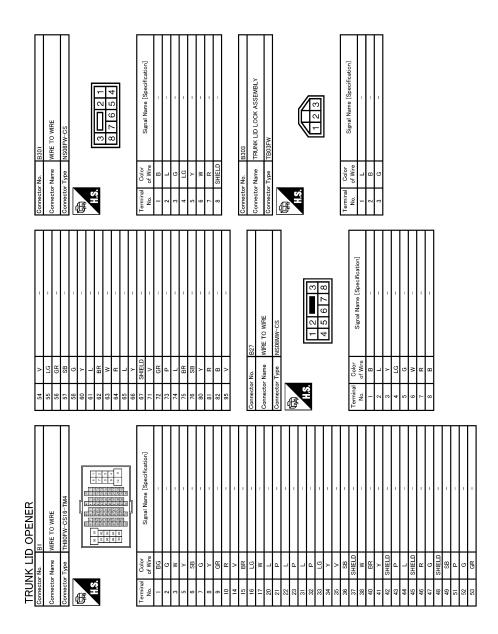
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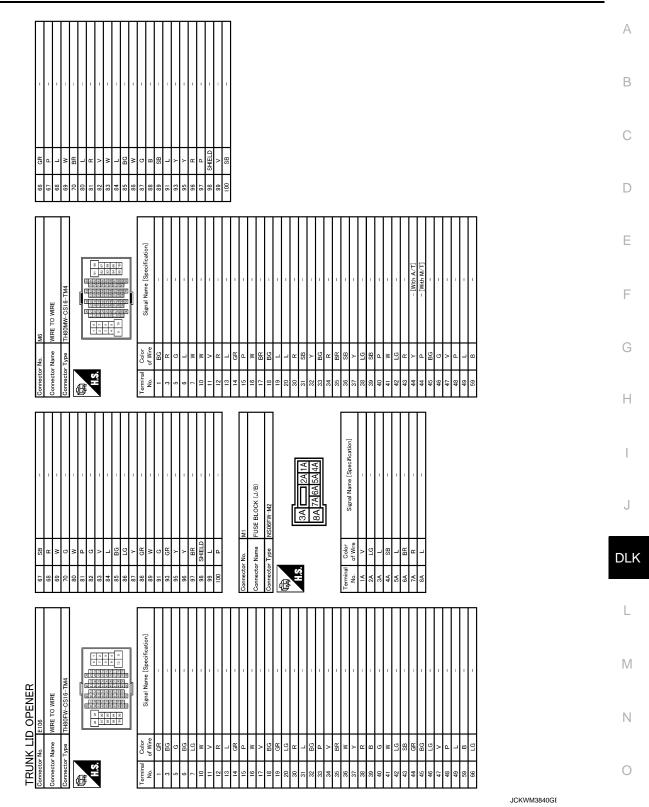
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JCKWM3839GE

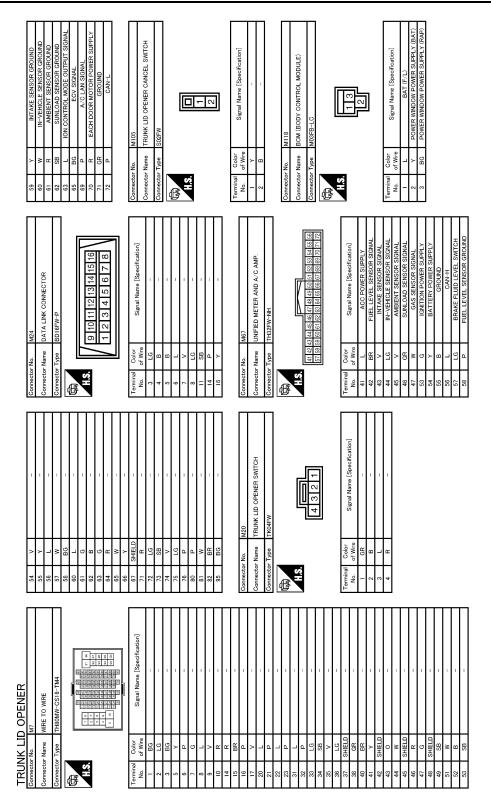
## **TRUNK LID OPENER**

#### < DTC/CIRCUIT DIAGNOSIS >



# **TRUNK LID OPENER**

#### < DTC/CIRCUIT DIAGNOSIS >



JCKWM3841GE

# TRUNK LID OPENER

#### < DTC/CIRCUIT DIAGNOSIS >

ND SUPPLY COMM	A
LOCK ND RECEIVER / SENSOR GUO RECEIVER / SENSOR GUO RECEIVER / SENSOR FOWER SUPPLY THE PRESURE RECIVER COMM SHIFT N/P COMBI SW OUTPUT 1 COMBI SW OUTPUT 1 COMBI SW OUTPUT 2 COMBI SW OUTPUT 2 COM	В
	С
134         138           137         138           138         149           144         143           151         149           151         149	D
INPUT 5 INPUT 5 INPUT 3 SW INPUT 3 SW ITLL ITLL ITLL ITLL ITLL ITLL ITLL ITLL ITLL ITLL ITLL ITLL ITLN 2 ITTON	E
COMBI SW COMBI SW COMBI SW COMBI SW COMBI SW COMBI SW COMBI SW COMBI SW COMBI SW SL COND SL CO	F
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88         88         88         88         88         88         88         88         88         88         88         88         88         88         88         89         90         100         101	Н
1 (BODY CONTROL MODULE) PEGY-NHI Signal Name (Specification) TRUMK REOM ANT- TRUMK ROOM ANT- TRUMK LD OPENER ANT- TRUMK LD OPENER ANT- TRUMK LD OPENER SW TRUMK LD OPENER SW	I
No.         MI21           Name         BCM (BODY CONTROL MODULE)           Type         FH40FGY-MH           Type         FH40FGY-MH           Oldor         Signal Manel (Specification of Wires)           Signal Manel (Specification of Wires)         Signal Manel (Specification of Wires)           Coldor         Signal Manel (Specification of Wires)           V         TRUNK ROOM AMT- TRUNK ROOM AMT- V           V         IRRUNK ROOM AMT- TRUNK ROOM AMT- Signal Manel (Specification of Wires)           Model         MI22           No.         MI22           No. <td< td=""><td>J</td></td<>	J
Connector No.         M           Connector Name         B           Si         V           Si         V           Si         V           Si         V           Si         V           Si         V           Si         Si           Si         V           Si         V           Si         V           Si         V      <	DLK
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TRUNK       Domestor Name       Commettor Name       Connector Name       One	0
	JCKWM3842GE

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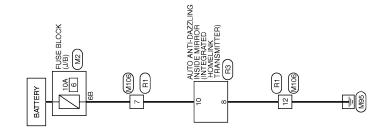
# INTEGRATED HOMELINK TRANSMITTER SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

INTEGRATED HOMELINK TRANSMITTER SYSTEM

Wiring Diagram - INTEGRATED HOMELINK TRANSMITTER SYSTEM - INFORM

INFOID:000000005654915



INTEGRATED HOMELINK TRANSMITTER

2009/11/05

JCKWM3843GE

## INTEGRATED HOMELINK TRANSMITTER SYSTEM < DTC/CIRCUIT DIAGNOSIS >

А В С D Е Signal Name [Specification] TO ANTI-DAZZUNG INSIDE MIRROR GND IGN F G Color of Wire BR ector Name H.S. erminal No. ß Н - $\sim$ Signal Name [Specification] N ω 9 4 с 12 11 WIRE TO WIRE 13 12 18 17 J 4 S 19 6 20 Color of Wire nnector Name θĘ 띪ピ ctor Type DLK H.S. 19 20 Ŝ Æ INTEGRATED HOMELINK TRANSMITTER L 9 20 Signal Name [Specification] Signal Name [Specification] 19 ഹ Μ 4 2 17 FUSE BLOCK (J/B) 15 16 10 11 WIRE TO WIRE NH10MW-CS ო o <u>†</u> Ν N ω 7 Color of Wire Color of Wire SB -HIELD inector Name stor Name មួត BG > euv. 5 H œ H.S. H.S. rminal No. Ο rmina No. Æ ß

JCKWM3844GE

# ECU DIAGNOSIS INFORMATION BCM (BODY CONTROL MODULE)

# **Reference Value**

INFOID:000000005889904

## VALUES ON THE DIAGNOSIS TOOL

#### CONSULT-III 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
FR WIPER LOW	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
FR WASHER SW	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT/AUTO	Off
	Front wiper switch INT/AUTO	On
FR WIPER STOP	Front wiper is not in STOP position	Off
FR WIPER STOP	Front wiper is in STOP position	On
INT VOLUME	Wiper volume dial is in a dial position 1 - 7	Wiper volume dial posi- tion
	Other than turn signal switch RH	Off
TURN SIGNAL R	Turn signal switch RH	On
	Other than turn signal switch LH	Off
TURN SIGNAL L	Turn signal switch LH	On
	Other than lighting switch 1ST and 2ND	Off
TAIL LAMP SW	Lighting switch 1ST or 2ND	On
	Other than lighting switch HI	Off
HI BEAM SW	Lighting switch HI	On
	Other than lighting switch 2ND	Off
HEAD LAMP SW 1	Lighting switch 2ND	On
	Other than lighting switch 2ND	Off
HEAD LAMP SW 2	Lighting switch 2ND	On
	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
	Other than lighting switch AUTO	Off
AUTO LIGHT SW	Lighting switch AUTO	On
	Front fog lamp switch OFF	Off
FR FOG SW	Front fog lamp switch ON	On
RR FOG SW	<b>NOTE:</b> The item is indicated, but not monitored.	Off
	Driver door closed	Off
DOOR SW-DR	Driver door opened	On
	Passenger door closed	Off
DOOR SW-AS	Passenger door opened	On
DOOR SW-RR	NOTE: The item is indicated, but not monitored.	Off

#### < ECU DIAGNOSIS INFORMATION >

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
	Other than power door lock switch LOCK	Off
CDL LOCK SW	Power door lock switch LOCK	On
	Other than power door lock switch UNLOCK	Off
CDL UNLOCK SW	Power door lock switch UNLOCK	On
	Other than driver door key cylinder LOCK position	Off
KEY CYL LK-SW	Driver door key cylinder LOCK position	On
	Other than driver door key cylinder UNLOCK position	Off
KEY CYL UN-SW	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
	Hazard switch is OFF	Off
HAZARD SW	Hazard switch is ON	On
REAR DEF SW	NOTE: The item is indicated, but not monitored.	Off
H/L WASH 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
TR/BD OPEN 3W	While the trunk lid opener switch is turned ON	On
TRNK/HAT MNTR	Trunk lid closed	Off
	Trunk lid opened	On
RKE-LOCK	LOCK button of the Intelligent Key is not pressed	Off
	LOCK button of the Intelligent Key is pressed	On
RKF-UNI OCK	UNLOCK button of the Intelligent Key is not pressed	Off
	UNLOCK button of the Intelligent Key is pressed	On
RKE-TR/BD	TRUNK OPEN button of the Intelligent Key is not pressed	Off
	TRUNK OPEN button of the Intelligent Key is pressed	On
RKE-PANIC	PANIC button of the Intelligent Key is not pressed	Off
	PANIC button of the Intelligent Key is pressed	On
RKE-P/W OPEN	UNLOCK button of the Intelligent Key is not pressed	Off
	UNLOCK button of the Intelligent Key is pressed and held	On
RKE-MODE CHG	LOCK/UNLOCK button of the Intelligent Key is not pressed and held simulta- neously	Off
	LOCK/UNLOCK button of the 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
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off

Revision: 2009 November

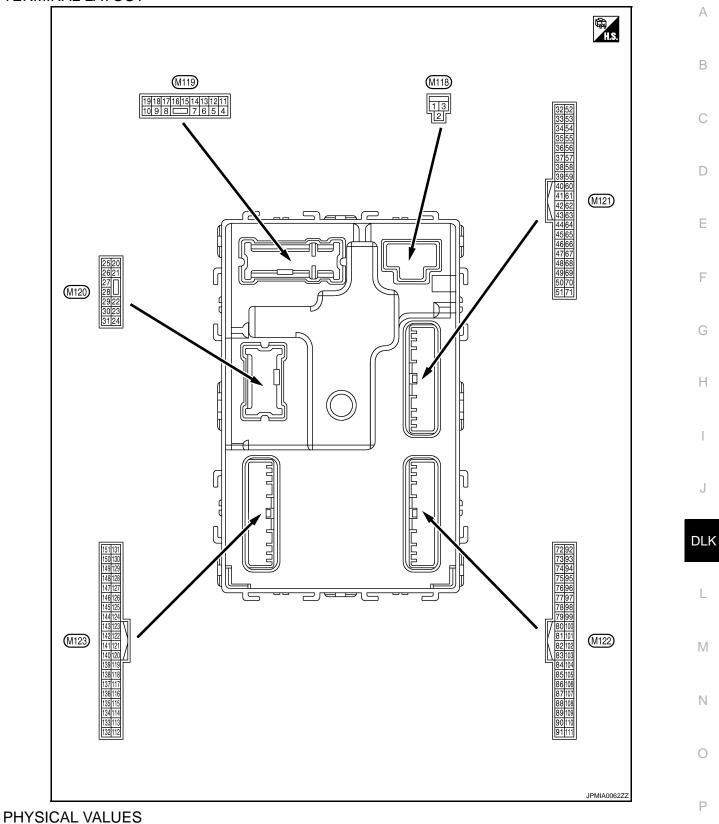
Monitor Item	Condition	Value/Status
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Trunk lid opener request switch is not pressed	Off
	Trunk lid opener request switch is pressed	On
	Push-button ignition switch (push switch) is not pressed	Off
PUSH SW	Push-button ignition switch (push switch) is pressed	On
	Ignition switch in OFF or ACC position	Off
GN RLY2 -F/B	Ignition switch in ON position	On
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off
	The clutch pedal is not depressed	Off
CLUCH SW	The clutch pedal is depressed	On
	The brake pedal is depressed when No. 7 fuse is blown	Off
BRAKE SW 1	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is nor- mal	On
	The brake pedal is not depressed	Off
3RAKE SW 2	The brake pedal is depressed	On
	Selector lever in P position (Except M/T models)     The clutch pedal is depressed (M/T models)	Off
DETE/CANCL SW	<ul> <li>Selector lever in any position other than P (Except M/T models)</li> <li>The clutch pedal is not depressed (M/T models)</li> </ul>	On
	Selector lever in any position other than P and N	Off
SFT PN/N SW	Selector lever in P or N position	On
	Steering is unlocked	Off
S/L -LOCK	Steering is locked	On
	Steering is locked	Off
S/L -UNLOCK	Steering is unlocked	On
	Ignition switch in OFF or ACC position	Off
S/L RELAY-F/B	Ignition switch in ON position	On
JNLK SEN -DR	Driver door is unlocked	Off
JNLK SEN-DR	Driver door is locked	On
	Push-button ignition switch (push-switch) is not pressed	Off
PUSH SW -IPDM	Push-button ignition switch (push-switch) is pressed	On
GN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
GN RLTT-F/D	Ignition switch in ON position	On
DETE SW -IPDM	Selector lever in any position other than P	Off
	Selector lever in P position	On
	Selector lever in any position other than P and N (Except M/T models)     The clutch pedal is not depressed (M/T models)	Off
SFT PN -IPDM	Selector lever in P or N position     The clutch pedal is depressed	On
	Selector lever in any position other than P	Off
SFT P -MET	Selector lever in P position	On
	Selector lever in any position other than N	Off
SFT N -MET	Selector lever in N position	On

Monitor Item	Condition	Value/Status
	Engine stopped	Stop
ENGINE STATE	While the engine stalls	Stall
	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	Steering is unlocked	Off
3/L LOCK-IPDIVI	Steering is locked	On
S/L UNLK-IPDM	Steering is locked	Off
S/E ONER-IF DIVI	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
5/L RELAT-REQ	Steering lock system are not 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
	Driver door is locked	LOCK
DOOR STAT-DR	Wait with selective UNLOCK operation (60 seconds)	READY
	Driver door is unlocked	UNLOCK
	Passenger door is locked	LOCK
DOOR STAT-AS	Wait with selective UNLOCK operation (60 seconds)	READY
	Passenger door is unlocked	UNLOCK
	Steering is locked	Reset
ID OK FLAG	Steering is unlocked	Set
	The engine start is prohibited	Reset
PRMT ENG STRT	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
KEY SW -SLOT	The Intelligent Key is not inserted into key slot	Off
NET 3W -3LUT	The Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of the Intelligent Key	Operation frequency of the Intelligent Key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	—
	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
CONFRM ID ALL	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done
	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
CONFIRM ID4	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done
	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet
CONFIRM ID3	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 reg- istered to BCM.	Yet
CONFIRMIDZ	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 regis- tered to BCM.	Yet
CONFIRMIDI	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done
	The ID of fourth Intelligent Key is not registered to BCM	Yet
TP 4	The ID of fourth Intelligent Key is registered to BCM	Done
	The ID of third Intelligent Key is not registered to BCM	Yet
TP 3	The ID of third Intelligent Key is registered to BCM	Done
TDO	The ID of second Intelligent Key is not registered to BCM	Yet
TP 2	The ID of second Intelligent Key is registered to BCM	Done
TP 1	The ID of first Intelligent Key is not registered to BCM	Yet
IFI	The ID of first Intelligent Key is registered to BCM	Done
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID REGST FL1	ID of front LH tire transmitter is registered	Done
ID REGST FLT	ID of front LH tire transmitter is not registered	Yet
ID REGST FR1	ID of front RH tire transmitter is registered	Done
ID REGST FRT	ID of front RH tire transmitter is not registered	Yet
	ID of rear RH tire transmitter is registered	Done
ID REGST RR1	ID of rear RH tire transmitter is not registered	Yet
	ID of rear LH tire transmitter is registered	Done
ID REGST RL1	ID of rear LH tire transmitter is not registered	Yet
	Tire pressure indicator OFF	Off
WARNING LAMP	Tire pressure indicator ON	On
BUZZER	Tire pressure warning alarm is not sounding	Off
DUZZEK	Tire pressure warning alarm is sounding	On

< ECU DIAGNOSIS INFORMATION >

**TERMINAL LAYOUT** 



	nal No.	Description				Value		
(vvire +	color)	Signal name	Input/ Output		Condition	(Approx.)		
1 (L)	Ground	Battery power supply	Input	Ignition switch (	OFF	Battery voltage		
2 (Y)	Ground	P/W power supply (BAT)	Output	Ignition switch (	OFF	12 V		
3 (BG)	Ground	P/W power supply (RAP)	Output	Ignition switch (	ИС	12 V		
					mp battery saver is activated. or room lamp power supply)	0 V		
4 (LG)	Ground	Interior room lamp power supply	Output	vated.	mp battery saver is not acti- erior room lamp power sup-	12 V		
5	Onerrord	Passenger door UN-	Outrout	Passenger	UNLOCK (Actuator is activated)	12 V		
(P)	Ground	LOCK	Output	door	Other than UNLOCK (Ac- tuator is not activated)	0 V		
7	0	<b>a</b>	Outrout	Otan Jaman	ON	0 V		
(SB)	Ground	Step lamp	Output	Step lamp	OFF	12 V		
8	8 (V) Ground All doors, fuel lid LOCK		Outrout	Output All doors, fuel lid	LOCK (Actuator is activated)	12 V		
(V)			Output		Other than LOCK (Actuator is not activated)	0 V		
9	Crownd	Driver door, fuel lid		Driver door,	UNLOCK (Actuator is activated)	12 V		
(G)	Ground	UNLOCK	Output	fuel lid	Other than UNLOCK (Actuator is not activated)	0 V		
11 (R)	Ground	Battery power supply	Input	Ignition switch (	DFF	Battery voltage		
13 (B)	Ground	Ground	_	Ignition switch (	ИС	0 V		
					OFF	0 V		
		Push-button ignition				<b>NOTE:</b> When the illumination brighten- ing/dimming level is in the neutral position.		
14 (W)	Ground	switch illumination ground	Output Tail lamp		Tail lamp	Output Tail lamp	ON	(V) 10 0 2 ms JSNIA0010GB
15 (BG)	Ground	ACC indicator lamp	Output	tput Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage		
(60)					ACC	0 V		

	nal No. color)	Description				Value
(wire +	-	Signal name	Input/ Output		Condition	(Approx.)
					Turn signal switch OFF	0 V
17 (W)	Ground	Turn signal RH (Front)	Output	lgnition switch ON	Turn signal switch RH	(V) 15 0 10 10 10 10 10 10 10 10 10
					Turn signal switch OFF	0.5 V
18 (BG)	Ground	Turn signal LH (Front)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1
19	Cround	Room lamp timer	Quitout	Interior room	OFF	12 V
(V)	Ground	control	Output	lamp	ON Turn signal switch OFF	0 V 0 V
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 50 1 s FKID0926E 6.5 V
23					OPEN (Trunk lid opener actuator is activated)	12 V
(L)	Ground	Trunk lid open	Output	Trunk lid	Other than OPEN (Trunk lid opener actuator is not activated)	0 V
					Turn signal switch OFF	0 V
25 (Y)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch LH	
30	Ground	Trunk room lamp	Output	Trunk room	ON	6.5 V 0 V
(P)	Ground		Output	lamp	OFF	12 V

	nal No.	Description				Value								
(Wire +	color)	Signal name	Input/ Output		Condition	(Approx.)								
34 Ground	Ground	round Trunk room antenna (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 0 1 1 1 1 1 1 1 1 1 1 1 1 1								
(SB)	(SB) Ground				When Intelligent Key is not in the passenger compart- ment	(V) 15 0 0 1 s JMKIA0063GB								
35	35	Trunk room antenna	Output Ignition sv OFF	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 0 0 1 s JMKIA0062GB								
(V)	Ground	(+)											OFF	When Intelligent Key is not in the passenger compart- ment
38	8 Roar humper apton	Ground Rear bumper anten- na (-) Output lid opener quest swit operated	When the trunk lid opener re-		When Intelligent Key is in the antenna detection area	(V) 15 0 1 s JMKIA0062GB								
(B)	Ground		operated with ignition switch	When Intelligent Key is not in the antenna detection area	(V) 15 0 5 0 1 s JMKIA0063GB									

	nal No.	Description				Value
(vvire +	color)	Signal name	Input/ Output		Condition	(Approx.)
39	0	Rear bumper anten-	0.444	When the trunk lid opener re-	When Intelligent Key is in the antenna detection area	(V) 15 10 0 1 1 5 0 1 5 0 1 5 0 1 5 0 1 5 1 5
(W)	Ground	na (+)	Output	quest switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
47		Ignition relay (IPDM	0.1.1		OFF or ACC	12 V
(Y)	Ground	E/R) control	Output	Ignition switch	ON	0 V
50 (G)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (Trunk lid is closed)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V
					ON (Trunk lid is opened)	0 V
				Ignition switch	When selector lever is in P or N position	12 V
52	Cround	Startar ralay control	Output	ON (A/T mod- els)	When selector lever is not in P or N position	0 V
(SB)	Ground	Starter relay control	Output	Ignition switch ON (M/T mod-	When the clutch pedal is depressed	Battery voltage
				els)	When the clutch pedal is not depressed	0 V
					ON (Pressed)	0 V
61 (SB)	Ground	Trunk lid opener re- quest switch	Input	Trunk lid open- er request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V
	1	Intelligent Key warn-		Intelligent Key	Sounding	0 V
64	Ground	ing buzzer (Engine	Output	warning buzzer		I de la constante de

# BCM (BODY CONTROL MODULE) < ECU DIAGNOSIS INFORMATION > Terminal No. Description (Mine collect)

Terminal No.		Description				Volue	
(Wire +	color) –	Signal name	Input/ Output		Condition	Value (Approx.)	
67 (GR)	Ground	Trunk lid opener switch	Input	Trunk lid open- er switch	Pressed Not pressed	0 V (V) 15 0 5 0 10 ms JPMIA0011GB 11.8 V	
72	Ground	Room antenna 2 (-)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s 10 5 0 1 s 5 JMKIA0062GB	
(R) Groun		(Center console)		OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 5 0 1 s JMKIA0063GB	
73	Ground Room antenna 2 (+) Outp	Room antenna 2 (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 15 10 5 0 15 15 10 5 0 15 15 15 10 15 15 10 15 15 10 15 15 15 15 15 15 15 15 15 15 15 15 15	
(G) Grou			OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 0 1 s JMKIA0063GB		

	Terminal No. Description (Wire color)				Value					
(Wire +	color)	Signal name	Input/ Output		Condition	(Approx.)	A			
				When the pas-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JJKIA0062GB	B C D			
74 (SB)	Ground	Passenger door an- tenna (-)	Output	senger door re- quest switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 5 0 1 s JMKIA0063GB	E			
75	Ground	Passenger door an-		Outrut	Outrut	When the pas- senger door re-	senger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	G H I
(BR)	Ground	tenna (+)	Output	operated with ignition switch OFF	operated with ignition switch		(V) 15 0 5 0 1 s JMKIA0063GB	J DLK		
76	Ground	Driver door antenna	Output	When the driv- er door request switch is oper- ated with igni- tion switch OFF	When Intelligent Key is in the antenna detection area	(V) 10 50 1 s JMKIA0062GB	M			
(V)	Ground	()	Output		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	P			

	nal No.	Description				Value
(vvire +	color)	Signal name	Input/ Output		Condition	(Approx.)
77	Ground	Driver door antenna	Output	When the driv- er door request	When Intelligent Key is in the antenna detection area	(V) 15 10 0 1 s JMKIA0062GB
(LG)		(+)	Cutput	utput switch is oper- ated with igni- tion switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 0 1 s 0 JMKIA0063GB
78	Ground	Room antenna 1 (-) (Instrument page)) Output	tout Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	
(Y)		(Instrument panel)		OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 0 1 s JMKIA0063GB
79		Room antenna 1 (+)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB
		(Instrument panel)	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s 1 JMKIA0063GB	

Terminal No. (Wire color)		Description	1			Value
+		Signal name	Input/ Output		Condition	(Approx.)
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (W)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (V)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC ON	0 V 12 V
83	Remote keyless entry	Input/	During waiting		(V) 15 0 0 <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b>	
(Y)	Ground	receiver communica- tion	Output	When operating gent Key	either button on the Intelli-	(V) 15 10 5 0 1 ms JMKIA0065GB
					All switches OFF (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
	Combination switch INPUT 5	Input	Combination switch	Front fog lamp switch ON (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3 V	
			Any of the conditions be- low with all switches OFF • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 6 • Wiper volume dial 7	(V) 10 5 0 2 ms JPMIA0040GB 1.3 V		

#### Terminal No. Description Value (Wire color) Condition Input/ (Approx.) Signal name + \_ Output (V 15 10 5 All switches OFF Õ (Wiper volume dial 4) 2 ms JPMIA0041GB 1.4 V (V 15 10 Lighting switch HI 0 (Wiper volume dial 4) 2 ms JPMIA0036GB 1.3 V 88 Combination switch Combination Ground Input (GR) **INPUT 3** switch 15 10 Lighting switch 2ND n (Wiper volume dial 4) 2 ms JPMIA0037GB 1.3 V 15 Any of the conditions be-10 low with all switches OFF n • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 3 2 ms JPMIA0040GB 1.3 V Push-button ig-0 V Pressed 89 Push-button ignition Ground Input nition switch (BR) switch (Push switch) Not pressed Battery voltage (push switch) 90 Input/ Ground CAN-L \_\_\_\_ (P) Output 91 Input/ CAN-H Ground (L) Output OFF 0 V (V 15 10 92 Key slot illumin Ground Key slot illumination Output Blinking (LG) nation 1 s JPMIA0015GB 6.5 V ON 12 V

## **BCM (BODY CONTROL MODULE)**

	nal No. color)	Description	_		Condition	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
93 (CB)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
(GR)				-	ON	0 V
95	Ground	ACC relay control	Output	Ignition owitch	OFF	0 V
(BG)	Ground	ACC relay control	Output	Ignition switch	ACC or ON	12 V
96 (GR)	Ground	A/T shift selector (De- tention switch) power supply	Output		_	12 V
97	Ground	Steering lock condi-	Input	Steering lock	LOCK status	0 V
(L)	0.00.00	tion No. 1		g.co.t	UNLOCK status	12 V
98	Ground	Steering lock condi-	Input	Steering lock	LOCK status	12 V
(BG)	e.eu.u	tion No. 2	p at	0.000g	UNLOCK status	0 V
		Selector lever P posi-		Selector lever	P position	0 V
	tion switch			Any position other than P	12 V	
	ASCD clutch switch (M/T models without		ASCD clutch	OFF (Clutch pedal is de- pressed)	0 V	
(P)* <sup>1</sup> (R)* <sup>2</sup>	Ground		Input	switch	ON (Clutch pedal is not depressed)	12 V
()		ICC clutch switch (M/		ICC clutch	OFF (Clutch pedal is de- pressed)	0 V
	T models with ICC)		switch	ON (Clutch pedal is not depressed)	12 V	
					ON (Pressed)	0 V
100 (Y)	Ground	Passenger door re- quest switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 15 0 10 10 ms JPMIA0016GB 1.0 V
					ON (Pressed)	0 V
101 (R)	Ground	Driver door request switch	Input	Driver door re- quest switch	OFF (Not pressed)	(V) 15 10 10 10 10 10 10 10 10 10 10
102 (BG)	Ground	Blower fan motor re- lay control	Output	Ignition switch	OFF or ACC ON	0 V 12 V
103 (LG)	Ground	Remote keyless entry receiver power sup- ply	Output	Ignition switch (	DFF	12 V
106 (W)	Ground	Steering lock unit power supply	Output	Ignition switch	OFF or ACC ON	12 V 0 V

	nal No. color)	Description				Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
					Turn signal switch LH	(V) 15 0 2 ms JPMIA0037GB 1.3 V
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper volume dial 4)	Turn signal switch RH	(V) 15 10 5 2 ms JPMIA0036GB 1.3 V
			Front wiper switch LO	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V		
_					Front washer switch ON	(V) 15 10 2 ms JPMIA0039GB 1.3 V

nal No.	Description				Value	А
	Signal name	Input/ Output		Condition	(Approx.)	A
				All switches OFF (Wiper volume dial 4)	(V) 15 0 2 ms JPMIA0041GB 1.4 V	B C D
	Combination switch		Combination	Lighting switch AUTO (Wiper volume dial 4)	(V) 15 10 5 2 ms JPMIA0038GB 1.3 V	E
Ground	INPUT 4	Input	switch	Lighting switch 1ST (Wiper volume dial 4)	(V) 15 10 0 2 ms JPMIA0036GB 1.3 V	G H I
				Any of the conditions be- low with all switches OFF • Wiper volume dial 1 • Wiper volume dial 5 • Wiper volume dial 6	(V) 15 0 2 ms JPMIA0039GB 1.3 V	J
	color)	color) Signal name	Crowned Combination switch	Crowned Combination switch	color)       Input/ Output       Condition         -       Signal name       Input/ Output       All switches OFF (Wiper volume dial 4)         Ground       Combination switch INPUT 4       Input       Combination switch       Lighting switch AUTO (Wiper volume dial 4)         Ground       Combination switch INPUT 4       Input       Combination switch       Lighting switch AUTO (Wiper volume dial 4)         Any of the conditions be- low with all switches OFF - Wiper volume dial 5       Any of the conditions be- low with all switches OFF - Wiper volume dial 5	Color)     Signal name     Input/ Output     Condition     Value (Approx.)       -     Signal name     Input/ Output     All switches OFF (Wiper volume dial 4)     Imput/ Imput/ Imput/ Signal name     Imput/ Imput/ Imput/ Imput/ Imput/ Signal name     Imput/

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#### Terminal No. Description Value (Wire color) Condition Input/ (Approx.) Signal name + \_ Output (V) 15 10 5 Õ All switches OFF 2 ms JPMIA0041GB 1.4 V (V 15 10 5 õ Lighting switch PASS 2 ms JPMIA0037GB 1.3 V (V 15 10 Combination 109 Combination switch switch Ō Lighting switch 2ND Ground Input INPUT 2 (W) (Wiper volume dial 4) 2 ms JPMIA0036GB 1.3 V (V 15 10 Front wiper switch INT/ 0 AUTO 2 ms JPMIA0038GB 1.3 V (V 15 10 ŏ Front wiper switch HI 2 ms JPMIA0040GB 1.3 V ON 0 V 110 Ground Hazard switch Input Hazard switch (G) ŏ OFF 10 ms JPMIA0012GB 1.1 V

## **BCM (BODY CONTROL MODULE)**

#### < ECU DIAGNOSIS INFORMATION >

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Terminal No.		Description				Value	
(Wire +	e color)	Signal name	Input/ Output		Condition	Value (Approx.)	A
					LOCK status	12 V	E
111 (Y)	Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK or UNLOCK	(V) 15 10 50 50 MKIA0066GB	
					For 15 seconds after UN- LOCK	12 V	E
					15 seconds or later after UNLOCK	0 V	F
112 (R)	Ground	Rain sensor serial link	Input/ Output	Ignition switch C	DN	(V) 15 10 5 0 10 10 10 10 10 10 10 10 10	г С
113 (BG)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle When dark outside of the	Close to 5 V	
114	Ground	Clutch interlock	Input	Clutch interlock	vehicle OFF (Clutch pedal is not depressed)	Close to 0 V	
(P)	Ground	switch	input	switch	ON (Clutch pedal is de- pressed)	Battery voltage	DL
116 (SB)	Ground	Stop lamp switch 1	Input		_	Battery voltage	
		Stop lamp switch 2 (Without ICC)		Stop lamp switch	OFF (Brake pedal is not depressed) ON (Brake pedal is de-	0 V	L
118 (BR)	Ground	Stan Jamp quitch 2	Input		pressed) h OFF (Brake pedal is not ICC brake hold relay OFF	Battery voltage 0 V	Ν
		Stop lamp switch 2 (With ICC)		Stop lamp switc	h ON (Brake pedal is de- brake hold relay ON	Battery voltage	Ν
119 (SB)	Ground	Driver side door lock assembly (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 10 50 10 ms JPMIA0012GB 1.1 V	F
					UNLOCK status (Unlock switch sensor ON)	0 V	

	nal No.	Description				
(Wire +	color)	Signal name	Input/ Output		Condition	Value (Approx.)
121	Ground	Key slot switch	Input	slot	gent Key is inserted into key	12 V
(G)		,	•	When the Intelligent Key is not inserted into key slot		0 V
123 (W)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	Battery voltage
					ON (Door open)	0 V
129 (Y)	Ground	Trunk lid opener can- cel switch	Input	Trunk lid open- er cancel switch	CANCEL	(V) 15 10 10 10 10 10 JPMIA0012GB 1.1 V
					ON	0 V
132 (V)	Ground	Power window switch communication	Input/ Output	Ignition switch C	DN	(V) 15 0 10 ms JPMIA0013GB
						10.2 V
				Ignition switch C		12 V
					ON (Tail lamps OFF)	9.5 V
133 (L)	Ground	Push-button ignition switch illumination	Output	Push-button ig- nition switch il- lumination	ON (Tail lamps ON)	NOTE: The pulse width of this wave is varied by the illumination bright- ening/dimming level.
					OFF OFF	0 V Battery voltage
134 (R)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF	0 V
137 (BG)	Ground	Receiver and sensor ground	Input	Ignition switch C		0 V

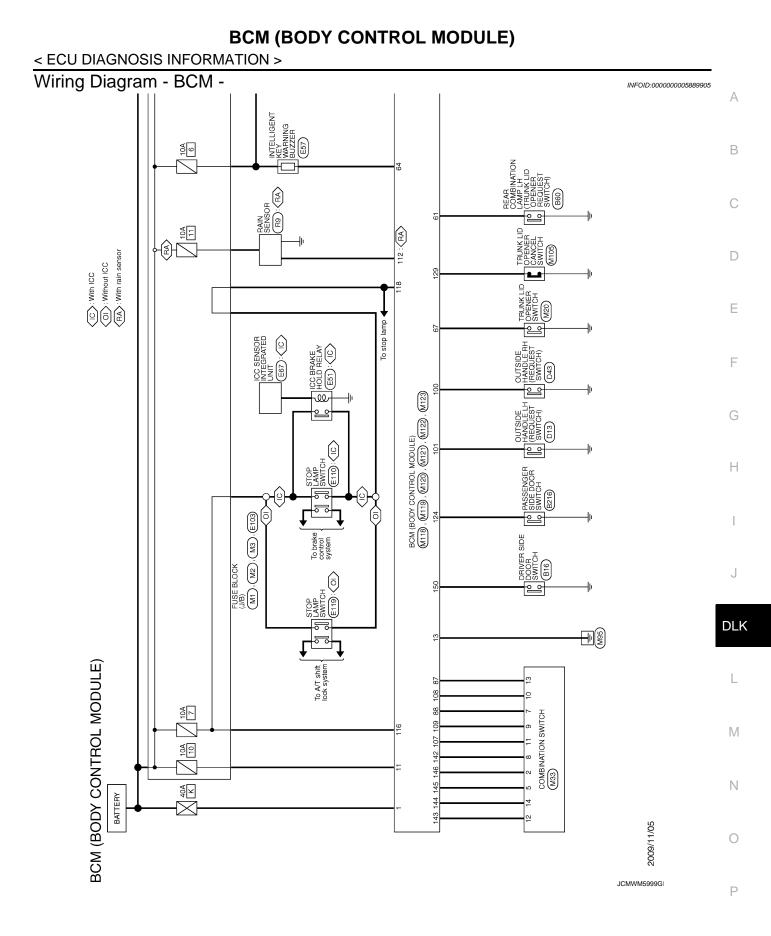
	nal No.	Description	1			Value	
(vvire +	color)	Signal name	Input/ Output		Condition	(Approx.)	
138		Receiver and sensor			OFF	0 V	
(V)	Ground	power supply	Output	Ignition switch	ACC or ON	5.0 V	
139	Ground	Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
(L)	Ground	er communication	Output		When receiving the signal from the transmitter	(V) 6 4 2 0 • • • 0.2s OCC3880D	
140	0	Selector lever P/N	1	0.1	P or N position	12 V	
(Y)	Ground	position (A/T models)	Input	Selector lever	Except P and N positions	0 V	
					ON	0 V	
141 (P)	Ground	Security indicator	Output	Security indica- tor	Blinking	(V) 15 0 1 s JPMA0014GB	
						11.3 V	
					OFF	12 V	
					All switches OFF	0 V	
					Lighting switch 1ST	(1)	
142 (LG)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper volume dial 4)	Lighting switch HI Lighting switch 2ND Turn signal switch RH	(V) 15 10 5 0 2 ms	
						JPMIA0031GB 10.7 V	
					All switches OFF (Wiper volume dial 4)	0 V	
					Front wiper switch HI (Wiper volume dial 4)	(V) 15	
143 (V)	Ground	Combination switch OUTPUT 1	Output	Combination switch	Any of the conditions be- low with all switches OFF • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 3 • Wiper volume dial 6 • Wiper volume dial 7	10 0 2 ms 10 10.7 V	

#### < ECU DIAGNOSIS INFORMATION >

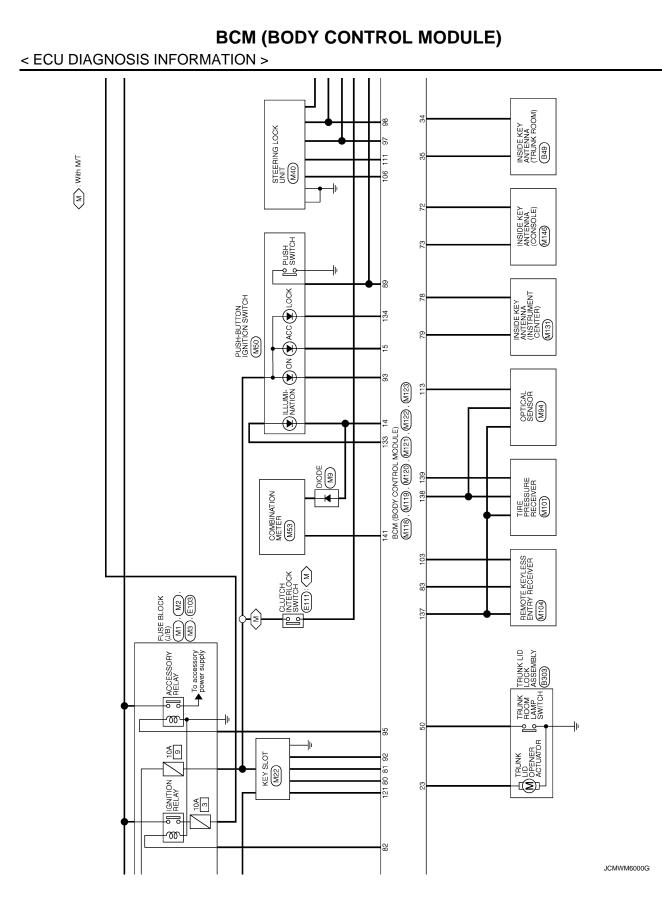
	nal No.	Description				Value
(vvire +	color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper volume dial 4)	0 V
			Output Combination switch		Front washer switch ON (Wiper volume dial 4)	(V) 15
144 (G)	Ground	Combination switch OUTPUT 2		Any of the conditions be- low with all switches OFF • Wiper volume dial 1 • Wiper volume dial 5 • Wiper volume dial 6	10 5 0 2 ms 10.7 V	
					All switches OFF	0 V
					Front wiper switch INT/ AUTO	(V)
145		Combination switch		Combination switch	Front wiper switch LO	
(L)	Ground	OUTPUT 3		(Wiper volume dial 4)	Lighting switch AUTO	5 0 2.ms 10.7 V
					All switches OFF	0 V
					Front fog lamp switch ON	
				Combination	Lighting switch 2ND	(V) 15
146	Ground	Combination switch	Output	switch	Lighting switch PASS	
(SB)	Clouid	OUTPUT 4	Cupu	(Wiper volume dial 4)	Turn signal switch LH	0 2 ms 10.7 V
149 (W)	Ground	Tire pressure warning check switch	Input		_	12 V
150 (R)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V
					ON (Door open)	0 V
151	Ground	Rear window defog-	Output	Rear window	Active	0 V
(G)	modele	ger relay control		defogger	Not activated	Battery voltage

• \*1: A/T models

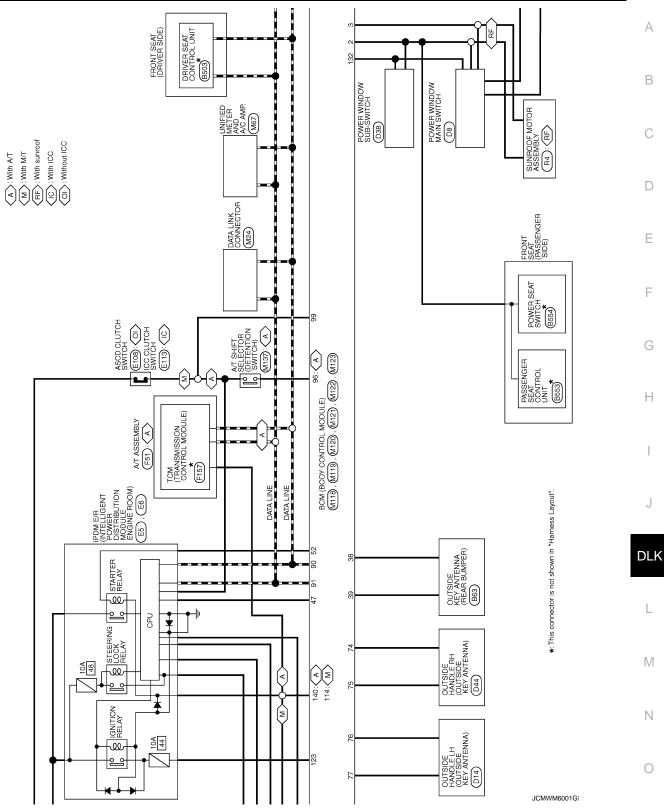
• \*2: M/T models

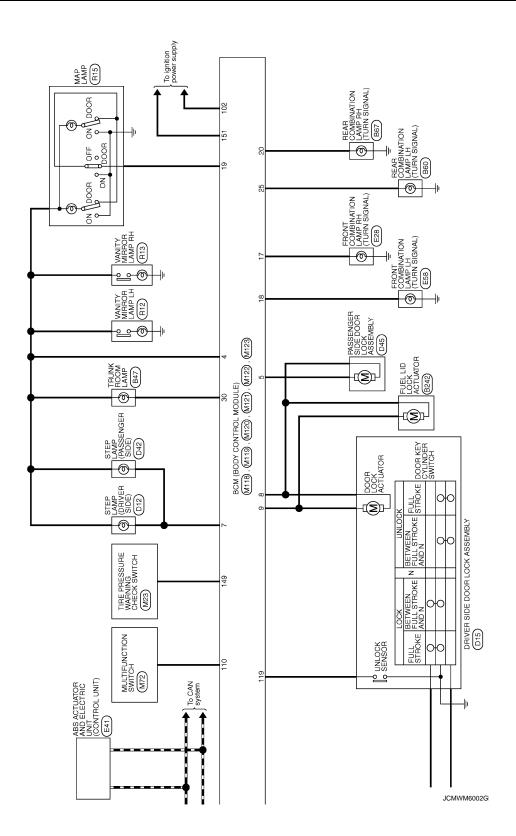


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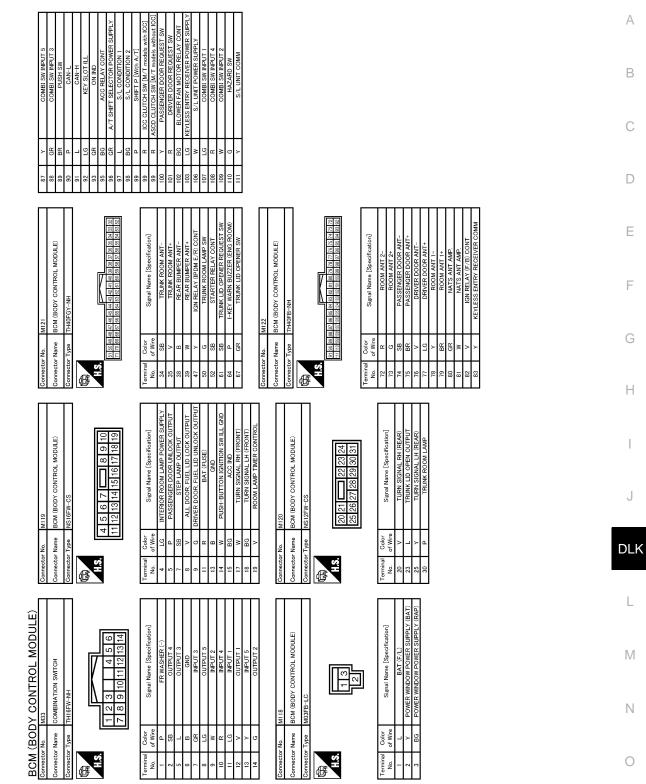


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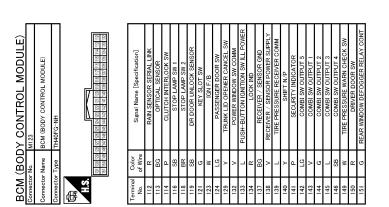


#### < ECU DIAGNOSIS INFORMATION >



JCMWM6003G

< ECU DIAGNOSIS INFORMATION >



JCMWM6004G

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## Fail-safe

#### FAIL-SAFE CONTROL BY DTC

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

Revision: 2009 November

## **DLK-162**

2010 G37 Coupe

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 $ON \rightarrow OFF$
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals are received from ABS actua- tor and electric unit (control unit) for 500 ms
B2560: STARTER CONT RELAY	Inhibit engine cranking	<ul> <li>500 ms after the following CAN signal communication status be- comes consistent</li> <li>Starter control relay signal</li> <li>Starter relay status signal</li> </ul>
B2601: SHIFT POSITION	Inhibit steering lock	<ul> <li>500 ms after the following signal reception status becomes consistent</li> <li>Selector lever P position switch signal</li> <li>P range signal (CAN)</li> </ul>
B2602: SHIFT POSITION	Inhibit steering lock	<ul> <li>5 seconds after the following BCM recognition conditions are fulfilled</li> <li>Ignition switch is in the ON position</li> <li>Selector lever P position switch signal: Except P position (12 V)</li> <li>Vehicle speed: 4 km/h (2.5 MPH) or more</li> </ul>
B2603: SHIFT POSI STATUS	Inhibit steering lock	<ul> <li>500 ms after the following BCM recognition conditions are fulfilled</li> <li>Ignition switch is in the ON position</li> <li>Selector lever P position switch signal: Except P position (12 V)</li> <li>Selector lever P/N position signal: Except P and N positions (0 V)</li> </ul>
B2604: PNP/CLUTCH SW	Inhibit steering lock	<ul> <li>500 ms after any of the following BCM recognition conditions are fulfilled</li> <li>Status 1</li> <li>Ignition switch is in the ON position</li> <li>Selector lever P/N position signal: P and N position (12 V)</li> <li>P range signal or N range signal (CAN): ON</li> <li>Status 2</li> <li>Ignition switch is in the ON position</li> <li>Selector lever P/N position signal: Except P and N positions (0 V)</li> <li>P range signal and N range signal (CAN): OFF</li> </ul>
B2605: PNP/CLUTCH SW	Inhibit steering lock	<ul> <li>500 ms after any of the following BCM recognition conditions are fulfilled</li> <li>Status 1</li> <li>Ignition switch is in the ON position</li> <li>Selector lever P/N position signal: Except P and N positions (0 V)</li> <li>Interlock/PNP switch signal (CAN): OFF</li> <li>Status 2</li> <li>Ignition switch is in the ON position</li> <li>Selector lever P/N position signal: P or N position (12 V)</li> <li>PNP switch signal (CAN): ON</li> </ul>
B2606: S/L RELAY	Inhibit engine cranking	<ul> <li>500 ms after the following CAN signal communication status becomes consistent</li> <li>Steering lock relay signal (Request signal)</li> <li>Steering lock relay signal (Condition signal)</li> </ul>
B2607: S/L RELAY	Inhibit engine cranking	<ul> <li>500 ms after the following CAN signal communication status has becomes consistent</li> <li>Steering lock relay signal (Request signal)</li> <li>Steering lock relay signal (Condition signal)</li> </ul>

#### < ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
B2608: STARTER RELAY	Inhibit engine cranking	<ul> <li>500 ms after the following signal communication status becomes consistent</li> <li>Starter motor relay control signal</li> <li>Starter relay status signal (CAN)</li> </ul>
B2609: S/L STATUS	<ul><li>Inhibit engine cranking</li><li>Inhibit steering lock</li></ul>	<ul> <li>When the following steering lock conditions agree</li> <li>BCM steering lock control status</li> <li>Steering lock condition No. 1 signal status</li> <li>Steering lock condition No. 2 signal status</li> </ul>
B260A: IGNITION RELAY	Inhibit engine cranking	<ul> <li>500 ms after the following conditions are fulfilled</li> <li>IGN relay (IPDM E/R) control signal: OFF (12 V)</li> <li>Ignition ON signal (CAN to IPDM E/R): OFF (Request signal)</li> <li>Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)</li> </ul>
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	<ul><li>When any of the following conditions are fulfilled</li><li>Power position changes to ACC</li><li>Receives engine status signal (CAN)</li></ul>
B2612: S/L STATUS	<ul> <li>Inhibit engine cranking</li> <li>Inhibit steering lock</li> </ul>	<ul> <li>When any of the following conditions are fulfilled</li> <li>Steering lock unit status signal (CAN) is received normally</li> <li>The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R)</li> </ul>
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 be- comes normal
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control in- side BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E8: CLUTCH SW	Inhibit engine cranking	<ul> <li>When any of the following BCM recognition conditions are fulfilled</li> <li>Status 1</li> <li>Clutch switch signal (CAN from ECM): ON</li> <li>Clutch interlock switch signal: OFF (0 V)</li> <li>Status 2</li> <li>Clutch switch signal (CAN from ECM): OFF</li> <li>Clutch interlock switch signal: ON (Battery voltage)</li> </ul>
B26E9: S/L STATUS	<ul> <li>Inhibit engine cranking</li> <li>Inhibit steering lock</li> </ul>	<ul> <li>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</li> <li>Steering condition No. 1 signal: LOCK (0 V)</li> <li>Steering condition No. 2 signal: LOCK (12 V)</li> </ul>

## 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	<ul> <li>B2190: NATS ANTENNA AMP</li> <li>B2191: DIFFERENCE OF KEY</li> <li>B2192: ID DISCORD BCM-ECM</li> <li>B2193: CHAIN OF BCM-ECM</li> <li>B2195: ANTI-SCANNING</li> </ul>

## < ECU DIAGNOSIS INFORMATION >

Priority	DTC	
	B2013: ID DISCORD BCM-S/L     B2014: CHAIN OF S/L-BCM     B2553: IGNITION RELAY	
	<ul> <li>B2555: STOP LAMP</li> <li>B2556: PUSH-BTN IGN SW</li> <li>B2557: VEHICLE SPEED</li> <li>B2560: STARTER CONT RELAY</li> </ul>	
	<ul> <li>B2601: SHIFT POSITION</li> <li>B2602: SHIFT POSITION</li> <li>B2603: SHIFT POSI STATUS</li> </ul>	
	<ul> <li>B2604: PNP/CLUTCH SW</li> <li>B2605: PNP/CLUTCH SW</li> <li>B2606: S/L RELAY</li> <li>B2607: S/L RELAY</li> </ul>	
4	<ul> <li>B2608: STARTER RELAY</li> <li>B2609: S/L STATUS</li> <li>B260A: IGNITION RELAY</li> <li>B260B: STEERING LOCK UNIT</li> </ul>	
7	<ul> <li>B260D: STEERING LOCK UNIT</li> <li>B260D: STEERING LOCK UNIT</li> <li>B260F: ENG STATE SIG LOST</li> <li>B2612: S/L STATUS</li> </ul>	
	<ul> <li>B2612: 0.12 01A100</li> <li>B2614: BCM</li> <li>B2615: BCM</li> <li>B2616: BCM</li> <li>B2617: BCM</li> </ul>	
	<ul> <li>B2618: BCM</li> <li>B2619: BCM</li> <li>B261A: PUSH-BTN IGN SW</li> </ul>	
	<ul> <li>B261E: VEHICLE TYPE</li> <li>B26E8: CLUTCH SW</li> <li>B26E9: S/L STATUS</li> <li>B26EA: KEY REGISTRATION</li> <li>C1729: VHCL SPEED SIG ERR</li> </ul>	
	<ul> <li>U0415: VEHICLE SPEED</li> <li>C1704: LOW PRESSURE FL</li> <li>C1705: LOW PRESSURE FR</li> <li>C1706: LOW PRESSURE RR</li> </ul>	
5	<ul> <li>C1707: LOW PRESSURE RL</li> <li>C1708: [NO DATA] FL</li> <li>C1709: [NO DATA] FR</li> <li>C1710: [NO DATA] RR</li> <li>C1711: [NO DATA] RL</li> </ul>	
	<ul> <li>C1711: [NO DATA] RL</li> <li>C1716: [PRESSDATA ERR] FL</li> <li>C1717: [PRESSDATA ERR] FR</li> <li>C1718: [PRESSDATA ERR] RR</li> <li>C1719: [PRESSDATA ERR] RL</li> <li>C1734: CONTROL UNIT</li> </ul>	
6	<ul> <li>B2621: INSIDE ANTENNA</li> <li>B2622: INSIDE ANTENNA</li> <li>B2623: INSIDE ANTENNA</li> </ul>	

## DTC Index

#### NOTE:

The details of time display are as follows.

CRNT: A malfunction is detected now.

• PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to <u>DLK-46, "COM-MON ITEM : CONSULT-III Function (BCM - COMMON ITEM)"</u>.

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#### < ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Refer- ence page
No DTC is detected. further testing may be required.	_	_	_	_	_
U1000: CAN COMM	_	—	—	_	BCS-33
U1010: CONTROL UNIT(CAN)	_	_	—	_	BCS-34
U0415: VEHICLE SPEED	_	_	—	_	BCS-35
B2013: ID DISCORD BCM-S/L	×	×	—	_	<u>SEC-55</u>
B2014: CHAIN OF S/L-BCM	×	×	—	_	<u>SEC-56</u>
B2190: NATS ANTENNA AMP	×	_	_	_	<u>SEC-47</u>
B2191: DIFFERENCE OF KEY	×	_	_	_	<u>SEC-50</u>
B2192: ID DISCORD BCM-ECM	×	_	_	_	<u>SEC-51</u>
B2193: CHAIN OF BCM-ECM	×	_	_	_	<u>SEC-53</u>
B2195: ANTI-SCANNING	×	_	_	_	<u>SEC-54</u>
B2553: IGNITION RELAY		×	_	_	PCS-48
B2555: STOP LAMP		×	_	_	SEC-59
B2556: PUSH-BTN IGN SW		×	×	_	SEC-61
B2557: VEHICLE SPEED	×	×	×	_	<u>SEC-63</u>
B2560: STARTER CONT RELAY	×	×	×	_	<u>SEC-64</u>
B2562: LOW VOLTAGE		×	_	_	BCS-36
B2601: SHIFT POSITION	×	×	×	_	<u>SEC-65</u>
B2602: SHIFT POSITION	×	×	×	_	SEC-68
B2603: SHIFT POSI STATUS	×	×	×		<u>SEC-70</u>
B2604: PNP/CLUTCH SW	×	×	×	_	<u>SEC-73</u>
B2605: PNP/CLUTCH SW	×	×	×	_	<u>SEC-75</u>
B2606: S/L RELAY	×	×	×	_	<u>SEC-77</u>
B2607: S/L RELAY	×	×	×	_	<u>SEC-78</u>
B2608: STARTER RELAY	×	×	×	_	<u>SEC-80</u>
B2609: S/L STATUS	×	×	×	_	SEC-82
B260A: IGNITION RELAY	×	×	×	_	PCS-50
B260B: STEERING LOCK UNIT		×	×	_	SEC-86
B260C: STEERING LOCK UNIT		×	×	_	SEC-87
B260D: STEERING LOCK UNIT		×	×	_	SEC-88
B260F: ENG STATE SIG LOST	×	×	×		SEC-89
B2612: S/L STATUS	×	×	×		SEC-94
B2614: BCM		×	×		PCS-52
B2615: BCM		×	×		PCS-54
B2616: BCM		×	×		PCS-56
B2617: BCM	×	×	×		<u>SEC-98</u>
B2618: BCM	×	×	×		<u>PCS-58</u>
B2619: BCM	×	×	×		<u>SEC-100</u>
B261A: PUSH-BTN IGN SW		× ×	× ×		PCS-59
B261E: VEHICLE TYPE		× ×	<pre>^</pre>		<u>SEC-101</u>

Revision: 2009 November

#### < ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Refer- ence page	A
B2621: INSIDE ANTENNA	_	×	—	_	DLK-55	В
B2622: INSIDE ANTENNA	—	×		—	DLK-57	
B2623: INSIDE ANTENNA	—	×	—	_	DLK-59	
B26E8: CLUTCH SW	×	×	×	—	<u>SEC-90</u>	С
B26E9: S/L STATUS	×	×	× (Turn ON for 15 seconds)	_	<u>SEC-92</u>	
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	_	<u>SEC-93</u>	D
C1704: LOW PRESSURE FL	_	_	—	×		E
C1705: LOW PRESSURE FR	_	_	—	×		
C1706: LOW PRESSURE RR	_	_	—	×	<u>WT-26</u>	
C1707: LOW PRESSURE RL	—	—	—	×		F
C1708: [NO DATA] FL	—	—	—	×		
C1709: [NO DATA] FR	—	—		×		
C1710: [NO DATA] RR	—	—	—	×	<u>WT-28</u>	G
C1711: [NO DATA] RL	_	—	—	×		
C1716: [PRESSDATA ERR] FL	—	—	—	×		Н
C1717: [PRESSDATA ERR] FR	—	—	—	×	W/T 21	
C1718: [PRESSDATA ERR] RR	—	—	—	×	<u>WT-31</u>	
C1719: [PRESSDATA ERR] RL	—	—	—	×	1	
C1729: VHCL SPEED SIG ERR	—	—	—	×	<u>WT-33</u>	
C1734: CONTROL UNIT	—	_	—	×	<u>WT-35</u>	J

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#### DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH < SYMPTOM DIAGNOSIS >

## SYMPTOM DIAGNOSIS

## DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH ALL DOOR

ALL DOOR : Description

All doors do not lock/unlock using door lock and unlock switch.

## ALL DOOR : Diagnosis Procedure

1. CHECK POWER SUPPLY AND GROUND CIRCUIT

Check power supply and ground circuit. Refer to DLK-61, "BCM (BODY CONTROL MODULE) : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.check door lock and unlock switch

Check door lock and unlock switch.

- Driver side: Refer to DLK-64, "DRIVER SIDE : Component Function Check".
- Passenger side: Refer to DLK-64, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK DOOR LOCK ACTUATOR

Check door lock actuator (driver side). Refer to DLK-66, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

**4.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".

NO >> GO TO 1. DRIVER SIDE

**DRIVER SIDE** : Description

Driver side door does not lock/unlock using door lock and unlock switch.

**DRIVER SIDE : Diagnosis Procedure** 

1.CHECK DOOR LOCK ACTUATOR

Check door lock actuator (driver side). Refer to DLK-66, "DRIVER SIDE : 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.

INFOID:000000005654923

INFOID:000000005654924

INFOID:000000005654921

INFOID:000000005654922

## DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH

< SYMPTOM DIAGNOSIS >	
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1. PASSENGER SIDE	A
PASSENGER SIDE : Description	5 5
Passenger side door does not lock/unlock using door lock and unlock switch. PASSENGER SIDE : Diagnosis Procedure	6
1. CHECK DOOR LOCK ACTUATOR	D
Check door lock actuator (passenger side). Refer to <u>DLK-67, "PASSENGER SIDE : Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. <b>2.</b> CONFIRM THE OPERATION	E F
Confirm the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> .	G
NO >> GO TO 1.	Н

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## **DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERATION** < SYMPTOM DIAGNOSIS >

## DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERA-TION

## Description

INFOID:000000005654927

INFOID:000000005654928

All doors do not lock/unlock using driver side door key cylinder.

## **Diagnosis Procedure**

1. CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

Does door lock/unlock with door lock and unlock switch?

YES >> GO TO 2.

NO >> Refer to <u>DLK-168</u>, "ALL DOOR : Diagnosis Procedure".

2. CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch. Refer to <u>DLK-73, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u>.

NO >> GO TO 1.

## DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

< SYMPTOM DIAGNOSIS >

## DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH ALL DOOR

ALL DOOR : Description	INFOID:0000000005654929	_
All doors do not lock/unlock using all door request switches.		В
<b>NOTE:</b> Check door request switch operation in the door lock condition. Refer to <u>DLK-19, "DOOR LOCK</u> <u>System Description"</u> .	FUNCTION :	С
ALL DOOR : Diagnosis Procedure	INFOID:000000005654930	
1. CHECK REMOTE KEYLESS ENTRY FUNCTION		D
Check remote keyless entry function.		Е
Does door lock/unlock with Intelligent Key button? YES >> GO TO 2.		
NO >> Refer to <u>DLK-28</u> , " <u>REMOTE KEYLESS ENTRY FUNCTION</u> : <u>System Description</u> ".		F
2. CHECK "LOCK/UNLOCK BY I-KEY" SETTING IN "WORK SUPPORT"		Г
Check "LOCK/UNLOCK BY I-KEY" in "WORK SUPPORT". Refer to <u>DLK-49, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)"</u> .		G
Is the inspection result normal?		
YES >> GO TO 3. NO >> Set "LOCK/UNLOCK BY I-KEY" in "WORK SUPPORT".		Н
<b>3.</b> CONFIRM THE OPERATION		
Confirm the operation again.		I
Is the result normal?		
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1. DRIVER SIDE		J
DRIVER SIDE : Description	INFOID:000000005654931	DLk
All doors do not lock/unlock using driver side door request switch.		
<b>NOTE:</b> Check door request switch operation in the door lock condition. Refer to <u>DLK-19, "DOOR LOCK</u> <u>System Description"</u> .	FUNCTION :	L
DRIVER SIDE : Diagnosis Procedure	INFOID:000000005654932	
1. CHECK DRIVER SIDE DOOR REQUEST SWITCH		Μ
Check driver side door request switch.		Ν
Refer to <u>DLK-84, "Component Function Check"</u> . Is the inspection result normal?		IN
YES >> GO TO 2.		
NO >> Repair or replace the malfunctioning parts.		0
2.CHECK OUTSIDE KEY ANTENNA LH		
Check outside key antenna LH. Refer to <u>DLK-88, "Component Function Check"</u> .		Ρ
Is the inspection result normal?		
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.		
3. CONFIRM THE OPERATION		
Confirm the operation again.		

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### DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

< SYMPTOM DIAGNOSIS >

Is the result normal?

YES >> Check Intermittent Incident. Refer to GI-38, "Intermittent Incident".

NO >> GO TO 1.

## PASSENGER SIDE

#### PASSENGER SIDE : Description

All doors do not lock/unlock using passenger side door request switch. NOTE:

Check door request switch operation in the door lock condition. Refer to DLK-19, "DOOR LOCK FUNCTION : System Description".

PASSENGER SIDE : Diagnosis Procedure

1. CHECK PASSENGER SIDE DOOR REQUEST SWITCH

Check passenger side door request switch. Refer to DLK-84, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK OUTSIDE KEY ANTENNA RH

Check outside key antenna RH. Refer to DLK-88, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

 ${f 3.}$ CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check Intermittent Incident. Refer to GI-38, "Intermittent Incident".

NO >> GO TO 1. INFOID:000000005654933

INFOID:000000005654934

## DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

< SYMPTOM DIAGNOSIS >	
DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY	А
Description INFOID:000000005654935	
All doors do not lock/unlock using Intelligent Key. <b>NOTE:</b> Check Intelligent Key remote operation in the door lock condition. Refer to <u>DLK-28, "REMOTE KEYLESS</u> <u>ENTRY FUNCTION : System Description"</u> .	В
Diagnosis Procedure	С
1. CHECK POWER DOOR LOCK OPERATION	D
Check power door lock operation.	
Does door lock/unlock with door lock and unlock switch?         YES       >> GO TO 2.         NO       >> Refer to DLK-168, "ALL DOOR : Diagnosis Procedure".	E
2. CHECK REMOTE KEYLESS ENTRY RECEIVER	_
Check remote keyless entry receiver. Refer to <u>DLK-75, "Component Function Check"</u> .	F
<u>Is the inspection result normal?</u> YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	G
3. CHECK INTELLIGENT KEY	Н
Check Intelligent Key. Refer to <u>DLK-93. "Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	I
4.CHECK KEY SLOT	J
Check key slot. Refer to <u>DLK-95, "Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts. <b>5.</b> CHECK DOOR SWITCH	DLł
Check door switch. Refer to <u>DLK-62, "Component Function Check"</u> .	M
Is the inspection result normal? YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts. 6.CONFIRM THE OPERATION	Ν
Confirm the operation again.	0
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1.	Р

## **TRUNK LID DOES NOT OPEN WITH TRUNK LID OPENER SWITCH**

## TRUNK LID DOES NOT OPEN WITH TRUNK LID OPENER SWITCH

## Description

INFOID:000000005654937

#### NOTE:

Check trunk lid opener switch operation in the trunk lid open condition. Refer to DLK-43, "System Description".

**Diagnosis** Procedure

INFOID:000000005654938

1. CHECK TRUNK LID OPENER SWITCH

Check trunk lid opener switch. Refer to <u>DLK-78, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK TRUNK LID OPENER ACTUATOR

Check trunk lid opener actuator.

Refer to DLK-69, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK TRUNK LID OPENER CANCEL SWITCH

Check trunk lid opener cancel switch. Refer to DLK-82, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

**4.**CHECK VEHICLE SPEED SIGNAL

Check unified meter A/C amp. Refer to <u>MWI-101, "DTC Index"</u>.

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

**5.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".

NO >> GO TO 1.

## TRUNK LID DOES NOT OPEN WITH INTELLIGENT KEY

# < SYMPTOM DIAGNOSIS > TRUNK LID DOES NOT OPEN WITH INTELLIGENT KEY

		А
Description	:000000005654939	Λ
NOTE: Check Intelligent Key remote operation with trunk lid open condition. Refer to <u>DLK-28, "REMOTE key ENTRY FUNCTION : System Description"</u> .	<u>KEYLESS</u>	В
Diagnosis Procedure	:000000005654940	С
1. CHECK TRUNK LID OPEN FUNCTION		
Check trunk lid open function with trunk lid opener switch.		D
Does trunk lid open with trunk lid opener switch?		
YES >> GO TO 2. NO >> Refer to <u>DLK-174, "Diagnosis Procedure"</u> .		E
2. CHECK "TRUNK OPEN DELAY" SETTING IN "WORK SUPPORT"		
Check "TRUNK OPEN DELAY" setting in "WORK SUPPORT".		F
Refer to <u>DLK-49, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)"</u> .		
Is the inspection result normal?		
YES >> GO TO 3. NO >> Set "TRUNK OPEN DELAY" setting in "WORK SUPPORT".		G
3. CHECK POWER POSITION		
Check if ignition switch position is changing or not.		Н
Does ignition switch position change?		
YES >> GO TO 4.		
NO >> Check DTC for BCM. Refer to <u>DLK-165, "DTC Index"</u> .		
4.CHECK INTELLIGENT KEY		
Check Intelligent Key.		J
Refer to DLK-93, "Component Function Check".		
Is the inspection result normal?		
YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts.		DLK
5.CONFIRM THE OPERATION		
		L
Confirm the operation again.		
Is the result normal?		
<ul> <li>YES &gt;&gt; Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u>.</li> <li>NO &gt;&gt; GO TO 1.</li> </ul>		Μ
		Ν
		0

## TRUNK LID DOES NOT OPEN WITH TRUNK LID OPENER REQUEST SWITCH

< SYMPTOM DIAGNOSIS >

# TRUNK LID DOES NOT OPEN WITH TRUNK LID OPENER REQUEST SWITCH

### Description

INFOID:000000005654941

NOTE:

Check trunk lid opener request switch operation in the trunk lid open condition. Refer to <u>DLK-24</u>, <u>"TRUNK</u> <u>OPEN FUNCTION : System Description"</u>.

Diagnosis Procedure

INFOID:000000005654942

**1.**CHECK TRUNK LID OPEN FUNCTION

Check trunk lid open function with Intelligent Key.

Does trunk lid open with Intelligent Key?

YES >> GO TO 2.

NO >> Refer to <u>DLK-175, "Diagnosis Procedure"</u>.

2. CHECK TRUNK LID OPENER REQUEST SWITCH

Check trunk lid opener request switch. Refer to <u>DLK-80, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

**3.**CHECK OUTSIDE KEY ANTENNA (REAR BUMPER)

Check outside key antenna (rear bumper).

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

Is the inspection result normal?

- YES >> GO TO 4.
- NO >> Repair or replace the malfunctioning parts.

**4.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

- YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u>.
- NO >> GO TO 1.

SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE
SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE DOOR REQUEST SWITCH
DOOR REQUEST SWITCH : Description
<b>NOTE:</b> Before performing the diagnosis in the following procedure, check the operation condition. Refer to <u>DLK-19</u> , <u>"DOOR LOCK FUNCTION : System Description"</u> .
DOOR REQUEST SWITCH : Diagnosis Procedure
1. CHECK DOOR LOCK FUNCTION
Check door lock function by door request switch. <u>Does door lock/unlock with door request switch?</u> YES >> GO TO 2. NO-1 >> Driver side: Refer to <u>DLK-171, "DRIVER SIDE : Diagnosis Procedure"</u> . NO-2 >> Passenger side: Refer to <u>DLK-172, "PASSENGER SIDE : Diagnosis Procedure"</u> .
2.CHECK "DOOR LOCK–UNLOCK SET" SETTING IN "WORK SUPPORT"
Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT". Refer to <u>DLK-47, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 3.
NO >> Set "DOOR LOCK-UNLOCK SET" in "WORK SUPPORT".
3.CONFIRM THE OPERATION
Confirm the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1. INTELLIGENT KEY
INTELLIGENT KEY : Description
<b>NOTE:</b> Before performing the diagnosis in the following procedure, check the operation condition. Refer to <u>DLK-28</u> , <u>"REMOTE KEYLESS ENTRY FUNCTION : System Description"</u> .
INTELLIGENT KEY : Diagnosis Procedure
1. CHECK DOOR LOCK FUNCTION
Check door lock function by intelligent key.
Does door lock/unlock with Intelligent Key button? YES >> GO TO 2.
NO >> Refer to <u>DLK-28</u> , "REMOTE KEYLESS ENTRY FUNCTION : System Description".
2.CHECK "DOOR LOCK-UNLOCK SET" SETTING IN "WORK SUPPORT"
Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT". Refer to <u>DLK-47, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)"</u> .
Is the inspection result normal? YES >> GO TO 3.
NO >> Set "DOOR LOCK-UNLOCK SET" of "WORK SUPPORT". 3.CONFIRM THE OPERATION
Confirm the operation again.
Is the result normal?
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> .

### SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

#### NO >> GO TO 1. DOOR KEY CYLINDER

DOOR KEY CYLINDER : Description

NOTE:

Before performing the diagnosis in the following procedure, check the operation condition. Refer to <u>DLK-11</u>, <u>"System Description"</u>.

DOOR KEY CYLINDER : Diagnosis Procedure

**1.**CHECK DOOR LOCK FUNCTION

Check door lock function by door key cylinder.

Does door lock/unlock with door key cylinder?

YES >> GO TO 2.

NO >> Refer to <u>DLK-170, "Diagnosis Procedure"</u>.

2. CHECK "DOOR LOCK–UNLOCK SET" SETTING IN "WORK SUPPORT"

Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT". Refer to <u>DLK-47, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)</u>".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Set "DOOR LOCK-UNLOCK SET" of "WORK SUPPORT".

3. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-38. "Intermittent Incident".

NO >> GO TO 1.

INFOID:000000005654947

INFOID:000000005654948

## VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >	
VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPER- ATE	A
Description	В
<b>NOTE:</b> Before performing the diagnosis in the following procedure, check the operation condition. Refer to <u>DLK-11</u> , <u>"System Description"</u> .	С
Diagnosis Procedure	
1. CHECK POWER DOOR LOCK OPERATION	D
Check power door lock operation. <u>Does door lock/unlock with door lock and unlock switch?</u> YES >> GO TO 2. NO >> Refer to <u>DLK-168</u> , " <u>ALL DOOR : Diagnosis Procedure</u> ".	E
2. CHECK "AUTOMATIC LOCK/UNLOCK SELECT" SETTING IN "WORK SUPPORT"	F
Check "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT". Refer to DLK-47, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".	
Is the inspection result normal? YES >> GO TO 3. NO >> Set "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".	G
<b>3.</b> CHECK "AUTOMATIC DOOR LOCK SELECT" SETTING IN "WORK SUPPORT"	Н
Check "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT". Refer to <u>DLK-47, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)"</u> .	I
Is the inspection result normal?         YES       >> GO TO 4.         NO       >> Set "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT".	J
4.CHECK VEHICLE SPEED SIGNAL	
Check unified meter A/C amp. Refer to <u>MWI-101, "DTC Index"</u> .	DLK
Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts.	L
5. CONFIRM THE OPERATION	_
Confirm the operation again.	M
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1.	Ν

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## IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

## IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

#### Description

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NOTE:

Before performing the diagnosis in the following procedure, check the operation condition. Refer to <u>DLK-11</u>, <u>"System Description"</u>.

**Diagnosis** Procedure

1. CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

Does door lock/unlock with door lock and unlock switch?

YES >> GO TO 2.

NO >> Refer to <u>DLK-168</u>, "ALL DOOR : Diagnosis Procedure".

2.CHECK "AUTOMATIC LOCK/UNLOCK SELECT" SETTING IN "WORK SUPPORT"

Check "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".

Refer to DLK-47, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Set "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".

 $\mathbf{3.}$  CHECK "AUTOMATIC DOOR UNLOCK SELECT" SETTING IN "WORK SUPPORT"

Check "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT". Refer to <u>DLK-47, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)"</u>.

Is the inspection result normal?

YES >> GO TO 4.

NO >> Set "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT".

4.CHECK BCM

Check BCM for DTC. Refer to <u>DLK-165, "DTC Index"</u>.

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

**5.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u>.

NO >> GO TO 1.

# P RANGE INTERLOCK DOOR LOCK/UNLOCK FUNCTION DOES NOT OPER-ATE

< SYMPTOM DIAGNOSIS >	
P RANGE INTERLOCK DOOR LOCK/UNLOCK FUNCTION DOES NOT OP-	
ERATE	А
Description INFOID:000000005654953	В
NOTE:	
Before performing the diagnosis in the following procedure, check the operation condition. Refer to <u>DLK-11</u> , <u>"System Description"</u> .	С
Diagnosis Procedure	
1. CHECK POWER DOOR LOCK OPERATION	D
Check power door lock operation.	
Does door lock/unlock with door lock and unlock switch?	Е
YES >> GO TO 2. NO >> Refer to <u>DLK-168, "ALL DOOR : Diagnosis Procedure"</u> .	
2. CHECK "AUTOMATIC LOCK/UNLOCK SELECT" SETTING IN "WORK SUPPORT"	F
Check "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT". Refer to DLK-47, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".	
Is the inspection result normal?	G
YES >> GO TO 3. NO >> Set "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".	
<b>3.</b> CHECK "AUTOMATIC DOOR LOCK SELECT" SETTING IN "WORK SUPPORT"	Н
Check "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT".	
Refer to <u>DLK-47, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)"</u> .	
Is the inspection result normal?	1
YES >> GO TO 4. NO >> Set "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT".	
4. CHECK "AUTOMATIC DOOR UNLOCK SELECT" SETTING IN "WORK SUPPORT"	J
Check "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT".	
Refer to DLK-47, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".	DLł
<u>Is the inspection result normal?</u> YES >> GO TO 5.	
NO >> Set "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT".	L
5.снеск тсм	
Check TCM for DTC. Refer to <u>TM-249, "DTC Index"</u> .	M
Is the inspection result normal?	
YES >> GO TO 6.	Ν
NO >> Repair or replace the malfunctioning parts. 6.CONFIRM THE OPERATION	
Confirm the operation again.	0
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> .	P

NO >> GO TO 1.

## AUTO DOOR LOCK OPERATION DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

## AUTO DOOR LOCK OPERATION DOES NOT OPERATE

## Description

NOTE:

Before performing the diagnosis in the following procedure, check the operation condition. Refer to <u>DLK-11.</u> "System Description".

**Diagnosis Procedure** 

INFOID:000000005654956

INFOID:000000005654955

1.CHECK "AUTO LOCK SET" SETTING IN "WORK SUPPORT"

Check "AUTO LOCK SET" setting in "WORK SUPPORT". Refer to <u>DLK-49, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "AUTO LOCK SET" setting in "WORK SUPPORT".

**2.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u>.

NO >> GO TO 1.

## FUEL LID LOCK ACTUATOR DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

## FUEL LID LOCK ACTUATOR DOES NOT OPERATE

	А
Description INFOID:000000005654957	Λ
<b>NOTE:</b> Before performing the diagnosis in the following procedure, check the operation condition. Refer to <u>DLK-11.</u> <u>"System Description"</u> .	В
Diagnosis Procedure	С
1.CHECK FUEL LID OPENER ACTUATOR         Check fuel lid opener actuator.         Refer to DLK-68, "Component Function Check".         Is the inspection result normal?         YES       >> GO TO 2.         NO       >> Repair or replace the malfunctioning parts.         2.CONFIRM THE OPERATION	D
Confirm the operation again.	F
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1.	G

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## PANIC ALARM FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

## PANIC ALARM FUNCTION DOES NOT OPERATE

#### Description

INFOID:000000005654959

INEOID:000000005654960

NOTE:

Before performing the diagnosis in the following procedure, check the operation condition. Refer to <u>DLK-28</u>. <u>"REMOTE KEYLESS ENTRY FUNCTION : System Description"</u>.

Diagnosis Procedure

**1.**CHECK REMOTE KEYLESS ENTRY FUNCTION

Check remote keyless entry function.

Does door lock/unlock with Intelligent Key button?

YES >> GO TO 2.

NO >> Refer to <u>DLK-173</u>, "Diagnosis Procedure".

2. CHECK VEHICLE SECURITY ALARM OPERATION

Check vehicle security alarm operation.

Does alarm (headlamp and horn) active?

YES >> GO TO 3.

NO >> Refer to <u>SEC-210, "Diagnosis Procedure"</u>.

 $\mathbf{3.}$ CHECK "PANIC ALARM SET" SETTING IN "WORK SUPPORT"

Check "PANIC ALARM SET" setting in "WORK SUPPORT".

Refer to DLK-49, "INTELLIGENT KEY : CONSULT-III 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 <u>GI-38, "Intermittent Incident"</u>.
- NO >> GO TO 1.

Description       Description         NOTE:       Before performing the diagnosis, check the operation condition. Refer to DLK-28, "REMOTE KEYLESS ENTRY FUNCTION : System Description".         Diagnosis Procedure       Description         1.CHECK "HAZARD ANSWER BACK" SETTING IN "WORK SUPPORT"       Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT".         Refer to DLK-49, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".       Is the inspection result normal?         YES       > 60 T0 2.       NO         2.CHECK "HAZARD ANSWER BACK" setting in "WORK SUPPORT".       Check "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT".         2.CHECK "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT".       Check "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT".         2.CHECK POWER POSITION       Refer to DLK-49, "INTELLIGENT KEY! CONSULT-III Function (BCM - INTELLIGENT KEY)".         Is the inspection result normal?       YES         YES       > 60 T0 3.         NO       > Set "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT".         3.CHECK POWER POSITION       Check fil ginition switch position is changing or not.         Does ignition switch position change?       YES         YES       > GO TO 4.         NO       > Check BCM for DTC. Refer to DLK-165, "DTC Index".         4.CHECK HAZARD FUNCTION       Set "HORN FUNCTION         Check horn function.       Refer to	HAZARD AND HORN REMINDER DOES NOT OPERATE	
Before performing the diagnosis, check the operation condition. Refer to DLK-28, "REMOTE KEYLESS ENTRY FUNCTION : System Description". Diagnosis Procedure 1. CHECK "HAZARD ANSWER BACK" SETTING IN "WORK SUPPORT" Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT". Refer to DLK-49, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)". Is the inspection result normal? YES >> GO TO 2. NO >> Set "HAZARD ANSWER BACK" setting in "WORK SUPPORT". 2. CHECK "HORN WITH KEYLESS LOCK" SETTING IN "WORK SUPPORT". Check "HORN WITH KEYLESS LOCK" SETTING IN "WORK SUPPORT". Check "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT". Refer to DLK-49. "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)". Is the inspection result normal? YES >> GO TO 3. NO >> Set "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT". 3. CHECK POWER POSITION Check if ignition switch position is changing or not. Designition switch position change? YES >> GO TO 4. NO >> Check BCM for DTC. Refer to DLK-165, "DTC Index". 4. CHECK HAZARD FUNCTION Check hazard function. Refer to DLK-104, "Component Function Check". Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts. 5. CHECK HORN FUNCTION Check horn function. Refer to DLK-199. "Component Function Check". Is the inspection result normal? YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts. 6. CONFIRM THE OPERATION Confirm the operation again. Is the result normal?	Description	INFOID:000000005654961
1. CHECK "HAZARD ANSWER BACK" SETTING IN "WORK SUPPORT"         Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT".         Refer to DLK-49. "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".         Is the inspection result normal?         YES       >> GO TO 2.         NO       >> Set "HAZARD ANSWER BACK" setting in "WORK SUPPORT".         2.CHECK "HORN WITH KEYLESS LOCK" SETTING IN "WORK SUPPORT".         Check "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT".         Refer to DLK-49. "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY]".         Is the inspection result normal?         YES       >> GO TO 3.         NO       >> Set "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT".         3.CHECK POWER POSITION         Check if ignition switch position is changing or not.         Does ignition switch position change?         YES       >> GO TO 4.         NO       >> Check BCM for DTC. Refer to DLK-165. "DTC Index".         4. CHECK HAZARD FUNCTION         Check hazard function.         Refer to DLK-04. "Component Function Check".         Is the inspection result normal?         YES       >> GO TO 5.         NO       >> Repair or replace the malfunctioning parts.         5.CHECK HORN FUNCTION         Check knorn function.         Refer to DL	Before performing the diagnosis, check the operation condition. Refer to DLK-28, "RE	MOTE KEYLESS
Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT". Refer to DLK-49. "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)". Is the inspection result normal? YES >> GO TO 2. NO >> Set "HAZARD ANSWER BACK" setting in "WORK SUPPORT". 2.CHECK "HORN WITH KEYLESS LOCK" SETTING IN "WORK SUPPORT". Check "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT". Refer to DLK-49. "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)". Is the inspection result normal? YES >> GO TO 3. NO >> Set "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT". 3.CHECK POWER POSITION Check if ignition switch position is changing or not. Does ignition switch position change? YES >> GO TO 4. NO >> Check BCM for DTC. Refer to DLK-165. "DTC Index". 4.CHECK HAZARD FUNCTION Check hazard function. Refer to DLK-104. "Component Function Check". Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts. 5.CHECK HORN FUNCTION Check horn function. Refer to DLK-99. "Component Function Check". Is the inspection result normal? YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts. 6.CONFIRM THE OPERATION Confirm the operation again. Is the result normal? YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts. 6.CONFIRM THE OPERATION	Diagnosis Procedure	INFOID:000000005654962
Refer to <u>DLK-49. "INTELLIGENT KEY</u> : <u>CONSULT-III Function (BCM - INTELLIGENT KEY)"</u> . Is the inspection result normal? YES >> GO TO 2. NO >> Set "HAZARD ANSWER BACK" setting in "WORK SUPPORT". 2. CHECK "HORN WITH KEYLESS LOCK" SETTING IN "WORK SUPPORT". Check "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT". Refer to <u>DLK-49. "INTELLIGENT KEY</u> : <u>CONSULT-III Function (BCM - INTELLIGENT KEY)"</u> . Is the inspection result normal? YES >> GO TO 3. NO >> Set "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT". 3. CHECK POWER POSITION Check if ignition switch position change? YES >> GO TO 4. NO >> Check BCM for DTC. Refer to <u>DLK-165. "DTC Index"</u> . 4. CHECK HAZARD FUNCTION Check hazard function. Refer to <u>DLK-104. "Component Function Check"</u> . Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts. 5. CHECK HORN FUNCTION Check horn function. Refer to <u>DLK-99. "Component Function Check"</u> . Is the inspection result normal? YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts. 6. CONFIRM THE OPERATION Confirm the operation again. Is the result normal?	<b>1.</b> CHECK "HAZARD ANSWER BACK" SETTING IN "WORK SUPPORT"	
YES       >> GO TO 2.         NO       >> Set "HAZARD ANSWER BACK" setting in "WORK SUPPORT".         2.CHECK "HORN WITH KEYLESS LOCK" SETTING IN "WORK SUPPORT".         Check "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT".         Refer to DLK-49. "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".         Is the inspection result normal?         YES       >> GO TO 3.         NO       >> Set "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT".         3.CHECK POWER POSITION         Check if ignition switch position change?         YES       >> GO TO 4.         NO       >> Check BCM for DTC. Refer to DLK-165, "DTC Index".         4.CHECK HAZARD FUNCTION         Check hazard function.         Refer to DLK-104, "Component Function Check".         Is the inspection result normal?         YES       >> GO TO 5.         NO       >> Repair or replace the malfunctioning parts.         5.CHECK HORN FUNCTION         Check horn function.         Refer to DLK-99, "Component Function Check".         Is the inspection result normal?         YES       >> GO TO 6.         NO       >> Repair or replace the malfunctioning parts.         5.CHECK HORN FUNCTION         Check horn function.         Refer to DLK-99, "Component Functio	Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT". Refer to <u>DLK-49, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY</u>	)".
NO >> Set "HAZARD ANSWER BACK" setting in "WORK SUPPORT". 2.CHECK "HORN WITH KEYLESS LOCK" SETTING IN "WORK SUPPORT". Check "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT". Refer to DLK-49. "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)". Is the inspection result normal? YES >> GO TO 3. NO >> Set "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT". 3.CHECK POWER POSITION Check if ignition switch position is changing or not. Does ignition switch position change? YES >> GO TO 4. NO >> Check BCM for DTC. Refer to DLK-165. "DTC Index". 4.CHECK HAZARD FUNCTION Check hazard function. Refer to DLK-104. "Component Function Check". Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts. 5.CHECK HORN FUNCTION Check horn function. Refer to DLK-99. "Component Function Check". Is the inspection result normal? YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts. 6.CONFIRM THE OPERATION Confirm the operation again. Is the result normal?	Is the inspection result normal?	
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Refer to <u>DLK-49. "INTELLIGENT KEY : CONŠULT-III Function (BCM - INTELLIGENT KEY)"</u> . Is the inspection result normal? YES $>$ GO TO 3. NO $>>$ Set "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT". 3. CHECK POWER POSITION Check if ignition switch position is changing or not. Does ignition switch position change? YES $>>$ GO TO 4. NO $>>$ Check BCM for DTC. Refer to <u>DLK-165, "DTC Index"</u> . 4. CHECK HAZARD FUNCTION Check hazard function. Refer to <u>DLK-104, "Component Function Check"</u> . Is the inspection result normal? YES $>>$ GO TO 5. NO $>>$ Repair or replace the malfunctioning parts. 5. CHECK HORN FUNCTION Check horn function. Refer to <u>DLK-99. "Component Function Check"</u> . Is the inspection result normal? YES $>>$ GO TO 6. NO $>>$ Repair or replace the malfunctioning parts. 6. CONFIRM THE OPERATION Confirm the operation again. Is the result normal?		
$\begin{array}{llllllllllllllllllllllllllllllllllll$	Refer to DLK-49, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY	<u>)"</u> .
NO >> Set "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT". 3.CHECK POWER POSITION Check if ignition switch position is changing or not. Does ignition switch position change? YES >> GO TO 4. NO >> Check BCM for DTC. Refer to DLK-165, "DTC Index". 4.CHECK HAZARD FUNCTION Check hazard function. Refer to DLK-104, "Component Function Check". Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts. 5.CHECK HORN FUNCTION Check horn function. Refer to DLK-99, "Component Function Check". Is the inspection result normal? YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts. 6.CONFIRM THE OPERATION Confirm the operation again. Is the result normal?	· · · · · · · · · · · · · · · · · · ·	
3. CHECK POWER POSITION Check if ignition switch position is changing or not. Does ignition switch position change? YES >> GO TO 4. NO >> Check BCM for DTC. Refer to DLK-165, "DTC Index". 4. CHECK HAZARD FUNCTION Check hazard function. Refer to DLK-104, "Component Function Check". Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts. 5. CHECK HORN FUNCTION Check horn function. Refer to DLK-99, "Component Function Check". Is the inspection result normal? YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts. 6. CONFIRM THE OPERATION Confirm the operation again. Is the result normal?		
$\begin{array}{llllllllllllllllllllllllllllllllllll$		
$\begin{array}{llllllllllllllllllllllllllllllllllll$	Check if ignition switch position is changing or not.	
NO >> Check BCM for DTC. Refer to <u>DLK-165, "DTC Index"</u> . <b>4.</b> CHECK HAZARD FUNCTION Check hazard function. Refer to <u>DLK-104, "Component Function Check"</u> . Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts. <b>5.</b> CHECK HORN FUNCTION Check horn function. Refer to <u>DLK-99, "Component Function Check"</u> . Is the inspection result normal? YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts. <b>6.</b> CONFIRM THE OPERATION Confirm the operation again. Is the result normal?	Does ignition switch position change?	
4.CHECK HAZARD FUNCTION         Check hazard function.         Refer to DLK-104, "Component Function Check".         Is the inspection result normal?         YES       >> GO TO 5.         NO       >> Repair or replace the malfunctioning parts.         5.CHECK HORN FUNCTION         Check horn function.         Refer to DLK-99, "Component Function Check".         Is the inspection result normal?         YES       >> GO TO 6.         NO       >> Repair or replace the malfunctioning parts.         6.CONFIRM THE OPERATION         Confirm the operation again.         Is the result normal?		
Check hazard function. Refer to DLK-104, "Component Function Check". Is the inspection result normal? YES $>>$ GO TO 5. NO $>>$ Repair or replace the malfunctioning parts. <b>5.</b> CHECK HORN FUNCTION Check horn function. Refer to DLK-99, "Component Function Check". Is the inspection result normal? YES $>>$ GO TO 6. NO $>>$ Repair or replace the malfunctioning parts. <b>6.</b> CONFIRM THE OPERATION Confirm the operation again. Is the result normal?		
Refer to DLK-104, "Component Function Check".         Is the inspection result normal?         YES       >> GO TO 5.         NO       >> Repair or replace the malfunctioning parts. <b>5.</b> CHECK HORN FUNCTION         Check horn function.         Refer to DLK-99. "Component Function Check".         Is the inspection result normal?         YES       >> GO TO 6.         NO       >> Repair or replace the malfunctioning parts. <b>6.</b> CONFIRM THE OPERATION         Confirm the operation again.         Is the result normal?		
YES       >> GO TO 5.         NO       >> Repair or replace the malfunctioning parts.         5.CHECK HORN FUNCTION         Check horn function.         Refer to DLK-99. "Component Function Check".         Is the inspection result normal?         YES       >> GO TO 6.         NO       >> Repair or replace the malfunctioning parts.         6.CONFIRM THE OPERATION         Confirm the operation again.         Is the result normal?		
NO       >> Repair or replace the malfunctioning parts. <b>5.</b> CHECK HORN FUNCTION         Check horn function.         Refer to DLK-99. "Component Function Check".         Is the inspection result normal?         YES       >> GO TO 6.         NO       >> Repair or replace the malfunctioning parts. <b>6.</b> CONFIRM THE OPERATION         Confirm the operation again.         Is the result normal?		
5.CHECK HORN FUNCTION Check horn function. Refer to DLK-99. "Component Function Check". Is the inspection result normal? YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts. 6.CONFIRM THE OPERATION Confirm the operation again. Is the result normal?		
Check horn function. Refer to DLK-99, "Component Function Check". Is the inspection result normal? YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts. 6.CONFIRM THE OPERATION Confirm the operation again. Is the result normal?		
Refer to DLK-99, "Component Function Check".         Is the inspection result normal?         YES       >> GO TO 6.         NO       >> Repair or replace the malfunctioning parts.         6.CONFIRM THE OPERATION         Confirm the operation again.         Is the result normal?		
YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts. 6.CONFIRM THE OPERATION Confirm the operation again. Is the result normal?		
NO       >> Repair or replace the malfunctioning parts.         6.CONFIRM THE OPERATION         Confirm the operation again.         Is the result normal?		
6.CONFIRM THE OPERATION Confirm the operation again. Is the result normal?		
Confirm the operation again. Is the result normal?		
Is the result normal?		

## HAZARD AND BUZZER REMINDER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

## HAZARD AND BUZZER REMINDER DOES NOT OPERATE

## Description

INFOID:000000005654963

NOTE:

Before performing the diagnosis, check the operation condition. Refer to <u>DLK-28</u>, "<u>REMOTE KEYLESS</u> <u>ENTRY FUNCTION</u>: <u>System Description</u>".

**Diagnosis** Procedure

INFOID:000000005654964

**1.**CHECK "HAZARD ANSWER BACK" SETTING IN "WORK SUPPORT"

Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT". Refer to DLK-49, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "HAZARD ANSWER BACK" in "WORK SUPPORT".

2.CHECK "ANS BACK I-KEY LOCK" SETTING IN "WORK SUPPORT"

Check "ANS BACK I-KEY LOCK" setting in "WORK SUPPORT". Refer to <u>DLK-49, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Set "ANS BACK I-KEY LOCK" in "WORK SUPPORT".

 ${f 3.}$ CHECK "ANS BACK I-KEY UNLOCK" SETTING IN "WORK SUPPORT"

Check "ANS BACK I-KEY UNLOCK" setting in "WORK SUPPORT". Refer to DLK-49, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Set "ANS BACK I-KEY UNLOCK" in "WORK SUPPORT".

**4.**CHECK POWER POSITION

Check if ignition switch position is changing or not.

Does ignition switch position change?

- YES >> GO TO 5.
- NO >> Check BCM for DTC. Refer to <u>DLK-165</u>, "DTC Index".

**5.**CHECK HAZARD FUNCTION

Check hazard function.

Refer to DLK-104, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

**6.**CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer. Refer to <u>DLK-91, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

**7.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u>.

NO >> GO TO 1.

KEY REMINDER FUNCTION DOES NOT OPERATE NTELLIGENT KEY SYSTEM	
NTELLIGENT KEY SYSTEM : Description	INFOID:000000005654965
NOTE: Before performing the diagnosis, check operation condition. Refer to <u>DLK-34, "KEY REMIN</u> <u>System Description"</u> .	DER FUNCTION :
NTELLIGENT KEY SYSTEM : Diagnosis Procedure	INFOID:000000005654966
<b>1.</b> CHECK "ANTI KEY LOCK IN FUNCTI" SETTING IN "WORK SUPPORT"	
Check "ANTI KEY LOCK IN FUNCTI" setting in "WORK SUPPORT". Refer to <u>DLK-49, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY</u> )	<u>"</u> .
<u>ls the inspection result normal?</u> YES >> GO TO 2.	
NO >> Set "ANTI KEY LOCK IN FUNCTI" setting in "WORK SUPPORT".	
2. CHECK DOOR SWITCH	
Check door switch. Refer to <u>DLK-62, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts.	
3.CHECK TRUNK ROOM LAMP SWITCH	
Check trunk room lamp switch. Refer to <u>DLK-71, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	
4.CHECK INSIDE KEY ANTENNA	
Check inside key antenna.	
<ul> <li>Instrument center: Refer to <u>DLK-55, "DTC Logic"</u>.</li> </ul>	
<ul> <li>Console: Refer to <u>DLK-57, "DTC Logic"</u>.</li> <li>Trunk room: Refer to <u>DLK-59, "DTC Logic"</u>.</li> </ul>	
Is the inspection result normal?	
YES >> GO TO 5.	
NO >> Repair or replace the malfunctioning parts.	
5. CHECK UNLOCK SENSOR	
Check unlock sensor. Refer to <u>DLK-86, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 6.	
NO >> Repair or replace the malfunctioning parts.	
O.CONFIRM THE OPERATION	
Confirm the operation again.	
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> .	

## **KEY REMINDER FUNCTION DOES NOT OPERATE**

< SYMPTOM DIAGNOSIS >

## POWER DOOR LOCK SYSTEM : Description

INFOID:000000005654967

#### NOTE:

Before performing the diagnosis, check operation condition. Refer to DLK-11. "System Description".

#### POWER DOOR LOCK SYSTEM : Diagnosis Procedure

INFOID:000000005654968

1.CHECK KEY SLOT

Check key slot. Refer to <u>DLK-95, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK DOOR SWITCH

Check door switch.

Refer to DLK-62, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-38. "Intermittent Incident".

NO >> GO TO 1.

## **KEY WARNING DOES NOT OPERATE**

#### < SYMPTOM DIAGNOSIS > KEY WARNING DOES NOT OPERATE

KEY WARNING DOES NOT OPERATE	А
Description INFOID:00000005654969	$\square$
<ul> <li>NOTE:</li> <li>Warning functions operating condition is extremely complicated. During operation confirmation reconfirm the list above twice in order to check for normal operation. Refer to <u>DLK-36</u>, "WARNING FUNCTION : System <u>Description"</u>.</li> <li>Door lock function is normal.</li> </ul>	B
Diagnosis Procedure	
1.CHECK BUZZER (COMBINATION METER)	D
Check buzzer (combination meter). Refer to <u>DLK-102, "Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. <b>2.</b> CHECK DOOR SWITCH	E
Check door switch (driver side). Refer to <u>DLK-62, "Component Function Check"</u> . Is the inspection result normal?	G
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	Н
3.CHECK KEY SLOT	
Check key slot. Refer to <u>DLK-95, "Component Function Check"</u> .	I
Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. 4.CHECK COMBINATION METER DISPLAY FUNCTION	J
Check combination meter display function.	DLK
Refer to DLK-101, "Component Function Check".         Is the inspection result normal?         YES       >> GO TO 5.         NO       >> Repair or replace the malfunctioning parts.	L
5.CHECK KEY SLOT INDICATOR	M
Check key slot indicator. Refer to <u>DLK-97, "Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts.	Ν
6.CONFIRM THE OPERATION	0
Confirm the operation again.	
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1.	Ρ

## **OFF POSITION WARNING DOES NOT OPERATE**

#### < SYMPTOM DIAGNOSIS >

## OFF POSITION WARNING DOES NOT OPERATE

#### Description

INFOID:000000005654971

#### NOTE:

- Warning functions operating condition is extremely complicated. During operation confirmation reconfirm the list above twice in order to check for normal operation. Refer to <u>DLK-36</u>, "WARNING FUNCTION : <u>System</u> <u>Description</u>".
- Door lock function is normal.

#### **Diagnosis** Procedure

INFOID:000000005654972

#### **1.**CHECK POWER POSITION

Check if ignition switch position is changing or not.

Does ignition switch position change?

YES >> GO TO 2.

NO >> Check BCM for DTC. Refer to <u>DLK-165, "DTC Index"</u>.

2. CHECK BUZZER (COMBINATION METER)

Check buzzer (combination meter). Refer to <u>DLK-102</u>, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.

Refer to DLK-91, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

**4.**CHECK DOOR SWITCH

Check door switch (driver side). Refer to <u>DLK-62, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

**5.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-38. "Intermittent Incident".

NO >> GO TO 1.

## **P POSITION WARNING DOES NOT OPERATE**

#### < SYMPTOM DIAGNOSIS >

## P POSITION WARNING DOES NOT OPERATE

	А
Description	$\square$
<ul> <li>NOTE:</li> <li>Warning functions operating condition is extremely complicated. During operation confirmation reconfirm the list above twice in order to check for normal operation. Refer to <u>DLK-36</u>, "WARNING FUNCTION : System <u>Description</u>".</li> <li>Door lock function is normal.</li> </ul>	B
Diagnosis Procedure	
1. CHECK POWER POSITION	D
Check if ignition switch position is changing or not. <u>Does ignition switch position change?</u> YES >> GO TO 2. NO >> Check BCM for DTC. Refer to <u>DLK-165, "DTC Index"</u> .	E
2. CHECK DETENTION SWITCH	F
Check BCM for DTC. Refer to <u>DLK-165, "DTC_Index"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 3.	G
NO >> Repair or replace the malfunctioning parts. 3.CHECK INTELLIGENT KEY WARNING BUZZER	Н
Check Intelligent Key warning buzzer. Refer to <u>DLK-91, "Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 4.	I
NO >> Repair or replace the malfunctioning parts.	J
4.CHECK BUZZER (COMBINATION METER)	
$\begin{array}{llllllllllllllllllllllllllllllllllll$	DLK
Check door switch (driver side). Refer to <u>DLK-62</u> , "Component Function Check". <u>Is the inspection result normal?</u> YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts.	M
6. CHECK INSIDE KEY ANTENNA	~
<ul> <li>Check inside key antenna.</li> <li>Instrument center: Refer to <u>DLK-55</u>, "<u>DTC Logic</u>".</li> <li>Console: Refer to <u>DLK-57</u>, "<u>DTC Logic</u>".</li> <li>Trunk room: Refer to <u>DLK-59</u>, "<u>DTC Logic</u>".</li> <li>Is the inspection result normal?</li> <li>YES &gt;&gt; GO TO 7.</li> </ul>	P
NO >> Repair or replace the malfunctioning parts. 7.CHECK COMBINATION METER DISPLAY FUNCTION	
Check combination meter display function.	

Refer to DLK-101, "Component Function Check".

## **P POSITION WARNING DOES NOT OPERATE**

< SYMPTOM DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace the malfunctioning parts.

8. Confirm the operation

Confirm the operation again.

Is the result normal?

- YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".
- NO >> GO TO 1.

## ACC WARNING DOES NOT OPERATE

# < SYMPTOM DIAGNOSIS > ACC WARNING DOES NOT OPERATE

	А
Description	A
<ul> <li>NOTE:</li> <li>Warning functions operating condition is extremely complicated. During operation confirmation reconfirm the list above twice in order to check for normal operation. Refer to <u>DLK-36</u>, "WARNING FUNCTION : System <u>Description"</u>.</li> </ul>	В
Door lock function is normal.	С
Diagnosis Procedure	
1.CHECK POWER POSITION	D
Check if ignition switch position is changing or not. <u>Does ignition switch position change?</u> YES >> GO TO 2.	Е
NO >> Check BCM for DTC. Refer to <u>DLK-165, "DTC Index"</u> . 2.CHECK BUZZER (COMBINATION METER)	F
Check buzzer (combination meter). Refer to <u>DLK-102, "Component Function Check"</u> . <u>Is the inspection result normal?</u>	G
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. <b>3.</b> CHECK COMBINATION METER DISPLAY FUNCTION	Н
Check combination meter display function. Refer to <u>DLK-101, "Component Function Check"</u> . Is the inspection result normal?	I
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. <b>4.</b> CONFIRM THE OPERATION	J
Confirm the operation again. <u>Is the result normal?</u>	DLK
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1.	L

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## TAKE AWAY WARNING DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

## TAKE AWAY WARNING DOES NOT OPERATE

## Description

When door opens, take away warning does not operate. **NOTE:** 

 Warning functions operating condition is extremely complicated. During operation confirmation reconfirm the list above twice in order to check for normal operation. Refer to <u>DLK-36</u>, "WARNING FUNCTION : <u>System</u> <u>Description</u>".

• Door lock function is normal.

#### Diagnosis Procedure

#### **1.**CHECK POWER POSITION

Check if ignition switch position is changing or not.

Does ignition switch position change?

YES >> GO TO 2.

NO >> Check BCM for DTC. Refer to <u>DLK-165, "DTC Index"</u>.

2. CHECK DOOR SWITCH

Check door switch.

Refer to DLK-62, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

**3.**CHECK KEY SLOT

Check key slot.

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

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

**4.**CHECK INSIDE KEY ANTENNA

#### Check inside key antenna.

- Instrument center: Refer to <u>DLK-55, "DTC Logic"</u>.
- Console: Refer to <u>DLK-57, "DTC Logic"</u>.
- Trunk room: Refer to <u>DLK-59, "DTC Logic"</u>.

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

**5.**CHECK BUZZER (COMBINATION METER)

Check buzzer (combination meter).

Refer to <u>DLK-102</u>, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

**6.**CHECK COMBINATION METER DISPLAY FUNCTION

Check combination meter display function.

Refer to DLK-101, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

**7.**CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.

INFOID:000000005654977

## TAKE AWAY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >	
Refer to DLK-91, "Component Function Check".	
Is the inspection result normal?	А
YES >> GO TO 8.	
NO >> Repair or replace the malfunctioning parts.	_
8. CHECK KEY SLOT INDICATOR	В
Check key slot indicator.	
Refer to <u>DLK-97, "Component Function Check"</u> .	С
Is the inspection result normal?	
YES >> GO TO 9.	
NO >> Repair or replace the malfunctioning parts.	D
9.CONFIRM THE OPERATION	
Confirm the operation again.	_
Is the result normal?	E
YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".	
NO >> GO TO 1.	_
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# INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE < SYMPTOM DIAGNOSIS >

## INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

## Description

INFOID:000000005654979

#### NOTE:

Warning functions operating condition is extremely complicated. During operation confirmation reconfirm the list above twice in order to check for normal operation. Refer to <u>DLK-36</u>, <u>"WARNING FUNCTION : System</u> <u>Description"</u>.

#### Diagnosis Procedure

INFOID:000000005654980

**1.**CHECK "LO- BATT OF KEY FOB WARN" SETTING IN "WORK SUPPORT"

Check "LO- BATT OF KEY FOB WARN" setting in "WORK SUPPORT". Refer to DLK-49, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "LO- BATT OF KEY FOB WARN" setting in "WORK SUPPORT".

2. CHECK INTELLIGENT KEY

Check Intelligent key.

Refer to DLK-93, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK COMBINATION METER DISPLAY FUNCTION

Check combination meter display function.

Refer to DLK-101, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

**4.**CHECK INSIDE KEY ANTENNA

Check inside key antenna.

- Instrument center: Refer to <u>DLK-55, "DTC Logic"</u>.
- Console: Refer to DLK-57, "DTC Logic".
- Trunk room: Refer to <u>DLK-59, "DTC Logic"</u>.

Is the inspection result normal?

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

**5.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

- YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u>.
- NO >> GO TO 1.

## DOOR LOCK OPERATION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

## DOOR LOCK OPERATION WARNING DOES NOT OPERATE

	А
Description INFOID:000000005654981	
Door lock operation warning does not activate using door request switch. NOTE:	В
Warning functions operating condition is extremely complicated. During operation confirmation reconfirm the list above twice in order to check for normal operation. Refer to <u>DLK-36</u> , "WARNING FUNCTION : System <u>Description</u> ".	С
Diagnosis Procedure	
1. CHECK DOOR LOCK FUNCTION	D
Check door lock function.	
Does door lock/unlock using door request switch?	Ε
<ul> <li>YES &gt;&gt; GO TO 2.</li> <li>NO-1 &gt;&gt; Driver side: Refer to <u>DLK-171, "DRIVER SIDE : Diagnosis Procedure"</u>.</li> <li>NO-2 &gt;&gt; Passenger side: Refer to <u>DLK-172, "PASSENGER SIDE : Diagnosis Procedure"</u>.</li> </ul>	F
2.CHECK INTELLIGENT KEY WARNING BUZZER	
Check Intelligent Key warning buzzer. Refer to <u>DLK-91, "Component Function Check"</u> .	G
Is the inspection result normal?	
YES >> GO TO 3.	Н
NO >> Repair or replace the malfunctioning parts.	
3.CONFIRM THE OPERATION	
Confirm the operation again.	
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1.	J
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### **KEY ID WARNING DOES NOT OPERATE**

#### < SYMPTOM DIAGNOSIS >

## KEY ID WARNING DOES NOT OPERATE

#### Description

INFOID:000000005654983

#### NOTE:

Warning functions operating condition is extremely complicated. During operation confirmation reconfirm the list above twice in order to check for normal operation. Refer to <u>DLK-36</u>, "WARNING FUNCTION : System <u>Description</u>".

#### Diagnosis Procedure

INFOID:000000005654984

**1.**CHECK INTELLIGENT KEY

Check Intelligent Key.

Refer to <u>DLK-93, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK COMBINATION METER DISPLAY FUNCTION

Check combination meter display function. Refer to <u>DLK-101, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

- YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u>.
- NO >> GO TO 1.

## **KEY WARNING LAMP DOES NOT ILLUMINATE**

#### < SYMPTOM DIAGNOSIS >

## KEY WARNING LAMP DOES NOT ILLUMINATE

#### Description

## NOTE: Warning functions operating condition is extremely complicated. During operation confirmation reconfirm the list above twice in order to check for normal operation. Refer to <u>DLK-36, "WARNING FUNCTION : System</u> <u>Description"</u>.

	INFCID.0000000005654988
1.CHECK KEY WARNING LAMP	D
Check key warning lamp. Refer to <u>DLK-103, "Component Function Check"</u> .	
<u>Is the inspection result normal?</u> YES >> GO TO 2.	E
NO >> Repair or replace the malfunctioning parts. 2.CONFIRM THE OPERATION	F
Confirm the operation again.	
Is the result normal?	G
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1.	0
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## INTEGRATED HOMELINK TRANSMITTER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

## INTEGRATED HOMELINK TRANSMITTER DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000005654987

1. CHECK INTEGRATED HOMELINK TRANSMITTER

Check integrated homelink transmitter. Refer to <u>DLK-105, "Component Function Check"</u>.

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?

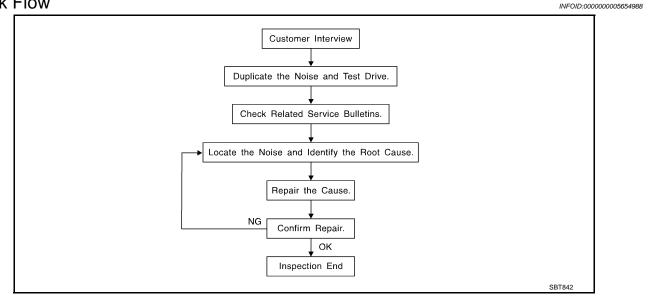
YES >> Check intermittent incident. Refer to GI-38. "Intermittent Incident".

NO >> GO TO 1.

#### < SYMPTOM DIAGNOSIS >

## SQUEAK AND RATTLE TROUBLE DIAGNOSES

#### Work Flow



#### CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of customer's comments; refer to <u>DLK-205</u>, "<u>Diagnostic Worksheet</u>". This information is necessary to duplicate the conditions that exist when the noise occurs.

- The customer may not be able to provide a detailed description or the location of the noise. Attempt to obtain all the facts and conditions that exist when the noise occurs (or does not occur).
- If there is more than one noise in the vehicle, perform a diagnosis and repair the noise that the customer is concerned about. This can be accomplished by performing a cruise test on the vehicle with the customer.
- After identifying the type of noise, isolate the noise in terms of its characteristics. The noise characteristics J are provided so the customer, service adviser and technician are all speaking the same language when defining the noise.
- Squeak (Like tennis shoes on a clean floor)
   Squeak characteristics include the light contact/fast movement/brought on by road conditions/hard surfaces
   higher pitch noise/softer surfaces = lower pitch noises/edge to surface = chirping
- Creak (Like walking on an old wooden floor)
   Creak characteristics include firm contact/slow movement/twisting with a rotational movement/pitch dependent on materials/often brought on by activity.
- Rattle (Like shaking a baby rattle) Rattle characteristics include the fast repeated contact/vibration or similar movement/loose parts/missing clip or fastener/incorrect clearance.
- Knock (Like a knock on a door)
   Knock characteristics include hollow sounding/sometimes repeating/often brought on by driver action.
- Tick (Like a clock second hand)
   Tick characteristics include gentle contacting of light materials/loose components/can be caused by driver action or road conditions.
- Thump (Heavy, muffled knock noise) Thump characteristics include softer knock/dead sound often brought on by activity.
- Buzz (Like a bumblebee)
   Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending up on the person. A noise that a technician may judge as acceptable may be very irritating to the customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

#### DUPLICATE THE NOISE AND TEST DRIVE

If possible, drive the vehicle with the customer until the noise is duplicated. Note any additional information on the Diagnostic Worksheet regarding the conditions or location of the noise. This information can be used to duplicate the same conditions when the repair is reconfirmed.

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#### < SYMPTOM DIAGNOSIS >

If the noise can be duplicated easily during the test drive, to help identify the source of the noise, try to duplicate the noise with the vehicle stopped by doing one or all of the following:

- 1) Close a door.
- 2) Tap or push/pull around the area where the noise appears to be coming from.
- 3) Rev the engine.
- 4) Use a floor jack to recreate vehicle "twist".
- 5) At idle, apply engine load (electrical load, half-clutch on M/T models, drive position on A/T models).
- 6) Raise the vehicle on a hoist and hit a tire with a rubber hammer.
- Drive the vehicle and attempt to duplicate the conditions the customer states exist when the noise occurs.
- If it is difficult to duplicate the noise, drive the vehicle slowly on an undulating or rough road to stress the vehicle body.

#### CHECK RELATED SERVICE BULLETINS

After verifying the customer concern or symptom, check ASIST for Technical Service Bulletins (TSBs) related to that concern or symptom.

If a TSB relates to the symptom, follow the procedure to repair the noise.

#### LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

- 1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis ear: J-39570, Engine ear and mechanics stethoscope).
- 2. Narrow down the noise to a more specific area and identify the cause of the noise by:
- Removing the components in the area that is are suspected to be the cause of the noise. Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
- Tapping or pushing/pulling the component that is are suspected to be the cause of the noise. Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
- Feeling for a vibration by hand by touching the component(s) that is are suspected to be the cause of the noise.
- Placing a piece of paper between components that are suspected to be the cause of the noise.
- Looking for loose components and contact marks. Refer to DLK-203, "Inspection Procedure".

#### REPAIR THE CAUSE

- If the cause is a loose component, tighten the component securely.
- If the cause is insufficient clearance between components:
- Separate components by repositioning or loosening and retightening the component, if possible.
- Insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or urethane tape. A Nissan Squeak and Rattle Kit (J-43980) is available through the authorized Nissan Parts Department.

#### CAUTION:

## Never use excessive force as many components are constructed of plastic and may be damaged. NOTE:

Always check with the Parts Department for the latest parts information.

The following materials are contained in the Nissan Squeak and Rattle Kit (J-43980). Each item can be ordered separately as needed.

URETHANE PADS [1.5 mm (0.059 in) thick]

Insulates connectors, harness, etc.

76268-9E005: 100  $\times$  135 mm (3.94  $\times$  5.31 in)/76884-71L01: 60  $\times$  85 mm (2.36  $\times$  3.35 in)/76884-71L02:15  $\times$  25 mm (0.59  $\times$  0.98 in)

INSULATOR (Foam blocks)

Insulates components from contact. Can be used to fill space behind a panel.

73982-9E000: 45 mm (1.77 in) thick,  $50 \times 50$  mm (1.97  $\times$  1.97 in)/73982-

50Y00: 10 mm (0.39 in) thick,  $50 \times 50$  mm (1.97  $\times$  1.97 in)

INSULATOR (Light foam block)

80845-71L00: 30 mm (1.18 in) thick,  $30 \times 50$  mm (1.18  $\times$  1.97in)

FELT CLOTHTAPE

Used to insulate where movement does not occur. Ideal for instrument panel applications. 68370-4B000:  $15 \times 25 \text{ mm} (0.59 \times 0.98 \text{ in}) \text{ pad}/68239-13E00: 5 \text{ mm} (0.20 \text{ in}) \text{ wide tape roll}$  The following materials, not found in the kit, can also be used to repair squeaks and rattles. UHMW (TEFLON) TAPE

## DLK-202

#### < SYMPTOM DIAGNOSIS > Insulates where slight movement is present. Ideal for instrument panel applications. SILICONE GREASE А Used in place of UHMW tape that is be visible or does not fit. Will only last a few months. SILICONE SPRAY Used when grease cannot be applied. В DUCT TAPE Used to eliminate movement. CONFIRM THE REPAIR Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet. Inspection Procedure D INFOID:000000005654989 Refer to Table of Contents for specific component removal and installation information. INSTRUMENT PANEL Е Most incidents are caused by contact and movement between: 1. The cluster lid A and instrument panel F Acrylic lens and combination meter housing Instrument panel to front pillar garnish Instrument panel to windshield Instrument panel mounting pins Wiring harnesses behind the combination meter A/C defroster duct and duct joint Н These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness. CAUTION: Never use silicone spray to isolate a squeak or rattle. If the area is saturated with silicone, the recheck of repair becomes impossible. CENTER CONSOLE Components to pay attention to include: DLK 1. Shifter assembly cover to finisher A/C control unit and cluster lid C Wiring harnesses behind audio and A/C control unit The instrument panel repair and isolation procedures also apply to the center console. DOORS Pay attention to the following: M 1. Finisher and inner panel making a slapping noise Inside handle escutcheon to door finisher Ν Wiring harnesses tapping 4. Door striker out of alignment causing a popping noise on starts and stops Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. The areas can usually be insulated with felt cloth tape or insulator foam blocks from the Nissan Squeak and Rattle Kit (J-43980) to repair the noise. TRUNK Ρ Trunk noises are often caused by a loose jack or loose items put into the trunk by the customer. In addition look for the following: Trunk lid dumpers out of adjustment Trunk lid striker out of adjustment

- 3. The trunk lid torsion bars knocking together
- 4. A loose license plate or bracket

#### < SYMPTOM DIAGNOSIS >

Most of these incidents can be repaired by adjusting, securing or insulating the item(s) or component(s) causing the noise.

#### SUNROOF/HEADLINING

Noises in the sunroof/headlining area can often be traced to one of the following:

- 1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
- 2. Sunvisor shaft shaking in the holder
- 3. Front or rear windshield touching headlining and squeaking

Again, pressing on the components to stop the noise while duplicating the conditions can isolate most of these incidents. Repairs usually consist of insulating with felt cloth tape.

#### SEATS

When isolating seat noise it's important to note the position the seats in and the load placed on the seat when the noise occurs. These conditions should be duplicated when verifying and isolating the cause of the noise. Cause of seat noise include:

- 1. Headrest rods and holder
- 2. A squeak between the seat pad cushion and frame
- 3. The rear seatback lock and bracket

These noises can be isolated by moving or pressing on the suspected components while duplicating the conditions under which the noise occurs. Most of these incidents can be repaired by repositioning the component or applying urethane tape to the contact area.

#### UNDERHOOD

Some interior noise may be caused by components under the hood or on the engine wall. The noise is then transmitted into the passenger compartment.

Causes of transmitted underhood noise include:

- 1. Any component mounted to the engine wall
- 2. Components that pass through the engine wall
- 3. Engine wall mounts and connectors
- 4. Loose radiator mounting pins
- 5. Hood bumpers out of adjustment
- 6. Hood striker out of adjustment

These noises can be difficult to isolate since they cannot be reached from the interior of the vehicle. The best method is to secure, move or insulate one component at a time and test drive the vehicle. Also, engine RPM or load can be changed to isolate the noise. Repairs can usually be made by moving, adjusting, securing, or insulating the component causing the noise.

< SYMPTOM DIAGNOSIS >

**Diagnostic Worksheet** 



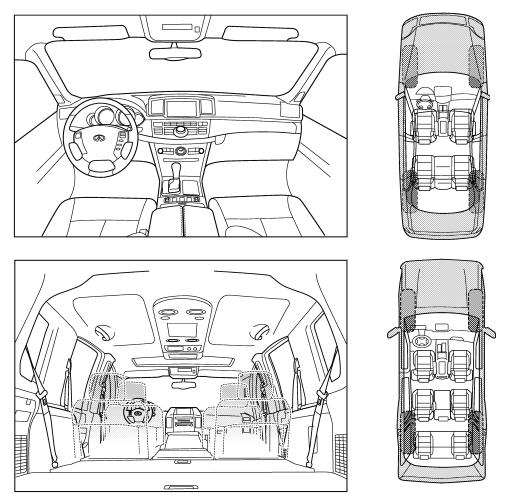
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

#### Dear Infiniti Customer:

We are concerned about your satisfaction with your Infiniti vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Infiniti right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may be asked to take a test drive with a service consultant or technician to ensure we confirm the noise you are hearing.

#### I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)

The illustrations are for reference only, and may not reflect the actual configuration of your vehicle.



Continue to page 2 of the worksheet and briefly describe the location of the noise or rattle. In addition, please indicate the conditions which are present when the noise occurs.

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#### < SYMPTOM DIAGNOSIS >

#### SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

II. WHEN DOES IT OCCUR? (please chec	k the boxes that apply)
<ul> <li>anytime</li> <li>1st time in the morning</li> <li>only when it is cold outside</li> <li>only when it is hot outside</li> </ul>	<ul> <li>after sitting out in the rain</li> <li>when it is raining or wet</li> <li>dry or dusty conditions</li> <li>other:</li> </ul>
III. WHEN DRIVING:	IV. WHAT TYPE OF NOISE
<ul> <li>through driveways</li> <li>over rough roads</li> <li>over speed bumps</li> <li>only about mph</li> <li>on acceleration</li> <li>coming to a stop</li> <li>on turns: left, right or either (circle)</li> <li>with passengers or cargo</li> <li>other:</li> <li>after driving miles or minu</li> </ul>	<ul> <li>squeak (like tennis shoes on a clean floor)</li> <li>creak (like walking on an old wooden floor)</li> <li>rattle (like shaking a baby rattle)</li> <li>knock (like a knock at the door)</li> <li>tick (like a clock second hand)</li> <li>thump (heavy, muffled knock noise)</li> <li>buzz (like a bumble bee)</li> </ul>

#### TO BE COMPLETED BY DEALERSHIP PERSONNEL

**Test Drive Notes:** 

	YES	NO	Initials of person performing
Vehicle test driven with customer - Noise verified on test drive - Noise source located and repaired - Follow up test drive performed to confirm repair			
		me:	

# < PRECAUTION > PRECAUTION PRECAUTIONS

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

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

#### WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which 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 the "SRS AIR BAG".
- Do not 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:

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, DO NOT 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 J battery, and wait at least 3 minutes before performing any service.

#### Precaution Necessary for Steering Wheel Rotation after Battery Disconnect

#### NOTE:

- Before removing and installing any control units, first turn the push-button 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-III 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 pro-

#### **OPERATION PROCEDURE**

1. Connect both battery cables. NOTE:

Supply power using jumper cables if battery is discharged.

- 2. Turn the push-button 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.

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## PRECAUTIONS

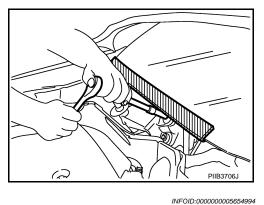
#### < PRECAUTION >

- 5. When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the push-button ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the push-button ignition switch is turned to LOCK position.)
- 6. Perform self-diagnosis check of all control units using CONSULT-III.

#### Precaution for Procedure without Cowl Top Cover

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



## Precaution for Battery Service

Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

Work

- After removing and installing the opening/closing parts, be sure to carry out fitting adjustments to check their operational.
- Check the lubrication level, damage, and wear of each part. If necessary, grease or replace it.

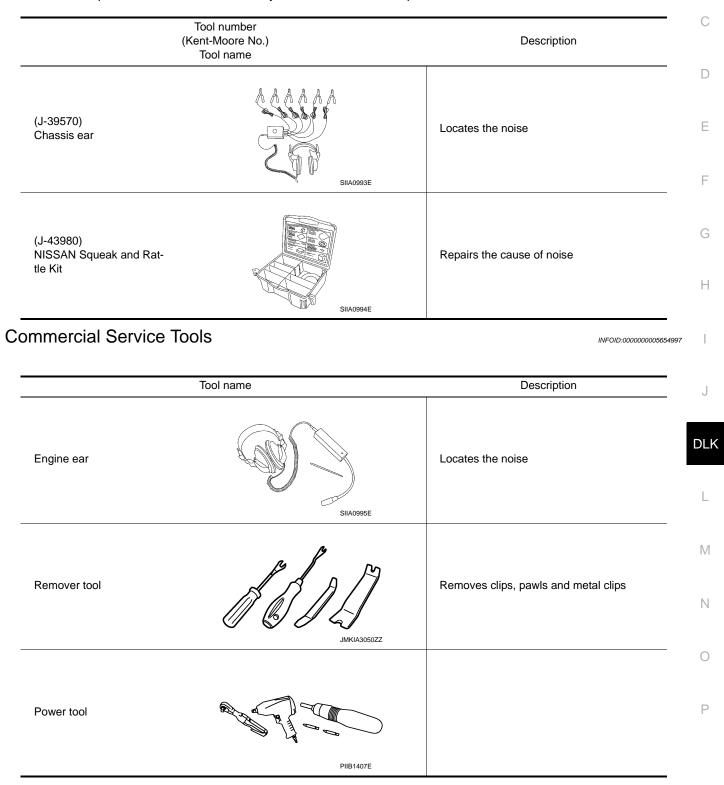
## PREPARATION

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## PREPARATION PREPARATION

## Special Service Tools

The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.



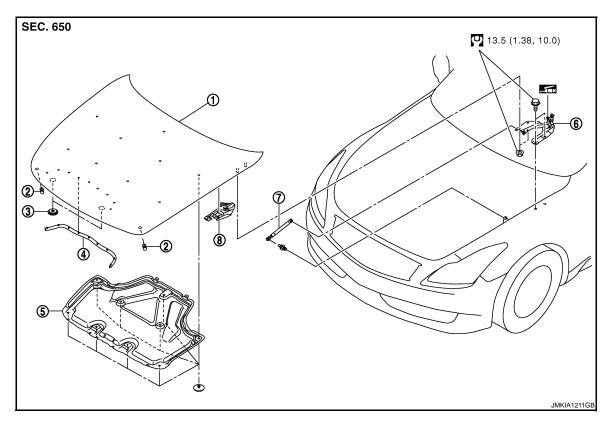
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#### < REMOVAL AND INSTALLATION >

## REMOVAL AND INSTALLATION HOOD HOOD ASSEMBLY HOOD ASSEMBLY : Exploded View

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1. Hood assembly

7. Hood stay

- 2. Hood bumper rubber
- 4. Radiator core seal
- 5. Hood insulator
- 8. Hood hinge cover

Refer to  $\underline{\text{GI-4}, \text{"Components"}}$  for symbols in the figure.

## HOOD ASSEMBLY : Removal and Installation

#### CAUTION:

#### Operate with two workers, because of its heavy weight.

#### REMOVAL

1. Support the hood lock assembly with a proper material to prevent it from falling.

#### WARNING:

# Body injury may occur if no supporting rod is holding the hood open when removing the hood stay.

- 2. Remove the hood hinge cover (LH/RH).
- 3. Remove the washer nozzle, washer tube. Refer to WW-51, "Removal and Installation".
- 4. Remove the stud balls on the hood stays at the hood side.
- 5. Remove the hinge mounting nuts on the hood to remove the hood assembly.

#### INSTALLATION

Install in the reverse order of removal. CAUTION:

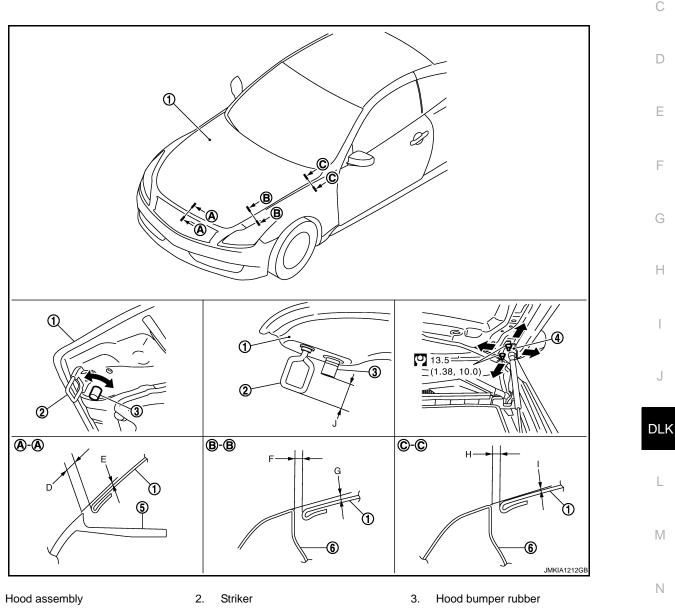
- 3.
- Seal
   Hood hinge

HOOD

< REMOVAL AND INSTALLATION >

- Before installing hood hinge, apply anticorrosive agent onto the mounting surface of the vehicle body.
- After installing, perform hood fitting adjustment. Refer to <u>DLK-211, "HOOD ASSEMBLY : Adjust-ment"</u>.
- After installing, perform front washer nozzle and tube inspection and adjustment. Refer to <u>WW-51</u>, <u>"Inspection and Adjustment"</u>.

HOOD ASSEMBLY : Adjustment



4. Hood hinge

1.

5. Front bumper

6. Front fender

Refer to GI-4, "Components" for symbols in the figure.

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## < REMOVAL AND INSTALLATION >

	Portion		Standard	Right/left Clearance (MAX)	
	B – B -	F	Clearance	2.5 – 4.5 mm (0.098 – 0.177 in)	2.0 mm (0.079 in)
Hood – Front fender		G	Surface height	–1.0 – 2.0 mm (–0.039 – 0.079 in)	_
	C – C	н	Clearance	2.5 – 4.5 mm (0.098 – 0.177 in)	2.0 mm (0.079 in)
		I	Surface height	–1.0 – 1.0 mm (–0.039 – 0.039 in)	_
Striker – Hood bumper rubber	—	J	Height difference	32.5 – 33.5 mm (1.280 – 1.319 in)	_

- 1. Check the clearance and the surface height between the hood and each part visually and by touching. (Fitting standard dimension in the table below should be satisfied.
- 2. In case out of specification, adjust them according to the procedures shown below.
- 3. Remove the striker and adjust the surface height of hood, front bumper and front fender according to the fitting standard dimension, by rotating hood bumper rubbers.
- 4. Adjust the height difference of striker, hood bumper rubber according to the fitting standard dimension.
- 5. Loosen the hood hinge mounting nuts on the hood.
- 6. Adjust the clearance of hood, front bumper and front fender according to the fitting standard dimension, for the hood.
- Check that the hood lock primary latch is securely engaged with the striker by dropping hood from approximately 200 mm (7.874 in) height or pressing lightly on the hood.
   CAUTION:

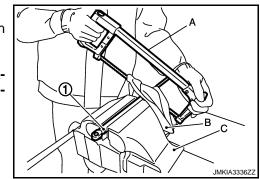
#### Never drop hood from a height of 300 mm (11.811 in) or more.

- 8. Install as static closing face of hood is  $94 490 \text{ N} \cdot \text{m} (9.6 50.0 \text{ kg-m})$ . **NOTE:** 
  - Exercise vertical force on right side and left side of hood lock.
  - Do not press simultaneously both sides.
- 9. After adjustment tighten hood hinge mounting nuts to the specified torque.

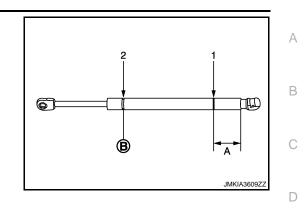
## HOOD ASSEMBLY : Disposal

#### DISPOSAL OF HOOD STAY

- 1. Fix hood stay (1) using a vise (C).
- Using hacksaw (A) slowly make 2 holes in the hood stay, in numerical order as shown in the figure.
   CAUTION:
  - When cutting a hole on hood stay, always cover a hacksaw using a shop cloth (B) to avoid scattering metal fragments or oil.
  - Wear eye protection (safety glasses).
  - Wear gloves.



- **A**: 20 mm (0.787 in)
- Cut at the groove. B:



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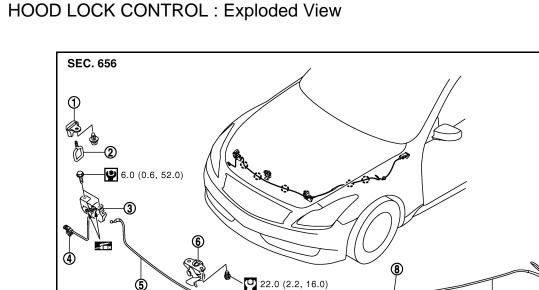
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# HOOD LOCK CONTROL



2

Striker

cover

11. Hood lock opener

2.

8.

Remove the washer tank. Refer to WW-48, "Removal and Installation".

6.0 (0.6, 52.0)

**Revision: 2009 November** 

Hood lock cover

Hood lock (LH)

10. Hood lock control cable (Rear)

Hood lock switch harness connector 5.

Refer to <u>GI-4, "Components"</u> for symbols in the figure.

Remove the radiator core support ornament.

1. 4.

7.

( ) : Clip

REMOVAL

1.

2.

JMKIA1213GB 3. Hood lock (RH) Hood lock control cable (Front) 6. Secondary latch Hood lock control cable protector 9. Hood lock control cable protector HOOD LOCK CONTROL : Removal and Installation

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#### < REMOVAL AND INSTALLATION >

• Remove the radiator core support ornament mounting bolts and clips.

#### NOTE:

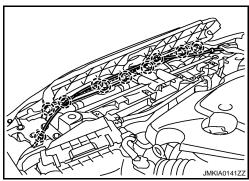
To remove the mounting bolts on both sides of radiator core support ornament, first remove the mounting bolts of front bumper (shown by arrows in the figure) and pull up the bumper edge slightly to get working clearance.

#### CAUTION:

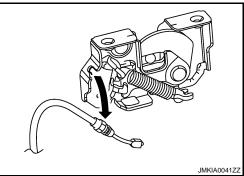
Never apply excessive force while pulling front bumper to prevent front bumper and front fender from being damaged.

- Hold both sides of radiator core support ornament, pull it upwards and slide it rearwards of the vehicle.
- Disconnect the harness clips and hood lock control cable clips on radiator core support.



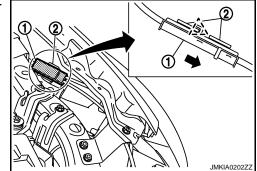


- 3. Remove the fender protector (LH). Refer to <u>DLK-219, "Removal and Installation"</u>.
- 4. Disconnect hood lock switch (RH side) harness connector.
- 5. Remove the hood lock bracket mounting bolts, and remove the hood lock bracket assembly. Refer to <u>DLK-216, "Exploded View"</u>.
- 6. Remove the hood lock mounting bolts, and disassemble the hood lock from the hood lock bracket.
- Disconnect the hood lock control cable from the hood lock and clip it to the hood ledge.



8. Remove the hood lock control cable protector (1) from the headlamp assembly (2).

2 : Pawl



9. Remove the hood lock control cable cover from hood lock control cable protector.

#### < REMOVAL AND INSTALLATION >

partment.

INSTALLATION

CAUTION:

ment".

NOTE:

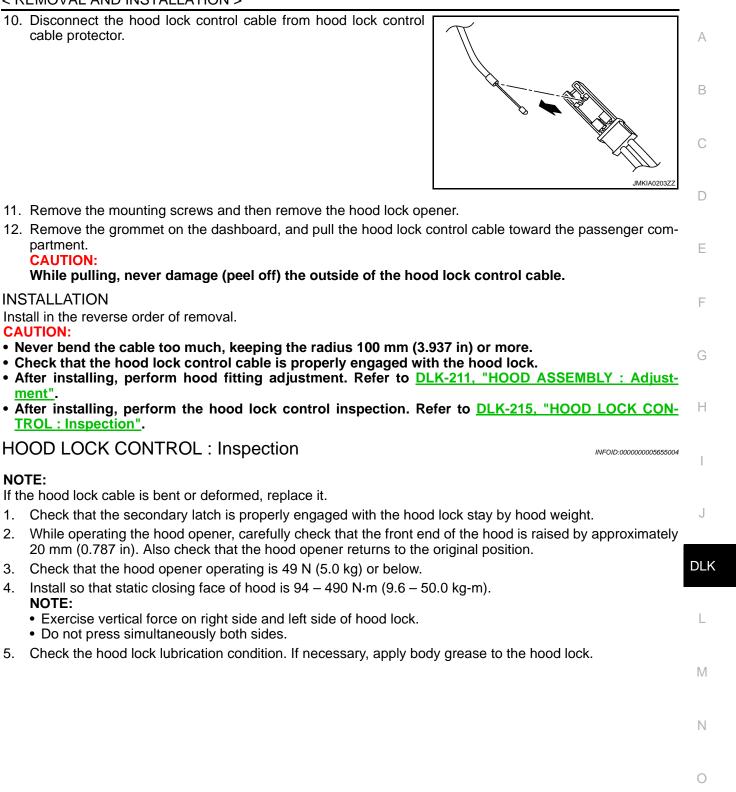
NOTE:

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CAUTION:

TROL : Inspection".

10. Disconnect the hood lock control cable from hood lock control cable protector.



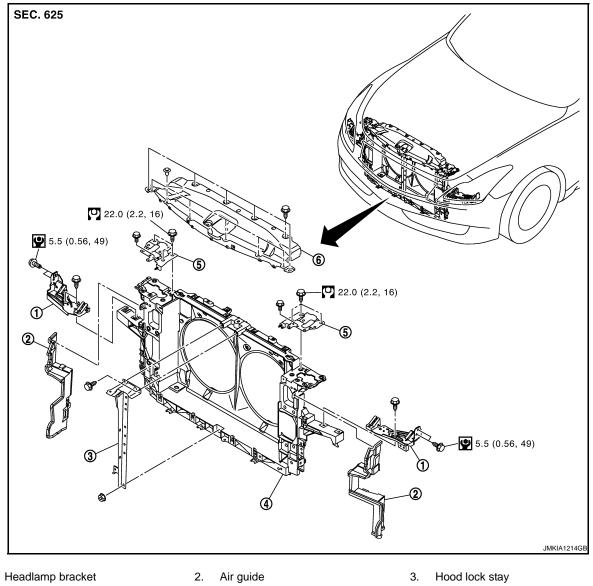
## **RADIATOR CORE SUPPORT**

#### < REMOVAL AND INSTALLATION >

## RADIATOR CORE SUPPORT

## **Exploded View**

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4. Radiator core support assembly 5. Hood lock bracket Refer to <u>GI-4, "Components"</u> for symbols in the figure.

## Removal and Installation

#### REMOVAL

1.

1. Remove the front bumper fascia and front bumper reinforcement. Refer to <u>EXT-14</u>, "<u>Removal and Installa-</u> tion".

6.

- 2. Remove the radiator reservoir tank. Refer to CO-13, "Exploded View".
- 3. Remove horn (High/Low). Refer to HRN-6, "Removal and Installation".
- 4. Remove the radiator core support ornament.
  - Remove the radiator core support ornament mounting bolts and clips.
     NOTE:

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Radiator core support ornament

## **RADIATOR CORE SUPPORT**

#### < REMOVAL AND INSTALLATION >

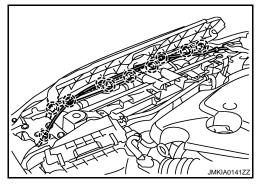
In the case that only radiator core support ornament is removed (front bumper is not removed), remove them according to the procedures shown below.

- To remove the mounting bolts on both sides of radiator core support ornament, first remove the mounting bolts of front bumper (shown by arrows in the figure) and pull up the bumper edge slightly to get working clearance. CAUTION:

Never apply excessive force while pulling front bumper to prevent front bumper and front fender from being damaged.

- Hold both sides of radiator core support ornament, pull it upwards and slide it rearwards of the vehicle.
- Disconnect the harness clips and hood lock control cable clips on radiator core support.





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- 5. Remove the front combination lamp. Refer to EXL-162, "Removal and Installation".
- 6. Remove the hood lock bracket assembly.
- 7. Remove the washer inlet and washer tank. Refer to <u>WW-48, "Removal and Installation"</u>.
- 8. Remove the ambient sensor. Refer to HAC-143, "Removal and Installation".
- 9. Remove the power steering fluid cooler. Refer to ST-59, "2WD : Exploded View".
- 10. Remove the air guide mounting clips and then remove air guide.
- 11. Disconnect the harness connector from refrigerant pressure sensor. Refer to <u>HAC-147, "Removal and</u> <u>Installation"</u>.
- 12. Disconnect harness clamp from radiator core support.
- 13. Remove the hood lock stay.
- 14. Remove the engine lower cover. Refer to EXT-30, "Removal and Installation".
- 15. Drain engine coolant from radiator. Refer to CO-7, "Draining".
- 16. Remove the radiator upper hose and lower hose on radiator & condenser assembly sides.
- Remove the A/T fluid cooler hose on radiator & condenser assembly sides. Refer to <u>TM-278, "2WD :</u> <u>Exploded View"</u> (2WD) or <u>TM-280, "AWD : Exploded View"</u> (AWD).
- Disconnect condenser pipe assembly at one touch joint. Refer to <u>HA-47, "CONDENSER PIPE ASSEM-</u> <u>BLY : Removal and Installation"</u>.
- 19. Remove the radiator core support assembly mounting bolts, and pull out radiator core support assembly toward the front of the vehicle.
- 20. Disconnect the cooling fan and crush zone sensor harness connector and clamp.
- 21. Remove the radiator core support assembly.
- 22. Remove the following parts after removing the radiator core support assembly.
  - Headlamp bracket.
  - Cooling fan. Refer to <u>CO-17, "Removal and Installation"</u>.
  - Radiator & condenser assembly. Refer to CO-14, "Removal and Installation".
  - Crush zone sensor. Refer to <u>SR-21, "Removal and Installation"</u>.

INSTALLATION Install in the reverse order of removal. CAUTION:

## **RADIATOR CORE SUPPORT**

< REMOVAL AND INSTALLATION >

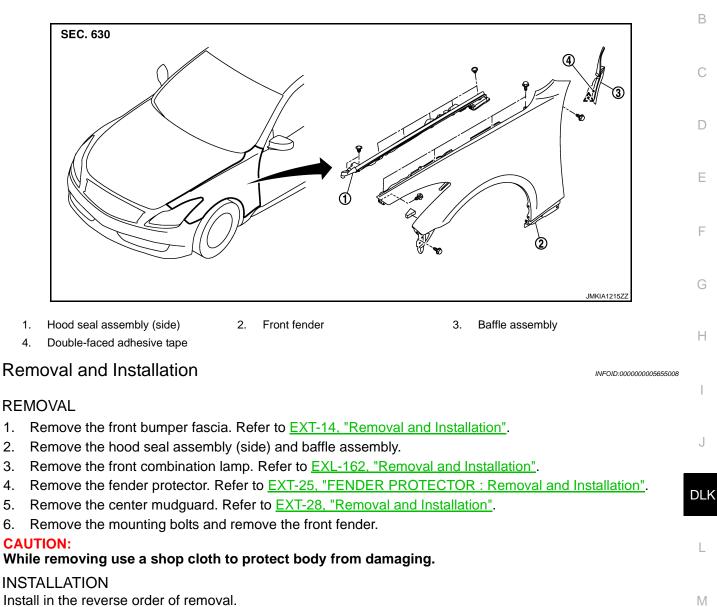
- After installation, refill the following.
- Power stealing fluid. Refer to ST-12, "Inspection".
- A/T fluid. Refer to <u>TM-258, "Changing"</u>.
  Engine coolant. Refer to <u>CO-8, "Refilling"</u>.

# FRONT FENDER

## **Exploded View**

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CAUTION:

2.

5.

6.

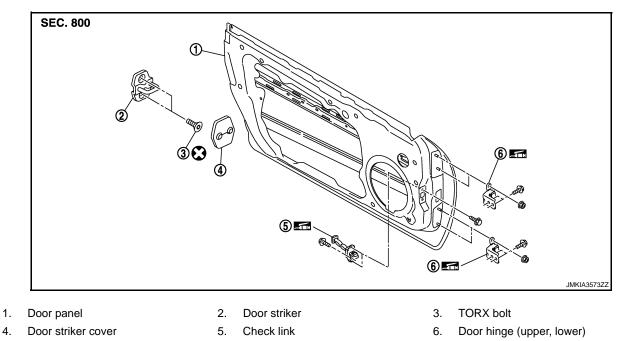
- After installing, apply touch-up paint (the body color) onto the head of the front fender mounting bolts.
- Ν After installing, check front fender adjustment. Refer to <u>DLK-211, "HOOD ASSEMBLY : Adjustment"</u> and DLK-220, "DOOR ASSEMBLY : Adjustment".

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## DOOR DOOR ASSEMBLY

DOOR ASSEMBLY : Exploded View

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Refer to <u>GI-4, "Components"</u> for symbols in the figure.

## DOOR ASSEMBLY : Removal and Installation

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## REMOVAL

#### **CAUTION:**

- When removing and installing the door assembly, support the door with a jack and cloth to protect the door and body.
- When removing and installing door assembly, perform the fitting adjustment. Refer to <u>DLK-220</u>, <u>"DOOR ASSEMBLY : Adjustment"</u>.
- After installing, apply touch-up paint (the body color) onto the head of the hinge mounting nuts.
- Check the hinge rotating part for poor lubrication. If necessary, apply body grease.
- Operate with two workers, because of its heavy weight.
- Check door open/close operation after installation.
- 1. Remove the mounting bolts of the check link on the vehicle.
- 2. Pull the lever and disconnect the door harness connector while removing tabs of door harness connector.
- 3. Remove the door side hinge mounting nuts, then remove the door assembly.

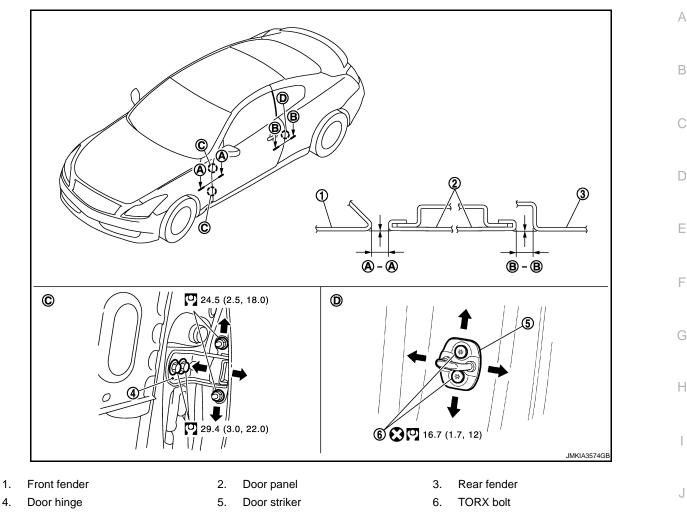
#### INSTALLATION

Install in the reverse order of removal.

## DOOR ASSEMBLY : Adjustment

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## CLEARANCE, SURFACE HEIGHT AND SURFACE MISMATCH ADJUSTMENT



Refer to <u>GI-4, "Components"</u> for symbols in the figure.

1. Check the clearance and surface height and surface mismatch between the door and each part visually DLK and by touching. (Fitting standard dimension in the table below should be satisfied.)

Portion		Clearance	Surface height	
Front fender – Door	A – A	2.5 – 4.5 mm (0.098 – 0.177 in)	–1.0 – 1.0 mm (–0.039 – 0.039 in)	
Door – Rear fender	B – B	2.5 – 4.5 mm (0.098 – 0.177 in)	–1.0 – 1.0 mm (–0.039 – 0.039 in)	

- 2. In case out of specification, adjust them according to the procedures shown below.
- 3. Remove the front fender. Refer to <u>DLK-219</u>, "Removal and Installation".
- 4. Loosen the hinge mounting nuts on door side.
- 5. Adjust the surface height and surface mismatch of the door according to the fitting standard dimension.
- 6. Temporarily tighten the hinge mounting nuts on door side.
- 7. Loosen the hinge mounting bolts on body side.
- 8. Raise the door at rear end to adjust clearance of the front according to the fitting standard dimension.
- 9. After adjustment tighten bolts and nuts to the specified torque.
- 10. Install the front fender. Refer to <u>DLK-219</u>, "Removal and Installation".

STRIKER ADJUSTMENT

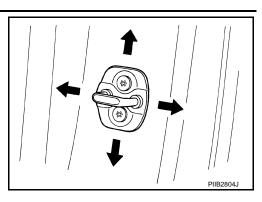
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## DOOR

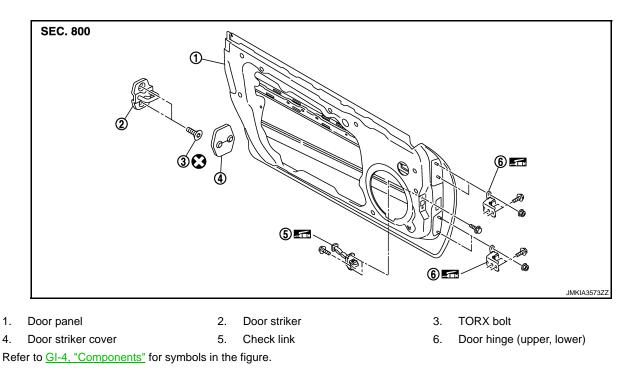
#### < REMOVAL AND INSTALLATION >

Adjust the striker so that it becomes parallel with the lock insertion direction.



# DOOR STRIKER DOOR STRIKER : Exploded View

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## DOOR STRIKER : Removal and Installation

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#### REMOVAL

- 1. Remove the door striker cover.
- 2. Remove the TORX bolts, and then remove the door striker.

#### INSTALLATION

Install in the reverse order of removal. **CAUTION:** 

- Check the door open/close operation after installation.
- When removing and installing the door striker, be sure to perform the fitting adjustment. Refer to <u>DLK-220, "DOOR ASSEMBLY : Adjustment"</u>.
   DOOR HINGE

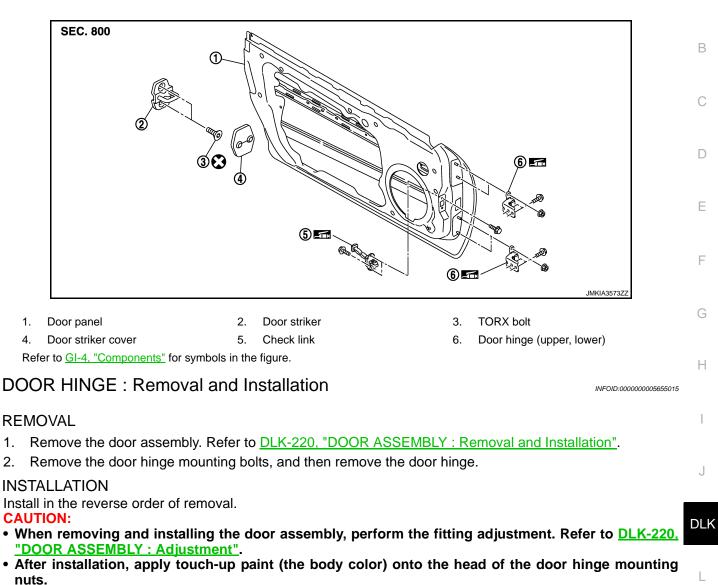
## DOOR

## < REMOVAL AND INSTALLATION >

## DOOR HINGE : Exploded View

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- Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.
- Check the door open/close operation after installation.

#### DOOR CHECK LINK

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2.

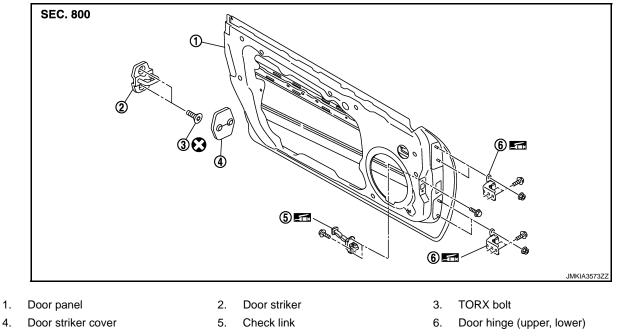
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## DOOR

## < REMOVAL AND INSTALLATION >

## DOOR CHECK LINK : Exploded View



Refer to  $\underline{\text{GI-4}, \text{"Components"}}$  for symbols in the figure.

# DOOR CHECK LINK : Removal and Installation

#### REMOVAL

- 1. Remove the door finisher. Refer to INT-12, "Removal and Installation".
- 2. Remove the door speaker.
- 3. Remove the mounting bolt of the door check link on the vehicle.
- 4. Remove the door check link mounting bolts on the door side.
- 5. Remove the door check link.

#### **INSTALLATION**

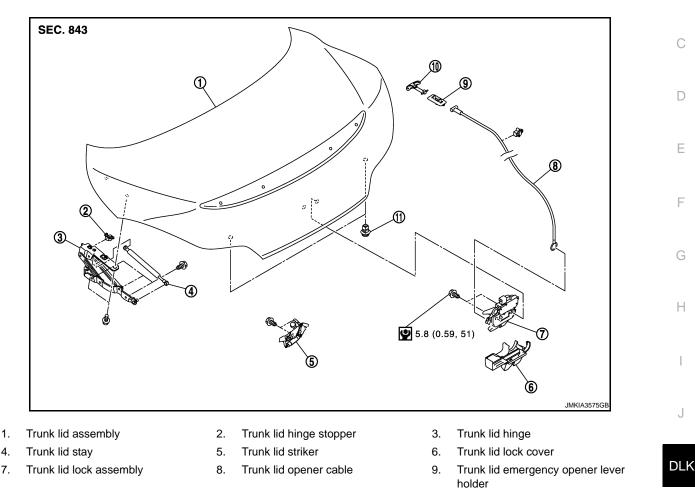
Install in the reverse order of removal.

#### CAUTION:

Check the door open/close operation after installation.

# TRUNK LID TRUNK LID ASSEMBLY

TRUNK LID ASSEMBLY : Exploded View



10. Trunk lid emergency opener lever 11. Bumper rubber Refer to <u>GI-4. "Components"</u> for the symbols in the figure.

# TRUNK LID ASSEMBLY : Removal and Installation

## REMOVAL

- 1. Remove the trunk lid finisher inner. Refer to INT-30, "Removal and Installation".
- Disconnect the connectors in the trunk lid, and remove the harness clamps to pull the harness out of the trunk lid.
- 3. Remove trunk lid stay at trunk lid side.

**NOTE:** Insert flat-bladed screwdriver into the gap and remove holder.

## WARNING:

Body injury may occur if no supporting rod is holding the trunk lid open when removing the stay.

## While removing use a shop cloth or tape to protect from damaging.

4. Remove the trunk lid hinge mounting bolts on trunk lid side and remove the trunk lid assembly.

## INSTALLATION

Install in the reverse order of removal.

#### CAUTION:

• After installing, apply touch-up paint (the body color) onto the head of the hinge mounting bolts.

## **DLK-225**

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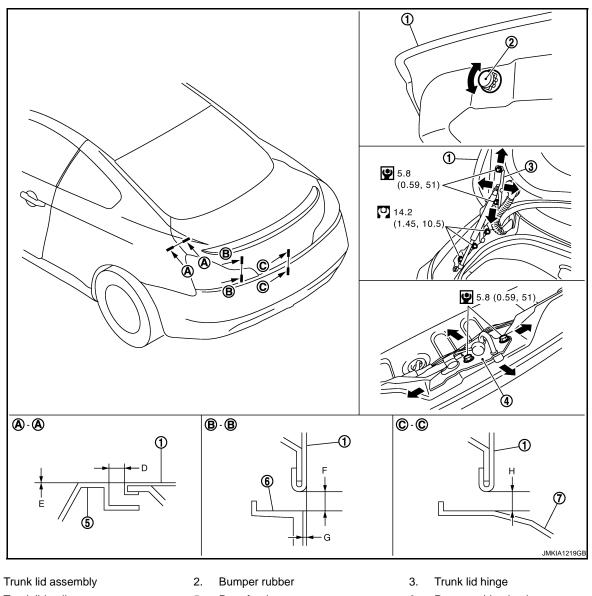
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- After installing, check operation.
- After installing, perform fitting adjustment. Refer to DLK-226, "TRUNK LID ASSEMBLY : Adjustment".

**TRUNK LID ASSEMBLY : Adjustment** 

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- 4. Trunk lid striker
- Rear bumper 7.

1.

5. Rear fender

6. Rear combination lamp

- Refer to GI-4, "Components" for symbols in the figure.
- 1. Check the clearance and the evenness between the trunk lid and each part visually and by touching. (Fitting standard dimension in the table below should be satisfied.)

Portion			Standard	Right/left Clearance (MAX)	
Trunk lid – Rear fender	<b>A</b> – <b>A</b>	D	Clearance	2.5 – 4.5 mm (0.098 – 0.177 in)	1.5 mm (0.059 in)
		Е	Surface height	–1.5 – 0.5 mm (–0.059 – 0.020 in)	1.5 mm (0.059 in)

### < REMOVAL AND INSTALLATION >

Portion				Standard	Right/left Clearance (MAX)	A
Trunk lid – Rear combination lamp	<b>B</b> – <b>B</b> –	F	Clearance	3.7 – 7.7 mm (0.146 – 0.303 in)	3.0 mm (0.118 in)	E
	Б-Б	G	Surface height	–2.5 – 1.5 mm (–0.098 – 0.059 in)	2.0 mm (0.079 in)	
Trunk lid – Rear bumper	<b>C</b> – <b>C</b>	н	Clearance	4.0 – 8.0 mm (0.157 – 0.315 in)	_	C

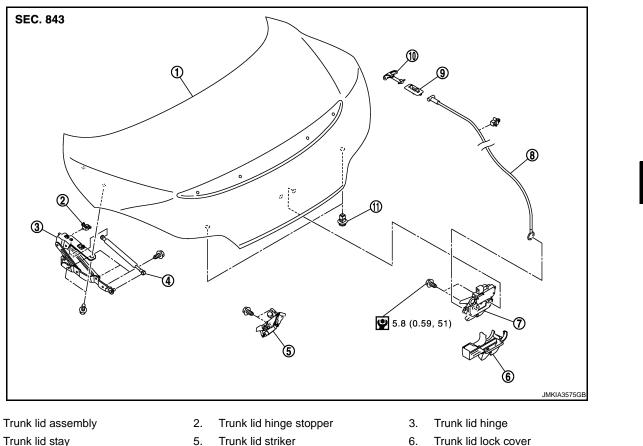
2. In case out of specification, adjust them according to the procedures shown below.

3. Loosen the bumper rubber.

- Loosen the striker mounting bolts.
- 5. Lift up the trunk lid approximately 100 150 mm (3.937 5.906 in) height then close it lightly and check Е that it is engaged firmly with the trunk lid closed.
- Check the clearance and evenness. 6.
- 7. Finally tighten the trunk lid striker.

## TRUNK LID STRIKER

## **TRUNK LID STRIKER : Exploded View**



Trunk lid lock assembly 7.

1. 4.

- 5.
  - 8. Trunk lid opener cable
- 10. Trunk lid emergency opener lever 11. Bumper rubber Refer to GI-4. "Components" for the symbols in the figure.

- 6. Trunk lid lock cover
- 9. Trunk lid emergency opener lever holder

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### < REMOVAL AND INSTALLATION >

### TRUNK LID STRIKER : Removal and Installation

#### REMOVAL

- 1. Remove the trunk rear plate. Refer to INT-28, "Exploded View".
- Remove the bolts, and remove the trunk lid striker. 2.

#### INSTALLATION

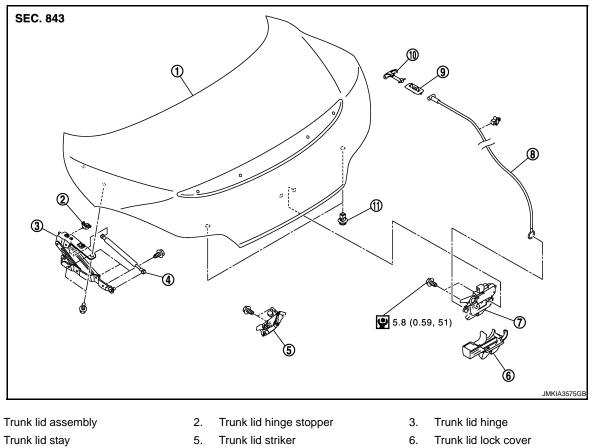
Install in the reverse order of removal.

#### **CAUTION:**

#### After installing, perform fitting adjustment. Refer to DLK-226, "TRUNK LID ASSEMBLY : Adjustment". TRUNK LID HINGE

## **TRUNK LID HINGE : Exploded View**

INFOID:000000005655023



- Trunk lid lock assembly 7.
- 8.
  - Trunk lid opener cable
- 9. Trunk lid emergency opener lever holder

10. Trunk lid emergency opener lever 11. Bumper rubber Refer to GI-4, "Components" for the symbols in the figure.

## TRUNK LID HINGE : Removal and Installation

#### REMOVAL

1.

4.

- Remove the trunk lid assembly. Refer to <u>DLK-225, "TRUNK LID ASSEMBLY : Removal and Installation"</u>.
- 2. Remove the trunk drip cover. Refer to EXT-40, "TRUNK DRIP COVER : Removal and Installation".
- 3. Remove the trunk lid stay. Refer to DLK-229, "TRUNK LID STAY : Removal and Installation".
- 4. Remove the trunk lid hinge mounting bolts (body side), and then remove the trunk lid hinge.

#### INSTALLATION

Install in the reverse order of removal.

Revision: 2009 November

## **DLK-228**

#### 2010 G37 Coupe

INFOID:000000005655024

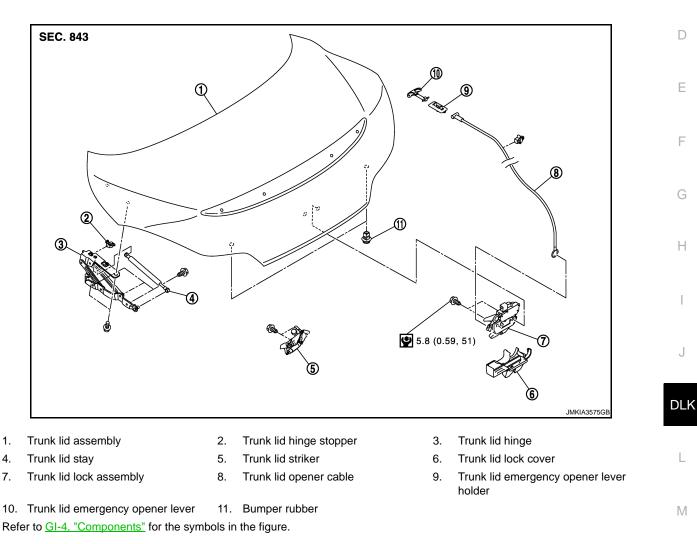
< REMOVAL AND INSTALLATION >

#### **CAUTION:**

- Check the trunk lid open/close operation after installation.
- Check the hinge rotating part for poor lubrication. If necessary, apply body grease.
- When removing and installing the trunk lid assembly, perform the fitting adjustment. Refer to <u>DLK-</u> <u>226, "TRUNK LID ASSEMBLY : Adjustment"</u>.

After installation, apply touch-up paint (the body color) onto the head of the hinge mounting nuts.
 TRUNK LID STAY

## **TRUNK LID STAY : Exploded View**



## TRUNK LID STAY : Removal and Installation

#### WARNING:

Body injury may occur if no supporting rod is holding the trunk lid open when removing the trunk lid stay.

#### REMOVAL

- 1. Remove the trunk drip cover. Refer to EXT-40, "TRUNK DRIP COVER : Removal and Installation".
- 2. Insert flat-bladed screwdriver into the gap and remove the trunk lid stay.

#### INSTALLATION

Install in the reverse order of removal.

#### **CAUTION:**

Check the trunk lid open/close operation after installation.

## **DLK-229**

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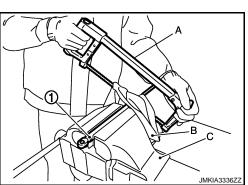
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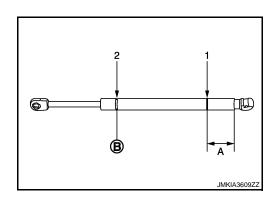
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## TRUNK LID STAY : Disposal

- 1. Fix trunk lid stay (1) using a vise (C).
- Using hacksaw (A) slowly make 2 holes in the trunk lid stay, in numerical order as shown in the figure.
   CAUTION:
  - When cutting a hole on trunk lid stay, always cover a hacksaw using a shop cloth (B) to avoid scattering metal fragments or oil.
  - Wear eye protection (safety glasses).
  - Wear gloves.
    - A: 20 mm (0.787 in)
    - **B:** Cut at the groove.



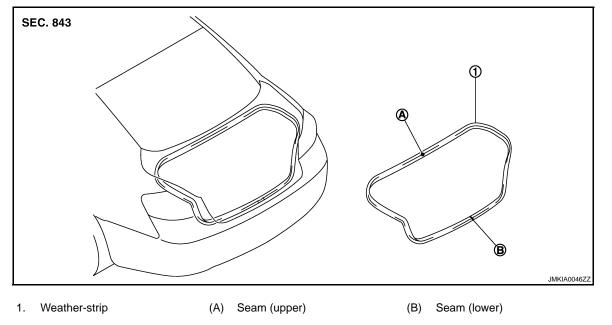


# TRUNK LID WEATHERSTRIP

## TRUNK LID WEATHERSTRIP : Exploded View

INFOID:000000005655028

INFOID:000000005655027



TRUNK LID WEATHERSTRIP : Removal and Installation

#### INFOID:000000005655029

#### REMOVAL

Pull up and remove engagement with body from weather-strip joint. CAUTION: After removal, never pull strongly on the weather-strip. INSTALLATION

Revision: 2009 November

< F	REMOVAL AND INSTALLATION >	_	
1. 2.	Align the weather-strip seam (upper) with mark of the body panel and weather-strip onto the vehicle. Align the weather-strip seem (lower) with center of the striker and weather-strip onto the vehicle.	A	
2. 3.	. After installation, pull the weather-strip gently to ensure that there is no loose section.		
	<b>NOTE:</b> Check that the weather-strip fits tightly at each corner and trunk rear plate.	В	
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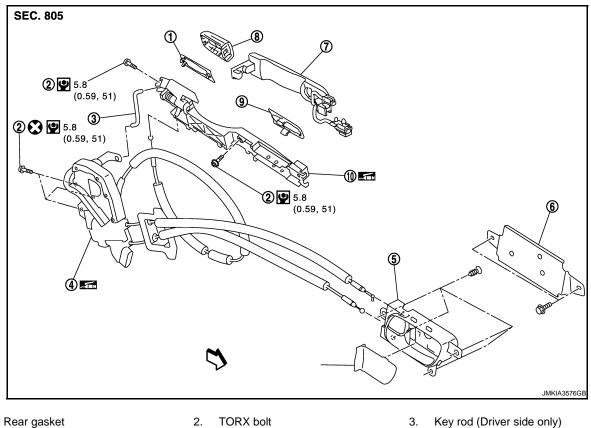
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## DOOR LOCK DOOR LOCK

DOOR LOCK : Exploded View

INFOID:000000005655030



- 1. Door lock assembly 4.
- 7. Outside handle

- 5. Inside handle
- 8. Door key cylinder assembly (Driver 9. side) Outside handle escutcheon (Passenger side)
- Inside handle bracket 6.
  - Front gasket

10. Outside handle bracket

#### : Vehicle front

Refer to GI-4, "Components" for symbols in the figure.

## DOOR LOCK : Removal and Installation

INFOID:000000005655031

## REMOVAL

- 1. Remove the door finisher. Refer to INT-12, "Removal and Installation".
- Remove the door glass and door module assembly. 2.
  - Door glass: Refer to <u>GW-18, "Removal and Installation"</u>.
  - Door module: Refer to GW-21, "Removal and Installation".
- 3. Remove the door side grommet, and loosen the door key cylinder assembly (driver side) and outside handle escutcheon (passenger side) TORX bolt from grommet hole. **CAUTION:**

#### < REMOVAL AND INSTALLATION >

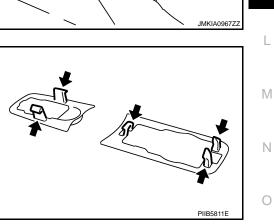
#### Never forcibly remove the TORX bolt.

- JMKIA0020ZZ
- 4. Disconnect the door antenna and door request switch connector and remove the harness clamp.
- 5. Reach in to separate the key rod connection (on the handle).
- 6. While pulling the outside handle, remove the door key cylinder assembly.
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- 7. Slide toward rear of vehicle, and pull forward to remove the outside handle.

8. Remove the front gasket and rear gasket.

9. Remove the TORX bolts, and remove the door lock assembly.







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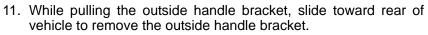
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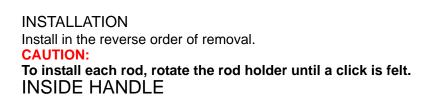
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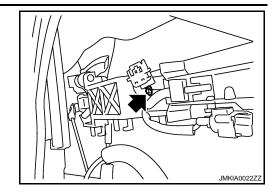
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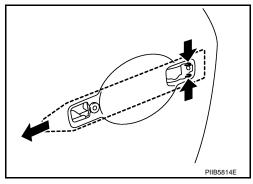
10. Remove the TORX bolt of the outside handle bracket.

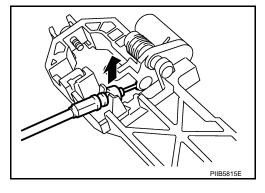


- 12. Disconnect the door lock actuator connector and remove the door lock assembly.
- 13. Reach in to separate the outside handle cable connection.



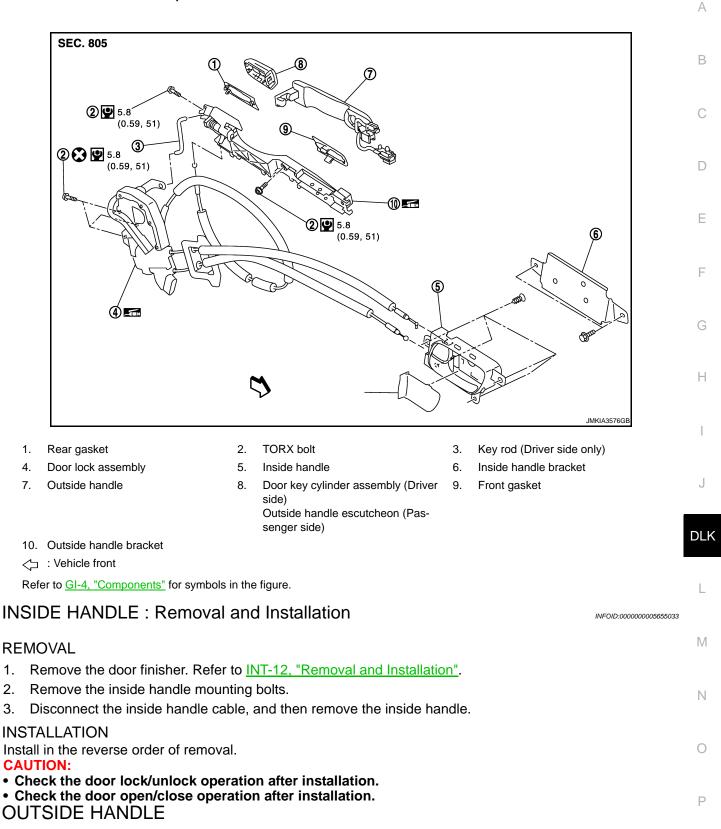






#### < REMOVAL AND INSTALLATION >

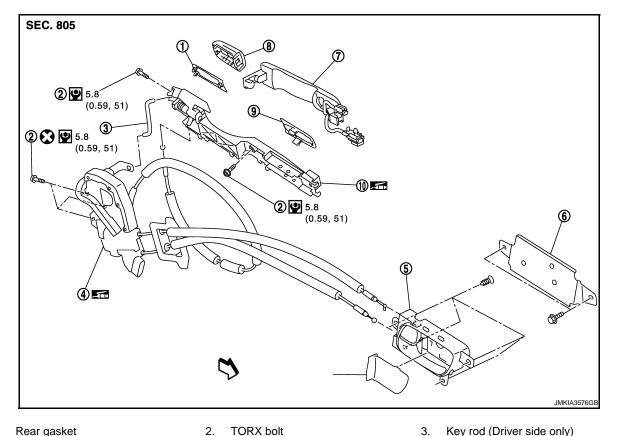
## **INSIDE HANDLE : Exploded View**



## < REMOVAL AND INSTALLATION >

## **OUTSIDE HANDLE : Exploded View**

INFOID:000000005655034



Rear gasket 1.

4.

7.

- 2. TORX bolt
- 5. Inside handle
  - 8. Door key cylinder assembly (Driver side) Outside handle escutcheon (Passenger side)

3.

6.

9.

Inside handle bracket

Front gasket

- 10. Outside handle bracket

Door lock assembly

Outside handle

: Vehicle front

Refer to GI-4, "Components" for symbols in the figure.

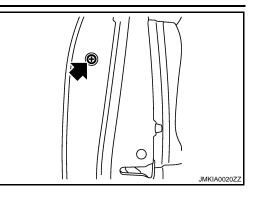
## **OUTSIDE HANDLE : Removal and Installation**

#### REMOVAL

- 1. Remove the door finisher. Refer to INT-12, "Removal and Installation".
- 2. Remove the door glass and door module assembly.
  - Door glass: Refer to <u>GW-18</u>, "<u>Removal and Installation</u>".
    Door module: Refer to <u>GW-21</u>, "<u>Removal and Installation</u>".
- 3. Remove the door side grommet, and loosen door key cylinder assembly (driver side) and outside handle escutcheon (passenger side) TORX bolt from grommet hole. **CAUTION:**

#### < REMOVAL AND INSTALLATION >

#### Never forcibly remove the TORX bolt.



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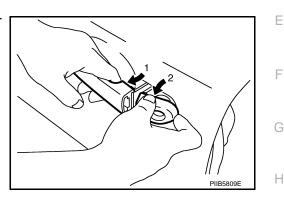
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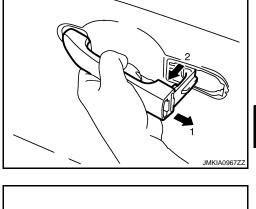
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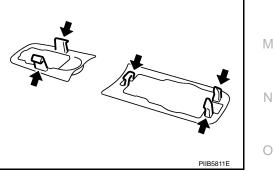
- 4. Disconnect the door antenna and door request switch connector and remove the harness clamp.
- 5. Reach in to separate the key rod connection (on the handle).
- 6. While pulling the outside handle, remove the door key cylinder assembly.



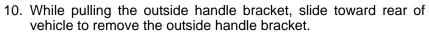
7. Slide toward rear of vehicle, and pull forward to remove the outside handle.

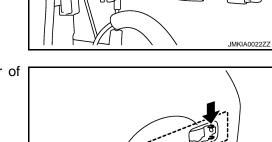
8. Remove the front gasket and rear gasket.

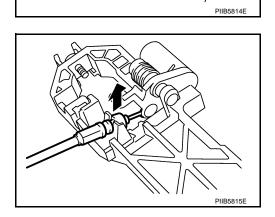




9. Remove the TORX bolt of the outside handle bracket.





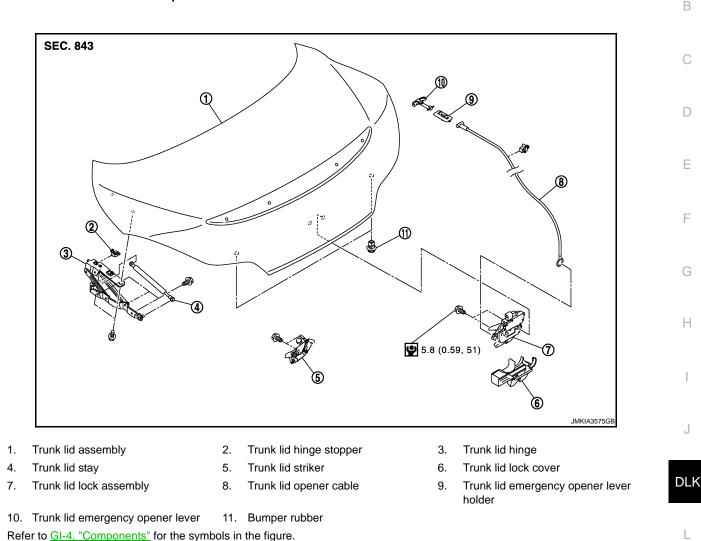


11. Reach in to separate the outside handle cable connection.

INSTALLATION Install in the reverse order of removal. CAUTION: To install each rod, rotate the rod holder until a click is felt.

## TRUNK LID LOCK TRUNK LID LOCK

TRUNK LID LOCK : Exploded View



TRUNK LID LOCK : Removal and Installation

# REMOVAL1. Remove the trunk lid finisher inner. Refer to <u>INT-30, "Removal and Installation"</u>.

- Remove the trunk lid emergency opener lever.
   Disconnect the trunk lid opener cable.
- 4. Disconnect the connector from trunk lid lock assembly.
- 5. Remove the mounting bolts, and remove the trunk lid lock assembly.

## INSTALLATION

Install in the reverse order of removal.

- NOTE:
- After installing, perform trunk lid fitting adjustment. Refer to <u>DLK-226</u>, <u>"TRUNK LID ASSEMBLY : Adjust-ment"</u>.
- After installing, check the operation.

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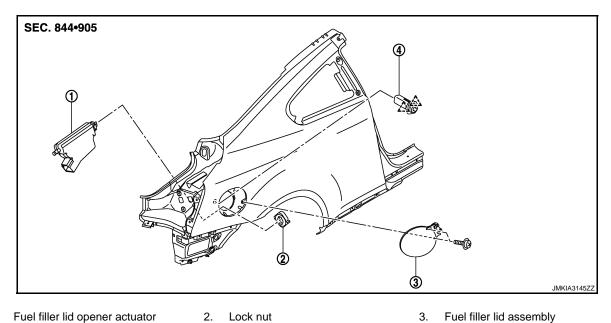
## FUEL FILLER LID OPENER

## < REMOVAL AND INSTALLATION >

## FUEL FILLER LID OPENER

## **Exploded View**

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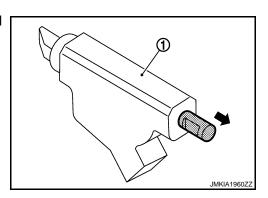


- Fuel filler lid opener actuator 1.
- 4. Lock and cable assembly
- ∧ : Pawl

## **Removal and Installation**

#### NOTE:

When fuel filler lid opener actuator (1) is a defective operation, pull the rod to open fuel filler lid.



## REMOVAL

- 1. Remove mounting screws, and then remove fuel filler lid.
- 2. Pull and remove lock & cable assembly forward, while pushing the pawls.
- 3. Rotate lock nut counterclockwise, and then remove lock nut.
- 4. Push fuel filler lid opener actuator behind the vehicle, while pushing the pawl.
- 5. Remove trunk side finisher (RH). Refer to INT-28, "Removal and Installation".
- Disconnect harness connector and remove fuel filler lid opener actuator. 6.

#### **INSTALLATION**

Install in the reverse order of removal.

#### CAUTION:

After installation, apply the touch-up paint (the body color) onto the head of the mounting screws.

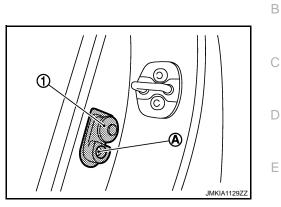
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# DOOR SWITCH

## Removal and Installation

### REMOVAL

1. Remove the door switch mounting bolt (A), and then remove door switch (1).



# INSTALLATION

Install in the reverse order of removal.

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## **INSIDE KEY ANTENNA INSTRUMENT CENTER**

**INSTRUMENT CENTER : Exploded View** 

Refer to IP-12, "A/T MODELS : Exploded View".

**INSTRUMENT CENTER : Removal and Installation** 

## REMOVAL

- 1. Remove the console finisher. Refer to IP-13, "A/T MODELS : Removal and Installation".
- 2. Remove the key slot mounting screw (A), and then remove inside key antenna (instrument center) (1).

**INSTALLATION** Install in the reverse order of removal. CONSOLE

**CONSOLE : Exploded View** 

Refer to IP-33, "A/T MODELS : Exploded View".

CONSOLE : Removal and Installation

## REMOVAL

- 1. Remove the console ashtray.
- 2. Remove the console rear finisher (2). Refer to IP-34, "A/T MODELS : Removal and Installation".

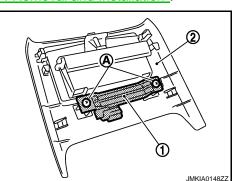
**DLK-242** 

3. Remove the inside key antenna mounting screw (A), and then remove inside key antenna (console) (1) from console rear finisher (2).

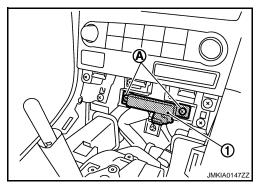
## INSTALLATION Install in the reverse order of removal. TRUNK ROOM

**TRUNK ROOM : Exploded View** 

Refer to INT-28, "Exploded View".







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## **INSIDE KEY ANTENNA**

#### < REMOVAL AND INSTALLATION >

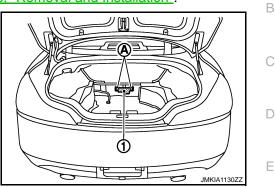
## TRUNK ROOM : Removal and Installation

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#### REMOVAL

- 1. Remove trunk floor carpet and trunk front finisher. Refer to INT-28. "Removal and Installation".
- 2. Remove the inside key antenna (trunk room) mounting clips (A), and then remove inside key antenna (trunk room) (1).



INSTALLATION Install in the reverse order of removal.

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## OUTSIDE KEY ANTENNA

< REMOVAL AND INSTALLATION >

# OUTSIDE KEY ANTENNA DRIVER SIDE

DRIVER SIDE : Exploded View

Refer to DLK-232, "DOOR LOCK : Exploded View".

DRIVER SIDE : Removal and Installation

REMOVAL Remove the front outside handle LH. Refer to <u>DLK-232, "DOOR LOCK : Removal and Installation"</u>.

INSTALLATION Install in the reverse order of removal. PASSENGER SIDE

PASSENGER SIDE : Exploded View

Refer to <u>DLK-232</u>, "DOOR LOCK : Exploded View".

PASSENGER SIDE : Removal and Installation

REMOVAL

Remove the front outside handle RH. Refer to <u>DLK-232</u>, "DOOR LOCK : Removal and Installation".

INSTALLATION Install in the reverse order of removal. REAR BUMPER

REAR BUMPER : Exploded View

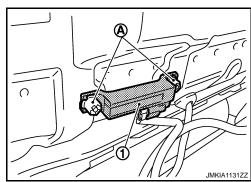
Refer to EXT-17, "Exploded View".

REAR BUMPER : Removal and Installation

REMOVAL

- 1. Remove the rear bumper. Refer to EXT-18, "Removal and Installation".
- Remove the outside key antenna (rear bumper) mounting nuts (A), and then remove outside key antenna (rear bumper) (1).

INSTALLATION Install in the reverse order of removal.



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**DLK-244** 

## INTELLIGENT KEY WARNING BUZZER

#### < REMOVAL AND INSTALLATION >

## INTELLIGENT KEY WARNING BUZZER

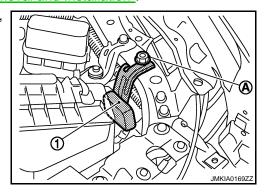
## **Exploded View**

Refer to DLK-219, "Exploded View".

## Removal and Installation

#### REMOVAL

- 1. Remove the hood seal assembly (side). Refer to <u>DLK-219</u>, "Removal and Installation".
- 2. Remove the Intelligent Key warning buzzer mounting bolt (A), and then remove the Intelligent Key warning buzzer (1).



INSTALLATION Install in the reverse order of removal.



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# < REMOVAL AND INSTALLATION > KEY SLOT

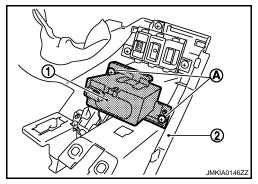
Exploded View

Refer to IP-12, "A/T MODELS : Exploded View".

## Removal and Installation

## REMOVAL

- 1. Remove the instrument driver lower panel (2). Refer to IP-13, "A/T MODELS : Removal and Installation".
- 2. Disconnect key slot connector.
- 3. Remove the key slot mounting screw (A), and then remove key slot (1) from instrument driver lower panel (2).



INSTALLATION Install in the reverse order of removal. INFOID:000000005655055

## TRUNK LID OPENER REQUEST SWITCH

## < REMOVAL AND INSTALLATION >

# TRUNK LID OPENER REQUEST SWITCH

## **Exploded View**

Refer to EXL-170, "Exploded View".

## Removal and Installation

## REMOVAL

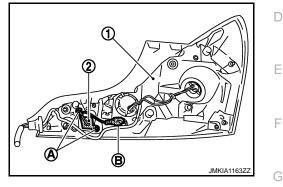
- 1. Remove the rear combination lamp LH (1). Refer to EXL-170, "Removal and Installation".
- 2. Remove the trunk lid opener request switch connector (B).

Remove the trunk lid opener request switch mounting screw (A), and then remove trunk lid opener request switch (2) from rear combination lamp LH (1).

#### INSTALLATION

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Install in the reverse order of removal.



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## TRUNK LID OPENER SWITCH

#### < REMOVAL AND INSTALLATION >

## TRUNK LID OPENER SWITCH

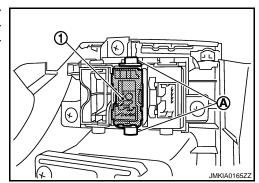
**Exploded View** 

Refer to IP-12, "A/T MODELS : Exploded View".

Removal and Installation

REMOVAL

- 1. Remove the instrument driver lower panel. Refer to IP-13, "A/T MODELS : Removal and Installation".
- 2. Remove the trunk lid opener switch (1) from instrument driver lower panel, and then remove pawl (A). Press trunk lid opener switch (1) front side to disengage from instrument driver lower panel.



INSTALLATION Install in the reverse order of removal.

## TRUNK LID OPENER CANCEL SWITCH

## < REMOVAL AND INSTALLATION >

## TRUNK LID OPENER CANCEL SWITCH

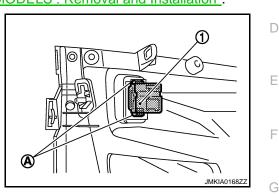
**Exploded View** 

Refer to IP-12, "A/T MODELS : Exploded View".

## Removal and Installation

## REMOVAL

- 1. Remove the instrument assist lower panel. Refer to IP-13, "A/T MODELS : Removal and Installation".
- 2. Remove the trunk lid opener cancel switch (1) from instrument assist lower panel, and then remove pawl (A). Press trunk lid opener cancel switch (1) back side to disengage from instrument assist lower panel.



INSTALLATION Install in the reverse order of removal.



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## **REMOTE KEYLESS ENTRY RECEIVER**

## < REMOVAL AND INSTALLATION >

# REMOTE KEYLESS ENTRY RECEIVER

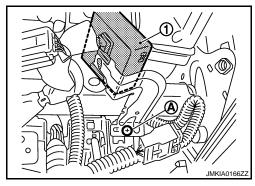
**Exploded View** 

Refer to IP-12, "A/T MODELS : Exploded View".

## Removal and Installation

#### REMOVAL

- 1. Remove the instrument assist lower panel. Refer to IP-13, "A/T MODELS : Removal and Installation".
- 2. Remove the remote keyless entry receiver mounting bolt (A), and then remove remote keyless entry receiver (1).



INSTALLATION Install in the reverse order of removal. INFOID:000000005655063