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## **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 that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal
  injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag
  Module, see 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 battery, and wait at least 3 minutes before performing any service.

Precaution Necessary for Steering Wheel Rotation after Battery Disconnect

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#### 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 procedure below before starting the repair operation.

#### **OPERATION PROCEDURE**

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.)
- 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.

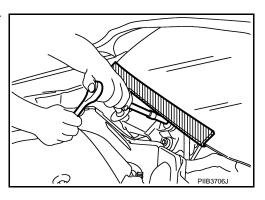
#### **PRECAUTIONS**

#### < 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.)
- Perform self-diagnosis check of all control units using CONSULT-III.

### Precaution for Procedure without Cowl Top Cover

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



## Precautions For Xenon Headlamp Service

#### **WARNING:**

Comply with the following warnings to prevent any serious accident.

- Disconnect the battery cable (negative terminal) or the power supply fuse before installing, removing, or touching the xenon headlamp (bulb included). The xenon headlamp contains high-voltage generated parts.
- · Never work with wet hands.
- Check the xenon headlamp ON-OFF status after assembling it to the vehicle. Never turn the xenon headlamp ON in other conditions. Connect the power supply to the vehicle-side connector. (Turning it ON outside the lamp case may cause fire or visual impairments.)
- Never touch the bulb glass immediately after turning it OFF. It is extremely hot.

#### **CAUTION:**

Comply with the following cautions to prevent any error and malfunction.

- Install the xenon bulb securely. (Insufficient bulb socket installation may melt the bulb, the connector, the housing, etc. by high-voltage leakage or corona discharge.)
- Never perform HID circuit inspection with a tester.
- Never touch the xenon bulb glass with hands. Never put oil and grease on it.
- Dispose of the used xenon bulb after packing it in thick vinyl without breaking it.
- Never wipe out dirt and contamination with organic solvent (thinner, gasoline, etc.).

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.

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## **PREPARATION**

## **PREPARATION**

## Special Service Tools

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

(Ken	ol number t-Moore No.) ool name	Description
(J-39570) Chassis ear	SIIAO993E	Locates the noise
(J-43980) NISSAN Squeak and Rat- tle Kit	SIIA0994E	Repairs the cause of noise

## **Commercial Service Tools**

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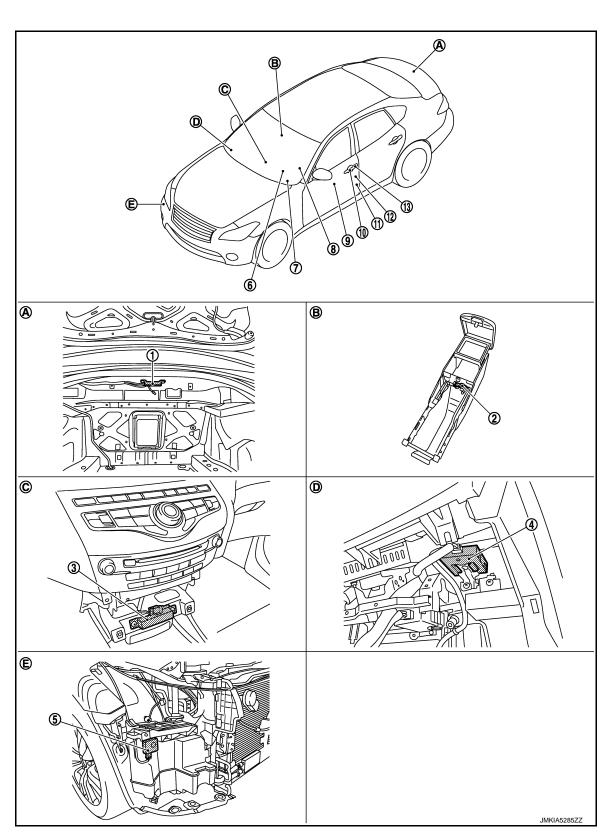
	Tool name	Description
Engine ear	SIIA0995E	Locates the noise
Remover tool	PIIB7923J	Removes the clips, pawls, and metal clips
Power tool	PIIB1407E	

## SYSTEM DESCRIPTION

COMPONENT PARTS DOOR LOCK SYSTEM

DOOR LOCK SYSTEM: Component Parts Location

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#### **COMPONENT PARTS**

#### < SYSTEM DESCRIPTION >

- 1. Inside key antenna (trunk room)
- 4. Remote keyless entry receiver
- 7. BCM
  Refer to BCS-4, "BODY CONTROL
  SYSTEM: Component Parts Location"
- 10. Outside key antenna (driver side)
- Front door request switch (driver side)
- View with trunk lid upper finisher removed
- D. View with glove box assembly removed

- 2. Inside key antenna (console)
- 5. Intelligent Key warning buzzer
- 8. TCM
  Refer to TM-8, "A/T CONTROL SYSTEM: Component Parts Location"

View with center console assembly

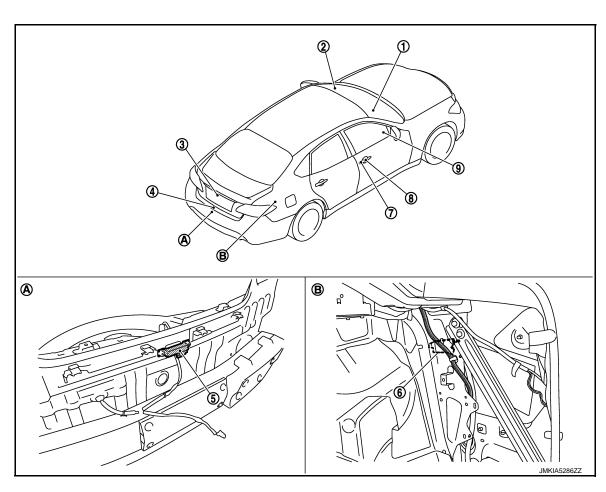
View with front bumper removed

11. Front door switch (driver side)

removed

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- Inside key antenna (instrument center)
- 6. Combination meter
- 9. Power window main switch (door lock and unlock switch)
- Front door lock assembly (driver side)
- View with cluster lid C removed



- 1. Push-button ignition switch
- 4. Trunk lid opener actuator
- 7. Front door request switch (passenger side)
- View with rear bumper removed
- 2. Trunk lid opener switch
- 5. Outside key antenna (rear bumper)
- 8. Outside key antenna (passenger
- View with trunk side finisher removed
- 3. Trunk lid opener request switch
- 6. Fuel lid lock actuator
- 9. Trunk lid opener cancel switch

## **COMPONENT PARTS**

## < SYSTEM DESCRIPTION >

## DOOR LOCK SYSTEM : Component Description

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Item	Function	
BCM	Controls the door lock system.	
IPDM E/R	Sounds horn and blinks head lamp via CAN communication between BCM	
TCM	Transmits shift position signal to BCM via CAN communication line.	
Combination meter	<ul> <li>Displays each operation method guide and warning for system malfunction</li> <li>Performs operation method guide and warning with buzzer</li> <li>Transmits vehicle speed signal to CAN communication line</li> </ul>	
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM	
Inside key antenna	Detects if Intelligent Key is inside the vehicle	
Outside key antenna	Detects if Intelligent Key is outside the vehicle	
Push-button ignition switch	Inputs push-button ignition switch ON/OFF condition to BCM	
Door switch	Inputs door open/close condition to BCM	
Door lock and unlock switch	<ul> <li>Detects if door lock and unlock switch is press/release</li> <li>Integrated in the power window main switch and front power window switch (passenger side)</li> </ul>	
Door request switch	<ul> <li>Detects if each door request switch is press/release</li> <li>Integrated in the outside handle (driver side, passenger side) and back door opener switch assembly</li> </ul>	
Intelligent Key	The following functions are available when having and carrying electronic ID  • Door lock/unlock  • Engine start  • Remote control entry function is available when operating on button	
Hazard warning lamp	Warns the user of the lock/unlock condition and inappropriate operations with the lamps blink	
Door lock actuator	Output lock/unlock signal from BCM and locks/unlocks each door	
Fuel lid lock actuator	Output lock/unlock signal from BCM and locks/unlocks fuel filler lid	
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound	
Unlock sensor	Detects lock condition of driver door	
Trunk lid opener actuator	Performs trunk lid open with signal from BCM	
Trunk lid opener request switch	Performs trunk lid open request when it is pressed	
Trunk lid opener cancel switch	Cancels trunk open operation	
Trunk room lamp switch	It detects engagement of trunk lid lock assembly and trunk lid striker	

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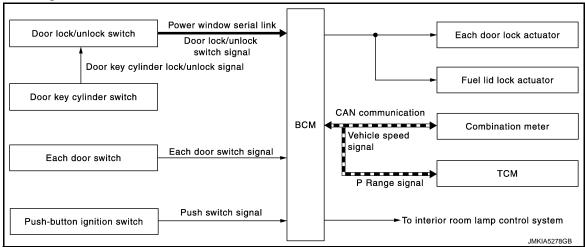
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## SYSTEM (POWER DOOR LOCK SYSTEM)

## System Diagram

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## System Description

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#### DOOR LOCK FUNCTION

Door Lock and Unlock Switch

- The door lock and unlock switch (driver side) is build into power window main 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 actuator and fuel lid lock actuator are unlocked.

#### Door Key Cylinder Switch

- With the mechanical key inserted in the door key cylinder on driver side, turning it to lock position, locks door lock actuator of all doors and fuel lid lock actuator.
- With the mechanical key inserted in the door key cylinder on driver side, turning it to unlock position once unlocks the driver side door, turning it to unlock position 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 CONSULT-III.

Refer to DLK-30, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

#### DOOR KEY CYLINDER SWITCH POWER WINDOW FUNCTION

Driver side door key cylinder LOCK/UNLOCK operation can activate power window operation. Refer to <a href="PWC-7">PWC-7</a>, "System Description".

#### **IGNITION POSITION WARNING FUNCTION**

When door lock and unlock switch are operated while driver side door is open and ignition position is ACC or ON, door locks once but immediately unlocks.

#### INTERIOR ROOM LAMP CONTROL FUNCTION

Interior room lamp is controlled according to door lock/unlock state, refer to <a href="INL-7">INL-7</a>, "INTERIOR ROOM LAMP CONTROL SYSTEM: System Description".

#### 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

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

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 24 km/h (15 MPH) or more.

P Range Interlock Door Lock

### SYSTEM (POWER DOOR LOCK SYSTEM)

#### < SYSTEM DESCRIPTION >

All doors are locked when shifting the selector lever from the P position to any position other than the P position.

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 the P position.

Setting change of Automatic Door Lock/Unlock Function

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

#### (P) With CONSULT-III

Refer to DLK-32, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

#### 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 switch is complete when the hazard lamp blinks.

 $OFF \rightarrow ON$  : 2 blinks  $ON \rightarrow OFF$  : 1 blink

#### 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\*

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

All doors are unlocked when shifting the selector lever from any position other than the P to P positions. 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 positions.

Setting change of Automatic Door Lock/Unlock Function

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

#### (P) With CONSULT- III

Refer to DLK-32, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

#### ₩ Without CONSULT- III

The automatic door lock/unlock 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 "UNLOCK" direction within 20 seconds after turning the power supply position ON.
- 4. The switch is complete when the hazard lamp blinks.

 $OFF \rightarrow ON$  : 2 blinks  $ON \rightarrow OFF$  : 1 blink

\*: This function is set to ON before delivery.

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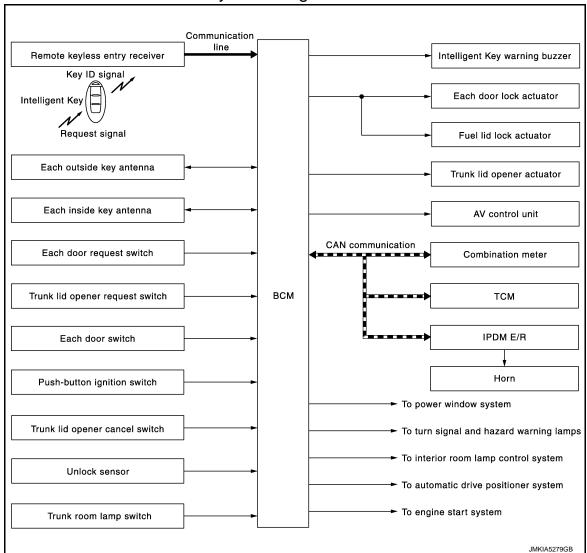
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# SYSTEM (INTELLIGENT KEY SYSTEM) INTELLIGENT KEY SYSTEM

### INTELLIGENT KEY SYSTEM: System Diagram

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## **INTELLIGENT KEY SYSTEM: System Description**

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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).

#### 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.

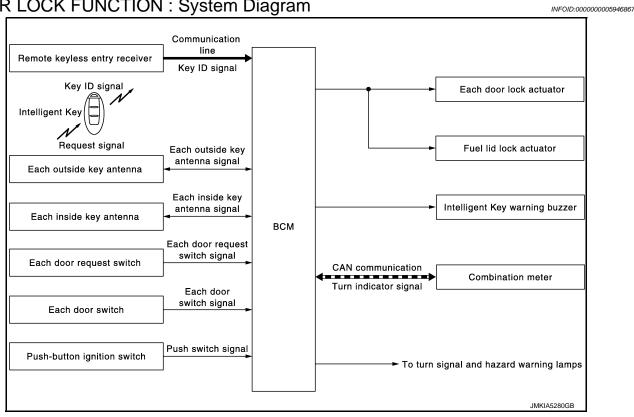
Function	Description	Refer
Door lock	Lock/unlock can be performed by pressing the request switch	DLK-15
Trunk open	The trunk lid can be opened by carrying the Intelligent Key and pressing the trunk lid opener request switch	DLK-18
Remote keyless entry	Lock/unlock can be performed by pressing the remote controller button of the Intelligent Key	DLK-19

#### < SYSTEM DESCRIPTION >

Function	Description		Refer
Key reminder	The key reminder buzzer sounds a warning if the door is locked with the key left inside the vehicle		DLK-22
Welcome light	When the Intelligent Key is carried, and vehicle doors are approached, the BCM illuminates interior room lamps and operates heart beat operation of the push-button ignition switch		DLK-23
Warning	If an action that does not meet the operating condition of the Intelligent Key system is taken, the buzzer sounds to inform the driver		DLK-24
Engine start	The engine can be turned on while carrying the Intelligent K	ey	SEC-12
Interior room lamp control	Interior room lamp is controlled according to door lock/unlock state		INL-7
Power window	Power window can be operated by Intelligent Key button operation		PWC-7
Panic alarm	When Intelligent Key panic alarm button is pressed, horn sounds and head- lamp blinks		SEC-18
	Setting of auto driving position can be automatically set, according to key ID of Intelligent Key, to the position that is registered in advance	Automatic drive positioner	ADP-21
Intelligent Key interlock	Setting of air conditioning system can be set, according to key ID of Intelligent Key, to the setting value that is set before turning ignition switch OFF	Air conditioning system	HAC-25
	Setting of multi AV system can be set, according to key ID of Intelligent Key, to the setting value that is set before turning ignition switch OFF	Multi AV system	<u>AV-150</u>

## DOOR LOCK FUNCTION

## DOOR LOCK FUNCTION: System Diagram



## DOOR LOCK FUNCTION: System Description

INFOID:0000000005946868

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

#### **OPERATION DESCRIPTION**

**DLK-15** Revision: 2010 June 2011 M37/M56 Α

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#### < SYSTEM 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. And 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 filler lid and sounds Intelligent Key buzzer warning (lock: 2 time, unlock: 1 times) at the same time as a reminder.

#### **OPERATION CONDITION**

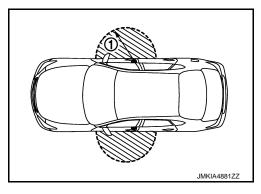
If the following conditions are satisfied, door lock/unlock operation is performed if the request switch is operated.

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>							

<sup>\*:</sup> Even with a registered Intelligent Key remaining inside the vehicle, door locks can be locked/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 filler lid will be locked.

#### **Unlock Operation**

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

#### **How to Change Selective Unlock Operation Mode**

Selective unlock operation mode can be changed using CONSULT-III.

Refer to DLK-32, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

#### HAZARD AND BUZZER REMINDER FUNCTION

During lock, unlock, operation by each request switch, the hazard warning lamps and Intelligent Key warning buzzer will blink 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
Unlock	Once	Once
Lock	Twice	Twice

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

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

Hazard and buzzer reminder operation mode can be changed using CONSULT-III.

Refer to DLK-32, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

#### AUTO DOOR LOCK FUNCTION

After door is unlocked by door request switch operation and if 60 seconds or more passes without performing the following operation, all doors and fuel filler lid are automatically locked. However, operation check function does not activate.

Operating condition	<ul><li>Door switch is ON (door is open)</li><li>Door is locked</li><li>Push switch is pressed</li></ul>
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#### **How To Change Auto Door Lock Operation Mode**

Auto door lock operation mode can be changed using CONSULT-III.

Refer to DLK-32, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

#### LIST OF OPERATION RELATED PARTS

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

Door lock function	Intelligent Key	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	ВСМ	Hazard warning lamp	Push-button ignition switch	Combination meter
Door lock/unlock function	×	×	×	×	×	×	×			×			
Hazard and buzzer reminder function								×	×	×	×		×
Selective unlock function	×			×	×	×	×			×			
Auto door lock function	×		×	×	×					×		×	

#### TRUNK OPEN FUNCTION

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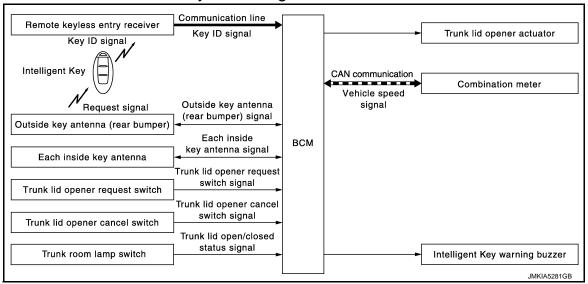
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#### < SYSTEM DESCRIPTION >

## TRUNK OPEN FUNCTION: System Diagram

INFOID:0000000005946869



### TRUNK OPEN FUNCTION: System Description

INFOID:0000000005946870

#### 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.

#### **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.

Trunk lid opener request switch operation	Operation condition
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 lid opener cancel switch is ON</li> <li>Trunk lid is closed</li> </ul>

#### **BUZZER REMINDER FUNCTION**

When trunk is opened by trunk lid opener request switch, BCM honks Intelligent Key warning buzzer as a reminder.

Operating Function Of Buzzer Reminder

Operation	Intelligent Key warning buzzer honks
Trunk lid open	Four times

#### How to change buzzer reminder mode

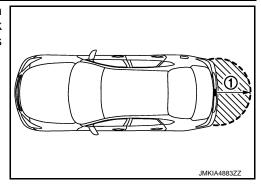
(III) With CONSULT-III

Refer to DLK-32, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

#### **OUTSIDE KEY ANTENNA DETECTION AREA**

#### < SYSTEM DESCRIPTION >

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	Outside key antenna (rear bumper)	Intelligent Key warning buzzer	CAN communication system	BCM	Trunk lid opener cancel switch
Trunk open function	×	×	×	×	×	×	×		×	×	×
Buzzer reminder function								×	×	×	

#### REMOTE KEYLESS ENTRY FUNCTION

## REMOTE KEYLESS ENTRY FUNCTION: System Diagram

INFOID:0000000005946871 Trunk lid opener actuator Communication line Remote keyless entry receiver Each door lock actuator Key ID signal Key ID signal Fuel lid lock actuator Intelligent Key CAN communication Combination meter Turn indicator Each door switch signal всм signal Each door switch Vehicle speed signal Push switch signal Push-button ignition switch IPDM E/R Horn reminder Trunk lid open/closed request signal status signal Trunk room lamp switch Horn Trunk lid opener cancel switch signal To turn signal and hazard warning lamps Trunk lid opener cancel switch

## REMOTE KEYLESS ENTRY FUNCTION: System Description

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 function

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#### < SYSTEM DESCRIPTION >

- · Selective unlock function
- Trunk lid open function
- · Hazard and horn reminder function
- Auto door lock function

#### **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.
- 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

If the following condition are satisfied, remote keyless entry operation is performed when the Intelligent Key is operated.

Remote controller operation	Operation condition			
Lock	<ul><li>Panic alarm is not activated</li><li>P position warning is not activated</li></ul>			
Unlock	Panic alarm is not activated			

#### SELECTIVE UNLOCK FUNCTION

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

#### **How To Change Selective Unlock Operation Mode**

Selective unlock operation mode can be changed using CONSULT-III.

Refer to DLK-30, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

#### 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	Operation condition
Trunk open	<ul> <li>Press and hold the trunk open button for 0.4 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> <li>Panic alarm is not activated</li> </ul>

<sup>\*:</sup> Pattern of trunk open button can be selected using CONSULT-III. Refer to <a href="DLK-32">DLK-32</a>, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

#### 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

#### < SYSTEM DESCRIPTION >

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

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

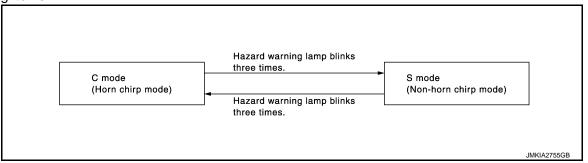
How to change hazard and horn reminder mode

#### (III) With CONSULT-III

Refer to DLK-32, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

#### Without CONSULT-III

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

After door is unlocked by Intelligent Key button operation and if 60 seconds or more passes without performing the following operation, all doors are locked. However, operation check function does not activate.

Operating condition	<ul> <li>Door switch is ON (door is open)</li> <li>Door is locked</li> <li>Push switch is pressed</li> </ul>
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#### **How To Change Auto Door Lock Operation Mode**

Auto door lock operation mode can be changed using CONSULT-III.

Refer to DLK-32, "INTELLIGENT KEY)".

#### LIST OF OPERATION RELATED PARTS

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

Remote keyless entry functions	Intelligent Key	Door switch	Door lock actuator	Push-button ignition switch	Intelligent Key warning buzzer	CAN communication system	BCM	Combination meter	Hazard warning lamp	Horn	IPDM E/R	Trunk lid opener actuator	Trunk lid opener cancel switch	Trunk room lamp switch
Door lock/unlock function	×	×	×			×	×							
Trunk open function	×			×	×	×	×					×	×	×
								×	×					
Hazard and horn reminder function	×				×	×	×	_ ^		×	×			
Hazard and horn reminder function Selective unlock function	×	×	×		×	×	×	*	*	×	×			

#### KEY REMINDER FUNCTION

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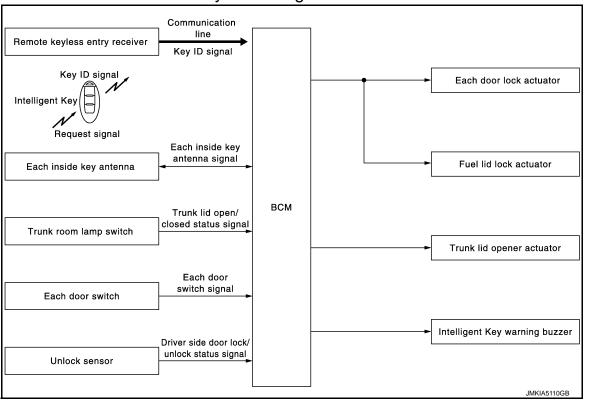
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## KEY REMINDER FUNCTION: System Diagram

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## KEY REMINDER FUNCTION: System Description

INFOID:0000000005946874

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*	Right after driver side door is closed under the following conditions  Door lock operation is performed  Driver side door is open  Driver side door is in unlock state	All doors and fuel filler lid unlock		
Door is open or closed	Right after all doors are closed under the following conditions  Intelligent Key is inside the vehicle  Any door is open  All doors are locked by door lock and unlock switch or door lock knob	All doors and fuel filler lid unlock     Honk Intelligent Key warning buzzer		
Trunk is closed	Right after trunk is closed under the following conditions  Intelligent Key is inside trunk room  All doors are closed  All doors are locked	Trunk open Honk Intelligent Key warning buzzer		

<sup>\*:</sup>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.

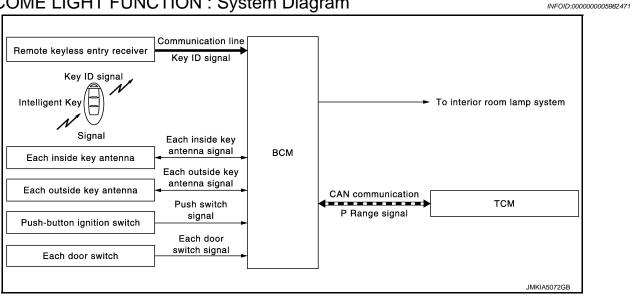
#### CAUTION:

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

#### WELCOME LIGHT FUNCTION

#### < SYSTEM DESCRIPTION >

## WELCOME LIGHT FUNCTION: System Diagram



## WELCOME LIGHT FUNCTION: System Description

INFOID:0000000005982472

The welcome light function operates as per the following. When the Intelligent Key is carried, and vehicle doors are approached, the BCM illuminates interior room lamp\* and operates heart beat operation of the pushbutton ignition switch.

\*: Settings for map lamp, foot lamp, personal lamp, and outside handle lamp are available.

#### **OPERATION DESCRIPTION**

- When the BCM detects that the Intelligent Key is within the outside key antenna detection area. BCM transmits the request signal to the Intelligent Key and check it is near the door.
- Intelligent Key receives the request signal and transmits the key ID signal to the BCM via remote keyless receiver.
- BCM receives the key ID signal and compares it with the registered key ID.
- BCM illuminates lamps that are set, when key ID verification is OK.

#### TIMER FUNCTION

BCM can operate welcome light function, using the timer function, for 9 days, after key switch is turned OFF. The timer function resets when the engine is started\*. Operating period of timer function may differ depending on battery size.

: Timer function does not stop if another Intelligent Key that has a different key ID is detected within the interior antenna detection area, when starting the engine.

#### **OPERATION CONDITION**

If the following condition are satisfied, welcome light function is operated.

Function	Operation condition		
Welcome light function	<ul> <li>All door are closed</li> <li>All doors is locked</li> <li>Ignition switch: OFF position</li> <li>Shift position: P position</li> <li>Intelligent Key is outside the vehicle</li> <li>Timer function is activated</li> </ul>		

#### **OUTSIDE KEY ANTENNA DETECTION AREA**

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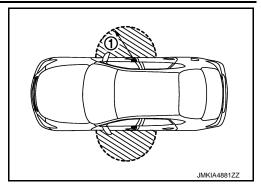
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#### < SYSTEM DESCRIPTION >

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) and back door handle (2). However, this operating range depends on the ambient conditions.



#### WELCOME LIGHT FUNCTION SETTING

Welcome light function operation mode can be changed using CONSULT-III

(P)With CONSULT-III

Refer to DLK-32, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

₩ Without CONSULT-III

The welcome light function ON/OFF can be switched by performing the following operation.

- 1. Turn ignition switch: OFF→ON
- 2. Press and hold the driver side door request switch for 5 seconds or more within 20 seconds after turning the ignition switch ON.
- 3. The switching is complete when combination meter buzzer sounds.

#### WARNING FUNCTION

### WARNING FUNCTION: System Description

INFOID:0000000005946875

#### 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, combination meter buzzer and information display in combination meter.

- Intelligent Key system malfunction
- OFF position warning
- P position warning
- ACC warning
- Take away warning
- · Door lock operation warning
- Engine start information
- Steering lock information
- Intelligent Key low battery warning
- Key ID warning
- Key ID verification information

#### **OPERATION CONDITION**

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

Warning/Information functions		Operation procedure		
Intelligent Key system malfunction		When a malfunction is detected on BCM		
	For internal	Ignition switch: ACC position     Door switch (driver side): ON (Door is open)		
OFF position warning	For external	OFF position warning (For internal) is in active mode, driver side door is closed NOTE:  OFF position (For external) active only when each of the sequence occurs as below: P position warning → ACC warning → OFF position warning (For internal)		
P position warning	For internal	<ul> <li>Shift position: Except P position</li> <li>Engine is running to stopped (Ignition switch is ON to OFF)</li> </ul>		
	For external	Warning is activated when driver door is closed from the open position while the P position warning (for inside vehicle) is ON		

#### < SYSTEM DESCRIPTION >

Warning/Information functions		Operation procedure		
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>		
Door lock operation warning		When door lock operation is requested while door lock operating condition of door request switch or Intelligent Key are not satisfied		
Engine start information	Ignition switch is ON position	<ul><li>Ignition switch: ON position</li><li>Shift position: P position</li><li>Engine is stopped</li></ul>		
	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	I.	When steering lock cannot be released after ignition switch is turned ON		
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 afte ignition switch is turned ON		
Key ID verification information		When registered Intelligent Key cannnot be detected inside the vehicle     Intelligent Key battery is discharged     When NATS antenna amp cannot be detected NATS ID		

#### WARNING METHOD

The following table shows the alarm or warning methods with chime. Information display (combination meter) when the warning conditions are met.

Warning/Information functions		Information display	Warning chime			
		(combination meter)	Combination meter buzzer	Intelligent Key warning buzzer		
Intelligent Key system n	nalfunction	KEY SYSTEM	_	_		
055	For internal	_	Activate	_		
OFF position warning	For external	_	_	Activate		
	For internal		Activate	_		
P position warning	For external	SHIFT JMKIA0037GB	_	Active		

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Revision: 2010 June **DLK-25** 2011 M37/M56

## < SYSTEM DESCRIPTION >

		Information display	Warning chime			
Warning/Information functions		(combination meter)	Combination meter buzzer	Intelligent Key warning buzzer		
ACC warning		PUSH  JMKIA0047GB	_	_		
	Door is open to close		Activate	Activate		
	Door is open		_	_		
Take away warning	Push-ignition switch operation	NO KEY  JMKIA4906ZZ	Activate	_		
Door lock operation	Request switch operation	—	_	Activate		
warning	Intelligent Key operation	_	_	Activate		
Key ID warning		NO KEY  JMKIA4906ZZ		_		
Engine start information		BRAKE JMKIA0032GB	_	_		
Steering lock information	n	JMKIA0033GB	_	_		

### < SYSTEM DESCRIPTION >

	Information display	Warning chime			
Warning/Information functions	(combination meter)	Combination meter buzzer	Intelligent Key warning buzzer		
Intelligent Key low battery warning	JMKIA3049ZZ	_	_		
Key ID verification information	JMKIA4907ZZ	_	_		

#### LIST OF OPERATION RELATED PARTS

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

Warn	ing function	Intelligent Key	Ignition switch	Door switch	Door request switch	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	Combination meter buzzer	CAN communication system	BCM	Information display
Intelligent Key system malfu	ınction									×	×	×
OFF position warning	For internal			×					×	×	×	
OFF position warning	For external			×				×			×	
P position warning			×						×	×	×	×
ACC warning			×						×	×	×	×
	Door is open or close	×		×		×		×	×	×	×	×
Take away warning	Door is open	×		×		×				×	×	×
rane away manining	Push-button ignition switch operation	×	×			×			×	×	×	×
Door lock operation warning	J	×		×	×	×	×	×			×	
Key ID warning			×			×				×	×	×
	Ignition switch is ON position	×	×			×				×	×	×
Engine start information	Ignition switch is except ON position	×	×			×				×	×	×
Steering lock information			×							×	×	×
Intelligent Key low battery w	arning	×				×				×	×	×
Key ID verification information	on	×				×				×	×	×

Revision: 2010 June **DLK-27** 2011 M37/M56

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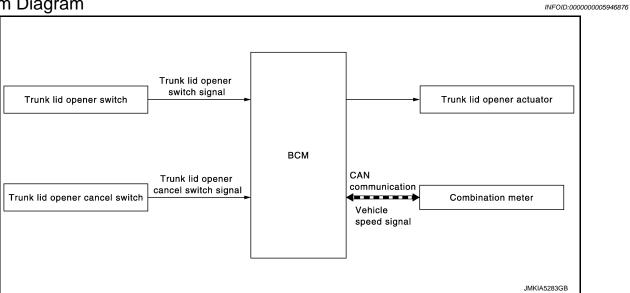
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## SYSTEM (TRUNK LID OPENER SYSTEM)

#### < SYSTEM DESCRIPTION >

## SYSTEM (TRUNK LID OPENER SYSTEM)

## System Diagram



## System Description

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#### TRUNK LID OPENER OPERATION

When trunk lid opener switch is ON, BCM operates trunk lid opener actuator.

#### **OPERATION CONDITION**

If the following conditions are satisfied, trunk open operation is performed.

Trunk lid opener switch operation	Operation condition	
Trunk lid open	<ul> <li>Trunk lid opener cancel switch is ON</li> <li>Vehicle speed is less than 5 km/h (3 MPH)</li> </ul>	

#### < SYSTEM DESCRIPTION >

## **DIAGNOSIS SYSTEM (BCM)**

COMMON ITEM

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

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#### 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 operation 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.

THEFT ALM

**RETAINED PWR** 

SIGNAL BUFFER

TPMS (AIR PRESSURE MONITOR)

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

# TPMS

Vehicle security system

Signal buffer system

RAP system

#### FREEZE FRAME DATA (FFD)

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

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X

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<sup>\*:</sup> This item is displayed, but is not used.

#### < SYSTEM DESCRIPTION >

CONSULT screen item	Indication/Unit	Description			
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected			
Odo/Trip Meter	km	Total mileage (Odometer	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" (Emergency stop operation)		
	ACC>OFF		While turning power supply position from "ACC" to "OFF"		
	OFF>LOCK		While turning power supply position from "OFF" to "LOCK"		
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 position is "OFF".) to low power consumption mode		
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK".) to low power consumption mode		
	LOCK		Power supply position is "LOCK" (Ignition switch OFF with steering is locked.)		
	OFF		Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.)		
	ACC		Power supply position is "ACC" (Ignition switch ACC)		
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)		
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)		
	CRANKING		Power supply position is "CRANKING" (At engine cranking)		
IGN Counter	0 - 39	<ul> <li>The number of times that ignition switch is turned ON after DTC is detected</li> <li>The number is 0 when a malfunction is detected now.</li> <li>The number increases like 1 → 2 → 338 → 39 after returning to the normal condition whenever ignition switch OFF → ON.</li> <li>The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.</li> </ul>			

DOOR LOCK

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

INFOID:00000000006062137

BCM CONSULT-III FUNCTION

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

**WORK SUPPORT** 

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## < SYSTEM DESCRIPTION >

Monitor item	Description				
DOOR LOCK-UNLOCK SET	Selective unlock function mode can be changed to operation with this mode  On: Operate  Off: Non-operation				
AUTOMATIC DOOR LOCK SE- LECT	Automatic door lock function mode can be selected from the following in this mode     VH SPD: All doors are locked when vehicle speed more than 24 km/h (15MPH)     P RANGE: All doors are locked when shifting the selector lever from P position to other than the P position				
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> <li>MODE 5: This item is displayed, but cannot be used</li> <li>MODE 6: This item is displayed, but cannot be used</li> </ul>				
AUTOMATIC LOCK/UNLOCK SET	Automatic door lock/unlock function mode can be selected from the following in this mode  Off: Non-operational  Unlock Only: Door unlock operation only  Lock Only: Door lock operation only  Lock/Unlock: Lock and unlock operation				

#### **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	Indicated [On/Off] condition of rear door switch RH
DOOR SW-RL	Indicated [On/Off] condition of rear door switch LH
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 switch
KEY CYL UN-SW	Indicated [On/Off] condition of unlock signal from door key cylinder switch

## **ACTIVE TEST**

Test item	Description	0
DOOR LOCK	This test is able to check door lock/unlock operation The all door lock actuators are locked when "ALL LOCK" on CONSULT-III screen is touched The all door lock actuators are unlocked when "ALL UNLK" on CONSULT-III screen is touched The front door lock actuator (driver side) is unlocked when "DR UNLK" on CONSULT-III screen is touched The front door lock actuator (passenger side) is unlocked when "AS UNLK" on CONSULT-III screen is touched The door lock actuator (other) is unlocked when "OTR ULK" on CONSULT-III screen is touched	Р

## **INTELLIGENT KEY**

### < SYSTEM DESCRIPTION >

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## **WORK SUPPORT**

Monitor item	Description
INSIDE ANT DIAGNOSIS	This function allows inside key antenna self-diagnosis
LOCK/UNLOCK BY I-KEY	Door lock/unlock function by door request switch mode can be changed to operation in this mode  On: Operate  Off: Non-operation
ENGINE START BY I-KEY	<ul><li>Engine start function mode can be changed to operation with this mode</li><li>On: Operate</li><li>Off: Non-operation</li></ul>
TRUNK/GLASS HATCH OPEN	Buzzer reminder function mode by trunk lid opener request switch and Intelligent Key can be changed to operation with this mode  On: Operate  Off: Non-operation
PANIC ALARM SET	Panic alarm button pressing time on Intelligent Key remote control button can be selected from the following with this mode  • MODE 1: 0.5 sec  • MODE 2: Non-operation  • MODE 3: 1.5 sec
TRUNK OPEN DELAY	Trunk button pressing on Intelligent Key can be selected as per the following in this mode.  • MODE 1: Press and hold  • MODE 2: Press twice  • MODE 3: Press and hold, or press twice
LO- BATT OF KEY FOB WARN	Intelligent Key low battery warning mode can be changed to operation with this mode  On: Operate  Off: Non-operation
ANTI KEY LOCK IN FUNCTI	Key reminder function mode can be changed to operation with this mode     On: Operate     Off: Non-operation
HAZARD ANSWER BACK	Hazard reminder function mode by door request switch and Intelligent Key button can be selected from the following with this mode  Lock Only: Door lock operation only  Unlock Only: Door unlock operation only  Lock/Unlock: Lock and unlock operation  Off: Non-operation
ANS BACK I-KEY LOCK	Buzzer reminder function (lock operation) mode by door request switch can be selected from the following with this mode  Horn Chirp: Sound horn  Buzzer: Sound Intelligent Key warning buzzer  Off: Non-operation
ANS BACK I-KEY UNLOCK	Buzzer reminder function (unlock operation) mode by door request switch can be changed to operation with this mode  On: Operate  Off: Non-operation
SHORT CRANKING OUTPUT	Starter motor can operate during the times below
CONFIRM KEY FOB ID	It can be checked whether Intelligent Key ID code is registered or not in this mode

## < SYSTEM DESCRIPTION >

Monitor item	Description
AUTO LOCK SET	Auto door lock operation time can be changed in this mode  • MODE 1: OFF  • MODE 2: 30 sec  • MODE 3: 1 minute  • MODE 4: 2 minutes  • MODE 5: 3 minutes  • MODE 6: 4 minutes  • MODE 7: 5 minutes
HORN WITH KEYLESS LOCK	Horn reminder function mode by Intelligent Key button can be selected from the following with this mode  On: Operate  Off: Non-operation
PW DOWN SET	Unlock button pressing time on Intelligent Key button can be selected from the following with this mode  • MODE 1: 3 sec  • MODE 2: Non-operation  • MODE 3: 5 sec
WELCOME LIGHT SELECT	Welcome light function mode can be selected from the following with this mode  • Puddle/Outside Handle  • Room lamp  • Head & Tail Lamps (this item is displayed, but cannot be used)  • Heart Beat
WELCOME LIGHT OP SET	Welcome light function mode can be changed to operation with this mode  On: Operate  Off: Non-operation
INTELLIGENT KEY SETUP	Intelligent Key interlock function mode can be changed to operation with this mode  On: Operate  Off: Non-operation

## **SELF-DIAG RESULT**

Refer to BCS-55, "DTC Index".

## DATA MONITOR

Monitor Item	Condition
REQ SW -DR	Indicates [On/Off] condition of door request switch (driver side)
REQ SW -AS	Indicates [On/Off] condition of door request switch (passenger side)
REQ SW -BD/TR	Indicates [On/Off] condition of trunk lid opener request switch
PUSH SW	Indicates [On/Off] condition of push-button ignition switch
CLUTCH SW	NOTE: This item is displayed, but cannot be monitored
BRAKE SW 1	Indicates [On/Off]* condition of stop lamp switch power supply
BRAKE SW 2	Indicates [On/Off] condition of stop lamp 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

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## < SYSTEM DESCRIPTION >

Monitor Item	Condition
SFT N -MET	Indicates [On/Off] condition of N position
ENGINE STATE	Indicates [Stop/Stall/Crank/Run] condition of engine states
S/L LOCK-IPDM	Indicates [On/Off] condition of steering lock unit (LOCK)
S/L UNLK-IPDM	Indicates [On/Off] condition of steering lock unit (UNLOCK)
S/L RELAY-REQ	Indicates [On/Off] condition of steering lock relay
VEH SPEED 1	Display the vehicle speed signal received from combination meter by numerical value [Km/h]
VEH SPEED 2	Display the vehicle speed signal received from ABS or VDC or TCM by numerical value [Km/h]
DOOR STAT-DR	Indicates [LOCK/READY/UNLK] condition of driver side door status
DOOR STAT-AS	Indicates [LOCK/READY/UNLK] 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
TRNK/HAT MNTR	Indicates [On/Off] condition of trunk room lamp switch
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 alarm button of Intelligent Key
RKE-MODE CHG	Indicates [On/Off] condition of MODE CHANGE signal from Intelligent Key
RKE OPE COUN1	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing
RKE OPE COUN2	NOTE: This item is displayed, but cannot be monitored

<sup>\*:</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     On: Operate     Off: Non-operation
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation  On: Operate  Off: Non-operation
INSIDE BUZZER	This test is able to check warning chime in combination meter operation  Take Out: Take away warning chime sounds when CONSULT-III screen is touched  Key: Key warning chime sounds when CONSULT-III screen is touched  Knob: OFF position warning chime sounds when CONSULT-III screen is touched  Off: Non-operation
INDICATOR	This test is able to check warning lamp operation  KEY ON: "KEY" Warning lamp illuminates when CONSULT-III screen is touched  KEY IND: "KEY" Warning lamp blinks when CONSULT-III screen is touched  Off: Non-operation
INT LAMP	This test is able to check interior room lamp operation     On: Operate     Off: Non-operation

## < SYSTEM DESCRIPTION >

Test item	Description
LCD	This 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  • P position warning displays when "SFT P" on CONSULT-III screen is touched  • INSRT: This item is displayed, but cannot be monitored  • BATT: This item is displayed, but cannot be monitored  • Take away through window warning displays when "NO KY" on CONSULT-III screen is touched  • Take away warning display when "OUTKEY" on CONSULT-III screen is touched  • OFF position warning display when "LK WN" on CONSULT-III screen is touched
FLASHER	This test is able to check hazard warning lamp operation The hazard warning lamps are activated after "LH/RH/Off" on CONSULT-III screen is touched
P RANGE	This test is able to check AT shift selector power supply    On: Operate    Off: Non-operation
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 (push-button ignition switch) operation  On: Operate  Off: Non-operation
ACC INDICATOR	This test is able to check ACC indicator (push-button ignition switch) operation  On: Operate  Off: Non-operation
IGNITION ON IND	This test is able to check ON indicator (push-button ignition switch) operation  On: Operate  Off: Non-operation
HORN	This test is able to check horn operation     On: Operate     Off: Non-operation
TRUNK/BACK DOOR	This test is able to check trunk lid open operation  Open: Operate
INTELLIGENT KEY LINK	This test is able to check Intelligent Key interlock function  ID No1: BCM transmits Intelligent Key ID No1 to each control unit  ID No2: BCM transmits Intelligent Key ID No2 to each control unit
INTELLIGENT KEY LINK (CAN)	<ul> <li>This test is able to check Intelligent Key interlock function</li> <li>Off: Non-operation</li> <li>ID No1: BCM transmits Intelligent Key ID No1 to each control unit via CAN communication line</li> <li>ID No2: BCM transmits Intelligent Key ID No2 to each control unit via CAN communication line</li> <li>ID No3: BCM transmits Intelligent Key ID No3 to each control unit via CAN communication line</li> <li>ID No4: BCM transmits Intelligent Key ID No4 to each control unit via CAN communication line</li> <li>ID No5: This item is displayed, but cannot be used</li> </ul>

**TRUNK** 

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

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## **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

## < SYSTEM DESCRIPTION >

Monitor Item	Contents
KEY CYL SW-TR	Indicates [On/Off] condition of trunk key cylinder switch
TR CANCEL SW	Indicates [On/Off] condition of trunk lid opener cancel switch
TR/BD OPEN SW	Indicates [Km/h] 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

# **ECU DIAGNOSIS INFORMATION**

# **BCM**

# List of ECU Reference

ECU	Reference
	BCS-32, "Reference Value"
BCM	BCS-52, "Fail-safe"
DCIVI	BCS-54, "DTC Inspection Priority Chart"
	BCS-55, "DTC Index"

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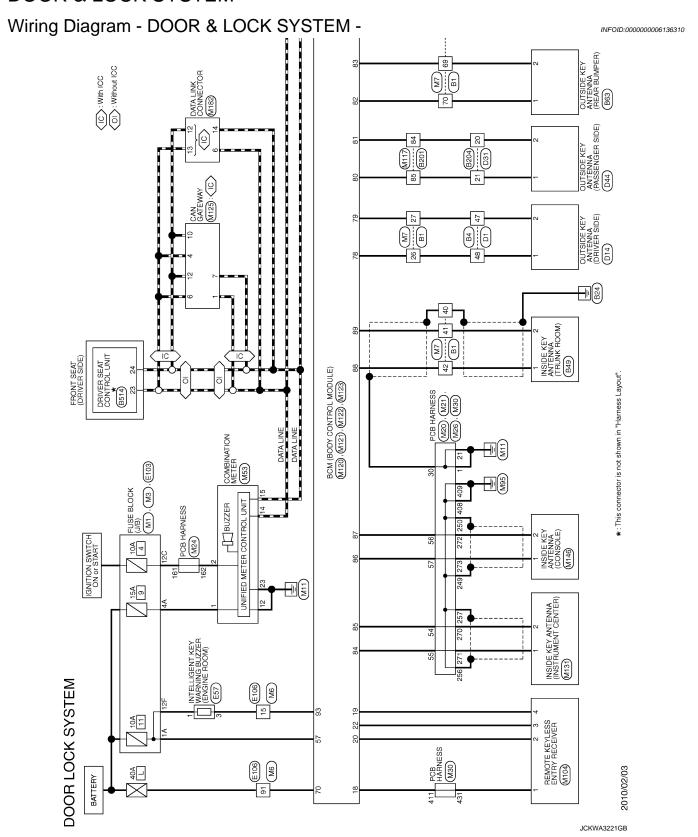
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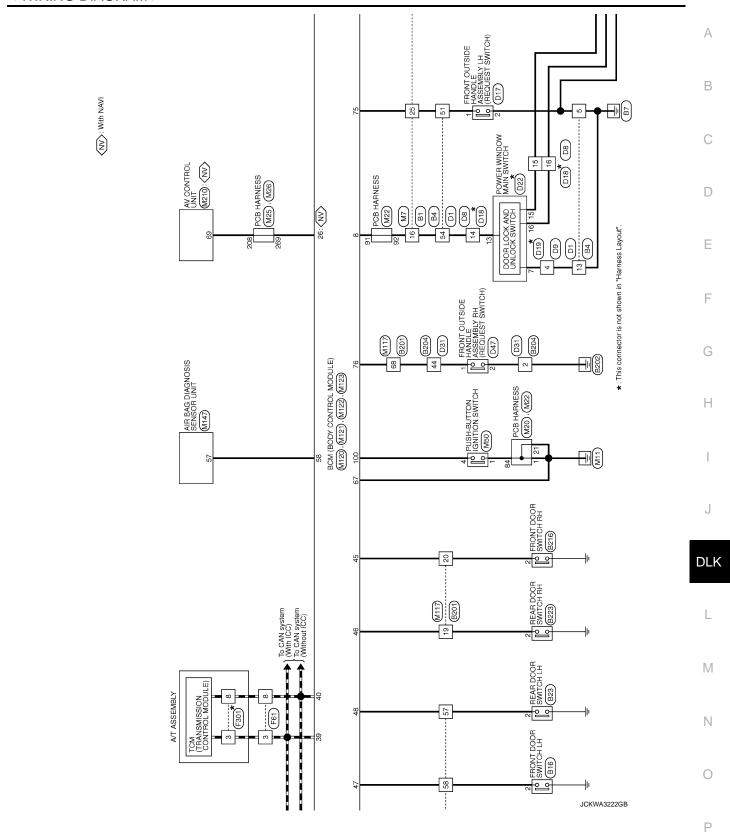
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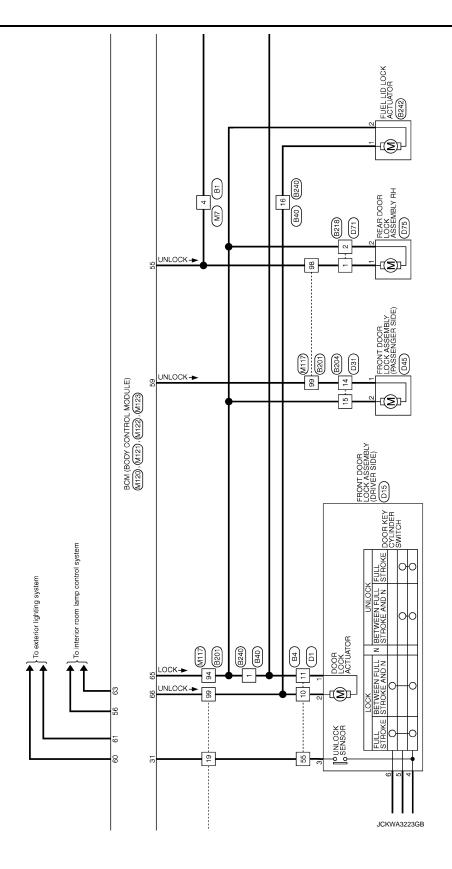
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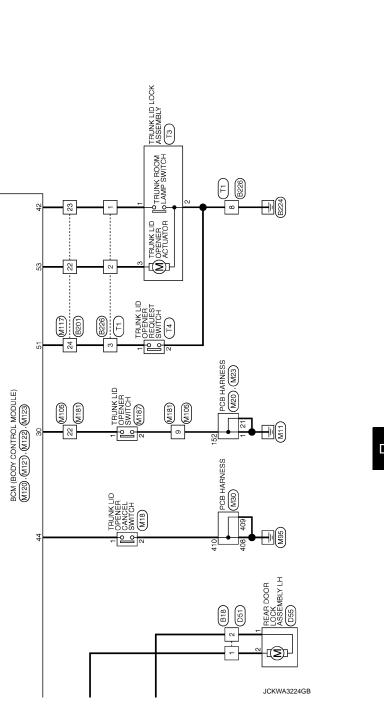
# WIRING DIAGRAM

# **DOOR & LOCK SYSTEM**









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# **DOOR & LOCK SYSTEM**

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<u>.</u>	No. D8 WIRE TO WIRE	Type TH24FW-NH		יַן		12 11 10 9 8	24 23 22 21 2			Color	of Wire	۵	<b>X</b>	>	GR	۳	» »	: 0		0 3	3 (	¥ (	5	æ	FG	ď	В	^			r No. D9	Г		Type NS08FW-CS			[	ဂ	8	]]			Color	of Wire	PT	0	B/W	٦	g	· >													G
٥	Connector Name	Connector Type	<b>4</b>	至少	H.S.					Terminal	No.	4	7	œ	6	O.	=	- 61	7 61	2 ;	4 ,	<u>c</u>	١	6	20	21	23	24			Connector No.	d	Connector Name	Connector Type	ą	厚	E.S.						Terminal	No.	2	က	4	2	9	7													Н
	Signal Name [Specification]	-		-			1			ī	-		-	-	-								-	1	_	-	-	-	-	1	-	-	-	-	-	=	-	-	=	1	-	1	-	-	-	-	-		1														I
	Signal Name																																																													_	J
	of Wire	, _	œ	æ	ۍ <u>د</u>	2 0	. <u>c</u>	B/W	>-	0	۳	>	æ	М	0	g	c	, :	3 0	n :	>	× (	¥	g	>	0	BR	٦	۵	>	GR	0	W	~	SHIELD	٦	Ь	>	Pl	HH.	-	<b>&gt;</b>	Ь	B/W	5	>-	B/W	*	Α														DLI
	No.	9	7	ω	o (	2 ;	12	2	14	15	91	17	18	19	20	21	22	23	24	7 7	7 50	27 3	58	8	31	32	33	34	35	36	37	38	38	40	41	42	43	44	42	46	47	48	46	20	51	52	23	24	22														
						F	<u> </u>	1			_			e e		(SD)	2	6	1	ê	I	Ī													8								ĺ	ſī	-	716																	L
	OL UNIT					233	6 29			9	Signal Name [Specification]	3ACKWARD)	SLIDE SW (FORWARD)	(BACKWARI	V (FORWARD	W (DOWNWA	SW (LIPWAR	(BACKWAPI	SW (LIDINAL	SW (DEWAR	(SLIDE)	ECLINER)	AR LIFTER	ONT LIFTER)	CAN-H	<b>√</b> -L	11	2.2	ESS 1	ESS 2	. SW	E(TILT)	-ESCOPIC)	TX/RX)	SUPPLY (ENCODER)									۱t	5 4 3	322212019181	19 00 00 10 10 00 00 00 00 00 00 00 00 00																M
STEM	BS14 DRIVER SEAT CONTROL UNIT	Ŧ			7	6 11 13 17 1	5 12 14 18 16			N Promise	ognal Name	SLIDE SW (E	SLIDE SW (FORWARD)	ECLINER SW	RECLINER SV	AR I IFTER S	FARIFTER	ECI INEP SW	ONT LETED	ONI LIFTER	PULSE	PULSE (R	PULSE (RE	PULSE (FRC	CAI	CAI	IN	INI	ADDR	ADDRESS	SET SW	PULSE(TILT)	PULSE(TEI	UART (	POWER SUPPI				VIRE		3815				9 8 7 6	3736 2625242	130340																
SCK SY	DRIVER S	TH32FW-NH				2031282	24 19 22 21 30 27 25 12 14 18 16					L	L	L	L	L	L	L	l	1	1														P(			Di	WIRE TO WIRE		TH40FW-CS1				15 14 13 12 11 10 9 8 7 6 5 4	46 45 44 43 42 41 40 39 38 37 36 26 25 24 23 22 21 20 15 18 17 16	000000000000000000000000000000000000000																Ν
DOOR LOCK SYSTEM	Connector Name	Connector Type	•		E.S.	23 32	24 19				No. of Wire	11 G/B	_	13 R/G	_	_	_	_	_	_	19 67	20 20	4	4	-	4	_	26 L/O	V 75	28 V/W	-	H	31 BR/W	Н	33 W			nnector No.	Connector Name		nector Type					46 45 44	1000																0
إَ	8 8	Š	₫.	手`	7					Ē	_		<u> </u>	<u> </u>	L	L				1		1		1					<u> </u>	L	L	L		L	L			ပိ	Š		Š	þ	匮	7	•							J	CKV	NA:	322	280	GE	3					
																																																															Ρ

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# **DOOR & LOCK SYSTEM**

Connector No. D44 Connector Name OUTSIDE KEY ANTENNA (PASSENGER SIDE) Connector Type RR(22MGY  TAS.  A.S.	Terminal   Color   Signal Name [Specification]   No.   Or Wire   Signal Name [Specification]   1   LG   -	Connector Name Provit Dook Lock Asselve. Y PASSENGER SIPS  Connector Type EDGFGV-RS  MAS.  This.	Terminal   Color   Signal Name [Specification]   1   G
Connector No.   D31	Terminal   Color   Signal Name [Specification]   Color   Col	+++++++	22 SB
Connector No.  Connector Name WIPE TO WIPE Connector Type NISSBMW-CS  T 2	Signal Name	7   Y	1   2   3   4     5   6   7
DOOR LOCK SYSTEM  Connector Name Frout oursibe HANDLE ASSEMBLY LH  Connector Type SAZOBEW  ALS	Terminal   Color   Signal Name [Specification]	Connector No. D18 Connector Type TH24MW-NH  Connector Type TH24MW-NH  (1 2 3 4 5 6 7 8 9 10 11 12 11 11 15 16 17 11 18 19 20 11 21 21 15 16 17 18 19 20 20 20 20 20 20 20 20 20 20 20 20 20	Terminal   Color   Signal Name [Specification]   No.   O   Virginal Name   Specification]   No.   O   Virginal Name   Specification]   No.   O   O   O   O   O   O   O   O   O

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D75   REAR DOOR LOCK ASSEMBLY RH   E06FGY-RS   Signal Name [Specification]   Rear	Signal Name [Specification]	F
	Dolor S S S S > >	G
Connector No. Connector Type Connector Name Connect	Terminal N. P. 2F	Н
MBLY LH eoification]		I
Signal Name [Sp. Signal		J
		DLK
Connector No.		
		L
SEMBLY RH  19 20  20 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		M
Signal Name [Specification]		1 V I
Signal N Signal N Signal N Signal N Signal N Signal N		Ν
1   1   1   1   1   1   1   1   1   1		
DOO   Connector	JCKWA3230GB	0
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# **DOOR & LOCK SYSTEM**

000	R LOC	DOOR LOCK SYSTEM						
Connector No.	r No.	E106	20	ΓG	1	5 B		5A V –
Connector Name		WIRE TO WIRE	9	≥ (		. O		- × × × × × × × × × × × × × × × × × × ×
Connector Type	Т	TH80FW-CS16-TM4	62	5 >				SA Y
4	1		63	BR	-	ΓG		
#			64	a ;	1	10 B		Connector No. M3
Ś			g 99	- a				Connector Name FUSE BLOCK (J/B)
		S 20 S 20 S 20 S 20 S 20 S 20 S 20 S 20	67	SB	-	Connector No. F301		Connector Type NS12FW-CS
			77	0	1	Connector Name TCM (TRANSMISSION CONTROL MODILLE)	ATROL MODULE)	d
	-		8 6	88 0				(Arth
H			8	3 6		٦.		C. 10000
lerminal No.	of Wire	Signal Name [Specification]	<del>∞</del> &	× 85		優		30,2010
-	۵	ı	83	胺	1	≪ SH		US 301
2	Μ	1	84	≻	1		a	
ဗ	SS	1	82	>	1	5 o	î.	ŀ
4	P.	1	98	- :	1	16 8 2 8 8 9 1	<b>9</b>	Ja L
9	0	1	87	>	1		١	of Wire
7	g,	1	88	H :	1	- 1-		+
ω .	ۍ او	-	8 8	9 1	-	nal Color	Signal Name [Specification]	
თ	-	1	90	3	1			+
0 ;	H 6	1	91	≥ (	-	≥ 0	VIGN	LG.
= 5	g >	r	26 60	1	ı	2 8	BALL	- IIC
13	) g	1	S 5	2 8		£ 0	KINE	4
5 4	8	1	95	>	1	0	GND	
12	>	1	96	~	1	GR	VIGN	
91	≻	1	97	~	1	7 L REV LA	REV LAMP RLY	
17	GR	-	86	≻	-	8 BR CA	CAN-L	
18	^	1	66	>	1	9 Y STAR	START RLY	
20	BR	1	100	>	1	10 W/B	GND	
21	а	1						
22	٦	1						
23	۵	1	Connector No.	tor No.	F61	Connector No. M1		
27	SHIELD	1	Connect	Connector Name	A/T ASSEMBLY	Connector Name FUSE BLOCK (J/B)		
28	0/3	1	d	F	) ( d C L C ) ( d	Т		
67 F	W/L		Connec	ror 1ype	KKIUFG=DGY	Connector Type INSUBLIVE MIZ		
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34 8	>		ė.			AS AS	F	
40	<u>a</u>				5 4 3 2 1	1 2 2	<u> </u>	
4	6 22	1			10 9 8 7 6	8A /A6A15A	4A	
42	í -				1		1	
43	<u>.</u>	1						
44	Α	1	Termina	al Color				
45	-	-	No.	_	Signal Name [Specification]	of Wire	Signal Name [Specification]	
46	GR	1	-	>	-	IA R		
47	>	1	2	œ	1	w	-	
48	ŋ	1	ဇ	7	1		-	
49	0	-	4	>		4A W		

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# **DOOR & LOCK SYSTEM**

Company   Comp	1   1   1   1   1   1   1   1   1   1	Connector No.   M6		20	×	1	9	*	1	63	BR		
Control   Cont	Comment   Comm	Connector Name		09	æ	1	_	5	1	69	М	1	
The control of the	Control   Cont	T		19	<u>в</u>	1	∞ ·	>	1	99	œ:	1	
	Control   Cont	٦	-TM4	62	9] [e	1	s (	: ا د	1	67	> !		
1	Column   C	q.		23	ž	1	0	<b>&gt;</b>		89	5	1	
1   10   10   10   10   10   10   10	1			64	7	1	=	>	<ul> <li>[With Climate controlled seat]</li> </ul>	69	SB	1	
1	1			65	œ	1	Ξ	_	- [With heated seat]	70	>	1	
Control   Cont	1		7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	99	۵	1	12	Δ.		72	7	-	
1   1   1   1   1   1   1   1   1   1	Control of the cont		88 SS S	67	-		12	9	L	73	۵	1	
1	Control   Cont		82 72 23 23 23 23 23 23 23 23 23 23 23 23 23	ļ	,		,	1	1	;			
Control   Cont	Control   Cont			` ;	١		2	1		ŧ.	-	1	
Signature   Secretarian   Signature   Signature   Secretarian   Signature   Sign	1			2	>	1	4	5		ę	•	ı	
1	10   10   10   10   10   10   10   10			80	g	_	15	BG		92	ŋ	_	
1	1			81	_	ı	16	>	1	77	<b>\</b>	ı	
N   N   N   N   N   N   N   N   N   N	No.   No.			82	8	1	17	BB		78	SB	1	
10   10   10   10   10   10   10   10	Sign			03	ď		Ĺ	٩		70	W	1	
10   10   10   10   10   10   10   10	Control of the cont	-		3	3		!	1		9			
Colored Part   Colo	Conversor Name   Conv	M 7	I	42	27	1	20	1		20	2	1	
1	1	3		82	>		6	≥		85	æ	ı	
10   10   10   10   10   10   10   10	No.   No.	4 LG	-	98	_	_	20	œ		83	BG	_	
1	10   10   10   10   10   10   10   10		-	87	>	_	21	В		84	В	_	
V   V   V   V   V   V   V   V   V   V	V   V   V   V   V   V   V   V   V   V	7 BG	-	88	>	-	22	PT		82	W	-	
No.   No.	No.   No.	-	1	68	97	1	23	М		98	5	1	
No.   No.	N   N   N   N   N   N   N   N   N   N	H	1	06	BG	1	24	>		87	~	ı	
V   V   V   V   V   V   V   V   V   V	No.   No.	$^{+}$		8 2	3		4 6	٠ ،		8		1	
1	1	$^{+}$		5	2 6		3 %	2 2		8 8	9 3		
Controlled Name   Controlled	1	+		35	2		07 [	1		5	٠ د		
1	1	+	ı	26	5	-	/2	7		92	5	1	
V   V   V   V   V   V   V   V   V   V	V   V   V   V   V   V   V   V   V   V	+	ſ	94	-	1	28	4		96	>	1	
V   V   V   V   V   V   V   V   V   V	Fig. 10   Fig.		-	92	Μ		59			97	BG	_	
Signature   Sign	10   10   10   10   10   10   10   10	_	-	96	œ	_	30			86	<b>&gt;</b>	_	
Commutator Name   Fig. 10   Commutator Name	Commerciary Name   Commerciary		1	97	SB		32		1	66	PC	1	
190   W	100   W	┝	1	86	ď	1	33	L	1				
Sign	100   1	H	1	8	×	1	2	ł					
1	1	t		3	-		,	+		- Connect	ı	0.75	
Single   Part	Single   Connector No.   Min.	$^{+}$		3	4		3	+			Τ	0	
Simple   Connector No.   Connector No.   M.Y.	Second Control of the control of t	+	ı				30	†		Connect		TRUNK LID OPENER CANCEL	LSWITCH
SHELD	SHELD	┪	1				37	SB					
Strike   S	Strict   S		1	Connector		M7	40	SHE		Connect	or Type S	SO2FW	
Second of Marker   Connection Paper   Marker	Connector Name   Wilk   Connector Name   Connector Name	г			Г		4	ď.					
SS   Connector Type   Floating   Color	Secondary Type   Husbank - Sig-Th4   Secondary Type   Sig-Th4   Sig-Th4   Sig-Th4   Secondary Type   Sig-Th4   S	t		Connector		WIRE TO WIRE	\$			E C			
19	100   100	+			Ţ	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7 .	<u> </u>					
P   P   P   P   P   P   P   P   P   P	No.   Color   Color	+	I	Connector	) ype	H8UMW-CS10-1M4	40	\$		Į,			
Fig. 10   Fig.	No. of Works   No.	+	1	4			4	1				<u> </u>	
BR   C   C   C   C   C   C   C   C   C	Secondary   Seco	-	-	手			48	LG				<u>-I</u>	
BR   Color	Faminal   Color   Color	┝	1	Ų.		г	49	BR				2	
Fig. 10   Fig.	Terminal   Color   No. of Wee   Signal Name   Signal Nam	╁	1	Ž		. 3	Ğ	>				]	
Fig. 1   Fig. 2   Fig. 3   Fig. 4   F	Signal Name (Specification)   Sign	+				8 2	3	·  ·					
ER	1   1   1   1   1   1   1   1   1   1	+				7.	5	1					
Fig. 10   Fig.	Terminal Color   No. of Wee   Signal Name [Specification]   Sign	+	1			8	25	۵.		Termina		Signal Name [Specif	cation
FP	Fig. 10   Color   Co		-				23	BG		No.		orginal realine Copecii	Digarion
FR	Fig.   Color   Color	t	1				ű.	ď		-		1	
Signal Name [Specification]   Sign	Signal Name [Specification]   Sign	+					8	ا ا		1	•	ı	
No of Wire   1	No of Wie   Section   No of Wie   No of Wi	-	1	Terminal	Color	Simal Nama [Spacification]	23	۵.	-	2	В	1	
S	P   P   P   P   P   P   P   P   P   P	_		Š	of Wire	Oignal Haine Copecinoauoin	28	97					
N   N   N   N   N   N   N   N   N   N	B 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	H		-	g		29	>					
80 P P P P P P P P P P P P P P P P P P P		╀		·	>		G	9					
B 6 6 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		+		7	- 8		8 8	5 6					
		+		7	ř	'	5	۱					
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5 5	Connector No.	Connector No. M20	43	>	- [With BOSE system]	88	В	1	131	SB	1	П
2	Connector Name	DCB HABNESS	43	^	- [Without BOSE system]	88	Υ	-	132	ΓG		
5	ector iva	TOD DARMESS	44	BR	- [With BOSE system]	16	۸	-	133	7	-	
Con	ector Ty	Connector Type TH40FB-NH	44	Д	- [Without BOSE system]	92	٨	_	135	Ь	-	П
<u> </u> 4			45	SHIELD	-	93	В		137	Υ	_	
厚	•		46	SB	- [With BOSE system]	94	В		138	٦	-	
7	Œ.		46	5	- [Without BOSE system]	95	ΓG	-	139	Ь	_	
•		/ "	47	>	- [With BOSE system]	96	BR	-	140	٦	I	П
	8 8	20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 4 3 3 2 1 4 3 3 3 2 1 4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	47	GR	- [Without BOSE system]	97	5	-	141	W	I	
		20 00 00 00 00 00 00 00 00 00 00 00 00 0	48	SHIELD	_	86	5	_	142	W	_	
			49	۳	1	66	ŋ	1	144	۵	1	П
			20	g	<ul><li>[With BOSE system]</li></ul>	100	5	_	145	ĸ	_	1
Terr	la	Color Signal Name [Snecification]	20	BR	<ul><li>[Without BOSE system]</li></ul>	101	٦	1	146	PT	t	П
No.			51	SHIELD	_	102	۵	_	147	В	-	
	$\frac{1}{2}$	B	25	۵	- [With BOSE system]	103	В	-	148	٦	T	П
_	11 E	BR -	25	٦	- [Without BOSE system]	104	BR	_	149	В	1	
	Н		53	7	- [With BOSE system]	105	œ	-	150	Ь	-	П
	14	T	53	g	<ul> <li>[Without BOSE system]</li> </ul>	107	>	-	151	_	1	1
_	15	B	54	Υ	1	108	Υ.	-	152	В	1	
	17	R -	55	BR	-	109	BR	-	153	W	_	
	16	- M	99	9	-	110	Υ	-	154	W	-	
2	20	1	22	~	1	112	а		155	×	ı	Γ
2	H	1	61	SB	1	113	а		157	Μ	ı	Γ
2	L		62	SB	П	114	_	1	158	œ	П	Γ
2	23	1	63	PT	1	116	В	-	159	۳	-	П
2	Н	- 1	64	В	1	117	В	- [With VK engine]				
2	П		65	٦	ı	117	BG	- [With VQ engine]				
(5)	П	SHIELD -	99	۳	1	118	В	1				
(*)	31		69	>	1	119	ŋ	1				
(2)	$\perp$					120	>	1				
60	32			- 1								
6)	$\dashv$	1	Connector No.	١	M22							
(0)	38	7	Connect	Connector Name	PCB HABNESS	Connector No.	T	M23				
4	40			П		Connector Name		PCB HABNESS				
			Connector Type	╗	TH40FB-NH		┱					
٥		- 1	1			Connector Type	╗	TH40FW-NH				
Con	Connector No.		<b>*</b>			€						
Con	Connector Name	me PCB HARNESS	į E		[							
Con	Connector Type	De TH40FW-NH		100 99 98 97	96 95 94 93 92 91 90 89 88 87 86 85 84 83 82 81	ė						
4		1		120 119 118 11.	118  115  114  113  112  111  110  103  108  107  108  105  104  118  118  110		140 139 138 137	156 155 154 155 152 (15) 150 159 169 (42) 166 (42) 164 145 (42) 145 (42)				
手	·											
•	4		Termina	-								
	88	80 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41	No	of Wire	Signal Name [Specification]	Terminal	Color	(a)				
	8	73 70 77 70 70 74 70 77 77 77 00 00 00 10 100 00 104 00 105 00 1	81	_	1	No.	of Wire	olgnal Name Lopecinication				
			82	۵	1	121	œ	1				
Ĺ	-		83	В	II.	122	>	1				
Terr	=	Color Signal Name [Specification]	84	В	ı	123	BG	1				
	No. of		82	В	1	124	BG	1				
4	$\neg$		98	<u>в</u>	1	128	E I	1				
	┪	SHIELD -	87	8	1	130	В	1				

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M30 me PCB HARNESS	pe TH40FW-NH		Color Signal Name [Specification]  R R	
Connector No. Connector Name	Connector Type	H.S.	A02 of No. of No	
		008 808 804 808 802 801 808 808 809 808 803 801	seat] seat] seat] seat] seat] seat]	
M26 PCB HARNESS	TH40FW-NH	35 25 (5) (50) 800 300 300 300 300 300 300 300 300 300	Signal Name (Speoification)  - [With Climate controlled seat] - [With Climate controlled seat] - [With heated seat] - [With Climate controlled seat] - [With heated seat] - [With Climate controlled seat]	
e e	П	(20) 250 253 255 254 254 254 255 255 255 255 255 255	C   C   C   C   C   C   C   C   C   C	
Connector No. Connector Name	Connector Type	F SH	No. No. 241 No. 243 244 244 245 245 245 249 250 250 250 257 277 277 279 279 279 279 279 279 279 27	
П	$\prod_{i=1}^{n}$			
		8 200 200 200 200 200 200 200 200 200 20	Signal Name [Specification]  - [With BOSE system] -	
M25 PCB HARNESS	TH40FB-NH	5 214 212 211 210 203 6 204 253 253 251 200 203	Signal Na   -   With	
e	П	023 1023 1023 1023 1023 1023 1023 1023 1	S   S   S   S   S   S   S   S   S   S	
Connector No.	Connector Type	· SE	Terminal No. 101 No. 201 201 209 209 210 210 211 212 212 213 213 223 223 223 223 233 23	
	<u>"</u>			
W S		[8] [93] [93] [93] [93] [93] [93] [93] [93	Signal Name [Specification]	
DOOR LOCK SYSTEM Connector No. M24 Connector Name PCB HARNESS	TH40FW-NH	1.10 1001 1001 1001 1001 1001 1001 1001		
Name P. M	П	188 175 175 175 175 175 175 175 175 175 175	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	
DOOR LC Connector No.	Connector Type	图 IS	Terminal No.   161   162   163   164   165   165   165   165   174   174   176   176   176   185   185   185   185   186   190	

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000	<u>-</u>	DOOR LOCK SYSTEM							
Connector No	No.	M50	91	œ	AIR BAG SIGNAL	Terminal	Color	Sirnal Nama [Snavification]	Г
Connector Name	r Name	PUSH-BUTTON IGNITION SWITCH	23	ш	GROUND	No.	of Wire	Diogrammadol americano	Т
			24	ш	FUEL LEVEL SENSOR GROUND	2	œ	1	1
Connector Type	r Type	TK08FBR	25	>	ALTERNATOR SIGNAL	ဂ	В	1	٦
q			26	>	PARKING BRAKE SWITCH SIGNAL	2	re	1	٦
手			27	>	BRAKE FLUID LEVEL SWITCH SIGNAL	9	Ь	_	
ES		- 114	28	G	SECURITY SIGNAL	7	_	1	П
		1 2 3	29	-	WASHER LEVEL SWITCH SIGNAL	ω	۵	1	Т
		4 5 6 7 8	32	g	PADDLE SHIFTER SHIFT DOWN SIGNAL	6	В	1	٦
			33	BG	PADDLE SHIFTER SHIFT UP SIGNAL	10	Χ	1	Ī
			34	5	FUEL LEVEL SENSOR SIGNAL	11	W	-	
			35	W	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)	12	SB	-	
Terminal	_	Simpl Name [Specification]	36	5	PASSENGER SEAT BELT WARNING SIGNAL	14	SB	_	
No.	of Wire		37	9	NON-MANUAL MODE SIGNAL	15	BR	-	
_	В		38	۸	MANUAL MODE SHIFT DOWN SIGNAL	16	۸	_	
2	ш	-	39	٦	MANUAL MODE SHIFT UP SIGNAL	18	ŋ	-	
3	œ	1	40	Μ	MANUAL MODE SIGNAL	19	В	1	Γ
4	æ	1				20	>	1	Γ
ď	g	1				33	. g	1	Τ
9	>		Connector No	No.	MICA	00	2		T
-	-   ;		000	2	#01M	20	0 3		T
,	, ;		Connector Name	Name	REMOTE KEYLESS ENTRY RECEIVER	67	2		T
00	*	1				9	r		T
			Connector Type		TH04FW-NH	31	æ	1	Т
			ąĮ			32	7	1	Т
Connector No.	ır No.	M53	李			33	۵	1	Т
Connector Name	r Name	COMBINATION METER	ΞŠ			34	LG	ı	٦
100	Malie	COMPLETE METERS			<u>_</u>	35	W	=	
Connector Type	r Type	TH40FW-NH			1 2 3 4	36	FG	=	
ą					+	37	7	_	
唐						38	Я	-	
Ü									1
			Terminal	Color	9				
	2 2	4 5 6 7 8 9 10 11 12 13 14 15 16	No	of Wire	olgnal Ivame Lopeciii cauorij				
	77 77 70	35 50 51 50 51 50 51 35 35 34 35 36 31 30	-	В	GND				
			2	æ	SIGNAL OUTPUT				
			8	æ	RSSI				
Terminal	Color	2	4	œ	BATTERY				
No.	_	Signal Name [Specification]							
-	Α	BATTERY POWER SUPPLY							
2	g	IGNITION SIGNAL	Connector No.	No.	M105				
3	SR	VEHICLE SPEED SIGNAL (2-PULSE)		,					
4	œ	VEHICLE SPEED SIGNAL (8-PULSE)	Connecto	Name	WINE TO WINE				
2	m	ILLUMINATION CONTROL SIGNAL	Connector Type	Type	TH40FW-NH				
9	m	METER CONTROL SWITCH GROUND	Ġ						
7	SB	ENTER SWITCH SIGNAL	修						
80	PC	SELECT SWITCH SIGNAL	\ \ \ \ \						
6	ŋ	ILLUMINATION CONTROL SWITCH SIGNAL (+)							
10	GR	ILLUMINATION CONTROL SWITCH SIGNAL (-)		20 19 18 1	7 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1				
Ξ	_	TRIP RESET SWITCH SIGNAL		200 60 06	1 30 30 34 35 37 37 38 58 50 57 50 50 50 50 50 50 50				
12	<u>a</u>	GROUND							
14	-	CAN-H							
15	۵	CAN-L							

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Connector No.   M122	
1   P   POWER WINDOW SW COMM     1   N   P   PAIN SENSOR SERAL LINK     1   N   OPTICAL SENSOR     1   N   OPTICAL SENSOR     1   N   SENSOR SERIAL LINK     1   N   SENSOR SERIAL LINK     1   S   S   S   S   S     2   S   S   S   S   S     3   R   RECEIVER PWR SBLY     2   C   S   S   S   S     2   C   S   S   S   S     3   C   S   S   S   S     4   C   S   S   S   S     5   C   S   S   S   S     5   C   S   S   S   S     5   C   S   S   S   S     6   C   HAZARO SW     19   R   RCEIVER PWR SBLY     22   G   NATS BLT RECEIVER COMM     24   C   S   S   S   S   S     5   C   S   S   S   S     5   C   S   S   S   S     6   S   S   S   S   S     7   COMBI SW OUTPUT 3     8   R   COMBI SW OUTPUT 3     9   C   C   C   S   S     9   C   C   C   S   S     10   C   C   S   S   S     11   S   S   S   S   S   S     12   S   S   S   S   S     13   S   S   S   S   S     14   S   S   S   S   S   S     15   S   S   S   S   S     16   S   S   S   S   S     17   S   S   S   S   S     18   R   REPORT LAWE SW     19   REAR RH BOOR SW     10   S   S   S   S   S     10   S   S   S   S   S     11   S   S   S   S   S   S     12   S   S   S   S   S     13   S   S   S   S   S     14   S   S   S   S   S   S     15   S   S   S   S   S     16   S   S   S   S   S     17   S   S   S   S   S     18   R   REAR RH BOOR SW     19   S   REAR RH BOOR SW     10   S   S   S   S   S     10   S   S   S   S   S     11   S   S   S   S   S     12   S   S   S   S   S     13   S   S   S   S   S     14   S   S   S   S   S     15   S   S   S   S   S     16   S   S   S   S   S     17   S   S   S   S   S     18   S   S   S   S   S     18   S   S   S   S   S     19   S   S   S   S   S     10   S   S   S   S   S     10   S   S   S   S   S     11   S   S   S   S   S     12   S   S   S   S   S     13   S   S   S   S   S     14   S   S   S   S   S   S     15   S   S   S   S   S   S     16   S   S   S   S   S   S     17   S   S   S   S   S   S     18   S   S   S   S   S   S     18   S	
65   R	
Connector Name   Wire TO Wire	JCKWA3236GB

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### **DOOR & LOCK SYSTEM**

Connector No.	ĞΠ₽	DOOR LOCK SYSTEM Demector No. M123 Demector Name BOM (BODY CONTROL MODULE)	Connector No. Connector Name	M125 CAN GATEWAY	Connector No. Connector Name	MI 46 INSIDE KEY ANTENNA (CONSOLE)	59 60	_   4	CAN-H	
Connector Type	П	TH40FW-NH	Connector Type	TH12FW-NH	Connector Type	RK02FL A	Connector No. Connector Name	o. M181 ame WIRE TO WIRE	₩	
	91 92	2.5 M 15 M	2	7 9 10 11 12			Connector Type	ype TH40MW-NH		
Terminal No.	I Color of Wire	Signal Name [Specification]	Terminal Color No. of Wire	Signal Name [Specification]	Terminal Color No. of Wire	r Signal Name [Specification]	21	1 2 3 4 5 6 7 8 9 21 22 23 24 25 26 27 28 29	10 11 12 13 14 15 16 17 18 19 20 30 31 32 33 34 35 36 37 38 38 40	
72	ω >	OUTS HD LAMP OUTPUT	- E	CAN-H RATTERY	- °					
75	g	DR DOOR REG SW	Н		$\frac{1}{1}$		lar	Color	Signal Name [Specification]	
9/ 8/	9 8	PASS DOOR REGISM DRIVER DOOR ANT+	n 9	GND GAN-H	Connector No.	M147	2 20	2 2	1	
79	SB	DRIVER DOOR ANT-	Н	CAN-L	Connector Name		ဗ	: B	1	
08	P.	PASSENGER DOOR ANT+	S €	IGNITION	Constant Trans	NILOGEN	ı, o	w 6	1	
ē 66	> >	REAR BMPR ANT+	2 =	GND	Comector type NH28FT-EX	NH28FY-EA	0 1	¥ -		
83	SB	REAR BMPR ANT-	H	CAN-L	修		. 80	1 4	-	
84	BR	ROOM ANT1+			H.S.		0	В	1	
82	>	ROOM ANT1-					01	M	ı	
98	<u>د</u> د	ROOM ANT2+	Connector No.	Т		19 52 54 23 24 22	11 22	LG SB	1 1	
88	, >	TRIINK BOOM ANT+	Connector Name	INSIDE KEY ANTENNA (INSTRUMENT CENTER)		18 51 53 60 59 25 57 1	14	88.8		
88	SB	TRUNK ROOM ANT-	Connector Type	RK02FL			H	BR	_	
06	۵ 5	PUSH-BTN IGN SW ILL PWR	Œ		Terminal Color	Signal Name [Specification]	91	> 0	1 :	
6	<u>ś</u> a	PLISH-BTN IGN SW II GND	E	<	t	NSI	0 6	D 00	1	
93	>	I-KEY WARN BUZZER		$\leqslant$	2 B		20	>	=	
94	>	S/L UNIT COMM			3	DR1 (+)	$\dashv$	BG	_	
92	M	S/L UNIT PWR SPLY			<b>4</b> :	DR1 (-) DR2 (-)	23	a :	-	
96	9 9	STARTER RELAY CONT			> > • •	DR2 (+)	30 52	× a	1 1	
86	В	IGN RELAY (IPDM E/R) CONT	Terminal Color	Circus Namo [Consideration]	7	AS1 (-)	31	BR	-	
66	۳	IGN RELAY (F/B) CONT	No. of Wi		8	AS2 (+)	32	٦	1	
100	BR	PUSH SW	- BR	1	+		33	Ь		
102	æ !	NOILLION	2 Y	1	SB SB		34	re ::		
50	£ a	A/1 SHIFT SELECT PWR SPLY STOP I AMP SW 2			19 V	P GND	39	м <sup>©</sup>	1 1	
901	B	BLWR RELAY CONT			T	AIR	37	i _		
107	_	S/L CONDITION1			H		38	В	_	
108	Ь	S/L CONDITION2			25 R	CUTOFF TELLTALE				
109	>	ACC IND			51 G					
					27 23 23	SATELLITE BH2 (+)				
					╀	SATELLITE RH2 (-)				
					27 L	IVCS				

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1 R F F F F F F F F F F F F F F F F F F	Connector No. 13 Connector Type TRUNK LID LOCK ASSEMBLY Connector Type TRUNK-LC  A.S. A.	Terminal Color Signal Name [Specification]	<del></del>	Terminal Color Signal Name [Specification]
Connector No. M210 Connector Type TH32FW-NH  Connector Type TH32FW-NH  (A).	Composite   Color   Signal Name (Specification)	S 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	S VEHICLE SELD COMPO S MM SELD C	Connector No.   11   Connector No.   11   Connector Type   NSIZPW-CS   Connector Type   NSIZPW-CS   Connector Type   Connec
DOOR LOCK SYSTEM   Gornector No.   MI82   Connector No.   MI82   Connector Type   BD167W   Connector Type   BD167W   BD167W	Terminal   Color   Signal Name [Specification]   No. of Wire   Signal Name [Specification]   A	12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Connector No. MIST. Connector Name TRUNK LID OPENER SWITCH Connector Type THOSRE-NH  LAS 4 3  4 1 3	Terminal   Color   Signal Name [Specification]   No. of Wive   Signal Name [Specification]

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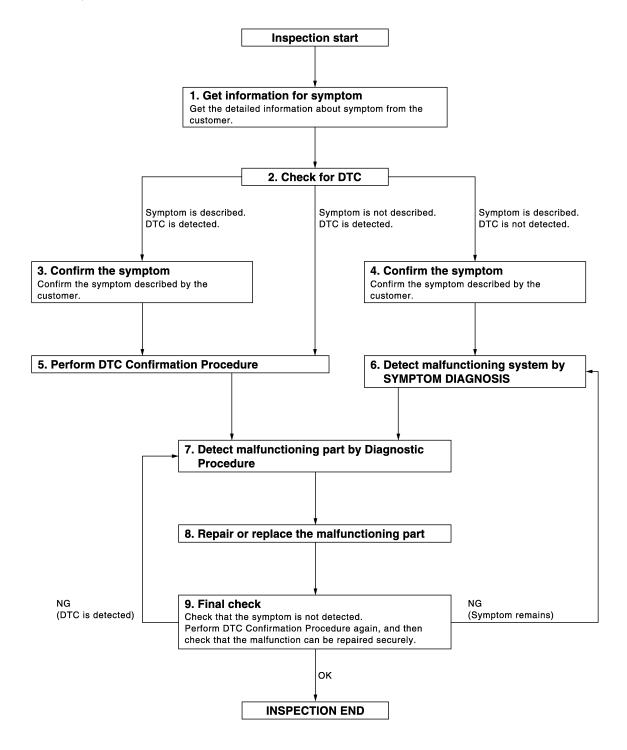
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# **BASIC INSPECTION**

# DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

**OVERALL SEQUENCE** 



JMKIA3620GB

#### DIAGNOSIS AND REPAIR WORK FLOW

#### < 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.

### f 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 <a href="BCS-54">BCS-54</a>, "DTC Inspection Priority Chart" (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.

# 7. 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.

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#### **DIAGNOSIS AND REPAIR WORK FLOW**

#### < BASIC INSPECTION >

#### Is malfunctioning part detected?

YES >> GO TO 8.

NO >> Check voltage of related BCM terminals using CONSULT-III.

# 8.repair or replace the malfunctioning part

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

>> GO TO 9.

# 9. FINAL CHECK

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.

#### Does the symptom reappear?

YES (DTC is detected)>>GO TO 7.

YES (Symptom remains)>>GO TO 6.

NO >> INSPECTION END

#### INSPECTION AND ADJUSTMENT

#### < BASIC INSPECTION >

# INSPECTION AND ADJUSTMENT ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

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ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000005946890

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

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ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement

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

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# DTC/CIRCUIT DIAGNOSIS

### **B2621 INSIDE ANTENNA**

DTC Logic

#### DTC DETECTION LOGIC

DTC	CONSULT-III dis- play description	DTC detecting condition	Possible cause
B2621	INSIDE ANTENNA	An excessive high or low voltage from inside antenna (instrument center) is sent to BCM.	Inside key antenna (instrument center)     Between BCM and Inside key antenna (instrument center)

#### DTC CONFIRMATION PROCEDURE

# 1.perform dtc confirmation procedure

- Select "INTELLIGENT KEY" of "BCM" using CONSULT-III.
- 2. Select "INSIDE ANT DIAGNOSIS" in "WORK SUPPORT" mode.
- Perform inside key antenna ("INSIDE ANT DIAGNOSIS") on "WORK SUPPORT" of "INTELLIGENT KEY".
- 4. Check BCM for DTC.

#### Is inside key antenna DTC detected?

YES >> Refer to <u>DLK-60</u>, "<u>Diagnosis Procedure</u>".

NO >> Inside key antenna (instrument center) is OK.

### Diagnosis Procedure

INFOID:0000000005946893

# 1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+)				Cimpal	
ВС	CM	(–)	Condition	Signal (Reference value)	
Connector	Terminal			,	
M123	84, 85	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB	
WIIZS	04, 03	Glound	When Intelligent Key is not in antenna detection area	(V) 15 10 5 0  MKIA3838GB	

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79. "Removal and Installation".

NO >> GO TO 2.

# 2. CHECK INSIDE KEY ANTENNA CIRCUIT

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

#### **B2621 INSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

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

В	CM	Inside key antenna	(instrument center)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M123	84	M131	1	Existed
WIZS	85	WHOT	2	LXISIGU

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M123	84	Ground	Not existed
IVI 123	85		NOT EXISTER

#### 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 with oscilloscope.

(+) BCM (-)		Condition	Signal	
		(-)	Condition	(Reference value)
Connector	Terminal			
M123	84, 85	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 1
IVITZO	O <del>1</del> , 60	Sibulia	When Intelligent Key is not in antenna detection area	(V) 15 10 5 0 JMKIA3838GB

#### Is the inspection result normal?

YES >> Replace inside key antenna (instrument center).

NO >> Replace BCM. Refer to BCS-79, "Removal and Installation".

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### **B2622 INSIDE ANTENNA**

DTC Logic

#### DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC detecting condition	Possible cause
B2622	INSIDE ANTENNA	An excessive high or low voltage from inside antenna (console) is sent to BCM.	Inside key antenna (console)     Between BCM and Inside key antenna (console)

#### DTC CONFIRMATION PROCEDURE

# 1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT-III.
- 2. Select "INSIDE ANT DIAGNOSIS" in "WORK SUPPORT" mode.
- Perform inside key antenna ("INSIDE ANT DIAGNOSIS") on "WORK SUPPORT" of "INTELLIGENT KEY".
- 4. Check BCM for DTC.

#### Is inside key antenna DTC detected?

YES >> Refer to <u>DLK-62</u>, "<u>Diagnosis Procedure</u>".

NO >> Inside key antenna (console) is OK.

### Diagnosis Procedure

INFOID:0000000005946895

# 1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

- Turn ignition switch OFF.
- Check signal between BCM harness connector and ground with oscilloscope.

(+) BCM		(-)	Condition	Signal (Reference value)	
Connector	Terminal			(Reference value)	
M123	86, 87	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB	
W125	00, 07	Stourid	When Intelligent Key is not in antenna detection area	(V) 15 10 5 0 5 0 JMKIA3838GB	

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> GO TO 2.

# 2. CHECK INSIDE KEY ANTENNA CIRCUIT

- 1. Disconnect BCM connector and inside key antenna (console) connector.
- Check continuity between BCM harness connector and inside key antenna (console) harness connector.

#### **B2622 INSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

E	BCM	Inside key ant	enna (console)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M123	86	M146	1	Existed
IVI 123	87	- IVI 140	2	Existed

3. Check continuity between BCM harness connector and ground.

	BCM		Continuity
Connector	Terminal	Ground	Continuity
M123	86	Ground	Not existed
W123	87		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 (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 with oscilloscope.

(+) BCM		(-)	Condition	Signal
Connector	Terminal	. ,		(Reference value)
M123	86, 87	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB
WIZS	60, 67	Ground	When Intelligent Key is not in antenna detection area	(V) 15 10 5 0  JMKIA3838GB

#### Is the inspection result normal?

YES >> Replace inside key antenna (console).

NO >> Replace BCM. Refer to <u>BCS-79</u>. "Removal and Installation".

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#### **B2623 INSIDE ANTENNA**

DTC Logic

#### DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC detecting condition	Possible cause
B2623	INSIDE ANTENNA	An excessive high or low voltage from inside antenna (trunk room) is sent to BCM.	Inside key antenna (trunk room)     Between BCM and Inside key antenna (trunk room)

#### DTC CONFIRMATION PROCEDURE

# 1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT-III.
- Select "INSIDE ANT DIAGNOSIS" in "WORK SUPPORT" mode.
- Perform inside key antenna ("INSIDE ANT DIAGNOSIS") on "WORK SUPPORT" of "INTELLIGENT KEY".
- 4. Check BCM for DTC.

#### Is inside key antenna DTC detected?

YES >> Refer to <u>DLK-64, "Diagnosis Procedure"</u>.

NO >> Inside key antenna (trunk room) is OK.

# Diagnosis Procedure

INFOID:0000000005946897

# 1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

- Turn ignition switch OFF.
- Check signal between BCM harness connector and ground with oscilloscope.

(+) BCM		(–)	Condition	Signal (Reference value)
Connector	Terminal			( 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
M123	88, 89	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB
W1720	35, 55	Glodina	When Intelligent Key is not in antenna detection area	(V) 15 10 5 0  MKIA3838GB

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> GO TO 2.

# 2. CHECK INSIDE KEY ANTENNA CIRCUIT

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

#### **B2623 INSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

Е	BCM	Inside key ante	nna (trunk room)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M123	88	B49	1	Existed
101123	89	D49	2	LXISIEU

3. Check continuity between BCM harness connector and ground.

В	CM		
Connector	Terminal	Ground	Continuity
M123	88	Ground	Not existed
WIIZS	89		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 (trunk room). (New antenna or other antenna)
- 2. Connect BCM connector and inside key antenna (trunk room) connector.
- 3. Check signal between BCM harness connector and ground with oscilloscope.

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			(Neteronee value)
M123	88, 89	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB
WIZS	00, 09	Ground	When Intelligent Key is not in antenna detection area	(V) 15 10 5 0

#### Is the inspection result normal?

YES >> Replace inside key antenna (trunk room).

NO >> Replace BCM. Refer to <u>BCS-79</u>. "Removal and Installation".

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#### **B2626 OUTSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

### **B2626 OUTSIDE ANTENNA**

DTC Logic

#### DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC detecting condition	Possible cause
B2626	OUTSIDE ANTENNA	An excessive high or low voltage from outside key antenna (driver side) is sent to BCM	Outside key antenna (driver side)     Between BCM ~ Outside key antenna (driver side)

#### DTC CONFIRMATION PROCEDURE

# 1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Check "Self Diagnostic Result" mode of "BCM" using CONSULT-III.

#### Is DTC detected?

YES >> Refer to <u>DLK-66</u>, "<u>Diagnosis Procedure</u>".

NO >> Inside key antenna (driver side) is OK.

### Diagnosis Procedure

INFOID:0000000006059408

# 1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector Terminal		(-)	Condition	Signal (Reference value)	
Driver side	M123	78, 79	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB
				When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA3838GB

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> GO TO 2.

# 2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

- 1. Disconnect BCM connector and outside key antenna (driver side) connector.
- Check continuity between BCM harness connector and outside key antenna (driver side) harness connector.

#### **B2626 OUTSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

E	BCM	Outside key ante	enna (driver side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M123	78	D14	1	Existed
IVI 123	79	014	2	LXISIEU

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Terminal	Ground	Continuity	
M123	78	Giodila	Not existed	
WIIZS	79		Not existed	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM		(-)	Condition	Signal (Reference value)	
Connec	tor	Terminal			
Driver side	M123	78, 79	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB
				When Intelligent Key is not in the antenna detection area	(V) 15 10 500 ms JMKIA3838GB

#### Is the inspection result normal?

YES >> Replace outside key antenna (driver side).

NO >> Replace BCM. Refer to BCS-79, "Removal and Installation".

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#### **B2627 OUTSIDE ANTENNA**

### **B2627 OUTSIDE ANTENNA**

DTC Logic

#### DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC detecting condition	Possible cause
B2627	OUTSIDE ANTENNA	An excessive high or low voltage from outside key antenna (passenger side) is sent to BCM	Outside key antenna (passenger side)     Between BCM ~ Outside key antenna (passenger side)

#### DTC CONFIRMATION PROCEDURE

### 1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Check "Self Diagnostic Result" mode of "BCM" using CONSULT-III.

#### Is DTC detected?

YES >> Refer to <u>DLK-68</u>, "<u>Diagnosis Procedure</u>".

NO >> Inside key antenna (passenger side) is OK.

### Diagnosis Procedure

INFOID:0000000006059410

# 1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM		(–)	Condition	Signal (Reference value)	
Conr	Connector Terminal				
Passenger	M123	80, 81	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB
side	29	33, 31	Sidana	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 5 500 ms  JMKIA3838GB

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> GO TO 2.

# 2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

- 1. Disconnect BCM connector and outside key antenna (passenger side) connector.
- Check continuity between BCM harness connector and outside key antenna (passenger side) harness connector.

#### **B2627 OUTSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

E	BCM	Outside key anten	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M123	80	D44	1	Existed
WITZS	81	D44	2	

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Terminal	Ground	Continuity	
M123	80	Ground	Not existed	
W123	81		Not existed	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM		(–)	Condition	Signal (Reference value)	
Conr	nector	Terminal			
Passenger	M123	80, 81	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB
side	WITZ	00, 01	Glound	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0  JMKIA3838GB

#### Is the inspection result normal?

YES >> Replace outside key antenna (passenger side).

NO >> Replace BCM. Refer to <u>BCS-79</u>, "Removal and Installation".

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#### **B2628 OUTSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

# **B2628 OUTSIDE ANTENNA**

DTC Logic

#### DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC detecting condition	Possible cause
B2628	OUTSIDE ANTENNA	An excessive high or low voltage from outside key antenna (rear bumper) is sent to BCM	Outside key antenna (rear bumper)     Between BCM – Outside key antenna (rear bumper)

#### DTC CONFIRMATION PROCEDURE

# 1. PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON.
- 2. Check "Self Diagnostic Result" mode of "BCM" using CONSULT-III.

#### Is DTC detected?

YES >> Refer to <u>DLK-70</u>, "<u>Diagnosis Procedure</u>".

NO >> Inside key antenna (rear bumper) is OK.

# Diagnosis Procedure

INFOID:0000000006059412

# 1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector Terminal		(-)	Condition	Signal (Reference value)	
		16111III.C.		When Intelligent Key is in the antenna detection area	(V) 15 10 5 0
Rear bumper	M123	82, 83	Ground	When Intelligent Key is not in the antenna detection area	JMKIA3839GB  (V) 15 10 500 ms  JMKIA3838GB

#### Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-79</u>, "Removal and Installation".

NO >> GO TO 2.

# 2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

- 1. Disconnect BCM connector and outside key antenna (rear bumper) connector.
- Check continuity between BCM harness connector and outside key antenna (rear bumper) harness connector.

#### **B2628 OUTSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

E	SCM	Outside key ante	Continuity	
Connector	Connector Terminal		Terminal	Continuity
M123	82	B63	1	Existed
IVI 123	83	D03	2	Existed

3. Check continuity between BCM harness connector and ground.

В	CM		
Connector	Terminal	Ground	Continuity
M123	82	Ground	Not existed
IVI 123	83		Not existed

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM Connector Terminal		(-)	Condition	Signal (Reference value)	
Rear	M123	82, 83	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB
bumper		,		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0  JMKIA3838GB

#### Is the inspection result normal?

YES >> Replace outside key antenna (rear bumper).

NO >> Replace BCM. Refer to <u>BCS-79</u>, "Removal and Installation".

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#### **DOOR SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

### **DOOR SWITCH**

# Component Function Check

#### INFOID:0000000005946906

# 1. CHECK FUNCTION

- 1. Select "DOOR LOCK" of "BCM" using CONSULT-III.
- 2. Select "DOOR SW-DR", "DOOR SW-AS", "DOOR SW-RL", "DOOR SW-RR" in "DATA MONITOR" mode.
- 3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
DOOR SW-DR	Driver side door	Open	On
DOOK SW-DK	Driver side door	Closed	Off
DOOR SW-AS	Passenger side door	Open	On
DOOR SW-AS		Closed	Off
DOOR SW-RL	Deen side deen III	Open	On
DOOK SW-KL	Rear side door LH	Closed	Off
DOOR SW-RR	B	Open	On
DOOK 300-KK	Rear side door RH	Closed	Off

#### Is the inspection result normal?

YES >> Door switch is OK.

NO >> Refer to <u>DLK-72</u>, "<u>Diagnosis Procedure</u>".

### Diagnosis Procedure

INFOID:0000000005946907

# 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 with oscilloscope.

### **DOOR SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

	(+)			
Door switch		(–)	Signal (Reference value)	
Conr	nector	Terminal		(10.010.100 10.100)
Front LH	B16			(V) 15 10 5 0 10 ms JPMIA0011GB
Front RH	B216	2	Ground	(V) 15 10 5 0 10 ms JPMIA0011GB
Rear LH	B23	2	Ground	(V) 15 10 5 0 10 ms JPMIA0011GB
Rear RH	B223			(V) 15 10 5 0 10 ms

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 BCM harness connector and door switch harness connector.

BCM		Door	Door switch	
Connector	Terminal	Connector	Terminal	Continuity
	47	B16 (Front LH)		
M121	45	B216 (Front RH)	2	Existed
IVI 12 I	48	B23 (Rear LH)	2	Existed
	46	B223 (Rear RH)		

3. Check continuity between BCM harness connector and ground.

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#### **DOOR SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

	BCM		Continuity	
Connector	Terminal		Continuity	
	47	Ground	Not existed	
M121	45			
IVITZT	48			
	46			

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> Repair or replace harness.

## 3. CHECK DOOR SWITCH

Refer to DLK-74, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace malfunctioning door switch.

## 4. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

#### >> INSPECTION END

## **Component Inspection**

INFOID:0000000005946908

## 1. CHECK DOOR SWITCH

- 1. Turn ignition switch OFF.
- Disconnect malfunction door switch connector.
- 3. Check continuity between door switch terminals.

Door switch		Condition		Continuity
Terminal				Continuity
2	Ground part of door	Door switch	Pressed	Not exists
	switch	Door switch	Released	Exists

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace malfunctioning door switch.

#### DOOR LOCK AND UNLOCK SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

### DOOR LOCK AND UNLOCK SWITCH

## Component Function Check

#### INFOID:0000000005946899

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## 1. CHECK FUNCTION

- 1. Select "DOOR LOCK" of "BCM" using CONSULT-III.
- 2. Select "CDL LOCK SW", "CDL UNLOCK SW" in "DATA MONITOR" mode.
- 3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
CDL LOCK SW		Lock	ON
CDL LOCK 3W	- Door lock and unlock switch	Unlock	OFF
CDL UNLOCK SW		Lock	OFF
CDL UNLOCK SW		Unlock	ON

#### Is the inspection result normal?

YES >> Door lock and unlock switch is OK.

NO >> Refer to <u>DLK-75</u>, "<u>Diagnosis Procedure</u>".

### Diagnosis Procedure

#### INFOID:0000000005946900

## 1. CHECK POWER WINDOW SWITCH

- 1. Turn ignition switch ON.
- 2. Check power window operation.

#### Does power window operate?

YES >> Replace power window main switch.

NO >> Refer to PWC-59, "Diagnosis Procedure".

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#### DOOR KEY CYLINDER SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

## DOOR KEY CYLINDER SWITCH

### Component Function Check

INFOID:00000000006059414

## 1. CHECK FUNCTION

- 1. Select "DOOR LOCK" of "BCM" using CONSULT-III.
- Select "KEY CYL LK-SW", "KEY CYL UN-SW" in "DATA MONITOR" mode.
- 3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
KEY CYL LK-SW		Lock	ON
KET CTL LK-SW	Driver aide deer key eylinder	Neutral / Unlock	OFF
KEY CYL UN-SW	Driver side door key cylinder	Unlock	ON
NET CIL UN-SW		Neutral / Lock	OFF

#### Is the inspection result normal?

YES >> Door key cylinder switch is OK.

NO >> Refer to <u>DLK-76</u>, "<u>Diagnosis Procedure</u>".

## Diagnosis Procedure

INFOID:0000000006059415

## 1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect front door lock assembly (driver side) connector.
- 3. Check voltage between front door lock assembly (driver side) harness connector and ground.

·	+)		Voltage (Approx.)	
Front door lock ass	sembly (driver side)	(-)		
Connector	Terminal		· · · · /	
D15	5	Ground	5 V	
D13	6	Giodila	3 V	

#### 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 front door lock assembly (driver side) harness connector.

Power wind	Power window main switch		Front door lock assembly (driver side)	
Connector	Terminal	Connector Terminal		Continuity
D22	15	D15	6	Existed
DZZ	16	DIS	5	Existed

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

Power windo	w main switch		Continuity	
Connector	Terminal	Ground	Continuity	
D22	15	Ground	Not existed	
	16			

#### Is the inspection result normal?

YES >> Replace power window main switch. Refer to <a href="PWC-72">PWC-72</a>, "Removal and Installation".

#### DOOR KEY CYLINDER SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness.

## ${f 3.}$ check door key cylinder switch ground circuit

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

Front door lock as:	sembly (driver side)		Continuity
Connector	Terminal	Ground	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-77, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace front door lock assembly (driver side).

### 5. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

## Component Inspection

1. CHECK DOOR KEY CYLINDER SWITCH

- Turn ignition switch OFF.
- 2. Disconnect front door lock assembly (driver side) connector.
- 3. Check continuity between front door lock assembly (driver side) terminals.

Front door lock assembly (driver side)  Terminal		Condition		Continuity
3	4	Neutral / Lock	Not existed	
6		Lock	Existed	
		Neutral / Unlock	Not existed	

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front door lock assembly (driver side).

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#### DOOR REQUEST SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

### DOOR REQUEST SWITCH

## Component Function Check

## 1. CHECK FUNCTION

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT-III.
- 2. Select "REQ SW -DR", "REQ SW -AS" in "DATA MONITOR" mode.
- 3. Check that the function operates normally according to the following conditions.

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
NEW OW -AO		Released	Off

#### Is the inspection result normal?

YES >> Door request switch is OK.

NO >> Refer to <u>DLK-78</u>, "<u>Diagnosis Procedure</u>".

### Diagnosis Procedure

INFOID:0000000005946930

INFOID:0000000005946929

## 1. CHECK DOOR REQUEST SWITCH INPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect malfunctioning front outside handle assembly connector.
- 3. Check voltage between malfunctioning front outside handle assembly harness connector and ground.

	(+)			Voltage (Approx.)	
Front outs	Front outside handle assembly (request switch)				
Con	Connector Terminal			(	
LH	D17	1	Ground	12 V	
RH	D47	<b>!</b>	Giodila	12 V	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2. CHECK DOOR REQUEST SWITCH CIRCUIT

- 1. Disconnect BCM connector.
- Check continuity between BCM harness connector and malfunctioning front outside handle assembly harness connector.

В	CM	Front outside handle assembly (request switch)			Continuity
Connector	Terminal	Connector		Terminal	Continuity
M123	75	LH	D17	1	Existed
W123	76	RH	D47	1	LXISIGU

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M123	75	Ground	Not existed
IVITZS	76		INOL EXISTED

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> Repair or replace harness.

#### DOOR REQUEST SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

## 3.check door request switch ground circuit

Check continuity between malfunctioning front outside handle assembly harness connector and ground.

Front outside handle assembly (request switch)				Continuity	
Connector		Terminal	Ground	Continuity	
LH	D17	2	Ground	Existed	
RH	D47	2		Existed	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4. CHECK DOOR REQUEST SWITCH

Refer to DLK-79, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace malfunctioning front outside handle assembly.

## 5. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

## Component Inspection

1. CHECK DOOR REQUEST SWITCH

- Turn ignition switch OFF.
- Disconnect front outside handle assembly connector. 2.
- Check continuing between front outside handle assembly terminal.

Front outside handle assembly (request switch)		Condition		Continuity
Terminal				Continuity
1	2	Door request switch	Pressed	Existed
ı	2	Door request switch	Released	Not existed

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front outside handle.

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INFOID:0000000005946931

#### TRUNK LID OPENER REQUEST SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

## TRUNK LID OPENER REQUEST SWITCH

## Component Function Check

#### INFOID:0000000005946932

## 1. CHECK FUNCTION

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT-III.
- 2. Select "REQ SW -BD/TR" in "DATA MONITOR" mode.
- 3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
REQ SW -BD/TR	Trunk lid opener request	Pressed	On
	switch	Released	Off

#### Is the inspection result normal?

YES >> Trunk lid opener request switch is OK.

NO >> Refer to <u>DLK-80. "Diagnosis Procedure"</u>.

### Diagnosis Procedure

INFOID:0000000005946933

## 1. CHECK TRUNK LID OPENER REQUEST SWITCH OUTPUT SIGNAL

- Turn ignition switch OFF.
- 2. Disconnect trunk lid opener request switch connector.
- 3. Check voltage between trunk lid opener request switch harness connector and ground.

(+)			Voltage	
Trunk lid opener request switch		(-)	Voltage (Approx.)	
Connector Terminal				
T4	1	Ground	12 V	

#### 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.
- Check continuity between BCM harness connector and trunk lid opener request switch harness connector.

В	СМ	Trunk lid opene	er request switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M121	51	T4	1	Existed

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector Terminal		Ground	Continuity	
M121	51		Not existed	

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> Repair or replace harness.

### 3.CHECK TRUNK LID OPENER REQUEST SWITCH GROUND CIRCUIT

Check continuity between trunk lid opener request switch harness connector and ground.

#### TRUNK LID OPENER REQUEST SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

Trunk lid opene	er request switch		Continuity
Connector	Connector Terminal		Continuity
T4	2		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK TRUNK LID OPENER REQUEST SWITCH

Refer to DLK-81, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace trunk lid opener request switch.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

## Component Inspection

1. CHECK TRUNK LID OPENER REQUEST SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect trunk lid opener request switch connector.
- 3. Check continuing between trunk lid opener request switch terminal.

Trunk lid opener request switch		Condition		Continuity
Terminal				Continuity
1	2	Trunk lid opener re-	Pressed	Existed
ı	2	quest switch	Released	Not existed

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace trunk lid opener request switch.

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#### TRUNK LID OPENER SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

### TRUNK LID OPENER SWITCH

## Component Function Check

## 1. CHECK FUNCTION

- 1. Select "TRUNK" of "BCM" using CONSULT-III.
- 2. Select "TR/BD OPEN SW" in "DATA MONITOR" mode.
- 3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
TR/BD OPEN SW	Trunk lid opener switch	Pressed	On
	Trunk ilu opener switch	Released	Off

#### Is the inspection result normal?

YES >> Trunk lid opener switch is OK.

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

## Diagnosis Procedure

INFOID:0000000005946924

INFOID:0000000005946923

## 1. CHECK TRUNK LID OPENER 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.

	+) pener switch Terminal	(-)	Signal (Reference value)
M187	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 SWITCH CIRCUIT

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

В	CM	Trunk lid opener switch				Continuity
Connector	Terminal	Connector	Terminal	Continuity		
M120	30	M187	1	Existed		

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Connector Terminal		Continuity
M120	30		Not existed

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> Repair or replace harness.

#### TRUNK LID OPENER SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

## 3.CHECK TRUNK LID OPENER SWITCH GROUND CIRCUIT

Check continuity between trunk lid opener switch harness connector and ground.

Trunk lid op	pener switch		Continuity
Connector	Terminal	Ground	Continuity
M187	2		Existed

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

## 4. CHECK TRUNK LID OPENER SWITCH

Refer to DLK-83, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace trunk lid opener switch.

#### 5. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

#### >> INSPECTION END

## Component Inspection

1. CHECK TRUNK LID OPENER SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect trunk lid opener switch connector.
- 3. Check continuity between trunk lid opener switch terminals.

Trunk lid opener switch		Condition		Continuity
Terr	Terminal		Condition	
1	2	Trunk lid opener switch	Pressed	Existed
	2	Trunk ila opener switch	Release	Not existed

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace trunk lid opener switch.

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Revision: 2010 June **DLK-83** 2011 M37/M56

#### TRUNK LID OPENER CANCEL SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

## TRUNK LID OPENER CANCEL SWITCH

## Component Function Check

#### INFOID:0000000005946926

## 1. CHECK FUNCTION

- 1. Select "TRUNK" of "BCM" using CONSULT-III.
- 2. Select "TR CANCEL SW" in "DATA MONITOR" mode.
- 3. Check that the function operates normally according to the following conditions.

Monitor item	Con	Status	
TR CANCEL SW	Trunk lid opener cancel switch	Pressed	On
THE OFFICE OVE	Trunk na opener cancer switch	Released	Off

#### Is the inspection result normal?

YES >> Trunk lid opener cancel switch is OK.

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

## Diagnosis Procedure

INFOID:0000000005946927

## 1. CHECK TRUNK LID OPENER CANCEL 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)
M18	1	Ground	(V) 15 10 5 0 10 ms

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2.check trunk lid opener switch circuit

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

В	CM	Trunk lid opener cancel switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M121	44	M18	1	Existed

3. Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector	Terminal	Ground	Continuity
M121	44		Not existed

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> Repair or replace harness.

#### TRUNK LID OPENER CANCEL SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

## ${f 3.}$ CHECK TRUNK LID OPENER CANCEL SWITCH GROUND CIRCUIT

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

Trunk lid opene	er cancel switch		Continuity
Connector	Terminal	Ground	Continuity
M18	2		Existed

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

## 4. CHECK TRUNK LID OPENER CANCEL SWITCH

Refer to DLK-85, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace trunk lid opener cancel switch.

#### 5.CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

## Component Inspection

INFOID:0000000005946928

## 1. CHECK TRUNK LID OPENER CANCEL SWITCH

- 1. Turn ignition switch OFF.
- Disconnect trunk lid opener cancel switch connector. 2.
- Check continuity between trunk lid opener cancel switch terminal.

Trunk lid opener cancel switch		Condition		Continuity
Terminal				
4	2	Trunk lid opener can-	Press and hold	Existed
	2	cel switch	Release	Not existed

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace trunk lid opener cancel switch. DLK

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**DLK-85** Revision: 2010 June 2011 M37/M56

#### TRUNK ROOM LAMP SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

### TRUNK ROOM LAMP SWITCH

## Component Function Check

#### INFOID:0000000005946935

## 1. CHECK FUNCTION

- 1. Select "TRUNK" of "BCM" using CONSULT-III.
- 2. Select "TRNK/HAT MNTR" in "DATA MONITOR" mode.
- 3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
TRNK/HAT MNTR	Trunk lid	Open	On
	Trunk iiu	Closed	Off

#### Is the inspection result normal?

YES >> Trunk room lamp switch is OK.

NO >> Refer to <u>DLK-87</u>, "Component Inspection".

## Diagnosis Procedure

INFOID:0000000005946936

## 1. CHECK TRUNK ROOM LAMP SWITCH INPUT SIGNAL

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

	t) ck assembly Terminal	(-)	Signal (Reference value)
Т3	1	Ground	(V) 15 10 5 0 ++10ms PKIB4960J

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2.CHECK TRUNK ROOM LAMP SWITCH CIRCUIT

- 1. Disconnect BCM connector.
- 2. Check continuity between BCM connector and trunk lid lock assembly connector.

В	СМ	Trunk lid lock assembly		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M121	42	Т3	1	Existed

3. Check continuity between BCM connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M121	42		Not existed

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> Repair or replace harness.

#### TRUNK ROOM LAMP SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

## 3.CHECK TRUNK ROOM LAMP SWITCH GROUND CIRCUIT

Check continuity between trunk lid lock assembly connector and ground.

Trunk lid lock assembly			Continuity
Connector	Terminal	Ground	Continuity
Т3	2		Existed

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

## 4. CHECK TRUNK ROOM LAMP SWITCH

Refer to DLK-87, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace trunk lid lock assembly.

#### 5. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

## Component Inspection

1. CHECK TRUNK ROOM LAMP SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect trunk lid lock assembly connector.
- 3. Check continuing between trunk room lamp switch terminal.

Trunk lid lock assembly		Condition		Continuity
Terr	minal	Con	uition	Continuity
1	2	Trunk lid	OPEN	Existed
	2	Trutik ila	CLOSE	Not existed

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace trunk lid lock assembly.

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#### < DTC/CIRCUIT DIAGNOSIS >

### DOOR LOCK ACTUATOR

#### **DRIVER SIDE**

### DRIVER SIDE : Component Function Check

INFOID:0000000005946909

## 1. CHECK FUNCTION

- 1. Select "DOOR LOCK" of "BCM" using CONSULT-III.
- 2. Select "DOOR LOCK" in "ACTIVE TEST" mode.
- 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-88</u>, "<u>DRIVER SIDE</u>: <u>Diagnosis Procedure</u>".

### DRIVER SIDE: Diagnosis Procedure

INFOID:0000000005946910

## 1. CHECK DOOR LOCK ACTUATOR OUTPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect front door lock assembly (driver side) connector.
- 3. Check voltage between front door lock assembly (driver side) harness connector and ground.

(+) Front door lock assembly (driver side)		(–)	Condition		Voltage (Approx.)
Connector	Terminal				(· 'FF' 0//')
D15	1	Ground	Door lock and un- lock switch	Lock	12 V
DIS	2	Giouna		Unlock	12 V

#### Is the inspection result normal?

YES >> Replace front door lock assembly (driver side).

NO >> GO TO 2.

## 2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

В	ВСМ		Front door lock assembly (driver side)	
Connector	Terminal	Connector	Terminal	Continuity
M122	M123		1	Existed
IVITZZ	66	D15	2	LXISIEU

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M122	65	Ground	Not existed
IVITZZ	66		NOT EXISTED

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### 3.CHECK BCM OUTPUT SIGNAL

- Connect BCM connector.
- Check voltage between BCM harness connector and ground.

#### < DTC/CIRCUIT DIAGNOSIS >

(+) BCM		(–)	Condition Voltage (Approx.		Voltage (Approx.)
Connector	Terminal				(11 /
M122	65	Ground	d Door lock and unlock switch	Lock	12 V
IVITZZ	66	Ground	Door lock and unlock switch	Unlock	12 V

#### Is the inspection result normal?

YES >> Check for internal short of each door lock actuator and fuel lid lock actuator.

NO >> Replace BCM. Refer to BCS-79, "Removal and Installation".

#### PASSENGER SIDE

### PASSENGER SIDE: Component Function Check

1. CHECK FUNCTION

- 1. Select "DOOR LOCK" of "BCM" using CONSULT-III.
- 2. Select "DOOR LOCK" in "ACTIVE TEST" mode.
- 3. 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-89</u>, "<u>PASSENGER SIDE</u>: <u>Diagnosis Procedure</u>".

## PASSENGER SIDE : Diagnosis Procedure

## 1. CHECK DOOR LOCK ACTUATOR OUTPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect front door lock assembly (passenger side) connector.
- Check voltage between front door lock assembly (passenger side) harness connector and ground.

(	+)				
	Front door lock assembly (passenger side)		Condition		Voltage (Approx.)
Connector	Terminal				
D45	1	Ground	Door lock and un-	Unlock	12 V
D43	2	Ground	lock switch	Lock	12 V

#### Is the inspection result normal?

YES >> Replace front door lock assembly (passenger side).

NO >> GO TO 2.

### 2. CHECK DOOR LOCK ACTUATOR CIRCUIT

Disconnect BCM connector.

Check continuity between BCM harness connector and front door lock assembly (passenger side) harness connector.

В	СМ	Front door lock asser	mbly (passenger side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M122	59	D45	1	Existed
IVITZZ	65	D45	2	LAISIEU

3. Check continuity between BCM harness connector and ground.

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#### < DTC/CIRCUIT DIAGNOSIS >

BCM			Continuity	
Connector	Terminal	Ground	Continuity	
M122	59	Giodila	Not existed	
IVITZZ	65		inoi existed	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3.CHECK BCM OUTPUT SIGNAL

- 1. Connect BCM connector.
- Check voltage between BCM harness connector and ground.

(	+)				Voltage	
В	СМ	(–)	Condition		Condition Voltage (Approx.)	(Approx.)
Connector	Terminal				, , ,	
M122	59	Ground	Door lock and unlock switch	Unlock	12 V	
IVITZZ	65	Giodila	Door lock and unlock switch	Lock	12 V	

#### Is the inspection result normal?

YES >> Check for internal short of each door lock actuator and fuel lid lock actuator.

NO >> Replace BCM. Refer to <u>BCS-79</u>, "Removal and Installation".

#### REAR LH

### REAR LH: Component Function Check

INFOID:0000000005946913

## 1. CHECK FUNCTION

- 1. Select "DOOR LOCK" of "BCM" using CONSULT-III.
- Select "DOOR LOCK" in "ACTIVE TEST" mode.
- 3. 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 DLK-90, "REAR LH: Diagnosis Procedure".

## REAR LH: Diagnosis Procedure

INFOID:0000000005946914

## 1. CHECK DOOR LOCK ACTUATOR OUTPUT SIGNAL

- Turn ignition switch OFF.
- Disconnect rear door lock assembly LH.
- Check voltage between rear door lock assembly LH harness connector and ground.

(+)  Rear door lock assembly LH		(–)	Condition		Voltage (Approx.)
Connector	Terminal				(Αρρίολ.)
D55	1	Ground	Door lock and unlock switch	Lock	12 V
D55 -	2	Giouna		Unlock	

#### Is the inspection result normal?

YES >> Replace rear door lock assembly LH.

NO >> GO TO 2.

## 2.CHECK DOOR LOCK ACTUATOR CIRCUIT

- Disconnect BCM connector.
- 2. Check continuity between BCM harness connector and rear door lock assembly LH harness connector.

#### < DTC/CIRCUIT DIAGNOSIS >

E	BCM	Rear door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M122	55	D55	2	Existed
	65	D33	1	LXISIEU

Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Terminal	Ground	Continuity	
M122	55	Giodila	Not existed	
	65		Not existed	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3.CHECK BCM OUTPUT SIGNAL

- Connect BCM connector.
- Check voltage between BCM harness connector and ground.

	+) CM	(–)	Condition		(-) Condition Voltage (Approx.)		Voltage (Approx.)
Connector	Terminal				(11 - 7		
M122	55	Ground	d Door lock and unlock switch	Unlock	12 V		
IVITZZ	65	Giodila	Door lock and unlock switch	Lock	12 V		

#### Is the inspection result normal?

>> Check for internal short of each door lock actuator and fuel lid lock actuator.

>> Replace BCM. Refer to BCS-79, "Removal and Installation". NO

#### REAR RH

## REAR RH: Component Function Check

# 1. CHECK FUNCTION

Select "DOOR LOCK" of "BCM" using CONSULT-III.

Select "DOOR LOCK" in "ACTIVE TEST" mode.

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

#### Is the inspection result normal?

YES >> Door lock actuator is OK.

>> Refer to DLK-91, "REAR RH: Diagnosis Procedure". NO

#### REAR RH: Diagnosis Procedure

## 1. CHECK DOOR LOCK ACTUATOR OUTPUT SIGNAL

- Turn ignition switch OFF.
- 2. Disconnect rear door lock assembly RH.
- Check voltage between rear door lock assembly RH harness connector and ground.

`	+) k assembly RH	(-)	Con	dition	Voltage (Approx.)
Connector	Terminal				( 11 . 5 )
D75	1 Cround	Ground	Door lock and	Unlock	12 V
<i>D1</i> 3	2	Glouria	unlock switch	Lock	12 V

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#### < DTC/CIRCUIT DIAGNOSIS >

#### Is the inspection result normal?

YES >> Replace rear door lock assembly RH.

NO >> GO TO 2.

## 2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM connector.

2. Check continuity between BCM harness connector and rear door lock assembly RH harness connector.

В	СМ	Rear door lock	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M122	55	D75	1	Existed
IVITZZ	65	D13	2	LXISIEU

3. Check continuity between BCM harness connector and ground.

ВС	CM		Continuity	
Connector	Terminal	Ground	Continuity	
M122	55	Ground	Not Existed	
	65		NOT EXISTED	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3.CHECK BCM OUTPUT SIGNAL

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

	+) CM	(–)	Condition		Voltage (Approx.)
Connector	Terminal				(* <b>.pp</b> . <b>0</b> /)
M122	55	Ground	Door lock and unlock switch	Unlock	12 V
IVITZZ	65	Giouna	Door lock and unlock Switch	Lock	12 V

#### Is the inspection result normal?

YES >> Check for internal short of each door lock actuator and fuel lid lock actuator.

NO >> Replace BCM. Refer to BCS-79, "Removal and Installation".

#### **FUEL LID LOCK ACTUATOR**

#### < DTC/CIRCUIT DIAGNOSIS >

### **FUEL LID LOCK ACTUATOR**

## Component Function Check

## 1. CHECK FUNCTION

- 1. Select "DOOR LOCK" of "BCM" using CONSULT-III.
- 2. Select "DOOR LOCK" in "ACTIVE TEST" mode.
- 3. Touch "ALL LCK" or "ALL UNLK" to check that it works normally.

#### Is the inspection result normal?

YES >> Fuel lid lock actuator is OK.

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

## Diagnosis Procedure

## 1. CHECK FUEL LID LOCK ACTUATOR INPUT SIGNAL

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

(+	)				V. Ita
Fuel lid lock actuator		(–)	Condition		Voltage (Approx.)
Connector	Terminal				(11 - 7
B242	1 Group	Ground	Door lock and	Unlock	12 V
D242	2	Giodria	unlock switch	Lock	12 V

#### Is the inspection result normal?

YES >> Replace fuel lid lock actuator.

NO >> GO TO 2.

### 2. CHECK FUEL LID LOCK ACTUATOR CIRCUIT

- 1. Disconnect BCM connector.
- 2. Check continuity between BCM harness connector and all door lock actuator harness connector.

ВСМ		Fuel lid lock actuator		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M122	65	B242	2	Existed	
M122	66	D242	1	Existed	

3. Check continuity between BCM harness connector and ground.

В	СМ		Continuity	
Connector	Terminal	Ground	Continuity	
M122	65	Giouna	Not existed	
IVI I Z Z	66		Not existed	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3.CHECK BCM OUTPUT SIGNAL

- Connect BCM connector.
- 2. Check voltage between BCM harness connector and ground.

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### **FUEL LID LOCK ACTUATOR**

### < DTC/CIRCUIT DIAGNOSIS >

	+) CM	(–)	Condition		Voltage (Approx.)
Connector	Terminal				
M122	65	Ground	Door lock and unlock switch	Lock	12 V
IVIIZZ	66	Giodila	Door lock and unlock switch	Unlock	12 V

#### Is the inspection result normal?

YES >> Check for internal short of each door lock actuator.

NO >> Replace BCM. Refer to BCS-79, "Removal and Installation".

#### TRUNK LID OPENER ACTUATOR

#### < DTC/CIRCUIT DIAGNOSIS >

### TRUNK LID OPENER ACTUATOR

## Component Function Check

## 1. CHECK FUNCTION

- Select "INTELLIGENT KEY" of "BCM" using CONSULT-III.
- Select "TRUNK/GLASS HATCH" in "ACTIVE TEST" mode.
- Touch "OPEN" to check that it works normally.

#### Is the inspection result normal?

YES >> Trunk lid opener actuator is OK.

>> Refer to DLK-95, "Diagnosis Procedure". NO

## Diagnosis Procedure

## 1. CHECK TRUNK LID OPENER INPUT SIGNAL

- Turn ignition switch OFF. 1.
- 2. Disconnect trunk lid lock assembly (trunk lid opener actuator) connector.
- Check voltage between trunk lid lock assembly (trunk lid opener actuator) harness connector and ground.

(	(+)			
	Trunk lid lock assembly (trunk lid opener actuator)		Condition	Voltage (Approx.)
Connector	Terminal			
Т3	3	Ground	Trunk lid opener switch is ON	12 V

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2.CHECK TRUNK LID OPENER ACTUATOR CIRCUIT

- Disconnect BCM connector.
- Check continuity between BCM harness connector and trunk lid lock assembly (trunk lid opener actuator) harness connector.

ВСМ		Trunk lid lock assembly (trunk lid opener actuator)		Continuity
Connector	Terminal	Connector	Terminal	
M121	53	Т3	3	Existed

Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector Terminal		Ground	Continuity
M121	53		Not existed

#### Is the inspection result normal?

>> Replace BCM. Refer to BCS-79, "Removal and Installation". YES

NO >> Repair or replace harness.

### $oldsymbol{3}.$ CHECK TRUNK LID OPENER ACTUATOR GROUND CIRCUIT

Check continuity between trunk lid lock assembly (trunk lid opener actuator) harness connector and ground.

	ck assembly ener actuator)	Ground	Continuity
Connector	Connector Terminal		
T3	2		Existed

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### TRUNK LID OPENER ACTUATOR

### < DTC/CIRCUIT DIAGNOSIS >

#### Is the inspection normal?

YES >> Replace trunk lid lock assembly (trunk lid opener actuator).

NO >> Repair or replace harness.

#### REMOTE KEYLESS ENTRY RECEIVER

#### < DTC/CIRCUIT DIAGNOSIS >

## REMOTE KEYLESS ENTRY RECEIVER

## Component Function Check

#### INFOID:0000000006071734

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### 1. CHECK FUNCTION

- Select "INTELLIGENT KEY" of "BCM" using CONSULT-III.
- Select "RKE OPE COUN1" in "DATA MONITOR" mode.
- Check that the function operates normally according to the following conditions.

Monitor item	Condition
RKE OPE COUN1	Check whether value changes when operating Intelligent Key

#### Is the inspection result normal?

YES >> Remote keyless entry receiver is OK.

>> Refer to DLK-97, "Diagnosis Procedure". NO

## Diagnosis Procedure

#### INFOID:0000000006071735

## 1. CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT SIGNAL

- Turn ignition switch OFF.
- Check signal between remote keyless entry receiver harness connector and ground using oscilloscope.

	(+)  Remote keyless entry receiver		Condition	Signal (Reference value)
Connector	Terminal			
M104	2	Ground	Waiting	(V) 15 10 5 0
			Signal receiving	(V) 15 10 5 0 WWWWWWWWWWWWWWWWWWWWWWWWWWWWW

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> GO TO 3.

## 2.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 1

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

В	CM	Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M120	20	M104	2	Existed

#### Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness.

**DLK-97** Revision: 2010 June 2011 M37/M56

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#### REMOTE KEYLESS ENTRY RECEIVER

#### < DTC/CIRCUIT DIAGNOSIS >

## ${f 3.}$ CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 2

- 1. Disconnect BCM connector.
- 2. Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M120	20		Not existed

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

## 4. CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

- 1. Disconnect remote keyless entry receiver.
- 2. Check signal between remote keyless entry receiver harness connector and ground using oscilloscope.

Remote keyles	(+)  Remote keyless entry receiver  Connector Terminal		Signal (Reference value)
M104	4	Ground	(V) 15 10 50 ms  JMKIA3838GB

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

## 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.

В	CM	Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M120	19	M104	4	Existed

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M120	19		Not existed

#### Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-79</u>, "Removal and Installation".

NO >> Repair or replace harness.

#### 6.CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT 1

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

BC	CM	Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M120	18	M104	1	Existed

#### REMOTE KEYLESS ENTRY RECEIVER

#### < DTC/CIRCUIT DIAGNOSIS >

3. Check continuity between BCM harness connector and ground.

ВСМ			Continuity
Connector	Terminal	Ground	Continuity
M120	18		Not existed

#### Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness.

## 7.CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT $_{ m 2}$

- 1. Connect BCM connector.
- 2. Check continuity between BCM harness connector and ground.

В	BCM		Continuity
Connector	Terminal	Ground	Continuity
M120	18		Existed

#### Is the inspection result normal?

YES >> Replace remote keyless entry receiver.

NO >> Replace BCM. Refer to BCS-79, "Removal and Installation".

## 8. CHECK REMOTE KEYLESS ENTRY RECEIVER RSSI OUTPUT SIGNAL

- 1. Connect BCM and remote keyless entry receiver connector.
- 2. Check signal between remote keyless entry receiver harness connector and ground using oscilloscope.

	(+) Remote keyless entry receiver		Condition	Signal (Reference value)	
Connector	Terminal			(Norononio Value)	
			Waiting	0 V	
M104	3	Ground	Signal receiving	(V) 15 10 5 0  MKIA3838GB	

#### Is the inspection result normal?

YES >> GO TO 9.

NO >> Replace remote keyless entry receiver.

## 9. CHECK REMOTE KEYLESS ENTRY RECEIVER RSSI CIRCUIT

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

В	CM	Remote keyless entry receiver		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M120	22	M104	3	Existed	

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> Repair or replace harness.

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### **UNLOCK SENSOR**

## Component Function Check

#### INFOID:0000000005946938

## 1. CHECK FUNCTION

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT-III.
- 2. Select "UNLK SEN -DR" in "DATA MONITOR" mode.
- 3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
UNLK SEN -DR	Driver side door	Lock	Off
ONLIN SEN -DIN	Driver side door	Unlock	On

#### Is the inspection result normal?

YES >> Unlock sensor is OK.

NO >> Refer to <u>DLK-100</u>, "<u>Diagnosis Procedure</u>".

## Diagnosis Procedure

INFOID:0000000005946939

### 1. CHECK BCM OUTPUT SIGNAL

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

Front door lock ass	(+) Front door lock assembly (driver side) Connector Terminal		Signal (Reference value)
Odifficator	Tommai		
D15	3	Ground	(V) 15 10 5 0 10ms PKIB4960J

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2. CHECK UNLOCK SENSOR CIRCUIT

- Disconnect BCM connector.
- Check continuity between BCM harness connector and front door lock assembly (driver side) harness connector.

В	CM	Front door lock assembly (driver side)		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M120	31	D15	3	Existed	

3. Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector	Terminal	Ground	Continuity
M120	31		Not existed

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

#### **UNLOCK SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness.

## 3.check unlock sensor ground circuit

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

Front door lock assembly (driver side)			Continuity
Connector	Terminal	Ground	Continuity
D15	4		Existed

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4. CHECK UNLOCK SENSOR

Refer to DLK-101, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

>> Replace front door lock assembly (driver side). NO

### 5. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

#### >> INSPECTION END

## Component Inspection

1. CHECK UNLOCK SENSOR

- Turn ignition switch OFF.
- Disconnect front door lock assembly (driver side). 2.
- Check front door lock assembly (driver side) terminals.

Front door lock assembly (driver side)		Condition		Continuity	
Terr	minal	Condition		Continuity	
3 4		Front door lock assembly (driv-	Unlock	Existed	
3	7	er side)	Lock	Not existed	

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front door lock assembly (driver side). DLK

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INFOID:0000000005946940

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**DLK-101** Revision: 2010 June 2011 M37/M56

#### INTELLIGENT KEY WARNING BUZZER

INFOID:0000000005946943

INFOID:0000000005946944

#### < DTC/CIRCUIT DIAGNOSIS >

### INTELLIGENT KEY WARNING BUZZER

## Component Function Check

## 1.CHECK FUNCTION

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT-III.
- Select "OUTSIDE BUZZER" in "ACTIVE TEST" mode.
- 3. Touch "ON" to check that it works normally.

#### Is the inspection result normal?

YES >> Intelligent Key warning buzzer is OK.

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

### Diagnosis Procedure

### 1. CHECK FUSE

- 1. Turn ignition switch OFF.
- 2. Check 10 A fuse, [No.11, 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 INTELLIGENT KEY WARNING BUZZER POWER SUPPLY CIRCUIT

- 1. Disconnect Intelligent Key warning buzzer connector.
- 2. Check voltage between Intelligent Key warning buzzer harness connector and ground.

(+)			Voltage (Approx.)
Intelligent Key	Intelligent Key warning buzzer		
Connector	Terminal		, , ,
E57	1	Ground	12 V

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3. CHECK INTELLIGENT KEY WARNING BUZZER CIRCUIT

- 1. Disconnect BCM connector.
- 2. Check continuity between BCM harness connector and Intelligent Key warning buzzer harness connector.

ВСМ		Intelligent Key	Intelligent Key warning buzzer	
Connector	Terminal	Connector	Terminal	Continuity
M123	93	E57	3	Existed

3. Check continuity between BCM harness connector and ground.

ВСМ			Continuity
Connector	Terminal	Ground	Continuity
M123	93		Not existed

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

## 4. CHECK INTELLIGENT KEY WARNING BUZZER

#### Check DLK-103, "Component Inspection".

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> Replace Intelligent Key warning buzzer.

Revision: 2010 June **DLK-102** 2011 M37/M56

#### INTELLIGENT KEY WARNING BUZZER

#### < DTC/CIRCUIT DIAGNOSIS >

## **Component Inspection**

INFOID:0000000005946945

## ${\bf 1.} {\sf CHECK\ INTELLIGENT\ KEY\ WARNING\ BUZZER}$

- 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.

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

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace Intelligent Key warning buzzer (engine room).

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Revision: 2010 June **DLK-103** 2011 M37/M56

#### **INTELLIGENT KEY**

#### < DTC/CIRCUIT DIAGNOSIS >

### INTELLIGENT KEY

## Component Function Check

INFOID:0000000005946946

## 1. CHECK FUNCTION

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT-III.
- 2. Select "RKE OPE COUN1" in "DATA MONITOR" mode.
- 3. Check that the function operates normally according to the following conditions.

Monitor item	Condition	
RKE OPE COUN1	Check that the numerical value is changing while operating on the Intelligent Key	

#### Is the inspection result normal?

YES >> Intelligent Key is OK.

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

### Diagnosis Procedure

INFOID:0000000005946947

## 1. CHECK INTELLIGENT KEY BATTERY

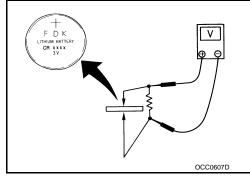
Check by connecting a resistance (approximately 300  $\Omega$ ) so that the current value becomes approximately 10 mA.

Standard: Approx. 2.5 - 3.0 V

Is the measurement value within the specification?

YES >> Replace Intelligent Key.

NO >> Replace Intelligent Key battery.



#### INFOID:0000000005946948

## Special Repair Requirement

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

#### INFORMATION DISPLAY

### < DTC/CIRCUIT DIAGNOSIS > INFORMATION DISPLAY Α Component Function Check INFOID:0000000005946955 1. CHECK FUNCTION В Select "INTELLIGENT KEY" of "BCM" using CONSULT-III. 2. Select "LCD" in "ACTIVE TEST" mode. 3. Check each warning display on meter display. Is the inspection result normal? YES >> Information display is OK. NO >> Refer to DLK-105, "Diagnosis Procedure". D Diagnosis Procedure INFOID:0000000005946956 Е 1. CHECK COMBINATION METER Refer to MWI-29, "On Board Diagnosis Function". Is the inspection result normal? F YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2. CHECK INTERMITTENT INCIDENT Refer to GI-38, "Intermittent Incident". Н >> INSPECTION END

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Revision: 2010 June **DLK-105** 2011 M37/M56

#### **COMBINATION METER BUZZER**

#### < DTC/CIRCUIT DIAGNOSIS >

## COMBINATION METER BUZZER

## Component Function Check

## 1. CHECK FUNCTION

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT-III.
- 2. Select "INSIDE BUZZER" in "ACTIVE TEST" mode.
- 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-106</u>, "<u>Diagnosis Procedure</u>".

### Diagnosis Procedure

INFOID:0000000005946958

INFOID:0000000005946957

## 1. CHECK METER BUZZER CIRCUIT

Refer to WCS-41, "Component Function Check".

#### Is the inspection result normal?

Yes >> GO TO 2.

No >> Repair or replace the malfunctioning parts.

## 2. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

### **HAZARD FUNCTION**

< DTC/CIRCUIT DIAGNOSIS >	
HAZARD FUNCTION	A
Component Function Check	INFOID:000000005946961
1.CHECK FUNCTION	В
<ol> <li>Select "INTELLIGENT KEY" of "BCM" using CONSULT-III.</li> <li>Select "FLASHER" in "ACTIVE TEST" mode.</li> <li>Touch "LH" or "RH" to check that it works normally.</li> <li>Is the inspection result normal?</li> </ol>	C
YES >> Hazard warning lamp circuit is OK.  NO >> Refer to <u>DLK-107</u> , " <u>Diagnosis Procedure"</u> .	D
Diagnosis Procedure	INFOID:000000005946962
1. CHECK HAZARD SWITCH CIRCUIT	Е
Check hazard switch circuit. Refer to EXL-104, "Component Function Check".  Is the inspection result normal?	F
YES >> GO TO 2.  NO >> Repair or replace the malfunctioning parts.  2.CHECK INTERMITTENT INCIDENT	G
Refer to GI-38, "Intermittent Incident".	
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>> INSPECTION END	
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Revision: 2010 June **DLK-107** 2011 M37/M56

### 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

INFOID:0000000005946963

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

ALL DOOR: Diagnosis Procedure

INFOID:0000000005946964

### ${f 1}$ .CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch.

Refer to DLK-75, "Component Function Check"

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

## 2. CHECK DOOR LOCK ACTUATOR CIRCUIT

Check front door lock assembly (driver side).

Refer to DLK-88, "DRIVER SIDE: Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

## 3. REPLACE BCM

- Replace BCM. Refer to <u>BCS-79</u>, "Removal and Installation".
- Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".

DRIVER SIDE

**DRIVER SIDE**: Description

INFOID:0000000005946965

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

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

INFOID:0000000005946966

## 1. CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (driver side).

Refer to DLK-88, "DRIVER SIDE: Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

#### 2.REPLACE BCM

- Replace BCM. Refer to BCS-79, "Removal and Installation".
- Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".

#### PASSENGER SIDE

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

< SYMPTOM DIAGNOSIS >

< SYMPTOM DIAGNOSIS >	
PASSENGER SIDE : Description	INFOID:0000000005946967
Passenger side door does not lock/unlock using door lock and unlock switch.	
PASSENGER SIDE : Diagnosis Procedure	INFOID:0000000005946968
1. CHECK DOOR LOCK ACTUATOR	
Check front door lock assembly (passenger side). Refer to DLK-89, "PASSENGER SIDE: Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 2.  NO >> Repair or replace the malfunctioning parts.	
2.replace bcm	
<ul> <li>Replace BCM. Refer to <u>BCS-79</u>. "Removal and Installation".</li> <li>Confirm the operation after replacement.</li> </ul>	
Is the result normal?	
YES >> INSPECTION END NO >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".	
REAR LH	
REAR LH : Description	INFOID:0000000005946969
Rear LH side door does not lock/unlock using door lock and unlock switch.	
REAR LH : Diagnosis Procedure	INFOID:0000000005946970
1. CHECK DOOR LOCK ACTUATOR	
Check rear door lock assembly LH. Refer to DLK-90, "REAR LH: Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 2.  NO >> Repair or replace the malfunctioning parts.	
2.REPLACE BCM	
Replace BCM. Refer to BCS-79, "Removal and Installation".      Confirm the appropriate offer replacement.	
<ul> <li>Confirm the operation after replacement.</li> <li>Is the result normal?</li> </ul>	
YES >> INSPECTION END	
NO >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".  REAR RH	
REAR RH : Description	INFOID:000000005946971
·	II4I OID.0000000003940971
Rear RH side door does not lock/unlock using door lock and unlock switch.	
REAR RH : Diagnosis Procedure	INFOID:0000000005946972
1. CHECK DOOR LOCK ACTUATOR	
Check rear door lock assembly RH.  Refer to DLK-91, "REAR RH: Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	
2.REPLACE BCM	
Replace BCM. Refer to BCS-79, "Removal and Installation".	

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

#### < SYMPTOM DIAGNOSIS >

#### Is the result normal?

YES >> INSPECTION END

<sup>•</sup> Confirm the operation after replacement.

#### DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERATION

< SYMPTOM DIAGNOSIS >

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

INFOID:0000000006059496 В

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# 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.

>> Refer to DLK-108, "ALL DOOR : Diagnosis Procedure". NO

2. CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.replace  $_{
m BCM}$ 

• Replace BCM. Refer to BCS-79, "Removal and Installation".

• Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".

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**DLK-111** Revision: 2010 June 2011 M37/M56

#### 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:0000000005946973

All doors do not lock/unlock using all door request switches.

ALL DOOR: Diagnosis Procedure

INFOID:0000000005946974

## 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-114</u>, "<u>Diagnosis Procedure</u>".

2.check "Lock/unlock by I-key" setting in "work support"

Check "LOCK/UNLOCK BY I-KEY" in "WORK SUPPORT".

Refer to DLK-32, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Set "LOCK/UNLOCK BY I-KEY" in "WORK SUPPORT".

## 3.check door switch

Check door switch.

Refer to DLK-72, "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-60, "DTC Logic"</u>.
- Console: Refer to DLK-62, "DTC Logic".
- Trunk room: Refer to DLK-64, "DTC Logic".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

#### CHECK OUTSIDE KEY ANTENNA

Check outside key antenna.

- Driver side: Refer to <u>DLK-66, "DTC Logic"</u>.
- Passenger side: Refer to <u>DLK-68, "DTC Logic"</u>.
- Rear bumper: Refer to <u>DLK-70, "DTC Logic"</u>.

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

#### 6.REPLACE BCM

- Replace BCM. Refer to <u>BCS-79</u>, "Removal and Installation".
- Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".

#### DRIVER SIDE

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

< SYMPTOM DIAGNOSIS >

< SYMPTOM DIAGNOSIS >	
DRIVER SIDE : Description	INFOID:0000000005946975
All doors do not lock/unlock using driver side door request switch.	
DRIVER SIDE : Diagnosis Procedure	INFOID:000000005946976
1. CHECK DRIVER SIDE DOOR REQUEST SWITCH	
Check driver side door request switch.	
Refer to DLK-78, "Component Function Check".  Is the inspection result normal?	
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts.	
2.REPLACE BCM	
<ul> <li>Replace BCM. Refer to <u>BCS-79, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ul>	
Is the result normal?	
YES >> INSPECTION END NO >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".	
PASSENGER SIDE	
PASSENGER SIDE : Description	INFOID:000000005946977
All doors do not lock/unlock using passenger side door request switch.	
PASSENGER SIDE : Diagnosis Procedure	INFOID:0000000005946978
1. CHECK PASSENGER SIDE DOOR REQUEST SWITCH	
Check passenger side door request switch.	
Refer to DLK-78, "Component Function Check".  Is the inspection result normal?	
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts.  2. REPLACE BCM	
Replace BCM. Refer to <u>BCS-79, "Removal and Installation"</u> .	
Confirm the operation after replacement.	
<u>ls the result normal?</u> YES >> INSPECTION END	
NO >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".	

#### DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

#### < SYMPTOM DIAGNOSIS >

## DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

## Diagnosis Procedure

INFOID:0000000005946979

## 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-108</u>, "ALL <u>DOOR</u>: <u>Diagnosis Procedure"</u>.

## 2.CHECK REMOTE KEYLESS ENTRY RECEIVER

Check remote keyless entry receiver.

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

## 3.check intelligent key

Check Intelligent Key.

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

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

## 4. REPLACE BCM

- Replace BCM. Refer to BCS-79, "Removal and Installation".
- · Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

## TRUNK LID DOES NOT OPEN

< SYMPTOM DIAGNOSIS >		
TRUNK LID DOES NOT OPEN		А
TRUNK LID OPENER SWITCH		$\wedge$
TRUNK LID OPENER SWITCH : Description	INFOID:0000000005946980	В
Trunk lid does not open by trunk lid opener switch operation.		D
TRUNK LID OPENER SWITCH : Diagnosis Procedure	INFOID:0000000005946981	С
1. CHECK TRUNK LID OPENER SWITCH		
Check trunk lid opener switch.  Refer to DLK-82, "Component Function Check".		D
Is the inspection result normal?		
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.		Е
2.CHECK TRUNK LID OPENER CANCEL SWITCH		
Check trunk lid opener cancel switch.		F
Refer to DLK-84, "Component Function Check".		
Is the inspection result normal?		G
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.		G
3. CHECK TRUNK LID OPENER ACTUATOR		
Check trunk lid opener actuator.  Refer to DLK-95, "Component Function Check".		Н
ls the inspection result normal?		1
YES >> GO TO 4.		ı
NO >> Repair or replace the malfunctioning parts.		
4.REPLACE BCM		J
<ul> <li>Replace BCM. Refer to <u>BCS-79</u>, "<u>Removal and Installation</u>".</li> <li>Confirm the operation after replacement.</li> </ul>	1	
Is the result normal?		DLK
YES >> INSPECTION END		
NO >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".  INTELLIGENT KEY		L
INTELLIGENT KEY : Description	INFOID:0000000005946982	D. 4
Trunk lid does not open by Intelligent Key remote operation.		M
INTELLIGENT KEY : Diagnosis Procedure	INFOID:0000000005946983	
1. CHECK TRUNK LID OPEN FUNCTION		Ν
Check trunk lid open function with trunk lid opener switch.		
Does trunk lid open with trunk lid opener switch?		0
YES >> GO TO 2.  NO >> Refer to <u>DLK-115</u> , "TRUNK LID OPENER SWITCH: Diagnosis Procedure".		
2. CHECK REMOTE KEYLESS ENTRY FUNCTION		Р
Check remote keyless entry function.		
Does door lock/unlock with Intelligent Key button?		
YES >> GO TO 3.		
NO >> Refer to <u>DLK-114, "Diagnosis Procedure"</u> .		
3.CHECK INTELLIGENT KEY		

#### TRUNK LID DOES NOT OPEN

#### < SYMPTOM DIAGNOSIS >

Check Intelligent Key.

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

### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

## 4.REPLACE BCM

- Replace BCM. Refer to BCS-79, "Removal and Installation".
- · Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".

#### TRUNK LID OPENER REQUEST SWITCH

#### TRUNK LID OPENER REQUEST SWITCH: Description

INFOID:0000000005946984

Trunk lid does not open by trunk lid opener request switch operation.

## TRUNK LID OPENER REQUEST SWITCH: Diagnosis Procedure

INFOID:0000000005946985

## 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-115</u>, "INTELLIGENT KEY : <u>Diagnosis Procedure</u>".

## 2.CHECK TRUNK LID OPENER REQUEST SWITCH

Check trunk lid opener request switch.

Refer to DLK-80, "Component Function Check".

#### 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-70, "DTC Logic".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

#### 4. CHECK TRUNK ROOM LAMP SWITCH

Check trunk room lamp switch.

Refer to DLK-86, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

## 5. REPLACE BCM

- Replace BCM. Refer to <u>BCS-79</u>, "Removal and Installation".
- Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".

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#### FUEL LID LOCK ACTUATOR DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

#### FUEL LID LOCK ACTUATOR DOES NOT OPERATE Α Diagnosis Procedure INFOID:0000000005946986 1. CHECK POWER DOOR LOCK OPERATION В Check power door lock operation. Does door lock/unlock with door lock and unlock switch? C YES >> GO TO 2. NO >> Refer to DLK-108, "ALL DOOR: Diagnosis Procedure". 2.CHECK FUEL LID LOCK ACTUATOR D Check fuel lid lock actuator. Refer to DLK-93, "Component Function Check". Is the inspection result normal? Е YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3.replace $_{ m BCM}$ F • Replace BCM. Refer to BCS-79, "Removal and Installation". Confirm the operation after replacement. Is the result normal? YES >> INSPECTION END NO >> Check intermittent incident. Refer to GI-38, "Intermittent Incident". Н

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Revision: 2010 June **DLK-117** 2011 M37/M56

#### **IGNITION POSITION WARNING FUNCTION DOES NOT OPERATE**

#### < SYMPTOM DIAGNOSIS >

## IGNITION POSITION WARNING FUNCTION DOES NOT OPERATE

## Diagnosis Procedure

#### INFOID:00000000006090447

## 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-108</u>, "ALL <u>DOOR</u>: <u>Diagnosis Procedure"</u>.

## 2.check door switch

Check door switch.

Refer to DLK-72, "Component Function Check".

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 DLK-86, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

#### 4. REPLACE BCM

- Replace BCM. Refer to BCS-79, "Removal and Installation".
- · Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

#### SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE

# < SYMPTOM DIAGNOSIS > SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE Α **Diagnosis Procedure** INFOID:0000000005946987 1. CHECK "DOOR LOCK-UNLOCK SET" SETTING IN "WORK SUPPORT" В Select "DOOR LOCK" of "BCM" using CONSULT-III. Select "DOOR LOCK-UNLOCK SET" in "WORK SUPPORT" mode. Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT". Refer to DLK-30, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)". Is the inspection result normal? YES >> GO TO 2. D NO >> Set "ON" in "DOOR LOCK-UNLOCK SET". 2.REPLACE BCM Е • Replace BCM. Refer to BCS-79, "Removal and Installation". · Confirm the operation after replacement. Is the result normal? F >> INSPECTION END YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident". NO Н J DLK M

**DLK-119** Revision: 2010 June 2011 M37/M56 Ν

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#### VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

# VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

## Diagnosis Procedure

INFOID:0000000005946988

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

- 1. Select "DOOR LOCK" of "BCM" using CONSULT-III.
- 2. Select "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT" mode.
- Check "AUTOMATIC LOCK/UNLOCK SELECT" setting in "WORK SUPPORT". Refer to <u>DLK-30</u>, "<u>DOOR LOCK</u>: <u>CONSULT-III Function</u> (<u>BCM - DOOR LOCK</u>)".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "Lock Only" or "Lock/Unlock" in "AUTOMATIC LOCK/UNLOCK SELECT".

## 2.CHECK "AUTOMATIC DOOR LOCK SELECT" SETTING IN "WORK SUPPORT"

- 1. Select "DOOR LOCK" of "BCM" using CONSULT-III.
- 2. Select "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT" mode.
- 3. Check "AUTOMATIC DOOR LOCK SELECT" setting in "WORK SUPPORT".

  Refer to <u>DLK-30</u>, "<u>DOOR LOCK</u>: <u>CONSULT-III Function</u> (<u>BCM DOOR LOCK</u>)".

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Set "VH SPD" in "AUTOMATIC DOOR LOCK SELECT".

## 3. REPLACE BCM

- Replace BCM. Refer to <u>BCS-79</u>, "Removal and Installation".
- Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

#### IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS > IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE Α Diagnosis Procedure INFOID:0000000005946989 1. CHECK "AUTOMATIC LOCK/UNLOCK SELECT" SETTING IN "WORK SUPPORT" В Select "DOOR LOCK" of "BCM" using CONSULT-III. Select "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT" mode. Check "AUTOMATIC LOCK/UNLOCK SELECT" setting in "WORK SUPPORT". Refer to DLK-30, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)". Is the inspection result normal? YES >> GO TO 2. D NO >> Set "Unlock Only" or "Lock/Unlock" in "AUTOMATIC LOCK/UNLOCK SELECT". 2.CHECK "AUTOMATIC DOOR UNLOCK SELECT" SETTING IN "WORK SUPPORT" Е Select "DOOR LOCK" of "BCM" using CONSULT-III. Select "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT" mode. Check "AUTOMATIC DOOR UNLOCK SELECT" setting in "WORK SUPPORT". Refer to DLK-30, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)". F Is the inspection result normal? YES >> GO TO 3. NO >> Set "MODE 1" or "MODE 3" in "AUTOMATIC DOOR UNLOCK SELECT". 3. REPLACE BCM • Replace BCM. Refer to BCS-79, "Removal and Installation". Н Confirm the operation after replacement. Is the result normal? YES >> INSPECTION END NO >> Check intermittent incident. Refer to GI-38, "Intermittent Incident". DLK

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**DLK-121** Revision: 2010 June 2011 M37/M56

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

#### < SYMPTOM DIAGNOSIS >

# P RANGE INTERLOCK DOOR LOCK/UNLOCK FUNCTION DOES NOT OPERATE

## Diagnosis Procedure

INFOID:0000000005946990

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

- 1. Select "DOOR LOCK" of "BCM" using CONSULT-III.
- 2. Select "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT" mode.
- Check "AUTOMATIC LOCK/UNLOCK SELECT" setting in "WORK SUPPORT". Refer to <u>DLK-30</u>, "<u>DOOR LOCK</u>: <u>CONSULT-III Function</u> (<u>BCM - DOOR LOCK</u>)".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "Unlock Only", "Lock Only" or "Lock/Unlock" in "AUTOMATIC LOCK/UNLOCK SELECT".

## 2.CHECK "AUTOMATIC DOOR LOCK SELECT" SETTING IN "WORK SUPPORT"

- 1. Select "DOOR LOCK" of "BCM" using CONSULT-III.
- 2. Select "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT" mode.
- Check "AUTOMATIC DOOR LOCK SELECT" setting in "WORK SUPPORT". Refer to <u>DLK-30</u>, "<u>DOOR LOCK</u>: <u>CONSULT-III Function</u> (<u>BCM - DOOR LOCK</u>)".

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Set "P RANGE" in "AUTOMATIC DOOR LOCK SELECT".

## ${f 3.}$ CHECK "AUTOMATIC DOOR UNLOCK SELECT" SETTING IN "WORK SUPPORT"

- 1. Select "DOOR LOCK" of "BCM" using CONSULT-III.
- Select "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT" mode.
- Check "AUTOMATIC DOOR UNLOCK SELECT" setting in "WORK SUPPORT". Refer to <u>DLK-30</u>, "<u>DOOR LOCK</u>: <u>CONSULT-III Function</u> (<u>BCM - DOOR LOCK</u>)".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Set "MODE 2" or "MODE 4" in "AUTOMATIC DOOR UNLOCK SELECT".

#### 4.REPLACE BCM

- Replace BCM. Refer to BCS-79, "Removal and Installation".
- Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

#### **AUTO DOOR LOCK OPERATION DOES NOT OPERATE**

#### < SYMPTOM DIAGNOSIS >

## AUTO DOOR LOCK OPERATION DOES NOT OPERATE Α **Diagnosis Procedure** INFOID:0000000005946991 1. CHECK "AUTO LOCK SET" SETTING IN "WORK SUPPORT" В Select "INTELLIGENT KEY" of "BCM" using CONSULT-III. Select "AUTO LOCK SET" in "WORK SUPPORT" mode. Check "AUTO LOCK SET" setting in "WORK SUPPORT". C Refer to DLK-32, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)". Is the inspection result normal? YES >> GO TO 2. D >> Set "MODE 2", "MODE 3", "MODE 4", "MODE 5", "MODE 6" or "MODE 7" in "AUTO LOCK SET". NO 2.REPLACE BCM Е • Replace BCM. Refer to BCS-79, "Removal and Installation". Confirm the operation after replacement. Is the result normal? F >> INSPECTION END YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident". NO Н J

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**DLK-123** Revision: 2010 June 2011 M37/M56

#### HAZARD AND HORN REMINDER DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

## HAZARD AND HORN REMINDER DOES NOT OPERATE

## Diagnosis Procedure

INFOID:0000000005946992

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

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT-III.
- Select "HAZARD ANSWER BACK" in "WORK SUPPORT" mode.
- 3. Check the "HAZARD ANSWER BACK" setting in "WORK SUPPORT".

  Refer to <a href="DLK-32">DLK-32</a>, "INTELLIGENT KEY: CONSULT-III Function (BCM INTELLIGENT KEY)".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "Lock Only", "Unlock Only" or "Lock/Unlock" in "HAZARD ANSWER BACK".

## 2. CHECK "HORN WITH KEYLESS LOCK" SETTING IN "WORK SUPPORT"

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT-III.
- 2. Select "HORN WITH KEYLESS LOCK in "WORK SUPPORT" mode.
- Check the "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT".
   Refer to <u>DLK-32</u>, "INTELLIGENT KEY: CONSULT-III Function (BCM INTELLIGENT KEY)".

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Set "On" in "HORN WITH KEYLESS LOCK".

# 3. CHECK HAZARD FUNCTION

#### Check hazard function.

Refer to DLK-107, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

## 4. CHECK HORN FUNCTION

#### Check horn function.

Refer to SEC-138, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

#### 5.REPLACE BCM

- Replace BCM. Refer to BCS-79, "Removal and Installation".
- · Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

## HAZARD AND BUZZER REMINDER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

HAZARD AND BUZZER REMINDER DOES NOT OPERATE	
Diagnosis Procedure	INFOID:0000000005946993
1. CHECK "HAZARD ANSWER BACK" SETTING IN "WORK SUPPORT"	
<ol> <li>Select "INTELLIGENT KEY" of "BCM" using CONSULT-III.</li> <li>Select "HAZARD ANSWER BACK" in "WORK SUPPORT" mode.</li> <li>Check the "HAZARD ANSWER BACK" setting in "WORK SUPPORT". Refer to DLK-32, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KE)</li> </ol>	Y)".
Is the inspection result normal?	
YES >> GO TO 2.  NO >> Set "Lock Only", "Unlock Only" or "Lock/Unlock" in "HAZARD ANSWER BACK".	
2.CHECK "ANS BACK I-KEY LOCK" SETTING IN "WORK SUPPORT"	
<ol> <li>Select "INTELLIGENT KEY" of "BCM" using CONSULT-III.</li> <li>Select "ANS BACK I-KEY LOCK" in "WORK SUPPORT" mode.</li> <li>Check the "ANS BACK I-KEY LOCK" setting in "WORK SUPPORT".         Refer to DLK-32, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KE)     </li> </ol>	<u>Y)"</u> .
YES >> GO TO 3.  NO >> Set "Horn Chirp" or "Buzzer" in "ANS BACK I-KEY LOCK".	
3.CHECK "ANS BACK I-KEY UNLOCK" SETTING IN "WORK SUPPORT"	
<ol> <li>Select "INTELLIGENT KEY" of "BCM" using CONSULT-III.</li> <li>Select "ANS BACK I-KEY UNLOCK" in "WORK SUPPORT" mode.</li> <li>Check the "ANS BACK I-KEY UNLOCK" setting in "WORK SUPPORT".</li> </ol>	201
Refer to <u>DLK-32</u> , "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KE) Is the inspection result normal?	<u>Y)"</u> .
YES >> GO TO 4.	
NO >> Set the "On" in "ANS BACK I-KEY UNLOCK".	
4.CHECK HAZARD FUNCTION	
Check hazard function.  Refer to DLK-107, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts.	
5. CHECK INTELLIGENT KEY WARNING BUZZER	
Check Intelligent Key warning buzzer.	
Refer to DLK-102, "Component Function Check".	
Is the inspection result normal?  YES >> GO TO 6.	
NO >> Repair or replace the malfunctioning parts.	
6.REPLACE BCM	
Replace BCM. Refer to BCS-79, "Removal and Installation".      Confirm the energtion after replacement.	
Confirm the operation after replacement.  Is the result normal?	
YES >> INSPECTION END	
NO >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".	

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

#### < SYMPTOM DIAGNOSIS >

### KEY REMINDER FUNCTION DOES NOT OPERATE

## Diagnosis Procedure

INFOID:0000000005946995

## ${f 1}$ .CHECK "ANTI KEY LOCK IN FUNCTI" SETTING IN "WORK SUPPORT"

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT-III.
- Select "ANTI KEY LOCK IN FUNCTI" in "WORK SUPPORT" mode.
- Check "ANTI KEY LOCK IN FUNCTI" setting in "WORK SUPPORT".
   Refer to <u>DLK-32</u>, "INTELLIGENT KEY: CONSULT-III Function (BCM INTELLIGENT KEY)".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "On" in "ANTI KEY LOCK IN FUNCTI".

## 2. CHECK INSIDE KEY ANTENNA

#### Check inside key antenna.

- Instrument center: Refer to <u>DLK-60</u>, "<u>DTC Logic</u>".
- Console: Refer to DLK-62, "DTC Logic".
- Trunk room: Refer to <u>DLK-64, "DTC Logic"</u>.

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

# 3. CHECK DOOR SWITCH

#### Check door switch.

Refer to DLK-72, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

## 4. CHECK TRUNK ROOM LAMP SWITCH

#### Check trunk room lamp switch.

Refer to DLK-86, "Component Function Check".

#### 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 DLK-100, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

## 6.REPLACE BCM

- Replace BCM. Refer to BCS-79, "Removal and Installation".
- · Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

## **WELCOME LIGHT FUNCTION DOES NOT OPERATE**

## < SYMPTOM DIAGNOSIS >

Is the result normal?

WELCOME LIGHT FUNCTION DOES NOT OPERATE	
Diagnosis Procedure	A FOID:000000000000059497
1. CHECK "WELCOME LIGHT OP SET" SETTING IN "WORK SUPPORT"	В
<ol> <li>Select "INTELLIGENT KEY" of "BCM" using CONSULT-III.</li> <li>Select "WELCOME LIGHT OP SET" in "WORK SUPPORT" mode.</li> <li>Check "WELCOME LIGHT OP SET" setting in "WORK SUPPORT". Refer to DLK-32, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".</li> </ol>	С
Is the inspection result normal?	
YES >> GO TO 2.  NO >> Set "On" and "WELCOME LIGHT SELECT" in "WORK SUPPORT".	D
2. CHECK "WELCOME LIGHT SELECT" SETTING IN "WORK SUPPORT"	
<ol> <li>Select "INTELLIGENT KEY" of "BCM" using CONSULT-III.</li> <li>Select "WELCOME LIGHT SELECT" in "WORK SUPPORT" mode.</li> <li>Check "WELCOME LIGHT SELECT" setting in "WORK SUPPORT". Refer to <a href="https://doi.org/10.1007/journal.org/light-number-10.1007/journal.org/">DLK-32</a>, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".</li> </ol>	F
Is the inspection result normal?	
YES >> GO TO 3.  NO >> Set "WELCOME LIGHT SELECT" setting in "WORK SUPPORT".	G
3. CHECK INSIDE KEY ANTENNA	
Check inside key antenna.  Instrument center: Refer to <a href="DLK-60">DLK-60</a> , "DTC Logic".  Console: Refer to <a href="DLK-62">DLK-62</a> , "DTC Logic".	Н
<ul> <li>Trunk room: Refer to <u>DLK-64, "DTC Logic"</u>.</li> <li>Is the inspection result normal?</li> </ul>	1
YES >> GO TO 4.  NO >> Repair or replace the malfunctioning parts.  4.CHECK OUTSIDE KEY ANTENNA	J
Check outside key antenna.	
<ul> <li>Driver side: Refer to <u>DLK-66, "DTC Logic"</u>.</li> <li>Passenger side: Refer to <u>DLK-68, "DTC Logic"</u>.</li> <li>Rear bumper: Refer to <u>DLK-70, "DTC Logic"</u>.</li> </ul>	DL
Is the inspection result normal?	L
YES >> GO TO 5.  NO >> Repair or replace the malfunctioning parts.	
5.CHECK REMOTE KEYLESS ENTRY FUNCTION	M
Check remote keyless entry function	
Does door lock/unlock with Intelligent Key button?	N
YES >> GO TO 6. NO >> Refer to <u>DLK-114, "Diagnosis Procedure"</u> .	14
6.CHECK INTERIOR ROOM LAMP CONTROL SYSTEM	
Check interior room lamp control system. Refer to <a href="INL-7">INL-7</a> , "INTERIOR ROOM LAMP CONTROL System Description".	SYSTEM:
Does the room lamp and puddle lamp turn ON?	Р
YES >> GO TO 7. NO >> Refer to INL-66, "Symptom Table".	
7.REPLACE BCM	
<ul> <li>Replace BCM. Refer to <u>BCS-79</u>, "Removal and Installation".</li> <li>Confirm the operation after replacement.</li> </ul>	

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## **WELCOME LIGHT FUNCTION DOES NOT OPERATE**

## < SYMPTOM DIAGNOSIS >

YES >> INSPECTION END

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

## < SYMPTOM DIAGNOSIS >

OFF POSITION WARNING DOES NOT OPERATE	
Diagnosis Procedure	INFOID:0000000005946999
1. CHECK DTC WITH BCM	Е
Check that DTC is not detected with BCM.	
Is the inspection result normal?	(
YES >> GO TO 2. NO >> Perform trouble diagnosis relevant to DTC indicated.	
2. CHECK DTC WITH COMBINATION METER	г
Check that DTC is not detected with combination meter.	
Is the inspection result normal?	-
YES >> GO TO 3.  NO >> Perform trouble diagnosis relevant to DTC indicated.	E
3.CHECK COMBINATION METER BUZZER	
Check combination meter buzzer.	F
Refer to DLK-106, "Component Function Check".	
Is the inspection result normal?  YES >> GO TO 4.	(
NO >> Repair or replace the malfunctioning parts.	
4.CHECK INTELLIGENT KEY WARNING BUZZER	H
Check Intelligent Key warning buzzer. Refer to DLK-102, "Component Function Check".	
Is the inspection result normal?	1
YES >> GO TO 5.	
NO >> Repair or replace the malfunctioning parts.	
5.CHECK DOOR SWITCH	
Check door switch (driver side).  Refer to <a href="https://docs.org/length-12">DLK-72</a> , "Component Function Check".	
Is the inspection result normal?	DI
YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts.	
6.REPLACE BCM	L
Replace BCM. Refer to BCS-79, "Removal and Installation".	
Confirm the operation after replacement.	$\mathbb{N}$
Is the result normal?	
YES >> INSPECTION END NO >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".	N
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#### P POSITION WARNING DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

## P POSITION WARNING DOES NOT OPERATE

## Diagnosis Procedure

INFOID:0000000005947000

## 1. CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

## 2.CHECK DTC WITH COMBINATION METER

Check that DTC is not detected with combination meter.

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Perform trouble diagnosis relevant to DTC indicated.

# 3.CHECK INTELLIGENT KEY WARNING BUZZER

#### Check Intelligent Key warning buzzer.

Refer to DLK-102, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

## 4. CHECK COMBINATION METER BUZZER

#### Check combination meter buzzer.

Refer to DLK-106, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

## 5. CHECK DOOR SWITCH

#### Check door switch (driver side).

Refer to DLK-72, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

## 6.CHECK INFORMATION DISPLAY

#### Check information display.

Refer to DLK-105, "Component Function Check".

### Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

## 7.REPLACE BCM

- Replace BCM. Refer to BCS-79, "Removal and Installation".
- Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

## **ACC WARNING DOES NOT OPERATE**

## < SYMPTOM DIAGNOSIS >

ACC WARNING DOES NOT OPERATE	
Diagnosis Procedure	INFOID:000000005947001
1.CHECK DTC WITH BCM	
Check that DTC is not detected with BCM.	
Is the inspection result normal?	
YES >> GO TO 2.	
NO >> Perform trouble diagnosis relevant to DTC indicated.  2.CHECK DTC WITH COMBINATION METER	
Check that DTC is not detected with combination meter.	
Is the inspection result normal?  YES >> GO TO 3.	
NO >> Perform trouble diagnosis relevant to DTC indicated.	
3.CHECK COMBINATION METER BUZZER	
Check combination meter buzzer.	
Refer to <u>DLK-106</u> , "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	
4. CHECK INFORMATION DISPLAY	
Check information display.	
Refer to DLK-105, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 5.	
NO >> Repair or replace the malfunctioning parts. <b>5.</b> REPLACE BCM	
<ul> <li>Replace BCM. Refer to <u>BCS-79</u>, "<u>Removal and Installation</u>".</li> <li>Confirm the operation after replacement.</li> </ul>	
Is the result normal?	
YES >> INSPECTION END	-
NO >> Check intermittent incident. Refer to GI-38. "Intermittent Incident".	

Revision: 2010 June **DLK-131** 2011 M37/M56

#### TAKE AWAY WARNING DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

## TAKE AWAY WARNING DOES NOT OPERATE

## Diagnosis Procedure

INFOID:0000000005947002

## 1. CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

## 2.CHECK DTC WITH COMBINATION METER

Check that DTC is not detected with combination meter.

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Perform trouble diagnosis relevant to DTC indicated.

# 3. CHECK DOOR SWITCH

Check door switch.

Refer to DLK-72, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

## 4. CHECK TRUNK ROOM LAMP SWITCH

Check trunk room lamp switch.

Refer to DLK-86, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

#### 5. CHECK COMBINATION METER BUZZER

Check combination meter buzzer.

Refer to DLK-106, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

## 6.CHECK INFORMATION DISPLAY

Check information display.

Refer to DLK-105, "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.

Refer to DLK-102, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace the malfunctioning parts.

#### 8.REPLACE BCM

- Replace BCM. Refer to BCS-79, "Removal and Installation".
- · Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

## TAKE AWAY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS > >> Check intermittent incident. Refer to GI-38, "Intermittent Incident". NO Α В С D Е F G Н J DLK L M Ν 0

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#### INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

## INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

## Diagnosis Procedure

INFOID:0000000005947003

## 1. CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

## 2.CHECK DTC WITH COMBINATION METER

Check that DTC is not detected with combination meter.

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Perform trouble diagnosis relevant to DTC indicated.

# 3.check "Lo- batt of key fob warn" setting in "work support"

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT-III.
- 2. Select "LO- BATT OF KEY FOB WARN" in "WORK SUPPORT" mode.
- 3. Check "LO-BATT OF KEY FOB WARN" setting in "WORK SUPPORT".

  Refer to DLK-32, "INTELLIGENT KEY: CONSULT-III Function (BCM INTELLIGENT KEY)".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Set "ON" setting in "WORK SUPPORT".

## 4. CHECK INTELLIGENT KEY

Check Intelligent Key.

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 INFORMATION DISPLAY

Check information display.

Refer to DLK-105, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

#### **6.**REPLACE BCM

- Replace BCM. Refer to BCS-79, "Removal and Installation".
- Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

## DOOR LOCK OPERATION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >		
DOOR LOCK OPERATION WARNING DOES NOT OPERATE		А
Diagnosis Procedure	INFOID:0000000005947004	
1.CHECK DOOR LOCK FUNCTION		В
Check door lock function.		
<u>Does door lock/unlock using door request switch?</u> YES >> GO TO 2.		С
NO >> Refer to <u>DLK-112</u> , " <u>ALL DOOR</u> : <u>Diagnosis Procedure</u> ".		
2.CHECK INTELLIGENT KEY WARNING BUZZER		
Check Intelligent Key warning buzzer.  Refer to DLK-102, "Component Function Check".		
Is the inspection result normal?		Е
YES >> GO TO 3.  NO >> Repair or replace the malfunctioning parts.		
3.REPLACE BCM		F
Replace BCM. Refer to <u>BCS-79, "Removal and Installation"</u> .		
<ul> <li>Confirm the operation after replacement.</li> <li>Is the result normal?</li> </ul>		C
YES >> INSPECTION END		
NO >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".		-
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#### **KEY ID WARNING DOES NOT OPERATE**

#### < SYMPTOM DIAGNOSIS >

## KEY ID WARNING DOES NOT OPERATE

## Diagnosis Procedure

INFOID:0000000005947005

## 1. CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

# 2. CHECK DTC WITH COMBINATION METER

Check that DTC is not detected with combination meter.

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Perform trouble diagnosis relevant to DTC indicated.

# 3.CHECK INTELLIGENT KEY

#### Check Intelligent Key.

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

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

## 4. CHECK INFORMATION DISPLAY

#### Check information display

Refer to DLK-105, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

## 5. CHECK INSIDE KEY ANTENNA

#### Check inside key antenna.

- Instrument center: Refer to <u>DLK-60</u>, "<u>DTC Logic</u>".
- Console: Refer to DLK-62, "DTC Logic".
- Trunk room: Refer to DLK-64, "DTC Logic".

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

## 6.REPLACE BCM

- Replace BCM. Refer to BCS-79, "Removal and Installation".
- · Confirm the operation after replacement.

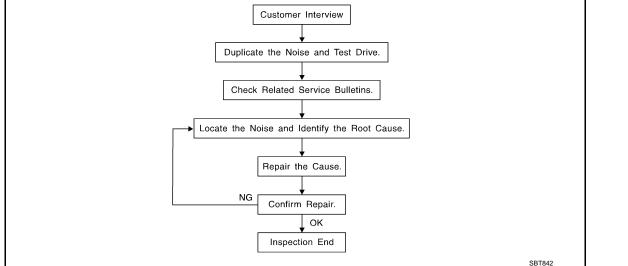
#### Is the result normal?

YES >> INSPECTION END

< SYMPTOM DIAGNOSIS >

## SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow INFOID:0000000006114049 Customer Interview Duplicate the Noise and Test Drive.



#### **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 DLK-141, "Diagnostic Worksheet". 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 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 <u>DLK-139</u>, "Inspection <u>Procedure"</u>.

#### 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.

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** 

#### < SYMPTOM DIAGNOSIS >

Insulates where slight movement is present. Ideal for instrument panel applications.

SILICONE GREASE

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.

**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

Refer to Table of Contents for specific component removal and installation information.

#### INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

- 1. The cluster lid A and instrument panel
- 2. Acrylic lens and combination meter housing
- 3. Instrument panel to front pillar garnish
- Instrument panel to windshield
- 5. Instrument panel mounting pins
- 6. Wiring harnesses behind the combination meter
- 7. A/C defroster duct and duct joint

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:

- 1. Shifter assembly cover to finisher
- 2. 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:

- 1. Finisher and inner panel making a slapping noise
- Inside handle escutcheon to door finisher
- 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**

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:

- 1. 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

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#### < 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
- 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:

- Headrest rods and holder
- 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
- Engine wall mounts and connectors
- 4. Loose radiator mounting pins
- 5. Hood bumpers out of adjustment
- 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

INFOID:0000000006114051



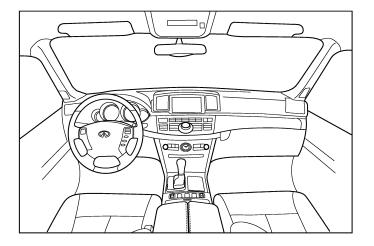
# SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

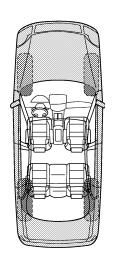
#### Dear Infiniti Customer:

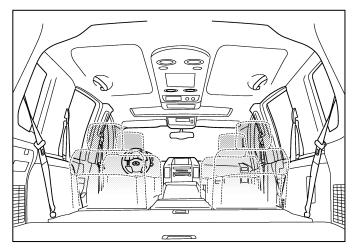
We are concerned about your satisfaction with your Infiniti vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Infiniti right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may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

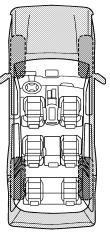
## I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)

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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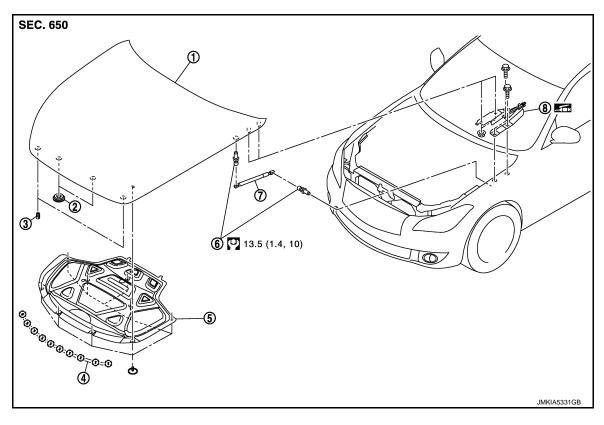
Briefly describe the location where the noi	se occurs:					
II. WHEN DOES IT OCCUR? (please che	ck the box	es that ap	ply)			
<ul><li>□ anytime</li><li>□ 1st time in the morning</li><li>□ only when it is cold outside</li><li>□ only when it is hot outside</li></ul>	☐ whe	sitting oun it is rain or dusty con:	ing or wet			
III. WHEN DRIVING:	IV. WHAT TYPE OF NOISE			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> </ul>	crea	k (like wa e (like sha ck (like a k (like a cloc	lking on a king a ba knock at th ck second , muffled l	ne door) hand) knock noise)		
after driving miles or min  TO BE COMPLETED BY DEALERSHIP		JEL				
TO BE COMPLETED BY DEALERSHIP		IEL				
TO BE COMPLETED BY DEALERSHIP		YES	NO	Initials of person performing		
TO BE COMPLETED BY DEALERSHIP Test Drive Notes:	PERSON		NO	Initials of person performing		
TO BE COMPLETED BY DEALERSHIP Test Drive Notes:  Vehicle test driven with customer - Noise verified on test drive - Noise source located and repaired	n repair	YES		performing		

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# REMOVAL AND INSTALLATION

## **HOOD**

**Exploded View** 



- 1. Hood assembly
- 4. Radiator core seal
- 7. Hood stay
- (\_) : Clip

- 2. Grommet
- 5. Hood insulator
- 8. Hood hinge

- 3. Bumper rubber
- 6. Stud ball

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

### **HOOD ASSEMBLY**

#### **HOOD ASSEMBLY: Removal and Installation**

#### **CAUTION:**

Operate with 2 workers, because of its heavy weight.

#### **REMOVAL**

- 1. Remove washer nozzle (LH and RH) and washer tube. Refer to WW-51, "Removal and Installation".
- 2. Support 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.

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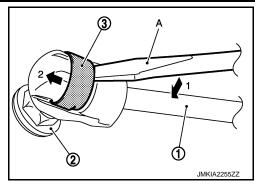
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#### HOOD

#### < REMOVAL AND INSTALLATION >

- 3. Remove the metal clip (3) located on the connection between the hood stay (1) and the stud ball (2) (hood side), by using a flatted-blade screwdriver (A).
- 4. Disengage the stud ball from the hood stay (hood side).



- 5. Remove hood hinge mounting nuts on the hood to remove the hood assembly.
- 6. Remove following parts after removing the hood assembly.
  - Radiator core seal
  - · Hood insulator
  - Hood bumper rubber
  - Hood striker

#### **INSTALLATION**

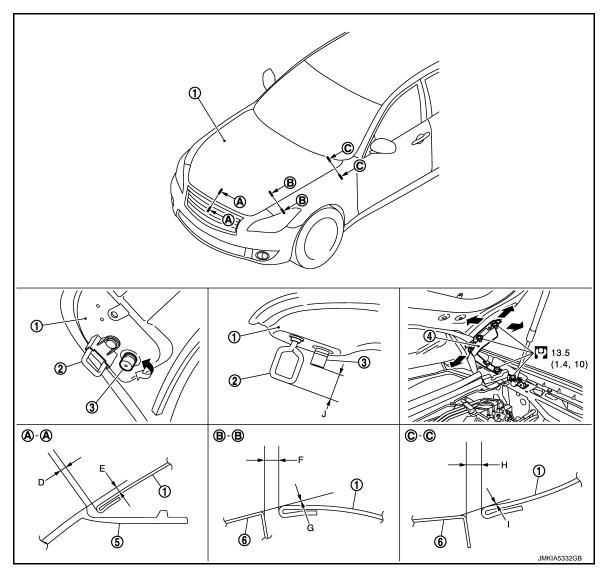
Note the following item, and install in the reverse order of removal.

#### **CAUTION:**

- 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-145</u>, "HOOD ASSEMBLY : Adjustment".
- After installing, perform front washer nozzle and tube inspection and adjustment. Refer to <u>WW-52</u>, "Inspection and Adjustment".

**HOOD ASSEMBLY: Adjustment** 

INFOID:0000000006039533



Hood assembly Hood hinge

- 2. Hood striker
- Front bumper fascia
- Hood bumper rubber 3.
- Front fender

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

Check the clearance and the surface height between hood and each part visually and by touching. (Fitting standard dimension in the table below should be satisfied.

If the clearance and the surface height are out of specification, adjust them according to the procedures shown below.

Portion			Standard	Difference (LH/RH, MAX)	
Hood – Bumper fascia	A – A	D	Clearance	1.7 – 5.3 mm (0.067 – 0.209 in)	2.0 mm (0.079 in)
		E	Surface height	(-2.5) - (+0.5) mm [(-0.098) - (+0.020) in]	2.0 mm (0.079 in)

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Portion			Standard	Difference (LH/RH, MAX)	
Hood – Fender	B – B	F	Clearance	2.5 – 4.5 mm (0.098 – 0.177 in)	1.0 mm (0.039 in)
		G	Surface height	(-1.5) - (+1.5) mm [(-0.059) - (+0.059) in]	_
	C – C	Ξ	Clearance	2.5 – 4.5 mm (0.098 – 0.177 in)	1.0 mm (0.039 in)
		-	Surface height	(-1.5) - (+1.5) mm [(-0.059) - (+0.059) in]	_
Hood striker – Bumper rubber	_	J	Clearance	32.5 – 33.5 mm (1.280 – 1.319 in)	_

- Remove striker and adjust the surface height of hood, front bumper fascia and front fender according to the fitting standard dimension, by rotating hood bumper rubbers.
- 2. Adjust the height difference of striker, hood bumper rubber according to the fitting standard dimension.
- 3. Loosen hood hinge mounting nuts on the hood.
- Adjust the clearance of hood, front bumper fascia, front grill and front fender according to the fitting standard dimension, for the hood.
- Check that hood lock secondary latch is securely engaged with 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.

6. Install as static closing face of hood is 94 – 490 N·m (9.6 – 50.0 kg-m).

NOTE:

- Exercise vertical force on right side and left side of hood lock.
- Never press simultaneously both sides.
- 7. After adjustment tighten hood hinge mounting nuts to the specified torque.

### **HOOD HINGE**

### **HOOD HINGE**: Removal and Installation

INFOID:00000000006039535

#### REMOVAL

- Remove hood assembly. Refer to <u>DLK-143</u>, "HOOD ASSEMBLY: Removal and Installation".
- Remove front fender cover. Refer to <u>EXT-21</u>, "Exploded View".
- 3. Remove brake master cylinder cover, battery cover, and hood ledge cover (LH and RH). Refer to <u>EXT-21</u>, <u>"Exploded View"</u>.
- Remove clips of hood seal, and then remove hood seal assembly (side). Refer to <u>DLK-151, "Exploded View"</u>.
- 5. Remove front fender mounting bolt.
- 6. Remove hood hinge mounting bolts, and then remove hood hinge.

#### **INSTALLATION**

Note the following item, and install in the reverse order of removal.

#### **CAUTION:**

- Before installation of hood hinge, apply anticorrosive agent onto the surface of the vehicle body.
- Before installation of hood hinge, drop genuine high strength locking sealant or equivalent into bolt hole of hood hinge (body side).
- After installation, apply touch-up paint (the body color) onto the head of the hinge mounting bolts and nuts.
- After installation, perform hood fitting adjustment. Refer to <u>DLK-145</u>, "HOOD ASSEMBLY: Adjustment".

**HOOD STAY** 

### **HOOD STAY: Removal and Installation**

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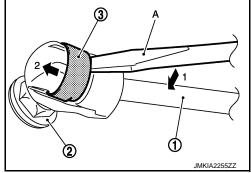
### **REMOVAL**

1. Support 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 metal clip (3) located on the connection between the hood stay (1) and the stud ball (2) (hood side), by using a flat-bladed screwdriver (A).
- 3. Disengage the stud ball from the hood stay (hood side).
- 4. Repeat the same operation to disengage the stud ball from the hood stay (body side), then remove the hood stay.



#### **INSTALLATION**

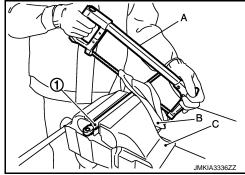
Install in the reverse order of removal.

### **HOOD STAY**: Disposal

- 1. Fix hood stay (1) using a vise (C).
- 2. Using hacksaw (A) slowly make 2 holes in the hood stay, in numerical order as shown in the figure.

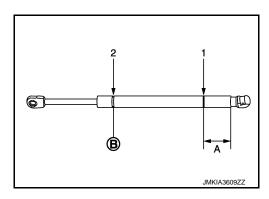
#### **CAUTION:**

- 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: 20.0 mm (0.787 in)

B: Cut at the groove.



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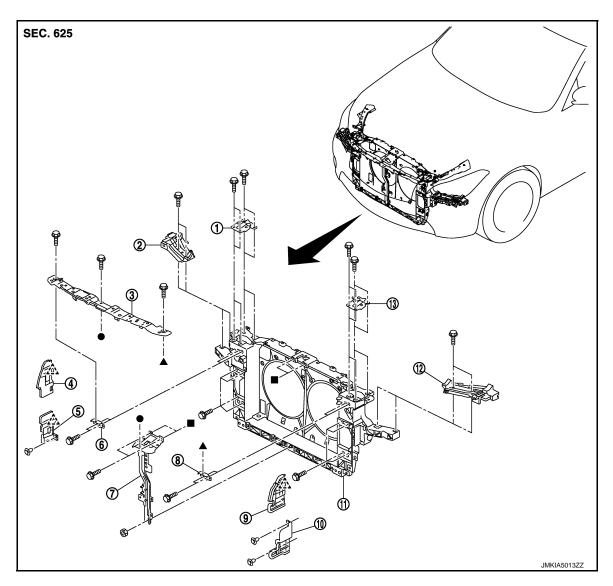
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## RADIATOR CORE SUPPORT

Exploded View



- 1. Hood lock bracket (RH)
- 4. Condenser side seal upper (RH)
- 7. Hood lock support stay
- 10. Condenser side seal lower (LH)
- 13. Hood lock bracket (LH)
- ∠\_`\_: Pawl

- 2. Head lamp bracket (RH)
- 5. Condenser side seal lower (RH)
- 8. Front bumper side retainer (LH)
- 11. Radiator core support assembly
- 3. Front bumper upper retainer
- 6. Front bumper side retainer (RH)
- 9. Condenser side seal upper (LH)
- 12. Head lamp bracket (LH)

### Removal and Installation

#### **REMOVAL**

 Remove brake master cylinder cover, battery cover, and hood ledge cover (LH and RH). Refer to <u>EXT-21</u>, <u>"Exploded View"</u>.

- 2. Use a refrigerant collecting equipment to discharge the refrigerant. Refer to HA-21, "Recycle Refrigerant".
- 3. Remove engine under cover. Refer to EXT-28, "ENGINE UNDER COVER: Removal and Installation".
- 4. Drain engine coolant from radiator.
  - VQ engine models: Refer to <u>CO-8</u>, "<u>Draining</u>".
  - VK engine models: Refer to <u>CO-33, "Draining"</u>.

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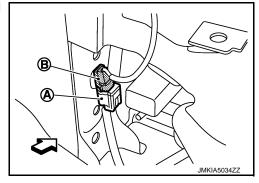
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### RADIATOR CORE SUPPORT

#### < REMOVAL AND INSTALLATION >

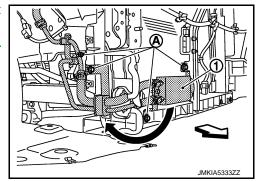
- 5. Remove air duct (inlet) assembly.
  - VQ engine models: Refer to EM-29, "Removal and Installation".
  - VK engine models: Refer to EM-184, "Removal and Installation".
- Remove front bumper fascia, energy absorber, and reinforcement. Refer to <u>EXT-14. "Removal and Installation"</u>.
- Remove front combination lamp (LH and RH). Refer to <u>EXL-119</u>, "Removal and Installation".
- 8. Remove head lamp bracket.
  - 1. Disconnect harness connector of Intelligent Key warning buzzer.
  - Remove mounting bolts and remove head lamp bracket.
- 9. Remove washer tank. Refer to <a href="https://www.asher.com/www.asher.com/"><u>WW-48, "Removal and Installation"</u></a>.
- 10. Remove mounting bolts and remove hood lock bracket (LH and RH).
  - Remove hood lock control cable (front) fixing clips from hood lock support stay and condenser upper bracket. Refer to <u>DLK-169</u>, "<u>Exploded View</u>".
  - Remove hood lock control cable (front) from tube clip of front bumper upper retainer. Refer to <u>DLK-169</u>, "<u>Exploded View</u>"
  - 3. Remove hood lock bracket mounting bolts.
  - 4. Remove air cleaner assembly (VK engine models only). Refer to EM-184, "Removal and Installation".
  - 5. Disconnect harness connector (A), and then remove hood lock switch harness connector (B) from vehicle.

: Vehicle front



- Move hood lock bracket to a location where it does not inhibit work.
- 11. Remove horn (HIGH and LOW). Refer to HRN-6, "Removal and Installation".
- 12. Disconnect harness connector of refrigerant pressure sensor. Refer to <u>HA-41, "REFRIGERANT PRESSURE SENSOR: Removal and Installation"</u>.
- 13. Disconnect harness connector of exhaust gas/outside odor sensor. Refer to <u>HAC-208</u>, "Removal and <u>Installation"</u>.
- Disconnect harness connector of ambient sensor. Refer to <u>HAC-202</u>, "Removal and Installation".
- 15. Remove ICC sensor integrated unit (with intelligent cruse control model). Refer to <a href="CCS-180">CCS-180</a>, "Removal and Installation".
- Move power steering oil cooler to a location where it does not inhibit work.
  - Remove under side cover RH. Refer to <u>EXT-24</u>, "<u>FENDER PROTECTOR</u>: <u>Exploded View</u>".
  - 2. Remove mounting bolts (A) and remove power steering oil cooler (1).
  - 3. Remove power steering oil cooler as show in the figure.

: Vehicle front



- 17. Remove condenser pipe assembly. Refer to <u>HA-41, "CONDENSER PIPE ASSEMBLY: Removal and Installation"</u>.
- 18. Remove radiator reservoir tank.
  - VQ engine models: Refer to <u>CO-13, "Exploded View"</u>.
  - VK engine models: Refer to <u>CO-39</u>, "<u>Exploded View</u>".
- 19. Remove radiator hose (upper) and radiator hose (lower) at radiator side.
  - VQ engine models: Refer to <u>CO-13, "Removal and Installation"</u>.

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#### RADIATOR CORE SUPPORT

#### < REMOVAL AND INSTALLATION >

- VK engine models: Refer to CO-39, "Removal and Installation".
- 20. Disconnect AT fluid cooler hose (A and B) from fan shroud and remove AT fluid cooler hose (A and B) from radiator.
  - VQ engine (2WD) models: Refer to TM-188, "VQ37VHR (2WD): Removal and Installation".
  - VQ engine (AWD) models: Refer to TM-190, "VQ37VHR (AWD): Removal and Installation".
  - VK engine (2WD) models: Refer to TM-192, "VK56VD (2WD): Removal and Installation".
  - VK engine (AWD) models: Refer to TM-195, "VK56VD (AWD): Removal and Installation".
- 21. Disconnect harness connector of cooling fan control modules.
  - VQ engine models: Refer to <u>CO-17</u>, "Removal and Installation".
  - VK engine models: Refer to <u>CO-43, "Removal and Installation"</u>.
- 22. Disconnect harness connector of crash zone sensor. Refer to SR-21, "Removal and Installation".
- 23. Remove harness fixing clips from the following components.
  - Front bumper upper retainer
  - Hood lock support stay
  - · Cooling fan assembly
  - Radiator core support assembly
- 24. Remove mounting bolts, and then remove radiator core support assembly.

#### **CAUTION:**

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

- 25. Remove the following parts after removing radiator core support assembly.
  - Front bumper upper retainer
  - Front bumper side retainer (LH and RH)
  - Hood lock support stay
  - condenser assembly: Refer to HA-40, "CONDENSER: Removal and Installation".
  - Crash zone sensor: Refer to <u>SR-21, "Removal and Installation"</u>.
  - Cooling fan assembly
  - VQ engine models: Refer to <u>CO-17</u>, "Removal and Installation".
  - VK engine models: Refer to CO-43, "Removal and Installation".
  - Remove radiator.
  - VQ engine models: Refer to CO-13, "Removal and Installation".
  - VK engine models: Refer to CO-39, "Removal and Installation".
  - Condenser side seal upper and lower

#### INSTALLATION

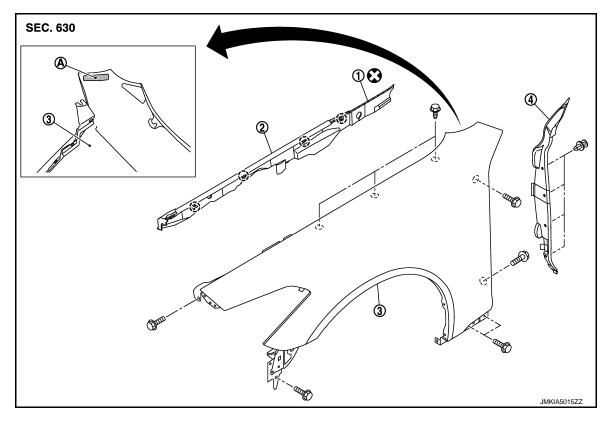
Note the following item, and install in the reverse order of removal.

#### **CAUTION:**

- Replenish the following parts.
- Refrigerant: Refer to HA-21, "Charge Refrigerant".
- Engine coolant (VQ engine models): Refer to CO-9, "Refilling".
- Engine coolant (VK engine models): Refer to <u>CO-34, "Refilling"</u>.
- AT fluid: Refer to TM-94, "Changing".
- Power steering oil: Refer to ST-31, "Inspection".
- Adjust the following parts.
- Front combination lamp: Refer to EXL-115, "Aiming Adjustment Procedure".
- ICC sensor integrated unit (with intelligent cruse control model): Refer to CCS-75, "Description".

### FRONT FENDER

**Exploded View** INFOID:0000000006039541



- Double-faced adhesive tape 2.0 mm (0.079 in)
- Hood seal assembly (side)
- Front fender assembly

- Front fender baffle
- : Clip

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

A viscous urethane foam (A) is installed on the back surface of front fender. When removing the front fender, peel of the urethane foam bit at a time, and carefully to remove it.

#### Removal and Installation

Use a shop cloth to protect the body from being damaged during removal and installation.

- 1. Remove front fender cover (RH and LH): Refer to EXT-21, "Exploded View".
- Remove brake master cylinder cover, battery cover, hood ledge cover (LH and RH). Refer to EXT-21, "Exploded View".
- Remove hood seal assembly (side).
- Remove air duct (inlet).

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- VQ37: Refer to EM-29, "Removal and Installation".
- VK56: Refer to EM-184, "Removal and Installation".
- 5. Remove front bumper fascia. Refer to EXT-14, "Removal and Installation".
- Remove front combination lamp. Refer to <u>EXL-119</u>, "Removal and Installation".
- Remove fender protector. Refer to EXT-24, "FENDER PROTECTOR: Removal and Installation". 7.
- Remove front door assembly. Refer to <u>DLK-153</u>, "<u>DOOR ASSEMBLY</u>: Removal and Installation".

**DLK-151** 

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#### **CAUTION:**

#### **REMOVAL**

### **FRONT FENDER**

#### < REMOVAL AND INSTALLATION >

- 9. Remove front fender baffle.
- 10. Remove front fender mounting bolts, and then remove front fender.

### **INSTALLATION**

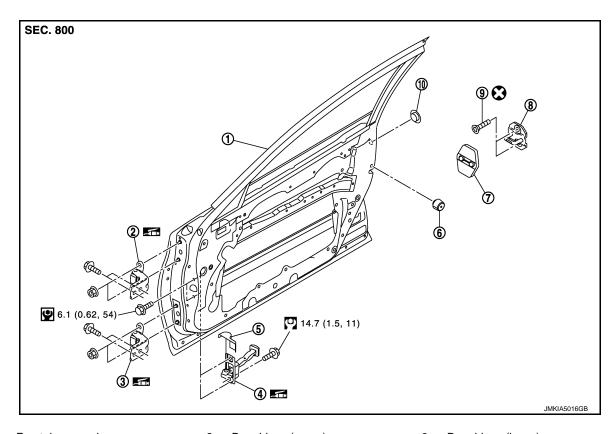
Note the following item, and install in the reverse order of removal.

### **CAUTION:**

- · After installation, check front fender adjustment.
- Hood side: Refer to DLK-145, "HOOD ASSEMBLY: Adjustment".
- Front door side: Refer to <u>DLK-154, "DOOR ASSEMBLY: Adjustment"</u>.
- After installation, apply the touch-up paint (the body color) onto the head of front fender mounting bolts.
- Adjust the following part.
- Front combination lamp: Refer to EXL-115, "Aiming Adjustment Procedure".

### FRONT DOOR

Exploded View



- 1. Front door panel
- 4. Door check link
- 7. Door striker cover
- 10. Grommet

- 2. Door hinge (upper)
- 5. Check link cover
- Door striker

- 3. Door hinge (lower)
- 6. Bumper rubber
- 9. TORX bolt

DOOR ASSEMBLY

DOOR ASSEMBLY: Removal and Installation

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

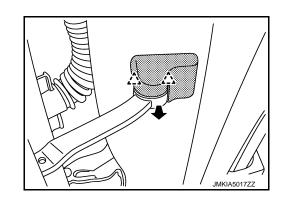
### **CAUTION:**

- Perform work with 2 workers, because of its heavy weight.
- When removing and installing front door assembly, support door with a jack and cloth to protect door and body.

#### **REMOVAL**

1. Remove check link cover toward vehicle rear..

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Remove mounting bolts of door check link on the vehicle.

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- Disconnect front door harness connector.
- 4. Remove door hinge mounting nuts (door side), and then remove door assembly.

#### NOTE:

Adjustment of front door for installation is not necessary if front door assembly is removed by removing door hinge mounting nuts.

#### INSTALLATION

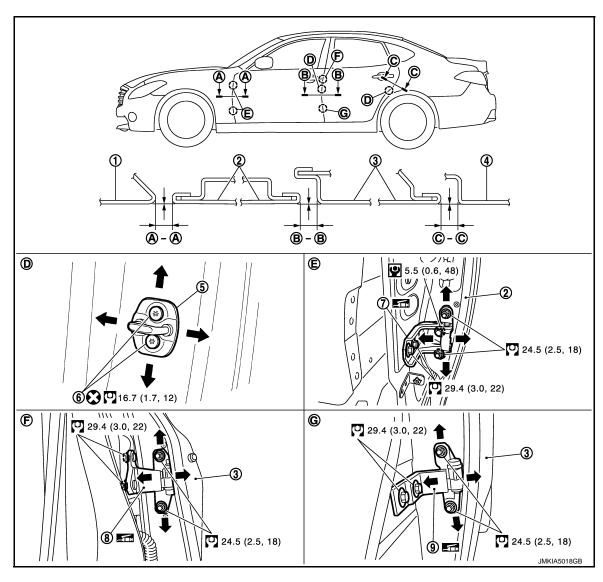
Note the following item, and install in the reverse order of removal.

#### **CAUTION:**

- Check front door open/close, lock/unlock operation after installation.
- Check door hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installation, perform the fitting adjustment. Refer to <u>DLK-154</u>, "<u>DOOR ASSEMBLY</u>: <u>Adjust-ment"</u>.
- After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.

DOOR ASSEMBLY: Adjustment

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- 1. Front fender
- Body side outer
- 7. Front door hinge
- 2. Front door
- Door striker
- 8. Rear door hinge (upper)
- 3. Rear door
- TORX bolt
- 9. Rear door hinge (lower)

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

Check the clearance and surface height between front door and each part by visually and touching.

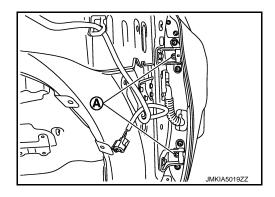
#### FRONT DOOR

#### < REMOVAL AND INSTALLATION >

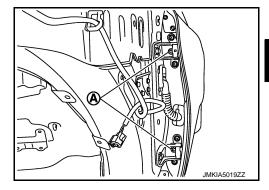
If the clearance and the surface height are out of specification, adjust them according to the procedures shown below.

Portion			Standard	
Front fender – Front door	<b>A</b> – <b>A</b>	Clearance	2.7 – 4.7 mm (0.106 – 0.185 in)	
		Surface height	(–1.0) – (+1.0) mm [(–0.039) – (+0.039) in]	
Front door – Rear door	B – B	Clearance	2.9 – 4.7 mm (0.114 – 0.185 in)	
		Surface height	-1.0) - (+1.0) mm [(-0.039) - (+0.039) in]	

- 1. Remove front fender. Refer to <u>DLK-151</u>, "Removal and Installation".
- 2. Loosen door hinge mounting nuts on door side.
- 3. Loosen bolts (A).



- 4. Adjust the surface height of front door according to the fitting standard dimension.
- 5. Tighten bolts (A).



- 6. Temporarily tighten door hinge mounting nuts on door side.
- 7. Loosen door hinge mounting bolts on body side.
- 8. Raise front door at rear end to adjust clearance of the front door according to the fitting standard dimension.
- 9. After adjustment tighten bolts and nuts to the specified torque.
- 10. Install front fender. Refer to <u>DLK-151, "Removal and Installation"</u>.

#### DOOR STRIKER ADJUSTMENT

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

#### DOOR STRIKER

DOOR STRIKER: Removal and Installation

#### **REMOVAL**

Remove door striker cover and TORX bolts, and then remove door striker.

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### **FRONT DOOR**

#### < REMOVAL AND INSTALLATION >

#### INSTALLATION

Note the following item, and install in the reverse order of removal.

#### **CAUTION:**

- Check front door open/close, lock/unlock operation after installation.
- After installation, check to perform the fitting adjustment. Refer to <u>DLK-154</u>, "<u>DOOR ASSEMBLY</u>:
   <u>Adjustment</u>".

#### DOOR HINGE

#### DOOR HINGE: Removal and Installation

INFOID:0000000006039549

#### **REMOVAL**

- 1. Remove front fender. Refer to <u>DLK-151, "Removal and Installation"</u>.
- 2. Remove front door assembly. Refer to <u>DLK-153</u>, "DOOR ASSEMBLY: Removal and Installation".
- Remove front door hinge mounting bolts, and then remove front door hinge.

#### INSTALLATION

Note the following item, and install in the reverse order of removal.

#### **CAUTION:**

- Check front door open/close, lock/unlock operation after installation.
- Check door hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installation, perform the fitting adjustment. Refer to <u>DLK-154, "DOOR ASSEMBLY: Adjust-ment".</u>
- After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.
   DOOR CHECK LINK

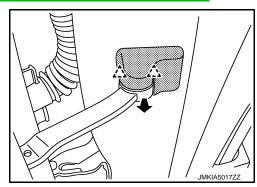
### DOOR CHECK LINK: Removal and Installation

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#### **REMOVAL**

- 1. Fully close the front door window.
- 2. Remove front door finisher. Refer to INT-31, "FRONT DOOR FINISHER: Removal and Installation".
- Remove front door speaker or front door woofer.
  - Front door speaker (base audio without navigation): Refer to AV-121, "Removal and Installation".
  - Front door woofer (BOSE audio without navigation): Refer to AV-299, "Removal and Installation".
- 4. Remove check link cover toward vehicle rear.





- 5. Remove mounting bolts of door check link on the vehicle.
- 6. Remove mounting bolts of door check link on door panel.
- 7. Take door check link out from the hole of door panel.

#### INSTALLATION

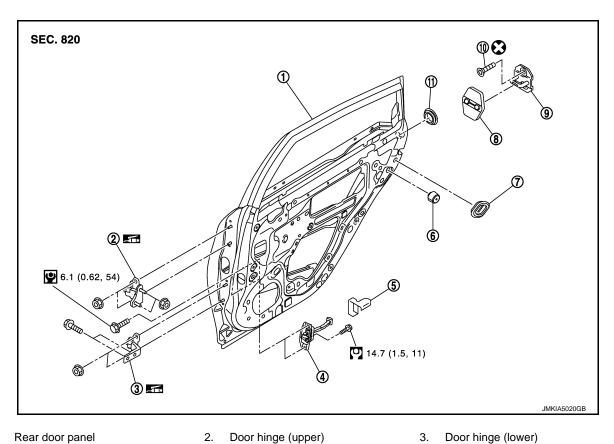
**CAUTION:** 

Note the following item, and install in the reverse order of removal.

Check front door open/close operation after installation.

## **REAR DOOR**

**Exploded View** INFOID:0000000006039552



- Rear door panel 1.
- Door check link
- Child lock lever cover
- 10. TORX bolt

- 2. Door hinge (upper)
- 5. Door check link cover
- Door striker cover
- 11. Grommet
- 6.
  - Door striker

Bumper rubber

DOOR ASSEMBLY

DOOR ASSEMBLY: Removal and Installation

#### **CAUTION:**

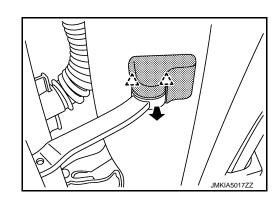
- Perform work with 2 workers, because of it's heavy weight.
- When removing and installing rear door assembly, support door with a jack and cloth to protect door and body.

#### **REMOVAL**

1. Remove check link cover toward vehicle rear.

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

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Remove mounting bolts of door check link on the vehicle.

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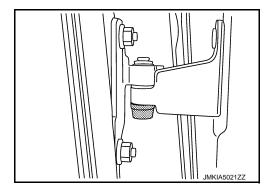
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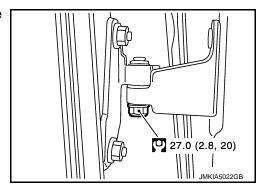
### **REAR DOOR**

#### < REMOVAL AND INSTALLATION >

- 3. Remove rear door harness grommet, and then pull out door harness from the vehicle.
- 4. Disconnect rear door harness connector.
- 5. Remove nut cup.



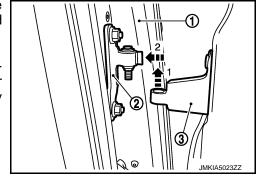
6. Remove door hinge mounting nuts (door side), and then remove rear door assembly.



7. Lift up rear door assembly (1). Disconnect door hinge [male-side (door side)] (2) from door hinge [female-side (body side)] (2) and remove toward outside of vehicle.

#### NOTE:

Adjustment of rear door assembly for installation is not necessary if rear door assembly is removed by disconnecting door hinge [male-side (door side)] from door hinge [female-side (body side)].



### **INSTALLATION**

Note the following item, and install in the reverse order of removal.

#### **CAUTION:**

- Check rear door open/close, lock/unlock operation after installation.
- Check door hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installation, perform the fitting adjustment.
- After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.

## **DOOR ASSEMBLY: Adjustment**

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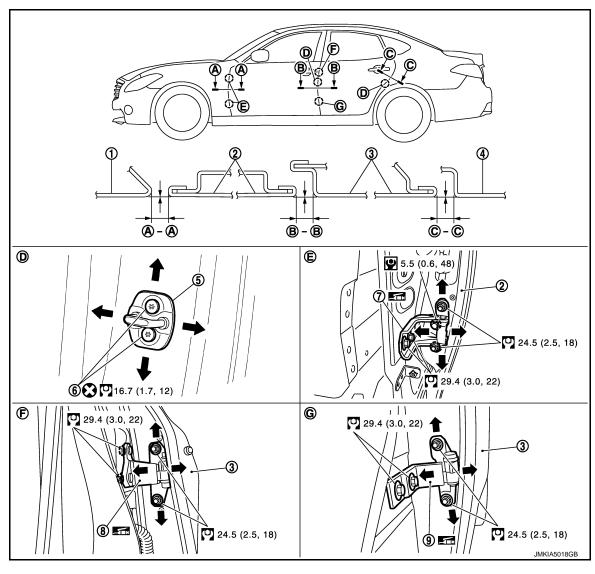
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- Front fender
- 4. Body side outer
- 7. Front door hinge

- 2. Front door
- 5. Door striker
- 8. Rear door hinge (upper)
- 3. Rear door
- 6. TORX bolt
- 9. Rear door hinge (lower)

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

Check the clearance and surface height between rear door and each part by visually and touching. If the clearance and the surface height are out of specification, adjust them according to the procedures shown below.

Portion			Standard	
Front door – Rear door	B – B	Clearance	2.9 – 4.7 mm (0.114 – 0.185 in)	
Front door – Real door	<b>D</b> - <b>D</b>	Surface height	(-1.0) - (+1.0) mm [(-0.039) - (+0.039) in]	
Rear door – Body side outer	C – C	Clearance	2.7 – 4.7 mm (0.106 – 0.185 in)	
Real door Body side outer		Surface height	(-1.0) - (+1.0) mm [(-0.039) - (+0.039) in]	

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### **REAR DOOR**

#### < REMOVAL AND INSTALLATION >

#### **CAUTION:**

When performing adjustment for installation, check that door hinge [male-side (door side)] is connected to door hinge [female-side (body side)].

- Remove center pillar lower garnish. Refer to <u>INT-40, "CENTER PILLAR LOWER GARNISH: Removal</u> and Installation".
- 2. Loosen door hinge mounting nuts on door side.
- 3. Adjust the surface height of rear door according to the fitting standard dimension.
- 4. Temporarily tighten door hinge mounting nuts on door side.
- 5. Loosen door hinge mounting nuts and bolts on body side.
- 6. Raise rear door at rear end to adjust clearance of rear door according to the fitting standard dimension.
- After adjustment tighten bolts and nuts to the specified torque.
- 8. Install center pillar lower garnish. Refer to <a href="INT-40">INT-40</a>, "CENTER PILLAR LOWER GARNISH: Removal and Installation".

#### DOOR STRIKER ADJUSTMENT

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

#### DOOR STRIKER

#### DOOR STRIKER: Removal and Installation

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#### REMOVAL

- 1. Remove door striker cover with remover tool.
- Remove door striker mounting TORX bolts, and then remove door striker.

#### **INSTALLATION**

Note the following item, and install in the reverse order of removal.

#### **CAUTION:**

- Check rear door open/close, lock/unlock operation after installation.
- After installation, check to perform the fitting adjustment. Refer to <u>DLK-159</u>, "<u>DOOR ASSEMBLY</u>:
   <u>Adjustment</u>".

#### DOOR HINGE

#### DOOR HINGE: Removal and Installation

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#### REMOVAL

- Remove center pillar lower garnish. Refer to <u>INT-40, "CENTER PILLAR LOWER GARNISH: Removal and Installation".</u>
- Remove rear door assembly. Refer to <u>DLK-157</u>, "<u>DOOR ASSEMBLY</u>: <u>Removal and Installation</u>".
- 3. Remove rear door hinge mounting bolts and nuts (body side), and then remove door hinge.

#### INSTALLATION

Note the following item, and install in the reverse order of removal.

### **CAUTION:**

- Check rear door open/close operation after installation.
- Check door hinge rotating part for poor lubrication. If necessary, apply body grease.
- When removing and installing rear door assembly, perform the fitting adjustment. Refer to <u>DLK-159</u>, <u>"DOOR ASSEMBLY: Adjustment"</u>.
- After installing, apply the touch-up paint (the body color) onto the head of door hinge mounting nuts.
   DOOR CHECK LINK

#### DOOR CHECK LINK: Removal and Installation

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#### REMOVAL

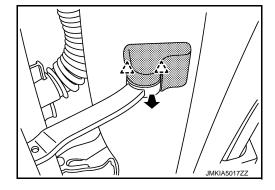
- Fully close the rear door window.
- 2. Remove rear door finisher. Refer to <a href="INT-33">INT-33</a>, "REAR DOOR FINISHER: Removal and Installation".
- Remove rear door speaker.

### **REAR DOOR**

#### < REMOVAL AND INSTALLATION >

- Base audio without navigation: Refer to AV-123, "Removal and Installation".
- BOSE audio without navigation: Refer to AV-302, "Removal and Installation".
- 4. Remove check link cover toward vehicle rear.





- 5. Remove mounting bolts of the check link on the vehicle.
- 6. Remove mounting bolts of the check link on door panel.
- 7. Take door check link out from the hole of door panel.

#### INSTALLATION

Note the following item, and install in the reverse order of removal. **CAUTION:** 

Check rear door open/close operation after installation.

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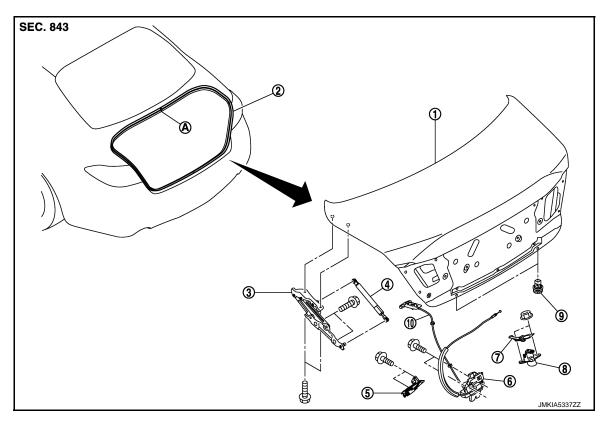
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## **TRUNK LID**

Exploded View



- 1. Trunk lid assembly
- 4. Trunk lid stay
- 7. Trunk lid outer protector
- 10. Emergency opener cable
- A : Center mark (upper)
- 2. Trunk lid weather-strip
- 5. Trunk lid striker
- 8. Trunk key cylinder
- 3. Trunk lid hinge
- 6. Trunk lid lock assembly
- 9. Bumper rubber

### TRUNK LID ASSEMBLY

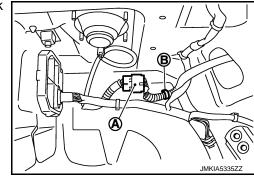
### TRUNK LID ASSEMBLY: Removal and Installation

#### **CAUTION:**

Operate with two workers, because of its heavy weight.

### **REMOVAL**

- 1. Remove the trunk lid finisher inner. Refer to INT-56, "Removal and Installation"
- 2. Disconnect harness connector (A) and harness clip (B) in trunk room.

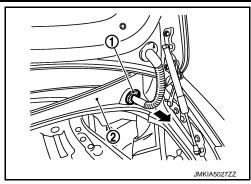


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### **TRUNK LID**

#### < REMOVAL AND INSTALLATION >

3. Remove grommet (1), and then pull harness throughout body panel (2).



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

### **INSTALLATION**

Note the following item, and 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.
- Check trunk lid open/close, lock/unlock operation after installation.
- After installation, perform fitting adjustment. Refer to <u>DLK-164, "TRUNK LID ASSEMBLY: Adjustment"</u>.

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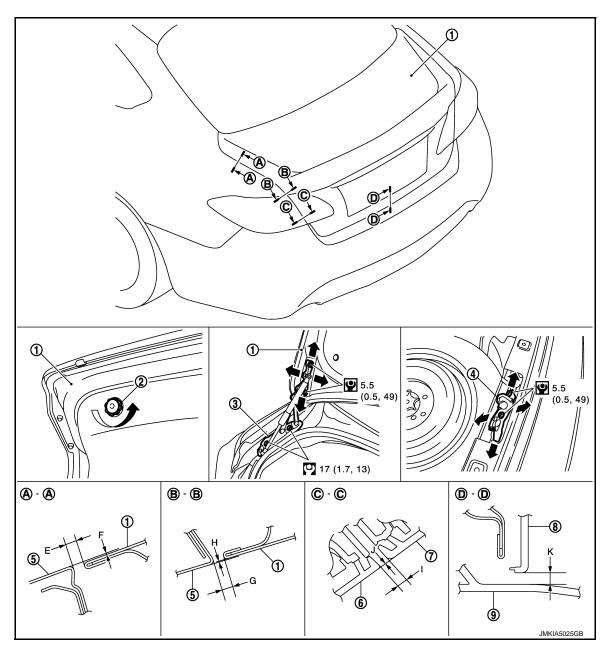
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# TRUNK LID ASSEMBLY : Adjustment

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- 1. Trunk lid assembly
- 4. Trunk lid striker
- 7. Reverse lamp

- 2. Bumper rubber
- 5. Body side outer
- Trunk lid finisher

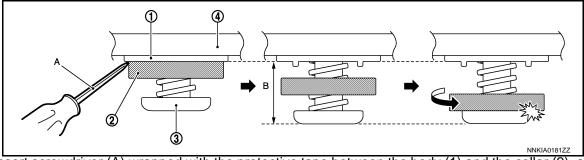
- 3. Trunk lid hinge
- 6. Rear combination lamp
- 9. Rear bumper fascia

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

Check the clearance and surface height between trunk lid and each part by visually and touching. If the clearance and surface height are out of specification, adjust them according to the procedures shown below.

Portion				Standard	Difference (RH/LH, MAX)
Trunk lid – Body side outer	<b>A</b> – <b>A</b>	E	Clearance	2.5 – 4.5 mm (0.098 – 0.177 in)	1.4 mm (0.055 in)
		F	Surface height	(-1.5) - (+0.5) mm [(-0.059) - (+0.020) in]	1.4 mm (0.055 in)
	B – B	G	Clearance	3.5 – 5.0 mm (0.118 – 0.197 in)	1.4 mm (0.055 in)
		Н	Surface height	(-1.5) - (+0.5) mm [(-0.059) - (+0.020) in]	1.4 mm (0.055 in)
Rear combination lamp  – Reverse lamp	C – C	ı	Clearance	2.1 – 5.9 mm (0.083 – 0.232 in)	2.5 mm (0.098 in)
		J	Surface height	(-1.9) - (+1.9) mm [(-0.075) - (+0.075) in]	2.2 mm (0.087 in)
Trunk lid – Rear bumper fascia	D – D	K	Clearance	2.4 – 6.6 mm (0.094 – 0.260 in)	_

- 1. Loosen trunk lid hinge mounting bolts (trunk lid side).
- 2. Remove trunk rear plate. Refer to INT-54, "TRUNK REAR PLATE: Removal and Installation".
- 3. Loosen trunk lid striker mounting bolts.
- 4. Lift up trunk lid approximately 100 150 mm (3.937 5.906 in) height then close it lightly and check that it is engaged firmly with trunk lid closed.
- 5. Check the clearance and surface height.
- 6. Finally tighten trunk lid hinge and trunk lid striker.
- 7. Install trunk rear plate. Refer to INT-54, "TRUNK REAR PLATE: Removal and Installation".
- 8. Initialize the height of bumper rubber.



- Insert screwdriver (A) wrapped with the protective tape between the body (1) and the collar (2), and then pull out the bumper rubber (3) from the trunk lid (4).
- Rotate the collar and contact it with the bumper rubber.
- 9. Close the trunk lid by pushing with hands.

#### NOTE:

The bumper rubber is pressed to the vehicle body side, and it is compressed in the trunk lid. **CAUTION:** 

- Close the trunk lid gently because the bumper rubber is compressed excessively by slamming the trunk lid.
- If the bumper rubber is compressed excessively, initialize the height of bumper rubber, and then repeat the procedure again.

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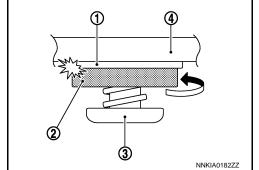
#### TRUNK LID

#### < REMOVAL AND INSTALLATION >

Open the trunk lid, and then engage it with the body by rotating the collar.

> (1) : Body (2) : Collar

(3) : Bumper rubber(4) : Trunk lid



#### **CAUTION:**

- Apply anticorrosive agent onto the mounting surface.
- After installation, check trunk lid open/close, lock/unlock operation.
- After installation, apply touch-up paint (the body color) onto the head of trunk lid hinge mounting bolts and nuts.

#### TRUNK LID STRIKER ADJUSTMENT

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

TRUNK LID STRIKER

TRUNK LID STRIKER: Removal and Installation

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#### **REMOVAL**

- Remove trunk rear plate. Refer to <u>INT-54, "TRUNK REAR PLATE: Removal and Installation"</u>.
- 2. Remove mounting bolts, and then remove trunk lid striker.

#### INSTALLATION

Note the following item, and install in the reverse order of removal.

#### **CAUTION:**

- Check trunk lid open/close, lock/unlock operation after installation.
- When removing and installing trunk lid striker, perform the fitting adjustment. Refer to <u>DLK-164</u>, <u>"TRUNK LID ASSEMBLY: Adjustment"</u>.

TRUNK LID HINGE

TRUNK LID HINGE: Removal and Installation

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#### **REMOVAL**

- Remove trunk lid assembly. Refer to DLK-162, "TRUNK LID ASSEMBLY: Removal and Installation".
- Remove trunk lid stay from trunk lid hinge. Refer to <u>DLK-166</u>, "TRUNK LID STAY: Removal and Installation".
- 3. Remove trunk lid hinge mounting nuts (body side), and then remove trunk lid hinge.

#### INSTALLATION

Note the following item, and install in the reverse order of removal.

#### **CAUTION:**

- Check trunk lid open/close, lock/unlock operation after installation.
- Check trunk lid hinge rotating part for poor lubrication. If necessary, apply body grease.
- When removing and installing trunk lid assembly, perform the fitting adjustment. Refer to <u>DLK-164</u>, <u>"TRUNK LID ASSEMBLY: Adjustment"</u>.
- After installation, apply touch-up paint (the body color) onto the head of trunk lid hinge mounting bolts.

TRUNK LID STAY

TRUNK LID STAY: Removal and Installation

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**REMOVAL** 

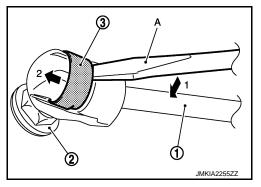
#### < REMOVAL AND INSTALLATION >

Support trunk lid with the proper material to prevent it from falling.

#### **WARNING:**

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

- 2. Remove the metal clip (3) located on the connection between the trunk lid stay (1) and the stud ball (2) (trunk lid side) by using a flat-bladed screwdriver (A).
- 3. Remove trunk lid stay (trunk lid side).



4. In the same way, remove trunk lid stay (body side).

#### INSTALLATION

Note the following item, and install in the reverse order of removal.

#### **CAUTION:**

Check trunk lid open/close operation after installation.

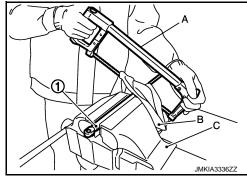
### TRUNK LID STAY : Disposal

1. Fix trunk lid stay (1) using a vise (C).

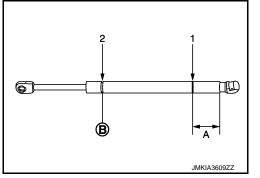
2. Using hacksaw (A) slowly make 2 holes in the trunk lid stay, in numerical order as shown in the figure.

#### **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: 20.0 mm (0.787 in) B: Cut at the groove.



### TRUNK LID WEATHER-STRIP

#### TRUNK LID WEATHER-STRIP: Removal and Installation

### REMOVAL

Pull up and remove engagement with body from weather-strip joint.

#### **CAUTION:**

Never pull strongly on weather-strip.

INSTALLATION

**DLK-167** Revision: 2010 June 2011 M37/M56

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### **TRUNK LID**

#### < REMOVAL AND INSTALLATION >

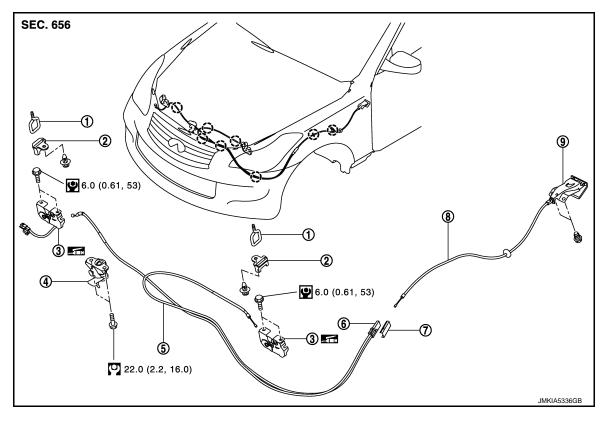
- 1. Working from the upper section, align weather-strip center mark (upper) with vehicle center position mark and install weather-strip onto the vehicle.
- 2. For the lower section, align weather-strip center mark (lower) with center of trunk lid striker.
- 3. Pull weather-strip gently to ensure that there is no loose section.

#### NOTE:

Check that weather-strip fits tightly in each corner.

### **HOOD LOCK**

Exploded View



- 1. Hood striker (LH/RH)
- 4. Secondary latch
- 7. Hood lock control cable protector cover
- 2. Hood striker cover (LH/RH)
- 5. Hood lock control cable (front)
- 8. Hood lock control cable (rear)
- 3. Hood lock (LH/RH)
- 6. Hood lock control cable protector
- 9. Hood lock opener lever

( ) : Clip

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

### **HOOD LOCK**

### **HOOD LOCK**: Removal and Installation

### REMOVAL

#### **CAUTION:**

Check wiring of hood lock control before removal.

- 1. Remove air duct (inlet).
  - VQ engine models: Refer to <u>EM-29</u>, "<u>Exploded View</u>".
  - VK engine models: Refer to EM-184, "Exploded View".
- 2. Remove hood lock control cable (front) clips from hood lock stay and condenser upper bracket.
- 3. Remove hood lock control cable (front) from tube clip of front bumper upper retainer.
- 4. Remove air cleaner assembly (VK engine models only). Refer to EM-184, "Removal and Installation".

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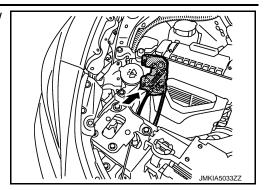
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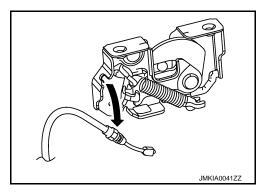
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Revision: 2010 June DLK-169 2011 M37/M56

Remove mounting bolts of hood lock then reward the arrow direction.

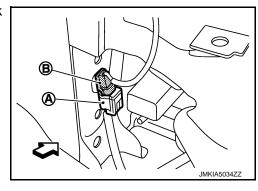


Disconnect hood lock control cable (front) from hood lock.



7. Disconnect harness connector (A), and then remove hood lock switch harness connector (B) from vehicle.





8. Remove hood lock.

#### INSTALLATION

Note the following item, and install in the reverse order of removal.

#### **CAUTION:**

- Check that hood lock control cable is properly engaged with hood lock.
- After installation, perform hood fitting adjustment. Refer to <u>DLK-145, "HOOD ASSEMBLY: Adjust-ment"</u>.
- After installation, perform hood lock control inspection. Refer to <u>DLK-170, "HOOD LOCK: Inspection"</u>.

**HOOD LOCK: Inspection** 

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#### NOTE:

If the hood lock cable is bent or deformed, replace it.

- 1. Check that the secondary and the hood lock stay are securely engaged by the weight of the hood when letting the hood free fall from a height of approximately 100 mm (3.937 in).
- 2. Check that the front end of the hood rises by approximately 20 mm (0.787 in) when pulling the hood opener lever gently. Also check that the hood opener lever returns to the original position.
- 3. Check that the tension of hood opener lever is less than 49.0 N (5.0 kg, 11.02 lb).
- 4. Check that the hood striker and the hood lock are securely engaged by the weight of the hood when letting the hood free fall from a height of approximately 300 mm (11.811 in).
  NOTE:
  - · Exert vertical force on right side and left side of hood lock.

### **HOOD LOCK**

### < REMOVAL AND INSTALLATION >

- · Never press simultaneously both sides.
- 5. Check the hood lock lubrication condition. If necessary, apply body grease to hood lock.

## HOOD LOCK CONTROL CABLE

### HOOD LOCK CONTROL CABLE: Removal and Installation

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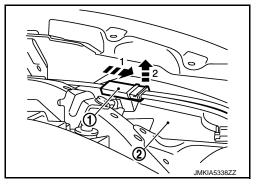
#### **FRONT**

Removal

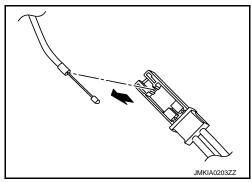
### **CAUTION:**

Check wiring of hood lock control before removal.

- 1. Remove clips of hood seal assembly (side).
- 2. Remove hood lock control cable protector (1) toward the arrow direction, then remove it from front combination lamp assembly (2).

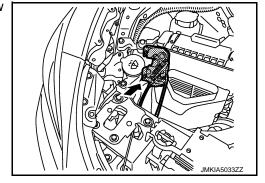


- 3. Remove hood lock control cable cover from hood lock control cable protector.
- 4. Disconnect hood lock control cable (front) hood lock control cable protector.



5. Remove air duct (inlet).

- VQ engine models: Refer to <u>EM-29</u>, "<u>Exploded View</u>".
- VK engine models: Refer to EM-184, "Exploded View".
- Remove hood lock control cable (front) fixing clips from hood lock stay and condenser upper bracket.
- 7. Remove hood lock control cable (front) from tube clip of front bumper upper retainer.
- Remove air cleaner assembly (VK engine models only). Refer to <u>EM-184, "Removal and Installation"</u>.
- Remove mounting bolts of hood lock then reward the arrow direction.



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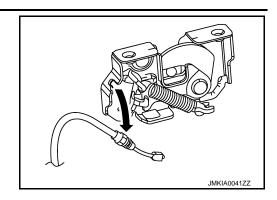
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10. Disconnect hood lock control cable (front) from hood lock.



11. Remove hood lock control cable (front) from vehicle.

Installation

Note the following item, and install in the reverse order of removal.

#### **CAUTION:**

Never to bend cable too much, keeping the radius 100 mm (3.937 in) or more.

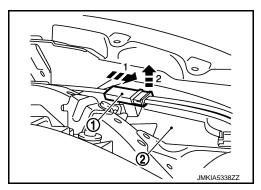
#### **REAR**

#### Removal

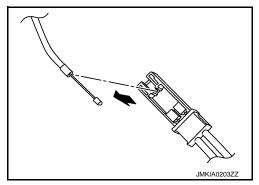
#### **CAUTION:**

Check wiring of hood lock control before removal.

- 1. Remove clips of hood seal assembly (side).
- 2. Remove hood lock control cable protector (1) toward the arrow direction, then remove it from front combination lamp assembly (2).



- 3. Remove hood lock control cable cover from hood lock control cable protector.
- 4. Disconnect hood lock control cable (rear) from hood lock control cable protector.



- 5. Remove fender protector LH. Refer to EXT-24, "FENDER PROTECTOR: Removal and Installation".
- 6. Remove mounting bolts and remove hood lock opener lever.
- 7. Remove front kicking plate inner LH and dash side finisher LH. Refer to INT-36, "Exploded View".
- Remove grommet on the lower dash, pull hood lock control cable (rear) toward the passenger compartment.

#### **CAUTION:**

While pulling, never to damage (peeling) the outside of the hood lock control cable.

Installation

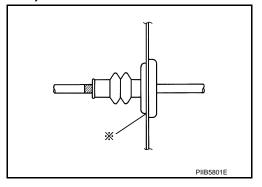
### **HOOD LOCK**

#### < REMOVAL AND INSTALLATION >

Note the following item, and install in the reverse order of removal.

### **CAUTION:**

- Never to bend cable too much, keeping the radius 100 mm (3.937 in) or more.
- Check that cable is not offset from the positioning grommet, and apply the sealant to the grommet (at\* mark) properly.



- Check that hood lock control cable is properly engaged with hood lock.
- After installation, perform hood fitting adjustment. Refer to <u>DLK-145, "HOOD ASSEMBLY: Adjust-ment"</u>.
- After installation, perform hood lock control inspection. Refer to <u>DLK-170, "HOOD LOCK: Inspection"</u>.

### HOOD LOCK CONTROL CABLE: Inspection

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#### NOTE:

If the hood lock cable is bent or deformed, replace it.

- 1. Check that secondary latch is properly engaged with secondary striker [6.8 mm (0.268 in)] by hood weight.
- 2. While operating hood opener, carefully check that the front end of hood is raised by approximately 20.0 mm (0.787 in). Also check that hood opener returns to the original position.
- 3. Check that hood opener operating is condition 49 N (5.0 kg, 11.0 lb) or below.
- Install so that static closing force of hood is 94 − 490 N·m (9.6 − 50.0 kg-m, 69 − 361 ft − lb).
   NOTE:
  - Exert vertical force on right side and left side of hood lock.
  - Never press simultaneously both sides.
- 5. Check the hood lock lubrication condition. If necessary, apply body grease to hood lock.

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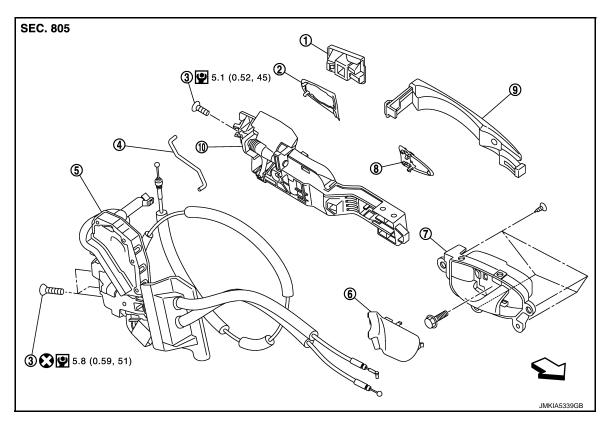
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Revision: 2010 June **DLK-173** 2011 M37/M56

Exploded View



- Door key cylinder assembly (driver side)
  - Outside handle escutcheon (passenger side)
- 4. Key rod (driver side)
- 7. Inside handle
- 10. Outside handle bracket
- <□ : Vehicle front

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

- Rear gasket
- 5. Door lock assembly
- 8. Front gasket

- TORX bolt
- 6. Inside handle escutcheon

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Outside handle

### DOOR LOCK

### DOOR LOCK: Removal and Installation

#### **REMOVAL**

- 1. Remove front door finisher. Refer to <a href="INT-31">INT-31</a>, "FRONT DOOR FINISHER: Removal and Installation".
- 2. Remove front door glass. Refer to GW-18, "Removal and Installation".
- 3. Remove front door module assembly. Refer to GW-20, "Removal and Installation".
- Disconnect door antenna and door request switch connector and remove harness clamp (with Intelligent Key system model) on outside handle bracket.

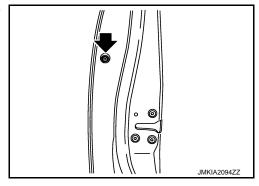
### < REMOVAL AND INSTALLATION >

5. Remove door side grommet, and loosen TORX bolt from grommet hole.

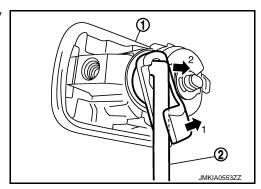
### **CAUTION:**

**Never remove TORX bolt forcibly.** 

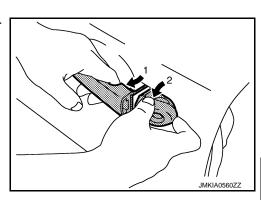
= : TORX bolt



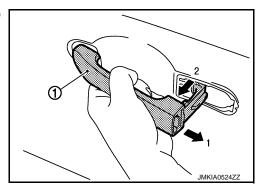
6. Reach in to separate key rod (2) connection [on the door key cylinder assembly (1)] (driver side).



7. While pulling outside handle, remove door key cylinder assembly (driver side) or outside handle escutcheon (passenger side).



8. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



9. Remove front gasket and rear gasket.

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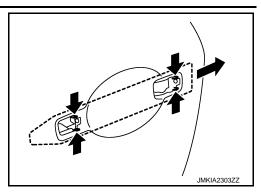
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### < REMOVAL AND INSTALLATION >

10. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.



- 11. Reach in to separate outside handle cable connection on outside handle bracket.
- 12. Remove door lock assembly mounting TORX bolts.
- 13. Disconnect door lock actuator connector, and then remove door lock assembly.
- 14. Remove key rod from door lock assembly.

#### INSTALLATION

Note the following item, and install in the reverse order of removal.

#### **CAUTION:**

- When installing each rod, rotate rod holder until a click is felt.
- · Check door open/close, lock/unlock operation after installation.

INSIDE HANDLE

INSIDE HANDLE: Removal and Installation

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### **REMOVAL**

- Remove front door finisher. Refer to INT-31, "FRONT DOOR FINISHER: Removal and Installation".
- 2. Remove inside handle mounting screws.

#### INSTALLATION

Note the following item, and install in the reverse order of removal.

#### CAUTION

Check door open/close, lock/unlock operation after installation.

OUTSIDE HANDLE

**OUTSIDE HANDLE: Removal and Installation** 

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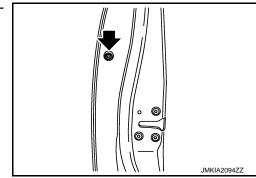
#### **REMOVAL**

- 1. Remove front door finisher. Refer to <a href="INT-31">INT-31</a>, "FRONT DOOR FINISHER: Removal and Installation".
- Remove front door glass. Refer to <u>GW-18</u>, "<u>Removal and Installation</u>".
- 3. Remove front door module assembly. Refer to <a href="GW-20">GW-20</a>, "Removal and Installation".
- 4. Disconnect door antenna and door request switch connector and remove harness clamp (models with Intelligent Key system) on outside handle bracket.
- Remove door side grommet, and loosen TORX bolt from grommet hole.

#### **CAUTION:**

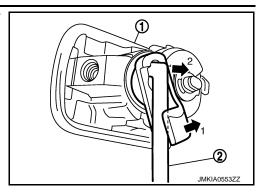
Never remove TORX bolt forcibly.

= : TORX bolt

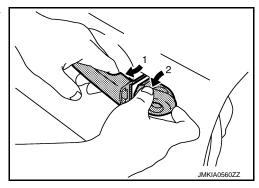


#### < REMOVAL AND INSTALLATION >

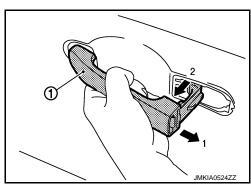
Reach in to separate key rod (2) connection [on the door key cylinder assembly (1)] (driver side).



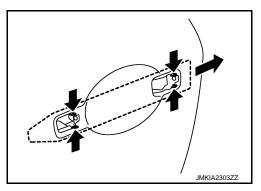
7. While pulling outside handle, remove door key cylinder assembly (driver side) or outside handle escutcheon (passenger side).



8. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



- 9. Remove front gasket and rear gasket.
- 10. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.



11. Reach in to separate outside handle cable connection on outside handle bracket.

#### INSTALLATION

Note the following item, and install in the reverse order of removal.

#### **CAUTION:**

- When installing each rod, rotate rod holder until a click is felt.
- Check door open/close, lock/unlock operation after installation.

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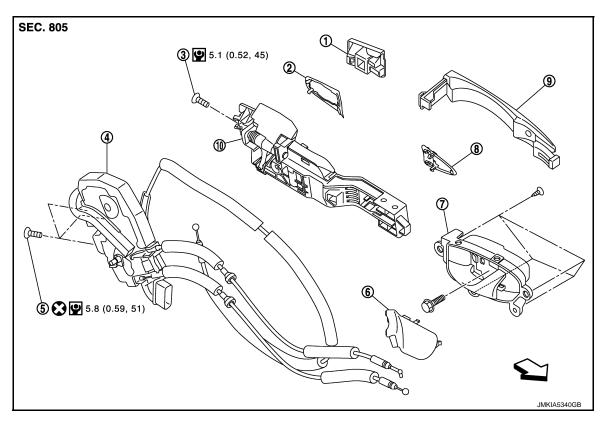
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## **REAR DOOR LOCK**

Exploded View



- 1. Outside handle escutcheon
- 4. Door lock assembly
- 7. Inside handle
- 10. Outside handle bracket
- $\cline \Box$  : Vehicle front

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

- 2. Rear gasket
- 5. TORX bolt
- 8. Front gasket

- 3. TORX bolt
- 6. Inside handle escutcheon
- 9. Outside handle

### DOOR LOCK

DOOR LOCK: Removal and Installation

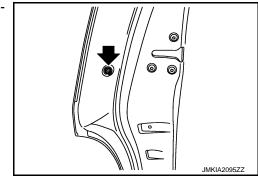
#### **REMOVAL**

- 1. Remove rear door finisher. Refer to INT-33, "REAR DOOR FINISHER: Removal and Installation".
- 2. Remove sealing screen. Refer to GW-23, "Removal and Installation".
- 3. Fully close the rear door glass.
- 4. Remove door side grommet, and loosen TORX bolt from grommet hole.

#### **CAUTION:**

Never remove TORX bolt forcibly.

= : TORX bolt

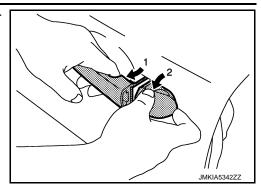


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#### REAR DOOR LOCK

#### < REMOVAL AND INSTALLATION >

While pulling outside handle, remove outside handle escutcheon



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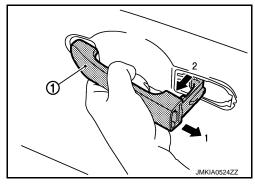
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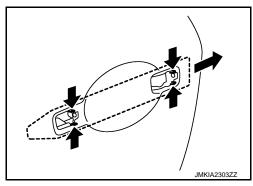
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While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



- 7. Remove front gasket and rear gasket.
- 8. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.



9. Reach in to separate outside handle cable connection on outside handle bracket.

10. Remove door lock assembly mounting TORX bolts.

11. Disconnect door lock actuator connector, and then remove door lock assembly.

#### **INSTALLATION**

Note the following item, and install in the reverse order of removal.

#### CAUTION:

Check door open/close, lock/unlock operation after installation.

### **INSIDE HANDLE**

### INSIDE HANDLE: Removal and Installation

#### INFOID:0000000006039577

#### REMOVAL

- 1. Remove rear door finisher. Refer to <a href="INT-33">INT-33</a>, "REAR DOOR FINISHER: Removal and Installation".
- Remove inside handle mounting screws, and then remove inside handle.

#### INSTALLATION

Note the following item, and install in the reverse order of removal.

#### **CAUTION:**

Check door open/close, lock/unlock operation after installation.

**OUTSIDE HANDLE** 

### **OUTSIDE HANDLE: Removal and Installation**

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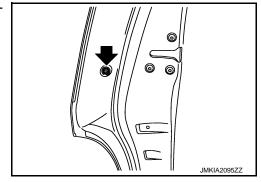
### **REMOVAL**

Remove door side grommet, and loosen TORX bolt from grommet hole.

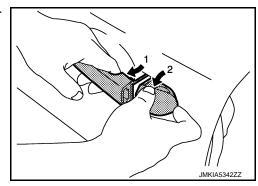
#### **CAUTION:**

Never remove TORX bolt forcibly.

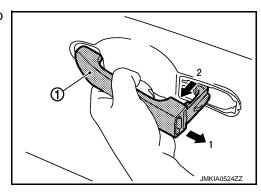
= : TORX bolt



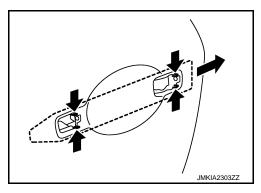
2. While pulling outside handle, remove outside handle escutcheon



3. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



- 4. Remove rear door finisher. Refer to INT-33, "REAR DOOR FINISHER: Removal and Installation".
- 5. Remove sealing screen. Refer to GW-23, "Removal and Installation".
- 6. Fully close rear door glass.
- 7. Remove front gasket and rear gasket.
- 8. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.



9. Reach in to separate outside handle cable connection on outside handle bracket.

#### INSTALLATION

#### **REAR DOOR LOCK**

#### < REMOVAL AND INSTALLATION >

Note the following item, and install in the reverse order of removal. **CAUTION:** 

Check door open/close, lock/unlock operation after installation.

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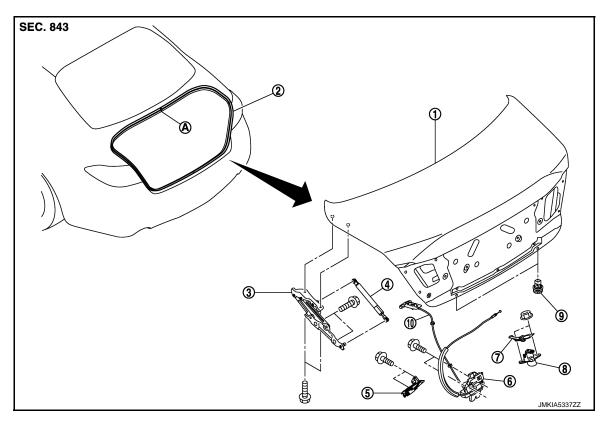
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Revision: 2010 June **DLK-181** 2011 M37/M56

## TRUNK LID LOCK

Exploded View



- 1. Trunk lid
- 4. Trunk lid stay
- 7. Trunk lid outer protector
- 10. Emergency opener cable
- A. Center mark (upper)
- Refer to GI-4, "Components" for symbols in the figure.
- 2. Trunk lid weather-strip
- 5. Trunk lid striker
- 8. Trunk key cylinder
- 3. Trunk lid hinge
- 6. Trunk lid lock assembly

INFOID:0000000006039596

2011 M37/M56

9. Bumper rubber

#### Removal and Installation

#### **REMOVAL**

- 1. Remove trunk lid finisher inner. Refer to <a href="INT-56">INT-56</a>, "Removal and Installation".
- 2. Disconnect trunk lid emergency opener cable.
- 3. Disconnect cable of trunk lid lock assembly from trunk lid cylinder.
- 4. Disconnect trunk lid lock assembly connector.
- 5. Remove trunk lid lock assembly mounting bolts, and then remove trunk lid lock assembly.

#### **INSTALLATION**

Revision: 2010 June

Note the following item, and install in the reverse order of removal.

#### **CAUTION:**

Check trunk lid open/close, lock/unlock operation after installation.

**DLK-182** 

## **FUEL FILLER LID OPENER**

## **Exploded View**

SEC. 844\*905

- 1. Fuel filler lid opener actuator
- 4. Fuel filler lid assembly
- ^` : Pawl

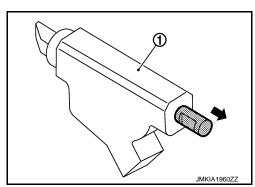
- 2. Lock nut
- 5. Bumper rubber

- 3. Bumper rubber
- 6. Lock and rod assembly

#### Removal and Installation

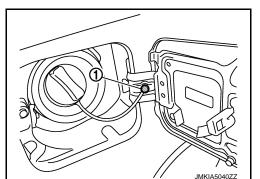
#### NOTE:

When fuel filler lid opener actuator (1) is a defective operation, pull the rod to open fuel filler lid.



#### **REMOVAL**

- Fully open fuel filler lid.
- 2. Remove fuel mounting pin (1).



- 3. Remove mounting screws and then remove fuel filler lid.
- 4. Rotate lock nut counterclockwise, and then remove lock nut.

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#### **FUEL FILLER LID OPENER**

#### < REMOVAL AND INSTALLATION >

- 5. Remove trunk side finisher RH. Refer to INT-54, "TRUNK SIDE FINISHER: Removal and Installation".
- 6. Push fuel filler lid opener actuator behind the vehicle, while pushing the pawl.
- 7. Disconnect harness connector and remove fuel filler lid opener actuator.
- 8. Pull and remove lock & rod assembly forward, while pushing the pawls.

#### **INSTALLATION**

Note the following item, and install in the reverse order of removal.

#### **CAUTION:**

- After installation, check fuel filler lid assembly open/close, lock/unlock operation.
- After installation, apply the touch-up paint (the body color) onto the head of the mounting screws.

#### **DOOR SWITCH**

#### < REMOVAL AND INSTALLATION >

# DOOR SWITCH Removal and Installation

REMOVAL Remove the door switch mounting bolt, and then remove door switch.

INSTALLATION

Install in the reverse order of removal.

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#### **INSIDE KEY ANTENNA**

#### < REMOVAL AND INSTALLATION >

## INSIDE KEY ANTENNA INSTRUMENT CENTER

#### **INSTRUMENT CENTER:** Removal and Installation

INFOID:0000000005947042

#### **REMOVAL**

- 1. Remove the cluster lid C. Refer to IP-13, "Removal and Installation".
- 2. Remove the inside key antenna (instrument center) mounting screw, and then remove inside key antenna (instrument center).

#### INSTALLATION

Install in the reverse order of removal.

#### CONSOLE

#### **CONSOLE**: Removal and Installation

INFOID:0000000005947044

#### **REMOVAL**

- 1. Remove the console ashtray.
- 2. Remove the center console assembly. Refer to IP-24, "Removal and Installation".
- Remove the inside key antenna mounting (console) screw, and then remove inside key antenna (console).

#### **INSTALLATION**

Install in the reverse order of removal.

#### TRUNK ROOM

#### TRUNK ROOM: Removal and Installation

INFOID:0000000005947046

#### **REMOVAL**

- 1. Remove the trunk lid upper finisher. Refer to <a href="INT-54">INT-54</a>, "TRUNK FINISHER FRONT: Removal and Installation"
- 2. Remove the inside key antenna (trunk room) mounting nuts, and then remove inside key antenna (trunk room).

#### **INSTALLATION**

#### **OUTSIDE KEY ANTENNA**

#### < REMOVAL AND INSTALLATION > **OUTSIDE KEY ANTENNA** Α **DRIVER SIDE** DRIVER SIDE: Removal and Installation INFOID:0000000005947048 В REMOVAL Remove the front outside handle LH. Refer to <u>DLK-176</u>, "OUTSIDE HANDLE: Removal and Installation". **INSTALLATION** Install in the reverse order of removal. PASSENGER SIDE D PASSENGER SIDE: Removal and Installation INFOID:0000000005947050 Е **REMOVAL** Remove the front outside handle RH. Refer to DLK-176, "OUTSIDE HANDLE: Removal and Installation". INSTALLATION

**REMOVAL** 

REAR BUMPER

INFOID:0000000005947052

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- 1. Remove the rear bumper. Refer to EXT-18, "Removal and Installation".
- 2. Remove the outside key antenna (rear bumper) mounting nuts, and then remove outside key antenna (rear bumper).

**INSTALLATION** 

Install in the reverse order of removal.

Install in the reverse order of removal.

REAR BUMPER: Removal and Installation

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#### INTELLIGENT KEY WARNING BUZZER

#### < REMOVAL AND INSTALLATION >

## INTELLIGENT KEY WARNING BUZZER

#### Removal and Installation

#### INFOID:0000000005947054

#### **REMOVAL**

- 1. Remove the front bumper. Refer to <u>EXT-14, "Removal and Installation"</u>.
- 2. Remove the Intelligent Key warning buzzer mounting bolt, and then remove the Intelligent Key warning buzzer.

#### **INSTALLATION**

#### TRUNK OPENER REQUEST SWITCH

#### < REMOVAL AND INSTALLATION >

## TRUNK OPENER REQUEST SWITCH

## Removal and Installation

#### INFOID:0000000005947058

#### **REMOVAL**

- 1. Remove the trunk lid finisher. Refer to EXT-41, "Removal and Installation".
- 2. Remove trunk lid request switch from trunk lid finisher.

#### **INSTALLATION**

Install in the reverse order of removal.

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#### TRUNK LID OPENER SWITCH

#### < REMOVAL AND INSTALLATION >

## TRUNK LID OPENER SWITCH

### Removal and Installation

INFOID:0000000005947060

#### **REMOVAL**

- 1. Remove the instrument driver lower panel. Refer to IP-13, "Removal and Installation".
- 2. Remove the trunk lid opener switch from instrument driver lower panel, and then remove pawl. Press trunk lid opener switch front side to disengage from instrument driver lower panel.

#### **INSTALLATION**

#### TRUNK LID OPENER CANCEL SWITCH

#### < REMOVAL AND INSTALLATION >

## TRUNK LID OPENER CANCEL SWITCH

## Removal and Installation

INFOID:0000000005947062

#### **REMOVAL**

- 1. Remove the instrument assist lower panel. Refer to IP-13, "Removal and Installation".
- 2. Remove the trunk lid opener cancel switch instrument assist lower panel, and then remove pawl. Press trunk lid opener cancel switch backside to disengage from instrument assist lower panel.

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#### **INSTALLATION**

Install in the reverse order of removal.

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#### REMOTE KEYLESS ENTRY RECEIVER

#### < REMOVAL AND INSTALLATION >

## REMOTE KEYLESS ENTRY RECEIVER

#### Removal and Installation

#### INFOID:0000000005947064

#### **REMOVAL**

- 1. Remove the glove box assembly. Refer to <a href="IP-13">IP-13</a>, "Removal and Installation".
- 2. Remove the remote keyless entry receiver mounting bolt, and then remove remote keyless entry receiver.

#### **INSTALLATION**

#### INTELLIGENT KEY BATTERY

#### < REMOVAL AND INSTALLATION >

#### INTELLIGENT KEY BATTERY

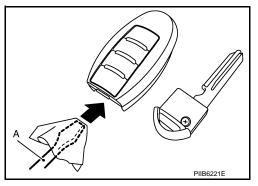
#### Removal and Installation

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.



Replace the battery with new one.

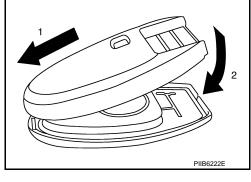
**Battery replacement** 

:Coin-type lithium battery (CR2025)

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.



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