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# < PRECAUTION >

# PRECAUTION PRECAUTIONS

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

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

#### WARNING:

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see "SRS AIR BAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

#### PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

#### WARNING:

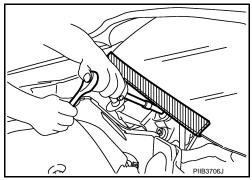
Always observe the following items for preventing accidental activation.

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

#### Precaution for Procedure without Cowl Top Cover

INFOID:000000010102742

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



#### Precautions For Xenon Headlamp Service

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#### 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.

#### DLK-6

# PRECAUTIONS

#### < PRECAUTION >

- (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.).

#### Precautions for Removing of Battery Terminal

• When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.

NOTE:

ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.

• For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch. **NOTE:** 

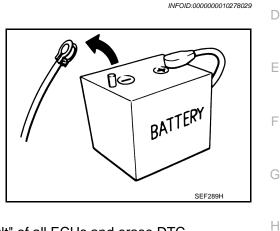
If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.

• After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC. **NOTE:** 

The removal of 12V battery may cause a DTC detection error.

#### 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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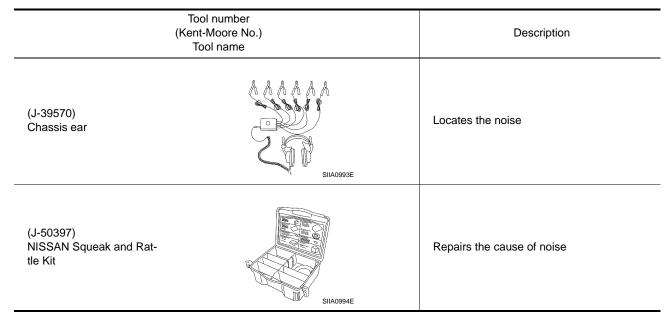
#### < PREPARATION >

# PREPARATION 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.

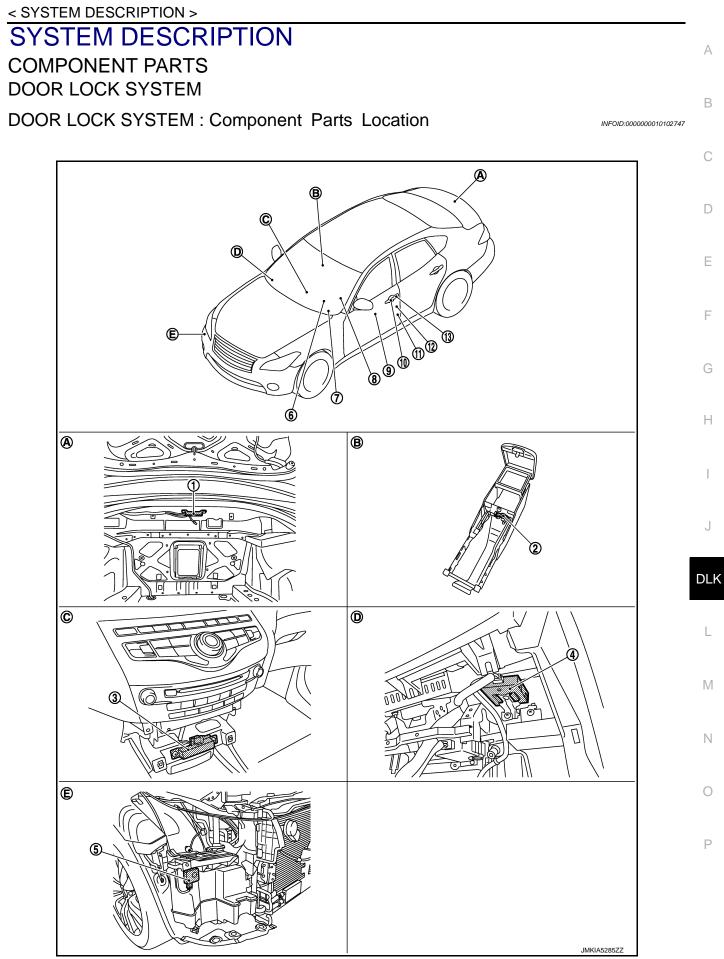


# **Commercial Service Tools**

INFOID:000000010102746

	Tool name	Description
Engine ear	SIIA0995E	Locates the noise
Remover tool	PIB7923J	Removes the clips, pawls, and metal clips
Power tool		
	PIIB1407E	

#### **COMPONENT PARTS**



# **COMPONENT PARTS**

#### < SYSTEM DESCRIPTION >

- 1. Inside key antenna (trunk room)
- 4. Remote keyless entry receiver
- 7. BCM Refer to <u>BCS-4</u>, "BODY CONTROL <u>SYSTEM : Component Parts Loca-</u> tion"
- 10. Outside key antenna (driver side)
- 13. Front door request switch (driver side)
- A. 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 <u>TM-11, "A/T CONTROL</u> <u>SYSTEM : Component Parts Loca-</u> <u>tion"</u>

View with center console assembly

View with front bumper removed

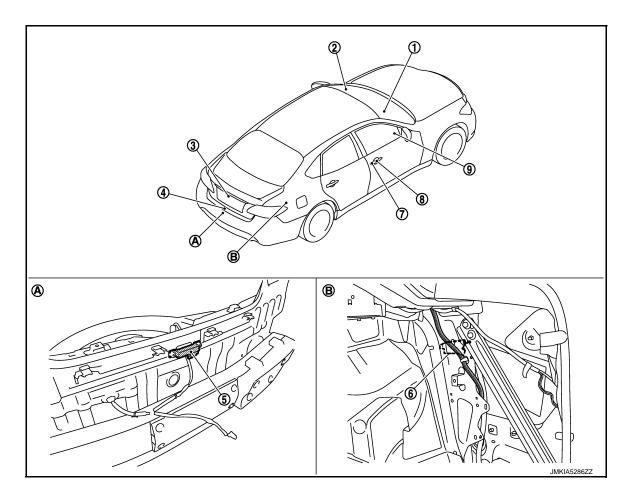
11. Front door switch (driver side)

Β.

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removed

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



- 1. Push-button ignition switch
- 4. Trunk closure assembly
- 7. Front door request switch (passenger side)
- A. View with rear bumper removed
- 2. Trunk lid opener switch
- 5. Outside key antenna (rear bumper)
- 8. Outside key antenna (passenger side)
- B. 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

INFOID:000000010102748

А

Item	Function
BCM	Controls the door lock system.
IPDM E/R	Sounds horn and blinks head lamp via CAN communication between BCM
ТСМ	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 Intelligent Ke	
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 closure assembly	Performs trunk lid open and close operation
Trunk lid opener request switch	Performs trunk lid open request when it is pressed
Trunk lid opener cancel switch	Cancels trunk open operation
Trunk rid opener switch	Performs trunk lid open request when it is pressed

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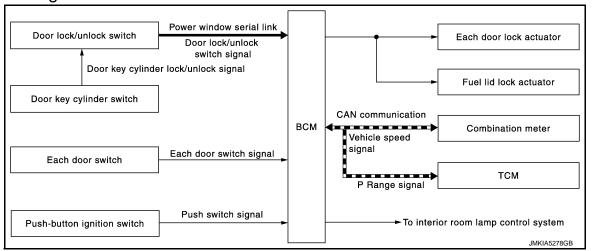
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# SYSTEM (POWER DOOR LOCK SYSTEM)

#### < SYSTEM DESCRIPTION >

# SYSTEM (POWER DOOR LOCK SYSTEM)

### System Diagram



# System Description

INFOID:000000010102750

INFOID:000000010102749

#### 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.

Refer to DLK-32, "DOOR LOCK : CONSULT 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 <u>PWC-</u> <u>7, "System Description"</u>.

#### **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 <u>INL-6</u>, "INTERIOR ROOM LAMP <u>CONTROL SYSTEM : System Description</u>".

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

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

Vehicle Speed Sensing Auto Door Lock

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

Revision: 2013 November

# SYSTEM (POWER DOOR LOCK SYSTEM)

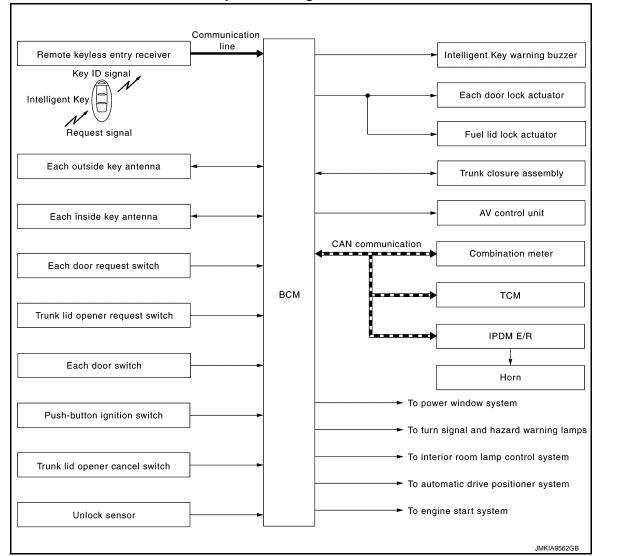
#### < SYSTEM DESCRIPTION >

All doors are locked when shifting the selector lever from the P position to any position other than the P posi-	_
BCM outputs the lock signal to all door lock actuators when it detects that the ignition switch is in the ON posi- tion 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	Δ.
Setting change of Automatic Door Lock/Unlock Function	3
The lock operation setting of the automatic door lock/unlock function can be changed.	
With CONSULT Refer to <u>DLK-34, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u> .	С
Without CONSULT	
The automatic door lock function ON/OFF can be switched by performing the following operation.	C
<ol> <li>Close all doors (door switch OFF)</li> <li>Turn ignition switch ON</li> </ol>	
	_
seconds after turning the ignition switch ON.	-
4. The switch is complete when the hazard lamp blinks.	
$OFF \to ON$ : 2 blinks	-
$ON \rightarrow OFF$ : 1 blink	
AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (UNLOCK OPERATION)	G
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 <sup>*</sup>	
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.	I
P Range Interlock Door Unlock	
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	J
Setting change of Automatic Door Lock/Unlock Function	LK
The unlock operation setting of the automatic door lock/unlock function can be changed.	
With CONSULT Refer to <u>DLK-34, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u> .	
Without CONSULT	
The automatic door lock/unlock function ON/OFF can be switched by performing the following operation.	Л
<ol> <li>Close all doors (door switch OFF)</li> <li>Turn ignition switch ON</li> </ol>	
3 Press and hold the door lock and unlock switch for 5 seconds or more in the "INILOCK" direction within 20	. 1
seconds after turning the power supply position ON.	N
4. The switch is complete when the hazard lamp blinks.	
$OFF \rightarrow ON$ : 2 blinks	C
$ON \rightarrow OFF$ : 1 blink	
*: This function is set to ON before delivery.	С

#### < SYSTEM DESCRIPTION >

# SYSTEM (INTELLIGENT KEY SYSTEM) INTELLIGENT KEY SYSTEM

**INTELLIGENT KEY SYSTEM : System Diagram** 



# INTELLIGENT KEY SYSTEM : System Description

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INFOID:000000010102751

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

#### The driver should always carry the Intelligent Key

- The settings for each function can be changed with CONSULT.
- 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.

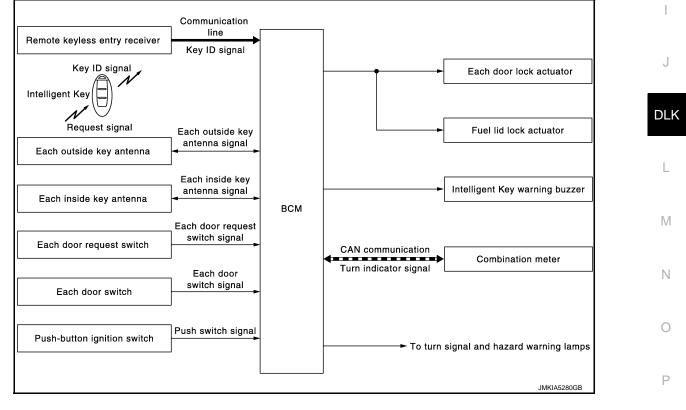
Function	Description	Refer
Door lock	Lock/unlock can be performed by pressing the request switch	<u>DLK-15</u>
Trunk open	The trunk lid can be opened by carrying the Intelligent Key and pressing the trunk lid opener request switch	<u>DLK-18</u>
Remote keyless entry	Lock/unlock can be performed by pressing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

#### < SYSTEM DESCRIPTION >

Function	Description	Refer	
Key reminder	The key reminder buzzer sounds a warning if the door is loc left inside the vehicle	ked with the key	DLK-22
Welcome light	When the Intelligent Key is carried, and vehicle doors are ap BCM illuminates interior room lamps and operates heart bea push-button ignition switch	•	DLK-23
Warning	If an action that does not meet the operating condition of the I tem is taken, the buzzer sounds to inform the driver	ntelligent Key sys-	<u>DLK-24</u>
Engine start	The engine can be turned on while carrying the Intelligent K	ey	<u>SEC-11</u>
Interior room lamp control	Interior room lamp is controlled according to door lock/unloc	k state	<u>INL-6</u>
Power window	Power window can be operated by Intelligent Key button op	PWC-7	
Panic alarm	When Intelligent Key panic alarm button is pressed, horn so lamp blinks	<u>SEC-16</u>	
	Setting of auto driving position can be automatically set, ac- cording to key ID of Intelligent Key, to the position that is reg- istered in advance	Automatic drive positioner	<u>ADP-21</u>
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	<u>HAC-21</u>
	Setting of multi AV system can be set, according to key ID of Intelligent Key, to the setting value that is set before turn- ing ignition switch OFF	Multi AV system	<u>AV-154</u>

# DOOR LOCK FUNCTION

# DOOR LOCK FUNCTION : System Diagram



# DOOR LOCK FUNCTION : System Description

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

#### **OPERATION DESCRIPTION**

#### < 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**

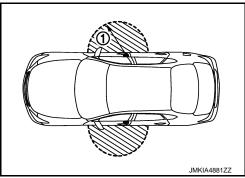
If the following conditions are satisfied, door lock/unlock operation is performed if the request switch is operated.

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<sup>*</sup></li> </ul>
Unlock Operation	<ul> <li>Panic alarm is not activated</li> <li>Intelligent Key is outside the vehicle</li> <li>Intelligent Key is within outside key antenna detection area *</li> </ul>

\*: Even with a registered Intelligent Key remaining inside the vehicle, door locks can be 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. Refer to <u>DLK-34</u>, "INTELLIGENT KEY : CONSULT 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	A
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. Refer to <u>DLK-34, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>.

#### 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.

		Door switch is ON (door is open)	
(	Operating condition	Door is locked	
		Push switch is pressed	

#### How To Change Auto Door Lock Operation Mode

Auto door lock operation mode can be changed using CONSULT. Refer to <u>DLK-34, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>.

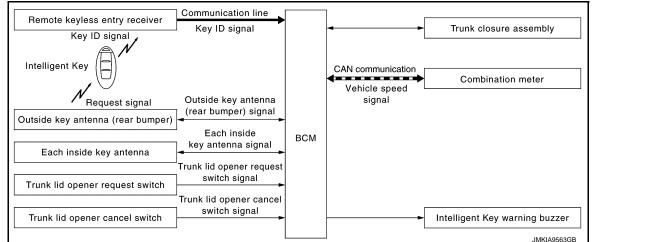
#### LIST OF OPERATION RELATED PARTS

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	BCM	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

# **TRUNK OPEN FUNCTION : System Diagram**



#### Revision: 2013 November

**DLK-17** 

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#### < SYSTEM DESCRIPTION >

#### TRUNK OPEN FUNCTION : System Description

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#### TRUNK LID OPEN FUNCTION

- When BCM detects that trunk lid opener request switch is pressed, it activates outside key antenna (rear bumper) and inside key antenna to transmit request signals to the Intelligent Key. And then, BCM checks that the Intelligent Key is near 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 BCM.
- BCM receives the key ID signal via remote keyless entry receiver and compares it with the registered key ID.
- BCM transmits the trunk lid open request signal to trunk closure assembly 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 trunk closure control unit, integrated into the trunk closure assembly, receives the trunk lid open request signal, it operates trunk closure motor to release the interlocking of trunk lid lock and trunk lid striker, and then trunk lid opens.
- To prevent performing open operation due to mis-operation of trunk lid opener request switch by owner, the trunk lid open function is activated when trunk closure control unit receives the trunk lid open request signal from BCM for more than 0.2 sec.
- After closure control unit detects that the trunk is opened, it stops the trunk closure motor and then operates in reverse direction to the neutral position.
- The trunk closure control unit transmits trunk lid open/closed status signal to BCM.
- If trunk lid open operation stops accidentally (because of mis-latching, etc.), trunk lid can be open mechanically using trunk key cylinder.
- For trunk lid auto closure system, refer to DLK-30, "System Description".

#### 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>Panic alarm is not activated</li> <li>Vehicle speed is less than 5 km/h (3 MPH)</li> <li>Intelligent Key is within outside key antenna (rear bumper) detection area (If trunk lid is closed)</li> <li>Trunk lid opener cancel switch is ON</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

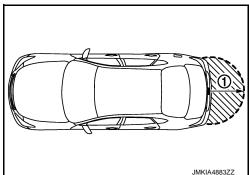
#### How to change buzzer reminder mode

#### With CONSULT

Refer to DLK-34, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

#### OUTSIDE KEY ANTENNA DETECTION AREA

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



#### < SYSTEM DESCRIPTION >

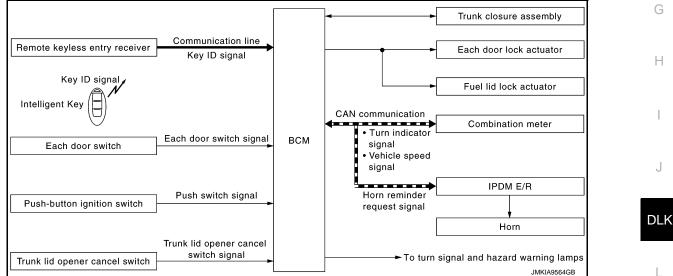
# LIST OF OPERATION RELATED PARTS

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

Trunk open function	Intelligent Key	Remote keyless entry receiver	Trunk closure assembly	Trunk lid opener request switch	Inside key antenna	Outside key antenna (rear bumper)	Intelligent Key warning buzzer	CAN communication system	BCM	Trunk lid opener cancel switch
Trunk open function	×	×	×	×	×	×		×	×	Х
Buzzer reminder function							×	×	X	

# REMOTE KEYLESS ENTRY FUNCTION

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



# **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 using the door lock/unlock button.

#### OPERATION

Remote keyless entry system controls operation of the following items

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

#### **OPERATION AREA**

To ensure the Intelligent Key works effectively, use with-in 1 m (3 ft) range of each door, 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.

# **DLK-19**

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#### < SYSTEM DESCRIPTION >

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

#### OPERATION CONDITION

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. Refer to <u>DLK-32, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.

#### TRUNK OPEN FUNCTION

- When trunk button of the Intelligent Key is pressed, the trunk open signal is transmitted from the Intelligent Key to the BCM via remote keyless entry receiver.
- When BCM receives the trunk open request signal, it performs the trunk lid open function. For details of trunk lid open function, refer to <u>DLK-18, "TRUNK OPEN FUNCTION : System Description"</u>.

#### **OPERATION CONDITION**

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

\*: Pattern of trunk open button can be selected using CONSULT. Refer to <u>DLK-34, "INTELLIGENT KEY :</u> <u>CONSULT Function (BCM - INTELLIGENT KEY)</u>.

#### HAZARD AND HORN REMINDER FUNCTION

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

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

Operating Function of Hazard and Horn Reminder

	C mode					
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** 

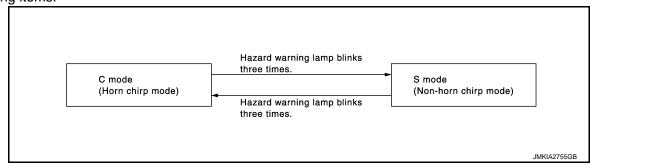
#### (I) With CONSULT

Refer to DLK-34, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

#### Without CONSULT

#### < SYSTEM DESCRIPTION >

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



#### AUTO DOOR LOCK FUNCTION

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>	 F
How To Change Auto Doo	r Lock Operation Mode	G

Auto door lock operation mode can be changed using CONSULT. Refer to DLK-34, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

#### LIST OF OPERATION RELATED PARTS

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

Function		or switch	opener cancel switch	lock actuator lid lock actuator	sure assembly	communication system	BCM	warning lamp	status indicator	n ignition switch	l J
	Intelligent	Door	Trunk lid ope	Door lock act and fuel lid lock	Trunk closure	CAN comm		Hazard	Door lock	Push-button ignition	DLK
Door lock/unlock function	×	×		×			×			×	L
Trunk lid open function	×		×		×		×				
Auto door lock function	×	×					×			×	M
Selective unlock function	×	×		×			×				111
Hazard and horn reminder function	×					×	×	×			



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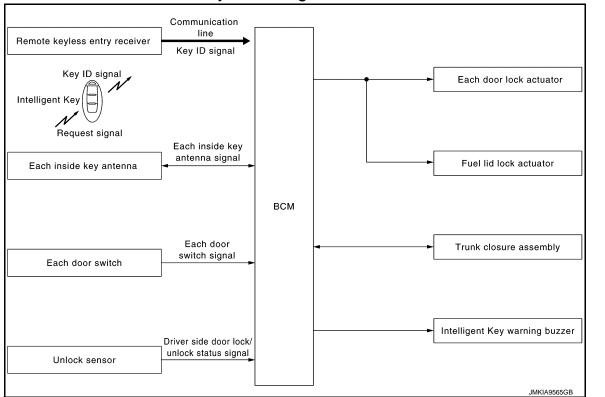
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#### < SYSTEM DESCRIPTION >

#### KEY REMINDER FUNCTION : System Diagram



# KEY REMINDER FUNCTION : System Description

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

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

#### **CAUTION:**

The above function operates when the Intelligent Key is inside the vehicle. However, there may be times when the Intelligent Key cannot be detected, and this function will does not operate when the Intelligent Key is on the instrument panel, or in the glove box. Also, this system sometimes does not operate if the Intelligent Key is in the door pocket of an open door.

WELCOME LIGHT FUNCTION

#### SYSTEM (INTELLIGENT KEY SYSTEM) < SYSTEM DESCRIPTION > WELCOME LIGHT FUNCTION : System Diagram INFOID:000000010102761 А Communication line Remote keyless entry receiver Key ID signal В Key ID signal Intelligent Ke To interior room lamp system Signal Each inside key antenna signal BCM Each inside key antenna Each outside kev D antenna signal Each outside key antenna CAN communication тсм Push switch P Range signal signal Push-button ignition switch Е Each door switch signal Each door switch F JMKIA5072GE

# WELCOME LIGHT FUNCTION : System Description

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<sup>\*</sup> and operates heart beat operation of the push-button 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<sup>\*</sup>.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.

<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> </ul>
<ul> <li>Intelligent Key is outside the vehicle</li> <li>Timer function is activated</li> </ul>

#### OUTSIDE KEY ANTENNA DETECTION AREA

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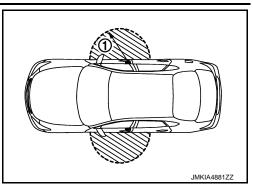
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#### < SYSTEM DESCRIPTION >

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 (P)With CONSULT

Refer to <u>DLK-34, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>.

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:000000010102763

#### **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

#### < SYSTEM DESCRIPTION >

Warning/Inforr	nation functions	Operation procedure
OFF position warning	For internal	<ul> <li>When condition A, B or condition C is satisfied</li> <li>Condition A</li> <li>Ignition switch: ACC position</li> <li>Door switch (driver side): ON (Door is open)</li> <li>Condition B</li> <li>Turn ignition switch from ON to OFF while door is open</li> <li>Condition C</li> <li>Intelligent Key backside is contacted to ignition switch while brake pedal is depressed and ignition switch is LOCK or OFF (When the Intelligent Key battery is discharged)</li> <li>Door switch (driver side): ON (Door is open)</li> </ul>
	For external	OFF position warning (For internal) is in active mode, driver side door is closed <b>NOTE:</b> OFF position (For external) active only when each of the sequence occurs as below: P position warning $\rightarrow$ ACC warning $\rightarrow$ OFF position warning (For internal)
	For internal	<ul><li>Shift position: Except P position</li><li>Engine is running to stopped (Ignition switch is ON to OFF)</li></ul>
P position warning	For external	Warning is activated when driver door is closed from the open position while the P position warning (for inside vehicle) is ON
ACC warning		<ul> <li>When P position warning is in active mode, shift position changes P position.</li> <li>Ignition switch: ACC position</li> </ul>
	Door is open to close	<ul> <li>Ignition switch: Except LOCK position</li> <li>Door switch: ON to OFF (Door is open to close)</li> <li>Intelligent Key cannot be detected inside the vehicle</li> </ul>
Take away warning	Door is open	<ul> <li>Ignition switch: Except LOCK position</li> <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 warn	ing	When door lock operation is requested while door lock operating condition of door request switch or Intelligent Key are not satisfied
	Ignition switch is ON po- sition	<ul><li> Ignition switch: ON position</li><li> Shift position: P position</li><li> Engine is stopped</li></ul>
Engine start information	Ignition switch is except ON position	<ul> <li>Ignition switch: Except ON position</li> <li>Shift position: P position</li> <li>Intelligent Key is in the passenger room after driver door is opened and closed.</li> </ul>
	Ignition switch is ON po- sition to OFF position	<ul> <li>Ignition switch: ON position to OFF position</li> <li>Shift position: P position</li> <li>NOTE:</li> <li>Engine start information turns ON for several seconds and then turns OFF, when ignition switch is turned to the ON position from the OFF position. Engine start information does not turn ON until opening and closing of driver door is detected again.</li> </ul>
Steering lock information		When steering lock cannot be released after ignition switch is turned ON
Intelligent Key low batter	y warning	When Intelligent Key is low battery, BCM is detected after ignition switch is turned ON
Key ID warning		When registered intelligent Key cannot be detected inside the vehicle after ignition switch is turned ON
Key ID verification inform	ation	<ul> <li>When registered Intelligent Key cannot be detected inside the vehicle</li> <li>Intelligent Key battery is discharged</li> <li>When NATS antenna amp cannot be detected NATS ID</li> </ul>

#### < SYSTEM DESCRIPTION >

#### WARNING METHOD

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

		Information display	Warning chime				
Warning/Inform	ation functions	Combination meter buzzer	Intelligent Key warning buzzer				
Intelligent Key system malfunction		KEY SYSTEM		_			
	For internal		Activate	_			
OFF position warning	For external	_		Activate			
	For internal		Activate				
P position warning	For external	P SHIFT	_	Active			
ACC warning		PUSH JMKIA0047GB		_			
	Door is open to close		Activate	Activate			
	Door is open			_			
Take away warning	Push-ignition switch operation	JMKIA4906ZZ	Activate	_			
Door lock operation	Request switch op- eration	-	_	Activate			
warning	Intelligent Key oper- ation	_		Activate			
Key ID warning		<b>IND KEY</b> JMKIA4906ZZ	_	_			

#### < SYSTEM DESCRIPTION >

	Information diaplay	Warnin	g chime
Warning/Information functions	Information display (combination meter)	Combination meter buzzer	Intelligent Key warning buzzer
Engine start information	BRAKE BRAKE	_	_
Steering lock information	JMKIA0033GB	_	_
Intelligent Key low battery warning	<b>FECE</b> JMKIA3049ZZ	_	_
Key ID verification information	JMKIA4907ZZ	_	_

#### LIST OF OPERATION RELATED PARTS Parts marked with $\times$ are the parts related to operation.

Warning 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 malfunction										×	×	×
	For internal			×					×	×	×	
OFF position warning	For external			×				×			×	
P position warning			×						×	×	×	×
ACC warning			×						×	×	×	×

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#### < SYSTEM DESCRIPTION >

Warning 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
Take away warning	Door is open or close	×		х		×		×	×	×	×	×
	Door is open	×		×		×				×	×	×
	Push-button ignition switch operation	×	×			×			×	×	×	×
Door lock operation warning		×		×	×	×	×	×			×	
Key ID warning			×			×				×	×	×
	Ignition switch is ON position	×	×			×				×	×	×
Engine start information	Ignition switch is except ON position	×	×			×				×	×	×
Steering lock information			×							×	×	×
Intelligent Key low battery warning		×				×				×	×	×
Key ID verification information		×				×				×	×	×

### SYSTEM (TRUNK LID OPENER SYSTEM)

#### < SYSTEM DESCRIPTION >

# SYSTEM (TRUNK LID OPENER SYSTEM)

# System Diagram

# System Description

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- When trunk lid opener switch is turned ON, BCM transmits trunk lid open request signal to trunk closure H assembly.
- When trunk closure control unit, integrated into the trunk closure assembly, receives the trunk lid open request signal, it operates trunk closure motor to release the interlocking of trunk lid lock and trunk lid striker, and then trunk lid opens.
- To prevent performing open operation due to mis-operation of trunk lid opener switch by owner, the trunk lid open function is activated when trunk closure control unit receives the trunk lid open request signal from BCM for more than 0.2 sec.
- After trunk closure control unit detects that the trunk is opened, it stops the trunk closure motor and then
  operates in reverse direction to the neutral position.
- The trunk closure control unit transmits trunk lid open/closed status signal to BCM.
- If trunk lid open operation stops accidentally (because of mislatching, etc.), trunk lid can be open mechanically using trunk key cylinder.
- For trunk lid auto closure system, refer to <u>DLK-30, "System Description"</u>.

#### **OPERATION CONDITION**

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

Trunk lid opener switch operation	Operation condition	M
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> <li>Vehicle security system is in the disarmed or pre-armed phase (Refer to <u>SEC-16, "VEHICLE</u> <u>SECURITY SYSTEM : System Description"</u>.)</li> </ul>	Ν

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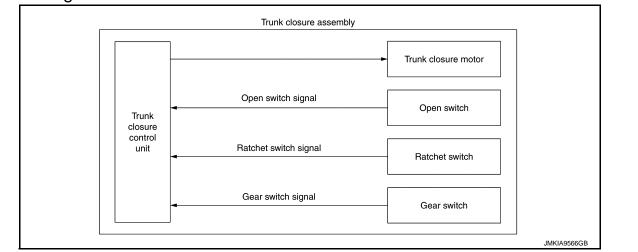
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# SYSTEM (TRUNK LID AUTO CLOSURE SYSTEM)

#### < SYSTEM DESCRIPTION >

# SYSTEM (TRUNK LID AUTO CLOSURE SYSTEM)

#### System Diagram



# System Description

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INFOID:000000010102766

- Trunk lid auto closure system is performed using trunk closure assembly that consists of trunk closure control unit, trunk closure motor, gear switch, open switch and ratchet switch.
- Trunk lid auto closure system closes trunk lid automatically to the fully closed position when trunk lid is in the half latch status (trunk lid lock and trunk lid striker are in engage status).
- While power source is applied, trunk closure control unit monitors each switch signals to judge the trunk lid status (open, half latch and fully closed).
- Trunk closure control unit transmits trunk lid open signal when the trunk lid is in open or half latch status, and transmits trunk lid close signal when in fully closed status to BCM.

#### **OPERATION DESCRIPTION**

- Trunk closure control unit operates trunk closure motor and performs retracting operation when trunk lid is judged to be in the half latch status.
- Trunk closure control unit stops retracting operation of trunk closure motor when trunk is judged to be in fully closed status.
- After stopping retracting operation, trunk closure control unit operates trunk closure motor in reverse direction to the neutral position.
- When any of the following conditions is met during auto closure operation, trunk closure control unit stops retracting operation, and operates trunk closure motor in reverse direction to open trunk lid.
- Trunk closure control unit receives trunk lid open request signal
- The specified time (Approx. 4.6 sec) is past before trunk lid reaches the fully closed position
- For trunk lid open system, refer to <u>DLK-18, "TRUNK OPEN FUNCTION : System Description"</u>, <u>DLK-19,</u> <u>"REMOTE KEYLESS ENTRY FUNCTION : System Description"</u>, and <u>DLK-29, "System Description"</u>,

#### FAIL-SAFE

The fail-safe function is adopted for the trunk closure control unit. Refer to DLK-40, "Fail-safe".

# < SYSTEM DESCRIPTION > DIAGNOSIS SYSTEM (BCM) COMMON ITEM

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

INFOID:000000010255944

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#### APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

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

#### 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.

				$\times:$ Applicable item	Н
System	Sub system selection item		Diagnosis mode		
System	Sub system selection item	Work Support	Data Monitor	Active Test	
Door lock	DOOR LOCK	×	×	×	I
Rear window defogger	REAR DEFOGGER		×	×	
Warning chime	BUZZER		×	×	J
Interior room lamp timer	INT LAMP	×	×	×	
Exterior lamp	HEAD LAMP	×	×	×	
Wiper and washer	WIPER	×	×	×	DLK
Turn signal and hazard warning lamps	FLASHER	×	×	×	
	AIR CONDITONER*		×	×	L
<ul><li>Intelligent Key system</li><li>Engine start system</li></ul>	INTELLIGENT KEY	×	×	×	
Combination switch	COMB SW		×		M
Body control system	BCM	×			
IVIS - NATS	IMMU	×	×	×	
Interior room lamp battery saver	BATTERY SAVER	×	×	×	Ν
Trunk lid open	TRUNK		×		
Vehicle security system	THEFT ALM	×	×	×	0
RAP system	RETAINED PWR		×		0
Signal buffer system	SIGNAL BUFFER		×	×	
_	AIR PRESSURE MONITOR*	×	×	×	Ρ

\*: This item is not used.

#### FREEZE FRAME DATA (FFD)

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

#### < 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 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		While turning power supply position from "RUN" to "ACC" (Emer- gency stop operation)	
	ACC>OFF		While turning power supply position from "ACC" to "OFF"	
	OFF>LOCK	Power position status of the moment a particular DTC is detected*	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 steer- ing is locked.)*	
	OFF		Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.)	
	ACC		Power supply position is "ACC" (Ignition switch ACC)	
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)	
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)	
	CRANKING		Power supply position is "CRANKING" (At engine cranking)	
IGN Counter	0 - 39	<ul> <li>The number 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>		

#### NOTE:

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

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

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

#### DOOR LOCK

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

INFOID:000000010102769

#### BCM CONSULT FUNCTION

CONSULT performs the following functions via CAN communication with BCM.

#### **DLK-32**

< SYSTEM DESCRIPTION >

#### WORK SUPPORT

Monitor item	Description		
DOOR LOCK-UNLOCK SET	<ul><li>Selective unlock function mode can be changed to operation with this mode</li><li>On: Operate</li><li>Off: Non-operation</li></ul>		
AUTOMATIC DOOR LOCK SE- LECT	<ul> <li>Automatic door lock function mode can be selected from the following in this mode</li> <li>VH SPD: All doors are locked when vehicle speed more than 24 km/h (15MPH)</li> <li>P RANGE: All doors are locked when shifting the selector lever from P position to other than the P position</li> </ul>		
AUTOMATIC DOOR UNLOCK SELECT	<ul> <li>Automatic door unlock function mode can be selected from the following in the mode</li> <li>MODE 1: All doors are unlocked when the power supply position is changed from ON to OFF</li> <li>MODE 2: All doors are unlocked when shifting the selector lever from any position other than the P to P position</li> <li>MODE 3: Driver side door is unlocked when the power supply position is changed from ON to OFF</li> <li>MODE 4: Driver side door is unlocked when shifting the selector lever from any position other er than the P to P position</li> <li>MODE 4: Driver side door is unlocked when shifting the selector lever from any position other of the the 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	<ul> <li>Automatic door lock/unlock function mode can be selected from the following in this mode</li> <li>Off: Non-operational</li> <li>Unlock Only: Door unlock operation only</li> <li>Lock Only: Door lock operation only</li> <li>Lock/Unlock: Lock and unlock operation</li> </ul>		

# DATA MONITOR **NOTE**:

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

Monitor Item	Contents	J
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	DLK
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)	L
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	M
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	N
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	0

#### ACTIVE TEST

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#### < SYSTEM DESCRIPTION >

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

# INTELLIGENT KEY INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)

INFOID:000000010102770

#### WORK SUPPORT

Monitor item	Description		
INSIDE ANT DIAGNOSIS	This function allows inside key antenna self-diagnosis		
LOCK/UNLOCK BY I-KEY	<ul> <li>Door lock/unlock function by door request switch mode can be changed to operation in this mode</li> <li>On: Operate</li> <li>Off: Non-operation</li> </ul>		
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	<ul> <li>Buzzer reminder function mode by trunk lid opener request switch and Intelligent Key can be changed to operation with this mode</li> <li>On: Operate</li> <li>Off: Non-operation</li> </ul>		
PANIC ALARM SET	<ul> <li>Panic alarm button pressing time on Intelligent Key remote control button can be selected from the following with this mode</li> <li>MODE 1: 0.5 sec</li> <li>MODE 2: Non-operation</li> <li>MODE 3: 1.5 sec</li> </ul>		
TRUNK OPEN DELAY	<ul> <li>Trunk button pressing on Intelligent Key can be selected as per the following in this mode.</li> <li>MODE 1: Press and hold</li> <li>MODE 2: Press twice</li> <li>MODE 3: Press and hold, or press twice</li> </ul>		
LO- BATT OF KEY FOB WARN	<ul><li>Intelligent Key low battery warning mode can be changed to operation with this mode</li><li>On: Operate</li><li>Off: Non-operation</li></ul>		
ANTI KEY LOCK IN FUNCTI	<ul><li>Key reminder function mode can be changed to operation with this mode</li><li>On: Operate</li><li>Off: Non-operation</li></ul>		
HAZARD ANSWER BACK	<ul> <li>Hazard reminder function mode by door request switch and Intelligent Key button can be selected from the following with this mode</li> <li>Lock Only: Door lock operation only</li> <li>Unlock Only: Door unlock operation only</li> <li>Lock/Unlock: Lock and unlock operation</li> <li>Off: Non-operation</li> </ul>		
ANS BACK I-KEY LOCK	<ul> <li>Buzzer reminder function (lock operation) mode by door request switch can be selected from the following with this mode</li> <li>Horn Chirp: Sound horn</li> <li>Buzzer: Sound Intelligent Key warning buzzer</li> <li>Off: Non-operation</li> </ul>		
ANS BACK I-KEY UNLOCK	<ul> <li>Buzzer reminder function (unlock operation) mode by door request switch can be changed to operation with this mode</li> <li>On: Operate</li> <li>Off: Non-operation</li> </ul>		

< SYSTEM DESCRIPTION >

Monitor item	Description
SHORT CRANKING OUTPUT	Starter motor can operate during the times below • 70 msec • 100 msec • 200 msec
CONFIRM KEY FOB ID	It can be checked whether Intelligent Key ID code is registered or not in this mode
AUTO LOCK SET	Auto door lock 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	<ul> <li>Horn reminder function mode by Intelligent Key button can be selected from the following with this mode</li> <li>On: Operate</li> <li>Off: Non-operation</li> </ul>
PW DOWN SET	<ul> <li>Unlock button pressing time on Intelligent Key button can be selected from the following with this mode</li> <li>MODE 1: 3 sec</li> <li>MODE 2: Non-operation</li> <li>MODE 3: 5 sec</li> </ul>
WELCOME LIGHT SELECT	<ul> <li>Welcome light function mode can be selected from the following with this mode</li> <li>Puddle/Outside Handle</li> <li>Room lamp</li> <li>Head &amp; Tail Lamps (this item is displayed, but cannot be used)</li> <li>Heart Beat</li> </ul>
WELCOME LIGHT OP SET	<ul><li>Welcome light function mode can be changed to operation with this mode</li><li>On: Operate</li><li>Off: Non-operation</li></ul>
INTELLIGENT KEY SETUP	<ul><li>Intelligent Key interlock function mode can be changed to operation with this mode</li><li>On: Operate</li><li>Off: Non-operation</li></ul>

#### SELF-DIAG RESULT Refer to <u>BCS-54, "DTC Index"</u>.

# DATA MONITOR

#### NOTE:

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

Monitor Item	Condition	
REQ SW -DR	Indicates [On/Off] condition of door request switch (driver side)	
REQ SW -AS	Indicates [On/Off] condition of door request switch (passenger side)	N
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	F
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	NOTE: This item is displayed, but cannot be monitored	

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#### < SYSTEM DESCRIPTION >

Monitor Item	Condition	
S/L -UNLOCK	NOTE: This item is displayed, but cannot be monitored	
S/L RELAY -F/B	NOTE: This item is displayed, but cannot be monitored	
UNLK SEN -DR	Indicates [On/Off] condition of driver door UNLOCK status	
PUSH SW -IPDM	Indicates [On/Off] condition of push-button ignition switch	
IGN RLY1 -F/B	Indicates [On/Off] condition of ignition relay 1	
DETE SW -IPDM	Indicates [On/Off] condition of P position	
SFT PN -IPDM	Indicates [On/Off] condition of P or N position	
SFT P -MET	Indicates [On/Off] condition of P position	
SFT N -MET	Indicates [On/Off] condition of N position	
ENGINE STATE	Indicates [Stop/Stall/Crank/Run] condition of engine states	
S/L LOCK-IPDM	NOTE: This item is displayed, but cannot be monitored	
S/L UNLK-IPDM	NOTE: This item is displayed, but cannot be monitored	
S/L RELAY-REQ	NOTE: This item is displayed, but cannot be monitored	
VEH SPEED 1	Display the vehicle speed signal received from 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 Intelli- gent Key, the numerical value start changing	
RKE OPE COUN2	NOTE: This item is displayed, but cannot be monitored	

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

#### ACTIVE TEST

Test item	Description
BATTERY SAVER	<ul><li>This test is able to check interior room lamp operation</li><li>On: Operate</li><li>Off: Non-operation</li></ul>
OUTSIDE BUZZER	<ul><li>This test is able to check Intelligent Key warning buzzer operation</li><li>On: Operate</li><li>Off: Non-operation</li></ul>

# **DIAGNOSIS SYSTEM (BCM)**

### < SYSTEM DESCRIPTION >

Test item	Description
INSIDE BUZZER	<ul> <li>This test is able to check warning chime in combination meter operation</li> <li>Take Out: Take away warning chime sounds when CONSULT screen is touched</li> <li>Key: Key warning chime sounds when CONSULT screen is touched</li> <li>Knob: OFF position warning chime sounds when CONSULT screen is touched</li> <li>Off: Non-operation</li> </ul>
INDICATOR	<ul> <li>This test is able to check warning lamp operation</li> <li>KEY ON: "KEY" Warning lamp illuminates when CONSULT screen is touched</li> <li>KEY IND: "KEY" Warning lamp blinks when CONSULT screen is touched</li> <li>Off: Non-operation</li> </ul>
INT LAMP	This test is able to check interior room lamp operation <ul> <li>On: Operate</li> <li>Off: Non-operation</li> </ul>
LCD	<ul> <li>This test is able to check meter display information</li> <li>Engine start information displays when "BP N" on CONSULT screen is touched</li> <li>Engine start information displays when "BP I" on CONSULT screen is touched</li> <li>Key ID warning displays when "ID NG" on CONSULT screen is touched</li> <li>Steering lock information displays when "ROTAT" on CONSULT screen is touched</li> <li>NOTE:</li> <li>For models without steering lock unit, "ROTAT" is displayed, but cannot be tested.</li> <li>P position warning displays when "SFT P" on CONSULT screen is touched</li> <li>INSRT: This item is displayed, but cannot be monitored</li> <li>BATT: This item is displayed, but cannot be monitored</li> <li>Take away through window warning displays when "NO KY" on CONSULT screen is touched</li> <li>OFF position warning display when "OUTKEY" on CONSULT screen is touched</li> </ul>
FLASHER	This test is able to check hazard warning lamp operation The hazard warning lamps are activated after "LH/RH/Off" on CONSULT screen is touched
P RANGE	<ul><li>This test is able to check AT shift selector power supply</li><li>On: Operate</li><li>Off: Non-operation</li></ul>
ENGINE SW ILLUMI	This test is able to check push-ignition switch illumination operation Push-ignition switch illumination illuminates when "ON" on CONSULT screen is touched
LOCK INDICATOR	<ul> <li>This test is able to check LOCK indicator (push-button ignition switch) operation</li> <li>On: Operate</li> <li>Off: Non-operation</li> </ul>
ACC INDICATOR	<ul> <li>This test is able to check ACC indicator (push-button ignition switch) operation</li> <li>On: Operate</li> <li>Off: Non-operation</li> </ul>
IGNITION ON IND	<ul><li>This test is able to check ON indicator (push-button ignition switch) operation</li><li>On: Operate</li><li>Off: Non-operation</li></ul>
HORN	This test is able to check horn operation <ul> <li>On: Operate</li> <li>Off: Non-operation</li> </ul>
TRUNK/BACK DOOR	This test is able to check trunk lid open operation <ul> <li>Open: Operate</li> </ul>

# **DIAGNOSIS SYSTEM (BCM)**

#### < SYSTEM DESCRIPTION >

Test item	Description
INTELLIGENT KEY LINK	<ul> <li>This test is able to check Intelligent Key interlock function</li> <li>ID No1: BCM transmits Intelligent Key ID No1 to each control unit</li> <li>ID No2: BCM transmits Intelligent Key ID No2 to each control unit</li> </ul>
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 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 Function (BCM - TRUNK)

INFOID:000000010102771

### DATA MONITOR

#### NOTE:

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

Monitor Item	Contents
PUSH SW	Indicates [On/Off] condition of push switch
UNLK SEN -DR	Indicates [On/Off] condition of unlock sensor
VEH SPEED 1	Indicates [Km/h] condition of vehicle speed signal from combination meter
KEY CYL SW-TR	NOTE: This item is displayed, but cannot be monitored
TR CANCEL SW	Indicates [On/Off] condition of trunk lid opener cancel switch
TR/BD OPEN SW	Indicates [Km/h] condition of trunk lid opener switch
TRNK/HAT MNTR	Indicates [On/Off] condition of trunk lid open/close status signal from trunk closure assembly
RKE-TR/BD	Indicates [On/Off] condition of trunk open signal from Intelligent Key

# ECU DIAGNOSIS INFORMATION BCM

# List of ECU Reference

INFOID:000000010102772

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	ECU	Reference	
		BCS-33, "Reference Value"	
BCM		BCS-53, "Fail-safe"	
		BCS-54, "DTC Inspection Priority Chart"	D
		BCS-54, "DTC Index"	

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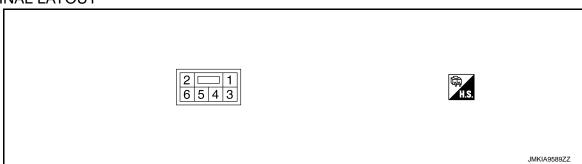
# < ECU DIAGNOSIS INFORMATION >

# TRUNK CLOSURE CONTROL UNIT

# **Reference Value**

INFOID:000000010102773

## TERMINAL LAYOUT



### PHYSICAL VALUES

	ninal No. re color)	Description		Cor	ndition	Voltage (V)
(+)	()	Signal name	Input/ Output			(Approx.)
1	Ground	Trunk lid open request signal	Input	When oper	ning trunk lid	9 - 16
(G)	Cround	Trunk in open request signal	mput	Except abo	ve condition	0
2 (L)	Ground	Ground	_		_	0
3 (L)	Ground	Ground	_		_	0
4 (P)	Ground	Battery power supply (Sub)	Input		_	9 - 16
5	Ground	Trunk lid open/close status sig-	Output	Trunk lid	Closed	9 - 16
(Y)	Ground	nal	Output		Open	0
6 (R)	Ground	Battery power supply (Main)	Input		-	9 - 16

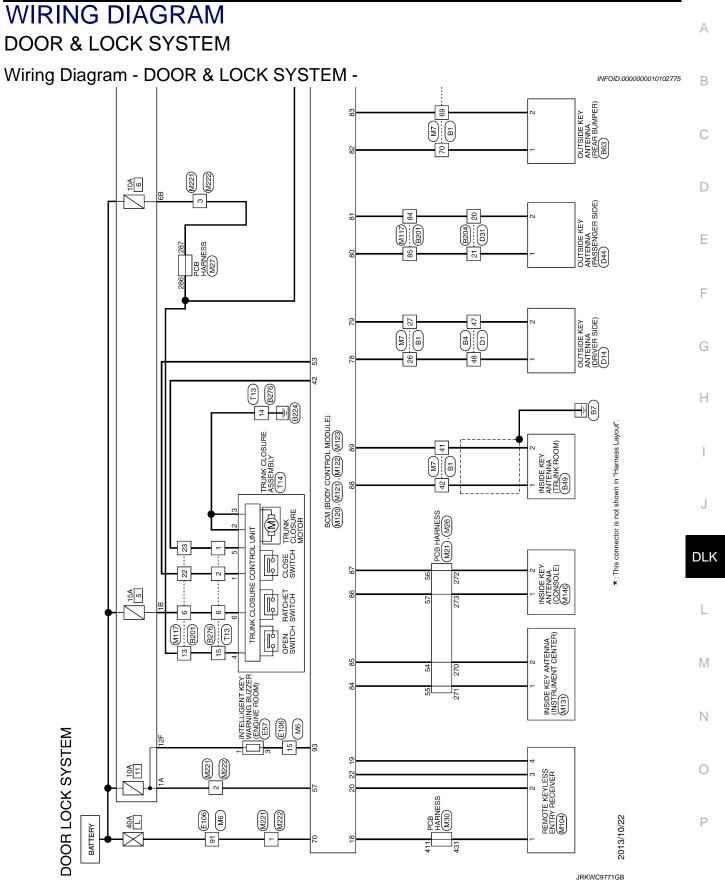
# Fail-safe

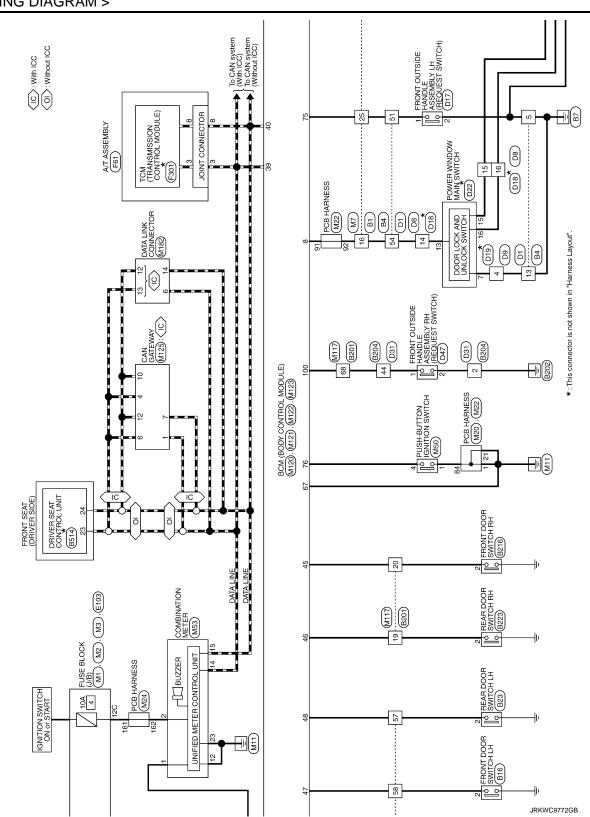
INFOID:000000010102774

Fail-safe function is adopted to the trunk lid auto closure system as per the following. Fail-safe mode is canceled when the cause of malfunction is fixed.

Malfunction	Trunk closure operation
Switch malfunction	<ul> <li>The system enters into either the following condition after trunk closure motor returns to the neutral position depending on the malfunctioning switch.</li> <li>All operations are not available</li> <li>Closing operation is not available</li> </ul>
Continuous operation	In case that open/close operations are performed continuously (Approximately 50 times at room temperature), trunk closure control unit stops all operations to prevent overheating. The open/close operations can be available after the temperature of trunk closure motor is reduced to the specified value.
Foreign material pinching	In case that fully closed status of trunk lid cannot be detected when more than 4.6 seconds are passed after retracting operation of trunk closure motor is started, trunk closure control unit stops the retracting operation and operates the trunk closure motor in reverse direction to open trunk lid. Then trunk closure motor returns to the neutral position.

< WIRING DIAGRAM >





**DOOR & LOCK SYSTEM** 

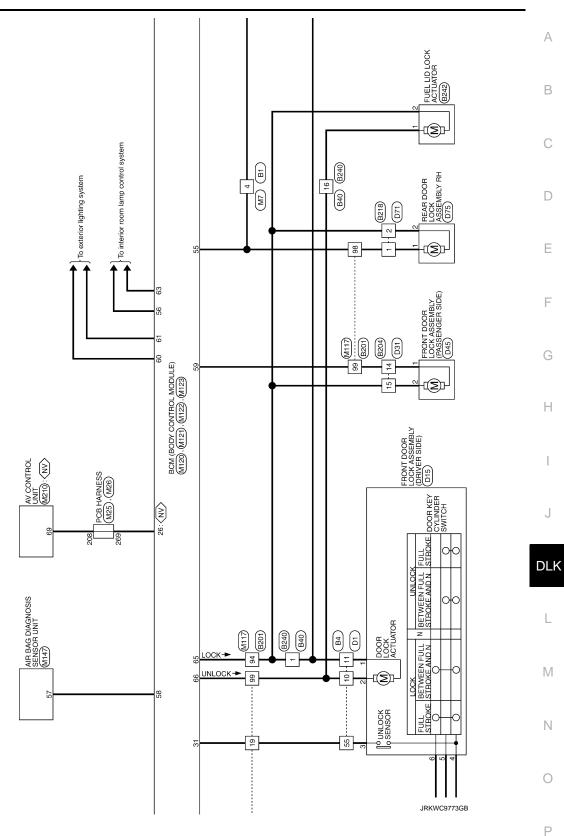
#### < WIRING DIAGRAM >

Revision: 2013 November

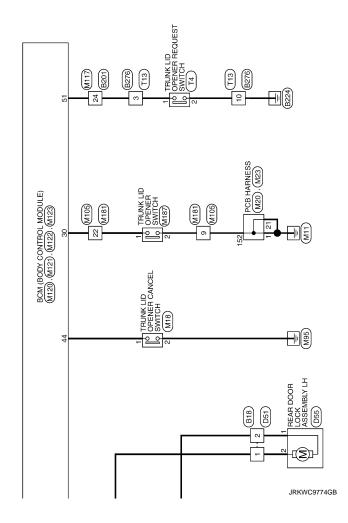
2014 Q70

# **DOOR & LOCK SYSTEM**

#### < WIRING DIAGRAM >



(NV): With NAVI



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[eation]	В
BII FRONT DOOR SMITCH LH Sgral Mumor (Specification)	С
33         B./R           33         B./R           33         B./R           33         B./R           33         B./R           34         V/L           43         V/L           44         V           53         B           54         V           55         V           56         V           57         V           58         F           59         V           50         Connector Num           FROMTOR         FROMTOR           7         V/G           5         LG           7         V/G	D
	E
4       4         MRE TO MRE       MRE TO MRE         Supul MEMO       Conditionation         Supul MEMO       Conditionation         MRE TO MRE       MRE TO MRE         MRE TO MRE TO MRE TO MRE       MRE TO MRE         MRE TO MRE TO MRE TO MRE TO MRE TO MRE       MRE TO MRE         MRE TO MRE TO MRE TO MRE TO MRE TO MRE       MRE TO MRE         MRE TO MRE       MRE TO M	F
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Conversion         OUTSIDE         Ref         ATTENDA         Conversion	Connector No. B18		Connector No.		B40	Connector No.		B63		Н	>	1
	Connector Name WI	RE TO WIRE	Connector		IRE TO WIRE	Connecto		OUTSIDE KEY ANTENNA (REAR BUMPER)			HIELD	т
	Т		,	T		]	Т		T	╉	N/K	ť,
		110FW-CS10	Connector		S16MW-CS	Connecto		RK02FL		42	> '	1
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			The second se					<		<del>.</del>	80	1
		ო						<		46	œ	- [With climate controlled sea
	e.ii		2.1		3 4 5		-	ſ		46	>	<ul> <li>[With heated seat]</li> </ul>
		12 11 10 9 。		1	40 44 40 40 44 4F		1	((1 2))		47	σ	- [With climate controlled seat]
					10 11 12 13 14 15					47	GR	- [With heated seat]
	-1									48	< V	-
0         Stant locol         Sta										49	0	1
	Terminal Color Of	Signal Name [Snarification]	Terminal	Color Of	Signal Name [Snecification]	Terminal	Color Of	Signal Name [Snecification]		50	æ	1
			No.	Wire		No.	Wire			51	GR	-
	1 LG	1	t	٩	1	-	œ	ANT+		52	ГC	1
	_	Т	2	0	Ŧ	2	GR	ANT-		53	۵.	Т
			en	ΓC	T					56	٩	T
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$ \begin{array}{                                    $	7 B		ß	B/W		Connecto		8201		58	0	1
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	┝		σ		-	Connecto		WIRE TO WIRE		61	BB	-
11       R       1       1	┝		ō	×	-	Connecto	L	TH80MW-CS16-TM4		62		-
			=	œ	-		L	[	L ]	63	×	1
	12 Y		12	9		Æ				99		1
Image: Signal hand Sign			13	>		-				67	×	1
Parameter         Parameter <t< td=""><td></td><td></td><td>14</td><td>BR</td><td></td><td></td><td></td><td></td><td></td><td>68</td><td>SB</td><td>1</td></t<>			14	BR						68	SB	1
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ADDRW         Connector Num         B4-3         Terminol Code Of Signal Numer (Speerfication)         75         8 LL in the Speerfication)           Connector Num         NSIDE KEY ATTENIA (TRUK ROOM)         3         R         -         -         77         9         L           Connector Num         NSIDE KEY ATTENIA (TRUK ROOM)         3         R         -         -         77         9         R           Connector Num         NSIDE KEY ATTENIA (TRUK ROOM)         1         0         -         -         77         9         R           Connector Num         NSIDE KEY ATTENIA (TRUK ROOM)         1         0         -         -         77         9         R           Connector Num         Signal Num (Specification)         1         0         -         -         1         0         -         -         1         0         1         0         1 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>]</td> <td></td> <td>74</td> <td>в</td> <td>1</td>								]		74	в	1
Concretor Num         No.         Wor         Signal Name: concretor Num         No.		03FW	Connector		49	Terminal		Construction of Construction		75	٦	-
Observed International Internationa					CHOCK VEV ANTEANIA / TRUNK BOOM	.oN	Wire	Olgran Name Lopecification			HIELD	I
Contractor Type         Record Type         Record Type         Record Type         Contractor Type	1 E	E	Colligation			e	æ	1		77	ŋ	1
Client         Client<			Connector		K02FL	9	œ	1		78	н	1
Color Of Wire         Signal Mane [Specification]         Color Of BI         Color Of BI <thcolor of<br="">BI         Color Of BI</thcolor> BI	5.1.5		1			13	Y	1		79	۵.	1
Production         Product		c	ſ		<	17	GR	1		80	D	I
Color of Ware         Color of Signal Mane [socification]         Color of 21         Color 22         Color 23         Color 23         Color 23         Color 23         Color 23         Color 23         Color 23         Color 23         Color 23         Color 24         Color 23         Color 24         Color 23         Color 24         Color 23         Color 24         Color 23         Color 24         Color 23         Color 23         Color 24         Color 23         Color 24         Color 23         Color 24         Color 23         Color 24         Color 23         Color 24         Color 24         Color 23         Color 24         Color 24         Color 24 <td></td> <td>7</td> <td></td> <td></td> <td></td> <td>18</td> <td>٩</td> <td>-</td> <td></td> <td>81</td> <td>0</td> <td>-</td>		7				18	٩	-		81	0	-
Observed Wave         Signal Mane (Seedification)         Tenning (Seedification)         Tenning (Seedification) <thtenning (seedification)<="" th="">         Tenning (Seedification)         <thtenning (seedification)<="" th=""> <thtenning (seedification)<="" td=""><td></td><td></td><td></td><td></td><td></td><td>19</td><td>BR</td><td>-</td><td></td><td></td><td>BR</td><td>-</td></thtenning></thtenning></thtenning>						19	BR	-			BR	-
Oncorol Market Name (Separtitation)         Signal Market (Secondation)         21         Y         -         84         V           22         23         R         -         -         86         W           23         R         -         -         86         W           23         R         -         -         86         W           70         Wine         Signal Mare (Secification)         -         -         86         W           1         W/L         AMT-         23         V         -         89         R           2         GR         M         -         -         99         R         -		]]				20	GR	1		83	GR	1
Wire         ougan remain construction to the constructiont to the constructiont to the construction totheconstruc	Terminal Color Of	Simil N [SiG-++i]				21	Y	1		84	^	1
BR         -         22         R         -         85         W           Terminal No.         Wire Nie         Wire Nie         Signal Name (Specification)         24         V         -         85         W           1         W/L         Mit+         26         W         -         99         R9           2         GR/V         ANT+         25         W         -         90         L1	No. Wire	Digusi Asime Lopectification				22	GR	1		85	ГC	1
Color Of Wree         Signal Nume (Specification)         24         V         -         87         O           Wr.e         NWr         NWr         29         B         -         89         BR         Y           Mr.e         ANT+         27         O         -         90         L         91         BR           GRV         ANT+         27         O         -         91         BR         91         L		1				23	œ	1		86	w	Т
Mile         Definition         25         B         -         88         Y           M/L         MIT+         26         W         -         89         BR           M/L         MIT+         27         0         -         91         BR           28         V         -         -         91         BR			Terminal		[	24	>	1		87	0	I
W.L         ANT+         26         W         -         89         BR           GR/V         ANT-         27         0         -         99         BR           38         X         -         -         91         BL			No	Wire	orginal realing Copecification	25	в	-		88	Y	-
GR/v         ANT-         27         0         -         90         L           28         v         -         91         BR			-	M/L	ANT+	26	w	-		89	BR	-
V   - 91 BR			2	GR/V	ANT-	27	0			90	-	1
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Connector No.         B242           Connector Name         FuEL LID LOCK ACTUATOR           Connector Type         MolFW-LC           Connector Type         MolFW-LC           Time         Connector Type           Time         Connector Type           Connector Type         MolFW-LC           Time         Sgnal Nume (Speefification)           1         Lo           2         C           Connector No.         B226	Connector Name         URE         Connector Name         Net           Connector Type         MRS.16MM-CS         MRS.16MM-CS         MRS.16MM-CS           MINE         MRS.16MM-CS         MRS.16MM-CS         MRS.16MM-CS           MINE         MRS.16MM-CS         Signal Name [Specification]         MRS.16MM-CS           MINE         MRS         Signal Name [Specification]         MRS.16MM-CS           MINE         MRS         MRS         MRS.16MM-CS           MINE         MRS         Signal Name [Specification]         MRS.16MM-CS           MINE         MRS         MRS         MRS.16MM-CS         MRS.16MM-CS           MINE         MRS         MRS         MINE         MINE         MINE
Connector Non         B223           Connector Nums         RE-AR DOOR SWITCH RH           Timinal         A00FW           2         2           2         2           2         RM           2         2           2         2           2         2           2         2           2         2	
41         58         -           45         R         -           45         R         -           53         L         -           54         B         -           53         L         -           60metter No.         B716           Connector Nume         FRONT DOOR SWITCH RH           Connector Yape         A03FW	Terminal (a)         Open- (b)         Signal Name (Specification)           2         0R         21           Connector Name         WRE TO WRE MRE TO WRE         21           Connector Name         WRE TO WRE         21           Connector Name         MILPN-CS10         21           Mile         13         12         13           Mile         10         12         13           Mile         13         12         13           Mile         13         12         13           1         10         W         2         1           13         2         1         1         1
DOOR LOCK SYSTEM       90/10     V/10       90/10     V/10       90/10     V/10       0     0 <td>Terminal Main         Object of Main         Signal Mannel (Specification)           2         E.W.         2           3         Y         2           4         P         -           1         Y         2           1         Y         2           1         Y         2           11         Y         2           11         Y         2           11         Y         2           13         US         -           14         US         -           15         V         -           16         C         -           17         Y         -           18         BR         -           23         V         -           24         SHEL         -           23         V         -           24         SHEL         -           23         V         -           23         V         -           24         SHEL         -           23         V         -           24         SHE         -           23         P</td>	Terminal Main         Object of Main         Signal Mannel (Specification)           2         E.W.         2           3         Y         2           4         P         -           1         Y         2           1         Y         2           1         Y         2           11         Y         2           11         Y         2           11         Y         2           13         US         -           14         US         -           15         V         -           16         C         -           17         Y         -           18         BR         -           23         V         -           24         SHEL         -           23         V         -           24         SHEL         -           23         V         -           23         V         -           24         SHEL         -           23         V         -           24         SHE         -           23         P

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	го сі пе сі пе сі 3 Signal Numo (Specification) 2 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	<sup>C0</sup> 6 0 <sup>C0</sup> 6 0 K <sup>ab</sup> 0 K <sup>ab</sup> 0 − C 0 Ω R − C 0 − C 0 Ω R − C 0 − C 0 R − C 0 Ω R − C 0 − C	Terminal Mon.         Color Of Mine           Abs.         Mon.           Abs.         Mine           Abs.         Mine           Abs.         Mine           B         M           Abs.         Mine           B         M	Signal Mane (Specification)         Terminal Color Of No.         Terminal Color Of No.         Terminal Color Of No.           SLIDE SW (BACKWARD)         2         L         L           RECLIRET SW (BACKWARD)         2         R         L           RECLIRET SW (BACKWARD)         2         R         L           RECLIRET SW (DOWMARD)         2         R         R           REAL LIFTER SW (DOWMARD)         1         L         L           FRONT LIFTER SW (DOWMARD)         1         L         L           PULSE (EALDE)         11         L         D         L           PULSE (EALDE)         11         L         D         D         D           PULSE (EALDE)         11         L         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D

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		D44	Signal Name (Specification)	
9         ∨           10         R           12         L           13         BR           14         G           15         SB           16         G           17         B           18         B           19         GR           19         GR	20 V 21 LG 23 LG 23 G 24 Y 25 BR 25 BR 32 L/O 33 W/L		Hand a second a secon	
6     C     -       7     Y     -       8     B     -       Connector No.     D22       Connector Nume     POWER WINDOW MAIN SWITCH       Connector Type     NS167W-CIS	al Oolor Of Sign	0         1         0         1         1         p         1         p         0         1         1         p         1         p         1         p         1         p         1         p         1         p         1         p         1         p         1         p         1         p         1         p         1         p         1         p         1         p         1         p         1         p         1         p         1         1         1         1         1         1         1         1         1         1         1	5	
Connector No.         D18           Connector Name         WIRE TO WIRE           Connector Type         TH24MW-NH           Connector Type         TH24MW-NH <td< td=""><td>al Dolor Of Signal Name Wire Signal Name V/W V/W V/W</td><td>14            13         R           19         V           10         S           11         R           12         R           13         V           14         -           19         V           21         R           22         LG           23         LG           24         S           20         S           21         LG           23         LG           24         S           25         LG           26         S           27         LG           28         LG           29         LG           20         S           21         LG           22         LG           23         LG           24         S           25         LG           26         S           27         LG           28         LG           29         LG           20         LG           20         LG           21         LG</td><td>Taminal No.         Color Of Wire         Signal Mane [Specification]           2         LG         -           4         B         -           4         B         -</td><td></td></td<>	al Dolor Of Signal Name Wire Signal Name V/W V/W V/W	14            13         R           19         V           10         S           11         R           12         R           13         V           14         -           19         V           21         R           22         LG           23         LG           24         S           20         S           21         LG           23         LG           24         S           25         LG           26         S           27         LG           28         LG           29         LG           20         S           21         LG           22         LG           23         LG           24         S           25         LG           26         S           27         LG           28         LG           29         LG           20         LG           20         LG           21         LG	Taminal No.         Color Of Wire         Signal Mane [Specification]           2         LG         -           4         B         -           4         B         -	
DOOR LOCK SYSTEM Connector Name From toon Lock Assemily Universities Connector Type Connector Type Connec	Terminal         Color Of Wree         Signal Manre [Specification]           1         P         P           2         LG         -           4         B         -           5         R         -           6         0         -	Connector Nu. 017 Connector Nume FRONT OUTSDE HANDLE ASSEMBLY LH Connector Trope SAZOBFW Connector Trope SAZOBFW Connector Trope SAZOBFW Connector Trope SAZOBFW Connector Trope SAZOBFW		

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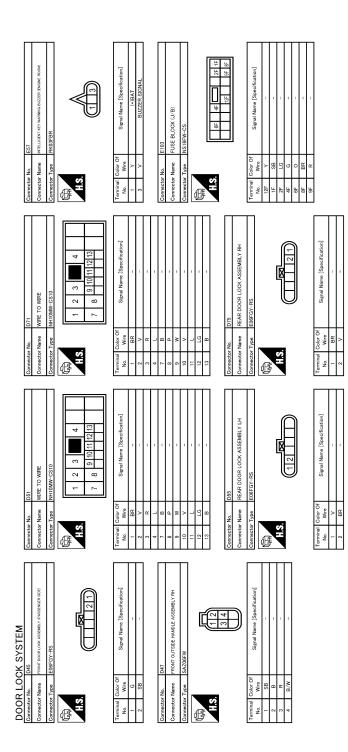
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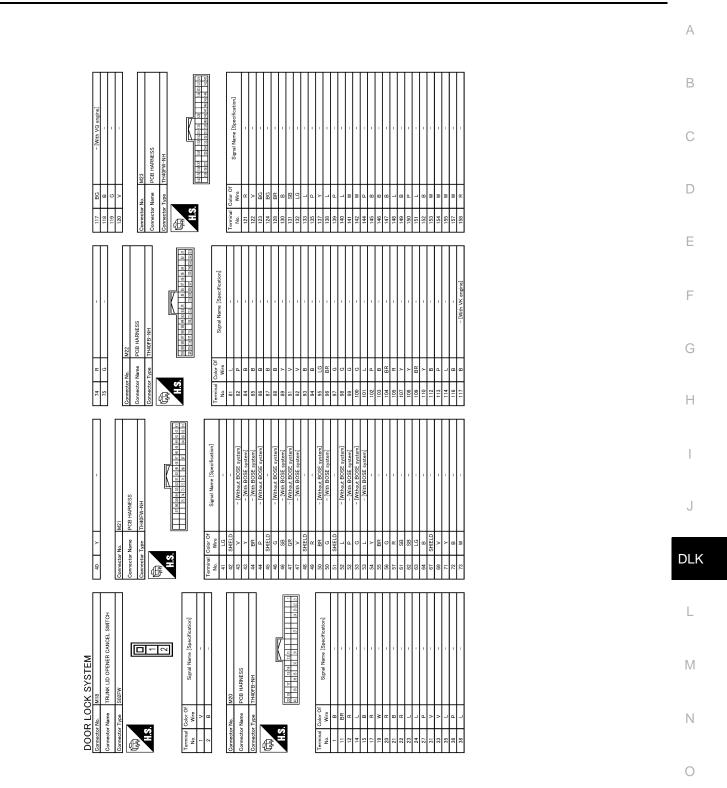
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DOO	R LOCK	DOOR LOCK SYSTEM										
Terminal	Terminal Color Of	Simal Nama [Snarification]	32	٩	-	Conne	Connector No.	M7	37	SB	-	
No.	Wire		33	-	-	Conne	Connector Name	WIDE TO WIDE	41	BB	-	
10C	ΓC	1	34	_	1	100			42	^	1	
110	DT	-	41	_	1	Conne	Connector Type	TH80MW-CS16-TM4	43	-	1	
12C	0	1	44	BR	1				44	m	,	
90	ж	I	45	>	1	£			45	M	I	
7C	8	1	46	BG	,	主		14	47	_	,	
8C		1	47	$\vdash$			E S	응 <u>.</u> 위켓	48	P		
90	_		48	G	,		1		49	ä	1	
			49		-				20	>	-	
			50						51	>		
Connector No.	r No. M6		99						52	٩		
		and the second se	61	$\vdash$		Terminal	al Color Of		53	BG	1	
Connecto	Connector Name WIH	WIRE IO WIRE	62	┡		Ň	Wire	Signal Name [Specification]	56	8		
Connector Type	Г	TH80MW-CS16-TM4	63	┝	,	-	0	-	57	٩	,	
	1		64	┝	-	~	>		28	9	-	
¢			65	œ		4	BR		59	>		
手			99			ur.	٩	1	60	GR		
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			3	5	•	20	2	'	8	2	1	
			81	+	1	₽	>	1	99	œ	1	
Terminal	Terminal Color Of	Signal Name [Snecification]	82	-		=		<ul> <li>[With heated seat]</li> </ul>	67	>		
No.	Wire	France could be as a 10 to	83	-	,	Ξ	>	<ul> <li>[With climate controlled seat]</li> </ul>	68	ГG		
1	w	-	84		-	12	GR	- [With heated seat]	69	SB	-	
2	w	-	85	7	-	12	٩	- [With climate controlled seat]	70	>	-	
3	SB	1	86	-	1	13	BR	1	72	-	1	
4	ΓC	T	87	>	1	14	GR	1	73	۵.	Т	
2	w	T	88	>	1	15	BG	1	74		1	
7	BG		68	5 LG		16	>		75	٩	,	
8	5		6		,	11	BG		76	0	,	
6	~	1	91	$\vdash$	1	18	_	ſ	11	>	1	
10	N	1	92	BG	,	19	>	'	78	89	,	
11	œ	1	8	┝	1	20	œ	-	79	>	1	
12	>		9	┝	,	21	•	-	8	H	,	
13	ГC		95	>	1	22	P	-	81	9	,	
14			97	BS	,	23	*		82	BR	,	
15	>		98		1	24	>		83	BG	1	
16	8		66			25	9	1	84			
17	GR		100			26	H	,	85	×		
18	>	1				26	В.	,	98	c	1	
20	BS	,				28	•	'	87	· ~	,	
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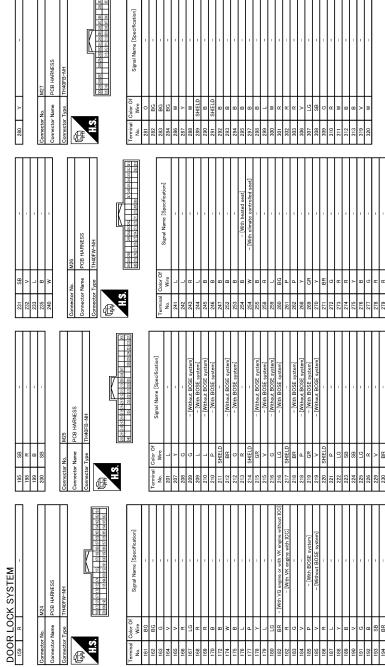
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NH	Signal Name [Specification]	-	1	-	 -	,	1	-	ļ	-	-	-	-	-	-	-	-	-	1	1	1	-	1	1	-	-	-

**DOOR & LOCK SYSTEM** 



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LL CEEVER CEEVER CEVER CEVER CEVER	
CARH-H CARH-H CARH-H AR BAG SIGNAL AR BAG SIGNAL AR BAG SIGNAL DEARE LEVEL EDVICE AND	F
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14         14           15         15           16         15           17         16           18         16           19         16           19         16           11         16           12         17           13         18           14         1           15         16           16         16           17         16           18         16           19         16           10         16           11         1           12         2           2         2           2         2           2         2           2         2           2         2           2         2           2         2           2         2           2         2           2         2           2         2           2         2           2         2           2         2           2         2           2         2	Н
M80 PUSH-BUTTON IGNITION SWITCH M00FER     M80 PUSH-BUTTON IGNITION SWITCH M00FER       M80 PUSH-BUTTON IGNITION SWITCH M00FER     Signal Mame [Sacrification]       M80 PUSH-BUTTON IGNITION SWITCH M00FER     -       M80 PUSH-BUTTON IGNITION SWITCH M00FER     -       M80 PUSH-BUTTON IGNITION SWITCH PUSH-BUTTON IGNITION PUSH-BUTTON IGNITION IGNITION PUSH-BUTTON IGNITION PUSH-BUTTON IGNITION IGNITON	I
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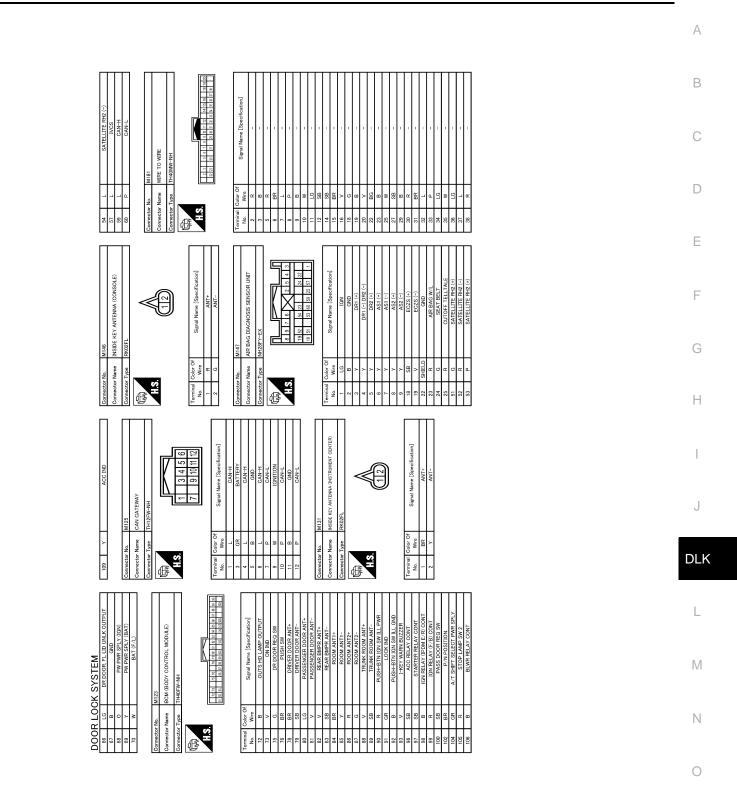
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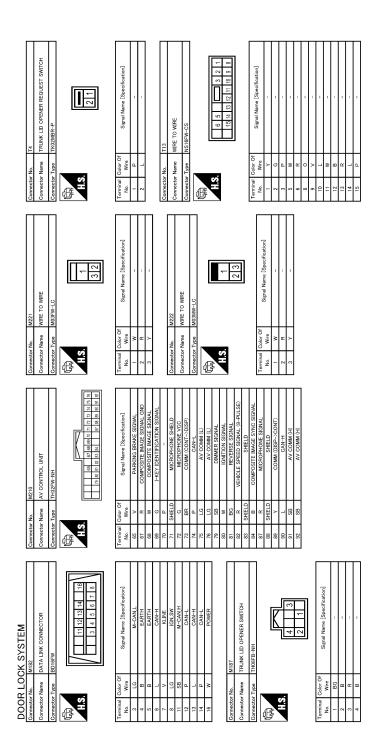
	DOOR LOCK SYSTEM		85	۳.	'	Conne	Connector No.	M120	Connector No	M121	-
Connector Name	Name WIRE TO WIRE		59	> <u>-</u>		Conne	Connector Name	BCM (BODY CONTROL MODULE)	Connector Name		BCM (BODY CONTROL MODULE)
Connector Type	Type TH80FW-CS16-TM4		62	┝	1	Conne	Connector Type	TH40FB-NH	Connector Type	Γ	FEA09FB-FHA6-SA
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			67	- >	1 1	Ŧ			THE P		
H-S-	X		68	8	1		Ś		H.S.		41 42 44 45 46 47 48 40
			69	Н	-		1	1 2 3 4 5 6 8 9 11 11 14 15 17 18 19 20 31 37 37 32 34 5 5 6 3 9 31 31 81 32 32 32 32 32 32 32 32 32 32 32 32 32			
			70	-	-			10 00 02 00 00 00			51 53 55
	с 4 ж		71	_							
			74	8							
Terminal Color Of No. Wire		Signal Name [Specification]	75	SHIELD	0	Terminal No.	nal Color Of Wire	Signal Name [Specification]	Terminal Col No. V	Color Of Wire	Signal Name [Specification]
	~		11	ø	1	-	σ	RR WINDOW DEFG RLY CONT	41	×	TR KEY CYLINDER SW
9	ж		78	œ	1	7	BG	COMBI SW INPUT 5	42	æ	TRUNK LID OPEN/CLOSE STATUS
13	w	-	79	-		°	SB	COMBI SW INPUT 4	44	^	TR LID OP CANCEL SW
17	GR		80	9	-	4	-	COMBI SW INPUT 3	45	GR	PASSENGER DOOR SW
18	ч	1	81			5	IJ	COMBI SW INPUT 2	46	BR	REAR RH DOOR SW
19	BR		82	BR	1	9	٩	COMBI SW INPUT 1	47	ГG	DRIVER DOOR SW
20	GR	-	83	GR	-	~	>	POWER WINDOW SW COMM	_	٩.	REAR LH DOOR SW
21	Y	-	84	>	-	6	٩	STOP LAMP SW 1	49	SB	TR ROOM LAMP CONT
22	LG	-	85	LG	-	Ξ	я	RAIN SENSOR SERIAL LINK	51	BG	TR LID OPEN REQ SW
23	я	-	86	>	-	14	M	OPTICAL SENSOR	53	ΓC	TRUNK LID OPEN REQUEST
24	BG	-	87	R		16	SB	DIMMER SIGNAL	55	BR	RR DOOR UNLK OUTPUT
25	BG	1	88		1	17	>	SENSOR PWR SPLY			
26	w	1	89	BR	-	18		RECEIVER / SENSOR GND			
27	я	1	8			19	┥	RECEIVER PWR SPLY	Connector No.	. M122	2
28	>	-	91	>		20	_	KYLS ENT RECEIVER COMM	Connector Name		BCM (BODY CONTROL MODULE)
29	P	-	93	σ	<ul> <li>[With heated seat]</li> </ul>	21	٩	NATS ANT AMP.			
30	B	-	93	×	<ul> <li>[With climate controlled seat]</li> </ul>	22	GR	KYLS ENT RECEIVER RSSI	Connector Type		FEA09FW-FHA6-SA
31	G	-	94	>		23	σ	SECURITY IND CONT	(		
32	~	T	96	>	T	24	+	DONGLE LINK	E		
40	SHIELD	1	97	+		25	+	NATS ANT AMP.			
41	æ	T	8			26	+	I-KEY IDENTIFICATION	H-3.		56 57 58 59 60 61 62 63
42	>	T	66	σ		29	+	HAZARD SW			CC C7 C0 C0
44	w	1	<u>6</u>	~	1	30		TR LID OPNR SW		-1	00 01 00 03
45						31	+	DR DOOR UNLK SENSOR			
46	BG – [With I	heated seat				32	-	COMBI SW OUTPUT 5			
46	_	- [With climate controlled seat]				8	+	COMBI SW OUTPUT 4	в	Color Of	Signal Name [Specification]
47		<ul> <li>[With climate controlled seat]</li> </ul>				ά.	>	COMBI SW OUTPUT 3	┥	Wire	
47	GR – [With !	heated seat]				35	>	COMBI SW OUTPUT 2	+	œ	INT ROOM LAMP PWR SPLY
48	>					36	_	COMBI SW OUTPUT 1	_	œ	BAT (FUSE)
49	BG	-				37	æ	P POSITION	58	-	SENS CANCEL SW
50	LG	-				39	L	CAN-H	59	G	PASS DOOR UNLK OUTPUT
51	SB	-				40	٩	CAN-L	60	G	TURN SIG LH OUTPUT
52	~					I			61	>	TURN SIG RH OUTPUT
53	w	1							62	>	STEP LAMP CONT
56	8								63		ROOM LAMP TIMER CONT
57	9	I							65	>	ALL DOOR, FL LID LOCK OUTPUT

JRKWC9786GB

<b>DOOR &amp; LOCK SYSTEM</b>	DOOR	& L	OCK	SYS	TEM
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JRKWC9787GB



JRKWC9788GB

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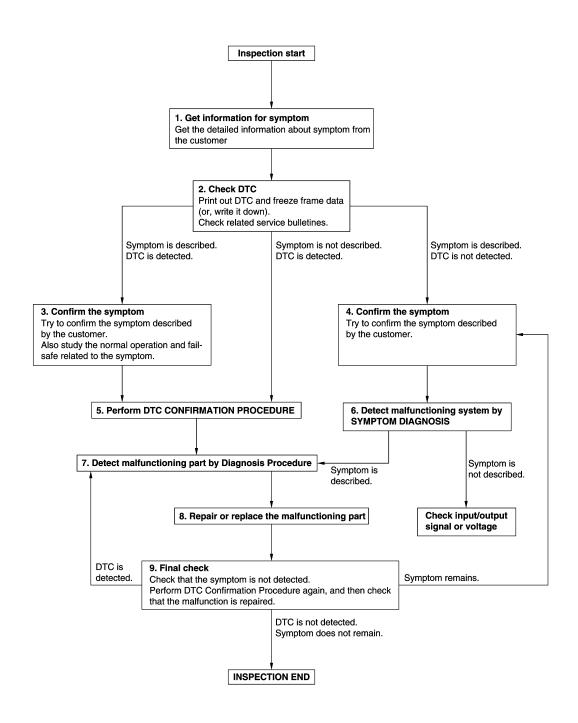
< BASIC INSPECTION >

# BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000010102776

**OVERALL SEQUENCE** 



JMKIA8652GB

DETAILED FLOW

### < BASIC INSPECTION >

1.GET INFORMATION FOR SYMPTOM
1. Get detailed information from the customer about the symptom (the condition and the environment when
<ul><li>the incident/malfunction occurs).</li><li>Check operation condition of the function that is malfunctioning.</li></ul>
>> GO TO 2.
2.CHECK DTC
<ol> <li>Check DTC.</li> <li>Perform the following procedure if DTC is detected.</li> </ol>
<ul> <li>Record DTC and freeze frame data (print them out using CONSULT).</li> </ul>
<ul> <li>Erase DTC.</li> <li>Study the relationship between the cause detected by DTC and the symptom described by the customer.</li> </ul>
<ol> <li>Check related service bulletins for information.</li> </ol>
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.
<b>3.</b> CONFIRM THE SYMPTOM
Confirm the symptom described by the customer.
Also study the normal operation and fail-safe related to the symptom. Verify relation between the symptom and the condition when the symptom is detected.
venty relation between the symptom and the condition when the symptom is detected.
>> GO TO 5.
4.CONFIRM THE SYMPTOM
Try to confirm the symptom described by the customer. Verify relation between the symptom and the condition when the symptom is detected.
>> GO TO 6.
<b>5.</b> PERFORM DTC CONFIRMATION PROCEDURE
Perform DTC CONFIRMATION PROCEDURE for the detected DTC, and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle, and check diagnostic results in real time.
If two or more DTCs are detected, refer to <u>BCS-54, "DTC Inspection Priority Chart"</u> (BCM), and determine
trouble diagnosis order. NOTE:
Freeze frame data is useful if the DTC is not detected.
Perform Component Function Check if DTC CONFIRMATION PROCEDURE is not included on Service     Manual, This simplified shack presedure is an effective alternative through DTC compare the detected during
Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check.
If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC CONFIR-
MATION PROCEDURE. <u>Is DTC detected?</u>
YES >> GO TO 7.
NO >> Refer to <u>GI-47, "Intermittent Incident"</u> .
6. DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS
Detect malfunctioning system according to SYMPTOM DIAGNOSIS based on the confirmed symptom in step 4, and determine the trouble diagnosis order based on possible causes and symptom.
IS the symptom described?
<ul> <li>YES &gt;&gt; GO TO 7.</li> <li>NO &gt;&gt; Monitor input data from related sensors or check voltage of related module terminals using CON- SULT.</li> </ul>
7. DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

# DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.

NO >> Check according to <u>GI-47, "Intermittent Incident"</u>.

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

- 1. Repair or replace the malfunctioning part.
- Reconnect parts or connectors disconnected during Diagnosis Procedure again after repair and replacement.
- 3. 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 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.

Is DTC detected and does symptom remain?

- YES-1 >> DTC is detected: GO TO 7.
- YES-2 >> Symptom remains: GO TO 4.

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

# **INSPECTION AND ADJUSTMENT**

< BASIC INSPECTION >	
INSPECTION AND ADJUSTMENT	А
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT	A
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description	В
BEFORE REPLACEMENT When replacing BCM, save or print current vehicle specification with CONSULT configuration before replace- ment.	С
<b>NOTE:</b> If "READ CONFIGURATION" can not be used, use the "WRITE CONFIGURATION - Manual selection" after replacing BCM.	D
AFTER REPLACEMENT CAUTION: When replacing BCM, always perform "WRITE CONFIGURATION" with CONSULT. Or not doing so, BCM control function does not operate normally.	Е
<ul> <li>Complete the procedure of "WRITE CONFIGURATION" in order.</li> <li>Configuration is different for each vehicle model. Confirm configuration of each vehicle model.</li> <li>If you set incorrect "WRITE CONFIGURATION", incidents might occur.</li> <li>NOTE:</li> </ul>	F
When replacing BCM, perform the system initialization (NATS) (if equipped).	G
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Work Procedure	
INFOID:000000010102778	Н
1. SAVING VEHICLE SPECIFICATION	
CONSULT Configuration     Perform "READ CONFIGURATION" to save or print current vehicle specification. Refer to <u>BCS-75, "CONFIG-</u> <u>URATION (BCM) : Description"</u> .	I
NOTE: If "READ CONFIGURATION" can not be used, use the "WRITE CONFIGURATION - Manual selection" after replacing BCM.	J
>> GO TO 2.	DLk
2.REPLACE BCM	
Replace BCM. Refer to BCS-90, "Removal and Installation".	L
>> GO TO 3.	ъл
3.WRITING VEHICLE SPECIFICATION	Μ
CONSULT Configuration Perform "WRITE CONFIGURATION - Config file" or "WRITE CONFIGURATION - Manual selection" to write vehicle specification. Refer to <u>BCS-75, "CONFIGURATION (BCM) : Work Procedure"</u> .	Ν
>> GO TO 4.	~
4.INITIALIZE BCM (NATS) (IF EQUIPPED)	0
Perform BCM initialization. (NATS)	
	Ρ
>> WORK END	

## < DTC/CIRCUIT DIAGNOSIS >

# DTC/CIRCUIT DIAGNOSIS B2621 INSIDE ANTENNA

DTC Logic

DTC DETECTION LOGIC

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

## DTC CONFIRMATION PROCEDURE

**1.**PERFORM DTC CONFIRMATION PROCEDURE

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 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-64, "Diagnosis Procedure"</u>.

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

# **Diagnosis Procedure**

INFOID:000000010102780

INFOID:000000010102779

# 1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

#### 1. Turn ignition switch OFF.

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

	+) CM	()	Condition	Signal (Reference value)
Connector	Terminal			
M123	84, 85	Ground	When Intelligent Key is in the anten- na detection area	(V) 15 0 5 0 1 s JMKIA3839GB
WIL20	04,00	Cround	When Intelligent Key is not in anten- na detection area	(V) 15 0 10 10 10 10 10 10 10 10 10 10 10 10 1

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u>.

NO >> GO TO 2.

2. CHECK INSIDE KEY ANTENNA CIRCUIT

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

# **DLK-64**

# **B2621 INSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

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

Connector	Terminal	Connector	Tarminal	Continuity	_
		Connector	Terminal		В
M123	84	M131	1	Existed	
WI123	85	WITST	2	- Existed	

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

B	СМ		Continuity	D
Connector	Terminal	Ground	Continuity	D
M123	84	Ground	Not existed	
101123	85			E

#### 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				Signal
		()	Condition	(Reference value)
Connector	Terminal			
M123	04.05	Ground	When Intelligent Key is in the anten- na detection area	(V) 15 10 5 0 15 1 1 15 10 5 0 15 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 15 10 15 15 15 15 15 15 15 15 15 15
IVIT23	84, 85	Ground	When Intelligent Key is not in anten-	(V) 15 10 5
			na detection area	Ŭ I S JMKIA5951GB

#### Is the inspection result normal?

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

NO >> Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u>.

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### < DTC/CIRCUIT DIAGNOSIS >

# **B2622 INSIDE ANTENNA**

# DTC Logic

INFOID:000000010102781

### DTC DETECTION LOGIC

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

### DTC CONFIRMATION PROCEDURE

# 1.PERFORM DTC CONFIRMATION PROCEDURE

- Select "INTELLIGENT KEY" of "BCM" using CONSULT. 1.
- Select "INSIDE ANT DIAGNOSIS" in "WORK SUPPORT" mode. 2.
- Perform inside key antenna ("INSIDE ANT DIAGNOSIS") on "WORK SUPPORT" of "INTELLIGENT 3. KEY".
- 4. Check BCM for DTC.

#### Is inside key antenna DTC detected?

- YES >> Refer to <u>DLK-66, "Diagnosis Procedure"</u>.
- >> Inside key antenna (console) is OK. NO

### **Diagnosis** Procedure

INFOID:000000010102782

# 1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM		()	Condition	Signal (Reference value)
Connector	Terminal			
M123	86, 87	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 15 10 5 0 15 10 10 10 10 10 10 10 10 10 10 10 10 10
WIZS	00, 01	Cround	When Intelligent Key is not in antenna detection area	(V) 15 10 5 0 1 t 1 s JMKIA5951GB

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-90, "Removal and Installation". O TO 2.

# 2. CHECK INSIDE KEY ANTENNA CIRCUIT

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

## **DLK-66**

# **B2622 INSIDE ANTENNA**

### < DTC/CIRCUIT DIAGNOSIS >

	BCM			Inside key an	tenna (console)	)	Continuity
Conn	ector	Terminal	(	Connector	Termi	nal	
M1	23	86		M146	1		Existed
	20	87		2		Existed	
Check co	ontinuity betw	veen BCM har	ness conne	ctor and grou	nd.		
		ВСМ					
Con	nector	Termi		-			Continuity
CON	necioi	86		G	iround		
N	123	87		-		٦	lot existed
S >> C >> F HECK IN Replace Connect	ISIDE KEY A inside key ar BCM connec	ANTENNA INP ntenna (consol ctor and inside n BCM harnes	e). (New ar key antenr	ntenna or othe na (console) c	onnector.	ope.	
	(+)						
E	всм	(-)		Condition			nal ce value)
Connector	Terminal						
M123	86, 87	Ground	When Intelli detection a	igent Key is in the rea	e antenna	(V) 15 10 5 0 • • • •	JMKIA3839GB

### < DTC/CIRCUIT DIAGNOSIS >

# **B2623 INSIDE ANTENNA**

# DTC Logic

INFOID:000000010102783

### DTC DETECTION LOGIC

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

### DTC CONFIRMATION PROCEDURE

# 1.PERFORM DTC CONFIRMATION PROCEDURE

- Select "INTELLIGENT KEY" of "BCM" using CONSULT. 1.
- Select "INSIDE ANT DIAGNOSIS" in "WORK SUPPORT" mode. 2.
- Perform inside key antenna ("INSIDE ANT DIAGNOSIS") on "WORK SUPPORT" of "INTELLIGENT 3. KEY".
- 4. Check BCM for DTC.

#### Is inside key antenna DTC detected?

- YES >> Refer to <u>DLK-68, "Diagnosis Procedure"</u>.
- >> Inside key antenna (trunk room) is OK. NO

### **Diagnosis** Procedure

INFOID:000000010102784

# 1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

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

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-90, "Removal and Installation". O TO 2.

# 2. CHECK INSIDE KEY ANTENNA CIRCUIT

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

## **DLK-68**

# **B2623 INSIDE ANTENNA**

### < DTC/CIRCUIT DIAGNOSIS >

	BCM		Ins	ide key antenr	na (trunk room)		Continuity
Connector		Terminal	Conn	nector	Termina	ıl	Continuity
M123		88	B	49	1		Existed
WI120	89			-10	2		Existed
neck continuity	betwee	en BCM harne	ess connector	and ground	d.		
	B	CM					
Connector		Tern	ninal				Continuity
M123		8	8	G	round		Not existed
101123		8	9				NOT EXISTED
ECK INSIDE k eplace inside k onnect BCM co neck signal bei	ey ante	nna (trunk roc r and inside k	om). (New ani ey antenna (t	runk room)	connector.	pe	
-				5			
(+) BCM		()		condition			Signal rence value)
(+) BCM	ninal						
(+) BCM onnector Terr			с	condition			rence value)

## **B2626 OUTSIDE ANTENNA**

### < DTC/CIRCUIT DIAGNOSIS >

# B2626 OUTSIDE ANTENNA

# **DTC Logic**

INFOID:000000010102785

INFOID:000000010102786

### DTC DETECTION LOGIC

DTC	CONSULT 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	<ul> <li>Outside key antenna (driver side)</li> <li>Between BCM ~ Outside key antenna (driver side)</li> </ul>

### DTC CONFIRMATION PROCEDURE

# **1.**PERFORM DTC CONFIRMATION PROCEDURE

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

#### Is DTC detected?

- YES >> Refer to DLK-70, "Diagnosis Procedure".
- NO >> Inside key antenna (driver side) is OK.

### **Diagnosis Procedure**

1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+ BC		()	(–) Condition		Signal (Reference value)
Connector	Terminal				
M123	78 79	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna de- tection area (distance between In- telligent Key and an- tenna: 80 cm or less) When Intelligent Key is not in the antenna detection area (distance between In- telligent Key and an- tenna: Approx. 2 m)	(V) 15 500 ms JMKIA5955GB (V) 15 10 500 ms JMKIA5954GB JMKIA5964GB

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u>.

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 >

Connector       Terminal       Connector       Terminal       Continuity         M123       78       D14       1       2       Existed         Check continuity between BCM hamess connector and ground.         BCM       Ground       Continuity         M123       78       Ground       Continuity         M123       78       Ground       Continuity         M123       78       Ground       Continuity         M123       78       Ground       Continuity         M123       79       Ground       Continuity         Connector result normal?       Control       Control       Control         Connect DC OT O 3.       O       >> Replace outside key antenna (driver side). (New antenna or other antenna)       Connector.         Check signal between BCM harness connector and ground using oscilloscope.       Contextor       Signal (Reference value)         Image: Connector Terminal       (-)       Condition       Ground (Reference value)       Signal (Reference value)         Image: Connector Terminal       Image: Contextor and ground using oscilloscope.       Image: Connector and outside key antenna (driver side).       Contextor and ground using oscilloscope.         Image: Connector Terminal       Image: Contextor       Image: Contextor and ground	Connector         Terminal         Connector         Terminal         1         Existed           M123         78         D14         1         2         Existed           Check continuity between BCM harness connector and ground.         Existed         Continuity         Continuity           M123         78         Ground         Continuity         Continuity           M123         78         Ground         Continuity           M123         79         Ground         Continuity           M123         79         Orgo         Not existed           Not existed         S         > Go TO 3.         >         >> Replair or replace harness.         CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2           Replace outside key antenna (driver side). (New antenna or other antenna) Connector.         Condition         (Reference value)           (+)         Condition         (Reference value)         (Reference value)		B	CM		Outside key ante	enna (driver side)		Pontinuit.	
M123       79       D14       2       Existed         Check continuity between BCM harness connector and ground.         Image: Connector       Terminal       Ground       Continuity         M123       78       Ground       Continuity         M123       78       Ground       Not existed         M123       78       Ground       Not existed         M123       78       79       Not existed         Connector nesult normal?         ES       >> GO TO 3.       O       > Repair or replace harness.         CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2         Replace outside key antenna (driver side). (New antenna or other antenna)         Connector Connector and outside key antenna (driver side) connector.         Check signal between BCM harness connector and ground using oscilloscope.         (#)         Connector Terminal         M123       78       Ground       When the driver door request switch is operated with grinton switch of F       When Intelligent Key and antenna detection area (distance between Intelligent Key and antenna detection area (distance between Intelligent Key and antenna detection area (distance between Intelligent Key and antenna: Approx. 2 m)	M123       79       D14       2       Existed         Check continuity between BCM harness connector and ground.       Image: Connector indication of the second of th	Conr	nector	Те	rminal	Connector	Terminal	(	Jonunuity	
1         Check continuity between BCM harness connector and ground.         Continuity         Connector         M123       Continuity         M123       Continuity         Continuity         Connector       Continuity         Continuity         Contention       Continuity         Continuity         Contention       Continuity         Contention       Contention         Contention       Contention         Contention       Contention         Contention       Signal         Contention       Contention         Contention       Contention         M123 <th colsp<="" td=""><td>Time     Time       Check continuity between BCM harness connector and ground.       BCM       Connector     Terminal       M123     78       79     Ground       M123     78       79     Ground       M123     78       79     Ground       M123     78       79     On existed       M123     78       79     On existed       Not existed     Not existed       S &gt;&gt; GO TO 3.     &gt;&gt; Repair or replace harness.       Check outside key antenna (driver side). (New antenna or other antenna)     Connector.       Connect BCM connector and outside key antenna (driver side) connector.     Signal (Reference value)       Condition     (*)     (*)       M123     78     Ground       M123     78     Ground       M123     78     Ground       M123     78     Ground       When Intelli</td><td>M</td><td>123</td><td></td><td>78</td><td>D14</td><td>1</td><td></td><td>Existed</td></th>	<td>Time     Time       Check continuity between BCM harness connector and ground.       BCM       Connector     Terminal       M123     78       79     Ground       M123     78       79     Ground       M123     78       79     Ground       M123     78       79     On existed       M123     78       79     On existed       Not existed     Not existed       S &gt;&gt; GO TO 3.     &gt;&gt; Repair or replace harness.       Check outside key antenna (driver side). (New antenna or other antenna)     Connector.       Connect BCM connector and outside key antenna (driver side) connector.     Signal (Reference value)       Condition     (*)     (*)       M123     78     Ground       M123     78     Ground       M123     78     Ground       M123     78     Ground       When Intelli</td> <td>M</td> <td>123</td> <td></td> <td>78</td> <td>D14</td> <td>1</td> <td></td> <td>Existed</td>	Time     Time       Check continuity between BCM harness connector and ground.       BCM       Connector     Terminal       M123     78       79     Ground       M123     78       79     Ground       M123     78       79     Ground       M123     78       79     On existed       M123     78       79     On existed       Not existed     Not existed       S >> GO TO 3.     >> Repair or replace harness.       Check outside key antenna (driver side). (New antenna or other antenna)     Connector.       Connect BCM connector and outside key antenna (driver side) connector.     Signal (Reference value)       Condition     (*)     (*)       M123     78     Ground       M123     78     Ground       M123     78     Ground       M123     78     Ground       When Intelli	M	123		78	D14	1		Existed
BCM       Continuity         Connector       Terminal       Ground       Continuity         M123       78       Ground       Not existed         the inspection result normal?       ES       >> GO TO 3.       Not existed         O       >> Repair or replace harness.       CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2         Replace outside key antenna (driver side). (New antenna or other antenna)         Connect or and outside key antenna (driver side) connector.         Check signal between BCM harness connector and ground using oscilloscope.         (+)       Condition       Signal (Reference value)         (minute)       When the driver door request witch is operated with ignition switch OFF       When Intelligent Key and antenna: 80 cm or less)       Junuxesscop         M123       78       Ground       When the driver door request witch is operated with ignition switch OFF       When Intelligent Key and antenna: 80 cm or less)       Junuxesscop         M123       78       Ground       When the driver door request with is operated with ignition switch OFF       When Intelligent Key and antenna: Approx. 2 m)       Junuxesscop         Menutestigent Key and antenna: Approx. 2 m)         Junuxesscop         Junuxesscop       Junu	BCM       Ground       Continuity         M123       78       Ground       Not existed         we inspection result normal?       79       Not existed       Not existed         S       >> GO TO 3.       >> >> Repair or replace harness.       State       State       State         Connector       replace outside key antenna (driver side). (New antenna or other antenna).       Connector.       Check signal between BCM harness connector and ground using oscilloscope.         (+)       (-)       Condition       Signal (Reference value)         (distance between In-telligent Key and anarea (distance between In-telligent Key and		120		79	511	2		Exiotod	
Connector         Terminal         Ground         Continuity           M123         78         Not existed         Not existed           the inspection result normal?         79         Not existed         Not existed           ES         >> GO TO 3.         >> Repair or replace harness.         Statistical connector and outside key antenna (driver side). (New antenna or other antenna)         Connector.           Connector BCM connector and outside key antenna (driver side) connector.         Check signal between BCM harness connector and ground using oscilloscope.         Signal (Reference value)           (et + BCM / Connector Terminal         (-)         Condition         Signal (Reference value)           M123         78 / 79         Ground         When the driver door request switch is operated with ignition switch OFF         When Intelligent Key and antenna (distance between Intelligent Key is not in the antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)         UMAADBEGGB           M123         78 / 79         Ground         When the driver dot request switch is operated with ignition switch OFF         When Intelligent Key and antenna: 80 cm or less)         UMAADBEGGB           M123         78 / 79         Ground         When Intelligent Key and antenna: Approx. 2 m)         UMAADBEGGB	Connector       Terminal       Ground       Continuity         M123       78       79       Not existed         me inspection result normal?       73       Not existed         S       >> GO TO 3.       >>> Prepair or replace harness.       S         Check COUTSIDE KEY ANTENNA INPUT SIGNAL 2       Replace outside key antenna (driver side). (New antenna or other antenna)       Connector.         Connector and outside key antenna (driver side) connector.       Check signal between BCM harness connector and ground using oscilloscope.         Image: terminal determinal       (-)       Condition       Signal (Reference value)         Image: terminal determinal       (-)       Condition read (distance between Intelligent Key and antenna: 80 cm or less)       Image: terminal detection area (distance between Intelligent Key and antenna: Approx. 2 m)         Image: terminal detectorion area (distanc	Check co	ontinuity be	etween B	CM harness coni	nector and grour	nd.			
Connector       Terminal       Ground         M123       78       Not existed         he inspection result normal?       79       Not existed         CONNECTION RESULT OF TERMINAL INPUT SIGNAL 2       So >> Repair or replace harness.       CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2         Replace outside key antenna (driver side). (New antenna or other antenna)       Connector.       Connector.         Connector BCM connector and outside key antenna (driver side) connector.       Connector.       Signal (Reference value)         (+)       (-)       Condition       Signal (Reference value)         (connector       Terminal       (-)       Vhen the driver door request switch is operated with ignition switch OFF       When Intelligent Key and antenna detection area (distance between Intelligent Key and antenna: Approx. 2 m)       Use (V)       Use (V)         M123       78       Ground       When Intelligent Key and antenna detection area (distance between Intelligent Key and antenna: Approx. 2 m)       Use (V)       Use (V)         Image: So or	Connector       Terminal       Ground         M123       78       Not existed         79       79       Not existed         M123       79       Not existed         S       >> GO TO 3.       >> Repair or replace harness.         Check OUTSIDE KEY ANTENNA INPUT SIGNAL 2       Replace outside key antenna (driver side). (New antenna or other antenna)         Connect BCM connector and outside key antenna (driver side) connector.       Check signal between BCM harness connector and ground using oscilloscope.         (+)       (-)       Condition       Signal (Reference value)         (main connector       Terminal       (-)       Condition         (M123       78       Ground       When the driver door request switch is operated with ignition switch OFF       When Intelligent Key and antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)			BCM				Con	tinuity	
M123       78 79       Not existed         the inspection result normal?       ES       >> GO TO 3.          O       >> Repair or replace harness.       CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2         Replace outside key antenna (driver side). (New antenna or other antenna).       Connector and outside key antenna (driver side) connector.         Connect BCM connector and outside key antenna (driver side) connector.       Signal (Reference value)         (+)       (-)       Condition         (algorithm and between BCM harness connector and ground using oscilloscope.       Signal (Reference value)         (minimic connector Terminal       (-)       Condition         (M123       78 79       Ground       When the driver is the antenna detection area (distance between Intelligent Key is in the antenna detection reae (distance between Intelligent Key and antenna (driver side).       JMKUASSEGEB         M123       78 79       Ground       When the driver is the antenna detection area (distance between Intelligent Key and antenna (driver side).       JMKUASSEGEB         the inspection result normal?       JMKUASSEGEB       JMKUASSEGEB       JMKUASSEGEB         the inspection result normal?       JMKUASSEGEB       JMKUASSEGEB       JMKUASSEGEB	M123       78       Not existed         ne inspection result normal?         (S)       >> Repair or replace harness.         CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2         Replace outside key antenna (driver side). (New antenna or other antenna). Connect BCM connector and outside key antenna (driver side) connector. Check signal between BCM harness connector and ground using oscilloscope.         (+)       (-)       Condition       Signal (Reference value)         Connector       Terminal       (-)       Condition       Signal (Reference value)         M123       78 79       Ground       When the driver dor request with is operated with ignition switch OFF       When Intelligent Key is not in the antenna detection area (distance between In- telligent Key and an- tenna: 80 cm or less)       JMUASSEGB         M123       78 79       Ground       When Intelligent Key is not in the antenna detection area (distance between In- telligent Key and an- tenna: Approx. 2 m)       JMUASSEGB         JMUASSEGB	С	onnector		Terminal		Ground			
the inspection result normal?         ES       >> GO TO 3.         O       >> Repair or replace harness.         CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2         Replace outside key antenna (driver side). (New antenna or other antenna)         Connect BCM connector and outside key antenna (driver side) connector.         Check signal between BCM harness connector and ground using oscilloscope.         (+)       (-)         BCM       (-)         Condition       Signal (Reference value)         (reference value)       (-)         M123       78         79       Ground         When the driver door request switch is operated with ignition switch OFF       When Intelligent Key is not in the antenna detenna: 80 cm or less)         When Intelligent Key is not in the antenna detenna: 80 cm or less)	ie inspection result normal?         (S) >> GO TO 3.         (S) >> Repair or replace harness.         CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2         Replace outside key antenna (driver side). (New antenna or other antenna) Connect BCM connector and outside key antenna (driver side) connector. Check signal between BCM harness connector and ground using oscilloscope.         (+)       (-)         BCM       (-)         Connector       Terminal         (mits)       (-)         Connector       Terminal         (M123)       78 79       Ground         When the driver door request with ignition switch OFF       When Intelligent Key is in the antenna detection area (distance between In- telligent Key and an- tenna: 80 cm or less)		M123		_			Not e	existed	
ES       >> GO TO 3.         IO       >> Repair or replace harness.         CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2         Replace outside key antenna (driver side). (New antenna or other antenna). Connector and outside key antenna (driver side) connector. Check signal between BCM harness connector and ground using oscilloscope.         (+)       (-)       Condition       Signal (Reference value)         Image: Connector Terminal       (-)       Condition       Signal (Reference value)         Image: M123       78 / 79       Ground       When the driver door request switch is operated with ignition switch OFF       When Intelligent Key is not in the antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)       Image: State	S       >> GO TO 3.         >> Repair or replace harness.         CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2         Replace outside key antenna (driver side). (New antenna or other antenna).         Connect BCM connector and outside key antenna (driver side) connector.         Check signal between BCM harness connector and ground using oscilloscope.         (+)       (-)         Condition       Signal (Reference value)         (Reference value)       (-)         Venn the driver door request switch is operated with ignition switch OFF       When Intelligent Key is not in the antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)         M123       78 79       Ground         Ven Intelligent Key and antenna (driver side).       When Intelligent Key is not in the antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)				79					
BCM       (-)       Condition       Signal (Reference value)         Connector       Terminal       (-)       Condition       Signal (Reference value)         M123       78 79       Ground       When the driver door request switch is operated with ignition switch OFF       When Intelligent Key is not in the antenna detection area (distance between In- tenna: 80 cm or less)       Image: Condition (V) Image: Condition (V) Ima	BCM       (-)       Condition       Signal (Reference value)         Connector       Terminal       (-)       Condition       Signal (Reference value)         M123       78 79       Ground       When the driver door request switch is operated with ignition switch OFF       When Intelligent Key is in the antenna de- tection area (distance between In- telligent Key and an- tenna: 80 cm or less)       Image: Condition         M123       78 79       Ground       When the driver door request switch is operated with ignition switch OFF       When Intelligent Key is not in the antenna detection area (distance between In- telligent Key and an- tenna: Approx. 2 m)       Image: Condition         Mucussesces       Image: Condition       Image: Condition       Image: Condition         Mucussesces       Image: Condition       Image: Condition       Image: Condition         M123       78 79       Ground       When the driver south is operated with ignition switch OFF       When Intelligent Key is not in the antenna detection area (distance between In- tenna: Approx. 2 m)       Image: Condition         Image: Condition       Image: Condition       Image: Condition       Image: Condition         Image: Condition       Image: Condition       Image: Condition       Image: Condition       Image: Condition         Image: Condition       Image: Condition       Image: Condition       Image: Condition       Image: Condition	ES >> ( O >> F CHECK C Replace Connect	GO TO 3. Repair or re OUTSIDE K outside ke BCM conr	eplace ha EY ANTE y antenna	ENNA INPUT SIG a (driver side). (N d outside key ant	lew antenna or o enna (driver side	e) connector.	)e.		
BCM     (-)     Condition     Signal (Reference value)       Connector     Terminal     (-)     Condition     Signal (Reference value)       M123     78 79     Ground     When the driver door request switch is operated with ignition switch OFF     When Intelligent Key is in the antenna detection area (distance between In- telligent Key and an- tenna: 80 cm or less)     Image: Condition of the antenna detection area (distance between In- telligent Key and an- tenna: 80 cm or less)       M123     78 79     Ground     When the driver door request switch is operated with ignition switch OFF     When Intelligent Key is not in the antenna detection area (distance between In- telligent Key and an- tenna: Approx. 2 m)     Image: Condition of the antenna detection area (distance between In- telligent Key and an- tenna: Approx. 2 m)       the inspection result normal?     Jmkkasse-koe	BCM       (-)       Condition       Signal (Reference value)         Connector       Terminal       (-)       Condition       Signal (Reference value)         M123       78 79       Ground       When the driver door request switch is operated with ignition switch OFF       When Intelligent Key is in the antenna de- tection area (distance between In- telligent Key and an- tenna: 80 cm or less)       Image: Condition         M123       78 79       Ground       When the driver door request switch is operated with ignition switch OFF       When Intelligent Key is not in the antenna detection area (distance between In- telligent Key and an- tenna: Approx. 2 m)       Image: Condition         Mucussesces       Image: Condition       Image: Condition       Image: Condition         Mucussesces       Image: Condition       Image: Condition       Image: Condition         M123       78 79       Ground       When the driver south is operated with ignition switch OFF       When Intelligent Key is not in the antenna detection area (distance between In- tenna: Approx. 2 m)       Image: Condition         Image: Condition       Image: Condition       Image: Condition       Image: Condition         Image: Condition       Image: Condition       Image: Condition       Image: Condition       Image: Condition         Image: Condition       Image: Condition       Image: Condition       Image: Condition       Image: Condition	(	+)							
Connector       Terminal       (Reference value)         Connector       Terminal       (Reference value)         M123       78       Ground       When the driver door request switch is operated with ignition switch OFF       When Intelligent Key and antenna detection area (distance between Intelligent Key is not in the antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)       JMKIA5955GB         When Intelligent Key and antenna: 80 cm or less)       Use of the antenna detection area (distance between Intelligent Key is not in the antenna detection area (distance between Intelligent Key and antenna: Approx. 2 m)       JMKIA5955GB         the inspection result normal?       JMKIA5954GB       JMKIA5954GB	Connector       Terminal       When Intelligent Key is in the antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)       When Intelligent Key and antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)       When Intelligent Key is not in the antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)       JMKIA5955GB         M123       78 79       Ground       When the driver door request switch is operated with ignition switch OFF       When Intelligent Key is not in the antenna detection area (distance between Intelligent Key and antenna: Approx. 2 m)       JMKIA5954GB         Interinspection result normal?         S >> Replace outside key antenna (driver side).			()	C	ondition			,	
M123       78       Ground       When the driver door request switch is operated with ignition switch       When Intelligent Key and antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)       JMKIA69954GB         M123       78       F       Ground       When the driver door request switch is operated with ignition switch       When Intelligent Key is not in the antenna detection area (distance between Intelligent Key is not in the antenna detection area (distance between Intelligent Key and antenna: Approx. 2 m)       JMKIA69954GB         the inspection result normal?       JMKIA69954GB       JMKIA69954GB	M123       78       Ground       When the driver door request switch is operated with ignition switch OFF       When Intelligent Key and antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)       JMKIA5955GB         M123       78       Ground       When the driver door request switch is operated with ignition switch OFF       When Intelligent Key is not in the antenna detection area (distance between Intelligent Key and antenna: detection area (distance between Intelligent Key and antenna: Approx. 2 m)       JMKIA5955GB         me inspection result normal?       S       >> Replace outside key antenna (driver side).		1					(Reference valu	le)	
the inspection result normal? ES >> Replace outside key antenna (driver side).	with ignition switch OFF When Intelligent Key is not in the antenna detection area (distance between In- telligent Key and an- tenna: Approx. 2 m) MKIA5954GB MKIA5954GB	M123		Ground	door request	is in the antenna tection area (distance between telligent Key and	de- 15 - 10 - 5 = n In- an-	500 ms	MKIA5955GB	
the inspection result normal? ES >> Replace outside key antenna (driver side).	ne inspection result normal? S >> Replace outside key antenna (driver side).		73			When Intelligent H is not in the anten detection area (distance between telligent Key and	na 15 - 10 - 5 - an- 0 -	→		
ES >> Replace outside key antenna (driver side).	S >> Replace outside key antenna (driver side).	the inspec	tion result	normal?						
O >> Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u> .	>> Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u> .	ES >> F	Replace ou	itside key	antenna (driver	side).				
		IO >> [	Replace B	CM. Refer	to <u>BCS-90, "Re</u>	moval and Instal	<u>llation"</u> .			

## **B2627 OUTSIDE ANTENNA**

### < DTC/CIRCUIT DIAGNOSIS >

# B2627 OUTSIDE ANTENNA

# **DTC Logic**

INFOID:000000010102787

### DTC DETECTION LOGIC

DTC	CONSULT 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	<ul> <li>Outside key antenna (passenger side)</li> <li>Between BCM ~ Outside key an- tenna (passenger side)</li> </ul>

### DTC CONFIRMATION PROCEDURE

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

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

Is DTC detected?

YES >> Refer to <u>DLK-72</u>, "Diagnosis Procedure".

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

### **Diagnosis Procedure**

INFOID:000000010102788

# 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)
M123	78 79	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna de- tection area (distance between In- telligent Key and an- tenna: 80 cm or less)	(V) 15 10 50 500 ms JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (distance between In- telligent Key and an- tenna: Approx. 2 m)	(V) 15 10 5 0 500 ms JMKIA5954GB

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u>.

NO >> GO TO 2.

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and outside key antenna (passenger side) connector.

2. Check continuity between BCM harness connector and outside key antenna (passenger side) harness connector.

## **B2627 OUTSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

	BC	CM		Outside key antenna	(passenger side)	Continuity	
Con	nector	Те	rminal	Connector	Terminal		
М	123		80	D44	1	Existed	
IVI	120		81		2	LAISIEU	
Check c	ontinuity be	etween B	CM harness conn	nector and ground	l.		
		DOM					
	Service store	BCM	Terminal			Continuity	
	Connector						
	M123		81			Not existed	
ha inanaa	tion result	normal?	01				
•	GO TO 3.	nonnar					
	Repair or re	eplace ha	rness.				
			ENNA INPUT SIG	SNAL 2			
				e). (New antenna	or other antenn	a)	
Connec	t BCM conr	nector and	d outside key ante	enna (passenger	side) connector	•	
				or and ground us			
	(+)						
	(+) CM	()	Condition			Signal	
Connector	1	(-)		(Re		Reference value)	
	Terminal						
				When Intelligent Ke	y (V)		
				is in the antenna de tection area	10		
				(distance between			
			When the driver	telligent Key and ar tenna: 80 cm or les			
	70		door request	terma. ou criti or les	>)	500 ms	
M123	78 79	Ground	switch is operated				
			with ignition switch OFF	When Intelligent Ke	y (V)		
			is not in the antenn	a 15 10			
				detection area (distance between	n- 5		
				telligent Key and ar	ı-	→ <b>←</b>	
				tenna: Approx. 2 m	)   E	500 ms	
<del>.</del>						JMKIA5954GB	
	tion result						
			antenna (passer	iger side). noval and Installa	ation"		
5			to <u>DOO-30, Tter</u>				

## **B2628 OUTSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

# B2628 OUTSIDE ANTENNA

## **DTC Logic**

INFOID:000000010102789

### DTC DETECTION LOGIC

DTC	CONSULT 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	<ul> <li>Outside key antenna (rear bumper)</li> <li>Between BCM – Outside key an- tenna (rear bumper)</li> </ul>

### DTC CONFIRMATION PROCEDURE

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

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

Is DTC detected?

YES >> Refer to <u>DLK-74, "Diagnosis Procedure"</u>.

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

#### **Diagnosis** Procedure

INFOID:000000010102790

## 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)	
Connector	Terminal					
M123	78	Ground	When the driver door request switch is operated	When Intelligent Key is in the antenna de- tection area (distance between In- telligent Key and an- tenna: 80 cm or less)	(V) 15 10 5 0 500 ms JMKIA5955GB	
WIZ	79	Clound	with ignition switch OFF	When Intelligent Key is not in the antenna detection area (distance between In- telligent Key and an- tenna: Approx. 2 m)	(V) 15 10 5 0 500 ms JJK(A5954GB	

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-90. "Removal and Installation".

NO >> GO TO 2.

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and outside key antenna (rear bumper) connector.

2. Check continuity between BCM harness connector and outside key antenna (rear bumper) harness connector.

## **B2628 OUTSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

	BCM			Outside key ante	enna (rear bumper)	Continuity
Conn	nector	Te	rminal	Connector	Terminal	Continuity
M1	23		82	B63	1	Existed
			83		2	
Check co	ontinuity be	etween B	CM harness con	nector and grou	nd.	
		BCM				
Cr	onnector		Terminal			Continuity
			82 Ground		N / · · /	
	M123		83			Not existed
NO >> F .CHECK O	GO TO 3. Repair or re OUTSIDE K	eplace ha EY ANTE	ENNA INPUT SI			
Connect Check si	BCM and gnal betwe	outside k	ey antenna (rear	bumper) conne	or other antenna) ector. using oscilloscop	
	(+)					Signal
BC	CM	()	C	Condition		(Reference value)
-						(
Connector	Terminal					(
	78	Ground	When the driver door request	When Intelligent is in the antenna tection area (distance betwee telligent Key and tenna: 80 cm or	Key (V) de- 15 10 5 en In- 0 an-	500 ms JMKIA5955GB
M123		Ground		is in the antenna tection area (distance betwee telligent Key and tenna: 80 cm or l	Key (V) de- 15 en In- 0 an- less) (V) nna 15 nna 15 10 sn In- 0 an-	
	78 79		door request switch is operated with ignition switch	is in the antenna tection area (distance betwee telligent Key and tenna: 80 cm or l When Intelligent is not in the ante detection area (distance betwee telligent Key and	Key (V) de- 15 en In- 0 an- less) (V) nna 15 nna 15 10 sn In- 0 an-	→ ← ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
M123 the inspect fES >> F	78 79 tion result	normal?	door request switch is operated with ignition switch	is in the antenna tection area (distance betwee telligent Key and tenna: 80 cm or l When Intelligent is not in the ante detection area (distance betwee telligent Key and tenna: Approx. 2	Key (V) de- 15 10 an- an- less) (V) nna 15 10 sn In- an- m)	→ ← ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
M123 the inspect fES >> F	78 79 tion result	normal?	door request switch is operated with ignition switch OFF antenna (rear b	is in the antenna tection area (distance betwee telligent Key and tenna: 80 cm or l When Intelligent is not in the ante detection area (distance betwee telligent Key and tenna: Approx. 2	Key (V) de- 15 10 an- an- less) (V) nna 15 10 sn In- an- m)	→ ← ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓

## POWER SUPPLY AND GROUND CIRCUIT

### < DTC/CIRCUIT DIAGNOSIS >

# POWER SUPPLY AND GROUND CIRCUIT TRUNK CLOSURE CONTROL UNIT

## **TRUNK CLOSURE CONTROL UNIT : Diagnosis Procedure**

INFOID:000000010102791

## **1.**CHECK FUSES

#### 1. Turn ignition switch OFF.

2. Check that the following fuses are not fusing.

Signal name	Fuse No.
Battery power supply	1 (15 A)
Ballery power supply	6 (10 A)

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the blown fuse after repairing the affected circuit.

## 2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect trunk closure assembly connector.

2. Check voltage between trunk closure assembly harness connector and ground.

	+) re assembly	(-)	Voltage (Approx.)	
Connector	Terminal		(, , , , , , , , , , , , , , , , , , ,	
T14	4	Ground	Battery voltage	
114	6	Gibullu	Dattery Voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

## $\mathbf{3.}$ CHECK GROUND CIRCUIT

Check continuity between trunk closure assembly harness connector and ground.

Trunk closu	re assembly		Continuity	
Connector	Terminal	Ground	Continuity	
 T14	2	Ground	Existed	
	3			

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

## < DTC/CIRCUIT DIAGNOSIS >

# DOOR SWITCH

## Component Function Check

INFOID:000000010102792

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## **1.**CHECK FUNCTION

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 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	Monitor item Condition		Status	
	Driver eide deer	Open	On	D
DOOR SW-DR	Driver side door	Closed	Off	
	Decembra side dece	Open	On	
DOOR SW-AS	Passenger side door	Closed	Off	— E
	Deer side deer LU	Open	On	
DOOR SW-RL	Rear side door LH	Closed	Off	F
	Describe less DU	Open	On	
DOOR SW-RR	Rear side door RH	Closed	Off	

#### Is the inspection result normal?

- YES >> Door switch is OK.
- NO >> Refer to <u>DLK-77, "Diagnosis Procedure"</u>.

### **Diagnosis Procedure**

1. CHECK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.

2. Disconnect malfunctioning door switch connector.

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

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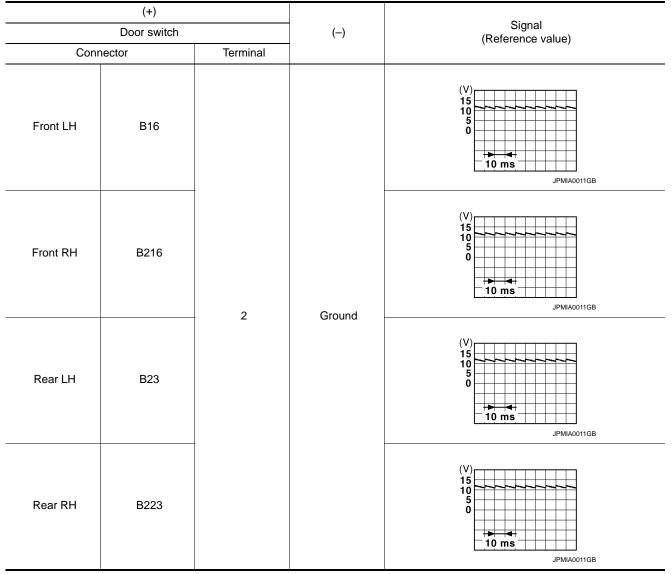
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## **DOOR SWITCH**

### < DTC/CIRCUIT DIAGNOSIS >



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.

BC	CM	Door	switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
	47	B16 (Front LH)		Existed
M404	45	B216 (Front RH)	2	
M121	48	B23 (Rear LH)	2	
	46	B223 (Rear RH)		

3. Check continuity between BCM harness connector and ground.

## **DOOR SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

BCM			Continuity	
Connector	Terminal	Continuity		
	47	Ground		
M121	45	Ground	Not existed	
	48		NOT EXISTED	
	46			
<u>s the inspection result norm</u> YES >> Replace BCM. F NO >> Repair or replac <b>3.</b> CHECK DOOR SWITCH	Refer to <u>BCS-90, "Remo</u> e harness.	oval and Installation".		
Refer to <u>DLK-79, "Compone</u>	nt Inspection".			
s the inspection result norm	<u>al?</u>			
YES >> GO TO 4. NO >> Replace malfun	ationing, door outlab			
1.CHECK INTERMITTENT	ctioning door switch. INCIDENT			
Refer to <u>GI-47, "Intermittent</u>	Incident".			
>> INSPECTION E	ND			
Component Inspectior	1		INFOID:000000010102794	
<b>1</b> .CHECK DOOR SWITCH				
<ol> <li>Turn ignition switch OFF</li> <li>Disconnect malfunction</li> <li>Check continuity betweet</li> </ol>	door switch connector.			
Door switch	ı	Condition	Continuity	
Torminal			,	

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace malfunctioning door switch.

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### < DTC/CIRCUIT DIAGNOSIS >

## DOOR REQUEST SWITCH

## Component Function Check

**1.**CHECK FUNCTION

1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.

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
	Driver side door request switch	Released	Off
REQ SW -AS	Passenger side door request switch	Pressed	On
REQ 3W -AS	rassenger side door request switch	Released	Off

Is the inspection result normal?

YES >> Door request switch is OK.

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

## **Diagnosis Procedure**

INFOID:000000010102796

### 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.

	(+)			
Front outs	Front outside handle assembly (request switch)			Voltage (Approx.)
Con	nector	Terminal		(*******)
LH	D17	1	Ground	12 V
RH	D47	I	Ground	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.

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

BCM		Front outside handle assembly (request switch)			Continuity
Connector	Terminal	Connector		Terminal	Continuity
	75	LH	D17	1	Existed
M123	76 (Models with steering lock unit)	RH D47	D47		Existed
	100 (Models without steering lock unit)		047		

3. Check continuity between BCM harness connector and ground.

	BCM		Continuity
Connector	Terminal		Continuity
	75	Ground	
M123	76 (Models with steering lock unit)		Not existed
	100 (Models without steering lock unit)		

Is the inspection result normal?

## DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAG	NOSIS >			
	CM. Refer to <u>BCS-90</u>	, "Removal and Insta	Ilation".	
<u>^</u>	eplace harness.			
<b>3.</b> CHECK DOOR REC	UEST SWITCH GRO	OUND CIRCUIT		
Check continuity between	en malfunctioning fro	nt outside handle as	sembly harness con	nector and ground.
Front outsi	ide handle assembly (requ	lest switch)		
Conr	nector	Terminal	-	Continuity
LH	D17		Ground	
RH	D47	2		Existed
Is the inspection result	normal?			
YES >> GO TO 4.				
	eplace harness.			
4.CHECK DOOR REC	UEST SWITCH			
Refer to <u>DLK-81, "Com</u>	ponent Inspection".			
Is the inspection result				
YES >> GO TO 5.				
NO >> Replace ma	alfunctioning front ou	tside handle assemb	ly.	
5. CHECK INTERMITT	ENT INCIDENT			
Refer to <u>GI-47, "Intermi</u>	ttent Incident".			
>> INSPECTIO	ON END			
Component Inspec	ction			INFOID:000000010102797
				INFOID.000000010102797
<b>1.</b> CHECK DOOR REC	UEST SWITCH			
1. Turn ignition switch	OFF.			
	itside handle assemb			
<ol><li>Check continuing b</li></ol>	etween front outside	handle assembly ter	minal.	_
Front outside handle asse	embly (request switch)			
Termi	nal	Conditio	n	Continuity

Front outside handle assembly (request switch)		Condition		Continuity	DLK	
Terr	minal		nation	Continuity		
1	2	Door request switch	Pressed	Existed	-	
I	2	Door request switch	Released	Not existed	- L	
					-	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front outside handle.

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#### < DTC/CIRCUIT DIAGNOSIS >

## DOOR KEY CYLINDER SWITCH

## Component Function Check

INFOID:000000010102798

## 1.CHECK FUNCTION

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 2. 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	Сог	Status	
KEY CYL LK-SW		Lock	ON
	- Driver side door key cylinder	Neutral / Unlock	OFF
KEY CYL UN-SW		Unlock	ON
		Neutral / Lock	OFF

#### Is the inspection result normal?

- YES >> Door key cylinder switch is OK.
- NO >> Refer to <u>DLK-82, "Diagnosis Procedure"</u>.

### **Diagnosis Procedure**

INFOID:000000010102799

## 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.

Front door lock as	(+) Front door lock assembly (driver side)		Voltage (Approx.)	
Connector	Terminal		( P )	
D15	5	Ground	5 V	
	6	Ground	5 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 winde	vindow main switch Front door lock assembly (driver side)		Continuity	
Connector	Terminal	Connector	Terminal	Continuity
D22	15	D15	6	Existed
DZZ	16	015	5	EXISIEU

#### 3. 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
DZZ	16		NOT EXISTED

Is the inspection result normal?

YES >> Replace power window main switch. Refer to <u>PWC-73. "Removal and Installation"</u>.

## DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS	S >			
NO >> Repair or replace	harness.			
<b>3.</b> CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT				
Check continuity between from	t door lock assembly (dr	river side) harness connect	or and ground.	
Front door lock asse	• • •		Continuity	
Connector	Terminal	Ground		
D15	4		Existed	
Is the inspection result normal	<u>?</u>			
YES >> GO TO 4.				
NO >> Repair or replace harness.				
4.CHECK DOOR KEY CYLINDER SWITCH				
Refer to DLK-83, "Component Inspection".				
Is the inspection result normal	<u>?</u>			
YES >> GO TO 5.				
	or lock assembly (driver s	side).		
5. CHECK INTERMITTENT II	NCIDENT			
Refer to GI-47, "Intermittent In	icident".			
>> INSPECTION EN	D			
Component Inspection			INFOID:000000010102800	
1. CHECK DOOR KEY CYLIN	NDER SWITCH			
<ol> <li>Turn ignition switch OFF.</li> <li>Disconnect front door lock</li> <li>Check continuity between</li> </ol>	,			

3. Check continuity between front door lock assembly (driver side) terminals.

Front door lock ass	embly (driver side)	Condit	ion	Continuity	
Term	inal	Condit	ion	Continuity	
			Unlock	Existed	DLK
5	4		Neutral / Lock	Not existed	_
6	4	Driver side door key cylinder	Lock	Existed	
6			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 LOCK AND UNLOCK SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

## DOOR LOCK AND UNLOCK SWITCH

## Component Function Check

INFOID:000000010102801

## **1.**CHECK FUNCTION

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 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
	- Door lock and unlock switch	Unlock	OFF
CDL UNLOCK SW		Lock	OFF
ODE UNEOUR SW		Unlock	ON

#### Is the inspection result normal?

- YES >> Door lock and unlock switch is OK.
- NO >> Refer to <u>DLK-84, "Diagnosis Procedure"</u>.

## **Diagnosis Procedure**

## 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 <u>PWC-60, "Diagnosis Procedure"</u>.

< DTC/CIRCUIT D	AGNOSIS >	DOON	LUCKACIU		
DOOR LOCK		R			
DRIVER SIDE					
DRIVER SIDE	: Componen	t Functio	n Check		INFOID:000000010102803
1.CHECK FUNCT	ION				
<ol> <li>Select "DOOR</li> <li>Touch "ALL LC</li> <li>Is the inspection re</li> <li>YES &gt;&gt; Door lc</li> </ol>	<u>sult normal?</u> ock actuator is O	VE TĔST" r <" to check K.		·	
DRIVER SIDE			-		INFOID:000000010102804
<b>1.</b> CHECK DOOR	LOCK ACTUAT	OR OUTPU	T SIGNAL		
	nt door lock asse		r side) connector. embly (driver side	) harness conne	ctor and ground.
	+)			Condition	Voltage
Connector	sembly (driver side) Terminal	()		Condition	(Approx.)
	1	_	Door lock and	un- Lock	
D15	2	Ground	lock switch	Unlock	12 V
NO >> GO TC 2.CHECK DOOR 1. Disconnect BC	e front door lock 2. LOCK ACTUAT( M connector.	OR CIRCUI	Γ	nt door lock ass	sembly (driver side) harness
	BCM		Front door lock as	ssembly (driver side)	
Connector	Termi	nal	Connector	Terminal	Continuity
M122	65		D15	1	Existed
	66			2	
3. Check continui	ty between BCIV	i namess co	onnector and grou	na.	
	BCM				Continuity
Connecto	or	Terminal 65	Terminal Gr		
M122		66			Not existed
Is the inspection re YES >> GO TC NO >> Repair		ess.			

3. CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.

2. Check voltage between BCM harness connector and ground.

#### < DTC/CIRCUIT DIAGNOSIS >

(+) BCM		()	Condition		Voltage (Approx.)
Connector	Terminal				
M122	65	Ground	Door look and unlook awitch	Lock	12 V
101122	66	Ground	Ground Door lock and unlock switch		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-90, "Removal and Installation"</u>.

#### PASSENGER SIDE

## PASSENGER SIDE : Component Function Check

## **1.**CHECK FUNCTION

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 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-86, "PASSENGER SIDE : 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.
- 3. 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

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

E	BCM		Front door lock assembly (passenger side)		
Connector	Terminal	Connector	Terminal	Continuity	
M122	59	D45	1	Existed	
101122	65	D45	2	Existed	

3. Check continuity between BCM harness connector and ground.

INFOID:000000010102805

#### < DTC/CIRCUIT DIAGNOSIS >

	BCM Connector Terminal					Continuity
Connec	ctor	Termi	nal	Gro	ound	Continuity
M12	2	59		GIU		Not existed
	-	65				
CHECK BCM	TO 3. air or replace I OUTPUT SIG	narness.				
. Connect BCN 2. Check voltag	a connector. Ne between BC	CM harness o	connector a	ind ground.		
(+)	)					
BC	M	()		Condition		Voltage (Approx.)
Connector	Terminal					( ++ )
M122	59	Ground	Door lock a	nd unlock switch	Unlock	12 V
	65				Lock	12 V
2. Select "DOO 5. Touch "ALL L 5 the inspection 1 YES >> Door	R LOCK" of "I R LOCK" in " <i>I</i> CK" or "ALL I result normal" lock actuator r to <u>DLK-87, "</u> iagnosis Pl	ACTIVE TĔS JNLK" to che is OK. <u>REAR LH : E</u> rocedure	T" mode. eck that it w <u>Diagnosis P</u>			INFOID:00000001010280
	ear door lock e between rea			H harness co	nnector and ç	ground.
	(+)			0	dition	Voltage
	lock assembly LH		()	Cond	dition	(Approx.)
Connector D55	Termina 1 2		ound	oor lock and un- ck switch	Lock	12 V
s the inspection		?			-	
YES >> Repla NO >> GO T 2.CHECK DOOR	ace rear door ſO 2.	lock assemb	-			

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

## **DLK-87**

#### < DTC/CIRCUIT DIAGNOSIS >

E	BCM	Rear door loc	Rear door lock assembly LH		
Connector	Terminal	Connector	Connector Terminal		
M122	55	- D55	2	Existed	
101122	65		1		

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

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M122	55	Ground	Not existed
IVI 122	65		NUL EXISIEU

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.

	(+) BCM		Condition		Voltage (Approx.)	
Connector	Terminal				(/ \ppi0x.)	
M122	55	Ground	Door lock and unlock switch	Unlock	12 V	
	65	Ground		Lock		

#### 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-90, "Removal and Installation"</u>.

#### REAR RH

## REAR RH : Component Function Check

## **1.**CHECK FUNCTION

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 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-88, "REAR RH : Diagnosis Procedure"</u>.

### **REAR RH** : Diagnosis Procedure

# 1. CHECK DOOR LOCK ACTUATOR OUTPUT SIGNAL

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

	(+) Rear door lock assembly RH		Con	dition	Voltage (Approx.)
Connector	Terminal				(Approx.)
D75	1	Ground	Door lock and	Unlock	12 V
015	2	Ground	unlock switch	Lock	- 12 V

INFOID:000000010102810

< DTC/CIRCUIT DIAGNOSIS >

		M connective between		ss connector	and rear doo	or lock assembl	y RH harness connector
		BCM		R	ear door lock as	ssembly RH	Continuity
(	Connector		Terminal	Conn	ector	Terminal	
	M122		55	D7	75	1	Existed
Chec	k continui	ity betweer	65 n BCM harnes	ss connector	and ground.	2	
		BC	M				Continuity
	Connecto	or	Termi	inal	Gro	bund	Continuity
	M122		55		Git		Not Existed
		sult norma	65				
	ect BCM k voltage		BCM harness	connector ar	nd ground.		
	k voltage (+)		3CM harness	connector ar			Voltage
. Chec	k voltage			connector ar	nd ground. Condition		Voltage (Approx.)
Chec	(+) BCM hector	between E	BCM harness ( (-)		Condition	Unlock	(Approx.)
Chec Conr M1	(+) BCM hector	between E Terminal 55 65	CM harness ( (-) Ground			Unlock Lock	
Chec Conr M1 the insp (ES	(+) BCM hector 122 Dection re >> Check	between E	CM harness (-) Ground	Door lock and	Condition d unlock switch	Lock	(Approx.) 12 V
Chec Conr M1 the insp (ES 2)	(+) BCM hector 122 Dection re >> Check	between E	CM harness (-) Ground U? I short of each	Door lock and	Condition d unlock switch	Lock	(Approx.) 12 V
Chec Conr M1 the insp YES	(+) BCM hector 122 Dection re >> Check	between E	CM harness (-) Ground U? I short of each	Door lock and	Condition d unlock switch	Lock	(Approx.) 12 V

## **TRUNK LID OPEN SIGNAL CIRCUIT**

#### < DTC/CIRCUIT DIAGNOSIS >

## TRUNK LID OPEN SIGNAL CIRCUIT

### Description

BCM transmits trunk lid open request signal to trunk closure assembly to open trunk lid, and trunk closure assembly transmits trunk lid open/close status signal to BCM.

### **Component Function Check**

INFOID:000000010102812

INFOID:000000010102811

**1.**CHECK TRUNK LID OPENER CANCEL SWITCH

Check trunk lid opener cancel switch position.

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

YES >> Turn on trunk lid opener cancel switch.

NO >> GO TO 2.

2. CHECK BCM OUTPUT SIGNAL CIRCUIT

- 1. Turn ignition switch ON.
- 2. Select "TRUNK/BACK DOOR" in "Active Test" mode of "INTELLIGENT KEY" of "BCM" using CONSULT.
- 3. Touch "OPEN".
- 4. Check that trunk lid opens normally.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Refer to <u>DLK-90, "Diagnosis Procedure"</u>.

**3.**CHECK BCM INPUT SIGNAL CIRCUIT

- 1. Select "TRNK/HAT MNTR" in "Data Monitor" mode of "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Check that CONSULT display varies according to the trunk lid position.

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to <u>DLK-90, "Diagnosis Procedure"</u>.

### **Diagnosis** Procedure

INFOID:000000010102813

## **1.**INSPECTION START

Check that which circuit is malfunctioning. Refer to <u>DLK-90, "Component Function Check"</u>.

Which circuit is malfunctioning?

Output signal circuit>>GO TO 2.

Input signal circuit>>GO TO 4.

## 2.CHECK TRUNK LID OPEN REQUEST SIGNAL

- 1. Turn ignition switch ON.
- 2. Select "TRUNK/BACK DOOR" in "Active Test" mode of "INTELLIGENT KEY" of "BCM" using CONSULT.
- 3. Check voltage between trunk closure assembly harness connector and ground when touching "OPEN".

	(+) Trunk closure assembly		CONSULT Active Test condition		Voltage (V) (Approx.)
Connector	Terminal				(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
T14	1	Ground	TRUNK/GLASS HATCH	OPEN	$0 \rightarrow 12 \rightarrow 0$

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 3.

## TRUNK LID OPEN SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Diso Diso Diso	n ignition switc connect negati connect BCM c connect trunk c eck continuity b	ve battery ca connector. closure asser	nbly harness c		k closure assembly	harness connector.
	E	BCM		Trunk clos	ure assembly	Continuity
	Connector	Termi	nal	Connector	Terminal	Continuity
	M121	53		T14	1	Existed
Che	eck continuity b	between BCN	harness conn	ector and grou	ınd.	
		BCM				Continuity
	Connector		Terminal		Ground	
	M121		53			Not existed
Che	eck voltage bet (+)	ween BCM h	arness connec	ctor and ground	d under the followin	
	BCM		()		Condition	Voltage (V) (Approx.)
С	connector	Terminal				
	M121	42	Ground	Trunk lid	Open	0
					Closed	12
the in	spection result	<u>I normar:</u>				
YES NO CHE . Turi . Disc . Disc . Disc	>> GO TO 6. >> GO TO 5. CK TRUNK LII n ignition switc connect negati connect BCM c connect trunk c eck continuity b	D OPEN/CLC h OFF. ve battery ca connector. closure asser between BCM	ble. nbly harness c harness conn	onnector. ector and trun Trunk clos	k closure assembly	harness connector.
YES NO CHE Uiso Diso Diso	>> GO TO 6. >> GO TO 5. CK TRUNK LII n ignition switc connect negati connect BCM of connect trunk of eck continuity b	D OPEN/CLC h OFF. ve battery ca connector. closure asser between BCM 3CM	ble. nbly harness c harness conn	onnector. ector and trun Trunk clos Connector	k closure assembly ure assembly Terminal	Continuity
YES NO CHE Disc Disc Che	>> GO TO 6. >> GO TO 5. CK TRUNK LII n ignition switc connect negati connect BCM c connect trunk c eck continuity b E Connector M121	D OPEN/CLC h OFF. ve battery ca connector. closure asser between BCW 3CM Termin 42	ble. hbly harness c harness conn	onnector. lector and trun Trunk clos Connector T14	k closure assembly ure assembly Terminal 5	
YES NO Turn Disc Disc Che	>> GO TO 6. >> GO TO 5. CK TRUNK LII n ignition switc connect negati connect BCM of connect trunk of eck continuity b	D OPEN/CLC h OFF. ve battery ca connector. closure asser between BCM 3CM Termin 42 between BCM	ble. hbly harness c harness conn	onnector. lector and trun Trunk clos Connector T14	k closure assembly ure assembly Terminal 5	Continuity
YES NO .CHE . Turi . Disc . Disc . Disc . Che	>> GO TO 6. >> GO TO 5. CK TRUNK LII n ignition switc connect negati connect BCM of connect trunk of eck continuity b Connector M121 eck continuity b	D OPEN/CLC h OFF. ve battery ca connector. closure asser between BCW 3CM Termin 42	ble. hbly harness conn harness conn hal	onnector. lector and trun Trunk clos Connector T14	k closure assembly ure assembly Terminal 5 Ind.	Continuity
YES NO .CHE . Turi . Disc . Disc . Disc . Che	>> GO TO 6. >> GO TO 5. CK TRUNK LII n ignition switc connect negati connect BCM c connect trunk c eck continuity b E Connector M121	D OPEN/CLC h OFF. ve battery ca connector. closure asser between BCM 3CM Termin 42 between BCM	ble. hbly harness c harness conn	onnector. lector and trun Trunk clos Connector T14	k closure assembly ure assembly Terminal 5	Continuity Existed

Refer to GI-47, "Intermittent Incident".

## **TRUNK LID OPEN SIGNAL CIRCUIT**

< DTC/CIRCUIT DIAGNOSIS >

>> INSPECTION END

## TRUNK LID OPENER REQUEST SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

# TRUNK LID OPENER REQUEST SWITCH

## Component Function Check

## **1.**CHECK FUNCTION

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 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	
DE	EQ SW -BD/TR	Trunk lid opener request	Pressed	On	D
		switch	Released	Off	

### Is the inspection result normal?

- YES >> Trunk lid opener request switch is OK.
- NO >> Refer to <u>DLK-93. "Diagnosis Procedure"</u>.

## Diagnosis Procedure

# 1. CHECK TRUNK LID OPENER REQUEST SWITCH OUTPUT SIGNAL

- 1. 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.

	(+) Trunk lid opener request switch				. н
			()	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.

BCM		Trunk lid opene	er request switch	Continuity	
Connector	Terminal	Connector	Terminal	Continuity	M
M121	51	T4	1	Existed	-

3. Check continuity between BCM harness connector and ground.

 B	CM		Continuity	-
 Connector	Terminal	Ground	Continuity	
 M121	51	_	Not existed	0

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u>.

NO >> Repair or replace harness.

### $\mathbf{3.}$ CHECK TRUNK LID OPENER REQUEST SWITCH GROUND CIRCUIT

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

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## TRUNK LID OPENER REQUEST SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

Trunk lid opener	r request switch	Ground	Continuity
Connector	Terminal		
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-94, "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-47, "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 Terminal		Condition		Continuity
				Continuity
4	2	Trunk lid opener re-	Pressed	Existed
I		quest switch	Released	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace trunk lid opener request switch.

Revision: 2013 November

# TRUNK LID OPENER SWITCH

## Component Function Check

### **1.**CHECK FUNCTION

- 1. Select "TRUNK" of "BCM" using CONSULT.
- 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	D
TR/DD OPEN SW	IN/BD OF EN SW		Released	Off	

#### Is the inspection result normal?

- YES >> Trunk lid opener switch is OK.
- NO >> Refer to <u>DLK-95. "Diagnosis Procedure"</u>.

## **Diagnosis Procedure**

## 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.

(	(+)			- H
Trunk lid opener switch		()	Signal (Reference value)	
Connector	Terminal	-		
M187	1	Ground	(V) 15 0 5 0 10 ms JPMIA0012GB	J DLK

#### Is the inspection result normal?

YES >> GO TO 3.

2.check trunk lid opener switch circuit

#### 1. Disconnect BCM connector.

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

_						. N
	BCM		Trunk lid op	pener switch	Continuity	
_	Connector	Terminal	Connector	Terminal	Continuity	
_	M120	30	M187	1	Existed	0

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

	B	CM		Continuity	Р
Connect	Connector Terminal		Ground	Continuity	
M120		30		Not existed	

#### Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u>.

NO >> Repair or replace harness.

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## TRUNK LID OPENER SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

# $\mathbf{3}$ .check trunk lid opener switch ground circuit

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

Trunk lid o	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-96, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace trunk lid opener switch.

**5.**CHECK INTERMITTENT INCIDENT

Refer to GI-47, "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	ninal	Condition		Continuity	
_	1		Truck lid opener owitch	Pressed	Existed	
	I	Z	Trunk lid opener switch	Release	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace trunk lid opener switch.

## TRUNK LID OPENER CANCEL SWITCH

### < DTC/CIRCUIT DIAGNOSIS >

# TRUNK LID OPENER CANCEL SWITCH

### Component Function Check

### **1.**CHECK FUNCTION

- 1. Select "TRUNK" of "BCM" using CONSULT.
- 2. Select "TR CANCEL SW" in "DATA MONITOR" mode.

#### 3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status	
TR CANCEL SW	Trunk lid opener cancel switch	Pressed	On	D
		Released	Off	

#### Is the inspection result normal?

- YES >> Trunk lid opener cancel switch is OK.
- NO >> Refer to <u>DLK-97, "Diagnosis Procedure"</u>.

### **Diagnosis Procedure**

## 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.

(+	-)			
Trunk lid opene	r cancel switch	(-)	Signal (Reference value)	
Connector	Terminal			
M18	1	Ground	(V) 15 10 5 0 10 ms JPMIA0012GB	J

#### Is the inspection result normal?

YES >> GO TO 3.

2.check trunk lid opener switch circuit

#### 1. Disconnect BCM connector.

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

					- N
BC	CM	Trunk lid opene	er cancel switch	Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M121	44	M18	1	Existed	0

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

BC	CM		Continuity	Р
 Connector	Terminal Ground		Continuity	
 M121	44		Not existed	

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-90, "Removal and Installation".

NO >> Repair or replace harness.

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## TRUNK LID OPENER CANCEL SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

# $\mathbf{3}$ . 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-98, "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-47, "Intermittent Incident".

#### >> INSPECTION END

### **Component Inspection**

## 1. CHECK TRUNK LID OPENER CANCEL SWITCH

1. Turn ignition switch OFF.

2. Disconnect trunk lid opener cancel switch connector.

3. Check continuity between trunk lid opener cancel switch terminal.

Tr	Trunk lid opener cancel switch Terminal		Condition		Continuity
	1	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.

## TRUNK CLOSURE ASSEMBLY

< DTC/CIRCUIT DIAGNOSIS >	
TRUNK CLOSURE ASSEMBLY	
Component Function Check	A NFOID:0000000010102823
1. CHECK TRUNK LID OPEN OPERATION	В
<ol> <li>Check that trunk lid is fully closed.</li> <li>Check that trunk lid opener cancel switch is turned ON.</li> <li>Select "INTELLIGENT KEY" of "BCM" using CONSULT.</li> <li>Select "TRUNK/GLASS HATCH" in "ACTIVE TEST" mode.</li> <li>Touch "OPEN" to check that trunk lid opens normally.</li> </ol>	С
Is the inspection result normal?	D
YES >> GO TO 2. NO >> Refer to <u>DLK-99, "Diagnosis Procedure"</u> .	
<b>2.</b> CHECK TRUNK LID AUTO CLOSE OPERATION	E
<ol> <li>Close trunk lid manually to the half latched position. (Clicking noise is heard.)</li> <li>Check that trunk lid is retracted to the fully closed position and locked.</li> </ol>	F
Is the inspection result normal? YES >> INSPECTION END	F
NO >> Refer to <u>DLK-99, "Diagnosis Procedure"</u> .	G
Diagnosis Procedure	NFOID:000000010102824
1.CHECK POWER SUPPLY AND GROUND CIRCUIT	Н
Check trunk closure assembly power supply and ground circuit. Refer to <u>DLK-76, "TRUNK CLOSURE CONTROL UNIT : Diagnosis Procedure"</u> .	
Is the inspection result normal?	I
YES >> GO TO 2. NO >> Repair harness or connector.	
2. CHECK TRUNK LID OPEN SIGNAL CIRCUIT	J
Check trunk lid open signal circuit. Refer to <u>DLK-90, "Component Function Check"</u> .	
Is the inspection result normal?	DL
<ul> <li>YES &gt;&gt; Replace trunk closure assembly. Refer to <u>DLK-191, "Removal and Installation"</u>.</li> <li>NO &gt;&gt; Repair harness or connector.</li> </ul>	L
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## FUEL LID LOCK ACTUATOR

## Component Function Check

**1.**CHECK FUNCTION

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 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-100, "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.

(+ Fuel lid loc		()	Co	ondition	Voltage (Approx.)
Connector	Terminal				()
B242	1	Ground	Door lock and	Unlock	12 V
D242	2	Gibunu	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.

E	BCM	Fuel lid lock actuator		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M122	65	B242	2	Existed
11122	66	D242	1	Existed

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

B	BCM		Continuity	
Connector	Terminal	Ground	Continuity	
M122	65	- Not exis	Not existed	
IVI I ZZ	66		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.

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## FUEL LID LOCK ACTUATOR

### < DTC/CIRCUIT DIAGNOSIS >

_	(- BC		(-)	Condition		Voltage (Approx.)	A
	Connector	Terminal				(	_
	M122	65	Cround	Door look and unlook owitch	Lock	12.)/	В
	IVI I ZZ	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.

NO >> Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u>.

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#### < DTC/CIRCUIT DIAGNOSIS >

# REMOTE KEYLESS ENTRY RECEIVER

### Component Function Check

### **1.**CHECK FUNCTION

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 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 whether value changes when operating Intelligent Key

#### Is the inspection result normal?

- YES >> Remote keyless entry receiver is OK.
- NO >> Refer to <u>DLK-102</u>, "Diagnosis Procedure".

### Diagnosis Procedure

**1.**CHECK BCM SIGNAL 1

### 1. Turn ignition switch OFF.

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

(	(+)			
Remote keyles	s entry receiver	()	Voltage (V) (Approx.)	
Connector	Terminal			
M104	4	Ground	5	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

### 2.CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY CIRCUIT

1. Disconnect BCM connector.

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

B	СМ	Remote keyles	s entry receiver	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M120	19	M104	4	Existed

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

В	СМ		Continuity
Connector	Terminal	Ground	Continuity
M120	19		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u>.

NO >> Repair or replace harness.

### 3.CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

1. Reconnect remote keyless entry receiver connector.

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

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## **REMOTE KEYLESS ENTRY RECEIVER**

S       >> GO TO 4.         >> Replace remote keyless entry receiver. Refer to DLK-205. "Removal and Installation".         HECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT         Disconnect Remote keyless entry receiver connector.         Check continuity between BCM harness connector and remote keyless entry receiver harness continuity         ECM         Remote keyless entry receiver         Connector         Terminal         M120         18         Not existed         a inspection result normal?         S >> GO TO 5.         >> Repair or replace harness.         HECK BCM SIGNAL 2         Reconnect BCM connector.         Check voltage between remote keyless entry receiver harness connector and ground.         (+)       Voltage (V) (Approx.)         Connector       Terminal <t< th=""><th></th><th></th><th></th><th></th><th></th></t<>						
Connector       Terminal         M104       4       Ground       Image: Connector in the second se	Remote keyless	entry receiver	(—)	(Ref		
M104       4       Ground       15       15       15       15       15       15       15       16	Connector	Terminal				
S       >> GO TO 4.         >> Replace remote keyless entry receiver. Refer to DLK-205. "Removal and Installation".         HECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT         Disconnect BCM connector.         Disconnect remote keyless entry receiver connector.         Check continuity between BCM harness connector and remote keyless entry receiver harness continuity         M120       18         Not existed         a inspection result normal?         S       >> GO TO 5.         >> Repair or replace harness.         HECK BCM SIGNAL 2         Reconnect BCM connector.         Check voltage between remote keyless entry receiver harness connector and ground.         (+)       Voltage (V) (Approx.)         (-)       Voltage (V) (Approx.)	M104	4	Ground	15 10 5 0 0 -→- <		
Beplace remote keyless entry receiver. Refer to DLK-205. "Removal and Installation".         HECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT         Disconnect BCM connector.         bisconnect remote keyless entry receiver connector.         theck continuity between BCM harness connector and remote keyless entry receiver harness control         BCM       Remote keyless entry receiver         Connector       Terminal       Continuity         M120       18       M104       1       Existed         Scheck continuity between BCM harness connector and ground.       Continuity       Continuity         M120       18       M104       1       Existed         Scheck continuity between BCM harness connector and ground.       Continuity       Continuity         M120       18       M104       1       Existed         Scheck continuity between BCM harness connector and ground.       Continuity       Not existed         Inspection result normal?		normal?				
BCM       Continuity         Continuity between BCM harness connector and remote keyless entry receiver harness connector         Continuity between BCM harness connector and remote keyless entry receiver harness connector         Connector       Continuity         Memote keyless entry receiver         Continuity         Memote keyless entry receiver         Continuity         Mitage between BCM harness connector and ground.         BCM       Continuity         Mitage between BCM harness connector and ground.         BCM       Continuity         Mitage between BCM harness connector and ground.         Mitage between remote keyless entry receiver         Mitage between remote keyless entry receiver harness connector and ground.         (+)       Voltage (V) (Approx.) <th cols<="" td=""><td></td><td>note kevless entru</td><td>receiver Refer to</td><td>DI K-205 "Removal a</td><td>nd Installation"</td></th>	<td></td> <td>note kevless entru</td> <td>receiver Refer to</td> <td>DI K-205 "Removal a</td> <td>nd Installation"</td>		note kevless entru	receiver Refer to	DI K-205 "Removal a	nd Installation"
Disconnect BCM connector.         Disconnect remote keyless entry receiver connector.         Check continuity between BCM harness connector and remote keyless entry receiver         Continuity         Connector       Terminal       Continuity         Connector       Terminal       Continuity         Mittee REM harness connector and ground.         BCM       Continuity         Continuity between BCM harness connector and ground.         BCM       Continuity         Connector       Terminal       Continuity         Mittee Reviews connector and ground.         BCM       Continuity         Connector       Terminal       Continuity         Mittee Reviewen BCM harness connector and ground.         Mittee Reviewen BCM harness connector and ground         Mittee Reviewen BCM harness connector and ground         Mittee Reviewen result normal?         S >> GO TO 5.       >> Repair or replace harness.         HECK BCM SIGNAL 2         Reconnect BCM connector.	•				<u>ina motanation</u> .	
BCM receiver connector.         Continuity between BCM harness connector and remote keyless entry receiver harness connector         BCM       Remote keyless entry receiver       Continuity         M120       18       M104       1       Existed         Check continuity between BCM harness connector and ground.       Terminal       Continuity         M120       18       M104       1       Existed         Connector       Terminal       Ground       Continuity         M120       18       M104       1       Existed         M120       18       Ground       Continuity         M120       18       Other existed       Other existed         a inspection result normal?       S       S       GO TO 5.       Sequence harness.         HECK BCM SIGNAL 2       Reconnect BCM connector.       Voltage between remote keyless entry receiver harness connector and ground.         (+)       (-)       Voltage (V) (Approx.)         Connector       Terminal       (-)       Voltage (V) (Approx.)         M104       2       Ground       5						
BCM harness connector and remote keyless entry receiver harness concerted and remote keyless entry receiver       Continuity         BCM       Remote keyless entry receiver       Continuity         M120       18       M104       1       Existed         Check continuity between BCM harness connector and ground.       Continuity       Continuity         BCM       18       M104       1       Existed         Check continuity between BCM harness connector and ground.       Continuity       Continuity         M120       18       Ground       Continuity         M120       18       Other is the isother iso			or oppositor			
BCM     Remote keyless entry receiver     Continuity       M120     18     M104     1     Existed       M120     18     M104     1     Existed       Check continuity between BCM harness connector and ground.     Existed     Continuity       BCM     Ground     Continuity       M120     18     Origonal     Not existed       e inspection result normal?     S     S     S O TO 5.       >> Repair or replace harness.     HECK BCM SIGNAL 2     Reconnect BCM connector.       Check voltage between remote keyless entry receiver harness connector and ground.     Voltage (V) (Approx.)       Connector     Terminal     (-)     Voltage (V) (Approx.)       Connector     Terminal     Ground     5				remote keyless entry r	eceiver harness cor	
ConnectorTerminalConnectorTerminalContinuityM12018M1041ExistedCheck continuity between BCM harness connector and ground.EXMContinuityBCMGroundContinuityM12018GroundContinuityM12018Not existedM12018Not existedS >> GO TO 5.>> Repair or replace harness.HECK BCM SIGNAL 2Reconnect BCM connector.Check voltage between remote keyless entry receiver harness connector and ground.(+)Voltage (V) (Approx.)ConnectorTerminal(-)Voltage (V) (Approx.)M1042GroundM1042Ground5	Theore continuity be		S connector and	remote keyless entry i	eceiver namess cor	
Connector       Terminal       Connector       Terminal       Continuity         M120       18       M104       1       Existed         Check continuity between BCM harness connector and ground.       Existed       Continuity         BCM       Ground       Continuity         M120       18       Ground       Continuity         M120       18       Ground       Continuity         M120       18       Ground       Continuity         M120       18       Oto existed       Not existed         e inspection result normal?       S       S >> GO TO 5.       Not existed       Not existed         S >> GO TO 5.       >> Repair or replace harness.       Reconnect BCM connector.       Check voltage between remote keyless entry receiver harness connector and ground.       Voltage (V) (Approx.)         (+)       Remote keyless entry receiver       (-)       Voltage (V) (Approx.)         Connector       Terminal       (-)       Yotage (V) (Approx.)         M104       2       Ground       5	BC	M	Remote	keyless entry receiver		
M12018M1041ExistedCheck continuity between BCM harness connector and ground.BCMContinuityConnectorTerminalGroundContinuityM120180Not existeda inspection result normal? S>> GO TO 5. >>> Repair or replace harness.Not existedHECK BCM SIGNAL 2Reconnect BCM connector. Check voltage between remote keyless entry receiver harness connector and ground.(+)Voltage (V) (Approx.)(-)Voltage (V) (Approx.)ConnectorTerminalM1042Ground5	Connector	Terminal			Continuity	
BCM       Ground       Continuity         M120       18       Not existed         a inspection result normal?       S       S         S       >> GO TO 5.       >> Repair or replace harness.         HECK BCM SIGNAL 2       Reconnect BCM connector.         Check voltage between remote keyless entry receiver harness connector and ground.         (+)       (-)         Voltage (V)         (Approx.)         Connector       Terminal         M104       2       Ground	M120	18	M104	1	Existed	
ConnectorTerminalGroundContinuityM12018Not existeda inspection result normal?S>> GO TO 5.>> Repair or replace harness.HECK BCM SIGNAL 2Reconnect BCM connector.Check voltage between remote keyless entry receiver harness connector and ground.(+)(-)(-)Voltage (V) (Approx.)Connector(-)M1042Ground5	heck continuity be	tween BCM harnes	s connector and	ground.		
ConnectorTerminalGroundM12018Not existeda inspection result normal?S>> GO TO 5.>> Repair or replace harness.HECK BCM SIGNAL 2Reconnect BCM connector.Check voltage between remote keyless entry receiver harness connector and ground.(+)Remote keyless entry receiver(-)Voltage (V) (Approx.)ConnectorTerminalM1042Ground5		BCM				
a inspection result normal?         S       >> GO TO 5.         >> Repair or replace harness.         HECK BCM SIGNAL 2         Reconnect BCM connector.         Check voltage between remote keyless entry receiver harness connector and ground.         (+)         (+)         Remote keyless entry receiver         (-)         Voltage (V) (Approx.)         M104       2         Ground       5	Connector	Termi	nal	Ground	Continuity	
S       >> GO TO 5.         >> Repair or replace harness.         HECK BCM SIGNAL 2         Reconnect BCM connector.         Check voltage between remote keyless entry receiver harness connector and ground.         (+)       (-)         Voltage (V)         Remote keyless entry receiver         (-)       Voltage (V)         (Approx.)         M104       2         Ground       5	M120	18			Not existed	
S       >> GO TO 5.         >> Repair or replace harness.         HECK BCM SIGNAL 2         Reconnect BCM connector.         Check voltage between remote keyless entry receiver harness connector and ground.         (+)       (-)         Voltage (V)         Remote keyless entry receiver         (-)       Voltage (V)         (Approx.)         M104       2         Ground       5	inspection result r	normal?				
>> Repair or replace harness.         HECK BCM SIGNAL 2         Reconnect BCM connector.         Check voltage between remote keyless entry receiver harness connector and ground.         (+)         (+)         Remote keyless entry receiver         (-)         Voltage (V) (Approx.)         M104       2         Ground       5						
Reconnect BCM connector.         Check voltage between remote keyless entry receiver harness connector and ground.         (+)       Voltage (V)         Remote keyless entry receiver       (-)       Voltage (V)         Connector       Terminal       Yoltage       Yoltage         M104       2       Ground       5		place harness.				
Reconnect BCM connector.         Check voltage between remote keyless entry receiver harness connector and ground.         (+)       Voltage (V)         Remote keyless entry receiver       (-)       Voltage (V)         Connector       Terminal       Yoltage       Yoltage         M104       2       Ground       5		L 2				
Check voltage between remote keyless entry receiver harness connector and ground.         (+)       Voltage (V)         Remote keyless entry receiver       (-)       Voltage (V)         Connector       Terminal       Or (Approx.)         M104       2       Ground       5						
(+)     Voltage (V)       Remote keyless entry receiver     (-)       Connector     Terminal       M104     2     Ground     5	HECK BCM SIGNA					
Remote keyless entry receiver(-)Voltage (V) (Approx.)ConnectorTerminalM1042Ground5	HECK BCM SIGNA Reconnect BCM co	nnector.	s entry receiver ha	arness connector and	ground.	
Remote keyless entry receiver(-)(Approx.)ConnectorTerminalGround5	HECK BCM SIGNA Reconnect BCM co	nnector.	s entry receiver ha	arness connector and	ground.	
ConnectorTerminalM1042Ground5	HECK BCM SIGNA Reconnect BCM co Check voltage betw	nnector.	s entry receiver ha			
	HECK BCM SIGNA Reconnect BCM co Check voltage betw (+)	nnector. een remote keyless		V	oltage (V)	
e inspection result normal?	HECK BCM SIGNA Reconnect BCM co Check voltage betw (+) Remote keyless	nnector. een remote keyless entry receiver		V	oltage (V)	
	HECK BCM SIGNA Reconnect BCM co Check voltage betw (+) Remote keyless Connector	nnector. een remote keyless entry receiver Terminal	()	V	oltage (V) (Approx.)	
	HECK BCM SIGNA Reconnect BCM co Check voltage betw (+) Remote keyless Connector M104	nnector. veen remote keyless entry receiver Terminal 2	()	V	oltage (V) (Approx.)	

1. Disconnect BCM connector.

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

B	СМ	Remote keyles	s entry receiver	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M120	20	M104	2	Existed

3. Check continuity between BCM harness connector and ground.

## **REMOTE KEYLESS ENTRY RECEIVER**

#### < DTC/CIRCUIT DIAGNOSIS >

B	BCM Connector Terminal		Continuity
Connector			Continuity
M120	20		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-90, "Removal and Installation".

NO >> Repair or replace harness.

# 7.CHECK REMOTE KEYLESS ENTRY RECEIVER SIGNAL

1. Reconnect remote keyless entry receiver connector.

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

(+) Remote keyless entr Connector	y receiver Terminal	()	Condition	Signal (Reference value)
M104	2	Ground	During waiting	(V) 15 10 5 0 •••••••••••••••••••••••••••••
			When operating either button on the Intelligent Key	(V) 15 10 5 0 1 ms JMKIA0065GB

#### Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace remote keyless entry receiver. Refer to <u>DLK-205, "Removal and Installation"</u>.

#### 8. CHECK BCM SIGNAL 3

1. Disconnect remote keyless entry receiver connector.

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

(+)				
Remote keyles	ss entry receiver	()	Voltage (V) (Approx.)	
Connector	Terminal			
M104	3	Ground	5	

#### Is the inspection result normal?

YES >> GO TO 10.

NO >> GO TO 9.

#### 9.CHECK REMOTE KEYLESS ENTRY RECEIVER RSSI SIGNAL CIRCUIT

1. Disconnect BCM connector.

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

B	BCM		Remote keyless entry receiver		
Connector	Terminal	Connector	Terminal	Continuity	
M120	22	M104	3	Existed	

3. Check continuity between BCM harness connector and ground.

## **REMOTE KEYLESS ENTRY RECEIVER**

#### < DTC/CIRCUIT DIAGNOSIS >

<b>^</b>	BCM		<b>a</b> .	Continuity
Connector		minal	Ground	
M120		22		Not existed
>> Repair or re CHECK REMOTE Reconnect remote I	CM. Refer to <u>BCS</u> eplace harness. KEYLESS ENTR keyless entry rece	Y RECEIVER	r.	r and ground using oscilloscope
(+)				
Remote keyless er	ntry receiver	()	Condition	Signal
Connector	Terminal			(Reference value)
M104	3	Ground	During waiting	(V) 6 2 0 100 ms JMKIA5952GB
			When pressing and holding either button on Intelli- gent Key	(V) 6 4 2 0 0 100 ms JMKIA5953GB
e inspection result r S >> GO TO 11. >> Replace rer CHECK INTERMIT r to <u>GI-47, "Intermit</u>	note keyless entr TENT INCIDENT	-	fer to <u>DLK-205, "Rer</u>	noval and Installation".
>> INSPECTIC	ON END			

### < DTC/CIRCUIT DIAGNOSIS >

# UNLOCK SENSOR

## **Component Function Check**

INFOID:000000010102829

## **1.**CHECK FUNCTION

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 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
		Unlock	On

#### Is the inspection result normal?

- YES >> Unlock sensor is OK.
- NO >> Refer to <u>DLK-106</u>, "Diagnosis Procedure".

## Diagnosis Procedure

INFOID:000000010102830

## **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 assembly (driver side)		Signal (Reference value)
Connector	Terminal		
D15	3	Ground	(V) 15 0 0 0 0 0 0 0 0 0 0 0 0 0

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2. CHECK UNLOCK SENSOR CIRCUIT

1. Disconnect BCM connector.

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

В	СМ	Front door lock as	sembly (driver side)	Continuity
Connector	Terminal	Connector	Terminal	
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 <u>BCS-90, "Removal and Installation"</u>.

### **DLK-106**

## **UNLOCK SENSOR**

< DTC/CIRCUIT DI	IAGNOSIS >					
NO >> Repair	or replace harn	ess.				
3.CHECK UNLOC	K SENSOR GF	ROUND CIRCUIT				
Check continuity be	tween front doo	or lock assembly (driver sid	le) harness connector	and ground.		
			,			
Front do	Front door lock assembly (driver side) Continuity					
Connector	r	Terminal	Ground			
D15		4		Existed		
Is the inspection res	sult normal?					
YES >> GO TO						
	or replace harn	ess.				
4.CHECK UNLOC	K SENSOR					
Refer to DLK-107, "	Component Ins	spection".				
Is the inspection res	sult normal?					
YES >> GO TO	•••					
_ '		k assembly (driver side).				
5.CHECK INTERM	ITTENT INCID	DENT				
Refer to GI-47, "Inte	ermittent Incide	<u>nt"</u> .				
>> INSPEC	CTION END					
Component Ins	pection			INFOID:000000010102831		
	•					
1.CHECK UNLOC	K SENSOR					
1. Turn ignition sw						
		embly (driver side). y (driver side) terminals.				
Front door lock asse	embly (driver side)	2	P.C			
Termi	inal	Condition Continuity		Continuity		
2	Λ	Front door lock assembly (driv-	Unlock	Existed		

er side)

Is the inspection result normal?

3

>> INSPECTION END YES

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

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Not existed

Lock

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### < DTC/CIRCUIT DIAGNOSIS >

## INTELLIGENT KEY WARNING BUZZER

### Component Function Check

**1.**CHECK FUNCTION

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. 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-108</u>, "Diagnosis Procedure".

### **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 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.

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

3. Check continuity between BCM harness connector and ground.

BCM			Continuity	
Connector	Connector Terminal		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-109, "Component Inspection".

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u>.

NO >> Replace Intelligent Key warning buzzer.

### **DLK-108**

INFOID:000000010102832

# INTELLIGENT KEY WARNING BUZZER

### < DTC/CIRCUIT DIAGNOSIS >

## Component Inspection

INFOID:0000000010102834

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# 1. CHECK INTELLIGENT KEY WARNING BUZZER

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

			С
Intelligent Key v	warning buzzer		
Term	ninal	Operation	
(+)	(-)		D
1	3	Buzzer sounds	

Is the inspection result normal?

#### YES >> INSPECTION END

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

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### < DTC/CIRCUIT DIAGNOSIS >

# INTELLIGENT KEY BATTERY

**Component Inspection** 

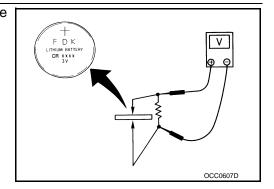
# **1.**CHECK INTELLIGENT KEY BATTERY

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 >> INSPECTION END
- NO >> Replace Intelligent Key battery.



INFOID:000000010102835

< DTC/CIRCUIT DIAGNOSIS >	
INFORMATION DISPLAY	A
Component Function Check	CID:000000010102836
1.CHECK FUNCTION	В
<ol> <li>Select "INTELLIGENT KEY" of "BCM" using CONSULT.</li> <li>Select "LCD" in "ACTIVE TEST" mode.</li> <li>Check each warring diaplay on mater diaplay.</li> </ol>	
<ol> <li>Check each warning display on meter display.</li> <li><u>Is the inspection result normal?</u></li> </ol>	C
YES >> Information display is OK. NO >> Refer to <u>DLK-111, "Diagnosis Procedure"</u> .	D
Diagnosis Procedure	DID:000000010102837
1.CHECK COMBINATION METER	E
Refer to MWI-30, "On Board Diagnosis Function".	
<u>Is the inspection result normal?</u> YES >> GO TO 2.	F
NO >> Repair or replace the malfunctioning parts.	
2.CHECK INTERMITTENT INCIDENT	G
Refer to GI-47, "Intermittent Incident".	
>> INSPECTION END	Н

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# COMBINATION METER BUZZER

Component Function Check

1. CHECK FUNCTION

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "INSIDE BUZZER" in "ACTIVE TEST" mode.
- 3. 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-112, "Diagnosis Procedure"</u>.

Diagnosis Procedure

**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-47, "Intermittent Incident".

>> INSPECTION END

INFOID:000000010102838

INFOID:000000010102839

< DTC/CIRCUIT DIAGNOSIS >	
HAZARD FUNCTION	Δ
Component Function Check	A
1.CHECK FUNCTION	В
<ol> <li>Select "INTELLIGENT KEY" of "BCM" using CONSULT.</li> <li>Select "FLASHER" in "ACTIVE TEST" mode.</li> <li>Touch "LH" or "RH" to check that it works normally.</li> </ol>	С
Is the inspection result normal?         YES       >> Hazard warning lamp circuit is OK.         NO       >> Refer to <u>DLK-113, "Diagnosis Procedure"</u> .	D
Diagnosis Procedure	
1. CHECK HAZARD SWITCH CIRCUIT	E
Check hazard switch circuit. Refer to <u>EXL-109, "Component Function Check"</u> . Is the inspection result normal?	F
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CHECK INTERMITTENT INCIDENT	G
Refer to <u>GI-47, "Intermittent Incident"</u> .	Н

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

# SYMPTOM DIAGNOSIS

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

ALL DOOR : Description

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

# ALL DOOR : Diagnosis Procedure

1. CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch. Refer to <u>DLK-84, "Component Function Check"</u>

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-85, "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-90, "Removal and Installation"</u>.
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".

DRIVER SIDE

DRIVER SIDE : Description

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

# DRIVER SIDE : Diagnosis Procedure

1. CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (driver side). Refer to DLK-85, "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 <u>BCS-90, "Removal and Installation"</u>.

• Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u>.

PASSENGER SIDE

INFOID:000000010102844

INFOID:000000010102842

INFOID:000000010102843

INFOID:000000010102845

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

< SYMPTOM DIAGNOSIS >	
PASSENGER SIDE : Description	
Passenger side door does not lock/unlock using door lock and unlock switch.	A
PASSENGER SIDE : Diagnosis Procedure	47 B
1. CHECK DOOR LOCK ACTUATOR	
Check front door lock assembly (passenger side). Refer to <u>DLK-86, "PASSENGER SIDE : Component Function Check"</u> .	С
Is the inspection result normal?	
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	D
2.REPLACE BCM	
<ul> <li>Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ul>	E
Is the result normal?	
YES >> INSPECTION END NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> .	F
REAR LH	0
REAR LH : Description	48
Rear LH side door does not lock/unlock using door lock and unlock switch.	Н
REAR LH : Diagnosis Procedure	
1. CHECK DOOR LOCK ACTUATOR	I
Check rear door lock assembly LH. Refer to <u>DLK-87, "REAR LH : Component Function Check"</u> .	-
Is the inspection result normal?	J
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	
2.REPLACE BCM	DLK
Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u> .     Confirm the energian offer replacement.	
<ul> <li>Confirm the operation after replacement.</li> <li><u>Is the result normal?</u></li> </ul>	L
YES >> INSPECTION END NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> .	
REAR RH	Μ
REAR RH : Description	
Rear RH side door does not lock/unlock using door lock and unlock switch.	Ν
REAR RH : Diagnosis Procedure	51
1. CHECK DOOR LOCK ACTUATOR	<u> </u>
Check rear door lock assembly RH.	P
Refer to <u>DLK-88, "REAR RH : Component Function Check"</u> . 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-90, "Removal and Installation"</u> .	-

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

< SYMPTOM DIAGNOSIS >

• Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u>.

# **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:000000010102852	В
1. CHECK POWER DOOR LOCK OPERATION		D
Check power door lock operation.		C
Does door lock/unlock with door lock and unlock switch?		C
YES >> GO TO 2. NO >> Refer to <u>DLK-114, "ALL DOOR : Diagnosis Procedure"</u> .		D
2.CHECK DOOR KEY CYLINDER SWITCH		
Check door key cylinder switch. Refer to <u>DLK-82, "Component Function Check"</u> .		Е
Is the inspection result normal?		
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.		F
3.REPLACE BCM		
<ul> <li>Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ul>		G
Is the result normal?		
YES >> INSPECTION END NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> .		Н

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# 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:000000010102853

INFOID:000000010102854

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

# ALL DOOR : Diagnosis Procedure

**1.**CHECK REMOTE KEYLESS ENTRY FUNCTION

Check remote keyless entry function.

Does door lock/unlock with Intelligent Key button?

YES >> GO TO 2.

NO >> Refer to <u>DLK-120, "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-34, "INTELLIGENT KEY : CONSULT 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-77, "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-64, "DTC Logic"</u>.
- Console: Refer to <u>DLK-66, "DTC Logic"</u>.
- Trunk room: Refer to <u>DLK-68, "DTC Logic"</u>.

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

**5.**CHECK OUTSIDE KEY ANTENNA

Check outside key antenna.

- Driver side: Refer to <u>DLK-70, "DTC Logic"</u>.
- Passenger side: Refer to <u>DLK-72, "DTC Logic"</u>.
- Rear bumper: Refer to <u>DLK-74, "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-90, "Removal and Installation"</u>.
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u>.

DRIVER SIDE

# DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

SYMPTOM DIAGNOSIS >		
RIVER SIDE : Description	INFOID:000000010102855	
l doors do not lock/unlock using driver side door request switch.		
RIVER SIDE : Diagnosis Procedure	INF0ID:000000010102856	
CHECK DRIVER SIDE DOOR REQUEST SWITCH		
neck driver side door request switch. efer to <u>DLK-80, "Component Function Check"</u> .		
the inspection result normal?		
<ul> <li>YES &gt;&gt; GO TO 2.</li> <li>NO &gt;&gt; Repair or replace the malfunctioning parts.</li> </ul>		
REPLACE BCM		
Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u> . Confirm the operation after replacement.		
<u>the result normal?</u> YES >> INSPECTION END NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> . ASSENGER SIDE		
ASSENGER SIDE : Description	INFOID:000000010102857	
l doors do not lock/unlock using passenger side door request switch.		
ASSENGER SIDE : Diagnosis Procedure	INFOID:000000010102858	
CHECK PASSENGER SIDE DOOR REQUEST SWITCH		
heck passenger side door request switch.		
efer to <u>DLK-80, "Component Function Check"</u> . the inspection result normal?		
/ES >> GO TO 2.		_
<ul> <li>NO &gt;&gt; Repair or replace the malfunctioning parts.</li> <li>REPLACE BCM</li> </ul>		
Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u> .		
Confirm the operation after replacement.		
the result normal?		
<ul> <li>&gt;&gt; INSPECTION END</li> <li>&gt;&gt; Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u>.</li> </ul>		

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

< SYMPTOM DIAGNOSIS >

# DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

Diagnosis Procedure

INFOID:000000010102859

### **1.**CHECK INTELLIGENT KEY

For Intelligent Key that cannot be used for door lock and unlock, check that the Intelligent Key belongs to the vehicle to be checked.

Does the Intelligent Key belong to the vehicle to checked?

YES >> GO TO 2.

NO >> Check Intelligent Key button operation with registered Intelligent Key belonging to the vehicle.

2. CHECK INTELLIGENT KEY LOW BATTERY WARNING

Check that the Intelligent Key low battery warning is operated.

Is the Intelligent Key low battery warning operated?

YES >> GO TO 6.

NO-1 >> With another registered Intelligent Key: GO TO 3.

NO-2 >> Without another registered Intelligent Key: GO TO 4.

3.CHECK INTELLIGENT KEY BUTTON OPERATION

Check that door lock and unlock can be performed by operating the buttons of another registered Intelligent Key.

Can door lock and unlock be performed with another registered Intelligent Key?

YES >> GO TO 4.

NO >> GO TO 7.

**4.**CHECK ENGINE START

While depressing the brake pedal, contact the backside of the Intelligent Key that cannot be used to perform door lock and unlock operation to the push-button ignition switch. Operate the push-button ignition switch, and check that the vehicle is in START status.

Is the vehicle in START status?

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

5. CHECK INTELLIGENT KEY

Check the inside of the Intelligent Key for rust or corrosion by water. Simultaneously check the internal circuits for damage.

Is the vehicle in START status?

YES >> GO TO 6.

NO >> Replace Intelligent Key.

**6.**CHECK INTELLIGENT KEY BATTERY

Check the Intelligent Key battery.

Refer to <u>DLK-110</u>, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 7.

NO >> Replace Intelligent Key battery.

7. CHECK POWER DOOR LOCK OPERATION

Check door lock/unlock using door lock and unlock switch.

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

YES >> GO TO 8.

NO >> Refer to <u>DLK-114</u>, "ALL DOOR : Diagnosis Procedure".

**8.**CHECK REMOTE KEYLESS ENTRY RECEIVER

Check remote keyless entry receiver.

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

# DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

< SYMPTOM DIAGNOSIS >	
Is the inspection result normal?	
YES >> GO TO 9.	А
NO >> Repair or replace the malfunctioning parts.	
9. CHECK DOOR SWITCH	D
Check door switch.	В
Refer to DLK-77, "Component Function Check".	
Is the inspection result normal?	C
YES >> GO TO 10.	0
NO >> Repair or replace the malfunctioning parts.	
10.REPLACE INTELLIGENT KEY	D
1. Replace Intelligent Key.	
2. Confirm the operation after replacement.	_
Is the result normal?	E
YES >> INSPECTION END	
NO >> Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u> .	_
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TRUNK LID DOES NOT OPEN
< SYMPTOM DIAGNOSIS >
TRUNK LID DOES NOT OPEN
TRUNK LID OPENER SWITCH
TRUNK LID OPENER SWITCH : Description
Trunk lid does not open by trunk lid opener switch operation.
TRUNK LID OPENER SWITCH : Diagnosis Procedure
1. CHECK TRUNK LID OPENER SWITCH CIRCUIT
Check trunk lid opener switch circuit. Refer to <u>DLK-95, "Component Function Check"</u> .
Is the inspection result normal?
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.
2. CHECK TRUNK LID OPENER CANCEL SWITCH CIECUIT
Check trunk lid opener cancel switch circuit.
Refer to <u>DLK-97, "Component Function Check"</u> .
<u>Is the inspection result normal?</u> YES >> GO TO 3.
NO >> Repair or replace the malfunctioning parts.
3. CHECK TRUNK LID OPEN SIGNAL CIRCUIT
Check trunk lid open signal circuit. Refer to <u>DLK-90, "Component_Function_Check"</u> .
Is the inspection result normal?
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.
4. CHECK TRUNK CLOSURE ASSENBLY
Check trunk closure assembly.
Refer to DLK-99, "Component Function Check".
Is the inspection result normal?
YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts.
5.REPLACE BCM
<ul> <li>Replace BCM. Refer to <u>BCS-90, "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 <u>GI-47, "Intermittent Incident"</u> .
INTELLIGENT KEY
INTELLIGENT KEY : Description
Trunk lid does not open by Intelligent Key operation.
INTELLIGENT KEY : Diagnosis Procedure
1.CHECK TRUNK LID OPEN FUNCTION
Check trunk lid open function with trunk lid opener switch.
Does trunk lid open with trunk lid opener switch? YES >> GO TO 2.

YES >> GO TO 2.

NO >> Refer to <u>DLK-122</u>, "TRUNK LID OPENER SWITCH : Diagnosis Procedure".

# **DLK-122**

# TRUNK LID DOES NOT OPEN

< SYMPTOM DIAGNOSIS >	
2. CHECK REMOTE KEYLESS ENTRY FUNCTION	Δ
Check remote keyless entry function.	A
Does door lock/unlock with Intelligent Key button?	
YES >> GO TO 3. NO >> Refer to <u>DLK-120, "Diagnosis Procedure"</u> .	В
3. CHECK INTELLIGENT KEY BATTERY	
Check Intelligent Key battery.	С
Refer to <u>DLK-110. "Component Inspection"</u> . <u>Is the inspection result normal?</u>	
YES >> GO TO 4.	D
NO >> Repair or replace the malfunctioning parts.	
4.REPLACE BCM	Е
<ul> <li>Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ul>	
Is the result normal?	F
YES >> INSPECTION END NO >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".	
NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> . TRUNK LID OPENER REQUEST SWITCH	G
TRUNK LID OPENER REQUEST SWITCH : Description	0
Trunk lid does not open by trunk lid opener request switch operation.	Н
TRUNK LID OPENER REQUEST SWITCH : Diagnosis Procedure	
1. CHECK TRUNK LID OPEN FUNCTION	
Check trunk lid open function with Intelligent Key.	
Does trunk lid open with Intelligent Key?	J
YES >> GO TO 2. NO >> Refer to <u>DLK-122, "INTELLIGENT KEY : Diagnosis Procedure"</u> .	
2. CHECK TRUNK LID OPENER REQUEST SWITCH	DLK
Check trunk lid opener request switch.	
Refer to DLK-93. "Component Function Check".	L
<u>Is the inspection result normal?</u> YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts.	M
3.CHECK OUTSIDE KEY ANTENNA (REAR BUMPER)	
Check outside key antenna (rear bumper). Refer to <u>DLK-74, "DTC Logic"</u> .	Ν
Is the inspection result normal?	
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	0
4. CHECK TRUNK LID OPEN SIGNAL CIRCUIT	
Check trunk lid open signal circuit. Refer to <u>DLK-90, "Component_Function_Check"</u> .	Ρ
Is the inspection result normal?	
YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts.	
<b>5.</b> REPLACE BCM	
· Devices POM Defeate DOO 00. "Developed and leatellating"	

Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u>.

### TRUNK LID DOES NOT OPEN

< SYMPTOM DIAGNOSIS >

• Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u>.

TRUNK LID AUTO CLOSURE SYSTEM DOES NOT OPERAT	E
TRUNK LID AUTO CLOSURE SYSTEM DOES NOT OPERATE	
OPEN/CLOSURE FUNCTION	
OPEN/CLOSURE FUNCTION : Description	INFOID:000000010102866
Trunk lid auto closure system does not operate when trunk lid opening and closing operations	are performed.
OPEN/CLOSURE FUNCTION : Diagnosis Procedure	INFOID:000000010102867
1. CHECK TRUNK CLOSURE CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT	
Check trunk closure control unit power supply and ground circuit. Refer to <u>DLK-76, "TRUNK CLOSURE CONTROL UNIT : Diagnosis Procedure"</u> .	
Is the inspection result normal?	
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts. 2.REPLACE TRUNK CLOSURE ASSEMBLY	
<ul> <li>Replace trunk closure assembly. Refer to <u>DLK-191, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ul>	
Is the inspection result normal?	
YES >> INSPECTION END NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> .	
CLOSURE FUNCTION	
CLOSURE FUNCTION : Description	
·	INFOID:0000000010102868
Trunk lid auto closure system does not operate when trunk lid closing operation is performed.	
CLOSURE FUNCTION : Diagnosis Procedure	INFOID:000000010102869
1.REPLACE TRUNK CLOSURE ASSEMBLY	
Replace trunk closure assembly. Refer to <u>DLK-191, "Removal and Installation"</u> .	
<ul> <li>Confirm the operation after replacement.</li> <li>Is the result normal?</li> </ul>	
YES >> INSPECTION END	
NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> .	
OPEN FUNCTION	
OPEN FUNCTION : Description	INFOID:000000010102870
Trunk lid auto closure system does not operate when trunk lid opening operation is performed.	
OPEN FUNCTION : Diagnosis Procedure	INFOID:000000010102871
1. CHECK TRUNK LID OPEN SIGNAL CIRCUIT	
Check trunk lid open signal circuit.	
Refer to <u>DLK-90, "Component Function Check"</u> .	
<u>Is the inspection result normal?</u> YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts.	
2.REPLACE TRUNK CLOSURE ASSEMBLY	
<ul> <li>Replace trunk closure assembly. Refer to <u>DLK-191, "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 <u>GI-47, "Intermittent Incident"</u> .	
Pavision: 2013 November DLK-125	2014 070

### FUEL LID LOCK ACTUATOR DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

# FUEL LID LOCK ACTUATOR DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000010102872

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-114</u>, "ALL DOOR : Diagnosis Procedure".

2. CHECK FUEL LID LOCK ACTUATOR

Check fuel lid lock actuator. Refer to <u>DLK-100, "Component Function Check"</u>.

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-90, "Removal and Installation"</u>.

Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u>.

IGNITION POSITION WARNING FUNCTION DOES NOT OPERATE < SYMPTOM DIAGNOSIS > IGNITION POSITION WARNING FUNCTION DOES NOT OPERATE	
IGNITION POSITION WARNING FUNCTION DOES NOT OPERATE	А
Diagnosis Procedure	)102873
1. CHECK POWER DOOR LOCK OPERATION	В
Check power door lock operation.         Does door lock/unlock with door lock and unlock switch?         YES       >> GO TO 2.         NO       >> Refer to DLK-114, "ALL DOOR : Diagnosis Procedure".	С
2. CHECK DOOR SWITCH	D
Check door switch. Refer to <u>DLK-77, "Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 3.	E
NO $\rightarrow$ Repair or replace the malfunctioning parts. <b>3.</b> CHECK TRUNK LID OPEN SIGNAL CIRCUIT	F
Check trunk lid open signal circuit. Refer to <u>DLK-90, "Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 4.	G
NO >> Repair or replace the malfunctioning parts. <b>4.</b> REPLACE BCM	Н
<ul> <li>Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> <li><u>Is the result normal?</u></li> <li>YES &gt;&gt; INSPECTION END</li> </ul>	
NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> .	J

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### SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

# SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE

**Diagnosis** Procedure

INFOID:000000010102874

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

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 2. Select "DOOR LOCK-UNLOCK SET" in "WORK SUPPORT" mode.
- 3. Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT".
- Refer to <u>DLK-32, "DOOR LOCK : CONSULT Function (BCM DOOR LOCK)"</u>.

Is the inspection result normal?

- YES >> GO TO 2.
- NO >> Set "ON" in "DOOR LOCK-UNLOCK SET".

2.REPLACE BCM

- Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u>.
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".

# VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE < SYMPTOM DIAGNOSIS >

# VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

Diagnosis Procedure	INFOID:000000010102875	В
<b>1.</b> CHECK "AUTOMATIC LOCK/UNLOCK SELECT" SETTING IN "WORK SUPPORT"		
<ol> <li>Select "DOOR LOCK" of "BCM" using CONSULT.</li> <li>Select "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT" mode.</li> <li>Check "AUTOMATIC LOCK/UNLOCK SELECT" setting in "WORK SUPPORT". Refer to <u>DLK-32</u>, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".</li> </ol>		С
Is the inspection result normal?		D
YES $>>$ GO TO 2. NO $>>$ Set "Lock Only" or "Lock/Unlock" in "AUTOMATIC LOCK/UNLOCK SELECT". <b>2.</b> CHECK "AUTOMATIC DOOR LOCK SELECT" SETTING IN "WORK SUPPORT"		E
<ol> <li>Select "DOOR LOCK" of "BCM" using CONSULT.</li> <li>Select "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT" mode.</li> <li>Check "AUTOMATIC DOOR LOCK SELECT" setting in "WORK SUPPORT". Refer to <u>DLK-32, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.</li> </ol>		F
<u>Is the inspection result normal?</u> YES >> GO TO 3. NO >> Set "VH SPD" in "AUTOMATIC DOOR LOCK SELECT". <b>3.</b> REPLACE BCM		G
<ul> <li>Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ul>		
<u>Is the result normal?</u> YES >> INSPECTION END NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> .		I
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# IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

### < SYMPTOM DIAGNOSIS >

# IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

### **Diagnosis Procedure**

INFOID:000000010102876

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

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 2. Select "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT" mode.
- Check "AUTOMATIC LOCK/UNLOCK SELECT" setting in "WORK SUPPORT". Refer to DLK-32, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 2.

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

**2.**CHECK "AUTOMATIC DOOR UNLOCK SELECT" SETTING IN "WORK SUPPORT"

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 2. Select "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT" mode.
- Check "AUTOMATIC DOOR UNLOCK SELECT" setting in "WORK SUPPORT". Refer to DLK-32, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

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-90, "Removal and Installation".
- Confirm the operation after replacement.

### Is the result normal?

- YES >> INSPECTION END
- NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u>.

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

< SYMPTOM DIAGNOSIS >

# P RANGE INTERLOCK DOOR LOCK/UNLOCK FUNCTION DOES NOT OP-ERATE

Diagnosis Procedure	INFOID:000000010102877
<b>1.</b> CHECK "AUTOMATIC LOCK/UNLOCK SELECT" SETTING IN "WORK SUPPORT"	
<ol> <li>Select "DOOR LOCK" of "BCM" using CONSULT.</li> <li>Select "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT" mode.</li> <li>Check "AUTOMATIC LOCK/UNLOCK SELECT" setting in "WORK SUPPORT". Refer to <u>DLK-32, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.</li> </ol>	С
Is the inspection result normal?	D
YES >> GO TO 2. NO >> Set "Unlock Only", "Lock Only" or "Lock/Unlock" in "AUTOMATIC LOCK/UNLOCK S 2.CHECK "AUTOMATIC DOOR LOCK SELECT" SETTING IN "WORK SUPPORT"	SELECT".
<ol> <li>Select "DOOR LOCK" of "BCM" using CONSULT.</li> <li>Select "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT" mode.</li> <li>Check "AUTOMATIC DOOR LOCK SELECT" setting in "WORK SUPPORT". Refer to <u>DLK-32. "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.</li> </ol>	F
Is the inspection result normal?	G
YES >> GO TO 3. NO >> Set "P RANGE" in "AUTOMATIC DOOR LOCK SELECT".	C
${f 3.}$ CHECK "AUTOMATIC DOOR UNLOCK SELECT" SETTING IN "WORK SUPPORT"	Н
<ol> <li>Select "DOOR LOCK" of "BCM" using CONSULT.</li> <li>Select "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT" mode.</li> <li>Check "AUTOMATIC DOOR UNLOCK SELECT" setting in "WORK SUPPORT". Refer to <u>DLK-32, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.</li> </ol>	I
Is the inspection result normal?	
YES >> GO TO 4. NO >> Set "MODE 2" or "MODE 4" in "AUTOMATIC DOOR UNLOCK SELECT".	J
4.REPLACE BCM	DLK
<ul> <li>Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ul>	DEK
Is the result normal?	L
YES >> INSPECTION END NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> .	
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### AUTO DOOR LOCK OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

# AUTO DOOR LOCK OPERATION DOES NOT OPERATE

**Diagnosis Procedure** 

INFOID:000000010102878

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

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "AUTO LOCK SET" in "WORK SUPPORT" mode.
- 3. Check "AUTO LOCK SET" setting in "WORK SUPPORT".

Refer to DLK-34, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "MODE 2", "MODE 3", "MODE 4", "MODE 5", "MODE 6" or "MODE 7" in "AUTO LOCK SET". 2.REPLACE BCM

• Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u>.

• Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".

HAZARD AND HORN REMINDER DOES NOT OPERATE	
< SYMPTOM DIAGNOSIS > HAZARD AND HORN REMINDER DOES NOT OPERATE	
Diagnosis Procedure	INFOID:000000010102879
1.CHECK "HAZARD ANSWER BACK" SETTING IN "WORK SUPPORT"	
<ol> <li>Select "INTELLIGENT KEY" of "BCM" using CONSULT.</li> <li>Select "HAZARD ANSWER BACK" in "WORK SUPPORT" mode.</li> <li>Check the "HAZARD ANSWER BACK" setting in "WORK SUPPORT". Refer to <u>DLK-34, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)</u></li> </ol>	<u>.</u>
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"	
<ol> <li>Select "INTELLIGENT KEY" of "BCM" using CONSULT.</li> <li>Select "HORN WITH KEYLESS LOCK in "WORK SUPPORT" mode.</li> <li>Check the "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT". Refer to <u>DLK-34, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)</u></li> </ol>	<u>.</u>
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-113, "Component Function Check".	
<u>Is the inspection result normal?</u> YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	
4.CHECK HORN FUNCTION	
Check horn function. Refer to <u>SEC-110, "Component Function Check"</u> .	
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-90, "Removal and Installation"</u> .     Confirm the operation ofter replacement	
<ul> <li>Confirm the operation after replacement.</li> <li><u>Is the result normal?</u></li> </ul>	
YES >> INSPECTION END	
NO >> Check intermittent incident. Refer to <u>GI-47. "Intermittent Incident"</u> .	

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### HAZARD AND BUZZER REMINDER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

# HAZARD AND BUZZER REMINDER DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000010102880

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

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

Refer to <u>DLK-34, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>.

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"

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "ANS BACK I-KEY LOCK" in "WORK SUPPORT" mode.
- Check the "ANS BACK I-KEY LOCK"setting in "WORK SUPPORT". Refer to <u>DLK-34, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>.

Is the inspection result normal?

- 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"

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "ANS BACK I-KEY UNLOCK" in "WORK SUPPORT" mode.
- Check the "ANS BACK I-KEY UNLOCK" setting in "WORK SUPPORT". Refer to <u>DLK-34, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>.

Is the inspection result normal?

- YES >> GO TO 4.
- NO >> Set the "On" in "ANS BACK I-KEY UNLOCK".

**4.**CHECK HAZARD FUNCTION

### Check hazard function.

Refer to DLK-113, "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-108, "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 <u>BCS-90, "Removal and Installation"</u>.
- Confirm the operation after replacement.

### Is the result normal?

- YES >> INSPECTION END
- NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u>.

KEY REMINDER FUNCTION DOES NOT OPERATE	
< SYMPTOM DIAGNOSIS >	
KEY REMINDER FUNCTION DOES NOT OPERATE	А
Diagnosis Procedure	INFOID:000000010102881
<b>1.</b> CHECK "ANTI KEY LOCK IN FUNCTI" SETTING IN "WORK SUPPORT"	В
<ol> <li>Select "INTELLIGENT KEY" of "BCM" using CONSULT.</li> <li>Select "ANTI KEY LOCK IN FUNCTI" in "WORK SUPPORT" mode.</li> <li>Check "ANTI KEY LOCK IN FUNCTI" setting in "WORK SUPPORT". Refer to <u>DLK-34, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>.</li> <li>Is the inspection result normal?</li> </ol>	С
YES $>>$ GO TO 2. NO $>>$ Set "On" in "ANTI KEY LOCK IN FUNCTI". <b>2.</b> CHECK INSIDE KEY ANTENNA	D
Check inside key antenna. • Instrument center: Refer to <u>DLK-64, "DTC Logic"</u> . • Console: Refer to <u>DLK-66, "DTC Logic"</u> . • Trunk room: Refer to <u>DLK-68, "DTC Logic"</u> . Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. <b>3.</b> CHECK DOOR SWITCH	F
Check door switch. Refer to <u>DLK-77, "Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	H
4.CHECK TRUNK LID OPEN SIGNAL CIRCUIT Check trunk lid open signal circuit. Refer to <u>DLK-90, "Component Function Check"</u> . Is the inspection result normal?	J
YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts. 5.CHECK UNLOCK SENSOR	DLł
Check unlock sensor. Refer to <u>DLK-106. "Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts.	M
6.REPLACE BCM	Ν
<ul> <li>Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> <li><u>Is the result normal?</u></li> <li>YES &gt;&gt; INSPECTION END</li> <li>NO &gt;&gt; Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u>.</li> </ul>	0
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### WELCOME LIGHT FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

# WELCOME LIGHT FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000010102882

**1.**CHECK "WELCOME LIGHT OP SET" SETTING IN "WORK SUPPORT"

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "WELCOME LIGHT OP SET" in "WORK SUPPORT" mode.
- 3. Check "WELCOME LIGHT OP SET" setting in "WORK SUPPORT".

Refer to DLK-34, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "On" and "WELCOME LIGHT SELECT" in "WORK SUPPORT".

2.CHECK "WELCOME LIGHT SELECT" SETTING IN "WORK SUPPORT"

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "WELCOME LIGHT SELECT" in "WORK SUPPORT" mode.
- 3. Check "WELCOME LIGHT SELECT" setting in "WORK SUPPORT".

Refer to <u>DLK-34, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>.

Is the inspection result normal?

- YES >> GO TO 3.
- NO >> Set "WELCOME LIGHT SELECT" setting in "WORK SUPPORT".

**3.**CHECK INSIDE KEY ANTENNA

Check inside key antenna.

- Instrument center: Refer to <u>DLK-64, "DTC Logic"</u>.
- Console: Refer to <u>DLK-66, "DTC Logic"</u>.
- Trunk room: Refer to <u>DLK-68, "DTC Logic"</u>.

Is the inspection result normal?

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

**4.**CHECK OUTSIDE KEY ANTENNA

### Check outside key antenna.

- Driver side: Refer to <u>DLK-70, "DTC Logic"</u>.
- Passenger side: Refer to <u>DLK-72, "DTC Logic"</u>.
- Rear bumper: Refer to <u>DLK-74, "DTC Logic"</u>.

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

**5.**CHECK REMOTE KEYLESS ENTRY FUNCTION

Check remote keyless entry function

Does door lock/unlock with Intelligent Key button?

YES >> GO TO 6.

NO >> Refer to <u>DLK-120, "Diagnosis Procedure"</u>.

**6.**CHECK INTERIOR ROOM LAMP CONTROL SYSTEM

Check interior room lamp control system. Refer to <u>INL-6, "INTERIOR ROOM LAMP CONTROL SYSTEM :</u> <u>System Description"</u>.

Does the room lamp and puddle lamp turn ON?

YES >> GO TO 7.

NO >> Refer to <u>INL-67, "Symptom Table"</u>.

**7.**REPLACE BCM

- Replace BCM. Refer to <u>BCS-90, "Removal and Installation".</u>
- · Confirm the operation after replacement.

Is the result normal?

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< SYM	<pre>SYMPTOM DIAGNOSIS &gt;</pre>	
YES NO	>> INSPECTION END >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".	A
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### **OFF POSITION WARNING DOES NOT OPERATE**

< SYMPTOM DIAGNOSIS >

# OFF POSITION WARNING DOES NOT OPERATE

**Diagnosis** Procedure INFOID:000000010102883 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 DLK-112, "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 Check Intelligent Key warning buzzer. Refer to DLK-108, "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-77, "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-90, "Removal and Installation". · Confirm the operation after replacement. Is the result normal?

- YES >> INSPECTION END
- NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u>.

# **P POSITION WARNING DOES NOT OPERATE**

< SYMPTOM DIAGNOSIS >	
P POSITION WARNING DOES NOT OPERATE	_
Diagnosis Procedure	A 34
1.снеск отс with всм	В
Check that DTC is not detected with BCM.	-
Is the inspection result normal?	
YES >> GO TO 2.	С
NO >> Perform trouble diagnosis relevant to DTC indicated.	
2.CHECK DTC WITH COMBINATION METER	D
Check that DTC is not detected with combination meter.	
Is the inspection result normal?	Е
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 <u>DLK-108, "Component Function Check"</u> .	- F
Is the inspection result normal?	G
YES >> GO TO 4.	G
NO >> Repair or replace the malfunctioning parts.	
4.CHECK COMBINATION METER BUZZER	Н
Check combination meter buzzer. Refer to <u>DLK-112, "Component Function Check"</u> .	
Is the inspection result normal?	1
YES >> GO TO 5.	
NO >> Repair or replace the malfunctioning parts.	
5.CHECK DOOR SWITCH	J
Check door switch (driver side).	
Refer to <u>DLK-77, "Component Function Check"</u> .	DLK
<u>Is the inspection result normal?</u> YES >> GO TO 6.	
NO >> Repair or replace the malfunctioning parts.	1
6.CHECK INFORMATION DISPLAY	L
Check information display.	-
Refer to <u>DLK-111, "Component Function Check"</u> .	M
<u>Is the inspection result normal?</u> YES >> GO TO 7.	
NO >> Repair or replace the malfunctioning parts.	Ν
7.REPLACE BCM	
Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u> .	0
<ul> <li>Confirm the operation after replacement.</li> </ul>	0
Is the result normal?	
YES >> INSPECTION END NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident</u> ".	Ρ

# ACC WARNING DOES NOT OPERATE

Diagnosis Procedure	Diagnosis	Procedure
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INFOID:000000010102885

**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 DLK-112, "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-111, "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-90, "Removal and Installation"</u>.

• Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".

# TAKE AWAY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >		
TAKE AWAY WARNING DOES NOT OPERATE		А
Diagnosis Procedure	INFOID:000000010102886	/ \
1.снеск отс with всм		В
Check that DTC is not detected with BCM.		
Is the inspection result normal?		
YES >> GO TO 2.		С
NO >> Perform trouble diagnosis relevant to DTC indicated.		
		D
Check that DTC is not detected with combination meter. <u>Is the inspection result normal?</u>		
YES >> GO TO 3.		Е
NO >> Perform trouble diagnosis relevant to DTC indicated.		
<b>3.</b> CHECK DOOR SWITCH		_
Check door switch.		F
Refer to <u>DLK-77, "Component Function Check"</u> . <u>Is the inspection result normal?</u>		
YES >> GO TO 4.		G
NO >> Repair or replace the malfunctioning parts.		
4.CHECK TRUNK LID OPEN SIGNAL CIRCUIT		Н
Check trunk lid open signal circuit. Refer to <u>DLK-90, "Component Function Check"</u> .		
Is the inspection result normal?		1
YES >> GO TO 5.		
NO >> Repair or replace the malfunctioning parts.		
5.CHECK COMBINATION METER BUZZER		J
Check combination meter buzzer. Refer to <u>DLK-112, "Component Function Check"</u> .		
Is the inspection result normal?	D	DLK
YES >> GO TO 6.		
NO >> Repair or replace the malfunctioning parts.		L
6.CHECK INFORMATION DISPLAY		
Check information display.		ъл
Refer to <u>DLK-111, "Component Function Check"</u> . <u>Is the inspection result normal?</u>		Μ
YES >> GO TO 7.		
NO >> Repair or replace the malfunctioning parts.		Ν
7.CHECK INTELLIGENT KEY WARNING BUZZER		
Check Intelligent Key warning buzzer.		0
Refer to <u>DLK-108, "Component Function Check"</u> . <u>Is the inspection result normal?</u>		
YES >> GO TO 8.		
NO >> Repair or replace the malfunctioning parts.		Ρ
8.REPLACE BCM		
Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u> .		
Confirm the operation after replacement.		
<u>Is the result normal?</u> YES >> INSPECTION END		

## TAKE AWAY WARNING DOES NOT OPERATE

### < SYMPTOM DIAGNOSIS >

NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u>.

# INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE < SYMPTOM DIAGNOSIS >

# INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

Diagnosis Procedure	A INFOID:0000000010102887
1.снеск ртс with всм	
	B
Check that DTC is not detected with BCM. Is the inspection result normal?	
YES >> GO TO 2.	С
NO >> Perform trouble diagnosis relevant to DTC indicated.	
2. CHECK DTC WITH COMBINATION METER	D
Check that DTC is not detected with combination meter.	
Is the inspection result normal?	F
YES >> GO TO 3. NO >> Perform trouble diagnosis relevant to DTC indicated.	E
3. CHECK "LO- BATT OF KEY FOB WARN" SETTING IN "WORK SUPPORT"	
1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.	F
2. Select "LO- BATT OF KEY FOB WARN" in "WORK SUPPORT" mode.	
<ol> <li>Check "LO-BATT OF KEY FOB WARN" setting in "WORK SUPPORT". Refer to <u>DLK-34, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)"</u>.</li> </ol>	G
Is the inspection result normal?	
YES >> GO TO 4.	Н
NO >> Set "ON" setting in "WORK SUPPORT". 4.CHECK INTELLIGENT KEY BATTERY	
Check Intelligent Key battery.	
Refer to <u>DLK-110, "Component Inspection"</u> .	I
Is the inspection result normal?	
YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts.	J
NO >> Repair or replace the malfunctioning parts. 5.CHECK INFORMATION DISPLAY	
Check information display.	DLK
Refer to <u>DLK-111, "Component Function Check"</u> .	
Is the inspection result normal?	1
YES >> GO TO 6.	L
NO >> Repair or replace the malfunctioning parts. 6.REPLACE BCM	
	M
<ul> <li>Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ul>	
Is the result normal?	Ν
YES >> INSPECTION END	
NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> .	$\sim$
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### DOOR LOCK OPERATION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

# DOOR LOCK OPERATION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000010102888

1. CHECK DOOR LOCK FUNCTION

Check door lock function.

Does door lock/unlock using door request switch?

YES >> GO TO 2.

NO >> Refer to <u>DLK-118</u>, "ALL DOOR : Diagnosis Procedure".

2. CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer. Refer to <u>DLK-108</u>, "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-90, "Removal and Installation"</u>.

Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u>.

# **KEY ID WARNING DOES NOT OPERATE**

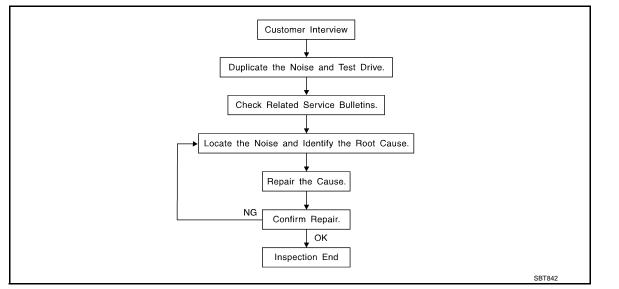
< SYMPTOM DIAGNOSIS >	
KEY ID WARNING DOES NOT OPERATE	Δ
Diagnosis Procedure	А
1.снеск отс with всм	В
Check that DTC is not detected with BCM.	
Is the inspection result normal? YES >> GO TO 2.	С
NO >> Perform trouble diagnosis relevant to DTC indicated.	
2.CHECK DTC WITH COMBINATION METER	D
Check that DTC is not detected with combination meter.	
Is the inspection result normal? YES >> GO TO 3.	Е
NO >> Perform trouble diagnosis relevant to DTC indicated.	
3. CHECK INTELLIGENT KEY BATTERY	
Check Intelligent Key battery. Refer to <u>DLK-110, "Component Inspection"</u> .	F
Is the inspection result normal?	G
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	0
4. CHECK INFORMATION DISPLAY	Н
Check information display Refer to <u>DLK-111, "Component_Function_Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts.	
5. CHECK INSIDE KEY ANTENNA	J
Check inside key antenna. • Instrument center: Refer to <u>DLK-64, "DTC Logic"</u> . • Console: Refer to <u>DLK-66, "DTC Logic"</u> . • Trunk room: Refer to <u>DLK-68, "DTC Logic"</u> .	DLł
Is the inspection result normal?	
YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts.	L
6. REPLACE BCM	
Replace BCM. Refer to <u>BCS-90, "Removal and Installation"</u> .	Μ
Confirm the operation after replacement.	
Is the result normal?	Ν
YES >> INSPECTION END NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> .	
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#### < SYMPTOM DIAGNOSIS >

# SQUEAK AND RATTLE TROUBLE DIAGNOSES

### Work Flow



#### CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of customer's comments; refer to <u>DLK-150</u>, "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.

### **DLK-146**

#### < SYMPTOM DIAGNOSIS >

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

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

#### CHECK RELATED SERVICE BULLETINS

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

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

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

- 1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis ear: J-39570, Engine ear and mechanics stethoscope).
- 2. Narrow down the noise to a more specific area and identify the cause of the noise by:
- Removing the components in the area that is are suspected to be the cause of the noise.
   Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
- Tapping or pushing/pulling the component that is are suspected to be the cause of the noise.
   Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
- Feeling for a vibration by hand by touching the component(s) that is are suspected to be the cause of the noise.
- Placing a piece of paper between components that are suspected to be the cause of the noise.
- Looking for loose components and contact marks. Refer to DLK-148, "Inspection Procedure".

#### REPAIR THE CAUSE

- If the cause is a loose component, tighten the component securely.
- If the cause is insufficient clearance between components:
- Separate components by repositioning or loosening and retightening the component, if possible.
- Insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or urethane tape. A Nissan Squeak and Rattle Kit (J-50397) is available through the authorized Nissan Parts Department.

#### **CAUTION:**

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

Μ Always check with the Parts Department for the latest parts information. The following materials are contained in the Nissan Squeak and Rattle Kit (J-50397) are listed on the inside cover of the kit; and can each be ordered separately as needed. URETHANE PADS [1.5 mm (0.059 in) thick] Ν 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) Ρ 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 × 25 mm (0.59 × 0.98 in) pad/68239-13E00: 5 mm (0.20 in) wide tape roll The following materials, not found in the kit, can also be used to repair squeaks and rattles. UHMW (TEFLON) TAPE

### **DLK-147**

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#### < 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

INFOID:000000010102891

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
- 4. 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
- 3. 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
- 2. Inside handle escutcheon to door finisher
- 3. 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-50397) 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
- 2. Trunk lid striker out of adjustment
- 3. The trunk lid torsion bars knocking together
- 4. A loose license plate or bracket

### **DLK-148**

#### < SYMPTOM DIAGNOSIS >

Most of these incidents can be repaired by adjusting, securing or insulating the item(s) or component(s) caus- ing the noise.	А
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	В
2. Sunvisor shaft shaking in the holder	
3. Front or rear windshield touching headlining and squeaking	С
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.	C
SEATS	D
When isolating seat noise it's important to note the position the seats in and the load placed on the seat when the noise occurs. These conditions should be duplicated when verifying and isolating the cause of the noise. Cause of seat noise include:	_
1. Headrest rods and holder	E
2. A squeak between the seat pad cushion and frame	
3. The rear seatback lock and bracket	F
These noises can be isolated by moving or pressing on the suspected components while duplicating the con- ditions under which the noise occurs. Most of these incidents can be repaired by repositioning the component or applying urethane tape to the contact area.	G
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:	Η
1. Any component mounted to the engine wall	
2. Components that pass through the engine wall	
3. Engine wall mounts and connectors	
4. Loose radiator mounting pins	
5. Hood bumpers out of adjustment	J
6. Hood striker out of adjustment	
These noises can be difficult to isolate since they cannot be reached from the interior of the vehicle. The best method is to secure, move or insulate one component at a time and test drive the vehicle. Also, engine RPM or load can be changed to isolate the noise. Repairs can usually be made by moving, adjusting, securing, or insulating the component causing the noise.	DLK
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< SYMPTOM DIAGNOSIS >

**Diagnostic Worksheet** 



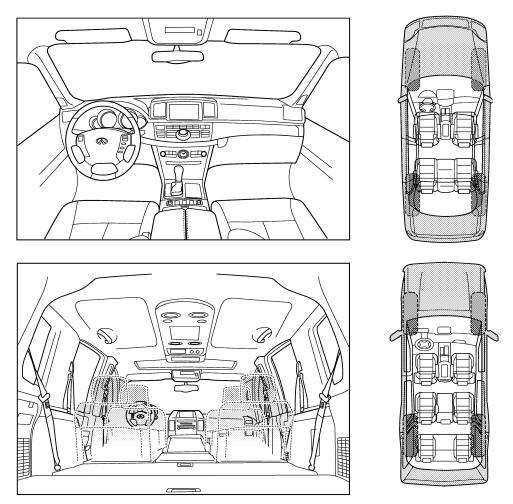
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

#### Dear Infiniti Customer:

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

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

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



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

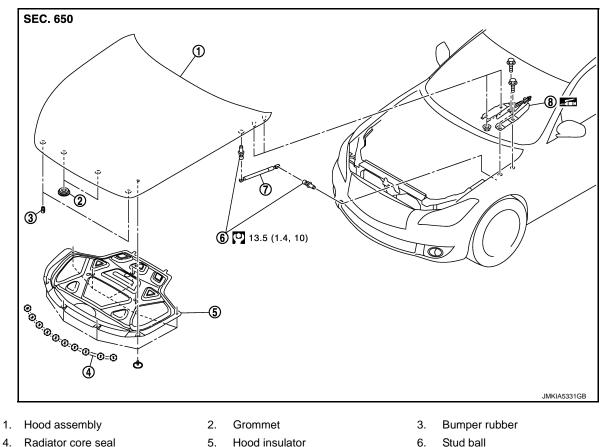
#### < SYMPTOM DIAGNOSIS >

I. WHEN DOES IT OCCUR? (please check the boxes that apply)         anytime       after sitting out in the rain         1st time in the morning       when it is raining or wet         only when it is cold outside       dry or dusty conditions         only when it is hot outside       other:         II. WHEN DRIVING:       IV. WHAT TYPE OF NOISE         through driveways       squeak (like tennis shoes on a clean floor)         over rough roads       creak (like walking on an old wooden floor)	
1st time in the morning       when it is raining or wet         only when it is cold outside       dry or dusty conditions         only when it is hot outside       other:         II. WHEN DRIVING:       IV. WHAT TYPE OF NOISE         through driveways       squeak (like tennis shoes on a clean floor)         over rough roads       creak (like walking on an old wooden floor)	
<ul> <li>only when it is cold outside</li> <li>only when it is hot outside</li> <li>only when it is hot outside</li> <li>other:</li> </ul> II. WHEN DRIVING: <ul> <li>IV. WHAT TYPE OF NOISE</li> <li>through driveways</li> <li>squeak (like tennis shoes on a clean floor)</li> <li>over rough roads</li> <li>creak (like walking on an old wooden floor)</li> </ul>	
only when it is hot outside       other:         II. WHEN DRIVING:       IV. WHAT TYPE OF NOISE         through driveways       squeak (like tennis shoes on a clean floor)         over rough roads       creak (like walking on an old wooden floor)	
II. WHEN DRIVING:       IV. WHAT TYPE OF NOISE         Ithrough driveways       Image: squeak (like tennis shoes on a clean floor)         Ithrough roads       Image: creak (like walking on an old wooden floor)	
through driveways       Image: squeak (like tennis shoes on a clean floor)         over rough roads       Image: creak (like walking on an old wooden floor)	
over rough roads Creak (like walking on an old wooden floor)	
over rough roads Creak (like walking on an old wooden floor)	
over speed bumps I rattle (like shaking a baby rattle)	
only about mph knock (like a knock at the door)	
on acceleration I tick (like a clock second hand)	
coming to a stop	
on turns: left, right or either (circle)  buzz (like a bumble bee)	
☐ with passengers or cargo ] other:	
after driving miles or minutes	
	ı
O BE COMPLETED BY DEALERSHIP PERSONNEL	
est Drive Notes:	
	<b>.</b>
YES NO Initials of person performing	
YES NO Initials of person performing	
/ehicle test driven with customer	
/ehicle test driven with customer     Image: Constraint of the customer       • Noise verified on test drive     Image: Constraint of the customer	
Vehicle test driven with customer       Image: Constraint of the sector of	

# < REMOVAL AND INSTALLATION > **REMOVAL AND INSTALLATION** HOOD

**Exploded View** 

INFOID:000000010102893



- 4. Radiator core seal
- 7. Hood stay
- (`) : Clip

Refer to <u>GI-4, "Components"</u> 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 <u>WW-52, "Removal and Installation"</u>.

Hood hinge

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

8.

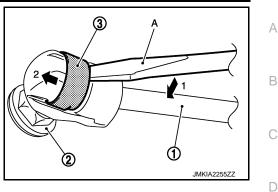
#### WARNING:

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

### 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-154, "HOOD ASSEMBLY : Adjust-</u> ment".
- After installing, perform front washer nozzle and tube inspection and adjustment. Refer to <u>WW-53</u>, <u>"Inspection and Adjustment"</u>.

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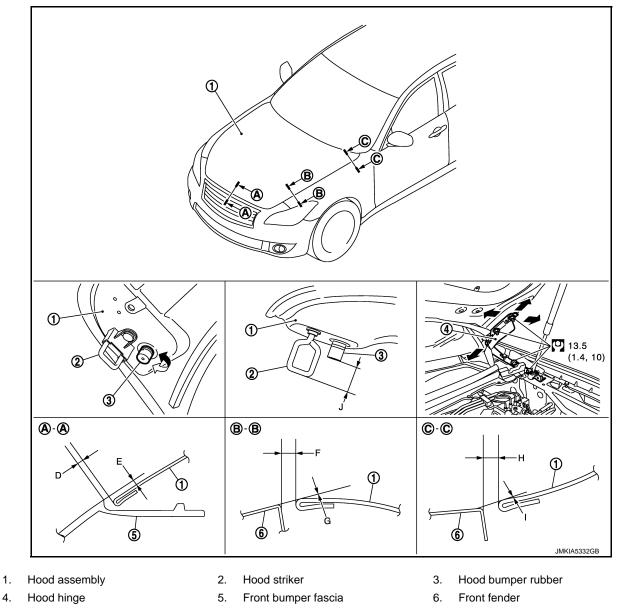
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HOOD

#### < REMOVAL AND INSTALLATION >

# HOOD ASSEMBLY : Adjustment

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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 Pumper faceia	A – A	D	Clearance	1.7 – 5.3 mm (0.067 – 0.209 in)	2.0 mm (0.079 in)
Hood – Bumper fascia	A-A	Е	Surface height	(−2.5) − (+0.5) mm [(−0.098) − (+0.020) in]	2.0 mm (0.079 in)

4.

#### < REMOVAL AND INSTALLATION >

	Portion			Standard	Difference (LH/RH, MAX)	А
Hood – Fender	В – В	F	Clearance	2.5 – 4.5 mm (0.098 – 0.177 in)	1.0 mm (0.039 in)	В
		G	Surface height	(–1.5) – (+1.5) mm [(–0.059) – (+0.059) in]	_	_
	C – C	н	Clearance	2.5 – 4.5 mm (0.098 – 0.177 in)	1.0 mm (0.039 in)	С
		I	Surface height	(–1.5) – (+1.5) mm [(–0.059) – (+0.059) in]	-	D
Hood striker – Bumper rubber		J	Clearance	32.0 – 36.0 mm (1.260 – 1.417 in)	-	Е
<ol> <li>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.</li> </ol>						
<ol> <li>Adjust the height difference of striker, hood bumper rubber according to the fitting standard dimension.</li> </ol>						

- 3. Loosen hood hinge mounting nuts on the hood.
- 4. Adjust the clearance of hood, front bumper fascia, front grill and front fender according to the fitting standard dimension, for the hood.

		0
5.	Check that hood lock secondary latch is securely engaged with striker by dropping hood from approxi- mately 200 mm (7.874 in) height or pressing lightly on the hood.	Н
	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:	
	<ul> <li>Exercise vertical force on right side and left side of hood lock.</li> <li>Never press simultaneously both sides.</li> </ul>	
7.	After adjustment tighten hood hinge mounting nuts to the specified torque.	
	DOD HINGE	J
	OD HINCE , Demovel and Installation	
	DOD HINGE : Removal and Installation	DLK
RE	MOVAL	
1.	Remove hood assembly. Refer to DLK-152, "HOOD ASSEMBLY : Removal and Installation".	I
2.	Remove front fender cover. Refer to EXT-23. "Exploded View".	
3.	Remove brake master cylinder cover, battery cover, and hood ledge cover (LH and RH). Refer to EXT-23,	
	"Exploded View"	M
4.	Remove clips of hood seal, and then remove hood seal assembly (side). Refer to <u>DLK-160. "Exploded</u> <u>View"</u> .	
5.	Remove front fender mounting bolt.	Ν
6.	Remove hood hinge mounting bolts, and then remove hood hinge.	
INS	STALLATION	
	te the following item, and install in the reverse order of removal.	0
	UTION:	
	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	P

- of hood hinge, drop genuine high strength locking sealant or equivalent into bolt P 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-154, "HOOD ASSEMBLY : Adjust-</u> <u>ment"</u>.

HOOD STAY

G

### HOOD

### < REMOVAL AND INSTALLATION >

### HOOD STAY : Removal and Installation

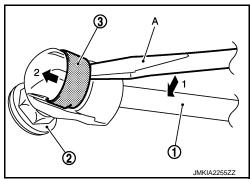
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#### REMOVAL

 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.

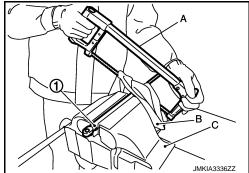
- 2. Remove the metal clip (3) located on the connection between the hood stay (1) and the stud ball (2) (hood side), by using a flat-bladed screwdriver (A).
- 3. Disengage the stud ball from the hood stay (hood side).
- 4. Repeat the same operation to disengage the stud ball from the hood stay (body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

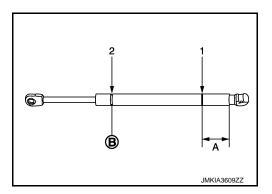


INSTALLATION Install in the reverse order of removal.

### HOOD STAY : Disposal

- 1. Fix hood stay (1) using a vise (C).
- 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.

### **RADIATOR CORE SUPPORT**

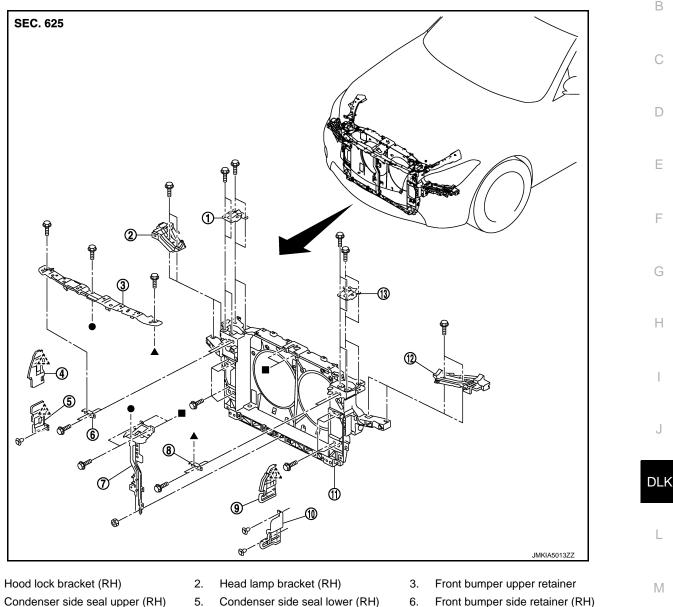
### < REMOVAL AND INSTALLATION >

# RADIATOR CORE SUPPORT

### **Exploded View**

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А



- 1.
- Condenser side seal upper (RH) 4.
- 7. Hood lock support stay
- 10. Condenser side seal lower (LH)
- 13. Hood lock bracket (LH)

```
之: Pawl
```

### **Removal and Installation**

12. Head lamp bracket (LH)

Condenser side seal upper (LH)

9.

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#### REMOVAL

Remove brake master cylinder cover, battery cover, and hood ledge cover (LH and RH). Refer to EXT-23. 1. "Exploded View".

Front bumper side retainer (LH)

Radiator core support assembly

- Use a refrigerant collecting equipment to discharge the refrigerant. Refer to HA-21, "Recycle Refrigerant". 2.
- Remove engine under cover. Refer to EXT-31, "ENGINE UNDER COVER : Removal and Installation". 3.
- 4. Drain engine coolant from radiator.
  - VQ engine models: Refer to <u>CO-10, "Draining"</u>.

8.

11.

VK engine models: Refer to <u>CO-37, "Draining"</u>.

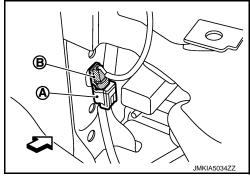
# **RADIATOR CORE SUPPORT**

#### < REMOVAL AND INSTALLATION >

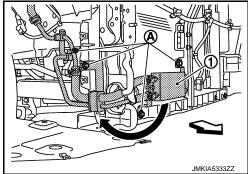
- Remove air duct (inlet) assembly.
- VQ engine models: Refer to <u>EM-29</u>, "Removal and Installation".
- VK engine models: Refer to EM-191, "Removal and Installation".
- 6. Remove front bumper fascia, energy absorber, and reinforcement. Refer to <u>EXT-16</u>, "<u>Removal and Instal-</u><u>lation</u>".
- 7. Remove front combination lamp (LH and RH). Refer to EXL-124, "Removal and Installation".
- 8. Remove head lamp bracket.

5.

- 1. Disconnect harness connector of Intelligent Key warning buzzer.
- 2. Remove mounting bolts and remove head lamp bracket.
- 9. Remove washer tank. Refer to WW-49, "Removal and Installation".
- 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-178, "Exploded View"</u>.
  - Remove hood lock control cable (front) from tube clip of front bumper upper retainer. Refer to <u>DLK-178, "Exploded View"</u>
  - 3. Remove hood lock bracket mounting bolts.
  - 4. Remove air cleaner assembly (VK engine models only). Refer to EM-191, "Removal and Installation".
  - 5. Disconnect harness connector (A), and then remove hood lock switch harness connector (B) from vehicle.



- 6. 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-42</u>, <u>"REFRIGERANT PRES-SURE SENSOR : Removal and Installation"</u>.
- 13. Disconnect harness connector of exhaust gas/outside odor sensor. Refer to <u>HAC-182, "Removal and</u> <u>Installation"</u>.
- 14. Disconnect harness connector of ambient sensor. Refer to HAC-176, "Removal and Installation".
- 15. Remove ICC sensor integrated unit (with intelligent cruse control model). Refer to <u>CCS-181, "Removal and Installation"</u>.
- 16. Move power steering oil cooler to a location where it does not inhibit work.
  - Remove under side cover RH. Refer to <u>EXT-26, "FENDER</u> <u>PROTECTOR : 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.



- 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-15, "Exploded View"</u>.
  - VK engine models: Refer to <u>CO-43</u>, "Exploded View".
- 19. Remove radiator hose (upper) and radiator hose (lower) at radiator side.
  - VQ engine models: Refer to CO-16, "Removal and Installation".

### **DLK-158**

# **RADIATOR CORE SUPPORT**

< REMOVAL AND INSTALLATION >	
<ul> <li>VK engine models: Refer to <u>CO-43, "Removal and Installation"</u>.</li> </ul>	
20. Disconnect AT fluid cooler hose (A and B) from fan shroud and remove AT fluid cooler hose (A and from radiator.	B) A
<ul> <li>VQ engine (2WD) models: Refer to <u>TM-214</u>, "VQ37VHR (2WD): Removal and Installation".</li> <li>VQ engine (AWD) models: Refer to <u>TM-216</u>, "VQ37VHR (AWD): Removal and Installation".</li> <li>VK engine (2WD) models: Refer to <u>TM-218</u>, "VK56VD (2WD): Removal and Installation".</li> <li>VK engine (AWD) models: Refer to <u>TM-221</u>, "VK56VD (AWD): Removal and Installation".</li> </ul>	В
<ul> <li>21. Disconnect harness connector of cooling fan control modules.</li> <li>VQ engine models: Refer to <u>CO-20, "Removal and Installation"</u>.</li> <li>VK engine models: Refer to <u>CO-47, "Removal and Installation"</u>.</li> </ul>	С
22. Disconnect harness connector of crash zone sensor. Refer to SR-21, "Removal and Installation".	D
<ul> <li>23. Remove harness fixing clips from the following components.</li> <li>Front bumper upper retainer</li> <li>Hood lock support stay</li> <li>Cooling fan assembly</li> <li>Radiator core support assembly</li> </ul>	E
<ul> <li>24. Remove mounting bolts, and then remove radiator core support assembly.</li> <li>CAUTION:</li> <li>Operate with two workers, because of its heavy weight.</li> </ul>	F
25. Remove the following parts after removing radiator core support assembly.	
<ul> <li>Front bumper upper retainer</li> <li>Front bumper side retainer (LH and RH)</li> <li>Hood lock support stay</li> </ul>	G
<ul> <li>condenser assembly: Refer to <u>HA-40, "CONDENSER : Removal and Installation"</u>.</li> <li>Crash zone sensor: Refer to <u>SR-21, "Removal and Installation"</u>.</li> <li>Cooling fan assembly</li> </ul>	Н
<ul> <li>VQ engine models: Refer to <u>CO-20, "Removal and Installation"</u>.</li> <li>VK engine models: Refer to <u>CO-47, "Removal and Installation"</u>.</li> <li>Remove radiator.</li> </ul>	I
<ul> <li>VQ engine models: Refer to <u>CO-16, "Removal and Installation"</u>.</li> <li>VK engine models: Refer to <u>CO-43, "Removal and Installation"</u>.</li> <li>Condenser side seal upper and lower</li> </ul>	J
INSTALLATION Note the following item, and install in the reverse order of removal. CAUTION: • Replenish the following parts.	DL
<ul> <li>Refrigerant: Refer to <u>HA-21, "Charge Refrigerant"</u>.</li> <li>Engine coolant (VQ engine models): Refer to <u>CO-10, "Refilling"</u>.</li> <li>Engine coolant (VK engine models): Refer to <u>CO-38, "Refilling"</u>.</li> </ul>	L
<ul> <li>AT fluid: Refer to <u>TM-181, "Changing"</u>.</li> <li>Power steering oil: Refer to <u>ST-30, "Inspection"</u>.</li> <li>Adjust the following parts.</li> <li>Front combination lamp: Refer to <u>EXL-120, "Aiming Adjustment Procedure"</u>.</li> </ul>	Μ
<ul> <li>ICC sensor integrated unit (with intelligent cruse control model): Refer to <u>CCS-76, "Description"</u>.</li> </ul>	Ν

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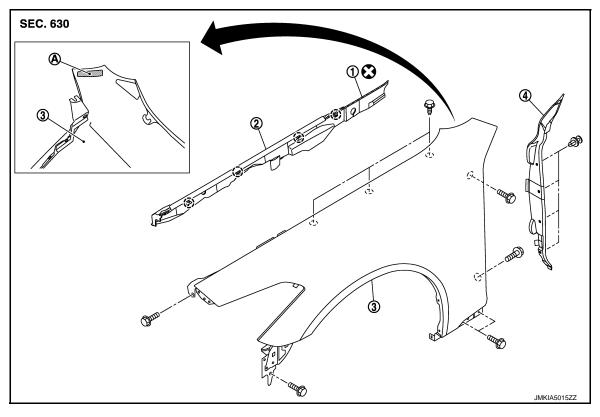
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# < REMOVAL AND INSTALLATION >

# FRONT FENDER

Exploded View

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- Double-faced adhesive tape 1. 2. 2.0 mm (0.079 in)

  - Front fender baffle

 $(\overline{})$ : Clip

4.

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

#### **CAUTION:**

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.

Hood seal assembly (side)

### Removal and Installation

#### CAUTION:

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

### REMOVAL

- 1. Remove front fender cover (RH and LH): Refer to EXT-23, "Exploded View".
- 2. Remove brake master cylinder cover, battery cover, hood ledge cover (LH and RH). Refer to EXT-23, "Exploded View".
- Remove hood seal assembly (side).
- 4. Remove air duct (inlet).
  - VQ37: Refer to EM-29, "Removal and Installation".
  - VK56: Refer to EM-191, "Removal and Installation".
- 5. Remove front bumper fascia. Refer to EXT-16, "Removal and Installation".
- 6. Remove front combination lamp. Refer to EXL-124, "Removal and Installation".
- 7. Remove fender protector. Refer to EXT-26, "FENDER PROTECTOR : Removal and Installation".
- Remove front door assembly. Refer to DLK-162, "DOOR ASSEMBLY : Removal and Installation". 8.

### **DLK-160**

INFOID:000000010102902

3. Front fender assembly

## **FRONT FENDER**

### < REMOVAL AND INSTALLATION >

9.	Remove front fender baffle.	
10.	Remove front fender mounting bolts, and then remove front fender.	А
INS	TALLATION	
	e the following item, and install in the reverse order of removal.	В
	UTION: fter installation, check front fender adjustment.	
- He	ood side: Refer to <u>DLK-154, "HOOD ASSEMBLY : Adjustment"</u> .	
	ront door side: Refer to <u>DLK-163, "DOOR ASSEMBLY : Adjustment"</u> .	С
	fter installation, apply the touch-up paint (the body color) onto the head of front fender mounting olts.	
	djust the following part.	D
- Fr	ront combination lamp: Refer to <u>EXL-120, "Aiming Adjustment Procedure"</u> .	
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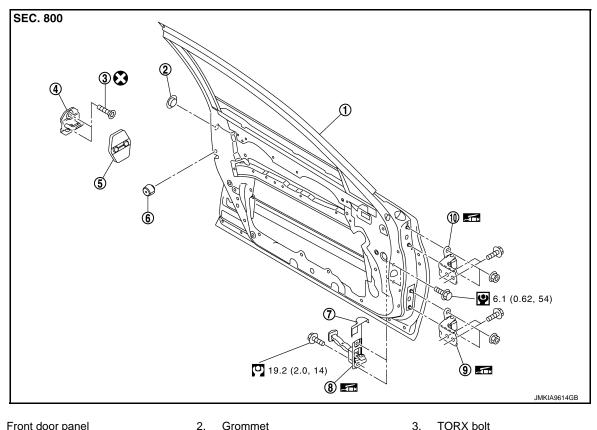
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# < REMOVAL AND INSTALLATION >

# FRONT DOOR

**Exploded View** 

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- 1. Front door panel
- 4. TORX bolt

- 2. Grommet 5.
- Door striker cover 8. Door check link
- Check link cover 7.
- 10. Door hinge (upper)

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

# DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

#### **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.

3.

6.

9.

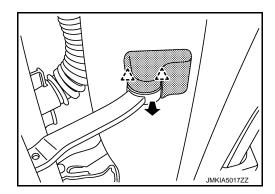
Bumper rubber

Door hinge (lower)

### REMOVAL

1. Remove check link cover toward vehicle rear..

△ : Pawl



Remove mounting bolts of door check link on the vehicle. 2.

# FRONT DOOR

#### < REMOVAL AND INSTALLATION >

- 3. 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. В

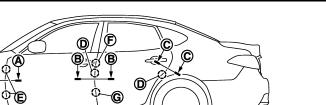
#### INSTALLATION

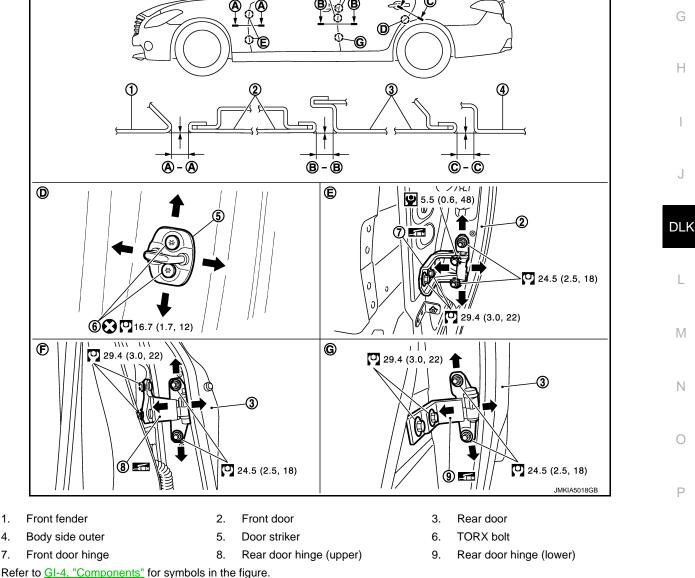
Note the following item, and install in the reverse order of removal.

#### 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-163, "DOOR ASSEMBLY : Adjust-</u> D ment".
- After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.

### DOOR ASSEMBLY : Adjustment





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

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4.

7.

**DLK-163** 

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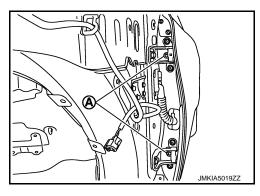
# **FRONT DOOR**

#### < REMOVAL AND INSTALLATION >

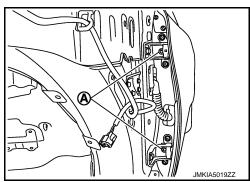
If the clearance and the surface height are out of specification, adjust them according to the procedures shown below.

Pc	ortion	Standard	
Front fender – Front door		Clearance	2.7 – 4.7 mm (0.106 – 0.185 in)
	<b>A</b> – A	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-160, "Removal and Installation"</u>.
- 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 DLK-160, "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

#### REMOVAL

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

### **DLK-164**

2014 Q70

# **FRONT DOOR**

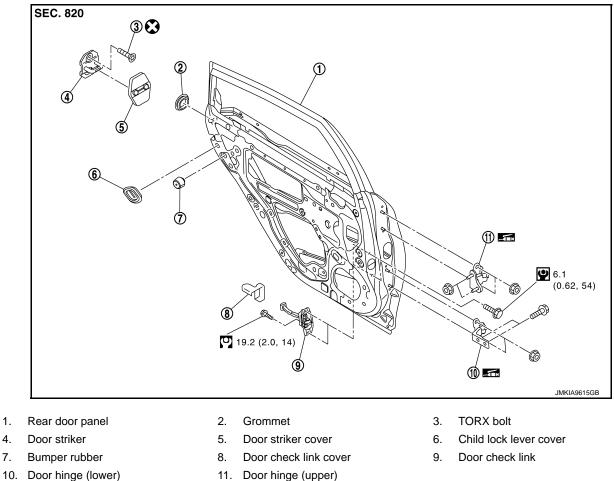
TKONT BOOK	
< REMOVAL AND INSTALLATION >	
INSTALLATION Note the following item, and install in the reverse order of removal. CAUTION:	А
<ul> <li>Check front door open/close, lock/unlock operation after installation.</li> <li>After installation, check to perform the fitting adjustment. Refer to <u>DLK-163, "DOOR ASSEMBLY :</u> <u>Adjustment"</u>.</li> <li>DOOR HINGE</li> </ul>	В
DOOR HINGE : Removal and Installation	С
<ol> <li>REMOVAL</li> <li>Remove front fender. Refer to <u>DLK-160, "Removal and Installation"</u>.</li> <li>Remove front door assembly. Refer to <u>DLK-162, "DOOR ASSEMBLY : Removal and Installation"</u>.</li> <li>Remove front door hinge mounting bolts, and then remove front door hinge.</li> </ol>	D
INSTALLATION Note the following item, and install in the reverse order of removal.	E
CAUTION:	F
<ul> <li>Check front door open/close, lock/unlock operation after installation.</li> <li>Check door hinge rotating part for poor lubrication. If necessary, apply body grease.</li> <li>After installation, perform the fitting adjustment. Refer to <u>DLK-163, "DOOR ASSEMBLY : Adjustment"</u>.</li> </ul>	G
<ul> <li>After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.</li> <li>DOOR CHECK LINK</li> </ul>	
DOOR CHECK LINK : Removal and Installation	Η
REMOVAL	1
1. Fully close the front door window.	
2. Remove front door finisher. Refer to INT-31, "FRONT DOOR FINISHER : Removal and Installation".	
<ul> <li>Remove front door speaker or front door woofer.</li> <li>Front door speaker (base audio without navigation): Refer to <u>AV-125, "Removal and Installation"</u>.</li> <li>Front door woofer (BOSE audio without navigation): Refer to <u>AV-306, "Removal and Installation"</u>.</li> </ul>	J
4. Remove check link cover toward vehicle rear.	DLK
∴ : Pawl	L
	M
JMKIA5017ZZ	Ν
<ol> <li>Remove mounting bolts of door check link on the vehicle.</li> <li>Remove mounting bolts of door check link on door panel.</li> <li>Take door check link out from the hole of door panel.</li> </ol>	0
INSTALLATION Note the following item, and install in the reverse order of removal.	Ρ
CAUTION: Check front door open/close operation after installation.	

# < REMOVAL AND INSTALLATION >

# REAR DOOR

Exploded View

INFOID:000000010102909



10. Door hinge (lower)11. Door hRefer to GI-4. "Components" for symbols in the figure.

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

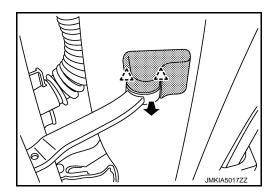
#### **CAUTION:**

- 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.

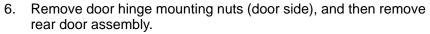
: Pawl



2. Remove mounting bolts of door check link on the vehicle.

### < REMOVAL AND INSTALLATION >

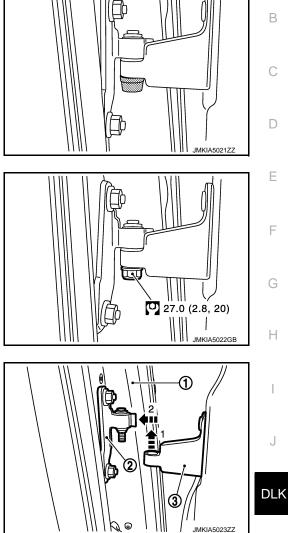
- 3. Remove rear door harness grommet, and then pull out door harness from the vehicle.
- 4. Disconnect rear door harness connector.
- 5. Remove nut cup.



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.

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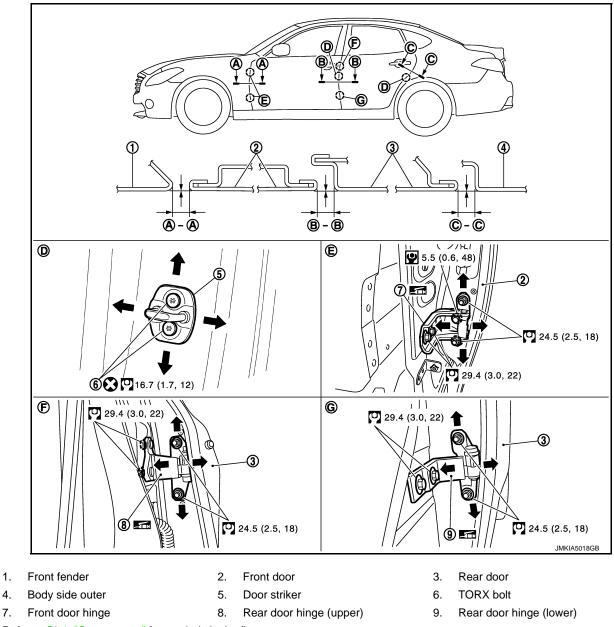
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### < REMOVAL AND INSTALLATION >

# **DOOR ASSEMBLY : Adjustment**



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.

Port		Standard	
Front door – Rear door	B – B -	Clearance	2.9 – 4.7 mm (0.114 – 0.185 in)
From door – Rear door		Surface height	(–1.0) – (+1.0) mm [(–0.039) – (+0.039) in]
Deer deer - Dedu eide euter		Clearance	2.7 – 4.7 mm (0.106 – 0.185 in)
Rear door – Body side outer	<b>C</b> – C	Surface height	(–1.0) – (+1.0) mm [(–0.039) – (+0.039) in]

4.

7.

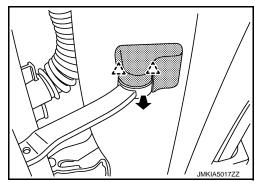
< REMOVAL AND INSTALLATION >	
CAUTION: When performing adjustment for installation, check that door hinge [male-side (door side)] is con- nected to door hinge [female-side (body side)].	A
<ol> <li>Remove center pillar lower garnish. Refer to <u>INT-41, "CENTER PILLAR LOWER GARNISH : Removal</u> and Installation".</li> </ol>	В
2. Loosen door hinge mounting nuts on door side.	
3. Adjust the surface height of rear door according to the fitting standard dimension.	
<ol><li>Temporarily tighten door hinge mounting nuts on door side.</li></ol>	С
5. Loosen door hinge mounting nuts and bolts on body side.	
<ol> <li>Raise rear door at rear end to adjust clearance of rear door according to the fitting standard dimension.</li> <li>After adjustment tighten bolts and nuts to the specified torque.</li> </ol>	D
<ol> <li>Install center pillar lower garnish. Refer to <u>INT-41, "CENTER PILLAR LOWER GARNISH : Removal and</u> <u>Installation"</u>.</li> </ol>	Е
DOOR STRIKER ADJUSTMENT Adjust door striker so that it becomes parallel with door lock insertion direction. DOOR STRIKER	F
DOOR STRIKER : Removal and Installation	1
REMOVAL	G
<ol> <li>Remove door striker cover with remover tool.</li> <li>Remove door striker mounting TORX bolts, and then remove door striker.</li> <li>INSTALLATION</li> </ol>	Н
<ul> <li>Note the following item, and install in the reverse order of removal.</li> <li>CAUTION: <ul> <li>Check rear door open/close, lock/unlock operation after installation.</li> <li>After installation, check to perform the fitting adjustment. Refer to <u>DLK-168</u>, "<u>DOOR ASSEMBLY</u>: <u>Adjustment</u>".</li> </ul> </li> <li>DOOR HINGE</li> </ul>	l J
DOOR HINGE : Removal and Installation	
	DLł
REMOVAL	
1. Remove center pillar lower garnish. Refer to <u>INT-41, "CENTER PILLAR LOWER GARNISH : Removal</u> and Installation".	L
2. Remove rear door assembly. Refer to <u>DLK-166, "DOOR ASSEMBLY : Removal and Installation"</u> .	
3. Remove rear door hinge mounting bolts and nuts (body side), and then remove door hinge.	M
INSTALLATION	
Note the following item, and install in the reverse order of removal. CAUTION:	
Check rear door open/close operation after installation.	Ν
<ul> <li>Check door hinge rotating part for poor lubrication. If necessary, apply body grease.</li> <li>When removing and installing rear door assembly, perform the fitting adjustment. Refer to <u>DLK-168</u>, <u>"DOOR ASSEMBLY : Adjustment"</u>.</li> </ul>	0
<ul> <li>After installing, apply the touch-up paint (the body color) onto the head of door hinge mounting nuts.</li> <li>DOOR CHECK LINK</li> </ul>	
DOOR CHECK LINK : Removal and Installation	Ρ
REMOVAL	

- 1. Fully close the rear door window.
- 2. Remove rear door finisher. Refer to INT-33, "REAR DOOR FINISHER : Removal and Installation".
- 3. Remove rear door speaker.

# **DLK-169**

### < REMOVAL AND INSTALLATION >

- Base audio without navigation: Refer to AV-127, "Removal and Installation".
- BOSE audio without navigation: Refer to <u>AV-309, "Removal and Installation"</u>.
- 4. Remove check link cover toward vehicle rear.
  - 2 : Pawl



- 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.

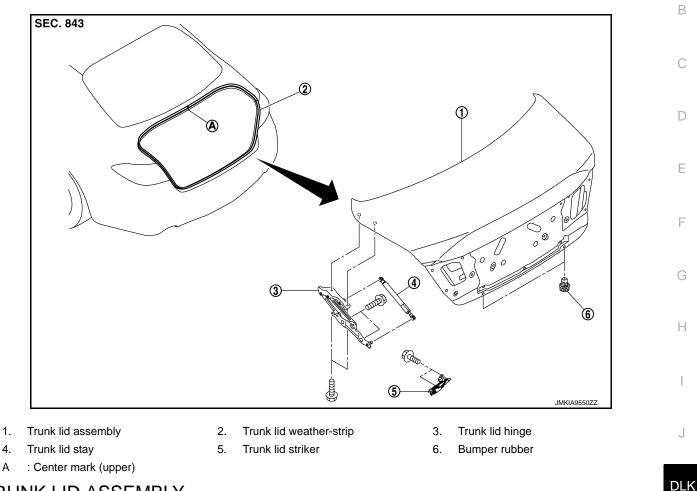
# < REMOVAL AND INSTALLATION >

# **TRUNK LID**

**Exploded View** 

INFOID:000000010102915

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# TRUNK LID ASSEMBLY

### **TRUNK LID ASSEMBLY : Removal and Installation**

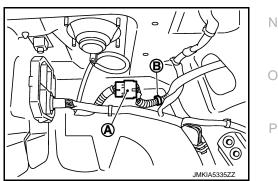
#### **CAUTION:**

А

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

#### REMOVAL

- 1. Remove the trunk lid finisher inner. Refer to INT-59, "Removal and Installation"
- 2. Disconnect harness connector (A) and harness clip (B) in trunk room.



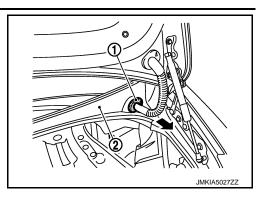
INFOID:000000010102916

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#### < 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:** 

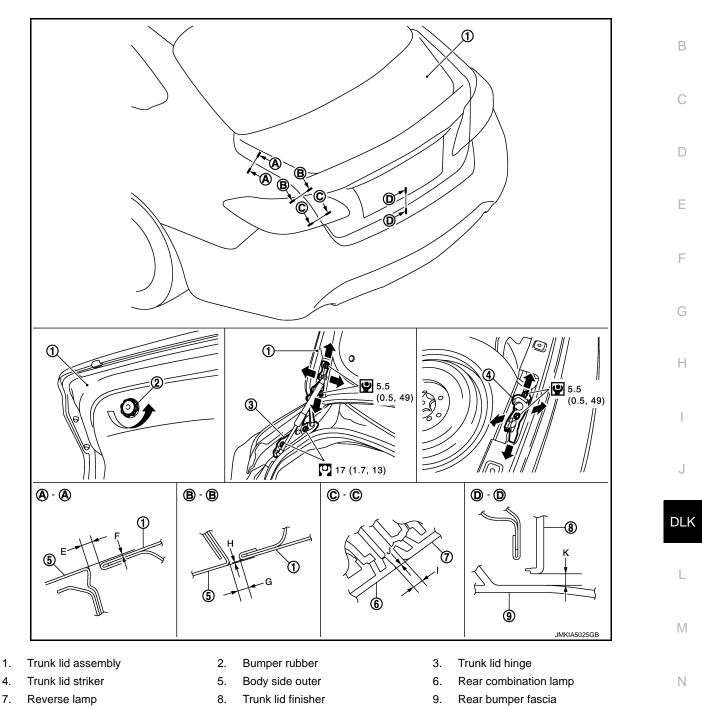
- After installing, apply touch-up paint (the body color) onto the head of the hinge mounting bolts.
- Check trunk lid open/close, lock/unlock operation after installation.
- After installation, perform fitting adjustment. Refer to <u>DLK-173, "TRUNK LID ASSEMBLY : Adjust-ment"</u>.

### < REMOVAL AND INSTALLATION >

# TRUNK LID ASSEMBLY : Adjustment

#### INFOID:000000010102917

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Refer to <u>GI-4, "Components"</u> 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.

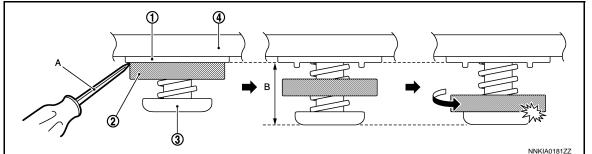
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#### < REMOVAL AND INSTALLATION >

Portion				Standard	Difference (RH/LH, MAX)
Trunk lid – Body side outer	A – A	Е	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	I	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	<b>D</b> – <b>D</b>	ĸ	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-57. "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-57. "TRUNK REAR PLATE : Removal and Installation".
- 8. Initialize the height of bumper rubber.



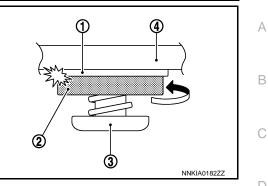
- Insert screwdriver (A) wrapped with the protective tape between the body (1) and the collar (2), and then pull out the bumper rubber (3) from the trunk lid (4).
- Rotate the collar and contact it with the bumper rubber.
- 9. Close the trunk lid by pushing with hands.
  - NOTE:

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.

### < REMOVAL AND INSTALLATION >

- 10. 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



	NNKIA0182ZZ	
CAUTION: <ul> <li>Apply anticorrosive agent onto the mounting surface.</li> <li>After installation, check trunk lid open/close, lock/unlock open/close</li> </ul>		
<ul> <li>After installation, apply touch-up paint (the body color) onto bolts and nuts.</li> </ul>	o the head of trunk lid hinge mounting	
TRUNK LID STRIKER ADJUSTMENT Adjust trunk lid striker so that it becomes parallel with trunk lid lock ins TRUNK LID STRIKER	F	
TRUNK LID STRIKER : Removal and Installation	INFOID:000000010102918	
REMOVAL	Н	
<ol> <li>Remove trunk rear plate. Refer to <u>INT-57, "TRUNK REAR PLATE</u></li> <li>Remove mounting bolts, and then remove trunk lid striker.</li> </ol>		
INSTALLATION Note the following item, and install in the reverse order of removal.	I	
<ul> <li>CAUTION:</li> <li>Check trunk lid open/close, lock/unlock operation after installa</li> <li>When removing and installing trunk lid striker, perform the fille</li> </ul>		
"TRUNK LID ASSEMBLY : Adjustment".		
<u>"TRUNK LID ASSEMBLY : Adjustment"</u> . TRUNK LID HINGE	DLK	
	INFOID:000000010102919	K
TRUNK LID HINGE		K
TRUNK LID HINGE TRUNK LID HINGE : Removal and Installation	INFOID:000000010102919	X
<ul> <li>TRUNK LID HINGE</li> <li>TRUNK LID HINGE : Removal and Installation</li> <li>REMOVAL</li> <li>1. Remove trunk lid assembly. Refer to <u>DLK-171, "TRUNK LID ASS</u></li> <li>2. Remove trunk lid stay from trunk lid hinge. Refer to <u>DLK-175, "TI tion"</u>.</li> <li>3. Remove trunk lid hinge mounting nuts (body side), and then removed</li> </ul>	INFOID:000000010102919	K
<ul> <li>TRUNK LID HINGE</li> <li>TRUNK LID HINGE : Removal and Installation</li> <li>REMOVAL</li> <li>1. Remove trunk lid assembly. Refer to <u>DLK-171, "TRUNK LID ASS</u></li> <li>2. Remove trunk lid stay from trunk lid hinge. Refer to <u>DLK-175, "TI</u> tion".</li> <li>3. Remove trunk lid hinge mounting nuts (body side), and then remove INSTALLATION</li> <li>Note the following item, and install in the reverse order of removal.</li> </ul>	INFOID:000000010102919	K
<ul> <li>TRUNK LID HINGE</li> <li>TRUNK LID HINGE : Removal and Installation</li> <li>REMOVAL</li> <li>1. Remove trunk lid assembly. Refer to <u>DLK-171, "TRUNK LID ASS</u></li> <li>2. Remove trunk lid stay from trunk lid hinge. Refer to <u>DLK-175, "TI tion"</u>.</li> <li>3. Remove trunk lid hinge mounting nuts (body side), and then remove INSTALLATION</li> </ul>	INFOID:000000010102919 L EMBLY : Removal and Installation". RUNK LID STAY : Removal and Installa- ove trunk lid hinge.	
<ul> <li>TRUNK LID HINGE</li> <li>TRUNK LID HINGE : Removal and Installation</li> <li>REMOVAL</li> <li>1. Remove trunk lid assembly. Refer to <u>DLK-171, "TRUNK LID ASS</u></li> <li>2. Remove trunk lid stay from trunk lid hinge. Refer to <u>DLK-175, "TI</u> tion".</li> <li>3. Remove trunk lid hinge mounting nuts (body side), and then remover the following item, and install in the reverse order of removal.</li> <li>CAUTION:</li> <li>Check trunk lid open/close, lock/unlock operation after installa</li> <li>Check trunk lid hinge rotating part for poor lubrication. If necessive the following and installing trunk lid assembly, perform the "TRUNK LID ASSEMBLY : Adjustment".</li> <li>After installation, apply touch-up paint (the body color) onto a bolts.</li> </ul>	INFOID:000000010102919 L EMBLY : Removal and Installation". RUNK LID STAY : Removal and Installa- ove trunk lid hinge. N tion. ssary, apply body grease. fitting adjustment. Refer to <u>DLK-173.</u>	
<ul> <li>TRUNK LID HINGE</li> <li>TRUNK LID HINGE : Removal and Installation</li> <li>REMOVAL</li> <li>1. Remove trunk lid assembly. Refer to <u>DLK-171, "TRUNK LID ASS</u></li> <li>2. Remove trunk lid stay from trunk lid hinge. Refer to <u>DLK-175, "This tion"</u>.</li> <li>3. Remove trunk lid hinge mounting nuts (body side), and then remove INSTALLATION</li> <li>Note the following item, and install in the reverse order of removal.</li> <li>CAUTION:</li> <li>Check trunk lid open/close, lock/unlock operation after installa</li> <li>Check trunk lid hinge rotating part for poor lubrication. If necess</li> <li>When removing and installing trunk lid assembly, perform the <u>"TRUNK LID ASSEMBLY : Adjustment"</u>.</li> <li>After installation, apply touch-up paint (the body color) onto the paint (the body color)</li> </ul>	INFOID:000000010102919 L EMBLY : Removal and Installation". RUNK LID STAY : Removal and Installa- ove trunk lid hinge. N tion. ssary, apply body grease. fitting adjustment. Refer to <u>DLK-173.</u>	

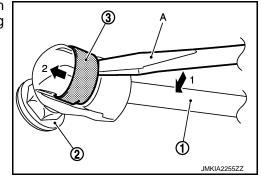
REMOVAL

### < 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 tru

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

- 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

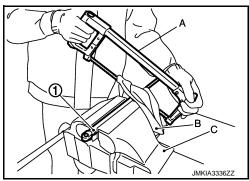
Note the following item, and install in the reverse order of removal.

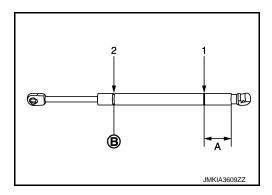
#### CAUTION:

Check trunk lid open/close operation after installation.

### **TRUNK LID STAY : Disposal**

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





# TRUNK LID WEATHER-STRIP

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

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

Revision: 2013 November

### **DLK-176**

INFOID:000000010102922

### < REMOVAL AND INSTALLATION >

<u> </u>	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.

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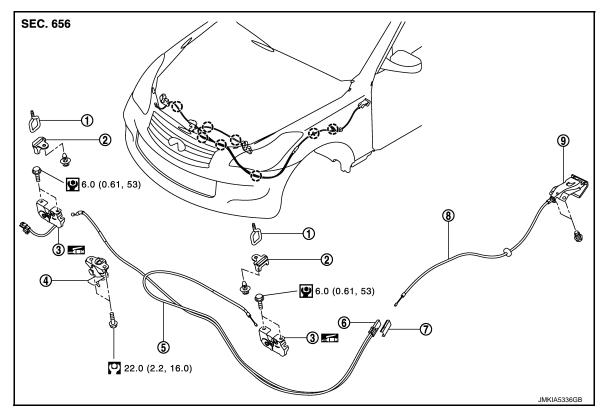
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# < REMOVAL AND INSTALLATION > HOOD LOCK

# Exploded View

INFOID:000000010102923



- 1. Hood striker (LH/RH)
- 2. Hood striker cover (LH/RH)
- 4. Secondary latch
- Hood lock control cable (front)
- 8. Hood lock control cable (rear)

3.

6.

9.

Hood lock (LH/RH)

Hood lock opener lever

Hood lock control cable protector

7. Hood lock control cable protector cover

```
(_) : Clip
```

Refer to <u>GI-4, "Components"</u> 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 EM-29, "Exploded View".
  - VK engine models: Refer to EM-191, "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-191, "Removal and Installation".

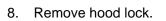
# HOOD LOCK

#### < REMOVAL AND INSTALLATION >

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

6. 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.



#### INSTALLATION

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

- Check that hood lock control cable is properly engaged with hood lock.
- After installation, perform hood fitting adjustment. Refer to <u>DLK-154, "HOOD ASSEMBLY : Adjust-</u> M <u>ment"</u>.
- After installation, perform hood lock control inspection. Refer to <u>DLK-179, "HOOD LOCK : Inspec-</u><u>tion"</u>.

### HOOD LOCK : Inspection

#### 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.

### **DLK-179**

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# 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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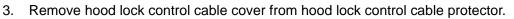
FRONT

Removal

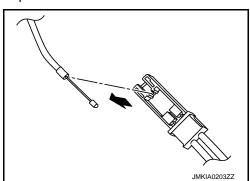
#### CAUTION:

#### Check wiring of hood lock control before removal.

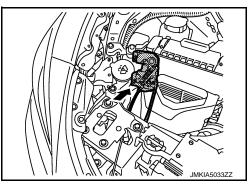
- 1. Remove clips of hood seal assembly (side).
- Remove hood lock control cable protector (1) toward the arrow direction, then remove it from front combination lamp assembly (2).



4. Disconnect hood lock control cable (front) hood lock control cable protector.



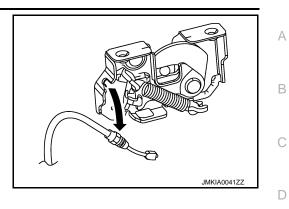
- 5. Remove air duct (inlet).
  - VQ engine models: Refer to EM-29, "Exploded View".
  - VK engine models: Refer to EM-191, "Exploded View".
- 6. Remove hood lock control cable (front) fixing clips from hood lock stay and condenser upper bracket.
- 7. Remove hood lock control cable (front) from tube clip of front bumper upper retainer.
- 8. Remove air cleaner assembly (VK engine models only). Refer to EM-191, "Removal and Installation".
- 9. Remove mounting bolts of hood lock then reward the arrow direction.



# HOOD LOCK

### < REMOVAL AND INSTALLATION >

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



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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.

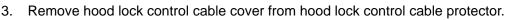
REAR

Removal

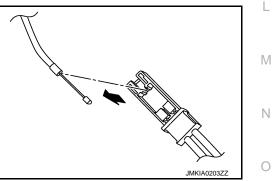
CAUTION:

### Check wiring of hood lock control before removal.

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



4. Disconnect hood lock control cable (rear) from hood lock control cable protector.



- 5. Remove fender protector LH. Refer to EXT-26, "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

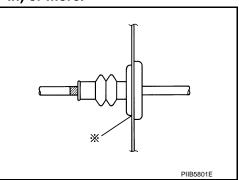
### **DLK-181**

# 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-154, "HOOD ASSEMBLY : Adjust-ment"</u>.
- After installation, perform hood lock control inspection. Refer to <u>DLK-179, "HOOD LOCK : Inspec-</u><u>tion"</u>.

### HOOD LOCK CONTROL CABLE : Inspection

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### NOTE:

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

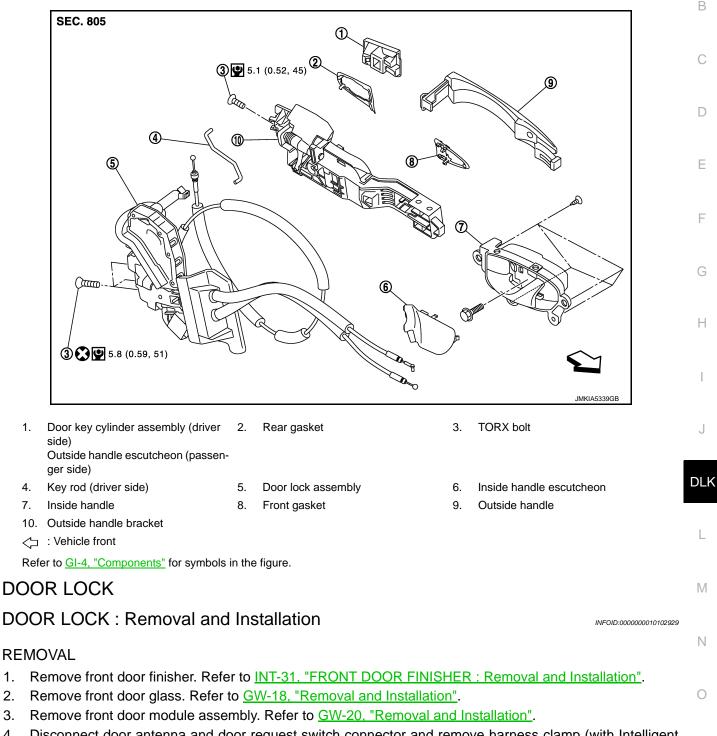
- 1. Check that secondary latch is properly engaged with secondary striker [6.8 mm (0.268 in)] by hood weight.
- 2. While operating hood opener, carefully check that the front end of hood is raised by approximately 20.0 mm (0.787 in). Also check that hood opener returns to the original position.
- 3. 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.

# FRONT DOOR LOCK

# Exploded View

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 Disconnect door antenna and door request switch connector and remove harness clamp (with Intelligent Key system model) on outside handle bracket.

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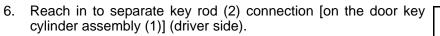
# FRONT DOOR LOCK

### < REMOVAL AND INSTALLATION >

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

Never remove TORX bolt forcibly.

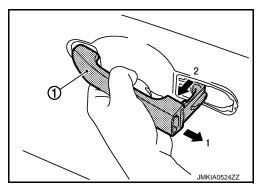
: TORX bolt

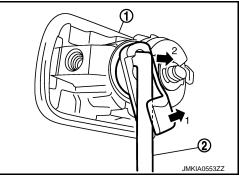


7. While pulling outside handle, remove door key cylinder assembly (driver side) or outside handle escutcheon (passenger side).

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

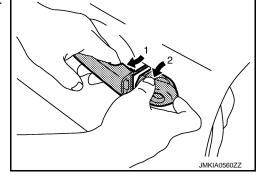






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# FRONT DOOR LOCK

### < REMOVAL AND INSTALLATION >

INSTALLATION

INSIDE HANDLE

CAUTION:

REMOVAL

CAUTION:

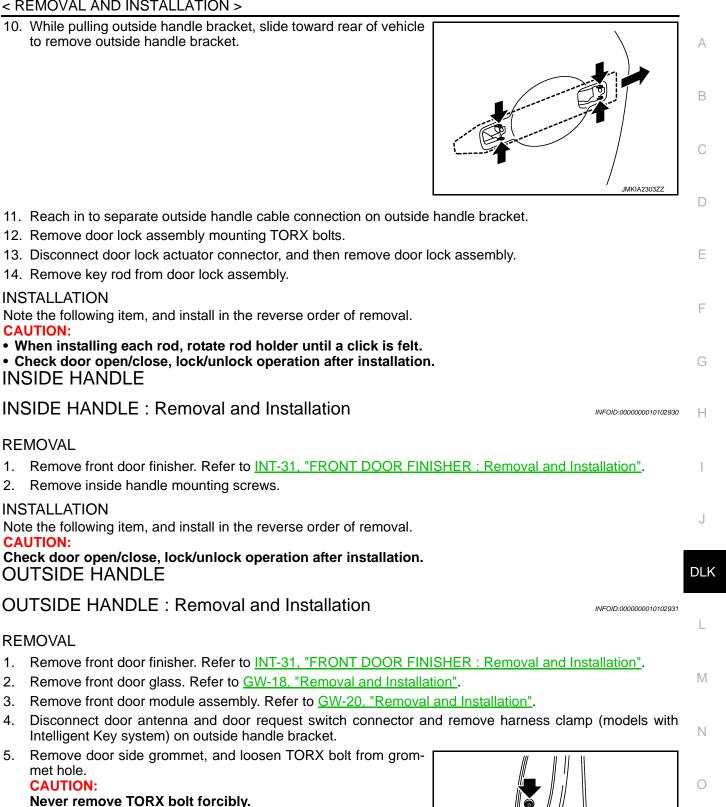
REMOVAL

5.

INSTALLATION

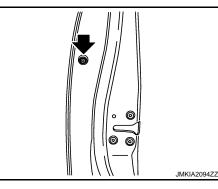
OUTSIDE HANDLE

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



: TORX bolt

met hole. **CAUTION:** 



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# FRONT DOOR LOCK

### < REMOVAL AND INSTALLATION >

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

Revision: 2013 November

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.

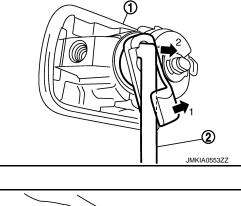
- 9. Remove front gasket and rear gasket.
- 10. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.

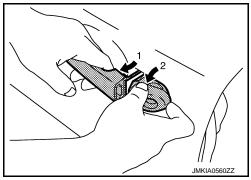
11. Reach in to separate outside handle cable connection on outside handle bracket.

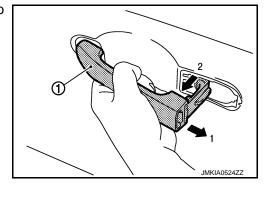
## INSTALLATION

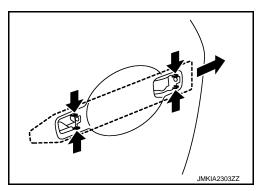
Note the following item, and install in the reverse order of removal.

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







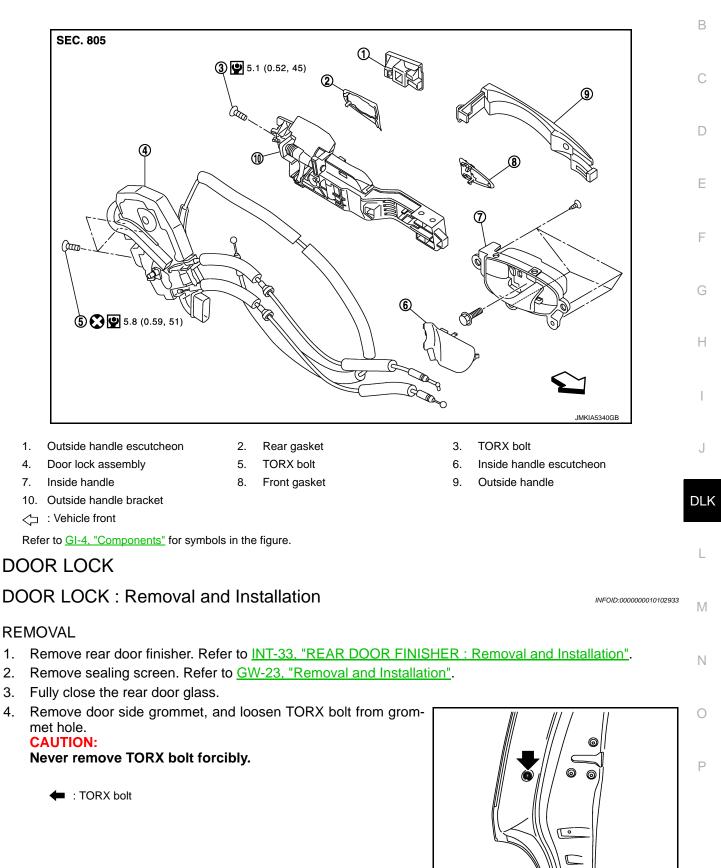


# REAR DOOR LOCK

# Exploded View

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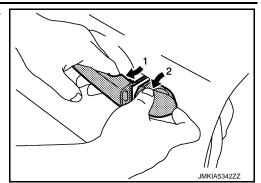


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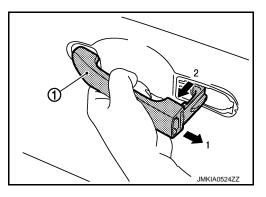
# **REAR DOOR LOCK**

### < REMOVAL AND INSTALLATION >

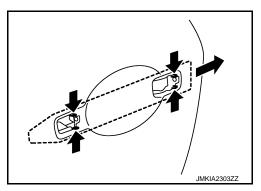
5. While pulling outside handle, remove outside handle escutcheon.



6. 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** 

### REMOVAL

- 1. Remove rear door finisher. Refer to INT-33, "REAR DOOR FINISHER : Removal and Installation".
- 2. 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

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

# **DLK-188**

# **REAR DOOR LOCK**

### < REMOVAL AND INSTALLATION >

# OUTSIDE HANDLE : Removal and Installation

### 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 <u>GW-23, "Removal and Installation"</u>.
- 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.

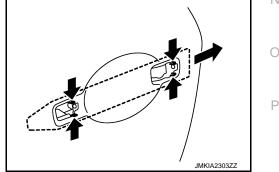
9. Reach in to separate outside handle cable connection on outside handle bracket.

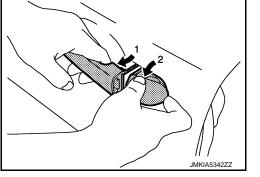
## INSTALLATION

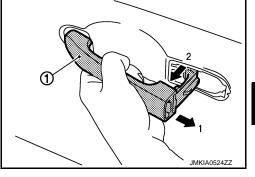
Revision: 2013 November

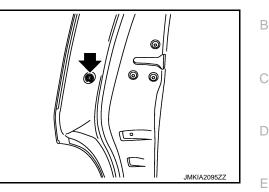
# **DLK-189**

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# **REAR DOOR LOCK**

< REMOVAL AND INSTALLATION >

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

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

# **TRUNK LID LOCK**

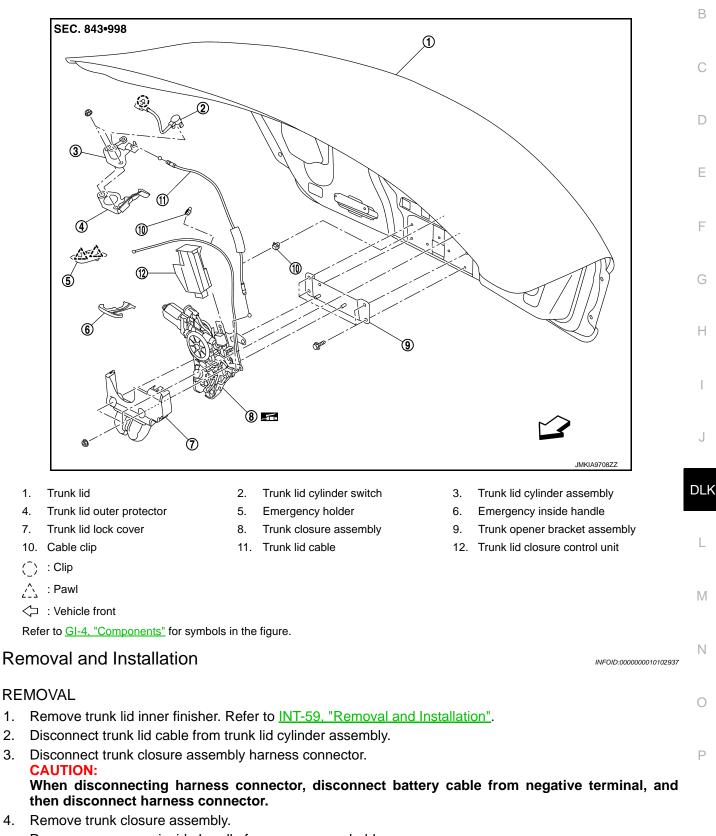
# < REMOVAL AND INSTALLATION >

# TRUNK LID LOCK

# Exploded View

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- a. Remove emergency inside handle from emergency holder.
- b. Remove cable from emergency inside handle.

# DLK-191

# **TRUNK LID LOCK**

### < REMOVAL AND INSTALLATION >

- c. Remove trunk closure assembly mounting nuts, and then remove trunk closure assembly.
- 5. Remove trunk lid lock cover and trunk lid cable from trunk closure assembly.

### INSTALLATION

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

- Check trunk lid open/close, lock/unlock operation after installation.
- For preventing accidental activation of trunk closure assembly, be careful of the following items and perform installation procedures.
- Never subject trunk closure assembly to strong impact, such as by hitting it with a tool.
- Never use trunk closure assembly that is subjected to strong impact by dropping or hitting.

# FUEL FILLER LID OPENER

# < REMOVAL AND INSTALLATION >

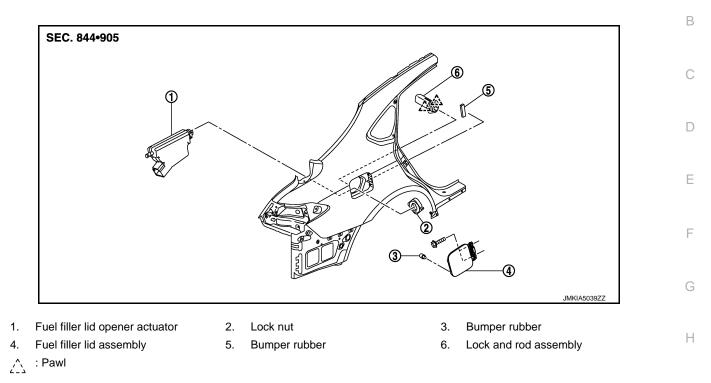
# FUEL FILLER LID OPENER

# **Exploded View**

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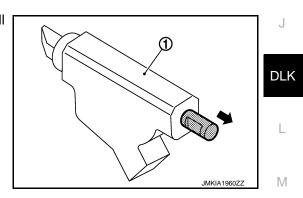
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# Removal and Installation

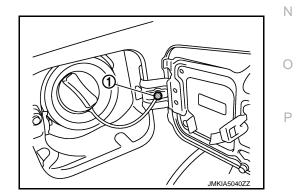
### NOTE:

When fuel filler lid opener actuator (1) is a defective operation, pull the rod to open fuel filler lid.



### REMOVAL

- 1. 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.

# FUEL FILLER LID OPENER

### < REMOVAL AND INSTALLATION >

- 5. Remove trunk side finisher RH. Refer to INT-57, "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

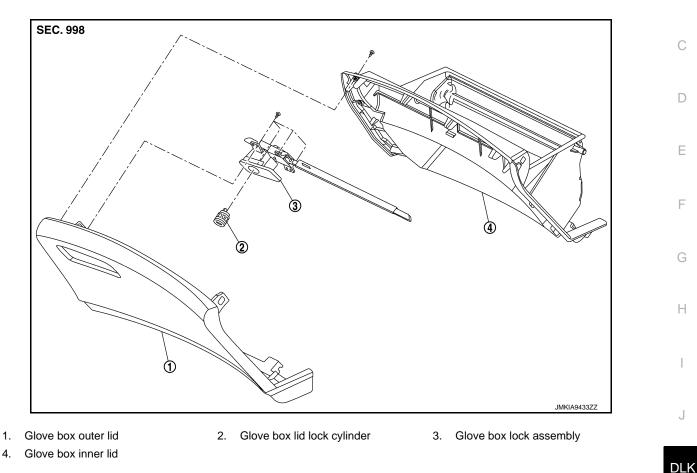
Note the following item, and install in the reverse order of removal.

**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.



# KEY CYLINDER GLOVE BOX LID KEY CYLINDER GLOVE BOX LID KEY CYLINDER : Exploded View



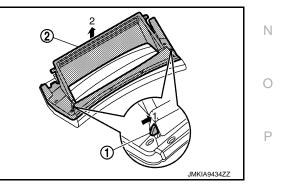
# GLOVE BOX LID KEY CYLINDER : Removal and Installation

# REMOVAL

### CAUTION:

### Replace glove box lock assembly when replacing glove box lid lock cylinder.

- 1. Remove glove box assembly. Refer to IP-13, "Removal and Installation".
- 2. Remove fixing screws of glove box inner lid.
- 3. Push rod (1) of glove box lock assembly into the inside of glove box inner lid (2). Remove glove box inner lid.



4. Remove fixing screws of glove box lock assembly.

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# **KEY CYLINDER**

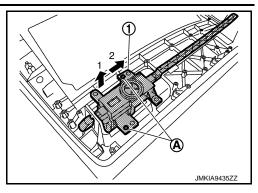
### < REMOVAL AND INSTALLATION >

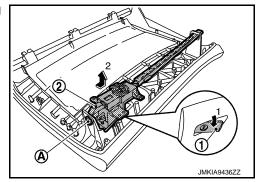
5. Slightly lift up glove box lock assembly (1), and then move it toward the direction as shown by arrow without interfering with pin portion (A).

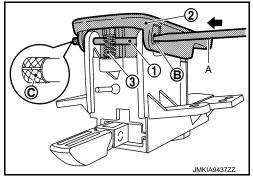
6. Disconnect rod (2) from rod slide hole portion (A) while pulling handle (1) of glove box lock assembly.

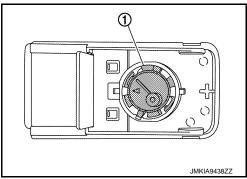
- 7. Remove glove box lock assembly.
- Using a screwdriver (A), insert shaft (1) from portion (B) as shown in the figure. Remove shaft, handle (2), and handle spring (3).
   CAUTION:
  - Be sure to push shaft toward the specified direction, because treatment (C) is applied on one side of shaft so that shaft can be fixed.
  - Caulking processing is applied at the end of the shaft. Shaft and handle are damaged when removing the shaft. Therefore, replace glove box lock assembly when replacing glove box lid lock cylinder.
- 9. Insert mechanical key into glove box lid lock cylinder. Align the position of striker (1) to the same position as shown in the figure.











# **KEY CYLINDER**

### < REMOVAL AND INSTALLATION >

box lid key cylinder (2).

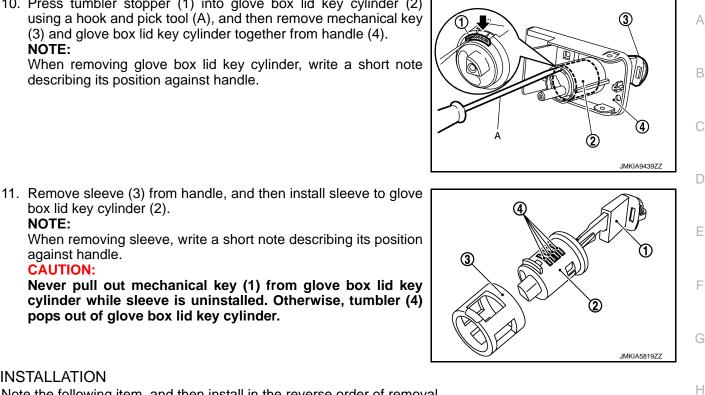
pops out of glove box lid key cylinder.

against handle.

**CAUTION:** 

10. Press tumbler stopper (1) into glove box lid key cylinder (2) using a hook and pick tool (A), and then remove mechanical key (3) and glove box lid key cylinder together from handle (4). NOTE:

When removing glove box lid key cylinder, write a short note describing its position against handle.



### **INSTALLATION**

NOTE:

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

After installation, check glove box assembly open/close, lock/unlock operation.

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Revision: 2013 November

# 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.

INSIDE KEY ANTENNA	
< REMOVAL AND INSTALLATION >	
INSIDE KEY ANTENNA INSTRUMENT CENTER	A
INSTRUMENT CENTER : Removal and Installation	В
<ol> <li>REMOVAL</li> <li>Remove the cluster lid C. Refer to <u>IP-13, "Removal and Installation"</u>.</li> <li>Remove the inside key antenna (instrument center) mounting screw, and then remove inside key antenna (instrument center).</li> </ol>	С
INSTALLATION Install in the reverse order of removal. CONSOLE	D
CONSOLE : Removal and Installation	
REMOVAL 1. Remove the console ashtray.	F
<ol> <li>Remove the center console assembly. Refer to <u>IP-24, "Removal and Installation"</u>.</li> <li>Remove the inside key antenna mounting (console) screw, and then remove inside key antenna (console).</li> </ol>	G
INSTALLATION Install in the reverse order of removal. TRUNK ROOM	Н
TRUNK ROOM : Removal and Installation	I
REMOVAL 1. Remove the trunk lid upper finisher. Refer to <u>INT-57, "TRUNK FINISHER FRONT : Removal and Installa-</u>	J
<ul> <li>tion<sup>"</sup>.</li> <li>Remove the inside key antenna (trunk room) mounting nuts, and then remove inside key antenna (trunk room).</li> </ul>	DLK
INSTALLATION Install in the reverse order of removal.	L
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# **OUTSIDE KEY ANTENNA**

< REMOVAL AND INSTALLATION >

# OUTSIDE KEY ANTENNA DRIVER SIDE

DRIVER SIDE : Removal and Installation

REMOVAL

Remove the front outside handle LH. Refer to <u>DLK-185, "OUTSIDE HANDLE : Removal and Installation"</u>.

INSTALLATION Install in the reverse order of removal. PASSENGER SIDE

# PASSENGER SIDE : Removal and Installation

REMOVAL Remove the front outside handle RH. Refer to <u>DLK-185, "OUTSIDE HANDLE : Removal and Installation"</u>.

INSTALLATION Install in the reverse order of removal. REAR BUMPER

# REAR BUMPER : Removal and Installation

REMOVAL

- 1. Remove the rear bumper. Refer to EXT-20, "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.

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# INTELLIGENT KEY WARNING BUZZER

< REMOVAL AND INSTALLATION >	
INTELLIGENT KEY WARNING BUZZER	
Removal and Installation	INFOID:0000000010102949
REMOVAL	
<ol> <li>Remove the front bumper. Refer to <u>EXT-16, "Removal and Installation"</u>.</li> <li>Remove the Intelligent Key warning buzzer mounting bolt, and then remove the Intelligent buzzer.</li> </ol>	t Key warning
INSTALLATION Install in the reverse order of removal.	

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# TRUNK OPENER REQUEST SWITCH

Removal and Installation

### REMOVAL

- 1. Remove the trunk lid finisher. Refer to EXT-43, "Removal and Installation".
- 2. Remove trunk lid request switch from trunk lid finisher.

### INSTALLATION

Install in the reverse order of removal.

### **TRUNK LID OPENER SWITCH**

### < REMOVAL AND INSTALLATION >

# TRUNK LID OPENER SWITCH A Removal and Installation INFOLL-0000000101022651 REMOVAL B 1. Remove the instrument driver lower panel. Refer to IP-13, "Removal and Installation". B 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. C INSTALLATION Install in the reverse order of removal. D

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# TRUNK LID OPENER CANCEL SWITCH

### Removal and Installation

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### 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.

### INSTALLATION

Install in the reverse order of removal.

# **REMOTE KEYLESS ENTRY RECEIVER**

### < REMOVAL AND INSTALLATION >

# REMOTE KEYLESS ENTRY RECEIVER

# Removal and Installation INFOID:00000010102953 REMOVAL

- 1. Remove the glove box assembly. Refer to <u>IP-13, "Removal and Installation"</u>.
- 2. Remove the remote keyless entry receiver mounting bolt, and then remove remote keyless entry receiver.

### INSTALLATION

Install in the reverse order of removal.

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# INTELLIGENT KEY BATTERY

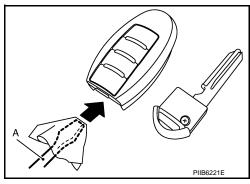
# < REMOVAL AND INSTALLATION >

# INTELLIGENT KEY BATTERY

## Removal and Installation

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



3. Replace the battery with new one.

**Battery replacement** 

:Coin-type lithium battery (CR2025)

- 4. 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.

