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### **PRECAUTION**

### **PRECAUTIONS**

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

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the SR and SB section of this Service Manual.

#### **WARNING:**

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal
  injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag
  Module, see the SR section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

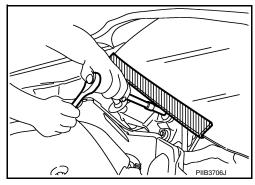
PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

#### **WARNING:**

- When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery and wait at least three minutes before performing any service.

### Procedure without Cowl Top Cover

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



### Precaution for Servicing Doors and Locks

#### **WARNING:**

Radio waves could adversely affect electric medical equipment. Those who use a pacemaker should contact the electric medical equipment manufacturer for the possible influences before use,

- After removing and installing the opening/closing parts, be sure to carry out fitting adjustments to check their operation.
- Check the lubrication level, damage, and wear of each part. If necessary, grease or replace it.
- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with a new one.

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### **PRECAUTIONS**

### < PRECAUTION >

[WITH INTELLIGENT KEY SYSTEM]

- Be sure to tighten bolts and nuts securely to the specified torque.
- After installation is complete, be sure to check that each part works properly.
- Follow the steps below to clean components:
- Water soluble dirt:
- Dip a soft cloth into lukewarm water, wring the water out of the cloth and wipe the dirty area.
- Then rub with a soft, dry cloth.
- Oily dirt:
- Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%) and wipe the dirty area.
- Then dip a cloth into fresh water, wring the water out of the cloth and wipe the detergent off.
- Then rub with a soft, dry cloth.
- Do not use organic solvent such as thinner, benzene, alcohol or gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

### **PREPARATION**

< PREPARATION >

### [WITH INTELLIGENT KEY SYSTEM]

# **PREPARATION**

### **PREPARATION**

**Special Service Tools** 

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	Tool number					

Tool number (TechMate No.) Tool name		Description
— (J-39570) Chassis Ear	SIIAO993E	Locating the noise
— (J-50397) NISSAN Squeak and Rat- tle Kit	Ser Property & Yearning	Repairing the cause of noise

ALJIA1232ZZ

(J-43241) Remote Keyless Entry Tester



Used to test keyfobs

(J-50190) Signal Tech II



· Activate and display TPMS transmitter

- · Display tire pressure reported by the TPMS transmitter
- · Read TPMS DTCs
- · Register TPMS transmitter IDs
- · Check Intelligent Key relative signal strength
- · Confirm vehicle Intelligent Key antenna signal strength
- · Compatible with future sensors
- · Equipped with a display

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### **PREPARATION**

### < PREPARATION >

# [WITH INTELLIGENT KEY SYSTEM]

Tool number (TechMate No.) Tool name		Description
KV48105501 (J-45295-A) Transmitter activation tool	ALEIA0183ZZ	Activate TPMS transmitter IDs     Compatible with future sensors     Equipped with a display (KV48105501 only)
(J-46534) Trim Tool Set	AWJIA0483ZZ	Removing trim components

### **Commercial Service Tools**

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(TechMate No.) Tool name		Description
(J-39565) Engine Ear	SIIA0995E	Locating the noise

### [WITH INTELLIGENT KEY SYSTEM]

## **CLIP LIST**

# **Descriptions for Clips**

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### Replace any clips which are damaged during removal or installation.

Symbol No.	Shapes	Removal & Installation
C101		Removal: Remove by bending up with flat-bladed screwdrivers or clip remover.
C103	TTTT	Removal: Remove with a clip remover.
C203 [ (7)		Removal: Push center pin to catching position. (Do not remove center pin by hitting it.) Push Push Installation:
C205		Removal: Flat-bladed screwdriver  Clip Finisher
C206		Removal:

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Symbol No.	Shapes	Removal & Installation
CE103		Removal:
CF110	Clip A	Removal:  Finisher Clip A  Flat-bladed screwdrivers  Clip B
CF118	Clip A Clip B (Grommet)	Removal:  Flat-bladed screwdrivers  Body panel  Clip A Clip B (Grommet)
CR103		Removal: Holder portion of clip must be spread out to remove rod.
CS101		Removal:  1. Screw out with a Phillips screwdriver.  2. Remove female portion with flat-bladed screwdriver.

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### [WITH INTELLIGENT KEY SYSTEM]

Symbol No.	Shapes	Remov	al & Installation
CG101		Removal:  Rotate 45° to remove  Removal:	Installation:
CS102	(X)	(	
CS113		with a flat-blade then remove clip	o while inserting a wdriver between
C111			

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Symbol No.	Shapes	Removal & Installation
CG104		Removal: Remove by bending up with flat-bladed screwdrivers.
		Radiator grille  Body panel
CE114		
CF118	Clip A	Removal:
# The state of the	Clip B (Grommet)	Flat-bladed screwdrivers  Body panel Clip A Clip B (Grommet)

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# SYSTEM DESCRIPTION

COMPONENT PARTS
POWER DOOR LOCK SYSTEM

POWER DOOR LOCK SYSTEM: Component Parts Location

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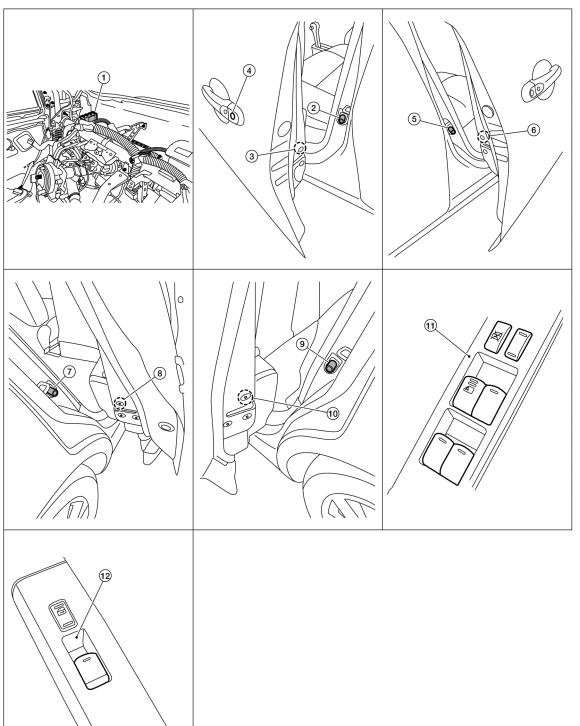
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### **COMPONENT PARTS**

### < SYSTEM DESCRIPTION >

### [WITH INTELLIGENT KEY SYSTEM]

- BCM (view with instrument panel re- 2. moved)
- 4. Front door lock assembly LH
- 7. Rear door switch RH
- 10. Rear door lock actuator LH
- . Front door switch LH
- 5. Front door switch RH
- 8. Rear door lock actuator RH
- Main power window and door lock/ unlock switch
- 3. Front door lock actuator LH
- 6. Front door lock actuator RH
- 9. Rear door lock switch LH
- 12. Power window and door lock/unlock switch RH

### POWER DOOR LOCK SYSTEM: Component Description

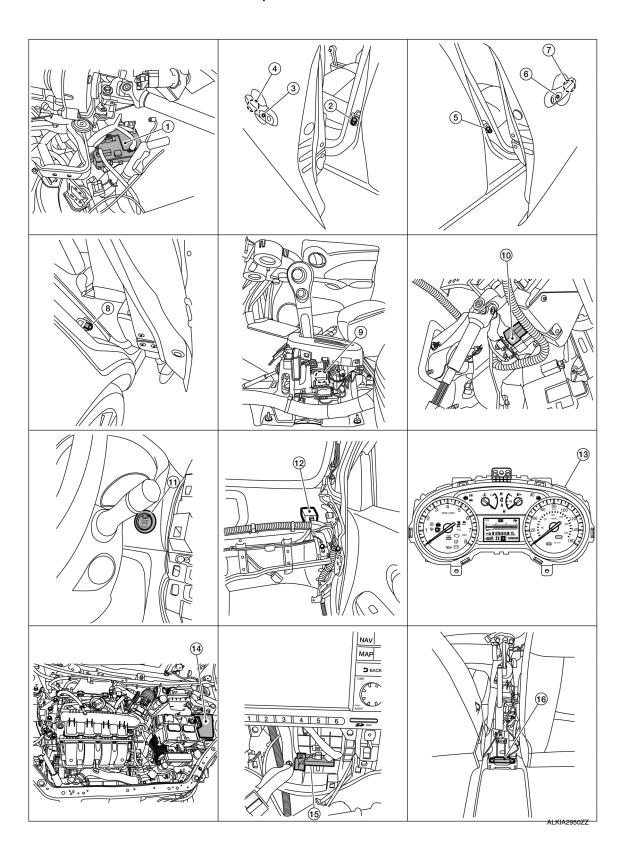
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Item	Function
BCM	Controls the door lock system
Door switch	Inputs door open/close condition to BCM
Door lock and unlock switch	Detects if door lock and unlock switch is press/release     Integrated in the main power window and door lock/unlock switch and power window and door lock/unlock switch (RH)
Door lock actuator	Output lock/unlock signal from BCM and locks/unlocks each door

### INTELLIGENT KEY SYSTEM

# INTELLIGENT KEY SYSTEM: Component Parts Location

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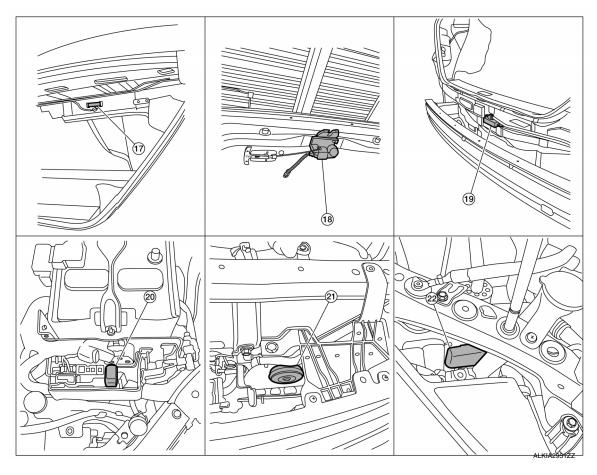
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- BCM (view with instrument panel re- 2. moved)
- 4. Outside key antenna (driver side)
- 7. Outside key antenna (passenger side)
- 10. Brake switch
- 13. Combination meter
- 16. Inside key antenna (console) (view with center console removed)
- Outside key antenna (rear bumper) (view with rear bumper facia removed)
- 22. Intelligent Key warning buzzer

- Front door switch LH
- 5. Front door switch RH
- 8. Rear door switch RH (rear door switch LH similar)
- 11. Push-button ignition switch
- 14. IPDM E/R
- 17. Inside key antenna (trunk room)
- 20. Horn relay

- 3. Door request switch LH
- 6. Door request switch RH
- CVT shift selector (park position switch) (view with center console removed)
- 12. Remote keyless entry receiver (view with instrument panel removed)
- 15. Inside key antenna (instrument center)
- 18. Trunk lid opener assembly
- 21. Horn

# INTELLIGENT KEY SYSTEM : Component Description

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Item	Function
BCM	Controls the Intelligent Key system.
Trunk room lamp switch	Inputs trunk lid open/close condition to BCM.
Door lock actuator	Output lock/unlock signal from BCM and locks/unlocks each door.
Stop lamp switch	Inputs the brake pedal position condition to BCM.
Push button ignition switch	Inputs the push button ignition switch ON/OFF condition to BCM.
Door switch	Inputs door open/close condition to BCM.

### **COMPONENT PARTS**

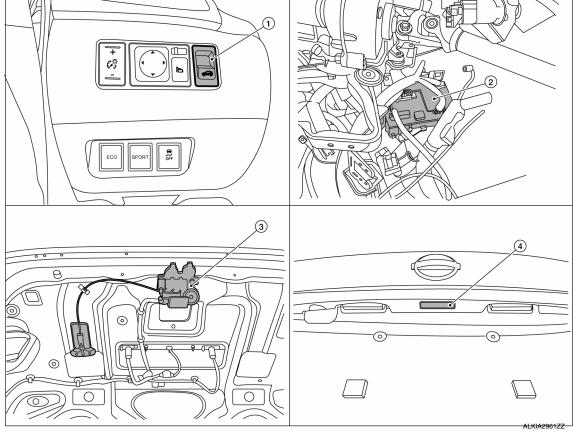
### < SYSTEM DESCRIPTION >

### [WITH INTELLIGENT KEY SYSTEM]

Item	Function
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM.
Request switch	Inputs lock/unlock operation to BCM.
Intelligent Key	Transmits button operation to remote keyless entry receiver.
Outside key antenna	Detects if Intelligent Key is outside the vehicle.
Inside key antenna	Detects if Intelligent Key is inside the vehicle.
Combination meter	Display, buzzer (combination meter) and KEY warning lamp are installed to combination meter.

### TRUNK LID OPENER SYSTEM

### TRUNK LID OPENER SYSTEM: Component Parts Location



- Trunk lid opener switch
- BCM (view with instrument panel re- 3. moved
- Trunk lid opener assembly (trunk lid opener actuator and trunk room lamp switch)

4. Trunk opener request switch

# TRUNK LID OPENER SYSTEM: Component Description

Item	Function
BCM	Controls the Intelligent Key system.
Trunk opener request switch	Inputs the trunk open request to the BCM.
Trunk lid opener actuator	Releases the mechanical latch to open the trunk lid.
Trunk lid opener switch	Inputs the trunk open request to the BCM.
Trunk room lamp switch	Inputs the trunk lid open/close condition to the BCM.

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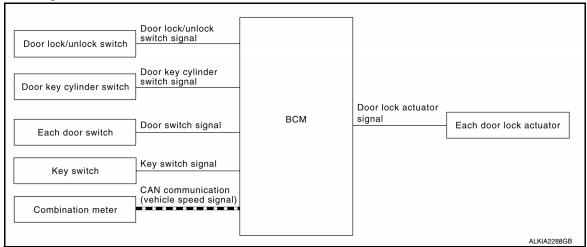
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INFOID:0000000009756348

### SYSTEM (POWER DOOR LOCK SYSTEM)

### System Diagram

INFOID:0000000009756349



### System Description

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Input	Single	Function	Actuator	
Door lock/unlock switch	Door lock/unlock signal	Door lock function		
Door key cylinder switch	- Door lock/utillock signal	Door lock function		
Each door switch	Door open/close signal	Key reminder function • Each door lock actuator		
	Warning buzzer signal	rey reminder function		
Combination meter	Vehicle speed signal	Automatic door lock/unlock function		

#### DOOR LOCK FUNCTION

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

#### Door Key Cylinder

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

Selective unlock operation mode can be changed using "AUTO LOCK SET" mode in "WORK SUPPORT". Refer to <u>DLK-36</u>, "<u>DOOR LOCK</u>: <u>CONSULT Function</u> (<u>BCM - DOOR LOCK</u>)".

### AUTOMATIC DOOR LOCKS (LOCK OPERATION)

The automatic door locks function is the function that locks all doors linked with the vehicle speed or shift position.

Vehicle Speed Sensing Auto Door Lock\*1

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.

If a door is opened and closed at any time during one ignition cycle (OFF  $\rightarrow$  ON), even after initial auto door lock operation has taken place, the BCM will relock all doors when the vehicle speed reaches 24 km/h (15 MPH) or more again.

### SYSTEM (POWER DOOR LOCK SYSTEM)

### < SYSTEM DESCRIPTION >

**[WITH INTELLIGENT KEY SYSTEM]** 

Setting change of Automatic Door Locks (LOCK) Function

The LOCK operation setting of the automatic door locks function can be changed.

### (P)With CONSULT

The ON/OFF switching of the automatic door locks (LOCK) function and the type selection of the automatic door locks (LOCK) function can be performed at the WORK SUPPORT setting of CONSULT. Refer to DLK-36. "DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)".

### **⋈**Without CONSULT

The automatic door locks (LOCK) function can be switched ON/OFF by performing the following operation.

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

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

5. The ignition switch must be turned OFF and ON again between each setting change.

### AUTOMATIC DOOR LOCKS (UNLOCK OPERATION)

The automatic door locks (UNLOCK) function is the function that unlocks all doors linked with the key position or shift position.

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

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

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

Setting change of Automatic Door Locks (UNLOCK) Function

The UNLOCK operation setting of the automatic door locks function can be changed.

### (P)With CONSULT

The ON/OFF switching of the automatic door locks (UNLOCK) function and the type selection of the automatic door locks (UNLOCK) function can be performed at the WORK SUPPORT setting of CONSULT. Refer to DLK-36, "DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)".

#### **⋈**Without CONSULT

The automatic door locks (UNLOCK) function can be switched ON/OFF by performing the following operation.

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

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

5. The ignition switch must be turned OFF and ON again between each setting change.

\*1: This function is set to ON before delivery.

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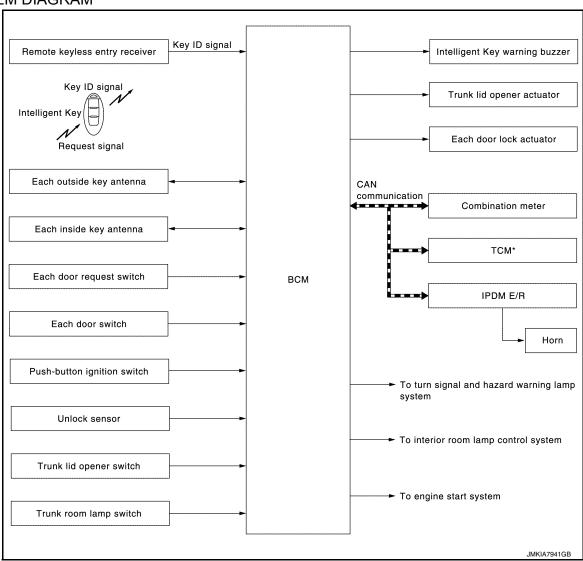
**DLK-23** Revision: October 2013 2014 Sentra NAM

# SYSTEM (INTELLIGENT KEY SYSTEM) INTELLIGENT KEY SYSTEM

**INTELLIGENT KEY SYSTEM: System Description** 

INFOID:0000000009756351

### SYSTEM DIAGRAM



### SYSTEM DESCRIPTION

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

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	DLK-25
Trunk open	The trunk lid can be opened by carrying the Intelligent Key and pressing the trunk lid opener switch	<u>DLK-27</u>

### < SYSTEM DESCRIPTION >

### [WITH INTELLIGENT KEY SYSTEM]

Function	Description	Refer
Remote keyless entry	Lock/unlock can be performed by pressing the remote controller button of the Intelligent Key	DLK-28
Key reminder	The key reminder buzzer sounds a warning if the door is locked with the key left inside the vehicle	DLK-30
Warning	If an action that does not meet the operating condition of the Intelligent Key system is taken, the buzzer sounds to inform the driver	DLK-31
Engine start	The engine can be turned on while carrying the Intelligent Key	DLK-24
Interior room lamp control	Interior room lamp is controlled according to door lock/unlock state	DLK-22

### DOOR LOCK FUNCTION

### DOOR LOCK FUNCTION: System Description

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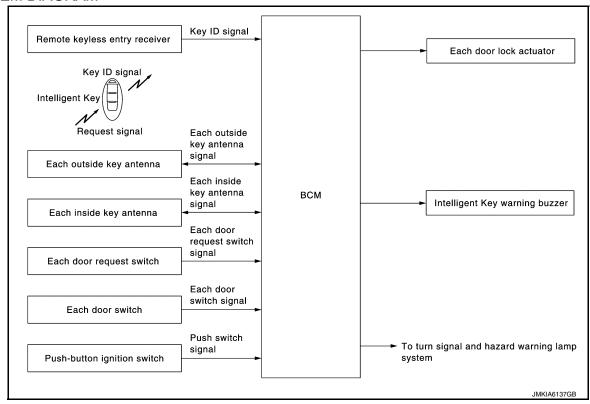
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### SYSTEM DIAGRAM



#### DOOR REQUEST SWITCH OPERATION

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

#### OPERATION DESCRIPTION

- When the BCM detects that each door request switch is pressed, it starts the outside key antenna and inside
  key antenna corresponding to the pressed door request switch and transmits the request signal to the Intelligent Key. 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 transmits door lock/unlock signal and operates each door lock actuator. At the same time, BCM blinks hazard warning lamp (lock: 1 time, unlock: 2 times) and sounds Intelligent Key buzzer (lock: 1 time, unlock: 2 times) as a reminder.

### **OPERATION CONDITION**

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

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### [WITH INTELLIGENT KEY SYSTEM]

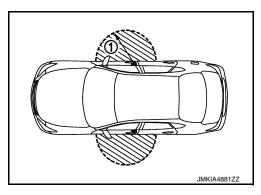
Each request switch operation	Operation condition	
Lock	<ul> <li>All doors are closed</li> <li>Ignition switch is in the LOCK or OFF position</li> <li>Panic alarm is not activated</li> <li>Intelligent Key is outside the vehicle</li> <li>Intelligent Key is within outside key antenna detection area</li>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

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

Door lock function can be changed using "LOCK/UNLOCK BY I-KEY" mode in "WORK SUPPORT". Refer to DLK-36, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

#### **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.



#### HAZARD AND BUZZER REMINDER FUNCTION

For the operation check, BCM blinks hazard warning lamps (lock: 1 time, unlock: 2 times) and sounds Intelligent Key warning buzzer (lock: 1 time, unlock: 2 times) when door lock or unlock operates by operation of each door request switch.

### How to Change Hazard and Buzzer Reminder Mode

Refer to DLK-36, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

#### AUTO DOOR LOCK FUNCTION

After door is unlocked by door request switch operation and if 30 seconds or more passes without performing the following operation, all doors are automatically locked. However, operation check function does not activate.

Operating condition	Door switch is ON (door is open)     BCM receives lock signal     Push switch is pressed
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Auto door lock mode can be changed by the "AUTO LOCK SET" mode in "WORK SUPPORT". Refer to <u>DLK-36</u>, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

#### LIST OF OPERATION RELATED PARTS

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

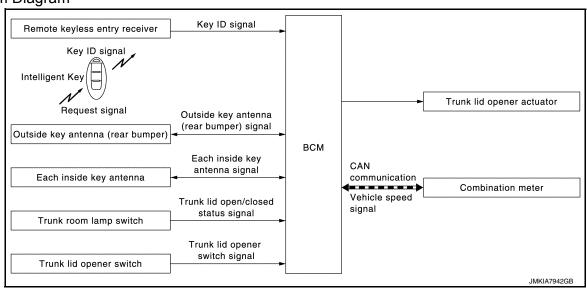
### [WITH INTELLIGENT KEY SYSTEM]

Door lock function	Intelligent Key	Remote keyless entry receiver	Door switch	Door request switch	Door 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								×	×	×	×		×
Auto door lock function	×	×	×	×	×		×			×		×	

### TRUNK OPEN FUNCTION

### TRUNK OPEN FUNCTION: System Description

System Diagram



#### TRUNK LID OPENER OPERATION

- When the BCM detects that trunk lid opener switch is pressed, it starts the outside key antenna (rear bumper) and inside key antenna and transmits the request signal to the Intelligent Key. Then, checks that the Intelligent Key is near the trunk lid.
- If the Intelligent Key is within the outside key antenna detection area, it receives the request signal and transmits the key ID signal to the BCM via remote keyless entry receiver.
- BCM receives the key ID signal and compares it with the registered key ID.

#### **OPERATION CONDITION**

Revision: October 2013

If the following conditions are satisfied, the trunk lid can be opened.

Trunk lid open function	Operation condition
Trunk open operation	<ul> <li>Vehicle speed is less than 5 km/h (3 MPH)</li> <li>Intelligent Key is within outside key antenna (rear bumper) detection area</li> <li>Trunk lid is closed</li> </ul>

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

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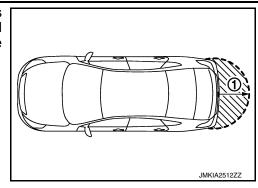
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### < SYSTEM DESCRIPTION >

### [WITH INTELLIGENT KEY SYSTEM]

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



#### LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

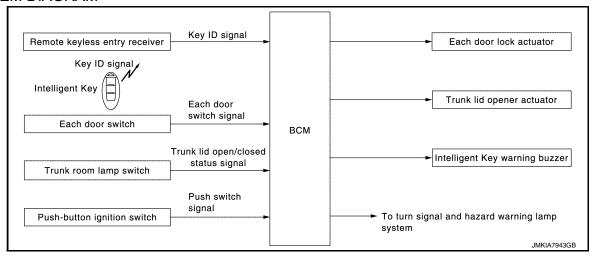
Trunk open function	Intelligent Key	Remote keyless entry receiver	Trunk lid opener actuator	Trunk room lamp switch	Inside key antenna	Outside key antenna (rear bumper)	CAN communication system	ВСМ	Trunk lid opener switch	Combination meter
Trunk lid open function	×	×	×	×	×	×	×	×	×	×

### REMOTE KEYLESS ENTRY FUNCTION

### REMOTE KEYLESS ENTRY FUNCTION: System Description

INFOID:0000000009756354

### SYSTEM DIAGRAM



### REMOTE KEYLESS ENTRY OPERATION

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

Remote keyless entry system controls operation of the following items.

- Auto door lock
- Door lock/unlock
- Hazard and buzzer reminder
- Panic alarm
- · Trunk lid open

#### < SYSTEM DESCRIPTION >

#### [WITH INTELLIGENT KEY SYSTEM]

#### **OPERATION AREA**

To check that the Intelligent Key works normally, use within 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 is transmitted from Intelligent Key to BCM via remote keyless entry receiver.
- BCM receives the signal and compares it with the registered key ID to the vehicle.
- BCM transmits door lock/unlock signal to each door lock actuator and operates each door lock actuator. when key ID matches. At the same time, BCM blinks hazard warning lamps (lock: 1 time, unlock: 2 times) and sounds Intelligent Key buzzer (lock: 1 time, unlock: 2 times) as a reminder.

#### OPERATION CONDITION

Remote controller operation	Operation condition
Lock	<ul> <li>All door are closed</li> <li>Ignition switch is in the LOCK or OFF position</li> <li>Panic alarm is not activated</li> <li>P position warning is not activated</li> </ul>
Unlock	<ul> <li>Ignition switch is in the LOCK or OFF position</li> <li>Intelligent Key is outside the vehicle</li> <li>Panic alarm is not activated</li> <li>P position warning is not activated</li> </ul>

#### TRUNK OPEN FUNCTION

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

#### OPERATION CONDITION

Remote controller operation	Operation condition
Trunk open	<ul> <li>Press and hold the trunk open button for 0.4 second or more*</li> <li>Ignition switch is except the ON position</li> <li>Vehicle speed is less than 5 km/h (3 MPH)</li> </ul>

<sup>\*:</sup> Pattern of trunk open button can be selected using CONSULT. Refer to DLK-36, "INTELLIGENT KEY CONSULT Function (BCM - INTELLIGENT KEY)".

### PANIC ALARM FUNCTION

When ignition switch is OFF, BCM transmits theft warning horn reguest signal to IPDM E/R. Then, IPDM E/R turns on and off horn intermittently.

The horn sounds intermittently.

The alarm automatically turns off.

- After 25 seconds
- · When BCM receives any signal from Intelligent Key

### **How to Change Panic Alarm Operation Mode**

Refer to DLK-36, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

### HAZARD AND BUZZER REMINDER FUNCTION

For the operation check, BCM blinks hazard warning lamps (lock: 1 time, unlock: 2 times) and sounds Intelligent Key warning buzzer (lock: 1 time, unlock: 2 times) when door lock or unlock operates by each remote controller button operation of Intelligent Key.

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

Refer to DLK-36, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

#### AUTO DOOR LOCK FUNCTION

After door is unlocked by Intelligent Key button operation and if 30 seconds or more passes without performing the following operation, all doors are automatically locked. However, operation check function does not activate.

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< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Operating condition	<ul> <li>Door switch is ON (door is open)</li> <li>BCM receives lock signal</li> <li>Push switch is pressed</li> </ul>
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Auto door lock mode can be changed by the "AUTO LOCK SET" mode in "WORK SUPPORT". Refer to <u>DLK-36, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)"</u>.

### LIST OF OPERATION RELATED PARTS

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

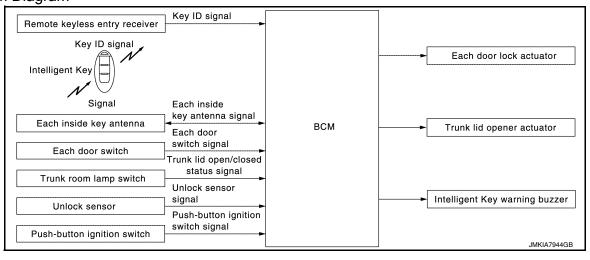
Remote keyless entry functions	Intelligent Key	Remote keyless entry receiver	Door switch	Door lock actuator	Push-button ignition switch	Intelligent Key warning buzzer	CAN communication system	ВСМ	Combination meter	Hazard warning lamp	Trunk lid opener actuator	Trunk room lamp switch	IPDM E/R	Нот
Door lock/unlock function by remote control button	×	×	×	×	×			×						
Trunk open function	×	×			×	×	×	×			×	×		
Hazard and buzzer reminder function	×	×				×	×	×	×	×				
Auto door lock function	×	×	×	×	×			×						
Panic alarm function	×						×	×					×	×

### **KEY REMINDER FUNCTION**

### KEY REMINDER FUNCTION : System Description

INFOID:0000000009756355

### System Diagram



#### **BASIC OPERATION**

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

#### < SYSTEM DESCRIPTION >

### [WITH INTELLIGENT KEY SYSTEM]

Key reminder function	Operation condition	Operation
Driver side door closed*	Right after driver side door is closed under the following conditions  Intelligent Key is inside the vehicle  Driver side door is opened  Driver side door is in unlock state	All doors unlock
Door is open or closed	Right after all doors are closed under the following conditions  Door lock/unlock switch or driver side door lock knob are operated  Intelligent Key is inside the vehicle  Any door is opened  All doors are locked.	All doors unlock     Honk Intelligent Key warning buzzer
Trunk is closed	Right after trunk is closed under the following conditions  Intelligent Key is inside trunk room  All doors are closed  All doors are locked	Trunk open Honk Intelligent Key warning buzzer

<sup>\*:</sup>When closing the door if something comes into contact with the door lock switch it might activate the door locks accidentally, but the unlock operation will override this.

#### NOTE:

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

### WARNING FUNCTION

### WARNING FUNCTION: System Description

INFOID:0000000009756356

### **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, KEY warning lamp, shift P warning lamp and engine start operation indicator lamp.

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

#### OPERATION CONDITION

Operation condition of warning and information is as per the following table.

Warning/Information functions	Operation procedure
Intelligent Key system malfunction	A malfunction is detected on BCM and key warning lamp turns ON

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### [WITH INTELLIGENT KEY SYSTEM]

Warning/Inforr	nation functions	Operation procedure
OFF position warning	For internal	When condition A, B or condition C is satisfied  Condition A  Ignition switch: ACC position  Door switch (driver side): ON (Door is open)  Condition B  Turn ignition switch from ON to OFF while door is open  Condition C  Intelligent Key backside is contacted to push-button ignition switch while brake pedal is depressed and ignition switch is LOCK or OFF (When the Intelligent Key battery is discharged)  Door switch (driver side): ON (Door is open)
	For external*	OFF position warning (For internal) is in active mode, driver side door has been closed.  NOTE:  OFF position (For external) active only when each of the sequence has occurred as below: P position warning → ACC warning → OFF position warning (For internal)
	For internal	Shift position: Other than P     Engine is stopped (Ignition switch is turned from ON to OFF)
P position warning	For external	<ul> <li>P position warning (For internal) operates</li> <li>Door switch: ON to OFF (Door is open to close)</li> <li>Intelligent Key cannot be detected inside the vehicle</li> </ul>
ACC warning		<ul> <li>After P position warning operates, or when ignition switch is turned ON immediately after P position warning operates</li> <li>Ignition switch: ACC</li> </ul>
	Door status changes from open to close	<ul> <li>Ignition switch: Other than LOCK and OFF</li> <li>Door switch: ON to OFF (Door status changes from open to close)</li> <li>Registered Intelligent Key is not detected inside the vehicle</li> </ul>
Take away warning	Door status is open	<ul> <li>Ignition switch: Other than LOCK and OFF</li> <li>Door switch: ON (Door is open)</li> <li>Registered Intelligent Key is not detected inside the vehicle during Key ID verification for 5 seconds</li> </ul>
	Push button-ignition switch operation	<ul> <li>Ignition switch: Other than LOCK position</li> <li>Push-button ignition switch is pressed</li> <li>Registered Intelligent Key is not detected inside the vehicle</li> </ul>
Door lock operation warr	ning	Door lock operation is requested while door lock operation condition of door request switch is not satisfied
	Ignition switch is ON position	Ignition switch: ON position     Shift position: P     Engine is stopped
Engine start information	Ignition switch is other than ON position	<ul> <li>Ignition switch: Other than ON</li> <li>Shift position: P</li> <li>Intelligent Key is in the passenger room after driver door is opened and closed</li> </ul>
	Ignition switch is ON position to OFF position	Ignition switch: ON position to OFF position     Shift position: P position     NOTE:     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.
Intelligent Key low batter	y warning	BCM detects that Intelligent Key is low battery, after ignition switch is turned ON
Key ID warning		<ul><li>Push-button ignition switch is pressed</li><li>Registered Intelligent Key is not detected inside the vehicle</li></ul>

<sup>\*:</sup> M/T models do not apply.

### WARNING METHOD

The following table shows the alarm or warning methods with chime.

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< SYSTEM DESCRIPTION >

### [WITH INTELLIGENT KEY SYSTEM]

			Shift P	Warning	chime	Engine start
Warning/Info	rmation functions	"KEY" warning lamp	warning lamp	Combination meter buzzer	Intelligent Key warn- ing buzzer	operation in- dicator lamp
Intelligent Key system n	nalfunction	Indicate	_	_	_	_
OFF position warning For internal — For external —		_	_	Activate	_	_
		_	_	_	Activate	_
P position warning	For internal	Blink (yellow)	Indicate	Activate	_	_
P position warning	For external	billik (yellow)	_	_	Active	_
ACC warning		_	_	Activate	_	_
	Door is open to close		_	Activate	Activate	_
Take away warning	Door is open	Blink (yellow)	_	_	_	_
rano amay mammig	Push-ignition switch operation	2 (Jenem)	_	Activate	_	_
Door lock operation war	rning	_	_	_	Activate	_
Engine start information	Engine start information		_	_	_	Indicate
Intelligent Key low batte	ery warning	Blink (green)	_	_	_	_
Key ID warning	Blink (yellow)	_	_	_	_	

### LIST OF OPERATION RELATED PARTS

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

Function  Intelligent Key system malfunction		Intelligent Key	Push-button ignition switch	Door switch	Door request switch	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	Combination meter buzzer	CAN communication system	ВСМ	Shiff P warning lamp	Engine start operation indicator lamp	"KEY" warning lamp
Intelligent Key system malfunction										×	×			×
OFF position warning	For internal			×					×	×	×			
Of a position warning	For external			×				×			×			
P position warning			×						×	×	×	×		×
ACC warning			×						×	×	×			
	Door is open or close	×		×		×		×	×	×	×			×
Take away warning	Door is open	×		×		×				×	×			×
rate away warming	Push-button ignition switch operation	×	×			×			×	×	×			×
Door lock operation warning		×		×	×	×	×	×			×			
Key ID warning			×			×				×	×			×
Engine start information		×	×			×				×	×		×	
Intelligent Key low battery	warning	×				×				×	×			×

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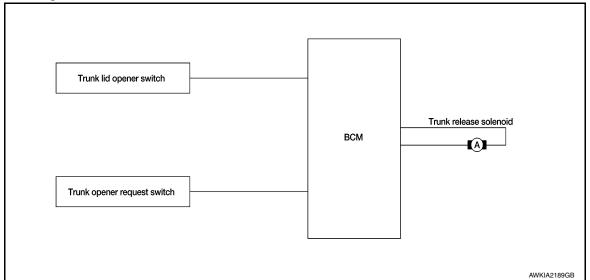
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# SYSTEM (TRUNK LID OPENER SYSTEM)

### System Diagram

INFOID:0000000009756357



### **System Description**

INFOID:0000000009756358

### TRUNK LID OPENER OPERATION

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

### **OPERATION CONDITION**

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

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

### **DIAGNOSIS SYSTEM (BCM)**

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

# DIAGNOSIS SYSTEM (BCM)

**COMMON ITEM** 

COMMON ITEM: CONSULT Function (BCM - COMMON ITEM)

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### APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Direct Diagnostic Mode	Description	
ECU identification	The BCM part number is displayed.	
Self Diagnostic Result	The BCM self diagnostic results are displayed.	
Data Monitor	The BCM input/output data is displayed in real time.	
Active Test	The BCM activates outputs to test components.	
Work support	The settings for BCM functions can be changed.	
Configuration	<ul> <li>The vehicle specification can be read and saved.</li> <li>The vehicle specification can be written when replacing BCM.</li> </ul>	
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication is displayed.	

### SYSTEM APPLICATION

BCM can perform the following functions.

		Direct Diagnostic Mode						
System	Sub System	ECU identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN DIAG SUPPORT MNTR
Door lock	DOOR LOCK		×	×	×	×		
Rear window defogger	REAR DEFOGGER			×	×			
Warning chime	BUZZER			×	×			
Interior room lamp timer	INT LAMP			×	×	×		
Exterior lamp	HEAD LAMP			×	×	×		
Wiper and washer	WIPER			×	×	×		
Turn signal and hazard warning lamps	FLASHER			×	×	×		
Air conditioner	AIR CONDITIONER			×				
Intelligent Key system	INTELLIGENT KEY		×	×	×	×		
Combination switch	COMB SW			×				
BCM	ВСМ	×	×			×	×	×
Immobilizer	IMMU		×	×	×	×		
Interior room lamp battery saver	BATTERY SAVER			×	×	×		
Trunk open	TRUNK			×				
Vehicle security system	THEFT ALM			×	×	×		
RAP system	RETAINED PWR			×				
Signal buffer system	SIGNAL BUFFER			×				
TPMS	AIR PRESSURE MONITOR		×	×	×	×		

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### **DOOR LOCK**

DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)

INFOID:0000000010290945

### **DATA MONITOR**

Monitor Item [Unit]	Description	
REQ SW-DR [On/Off]	Indicates condition of door request switch LH.	
REQ SW-AS [On/Off]	Indicates condition of door request switch RH.	
REQ SW -BD/TR [On/Off]	Indicates condition of trunk open switch.	
DOOR SW-DR [On/Off]	Indicates condition of front door switch LH.	
DOOR SW-AS [On/Off]	Indicates condition of front door switch RH.	
DOOR SW-RR [On/Off]	Indicates condition of rear door switch RH.	
DOOR SW-RL [On/Off]	Indicates condition of rear door switch LH.	
DOOR SW-BK [On/Off]	Indicates condition of trunk switch.	
CDL LOCK SW [On/Off]	Indicates condition of lock signal from door lock and unlock switch.	
CDL UNLOCK SW [On/Off]	Indicates condition of unlock signal from door lock and unlock switch.	
KEY CYL LK-SW [On/Off]	Indicates condition of lock signal from door key cylinder switch.	
KEY CYL UN-SW [On/Off]	Indicates condition of unlock signal from door key cylinder switch.	

### **ACTIVE TEST**

Test Item	Description
DOOR LOCK	This test is able to check door lock operation [OTR ULK/AS UNLK/DR UNLK/ALL UNLK/ALL LOCK].

### **WORK SUPPORT**

Support Item	Setting	Description			
DOOR LOCK-UNLOCK SET	On*	Automatic door locks function ON.			
	Off	Automatic door locks function OFF.			
AUTOMATIC LOCK/UNLOCK SELECT	Lock/Unlock*	Automatic door locks function operates in lock and unlock.			
	Lock Only	Automatic door locks function operates in lock only.			
	Unlock Only	Automatic door locks function operates in unlock only.			
	Off	Automatic door locks function OFF.			
AUTOMATIC DOOR LOCK SELECT	P RANGE	Doors lock automatically when shifted out of Park (P).			
	VH SPD*	Doors lock automatically when vehicle speed reaches 24 km/h (15 mph).			
AUTOMATIC DOOR UNLOCK SELECT	MODE6*	Drivers door unlocks automatically when key is removed.			
	MODE5	Drivers door unlocks automatically when shifted into Park (P).			
	MODE4	Drivers door unlocks automatically when ignition is switched from ON to OFF.			
	MODE3	Doors unlock automatically when key is removed.			
	MODE2	Doors unlock automatically when shifted into Park (P).			
	MODE1	Doors unlock automatically when ignition is switched from ON to OFF.			

<sup>\*:</sup> Initial setting

INTELLIGENT KEY

INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)

NFOID:0000000010290946

SELF DIAGNOSTIC RESULT Refer to <u>BCS-49</u>, "DTC <u>Index"</u>.

## **DIAGNOSIS SYSTEM (BCM)**

## < SYSTEM DESCRIPTION >

## [WITH INTELLIGENT KEY SYSTEM]

Α

### DATA MONITOR

Monitor Item [Unit]	Main	Description
REQ SW -DR [On/Off]	×	Indicates condition of door request switch LH.
REQ SW -AS [On/Off]	×	Indicates condition of door request switch RH.
REQ SW -BD/TR [On/Off]	×	Indicates condition of trunk open switch.
PUSH SW [On/Off]		Indicates condition of push-button ignition switch.
CLUCH SW [On/Off]		Indicates condition of clutch switch.
BRAKE SW 1 [On/Off]	×	Indicates condition of brake switch.
BRAKE SW 2 [On/Off]		Indicates condition of brake switch.
DETE/CANCL SW [On/Off]	×	Indicates condition of P (park) position.
SFT PN/N SW [On/Off]	×	Indicates condition of P (park) or N (neutral) position.
UNLK SEN -DR [On/Off]	×	Indicates condition of driver door unlock sensor.
PUSH SW -IPDM [On/Off]		Indicates condition of push-button ignition switch received from IPDM E/R on CAN communication line.
IGN RLY1 -F/B [On/Off]		Indicates condition of ignition relay 1 received from IPDM E/R on CAN communication line.
DETE SW -IPDM [On/Off]		Indicates condition of detent switch received from TCM on CAN communication line.
SFT PN -IPDM [On/Off]		Indicates condition of P (park) or N (neutral) position from TCM on CAN communication line.
SFT P -MET [On/Off]		Indicates condition of P (park) position from TCM on CAN communication line.
SFT N -MET [On/Off]		Indicates condition of N (neutral) position from IPDM E/R on CAN communication line.
ENGINE STATE [Stop/Start/Crank/Run]	×	Indicates condition of engine state from ECM on CAN communication line.
VEH SPEED 1 [mph/km/h]	×	Indicates condition of vehicle speed signal received from ABS on CAN communication line.
VEH SPEED 2 [mph/km/h]	×	Indicates condition of vehicle speed signal received from combination meter on CAN communication line.
DOOR STAT -DR [LOCK/READY/UNLK]	×	Indicates condition of driver side door status.
DOOR STAT -AS [LOCK/READY/UNLK]	×	Indicates condition of passenger side door status.
ID OK FLAG [Set/Reset]		Indicates condition of Intelligent Key ID.
PRMT ENG STRT [Set/Reset]		Indicates condition of engine start possibility.
PRMT RKE STRT [Set/Reset]		Indicates condition of engine start possibility from Intelligent Key.
RKE OPE COUN1 [0-19]	×	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing.
RKE OPE COUN2 [0-19]	×	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing.
TRNK/HAT MNTR [On/Off]		Indicates condition of trunk room lamp switch.
RKE-LOCK [On/Off]		Indicates condition of lock signal from Intelligent Key.
RKE-UNLOCK [On/Off]		Indicates condition of unlock signal from Intelligent Key.
RKE-TR/BD [On/Off]		Indicates condition of trunk open signal from Intelligent Key.
RKE-PANIC [On/Off]		Indicates condition of panic signal from Intelligent Key.
RKE-MODE CHG [On/Off]		Indicates condition of mode change signal from Intelligent Key.

**ACTIVE TEST** 

## **DIAGNOSIS SYSTEM (BCM)**

## [WITH INTELLIGENT KEY SYSTEM]

Test Item	Description
INSIDE BUZZER	This test is able to check combination meter warning chime operation [Take Out/Knob/Key/Off].
LCD	This test is able to check combination meter display information [Off/LK WN/OUTKEY/NO KY/BATT/INSRT/SFT P/ROTAT/ID NG/B&P I/B&P N].
BATTERY SAVER	This test is able to check battery saver operation [On/Off].
ENGINE SW ILLUMI	This test is able to check push-button ignition switch START indicator operation [On/Off].
PUSH SWITCH INDICATOR	This test is able to check push-button ignition switch indicator operation [On/Off].
TRUNK/BACK DOOR	This test is able to check trunk actuator operation [Open].
INT LAMP	This test is able to check interior room lamp operation [On/Off].
INDICATOR	This test is able to check combination meter warning lamp operation [KEY ON/KEY IND/Off].
FLASHER	This test is able to check hazard lamp operation [LH/RH/Off].
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation [On/Off].
HORN	This test is able to check horn operation [On].
P RANGE	This test is able to check CVT shift selector illumination operation [On/Off].

## **WORK SUPPORT**

Support Item	Se	etting	Description						
LOCK/UNLOCK BY I-KEY	On*		Door lock/unlock function from Intelligent Key ON.						
LOCK UNLOCK BY I-REY	Off		Door lock/unlock function from Intelligent Key OFF.						
TRUNKICI ACCULATCU ODEN	On*		Buzzer reminder function from trunk opener switch.						
TRUNK/GLASS HATCH OPEN	Off		No buzzer reminder function from trunk opener switch.						
ANTI KEV LOCK IN ELINOTI	On*		Anti lock out setting ON.						
ANTI KEY LOCK IN FUNCTI	Off		Anti lock out setting OFF.						
AND DACK I VEVI INI OCK	Off		No buzzer reminder when doors are unlocked with request switch.						
ANS BACK I-KEY UNLOCK	On*		Buzzer reminder when doors are unlocked with request switch.						
	Horn Chir	р	Horn chirp reminder when doors are locked with request switch.						
ANS BACK I-KEY LOCK	Buzzer*		Buzzer reminder when doors are locked with request switch.						
	Off		No reminder when doors are locked with request switch.						
HODNI WITH KEVI ESS LOOK	Off		Horn chirp reminder when doors are locked with Intelligent Key.						
HORN WITH KEYLESS LOCK	On*		No horn chirp reminder when doors are locked with Intelligent Key.						
ENGINE START BY I-KEY	On*		Engine start function from Intelligent Key ON.						
ENGINE START BY I-REY	Off		Engine start function from Intelligent Key OFF.						
	Lock/Unio	ck*	Hazard warning lamp activation when doors are locked/unlocked with Intelligent Key or request switch.						
HAZADD ANGWED DAGK	Unlock Or	nly	Hazard warning lamp activation when doors are unlocked with Intelligent Key or request switch.						
HAZARD ANSWER BACK	Lock Only	,	Hazard warning lamp activation when doors are locked with Intelligent Key or request switch.						
	Off		No hazard warning lamp activation when doors are locked/unlocked with Intelligent Key or request switch.						
INSIDE ANT DIAGNOSIS		_	This function allows inside key antenna self-diagnosis.						
CONFIRM KEY FOB ID		_	Intelligent Key ID code can be checked.						
		70 msec							
SHORT CRANKING OUTPUT	Start	100 msec	Starter motor operation duration time setting.						
SHURT CRAINNING UUTPUT		200 msec							
	End	1	<del>-</del>						

## **DIAGNOSIS SYSTEM (BCM)**

#### < SYSTEM DESCRIPTION >

### [WITH INTELLIGENT KEY SYSTEM]

Support Item	Se	tting	Description	Λ
	MODE 3	1.5 sec		А
PANIC ALARM SET	MODE 2	OFF	Intelligent Key panic alarm button setting.	
	MODE 1*	0.5 sec		В
LO- BATT OF KEY FOB WARN	On*		Intelligent Key low battery warning ON.	
LO-BATT OF RET FOB WARN	Off		Intelligent Key low battery warning OFF.	
	MODE7	5 min		С
	MODE6	4 min		
	MODE5	3 min		D
AUTO LOCK SET	MODE4	2 min	Auto door lock time setting.	
	MODE3*	1 min		
	MODE2	30 sec		Е
	MODE1	Off		
	MODE 3	1.5 sec		F
TRUNK OPEN DELAY	MODE 2	OFF	Intelligent Key trunk open button setting.	1
	MODE 1*	0.5 sec		

<sup>\*:</sup> Initial Setting

## **TRUNK**

TRUNK: CONSULT Function (BCM - TRUNK)

#### **DATA MONITOR**

Monitor Item [Unit]	Description
PUSH SW [On/Off]	Indicates condition of push-button ignition switch.
UNLK SEN -DR [On/Off]	Indicates condition of driver door unlock sensor.
VEH SPEED 1 [km/h]	Indicates vehicle speed signal received from ABS on CAN communication line.
TR/BD OPEN SW [On/Off]	Indicates condition of trunk open switch.
TRNK/HAT MNTR [On/Off]	Indicates condition of trunk room lamp switch.
RKE-TR/BD [On/Off]	Indicates condition of trunk open signal from Intelligent Key.

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# **ECU DIAGNOSIS INFORMATION**

**BCM** 

## List of ECU Reference

INFOID:0000000009756363

ECU	Reference
	BCS-29, "Reference Value"
BCM	BCS-46, "Fail-safe"
BOW	BCS-48, "DTC Inspection Priority Chart"
	BCS-49, "DTC Index"

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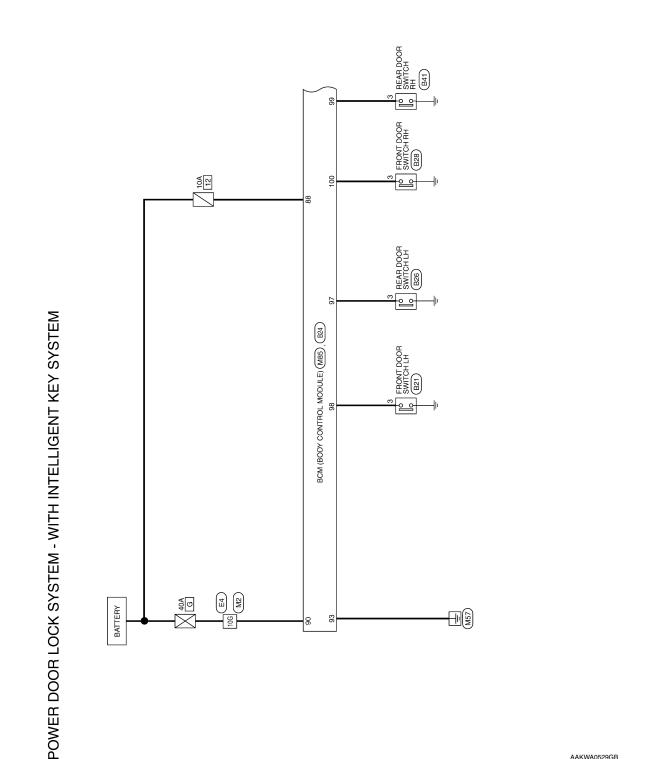
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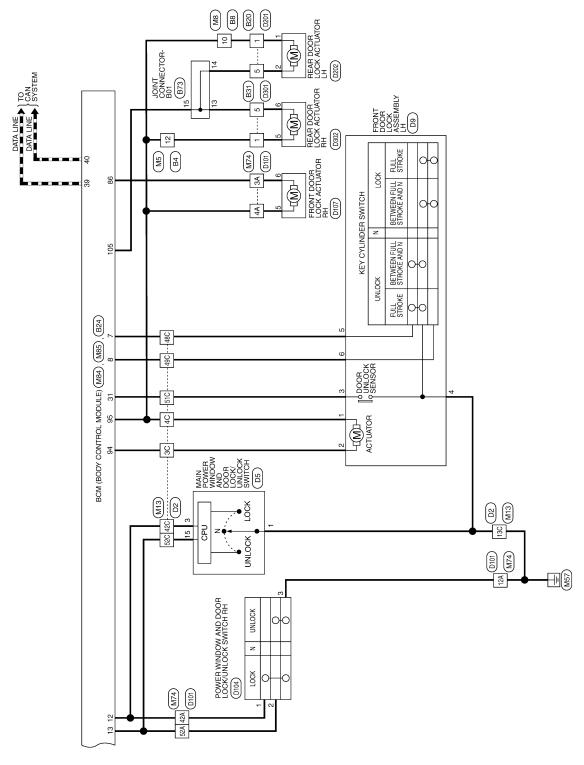
# **WIRING DIAGRAM**

## POWER DOOR LOCK SYSTEM

Wiring Diagram INFOID:0000000009756364 В

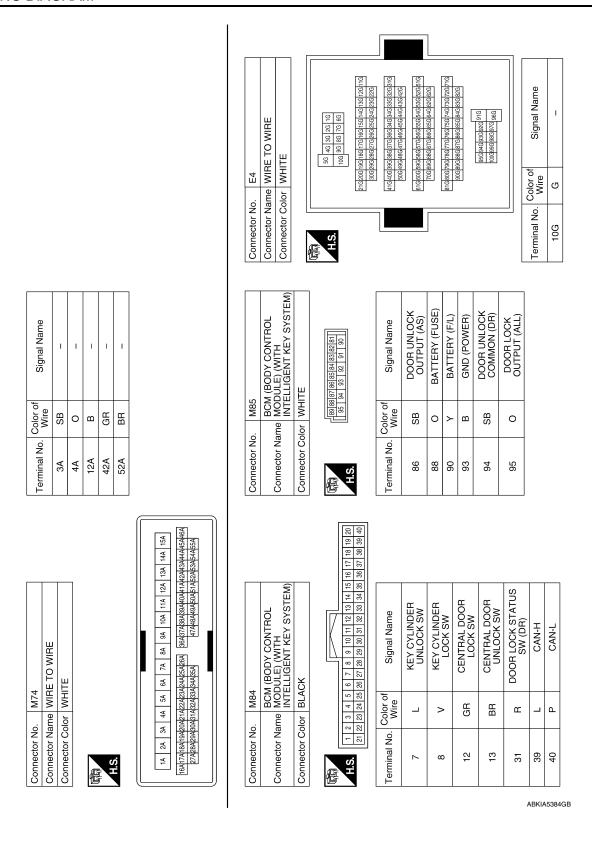


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Connector No.         M5         Connector No.         M8           Connector Name         WIRE TO WIRE         Connector Name         WIRE TO WIRE           Connector Color         WHITE         Connector Color         WHITE	H.S. (12 11 10 9 8 7 6	Terminal No. Color of Signal Name										
O WIRE	12 11 10 8 8 11	Signal Name		Signal Name	1	1   1	1	I	I	1 1	1	
Connector No. M5 Connector Name WIRE TO WIRE Connector Color WHITE	H.S.	Terminal No. Color of Wire		Terminal No. Wire		4C 0		48C L	+	52C BB		
										9C 10C 11C 12C 13C 14C 15C		
RE TO WIRE	10 20 30 40 56 60 77 80 90 100 119 20 30 40 30 40 30 90 20 0	210 220 G20 G40 G20 G80 G80 G80 G80 G80 G80 G80 G80 G80 G8	Signal Name	3 BE TO WIBE	WHITE					9 27 38	0240250 0340350	
Connector No. M2 Connector Name WIRE TO WIRE Connector Color WHITE	H.S.		Terminal No. Wire	Connector No. M13 Connector Name WIRE TO WIRE	Connector Color Wh	<u>[</u>	达达	11.5		10 20 30 40 50	10/2002/10/28 10/300/310/38	
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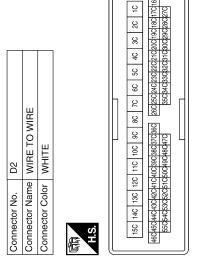


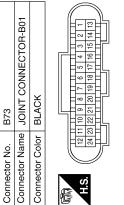
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	, ame	H1 H2H LH	Аате	E
WIRE TO WIRE WHITE  4 3	Signal Name	Connector No. B26 Connector Name REAR DOOR SWITCH LH Connector Color WHITE	Signal Name	(
	Color of Wire ×	No. B26 Name REAR C Color WHITE	Color of GR	
Connector No. Connector Name Connector Color	Terminal No.	Connector No. Connector Color Connector Color H.S.	Terminal No.	E
				F
35 (v) (v)	Signal Name -	B24  BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM) BLACK  Gling   105   10	Signal Name DOOR SW (RL) DOOR SW (DR) DOOR SW (RR) DOOR SW (AS) DOOR UNLOCK OUTPUT (RR, RL)	(
WIRE TO WIRE WHITE		B24   BCM (BODY CON   MODULE) (WITH   INTELLIGENT KE)   BLACK   BLACK   MODULE) (WITH   INTELLIGENT KE)		ŀ
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VIRE 5 6 7 14 15 16	Signal Name	OR SWITCH LH	Signal Name	L
HTE 4		B21 FRONT DOOR SWIT WHITE		N
	o. Color of Wire	No. Name Color N FI	Oolor of Wire	١
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			AAKIA0986GB	

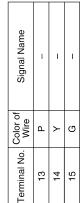
Revision: October 2013 DLK-45 2014 Sentra NAM

	WITCH RH			Signal Name		
B41	REAR DOOR S	WHITE	1 2 3 3 4 4			
Connector No. B41	Connector Name REAR DOOR SWITCH RH	Connector Color WHITE	雨 H.S.	Terminal No. Wire	З Р	
	O WIRE		7 6 5 1	Signal Name	1	
. B31	me WIRE T	lor WHITE	10 9 8	Color of Wire	SB	۵
Connector No.	Connector Name WIRE TO WIRE	Connector Color WHITE	师 H.S.	Terminal No. Wire	-	ĸ
	Connector Name FRONT DOOR SWITCH RH	LE .	4 0	Signal Name	ı	
o. B28	ame FROI	Connector Color WHITE	2	Terminal No. Wire	œ	
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Signal Name	1	ı	_	_	ı	_	_	ı
Color of Wire	٦	BR	В	٦	>	В	M	BR
Terminal No.	30	4C	13C	42C	48C	49C	51C	52C







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### **POWER DOOR LOCK SYSTEM**

## [WITH INTELLIGENT KEY SYSTEM]

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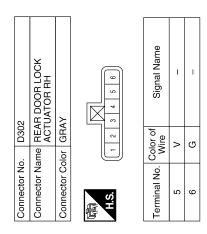
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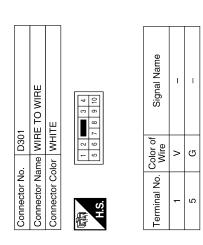
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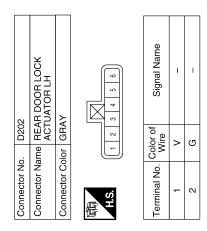
### < WIRING DIAGRAM >

Connector No. D101 Connector Name WIRE TO WIRE Connector Color WHITE H.S.	15A   14A   13A   12A   11A   10A   9A   8A   7A   6A   5A   4A   3A   2A   1A   1A   1A   1A   1A   1A   1	Connector No. D201 Connector Name WIRE TO WIRE Connector Color WHITE  MIS. TERMS 4  S 6 7 8 9 10	Terminal No. Color of Wire Signal Name
PBONT DOOR LOCK ASSEMBLY LH GRAY   2 3 4 5 6	Signal Name	FRONT DOOR LOCK ACTUATOR RH GRAY	Signal Name
9 5 E	Color of Wire BR K K K K K K K K K K K K K K K K K K		Color of Wire
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D5  MAIN POWER WINDOW  AND DOOR LOCK/UNLOCK  SWITCH  WHITE  6 5 4	Signal Name GND LOCK SW UNLOCK SW	D104 POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH WHITE  1 2   3   5   11   12   5   5   5   5   5   5   5   5   5	Signal Name
	Color of Wire B B B B B B B B B B B B B B B B B B B		Color of Wire BR BR BR
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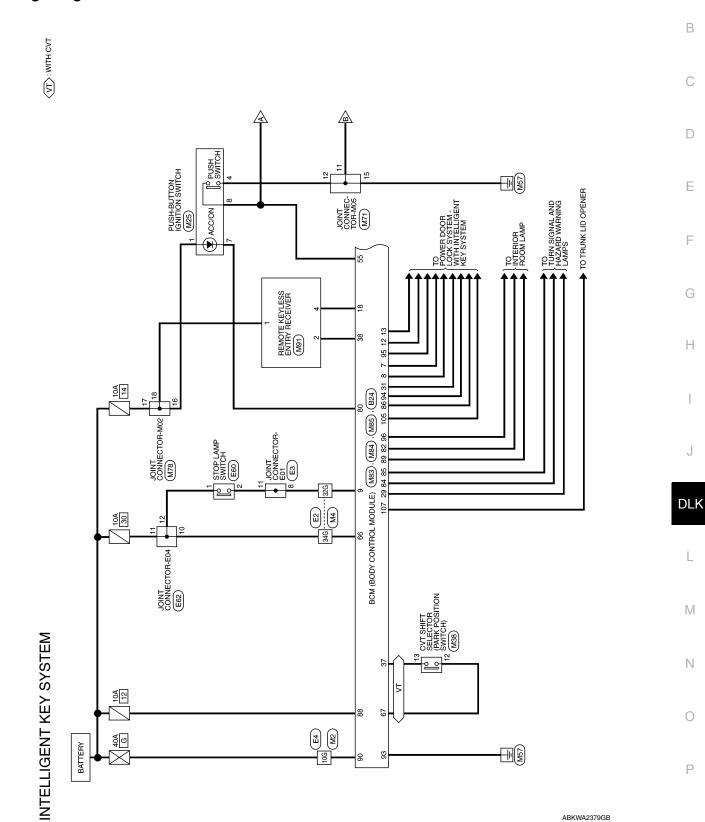


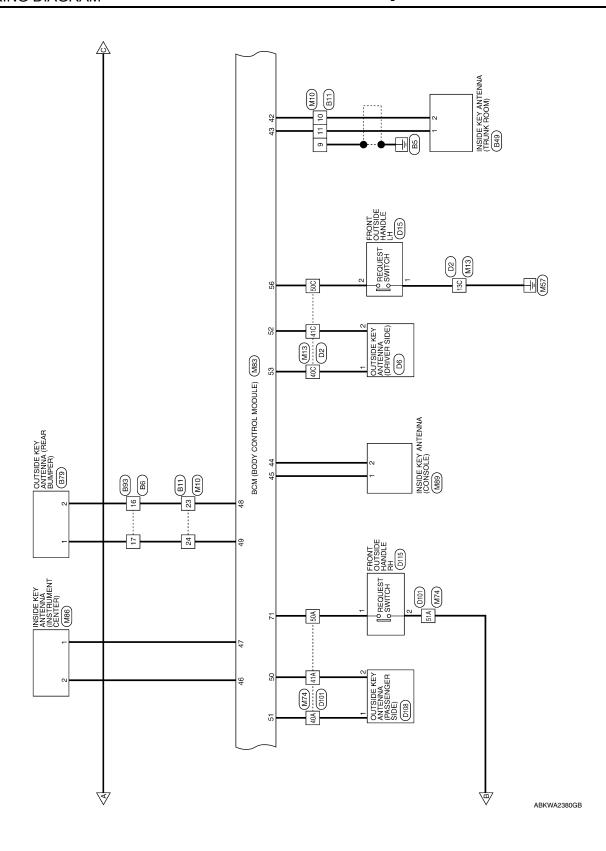


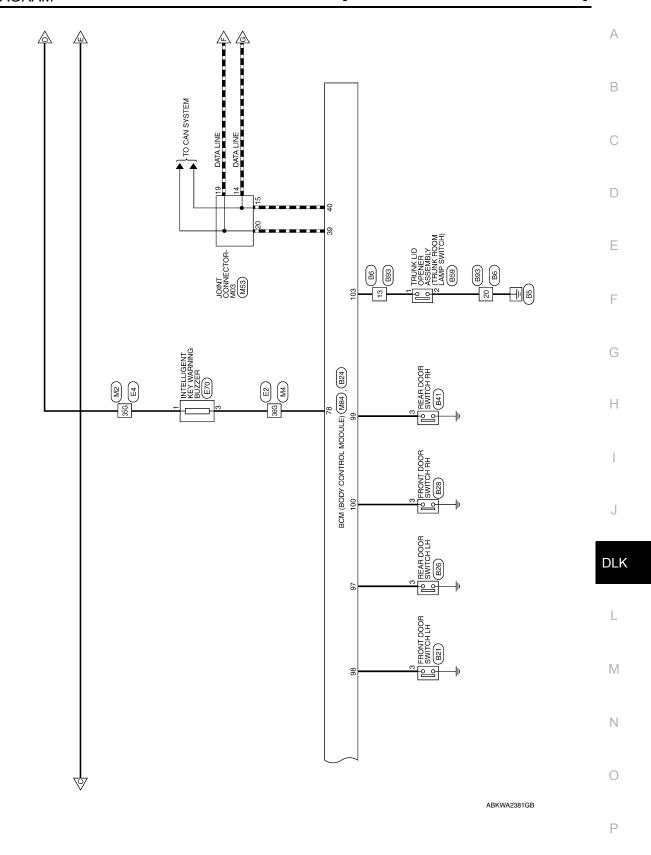
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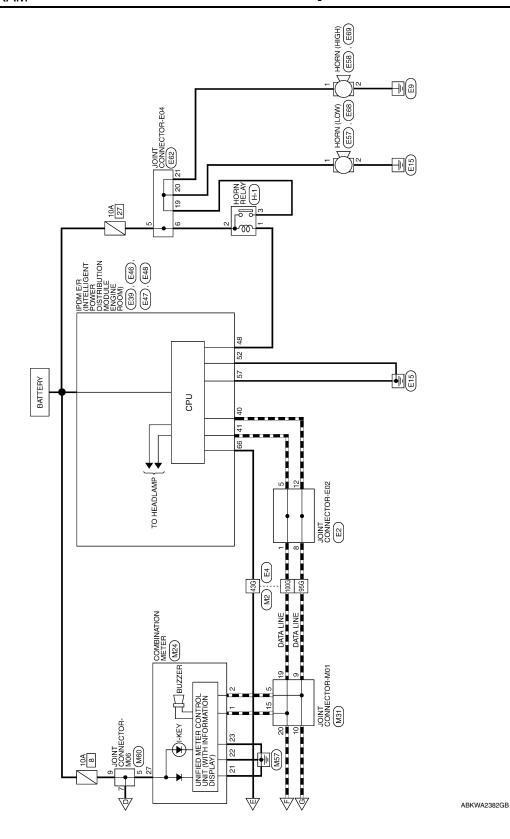
## **INTELLIGENT KEY SYSTEM**

Wiring Diagram









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Connector No. M10 Connector Name WIRE TO WIRE		_		12 11 10 9 8 7 6 5 4 3 2 1			3000	Terminal No. Wire Signal Name	10 BR –	- Y	23 R –	24 W –			Connector No. M25	SWITCH SWITCH	Connector Color   WHITE		4 3 2 1	9			Terminal No.   Color of   Signal Name	<b>├</b>	8 P		- BT 8		
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r of Signal Name	1	1	I	-	1	1	I								M24	OMBINA ION MI	Ш				12 11 10 9 8	33 32 31 30 29 28 27	r of Signal Name	CAN-H	CAN-L	GND (ILL)	GND2 (POWER)	GND3 (CIRCUIT)	BAT
Terminal No. Wire	10G Y	32G R	34G V	35G BR	36G W	43G LG	95G P	100G L							Connector No. M24		Connector Color WHITE		H.S.		18 17 16 15 14	40 39 38 37 36 35 34 33	Terminal No. Wire	1	2 P	21 B	22 B	23 B	27 LG
					•	•	•												•		00 110 120 130 140 150	38C39C40C41C42C43C44C45C46C			1				
Connector No. M2 Connector Name WIRE TO WIRE	!!!! !!			16 26 36 46 56	66 76 86 96 106	36146156166176186196206216	226236246256286276286296306	316326336346346366376386396406416	3G44G45G46G47G48G49G50G	519529539549559569579589599609619	62G 62G 64G 65G 65G 67G 68G 69G 70G	71G72G73G74G75G76G77G78G79G80G81G 82G83G84G85G86G87G88G89G90G	916 <u>pzcg 930 gud ges</u> 966 <u>970 980 geoch 100</u>		Connector No. M13	יין אין אין אין אין אין אין אין אין אין	<u>ш</u>				60 70 80 90 1	36C37C	2/4		Signal Name	1	ı	ı	I
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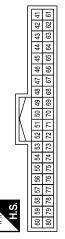
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Connector No.   M53	of Signal Nam	. 6 7 7	Connector No. M74 Connector Name WIRE TO WIRE Connector Color WHITE	1A   2A   3A   4A   5A   6A   7A   8A   9A   10A   11A   12A   13A   14A   15A   16A   17A   1
ctor No. M38  ctor Name CVT SHIFT  ctor Color WHITE	Terminal No.	} a	Connector No. M71  Connector Name JOINT CONNECTOR-M05  Connector Color PINK  To 9 8 7 6 5 4 3 2 1  H.S.	Terminal No.         Color of Wire         Signal Name           11         B         -           12         B         -           15         B         -
No. M31  Name JOINT CONNECTOR-M01  Solor GRAY  10 9 8 7 6 5 4 3 2 1 1	l Ra l		M60 JOINT CONNEC BLUE  8 7 6 5 4 8 9 1 18 17 16 115 114 11	Color of Wire Signal Name LG - BR - WW
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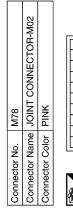
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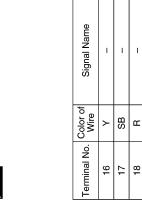
M84   M84		Y CONTROL WITH NT KEY SYSTEM)			12 13 14 15 16 17 18 19 20 32 33 34 35 36 37 38 39 40	Signal Name	KEY CYLINDER UNLOCK SW	KEY CYLINDER LOCK SW	BRAKE SW1	CENTRAL DOOR LOCK SW	CENTRAL DOOR UNLOCK SW	KEYLESS TUNER, AUTO LIGHT SENSOR GND	HAZARD SW	DOOR LOCK STATUS SW (DR)	SHIFT P POSITION, PARKING POSITION SW (WITH CVT)	INTELLIGENT TUNER	CAN-H	
	M84	BCM (BODY MODULE) (V INTELLIGEN	BLACK		8 9 10 11 28 29 30 31													
	Connector No.	Connector Name	Connector Color	H.S.	4 5 6 24 25 26			8	6	12 G	13 B	18	29 S	31 F	37 F	38 Li	39	

Connector Name MODULE) (WITH INTELLIGENT KEY SYSTEM) Connector Color WHITE	Connector No.	M83
Connector Color WHITE	Connector Name	BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM)
	Connector Color	WHITE



Signal Name	ROOM ANTENNA 3 -	ROOM ANTENNA 3+	ROOM ANTENNA 2 -	ROOM ANTENNA 2 +	ROOM ANTENNA 1 -	ROOM ANTENNA 1 +	BACK DOOR ANTENNA -	BACK DOOR ANTENNA +	DOOR ANTENNA (AS) -	DOOR ANTENNA (AS) +	DOOR ANTENNA (DR) -	DOOR ANTENNA (DR) +	<b>ENGINE START SW</b>	REQUEST SW (DR)	BRAKE SW2	AT DEVICE OUTPUT	REQUEST SW (AS)	SMART KEYLESS BUZZER OUTPUT	POWER POSITION LED (LOCK POSITION LED)
Color of Wire	BR	У	ш	ŋ	GR	BR	ш	*	<b>&gt;</b>	BR	ГВ	Д	ГG	В	^	SB	GR	W	>
Terminal No.	42	43	44	45	46	47	48	49	50	51	52	53	22	99	99	29	71	78	80





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Signal Name

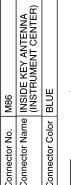
Color of Wire

Terminal No.

Connector No.	M86
Connector Name	Connector Name INSIDE KEY ANTENNA (INSTRUMENT CENTER)
Connector Color BLUE	BLUE





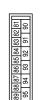




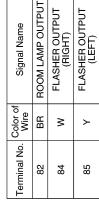
Signal Name	ı	-	
Color of Wire	BR	GR	
Terminal No.	٢	7	

Signal Name	DOOR UNLOCK OUTPUT (AS)	BATTERY (FUSE)	BATTERY SAVER OUTPUT	BATTERY (F/L)	GND (POWER)	DOOR UNLOCK COMMON (DR)	DOOR LOCK OUTPUT (ALL)
Color of Wire	SB	0	۵	>	В	SB	0
Terminal No.	98	88	68	06	93	94	92

Connector No.	M85
Connector Name	Connector Name MODULE) (WITH INTELLIGENT KEY SYSTEM)
Connector Color WHITE	WHITE







M91	REMOTE KEYLESS ENTRY RECEIVER (WITH INTELLIGENT KEY SYSTEM)	WHITE	
Connector No.	Connector Name	Connector Color WHITE	

Connector Name JOINT CONNECTOR-E02

<u>E</u>2

Connector No.

Connector Color BLUE



Signal Name	I	1	ı
Color of Wire	ш	ГG	>
Terminal No.	1	2	4

Connector Name	Connector Color	而 H.S.
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Conne	Conne	E OF

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Connector Name INSIDE KEY ANTENNA (CONSOLE) BLUE

Connector Color

M89

Connector No.



Signal Name	-	ı	
Color of Wire	G	œ	
Terminal No.	1	2	

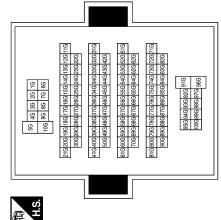
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Signal Name	ı	1	ı	_	1	ı	-	I
Color of Wire	σ	SB	*	В	GR	_	Ь	_
Terminal No. Wire	10G	32G	34G	926	36G	43G	526	100G

Connector Name WIRE TO WIRE

Connector No. E4

Connector Color WHITE



Connector No.	). E3	
Connector Na	Ime JOII	Connector Name JOINT CONNECTOR-E01
Connector Color BLUE	olor BLL	E
H.S.	12 11 10 9	8 7 8 2 1
Terminal No.	Color of Wire	Signal Name
8	SB	ı
11	SB	ı

Connector No.	). E47	
Connector Name		IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	olor BROWN	NWN
原 H.S.	56	55 54 53 52
Terminal No.	Color of Wire	Signal Name
52	Β/Y	GND (SIGNAL)

Connector No.	. E46	
onnector Na	me POV MOI	Connector Name POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color WHITE	lor WHI	TE
H.S.	42 41 48 47	45 43 33 37 44 43 43 43 43 43 43 43 43 43 43 43 43
Terminal No. Wire	Color of Wire	Signal Name
40	Ь	CAN-L
41	_	CAN-H

o. E39	ame POWER DISTRIBUTION MODULE ENGINE ROOM)	olor BLACK	67 66 65 64 63 72 71 77 69 68	Color of Signal Name Wire	L PUSH START SW
Connector No.	Connector Name	Connector Color	原。 H.S.	Terminal No.	99

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(京) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	Connector Name HORN (LOW) Connector Color BLACK  H.S.	(LOW)	Connector Name HORN (HIGH) Connector Color BLACK H.S.
Terminal No. Color of Signal Name 57 B/Y GND (POWER)	Terminal No. Wire	Signal Name	Terminal No. Color of Signal Name
Connector No. E60 Connector Name STOP LAMP SWITCH Connector Color WHITE	Connector No. E62  Connector Name JOINT CONNECTOR-E04  Connector Color BLACK	IT CONNECTOR-E04  CK  9 8 7 6 5 4 3 2 1  21 20 19 18 17 16 15 14 13	Connector No. E68 Connector Name HORN (LOW) Connector Color BLACK  Th.S.
Terminal No. Color of Signal Name  1 Wire	Terminal No. Color of 8 BR 6 BR 10 W 11 W 12 W 12 W 19 G 20 G	Signal Name	Terminal No. Color of Wire Signal Name

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### **INTELLIGENT KEY SYSTEM**

## [WITH INTELLIGENT KEY SYSTEM]

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< WIRING DIAGRAM >

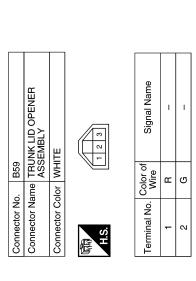
Connector Name   WIRE TO WIRE	Connector No.   B24
Connector No. E70 Connector Name INTELLIGENT KEY WARNING BUZZER Connector Color BROWN  Terminal No. Color of Signal Name  1 R - 3 GR -	Connector No. B21 Connector Name FRONT DOOR SWITCH LH Connector Color WHITE  Terminal No. Color of Signal Name  3 Y -
Connector Name HORN (HIGH) Connector Color BLACK  ##S.  Terminal No. Wire  2 B/W -	Connector No.   B11

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Revision: October 2013 DLK-59 2014 Sentra NAM

Connector No. B26 Connector Name REAR DOOR SWITCH Connector Color WHITE	AR DOOR SWITCH LH	Connector No. B28 Connector Name FRONT Connector Color WHITE	ame FRONT	Connector No. B28  Connector Name FRONT DOOR SWITCH RH  Connector Color WHITE	Connector Name REAR I Connector Color WHITE	ame REAF	Connector Name REAR DOOR SWITCH RH Connector Color WHITE
H.S.	2 3 4	是 H.S.	-	4	H.S.		4 8 8
Terminal No. Wire	Signal Name	Terminal No. Wire	Color of Wire	Signal Name	Terminal No. Wire	Color of Wire	Signal Name
3 GR	ı	3	œ	1	8	<u>م</u>	1

	OUTSIDE KEY ANTENNA (REAR BUMPER)	E		Signal Name	ı	1
. B79	me OUT	lor BLUE		Color of Wire	>	В
Connector No.	Connector Name	Connector Color	H.S.	Terminal No.	-	7



Connector No.	). B49	
Connector Na	ame INSI (TRI	Connector Name INSIDE KEY ANTENNA (TRUNK ROOM)
Connector Color	olor BLUE	E
H.S.		
Terminal No.	Color of Wire	Signal Name
1	۸	I
2	FG	ı

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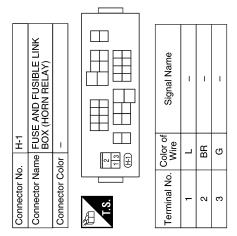
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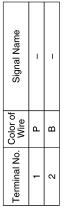
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Revision: October 2013 DLK-61 2014 Sentra NAM











D108	Connector Name OUTSIDE KEY ANTENN (PASSENGER SIDE)	GRAY
Connector No.	Connector Name	Connector Color GRAY





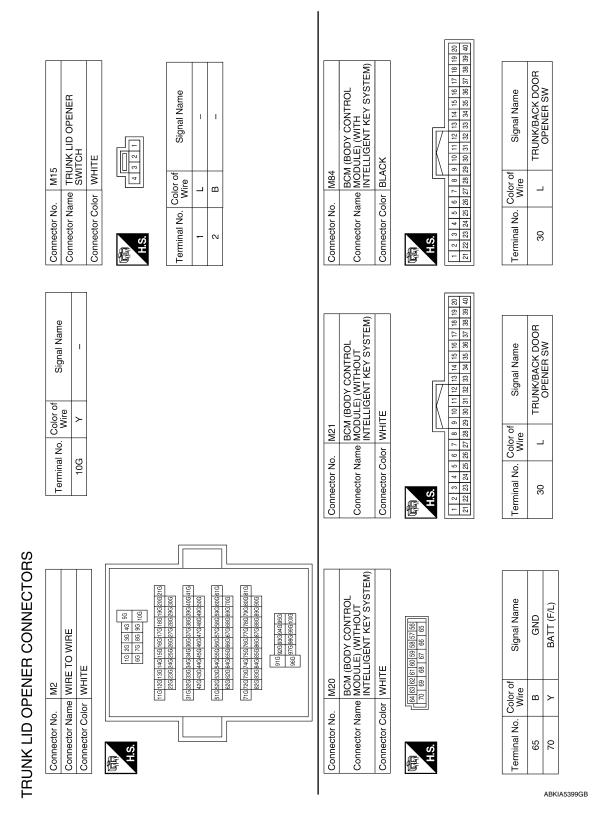
Signal Name	I	1
Color of Wire	Ь	>
Terminal No.	1	2

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# [WITH INTELLIGENT KEY SYSTEM] < WIRING DIAGRAM > TRUNK LID OPENER Α Wiring Diagram INFOID:0000000009756366 В С 93 D 103 . 90 $\mathbb{R}$ Е F G $\bigotimes_{\mathbb{A}} \bigotimes_{\mathbb{A}}$ - Til (25) Н B24 (B24) , MZ1 , M85 BCM (BODY CONTROL MODULE) (M20),( J TRUNK ROOM LAMP SWITCH DLK 883 893 M2 E4 GA (B) (B) 20 L M TRUNK LID OPENER Ν 0

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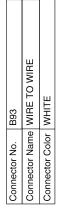
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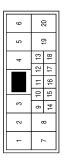
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Signal Name	I	-	ı	1
Color of Wire	Я	>	GR	В
Terminal No. Wire	13	18	19	20







Signal Name	1	1	_
Color of Wire	В	В	GR
Terminal No. Wire	+	2	3

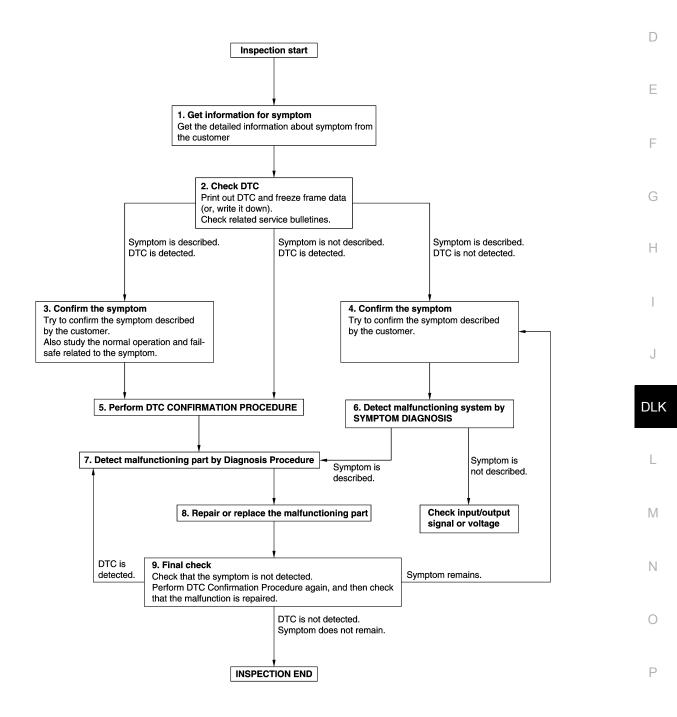
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# **BASIC INSPECTION**

### DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

**OVERALL SEQUENCE** 



JMKIA8652GB

#### DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

# 1.GET INFORMATION FOR SYMPTOM

- Get detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurs).
- 2. Check operation condition of the function that is malfunctioning.

>> GO TO 2.

## 2.CHECK DTC

- 1. Check DTC.
- 2. Perform the following procedure if DTC is detected.
- Record DTC and freeze frame data (Print them out using CONSULT.)
- Erase DTC.
- Study the relationship between the cause detected by DTC and the symptom described by the customer.
- 3. Check related service bulletins for information.

#### Are any symptoms described and any DTC detected?

Symptom is described, DTC is detected>>GO TO 3.

Symptom is described, DTC is not detected>>GO TO 4.

Symptom is not described, DTC is detected>>GO TO 5.

## 3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

Also study the normal operation and fail-safe related to the symptom.

Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5.

#### 4. CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 6.

## 5. PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC CONFIRMATION PROCEDURE for the detected DTC, and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle, and check self diagnostic results in real time. If two or more DTCs are detected, refer to <a href="BCS-48">BCS-48</a>, "DTC Inspection Priority Chart" and determine trouble diagnosis order.

#### NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC CONFIRMATION PROCEDURE is not included on Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check.

If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC CONFIR-MATION PROCEDURE.

#### Is DTC detected?

YES >> GO TO 7.

NO >> Check according to GI-39, "Intermittent Incident".

## 6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

Detect malfunctioning system according to SYMPTOM DIAGNOSIS based on the confirmed symptom in step 4, and determine the trouble diagnosis order based on possible causes and symptom.

#### Is the symptom described?

YES >> GO TO 7.

NO >> Monitor input data from related sensors or check voltage of related module terminals using CON-SULT.

## 7.DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

#### DIAGNOSIS AND REPAIR WORK FLOW

#### < BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.

NO >> Check according to GI-39, "Intermittent Incident".

## 8.repair or replace the malfunctioning part

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

>> GO TO 9.

## 9. FINAL CHECK

When DTC is detected in step 2, perform DTC CONFIRMATION PROCEDURE again, and then check that the malfunction is repaired securely.

When symptom is described by the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.

#### Is DTC detected and does symptom remain?

YES-1 >> DTC is detected: GO TO 7.

YES-2 >> Symptom remains: GO TO 4.

>> Before returning the vehicle to the customer, always erase DTC.

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#### **U1000 CAN COMM CIRCUIT**

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

# DTC/CIRCUIT DIAGNOSIS

## U1000 CAN COMM CIRCUIT

**Description** 

Refer to LAN-7, "CAN COMMUNICATION SYSTEM: System Description".

DTC Logic

#### DTC DETECTION LOGIC

#### NOTE

U1000 can be set if a module harness was disconnected and reconnected, perhaps during a repair. Confirm that there are actual CAN diagnostic symptoms and a present DTC by performing the Self Diagnostic Result procedure.

CONSULT Display	DTC Detection Condition	Possible Cause
CAN COMM CIRCUIT [U1000]	When any listed module cannot communicate with CAN communication signal continuously for 2 seconds or more with ignition switch ON	In CAN communication system, any item (or items) of the following listed below is malfunctioning.  Transmission Receiving (ECM) Receiving (VDC/TCS/ABS) Receiving (METER/M&A) Receiving (TCM) Receiving (IPDM E/R)

## Diagnosis Procedure

INFOID:0000000009756370

## 1. PERFORM SELF DIAGNOSTIC RESULT

- 1. Turn ignition switch ON and wait for 2 seconds or more.
- 2. Check "SELF- DIAG RESULTS".

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

YES >> Perform CAN Diagnosis as described in DIAGNOSIS section of CONSULT operation manual.

NO >> Refer to GI-39, "Intermittent Incident".

## **U1010 CONTROL UNIT (CAN)**

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

# U1010 CONTROL UNIT (CAN)

DTC Logic

#### DTC DETECTION LOGIC

CONSULT Display	DTC Detection Condition	Possible Cause
CONTROL UNIT (CAN) [U1010]	BCM detected internal CAN communication circuit malfunction.	BCM

## Diagnosis Procedure

INFOID:0000000009756372

1.REPLACE BCM

When DTC "U1010" is detected, replace BCM.

>> Replace BCM. Refer to BCS-73. "Removal and Installation".

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#### **B2621 INSIDE ANTENNA**

[WITH INTELLIGENT KEY SYSTEM]

#### **B2621 INSIDE ANTENNA**

DTC Logic

#### NOTE:

The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- · Check Intelligent Key relative signal strength
- Confirm vehicle Intelligent Key antenna signal strength

#### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2621	INSIDE ANTENNA 1	An excessive high or low voltage from inside antenna (instrument center) is sent to BCM	Inside key antenna (instrument center)     Harness between BCM and inside key antenna (instrument center)     BCM

#### 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.
- 3. 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-72</u>, "<u>Diagnosis Procedure</u>".

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

## Diagnosis Procedure

INFOID:0000000009756374

#### NOTE:

The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- Check Intelligent Key relative signal strength
- Confirm vehicle Intelligent Key antenna signal strength

Regarding Wiring Diagram information, refer to <u>DLK-49</u>, "Wiring Diagram".

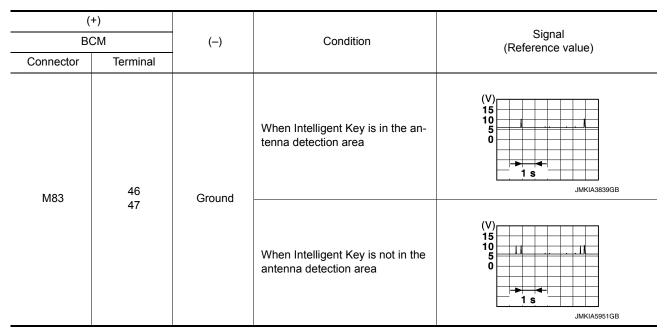
## 1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

### **B2621 INSIDE ANTENNA**

### < DTC/CIRCUIT DIAGNOSIS >

## [WITH INTELLIGENT KEY SYSTEM]



### Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-73</u>, "Removal and Installation".

NO >> GO TO 2.

# 2.CHECK INSIDE KEY ANTENNA CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect BCM connector and inside key antenna (instrument center) connector.
- 3. Check continuity between BCM harness connector and inside key antenna (instrument center) harness connector.

BCM		Inside key antenna (instrument center)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M83	47	M86	1	Yes
IVIOS	46	IVIOU	2	165

4. Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Terminal	Cround	Continuity	
M83	47	Ground	No	
IVIOS	46		INO	

### 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)
- Connect BCM connector and inside key antenna (instrument center) connector.
- Turn ignition switch ON.
- 4. Check signal between BCM harness connector and ground using oscilloscope.

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## **B2621 INSIDE ANTENNA**

(+) BCM		(–)	Condition	Signal (Reference value)
Connector	Terminal			
M83	47	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB
Wido	46	Sidding	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1   III

## Is the inspection result normal?

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

NO >> Replace BCM. Refer to BCS-73, "Removal and Installation".

#### **B2622 INSIDE ANTENNA**

## < DTC/CIRCUIT DIAGNOSIS >

### [WITH INTELLIGENT KEY SYSTEM]

## **B2622 INSIDE ANTENNA**

DTC Logic INFOID:0000000009756375

#### NOTE:

The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- Check Intelligent Key relative signal strength
- · Confirm vehicle Intelligent Key antenna signal strength

#### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2622	INSIDE ANTENNA 2	An excessive high or low voltage from inside antenna (console) is sent to BCM	Inside key antenna (console)     Harness between BCM and inside key antenna (console)     BCM

#### DTC CONFIRMATION PROCEDURE

# 1. PERFORM DTC CONFIRMATION PROCEDURE

- Select INTELLIGENT KEY of BCM using CONSULT.
- 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-75</u>, "<u>Diagnosis Procedure</u>".

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

## Diagnosis Procedure

NOTE: The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- Check Intelligent Key relative signal strength
- · Confirm vehicle Intelligent Key antenna signal strength

Regarding Wiring Diagram information, refer to <a href="DLK-49">DLK-49</a>, "Wiring Diagram".

# ${f 1}.$ CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

- Turn ignition switch ON.
- Check signal between BCM harness connector and ground using oscilloscope.

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INFOID:0000000009756376

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(+) BCM Connector Terminal		(-)	Condition	Signal (Reference value)
				(V)
45	45	Ground	When Intelligent Key is in the antenna detection area	15 10 5 0 1 s JMKIA3839GB
M83	44	Sigurd	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA5951GB

## Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".

NO >> GO TO 2.

# 2.check inside key antenna circuit

- Turn ignition switch OFF.
- 2. Disconnect BCM connector and inside key antenna (console) connector.
- 3. Check continuity between BCM harness connector and inside key antenna (console) harness connector.

BCM		Inside key antenna (console)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M83	45	M89	1	Yes
IVIOS	44	ivios	2	163

4. Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector Terminal		Ground	Continuity	
M83	45	Ground	No	
W03	44		NO	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

## **B2622 INSIDE ANTENNA**

## < DTC/CIRCUIT DIAGNOSIS >

## [WITH INTELLIGENT KEY SYSTEM]

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			(Foliation value)
M83	45	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB
Mee	44	Cround	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1   S   JMKIA5951GB

Is the inspection result normal?

YES >> Replace inside key antenna (console).

NO >> Replace BCM. Refer to BCS-73, "Removal and Installation".

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### **B2623 INSIDE ANTENNA**

[WITH INTELLIGENT KEY SYSTEM]

## **B2623 INSIDE ANTENNA**

DTC Logic

#### NOTE:

The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- · Check Intelligent Key relative signal strength
- Confirm vehicle Intelligent Key antenna signal strength

#### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2623	INSIDE ANTENNA 3	An excessive high or low voltage from inside antenna (trunk room) is sent to BCM	Inside key antenna (trunk room)     Harness between BCM and inside key antenna (trunk room)     BCM

### 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-78</u>, "<u>Diagnosis Procedure</u>".

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

## Diagnosis Procedure

INFOID:0000000009756378

#### NOTE:

The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- Check Intelligent Key relative signal strength
- Confirm vehicle Intelligent Key antenna signal strength

Regarding Wiring Diagram information, refer to <u>DLK-49</u>, "Wiring Diagram".

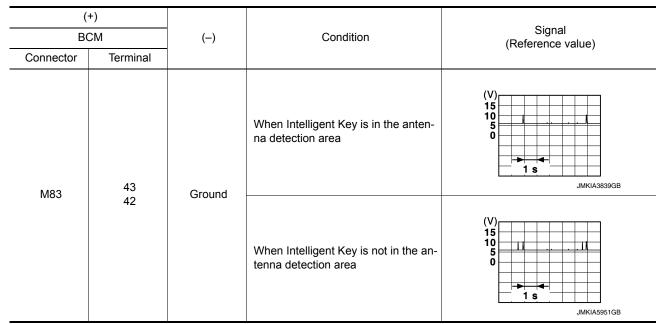
# 1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

### **B2623 INSIDE ANTENNA**

### < DTC/CIRCUIT DIAGNOSIS >

## [WITH INTELLIGENT KEY SYSTEM]



### Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-73</u>, "Removal and Installation".

NO >> GO TO 2.

# 2.CHECK INSIDE KEY ANTENNA CIRCUIT

Turn ignition switch OFF.

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

ВСМ		Inside key antenna (trunk room)		Continuity
Connector	Terminal	Connector Termin		Continuity
M83	43	B49	1	Yes
WIOS	42	D <del>4</del> 9	2	165

4. Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Terminal	Ground	Continuity	
M83	43	Ground	No	
WOS	42		INO	

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3.check inside key antenna input signal 2 $\,$

- 1. Replace inside key antenna (trunk room). (New antenna or other antenna)
- 2. Connect BCM connector and inside key antenna (trunk room) connector.
- Turn ignition switch ON.
- 4. Check signal between BCM harness connector and ground using oscilloscope.

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## **B2623 INSIDE ANTENNA**

## [WITH INTELLIGENT KEY SYSTEM]

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M83	43	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB
inico	42	Cround	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s  JMKIA5951GB

## Is the inspection result normal?

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

NO >> Replace BCM. Refer to BCS-73, "Removal and Installation".

### **B2626 OUTSIDE ANTENNA**

## < DTC/CIRCUIT DIAGNOSIS >

### [WITH INTELLIGENT KEY SYSTEM]

## **B2626 OUTSIDE ANTENNA**

**DTC Logic** INFOID:0000000009756379

#### NOTE:

The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- Check Intelligent Key relative signal strength
- Confirm vehicle Intelligent Key antenna signal strength

#### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2626	OUTSIDE ANTENNA 1	An excessive high or low voltage from outside key antenna (driver side) is sent to BCM	Outside key antenna (driver side)     Harness between BCM and outside key antenna (driver side)     BCM

#### DTC CONFIRMATION PROCEDURE

# 1. PERFORM DTC CONFIRMATION PROCEDURE

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

#### Is DTC detected?

YES >> Refer to <u>DLK-81</u>, "<u>Diagnosis Procedure</u>".

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

## Diagnosis Procedure

#### NOTE:

The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- Check Intelligent Key relative signal strength
- · Confirm vehicle Intelligent Key antenna signal strength

Regarding Wiring Diagram information, refer to <a href="DLK-49">DLK-49</a>, "Wiring Diagram".

# 1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

- Turn ignition switch ON.
- Check signal between BCM harness connector and ground using oscilloscope.

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(+) BCM Connector Terminal		(-)	Condition		Signal (Reference value)	
	53	01	When the driver door request switch is op-	When Intelligent Key is in the an- tenna detection area (The dis- tance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 500 ms  JMKIA5955GB	
M83	52	Ground	erated with ignition switch OFF	When Intelligent Key is not in the antenna detec- tion area (The distance be- tween Intelli- gent Key and antenna: Ap- prox. 2 m)	(V) 15 10 5 0 JMKIA5954GB	

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".

NO >> GO TO 2.

# 2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect BCM connector and outside key antenna (driver side) connector.
- Check continuity between BCM harness connector and outside key antenna (driver side) harness connector.

В	СМ	Outside key ante	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M83	53	D6	1	Yes
IVIOS	52	Бо	2	165

4. Check continuity between BCM harness connector and ground.

	BCM		Continuity
Connector	Terminal	Ground	Continuity
M83	53	Ground	No
IVIOS	52		INU

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

## **B2626 OUTSIDE ANTENNA**

## < DTC/CIRCUIT DIAGNOSIS >

## [WITH INTELLIGENT KEY SYSTEM]

(+) BCM		(–) Conditi		ion	Signal (Reference value)
Connector	Terminal				(Noterence Value)
	52		When the driver door request switch	When Intelligent Key is in the an- tenna detection area (The dis- tance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 500 ms JMKIA5955GB
M83	53	Ground	is operated with ignition switch OFF	When Intelligent Key is not in the antenna detec- tion area (The distance be- tween Intelli- gent Key and antenna: Ap- prox. 2 m)	(V) 15 10 50 MKIA5954GB

## Is the inspection result normal?

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

NO >> Replace BCM. Refer to BCS-73, "Removal and Installation".

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### **B2627 OUTSIDE ANTENNA**

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

## **B2627 OUTSIDE ANTENNA**

DTC Logic

#### NOTE:

The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- · Check Intelligent Key relative signal strength
- Confirm vehicle Intelligent Key antenna signal strength

#### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2627	OUTSIDE ANTENNA 2	An excessive high or low voltage from outside key antenna (passenger side ) is sent to BCM	Outside key antenna (passenger side)     Harness between BCM and outside key antenna (passenger side)     BCM

#### DTC CONFIRMATION PROCEDURE

# 1. PERFORM DTC CONFIRMATION PROCEDURE

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

### Is outside key antenna DTC detected?

YES >> Refer to <u>DLK-84</u>, "<u>Diagnosis Procedure</u>".

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

## Diagnosis Procedure

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#### NOTE:

The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- Check Intelligent Key relative signal strength
- · Confirm vehicle Intelligent Key antenna signal strength

Regarding Wiring Diagram information, refer to <u>DLK-49</u>, "Wiring <u>Diagram"</u>.

# 1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

## **B2627 OUTSIDE ANTENNA**

### < DTC/CIRCUIT DIAGNOSIS >

### [WITH INTELLIGENT KEY SYSTEM]

(+) BCM		(–)	Condition		Signal (Reference value)	
Connector	Terminal				(	
Moo	51	Constant	When the passenger side door request	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 JMKIA5955GB	
M83	50	Ground	switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	(V) 15 10 50  MKIA5954GB	

### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".

NO >> GO TO 2.

# 2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect BCM connector and outside key antenna (passenger side) connector.
- Check continuity between BCM harness connector and outside key antenna (passenger side) harness connector.

E	BCM	Outside key anteni	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M83	51	D108	1	Yes
IVIOO	50	100	2	168

4. Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Terminal	Ground	Continuity	
M83	51	- Ground	No	
	50		INO	

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

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## **B2627 OUTSIDE ANTENNA**

(+) BCM		(-)	Condition		Signal (Reference value)	
Connector	Terminal				(Noisions value)	
M83	51	Ground	When the passenger side door request	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 JMKIA5955GB	
IVIGO	50	Ground	switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	(V) 15 10 5 0 JMKIA5954GB	

## Is the inspection result normal?

YES

>> Replace outside key antenna (passenger side).
>> Replace BCM. Refer to <a href="BCS-73">BCS-73</a>, "Removal and Installation". NO

### **B2628 OUTSIDE ANTENNA**

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

## **B2628 OUTSIDE ANTENNA**

**DTC Logic** INFOID:0000000009756383

#### NOTE:

The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- · Check Intelligent Key relative signal strength
- · Confirm vehicle Intelligent Key antenna signal strength

#### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2628	OUTSIDE ANTENNA 3	An excessive high or low voltage from outside key antenna (rear bumper) is sent to BCM	Outside key antenna (rear bumper)     Harness between BCM and outside key antenna (rear bumper)     BCM

#### DTC CONFIRMATION PROCEDURE

# 1. PERFORM DTC CONFIRMATION PROCEDURE

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

### Is outside key antenna DTC detected?

>> Refer to DLK-87, "Diagnosis Procedure". YES

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

## Diagnosis Procedure

The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- Check Intelligent Key relative signal strength
- · Confirm vehicle Intelligent Key antenna signal strength

Regarding Wiring Diagram information, refer to <u>DLK-49</u>, "Wiring <u>Diagram"</u>.

# 1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

- Turn ignition switch ON.
- Check signal between BCM harness connector and ground using oscilloscope.

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(+) BCM		(–)	Condition		Signal (Reference value)	
Connector	Terminal				(1010101100110100)	
M83	48,49	Ground	When the trunk lid opener switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)  When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	(V) 15 10 500 ms  JMKIA5955GB  (V) 15 10 500 ms  JMKIA5954GB	

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".

NO >> GO TO 2.

# 2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect BCM connector and outside key antenna (rear bumper) connector.
- Check continuity between BCM harness connector and outside key antenna (rear bumper) harness connector.

BCM Outside key antenna (rear bumper)			Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M83	49	B79	1	Yes
IVIOS	48	D19	2	163

4. Check continuity between BCM harness connector and ground.

В	CM		
Connector	Connector Terminal		Continuity
M83	49	Ground	No
IVIOS	48		INO

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

## **B2628 OUTSIDE ANTENNA**

## < DTC/CIRCUIT DIAGNOSIS >

## [WITH INTELLIGENT KEY SYSTEM]

(+) BCM		( )	Con	dition	Signal	
	Terminal	(–)	Condition		(Reference value)	
M83	49,48	Ground	When the trunk lid opener switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)  When Intelligent Key is not in the antenna detection area (The distance be- tween Intelli- gent Key and antenna: Ap- prox. 2 m)	(V) 15 10 500 ms  JMKIA5955GB  (V) 15 10 500 ms  JMKIA5954GB	

## Is the inspection result normal?

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

NO >> Replace BCM. Refer to BCS-73, "Removal and Installation".

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## POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

## POWER SUPPLY AND GROUND CIRCUIT

## Diagnosis Procedure

INFOID:0000000010291082

Regarding Wiring Diagram information, refer to BCS-51, "Wiring Diagram".

## 1. CHECK FUSES AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuses and fusible link No.
88	Rattery power supply	12 (10A)
90	Battery power supply	G (40A)

#### Is the fuse blown?

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

NO >> GO TO 2.

# 2.CHECK POWER SUPPLY CIRCUIT

- 1. Disconnect BCM connector M85.
- 2. Check voltage between BCM connector M85 and ground.

ВС	СМ	Ground	Voltago	
Connector	Terminal	Giodila	Voltage	
M85	88		Pattery voltage	
WOS	90	_	Battery voltage	

## Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

# 3.CHECK GROUND CIRCUIT

Check continuity between BCM connector M85 and ground.

В	CM	Ground	Continuity	
Connector	Terminal	Giodila	Continuity	
M85	93	_	Yes	

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Repair harness or connector.

# **COMBINATION METER BUZZER**

< DTC/CIRCUIT DIAGNOSIS >	[WITH INTELLIGENT KEY SYSTEM]
COMBINATION METER BUZZER	
Component Function Check	INFOID:0000000009756386
1. CHECK FUNCTION	
Select INTELLIGENT KEY of BCM using CONSULT.     Select INSIDE BUZZER in ACTIVE TEST mode.	
3. Touch Key, Knob or Take Out to check that it works normally.	
Is the inspection result normal?  Yes >> Combination meter buzzer is OK.	
Yes >> Combination meter buzzer is OK. No >> Refer to <u>DLK-91, "Diagnosis Procedure"</u> .	
Diagnosis Procedure	INFOID:0000000009756387
1. CHECK METER BUZZER CIRCUIT	
Refer to WCS-28, "Component Function Check".	
Is the inspection result normal?  Yes >> GO TO 2.	
No >> Repair or replace harness.	
2.check intermittent incident	
Refer to GI-39, "Intermittent Incident".	
>> Inspection End.	

**DLK-91** Revision: October 2013 2014 Sentra NAM

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

## DOOR LOCK ACTUATOR

**DRIVER SIDE** 

## DRIVER SIDE: Component Function Check

INFOID:0000000009756388

# 1. CHECK FUNCTION

- 1. Select DOOR LOCK of BCM using CONSULT.
- 2. Select DOOR LOCK in ACTIVE TEST mode.
- Touch ALL LOCK 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-92</u>, "<u>DRIVER SIDE</u>: <u>Diagnosis Procedure</u>".

## DRIVER SIDE: Diagnosis Procedure

INFOID:0000000009756389

Regarding Wiring Diagram information, refer to <a href="DLK-41">DLK-41</a>, "Wiring Diagram".

# 1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

- Turn ignition switch OFF.
- 2. Disconnect front door lock actuator LH connector.
- 3. Check voltage between front door lock actuator LH harness connector and ground.

(+) Front door lock actuator LH		(–)	Condition		Voltage (Approx.)
Connector	Terminal				
D9	1	Ground	Door lock and unlock switch	Lock	12 V
Da	2	Ground	DOOL LOCK AND UNIOCK SWITCH	Unlock	12 V

#### Is the inspection result normal?

YES >> Replace front door lock actuator LH.

NO >> GO TO 2.

## 2.CHECK DOOR LOCK ACTUATOR CIRCUIT

- Disconnect BCM connector and all door lock actuator connectors.
- 2. Check continuity between BCM harness connector and front door lock actuator LH harness connector.

BCM		Front door lock actuator LH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M85	95	D9	1	Yes
COIVI	94	Da	2	165

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Connector Terminal		Continuity	
M85	95	Ground	No	
IVIOS	94		NO	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3.CHECK BCM OUTPUT SIGNAL

### < DTC/CIRCUIT DIAGNOSIS >

### [WITH INTELLIGENT KEY SYSTEM]

1. Connect BCM connector.

Check voltage between front door lock actuator LH harness connector and ground.

(+) BCM		(-)	Condition		Voltage (Approx.)
Connector	Terminal				, , ,
M85	95	Ground	Door lock and unlock switch	Lock	12 V
IVIOS	94	Giodila	Door lock and unlock switch	Unlock	12 V

#### Is the inspection result normal?

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

NO >> Replace BCM. Refer to BCS-73, "Removal and Installation".

#### 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 LOCK or ALL UNLK to check that it works normally.

#### Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to DLK-93, "PASSENGER SIDE : Diagnosis Procedure".

## PASSENGER SIDE: Diagnosis Procedure

Regarding Wiring Diagram information, refer to <a href="DLK-41">DLK-41</a>, "Wiring Diagram".

# 1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

- Turn ignition switch OFF.
- Disconnect front door lock actuator RH connector.
- 3. Check voltage between front door lock actuator RH harness connector and ground.

(+) Front door lock actuator RH		(–)	Condition		Voltage (Approx.)
Connector	Terminal				
D107	5	Ground	Door lock and unlock switch	Lock	12 V
5107	6	Ground	Door lock and unlock switch	Unlock	12 V

#### Is the inspection result normal?

YES >> Replace front door lock actuator (RH).

NO >> GO TO 2.

## 2 . CHECK DOOR LOCK ACTUATOR CIRCUIT

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

ВСМ		Front door lock actuator RH		Continuity			
Connector	Terminal	Connector	Terminal	Continuity			
M85	95	D107	5	Yes			
CBINI	86		6				

3. Check continuity between BCM harness connector and ground.

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### [WITH INTELLIGENT KEY SYSTEM]

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#### < DTC/CIRCUIT DIAGNOSIS >

E	BCM		Continuity	
Connector	Terminal	Ground	Continuity	
M85	95	Ground	No	
COIVI	86		INO	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3.CHECK BCM OUTPUT SIGNAL

- Connect BCM connector.
- Check voltage between front door lock actuator RH harness connector and ground.

(+) BCM		(–)	Condition		Voltage (Approx.)
Connector	Terminal				(* ,pp. 3)
M85	95	Ground	Door lock and unlock switch	Lock	12 V
COIVI	86	Giodila	DOOL LOCK AND UNIOCK SWILCH	Unlock	12 V

#### Is the inspection result normal?

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

>> Replace BCM. Refer to BCS-73, "Removal and Installation".

### REAR LH

## REAR LH: Component Function Check

INFOID:0000000009756392

# 1. CHECK FUNCTION

- Select DOOR LOCK of BCM using CONSULT.
- Select DOOR LOCK in ACTIVE TEST mode.
- Touch ALL LOCK or ALL UNLK to check that it works normally.

#### Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to DLK-94, "REAR LH: Diagnosis Procedure".

## REAR LH: Diagnosis Procedure

Regarding Wiring Diagram information, refer to <a href="DLK-41">DLK-41</a>, "Wiring Diagram".

# 1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+) Rear door lock actuator LH					V 16
		(–)	Condition		Voltage (Approx.)
Connector	Terminal				(     -   )
D202	1	Ground	Door lock and unlock switch	Lock	12 V
5202	2	Sibulia	Door lock and unlock switch	Unlock	12 V

#### Is the inspection result normal?

YES >> Replace rear door lock actuator LH.

NO >> GO TO 2.

### < DTC/CIRCUIT DIAGNOSIS >

### [WITH INTELLIGENT KEY SYSTEM]

# 2.CHECK DOOR LOCK ACTUATOR CIRCUIT

- Disconnect BCM connector and all door lock actuator connectors.
- Check continuity between BCM harness connector and rear door lock actuator LH harness connector.

BCM		Rear door lock actuator LH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M85	95	D202	1	Yes
B24	105	DZUZ	2	165

Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M85	95	Giouna	No
B24	105		INU

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3.CHECK BCM OUTPUT SIGNAL

- Connect BCM connector.
- 2. Check voltage between rear door lock actuator LH harness connector and ground.

	+) CM	(–)	Condition		Voltage (Approx.)
Connector	Terminal				( ); - /
M85	95	Ground	Ground Door lock and unlock switch	Lock	12 V
B24	105	Giouna	DOOL LOCK AND UNIOCK SWITCH	Unlock	12 V

### Is the inspection result normal?

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

>> Replace BCM. Refer to BCS-73, "Removal and Installation". NO

#### REAR RH

# REAR RH: Component Function Check

## 1. CHECK FUNCTION

- Select DOOR LOCK of BCM using CONSULT.
- Select DOOR LOCK in ACTIVE TEST mode.
- Touch ALL LOCK or ALL UNLK to check that it works normally.

#### Is the inspection result normal?

YES >> Door lock actuator is OK.

>> Refer to DLK-95. "REAR RH: Diagnosis Procedure".

## REAR RH: Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-41, "Wiring Diagram".

# 1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

Turn ignition switch OFF.

Revision: October 2013

- Disconnect rear door lock actuator RH connector.
- Check voltage between rear door lock actuator RH harness connector and ground.

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[WITH INTELLIGENT KEY SYSTEM]

### < DTC/CIRCUIT DIAGNOSIS >

(+)			Condition		Vallana
Rear door lock actuator RH		(–)			Condition Voltage (Approx.)
Connector	Terminal		, , ,		
D302	5	Ground	Ground Door lock and unlock switch	Lock	12 V
	6	Ground		Unlock	12 V

#### Is the inspection result normal?

YES >> Replace rear door lock actuator RH.

NO >> GO TO 2.

# 2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

ВСМ		Rear door lock actuator RH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M85	95	D302	5	Yes
B24	105	D302	6	163

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M85	95	Ground	No
B24	105		INU

### 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 rear door lock actuator RH harness connector and ground.

(+) BCM (-) Condition			Voltage (Approx.)		
Connector	Terminal				(
M85	95	Ground	Ground Door lock and unlock switch	Lock	12 V
B24	105	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 BCS-73, "Removal and Installation".

### DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

# DOOR LOCK AND UNLOCK SWITCH

# Component Function Check

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# 1. CHECK FUNCTION

- 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	Con	Status	
CDL LOCK SW		LOCK	ON
	Main power window and door lock/unlock switch	UNLOCK	OFF
CDL UNLOCK SW		LOCK	OFF
		UNLOCK	ON

#### Is the inspection result normal?

YES >> Main power window and door lock/unlock switch is OK.

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

## Diagnosis Procedure

INFOID:0000000009756397

Regarding Wiring Diagram information, refer to DLK-41, "Wiring Diagram".

# $1.\mathsf{check}\ \mathsf{door}\ \mathsf{lock}\ \mathsf{and}\ \mathsf{unlock}\ \mathsf{switch}\ \mathsf{input}\ \mathsf{signal}$

- 1. Turn ignition switch OFF.
- Disconnect main power window and door lock/unlock switch connector.
- 3. Check signal between main power window and door lock/unlock switch harness connector and ground using oscilloscope.

(+) Main power window and door lock/unlock switch		(–)	Signal (Reference value)
Connector	Terminal		(1000.0100)
	15		
D5	3	Ground	(V) 15 10 0 10 ms JPMIA0012GB 1.0 - 1.5 V

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

# 2.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

- Disconnect BCM connector.
- 2. Check continuity between BCM harness connector and main power window and door lock/unlock switch harness connector.

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## DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

### [WITH INTELLIGENT KEY SYSTEM]

E	BCM	Main power window and door lock/unlock switch		Continuity
Connector	Terminal	Connector Terminal		Continuity
M84	12	D5	3	Yes
IVIO4	13		15	165

Check continuity between BCM harness connector and ground.

ВСМ			Continuity
Connector	Terminal	Ground	Continuity
MOA	12	Ground	No
M84	13	_	INO

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".

NO >> Repair or replace harness.

## 3.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

Check continuity between main power window and door lock/unlock switch harness connector and ground.

Main power window and	d door lock/unlock switch		Continuity
Connector	Terminal	Ground	Continuity
D5	1		Yes

### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

# 4. CHECK DOOR LOCK AND UNLOCK SWITCH

### Refer to DLK-98, "Component Inspection".

### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace main power window and door lock/unlock switch. Refer to <a href="PWC-70">PWC-70</a>, "Removal and Installation".

## 5. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> Inspection End.

# Component Inspection

INFOID:0000000009756398

# 1. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

- Turn ignition switch OFF.
- Disconnect main power window and door lock/unlock switch connector.
- 3. Check continuity between main power window and door lock/unlock switch terminals.

Main power window and door lock/unlock switch  Terminal		Condition		Continuity
15	2	Main power window and door lock/ unlock	UNLOCK	Yes
3	switch	LOCK	Yes	
3			UNLOCK	No

#### Is the inspection result normal?

YES >> Inspection End

## DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Revision: October 2013

[WITH INTELLIGENT KEY SYSTEM]

>> Replace main power window and door lock/unlock switch. Refer to PWC-70, "Removal and Instal-NO С  $\mathsf{D}$ F J DLK L

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### DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

## DOOR REQUEST SWITCH

## Component Function Check

INFOID:0000000009756399

## 1. CHECK FUNCTION

- Select INTELLIGENT KEY of CM using CONSULT.
- 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 Door request switch LH		Pressed	ON
REQ SW -DR	Door request switch Err	Released	OFF
REQ SW -AS	DEC SW AS Deer request quiteb DH		ON
REQ 3W -A3	Door request switch RH	Released	OFF

#### Is the inspection result normal?

YES >> Front door request switch is OK.

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

## Diagnosis Procedure

INFOID:0000000009756400

Regarding Wiring Diagram information, refer to DLK-49, "Wiring Diagram".

# 1. CHECK DOOR REQUEST SWITCH INPUT SIGNAL

- 1. Turn ignition switch OFF.
- Disconnect malfunctioning front door request switch connector.
- 3. Check voltage between malfunctioning front door request switch harness connector and ground.

(+)				Voltage
Front door request switch			(–)	Voltage (Approx.)
Connector Terminal				
Left side	D15	2	Ground	12 V
Right side	D115	1	Ground	12 V

### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

# 2.CHECK DOOR REQUEST SWITCH CIRCUIT

- Disconnect BCM connector.
- 2. Check continuity between malfunctioning front door request switch harness connector and BCM harness connector.

Front door request switch			BCM		Continuity	
Coni	nector	Terminal	Connector	Terminal	Continuity	
Left side	D15	2	M83	56	Yes	
Right side	D115	1	IVIOS	71	ies	

3. Check continuity between malfunctioning front door request switch harness connector and ground.

### DOOR REQUEST SWITCH

### < DTC/CIRCUIT DIAGNOSIS >

### [WITH INTELLIGENT KEY SYSTEM]

Front door request switch				Continuity
Connector		Terminal	- - Ground	Continuity
Left side	D15	2	No	No
Right side	D115	1		INO

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".

NO >> Repair or replace harness.

# 3.check door request switch ground circuit

Check continuity between malfunctioning front door request switch harness connector and ground.

Front door request switch				Continuity	
Connector		Terminal	Ground	Continuity	
Left side	D15	1	Ground	Yes	
Right side	D115	2		163	

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

## 4. CHECK DOOR REQUEST SWITCH

Refer to DLK-101, "Component Inspection".

## Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace malfunctioning front door request switch.

## 5. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> Inspection End.

# Component Inspection

1. CHECK DOOR REQUEST SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect malfunctioning front door request switch connector.
- Check continuity between malfunctioning front door request switch terminals.

Front door request switch		Condition		Continuity
Terminal				
1	2	Door request switch	Pressed	Yes
	Z	Door request switch	Released	No

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace malfunctioning front door request switch.

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## [WITH INTELLIGENT KEY SYSTEM]

## **DOOR SWITCH**

## Component Function Check

INFOID:0000000009756402

## 1. CHECK FUNCTION

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

Monitor item		Condition	
DOOD OW DD	Front door LH	Open	ON
DOOR SW-DR	FIORIL GOOF LET	Closed	OFF
DOOR SW-AS	Front door DII	Open	ON
	Front door RH	Closed	OFF
DOOR SW-RL	Rear door LH	Open	ON
DOOR SW-RL	Real door LH	Closed	OFF
DOOR SW-RR	Rear door RH	Open	ON
	Real dool RH	Closed	OFF

#### Is the inspection result normal?

YES >> Door switch is OK.

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

## Diagnosis Procedure

INFOID:0000000009756403

Regarding Wiring Diagram information, refer to <u>DLK-49</u>, "Wiring <u>Diagram"</u>.

# 1. CHECK DOOR SWITCH INPUT SIGNAL

- Turn ignition switch OFF.
- 2. Disconnect malfunctioning door switch connector.
- 3. Check signal between malfunctioning door switch harness connector and ground using oscilloscope.

(+) Door switch			(-)	Signal
Connector Terminal		-	(Reference value)	
Front door switch LH	B21	3		(V) 15
Front door switch RH	B28	3	Ground	10 5 0
Rear door switch LH	B26	3		++ 10ms
Rear door switch RH	B41	3		PKIB4960J

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

# 2. CHECK DOOR SWITCH CIRCUIT

- Disconnect BCM connector.
- Check continuity between door switch harness connector and BCM harness connector.

### [WITH INTELLIGENT KEY SYSTEM]

Door switch		BO	BCM			
Coni	nector	Terminal	Connector	Terminal	Continuity	
Front door switch LH	B21	3		98		
Front door switch RH	B28		2 004	B24	100	Yes
Rear door switch LH	B26		D24	97	res	
Rear door switch RH	B41			99		

3. Check continuity between door switch harness connector and ground.

Door switch				Continuity	
Connector		Terminal		Continuity	
Front door switch LH	B21		Ground		
Front door switch RH	B28	2	Ground	No	
Rear door switch LH	B26	3		INO	
Rear door switch RH	B41				

## Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".

NO >> Repair or replace harness.

## 3. CHECK DOOR SWITCH

Refer to DLK-103, "Component Inspection".

## Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace malfunctioning door switch.

## 4. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> Inspection End.

# Component Inspection

1. CHECK DOOR SWITCH

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

	Door switch		Condition		Continuity	
Terminal		Condition		Continuity		
Front door switch				Pressed	No	
LH				Released	Yes	
Front door switch		Ground part of door switch		Pressed	No	
RH	3		Door switch	Released	Yes	
Rear door switch	3		Door switch	Pressed	No	
LH				Released	Yes	
Rear door switch					Pressed	No
RH				Released	Yes	

#### Is the inspection result normal?

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## **DOOR SWITCH**

[WITH INTELLIGENT KEY SYSTEM]

YES >> Inspection End.

NO >> Replace malfunction door switch.

# HAZARD FUNCTION

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< DTC/CIRCUIT DIAGNOSIS >	[WITH INTELLIGENT KET STSTEM]
HAZARD FUNCTION	
Component Function Check	INFOID:000000009756405
1.CHECK FUNCTION	ı
<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> <li>Is the inspection result normal?</li> </ol>	
YES >> Hazard warning lamp circuit is OK. NO >> Refer to <u>DLK-105, "Diagnosis Procedure"</u> .	1
Diagnosis Procedure	INFOID:000000009756406
1. CHECK HAZARD SWITCH CIRCUIT	I
Refer to EXL-105. "Component Function Check".  Is the inspection result normal?  YES >> GO TO 2.	-
NO >> Repair or replace harness.  2.CHECK INTERMITTENT INCIDENT	
Refer to GI-39, "Intermittent Incident".	
>> Inspection End.	I
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## INTELLIGENT KEY

## Component Function Check

INFOID:0000000009756407

#### NOTE:

The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- · Check Intelligent Key relative signal strength.
- Confirm vehicle Intelligent Key antenna signal strength.

# 1. CHECK FUNCTION

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

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

#### Is the inspection result normal?

YES >> Intelligent Key is OK.

NO >> Refer to <u>DLK-106</u>, "<u>Diagnosis Procedure</u>".

## Diagnosis Procedure

INFOID:0000000009756408

#### NOTE:

The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- · Check Intelligent Key relative signal strength.
- · Confirm vehicle Intelligent Key antenna signal strength.

## 1. CHECK INTELLIGENT KEY BATTERY

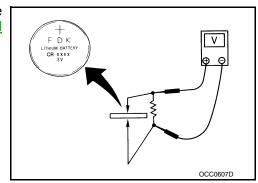
Check by connecting a resistance (approximately  $300\Omega$ ) so that the current value becomes about 10 mA. Refer to <u>DLK-200, "Removal and Installation"</u>.

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

Is the measurement value within the specification?

YES >> Replace Intelligent Key.

NO >> Replace Intelligent Key battery.



## **KEY WARNING LAMP**

### < DTC/CIRCUIT DIAGNOSIS >

## [WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >	[WITH MITELLIOLINI INC. OTOTLIN]	
KEY WARNING LAMP		^
Component Function Check	INFOID:000000009756409	Α
1.check function		В
<ol> <li>Select INTELLIGENT KEY of BCM using CONSULT.</li> <li>Select INDICATOR in ACTIVE TEST mode.</li> <li>Touch KEY IND or KEY ON to check that it works normally.</li> <li>Is the inspection result normal?</li> </ol>		С
YES >> Key warning lamp is OK. NO >> Refer to <u>DLK-107</u> , " <u>Diagnosis Procedure</u> ".		D
Diagnosis Procedure	INFOID:000000009756410	
1. CHECK KEY WARNING LAMP		Е
Refer to <u>DLK-31</u> , "WARNING FUNCTION: System Description".  Is the inspection result normal?  YES >> GO TO 2.		F
NO >> Repair or replace harness.  2.CHECK INTERMITTENT INCIDENT  Refer to GI-39, "Intermittent Incident".		G
Relei to GI-59, Intermittent incident.		H
>> Inspection End.		
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## REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

## 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	Checks whether value changes when operating Intelligent Key

## Is the inspection result normal?

YES >> Remote keyless entry receiver is OK.

NO >> Refer to <u>DLK-108</u>, "<u>Diagnosis Procedure</u>".

## Diagnosis Procedure

INFOID:0000000009756412

INFOID:0000000009756411

Regarding Wiring Diagram information, refer to <u>DLK-49</u>, "Wiring Diagram".

# 1. CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT SIGNAL

- Turn ignition switch OFF.
- 2. Check voltage between BCM harness connector and ground.

	+) CM	(-)	Condition		Signal (Reference value)
Connector	Terminal				(**************************************
M84	38	Ground	Push-button igni- OFF or ACC		0 - 0.5V
10104	36	Ground	tion switch	ON	Battery voltage

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".

NO >> GO TO 2.

# 2.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 1

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

В	CM	Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M84	38	M91	2	Yes

3. Check continuity between BCM harness connector and ground.

(+)				
ВСМ		(–)	Continuity	
Connector	Terminal			
M84	38	Ground	No	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

### REMOTE KEYLESS ENTRY RECEIVER

#### < DTC/CIRCUIT DIAGNOSIS >

#### [WITH INTELLIGENT KEY SYSTEM]

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

(+)			Voltage Approx.	
Remote keyless entry receiver		(–)		
Connector	Terminal			
M91	1	Ground	Battery voltage	

#### Is the inspection result normal?

>> GO TO 4. YES

NO-1 >> Check 10A fuse No. 14 [located in fuse block J/B].

NO-2 >> Repair or replace harness between BCM and 10A fuse No. 14.

# 4. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

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

Remote keyless entry receiver			Continuity
Connector	Connector Terminal		Continuity
M91	4		Yes

#### Is the inspection result normal?

YES >> Replace remote keyless entry receiver. Refer to <u>DLK-199</u>, "Removal and Installation".

NO >> Repair or replace harness.

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**DLK-109** Revision: October 2013 2014 Sentra NAM Α

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### SHIFT P WARNING LAMP

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

# SHIFT P WARNING LAMP

# Component Function Check

#### INFOID:0000000009756414

# 1. CHECK FUNCTION

- 1. Select INTELLIGENT KEY of BCM using CONSULT.
- 2. Select LCD in ACTIVE TEST mode.
- 3. Touch SET P to check that it works normally.

#### Is the inspection result normal?

YES >> Shift P warning lamp is OK.

NO >> Refer to <u>DLK-110</u>, "<u>Diagnosis Procedure</u>".

# Diagnosis Procedure

INFOID:0000000009756415

# 1. CHECK SHIFT P WARNING LAMP

Refer to DLK-31, "WARNING FUNCTION: System Description".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

# 2. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> Inspection End.

#### TRUNK LID OPENER ACTUATOR

#### < DTC/CIRCUIT DIAGNOSIS >

#### [WITH INTELLIGENT KEY SYSTEM]

### TRUNK LID OPENER ACTUATOR

# Component Function Check

# 1.CHECK FUNCTION

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

#### Is the inspection result normal?

YES >> Trunk lid opener actuator is OK.

NO >> Refer to <u>DLK-111</u>, "<u>Diagnosis Procedure</u>".

# Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-63, "Wiring Diagram".

# 1. CHECK TRUNK LID OPENER INPUT SIGNAL

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

	(+) Trunk lid opener assembly		Condition	Voltage
Connector	Terminal			(Approx.)
B59	3	Ground	Trunk lid opener switch is ON	12 V

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

# 2 .CHECK TRUNK LID OPENER ACTUATOR CIRCUIT

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

В	CM	Trunk lid opener assembly		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
B24	107	B59	3	Yes	

Check continuity between BCM harness connector and ground.

ВСМ			Continuity
Connector Terminal		Ground	Continuity
B24	107		No

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".

NO >> Repair or replace harness.

# 3.CHECK TRUNK LID OPENER ACTUATOR GROUND CIRCUIT

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

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### TRUNK LID OPENER ACTUATOR

#### < DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Trunk lid opener assembly			Continuity
Connector	Terminal	Ground	Continuity
B59	2		Yes

### Is the inspection normal?

YES >> Replace trunk lid opener assembly.

NO >> Repair or replace harness.

### TRUNK LID OPENER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

# TRUNK LID OPENER SWITCH

# Component Function Check

#### INFOID:0000000009756418

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# 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	Co	Status	
TR/BD OPEN SW	Trunk lid opener switch	Pressed	On
		Released	Off

#### Is the inspection result normal?

YES >> Trunk lid opener switch is OK.

NO >> Refer to <u>DLK-113</u>, "<u>Diagnosis Procedure</u>".

# Diagnosis Procedure

INFOID:0000000009756419

Regarding Wiring Diagram information, refer to <a href="DLK-63">DLK-63</a>, "Wiring Diagram".

# 1. CHECK TRUNK LID OPENER INPUT SIGNAL

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

	(+) Trunk lid opener switch		Signal (Reference value)	
Connector	Terminal		(	
M15	1	Ground	(V) 15 10 5 0 10 ms JPMIA0012GB	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

# 2.CHECK TRUNK LID OPENER SWITCH CIRCUIT

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

В	CM	Trunk lid opener switch		Trunk lid opener switch Continuity		Continuity
Connector	Terminal	Connector Terminal		Continuity		
M84	30	M15	1	Yes		

Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector	Terminal	Ground	Continuity
M84	30	-	No

#### TRUNK LID OPENER SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".

NO >> Repair or replace harness.

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

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

Trunk lid opener switch			Continuity
Connector	Terminal	Ground	Continuity
M15	2		Yes

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4. CHECK TRUNK LID OPENER SWITCH

Refer to DLK-113, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace trunk lid opener switch.

# 5. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> Inspection End.

# Component Inspection

INFOID:0000000009756420

# 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
Terminal		Con	ultion	Continuity
1 2		Trunk lid opener switch	Pressed	Yes
1	2	Trunk lid opener switch	Release	No

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace trunk lid opener switch.

### TRUNK LAMP SWITCH

### < DTC/CIRCUIT DIAGNOSIS >

#### [WITH INTELLIGENT KEY SYSTEM]

# TRUNK LAMP SWITCH

Description INFOID:000000009756421

Detects trunk open/close condition.

Component Function Check

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# 1. CHECK FUNCTION

# (II) With CONSULT

Check TRNK/HAT MNTR in Data Monitor mode with CONSULT.

Monitor item	Condition	
TRNK/HAT MNTR	OPEN	: ON
	CLOSE	: OFF

#### Is the inspection result normal?

YES >> Trunk room lamp switch is OK.

>> Refer to DLK-115, "Diagnosis Procedure". NO

# Diagnosis Procedure

Regarding Wiring Diagram information, refer to <a href="DLK-63">DLK-63</a>, "Wiring Diagram".

# 1. CHECK TRUNK LID SWITCH INPUT SIGNAL

- Turn ignition switch OFF.
- Check voltage between BCM connector and ground.

	Terminals			
(+)			Trunk	Voltage (V)
BCM connector	Terminal	(-)	condition	(Approx.)
			OPEN	0
B24	103	Ground	CLOSE	(V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0V

#### Is the inspection result normal?

YES >> GO TO 6

NO >> GO TO 2

# 2.CHECK TRUNK ROOM LAMP SWITCH CIRCUIT

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

BCM connector	Terminal	Trunk lid opener as- sembly connector	Terminal	Continuity
B24	103	B59	1	Yes

3. Check continuity between BCM connector and ground.

#### < DTC/CIRCUIT DIAGNOSIS >

BCM connector	Terminal	Ground	Continuity
B24	103	Ground	No

#### Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness between BCM and trunk lid opener assembly.

# 3.CHECK TRUNK LID SWITCH GROUND CIRCUIT

Check continuity between trunk lid opener assembly connector and ground.

Trunk lid opener as- sembly connector	Terminal	Ground	Continuity
B59	2		Yes

#### Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace trunk lid opener assembly ground circuit.

# 4. CHECK BCM OUTPUT SIGNAL

- Ensure trunk lid remains closed during this step.
- 2. Connect BCM connector.
- 3. Check voltage between BCM connector and ground.

Terminals				
(+)		( )	Voltage (V) (Approx.)	
BCM connector	Terminal	(–)	( , , , , , , , , , , , , , , , , , , ,	
B24	103	Ground	(V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0V	

#### Is the inspection result normal?

YES >> GO TO 5

NO >> Replace BCM. Refer to BCS-73, "Removal and Installation".

# 5. CHECK TRUNK ROOM LAMP SWITCH

Refer to DLK-113, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 6

NO >> Replace trunk lid opener assembly.

### **6.**CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> Inspection End.

# Component Inspection

INFOID:0000000009756424

# 1. CHECK TRUNK ROOM LAMP SWITCH

- Turn ignition switch OFF.
- 2. Disconnect trunk lid opener assembly connector.
- Check trunk room lamp switch.

### TRUNK LAMP SWITCH

### < DTC/CIRCUIT DIAGNOSIS >

# [WITH INTELLIGENT KEY SYSTEM]

Terminal Trunk room lamp switch		Trunk condition	Continuity	
		Trank Condition		
1	2	OPEN	Yes	
		CLOSE	No	

# Is the inspection result normal?

YES >> Inspection End.

NO >> Replace trunk lid opener assembly.

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### DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH [WITH INTELLIGENT KEY SYSTEM]

#### < SYMPTOM DIAGNOSIS >

# SYMPTOM DIAGNOSIS

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

ALL DOOR

ALL DOOR: Description

INFOID:0000000009756425

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

ALL DOOR: Diagnosis Procedure

INFOID:0000000009756426

### CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch.

Refer to <u>DLK-97</u>, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

# 2.CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (driver side).

Refer to DLK-179, "FRONT DOOR LOCK: Removal and Installation".

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

#### 3.REPLACE BCM

- Replace BCM. Refer to BCS-73, "Removal and Installation".
- Confirm the operation after replacement.

#### Is the result normal?

>> Inspection End. YES

NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

#### DRIVER SIDE

### **DRIVER SIDE**: Description

INFOID:0000000009756427

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

### DRIVER SIDE: Diagnosis Procedure

INFOID:0000000009756428

# CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (driver side).

Refer to DLK-92, "DRIVER SIDE: Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

### 2.REPLACE BCM

- Replace BCM. Refer to BCS-73, "Removal and Installation".
- Confirm the operation after replacement.

#### Is the result normal?

YES >> Inspection End.

>> Check intermittent incident. Refer to GI-39, "Intermittent Incident". NO

### PASSENGER SIDE

**DLK-118** Revision: October 2013 2014 Sentra NAM

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

< SYMPTOM DIAGNOSIS >	[WITH INTELLIGENT KEY SYSTEM]
PASSENGER SIDE : Description	INFOID:000000009756429
Passenger side door does not lock/unlock using door lock and un	nlock switch.
PASSENGER SIDE : Diagnosis Procedure	INFOID:0000000009756430
1. CHECK DOOR LOCK ACTUATOR	
Check front door lock assembly (passenger side).  Refer to DLK-93, "PASSENGER SIDE: Component Function C	heck".
Is the inspection result normal?	
YES >> GO TO 2.  NO >> Repair or replace the malfunctioning parts.	
2.REPLACE BCM	
1. Replace BCM. Refer to BCS-73, "Removal and Installation".	
<ol><li>Confirm the operation after replacement.</li></ol>	
YES >> Inspection End.	
NO >> Check intermittent incident. Refer to GI-39, "Intermitted REAR LH	ent Incident".
· <del></del> · · - ·	
REAR LH : Description	INFOID:0000000009756431
Rear LH side door does not lock/unlock using door lock and unlo	ck switch.
REAR LH : Diagnosis Procedure	INFOID:0000000009756432
1.CHECK DOOR LOCK ACTUATOR	
Check rear door lock assembly LH. Refer to DLK-94, "REAR LH: Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 2.  NO >> Repair or replace the malfunctioning parts.	•
2.REPLACE BCM	
1. Replace BCM. Refer to BCS-73, "Removal and Installation".	
Confirm the operation after replacement.  In the result permal?	
Is the result normal?  YES >> Inspection End.	
NO >> Check intermittent incident. Refer to GI-39. "Intermit	ent Incident".
REAR RH	
REAR RH : Description	INFOID:000000009756433
Rear RH side door does not lock/unlock using door lock and unlo	ock switch.
REAR RH : Diagnosis Procedure	INFOID:0000000009756434
1.CHECK DOOR LOCK ACTUATOR	
Check rear door lock assembly RH.  Refer to DLK 05. "PEAR RH: Component Function Check"	
Refer to <u>DLK-95, "REAR RH : Component Function Check"</u> . <u>Is the inspection result normal?</u>	
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts.  2.REPLACE BCM	
<ol> <li>Replace BCM. Refer to <u>BCS-73, "Removal and Installation"</u>.</li> </ol>	

Revision: October 2013 DLK-119 2014 Sentra NAM

# DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH [WITH INTELLIGENT KEY SYSTEM]

< SYMPTOM DIAGNOSIS >

2. Confirm the operation after replacement.

#### Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

**DLK-120** Revision: October 2013 2014 Sentra NAM

# DOOR DOES NOT LOCK/UNLOCK WITH DRIVER SIDE DOOR LOCK KNOB OR DOOR KEY CYLINDER

### < SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

# DOOR DOES NOT LOCK/UNLOCK WITH DRIVER SIDE DOOR LOCK KNOB OR DOOR KEY CYLINDER

INFOID:0000000009756435

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Diagnosis Procedure

1. CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

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

2.CHECK UNLOCK SENSOR

Check unlock sensor.

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. REPLACE BCM

1. Replace BCM. Refer to BCS-73, "Removal and Installation".

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

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Revision: October 2013 DLK-121 2014 Sentra NAM

### DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH [WITH INTELLIGENT KEY SYSTEM]

#### < SYMPTOM DIAGNOSIS >

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

# ALL DOOR REQUEST SWITCHES: Description

INFOID:0000000009756436

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

# ALL DOOR REQUEST SWITCHES: Diagnosis Procedure

INFOID:0000000009756437

# 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-124</u>, "<u>Diagnosis Procedure</u>".

# 2.check lock/unlock by i-key setting in work support

- Select INTELLIGENT KEY of BCM using CONSULT.
- Select LOCK/UNLOCK BY I-KEY in WORK SUPPORT mode.
- Check LOCK/UNLOCK BY I-KEY setting in WORK SUPPORT. Refer to BCS-21, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

#### Is the inspection result normal?

YES >> GO TO 3.

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

# 3. CHECK DOOR SWITCH

Check door switch.

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

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

### 4.CHECK INSIDE KEY ANTENNA

#### Check inside key antenna.

- Instrument center: Refer to <u>DLK-72</u>, "<u>DTC Logic</u>".
- Console: Refer to DLK-75, "DTC Logic".
- Trunk room: Refer to <u>DLK-78</u>, "<u>DTC Logic</u>".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

### ${f 5.}$ CHECK OUTSIDE KEY ANTENNA

#### Check outside key antenna.

- Driver side: Refer to <u>DLK-81</u>, "<u>DTC Logic</u>".
- Passenger side: Refer to <u>DLK-84, "DTC Logic"</u>.
- Rear bumper: Refer to <u>DLK-87</u>, "<u>DTC Logic</u>".

### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

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

- 1. Replace BCM. Refer to BCS-73, "Removal and Installation".
- Confirm the operation after replacement.

#### Is the result normal?

YES >> Inspection End.

>> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

### DRIVER SIDE DOOR REQUEST SWITCH

# DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

< SYMPTOM DIAGNOSIS > [WITH INTELLIGENT KEY SYSTEM			
DRIVER SIDE DOOR REQUEST SWITCH : Description	INFOID:000000000975643		
All doors do not lock/unlock using driver side door request switch.			
DRIVER SIDE DOOR REQUEST SWITCH: Diagnosis	s Procedure		
1. CHECK DRIVER SIDE DOOR REQUEST SWITCH			
Check driver side door request switch.			
Refer to <u>DLK-100, "Component Function Check"</u> .  Is the inspection result normal?			
YES >> GO TO 2.			
NO >> Repair or replace the malfunctioning parts.			
2.CHECK OUTSIDE KEY ANTENNA			
Check outside key antenna (driver side). Refer to <u>DLK-81, "DTC Logic"</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-73</u> , "Removal and Installation".			
<ol><li>Confirm the operation after replacement.</li></ol> Is the result normal?			
YES >> Inspection End.			
NO >> Check intermittent incident. Refer to GI-39. "Intermittent In PASSENGER SIDE DOOR REQUEST SWITCH	<u>ncident"</u> .		
PASSENGER SIDE DOOR REQUEST SWITCH : Des	CRIPTION INFOID:000000000975644		
All doors do not lock/unlock using passenger side door request switch	l.		
PASSENGER SIDE DOOR REQUEST SWITCH : Diag	gnosis Procedure INFOID:00000000975644		
1. CHECK PASSENGER SIDE DOOR REQUEST SWITCH			
Check passenger side door request switch. Refer to DLK-100, "Component Function Check".			
Is the inspection result normal?			
YES >> GO TO 2.			
NO >> Repair or replace the malfunctioning parts.  2.CHECK OUTSIDE KEY ANTENNA			
Check outside key antenna (passenger side).			
Refer to DLK-84, "DTC Logic".			
Is the inspection result normal?  YES >> GO TO 3.			
NO >> Repair or replace the malfunctioning parts.			
3.replace bcm			
<ol> <li>Replace BCM. Refer to <u>BCS-73</u>. "Removal and Installation".</li> <li>Confirm the operation after replacement.</li> </ol>			
ls the result normal?			
YES >> Inspection End	:-		
NO >> Check intermittent incident. Refer to GI-39, "Intermittent In	icident.		

# DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY [WITH INTELLIGENT KEY SYSTEM]

< SYMPTOM DIAGNOSIS >

# DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

# Diagnosis Procedure

INFOID:0000000009756442

# 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 DLK-118, "ALL DOOR : Diagnosis Procedure".

# 2.CHECK REMOTE KEYLESS ENTRY RECEIVER

Check remote keyless entry receiver.

Refer to DLK-108, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

# 3.CHECK INTELLIGENT KEY

Check Intelligent Key.

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

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

### 4. CHECK DOOR SWITCH

Check door switch.

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

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

# 5.REPLACE BCM

- 1. Replace BCM. Refer to BCS-73, "Removal and Installation".
- 2. Confirm the operation after replacement.

#### Is the result normal?

YES >> Inspection End

TRUNK LID DOES NOT	OPEN
< SYMPTOM DIAGNOSIS >	[WITH INTELLIGENT KEY SYSTEM]
TRUNK LID DOES NOT OPEN	
TRUNK LID OPENER SWITCH	
TRUNK LID OPENER SWITCH : Description	INFOID:0000000009756443
Trunk lid does not open by trunk lid opener switch operation.	
TRUNK LID OPENER SWITCH: Diagnosis Procedu	re INFOID:000000009756444
1.CHECK TRUNK LID SWITCH	
Check trunk lid switch.  Refer to DLK-113, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts.  2.CHECK TRUNK LID OPENER ACTUATOR	
Check trunk lid opener actuator.	
Refer to <u>DLK-111</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-73, "Removal and Installation"</u> .	
Confirm the operation after replacement.  Is the result normal?	
YES >> Inspection End.	
NO >> Check intermittent incident. Refer to GI-39, "Intermittent INTELLIGENT KEY	<u>t Incident"</u> .
INTELLIGENT KEY : Description	INFOID:0000000009756445
Trunk lid does not open by Intelligent Key remote operation.	
INTELLIGENT KEY : Diagnosis Procedure	INFOID:000000009756446
1. CHECK TRUNK LID OPEN FUNCTION	
Check trunk lid open function with trunk lid switch.	
<u>Does trunk lid open with trunk lid opener switch?</u> YES >> GO TO 2.	
NO >> Refer to <u>DLK-125</u> , "TRUNK LID OPENER SWITCH : Di	iagnosis Procedure".
2.CHECK REMOTE KEYLESS ENTRY FUNCTION	
Check remote keyless entry function.	
Does door lock/unlock with Intelligent Key button? YES >> GO TO 3.	
NO >> Refer to <u>DLK-124, "Diagnosis Procedure"</u> .	
3.CHECK INTELLIGENT KEY	
Check Intelligent Key. Refer to DLK-106, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	
4.REPLACE BCM	

### TRUNK LID DOES NOT OPEN

### < SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

- 1. Replace BCM. Refer to BCS-73, "Removal and Installation".
- 2. Confirm the operation after replacement.

#### Is the result normal?

YES >> Inspection End.

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

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

# IGNITION POSITION WARNING FUNCTION DOES NOT OPERATE Α Diagnosis Procedure INFOID:000000009756447 1. CHECK POWER DOOR LOCK OPERATION В Check power door lock operation. Does door lock/unlock with driver side door lock knob and door key cylinder? YES >> GO TO 2. NO >> Refer to <u>DLK-121, "Diagnosis Procedure"</u>. 2. CHECK DOOR SWITCH D Check door switch. Refer to DLK-102, "Component Function Check". Is the inspection result normal? Е YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3.REPLACE BCM F Replace BCM. Refer to BCS-73, "Removal and Installation". 2. Confirm the operation after replacement. Is the result normal? YES >> Inspection End. NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident". Н DLK

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**DLK-127** Revision: October 2013 2014 Sentra NAM

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

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

## AUTO DOOR LOCK OPERATION DOES NOT OPERATE

# Diagnosis Procedure

INFOID:0000000009756448

# 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.
- Check AUTO LOCK SET setting in WORK SUPPORT.
   Refer to <u>BCS-21</u>, "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

- 1. Replace BCM. Refer to BCS-73, "Removal and Installation".
- 2. Confirm the operation after replacement.

### Is the result normal?

YES >> Inspection End.

### VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE [WITH INTELLIGENT KEY SYSTEM]

< SYMPTOM DIAGNOSIS >

# VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPER-**ATE**

# Diagnosis Procedure

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

- Select DOOR LOCK of BCM using CONSULT.
- Select AUTOMATIC LOCK/UNLOCK SELECT in WORK SUPPORT mode.
- Check AUTOMATIC LOCK/UNLOCK SELECT setting in WORK SUPPORT. Refer to BCS-16, "DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Set Lock Only or Lock/Unlock in WORK SUPPORT.

# 2.check automatic door lock select setting in work support

- Select DOOR LOCK of BCM using CONSULT.
- Select AUTOMATIC DOOR LOCK SELECT in WORK SUPPORT mode.
- Check AUTOMATIC DOOR LOCK SELECT setting in WORK SUPPORT. Refer to BCS-16, "DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)".

#### Is the inspection result normal?

YES >> GO TO 3.

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

### 3.REPLACE BCM

- Replace BCM. Refer to BCS-73, "Removal and Installation".
- Confirm the operation after replacement.

#### Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

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INFOID:0000000009756449

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**DLK-129** Revision: October 2013 2014 Sentra NAM

# IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

## IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

# Diagnosis Procedure

INFOID:0000000009756450

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

- 1. Select DOOR LOCK of BCM using CONSULT.
- Select AUTOMATIC LOCK/UNLOCK SELECT in WORK SUPPORT mode.
- Check AUTOMATIC LOCK/UNLOCK SELECT setting in WORK SUPPORT. Refer to BCS-16, "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

- Select DOOR LOCK of BCM using CONSULT.
- Select AUTOMATIC DOOR UNLOCK SELECT in WORK SUPPORT mode.
- Check AUTOMATIC DOOR UNLOCK SELECT setting in WORK SUPPORT. Refer to BCS-16, "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

- 1. Replace BCM. Refer to BCS-73, "Removal and Installation".
- 2. Confirm the operation after replacement.

#### Is the result normal?

YES >> Inspection End.

# HAZARD AND BUZZER REMINDER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

HAZARD AND BUZZER REMINDER DOES NOT OPERATE	_
Diagnosis Procedure	A 1
1. CHECK HAZARD ANSWER BACK SETTING IN WORK SUPPORT	В
<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 BCS-21, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".</li> </ol>	С
Is the inspection result normal?	Б
YES >> GO TO 2.  NO >> Set the Lock Only, Unlock Only or Lock/Unlock in HAZARD ANSWER BACK.	D
2.CHECK ANS BACK I-KEY LOCK SETTING IN WORK SUPPORT	
<ol> <li>Select INTELLIGENT KEY of BCM using CONSULT.</li> <li>Select ANS BACK I-KEY LOCK in WORK SUPPORT mode.</li> <li>Check the ANS BACK I-KEY LOCK setting in WORK SUPPORT. Refer to BCS-21, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".</li> </ol>	- Е Г
Is the inspection result normal?	
YES >> GO TO 3.  NO >> Set the Horn Chirp or Buzzer in ANS BACK I-KEY LOCK.	G
3.CHECK ANS BACK I-KEY UNLOCK SETTING IN WORK SUPPORT	
<ol> <li>Select INTELLIGENT KEY of BCM using CONSULT.</li> <li>Select ANS BACK I-KEY UNLOCK in WORK SUPPORT mode.</li> <li>Check the ANS BACK I-KEY UNLOCK setting in WORK SUPPORT. Refer to BCS-21, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".</li> </ol>	Н
Is the inspection result normal?	ı
YES >> GO TO 4. NO >> Set the On in ANS BACK I-KEY UNLOCK.	
4.CHECK HAZARD FUNCTION	J
Check hazard function.  Refer to DLK-105, "Component Function Check".	DLK
Is the inspection result normal? YES >> GO TO 5.	
NO >> Repair or replace the malfunctioning parts.	L
5. CHECK INTELLIGENT KEY WARNING BUZZER	
Check Intelligent Key warning buzzer. Refer to DLK-91, "Component Function Check".	M
Is the inspection result normal?	
YES >> GO TO 6.  NO >> Repair or replace the malfunctioning parts.	Ν
6.REPLACE BCM	
<ol> <li>Replace BCM. Refer to <u>BCS-73, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ol>	0
Is the result normal?	_
YES >> Inspection End. NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".	Р

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

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

## KEY REMINDER FUNCTION DOES NOT OPERATE

# Diagnosis Procedure

INFOID:0000000009756452

# 1.check anti key lock in functi setting in work support

- 1. Select INTELLIGENT KEY of BCM using CONSULT.
- Select ANTI KEY LOCK IN FUNCTI in WORK SUPPORT mode.
- Check ANTI KEY LOCK IN FUNCTI setting in WORK SUPPORT.
   Refer to <u>BCS-21</u>, "INTELLIGENT KEY: CONSULT Function (BCM INTELLIGENT KEY)".

#### Is the inspection result normal?

YES >> GO TO 2.

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

# 2. CHECK DOOR SWITCH

#### Check door switch.

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

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

# CHECK INSIDE KEY ANTENNA

#### Check inside key antenna.

- Instrument center: Refer to <u>DLK-72</u>, "<u>DTC Logic</u>".
- Console: Refer to DLK-75, "DTC Logic".
- Trunk room: Refer to DLK-78, "DTC Logic".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

### 4. CHECK UNLOCK SENSOR

#### Check unlock sensor.

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

### Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

# 5.REPLACE BCM

- 1. Replace BCM. Refer to BCS-73, "Removal and Installation".
- Confirm the operation after replacement.

#### Is the result normal?

YES >> Inspection End.

# OFF POSITION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

OFF POSITION WARNING DOES NOT OPERATE	
Diagnosis Procedure	
1.check dtc with BCM	
Check that DTC is not detected with BCM	
Is the inspection result normal?	
YES >> GO TO 2.	
NO >> Perform trouble diagnosis relevant to DTC indicated.	
2.CHECK DTC WITH COMBINATION METER	
Check that DTC is not detected with combination meter	
Is the inspection result normal?	
YES >> GO TO 3.  NO >> Perform trouble diagnosis relevant to DTC indicated.	
3. CHECK DOOR SWITCH	
F	
Check front door switch (driver side).  Refer to DLK-102, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 4.	
NO >> Repair or replace the malfunctioning parts.	
4.CHECK COMBINATION METER BUZZER	
Check combination meter buzzer.	
Refer to DLK-91, "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-91, "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-73, "Removal and Installation".	
2. Confirm the operation after replacement.	
Is the result normal?	
YES >> Inspection End.  NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".	
No Short intermittent incident. Neith to of 50, intermittent incident.	
0	
P	

### P POSITION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INFOID:0000000009756454

## P POSITION WARNING DOES NOT OPERATE

# Diagnosis Procedure

1. CHECK DTC WITH BCM

Check that DTC is not detected with BCM

Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK DTC WITH COMBINATION METER

Check that DTC is not detected with combination meter

Is the inspection result normal?

YES >> GO TO 3.

NO >> Perform trouble diagnosis relevant to DTC indicated.

3.check intelligent key warning buzzer

Check Intelligent Key warning buzzer.

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

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4. CHECK COMBINATION METER BUZZER

Check combination meter buzzer.

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

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5.CHECK DOOR SWITCH

Check front door switch (driver side).

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

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

**6.**CHECK KEY WARNING LAMP

Check key warning lamp.

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

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

7. CHECK SHIFT P WARNING LAMP

Check shift P warning lamp.

Refer to DLK-110, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace the malfunctioning parts.

8.REPLACE BCM

- 1. Replace BCM. Refer to BCS-73, "Removal and Installation".
- 2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

### P POSITION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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>> Check intermittent incident. Refer to GI-39, "Intermittent Incident". Α В С  $\mathsf{D}$ Е F G Н J DLK L M Ν 0

### **ACC WARNING DOES NOT OPERATE**

### < SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

# ACC WARNING DOES NOT OPERATE

# Diagnosis Procedure

INFOID:0000000009756455

# 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-91, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

# 4.REPLACE BCM

- 1. Replace BCM. Refer to BCS-73, "Removal and Installation".
- 2. Confirm the operation after replacement.

#### Is the result normal?

YES >> Inspection End.

# TAKE AWAY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

TAKE AWAY WARNING DOES NOT OPERATE	
Diagnosis Procedure	A
1.CHECK DTC WITH BCM	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 INSIDE KEY ANTENNA	F
Check inside key antenna.  • Instrument center: Refer to DLK-72, "DTC Logic".	'
Console: Refer to <u>DLK-75, "DTC Logic"</u> .	G
Trunk room: Refer to <u>DLK-78, "DTC Logic"</u> .  Is the inspection result normal?	G
YES >> GO TO 4.	Н
NO >> Repair or replace the malfunctioning parts.  4.CHECK DOOR SWITCH	11
Check door switch.	
Refer to DLK-102, "Component Function Check".	ı
Is the inspection result normal?  YES >> GO TO 5.	
NO >> Repair or replace the malfunctioning parts.	J
5. CHECK COMBINATION METER BUZZER	
Check combination meter buzzer. Refer to DLK-91, "Component Function Check".	DLK
Is the inspection result normal?	L
YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts.	
6. CHECK INTELLIGENT KEY WARNING BUZZER	M
Check Intelligent Key warning buzzer. Refer to DLK-91, "Component Function Check".	
Is the inspection result normal?	Ν
YES >> GO TO 7.  NO >> Repair or replace the malfunctioning parts.	
7. CHECK KEY WARNING LAMP	0
Check key warning lamp. Refer to DLK-107, "Component Function Check".	
Is the inspection result normal?	Р
YES >> GO TO 8.  NO >> Repair or replace the malfunctioning parts.	
8. REPLACE BCM	
Replace BCM. Refer to <u>BCS-73</u> , "Removal and Installation".	
Confirm the operation after replacement.	

### TAKE AWAY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

### Is the result normal?

YES >> Inspection End.

# INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Diagnosis Procedure	INFOID:00000000097564
1. СНЕСК ДТС WITH ВСМ	
Check that DTC is not detected with BCM	
s 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	
s the inspection result normal?	
YES >> GO TO 3.	
NO >> Perform trouble diagnosis relevant to DTC indicated.  3. CHECK LO- BATT OF KEY FOB WARN SETTING IN WORK SUPPORT	
I. Select INTELLIGENT KEY of BCM.	
2. Select INTELLIGENT RET OF BCM. 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.</li> <li>Refer to BCS-21, "INTELLIGENT KEY: CONSULT Function (BCM - INTELL)</li> </ol>	ICENT KEV\"
s the inspection result normal?	<u>IGENT KET)</u> .
YES >> GO TO 4.	
NO >> Set ON in LO- BATT OF KEY FOB WARN.	
1.CHECK INTELLIGENT KEY	
Check Intelligent Key.  Refer to <u>DLK-106, "Component Function Check"</u> .	
s the inspection result normal?	
YES >> GO TO 5.	
NO >> Repair or replace the malfunctioning parts.	
O.CHECK INSIDE KEY ANTENNA	
Check inside key antenna. Instrument center: Refer to DLK-72, "DTC Logic".	
Console: Refer to DLK-75, "DTC Logic".	
Trunk room: Refer to <u>DLK-78, "DTC Logic"</u> .  s the inspection result normal?	
YES >> G0 T0 6.	
NO >> Repair or replace the malfunctioning parts.	
CHECK KEY WARNING LAMP	
Check key warning lamp.  Refer to <u>DLK-107, "Component_Function_Check"</u> .	
s the inspection result normal?	
YES >> GO TO 7.	
NO >> Repair or replace the malfunctioning parts.	
7.REPLACE BCM	
<ol> <li>Replace BCM. Refer to <u>BCS-73, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ol>	
s the result normal?	

### DOOR LOCK OPERATION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

# DOOR LOCK OPERATION WARNING DOES NOT OPERATE

### Diagnosis Procedure

INFOID:0000000009756458

# 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-121, "Diagnosis Procedure"</u>.

2.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.REPLACE BCM

- 1. Replace BCM. Refer to BCS-73, "Removal and Installation".
- 2. Confirm the operation after replacement.

#### Is the result normal?

YES >> Inspection End.

# **KEY ID WARNING DOES NOT OPERATE**

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[WITH INTELLIGENT KEY SYSTEM]

KEY ID WARNING DOES NOT OPERATE	A			
Diagnosis Procedure				
1. CHECK DTC WITH BCM				
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.  NO >> Perform trouble diagnosis relevant to DTC indicated.	Е			
3. CHECK INTELLIGENT KEY	- F			
Check Intelligent Key. Refer to DLK-106, "Component Function Check".				
Is the inspection result normal?	G			
YES >> GO TO 4.	0			
NO >> Repair or replace the malfunctioning parts.				
4.CHECK INSIDE KEY ANTENNA	Н			
Check inside key antenna.				
<ul> <li>Instrument center: Refer to <u>DLK-72, "DTC Logic"</u>.</li> <li>Console: Refer to <u>DLK-75, "DTC Logic"</u>.</li> </ul>				
Trunk room: Refer to <u>DLK-78, "DTC Logic"</u> .	I			
Is the inspection result normal?				
YES >> GO TO 5.	J			
NO >> Repair or replace the malfunctioning parts.				
5. CHECK KEY WARNING LAMP				
Check key warning lamp.	DLK			
Refer to DLK-107, "Component Function Check".				
Is the inspection result normal?	L			
YES >> GO TO 6.  NO >> Repair or replace the malfunctioning parts.				
6. REPLACE BCM				
	M			
<ol> <li>Replace BCM. Refer to <u>BCS-73, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ol>				
Is the result normal?	N			
YES >> Inspection End.				
NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".				
	0			
	Р			

#### PANIC ALARM FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

## PANIC ALARM FUNCTION DOES NOT OPERATE

# Diagnosis Procedure

INFOID:0000000009756460

# 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-124, "Diagnosis Procedure"</u>.

# 2.CHECK HORN OPERATION

- Select IPDM E/R using CONSULT.
- 2. Select HORN in ACTIVE TEST mode.
- 3. Touch On to check that it works normally.

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

# 3.CHECK PANIC ALARM SET SETTING IN WORK SUPPORT

- 1. Select INTELLIGENT KEY of BCM.
- 2. Select PANIC ALARM SET in WORK SUPPORT mode.
- Check PANIC ALARM SET setting in WORK SUPPORT.
   Refer to BCS-21, "INTELLIGENT KEY: CONSULT Function (BCM INTELLIGENT KEY)".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Set MODE 1 or MODE 3 in PANIC ALARM SET

# 4.REPLACE BCM

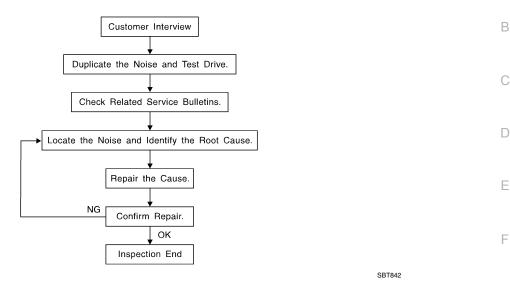
- Replace BCM. Refer to BCS-73, "Removal and Installation".
- 2. Confirm the operation after replacement.

#### Is the result normal?

YES >> Inspection End.

# 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 customer's comments; refer to <a href="DLK-147">DLK-147</a>, "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, be sure to diagnose and repair the noise that the customer is concerned about. This can be accomplished by test driving 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
- dent 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
- 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 bumble bee)
  Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending upon the person. A noise that you 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

clip or fastener/incorrect clearance.

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 you confirm the repair.

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#### SQUEAK AND RATTLE TROUBLE DIAGNOSES

#### < SYMPTOM DIAGNOSIS >

#### [WITH INTELLIGENT KEY SYSTEM]

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 model, drive position on CVT and 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: J-39565 and mechanic's 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 you suspect the noise is coming from.
     Do not use too much force when removing clips and fasteners, otherwise clips and fasteners can be broken or lost during the repair, resulting in the creation of new noise.
  - tapping or pushing/pulling the component that you suspect is causing 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 with your hand by touching the component(s) that you suspect is (are) causing the
    noise.
  - placing a piece of paper between components that you suspect are causing the noise.
  - looking for loose components and contact marks.
     Refer to DLK-144, "Generic Squeak and Rattle Troubleshooting".

#### 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 your authorized NISSAN Parts Department.

#### **CAUTION:**

# Do not use excessive force as many components are constructed of plastic and may be damaged. NOTE:

- Always check with the Parts Department for the latest parts information.
- The materials 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.
- The following materials not found in the kit can also be used to repair squeaks and rattles.
- SILICONE GREASE: Use instead of UHMW tape that will be visible or does not fit. The silicone grease will only last a few months.
- SILICONE SPRAY: Use when grease cannot be applied.
- DUCT TAPE: Use 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.

# Generic Squeak and Rattle Troubleshooting

INFOID:0000000010291105

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

#### INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

## < SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

- Cluster lid A and the instrument panel
- Acrylic lens and combination meter housing
- Instrument panel to front pillar finisher
- 4. Instrument panel to windshield
- Instrument panel pins
- 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 silicone spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

#### **CAUTION:**

Do not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will not be able to recheck the repair.

#### CENTER CONSOLE

Components to pay attention to include:

- 1. Shift selector assembly cover to finisher
- A/C control unit and cluster lid C
- Wiring harnesses behind audio and A/C control unit

The instrument panel repair and isolation procedures also apply to the center console.

#### DOORS

Pay attention to the:

- Finisher and inner panel making a slapping noise
- Inside handle escutcheon to door finisher
- Wiring harnesses tapping
- 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. You can usually insulate the areas 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 owner. In addition look for:

- Trunk lid bumpers out of adjustment
- Trunk lid striker out of adjustment
- The trunk lid torsion bars knocking together
- A loose license plate or bracket

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

#### SUNROOF/HEADLINING

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

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

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

## OVERHEAD CONSOLE (FRONT AND REAR)

Overhead console noises are often caused by the console panel clips not being engaged correctly. Most of these incidents are repaired by pushing up on the console at the clip locations until the clips engage. In addition look for:

- Loose harness or harness connectors.
- Front console map/reading lamp lens loose.

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## < SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Loose screws at console attachment points.

#### SEATS

When isolating seat noise it's important to note the position the seat is in and the load placed on the seat when the noise is present. These conditions should be duplicated when verifying and isolating the cause of the noise.

Cause of seat noise include:

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

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

#### **UNDERHOOD**

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

Causes of transmitted underhood noise include:

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

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

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

# **Diagnostic Worksheet**

INFOID:0000000010291106

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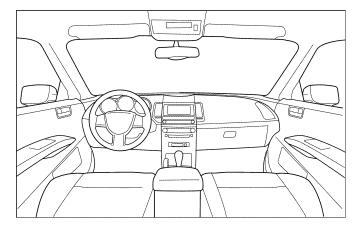
Dear Customer:

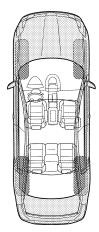
We are concerned about your satisfaction with your vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your vehicle right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may be asked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

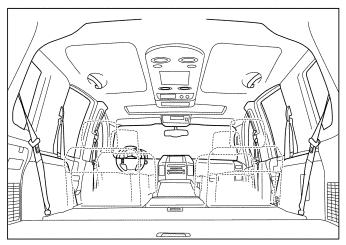
#### **SQUEAK & RATTLE DIAGNOSTIC WORKSHEET**

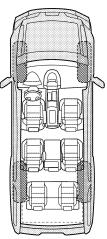
# I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)

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









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

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Briefly describe the location where the nois	e occurs	:			
II. WHEN DOES IT OCCUR? (please chec	ck the bo	xes that app	oly)		
<ul><li>☐ Anytime</li><li>☐ 1st time in the morning</li><li>☐ Only when it is cold outside</li><li>☐ Only when it is hot outside</li></ul>	☐ After sitting out in the rain ☐ When it is raining or wet ☐ Dry or dusty conditions ☐ Other:				
III. WHEN DRIVING:	IV. W	HAT TYPE	OF NOISE	<b>!</b>	
☐ Through driveways       ☐ Squeak (like tennis shoes on a clean floor)         ☐ Over rough roads       ☐ Creak (like walking on an old wooden floor)         ☐ Over speed bumps       ☐ Rattle (like shaking a baby rattle)         ☐ Only about mph       ☐ Knock (like a knock at the door)         ☐ On acceleration       ☐ Tick (like a clock second hand)         ☐ Coming to a stop       ☐ Thump (heavy muffled knock noise)         ☐ On turns: left, right or either (circle)       ☐ Buzz (like a bumble bee)         ☐ With passengers or cargo       ☐ Other: miles or minutes     TO BE COMPLETED BY DEALERSHIP PERSONNEL  Test Drive Notes:					
		VEC	NO	Initials of navon	
		YES	NO	Initials of person performing	
Vehicle test driven with customer - Noise verified on test drive					
<ul><li>Noise source located and repaired</li><li>Follow up test drive performed to confirm</li></ul>	repair				
·	Cust	omer Name	·		

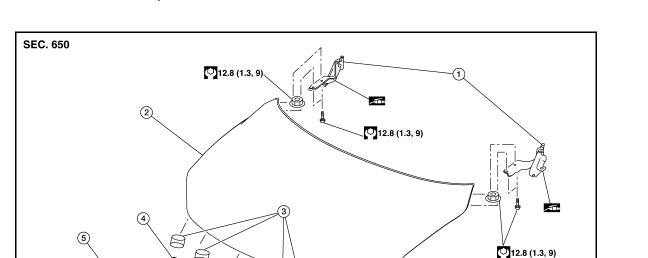
**DLK-148** Revision: October 2013 2014 Sentra NAM

# REMOVAL AND INSTALLATION

**HOOD** 

**HOOD ASSEMBLY** 

**HOOD ASSEMBLY: Exploded View** 



- 1. Hood hinge (LH/RH)
- 4. Hood seal
- 7. Hood support rod clamp
- 2. Hood assembly
- Hood insulator
- A. Clip

- Hood bumper rubber
- Hood support rod

# **HOOD ASSEMBLY**: Removal and Installation

**CAUTION:** 

- Use two people when removing or installing hood assembly due to its heavy weight.
- Use protective tape or shop cloths to protect surrounding components from damage during removal and installation of hood assembly.

#### REMOVAL

1. Support the hood assembly using a suitable tool.

#### WARNING:

Bodily injury may occur if hood assembly is not supported properly when removing hood assembly.

Disconnect front washer nozzle and tube.

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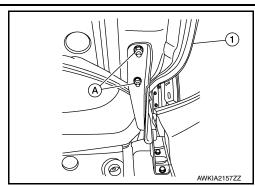
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Revision: October 2013 DLK-149 2014 Sentra NAM

3. Remove hood hinge to hood nuts (A) and then remove the hood assembly (1).



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#### INSTALLATION

Installation is in the reverse order of removal.

Tighten hood hinge to hood nuts to specified torque. Refer to <u>DLK-149, "HOOD ASSEMBLY: Exploded View"</u>. **CAUTION:** 

- Before installing the hood hinge, apply anticorrosive agent onto the surface of the vehicle.
- After installation, perform the hood assembly adjustment procedure. Refer to <u>DLK-150</u>, "HOOD ASSEMBLY: Adjustment".

**HOOD ASSEMBLY: Adjustment** 

SEC. 650

A - A

B - B

C - C

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- Hood assembly
   Front fender
- 2. Front grille
- Hood lock assembly
- 3. Front combination lamp

Check the clearance and the surface height between hood and each part by visual inspection and tactile feel. If the clearance and the surface height are out of specification, adjust them according to the adjustment procedures.

Unit: mm (in)

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Section	Item	Measurement	Standard	Parallelism	Equality
A – A		Clearance	6.2 ±2.2 (0.24 ±0.09)	2.0	_
A-A	Е	Surface height	_	_	_
B – B	F	Clearance	3.5 ±2.0 (0.14 ±0.08)	2.0	3.0
D-0	G	Surface height	3.6 ±2.0 (0.14 ±0.08)	2.0	2.0
C – C	Н	Clearance	3.7 ±1.0 (0.15 ±0.04)	2.0	2.0
0-0	J	Surface height	0.0 ±1.0 (0.00 ±0.04)	_	_

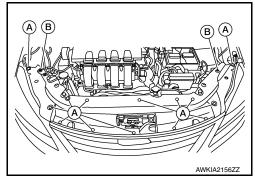
## **CLEARANCE ADJUSTMENT**

1. Loosen hood hinge (LH/RH) nuts and bolts.

#### NOTE:

The anticorrosive agent applied between the hoodledge and the hood hinges also acts as an adhesive. This seal must be broken before the hinges will move.

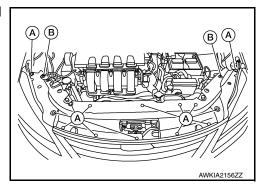
2. Remove the radiator core support upper cover clips (A) and bolts (B) and remove.



- 3. Loosen the hood lock assembly bolts.
- 4. Adjust the hood assembly so the clearance measurements are within specifications provided. Then tighten the hood hinge nuts and bolts to specified torque. Refer to <a href="DLK-149">DLK-149</a>, "HOOD ASSEMBLY: Exploded View".
- 5. Tighten the hood lock assembly bolts to specified torque. Refer to <a href="DLK-154">DLK-154</a>, "HOOD LOCK CONTROL: Exploded View".
- 6. Install the radiator core support upper cover.

## **HEIGHT ADJUSTMENT**

1. Remove the radiator core support upper cover clips (A) and bolts (B) and remove.



Loosen the hood lock assembly bolts.

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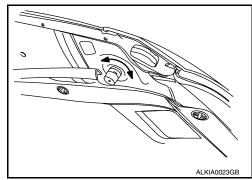
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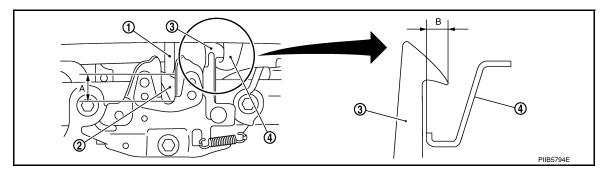
 Adjust the surface height of the hood assembly to front bumper fascia and front fender according to the specified values by rotating the hood bumper rubbers.

#### NOTE:

Only one hood bumper rubber shown for clarity.



- 4. Temporarily tighten the hood lock assembly bolts.
- 5. Adjust (A) and (B) as shown to the following value with hood's own weight by dropping it from approximately 200 mm (7.9 in) height or by pressing hood lightly [approximately 29 Nm (3.0 kg-m, 21 ft-lb)].



Hood striker

- 2. Primary latch

3.

- 4. Secondary latch
- A.  $21 \pm 1 \text{ mm } (0.8 \pm 0.04 \text{ in})$
- B. 6.8 mm (0.27 in)

Secondary striker

6. After adjustment, tighten hood hinge nuts and bolts to the specified torque. Refer to <a href="DLK-149">DLK-149</a>, "HOOD ASSEMBLY: Exploded View".

#### **CAUTION:**

- Check hood hinge rotating part for poor lubrication. If necessary, apply a suitable multi-purpose grease.
- After adjusting, apply touch-up paint (body color) to the head of hood hinge bolts and nuts.
- 7. Tighten the hood lock assembly bolts to specified torque.
- 8. Install the radiator core support upper cover.
- 9. If the clearance measurements between the hood and fender cannot be corrected by adjusting the hood, the fender must be adjusted. Refer to <a href="DLK-160">DLK-160</a>, "Adjustment".

# **HOOD HINGE**

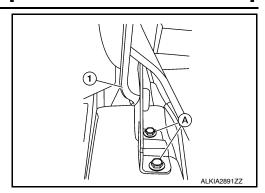
# **HOOD HINGE**: Removal and Installation

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#### REMOVAL

- 1. Remove the fender protector. Refer to <u>EXT-28</u>, <u>"FENDER PROTECTOR: Removal and Installation Front Fender Protector"</u>.
- 2. Remove the core support upper cover. Refer to <a href="HA-39">HA-39</a>, "Exploded View".
- 3. Remove the front fascia. Refer to EXT-17, "Removal and Installation".
- Remove the front combination lamp. Refer to EXL-119, "Removal and Installation".
- 5. Remove the front fender. Refer to <u>DLK-159</u>, "Removal and Installation".

Remove hood hinge bolts (A) and hood hinge (1).



#### INSTALLATION

Installation is in the reverse order of removal.

Tighten bolts to specified torque. Refer to <u>DLK-149</u>, "HOOD ASSEMBLY: Exploded View". **CAUTION**:

- Before installing the hood hinge, apply anticorrosive agent onto the surface of the vehicle.
- After installation, perform hood assembly adjustment procedure. Refer to <u>DLK-150</u>, "HOOD ASSEM-BLY: Adjustment".

# HOOD SUPPORT ROD

**HOOD SUPPORT ROD:** Removal and Installation

INFOID:0000000009756468

#### REMOVAL

1. Support hood assembly using a suitable tool.

#### WARNING:

Bodily injury may occur if hood assembly is not supported properly when removing hood support rod.

- 2. Rotate and remove hood support rod from grommet.
- 3. Remove grommet from hood hinge using a suitable tool, if necessary.

#### INSTALLATION

Installation is in the reverse order of removal.

# HOOD LOCK CONTROL

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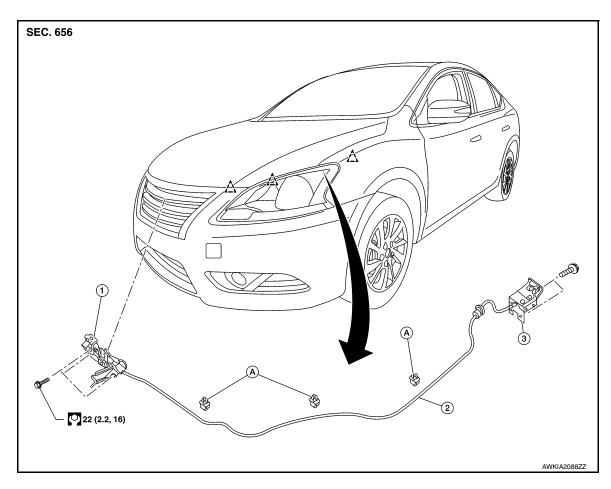
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**HOOD LOCK CONTROL: Exploded View** 

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- 1. Hood lock assembly
- A. Hood lock release cable clip
- 2. Hood lock release cable

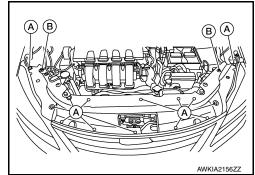
  ^ Clip
- 3. Hood lock/fuel filler door release handle assembly

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

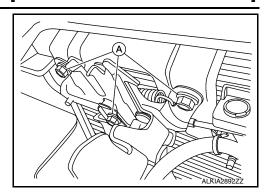
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# **REMOVAL**

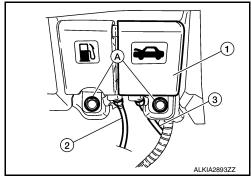
- Remove the fender protector (LH). Refer to <u>EXT-28</u>, "<u>FENDER PROTECTOR</u>: Removal and <u>Installation</u> <u>Front Fender Protector</u>".
- 2. Remove the radiator core support upper cover clips (A) and bolts (B) and remove.



3. Remove the hood lock assembly bolts (A).



- Disconnect the hood lock release cable from the hood lock assembly.
- 5. Remove the bolts (A), then separate the hood lock/fuel filler door release handle assembly (1) from the hood lock release cable (3) and fuel filler door release cable (2).



Remove the grommet from the dash assembly and pull the hood lock release cable into the passenger compartment.

#### CAUTION:

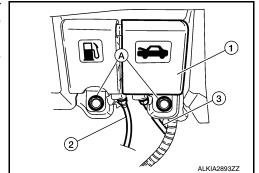
While pulling, be careful not to damage (peel) the outside of the hood lock release cable.

#### INSTALLATION

1. Pull the hood lock release cable through the dash assembly into the engine compartment. **CAUTION:** 

Be careful not to bend the cable too much, keep the radius 100 mm (3.94 in) or more.

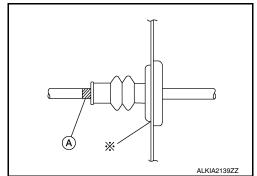
- Attach the hood lock release cable (3) and the fuel filler door release cable (2) to the hood lock/fuel filler door release handle assembly (1).
- 3. Place hood lock/fuel filler door release handle assembly in position and retain with bolts (A).



4. Check that the cable is not offset from the center of the grommet and seat the grommet into the dash hole.

#### NOTE:

Make sure that the marked area (A) of the cable is located as shown after mounting grommet to dash upper assembly. Apply sealant around the grommet at \* mark.



5. Position the hood lock release cable and clip it into place.

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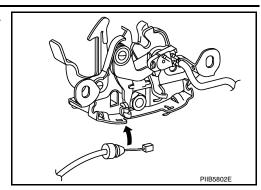
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6. Connect the hood lock release cable to the hood lock assembly.



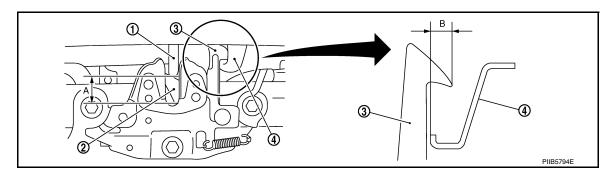
- 7. Perform hood fitting adjustment. Refer to <u>DLK-150</u>, "HOOD ASSEMBLY: Adjustment".
- 8. Perform the hood lock control inspection.

#### INSPECTION

#### NOTE:

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

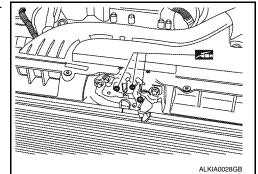
1. Check that the secondary latch is properly engaged with the secondary striker and meets specification provided (B) with hood's own weight.



Hood striker

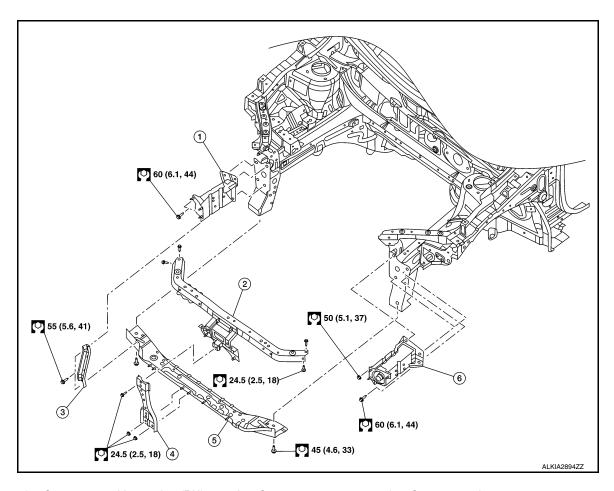
Secondary latch

- 2. Primary latch
- A.  $21 \pm 1$ mm  $(0.8 \pm 0.04 in)$
- Secondary striker
- B. 6.8 mm (0.27 in)
- 2. While operating the hood lock release handle, carefully check that the front end of the hood assembly is raised and meets the specification provided (A). Also check that the hood lock release handle returns to the original position.
- 3. Check that the hood lock release handle operating force is 49 N (5.0 kg, 11 lb) or less.
- 4. Install so the static closing force of the hood assembly is 49 490 N (5.0 50 kg-f, 36 110.2 lb-f).
- 5. Check the hood lock assembly lubrication condition. If necessary, apply a suitable multi-purpose grease as shown.



# RADIATOR CORE SUPPORT

**Exploded View** INFOID:0000000009756471



- 1. Core support side member (RH)
- 4. Hood lock support
- Core support upper
- Core support lower
- Core support lower stay
- Core support side member (LH)

# Removal and Installation

# REMOVAL

#### **CAUTION:**

Before servicing, turn ignition switch OFF, disconnect both battery terminals and wait at least three minutes.

- 1. Disconnect the battery negative and positive terminals then wait at least three minutes. Refer to PG-50. "Removal and Installation (Battery)".
- Remove crash zone sensor. Refer to SR-25, "Removal and Installation".
- Remove radiator. Refer to CO-15, "Removal and Installation".
- Remove the condenser (if equipped). Refer to <u>HA-39, "CONDENSER: Removal and Installation"</u>.
- 5. Remove the horns. Refer to <a href="https://example.com/HRN-6">HRN-6</a>, "Removal and Installation".
- Remove air guides (LH/RH).
- 7. Remove the hood lock support bolts and hood lock support.
- 8. Remove the core support lower stay bolts and core support lower stay.
- 9. Remove the core support lower bolts and core support lower.
- 10. Remove the core support side member nuts and bolts and remove the core support side member, if necessary.

#### INSTALLATION

**DLK-157** Revision: October 2013 2014 Sentra NAM DLK

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# **RADIATOR CORE SUPPORT**

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

Installation is in the reverse order of removal.

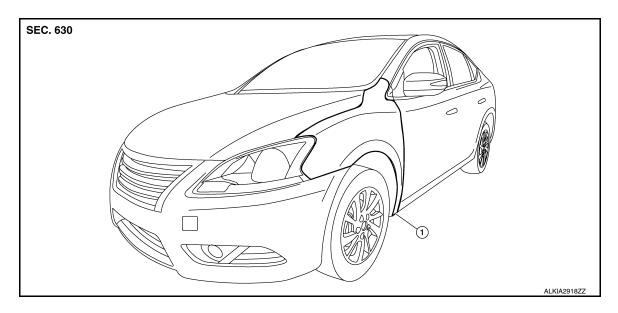
Tighten bolts to specification. Refer to <u>DLK-157</u>, "Exploded View".

# **CAUTION:**

After installation, perform hood fitting adjustment. Refer to  $\underline{\text{DLK-150}}$ , "HOOD ASSEMBLY : Adjustment".

# FRONT FENDER

Exploded View



1. Front fender

# Removal and Installation

INFOID:0000000009756474

## **REMOVAL**

- 1. Remove the front combination lamp. Ref to EXL-119, "Removal and Installation".
- Remove the front bumper fascia. Refer to <u>EXT-17</u>, "Removal and Installation".
- 3. Remove the front fender protector. Refer to <u>EXT-28</u>, "<u>FENDER PROTECTOR</u>: Removal and Installation <u>Front Fender Protector</u>".
- 4. Remove the front fender bolts and the front fender. **CAUTION:**

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

# **INSTALLATION**

Installation is in the reverse order of removal.

#### **CAUTION:**

After installation, perform fender adjustment procedure. Refer to DLK-160, "Adjustment".

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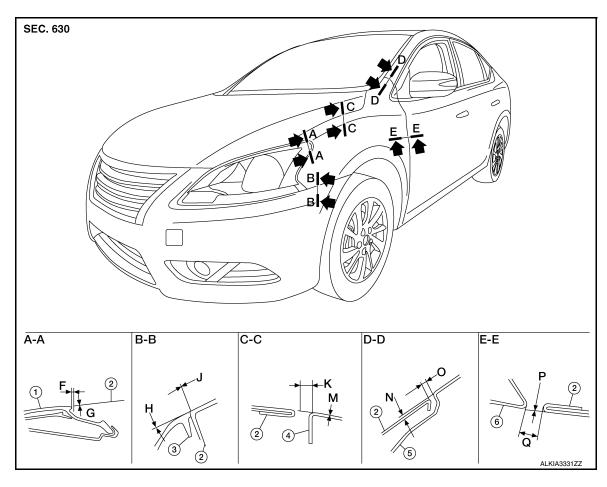
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Adjustment INFOID:000000009756475



1. Front combination lamp assembly

Hood assembly

- 2. Fender
- 5. Body side outer

- 3. Front bumper fascia
- 6. Front door

Check the clearance and the surface height between hood and each part by visual inspection and tactile feel. If the clearance and the surface height are out of specification, adjust them according to the adjustment procedures.

Unit: mm (in)

Section	Item	Measurement	Standard
A – A	F	Clearance	1.5 +1.2, -1.0 (0.06 + 0.05, -0.04)
	G	Surface height	3.9 ± 1.2 (0.15 ± 0.05)
B – B	Н	Surface height	0.7 ± 1.0 (0.03 ± 0.04)
B-B	J	Clearance	$0.0 \pm 1.0 \; (0.00 \pm 0.04)$
C – C	К	Clearance	3.7 ± 1.0 (0.15 ± 0.04)
	М	Surface height	$0.0 \pm 1.0 \; (0.00 \pm 0.04)$
D – D	N	Surface height	$0.0 \pm 1.0 \; (0.00 \pm 0.04)$
	0	Clearance	$3.0 \pm 1.0 \; (0.12 \pm 0.04)$
E-E	Р	Surface height	_
	Q	Clearance	_

# Adjustment

- Remove front bumper fascia. Refer to <u>EXT-17</u>, "Removal and Installation".
- Remove the front fender protector. Refer to <u>EXT-28</u>, "<u>FENDER PROTECTOR</u>: Removal and Installation -Front Fender Protector".

# FRONT FENDER

## < REMOVAL AND INSTALLATION >

## [WITH INTELLIGENT KEY SYSTEM]

- Loosen the front fender bolts.
- 4. Adjust the clearance (Q) and surface height (P) between the front fender and the front door.
- 5. Tighten the rear upper and lower front fender bolts.
- 6. Adjust the clearance (K) and surface height (M) between the front fender and the hood.
- 7. Adjust the clearance (O) and surface height (N) between the front fender and the body side outer.
- 8. Tighten the inner front fender bolts.
- 9. Adjust the clearance (J) and the surface height (H) between the front fender and the front fascia.
- 10. Tighten the front fender to front fascia and bracket screws.
- 11. Install front bumper fascia. Refer to EXT-17, "Removal and Installation".
- 12. Install front combination lamp.Refer to EXL-119, "Removal and Installation"
- 13. Install the front fender protector. Refer to EXT-28, "FENDER PROTECTOR: Removal and Installation -Front Fender Protector".

#### **CAUTION:**

- If the clearance measurements cannot be corrected by adjusting the fender, adjust the following as necessary.
- Hood assembly: Refer to DLK-150, "HOOD ASSEMBLY: Adjustment".
- Front door: Refer to DLK-164, "DOOR ASSEMBLY: Adjustment".
- After adjusting, apply touch-up paint (body color) to the head of the front fender bolts.

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**DLK-161** Revision: October 2013 2014 Sentra NAM

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# FRONT DOOR DOOR ASSEMBLY

# DOOR ASSEMBLY: Removal and Installation

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#### **CAUTION:**

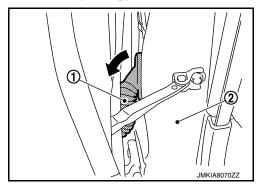
- Use two people when removing or installing the front door assembly due to its heavy weight.
- When removing and installing front door assembly, support front door using a suitable tool.
- Do not use air tools or electric tools for servicing.
- Before servicing, turn ignition switch OFF, disconnect both battery terminals and wait at least three minutes.

## NOTE:

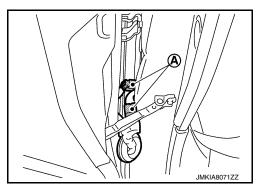
LH side shown; RH side similar.

#### **REMOVAL**

- 1. Disconnect the battery negative and positive terminals and wait at least three minutes, if equipped with the side air bag (satellite) sensor. Refer to <u>PG-50</u>, "Removal and Installation (Battery)".
- 2. Remove front door assembly harness grommet LH (1) then pull out door harness from body (2).



3. Disconnect the harness connectors (A) from the front door assembly harness.



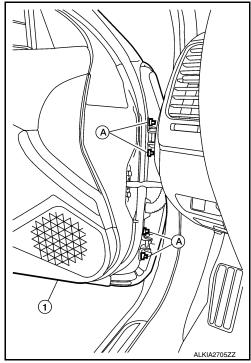
4. Remove check link bolt (body side).

# **FRONT DOOR**

# < REMOVAL AND INSTALLATION >

#### [WITH INTELLIGENT KEY SYSTEM]

5. Remove front door assembly hinge nuts (A) (door side) and the door assembly (1).



# **INSTALLATION**

Installation is in the reverse order of removal.

Tighten door hinge nuts to specified torque.

## **CAUTION:**

- After installation, check front door open/close, lock/unlock operation.
- After installation, perform the front door adjustment procedure. Refer to <u>DLK-164, "DOOR ASSEM-BLY</u>: Adjustment".

# NOTE:

When main power window and door lock/unlock switch is removed or replaced, it is necessary to perform the initialization procedure. Refer to <a href="PWC-28">PWC-28</a>, "Work Procedure".

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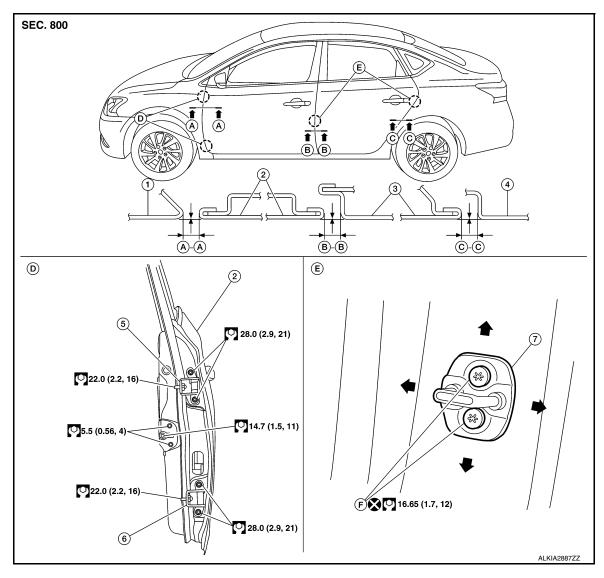
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# DOOR ASSEMBLY: Adjustment

INFOID:0000000009756477



- 1. Front fender
- 4. Body side outer
- 7. Front door striker

- 2. Front door assembly
- 5. Front door upper hinge
- F. Front door striker bolts
- 3. Rear door assembly
- 6. Front door lower hinge

Check the clearance and surface height between front door and each part by visual inspection and tactile feel. If the clearance and the surface height are out of specification, adjust them according to the adjustment procedure.

Unit: mm (in)

Section	Item	Measurement	Standard
A – A G	G	Clearance	4.0 ± 1.0 (0.16 ± 0.04)
	Н	Surface height	$0.0 \pm 1.0 \; (0.0 \pm 0.04)$
B – B	Н	Clearance	4.2 ± 1.0 (0.17 ± 0.04)
	J	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
C – C	J	Clearance	4.0 ± 1.0 (0.16 ± 0.04)
	K	Surface height	0.0 ± 1.0 (0.0 ± 0.04)

# LONGITUDINAL CLEARANCE

1. Remove the front fender. Refer to DLK-159, "Removal and Installation".

# FRONT DOOR

## < REMOVAL AND INSTALLATION >

#### [WITH INTELLIGENT KEY SYSTEM]

- Loosen the front door hinge to body bolts. Move the door forward or backward as necessary until within specifications provided.
- 3. Tighten the hinge to body bolts to specified torque.

## Front door hinge bolts

22.0 N·m (2.2 kg-m, 16 ft-lb)

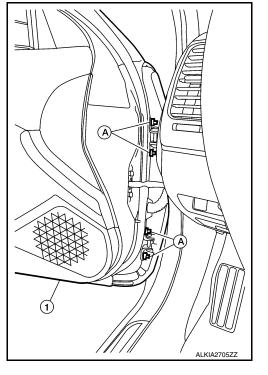
Install the front fender. Refer to <u>DLK-159</u>, "Removal and Installation".

#### SURFACE HEIGHT ADJUSTMENT

- 1. Loosen the front door hinge nuts (A).
- 2. Move the top and/or bottom of the door (1) in or out as necessary until it is within specifications provided.
- 3. Tighten the front door hinge nuts to specified torque.

Front door hinge nuts

28.0 N·m (2.9 kg-m, 21 ft-



#### **CAUTION:**

- Check front door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.
- After adjusting, apply touch-up paint (body color) to the head of front door hinge bolts and nuts.
- If the clearance measurements cannot be corrected by adjusting the front door assembly, adjust the following as necessary.
- Front fender: Refer to DLK-160, "Adjustment".
- Rear door: Refer to DLK-169, "DOOR ASSEMBLY: Adjustment".

# DOOR STRIKER ADJUSTMENT

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

DOOR HINGE

INFOID:0000000009756478

DOOR HINGE: Removal and Installation

#### REMOVAL

- 1. Remove front door assembly (2). Refer to <u>DLK-162</u>, "<u>DOOR ASSEMBLY</u>: <u>Removal and Installation</u>".
- Remove bolt (A) and door hinge (1).

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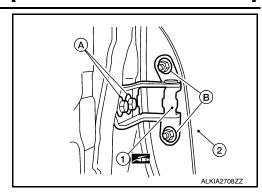
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3. Remove door hinge bolts (B) and remove hinge (1).



## **INSTALLATION**

Installation is in the reverse order of removal.

Tighten front door hinge bolts to specified torque. <u>DLK-164</u>, "<u>DOOR ASSEMBLY</u>: <u>Adjustment</u>" **CAUTION**:

- · Apply anticorrosive agent onto the front door hinge mating surface.
- After installation, check front door open/close, lock/unlock operation.
- After installation, perform the front door adjustment procedure. Refer to <u>DLK-164, "DOOR ASSEM-BLY</u>: Adjustment".

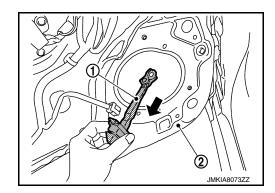
# DOOR CHECK LINK

DOOR CHECK LINK: Removal and Installation

INFOID:0000000009756479

#### **REMOVAL**

- 1. Fully close the front door glass.
- Remove front door speaker. Refer to <u>AV-60</u>, "Removal and <u>Installation"</u> (BASE AUDIO), <u>AV-205</u>, "Removal and <u>Installation"</u> (DISPLAY AUDIO WITH BOSE), <u>AV-124</u>, "Removal and <u>Installation"</u> (DISPLAY AUDIO WITHOUT BOSE) <u>AV-408</u>, "Removal and <u>Installation"</u> (NAVIGATION WITH BOSE) and <u>AV-300</u>, "Removal and <u>Installation"</u> (NAVIGATION WITHOUT BOSE).
- Remove door check link bolt from body.
- 4. Remove door check link bolts on door panel.
- 5. Remove door check link (1) through the hole in door panel (2).



#### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

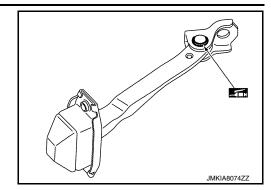
- After installation, check front door open/close, lock/unlock operation.
- Check front door check link rotating point for poor lubrication. If necessary, apply a suitable multipurpose grease.

# **FRONT DOOR**

# < REMOVAL AND INSTALLATION >

# [WITH INTELLIGENT KEY SYSTEM]

Grease



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# REAR DOOR DOOR ASSEMBLY

# DOOR ASSEMBLY: Removal and Installation

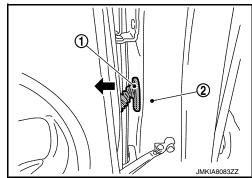
INFOID:0000000009756480

## **CAUTION:**

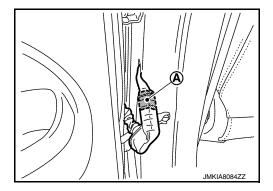
- Use two people when removing or installing the rear door assembly due to its heavy weight.
- When removing and installing rear door assembly, support rear door with a suitable tool.

#### RFMOVAL

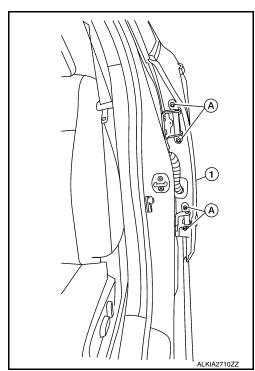
1. Remove rear door assembly harness grommet (LH) (1) then pull out door harness from body (2).



2. Disconnect the harness connector (A) from the door harness.



- 3. Remove the check link bolt from the body.
- 4. Remove rear door assembly hinge nuts (A) (door side) and the door assembly (1).



## **INSTALLATION**

Installation is in the reverse order of removal.

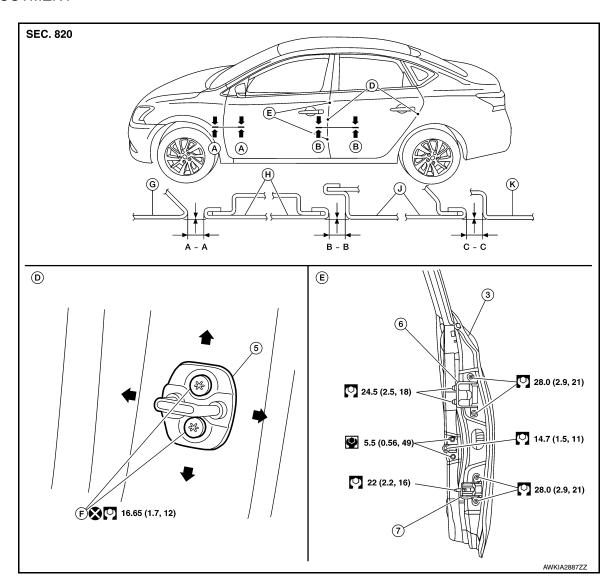
Tighten rear door hinge nuts (door side) to specified torque.

#### **CAUTION:**

- After installation, check rear door open/close, lock/unlock operation.
- After installation, perform the rear door adjustment procedure. Refer to <u>DLK-169</u>, "<u>DOOR ASSEMBLY</u>
   <u>: Adjustment"</u>.

# DOOR ASSEMBLY: Adjustment

# **ADJUSTMENT**



- 1. Front fender
- 4. Body side outer
- 7. Rear door lower hinge
- 2. Door assembly
- 5. Rear door striker
- F. Rear door striker screws
- 3. Rear door assembly
- 6. Rear door upper hinge

Check the clearance and surface height between rear door and each part by visual inspection and tactile feel. If the clearance and the surface height are out of specification, adjust them according to the adjustment procedure.

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Unit: mm (in)

Section	Item	Measurement	Standard
A – A	G	Clearance	4.0 ± 1.0 (0.16 ± 0.04)
	Н	Surface height	$0.0 \pm 1.0 \; (0.0 \pm 0.04)$
B – B	Н	Clearance	4.2 ± 1.0 (0.17 ± 0.04)
	J	Surface height	$0.0 \pm 1.0 \; (0.0 \pm 0.04)$
C – C	J	Clearance	4.0 ± 1.0 (0.16 ± 0.04)
	K	Surface height	$0.0 \pm 1.0 \; (0.0 \pm 0.04)$

#### LONGITUDINAL CLEARANCE

- 1. Remove the center pillar upper finisher. Refer to <a href="INT-28">INT-28</a>, "CENTER PILLAR UPPER FINISHER: Removal and Installation".
- 2. Loosen the rear door upper hinge nuts.
- Loosen the rear door lower hinge bolts.
- 4. Move the rear door forward or backward as necessary until within specifications provided.
- 5. Tighten the lower hinge bolts to specification.

## Rear door lower hinge bolts

22 N·m (2.2 kg-m, 16 ft-lb)

6. Tighten the upper hinge nuts to specification.

# Rear door upper hinge nuts

22 N·m (2.2 kg-m, 16 ft-lb)

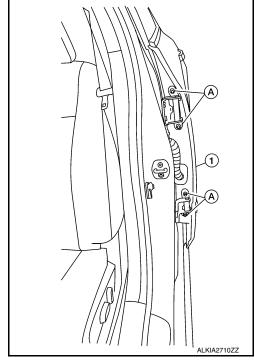
7. Install the center pillar upper finisher. Refer to <a href="INT-28">INT-28</a>, "CENTER PILLAR UPPER FINISHER: Removal and Installation".

#### SURFACE HEIGHT ADJUSTMENT

- 1. Loosen the rear door hinge nuts (door side) (A).
- 2. Move the top and/or the bottom of the rear door (1) in or out as necessary until it is within specifications provided.
- 3. Tighten the rear door hinge nuts (door side) (A) to specification.

Rear door nuts

28.0 N·m (2.9 kg-m, 21 ft-lb)



#### **CAUTION:**

- Check rear door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.
- After adjusting, apply touch-up paint (body color) to the head of rear door assembly hinge bolts and nuts.

• If the clearance measurements cannot be corrected by adjusting the rear door, adjust the front door. Refer to <u>DLK-164, "DOOR ASSEMBLY: Adjustment"</u>.

#### DOOR STRIKER ADJUSTMENT

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

# DOOR HINGE

DOOR HINGE: Removal and Installation

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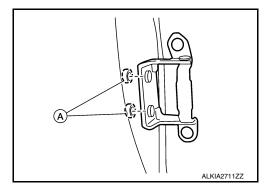
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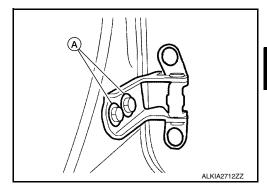
- Use two people when removing or installing rear door assembly due to its heavy weight.
- When removing and installing rear door assembly, support door using a suitable tool.

#### REMOVAL

- Remove rear door assembly. Refer to DLK-168, "DOOR ASSEMBLY: Removal and Installation".
- Remove center pillar upper finisher (upper hinge only). Refer to INT-28, "CENTER PILLAR UPPER FIN-ISHER: Removal and Installation".
- Remove rear door assembly upper hinge nuts (A) and remove.



Remove rear door assembly lower hinge bolts (A) and remove.



#### INSTALLATION

Installation is in the reverse order of removal.

Tighten rear door assembly hinge nuts and bolts to specified torque.Refer to <u>DLK-169</u>, "DOOR ASSEMBLY Adjustment"

#### **CAUTION:**

- Apply anticorrosive agent onto the hinge mating surface.
- After installation, check rear door open/close, lock/unlock operation.
- After installation, perform the rear door adjustment procedure. Refer to <u>DLK-169</u>, "<u>DOOR ASSEMBLY</u> : Adjustment".

# DOOR CHECK LINK

DOOR CHECK LINK: Removal and Installation

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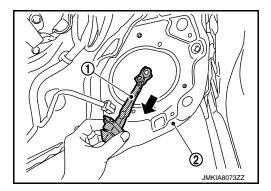
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## < REMOVAL AND INSTALLATION >

- Fully close the rear door glass.
- Remove rear door speaker (if equipped). Refer to <u>AV-61, "Removal and Installation"</u> (BASE AUDIO), <u>AV-206, "Removal and Installation"</u> (DISPLAY AUDIO WITH BOSE), <u>AV-125, "Removal and Installation"</u> (DISPLAY AUDIO WITHOUT BOSE) <u>AV-409, "Removal and Installation"</u> (NAVIGATION WITH BOSE) and <u>AV-301, "Removal and Installation"</u> (NAVIGATION WITHOUT BOSE).
- 3. Remove door check link bolt from body.
- 4. Remove door check link bolts on door panel.
- 5. Remove door check link (1) through the hole in door panel (2).

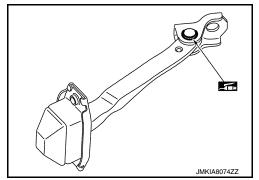


#### INSTALLATION

Installation is in the reverse order of removal.

## **CAUTION:**

- After installation, check rear door open/close, lock/unlock operation.
- Check rear door check link rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.



# DOOR HANDLE FRONT DOOR HANDLE

FRONT DOOR HANDLE: Exploded View

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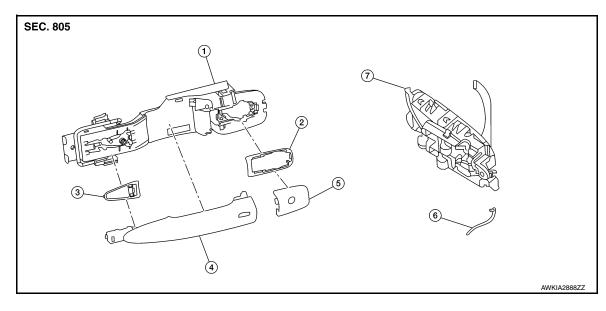
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- Outside handle bracket
- Intelligent key button
- Rear gasket

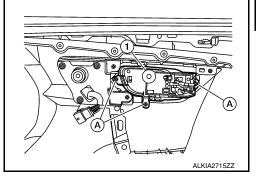
- Front gasket
- Door key cylinder rod
- Outside handle
- Inside handle assembly

# FRONT DOOR HANDLE: Removal and Installation - Inside Handle

INFOID:0000000009756485

#### **REMOVAL**

- Remove front door finisher. Refer to <a href="INT-15">INT-15</a>, "Removal and Installation".
- Remove screws (A) and inside handle assembly (1).



#### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

- Check front door lock cables are properly engaged to inside handle.
- After installation, check front door open/close, lock/unlock operation.

# FRONT DOOR HANDLE: Removal and Installation - Outside Handle

#### INFOID:0000000009756486

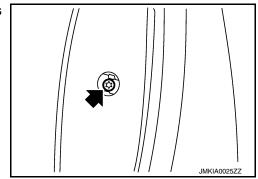
#### REMOVAL

- Fully close front door glass.
- 2. Remove front door finisher. Refer to <a href="INT-15">INT-15</a>, "Removal and Installation".</a>
- Remove front door vapor barrier.

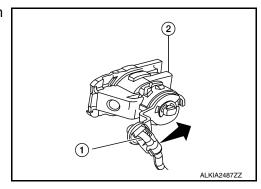
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# < REMOVAL AND INSTALLATION >

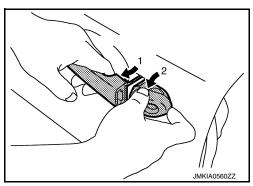
- 4. Remove front door glass channel rear.
- 5. Disconnect the harness connectors from the door antenna and door request switch and then remove harness clamp on outside handle bracket.
- 6. Remove door side grommet, and loosen screw ( that retains the front door outside handle bracket.



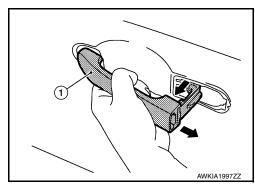
7. Reach in to separate door key cylinder rod (LH side) (1) from door key cylinder assembly (LH side) (2).



8. While pulling (1) outside handle, remove (2) door key cylinder assembly (LH side) or outside handle escutcheon (RH side).



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



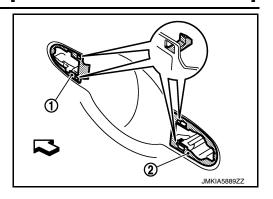
# **DOOR HANDLE**

# < REMOVAL AND INSTALLATION >

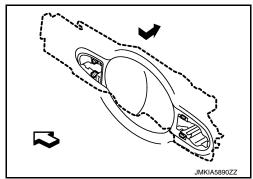
## [WITH INTELLIGENT KEY SYSTEM]

10. Remove front gasket (1) and rear gasket (2).

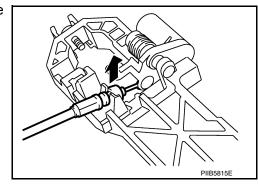
<: Front



11. Slide outside handle bracket toward rear of vehicle to remove. <: Front



12. Disconnect the outside handle cable from the outside handle bracket connection.



# **INSTALLATION**

Installation is in the reverse order of removal.

#### **CAUTION:**

- · When installing door key cylinder rod on the (LH) front door, be sure to rotate door key cylinder rod holder until a click is felt.
- Check front door lock cable is properly engaged to outside handle bracket.
- After installation, check front door open/close, lock/unlock operation.

# REAR DOOR HANDLE

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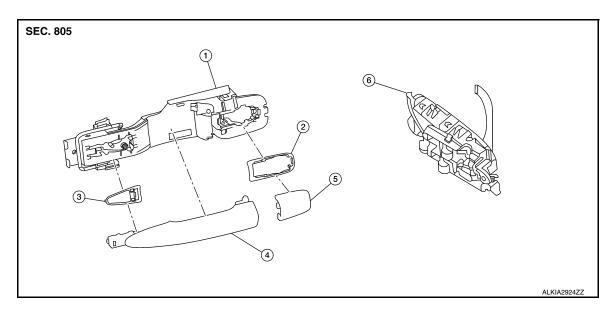
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REAR DOOR HANDLE: Exploded View

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- 1. Outside handle bracket
- 2. Front gasket
- 3. Outside handle

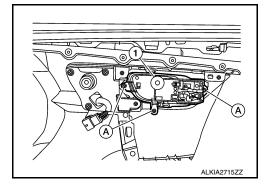
- 4. Outside handle escutcheon
- 5. Inside handle
- 6. Rear gasket

# REAR DOOR HANDLE: Removal and Installation - Inside Handle

INFOID:0000000009756488

## **REMOVAL**

- Remove rear door finisher. Refer to <u>INT-19</u>, "Removal and Installation".
- 2. Remove screws (A) and inside handle (1).



## INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

- Check rear door lock cables are properly engaged to inside handle.
- After installation, check rear door open/close, lock/unlock operation.

# REAR DOOR HANDLE: Removal and Installation - Outside Handle

## INFOID:0000000009756489

# **REMOVAL**

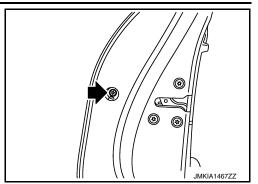
- 1. Fully close rear door glass.
- 2. Remove rear door finisher. Refer to INT-19, "Removal and Installation".
- 3. Remove rear door vapor barrier.

# **DOOR HANDLE**

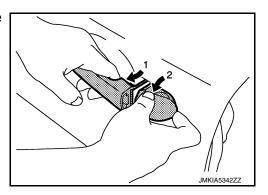
# < REMOVAL AND INSTALLATION >

# [WITH INTELLIGENT KEY SYSTEM]

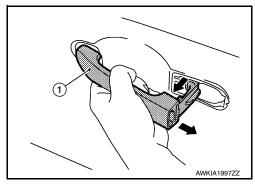
Remove door side grommet, and loosen screw (+)that retains the rear door outside handle bracket.



5. While pulling (1) outside handle, remove (2) outside handle escutcheon.



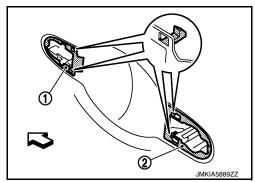
6. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



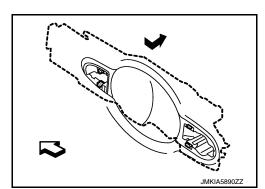
7. Remove front gasket (1) and rear gasket (2).

<: Front

Revision: October 2013



8. Slide outside handle bracket toward rear of vehicle to remove. <: Front



**DLK-177** 2014 Sentra NAM Α

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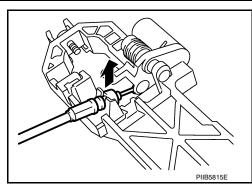
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# **DOOR HANDLE**

# < REMOVAL AND INSTALLATION >

# [WITH INTELLIGENT KEY SYSTEM]

Remove clip and disconnect the outside handle cable from the outside handle bracket.



## **INSTALLATION**

Installation in the reverse order of removal.

## **CAUTION:**

- Check rear door lock cable is properly engaged to outside handle bracket.
  After installation, check rear door open/close, lock/unlock operation.

# DOOR LOCK

FRONT DOOR LOCK

FRONT DOOR LOCK: Exploded View

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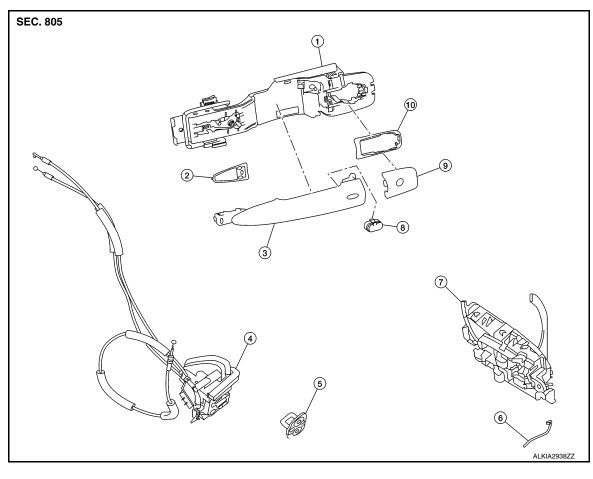
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- 1. Outside handle bracket
- 4. Front door lock assembly
- 7. Inside handle
- 10. Rear gasket

- 2. Front gasket
- 5. Door striker
- 8. Intelligent Key button
- 3. Front door handle
- 6. Door key cylinder rod (driver side)
- 9. Outside handle escutcheon

FRONT DOOR LOCK: Removal and Installation

INFOID:0000000009756491

#### **CAUTION:**

Before servicing, turn ignition switch OFF, disconnect both battery terminals and wait at least three minutes.

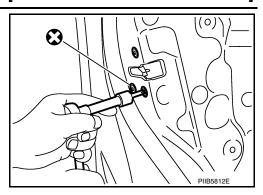
#### **REMOVAL**

- 1. Remove the front door outside handle. Refer to <u>DLK-173</u>, "<u>FRONT DOOR HANDLE</u>: <u>Removal and Installation Outside Handle</u>".
- 2. Remove the rear glass run.
- 3. Disconnect the harness connector from the front door lock actuator.

INFOID:0000000009756491

Revision: October 2013 DLK-179 2014 Sentra NAM

4. Remove screws and the front door lock assembly.



## **INSTALLATION**

Installation is in the reverse order of removal. Tighten front door lock screws to specified torque.

Front door lock screws: 5.8 Nm (0.59 kg-m, 51 in-lb)

#### **CAUTION:**

- Do not reuse front door lock assembly screws. Always replace screws with new ones when removed.
- Check front door lock cables are properly engaged to inside handle and outside handle bracket.
- When installing door key cylinder rod on the (LH) front door, be sure to rotate door key cylinder rod holder until a click is felt.
- After installation, check front door open/close, lock/unlock operation.
- Check front door lock assembly for poor lubrication. If necessary apply a suitable multi-purpose grease.

REAR DOOR LOCK

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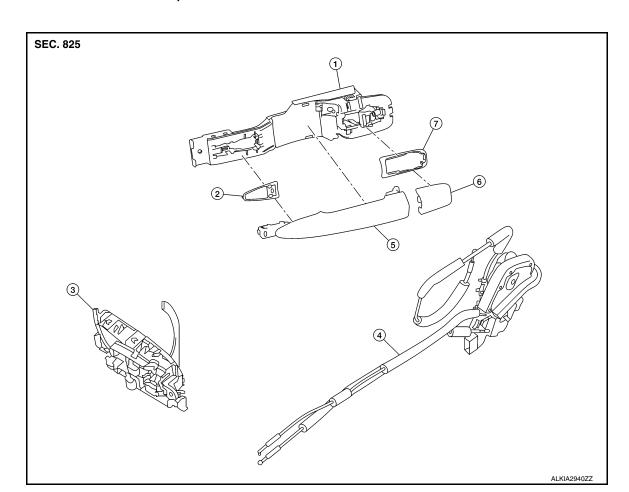
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## REAR DOOR LOCK: Exploded View



- 1. Outside handle bracket
- 4. Door lock assembly
- Rear gasket

- 2. Front gasket
- 5. Outside handle

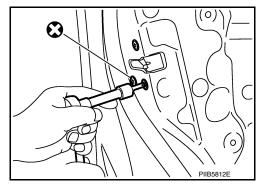
- 3. Inside handle assembly
- 6. Outside handle escutcheon

## REAR DOOR LOCK: Removal and Installation

INFOID:0000000009756493

#### **REMOVAL**

- 1. Remove the rear door outside handle. Refer to <u>DLK-176</u>, "<u>REAR DOOR HANDLE</u>: <u>Removal and Installation Outside Handle</u>".
- 2. Disconnect the harness connector from the rear door lock actuator.
- 3. Remove the screws and the rear door lock assembly.



#### **INSTALLATION**

Installation is in the reverse order of removal. Tighten rear door lock screws to specified torque.

Revision: October 2013 DLK-181 2014 Sentra NAM

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## **DOOR LOCK**

[WITH INTELLIGENT KEY SYSTEM]

Rear door lock screws: 5.8 Nm (0.59 kg-m, 51 in-lb)

#### **CAUTION:**

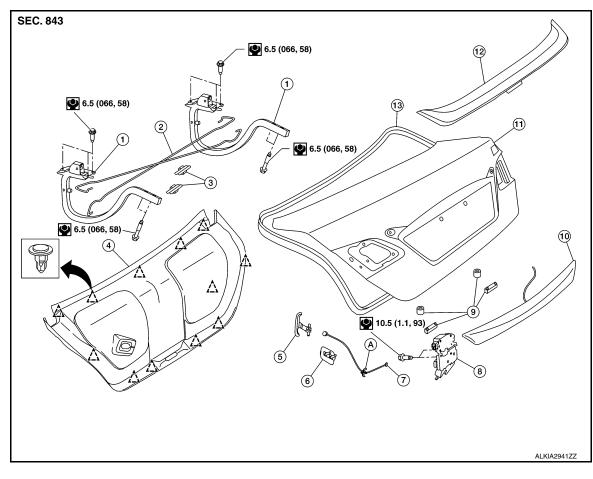
- Do not reuse rear door lock assembly screws. Always replace screws with new ones when removed.
- Check rear door lock cables are properly engaged to inside handle and outside handle bracket.
- After installation, check rear door open/close, lock/unlock operation.
- Check rear door lock assembly for poor lubrication. If necessary apply a suitable multi-purpose grease.

# TRUNK LID

TRUNK LID ASSEMBLY

TRUNK LID ASSEMBLY: Exploded View

INFOID:0000000009756494



- 1. Trunk lid hinge LH/RH
- 4. Trunk lid finisher (if equipped)
- 7. Emergency release handle ca-
- 10. License lamp finisher
- Weatherstrip 13.

- 2. Torsion bar LH/RH
- 5. Emergency release handle
- 8. Trunk lid lock
- 11. Trunk lid
- Clip

- 3. Torsion bar clips
- 6. Emergency release handle clip
- 9. Trunk lid bumpers
- 12. Rear spoiler (if equipped)
- Clip

## TRUNK LID ASSEMBLY: Removal and Installation

#### **CAUTION:**

- Use two people when removing or installing trunk lid assembly due to its heavy weight.
- Use protective tape or shop cloths to protect surrounding components from damage during removal and installation of trunk lid assembly.

**DLK-183** 

## REMOVAL

Revision: October 2013

Remove trunk lid finisher (if equipped). Refer to INT-45, "Removal and Installation".

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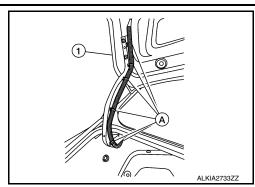
2014 Sentra NAM

## **TRUNK LID**

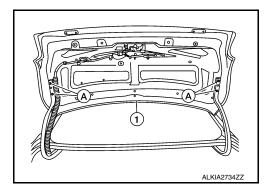
### < REMOVAL AND INSTALLATION >

### [WITH INTELLIGENT KEY SYSTEM]

 Disconnect the harness connectors in the trunk lid assembly (1) and remove the harness clips (A) then pull out harness from the trunk lid assembly (1).



3. Remove the bolts (A) and remove the trunk lid assembly (1).



### **INSTALLATION**

Installation is in the reverse order of removal.

#### **CAUTION:**

After installation, perform the trunk lid assembly adjustment procedure. Refer to <a href="DLK-185">DLK-185</a>, "TRUNK LID ASSEMBLY: Adjustment".

TRUNK LID ASSEMBLY : Adjustment

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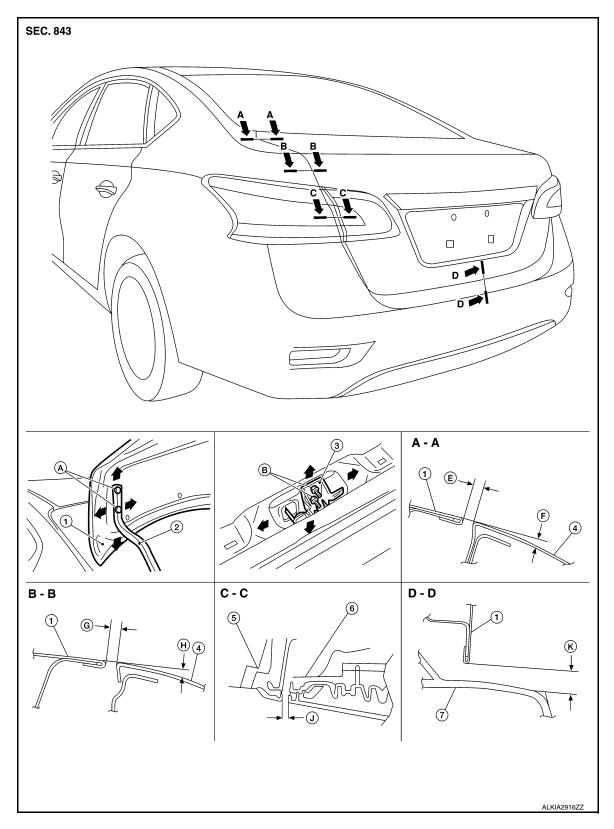
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- 1. Trunk lid assembly
- 4. Body side outer
- 7. Rear bumper fascia
- 2. Trunk lid hinge
- 5. Rear combination lamp
- A. Trunk lid bolts
- 3. Trunk lid striker
- 6. Reflector
- B. Striker bolts

lector

### TRUNK LID

#### < REMOVAL AND INSTALLATION >

#### [WITH INTELLIGENT KEY SYSTEM]

Check the clearance and the surface height between trunk lid and each part by visual inspection and tactile feel.

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

Unit: mm (in)

Section	Item	Measurement	Standard	Parallelism (MAX)	Right/Left Difference (MAX)
A – A	E	Clearance	3.5 ±1.0 (0.14 ±0.04)	1.5 (0.06)	1.5 (0.06)
A-A	F	Surface height	1.0 ±1.0 (0.04 ±0.04)	1.5 (0.06)	1.5 (0.06)
B – B	G	Clearance	3.5 ±1.0 (0.14 ±0.04)	1.5 (0.06)	1.5 (0.06)
B-B	Н	Surface height	1.0 ±1.0 (0.04 ±0.04)	1.5 (0.06)	1.5 (0.06)
C – C	J	Clearance	4.3 ±1.9 (0.17 ±0.07)	_	2.0 (0.08)
D – D	K	Clearance	7.0 ±2.0 (0.28 ±0.08)	_	_

#### LONGITUDINAL CLEARANCE

Trunk Lid Removed From Hinge

- Loosen the trunk lid to hinge bolts.
- Move the trunk lid so that the clearance measurements are within specifications provided.
- 3. Tighten the trunk lid to hinge bolts.

Trunk Lid Hinge Removed From Vehicle

- Remove the rear parcel shelf finisher. Refer to <u>INT-33</u>, "Removal and Installation".
- 2. Loosen the hinge to parcel shelf bolts.
- 3. Move the trunk lid so that the clearance measurements are within specifications provided.
- 4. Tighten the hinge to parcel shelf bolts.
- Install the rear parcel shelf finisher. Refer to <u>INT-33, "Removal and Installation"</u>.

#### SURFACE HEIGHT ADJUSTMENT

- 1. Loosen the bumper rubber.
- Loosen the striker bolts.
- Lift up the trunk lid approx. 100 150 mm (3.94 5.91 in) height then close it lightly. Make sure it engages firmly with the trunk lid closed.
- 4. Tighten the trunk lid striker.

## TRUNK LID HINGE

### TRUNK LID HINGE: Removal and Installation

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#### REMOVAL

- Remove trunk lid assembly. Refer to <u>DLK-183</u>, "TRUNK LID ASSEMBLY: Removal and Installation".
- 2. Remove torsion bar. Refer to <a href="https://doi.org/li>
  </a>. "TORSION BAR: Removal and Installation".
- 3. Remove rear parcel shelf finisher. Refer to <a href="INT-33">INT-33</a>, "Removal and Installation".
- 4. Remove trunk lid hinge bolts (body side) and remove.

#### **INSTALLATION**

Installation is in the reverse order of removal.

#### **CAUTION:**

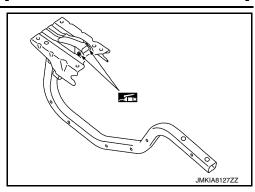
- Check trunk lid open/close, lock/unlock operation after installation.
- After installation, perform the trunk lid assembly adjustment procedure. Refer to <u>DLK-185, "TRUNK</u> <u>LID ASSEMBLY : Adjustment"</u>.

### TRUNK LID

#### < REMOVAL AND INSTALLATION >

#### [WITH INTELLIGENT KEY SYSTEM]

 Check trunk lid hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.



**TORSION BAR** 

TORSION BAR: Removal and Installation

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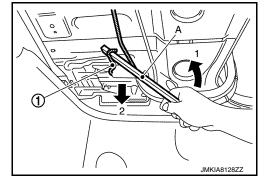
### **REMOVAL**

- 1. Remove torsion bar clips.
- 2. Support the trunk lid assembly using a suitable tool.

#### WARNING:

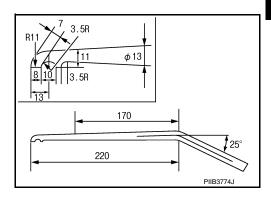
Bodily injury may occur if hood assembly is not supported properly when removing hood assembly.

3. Lift torsion bar (1) using a suitable tool (A) as shown to remove.



#### NOTE:

The suitable tool specifications are as shown.



#### **INSTALLATION**

Installation is in the reverse order of removal.

#### **CAUTION:**

After installation check the trunk lid open/close, lock/unlock operation.

### TRUNK LID LOCK

TRUNK LID LOCK: Removal and Installation

INFOID:0000000009756499

#### **REMOVAL**

1. Remove the trunk lid finisher (if equipped). Refer to <a href="INT-45">INT-45</a>, "Removal and Installation".</a>

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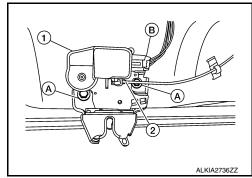
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#### [WITH INTELLIGENT KEY SYSTEM]

- 2. Disconnect the harness connector (B) and emergency release handle (2) from the trunk lid lock (1).
- 3. Remove the trunk lid lock bolts (A) and remove.



#### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

After installation, perform the trunk lid assembly adjustment procedure. Refer to <u>DLK-185, "TRUNK LID ASSEMBLY: Adjustment"</u>.

## **EMERGENCY LEVER**

**EMERGENCY LEVER:** Removal and Installation

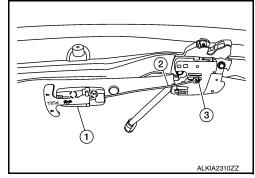
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#### **REMOVAL**

- Remove the trunk lid finisher (if equipped). Refer to <u>INT-45, "Removal and Installation"</u>.
- 2. Using a suitable tool release the pawls and remove emergency release handle (1) from trunk lid assembly.

( ): Pawl

3. Disconnect emergency release handle cable (2) from trunk lid lock assembly (3).



#### **INSTALLATION**

Installation is in the reverse order of removal.

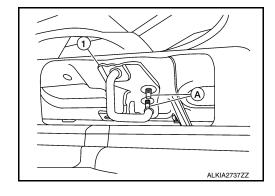
#### TRUNK LID STRIKER

### TRUNK LID STRIKER: Removal and Installation

INFOID:0000000009756501

#### **REMOVAL**

- 1. Remove the trunk kicking plate. Refer to <a href="INT-42">INT-42</a>, "TRUNK REAR PLATE: Removal and Installation".
- 2. Remove bolts (A) and striker (1).



## **TRUNK LID**

### < REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

Installation is in the reverse order of removal.

**CAUTION:** 

After installation, perform the trunk lid assembly adjustment procedure. Refer to <u>DLK-185, "TRUNK LID ASSEMBLY: Adjustment"</u>.

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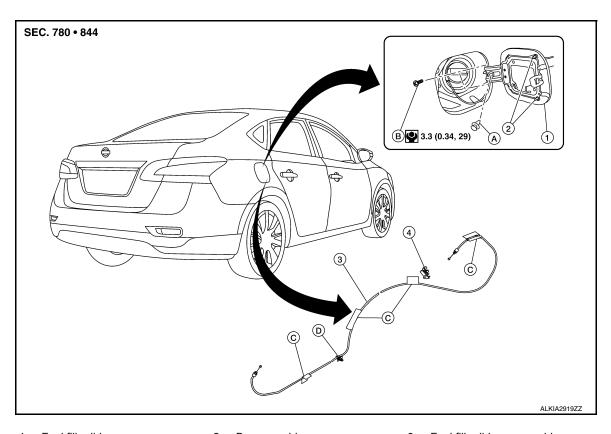
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Exploded View



- 1. Fuel filler lid
- 4. Fuel filler lid lock
- C. Cable protector
- 2. Bumper rubber
- A. Clip

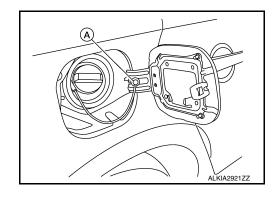
- 3. Fuel filler lid opener cable
- B. Bolt

## **FUEL FILLER LID**

## FUEL FILLER LID: Removal and Installation

## **REMOVAL**

- 1. Fully open fuel filler lid.
- 2. Remove fuel cap clip (A).

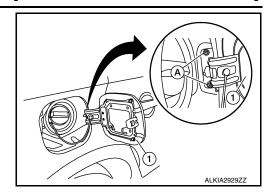


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## < REMOVAL AND INSTALLATION >

#### [WITH INTELLIGENT KEY SYSTEM]

3. Remove fuel filler lid screws (A) and fuel filler lid (1).



#### **INSTALLATION**

Installation is in the reverse order of removal.

#### **CAUTION:**

After installation, check fuel filler lid assembly open/close, lock/unlock operation. NOTE:

- The following table shows the specifications for a correctly installed fuel filler lid.
- · Fitting adjustment cannot be performed.

Unit: mm (in)

Portion	Measurement	Standard
Fuel filler lid – Body side outer	Clearance	5.1 ±1.0 (0.20 ±0.04)
Fuel filler lid – Body side outer	Surface height	0.0 ±1.0 (0.0 ±0.04)

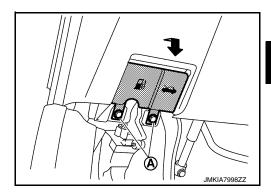
### FUEL FILLER OPENER CABLE

## FUEL FILLER OPENER CABLE: Removal and Installation

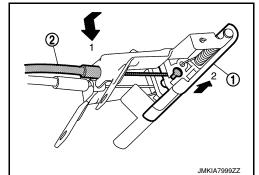
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#### **REMOVAL**

1. Remove hood and fuel filler handle assembly bolts (A).



2. Release fuel filler lid opener cable (2) by pulling downward and then sliding cable end to the side to remove from hood and fuel filler handle assembly (1).



- Remove dash side finisher (LH). Refer to <u>IP-14, "Removal and Installation"</u>.
- 4. Remove center pillar lower finisher (LH). Refer to <a href="INT-27">INT-27</a>, "CENTER PILLAR LOWER FINISHER: Removal and Installation".

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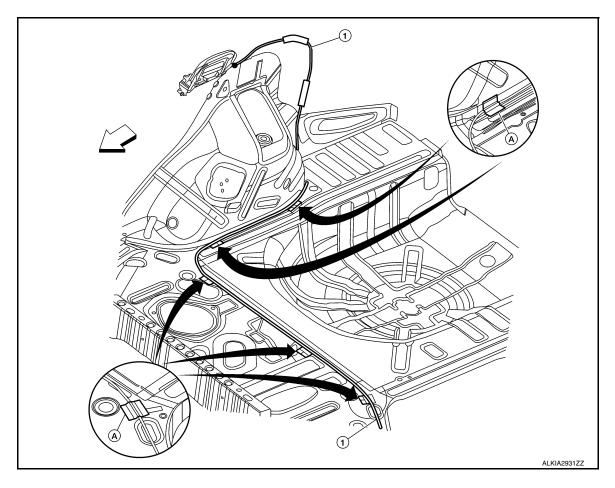
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- 5. Remove rear seat bolster (LH). Refer to SE-24, "Removal and Installation Rear Seat Bolster".
- 6. Remove trunk side finisher (LH). Refer to INT-43, "TRUNK SIDE FINISHER: Removal and Installation".
- 7. Remove fuel filler lid opener cable (1) from fuel filler lid lock assembly. Refer to <u>DLK-192, "FUEL FILLER LID LOCK</u>: Removal and Installation".



<□ Front

8. Remove each cable protector (A), then remove fuel filler lid opener cable (1).

#### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

After installation, check fuel filler lid assembly open/close, lock/unlock operation.

### FUEL FILLER LID LOCK

FUEL FILLER LID LOCK: Removal and Installation

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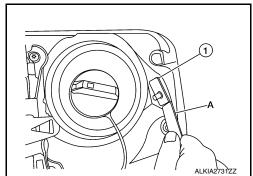
#### REMOVAL

1. Fully open fuel filler lid.

## < REMOVAL AND INSTALLATION >

#### [WITH INTELLIGENT KEY SYSTEM]

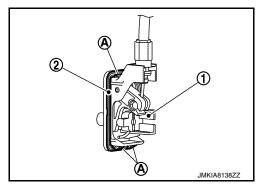
2. Insert a suitable tool (A) as shown into bottom of fuel filler lock assembly(1).



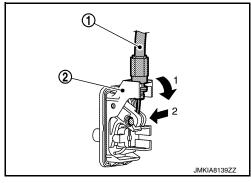
3. Release upper and lower pawls (A) using a suitable tool and remove fuel filler lid lock assembly (1).

## **CAUTION:**

Be careful not to damage gasket (2) when removing.



4. Disconnect fuel filler lid opener cable (1) by pulling downward and then sliding cable end to the side to remove from fuel filler lid lock assembly (2).



#### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

After installation, check fuel filler lid assembly open/close, lock/unlock operation.

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## [WITH INTELLIGENT KEY SYSTEM]

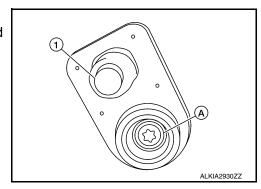
# **DOOR SWITCH**

## Removal and Installation

#### INFOID:0000000009756507

## **REMOVAL**

- 1. Remove the door switch screw (A).
- 2. Disconnect the harness connector from the door switch (1) and remove.



### **INSTALLATION**

Installation is in the reverse order of removal.

### **INSIDE KEY ANTENNA**

### < REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

# **INSIDE KEY ANTENNA**

## **CONSOLE**

## CONSOLE: Removal and Installation

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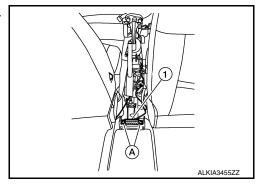
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#### **REMOVAL**

- 1. Remove the shift selector finisher. Refer to <u>IP-17</u>, "Removal and <u>Installation"</u>.
- 2. Remove the inside key antenna (console) screws (A) and inside key antenna (console) (1).



#### **INSTALLATION**

Installation is in the reverse order of removal.

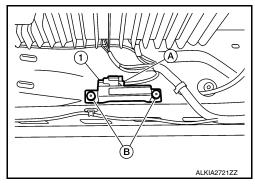
## **LUGGAGE ROOM**

### LUGGAGE ROOM: Removal and Installation

#### INFOID:0000000009756509

#### **REMOVAL**

- 1. Disconnect the harness connector (A) from the inside key antenna (luggage room) (1).
- Remove the inside key antenna (luggage room) clips (B), and remove.



#### INSTALLATION

Installation is in the reverse order of removal.

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### **OUTSIDE KEY ANTENNA**

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

## **OUTSIDE KEY ANTENNA**

**DRIVER SIDE** 

DRIVER SIDE: Removal and Installation

INFOID:0000000009756510

The driver side outside key antenna and driver side outside handle are serviced as an assembly. Refer to <u>DLK-173</u>, "FRONT DOOR HANDLE: Removal and Installation - Outside Handle".

PASSENGER SIDE

PASSENGER SIDE: Removal and Installation

INFOID:0000000009756511

The passenger side outside key antenna and passenger side outside handle are serviced as an assembly. Refer to DLK-173, "FRONT DOOR HANDLE: Removal and Installation - Outside Handle".

Installation is in the reverse order of removal.

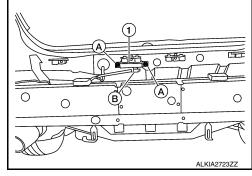
### REAR BUMPER

REAR BUMPER: Removal and Installation

INFOID:0000000009756513

#### **REMOVAL**

- 1. Remove rear bumper fascia. Refer to EXT-20, "Removal and Installation".
- 2. Disconnect the harness connector (B) from the rear bumper key antenna (1).
- 3. Remove the nuts (A) that retain the rear bumper key antenna (1) to the body.



#### INSTALLATION

Installation is in the reverse order of removal.

## DOOR REQUEST SWITCH

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

## DOOR REQUEST SWITCH

**DRIVER SIDE** 

DRIVER SIDE: Removal and Installation

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The driver side door request switch and driver side outside handle are serviced as an assembly. Refer to <u>DLK-173</u>, "FRONT DOOR HANDLE: Removal and Installation - Outside Handle".

PASSENGER SIDE

PASSENGER SIDE: Removal and Installation

INFOID:0000000009756515

The passenger side door request switch and passenger side outside handle are serviced as an assembly. Refer to <u>DLK-173</u>, "<u>FRONT DOOR HANDLE</u>: <u>Removal and Installation - Outside Handle</u>".

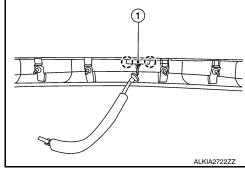
TRUNK LID FINISHER

TRUNK LID FINISHER: Removal and Installation

INFOID:0000000009756516

### **REMOVAL**

- 1. Remove the license lamp finisher. Refer to EXT-44, "Removal and Installation".
- Release the pawls and remove the trunk lid request switch (1).
   Pawl



#### **INSTALLATION**

Installation is in the reverse order of removal.

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## INTELLIGENT KEY WARNING BUZZER

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

## INTELLIGENT KEY WARNING BUZZER

## Removal and Installation

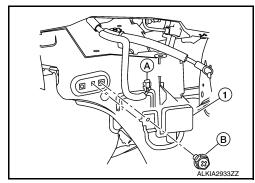
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#### **REMOVAL**

#### NOTE:

The Intelligent Key warning buzzer is located in the front passenger side area of the engine compartment, near the washer tank.

- 1. Remove the washer tank inlet. Refer to <a href="https://www.sepidecommons.org/www.sep
- 2. Remove the nut (B) and the Intelligent Key warning buzzer (1).
- 3. Disconnect the harness connector (A) from the Intelligent Key warning buzzer (1) and remove.



#### **INSTALLATION**

Installation is in the reverse order of removal.

## REMOTE KEYLESS ENTRY RECEIVER

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

## REMOTE KEYLESS ENTRY RECEIVER

## Removal and Installation

#### INFOID:0000000009756518

## **REMOVAL**

- 1. Remove glove box assembly. Refer to IP-22, "Removal and Installation".
- 2. Disconnect the harness connector from the remote keyless entry receiver.
- 3. Remove the screw and remote keyless entry receiver.

### **INSTALLATION**

Installation is in the reverse order or removal.

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## INTELLIGENT KEY BATTERY

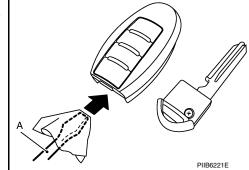
## Removal and Installation

Release the lock knob on the back of the Intelligent Key and remove the key.

Insert a suitable tool (A) wrapped with a cloth into the slit of the corner and rotate it to separate the upper part from the lower part.

#### **CAUTION:**

- Do not insert a tool into the notches of the Intelligent Key to pry it open, as this may damage the circuit board.
- Do not use excessive force when opening the Intelligent Key, as this may result in damage to the internal components.
- 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 a new one.

Battery replacement

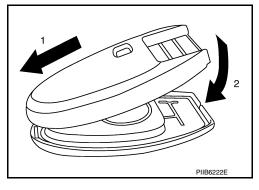
:Coin-type lithium battery

(CR2032)

4. Align the tips of the upper and lower parts, and then push them together until unit 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.



## TRUNK LID OPENER SWITCH

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

# TRUNK LID OPENER SWITCH

## Removal and Installation

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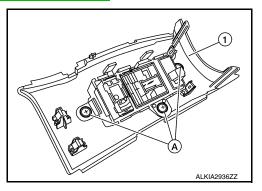
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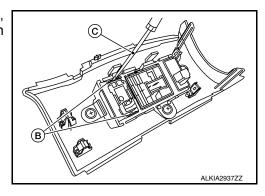
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#### **REMOVAL**

- 1. Remove the instrument lower panel LH. Refer to IP-21, "Removal and Installation".
- 2. Remove to the instrument finisher D (1).
- 3. Remove the screws (A) that retain the switch carrier to the instrument finisher (D).



4. Release upper tab and lower tab (B) using a suitable tool (C), then remove the trunk lid opener switch from the upper switch carrier.



#### INSTALLATION

Installation is in the reverse order of removal.

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# **PRECAUTION**

## **PRECAUTIONS**

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

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the SR and SB section of this Service Manual.

#### **WARNING:**

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SR section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

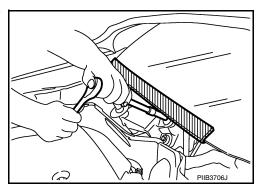
PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

#### **WARNING:**

- When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery and wait at least three minutes before performing any service.

## Procedure without Cowl Top Cover

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



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INFOID:0000000009756523

Precaution for Servicing Doors and Locks

## WARNING:

Radio waves could adversely affect electric medical equipment. Those who use a pacemaker should contact the electric medical equipment manufacturer for the possible influences before use,

- After removing and installing the opening/closing parts, be sure to carry out fitting adjustments to check their operation.
- Check the lubrication level, damage, and wear of each part. If necessary, grease or replace it.
- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with a new one.

Revision: October 2013 DLK-202 2014 Sentra NAM

## **PRECAUTIONS**

### < PRECAUTION >

#### [WITHOUT INTELLIGENT KEY SYSTEM]

- Be sure to tighten bolts and nuts securely to the specified torque.
- After installation is complete, be sure to check that each part works properly.
- Follow the steps below to clean components:
- Water soluble dirt:
- Dip a soft cloth into lukewarm water, wring the water out of the cloth and wipe the dirty area.
- Then rub with a soft, dry cloth.
- Oily dirt:
- Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%) and wipe the dirty area.
- Then dip a cloth into fresh water, wring the water out of the cloth and wipe the detergent off.
- Then rub with a soft, dry cloth.
- Do not use organic solvent such as thinner, benzene, alcohol or gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

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# **PREPARATION**

# **PREPARATION**

# Special Service Tools

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The actual shape of the tools may differ from	those illustrated here.	1
Tool number (TechMate No.) Tool name		Description
 (J-39570) Chassis Ear	SIIA0993E	Locating the noise
 (J-50397) NISSAN Squeak and Rattle Kit	ALJIA1232ZZ	Repairing the cause of noise
 (J-43241) Remote Keyless Entry Tester	LEL946A	Used to test key fobs
 (J-50190) Signal Tech II	ALEIA0131ZZ	Activate and display TPMS transmitter IDs     Display tire pressure reported by the TPMS transmitter     Read TPMS DTCs     Register TPMS transmitter IDs     Check Intelligent Key relative signal strength     Confirm vehicle Intelligent Key antenna signal strength     Compatible with future sensors     Equipped with a display

## **PREPARATION**

## < PREPARATION >

## [WITHOUT INTELLIGENT KEY SYSTEM]

Tool number (TechMate No.) Tool name		Description
KV48105501 (J-45295-A) Transmitter activation tool		<ul> <li>Activate TPMS transmitter IDs</li> <li>Compatible with future sensors</li> <li>Equipped with a display (KV48105501 only)</li> </ul>
	ALEIA0183ZZ	
(J-46534) Trim Tool Set	AWJIA0483ZZ	Removing trim components
Commercial Service Tools		INFOID:000000009756525
(TechMate No.) Tool name		Description
(J-39565) Engine Ear		Locating the noise

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# **CLIP LIST**

# **Descriptions for Clips**

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## Replace any clips which are damaged during removal or installation.

Symbol No.	Shapes	Removal & Installation
C101		Removal: Remove by bending up with flat-bladed screwdrivers or clip remover.
C103	TTTT	Removal: Remove with a clip remover.
C203 [ (7)		Removal: Push center pin to catching position. (Do not remove center pin by hitting it.) Push Push Installation:
C205		Removal: Flat-bladed screwdriver Clip Finisher
C206		Removal:

## [WITHOUT INTELLIGENT KEY SYSTEM]

Symbol No.	Shapes	Removal & Installation
CE103		Removal:
CF110	Clip A	Removal:  Finisher Clip A  Flat-bladed screwdrivers  Clip B
CF118	Clip A Clip B (Grommet)	Removal:  Flat-bladed Finisher screwdrivers  Body panel  Clip A Clip B (Grommet)
CR103		Removal: Holder portion of clip must be spread out to remove rod.
CS101		Removal:  1. Screw out with a Phillips screwdriver.  2. Remove female portion with flat-bladed screwdriver.

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# [WITHOUT INTELLIGENT KEY SYSTEM]

Symbol No.	Shapes	Remov	al & Installation
CG101		Removal:  Rotate 45° to remove  Removal:	Installation:
CS102	X)		
CS113		with a flat-blade then remove clip	while inserting a wdriver between
C111			

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## [WITHOUT INTELLIGENT KEY SYSTEM]

Symbol No.	Shapes	Removal & Installation
CG104		Removal: Remove by bending up with flat-bladed screwdrivers.
		Radiator grille Body panel
CE114		
CF118	Clip A  Clip B (Grommet)	Removal: Flat-bladed Finisher screwdrivers  Body panel Clip A Clip B (Grommet)

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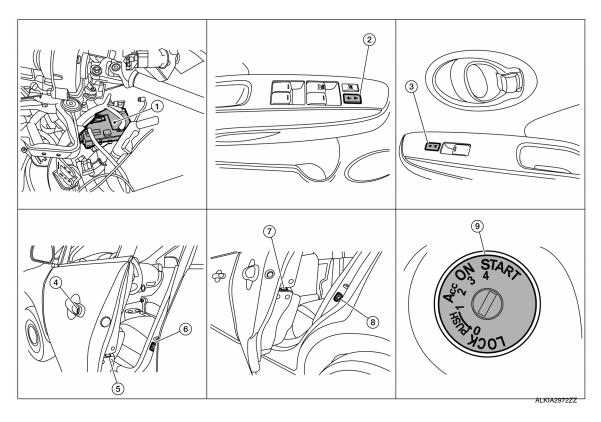
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# SYSTEM DESCRIPTION

# COMPONENT PARTS AUTOMATIC DOOR LOCK/UNLOCK FUNCTION

## AUTOMATIC DOOR LOCK/UNLOCK FUNCTION: Component Parts Location

INFOID:0000000009756527



- BCM (view with instrument panel removed)
- 4. Front door lock key cylinder switch LH
- Rear door lock actuator LH (RH similar)
- Main power window and door lock/un- 3. lock switch
- 5. Front door lock actuator LH (RH similar)
- 8. Rear door switch LH (RH similar)
- Power window and door lock/unlock switch RH
- 6. Front door switch LH (RH similar)
- 9. Key switch

# AUTOMATIC DOOR LOCK/UNLOCK FUNCTION: Component Description

INFOID:0000000009756528

Item	Function	
BCM	Controls the door lock function.	
Door lock and unlock switch	Input lock or unlock signal to BCM.	
Door lock actuator	Output lock/unlock signal from BCM and locks/unlocks each door.	
Door switch	Input door open/close condition to BCM.	
Key switch	Input key switch condition to BCM.	
Front door lock key cylinder switch LH	Input lock or unlock signal to the BCM.	
ABS actuator and electric unit (control unit)	Transmits vehicle speed signal to CAN communication line.	
Ignition switch	Input ignition switch ON/OFF condition to BCM.	

## POWER DOOR LOCK SYSTEM

# POWER DOOR LOCK SYSTEM: Component Parts Location

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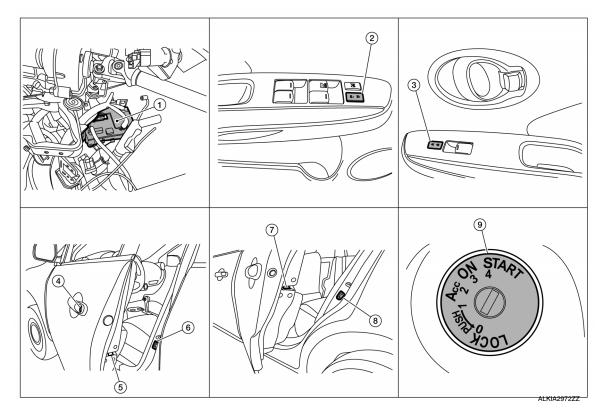
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- BCM (view with instrument panel removed)
- 4. Front door lock key cylinder switch LH
- Rear door lock actuator LH (RH similar)
- Main power window and door lock/un- 3. lock switch
- 5. Front door lock actuator LH (RH similar)
- 8. Rear door switch LH (RH similar)

- Power window and door lock/unlock switch RH
- 6. Front door switch LH (RH similar)
- 9. Key switch

# POWER DOOR LOCK SYSTEM: Component Description

INFOID:0000000009756530

Item	Function
BCM	Controls the door lock function.
Door lock and unlock switch	Input lock or unlock signal to BCM.
Door lock actuator	Output lock/unlock signal from BCM and locks/unlocks each door.
Door switch	Input door open/close condition to BCM.
Key switch	Input key switch condition to BCM.
Front door lock key cylinder switch LH	Input lock or unlock signal to the BCM.
ABS actuator and electric unit (control unit)	Transmits vehicle speed signal to CAN communication line.
Ignition switch	Input ignition switch ON/OFF condition to BCM.

# REMOTE KEYLESS ENTRY SYSTEM

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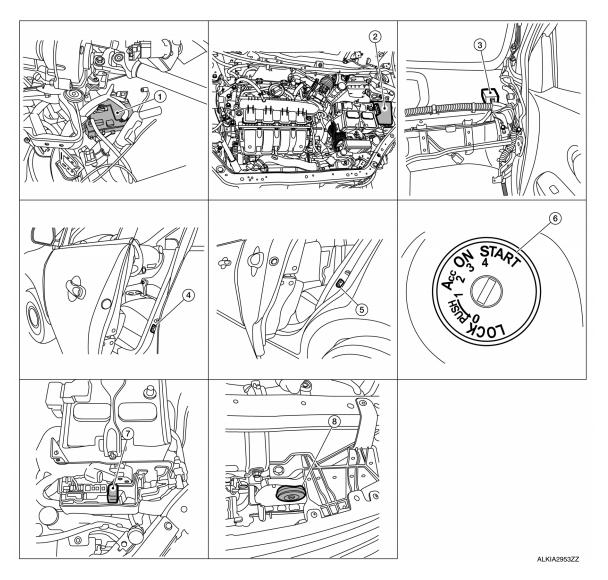
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Revision: October 2013 DLK-211 2014 Sentra NAM

# REMOTE KEYLESS ENTRY SYSTEM : Component Parts Location

NFOID:000000000975653



- BCM
  (view with instrument panel removed)
- 4. Front door switch LH (RH similar)
- 7. Horn relay

- 2. IPDM E/R
- 5. Rear door switch LH (RH similar)
- 8. Horn

- 3. Remote keyless entry receiver (view with instrument panel removed)
- 6. Key switch

# REMOTE KEYLESS ENTRY SYSTEM: Component Description

INFOID:0000000009756532

Item	Function
BCM	Controls the door lock function.
Door lock and unlock switch	Input lock or unlock signal to BCM.
Door switch	Input door open/close condition to BCM.
Key switch	Input key switch condition to BCM.
Remote keyless entry receiver	Receives lock/unlock signal from the keyfob, and then transmits to BCM.
Key switch	Input key switch ON/OFF condition to BCM.
Horn	Provides audible warning in panic mode.

## TRUNK LID OPENER SYSTEM

# TRUNK LID OPENER SYSTEM: Component Parts Location

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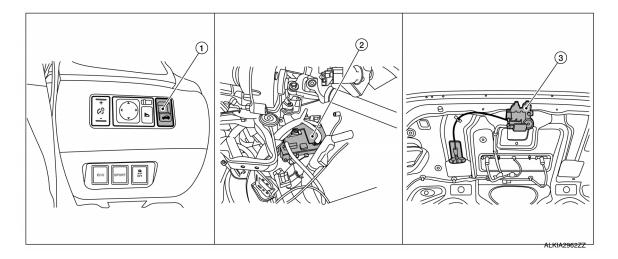
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- Trunk lid opener switch
- 2. BCM (view with instrument panel re- 3. moved
- Trunk lid opener assembly (trunk lid opener actuator and trunk room lamp switch)

# TRUNK LID OPENER SYSTEM: Component Description

INFOID:0000000009756534

Item	Function
BCM	Controls the trunk lid opener system.
Trunk lid opener actuator	Releases the mechanical latch to open the trunk lid.
Trunk lid opener switch	Inputs the trunk open request to the BCM.
Trunk room lamp switch	Inputs the trunk lid open/close condition to the BCM.

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## SYSTEM (POWER DOOR LOCK SYSTEM)

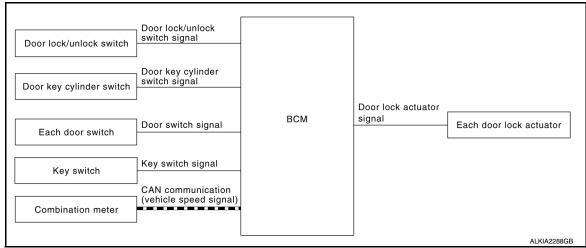
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[WITHOUT INTELLIGENT KEY SYSTEM]

# SYSTEM (POWER DOOR LOCK SYSTEM) AUTOMATIC DOOR LOCK/UNLOCK FUNCTION

## AUTOMATIC DOOR LOCK/UNLOCK FUNCTION: System Diagram

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## AUTOMATIC DOOR LOCK/UNLOCK FUNCTION: System Description

INFOID:0000000009756536

Input	Single	Function	Actuator
Door lock/unlock switch	Door lock/unlock signal	Door lock function	Each door lock actuator
Door key cylinder switch			
Each door switch	Door open/close signal	Key reminder function	
Combination meter.	Warning buzzer signal		
	Vehicle speed signal	Automatic door lock/unlock function	

### DOOR LOCK FUNCTION

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

#### Door Key Cylinder

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

Selective unlock operation mode can be changed using "DOOR LOCK-UNLOCK SET" mode in "WORK SUP-PORT". Refer to <u>BCS-87</u>, "DOOR LOCK: <u>CONSULT Function (BCM - DOOR LOCK)"</u>.

#### AUTOMATIC DOOR LOCKS (LOCK OPERATION)

The automatic door locks function is the function that locks all doors linked with the vehicle speed or shift position.

### Vehicle Speed Sensing Auto Door Lock\*1

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.

SYSTEM (POWER DOOR LOCK SYSTEM)				
< SYSTEM DESCRIPTION > [WITHOUT INTELLIGENT KEY SYSTEM]				
If a door is opened and closed at any time during one ignition cycle (OFF $\rightarrow$ ON), even after initial auto door lock operation has taken place, the BCM will relock all doors when the vehicle speed reaches 24 km/h (15 MPH) or more again.	А			
Setting change of Automatic Door Locks (LOCK) Function				
The LOCK operation setting of the automatic door locks function can be changed.	В			
(E) With CONSULT  The ON/OFF switching of the automatic door locks (LOCK) function and the type selection of the automatic door locks (LOCK) function can be performed at the WORK SUPPORT setting of CONSULT. Refer to BCS-87, "DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)".	С			
Without CONSULT				
The automatic door locks (LOCK) function can be switched ON/OFF by performing the following operation.	D			
Close all doors (door switch OFF)      Death the institute of the CN and				
<ol> <li>Push the ignition switch to the ON position</li> <li>Press and hold the door lock and unlock switch for 5 seconds or more in the lock direction within 20 sec-</li> </ol>	_			
onds after turning the ignition switch ON.	Е			
4. The switching is completed when the hazard lamp blinks.				
	F			
$OFF \rightarrow ON$ : 2 blinks				
$ON \rightarrow OFF$ : 1 blink				
5. The ignition switch must be turned OFF and ON again between each setting change.	G			
AUTOMATIC DOOR LOCKS (UNLOCK OPERATION)				
The automatic door locks (UNLOCK) function is the function that unlocks all doors linked with the key position or shift position.	Н			
IGN OFF Interlock Door Unlock*1				
All doors are unlocked when the power supply position is changed from ON to OFF. BCM outputs the unlock signal to all door lock actuators when it detects that the power supply position is changed from ignition switch ON to OFF.	I			
Setting change of Automatic Door Locks (UNLOCK) Function	1			
The UNLOCK operation setting of the automatic door locks function can be changed.	J			
With CONSULT				
The ON/OFF switching of the automatic door locks (UNLOCK) function and the type selection of the automatic door locks (UNLOCK) function can be performed at the WORK SUPPORT setting of CONSULT. Refer to <a href="https://example.com/BCS-87">BCS-87</a> , "DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)".	DLk			
Without CONSULT				
The automatic door locks (UNLOCK) function can be switched ON/OFF by performing the following operation.  1. Close all doors (door switch OFF)	L			
<ol> <li>Close all doors (door switch OFF)</li> <li>Place the ignition switch in the ON position</li> </ol>				
2. Proce and hold the deep leak and unlesh switch for 5 accordes an arranging the surface discretion within 00.	M			

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

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

5. The ignition switch must be turned OFF and ON again between each setting change.

\*1: This function is set to ON before delivery.

## POWER DOOR LOCK SYSTEM

**DLK-215** Revision: October 2013 2014 Sentra NAM

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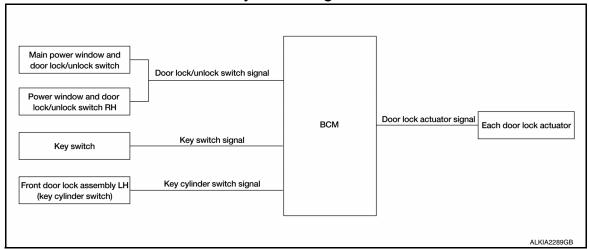
## SYSTEM (POWER DOOR LOCK SYSTEM)

< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

## POWER DOOR LOCK SYSTEM: System Diagram

INFOID:0000000009756537



## POWER DOOR LOCK SYSTEM: System Description

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Switch	Input/output signal to BCM	BCM function	Actuator
Main power window and door lock/unlock switch			
Power window and door lock/ unlock switch RH	Door lock/unlock signal	Door lock/unlock control	Door lock actuator
Front door lock key cylinder switch LH			

#### DOOR LOCK FUNCTION

Functions Available by Operating the Door Lock and Unlock Switches on Driver Door and Passenger Door

- Interlocked with the locking operation of door lock and unlock switch, door lock actuators of all door lock actuators are locked.
- Interlocked with the unlocking operation of door lock and unlock switch, door lock actuators of all door lock actuators are unlocked.

Functions Available by Operating the Key Cylinder Switch on Driver Door

 Interlocked with the locking operation of door key cylinder, door lock actuators of all door lock actuators are locked.

#### Selective Unlock Operation

- When door key cylinder is unlocked, door lock actuator driver side is unlocked.
- When door key cylinder is unlocked for the second time within 5 seconds after the first operation, door lock actuators on all doors are unlocked.

Select unlock operation mode can be changed using DOOR LOCK-UNLOCK SET mode in "WORK SUP-PORT". Refer to <a href="https://example.com/BCM-DOOR LOCK">BCS-87</a>, "DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)".

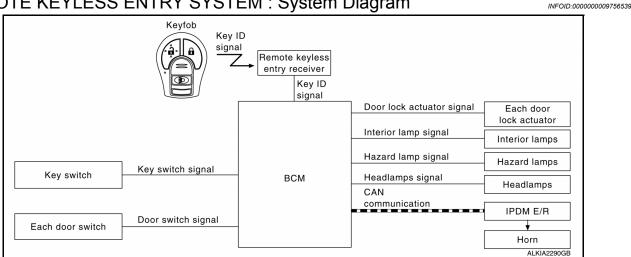
## REMOTE KEYLESS ENTRY SYSTEM

### SYSTEM (POWER DOOR LOCK SYSTEM)

< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

## REMOTE KEYLESS ENTRY SYSTEM: System Diagram



## REMOTE KEYLESS ENTRY SYSTEM: System Description

The remote keyless entry system can be locked and unlocked by pressing door lock and unlock button of keyfob.

### DOOR LOCK AND UNLOCK OPERATION

- · When door lock and unlock button of keyfob is pressed, door lock and unlock signal transmits from keyfob to BCM via remote keyless entry receiver.
- When BCM receives the door lock and unlock signal, it operates door lock actuator, flashes 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: 1 time) as a reminder.

#### OPERATION CONDITION

Remote controller operation	Operation condition
Lock/unlock	Key switch is OFF. Mechanical key is removed from the ignition cylinder.

#### OPERATION AREA

To ensure that the keyfob works effectively, use within 10 m (33ft) range of the vehicle, however the operable range may differ according to surroundings.

### SELECTIVE UNLOCK OPERATION

When door lock is unlocked, pressing LOCK button on keyfob once will lock all doors. When door lock is locked, pressing UNLOCK button on keyfob will unlock driver side door. Pressing UNLOCK button on keyfob second time within 5 seconds from the first time will unlock all doors.

#### HAZARD AND HORN REMINDER

When the doors are locked or unlocked by keyfob, power is supplied to sound horn and flash hazard warning lamps as a reminder

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

How to Change Hazard and Horn Reminder Modes

### (III) With CONSULT

Hazard and horn reminders can be changed using "WORK SUPPORT" mode in "MULTI REMOTE ENT".

Hazard reminder setting	Mode 1		Mode 2		Мо	de 3	Mode 4		
Keyfob operation	Lock Unlock		Lock	Unlock	Lock	Unlock	Lock	Unlock	
Hazard warning lamp blink	_	_	_	Once	Twice	_	Twice	Once	

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## SYSTEM (POWER DOOR LOCK SYSTEM)

### < SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

Horn reminder setting	C	N	OFF	=
Keyfob operation	Lock	Unlock	Lock	Unlock
Horns sound	Once	_	_	_

Hazard and horn reminders do not operate if any door switch is ON (any door is OPEN).

Hazard reminder can be changed using "HAZARD LAMP SET" mode in "WORK SUPPORT".

Horn reminder can be changed using "HORN CHIRP SET" mode in "WORK SUPPORT".

Refer to BCS-89, "MULTI REMOTE ENT: CONSULT Function (BCM - MULTI REMOTE ENT)".

### **Without CONSULT**

Refer to Owner's Manual for instructions.

#### AUTO DOOR LOCK OPERATION

When all doors are locked, ignition switch is OFF and key switch is OFF (mechanical key is removed from the ignition cylinder), doors are unlocked with keyfob button. When BCM does not receive the following signals within 1 minute, all doors are locked.

- Door switch is ON (door is opened)
- · Door is locked
- · Ignition switch is ON
- Key switch is ON (mechanical key is inserted in the ignition cylinder)

Auto door lock mode can be changed by "AUTO LOCK SET" mode in "WORK SUPPORT". Refer to <u>BCS-89</u>, "MULTI REMOTE ENT: CONSULT Function (BCM - MULTI REMOTE ENT)".

#### PANIC ALARM OPERATION

When key switch is OFF (mechanical key is removed from the ignition cylinder), BCM turns ON and OFF horn and headlamp intermittently with input of PANIC ALARM signal from keyfob.

BCM outputs to headlamps and IPDM E/R for panic alarm signal (horn signal) via CAN communication lines.

The alarm automatically turns OFF after 25 seconds or when BCM receives any signal from keyfob.

Panic alarm operation mode can be changed using "PANIC ALARM SET" mode in "WORK SUPPORT".

Refer to BCS-89, "MULTI REMOTE ENT: CONSULT Function (BCM - MULTI REMOTE ENT)".

#### INTERIOR LAMP TIMER OPERATION

When the following conditions occur, remote keyless entry system turns on interior lamp for 15 seconds with input of UNLOCK signal from keyfob. For detailed description, refer to <a href="DLK-216">DLK-216</a>, "POWER DOOR LOCK SYSTEM: System Description".

- Interior room lamp switch is in the DOOR position
- Door switch OFF (when all the doors are closed).

## SYSTEM (TRUNK LID OPENER SYSTEM)

< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

# SYSTEM (TRUNK LID OPENER SYSTEM)

## **System Description**

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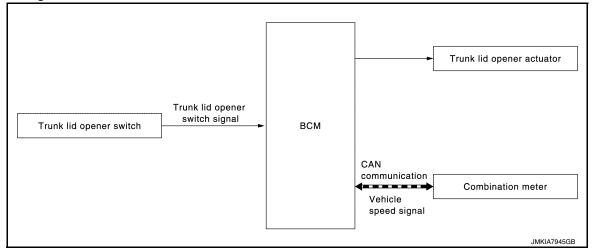
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System Diagram



### TRUNK LID OPENER OPERATION

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

### **OPERATION CONDITION**

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

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

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# DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

## DIAGNOSIS SYSTEM (BCM) COMMON ITEM

COMMON ITEM: CONSULT Function (BCM - COMMON ITEM)

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### APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Direct Diagnostic Mode	Description
ECU identification	The BCM part number is displayed.
Self Diagnostic Result	The BCM self diagnostic results are displayed.
Data Monitor	The BCM input/output data is displayed in real time.
Active Test	The BCM activates outputs to test components.
Work support	The settings for BCM functions can be changed.
Configuration	<ul> <li>The vehicle specification can be read and saved.</li> <li>The vehicle specification can be written when replacing BCM.</li> </ul>
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication is displayed.

### SYSTEM APPLICATION

BCM can perform the following functions.

				Direct [	Diagnosti	c Mode		
System	Sub System	ECU identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN DIAG SUPPORT MNTR
Door lock	DOOR LOCK		×	×	×	×		
Rear window defogger	REAR DEFOGGER			×	×			
Warning chime	BUZZER			×	×			
Interior room lamp timer	INT LAMP			×	×	×		
Remote keyless entry system	MULTI REMOTE ENT			×	×	×		
Exterior lamp	HEAD LAMP			×	×	×		
Wiper and washer	WIPER			×	×	×		
Turn signal and hazard warning lamps	FLASHER			×	×			
Air conditioner	AIR CONDITIONER			×				
Combination switch	COMB SW			×				
BCM	ВСМ	×	×			×	×	×
Immobilizer	IMMU		×		×	×		
Interior room lamp battery saver	BATTERY SAVER			×	×	×		
Trunk open	TRUNK			×				
RAP system	RETAINED PWR			×		×		
Signal buffer system	SIGNAL BUFFER			×				
TPMS	AIR PRESSURE MONITOR		×	×	×	×		
Panic alarm system	PANIC ALARM				×			

## **DIAGNOSIS SYSTEM (BCM)**

[WITHOUT INTELLIGENT KEY SYSTEM]

### < SYSTEM DESCRIPTION >

## **DOOR LOCK**

DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)

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### **DATA MONITOR**

Monitor Item [Unit]	Description
IGN ON SW [On/Off]	Indicates condition of ignition switch ON position.
KEY ON SW [On/Off]	Indicates condition of key switch.
CDL LOCK SW [On/Off]	Indicates condition of lock signal from door lock and unlock switch.
CDL UNLOCK SW [On/Off]	Indicates condition of unlock signal from door lock and unlock switch.
DOOR SW-DR [On/Off]	Indicates condition of front door switch LH.
DOOR SW-AS [On/Off]	Indicates condition of front door switch RH.
DOOR SW-RR [On/Off]	Indicates condition of rear door switch RH.
DOOR SW-RL [On/Off]	Indicates condition of rear door switch LH.
ACC ON SW [On/Off]	Indicates condition of ignition switch ACC position.
KEYLESS LOCK [On/Off]	Indicates condition of lock signal from keyfob.
KEYLESS UNLOCK [On/Off]	Indicates condition of unlock signal from keyfob.
KEY CYL LK-SW [On/Off]	Indicates condition of lock signal from door key cylinder switch.
KEY CYL UN-SW [On/Off]	Indicates condition of unlock signal from door key cylinder switch.
VEHICLE SPEED [km/h/mph]	Indicates vehicle speed signal received from combination meter on CAN communication line.

### **ACTIVE TEST**

Test Item	Description
DOOR LOCK	This test is able to check door lock operation [OTR ULK/DR UNLK/ALL UNLK/ALL LCK].
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### **WORK SUPPORT**

Support Item	Setting	Description
DOOD LOCK LINILOCK SET	On*	Automatic door locks function ON.
DOOR LOCK-UNLOCK SET	Off	Automatic door locks function OFF.
AUTOMATIC DOOR LOCK SELECT	P RANGE	Doors lock automatically when shifted out of Park (P).
AUTOMATIC BOOK LOCK SELECT	VH SPD*	Doors lock automatically when vehicle speed reaches 24 km/h (15 mph).
	MODE6*	Drivers door unlocks automatically when key is removed.
	MODE5	Drivers door unlocks automatically when shifted into Park (P).
AUTOMATIC DOOR UNLOCK	MODE4	Drivers door unlocks automatically when ignition is switched from ON to OFF.
SELECT	MODE3	Doors unlock automatically when key is removed.
	MODE2	Doors unlock automatically when shifted into Park (P).
	MODE1	Doors unlock automatically when ignition is switched from ON to OFF.
	Lock/Unlock*	Automatic door locks function operates in lock and unlock.
AUTOMATIC LOCK/UNLOCK	Lock Only	Automatic door locks function operates in lock only.
SELECT	Unlock Only	Automatic door locks function operates in unlock only.
	Off	Automatic door locks function OFF.

<sup>\* :</sup> Initial setting

**TRUNK** 

TRUNK: CONSULT Function (BCM - TRUNK)

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DATA MONITOR

# **DIAGNOSIS SYSTEM (BCM)**

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## [WITHOUT INTELLIGENT KEY SYSTEM]

Monitor Item [Unit]	Description
KEY ON SW [On/Off]	Indicates condition of key switch.
IGN ON SW [On/Off]	Indicates condition of ignition switch ON position.
VEHICLE SPEED [km/h/mph]	Indicates vehicle speed signal received from combination meter on CAN communication line.

### **BCM**

< ECU DIAGNOSIS INFORMATION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

BCS-108, "DTC Inspection Priority Chart"

BCS-109, "DTC Index"

# **ECU DIAGNOSIS INFORMATION**

**ECU** 

## **BCM**

BCM

List of ECU Reference

Reference	
BCS-97, "Reference Value"	
BCS-108, "Fail-safe"	

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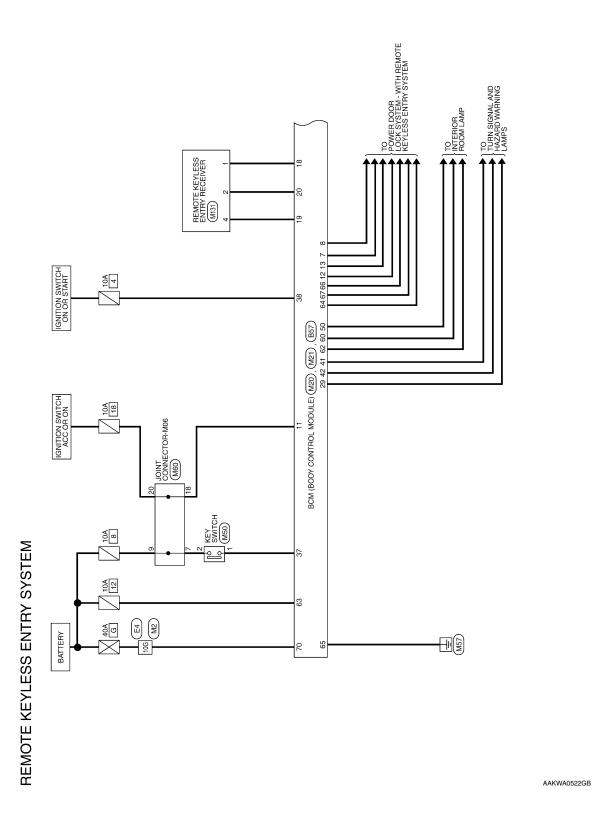
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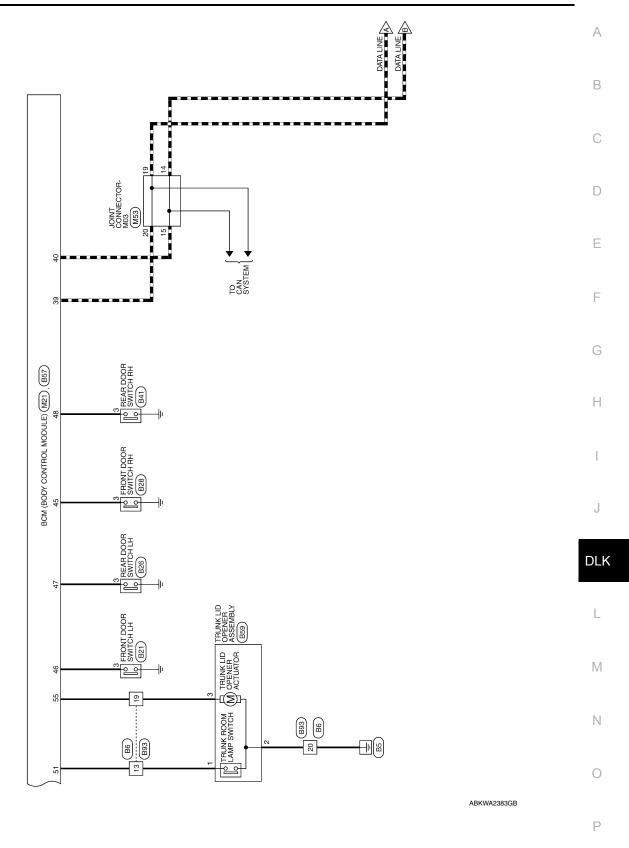
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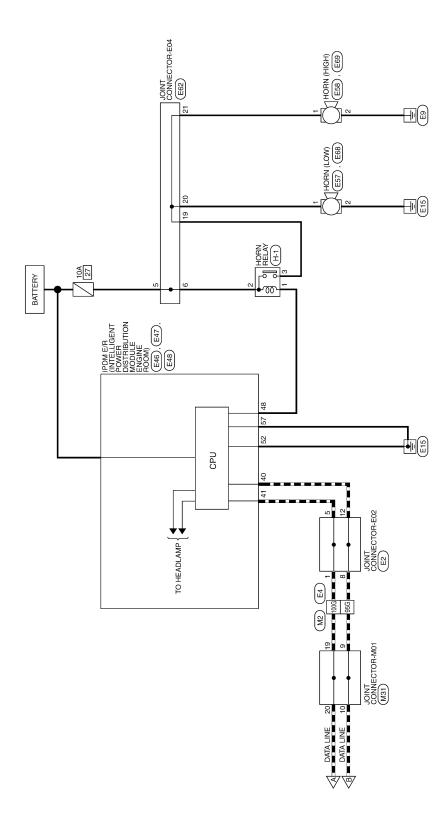
## REMOTE KEYLESS ENTRY SYSTEM

Wiring Diagram



## [WITHOUT INTELLIGENT KEY SYSTEM]





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## [WITHOUT INTELLIGENT KEY SYSTEM]

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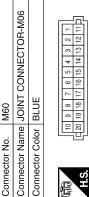
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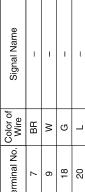
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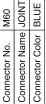
### < WIRING DIAGRAM >

Terminal No.   Wire   Signal Name   Connector No.   M20	Terminal No.   Wire   Signal Name   Connector No.   M31   Connector Name   Connector Name   Connector Name   Connector Name   Connector Color GRAY   Connector	13 BR CENTRAL DOOR ID UNLOCK SW TRY TAY THE TOTAL TOTAL THE TAY THE TA	Terminal No. V	30 31 32 33 34	. –	г <sub>р</sub> п	CANLOCK SW         39         L         CAN-H           KEY CYLINDER         40         P         CAN-L
	A (BODY CONT DULE) (WITHOU	ELLIGENT KEY SYSTEM)	13 14 15 16 17 18	30 31 32 33 34 35 36 37 38 39	Signal Name	KEY CYLINDER	KEY CYLINDER LOCK SW
Connector No.   M2   Connector Name   WIRE TO WIRE   Connector Color   WHITE   Connector Color   WHITE   Connector Color   WHITE   Connector Color   WHITE   Connector Color   Color	Connector No. M21 BCN Connector Name MOI	Connector Color WHITE	H.S.	21 22 23 24 25 26 27 28 29	Terminal No. Color of Wire	7 L	> 8

**DLK-227** Revision: October 2013 2014 Sentra NAM



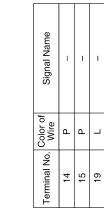




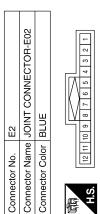


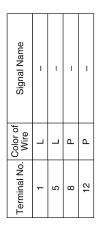
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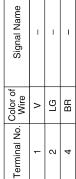
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Connector No.









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## [WITHOUT INTELLIGENT KEY SYSTEM]

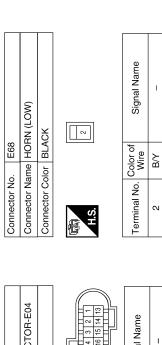
< WIRING DIAGRAM >

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E46 IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) WHITE  If 140 28 28 37 E 41 40 38 28 37 E 41 40 50 50 50 50 E 41 40 50 50 E 41	(LOW) Signal Name	В
	Color of Wire G	D
Connector No. Connector Name Connector Color H.S. 40 40 41 48	Connector No. E57 Connector Name HORN (LOW) Connector Color BLACK H.S.  Terminal No. Wire Sig	Е
		F
Signal Name	E48 IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) BLACK  Signal Name re re Roud (POWER)	G
	E48 POWER DIS' MODULE EN BLACK  Signal Signa	Н
Color of Wire G		I
Terminal No. 10G 95G 100G	Connector No. Connector Color Terminal No. Co	J
		DLK
## PE 4  WHITE  ## WHITE  ## WHITE  ## WHITE  ## WHITE  ## WHITE  ## ## ## ## ## ## ## ## ## ## ## ## ##	POWER DISTRIBUTION MODULE ENGINE ROOM) BROWN  Strict	L
## PE 4  WHITE  WHITE  ## A	I   ¥ >   m̂	171
ctor No.	ctor No	N
Connec	Connec Connec Termin Termin	0
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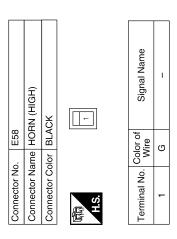
Revision: October 2013 DLK-229 2014 Sentra NAM

## [WITHOUT INTELLIGENT KEY SYSTEM]

### < WIRING DIAGRAM >



Connector No.  Connector Name JOINT CONNECTOR-E04  Connector Color BLACK  L2 12 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2										
Connector No E62 Connector Name JOII Connector Color BLA H.S. 12 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		NT CONNECTOR-E04	ÇK	8 7 6 5 4 3 2 20 19 18 17 16 15 14	Signal Name	ı	-	ı	I	ı
Connector No Conne			lor BL/	1 2 3 1	Color of Wire	BR	BR	ŋ	g	G
	Connector No	Connector Na	Connector Co			5	9	19	20	21



	Connector Name FRONT DOOR SWITCH LH	ПЕ	4 4	Signal Name	1
, B21	ıme FR(	lor WH		Color of Wire	>
Connector No.	Connector Na	Connector Color WHITE	H.S.	Terminal No. Wire	8

Connector No.	<u>.</u>	B6								
Connector Name WIRE TO WIRE	lame	M	뮖	12	>	IR				
Connector Color WHITE	olor	≱	≝	l						
僵	9	ro.	4	ш		$\vdash$	е е	2	-	
	20	9	13 12 11 10 9	1 12	= 4	은 <del>1</del>	0 2	∞	7	
			2	-	2	2	-			_

	7	٥	0	Signal Nam			
	က	6	14	a	1	1	_
	$\vdash$	10	15	ign			
		Ξ	16	S			
111	$\vdash$	12	17				
≣	4	13	18				
×	r.	Ç	<u>n</u>	Color of Wire		GR	В
lo	9	8	N N	ც>			
Connector Color WHITE	管			Terminal No.	13	19	20

Connector No.	E69
Connector Name HORN (HIGH)	HORN (HIGH)
Connector Color BLACK	BLACK
原动 H.S.	[ a

Signal Name	1	
Color of Wire	B/W	
Terminal No.	2	

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## [WITHOUT INTELLIGENT KEY SYSTEM]

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Connector No. B41 Connector Color WHITE	Signal Name	ETO WIRE  10 11 12 13 19 20  Signal Name
ne REAL	Color of Wire	Ame WIRE and
Connector No. B41 Connector Color WHITE  H.S.	Terminal No. G	Connector No.   B93
Connector No. B28 Connector Color WHITE	Signal Name	ASSEMBLY WHITE  Trof Signal Name
me FRONT or WHITE	Color of Wire R	
Connector No. Connector Color Connector Color	Terminal No.	Connector No.  Connector Color  H.S.  Terminal No. Color  1
Connector No. B26 Connector Name REAR DOOR SWITCH LH Connector Color WHITE	Signal Name	BEZM (BODY CONTROL   INTELLIGENT KEY SYSTEM)     BLACK
B26  Me REAR I  Or WHITE	Color of Wire GR	
Connector No. Connector Color Connector Color	Terminal No.	Connector Name Connector Name Connector Color H.S.  H.S.  42  42  42  45  45  46  47  Goldania No. Wall No. Wall Wall Market No. Wall Market N

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TRUNK OPEN OUTPUT

GR

55

TRUNK SW

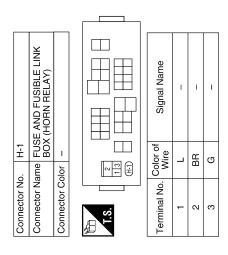
LUGGAGE LAMP OUTPUT

LG

DOOR SW (RR)

50 48

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## POWER DOOR LOCK SYSTEM

Wiring Diagram INFOID:0000000009756547

С D Е F POWER DOOR LOCK SYSTEM - WITH REMOTE KEYLESS ENTRY SYSTEM Н BCM (BODY CONTROL MODULE) (M20), (B57) J DLK L M M2 E4 BATTERY Ν 0 Р

# M8 B20 D201 REAR DOOR LOCK ACTUATOR LH D202 B31 REAR DOOR LOCK ACTUATOR RH (D302) FULL STROKE (M) (M) M74 FRONT DOOR LOCK ACTUATOR RH P00 BETWEEN FULL STROKE AND N KEY CYLINDER SWITCH BETWEEN FULL STROKE AND N 29 FULL STROKE 48C (M21 ACTUATOR BCM (BODY CONTROL MODULE) (M20) [2] M13) CPU M74 POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH (D104) UNLOCK z JOINT CONNECTOR-M06 (M60) Lock M74 KEY SWITCH (M50) 52A 42A ABKWA2377GB



Α

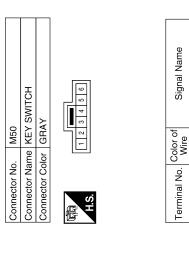
### < WIRING DIAGRAM >

WIRE	Signal Name	В
Connector No.   M5	No. Wire B B B B B B B B B B B B B B B B B B B	C
Connector No. Connector Coll Connector Coll Connector Coll Terminal No.  11 12	Terminal No.  3C  4C  4C  4C  42C  48C  48C  52C  52C	Е
EYLESS ENT	ETO WIRE  TO MIRE  TO	F G
REMOTE KE	M13 WINE TO WINE WHITE   5   50   70   80   90   17   17   17   17   17   17   17   1	Н
Connector No. M2 Connector Name WHE TO WHE Connector Name WHE TO WHE Connector Color WHITE  I glass led so  I glass led so	Connector No. M13 Connector Name WIRE TO WIRE Connector Color WHITE  It   20   30   40   50   60   70   80    It   20   30   40   30   40    It   20   30   40   30   40   80    It   20   30   40   80    It   20   30    It   20    It   20   30    It   20    It	J
CONNEC		DLK
10   26   36   46   56   60   70   80   80   100   1	TO WIRE Signal Name	L
VER DOOR LOCK SYS.  Connector No. M2  Connector Name WIRE TO WIRE  Connector Color WHITE  In 26 35 46 55  In 6 26 35 105  In 7 10 26 25 35 105  In 7 10	M8   M8   M8   M8   M8   M8   M8   M8	Ν
Connector No. Connector Name Connector Color H.S. Fig.	Connector No.  Connector No.  Connector Name Connector Name Terminal No.  MW MW MW MR	0
		Р

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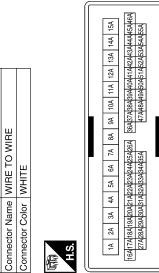


### < WIRING DIAGRAM >



ı	_		Signal Name
GR	BR		Color of Wire
1	2		Terminal No. Color of Wire

Signal Name	I	I	I	I	I
Color of Wire	SB	0	В	GR	BR
Terminal No.	3A	4A	12A	42A	52A



Connector No.	M21
Connector Name	BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM)
Connector Color WHITE	WHITE





Signal Name

┙ >

Terminal No.	7		8			12		<u>n</u>	37	
Signal Name	BATTERY (FUSE)	ACC INI ACC	OUTPUT (DR)	CINO	ġ.	DOOR LOCK OUTPUT	DOOR UNLOCK	OUTPUT (AS,RR,RL)	BATTERY (F/L)	
Color of Wire	0		SB	a	ם	0	85	3	>	
Terminal No. Color of Wire	63		64	GE	3	99	67	5	70	

KEY CYLINDER UNLOCK SW KEY CYLINDER LOCK SW CENTRAL DOOR LOCK SW

GR BB

12 5 37 39

CENTRAL DOOR UNLOCK SW

KEY SW CAN-H

GR

\_ ۵ M74

Connector No.

Connector No.





Signal Name	ı	_	
Color of Wire	BR	M	
Terminal No.	7	6	

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| 64 | 63 | 62 | 61 | 60 | 59 | 58 | 57 | 56 | 70 | 69 | 68 | 67 | 66 | 65 | 65 |



### < WIRING DIAGRAM >

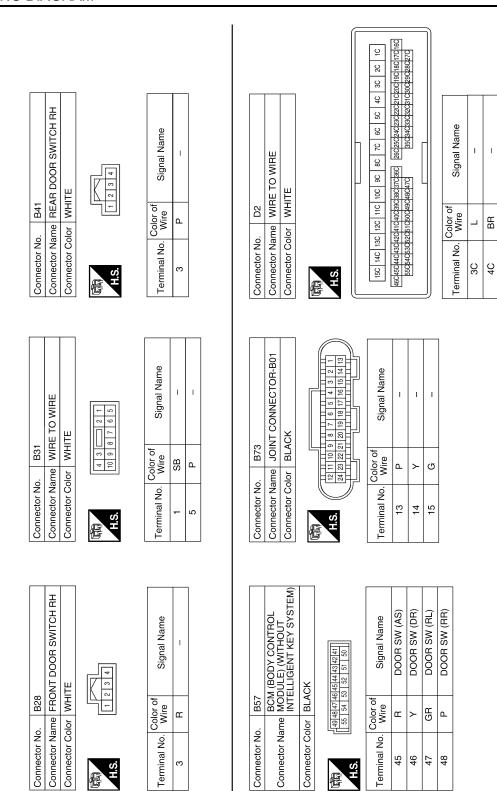
Connector No. B8 Connector Name WIRE TO WIRE Connector Color WHITE  Terminal No. Wire  10 V	Connector No. B26 Connector Name REAR DOOR SWITCH LH Connector Color WHITE  A.S. Color of Signal Name  3 GR -	A B C D
Connector No. B4  Connector Name WIRE TO WIRE  Connector Color WHITE      2	Connector No. B21 Connector Name FRONT DOOR SWITCH LH Connector Color WHITE  H.S. Terminal No. Wire Signal Name  3 Y —	F G H
Connector No. E4 Connector Name WIRE TO WIRE Connector Color WHITE  Connector Color WHITE  SG 4G 3G 2G 1G  TO 8G 8G 7G 8G  E1G 2G 2G 2G 1G  E1G 2G 2G 2G 2G 1G  E1G 2G 2G 2G 2G 1G  E1G 2G 2G 2G 2G 2G 1G  E1G 2G 2G 2G 2G 2G 2G 2G  E1G 2G 2G 2G 2G 2G 2G 2G  E1G 2G 2G 2G 2G 2G 2G 2G  E1G 2G 2G 2G 2G 2G 2G  E1G 2G 2G 2G 2G 2G 2G  E1G 2G  E1G 2G 2G  E1G	Connector No.   B20   Connector Name   WIRE TO WIRE	DLK  L  M  N

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**→** 

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13C 42C 48C 49C 52C



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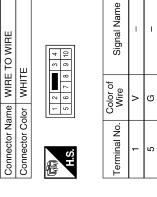
### < WIRING DIAGRAM >

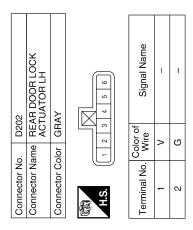
	3A 2A 1A 1A 0A 1A 0A 1A 0A 0 0A 0A	B
VIRE	74   64   54   44	gnal Name
D101 WIRE TO W	11A 10A (4) (10A (5) (10A (5) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	WIRE TO WHITE WHITE IT IS A STATE IT IS A ST
ctor No.	15A   14A   13A   12A   11A   10A   9A   14A   15A   14A   16A   14A   15A   14A   16A   14A   14A	tor Colc
Conne Conne H.S.	Termii Gonn	Connec Co
		G
D9 ASSEMBLY LH GRAY  2 3 4 5 6	Signal Name	ACTUATOR RH GRAY  rof Signal Name
		Colo Colo
Connector No. Connector Color Connector Color H.S.	Terminal No.  1 2 2 4 4 5 6 Connector No.	Connector Name Connector Color  Terminal No. W  5  6  1
		DL
D5 MAIN POWER WINDOW AND DOOR LOCK/ UNLOCK SWITCH  7 6 5 4	Signal Name  GND  LOCK SW  UNLOCK SW	POWER WINDOW AND BOOM LOCK/UNLOCK SWITCH RH WHITE  WHITE  7 8 9 10 11 12  7 8 9 10 11 12
Connector No. Connector Name Connector Color	Terminal No. 0	Connector Name Connector Color Terminal No. W 3 B 3 COLOR CO
	I	ABKIA5381GB

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# Signal Name Connector Name REAR DOOR LOCK ACTUATOR RH GRAY Color of Wire ്ര Connector Color Connector No. Terminal No. 20

	ŀ	
Connector No.		D301
Connector Nar	ne \	Connector Name WIRE TO WIRE
Connector Color WHITE	or \	WHITE
	1	3 4
8.	5 6	6 7 8 9 10



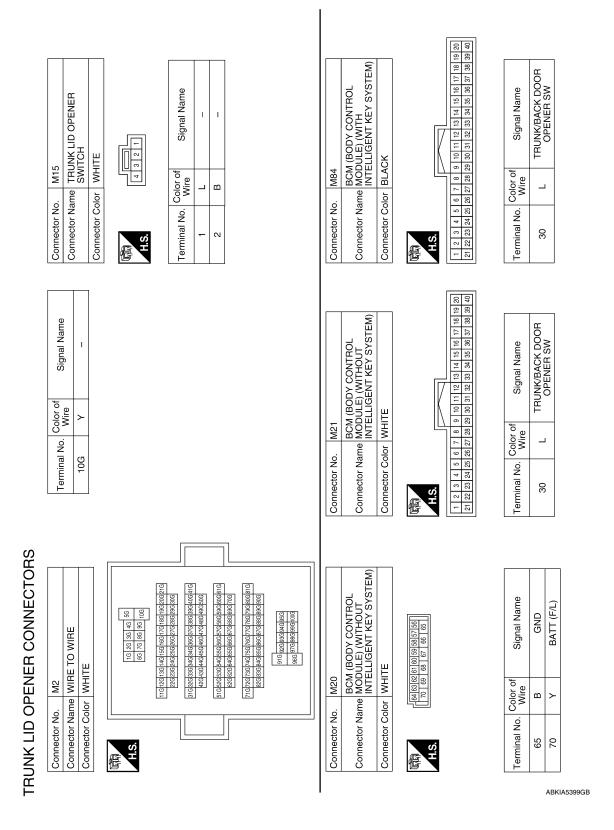


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# [WITHOUT INTELLIGENT KEY SYSTEM] < WIRING DIAGRAM > TRUNK LID OPENER Α Wiring Diagram INFOID:0000000009756548 В С 107 55 93 D 103 . 90 $\mathbb{R}$ Е F G - Til (25) $\bigotimes$ Н B24 (B24) M85 W85 BCM (BODY CONTROL MODULE) (M20),( J TRUNK ROOM LAMP SWITCH DLK 883 893 M2 E4 GA (B) (B) 20 L M TRUNK LID OPENER Ν 0

**DLK-241** Revision: October 2013 2014 Sentra NAM Р

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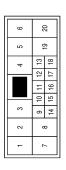
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Connector No.   E4	GR TRUNK/BACK DOOR OPEN OUTPUT
M85   BCM (BODY CONTROL   INTELLIGENT KEY SYSTEM)   Intelligent KEY (F/L)   B	ı
Connector Name Connector Name By 90 w 90	2

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Signal Name	1	I	Ι	I
Color of Wire	Ж	<b>&gt;</b>	GR	В
Terminal No. Wire	13	18	19	20

Connector Name TRUNK LID OPENER ASSEMBLY Connector Color WHITE	Connector No. B59
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Signal Name	_	_	_
Color of Wire	Ж	В	GR
Terminal No.	-	2	3

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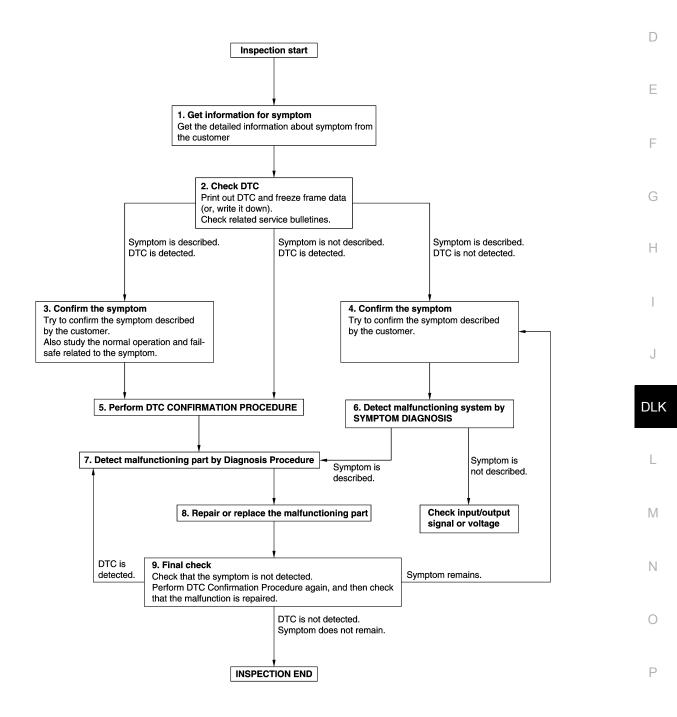
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# **BASIC INSPECTION**

## DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

**OVERALL SEQUENCE** 



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

[WITHOUT INTELLIGENT KEY SYSTEM]

### < BASIC INSPECTION >

# 1.GET INFORMATION FOR SYMPTOM

- 1. Get detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurs).
- 2. Check operation condition of the function that is malfunctioning.

>> GO TO 2.

## 2.CHECK DTC

- Check DTC.
- 2. Perform the following procedure if DTC is detected.
- Record DTC and freeze frame data (Print them out using CONSULT.)
- Erase DTC
- Study the relationship between the cause detected by DTC and the symptom described by the customer.
- 3. Check related service bulletins for information.

### Are any symptoms described and any DTC detected?

Symptom is described, DTC is detected>>GO TO 3.

Symptom is described, DTC is not detected>>GO TO 4.

Symptom is not described, DTC is detected>>GO TO 5.

## 3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

Also study the normal operation and fail-safe related to the symptom.

Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5.

### 4. CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 6.

## PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC CONFIRMATION PROCEDURE for the detected DTC, and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle, and check self diagnostic results in real time. If two or more DTCs are detected, refer to <a href="BCS-108">BCS-108</a>, "DTC Inspection Priority Chart" and determine trouble diagnosis order.

#### NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC CONFIRMATION PROCEDURE is not included on Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check.

If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC CONFIR-MATION PROCEDURE.

### Is DTC detected?

YES >> GO TO 7.

NO >> Check according to GI-39, "Intermittent Incident".

## 6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

Detect malfunctioning system according to SYMPTOM DIAGNOSIS based on the confirmed symptom in step 4, and determine the trouble diagnosis order based on possible causes and symptom.

#### Is the symptom described?

YES >> GO TO 7.

NO >> Monitor input data from related sensors or check voltage of related module terminals using CON-SULT.

## 7.DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

### DIAGNOSIS AND REPAIR WORK FLOW

### < BASIC INSPECTION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.

NO >> Check according to GI-39, "Intermittent Incident".

## 8.repair or replace the malfunctioning part

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

>> GO TO 9.

## 9. FINAL CHECK

When DTC is detected in step 2, perform DTC CONFIRMATION PROCEDURE again, and then check that the malfunction is repaired securely.

When symptom is described by the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.

### Is DTC detected and does symptom remain?

YES-1 >> DTC is detected: GO TO 7.

YES-2 >> Symptom remains: GO TO 4.

>> Before returning the vehicle to the customer, always erase DTC.

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[WITHOUT INTELLIGENT KEY SYSTEM]

### KEYFOB ID REGISTRATION

Description

Perform the following procedure after BCM is replaced or when new keyfob ID is registered

When registering the keyfob ID, perform only one procedure to simultaneously register both ID (IMMOBILIZER ID and keyfob ID).

Work Procedure

INFOID:0000000009756551

## **1.**STEP 1

Close all doors.

>> GO TO 2.

## **2**.STEP 2

Preform lock operation by door lock and unlock switch.

>> GO TO 3.

## **3.**STEP 3

- 1. Remove and insert the key into the ignition key cylinder 6 times within 10 seconds (turning the key switch from OFF to ON counts as 1 time).
- 2. All doors unlock automatically.

#### NOTE:

On the sixth key insertion, keep the key in the ignition key cylinder with the key switch ON.

### Do all unlock automatically?

YES >> GO TO 4.

NO >> GO TO 1.

## **4**.STEP 4

Turn ignition switch to ACC within 3 seconds after all doors unlock and perform lock operation by door lock and unlock switch.

>> GO TO 5.

## **5.**STEP 5

- 1. Press the lock or unlock button of the keyfob to be added.
- 2. All doors unlock simultaneously.
- 3. Key ID is registered.

### Is key ID registered?

YES-1 >> When adding a keyfob: GO TO 6.

YES-2 >> When ending registration: GO TO 8.

NO >> GO TO 1.

## **6.**STEP 6

Preform lock operation by door lock and unlock switch.

>> GO TO 7.

## **7.**STEP 7

- 1. Press the lock or unlock button of the keyfob to be added.
- 2. All doors unlock simultaneously.
- 3. Key ID is registered.

### Is key ID registered?

YES-1 >> When adding a keyfob: GO TO 6.

### **KEYFOB ID REGISTRATION**

[WITHOUT INTELLIGENT KEY SYSTEM] < BASIC INSPECTION > YES-2 >> When ending registration: GO TO 8. NO >> GO TO 6. Α **8.**STEP 8 Open the driver door. В >> REGISTRATION END С  $\mathsf{D}$ Е F G Н J DLK L M Ν 0

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### **U1000 CAN COMM**

### [WITHOUT INTELLIGENT KEY SYSTEM]

# DTC/CIRCUIT DIAGNOSIS

## U1000 CAN COMM

Description INFOID:000000009756552

Refer to LAN-7, "CAN COMMUNICATION SYSTEM: System Description".

DTC Logic

### DTC DETECTION LOGIC

#### NOTE:

U1000 can be set if a module harness was disconnected and reconnected, perhaps during a repair. Confirm that there are actual CAN diagnostic symptoms and a present DTC by performing the Self Diagnostic Result procedure.

CONSULT Display	DTC Detection Condition	Possible Cause
CAN COMM CIRCUIT [U1000]	When any listed module cannot communicate with CAN communication signal continuously for 2 seconds or more with ignition switch ON	In CAN communication system, any item (or items) of the following listed below is malfunctioning.  Transmission Receiving (ECM) Receiving (VDC/TCS/ABS) Receiving (METER/M&A) Receiving (TCM) Receiving (IPDM E/R)

## Diagnosis Procedure

INFOID:0000000009756554

## 1. PERFORM SELF DIAGNOSTIC RESULT

- 1. Turn ignition switch ON and wait for 2 second or more.
- 2. Check "SELF- DIAG RESULTS".

### Is "CAN COMM CIRCUIT" displayed?

YES >> Perform CAN Diagnosis as described in DIAGNOSIS section of CONSULT operation manual.

NO >> Refer to GI-39, "Intermittent Incident".

## **U1010 CONTROL UNIT (CAN)**

< DTC/CIRCUIT DIAGNOSIS >

## [WITHOUT INTELLIGENT KEY SYSTEM]

# U1010 CONTROL UNIT (CAN)

DTC Logic

### DTC DETECTION LOGIC

CONSULT Display	DTC Detection Condition	Possible Cause
CONTROL UNIT (CAN) [U1010]	BCM detected internal CAN communication circuit malfunction.	BCM

## Diagnosis Procedure

INFOID:0000000009756556

# 1.REPLACE BCM

When DTC "U1010" is detected, replace BCM.

>> Replace BCM. Refer to BCS-126, "Removal and Installation".

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### POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

### POWER SUPPLY AND GROUND CIRCUIT

## Diagnosis Procedure

INFOID:0000000010291095

Regarding Wiring Diagram information, refer to BCS-111, "Wiring Diagram".

## 1. CHECK FUSES AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuses and fusible link No.
63	Pattery power supply	12 (10A)
70	Battery power supply	G (40A)
11	Ignition switch ACC or ON	18 (10A)

### Is the fuse blown?

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

NO >> GO TO 2.

# 2.CHECK POWER SUPPLY CIRCUIT

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

ВСМ			Ignition switch position		
Connector	Terminal	Ground	OFF	ACC	ON
M20 _	63	Ground	Battery voltage	Battery voltage	Battery voltage
	70				
M21	11	_	0 V	Battery voltage	Battery voltage

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

## 3.CHECK GROUND CIRCUIT

Check continuity between BCM connector and ground.

BCM		Ground	Continuity	
Connector	Terminal	Orodina		
M20	65	_	Yes	

### Is the inspection result normal?

YES >> Inspection End.

NO >> Repair harness or connector.

### **DOOR SWITCH**

[WITHOUT INTELLIGENT KEY 5Y5TEM]
INFOID:000000009756558
INFOID:000000009756559
R SW-RL, DOOR SW-RR in Data Monitor mode
Condition
CLOSE $\rightarrow$ OPEN: OFF $\rightarrow$ ON
occor / or civil or i / or i
INFOID:000000009756566
ring Diagram".
ring Diagram".

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### [WITHOUT INTELLIGENT KEY SYSTEM]

	Terminals												
(+	(+)		Door co	ndition	Voltage (V)								
BCM connector	Terminal	(–)	(Аррг		(Approx.)								
				OPEN	0								
	45		Front RH	CLOSE	(V) 15 10 5 0 								
				OPEN	0								
	48 Rear RH CLOS		CLOSE	(V) 15 10 5 0 + 10ms PKIB4960J									
B57		— Ground ———	Ground	Ground	Ground	Ground	Ground	Ground	Ground	Ground	Ground		7.0 - 8.0V
				OPEN	0								
46	Front LH	CLOSE	(V) 15 10 5 0 +										
				OPEN	0								
	47		Rear LH	CLOSE	(V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0V								

Is the inspection result normal?

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

## 2.CHECK DOOR SWITCH CIRCUIT

- 1. Disconnect BCM connector.
- 2. Check continuity between BCM connector and door switch connector.

#### **DOOR SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

#### [WITHOUT INTELLIGENT KEY SYSTEM]

BCM connector	Terminal	Door switch connector	Terminal	Continuity
	45	B28 (Front RH)		
B57	48 B41 (Rear RH)	Yes		
637	46	B21 (Front LH)	3	162
	47	B26 (Rear LH)		

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
	45		
B57	48	Ground	No
D37	46		INO
	47		

#### Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness between BCM and door switch.

## 3. CHECK DOOR SWITCH

Refer to DLK-255, "Component Inspection".

### Is the inspection result normal?

YES >> GO TO 4

NO >> Replace malfunctioning door switch.

### 4. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> Inspection End.

### Component Inspection

1.CHECK DOOR SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect door switch connector.
- 3. Check door switch.

Tern	ninal	Door switch condition	Continuity
Door	Door switch		Continuity
3	Ground part of	Pressed	No
3	door switch	Released	Yes

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace malfunctioning door switch.

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< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

### DOOR LOCK AND UNLOCK SWITCH

**DRIVER SIDE** 

DRIVER SIDE : Description

INFOID:0000000009756562

Transmits door lock/unlock operation to BCM.

DRIVER SIDE: Component Function Check

INFOID:0000000009756563

### 1. CHECK FUNCTION

#### (P)With CONSULT

Check CDL LOCK SW, CDL UNLOCK SW in Data Monitor mode with CONSULT.

Monitor item	C	ondition	
CDL LOCK SW	LOCK	: ON	
CDL LOCK SW	UNLOCK	: OFF	
CDL UNLOCK SW	LOCK	: OFF	
	UNLOCK	: ON	

#### Is the inspection result normal?

YES >> Door lock and unlock switch is OK.

NO >> Refer to <u>DLK-256</u>, "<u>DRIVER SIDE</u>: <u>Diagnosis Procedure</u>".

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000009756564

Regarding Wiring Diagram information, refer to <a href="DLK-233">DLK-233</a>, "Wiring Diagram".

## 1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

- 1. Turn ignition switch ON.
- 2. Check voltage at the main power window and door lock/unlock switch connector when the switch (driver side) is turned to "LOCK" or "UNLOCK".

Connector	Main power window and door lock/unlock switch state		ninal	Voltage
D5	Neutral → Unlock	15	15 Ground Battery voltage	
БЭ	Neutral → Lock	3	Ground	Dattery Voltage -> 0

#### Is the inspection result normal?

YES >> GO TO 5 NO >> GO TO 2

2.check power window switch ground

- Turn ignition switch OFF.
- Disconnect main power window and door lock/unlock switch connector.
- 3. Check continuity between main power window and door lock/unlock switch connector and ground.

Main power window and door lock/unlock switch connector	Terminal Continuity		Continuity
D5	1	Ground	Yes

#### Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness.

#### < DTC/CIRCUIT DIAGNOSIS >

#### [WITHOUT INTELLIGENT KEY SYSTEM]

# $\overline{3}$ .check power window switch

Check continuity between main power window and door lock/unlock switch terminals.

Main power window and door lock/unlock switch state	Terminals	Continuity
Lock	1 - 3	Yes
Unlock	15 - 1	
Neutral/Lock	15 - 1	No
Neutral/Unlock	1 - 3	

Is the inspection result normal?

>> GO TO 4 YES

>> Replace main power window and door lock/unlock switch. Refer to PWC-70, "Removal and Instal-NO lation".

### f 4 . CHECK POWER WINDOW SWITCH CIRCUITS

- Disconnect BCM connector.
- Check continuity between BCM connector and main power window and door lock/unlock switch connec-

BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
M21	12	D5	3	Yes
IVIZ I	13	Ъ	15	165

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M21	12	Ground	No
IVIZ I	13	— Ground No	INO

#### Is the inspection result normal?

YES >> GO TO 5

NO >> Repair or replace harness.

### 5. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> Inspection End.

PASSENGER SIDE

PASSENGER SIDE : Description

Transmits door lock/unlock operation to BCM.

PASSENGER SIDE: Component Function Check

1. CHECK FUNCTION

(P)With CONSULT

Check CDL LOCK SW, CDL UNLOCK SW in Data Monitor mode with CONSULT.

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#### < DTC/CIRCUIT DIAGNOSIS >

#### [WITHOUT INTELLIGENT KEY SYSTEM]

INFOID:0000000009756567

Monitor item	C	condition
CDL LOCK SW	LOCK	: ON
CDL LOCK SW	UNLOCK	: OFF
CDL UNLOCK SW	LOCK	: OFF
CDL UNLOCK SW	UNLOCK	: ON

#### Is the inspection result normal?

YES >> Door lock and unlock switch is OK.

NO >> Refer to <u>DLK-258</u>, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE: Diagnosis Procedure

Regarding Wiring Diagram information, refer to <a href="DLK-233">DLK-233</a>, "Wiring Diagram".

## 1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

- 1. Turn ignition switch ON.
- Check voltage at the power window and door lock/unlock switch RH connector when the switch (passenger side) is turned to "LOCK" or "UNLOCK".

Connector	Power window and door lock/unlock switch RH state	Terminal		Voltage
D104	Neutral → Lock	1	Ground	Battery voltage → 0
D104	Neutral → Unlock	2 Ground		ballery vollage → 0

#### Is the inspection result normal?

YES >> GO TO 5 NO >> GO TO 2

## 2.check power window switch ground

- Turn ignition switch OFF.
- 2. Disconnect power window and door lock/unlock switch RH connector.
- 3. Check continuity between power window and door lock/unlock switch RH connector and ground.

Power window and door lock/ unlock switch RH connector	Terminal		Continuity
D104	3	Ground	Yes

#### Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness.

#### 3.CHECK POWER WINDOW SWITCH

Check continuity between power window and door lock/unlock switch RH terminals.

Power window and door lock/unlock switch RH state	Terminals	Continuity	
Lock	1 - 3	Yes	
Unlock	2 - 3	163	
Neutral/Unlock	1 - 3	No	
Neutral/Lock	2 - 3	INU	

#### Is the inspection result normal?

YES >> GO TO 4

NO >> Replace power window and door lock/unlock switch RH.

#### < DTC/CIRCUIT DIAGNOSIS >

#### [WITHOUT INTELLIGENT KEY SYSTEM]

## 4. CHECK POWER WINDOW SWITCH CIRCUITS

- 1. Disconnect BCM connector.
- 2. Check continuity between BCM connector and power window and door lock/unlock switch RH connector.

BCM connector	Terminal	Power window and door lock/unlock switch RH connector	Terminal	Continuity
M21	12	D104	1	Yes
IVIZI	13	D104	2	165

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M21	12	Ground	No
	13	Ground	INO

#### Is the inspection result normal?

YES >> GO TO 5

NO >> Repair or replace harness.

## 5. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> Inspection End.

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#### **KEY CYLINDER SWITCH**

[WITHOUT INTELLIGENT KEY SYSTEM]

#### < DTC/CIRCUIT DIAGNOSIS >

#### KEY CYLINDER SWITCH

**Description** 

When the mechanical key is inserted and turned into the front door lock key cylinder switch LH, the switch transmits the LOCK or UNLOCK signal directly to the BCM.

### Component Function Check

INFOID:0000000009756569

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

Check KEY CYL UN-SW, KEY CYL UN-SW in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT. Refer to <u>DLK-221</u>, "<u>DOOR LOCK</u>: <u>CONSULT Function (BCM - DOOR LOCK)"</u>.

Monitor item	Condition	
KEY CYL LK-SW	Lock	: ON
RET GTE ER-SW	Neutral / Unlock	: OFF
KEY CYL UN-SW	Unlock	: ON
RET CTL UN-SW	Neutral / Lock	: OFF

#### Is the inspection result normal?

YES >> Key cylinder switch is OK.

NO >> Refer to <u>DLK-260</u>, "<u>Diagnosis Procedure</u>".

### Diagnosis Procedure

INFOID:000000009756570

Regarding Wiring Diagram information, refer to <u>DLK-233, "Wiring Diagram"</u>.

## 1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

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

	Terminals		\		
(+)		(-)	Key position	Voltage (V) (Approx.)	
BCM connector	Terminal	(-)			
	8		Lock	0	
M21	0	Ground	Neutral / Unlock	5	
IVIZ I	7	Ground	Unlock	0	
			Neutral / Lock	5	

#### Is the inspection result normal?

YES >> Front door lock key cylinder switch LH is OK.

NO >> GO TO 2

# 2.check door key cylinder switch ground circuit

- Turn ignition switch OFF.
- 2. Disconnect front door lock key cylinder switch LH connector.
- 3. Check continuity between front door lock key cylinder switch LH connector and ground.

Front door lock key cylinder switch LH connector	Terminal	Ground	Continuity
D9	4		Yes

#### Is the inspection result normal?

#### **KEY CYLINDER SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

#### [WITHOUT INTELLIGENT KEY SYSTEM]

YES >> GO TO 3

NO >> Repair or replace harness.

### 3. CHECK DOOR KEY CYLINDER SIGNAL CIRCUIT

- 1. Disconnect BCM connector M21.
- 2. Check continuity between front door lock key cylinder switch LH connector and BCM connector M21.

Front door lock key cylinder switch LH connector	Terminal	BCM connector	Terminal	Continuity
D9	6	M21	8	Yes
Da	5	IVIZ I	7	169

3. Check continuity between front door lock key cylinder switch LH connector and ground.

Front door lock key cylinder switch LH connector	Terminal		Continuity	
D9	6	Ground	No	
D9	5		INO	

#### Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

### 4. CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.

Refer to DLK-261, "Component Inspection".

#### Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

NO >> Replace front door lock key cylinder switch LH.

### Component Inspection

#### COMPONENT INSPECTION

## 1. CHECK DOOR KEY CYLINDER SWITCH

Check front door lock key cylinder switch LH.

Term	inal		
Front door lock key cylinder switch LH connector		Key position	Continuity
6	5	Lock	Yes
0		Neutral / Unlock	No
5		Unlock	Yes
		Neutral / Lock	No

#### Is the inspection result normal?

YES >> Key cylinder switch is OK.

NO >> Replace front door lock key cylinder switch LH.

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### **KEY SWITCH (BCM INPUT)**

[WITHOUT INTELLIGENT KEY SYSTEM]

#### < DTC/CIRCUIT DIAGNOSIS >

### **KEY SWITCH (BCM INPUT)**

### Diagnosis Procedure

INFOID:0000000009756572

Regarding Wiring Diagram information, refer to <a href="DLK-224">DLK-224</a>, "Wiring Diagram".

### 1. CHECK KEY SWITCH INPUT SIGNAL

### With CONSULT

Check key switch "KEY ON SW" in DATA MONITOR mode with CONSULT. Refer to <u>DLK-221, "DOOR LOCK CONSULT Function (BCM - DOOR LOCK)"</u>.

• When key is inserted to ignition key cylinder:

KEY ON SW : ON

• When key is removed from ignition key cylinder:

KEY ON SW : OFF

### Without CONSULT

Check voltage between BCM connector M21 terminal 37 and ground.

Connector	Terminal		Condition	Voltage (V)	
Connector	(+)	(-)	Condition	voitage (v)	
M21 37 Ground		Ground	Key is inserted.	Battery voltage	
IVIZI	37	Ground	Key is removed.	0	

#### Is the inspection result normal?

YES >> Key switch (insert) circuit is OK.

NO >> GO TO 2

## 2.CHECK KEY SWITCH (INSERT)

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

Terminals	Condition	Continuity
1 – 2	Key is inserted.	Yes
1 – 2	Key is removed.	No

#### Is the inspection result normal?

YES >> Repair or replace harness or fuse.

NO >> Replace key switch.

#### DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

### DOOR LOCK ACTUATOR

**DRIVER SIDE** 

DRIVER SIDE: Description

Locks/unlocks the door with the signal from BCM.

DRIVER SIDE: Component Function Check

### 1. CHECK FUNCTION

- Use CONSULT to perform Active Test ("DOOR LOCK").
- Touch "ALL LOCK" or "ALL UNLOCK" to check that it works normally.

#### Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to DLK-263, "DRIVER SIDE: Diagnosis Procedure".

DRIVER SIDE: Diagnosis Procedure

Regarding Wiring Diagram information, refer to <a href="DLK-233">DLK-233</a>, "Wiring Diagram".

### 1. CHECK OUTPUT SIGNAL

Check voltage between BCM connector and ground.

	Terminals				
(+	(+)		Condition of door lock and	Voltage (V)	
BCM connector	Terminal	(–)	unlock switch	(Approx.)	
M20	64	Ground	Unlock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$	
IVIZU	66	Giodila	Lock	$0 \rightarrow Battery voltage \rightarrow 0$	

#### Is the inspection result normal?

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

## 2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Turn ignition switch OFF.

- Disconnect BCM and front door lock actuator driver side connector.
- Check continuity between BCM connector and front door lock actuator driver side connector.

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M20	64	D9	2	Yes
IVIZO	66	Б9	1	163

Check continuity between BCM connector and ground.

BCM connector	Terr	Continuity	
M20	64	Ground	No
IVIZU	66	Ground	110

#### Is the inspection result normal?

YES >> Replace front door lock actuator LH.

NO >> Repair or replace harness.

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#### DOOR LOCK ACTUATOR

[WITHOUT INTELLIGENT KEY SYSTEM]

#### < DTC/CIRCUIT DIAGNOSIS >

# 3.check intermittent incident

Refer to GI-39, "Intermittent Incident".

>> Inspection End.

PASSENGER SIDE

PASSENGER SIDE: Description

INFOID:0000000009756576

Locks/unlocks the door with the signal from BCM.

PASSENGER SIDE: Component Function Check

INFOID:0000000009756577

## 1. CHECK FUNCTION

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

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

#### Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to <u>DLK-264</u>, "PASSENGER SIDE : <u>Diagnosis Procedure"</u>.

### PASSENGER SIDE: Diagnosis Procedure

INFOID:0000000009756578

Regarding Wiring Diagram information, refer to <a href="DLK-233">DLK-233</a>, "Wiring Diagram".

### 1. CHECK DOOR LOCK ACTUATOR SIGNAL

Check voltage between BCM connector and ground.

Terminals				
(+)	(+)		Condition of door lock and	Voltage (V)
BCM connector	Terminal	(–)	unlock switch	(Approx.)
M20	66	Ground	Lock	$0 \rightarrow Battery voltage \rightarrow 0$
IVIZO	67	Giodila	Unlock	$0 \rightarrow Battery voltage \rightarrow 0$

#### Is the inspection result normal?

YES >> GO TO 3

NO >> GO TO 2

## 2. CHECK DOOR LOCK ACTUATOR CIRCUIT

- 1. Disconnect BCM and front door lock actuator RH connectors.
- 2. Check continuity between BCM connector and front door lock actuator RH.

BCM connector	Terminal	Front door lock actuator RH connector	Terminal	Continuity
M20	66	D107	5	Yes
IVIZU	67	D107	6	165

Check continuity between BCM connector and ground.

BCM connector	Terr	Continuity	
M20	66	Ground	No
IVIZO	67	- Ground	140

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DOOR LOCK ACTU	DOOR LOCK ACTUATOR			
< DTC/CIRCUIT DIAGNOSIS > [WITHOUT INTELLIGENT KEY SYS]				
Is the inspection result normal?				
YES >> Replace front door lock actuator RH. NO >> Repair or replace harness.				
3.CHECK INTERMITTENT INCIDENT				
Refer to GI-39, "Intermittent Incident".				
>> Inspection End. REAR LH				
REAR LH : Description	INFOID:0000000009756579			
Locks/unlocks the door with the signal from BCM.  REAR LH: Component Function Check	INFOID:000000009756580			

## 1. CHECK FUNCTION

- Use CONSULT to perform Active Test ("DOOR LOCK").
- Touch "ALL LOCK" or "ALL UNLOCK" to check that it works normally.

#### Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to DLK-265, "REAR LH: Diagnosis Procedure".

### REAR LH: Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-233, "Wiring Diagram".

## 1. CHECK DOOR LOCK ACTUATOR SIGNAL

Check voltage between BCM connector and ground.

Terminals			_	
(+	(+)		Condition of door lock and	Voltage (V)
BCM connector	Terminal	(–)	unlock switch (Approx.)	(Approx.)
M20	66	Ground	Lock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$
IVIZO	67	Giodila	Unlock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$

#### Is the inspection result normal?

YES >> GO TO 3

NO >> GO TO 2

## 2.CHECK DOOR LOCK ACTUATOR CIRCUIT

- Disconnect BCM and rear door lock actuator LH connectors.
- Check continuity between BCM connector and rear door lock actuator LH connectors.

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M20	66	D202	1	Yes
IVIZO	67	D202	2	163

Check continuity between BCM connector and ground.

BCM connector	Terminal	Continuity
BCIVI COTTTECTO	Terrilliai	Continuity

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#### DOOR LOCK ACTUATOR

#### < DTC/CIRCUIT DIAGNOSIS >

#### [WITHOUT INTELLIGENT KEY SYSTEM]

INFOID:0000000009756584

M20	66	Ground	No
IVIZO	67	Ground	140

#### Is the inspection result normal?

>> Replace rear door lock actuator LH.

NO >> Repair or replace harness.

### 3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> Inspection End.

REAR RH

**REAR RH**: Description

INFOID:0000000009756582

Locks/unlocks the door with the signal from BCM.

REAR RH: Component Function Check INFOID:0000000009756583

## 1. CHECK FUNCTION

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

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

#### Is the inspection result normal?

>> Door lock actuator is OK. YES

NO >> Refer to DLK-266, "REAR RH: Diagnosis Procedure".

REAR RH: Diagnosis Procedure

Regarding Wiring Diagram information, refer to <a href="DLK-233">DLK-233</a>, "Wiring Diagram".

### CHECK DOOR LOCK ACTUATOR SIGNAL

Check voltage between BCM connector and ground.

	Terminals			
(+	-)		Condition of door lock and	Voltage (V)
BCM connector	Terminal	(–)	unlock switch	(Approx.)
M20	66	Ground	Lock	$0 \rightarrow Battery voltage \rightarrow 0$
IVIZU	67	Giodila	Unlock	$0 \rightarrow Battery voltage \rightarrow 0$

#### Is the inspection result normal?

YES >> GO TO 3

NO >> GO TO 2

### 2.CHECK DOOR LOCK ACTUATOR CIRCUIT

- Disconnect BCM and rear door lock actuator RH connectors.
- Check continuity between BCM connector and rear door lock actuator RH connectors.

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M20	66	D302	5	Yes
IVIZU	67	D302	6	165

### **DOOR LOCK ACTUATOR**

< DTC/CIRCUIT DIAGNOSIS >

### [WITHOUT INTELLIGENT KEY SYSTEM]

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BCM connector	Tern	ninal	Continuity	•
M20	66 67	Ground	No	•
the inspection r				,
'ES >> Repla	ice rear door locl ir or replace harr	k actuator RH. less.		
	RMITTENT INCID			
eter to <u>GI-39, "Ir</u>	ntermittent Incide	<u>nt"</u> .		
>> Inspe	ction End.			
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#### REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

### REMOTE KEYLESS ENTRY RECEIVER

**Description** 

Receives keyfob operation and transmits to BCM.

### Component Function Check

INFOID:0000000009756586

## 1. CHECK FUNCTION

#### (P) With CONSULT

Check remote keyless entry receiver KEYLESS LOCK, KEYLESS UNLOCK, and KEYLESS PANIC in Data Monitor mode with CONSULT.

Monitor item	Condition
KEYLESS LOCK	Checks whether value changes from "Off" to "On" when operating keyfob lock button.
KEYLESS UNLOCK	Checks whether value changes from "Off" to "On" when operating keyfob unlock button.
KEYLESS PANIC	Checks whether value changes from "Off" to "On" when operating keyfob panic button.

#### Is the inspection result normal?

YES >> Remote keyless entry receiver is OK.

NO >> Refer to <u>DLK-268</u>, "<u>Diagnosis Procedure</u>".

### Diagnosis Procedure

INFOID:0000000009756587

Regarding Wiring Diagram information, refer to <a href="DLK-224">DLK-224</a>, "Wiring Diagram".

## 1. CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Check signal between remote keyless entry receiver connector and ground with oscilloscope.

Te	rminals				
(+)			Condition	Signal	
Remote keyless entry receiver connector	Terminal	(-)		(Reference value)	
			Key inserted into ignition key cylinder	0 V	
M131	2	Ground	Waiting	(V) 6 4 2 0 • +1.0ms	
			When signal is received	(V) 6 4 2 0 **1.0ms	

Is the inspection result normal?

YES >> GO TO 7

### REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

NO >> GO TO 2

# 2.CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

- Disconnect remote keyless entry receiver connector.
- Check signal between remote keyless entry receiver connector and ground with oscilloscope.

Te	erminals			
(+)				Signal
Remote keyless entry receiver connector	Terminal	(–)	Condition	(Reference value)
			Key inserted into ignition key cylinder	0 V
			Key removed from ignition key cylinder (Any door open)	5 V
M131	4	Ground	Key removed from ignition key cylinder (Any door closed)	(V) 6 4 2 0 •••0.2 s

#### Is the inspection result normal?

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

## 3.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 1 $\,$

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

BCM connector	Terminal	Remote keyless entry receiver connector	Terminal	Continuity
M21	19	M131	4	Yes

Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M21	19	Ground	No

#### Is the inspection result normal?

YES >> Reconnect BCM, GO TO 4

>> Repair or replace harness between BCM and remote keyless entry receiver. NO

### f 4.CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

Check continuity between remote keyless entry receiver connector and ground.

Remote keyless entry receiver connector	Terminal	Ground	Continuity
M131	1		Yes

#### Is the inspection result normal?

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

### ${f 5}.$ CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 2

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

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#### REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

#### [WITHOUT INTELLIGENT KEY SYSTEM]

BCM connector	Terminal	Remote keyless entry receiver connector	Terminal	Continuity
M21	18	M131	1	Yes

#### Is the inspection result normal?

YES >> GO TO 7

NO >> Repair or replace harness between BCM and remote keyless entry receiver.

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

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

BCM connector	Terminal	Remote keyless entry receiver connector	Terminal	Continuity
M21	20	M131	2	Yes

2. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M21	20	Ground	No

#### Is the inspection result normal?

YES >> GO TO 7

NO >> Repair or replace harness between BCM and remote keyless entry.

## 7. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> Inspection End.

#### **KEYFOB BATTERY AND FUNCTION**

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

### **KEYFOB BATTERY AND FUNCTION**

Description

The following functions are available when having and carrying the keyfob.

- · Door lock/unlock
- Panic mode (horn and headlamp operation)

Remote control entry function and panic alarm function are available when operating the remote buttons.

### Component Function Check

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#### NOTE:

The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- · Check keyfob relative signal strength
- · Confirm vehicle antenna signal strength

#### 1.CHECK FUNCTION

#### (P) With CONSULT

Check remote keyless entry receiver KEYLESS LOCK, KEYLESS UNLOCK, and KEYLESS PANIC in Data Monitor mode with CONSULT.

Monitor item	Condition
KEYLESS LOCK	Checks whether value changes from "Off" to "On" when operating keyfob lock button.
KEYLESS UNLOCK	Checks whether value changes from "Off" to "On" when operating keyfob unlock button.
KEYLESS PANIC	Checks whether value changes from "Off" to "On" when operating keyfob panic button.

#### Is the inspection result normal?

YES >> Keyfob is OK.

NO >> Refer to DLK-271, "Diagnosis Procedure".

### Diagnosis Procedure

INFOID:0000000009756590

#### NOTE:

The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

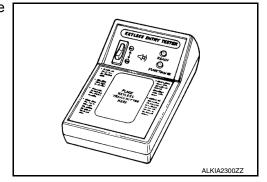
- · Check keyfob relative signal strength
- · Confirm vehicle antenna signal strength

#### 1. CHECK KEYFOB FUNCTION

Check keyfob function using Signal Tech II Tool J-50190 or Remote Keyless Entry Tester J-43241 (shown).

#### Does the test pass?

YES >> Keyfob is OK. NO >> GO TO 2



## 2. CHECK KEYFOB COMPONENTS

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#### **KEYFOB BATTERY AND FUNCTION**

#### < DTC/CIRCUIT DIAGNOSIS >

#### [WITHOUT INTELLIGENT KEY SYSTEM]

- 1. Remove the screw (A).
- Insert a small screwdriver into the slit of the corner (B) and twist it to separate the upper part from the power part. Use a cloth to protect the casing.

#### **CAUTION:**

- Do not touch the circuit board or battery terminal.
- The keyfob is water-resistant. However, if it does get wet, immediately wipe it dry.
- 3. Remove the keyfob battery.

#### **CAUTION:**

- Keep dirt, grease, and other foreign materials off the electrode contact area.
- 4. Visually inspect keyfob internal components.

#### Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace malfunctioning parts.

### 3.CHECK KEYFOB BATTERY

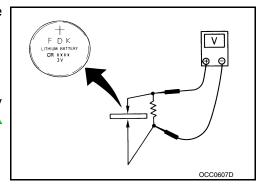
Check by connecting a resistance (approximately  $300\Omega$ ) so that the current value becomes about 10 mA.

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

#### Is the measurement value within specification?

YES >> Keyfob battery is OK. Check remote keyless entry receiver. Refer to <u>DLK-268.</u> "Component Function Check".

NO >> GO TO 4



### 4. REPLACE KEYFOB BATTERY

 Replace the keyfob battery with a new one (CR1620 or equivalent).

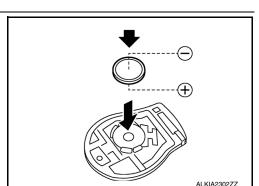
#### **CAUTION:**

- When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.
- Make sure that the + side faces the bottom of the case.
- 2. Align the tips of the upper and lower parts, and then push them together until it is securely closed.
- 3. After replacing the battery, check that all keyfob functions work properly.

#### Is the inspection result normal?

YES >> Keyfob is OK.

NO >> Check remote keyless entry receiver. Refer to <u>DLK-268</u>, "Component Function Check".



#### HORN FUNCTION

#### [WITHOUT INTELLIGENT KEY SYSTEM]

### HORN FUNCTION

Description INFOID:000000009756591

Perform answer-back for each operation with horn.

### Component Function Check

## 1. CHECK FUNCTION

- Select HORN in "ACTIVE TEST" mode with CONSULT.
- Check the horn operation.

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

#### Is the operation normal?

YES >> Inspection End.

NO >> Refer to <u>DLK-273</u>, "<u>Diagnosis Procedure</u>".

### Diagnosis Procedure

Regarding Wiring Diagram information, refer to <a href="DLK-224">DLK-224</a>, "Wiring Diagram".

### 1. CHECK HORN FUNCTION

Check horn function with horn switch.

#### Does the horn sound?

YES >> GO TO 2

NO >> Refer to HRN-3, "Wiring Diagram".

## 2.CHECK HORN RELAY POWER SUPPLY

- Turn ignition switch ON.
- Perform "ACTIVE TEST" ("HORN") with CONSULT.
- Using an oscilloscope or analog voltmeter to check voltage between IPDM E/R connector and ground.

IPD	M E/R	Ground	Test item		Voltage (V)
Connector	Terminal	Giodila			(Approx.)
E46	48 Ground HORN		ON	Battery voltage $\rightarrow$ 0 $\rightarrow$ Battery voltage	
L40	40	Ground	HOKIN	Other than above	Battery voltage

#### Is the inspection result normal?

>> Repair or replace open harness between IPDM E/R and horn relay. YES

NO >> GO TO 3

### 3.CHECK HORN RELAY CIRCUIT

- Turn ignition switch OFF.
- Disconnect IPDM E/R and horn relay connector.
- Check continuity between IPDM E/R harness connector and horn relay harness connector.

IPDM E/R		Horn relay		Continuity
Connector	Terminal	Connector Terminal		Continuity
E46	48	H-1	1	Yes

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

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#### HORN FUNCTION

#### < DTC/CIRCUIT DIAGNOSIS >

#### [WITHOUT INTELLIGENT KEY SYSTEM]

IPD	IPDM E/R		Continuity
Connector	Terminal	Ground	Continuity
E46	48	Ground	No

#### Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

#### Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-58, "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

#### TRUNK LID OPENER ACTUATOR

#### < DTC/CIRCUIT DIAGNOSIS >

#### [WITHOUT INTELLIGENT KEY SYSTEM]

### TRUNK LID OPENER ACTUATOR

### Component Function Check

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

#### Is the inspection result normal?

YES >> Trunk lid opener actuator is OK.

>> Refer to DLK-275, "Diagnosis Procedure". NO

### Diagnosis Procedure

1.CHECK FUNCTION

Regarding Wiring Diagram information, refer to DLK-241, "Wiring Diagram".

## 1. CHECK TRUNK LID OPENER INPUT SIGNAL

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

(+) Trunk lid opener assembly		(–)	Condition	Voltage	
Connector	Terminal			(Approx.)	
B59	3	Ground	Trunk lid opener switch is ON	12 V	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

### 2 .CHECK TRUNK LID OPENER ACTUATOR CIRCUIT

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

В	BCM		Trunk lid opener assembly	
Connector	Terminal	Connector Terminal		Continuity
B57	55	B59	3	Yes

Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector Terminal		Ground	Continuity
B57	55		No

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-126, "Removal and Installation".

NO >> Repair or replace harness.

## 3.CHECK TRUNK LID OPENER ACTUATOR GROUND CIRCUIT

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

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### TRUNK LID OPENER ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Trunk lid opener assembly			Continuity
Connector	Connector Terminal		Continuity
B59	2		Yes

#### Is the inspection normal?

YES >> Replace trunk lid opener assembly.

NO >> Repair or replace harness.

### TRUNK LID OPENER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

### TRUNK LID OPENER SWITCH

### Component Function Check

#### INFOID:0000000009756596

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### 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	Co	Status	
TR/BD OPEN SW	Trunk lid opener switch	Pressed	On
		Released	Off

#### Is the inspection result normal?

YES >> Trunk lid opener switch is OK.

NO >> Refer to <u>DLK-277</u>, "<u>Diagnosis Procedure</u>".

### Diagnosis Procedure

INFOID:0000000009756597

Regarding Wiring Diagram information, refer to <a href="DLK-241">DLK-241</a>, "Wiring Diagram".

## 1. CHECK TRUNK LID OPENER INPUT SIGNAL

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

	+) pener switch	(–)	Signal (Reference value)
Connector	Terminal		(
M15	1	Ground	(V) 15 10 5 0 10 ms JPMIA0012GB

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2. CHECK TRUNK LID OPENER SWITCH CIRCUIT

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

В	BCM		Trunk lid opener switch	
Connector	Terminal	Connector Terminal		Continuity
M21	30	M15	1	Yes

Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector	Terminal	Ground	Continuity
M21	30		No

#### TRUNK LID OPENER SWITCH

[WITHOUT INTELLIGENT KEY SYSTEM]

#### < DTC/CIRCUIT DIAGNOSIS >

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-126, "Removal and Installation".

NO >> Repair or replace harness.

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

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

Trunk lid op	pener switch		Continuity
Connector	Terminal	Ground	Continuity
M15	2		Yes

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4. CHECK TRUNK LID OPENER SWITCH

Refer to DLK-277, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace trunk lid opener switch.

### 5. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> Inspection End.

# Component Inspection

INFOID:0000000009756598

## 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 Terminal		Condition		Continuity
ı	2	Trunk lid opener switch	Release	No

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace trunk lid opener switch.

### TRUNK LAMP SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

#### [WITHOUT INTELLIGENT KEY SYSTEM]

### TRUNK LAMP SWITCH

**Description** 

Detects trunk open/close condition.

Component Function Check

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## 1. CHECK FUNCTION

### (I) With CONSULT

Check TRNK/HAT MNTR in Data Monitor mode with CONSULT.

Monitor item	Condition		
TRNK/HAT MNTR	OPEN	: ON	
TRINIOTIAL WINTE	CLOSE	: OFF	

#### Is the inspection result normal?

YES >> Trunk room lamp switch is OK.

NO >> Refer to <u>DLK-279</u>, "<u>Diagnosis Procedure</u>".

### Diagnosis Procedure

Regarding Wiring Diagram information, refer to <a href="DLK-241">DLK-241</a>. "Wiring Diagram".

## 1. CHECK TRUNK ROOM LAMP SWITCH INPUT SIGNAL

- 1. Turn ignition switch OFF.
- Check voltage between BCM connector and ground.

Terminals				
(+)		Trunk		Voltage (V)
BCM connector	Terminal	(–)	condition	(Approx.)
			OPEN	0
B57	51	Ground	CLOSE	(V) 15 10 5 0 **** 10ms PKIB4960J 7.0 - 8.0V

#### Is the inspection result normal?

YES >> GO TO 6

NO >> GO TO 2

### 2.CHECK TRUNK ROOM LAMP SWITCH CIRCUIT

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

BCM connector	Terminal	Trunk lid opener as- sembly connector Terminal		Continuity
B57	51	B59	1	Yes

3. Check continuity between BCM connector and ground.

### TRUNK LAMP SWITCH

#### [WITHOUT INTELLIGENT KEY SYSTEM]

#### < DTC/CIRCUIT DIAGNOSIS >

BCM connector	Terminal	Ground	Continuity
B57	51	Glound	No

#### Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness between BCM and trunk lid opener assembly.

### 3. CHECK TRUNK ROOM LAMP SWITCH GROUND CIRCUIT

Check continuity between trunk lid opener assembly connector and ground.

Trunk lid opener as- sembly connector	Terminal	Ground	Continuity
B59	2		Yes

#### Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace trunk lid opener assembly ground circuit.

### 4. CHECK BCM OUTPUT SIGNAL

- 1. Ensure trunk lid remains closed during this step.
- 2. Connect BCM connector.
- 3. Check voltage between BCM connector and ground.

	Terminals	V-11 0.0	
(+	(+)		Voltage (V) (Approx.)
BCM connector	Terminal	(-)	( , , , , , , , , , , , , , , , , , , ,
B57	51	Ground	(V) 15 10 5 0 ++10ms PKIB4960J 7.0 - 8.0V

#### Is the inspection result normal?

YES >> GO TO 5

NO >> Replace BCM. Refer to BCS-126, "Removal and Installation".

### 5. CHECK TRUNK ROOM LAMP SWITCH

Refer to DLK-277, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 6

NO >> Replace trunk lid opener assembly.

#### **6.**CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> Inspection End.

### **Component Inspection**

INFOID:0000000009756602

## 1. CHECK TRUNK ROOM LAMP SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect trunk lid opener assembly connector.
- Check trunk room lamp switch.

### TRUNK LAMP SWITCH

< DTC/CIRCUIT DIAGNOSIS >

#### [WITHOUT INTELLIGENT KEY SYSTEM]

Tern	Terminal		Continuity	
Trunk room	Trunk room lamp switch		Continuity	
1	1 2		Yes	
1	2	CLOSE	No	

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace trunk lid opener assembly.

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#### **WARNING CHIME FUNCTION**

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

### WARNING CHIME FUNCTION

Description INFOID:0000000009756603

Performs operation method guide and warning with buzzer.

### Component Function Check

INFOID:0000000009756604

### 1. CHECK FUNCTION

### (P) With CONSULT

- 1. Check the operation with "BUZZER" in the Active Test.
- 2. Touch "IGN KEY WARN ALM", "SEAT BELT WARN TEST" or "LIGHT WARN ALM" on screen.

#### Is the inspection result normal?

YES >> Warning buzzer into combination meter is OK.

NO >> Refer to <u>DLK-282</u>, "<u>Diagnosis Procedure</u>".

### Diagnosis Procedure

INFOID:0000000009756605

### 1. CHECK METER BUZZER CIRCUIT

Operate the hazard lights by turning ON the hazard warning switch.

#### Is the inspection result normal?

YES >> GO TO 2

NO >> Replace combination meter. Refer to MWI-77, "Removal and Installation".

## 2. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> Inspection End.

### **HAZARD FUNCTION**

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< DTC/CIRCUIT DIAGNOSIS >	[WITHOUT INTELLIGENT KEY SYSTEM]
HAZARD FUNCTION	
Description	INFOID:0000000009756606
Perform answer-back for each operation with number of blink	S.
Component Function Check	INFOID:0000000009756607
1. CHECK FUNCTION	
Check hazard warning lamp ("FLASHER") in Active Test.	
Is the inspection result normal?  YES >> Hazard warning lamp circuit is OK.  NO >> Refer to DLK-283, "Diagnosis Procedure".	
Diagnosis Procedure	INFOID:000000009756608
1. CHECK HAZARD SWITCH CIRCUIT	
Operate the hazard lights by turning ON the hazard warning so the inspection result normal?  YES >> GO TO 2  NO >> Repair or replace hazard warning switch circuit. If the control of the	
Refer to GI-39, "Intermittent Incident".	
>> Inspection End.	

**DLK-283** Revision: October 2013 2014 Sentra NAM

#### **KEYFOB ID SET UP WITH CONSULT**

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

### KEYFOB ID SET UP WITH CONSULT

### **ID Code Entry Procedure**

INFOID:0000000009756609

#### KEYFOB ID SET UP WITH CONSULT

#### NOTE:

- If a keyfob is lost, the ID code of the lost keyfob must be erased to prevent unauthorized use. A specific ID code can be erased with CONSULT. However, when the ID code of a lost keyfob is not known, all controller ID codes should be erased. After all ID codes are erased, the ID codes of all remaining and/or new keyfobs must be re-registered.
- When registering an additional keyfob, the existing ID codes in memory may or may not be erased. If
  five ID codes are stored in memory when an additional code is registered, only the oldest code is
  erased. If less than five codes are stored in memory when an additional code is registered, the new
  ID code is added and no ID codes are erased.
- Entry of a maximum of five ID codes is allowed. When more than five codes are entered, the oldest ID code will be erased.
- Even if the same ID code that is already in memory is input, the same ID code can be entered. The
  code is counted as an additional code.
- 1. Turn ignition switch ON.
- 2. Select BCM.
- Select MULTI REMOTE ENT.
- 4. Select WORK SUPPORT.
- 5. You can register, erase or confirm a keyfob ID code. To register a new code, select the following option and follow CONSULT instructions:
  - REMO CONT ID REGIST
    - Use this mode to register a keyfob ID code.

#### NOTE:

Register the ID code when keyfob or BCM is replaced, or when additional keyfob is required.

- REMO CONT ID ERASUR
  - Use this mode to erase a keyfob ID code.
- REMO CONT ID CONFIR
  - Use this mode to confirm if a keyfob ID code is registered or not.

#### **KEYFOB ID SET UP WITHOUT CONSULT**

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

### KEYFOB ID SET UP WITHOUT CONSULT

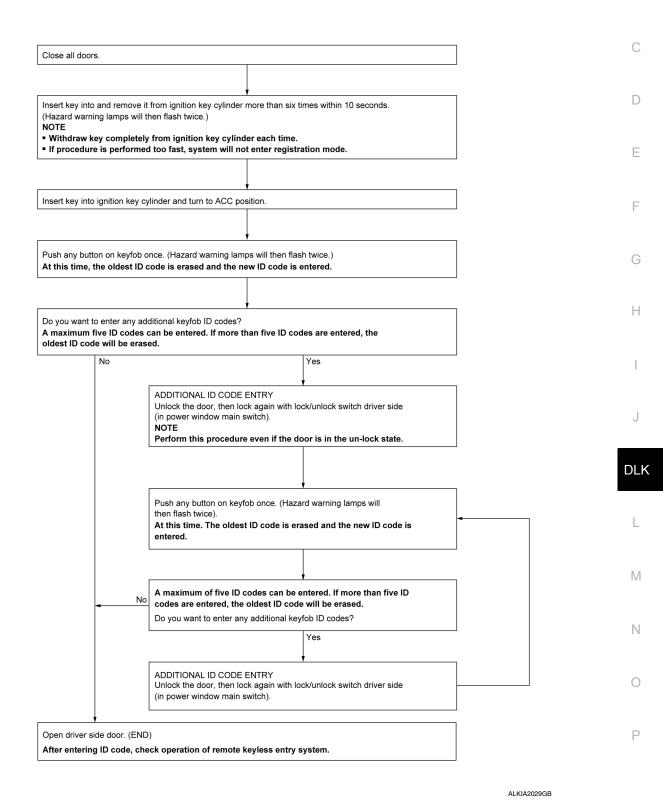
### ID Code Entry Procedure

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#### KEYFOB ID SET UP WITHOUT CONSULT



#### NOTE:

 If a keyfob is lost, the ID code of the lost keyfob must be erased to prevent unauthorized use. A specific ID code can be erased with CONSULT. However, when the ID code of a lost keyfob is not known, all controller

Revision: October 2013 DLK-285 2014 Sentra NAM

#### **KEYFOB ID SET UP WITHOUT CONSULT**

#### < DTC/CIRCUIT DIAGNOSIS >

#### [WITHOUT INTELLIGENT KEY SYSTEM]

ID codes should be erased. After all ID codes are erased, the ID codes of all remaining and/or new keyfobs must be re-registered.

To erase all ID codes in memory, register one ID code (keyfob) five times. After all ID codes are erased, the ID codes of all remaining and/or new keyfobs must be re-registered.

- When registering an additional keyfob, the existing ID codes in memory may or may not be erased. If five ID codes are stored in memory, when an additional code is registered, only the oldest code is erased. If less than five ID codes are stored in memory, when an additional ID code is registered, the new ID code is added and no ID codes are erased.
- If you need to activate more than two additional new keyfobs, repeat the procedure "Additional ID code entry" for each new keyfob <u>DLK-284. "ID Code Entry Procedure"</u> (with CONSULT), <u>DLK-285. "ID Code Entry Procedure"</u> (without CONSULT).
- A maximum amount of five ID codes is allowed. When more than five ID codes are entered, the oldest ID code will be erased.
- Even if same ID code that is already in the memory is input, the same ID code can be entered. The code is counted as an additional code.

#### POWER DOOR LOCK SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

## SYMPTOM DIAGNOSIS

### POWER DOOR LOCK SYSTEM SYMPTOMS

Symptom Table

## DOOR LOCK/UNLOCK FUNCTION MALFUNCTION

# NOTE:Before performing the diagnosis in the following table, check "WORK FLOW". F

- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to <u>DLK-245, "Work Flow"</u>.
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
- If the following symptoms are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Symptom	Diagnosis/service procedure		Reference page	
Key reminder door function does not operate properly.	1.	Check door switch.	DLK-253	
	2.	Check key switch.	DLK-262	
	3.	Check Intermittent Incident.		<u>GI-39</u>
Power door lock does not operate with door lock and unlock switch on main power window and door lock/unlock switch or power window and door lock/unlock switch RH.	1.	Check BCM Power supply and ground circuit.		DLK-252
	2.	2. Check main power window and door lock and unlock switch.		DLK-256
	3.	3. Check power window and door lock and unlock switch RH.		DLK-257
	4.	Check Intermittent Incident.		<u>GI-39</u>
Specific door lock actuator does not operate.		Check door lock actuator.	Driver side	DLK-263
	1.		Passenger side	DLK-264
			Rear LH	DLK-265
			Rear RH	DLK-266
	2.	Check Intermittent Incident.		<u>GI-39</u>
Power door locks do not operate with front door lock key cylinder switch LH.	1.	Check key cylinder switch.		DLK-260
	2.	Replace BCM.		BCS-126
Vehicle speed sensing auto door LOCK operation does not operate.	1.	Ensure automatic door lock/unlock function (lock operation) is enabled.		DLK-214
	2.	Check combination meter vehicle speed signal.		MWI-49
	3.	. Check intermittent incident.		<u>GI-39</u>
Ignition OFF interlock auto door UNLOCK function does not operate.	1.	Ensure automatic door lock/unlock fution) is enabled.	DLK-214	
	2.	2. Check BCM for DTCs.		DLK-245
	3.	Check intermittent incident.		<u>GI-39</u>

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### REMOTE KEYLESS ENTRY SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

### REMOTE KEYLESS ENTRY SYSTEM SYMPTOMS

Symptom Table

#### REMOTE KEYLESS ENTRY SYSTEM

Symptom	Diagnoses/service procedure	Reference page
All functions of remote keyless entry system do not operate.	Keyfob battery and function check (use Remote Keyless Entry Tester J-43241 or Signal Tech II Tool J-50190)     NOTE:     If the result of keyfob function check is OK, keyfob is not malfunctioning.	
	1. Keyfob battery and function check (use Remote Keyless Entry Tester J-43241 or Signal Tech II Tool J-50190)  NOTE: If the result of keyfob function check is OK, keyfob is not malfunctioning.  2. Check BCM and remote keyless entry receiver.  1. Keyfob battery and function check (use Remote Keyless Entry Tester J-43241 or Signal Tech II Tool J-50190)  NOTE: If the result of keyfob function check is OK, keyfob is not malfunctioning.  2. Door switch check  3. ACC power check  4. Replace BCM.  1. Keyfob battery and function check (use Remote Keyless Entry Tester J-43241 or Signal Tech II Tool J-50190)  NOTE: If the result of keyfob function check is OK, keyfob is not malfunctioning.  2. Replace BCM.  1. Check hazard and horn reminder mode with CONSULT NOTE: Hazard and horn reminder mode can be changed. First check the hazard and horn reminder mode setting.  2. Door switch check  3. Replace BCM.  1. Check hazard reminder mode with CONSULT NOTE:  Hazard and horn reminder mode setting.  2. Door switch check  3. Replace BCM.	DLK-268
The new ID of keyfob cannot be entered.	Tester J-43241 or Signal Tech II Tool J-50190) <b>NOTE:</b> If the result of keyfob function check is OK, keyfob is not malfur	DLK-271
	2. Door switch check	
	3. ACC power check	
	4. Replace BCM.	BCS-126
Door lock or unlock does not function. (If the power door lock system does not operate manually, check power door lock system)	NOTE: If the result of keyfob function check is OK, keyfob is not malfunc-	DLK-271
	1. Keyfob battery and function check (use Remote Keyless   Tester J-43241 or Signal Tech II Tool J-50190)  NOTE: If the result of keyfob function check is OK, keyfob is not mationing.  2. Check BCM and remote keyless entry receiver.  1. Keyfob battery and function check (use Remote Keyless   Tester J-43241 or Signal Tech II Tool J-50190)  NOTE: If the result of keyfob function check is OK, keyfob is not mationing.  2. Door switch check  3. ACC power check  4. Replace BCM.  1. Keyfob battery and function check (use Remote Keyless   Tester J-43241 or Signal Tech II Tool J-50190)  NOTE: If the result of keyfob function check is OK, keyfob is not mationing.  2. Replace BCM.  1. Check hazard and horn reminder mode with CONSULT NOTE: Hazard and horn reminder mode can be changed. First check the hazard and horn reminder mode setting.  2. Door switch check  3. Replace BCM.  1. Check hazard reminder mode with CONSULT NOTE: Hazard reminder mode can be changed. First check the hazard reminder mode setting.  2. Check hazard function with hazard switch  3. Replace BCM.  1. Check horn reminder mode with CONSULT NOTE: Hazard reminder mode can be changed. First check the hazard reminder mode setting.  2. Check horn reminder mode with CONSULT NOTE: Horn reminder mode can be changed. First check the horn reminder mode setting.  2. Check horn reminder mode with CONSULT NOTE: Horn reminder mode can be changed. First check the horn reminder mode setting.  2. Check horn function with horn switch  3. IPDM E/R operation check  4. Replace BCM.  1. Room lamp operation check  2. Door switch check	BCS-126
Hazard and horn reminder does not activate properly when pressing lock or unlock button of keyfob.	NOTE: Hazard and horn reminder mode can be changed.	DLK-217
	2. Door switch check	
	MOTE: If the result of keyfob function check is OK, keyfob is not malfur tioning.  2. Check BCM and remote keyless entry receiver.  1. Keyfob battery and function check (use Remote Keyless Ent Tester J-43241 or Signal Tech II Tool J-50190)  NOTE: If the result of keyfob function check is OK, keyfob is not malfur tioning.  2. Door switch check  3. ACC power check  4. Replace BCM.  1. Keyfob battery and function check (use Remote Keyless Ent Tester J-43241 or Signal Tech II Tool J-50190)  NOTE: If the result of keyfob function check is OK, keyfob is not malfur tioning.  2. Replace BCM.  1. Check hazard and horn reminder mode with CONSULT NOTE: Hazard and horn reminder mode can be changed. First check the hazard and horn reminder mode setting.  2. Door switch check  3. Replace BCM.  1. Check hazard reminder mode with CONSULT NOTE: Hazard reminder mode can be changed. First check the hazard reminder mode setting.  2. Check hazard function with hazard switch  3. Replace BCM.  1. Check horn reminder mode setting.  2. Check horn function with horn switch  3. IPDM E/R operation check  4. Replace BCM.  1. Room lamp operation check	BCS-126
Hazard reminder does not activate properly when pressing lock or unlock button of keyfob. (Horn reminder OK)	NOTE: Hazard reminder mode can be changed.	DLK-217
	2. Check hazard function with hazard switch	
	3. Replace BCM.	BCS-126
Horn reminder does not activate properly when pressing lock or unlock button of keyfob. (Hazard reminder OK)	NOTE: Horn reminder mode can be changed.	<u>DLK-217</u>
	2. Check horn function with horn switch	
	3. IPDM E/R operation check	
	4. Replace BCM.	BCS-126
Room lamp illumination does not operate properly.	Room lamp operation check	
	2. Door switch check	
	3. Replace BCM.	

# REMOTE KEYLESS ENTRY SYSTEM SYMPTOMS

### < SYMPTOM DIAGNOSIS >

# [WITHOUT INTELLIGENT KEY SYSTEM]

Symptom	Diagnoses/service procedure	Reference page
Panic alarm (horn and headlamp) does not activate when panic alarm button is continuously pressed.	Keyfob battery and function check (use Remote Keyless Entry Tester J-43241 or Signal Tech II Tool J-50190)     NOTE:     If the result of keyfob function check is OK, keyfob is not malfunctioning.	DLK-271
	2. ACC power check	PCS-36
	3. Replace BCM.	BCS-126
Auto door lock operation does not activate properly. (All other remote keyless entry functions OK.)	Check auto door lock operation mode with CONSULT NOTE:     Auto door lock operation mode can be changed.     First check the auto door lock operation mode setting.	DLK-216
	2. Replace BCM.	BCS-126

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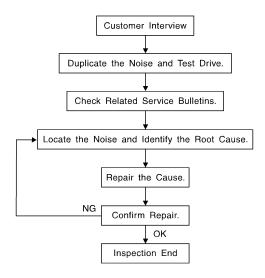
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## SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow INFOID:000000010291252



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### **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 customer's comments; refer to <a href="DLK-294">DLK-294</a>, "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, be sure to diagnose and repair the noise that the customer is concerned about. This can be accomplished by test driving 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 bumble bee)
  - Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending upon the person. A noise that you 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 you confirm the repair.

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SQUEAK AND RATTLE TROUBLE DIAGNOSES < SYMPTOM DIAGNOSIS > [WITHOUT INTELLIGENT KEY SYSTEM]	
< SYMPTOM DIAGNOSIS > [WITHOUT INTELLIGENT KEY SYSTEM] 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.	А
<ul><li>2) Tap or push/pull around the area where the noise appears to be coming from.</li><li>3) Rev the engine.</li></ul>	
<ul> <li>4) Use a floor jack to recreate vehicle "twist".</li> <li>5) At idle, apply engine load (electrical load, half-clutch on M/T model, drive position on CVT and A/T models).</li> <li>6) Raise the vehicle on a hoist and hit a tire with a rubber hammer.</li> <li>• Drive the vehicle and attempt to duplicate the conditions the customer states exist when the noise occurs.</li> </ul>	В
• 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	D
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.	Е
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: J-39565 and mechanic's stethoscope).	F
<ul> <li>Narrow down the noise to a more specific area and identify the cause of the noise by:</li> <li>removing the components in the area that you suspect the noise is coming from.</li> <li>Do not use too much force when removing clips and fasteners, otherwise clips and fasteners can be broken or lost during the repair, resulting in the creation of new noise.</li> <li>tapping or pushing/pulling the component that you suspect is causing the noise.</li> <li>Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only</li> </ul>	G
temporarily.  • feeling for a vibration with your hand by touching the component(s) that you suspect is (are) causing the noise.	
<ul> <li>placing a piece of paper between components that you suspect are causing the noise.</li> <li>looking for loose components and contact marks.</li> <li>Refer to DLK-291, "Generic Squeak and Rattle Troubleshooting".</li> </ul>	
REPAIR THE CAUSE	J
If the cause is a loose component, tighten the component securely.	
<ul> <li>If the cause is insufficient clearance between components:</li> <li>separate components by repositioning or loosening and retightening the component, if possible.</li> <li>insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or urethane</li> </ul>	DL
tape. A NISSAN Squeak and Rattle Kit (J-50397) is available through your authorized NISSAN Parts Department.  CAUTION:	L
Do not use excessive force as many components are constructed of plastic and may be damaged.	

- Always check with the Parts Department for the latest parts information.
- The materials 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.
- The following materials not found in the kit can also be used to repair squeaks and rattles.
- SILICONE GREASE: Use instead of UHMW tape that will be visible or does not fit. The silicone grease will only last a few months.
- SILICONE SPRAY: Use when grease cannot be applied.
- DUCT TAPE: Use 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.

# Generic Squeak and Rattle Troubleshooting

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

#### INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

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### SQUEAK AND RATTLE TROUBLE DIAGNOSES

### < SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

- Cluster lid A and the instrument panel
- 2. Acrylic lens and combination meter housing
- 3. Instrument panel to front pillar finisher
- 4. Instrument panel to windshield
- Instrument panel pins
- 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 silicone spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

### **CAUTION:**

Do not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will not be able to recheck the repair.

#### CENTER CONSOLE

Components to pay attention to include:

- Shift selector 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:

- 1. Finisher and inner panel making a slapping noise
- Inside handle escutcheon to door finisher
- Wiring harnesses tapping
- 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. You can usually insulate the areas 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 owner. In addition look for:

- Trunk lid bumpers out of adjustment
- 2. Trunk lid striker out of adjustment
- The trunk lid torsion bars knocking together
- 4. A loose license plate or bracket

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

### SUNROOF/HEADLINING

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

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

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

### OVERHEAD CONSOLE (FRONT AND REAR)

Overhead console noises are often caused by the console panel clips not being engaged correctly. Most of these incidents are repaired by pushing up on the console at the clip locations until the clips engage. In addition look for:

- Loose harness or harness connectors.
- 2. Front console map/reading lamp lens loose.

### SQUEAK AND RATTLE TROUBLE DIAGNOSES

### < SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

3. Loose screws at console attachment points.

#### SEATS

When isolating seat noise it's important to note the position the seat is in and the load placed on the seat when the noise is present. These conditions should be duplicated when verifying and isolating the cause of the noise.

Cause of seat noise include:

Headrest rods and holder

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

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

### UNDERHOOD

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

Causes of transmitted underhood noise include:

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

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

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# **Diagnostic Worksheet**

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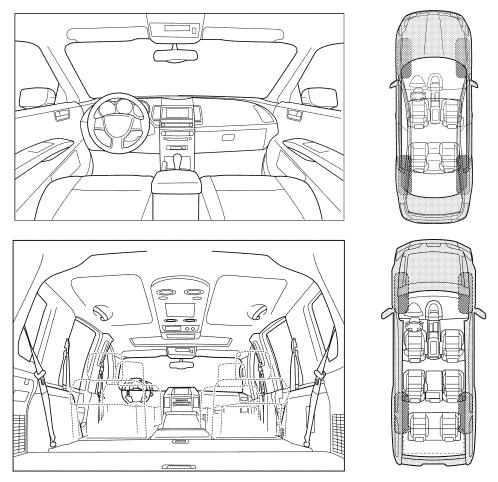
### Dear Customer:

We are concerned about your satisfaction with your vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your vehicle 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 advisor or technician to ensure we confirm the noise you are hearing.

#### **SQUEAK & RATTLE DIAGNOSTIC WORKSHEET**

### 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.

# **SQUEAK AND RATTLE TROUBLE DIAGNOSES**

< SYMPTOM DIAGNOSIS >

# [WITHOUT INTELLIGENT KEY SYSTEM]

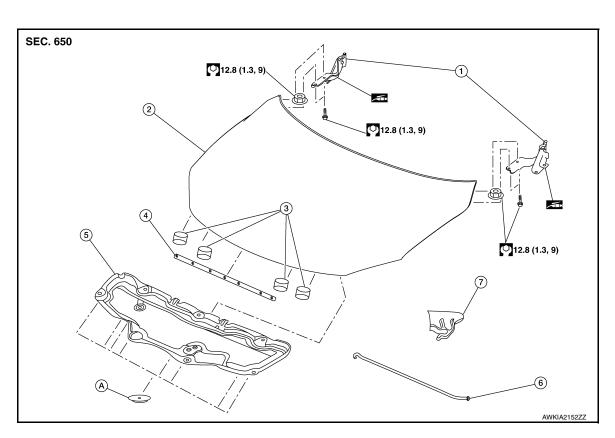
<del>.</del>	se occurs:
II. WHEN DOES IT OCCUR? (please che	eck the boxes that apply)
Anytime	☐ After sitting out in the rain
1st time in the morning	☐ When it is raining or wet
Only when it is cold outside	☐ Dry or dusty conditions
Only when it is hot outside	Other:
III. WHEN DRIVING:	IV. WHAT TYPE OF NOISE
☐ Through driveways	☐ Squeak (like tennis shoes on a clean floor)
Over rough roads	☐ Creak (like walking on an old wooden floor)
Over speed bumps	Rattle (like shaking a baby rattle)
Only about mph	☐ Knock (like a knock at the door)
On acceleration	☐ Tick (like a clock second hand)
Coming to a stop	Thump (heavy muffled knock noise)
On turns: left, right or either (circle)	Buzz (like a bumble bee)
With passengers or cargo	
Other:	
After driving miles or minu	utes
<del></del>	
After driving miles or minu  TO BE COMPLETED BY DEALERSHIP P  Test Drive Notes:	
TO BE COMPLETED BY DEALERSHIP P	
TO BE COMPLETED BY DEALERSHIP P	
TO BE COMPLETED BY DEALERSHIP P	PERSONNEL
TO BE COMPLETED BY DEALERSHIP P	PERSONNEL
TO BE COMPLETED BY DEALERSHIP P Test Drive Notes:  Vehicle test driven with customer	YES NO Initials of person performing
TO BE COMPLETED BY DEALERSHIP P Test Drive Notes:  Vehicle test driven with customer - Noise verified on test drive	PERSONNEL
TO BE COMPLETED BY DEALERSHIP P Test Drive Notes:  Vehicle test driven with customer - Noise verified on test drive - Noise source located and repaired	YES NO Initials of person performing
TO BE COMPLETED BY DEALERSHIP P Test Drive Notes:  Vehicle test driven with customer - Noise verified on test drive	YES NO Initials of person performing
TO BE COMPLETED BY DEALERSHIP P Test Drive Notes:  Vehicle test driven with customer - Noise verified on test drive - Noise source located and repaired - Follow up test drive performed to confirm	YES NO Initials of person performing
TO BE COMPLETED BY DEALERSHIP P Test Drive Notes:  Vehicle test driven with customer - Noise verified on test drive - Noise source located and repaired - Follow up test drive performed to confirm	YES NO Initials of person performing
TO BE COMPLETED BY DEALERSHIP P Test Drive Notes:  Vehicle test driven with customer - Noise verified on test drive - Noise source located and repaired - Follow up test drive performed to confirm VIN:  W.O.#	YES NO Initials of person performing
TO BE COMPLETED BY DEALERSHIP P Test Drive Notes:  Vehicle test driven with customer - Noise verified on test drive - Noise source located and repaired - Follow up test drive performed to confirm VIN:	YES NO Initials of person performing  The repair The control of the person performing  The control of the person performing  The repair The control of the person performing  The repair The person performing  The repair The person performing  The performing performing  The performing perf

# REMOVAL AND INSTALLATION

**HOOD** 

**HOOD ASSEMBLY** 

**HOOD ASSEMBLY: Exploded View** 



- 1. Hood hinge (LH/RH)
- 4. Hood seal
- 7. Hood support rod clamp
- 2. Hood assembly
- 5. Hood insulator
- A. Clip

- Hood bumper rubber
- Hood support rod

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

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### **CAUTION:**

- Use two people when removing or installing hood assembly due to its heavy weight.
- Use protective tape or shop cloths to protect surrounding components from damage during removal and installation of hood assembly.

#### REMOVAL

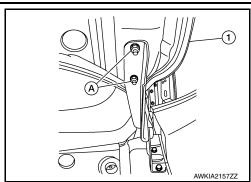
1. Support the hood assembly using a suitable tool.

#### **WARNING:**

Bodily injury may occur if hood assembly is not supported properly when removing hood assembly.

2. Disconnect front washer nozzle and tube.

3. Remove hood hinge to hood nuts (A) and then remove the hood assembly (1).



### INSTALLATION

Installation is in the reverse order of removal.

Tighten hood hinge to hood nuts to specified torque. Refer to <u>DLK-149</u>, "<u>HOOD ASSEMBLY</u>: <u>Exploded View</u>". **CAUTION**:

- Before installing the hood hinge, apply anticorrosive agent onto the surface of the vehicle.
- After installation, perform the hood assembly adjustment procedure. Refer to <u>DLK-297</u>, "HOOD ASSEMBLY: Adjustment".

**HOOD ASSEMBLY: Adjustment** 

- Hood assembly
   Front fender
- 2. Front grille
- Hood lock assembly
- 3. Front combination lamp

Check the clearance and the surface height between hood and each part by visual inspection and tactile feel. If the clearance and the surface height are out of specification, adjust them according to the adjustment procedures.

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Unit: mm (in)

Section	Item	Measurement	Standard	Parallelism	Equality
A – A	D	Clearance	6.2 ±2.2 (0.24 ±0.09)	2.0	_
A-A	Е	Surface height	_	_	_
B – B	F	Clearance	3.5 ±2.0 (0.14 ±0.08)	2.0	3.0
B-B	G	Surface height	3.6 ±2.0 (0.14 ±0.08)	2.0	2.0
C – C	Н	Clearance	3.7 ±1.0 (0.15 ±0.04)	2.0	2.0
0-0	J	Surface height	0.0 ±1.0 (0.00 ±0.04)	_	_

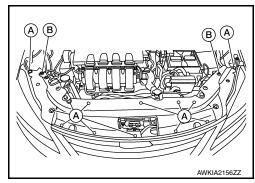
### **CLEARANCE ADJUSTMENT**

1. Loosen hood hinge (LH/RH) nuts and bolts.

#### NOTE:

The anticorrosive agent applied between the hoodledge and the hood hinges also acts as an adhesive. This seal must be broken before the hinges will move.

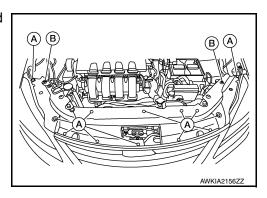
2. Remove the radiator core support upper cover clips (A) and bolts (B) and remove.



- 3. Loosen the hood lock assembly bolts.
- Adjust the hood assembly so the clearance measurements are within specifications provided. Then
  tighten the hood hinge nuts and bolts to specified torque. Refer to <u>DLK-149</u>, "HOOD ASSEMBLY:
  Exploded View".
- Tighten the hood lock assembly bolts to specified torque. Refer to <u>DLK-154, "HOOD LOCK CONTROL</u>: <u>Exploded View"</u>.
- 6. Install the radiator core support upper cover.

### **HEIGHT ADJUSTMENT**

 Remove the radiator core support upper cover clips (A) and bolts (B) and remove.

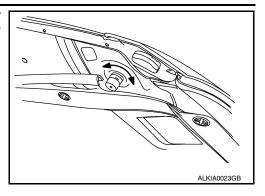


2. Loosen the hood lock assembly bolts.

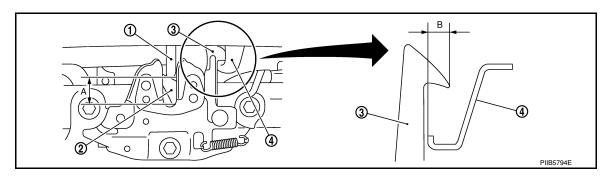
 Adjust the surface height of the hood assembly to front bumper fascia and front fender according to the specified values by rotating the hood bumper rubbers.

#### NOTE:

Only one hood bumper rubber shown for clarity.



- 4. Temporarily tighten the hood lock assembly bolts.
- 5. Adjust (A) and (B) as shown to the following value with hood's own weight by dropping it from approximately 200 mm (7.9 in) height or by pressing hood lightly [approximately 29 Nm (3.0 kg-m, 21 ft-lb)].



1. Hood striker

- 2. Primary latch

- 4. Secondary latch
- A.  $21 \pm 1 \text{ mm } (0.8 \pm 0.04 \text{ in})$
- B. 6.8 mm (0.27 in)

Secondary striker

After adjustment, tighten hood hinge nuts and bolts to the specified torque. Refer to <u>DLK-149</u>, "HOOD <u>ASSEMBLY</u>: <u>Exploded View</u>".

### **CAUTION:**

- Check hood hinge rotating part for poor lubrication. If necessary, apply a suitable multi-purpose grease.
- After adjusting, apply touch-up paint (body color) to the head of hood hinge bolts and nuts.
- Tighten the hood lock assembly bolts to specified torque.
- 8. Install the radiator core support upper cover.
- If the clearance measurements between the hood and fender cannot be corrected by adjusting the hood, the fender must be adjusted. Refer to <u>DLK-160</u>, "Adjustment".

### **HOOD HINGE**

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

#### INFOID:0000000009756619

#### REMOVAL

- Remove the fender protector. Refer to <u>EXT-28</u>, "FENDER PROTECTOR: Removal and Installation -Front Fender Protector".
- Remove the core support upper cover. Refer to <u>HA-39</u>, "Exploded View".
- 3. Remove the front fascia. Refer to EXT-17, "Removal and Installation".
- Remove the front combination lamp. Refer to EXL-119, "Removal and Installation".
- 5. Remove the front fender. Refer to <u>DLK-159</u>, "Removal and Installation".

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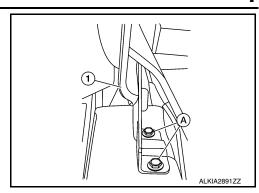
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6. Remove hood hinge bolts (A) and hood hinge (1).



### **INSTALLATION**

Installation is in the reverse order of removal.

Tighten bolts to specified torque. Refer to <u>DLK-149</u>, "<u>HOOD ASSEMBLY</u>: <u>Exploded View</u>". **CAUTION**:

- Before installing the hood hinge, apply anticorrosive agent onto the surface of the vehicle.
- After installation, perform hood assembly adjustment procedure. Refer to <u>DLK-297, "HOOD ASSEM-BLY</u>: Adjustment".

### HOOD SUPPORT ROD

**HOOD SUPPORT ROD:** Removal and Installation

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### **REMOVAL**

1. Support hood assembly using a suitable tool.

#### **WARNING:**

Bodily injury may occur if hood assembly is not supported properly when removing hood support rod.

- 2. Rotate and remove hood support rod from grommet.
- 3. Remove grommet from hood hinge using a suitable tool, if necessary.

#### INSTALLATION

Installation is in the reverse order of removal.

### HOOD LOCK CONTROL

**HOOD LOCK CONTROL: Exploded View** 

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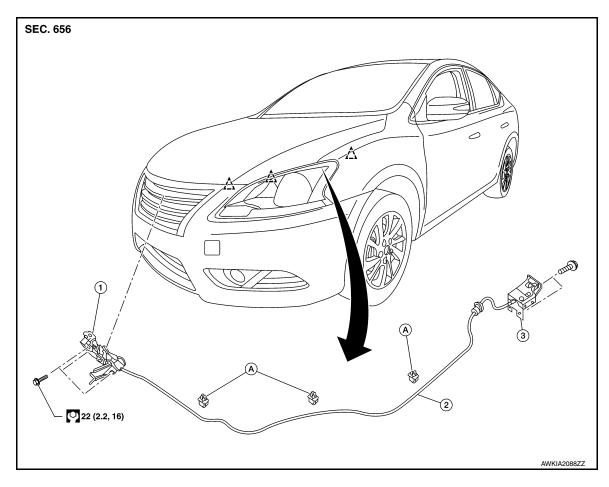
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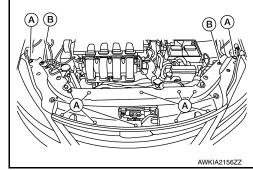
- Hood lock assembly
- A. Hood lock release cable clip
- 2. Hood lock release cable Clip
- 3. Hood lock/fuel filler door release handle assembly

### HOOD LOCK CONTROL: Removal and Installation

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### **REMOVAL**

- Remove the fender protector (LH). Refer to <u>EXT-28</u>, "<u>FENDER PROTECTOR</u>: Removal and Installation <u>Front Fender Protector</u>".
- 2. Remove the radiator core support upper cover clips (A) and bolts (B) and remove.



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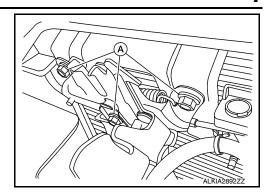
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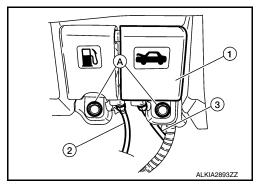
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Revision: October 2013 DLK-301 2014 Sentra NAM

Remove the hood lock assembly bolts (A).



- 4. Disconnect the hood lock release cable from the hood lock assembly.
- Remove the bolts (A), then separate the hood lock/fuel filler door release handle assembly (1) from the hood lock release cable (3) and fuel filler door release cable (2).



6. Remove the grommet from the dash assembly and pull the hood lock release cable into the passenger compartment.

#### **CAUTION:**

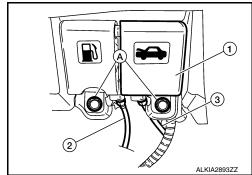
While pulling, be careful not to damage (peel) the outside of the hood lock release cable.

#### INSTALLATION

1. Pull the hood lock release cable through the dash assembly into the engine compartment. **CAUTION:** 

Be careful not to bend the cable too much, keep the radius 100 mm (3.94 in) or more.

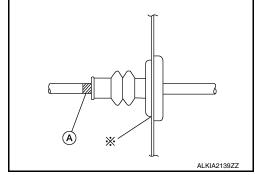
- 2. Attach the hood lock release cable (3) and the fuel filler door release cable (2) to the hood lock/fuel filler door release handle assembly (1).
- 3. Place hood lock/fuel filler door release handle assembly in position and retain with bolts (A).



4. Check that the cable is not offset from the center of the grommet and seat the grommet into the dash hole.

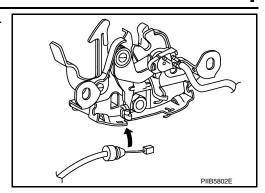
#### NOTE:

Make sure that the marked area (A) of the cable is located as shown after mounting grommet to dash upper assembly. Apply sealant around the grommet at \* mark.



5. Position the hood lock release cable and clip it into place.

6. Connect the hood lock release cable to the hood lock assembly.



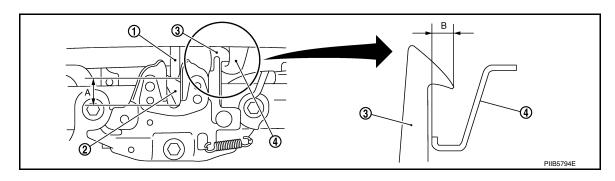
- 7. Perform hood fitting adjustment. Refer to <a href="DLK-297">DLK-297</a>, "HOOD ASSEMBLY: Adjustment".
- 8. Perform the hood lock control inspection.

#### INSPECTION

#### NOTE:

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

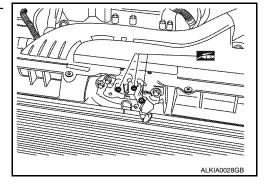
1. Check that the secondary latch is properly engaged with the secondary striker and meets specification provided (B) with hood's own weight.



1. Hood striker

Secondary latch

- Primary latch
  - A.  $21 \pm 1$ mm  $(0.8 \pm 0.04 in)$
- 3. Secondary striker
- B. 6.8 mm (0.27 in)
- 2. While operating the hood lock release handle, carefully check that the front end of the hood assembly is raised and meets the specification provided (A). Also check that the hood lock release handle returns to the original position.
- 3. Check that the hood lock release handle operating force is 49 N (5.0 kg, 11 lb) or less.
- 4. Install so the static closing force of the hood assembly is 49 490 N (5.0 50 kg-f, 36 110.2 lb-f).
- 5. Check the hood lock assembly lubrication condition. If necessary, apply a suitable multi-purpose grease as shown.



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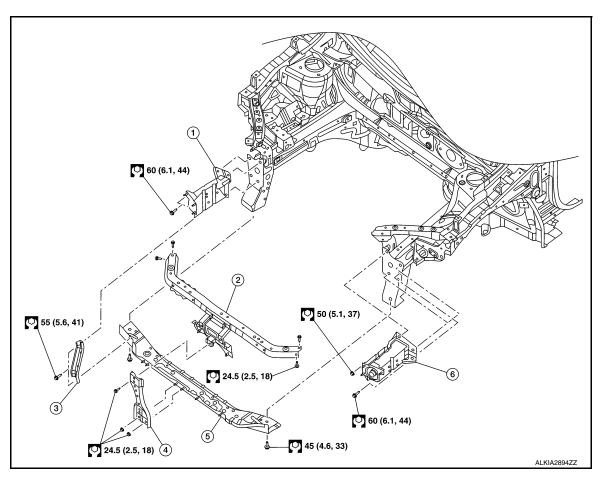
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# RADIATOR CORE SUPPORT

Exploded View



- 1. Core support side member (RH)
- 4. Hood lock support
- Core support upper
- 5. Core support lower
- 3. Core support lower stay
- 6. Core support side member (LH)

### Removal and Installation

INFOID:0000000009756624

#### **REMOVAL**

#### **CAUTION:**

Before servicing, turn ignition switch OFF, disconnect both battery terminals and wait at least three minutes.

- Disconnect the battery negative and positive terminals then wait at least three minutes. Refer to <u>PG-50</u>, <u>"Removal and Installation (Battery)"</u>.
- 2. Remove crash zone sensor. Refer to SR-25, "Removal and Installation".
- 3. Remove radiator. Refer to CO-15, "Removal and Installation".
- 4. Remove the condenser (if equipped). Refer to <a href="HA-39">HA-39</a>, "CONDENSER: Removal and Installation".
- 5. Remove the horns. Refer to <a href="https://example.com/HRN-6">HRN-6</a>, "Removal and Installation".
- 6. Remove air guides (LH/RH).
- 7. Remove the hood lock support bolts and hood lock support.
- 8. Remove the core support lower stay bolts and core support lower stay.
- 9. Remove the core support lower bolts and core support lower.
- Remove the core support side member nuts and bolts and remove the core support side member, if necessary.

### INSTALLATION

### **RADIATOR CORE SUPPORT**

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

Installation is in the reverse order of removal.

Tighten bolts to specification. Refer to <u>DLK-157</u>, "<u>Exploded View</u>".

**CAUTION:** 

After installation, perform hood fitting adjustment. Refer to <u>DLK-150, "HOOD ASSEMBLY : Adjustment"</u>.

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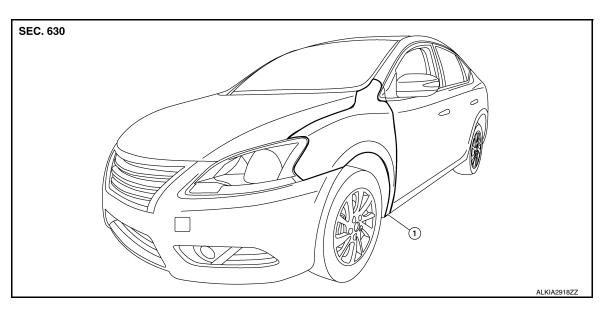
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### FRONT FENDER

Exploded View



Front fender

### Removal and Installation

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### **REMOVAL**

- 1. Remove the front combination lamp. Ref to EXL-119, "Removal and Installation".
- 2. Remove the front bumper fascia. Refer to EXT-17, "Removal and Installation".
- 3. Remove the front fender protector. Refer to <u>EXT-28</u>, "<u>FENDER PROTECTOR</u>: Removal and Installation <u>Front Fender Protector</u>".
- 4. Remove the front fender bolts and the front fender. **CAUTION:**

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

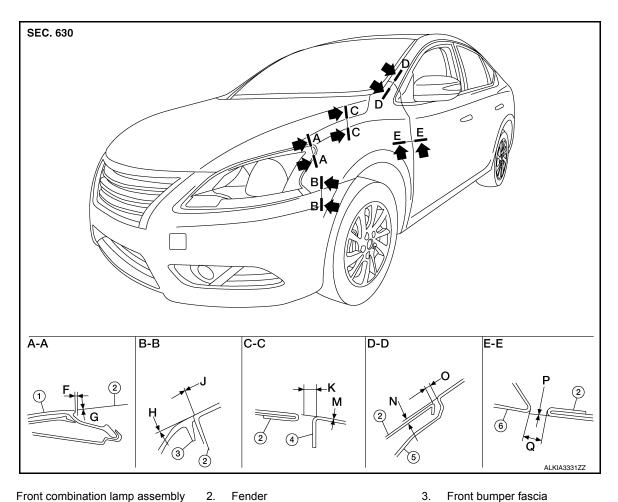
### **INSTALLATION**

Installation is in the reverse order of removal.

### **CAUTION:**

After installation, perform fender adjustment procedure. Refer to DLK-307, "Adjustment".

Adjustment INFOID:0000000009756627



- Front combination lamp assembly
- Fender

Hood assembly

Body side outer

Front door

Check the clearance and the surface height between hood and each part by visual inspection and tactile feel. If the clearance and the surface height are out of specification, adjust them according to the adjustment procedures.

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Section	Item	Measurement	Standard
A – A	F	Clearance	1.5 +1.2, -1.0 (0.06 + 0.05, -0.04)
A-A	G	Surface height	$3.9 \pm 1.2 \; (0.15 \pm 0.05)$
D D	Н	Surface height	$0.7 \pm 1.0 \; (0.03 \pm 0.04)$
B – B	J	Clearance	$0.0 \pm 1.0 \; (0.00 \pm 0.04)$
C – C	К	Clearance	$3.7 \pm 1.0 \; (0.15 \pm 0.04)$
	М	Surface height	$0.0 \pm 1.0 \; (0.00 \pm 0.04)$
D D	N	Surface height	$0.0 \pm 1.0 \; (0.00 \pm 0.04)$
D – D	0	Clearance	$3.0 \pm 1.0 \; (0.12 \pm 0.04)$
E-E	Р	Surface height	-
	Q	Clearance	_

### Adjustment

- Remove front bumper fascia. Refer to EXT-17, "Removal and Installation".
- Remove the front fender protector. Refer to EXT-28, "FENDER PROTECTOR: Removal and Installation -Front Fender Protector".

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**DLK-307** Revision: October 2013 2014 Sentra NAM

### FRONT FENDER

#### < REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

- Loosen the front fender bolts.
- 4. Adjust the clearance (Q) and surface height (P) between the front fender and the front door.
- 5. Tighten the rear upper and lower front fender bolts.
- 6. Adjust the clearance (K) and surface height (M) between the front fender and the hood.
- 7. Adjust the clearance (O) and surface height (N) between the front fender and the body side outer.
- 8. Tighten the inner front fender bolts.
- 9. Adjust the clearance (J) and the surface height (H) between the front fender and the front fascia.
- 10. Tighten the front fender to front fascia and bracket screws.
- 11. Install front bumper fascia. Refer to EXT-17, "Removal and Installation".
- 12. Install front combination lamp.Refer to EXL-119. "Removal and Installation"
- 13. Install the front fender protector. Refer to <u>EXT-28</u>, "FENDER PROTECTOR: Removal and Installation Front Fender Protector".

#### **CAUTION:**

- If the clearance measurements cannot be corrected by adjusting the fender, adjust the following as necessary.
- Hood assembly: Refer to <u>DLK-150, "HOOD ASSEMBLY: Adjustment"</u>.
- Front door: Refer to <u>DLK-164</u>, "<u>DOOR ASSEMBLY</u>: <u>Adjustment</u>".
- After adjusting, apply touch-up paint (body color) to the head of the front fender bolts.

< REMOVAL AND INSTALLATION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

# FRONT DOOR DOOR ASSEMBLY

### DOOR ASSEMBLY: Removal and Installation

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#### **CAUTION:**

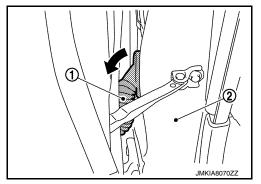
- · Use two people when removing or installing the front door assembly due to its heavy weight.
- When removing and installing front door assembly, support front door using a suitable tool.
- Do not use air tools or electric tools for servicing.
- Before servicing, turn ignition switch OFF, disconnect both battery terminals and wait at least three minutes.

### NOTE:

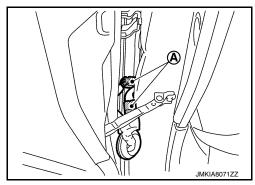
LH side shown; RH side similar.

### **REMOVAL**

- 1. Disconnect the battery negative and positive terminals and wait at least three minutes, if equipped with the side air bag (satellite) sensor. Refer to <u>PG-50</u>, "Removal and Installation (Battery)".
- 2. Remove front door assembly harness grommet LH (1) then pull out door harness from body (2).



3. Disconnect the harness connectors (A) from the front door assembly harness.



Remove check link bolt (body side).

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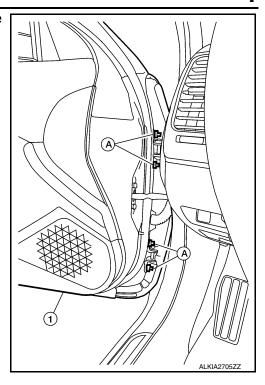
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### < REMOVAL AND INSTALLATION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

5. Remove front door assembly hinge nuts (A) (door side) and the door assembly (1).



### **INSTALLATION**

Installation is in the reverse order of removal.

Tighten door hinge nuts to specified torque.

#### **CAUTION:**

- After installation, check front door open/close, lock/unlock operation.
- After installation, perform the front door adjustment procedure. Refer to <u>DLK-311, "DOOR ASSEM-BLY</u>: Adjustment".

### NOTE:

When main power window and door lock/unlock switch is removed or replaced, it is necessary to perform the initialization procedure. Refer to <a href="PWC-28">PWC-28</a>, "Work Procedure".

DOOR ASSEMBLY: Adjustment

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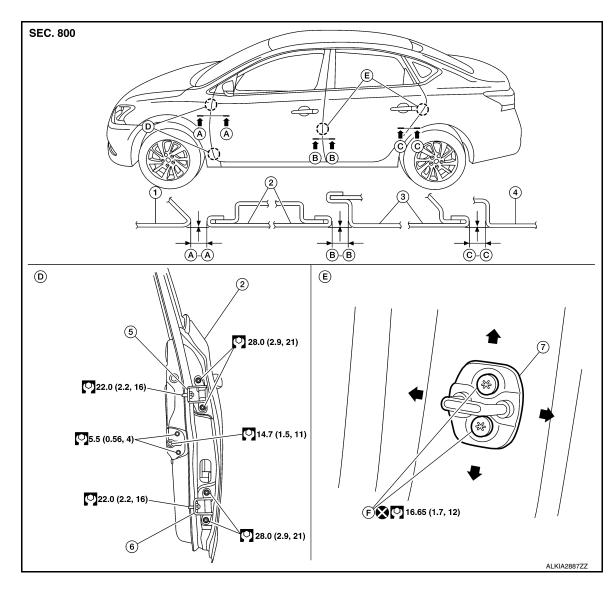
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- Front fender
- 4. Body side outer
- 7. Front door striker

- 2. Front door assembly
- 5. Front door upper hinge
- F. Front door striker bolts
- 3. Rear door assembly
- 6. Front door lower hinge

Check the clearance and surface height between front door and each part by visual inspection and tactile feel. If the clearance and the surface height are out of specification, adjust them according to the adjustment procedure.

Unit: mm (in)

Section	Item	Measurement	Standard
A – A	G	Clearance	4.0 ± 1.0 (0.16 ± 0.04)
A-A	Н	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
B – B	Н	Clearance	4.2 ± 1.0 (0.17 ± 0.04)
B-B	J	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
C – C	J	Clearance	4.0 ± 1.0 (0.16 ± 0.04)
0-0	K	Surface height	0.0 ± 1.0 (0.0 ± 0.04)

### LONGITUDINAL CLEARANCE

1. Remove the front fender. Refer to <a href="DLK-159">DLK-159</a>, "Removal and Installation".

### < REMOVAL AND INSTALLATION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

- 2. Loosen the front door hinge to body bolts. Move the door forward or backward as necessary until within specifications provided.
- Tighten the hinge to body bolts to specified torque.

### Front door hinge bolts

22.0 N·m (2.2 kg-m, 16 ft-lb)

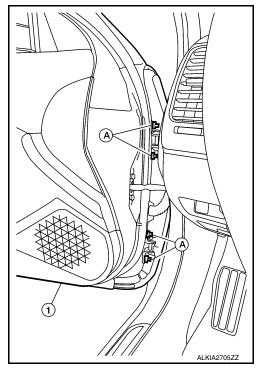
Install the front fender. Refer to <u>DLK-159</u>, "Removal and Installation".

#### SURFACE HEIGHT ADJUSTMENT

- 1. Loosen the front door hinge nuts (A).
- 2. Move the top and/or bottom of the door (1) in or out as necessary until it is within specifications provided.
- 3. Tighten the front door hinge nuts to specified torque.

Front door hinge nuts

28.0 N·m (2.9 kg-m, 21 ft-lb)



#### **CAUTION:**

- Check front door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.
- After adjusting, apply touch-up paint (body color) to the head of front door hinge bolts and nuts.
- If the clearance measurements cannot be corrected by adjusting the front door assembly, adjust the following as necessary.
- Front fender: Refer to DLK-160, "Adjustment".
- Rear door: Refer to <u>DLK-169</u>, "<u>DOOR ASSEMBLY</u>: <u>Adjustment"</u>.

### DOOR STRIKER ADJUSTMENT

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

### DOOR HINGE

DOOR HINGE: Removal and Installation

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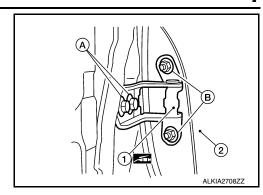
#### **REMOVAL**

- Remove front door assembly (2). Refer to DLK-309, "DOOR ASSEMBLY: Removal and Installation".
- Remove bolt (A) and door hinge (1).

### < REMOVAL AND INSTALLATION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

3. Remove door hinge bolts (B) and remove hinge (1).



#### INSTALLATION

Installation is in the reverse order of removal.

Tighten front door hinge bolts to specified torque. <u>DLK-164</u>, "DOOR ASSEMBLY: Adjustment" **CAUTION:** 

- · Apply anticorrosive agent onto the front door hinge mating surface.
- After installation, check front door open/close, lock/unlock operation.
- After installation, perform the front door adjustment procedure. Refer to <u>DLK-311, "DOOR ASSEM-BLY: Adjustment"</u>.

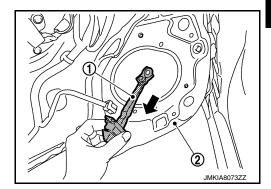
### DOOR CHECK LINK

DOOR CHECK LINK: Removal and Installation

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#### **REMOVAL**

- 1. Fully close the front door glass.
- Remove front door speaker. Refer to <u>AV-60</u>, "Removal and Installation" (BASE AUDIO), <u>AV-205</u>, "Removal and Installation" (DISPLAY AUDIO WITH BOSE), <u>AV-124</u>, "Removal and Installation" (DISPLAY AUDIO WITHOUT BOSE) <u>AV-408</u>, "Removal and Installation" (NAVIGATION WITH BOSE) and <u>AV-300</u>, "Removal and Installation" (NAVIGATION WITHOUT BOSE).
- Remove door check link bolt from body.
- 4. Remove door check link bolts on door panel.
- 5. Remove door check link (1) through the hole in door panel (2).



#### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

- After installation, check front door open/close, lock/unlock operation.
- Check front door check link rotating point for poor lubrication. If necessary, apply a suitable multipurpose grease.

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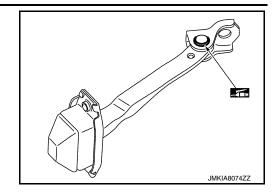
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Revision: October 2013 DLK-313 2014 Sentra NAM

# [WITHOUT INTELLIGENT KEY SYSTEM]

Grease



# REAR DOOR DOOR ASSEMBLY

### DOOR ASSEMBLY: Removal and Installation

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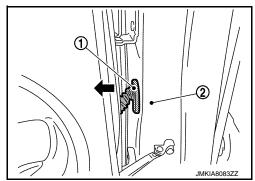
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### **CAUTION:**

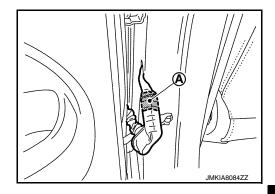
- Use two people when removing or installing the rear door assembly due to its heavy weight.
- When removing and installing rear door assembly, support rear door with a suitable tool.

#### RFMOVAL

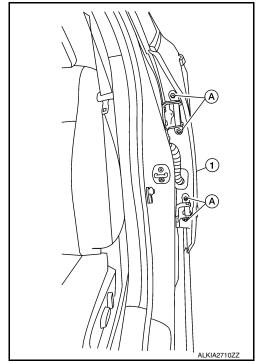
1. Remove rear door assembly harness grommet (LH) (1) then pull out door harness from body (2).



2. Disconnect the harness connector (A) from the door harness.



- 3. Remove the check link bolt from the body.
- 4. Remove rear door assembly hinge nuts (A) (door side) and the door assembly (1).



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### **INSTALLATION**

Installation is in the reverse order of removal.

Tighten rear door hinge nuts (door side) to specified torque.

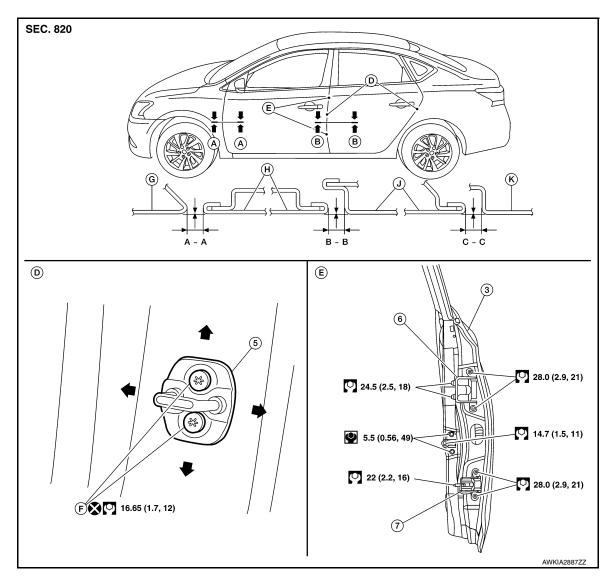
### **CAUTION:**

- After installation, check rear door open/close, lock/unlock operation.
- After installation, perform the rear door adjustment procedure. Refer to <u>DLK-316</u>, "<u>DOOR ASSEMBLY</u>
   <u>: Adjustment"</u>.

# DOOR ASSEMBLY: Adjustment

#### INFOID:0000000009756633

### **ADJUSTMENT**



- 1. Front fender
- 4. Body side outer
- 7. Rear door lower hinge
- 2. Door assembly
- 5. Rear door striker
- F. Rear door striker screws
- 3. Rear door assembly
- 6. Rear door upper hinge

Check the clearance and surface height between rear door and each part by visual inspection and tactile feel. If the clearance and the surface height are out of specification, adjust them according to the adjustment procedure.

### **REAR DOOR**

#### < REMOVAL AND INSTALLATION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

Unit: mm (in)

Section	Item	Measurement	Standard
A – A	G	Clearance	4.0 ± 1.0 (0.16 ± 0.04)
A-A	Н	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
B – B	Н	Clearance	4.2 ± 1.0 (0.17 ± 0.04)
B = B	J	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
C – C		Clearance	4.0 ± 1.0 (0.16 ± 0.04)
0-0	K	Surface height	$0.0 \pm 1.0 \; (0.0 \pm 0.04)$

#### LONGITUDINAL CLEARANCE

- 1. Remove the center pillar upper finisher. Refer to <a href="INT-28">INT-28</a>, "CENTER PILLAR UPPER FINISHER: Removal and Installation".
- Loosen the rear door upper hinge nuts.
- 3. Loosen the rear door lower hinge bolts.
- 4. Move the rear door forward or backward as necessary until within specifications provided.
- 5. Tighten the lower hinge bolts to specification.

### Rear door lower hinge bolts

22 N·m (2.2 kg-m, 16 ft-lb)

6. Tighten the upper hinge nuts to specification.

### Rear door upper hinge nuts

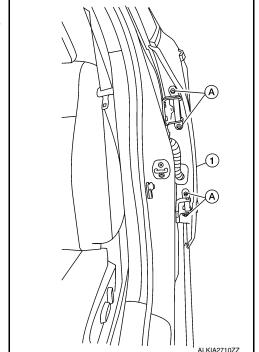
22 N·m (2.2 kg-m, 16 ft-lb)

7. Install the center pillar upper finisher. Refer to <a href="INT-28">INT-28</a>, "CENTER PILLAR UPPER FINISHER: Removal and Installation".

### SURFACE HEIGHT ADJUSTMENT

- 1. Loosen the rear door hinge nuts (door side) (A).
- 2. Move the top and/or the bottom of the rear door (1) in or out as necessary until it is within specifications provided.
- 3. Tighten the rear door hinge nuts (door side) (A) to specification.

Rear door nuts 28.0 N·m (2.9 kg-m, 21 ft-lb)



### **CAUTION:**

- Check rear door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.
- After adjusting, apply touch-up paint (body color) to the head of rear door assembly hinge bolts and nuts.

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• If the clearance measurements cannot be corrected by adjusting the rear door, adjust the front door. Refer to <a href="DLK-164">DLK-164</a>, "DOOR ASSEMBLY: Adjustment".

### DOOR STRIKER ADJUSTMENT

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

### DOOR HINGE

DOOR HINGE: Removal and Installation

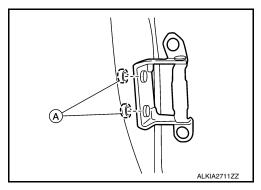
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#### CAUTION:

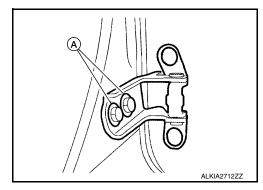
- · Use two people when removing or installing rear door assembly due to its heavy weight.
- When removing and installing rear door assembly, support door using a suitable tool.

#### REMOVAL

- Remove rear door assembly. Refer to <u>DLK-315</u>, "<u>DOOR ASSEMBLY</u>: <u>Removal and Installation</u>".
- 2. Remove center pillar upper finisher (upper hinge only). Refer to <a href="INT-28">INT-28</a>, "CENTER PILLAR UPPER FIN-ISHER: Removal and Installation".
- 3. Remove rear door assembly upper hinge nuts (A) and remove.



Remove rear door assembly lower hinge bolts (A) and remove.



#### INSTALLATION

Installation is in the reverse order of removal.

Tighten rear door assembly hinge nuts and bolts to specified torque.Refer to <u>DLK-169</u>. "<u>DOOR ASSEMBLY</u>: Adjustment"

### **CAUTION:**

- Apply anticorrosive agent onto the hinge mating surface.
- After installation, check rear door open/close, lock/unlock operation.
- After installation, perform the rear door adjustment procedure. Refer to <u>DLK-316</u>, "<u>DOOR ASSEMBLY</u>
   <u>: Adjustment"</u>.

### DOOR CHECK LINK

DOOR CHECK LINK: Removal and Installation

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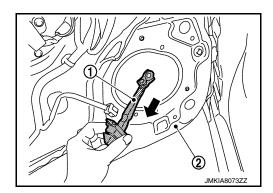
REMOVAL

### **REAR DOOR**

### < REMOVAL AND INSTALLATION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

- 1. Fully close the rear door glass.
- Remove rear door speaker (if equipped). Refer to <u>AV-61, "Removal and Installation"</u> (BASE AUDIO), <u>AV-206, "Removal and Installation"</u> (DISPLAY AUDIO WITH BOSE), <u>AV-125, "Removal and Installation"</u> (DISPLAY AUDIO WITHOUT BOSE) <u>AV-409, "Removal and Installation"</u> (NAVIGATION WITH BOSE) and <u>AV-301, "Removal and Installation"</u> (NAVIGATION WITHOUT BOSE).
- 3. Remove door check link bolt from body.
- 4. Remove door check link bolts on door panel.
- 5. Remove door check link (1) through the hole in door panel (2).

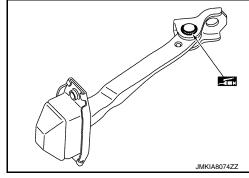


### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

- After installation, check rear door open/close, lock/unlock operation.
- Check rear door check link rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.



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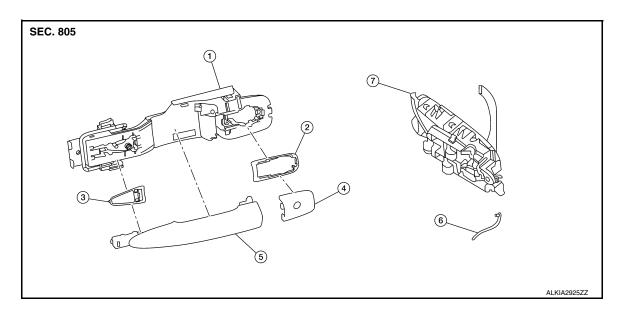
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# DOOR HANDLE FRONT DOOR HANDLE

FRONT DOOR HANDLE: Exploded View

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- 1. Outside handle bracket
- 4. Outside handle escutcheon
- 7. Inside handle assembly
- Rear gasket
- Outside handle

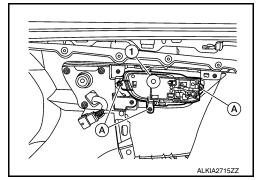
- 3. Front gasket
- 6. Door key cylinder rod

### FRONT DOOR HANDLE: Removal and Installation - Inside Handle

INFOID:0000000009756637

#### **REMOVAL**

- 1. Remove front door finisher. Refer to <a href="INT-15">INT-15</a>, "Removal and Installation".
- 2. Remove inside handle assembly screws (A) and the inside handle assembly (1).



#### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

- Check front door lock cables are properly engaged to inside handle.
- After installation, check front door open/close, lock/unlock operation.

### FRONT DOOR HANDLE: Removal and Installation - Outside Handle

#### INFOID:0000000009756638

### REMOVAL

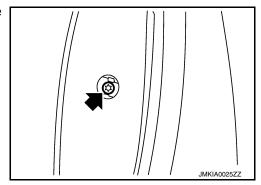
- 1. Fully close front door glass.
- 2. Remove front door finisher. Refer to INT-15, "Removal and Installation".
- 3. Remove front door vapor barrier.

### **DOOR HANDLE**

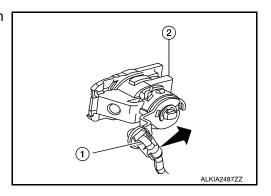
### < REMOVAL AND INSTALLATION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

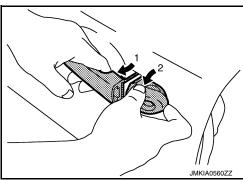
- 4. Remove front door glass channel rear.
- 5. Disconnect the harness connectors from the door antenna and door request switch and then remove harness clamp on outside handle bracket.
- 6. Remove door side grommet, and loosen screw that retains the front door outside handle bracket.



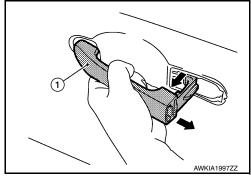
7. Reach in to separate door key cylinder rod (LH side) (1) from door key cylinder assembly (LH side).



8. While pulling outside handle (1), remove door key cylinder assembly (LH side) or outside handle escutcheon (2) (RH side).



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



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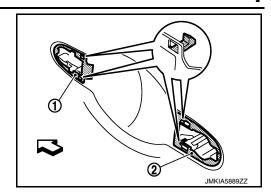
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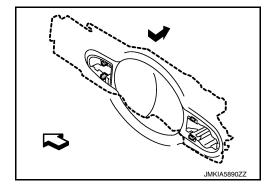
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10. Remove front gasket (1) and rear gasket (2).

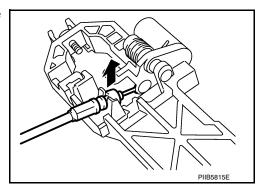
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11. Slide outside handle bracket toward rear of vehicle to remove. <a><□: Front</a>



12. Disconnect the outside handle cable from the outside handle bracket connection.



### **INSTALLATION**

Installation is in the reverse order of removal.

#### **CAUTION:**

- When installing do not reuse front door outside handle bracket screw. Always replace screw with new ones when removed.
- When installing door key cylinder rod on the LH front door, be sure to rotate door key cylinder rod holder until a click is felt.
- Check front door lock cable is properly engaged to outside handle bracket.
- After installation, check front door open/close, lock/unlock operation.

### REAR DOOR HANDLE

REAR DOOR HANDLE: Exploded View

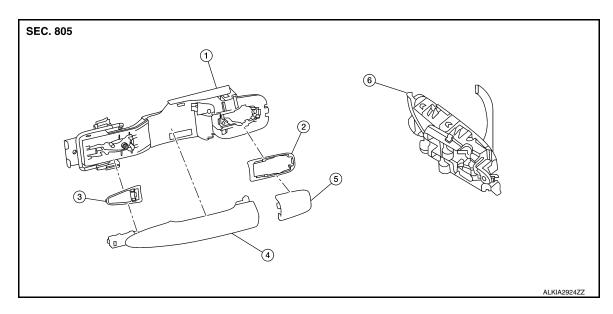
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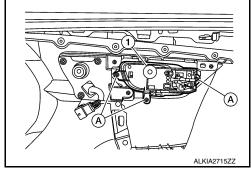
- 1. Outside handle bracket
- 4. Outside door handle
- 2. Rear gasket
- 5. Outside handle escutcheon
- 3. Front gasket
- 6. Inside handle assembly

### REAR DOOR HANDLE : Removal and Installation - Inside Handle

INFOID:0000000009756640

### **REMOVAL**

- 1. Remove rear door finisher. Refer to <a href="INT-19">INT-19</a>, "Removal and Installation".
- 2. Remove inside handle assembly screws (A) and inside handle assembly (1).



### INSTALLATION

Installation is in the reverse order of removal.

### **CAUTION:**

- Check rear door lock cables are properly engaged to inside handle.
- After installation, check rear door open/close, lock/unlock operation.

### REAR DOOR HANDLE: Removal and Installation - Outside Handle

### **REMOVAL**

- 1. Fully close rear door glass.
- Remove rear door finisher. Refer to <u>INT-19, "Removal and Installation"</u>.
- Remove rear door vapor barrier.

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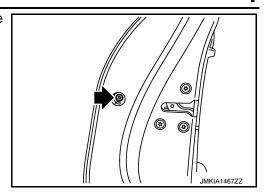
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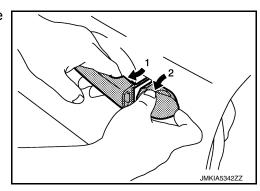
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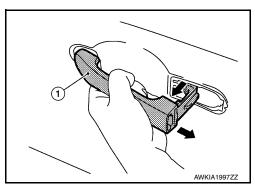
4. Remove door side grommet, and loosen screw that retains the rear door outside handle bracket.



5. While pulling outside handle (1), remove outside handle escutcheon (2).

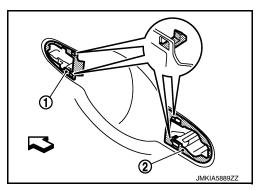


6. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.

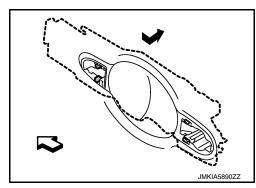


7. Remove front gasket (1) and rear gasket (2).





8. Slide outside handle bracket toward rear of vehicle to remove. <a href="#">
<a href="#">
<a href="#">: Front</a>

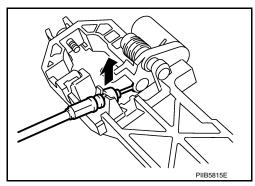


# **DOOR HANDLE**

# < REMOVAL AND INSTALLATION >

# [WITHOUT INTELLIGENT KEY SYSTEM]

Remove clip and disconnect the outside handle cable from the outside handle bracket.



### **INSTALLATION**

Installation in the reverse order of removal.

### **CAUTION:**

- · When installing do not reuse rear door outside handle bracket screw. Always replace screw with new ones when removed.
- · Check rear door lock cable is properly engaged to outside handle bracket.
- After installation, check rear door open/close, lock/unlock operation.

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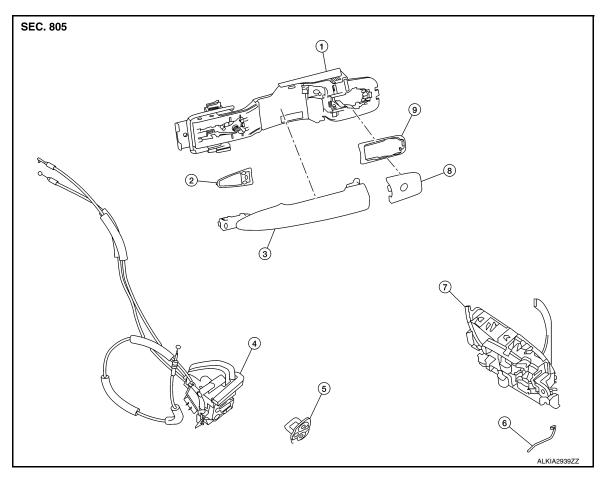
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# DOOR LOCK FRONT DOOR LOCK

FRONT DOOR LOCK: Exploded View





- 1. Outside handle bracket
- 4. Door lock assembly
- 7. Inside handle assembly
- 2. Front gasket
- 5. Door striker
- 8. Outside handle escutcheon
- 3. Outside handle
- 6. Door key cylinder rod
- 9. Rear gasket

# FRONT DOOR LOCK: Removal and Installation

INFOID:0000000009756643

### **CAUTION:**

Before servicing, turn ignition switch OFF, disconnect both battery terminals and wait at least three minutes.

### **REMOVAL**

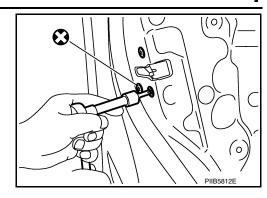
- 1. Remove the front door outside handle. Refer to <u>DLK-173</u>, "<u>FRONT DOOR HANDLE</u>: <u>Removal and Installation Outside Handle</u>".
- 2. Remove the rear glass run.
- Disconnect the harness connector from the front door lock actuator.

# **DOOR LOCK**

### < REMOVAL AND INSTALLATION >

# [WITHOUT INTELLIGENT KEY SYSTEM]

4. Remove screws, and the door lock assembly.



### INSTALLATION

Installation is in the reverse order of removal.

Tighten front door lock screws to specified torque.

Front door lock screws: 5.8 N·m (0.59 kg-m, 51 in-lb)

#### **CAUTION:**

- Do not reuse front door lock assembly screws. Always replace screws with new ones when removed.
- Check front door lock cables are properly engaged to inside handle and outside handle bracket.
- When installing door key cylinder rod on the LH front door, be sure to rotate door key cylinder rod holder until a click is felt.
- After installation, check front door open/close, lock/unlock operation.
- Check front door lock assembly for poor lubrication. If necessary apply a suitable multi-purpose grease.

REAR DOOR LOCK

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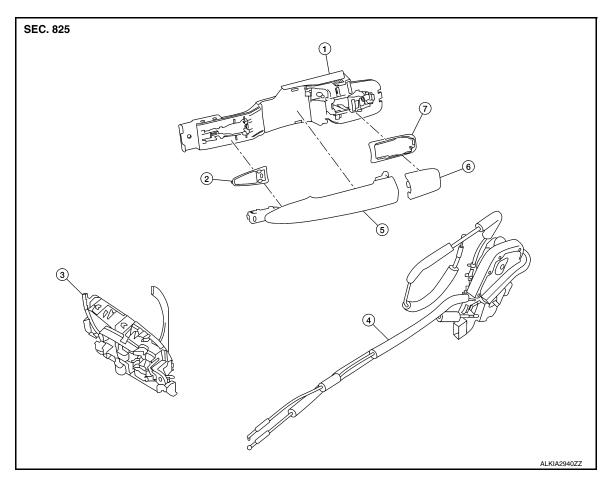
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REAR DOOR LOCK: Exploded View

INFOID:0000000009756644



- 1. Outside handle bracket
- 4. Door lock assembly
- 7. Rear gasket

- 2. Front gasket
- Outside handle

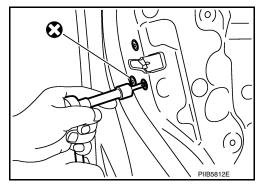
- 3. Inside handle assembly
- 6. Outside handle escutcheon

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# REAR DOOR LOCK: Removal and Installation

### **REMOVAL**

- 1. Remove the rear door outside handle. Refer to <u>DLK-176</u>, "<u>REAR DOOR HANDLE</u>: <u>Removal and Installation Outside Handle</u>".
- 2. Disconnect the harness connector from the rear door lock actuator.
- 3. Remove the screws, and the door lock assembly.



### INSTALLATION

Installation is in the reverse order of removal. Tighten rear door lock screws to specified torque.

# **DOOR LOCK**

[WITHOUT INTELLIGENT KEY SYSTEM]

Rear door lock screws: 5.8 N·m (0.59 kg-m, 51 in-lb)

### **CAUTION:**

- Do not reuse rear door lock assembly screws. Always replace screws with new ones when removed.
- Check rear door lock cables are properly engaged to inside handle and outside handle bracket.
- After installation, check rear door open/close, lock/unlock operation.
- Check rear door lock assembly for poor lubrication. If necessary apply a suitable multi-purpose grease.

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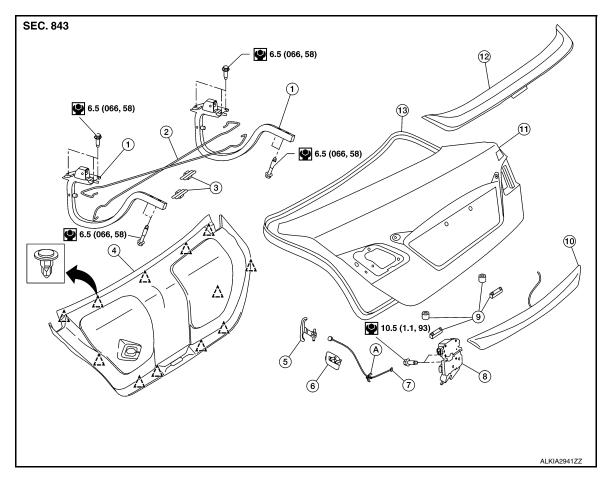
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# TRUNK LID TRUNK LID ASSEMBLY

TRUNK LID ASSEMBLY: Exploded View

INFOID:0000000009756646



- 1. Trunk lid hinge LH/RH
- 4. Trunk lid finisher (if equipped)
- 7. Emergency release handle cable
- 10. License lamp finisher
- 13. Weatherstrip

- 2. Torsion bar LH/RH
- 5. Emergency release handle
- 8. Trunk lid lock
- 11. Trunk lid
- A. Clip

- 3. Torsion bar clips
- 6. Emergency release handle clip
- 9. Trunk lid bumpers
- 12. Rear spoiler (if equipped)

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∧ Clip

# TRUNK LID ASSEMBLY: Removal and Installation

### **CAUTION:**

- · Use two people when removing or installing trunk lid assembly due to its heavy weight.
- Use protective tape or shop cloths to protect surrounding components from damage during removal and installation of trunk lid assembly.

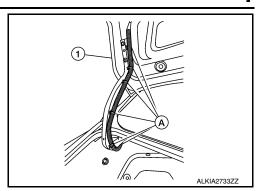
### REMOVAL

Remove trunk lid finisher (if equipped). Refer to INT-45, "Removal and Installation".

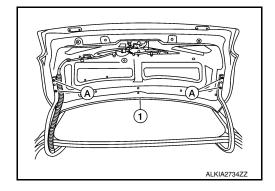
# < REMOVAL AND INSTALLATION >

# [WITHOUT INTELLIGENT KEY SYSTEM]

 Disconnect the harness connectors in the trunk lid assembly (1) and remove the harness clips (A) then pull out harness from the trunk lid assembly (1).



3. Remove the bolts (A) and remove the trunk lid assembly (1).



# **INSTALLATION**

Installation is in the reverse order of removal.

### **CAUTION:**

After installation, perform the trunk lid assembly adjustment procedure. Refer to <a href="DLK-332">DLK-332</a>, "TRUNK <a href="LID ASSEMBLY">LID ASSEMBLY</a> : Adjustment".

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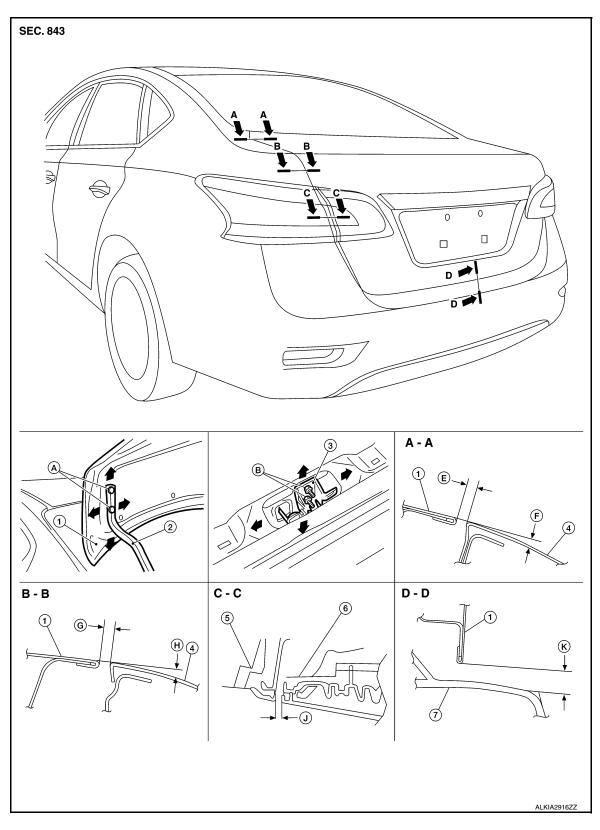
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# TRUNK LID ASSEMBLY : Adjustment

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- 1. Trunk lid assembly
- 4. Body side outer
- 7. Rear bumper fascia
- 2. Trunk lid hinge
- 5. Rear combination lamp
- A. Trunk lid bolts
- 3. Trunk lid striker
- 6. Reflector
- B. Striker bolts

### < REMOVAL AND INSTALLATION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

Check the clearance and the surface height between trunk lid and each part by visual inspection and tactile feel

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

Unit: mm (in)

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Section	Item	Measurement	Standard	Parallelism (MAX)	Right/Left Difference (MAX)
A – A	Е	Clearance	3.5 ±1.0 (0.14 ±0.04)	1.5 (0.06)	1.5 (0.06)
	F	Surface height	1.0 ±1.0 (0.04 ±0.04)	1.5 (0.06)	1.5 (0.06)
B – B	G	Clearance	3.5 ±1.0 (0.14 ±0.04)	1.5 (0.06)	1.5 (0.06)
	Н	Surface height	1.0 ±1.0 (0.04 ±0.04)	1.5 (0.06)	1.5 (0.06)
C – C	J	Clearance	4.3 ±1.9 (0.17 ±0.07)	_	2.0 (0.08)
D – D	K	Clearance	7.0 ±2.0 (0.28 ±0.08)	_	_

### LONGITUDINAL CLEARANCE

Trunk Lid Removed From Hinge

- Loosen the trunk lid to hinge bolts.
- 2. Move the trunk lid so that the clearance measurements are within specifications provided.
- 3. Tighten the trunk lid to hinge bolts.

Trunk Lid Hinge Removed From Vehicle

- Remove the rear parcel shelf finisher. Refer to <u>INT-33</u>, "Removal and Installation".
- 2. Loosen the hinge to parcel shelf bolts.
- 3. Move the trunk lid so that the clearance measurements are within specifications provided.
- 4. Tighten the hinge to parcel shelf bolts.
- Install the rear parcel shelf finisher. Refer to <u>INT-33</u>, "Removal and Installation".

### SURFACE HEIGHT ADJUSTMENT

- 1. Loosen the bumper rubber.
- Loosen the striker bolts.
- 3. Lift up the trunk lid approx. 100 150 mm (3.94 5.91 in) height then close it lightly. Make sure it engages firmly with the trunk lid closed.
- Tighten the trunk lid striker.

# TRUNK LID HINGE

# TRUNK LID HINGE: Removal and Installation

**REMOVAL** 

- Remove trunk lid assembly. Refer to <u>DLK-330</u>, "TRUNK LID ASSEMBLY: Removal and Installation".
- 2. Remove torsion bar. Refer to DLK-334, "TORSION BAR: Removal and Installation".
- 3. Remove rear parcel shelf finisher. Refer to <a href="INT-33">INT-33</a>, "Removal and Installation".
- Remove trunk lid hinge bolts (body side) and remove.

### INSTALLATION

Installation is in the reverse order of removal.

### **CAUTION:**

- Check trunk lid open/close, lock/unlock operation after installation.
- After installation, perform the trunk lid assembly adjustment procedure. Refer to <u>DLK-332</u>, "TRUNK LID ASSEMBLY: Adjustment".

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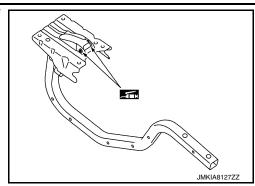
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### [WITHOUT INTELLIGENT KEY SYSTEM]

• Check trunk lid hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.



# **TORSION BAR**

# TORSION BAR: Removal and Installation

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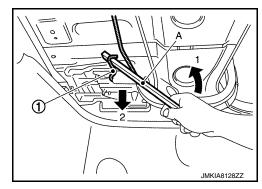
# **REMOVAL**

- 1. Remove torsion bar clips.
- 2. Support the trunk lid assembly using a suitable tool.

#### WARNING:

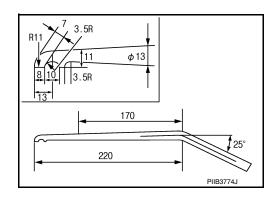
Bodily injury may occur if hood assembly is not supported properly when removing hood assembly.

3. Lift torsion bar (1) using a suitable tool (A) as shown to remove.



### NOTE:

The suitable tool specifications are as shown.



### **INSTALLATION**

Installation is in the reverse order of removal.

### **CAUTION:**

After installation check the trunk lid open/close, lock/unlock operation.

# TRUNK LID LOCK

TRUNK LID LOCK: Removal and Installation

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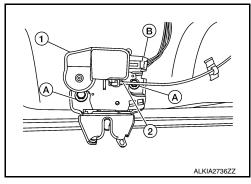
### **REMOVAL**

1. Remove the trunk lid finisher (if equipped). Refer to <a href="INT-45">INT-45</a>, "Removal and Installation".</a>

### < REMOVAL AND INSTALLATION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

- 2. Disconnect the harness connector (B) and emergency release handle (2) from the trunk lid lock (1).
- 3. Remove the trunk lid lock bolts (A) and remove.



### INSTALLATION

Installation is in the reverse order of removal.

### **CAUTION:**

After installation, perform the trunk lid assembly adjustment procedure. Refer to <u>DLK-332, "TRUNK LID ASSEMBLY: Adjustment"</u>.

# **EMERGENCY LEVER**

# **EMERGENCY LEVER:** Removal and Installation

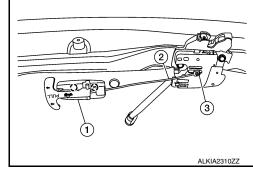
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### **REMOVAL**

- Remove the trunk lid finisher (if equipped). Refer to <u>INT-45, "Removal and Installation"</u>.
- Using a suitable tool release the pawls and remove emergency release handle (1) from trunk lid assembly.

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3. Disconnect emergency release handle cable (2) from trunk lid lock assembly (3).



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### **INSTALLATION**

Installation is in the reverse order of removal.

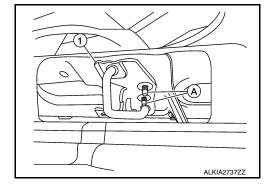
### TRUNK LID STRIKER

# TRUNK LID STRIKER: Removal and Installation

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### **REMOVAL**

- 1. Remove the trunk kicking plate. Refer to <a href="INT-42">INT-42</a>, "Exploded View".
- Remove bolts (A) and striker (1).



### INSTALLATION

< REMOVAL AND INSTALLATION >

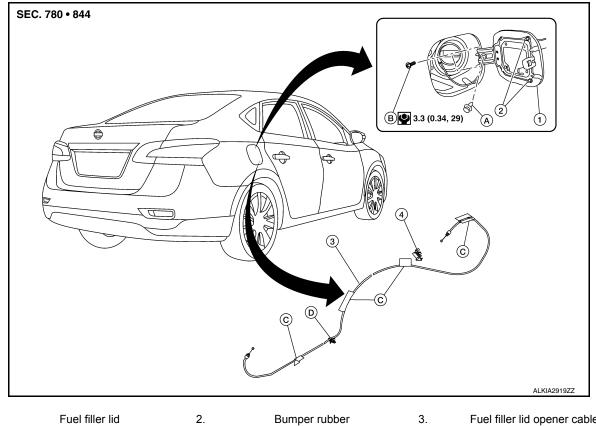
[WITHOUT INTELLIGENT KEY SYSTEM]

Installation is in the reverse order of removal.

**CAUTION:** 

After installation, perform the trunk lid assembly adjustment procedure. Refer to <u>DLK-332, "TRUNK LID ASSEMBLY: Adjustment"</u>.

**Exploded View** 



Clip

**FUEL FILLER LID** 

FUEL FILLER LID: Removal and Installation

A.

Fuel filler lid lock

Cable protector

# **REMOVAL**

1.

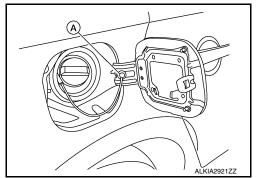
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- 1. Fully open fuel filler lid.
- 2. Remove fuel cap clip (A).

3. Fuel filler lid opener cableB. Bolts

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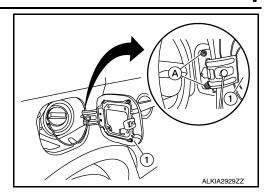
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# < REMOVAL AND INSTALLATION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

3. Remove fuel filler lid screws (A) and fuel filler lid (1).



### **INSTALLATION**

Installation is in the reverse order of removal.

### **CAUTION:**

# After installation, check fuel filler lid assembly open/close, lock/unlock operation. NOTE:

- The following table shows the specifications for a correctly installed fuel filler lid.
- · Fitting adjustment cannot be performed.

Unit: mm (in)

Portion	Measurement	Standard	
Fuel filler lid – Body side outer	Clearance	5.1 ±1.0 (0.20 ±0.04)	
Fuel filler lid – Body side outer	Surface height	0.0 ±1.0 (0.0 ±0.04)	

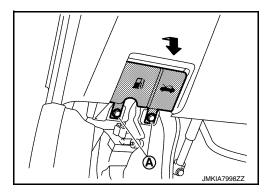
# FUEL FILLER OPENER CABLE

# FUEL FILLER OPENER CABLE: Removal and Installation

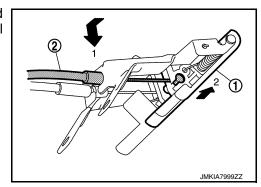
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### **REMOVAL**

1. Remove hood and fuel filler handle assembly bolts (A).



2. Release fuel filler lid opener cable (2) by pulling downward and then sliding cable end to the side to remove from hood and fuel filler handle assembly (1).

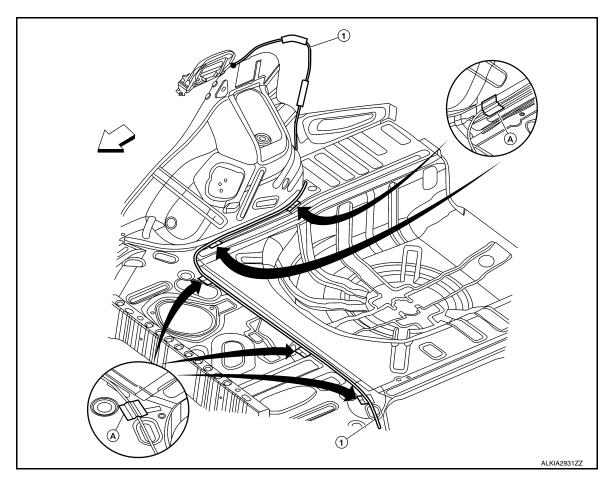


- 3. Remove dash side finisher (LH). Refer to <a href="INT-26">INT-26</a>, "DASH SIDE FINISHER: Removal and Installation".
- Remove center pillar lower finisher (LH). Refer to <u>INT-27, "CENTER PILLAR LOWER FINISHER:</u> Removal and Installation".

### < REMOVAL AND INSTALLATION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

- Remove rear seat bolster (LH). Refer to SE-24, "Removal and Installation Rear Seat Bolster".
- 6. Remove trunk side finisher (LH). Refer to INT-43, "TRUNK SIDE FINISHER: Removal and Installation".
- 7. Remove fuel filler lid opener cable (1) from fuel filler lid lock assembly. Refer to DLK-338, "FUEL FILLER OPENER CABLE: Removal and Installation".



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8. Remove each cable protector (A), then remove fuel filler lid opener cable (1).

### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

After installation, check fuel filler lid assembly open/close, lock/unlock operation.

# FUEL FILLER LID LOCK

FUEL FILLER LID LOCK: Removal and Installation

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### REMOVAL

1. Fully open fuel filler lid.

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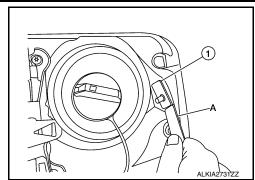
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# < REMOVAL AND INSTALLATION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

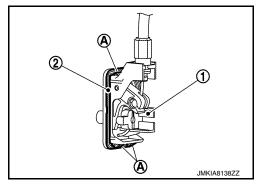
2. Insert a suitable tool (A) as shown into bottom of fuel filler lock assembly(1).



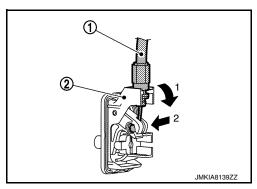
3. Release upper and lower pawls (A) using a suitable tool and remove fuel filler lid lock assembly (1).

# **CAUTION:**

Be careful not to damage gasket (2) when removing.



4. Disconnect fuel filler lid opener cable (1) by pulling downward and then sliding cable end to the side to remove from fuel filler lid lock assembly (2).



### INSTALLATION

Installation is in the reverse order of removal.

### **CAUTION:**

After installation, check fuel filler lid assembly open/close, lock/unlock operation.

# **DOOR SWITCH**

# < REMOVAL AND INSTALLATION >

# [WITHOUT INTELLIGENT KEY SYSTEM]

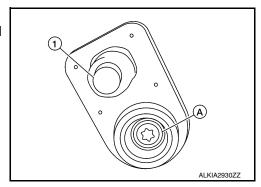
# **DOOR SWITCH**

# Removal and Installation

#### INFOID:0000000009756659

# **REMOVAL**

- 1. Remove the door switch bolt (A).
- 2. Disconnect the harness connector from the door switch (1) and remove.



# **INSTALLATION**

Installation is in the reverse order of removal.

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# REMOTE KEYLESS ENTRY RECEIVER

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

# REMOTE KEYLESS ENTRY RECEIVER

# Removal and Installation

#### INFOID:0000000009756660

### **REMOVAL**

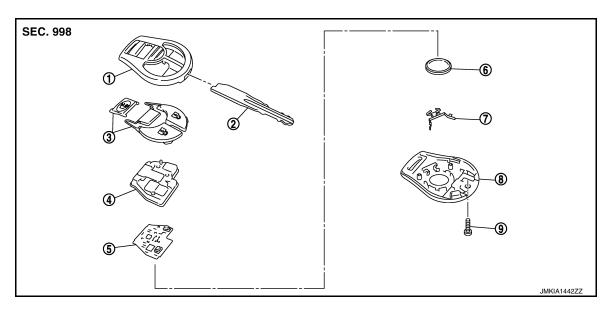
- 1. Remove glove box assembly. Refer to IP-22, "Removal and Installation".
- 2. Disconnect the harness connector from the remote keyless entry receiver.
- 3. Remove the screw and remote keyless entry receiver.

# **INSTALLATION**

Installation is in the reverse order or removal.

# **KEYFOB BATTERY**

# **Exploded View**



- 1. Upper case
- 4. Switch rubber
- 7. Plate

- 2. Key
- Board surface
- Lower case

- 3. Switch cover
- 6. Battery
- 9. Screw

### Removal and Installation

### **REMOVAL**

- 1. Remove the keyfob screw.
- 2. Seperate the upper and lower case using a suitable tool.

#### CAUTION:

- Do not touch the circuit board or battery terminal.
- The keyfob is water-resistant. However, if it does get wet, immediately wipe it dry.
- 3. Remove the circuit board from the upper case.

### **CAUTION:**

Do not touch the printed circuits directly.

4. Remove the keyfob battery from the upper case.

Battery replacement : Coin-type lithium battery (CR1620)

### **CAUTION:**

- When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.
- After replacing the battery, Be sure to check that door locking operates normally using the keyfob.

# INSTALLATION

Installation is in the reverse order of removal.

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# TRUNK LID OPENER SWITCH

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

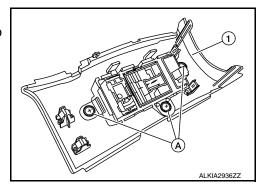
INFOID:0000000009756663

# TRUNK LID OPENER SWITCH

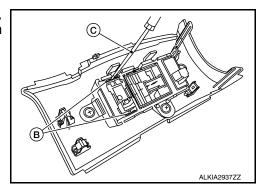
# Removal and Installation

### **REMOVAL**

- 1. Remove the instrument lower panel LH. Refer to IP-21, "Removal and Installation".
- 2. Remove to the instrument finisher D (1).
- 3. Remove the screws (A) that retain the instrument finisher D to the switch carrier.



4. Release upper tab (B) and lower tab using a suitable tool (C), then remove the trunk lid opener switch from the upper switch carrier.



### INSTALLATION

Installation is in the reverse order of removal.