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# < PRECAUTION > PRECAUTION PRECAUTIONS

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

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

## WARNING:

Always observe the following items for preventing accidental activation.

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

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

#### WARNING:

Always observe the following items for preventing accidental activation.

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

## Precaution for Procedure without Cowl Top Cover



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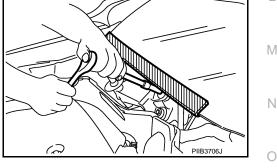
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When performing the procedure after removing cowl top cover, cover the lower end of windshield with urethane, etc to prevent damage to windshield.



Work

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

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## < PREPARATION >

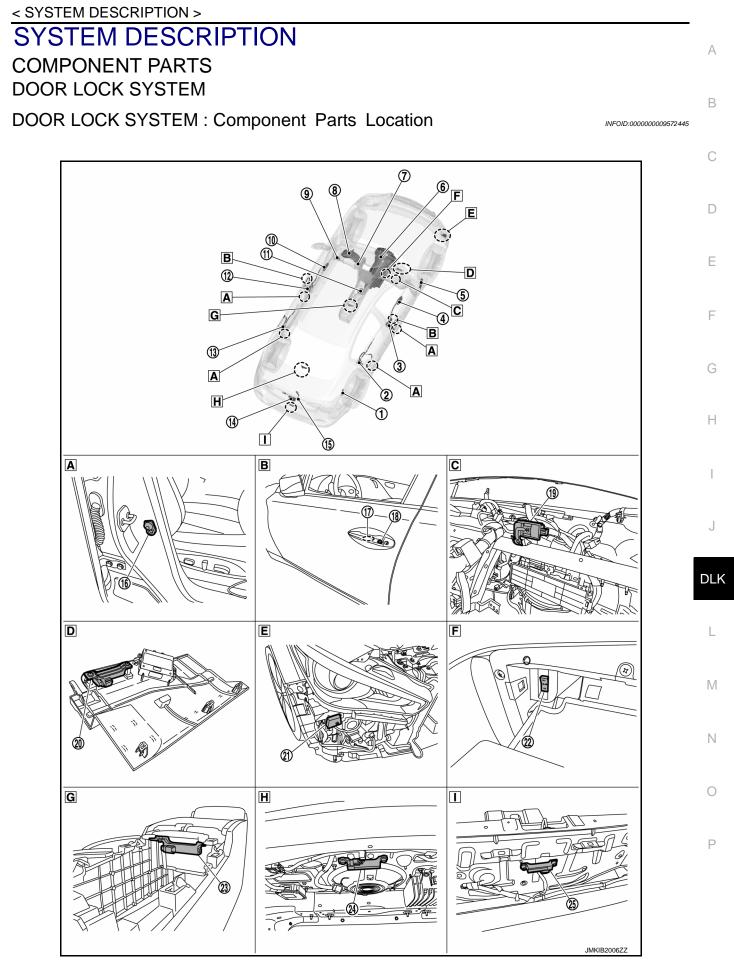
# PREPARATION PREPARATION

# Special Service Tools

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

Tool number (Kent-Moore No.) Tool name		Description
(J-39570) Chassis ear	SIIA0993E	Locates the noise
(J-50397) NISSAN Squeak and Rat- tle Kit	SIIA0994E	Repairs the cause of noise



View with front bumper fascia as-

View with trunk front finisher re-

#### < SYSTEM DESCRIPTION >

- A View with door opened
- B View with door panel

sembly removed

moved

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- D View with instrument lower cover re- E moved
- G View with center console assembly removed

- C View with instrument panel assembly removed
- $\begin{tabular}{ll} \hline \end{tabular} F & View with glove box lid opened \end{tabular} \end{tabular}$
- View with rear bumper fascia assembly removed

No.	Component	Function
1	Fuel filler lid lock actuator	DLK-12, "DOOR LOCK SYSTEM : Fuel Filler Lid Lock Actuator"
2	Rear door lock assembly RH	DLK-13, "DOOR LOCK SYSTEM : Rear Door Lock Assembly"
3	Front door lock assembly (passenger side)	DLK-12, "DOOR LOCK SYSTEM : Front Door Lock Assembly"
4	Front power window switch (passen- ger side) (door lock and unlock switch)	DLK-11, "DOOR LOCK SYSTEM : Door Lock and Unlock Switch"
5	ВСМ	BCM detects the vehicle status according to signals from each door switch and each outside/inside key antenna. BCM transmits drive signal to door lock actuator when BCM receives operation signal from remote keyless entry receiver and each switch. Refer to <u>BCS-4, "BODY CONTROL SYSTEM : Component Parts Location"</u> for detailed installation location.
6	A/T assembly (TCM)	Transmits shift position signal to BCM via CAN communication line. Refer to <u>TM-12</u> , "A/T CONTROL SYSTEM : Component Parts Location" for de- tailed installation location.
7	Push-button ignition switch	Inputs push-button ignition switch ON/OFF condition to BCM. Refer to <u>PCS-40, "Component Parts Location"</u> for detailed installation location.
8	Combination meter	<ul><li>Performs operation method guide and warning with buzzer.</li><li>Transmits vehicle speed signal to CAN communication line.</li></ul>
9	Trunk lid opener switch	DLK-14, "DOOR LOCK SYSTEM : Trunk Lid Opener Switch"
10	Power window main switch (door lock and unlock switch)	DLK-11, "DOOR LOCK SYSTEM : Door Lock and Unlock Switch"
(1)	Air bag diagnosis sensor unit	Refer to <u>SRC-5, "Component Parts Location"</u> for detailed installation location.
(12)	Front door lock assembly (driver side)	DLK-12, "DOOR LOCK SYSTEM : Front Door Lock Assembly"
(13)	Rear door lock assembly LH	DLK-13, "DOOR LOCK SYSTEM : Rear Door Lock Assembly"
(14)	Trunk lid lock assembly	DLK-14, "DOOR LOCK SYSTEM : Trunk Lid Lock Assembly"
(15)	Trunk lid opener request switch	DLK-14, "DOOR LOCK SYSTEM : Trunk Lid Opener Request Switch"
(16)	Door switch	DLK-11, "DOOR LOCK SYSTEM : Door Switch"
17	One touch unlock sensor assembly	DLK-13, "DOOR LOCK SYSTEM : One Touch Unlock Sensor Assembly"
(18)	Front door request switch	DLK-11, "DOOR LOCK SYSTEM : Door Request Switch"
(19)	Remote keyless entry receiver	DLK-13, "DOOR LOCK SYSTEM : Remote Keyless Entry Receiver"
20	Inside key antenna (instrument lower)	DLK-12, "DOOR LOCK SYSTEM : Inside Key Antenna"
21)	Intelligent Key warning buzzer	DLK-12, "DOOR LOCK SYSTEM : Intelligent Key Warning Buzzer"
22	Trunk lid opener cancel switch (except for Mexico models)	DLK-14, "DOOR LOCK SYSTEM : Trunk Lid Opener Cancel Switch"
23	Inside key antenna (console)	DLK-12, "DOOR LOCK SYSTEM : Inside Key Antenna"
24)	Inside key antenna (trunk room)	DLK-12, "DOOR LOCK SYSTEM : Inside Key Antenna"
25	Outside key antenna (rear bumper)	DLK-12, "DOOR LOCK SYSTEM : Outside Key Antenna (Rear Bumper)"

# Detects door open/close condition.

DOOR LOCK SYSTEM : Door Switch

## **COMPONENT PARTS**

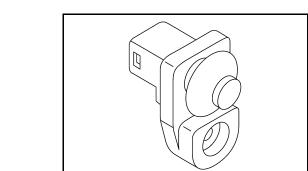
## DOOR LOCK SYSTEM : Door Lock and Unlock Switch

< SYSTEM DESCRIPTION >

- Door lock and unlock switch transmits door lock/unlock signal operation to BCM.
- Driver side door lock and unlock switch (1) is integrated in the power window main switch.

 Passenger side door lock and unlock switch (2) is integrated in the front power window switch (passenger side).

- DOOR LOCK SYSTEM : Door Request Switch
- Door request switch detects door lock/unlock operation and transmits door request switch signal to BCM.
- Door request switch (1) is integrated in the outside handle grip.



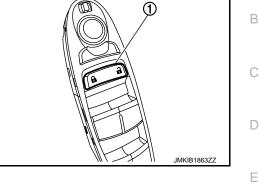
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# DOOR LOCK SYSTEM : Front Door Lock Assembly

< SYSTEM DESCRIPTION >

- Door lock actuator and unlock sensor are integrated in front door lock assembly (driver side).
- Door lock actuator receives lock/unlock signal from BCM, and then locks/unlocks door.
- · Only front door lock assembly (driver side) integrates unlock sensor. Unlock sensor transmits lock/unlock status of driver side door to BCM.

# DOOR LOCK SYSTEM : Fuel Filler Lid Lock Actuator

Fuel filler lid lock actuator receives lock/unlock signal from BCM, and then locks/unlocks fuel filler lid.

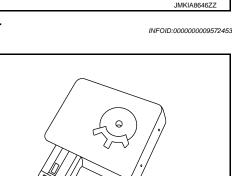
# DOOR LOCK SYSTEM : Inside Key Antenna

- · Inside key antenna detects that Intelligent Key is within the inside detection area, and then transmits detection status to BCM.
- · Inside key antenna (instrument lower) is installed behind instrument lower cover.
- Inside key antenna (console) is installed behind center console assembly.
- Inside key antenna (trunk room) is installed in upper side with trunk room.

## DOOR LOCK SYSTEM : Intelligent Key Warning Buzzer

- · Intelligent Key warning buzzer warns the user, who is outside vehicle, of operation confirmation according to Intelligent Key operation and door request switch operation, or of an inappropriate operation.
- Intelligent Key warning buzzer is installed in the rear of front bumper fascia assembly and underneath headlamp RH.

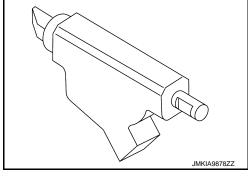
DOOR LOCK SYSTEM : Outside Key Antenna (Rear Bumper)



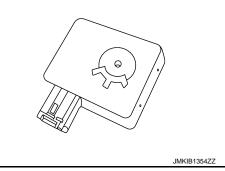
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 Outside key antenna detects that Intelligent Key is within the outside detection area, and then transmits detection status to BCM. Request signal is transmitted simultaneously to Intelligent Key.

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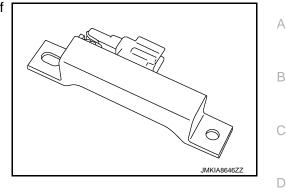






## < SYSTEM DESCRIPTION >

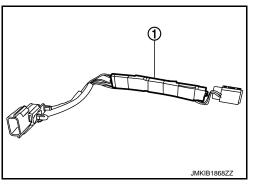
• Outside key antenna (rear bumper) is installed in the rear of bumper fascia assembly.



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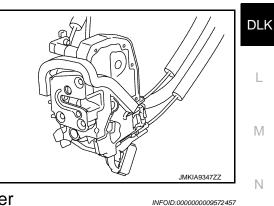
## DOOR LOCK SYSTEM : One Touch Unlock Sensor Assembly

- One touch unlock sensor assembly integrates outside key antenna and one touch unlock sensor.
- Outside key antenna detects that Intelligent Key is within the outside detection area, and then transmits detection status to BCM. Request signal is transmitted simultaneously to Intelligent Key.
- One touch unlock sensor detects user hold outside handle operation and transmits one touch unlock sensor signal to BCM.
- One touch unlock sensor assembly ① is integrated in front door outside handle grip.



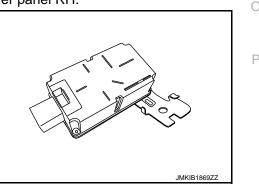
## DOOR LOCK SYSTEM : Rear Door Lock Assembly

- Door lock actuator is integrated in rear door lock assembly.
- Door lock actuator receives lock/unlock signal from BCM, and then locks/unlocks rear door.



## DOOR LOCK SYSTEM : Remote Keyless Entry Receiver

- Remote keyless entry receiver is installed in the rear of instrument lower panel RH.
- Remote keyless entry receiver receives button operation signal and key ID signal of Intelligent Key, and then transmits them to BCM.



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## DOOR LOCK SYSTEM : Trunk Lid Lock Assembly

< SYSTEM DESCRIPTION >

- Trunk lid lock assembly integrates trunk lid opener actuator and trunk room lamp switch.
- Trunk lid opener actuator opens the trunk lid according to the trunk lid open signal from BCM.
- Trunk room lamp switch detects open/close status of trunk lid.

## DOOR LOCK SYSTEM : Trunk Lid Opener Cancel Switch

- When trunk lid opener cancel switch is pressed in ON position, trunk lid can not open with Intelligent Key button operation, trunk lid opener switch and trunk lid opener request switch.
- Trunk lid opener cancel switch is installed in the instrument lower panel RH.

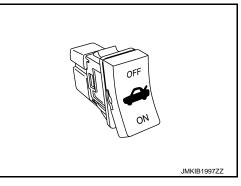
## DOOR LOCK SYSTEM : Trunk Lid Opener Switch

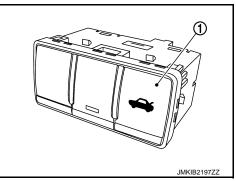
- When trunk lid opener switch is pressed, trunk lid open operation is detected and trunk lid opener switch signal is transmitted to BCM.
- Trunk lid opener switch ① is integrated in the triple switch.

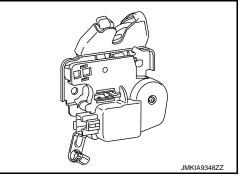
DOOR LOCK SYSTEM : Trunk Lid Opener Request Switch

• Trunk lid opener request switch detects open operation of trunk lid and transmits trunk lid opener request signal to BCM.

**DLK-14** 







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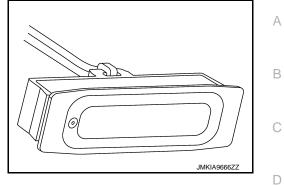
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## < SYSTEM DESCRIPTION >

• Trunk lid opener request switch is installed on the center of the upper side of the trunk lid finisher.





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## SYSTEM (POWER DOOR LOCK SYSTEM)

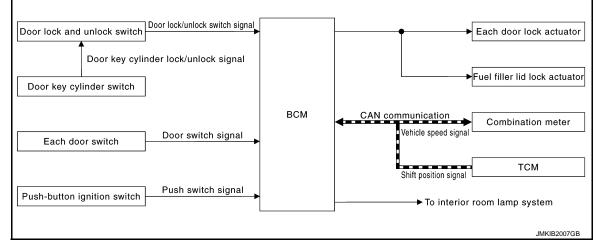
## < SYSTEM DESCRIPTION >

# SYSTEM (POWER DOOR LOCK SYSTEM)

## System Description

INFOID:000000009375438

## SYSTEM DIAGRAM



## DOOR LOCK FUNCTION

Door Lock and Unlock Switch

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

#### Door Key Cylinder Switch

- With the mechanical key inserted in the driver side door key cylinder, turn it to lock position, door lock actuator of all doors and fuel filler lid lock actuator are locked.
- With the mechanical key inserted in the driver side door key cylinder, turn it to unlock position one unlocks the driver door, turning it to unlock position again within 60 seconds after the first unlock operation unlocks all of the other door lock actuator and fuel filler lid lock actuator. (Selective unlock function operation) Information of selective unlock function, Refer to <u>DLK-23</u>, "DOOR LOCK FUNCTION : System Description".

## **IGNITION POSITION WARNING FUNCTION**

When ignition switch position is ON or ACC and any door is open, all doors cannot locked when door lock and unlock switch is operated in lock direction.

## INTERIOR ROOM LAMP CONTROL FUNCTION

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

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

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

#### Vehicle Speed Sensing Auto Door Lock

All doors are locked when the vehicle speed reaches 24 km/h (15 MPH) or more BCM outputs the lock signal to all door lock actuators when it detects all doors are closed and the vehicle speed received from the combination meter via CAN communication becomes 24 km/h (15 MPH) or more.

#### P Range Interlock Door Lock

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

Setting Change of Automatic Door Lock/Unlock Function

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

## **DLK-16**

# SYSTEM (POWER DOOR LOCK SYSTEM)

< SYSTEM DESCRIPTION >	
With CONSULT Automatic door lock/unlock function operation mode can be changed using CONSULT. Refer to <u>DLK-49, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u> .	A
AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (UNLOCK OPERATION) The automatic door lock/unlock function is the function that unlocks all doors linked with the key position or shift position. It has 2 types as per the following items.	В
IGN OFF Interlock Door Unlock All doors are unlocked when the ignition position is changed from ON to OFF. BCM outputs the unlock signal to all door lock actuators when it detects that the ignition position is changed from ignition switch ON to OFF.	С
P Range Interlock Door Unlock All doors are unlocked when shifting the selector lever from any position other than the P to P position. BCM outputs the unlock signal to all door lock actuators when it detects the shift position signal received from TCM via CAN communication is shifted from any position other than the P to P position.	D
Setting Change of Automatic Door Lock/Unlock Function The unlock operation setting of the automatic door lock/unlock function can be changed. <b>With CONSULT</b> Automatic door lock/unlock function operation mode can be changed using CONSULT. Refer to DLK-49, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".	F
Without CONSULT The automatic door lock/unlock function (unlock operation) ON/OFF can be switched by performing the follow- ing operation.	G
<ol> <li>Close all doors (door switch OFF)</li> <li>Ignition switch: OFF→ON</li> </ol>	Н
<ol> <li>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.</li> <li>The switching is complete when the hazard lamp blinks.</li> </ol>	
OFF $\rightarrow$ ON : 2 blinks ON $\rightarrow$ OFF : 1 blink	J

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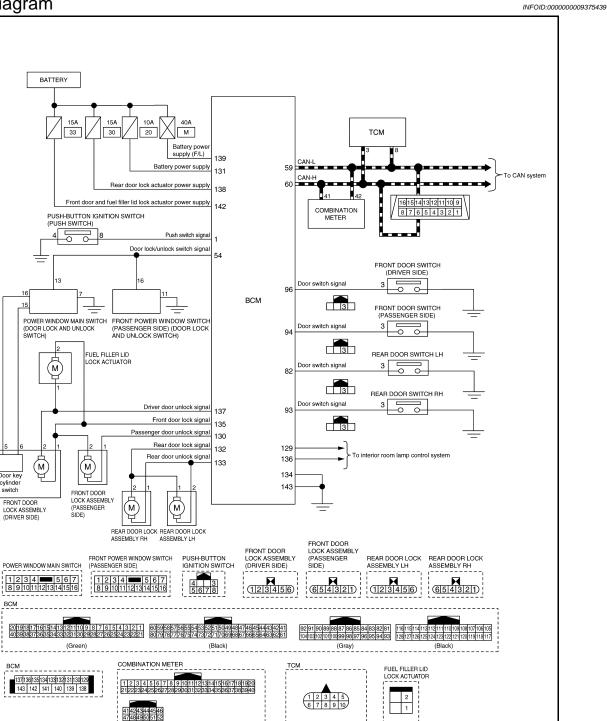
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## SYSTEM (POWER DOOR LOCK SYSTEM)

## < SYSTEM DESCRIPTION >

## **Circuit Diagram**



Door key cylinder switch

BCM

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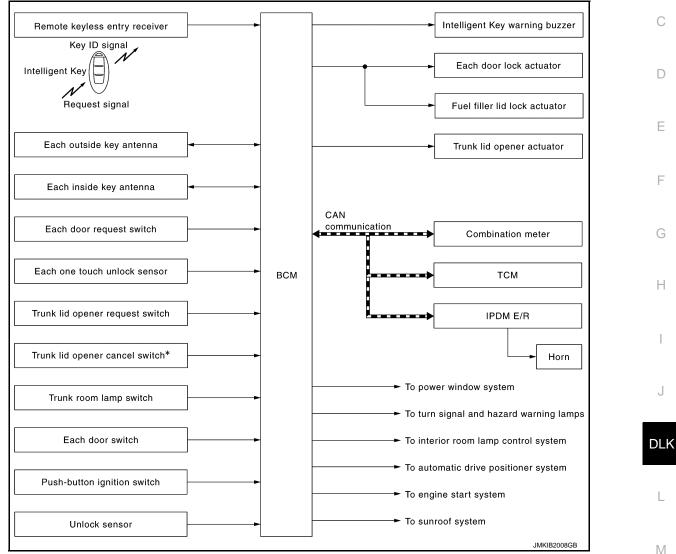
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## < SYSTEM DESCRIPTION >

# SYSTEM (INTELLIGENT KEY SYSTEM) INTELLIGENT KEY SYSTEM

# INTELLIGENT KEY SYSTEM : System Description

## SYSTEM DIAGRAM



## \*: Except for Mexico models

## 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 door request switch.	DLK-23
One touch unlock	Unlock can be performed by holding outside handle grip.	<u>DLK-26</u>

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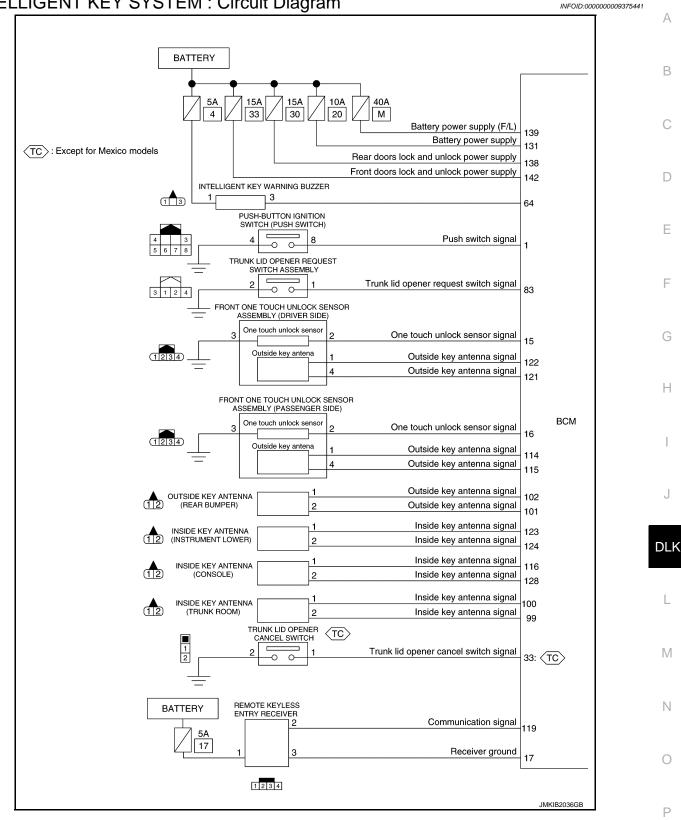
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## < SYSTEM DESCRIPTION >

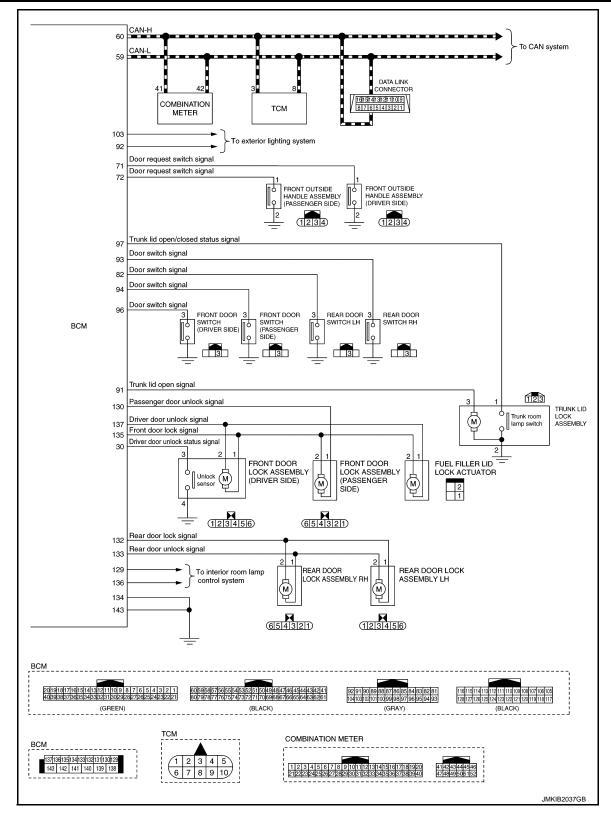
Function	Description	Refer
Trunk open	The trunk lid can be opened by carrying the Intelligent Key and pressing the trunk lid opener request switch.	DLK-29
Remote keyless entry	Lock/unlock can be performed by pressing the remote controller button of the Intelligent Key.	DLK-31
Key reminder	The Intelligent Key reminder buzzer sounds a warning if the door is locked with the key left inside the vehicle.	DLK-33
Warning (information dis- play)	If an action that does not meet the operating condition of the Intelligent Key sys- tem is taken, the information display displays to inform the driver.	<u>DLK-45</u>
Warning (buzzer)	If an action that does not meet the operating condition of the Intelligent Key system is taken, the buzzer sounds to inform the driver.	<u>DLK-45</u>
Engine start	The engine can be turned on while carrying the Intelligent Key.	<u>SEC-12</u>
Automatic drive positioner	Setting of auto driving position can be automatically set, according to key ID of Intelligent Key, to the setting value that is registered in advance.	<u>ADP-27</u>
Interior room lamp control	Interior room lamp is controlled according to door lock/unlock state.	INL-7
Power window	Power window can be operated by Intelligent Key button operation.	PWC-9
Sunroof	Sunroof can be operated by Intelligent Key button operation.	<u>RF-7</u>
Panic alarm	When Intelligent Key panic alarm button is pressed, horn sounds and head lamp blinks.	<u>SEC-19</u>
Log-in function	The adoption of log-in function allows stored user-to-user settings to be called up through the recognition of the last user by the Intelligent Key.	DMS-9

## < SYSTEM DESCRIPTION >

## **INTELLIGENT KEY SYSTEM : Circuit Diagram**



#### < SYSTEM DESCRIPTION >



DOOR LOCK FUNCTION

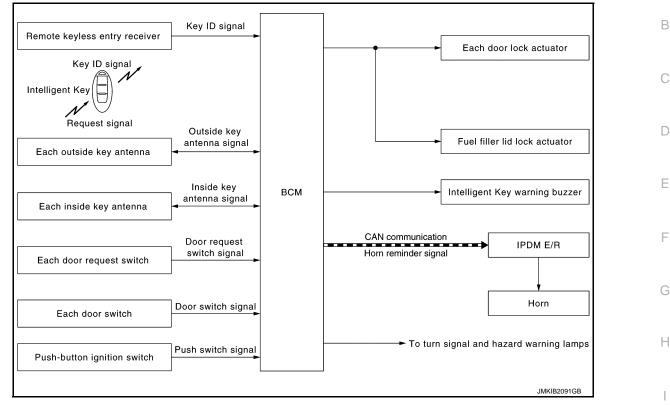
#### < SYSTEM DESCRIPTION >

## DOOR LOCK FUNCTION : System Description

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#### SYSTEM DIAGRAM



Door lock function controls operation function of the following items.

- Door lock and unlock function (door request switch)
- Selective unlock function (door request switch)
- Reminder function (door request switch)
- Auto door lock function (door request switch)

## DOOR LOCK AND UNLOCK FUNCTION (DOOR REQUEST SWITCH)

When pressing the door 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 lock/unlock each door lock actuator and fuel filler lid lock actuator.

#### **Operation Condition**

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

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## < SYSTEM DESCRIPTION >

Each door request switch operation	Operation condition
Lock	<ul> <li>All doors are closed</li> <li>Selective unlock function is not operating</li> <li>P position warning is not activated</li> <li>Panic alarm is not activated</li> <li>Intelligent Key is outside the vehicle</li> <li>Intelligent Key is within outside key antenna detection area<sup>*</sup></li> </ul>
Unlock (One touch unlock function is setting in OFF)	<ul> <li>[TOUCH SENSOR UNLOCK FUNCTION SETTING] in work support: Off</li> <li>Vehicle speed: 0 km/h</li> <li>Intelligent Key is outside the vehicle</li> <li>Intelligent Key is within outside key antenna detection area<sup>*</sup></li> </ul>
Unlock (One touch unlock function is setting in ON)	<ul> <li>[TOUCH SENSOR UNLOCK FUNCTION SETTING] in work support: On</li> <li>Vehicle speed: 0 km/h</li> <li>Selective unlock function is operating</li> <li>Front door request switch (driver door) operates: Driver door is unlocked and other door is locked</li> <li>Front door request switch (passenger door) operates: Passenger door is unlocked and other door is locked</li> <li>Intelligent Key is outside the vehicle</li> <li>Intelligent Key is within outside key antenna detection area<sup>*</sup></li> </ul>

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

#### How to Change Door Lock and Unlock Function Operation Mode

Door lock and unlock function (door request switch) operation mode can be changed using CONSULT. Refer to <u>DLK-51</u>, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

## SELECTIVE UNLOCK FUNCTION (DOOR REQUEST SWITCH)

#### Lock Operation

When an lock signal is sent from door request switch, all doors and fuel filler lid are locked.

Unlock Operation (One Touch Unlock Function is Setting in OFF)

- When an unlock signal from front door request switch (driver side) is transmitted, driver door and fuel filler lid unlocks. When front door request switch (driver side) is operated again within 60<sup>\*</sup> seconds, passenger door and rear door unlock.
- When an unlock signal from front door request switch (passenger side) is transmitted, passenger door unlock. When front door request switch (passenger side) is operated again within 60<sup>\*</sup> seconds, all doors and fuel filler lid unlocks.

\*: Default value is 60 seconds. This time changes according to auto door lock function operation time. **NOTE:** 

When [TOUCH SENSOR UNLOCK FUNCTION SETTING] in work support mode is setting in [On], selective unlock operation can not operates with door request switch.

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

Selective unlock function operation mode can be changed using CONSULT. Refer to <u>DLK-49, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.

#### REMINDER FUNCTION (DOOR REQUEST SWITCH)

When doors are locked or unlocked by door request switch, BCM blinks hazard warning lamps as a reminder and transmits Intelligent Key warning buzzer request signal to Intelligent Key warning buzzer or horn reminder signal to IPDM E/R via CAN communication. Reminder function does not operate if ignition switch in ACC or ON position. The reminder function has C mode and S mode.

Operation	C m	node	S m	node
Door request switch	Lock	Unlock	Lock	Unlock
Hazard warning lamp	Ird warning lamp Twice		Twice	-

#### < SYSTEM DESCRIPTION >

Operation	C mode		Sr		
Intelligent Key warning buzzer <sup>*1</sup>	Twice	Once	-	-	- F
Horn <sup>*2</sup>	Once	-	-	-	—

<sup>\*1</sup>: Work support mode [ANSWER BACK I-KEY LOCK UNLOCK] setting is [BUZZER]

<sup>\*2</sup>: Work support mode [ANSWER BACK I-KEY LOCK UNLOCK] setting is [HORN]

#### How to Change Reminder Function Operation Mode

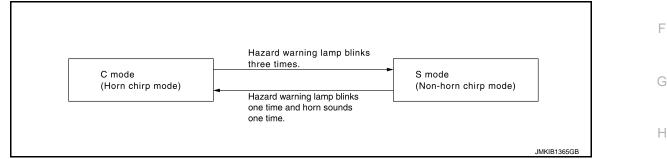
#### (P) With CONSULT

Reminder function operation mode can be changed using CONSULT.

Refer to DLK-51, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

#### **Without CONSULT**

When lock and unlock signal are sent from the Intelligent Key for more than 4 seconds at the same time, the hazard and buzzer reminder mode is changed and hazard warning lamp blinks and horn sounds as per the following items:



## AUTO DOOR LOCK FUNCTION (DOOR REQUEST SWITCH)

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

<ul> <li>Door switch is ON (each door is open)</li> <li>BCM receives door lock signal</li> <li>Push switch is pressed</li> </ul>	DLK
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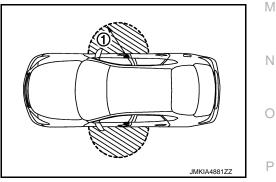
## How to Change Auto Door Lock Function Operation Time

#### (P) With CONSULT

Auto door lock function operation time can be changed using CONSULT. Refer to DLK-51, "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 outside door handle and passenger outside door handle (1). However, this operating range depends on the ambient conditions.



## LIST OF OPERATION RELATED PARTS

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

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## < SYSTEM DESCRIPTION >

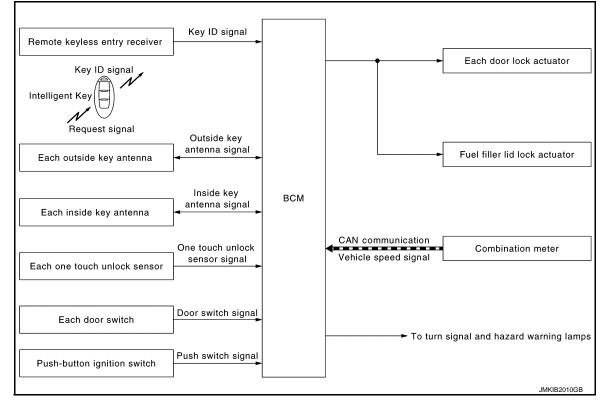
Function	Intelligent Key	Remote keyless entry receiver	Door switch	Door request switch	Door lock actuator	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	CAN communication system	BCM	Hazard warning lamp	Horn	Push-button ignition switch	Combination meter
Door lock and unlock function (door request switch)	×	×	×	×	×	×	×			×				
Selective unlock function (door request switch)	×	×	×	×	×	×	×			×				
Reminder function (door request switch)								×	×	×	×	×		×
Auto door lock function (door request switch)	×		×	×	×					×			×	

## ONE TOUCH UNLOCK FUNCTION

# ONE TOUCH UNLOCK FUNCTION : System Description

INFOID:000000009375659

## SYSTEM DIAGRAM



One touch unlock function controls operation function of the following items.

- One touch unlock function
- · Selective unlock function (one touch unlock sensor)
- Reminder function (one touch unlock sensor)

## ONE TOUCH UNLOCK FUNCTION

When holding the outside handle grip, it is possible to unlock the door by carrying the Intelligent Key.

#### **Operation Description**

• When the BCM detects that outside handle grip is held and all door is locked, it starts the outside key antenna and inside key antenna corresponding to the held outside handle grip and transmits the request signal to the Intelligent Key. And then, check that the Intelligent Key is near the door.

## **DLK-26**

#### < SYSTEM DESCRIPTION >

- 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 unlocks each door lock actuator and fuel filler lid lock actuator.

#### **Operation Condition**

If the following conditions are satisfied, door unlock operation is performed if the outside handle grip is held.

Outside handle grip operation	Operation condition	С
Hold	<ul> <li>[LOCK/UNLOCK BY I-KEY] and [TOUCH SENSOR UNLOCK FUNCTION SETTING] in work support: On</li> <li>Vehicle speed: 0 km/h</li> <li>2 seconds are passed while all door is locked</li> <li>Intelligent Key is outside the vehicle</li> <li>Intelligent Key is within outside key antenna detection area<sup>*</sup></li> </ul>	D
· Even with a registered Intelligent Key remaini	og inside the vehicle, door can be unlocked from outside of the vehicle with a spare Intel-	E

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

#### How to Change One Touch Unlock Function Operation Mode

One touch unlock function operation mode can be changed using CONSULT. Refer to <u>DLK-51, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>.

#### SELECTIVE UNLOCK FUNCTION (ONE TOUCH UNLOCK SENSOR)

Unlock Operation

- When an unlock signal from one touch unlock sensor (driver door) is transmitted, driver door and fuel filler lid unlocks. When front door request switch (driver side) is operated within 60<sup>\*</sup> seconds, all doors are unlocked.
- When an unlock signal from one touch unlock sensor (passenger door) is transmitted, passenger door unlocks. When front door request switch (passenger side) is operated within 60<sup>\*</sup> seconds, all doors and fuel filler lid unlocks.
- \*: Default value is 60 seconds. This time changes according to auto door lock function operation time.

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

Selective unlock function operation mode can be changed using CONSULT. Refer to <u>DLK-49, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.

#### REMINDER FUNCTION (ONE TOUCH UNLOCK SENSOR)

When doors are unlocked by one touch unlock sensor, BCM blinks hazard warning lamps as a reminder. Reminder function does not operate if ignition switch in ACC or ON position.

Unlock operation (With one touch unlock sensor)	C mode	S mode	L
Hazard warning lamp	Once	_	
Intelligent Key warning buzzer*	Once	_	M

\*: Work support mode [ANSWER BACK I-KEY LOCK UNLOCK] setting is [BUZZER]

#### How to Change Reminder Function Operation Mode

#### (P) With CONSULT

Reminder function operation mode can be changed using CONSULT.

Refer to DLK-51, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

#### **Without CONSULT**

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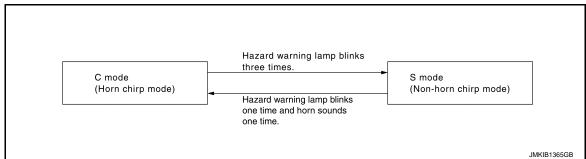
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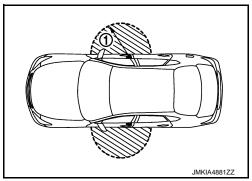
#### < SYSTEM DESCRIPTION >

When lock and unlock signal are sent from the Intelligent Key for more than 4 seconds at the same time, the hazard and buzzer reminder mode is changed and hazard warning lamp blinks and horn sounds as per the following items:



#### 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 outside door handle and passenger outside door handle (1). However, this operating range depends on the ambient conditions.



## LIST OF OPERATION RELATED PARTS

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

Function	Intelligent Key	Remote keyless entry receiver	Door switch	One touch unlock sensor	Door lock actuator	Inside key antenna	Outside key antenna	CAN communication system	BCM	Hazard warning lamp	Combination meter
One touch unlock function	×	×	×	×	×	×	×		×		
Selective unlock function (one touch unlock sensor)	×	×	×	×	×	×	×		×	×	
Reminder function (one touch unlock sensor)								×	×	×	×

## TRUNK OPEN FUNCTION

#### < SYSTEM DESCRIPTION >

## TRUNK OPEN FUNCTION : System Description

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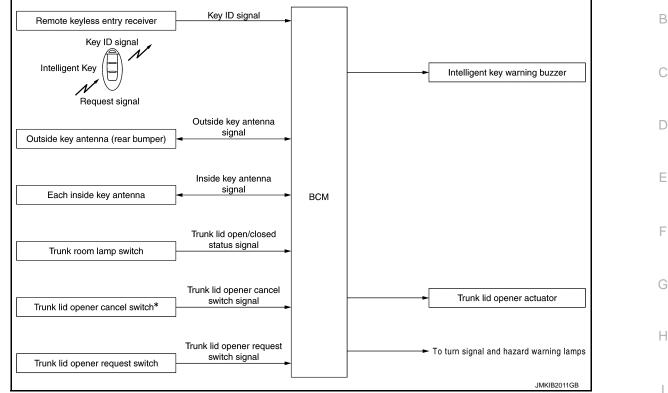
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## SYSTEM DIAGRAM



\*: Except for Mexico models

Trunk open function controls operation function of the following items.

- Trunk lid opener function (trunk lid opener request switch)
- Reminder function (trunk lid opener request switch)

Reminder function (trunk lid closed)

## TRUNK LID OPENER FUNCTION (TRUNK LID OPENER REQUEST SWITCH)

When pressing the trunk lid opener request switch, it is possible to open the trunk lid by carrying the Intelligent Key.

**Operation Description** 

- When the BCM detects that trunk lid opener request 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.
- · BCM transmits trunk lid open signal and operates trunk lid opener actuator.

#### **Operation Condition**

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

Trunk lid opener request switch operation	Operation condition	
Open	<ul> <li>All door are unlocked</li> <li>Trunk lid opener cancel switch: ON (except for Mexico models)</li> <li>Intelligent Key is outside the vehicle</li> <li>Theft warning alarm is not activated</li> <li>Intelligent Key is within outside key antenna (rear bumper) detection area<sup>*</sup></li> </ul>	Ρ

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

## **DLK-29**

#### < SYSTEM DESCRIPTION >

#### REMINDER FUNCTION (TRUNK LID OPENER REQUEST SWITCH)

The reminder function has C mode and S mode

When trunk lid is opened by trunk lid opener request switch, BCM activates Intelligent Key warning buzzer as a reminder in C mode.

Operation	C mode (Intelligent Key warning buzzer activates)
Trunk lid open	4 times

#### How to Change Reminder Function Operation Mode

#### (P) With CONSULT

Reminder function operation mode can be changed using CONSULT. Refer to <u>DLK-51, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>.

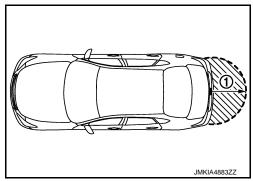
#### REMINDER FUNCTION (TRUNK LID CLOSED)

If the following conditions are satisfied, BCM blinks hazard warning lamps as a reminder.

Operation	Operation condition	Hazard warning lamp blink
Trunk lid: Open $\rightarrow$ Closed	All door: Closed and Locked	Twice

#### OUTSIDE KEY ANTENNA DETECTION AREA

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



## LIST OF OPERATION RELATED PARTS

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

Function	Intelligent Key	Intelligent Key warning buzzer	Remote keyless entry receiver	Trunk lid opener actuator	Trunk room lamp switch	Trunk lid opener cancel switch	Inside key antenna	Outside key antenna (rear bumper)	CAN communication system	BCM	Hazard warning lamp	Trunk lid opener request switch
Trunk lid opener function (trunk lid opener request switch)			×	×	×	×	×	×	×	×		×
Reminder function (trunk lid opener request switch)		×								×		
Reminder function (trunk lid close)					×				×	×	×	

## **REMOTE KEYLESS ENTRY FUNCTION**

## < SYSTEM DESCRIPTION >

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

INFOID:000000009375444

А

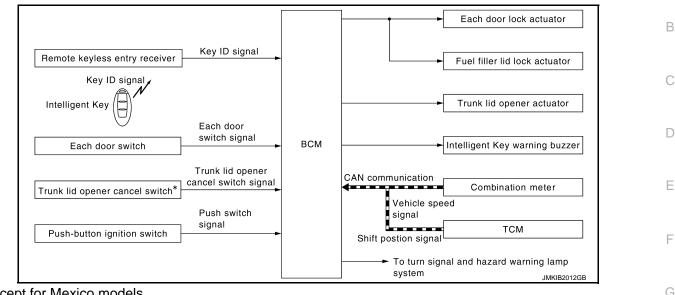
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## SYSTEM DIAGRAM



\*: Except for Mexico models

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

Remote keyless entry function controls operation function of the following items.

- Door lock and unlock function (Intelligent Key)
- Selective unlock function (Intelligent Key)
- Trunk lid opener function (Intelligent Key)
- Reminder function (Intelligent Key)
- Auto door lock function (Intelligent Key)

Panic alarm

## DOOR LOCK AND UNLOCK FUNCTION (INTELLIGENT KEY)

**Operation Description** 

- 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 lock/unlock each door lock actuator and fuel filler lid, when key ID matches.

#### Operation Condition

If the following condition is satisfied, door lock and unlock operation is performed if the Intelligent Key button is pressed.  $\mathbb{M}$ 

Intelligent Key button opera- tion	Operation condition	Ν
Lock	<ul><li>Panic alarm is not activate</li><li>P position warning is not activated</li></ul>	
Unlock	Panic alarm is not activate	0

## SELECTIVE UNLOCK FUNCTION (INTELLIGENT KEY)

#### Lock Operation

When an lock signal is sent from Intelligent Key, all doors and fuel filler lid are locked.

#### **Unlock Operation**

When an unlock signal from Intelligent Key is transmitted, driver door and fuel filler lid are unlocked. When unlock signal is transmitted from Intelligent Key within 60<sup>\*</sup> seconds again, passenger door and rear doors are unlocked.

\*: Default value is 60 seconds. This time changes according to auto lock function operation time.

## **DLK-31**

< SYSTEM DESCRIPTION >

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

Selective unlock function operation mode can be changed using CONSULT. Refer to <u>DLK-49, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.

#### TRUNK LID OPENER FUNCTION (INTELLIGENT KEY)

#### **Operation Description**

- 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 lid.

#### **Operation Condition**

Intelligent Key button operation	Operation condition	
Trunk open	<ul> <li>Trunk lid opener cancel switch: ON (except for Mexico models)</li> <li>Panic alarm is not activate</li> <li>Ignition switch: LOCK or OFF position</li> <li>Vehicle speed is less than 5 km/h (3 MPH)</li> </ul>	

## REMINDER FUNCTION (INTELLIGENT KEY)

#### **Operation Description**

When doors are locked or unlocked by Intelligent Key button operation, BCM blinks hazard warning lamps as a reminder and transmits horn reminder signal to IPDM E/R via CAN communication. The reminder function has C mode and S mode.

Operation	C r	node	Sm	node
Intelligent Key Operation	Lock	Unlock	Lock	Unlock
Hazard warning lamp blinks	Twice	One	Twice	_
Horn sound	One	_	_	_

#### **Operation Condition**

- Reminder function does not operate if ignition switch in ACC or ON position.
- When any door is open, reminder function does not operate according to door lock operation.

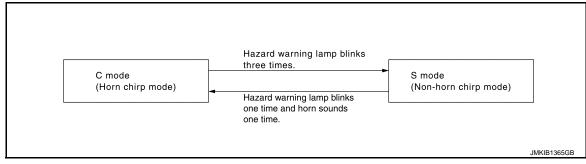
#### How to Change Reminder Function Operation Mode

#### (I) With CONSULT

Reminder function operation mode can be changed using CONSULT. Refer to <u>DLK-51, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>.

#### **Without CONSULT**

When lock and unlock signal are sent from the Intelligent Key for more than 4 seconds at the same time, the hazard and buzzer reminder mode is changed and hazard warning lamp blinks and horn sounds as per the following items:



## AUTO DOOR LOCK FUNCTION (INTELLIGENT KEY)

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

## < SYSTEM DESCRIPTION >

Operating condition     Operating condition     Push s	eceives lo	ck sigr	nal	ben)									
<b>low to Change Auto Door Lock Functio</b> Auto door lock function operation time ca Refer to <u>DLK-51, "INTELLIGENT KEY :</u> (	n be ch	ange	d usi	ng C			ELLIC	<u>SENT</u>	<u>KE</u>	<u>()"</u> .			
ANIC ALARM /hen Intelligent Key panic alarm button tefer to <u>SEC-19, "VEHICLE SECURITY</u>							ad lar	np bl	inks.				
DPERATION AREA To check that the Intelligent Key works n the range may differ according to surrour	dings.	use	withir	n 1 m	ı (3 ft	) ran	ge of	eac	h doc	or, ho	weve	er the	e ope
IST OF OPERATION RELATED PAF Parts marked with × are the parts related		ation											
Function	Intelligent Key	Remote keyless entry receiver	Door switch	Door lock actuator	Push-button ignition switch	CAN communication system	Trunk lid opener cancel switch	BCM	IPDM E/R	Horn	Combination meter	Hazard warning lamp	Trunk lid opener actuator
Door lock and unlock function (Intelligent Key)				_ ×		×		_ ×		-			
Trunk lid opener function (Intelligent Key)	×	×			×	×	×	×			×		×
Reminder function (Intelligent Key)	×	×	×			×		×	×	×	×	×	
Auto door lock function (Intelligent Key)	×	×	×	×	×			×					
KEY REMINDER FUNCTION KEY REMINDER FUNCTION : S SYSTE <u>M DIAGRAM</u>	Syster	n De	escr	iptic	n						INI	FOID:0000	0000093
Remote keyless entry receiver Key ID s	ignal						-•	Each	n door l	ock ac	tuator		
Intelligent Key Signal Each ins	ide						-•	Fuel f	iller lid	lock a	ctuator		
Each inside key antenna Each door Each door switch			В	СМ			-•	Trunk	lid op	ener ac	tuator		
Trunk room lamp switch	signal oor unlock	•					<b>►</b> [ ]	ntelliae	nt Kev	warnin	g buzz	er	
									y		J ~ ~ ~ L		

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

Revision: 2013 October

## **DLK-33**

## < SYSTEM DESCRIPTION >

Key remainder function	Operation condition	Operation
Driver door closed*	When all doors other than driver door are locked, driver door locks within 0.2 seconds after driver door is closed	All doors and fuel filler lid un- lock
Door is open to closed	<ul> <li>When all of the following conditions are satisfied</li> <li>Locked all doors with door lock and unlock switch</li> <li>[Any door: open] → [all doors: closed]</li> <li>Registered Intelligent Key is inside the vehicle</li> </ul>	<ul> <li>All doors and fuel filler lid unlock</li> <li>Honk Intelligent Key warn- ing buzzer</li> </ul>
Trunk is closed	<ul> <li>When all of the following conditions are satisfied</li> <li>[Trunk lid: Open] → [trunk lid: closed]</li> <li>All doors: closed</li> <li>All doors: locked</li> <li>Registered Intelligent Key is inside trunk room</li> </ul>	<ul> <li>Trunk open</li> <li>Honk Intelligent Key warn- ing buzzer</li> </ul>

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

#### 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.

## INFORMATION DISPLAY (COMBINATION METER)

## INFORMATION DISPLAY (COMBINATION METER) : ACC Warning (Information Display)

## **DESIGN/PURPOSE**

When the P position warning is canceled, an alarm warns the driver that the ignition switch is in the ACC position.

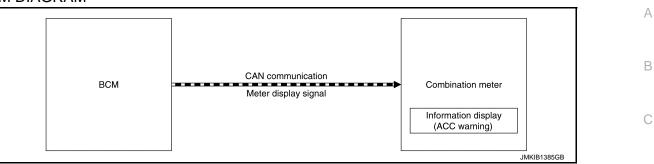
Symbol	Message
JMKIB1394ZZ	Push Ignition to OFF

SYNCHRONIZATION WITH MASTER WARNING LAMP Synchronization is applied. Refer to <u>MWI-34, "WARNING LAMPS/INDICATOR LAMPS : Master Warning Lamp"</u>.

SYNCHRONIZATION WITH WARNING CHIME Synchronization is applied. [ACC warning (buzzer)] Refer to WCS-7, "WARNING CHIME : ACC Warning (Buzzer)".

## < SYSTEM DESCRIPTION >

## SYSTEM DIAGRAM



SIGNAL PATH

- BCM transmits meter display signal to combination meter via CAN communication, when ACC warning (buzzer) is operated.
- When combination meter receives meter display signal, ACC warning (information display) displays.

## WARNING/INDICATOR OPERATIONG CONDITION

ACC warning (buzzer) operates.

WARNING/INDICATOR CANCEL CONDITION

ACC warning (buzzer) is canceled.

**TIMING CHART** 

CC warning (buzzer)	Operated		
	Ion-operation		
nformation display ACC warning)	OFF		

## INFORMATION DISPLAY (COMBINATION METER) : Door and Trunk Lid Open Warn-INFOID:000000009561148

ing

## **DESIGN/PURPOSE**

Information display warns the driver that each door or trunk lid is open or is not fully closed.

Symbol	Message	
	Т 	M
	_	Ν
		0
JMKIB1885ZZ		Ρ

## SYNCHRONIZATION WITH MASTER WARNING LAMP

Synchronization is applied.

Refer to MWI-34, "WARNING LAMPS/INDICATOR LAMPS : Master Warning Lamp".

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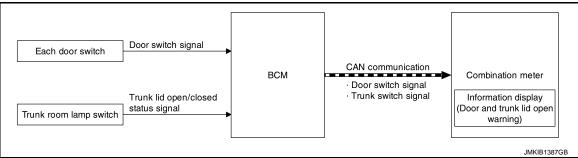
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## < SYSTEM DESCRIPTION >

#### SYSTEM DIAGRAM



#### SIGNAL PATH

- BCM transmits door switch signal or trunk switch signal to combination meter via CAN communication.
- When combination meter judges according to received door switch signal or trunk switch signal that a door is open or trunk lid is open or is not fully closed, door and trunk lid open warning displays.

#### WARNING/INDICATOR OPERATIONG CONDITION Each door switch or trunk room lamp switch is ON

WARNING/INDICATOR CANCEL CONDITION

All door switches and trunk room lamp switch are OFF

## TIMING CHART

Each door switch or Trunk room lamp switch	ON OFF	
Information display (Door and trunk lid open warning)		
(and a second se		JMKIB1649GB

INFORMATION DISPLAY (COMBINATION METER) : Engine Start Information

INFOID:000000009561149

## **DESIGN/PURPOSE**

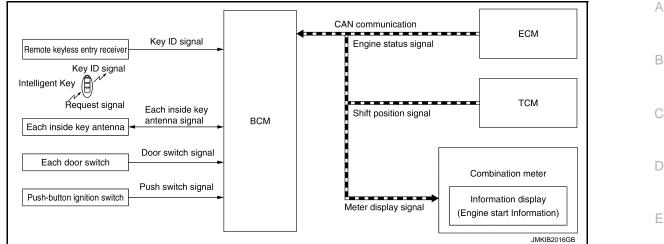
Information display informs the driver that the engine can be started.

Symbol	Message
BRAKE JMKIB18832Z	_

SYNCHRONIZATION WITH MASTER WARNING LAMP No applicable

#### < SYSTEM DESCRIPTION >

#### SYSTEM DIAGRAM



#### SIGNAL PATH

- BCM receives shift position signal and engine status signal from TCM and ECM via CAN communication and checks that the engine can be started.
- When BCM detects that the engine can be started, meter display signal is transmitted by BCM to combination meter via CAN communication.
- When combination meter receives meter display signal, engine start information displays.

#### WARNING/INDICATOR OPERATIONG CONDITION

When Ignition Switch is ON.

When all of the following conditions are satisfied.

- Ignition switch is in ON position.
- Shift position: P position
- Engine can be started.

When Ignition Switch is Other Than ON.

When all of the following conditions are satisfied.

- One condition of A
- All conditions of B

A condition	B condition	
<ul> <li>Any door is open → All door is closed</li> <li>Push-button ignition switch: Pressed</li> <li>Intelligent Key backside is contacted to push-button ignition switch while brake pedal is depressed.</li> </ul>	<ul> <li>Ignition switch: Other than ON position</li> <li>Shift position: P position</li> <li>Registered Intelligent Key is detected inside vehicle.</li> </ul>	

When Ignition Switch is Turned From ON to OFF.

When all of the following conditions are satisfied.

- Ignition switch:  $ON \rightarrow OFF$
- Shift position: P position
- Registered Intelligent Key is detected inside vehicle.

#### 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.

#### WARNING/INDICATOR CANCEL CONDITION

When Ignition Switch is ON.

When any of the following conditions are satisfied.

- Shift position: Other than P position
- Engine is started.
- Engine cannot start.

When Ignition Switch is Other than ON. When any of the following conditions are satisfied.

#### **DLK-37**

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#### < SYSTEM DESCRIPTION >

- Shift position: Other than P position
- Registered Intelligent Key is not detected inside the vehicle.
- When BCM receives Intelligent Key button operation via remote keyless entry receiver.
- When BCM receives door request switch signal from door request switch.
- After 15 seconds are passed since the engine start information is displayed.

When Ignition Switch is Turned From ON to OFF.

After several seconds are passed since the engine start information is displayed.

# INFORMATION DISPLAY (COMBINATION METER) : Intelligent Key Low Battery Warning

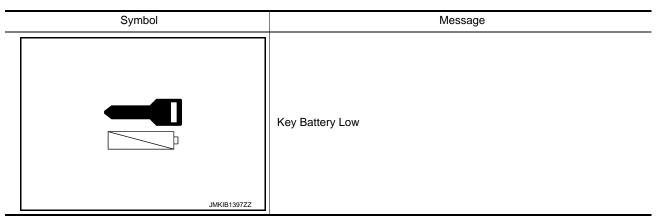
INFOID:000000009561150

#### **DESIGN/PURPOSE**

Information display warns the driver that Intelligent Key battery level is low.

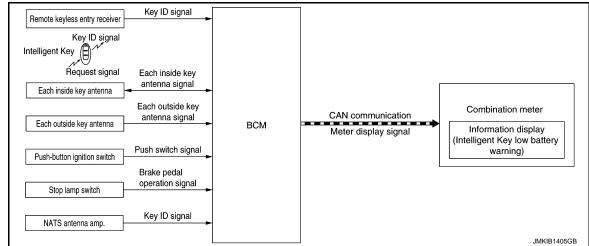
NOTE:

Information display does not displays when Intelligent Key battery is discharged.



#### SYNCHRONIZATION WITH MASTER WARNING LAMP No applicable

#### SYSTEM DIAGRAM



#### SIGNAL PATH

- When Intelligent Key receives request signal from inside key antenna or outside key antenna, transmits key ID signal is transmitted from Intelligent Key to remote keyless entry receiver.
- BCM receives key ID signal via remote keyless entry receiver and detects that Intelligent Key battery level is low.
- When BCM detects that ignition switch is ON, meter display signal is transmitted by BCM to combination meter via CAN communication.
- When combination meter receives meter display signal, Intelligent Key low battery warning displays.

#### WARNING/INDICATOR OPERATIONG CONDITION

#### **DLK-38**

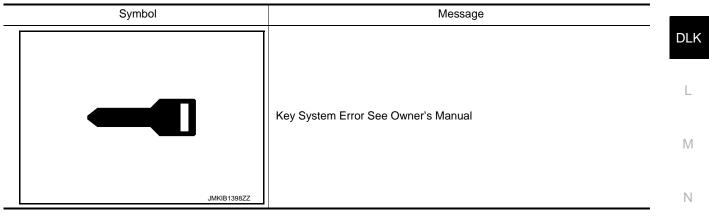
#### < SYSTEM DESCRIPTION >

nition switch is in ON elligent Key battery I	
n any of the followin er 30 seconds are p nition switch is in a p	R CANCEL CONDITION og conditions are satisfied. assed since the Intelligent Key low battery warning is displayed osition other than ON.
nen Intelligent Key bi ING CHART	ackside is contacted to push-button ignition switch while brake pedal is depressed
Ignition switch	ON Other than above
	Get low-
Intelligent Key battery Intelligent Key backside i	Other than above
contacted to push-button	Contacted
ignition switch while brak pedal is depressed	
	ON

INFORMATION DISPLAY (COMBINATION METER) : Intelligent Key System Malfunction

#### DESIGN/PURPOSE

Information display warns the driver that Intelligent Key system malfunctions or that engine cannot be started.



#### SYNCHRONIZATION WITH MASTER WARNING LAMP Synchronization is applied.

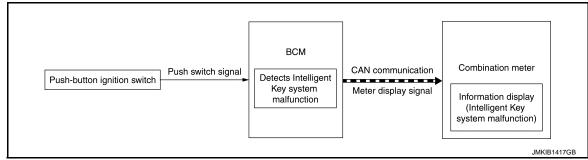
Refer to <u>MWI-34, "WARNING LAMPS/INDICATOR LAMPS : Master Warning Lamp"</u>.

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#### < SYSTEM DESCRIPTION >

#### SYSTEM DIAGRAM



#### SIGNAL PATH

- When BCM detects that Intelligent Key system malfunctions or that the engine cannot be started, meter display signal is transmitted by BCM to combination meter via can communication.
- When combination meter receives meter display signal, Intelligent Key system malfunction displays.

#### WARNING/INDICATOR OPERATING CONDITION

- When any of the following conditions are satisfied.
- The engine cannot be started.
- Intelligent Key system malfunction is detected.

#### WARNING/INDICATOR CANCEL CONDITION

When any of the following conditions are satisfied.

- Intelligent Key system malfunction or engine non-start status is resolved.
- Ignition switch is turned to LOCK or OFF, and 15 seconds are passed.

#### TIMING CHART

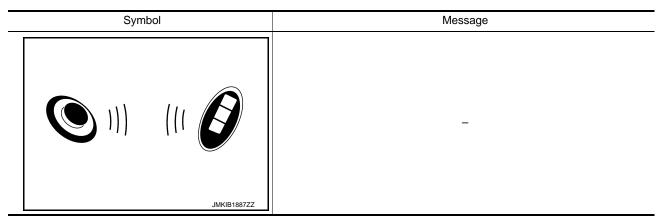
LOCK or OFF Ignition switch Other than above	4—15 sec →
Detects Intelligent Key Detects system malfunction or can not start engine Undetected	
Information display ON (Intelligent Key system malfunction) OFF	
	JMKIB1418GB

#### INFORMATION DISPLAY (COMBINATION METER) : Key ID Verification Information

INFOID:000000009561152

#### DESIGN/PURPOSE

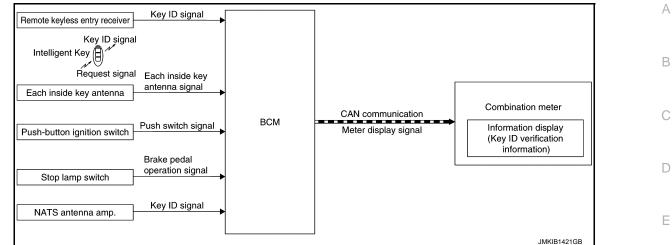
If the system cannot detect a registered Intelligent Key inside the vehicle, it informs the driver that it is necessary for the vehicle to detect a registered Intelligent Key.



# SYNCHRONIZATION WITH MASTER WARNING LAMP No applicable

#### < SYSTEM DESCRIPTION >

#### SYSTEM DIAGRAM



#### SIGNAL PATH

- BCM activates inside key antenna and checks that Intelligent Key is in vehicle, when push-button ignition switch operation is performed while ignition switch position is LOCK.
- When BCM does not detect a registered Intelligent Key in vehicle, meter display signal is transmitted by BCM to combination meter via CAN communication.
- When combination meter receives meter display signal, key ID warning displays.
- After 5 seconds are passed since the key ID warning is displayed, key ID verification information displays.

#### WARNING/INDICATOR OPERATIONG CONDITION

When all of the following conditions are satisfied.

- Ignition switch: LOCK position
- Push-button ignition switch operation is performed.
- Registered Intelligent Key is not detected inside the vehicle.

#### WARNING/INDICATOR CANCEL CONDITION

When any of the following conditions are satisfied.

- After 25 seconds are passed since the key ID verification information is displayed.
- When all door is locked with Intelligent Key or door request switch
- Lock the doors after all doors are closed
- When Intelligent Key backside is contacted to push-button ignition switch while brake pedal is depressed.

#### INFORMATION DISPLAY (COMBINATION METER) : Key ID Warning

#### DESIGN/PURPOSE

Information display warns the driver that Intelligent Key is not detected in vehicle.

Symbol	Message
	Ν
	Key ID Incorrect
	P
JMKIB1398ZZ	

# SYNCHRONIZATION WITH MASTER WARNING LAMP

Synchonization is applied.

Refer to MWI-34, "WARNING LAMPS/INDICATOR LAMPS : Master Warning Lamp".

#### **DLK-41**

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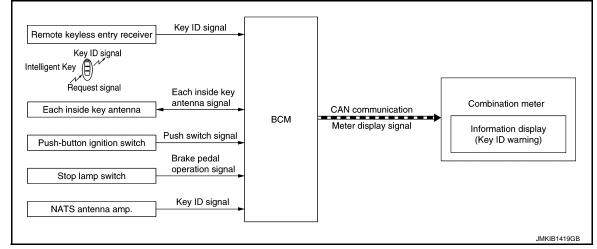
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INFOID:000000009561153

#### < SYSTEM DESCRIPTION >

#### SYSTEM DIAGRAM



#### SIGNAL PATH

- BCM activates inside key antenna and checks that Intelligent Key is in vehicle, when push-button ignition switch operation is performed while ignition switch position is LOCK.
- When BCM does not detect a registered Intelligent Key in vehicle, meter display signal is transmitted by BCM to combination meter via CAN communication.
- When combination meter receives meter display signal, key ID warning displays.

#### WARNING/INDICATOR OPERATING CONDITION

When all of the following conditions are satisfied.

- Ignition switch is in LOCK position
- Push-button ignition switch operation is performed.
- A registered Intelligent Key is not detected inside the vehicle.

#### WARNING/INDICATOR CANCEL CONDITION

When any of the following conditions are satisfied.

- 5 seconds are passed since operation start.
- A registered Intelligent Key is detected in passenger room when push-button ignition switch is operated.
- Intelligent Key backside is contacted to push-button ignition switch while brake pedal is depressed (when Intelligent Key battery is discharged).

#### TIMING CHART

Ignition switch	LOCK -	
Ignition switch	Other than above -	
Push-button	Pressed	
ignition switch	Release -	ll_ll.l.l_ll.l.l.l.l.l.l.l.l.l.l.l.l.l.l.l.l.l.
	Operated	
Take away warning	Non-operation -	
Intelligent Key backside is contacted to push-button	Contacted	
ignition switch while brake pedal is depressed	Non-contact -	
Intelligent Key (in	Detects	
passenger room)	Undetected -	
Information display	ON	
(Key ID warning)	OFF -	4— 5 sec →
		JMKIB1420GB

# INFORMATION DISPLAY (COMBINATION METER) : P Position Warning (Information Display)

#### DESIGN/PURPOSE

#### < SYSTEM DESCRIPTION >

Information display warns the driver of egression from the vehicle while shift is other than P position.

Symbol		Message	
P	:	Shift to Park	
	JMKIB1400ZZ		

SYNCHRONIZATION WITH MASTER WARNING LAMP

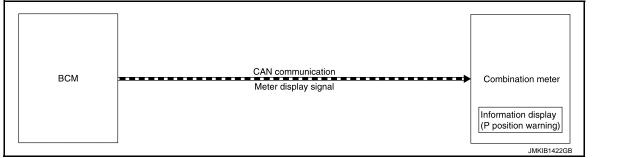
Synchronization is applied.

Refer to MWI-34, "WARNING LAMPS/INDICATOR LAMPS : Master Warning Lamp".

# SYNCHRONIZATION WITH WARNING CHIME Synchronization is applied. [P position warning (buzzer)]

Refer to WCS-13, "WARNING CHIME : P Position Warning (Buzzer)".

#### SYSTEM DIAGRAM



#### SIGNAL PATH

- DLK BCM transmits meter display signal to combination meter via CAN communication, when P position warning (buzzer) is operated.
- When combination meter receives meter display signal, P position warning displays.

#### WARNING/INDICATOR OPERATING CONDITION

P position warning (buzzer) is operated. Refer to WCS-13, "WARNING CHIME : P Position Warning (Buzzer)".

#### WARNING/INDICATOR CANCEL CONDITION

P position warning (buzzer) is canceled.

Refer to WCS-13, "WARNING CHIME : P Position Warning (Buzzer)".

#### TIMING CHART Г

P position warning (Buzzer)	Operated	
Information display (P position warning)	ON	
		JMKIB1423GB

INFORMATION DISPLAY (COMBINATION METER) : Take Away Warning (Informa-

# **DLK-43**

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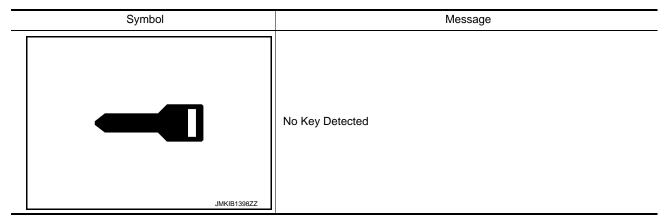
< SYSTEM DESCRIPTION >

### tion Display)

INFOID:000000009561156

#### DESIGN/PURPOSE

Information display warns the driver that Intelligent Key is not detected in vehicle.



#### SYNCHRONIZATION WITH MASTER WARNING LAMP Synchronization is applied.

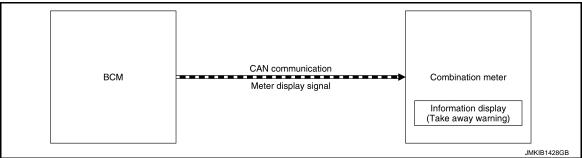
Refer to MWI-34, "WARNING LAMPS/INDICATOR LAMPS : Master Warning Lamp".

### SYNCHRONIZATION WITH WARNING CHIME

#### Take away warning

Refer to WCS-18. "WARNING CHIME : Take Away Warning (Buzzer)".

#### SYSTEM DIAGRAM



#### SIGNAL PATH

- BCM transmits meter display signal to combination meter via CAN communication, when take away warning (buzzer) is operated.
- When combination meter receives meter display signal, take away warning displays.

#### WARNING/INDICATOR OPERATING CONDITION

Take away warning (buzzer) operates. Refer to <u>WCS-18, "WARNING CHIME : Take Away Warning (Buzzer)"</u>.

#### WARNING/INDICATOR CANCEL CONDITION

Take away warning (buzzer) is canceled.

Refer to WCS-18, "WARNING CHIME : Take Away Warning (Buzzer)"

#### < SYSTEM DESCRIPTION >

# TIMING CHART Take away warning (Buzzer) Information display (Take away warning) OFF OF UNDICATOR/CHIME LIST A

# WARNING/INDICATOR/CHIME LIST : Warning Lamp/Indicator (Information Display)

INFOID:000000009561157

Item	Reference	
CC warning Refer to DLK-34, "INFORMATION DISPLAY (COMBINATION MET ACC Warning (Information Display)"		
Door and trunk lid open warning	Refer to <u>DLK-35, "INFORMATION DISPLAY (COMBINATION METER) :</u> <u>Door and Trunk Lid Open Warning</u> "	
Engine start information	Refer to <u>DLK-36, "INFORMATION DISPLAY (COMBINATION METER) :</u> Engine Start Information"	
Intelligent Key low battery warning	Refer to DLK-38, "INFORMATION DISPLAY (COMBINATION METER) :           Intelligent Key Low Battery Warning"	
Intelligent Key system malfunction	Refer to <u>DLK-39</u> , "INFORMATION DISPLAY (COMBINATION METER) : Intelligent Key System Malfunction"	
Key ID verification information	Refer to <u>DLK-40</u> , "INFORMATION DISPLAY (COMBINATION METER) : Key ID Verification Information"	
Key ID warning	Refer to <u>DLK-41. "INFORMATION DISPLAY (COMBINATION METER) :</u> Key ID Warning"	
P position warning	Refer to <u>DLK-42</u> , "INFORMATION DISPLAY (COMBINATION METER) : P Position Warning (Information Display)"	
Take away warning	Refer to <u>DLK-43</u> , "INFORMATION DISPLAY (COMBINATION METER) : <u>Take Away Warning (Information Display)</u> "	

# WARNING/INDICATOR/CHIME LIST : Warning Chime

INFOID:000000009561158

Item	Reference	M
ACC warning	Refer to WCS-7, "WARNING CHIME : ACC Warning (Buzzer)".	
Door lock operation warning	Refer to WCS-8, "WARNING CHIME : Door Lock Operation Warning".	N
OFF position warning	Refer to WCS-11, "WARNING CHIME : OFF Position Warning".	
P position warning	Refer to WCS-13, "WARNING CHIME : P Position Warning (Buzzer)".	
Take away warning	Refer to WCS-18, "WARNING CHIME : Take Away Warning (Buzzer)".	0

#### SYSTEM (TRUNK LID OPENER SYSTEM)

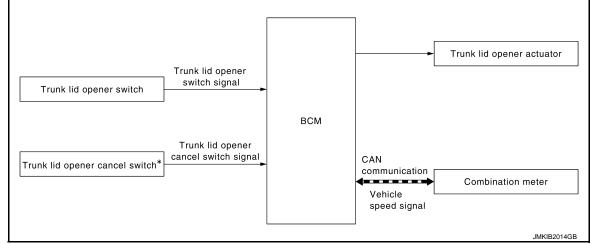
#### < SYSTEM DESCRIPTION >

# SYSTEM (TRUNK LID OPENER SYSTEM)

#### System Description

INFOID:000000009375449

#### SYSTEM DIAGRAM



#### \*: Except for Mexico models

#### TRUNK LID OPENER OPERATION

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

#### OPERATION CONDITION

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

Trunk lid opener switch operation	Operation condition	
Trunk lid open	<ul> <li>Theft warning alarm is not activated</li> <li>Trunk lid opener cancel switch: ON (except for Mexico models)</li> <li>Vehicle speed is less than 5 km/h (3 MPH)</li> </ul>	

#### REMINDER FUNCTION (TRUNK LID CLOSED)

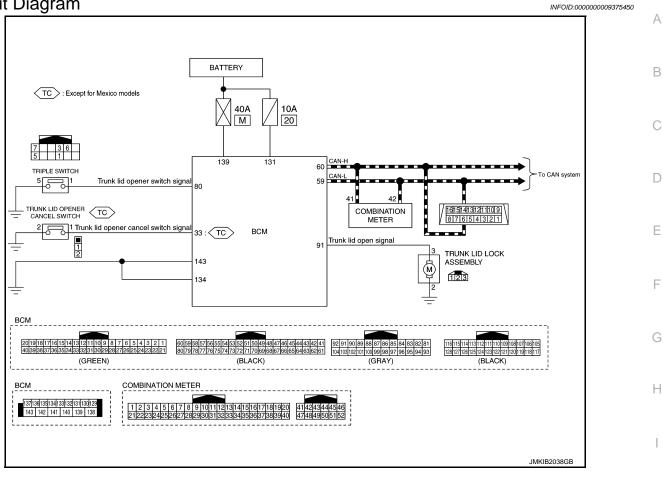
If the following conditions are satisfied, BCM blinks hazard warning lamps as a reminder.

Operation	Operation condition	Hazard warning lamp blink
Trunk lid: Open $\rightarrow$ Closed	All door: Closed and Locked	Twice

# SYSTEM (TRUNK LID OPENER SYSTEM)

#### < SYSTEM DESCRIPTION >

## Circuit Diagram



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# < SYSTEM DESCRIPTION >

# DIAGNOSIS SYSTEM (BCM) COMMON ITEM

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

INFOID:000000009599830

## APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

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

#### SYSTEM APPLICATION

BCM can perform the following functions for each system. **NOTE:** 

It can perform the diagnosis modes except the following for all sub system selection items.

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

\*: This item is not used.

#### FREEZE FRAME DATA (FFD)

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

#### **DLK-48**

#### < SYSTEM DESCRIPTION >

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

#### NOTE:

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

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

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

#### DOOR LOCK

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

#### BCM CONSULT FUNCTION

CONSULT performs the following functions via CAN communication with BCM.

#### WORK SUPPORT

# **DLK-49**

INFOID:000000009375452

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#### < SYSTEM DESCRIPTION >

Monitor item	Description
DOOR LOCK-UNLOCK SET	Selective unlock function mode can be changed to operation with this mode <ul> <li>On: Operate</li> <li>Off: Non-operation</li> </ul>
AUTO UNLOCK TYPE	Automatic door lock/unlock function (unlock operation) mode can be selected from the follow- ing in this mode <ul> <li>MODE1: All doors are unlocked</li> <li>MODE2: Only driver door is unlocked</li> </ul>
AUTO LOCK FUNCTION	<ul> <li>Automatic door lock/unlock function (lock operation) mode can be selected from the following in the mode</li> <li>MODE1: All doors are locked when vehicle speed more than 24 km/h (15 MPH)</li> <li>MODE2: All doors are locked when shifting the selector lever from P position to other than the P position</li> <li>MODE3: Non-operation</li> <li>Off: Non-operation</li> </ul>
AUTO UNLOCK FUNCTION	<ul> <li>Automatic door lock/unlock function (unlock operation) mode can be selected from the following in this mode</li> <li>MODE1: All doors are unlocked when the power supply position is changed from ON to OFF</li> <li>MODE2: All doors are unlocked when shifting the selector lever from any position other than the P to P position</li> <li>MODE3: Non-operation</li> <li>Off: Non-operation</li> </ul>
SIGNATURE LIGHT SETTING	Signature light function can be changed to operation with this mode <ul> <li>On: Operate</li> <li>Off: Non-operation</li> </ul>

# DATA MONITOR NOTE:

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

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

#### ACTIVE TEST

Test item	Description
DOOR LOCK	<ul><li>This test is able to check door lock/unlock operation</li><li>ALL LOCK: The all door lock actuators are locked.</li><li>ALL UNLK: The all door lock actuators are unlocked.</li></ul>

# INTELLIGENT KEY

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

INFOID:000000009375453

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#### WORK SUPPORT

Monitor item	Description	
NSIDE ANT DIAGNOSIS	This function allows inside key antenna self-diagnosis	
LOCK/UNLOCK BY I-KEY	<ul><li>Door lock function (door request switch) mode can be changed to operation in this mode</li><li>On: Operate</li><li>Off: Non-operation</li></ul>	
ENGINE START BY I-KEY	<ul><li>Engine start function mode can be changed to operation with this mode</li><li>On: Operate</li><li>Off: Non-operation</li></ul>	
TRUNK/GLASS HATCH OPEN	Reminder function (trunk lid opener request switch) mode can be changed to operation with this mode • On: Operate • Off: Non-operation	
AUTO LOCK SET	Auto door lock operation time can be changed in this mode • MODE 1: OFF • MODE 2: 30 sec. • MODE 3: 1 minute • MODE 4: 2 minutes • MODE 5: 3 minutes • MODE 6: 4 minutes • MODE 7: 5 minutes	
SHORT CRANKING OUTPUT	<ul> <li>Starter motor can operate during the times below</li> <li>70 msec</li> <li>100 msec</li> <li>200 msec</li> </ul>	
CONFIRM KEY FOB ID	It can be checked whether Intelligent Key ID code is registered or not in this mode	
RETRACTABLE MIRROR SET	NOTE: This item is displayed, but cannot be used	
TOUCH SENSOR UNLOCK FUNCTION SETTING	<ul><li>One touch unlock function can be changed to operation with this mode</li><li>On: Operate</li><li>Off: Non-operation</li></ul>	
IGN/ACC BATTERY SAVER	Ignition battery saver system mode can be changed to operation with this mode • On: Operate • Off: Non-operation	
REMOTE ENGINE STARTE	NOTE: This item is displayed, but cannot be used	
INTELLIGENT KEY LINK SET	NOTE: This item is displayed, but cannot be used	
ANSWER BACK	<ul> <li>Reminder function (door request switch and Intelligent Key) mode can be selected from the following with this mode</li> <li>On: S mode (buzzer or horn reminder non-operation)</li> <li>Off: C mode (buzzer or horn operate)</li> </ul>	
ANSWER BACK I-KEY LOCK UN- LOCK	<ul> <li>Reminder function (door request switch) mode can be selected from the following with this mode</li> <li>BUZZER: Sound Intelligent Key warning buzzer</li> <li>HORN: Sound horn</li> <li>Off: Only hazard warning lamp operate</li> <li>INVALID: This item is displayed, but cannot be used</li> </ul>	
ANSWERBACK KEYLESS LOCK UNLOCK	<ul> <li>Reminder function (Intelligent Key) mode can be selected from the following with this mode</li> <li>On: Horn and hazard warning lamp operate</li> <li>Off: Only hazard warning lamp operate</li> </ul>	
WELCOME LIGHT OP SET	<b>NOTE:</b> This item is displayed, but cannot be used	

#### SELF-DIAG RESULT

< SYSTEM DESCRIPTION >

#### Refer to BCS-62, "DTC Index".

# DATA MONITOR **NOTE**:

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

Monitor Item	Condition
REQ SW -DR	Indicates [On/Off] condition of front door request switch (driver side)
REQ SW -AS	Indicates [On/Off] condition of front door request switch (passenger side)
REQ SW -BD/TR	Indicates [On/Off] condition of trunk lid opener request switch
PUSH SW	Indicates [On/Off] condition of push-button ignition switch
SHFTLCK SLNID PWR SPLY	Indicates [On/Off] condition of the power supply from BCM to shift lock solenoid
CLUCH SW	NOTE: This item is displayed, but cannot be monitored
BRAKE SW 1	Indicates [On/Off]* condition of stop lamp switch power supply
BRAKE SW 2	Indicates [On/Off] condition of stop lamp switch
DETE/CANCL SW	Indicates [On/Off] condition of P position
SFT PN/N SW	Indicates [On/Off] condition of P or N position
UNLK SEN -DR	Indicates [On/Off] condition of driver door UNLOCK status
PUSH SW -IPDM	Indicates [On/Off] condition of push-button ignition switch
IGN RLY1 -F/B	Indicates [On/Off] condition of ignition relay 1
DETE SW -IPDM	Indicates [On/Off] condition of P position
SFT PN -IPDM	Indicates [On/Off] condition of P or N position
SFT P -MET	Indicates [On/Off] condition of P position
SFT N -MET	Indicates [On/Off] condition of N position
ENGINE STATE	Indicates [STOP/STALL/CRANK/RUN] condition of engine states
VEH SPEED 1	Display the vehicle speed signal received from combination meter by numerical value [km/h]
VEH SPEED 2	Display the vehicle speed signal received from ABS or VDC or TCM by numerical value [km/h]
DOOR STAT-DR	Indicates [LOCK/READY/UNLK] condition of driver door status
DOOR STAT-AS	Indicates [LOCK/READY/UNLK] condition of passenger door status
DOOR STAT-RR	Indicates [LOCK/READY/UNLK] condition of rear door RH status
DOOR STAT-RL	Indicates [LOCK/READY/UNLK] condition of rear door LH status
BK DOOR STATE	NOTE: This item is displayed, but cannot be monitored
ID OK FLAG	Indicates [Set/Reset] condition of Intelligent Key ID
PRMT ENG STRT	Indicates [Set/Reset] condition of engine start possibility
PRMT RKE STRT	NOTE: This item is displayed, but cannot be monitored
I-KEY OK FLAG	Indicates [KEY On/NOT On] condition of Intelligent Key ID and Intelligent Key is detected in- side vehicle
PRBT ENG STRT	Indicates whether or not the engine is in start prohibited status
ID AUTHENT CANCEL TIMER	Indicates whether or not it is in engine start possible status when Intelligent Key verification is unnecessary
ACC BATTERY SAVER	Indicates [On/Off] whether or not ignition battery saver is in operation
CRNK PRBT TMR	Indicates [On/Off] whether or not in cranking prohibited status due to starter motor protection function operation
AUT CRANK TMR	Indicates [On/Off] whether or not in AUTO CRANKING MODE status
CRNK PRBT TME	Indicates the time for changing from cranking prohibited status to cranking possible status

#### < SYSTEM DESCRIPTION >

Monitor Item	Condition
AUT CRANK TMR	Indicates the time that AUTO CRANKING MODE operates
CRANKING TME	Indicates the cranking operation time
SHORT CRANK	NOTE: This item is displayed, but not used
DETE SW PWR	Indicates [On/Off] condition of the power supply from BCM to the A/T shift selector (detention switch)
IGN RLY3-REQ	Indicates [On/Off] condition of blower relay control signal
ACC RLY-REQ	Indicates [On/Off] condition of accessory relay control signal
RKE OPE COUN1	When remote keyless entry receiver receives the signal transmitted while operating on Intel- ligent Key, the numerical value start changing
RKE OPE COUN2	NOTE: This item is displayed, but cannot be monitored
TRNK/HAT MNTR	Indicates [On/Off] condition of trunk room lamp switch
RKE-LOCK	Indicates [On/Off] condition of LOCK signal from Intelligent Key
RKE-UNLOCK	Indicates [On/Off] condition of UNLOCK signal from Intelligent Key
RKE-TR/BD	Indicates [On/Off] condition of trunk open signal from Intelligent Key
RKE-PANIC	Indicates [On/Off] condition of panic alarm signal from Intelligent Key
RKE-MODE CHG	NOTE: This item is displayed, but cannot be monitored
RKE PBD	<b>NOTE:</b> This item is displayed, but cannot be monitored

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

#### ACTIVE TEST

Test item	Description
OUTSIDE BUZZER	<ul><li>This test is able to check Intelligent Key warning buzzer operation</li><li>On: Operates</li><li>Off: Non-operation</li></ul>
INSIDE BUZZER	<ul> <li>This test is able to check warning chime in combination meter operation</li> <li>Take Out: Take away warning chime sounds when CONSULT screen is touched</li> <li>Key: Key warning chime sounds when CONSULT screen is touched</li> <li>Knob: OFF position warning chime sounds when CONSULT screen is touched</li> <li>Off: Non-operation</li> </ul>
INDICATOR	<ul> <li>This test is able to check information display (combination meter) operation</li> <li>KEY ON: [Intelligent Key system malfunction] displays when CONSULT screen is touched</li> <li>KEY IND: [Steering lock unit ID registration complete] displays when CONSULT screen is touched</li> <li>Off: Non-operation</li> </ul>
INT LAMP	This test is able to check interior room lamp operation <ul> <li>On: Operates</li> <li>Off: Non-operation</li> </ul>
FLASHER	This test is able to check hazard warning lamp operation The hazard warning lamps are activated after "LH/RH/Off" on CONSULT screen is touched
HORN	This test is able to check horn operation <ul> <li>On: Operates</li> </ul>
IGN CONT2	This test is able to operate the blower relay in fuse block (J/B) On: Operates Off: Non-operation
ENGINE SW ILLUMI	This test is able to check push-ignition switch illumination operation Push-ignition switch illumination illuminates when "On" on CONSULT screen is touched
PUSH SWITCH INDICATOR	This test is able to check push-ignition switch indicator operation when "On" on CONSULT screen is touched

#### < SYSTEM DESCRIPTION >

Test item	Description
ACC CONT	<ul> <li>This test is able to operate the accessory relay in fuse block (J/B)</li> <li>On: Operates</li> <li>Off: Non-operation</li> </ul>
IGN CONT1	<ul><li>This test is able to operate the ignition relay in IPDM E/R</li><li>On: Operates</li><li>Off: Non-operation</li></ul>
IGNITION RELAY	<ul><li>This test is able to operate the ignition relay in fuse block (J/B)</li><li>On: Operates</li><li>Off: Non-operation</li></ul>
ST CONT LOW	This test is able to operate the starter relay in IPDM E/R <ul> <li>On: Non-operation</li> <li>Off: Operates</li> </ul>
BATTERY SAVER	<ul><li>This test is able to check interior room lamp battery saver operation</li><li>On: Outputs interior room lamp power supply to turn interior room lamps ON.</li><li>Off: Cuts interior room lamp power supply to turn interior room lamps OFF.</li></ul>
TRUNK/BACK DOOR	This test is able to check trunk lid open operation. This actuator opens when "Open" on CONSULT screen is touched.
RETRACTABLE MIRROR	NOTE: This item is displayed, but cannot be used
INTELLIGENT KEY LINK(CAN)	NOTE: This item is displayed, but cannot be used
REVERSE LAMP TEST	NOTE: This item is displayed, but cannot be used
DOOR HANDLE LAMP TEST	<ul><li>This test is able to check outside handle lamp operation</li><li>On: Operates</li><li>Off: Non-operation</li></ul>
DR SEAT LAMP TEST	NOTE: This item is displayed, but cannot be used
AS SEAT LAMP TEST	NOTE: This item is displayed, but cannot be used
SHIFT SPOT LAMP TEST	NOTE: This item is displayed, but cannot be used
TRUNK/LUGGAGE LAMP TEST	<ul><li>This test is able to check trunk room lamp operation</li><li>On: Operates</li><li>Off: Non-operation</li></ul>
KEYFOB P/W TEST	<ul> <li>This test is able to check keyless power window up/down operation</li> <li>Up: Non-operation</li> <li>Down<sup>*</sup>: Power window and sunroof open</li> <li>Off: Non-operation</li> </ul>
SHIFTLOCK SORENOID TEST	NOTE: This item is displayed, but cannot be used

\*: When ignition switch is OFF, driver door opened, power window and sunroof is closed. TRUNK

# TRUNK : CONSULT Function (BCM - TRUNK)

INFOID:000000009375454

#### DATA MONITOR

#### NOTE:

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

Monitor Item	Contents
PUSH SW	Indicates [On/Off] condition of push-button ignition switch
UNLK SEN -DR	Indicates [On/Off] condition of unlock sensor

#### < SYSTEM DESCRIPTION >

Monitor Item	Contents	
VEH SPEED 1	Indicates [km/h] condition of vehicle speed signal from combination meter	
KEY CYL SW-TR	NOTE: This item is displayed, but cannot be monitored	
TR CANCEL SW	Indicates [On/Off] condition of trunk lid opener cancel switch	
TR/BD OPEN SW	Indicates [On/Off] condition of trunk lid opener switch	
TRNK/HAT MNTR	Indicates [On/Off] condition of trunk room lamp switch	(
RKE-TR/BD	Indicates [On/Off] condition of trunk open signal from Intelligent Key	

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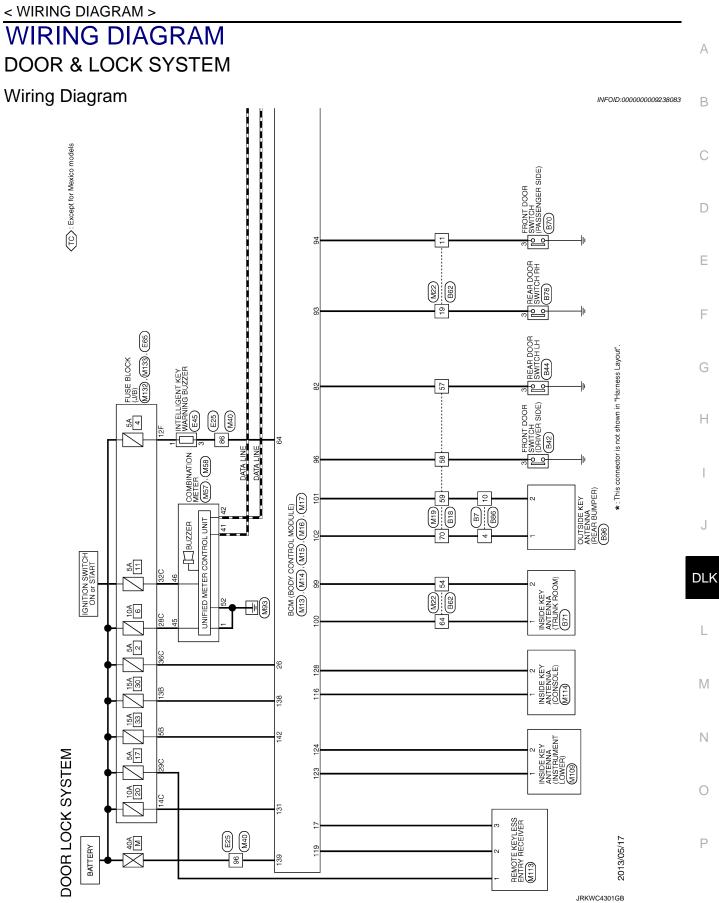
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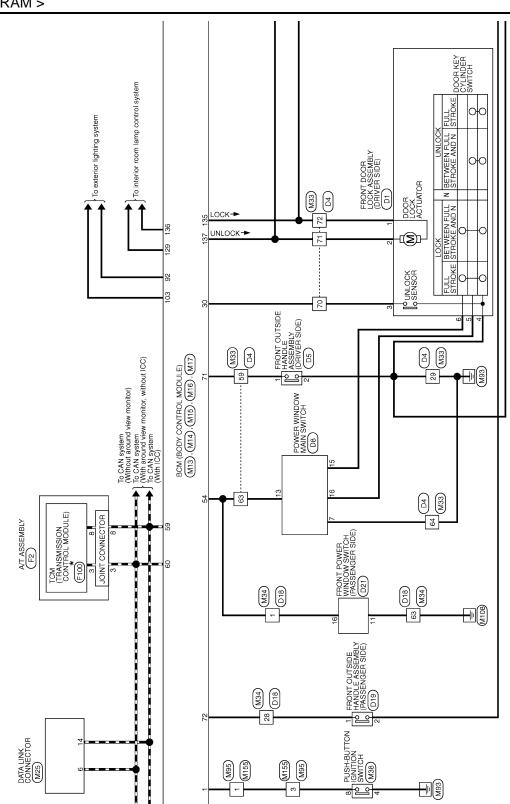
# ECU DIAGNOSIS INFORMATION BCM

List of ECU Reference

INFOID:000000009238080

	ECU	Reference
		BCS-35, "Reference Value"
DOM		BCS-60. "Fail-safe"
BCM		BCS-61, "DTC Inspection Priority Chart"
		BCS-62, "DTC Index"





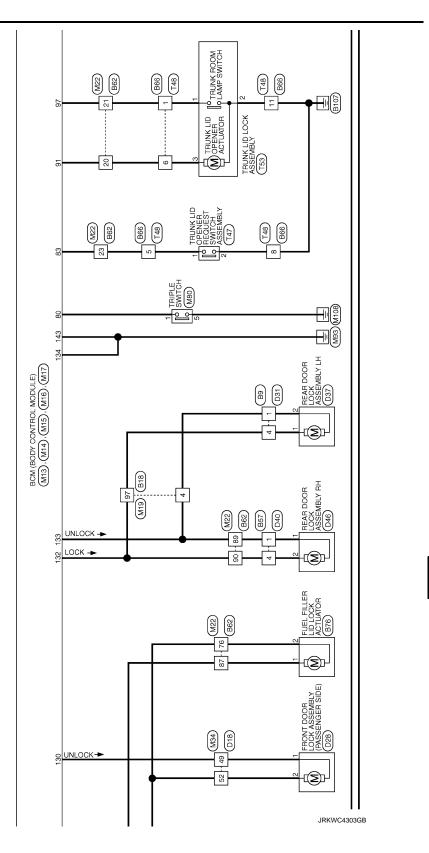
# DOOR & LOCK SYSTEM

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# **DOOR & LOCK SYSTEM**

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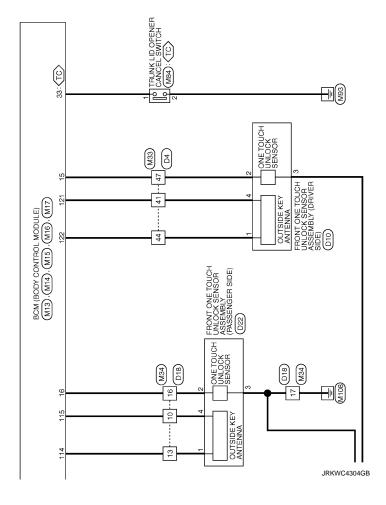
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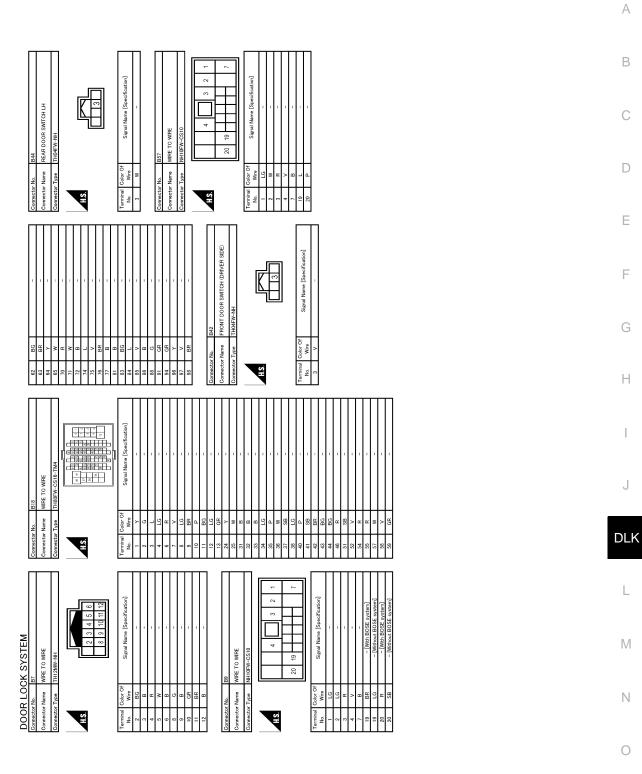
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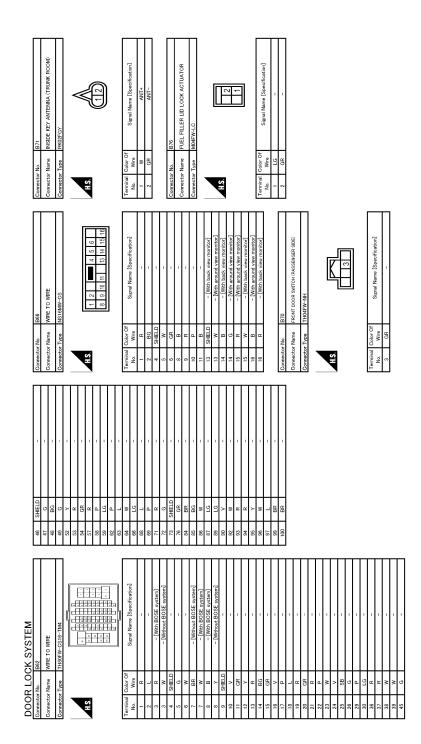
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JRKWC4305GB



JRKWC4306GB

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10	В	ENCODER_GND	Ű	8 W	-				3 3	-	
11	GR	ENCODER_SIG1	Ĩ	9 L	-	Termin	Terminal Color Of	Cinnal Mama [Cnanification]	4 L	-	
12	BR	ENCODER SIG2	-	10 L	-	No.	Wire				
_	SB	COM	-	11 GR		-	>	-			
15	>	LOCK_SW	-	13 Y		2	œ	-	Connector No.	D28	
16	>	UNLOCK_SW	-	+		e	щ	-	Connector Name	FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE)	
			-1	┥	'	4	В	1			Т
				+	1				Connector Type E06FGY-RS	E06FGY-RS	٦
Connector No.	o. D10		-1	+							
Connector Name		FRONT ONE TOUCH UNLOCK SENSOR ASSEMBLY (DRIVER SIDE)	-	+		Connector No.	tor No.	D21			
Constant Time		2	1	20 G		Connec	Connector Name	FRONT POWER WINDOW SMITCH (PASSENGER SIDE)	SH		
		2	ſ	t		Connec	Connector Tune	NC16FW-CC			
			ſ	╀	,		odd i ho				
		R	1	╀	,	-					
H.S.			~	┝	1						
		(1234)	2	26 V	-	HS		3 4 0	10	Df Simul Name [Sacation]	Г
		4	2	27 G					No. Wire		
			2	28 V	1			a in it iz 1 10	1 LG		T
			2	+					2 P	1	٦
70	lor Of	Signal Name [Specification]	~	┥	1	l					
No.	Wire		4	+		Termin	Terminal Color Of	Signal Name [Specification]			
•	≻ (	1	0	52 52		Ϋ́ς	Wire				
2	× 1		9	+			9	ENCODER			
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			1	┦		-	2				

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BUZZER BUZZER	В
E46 INTELLOEDT REY WARNING BUZZER Signal Name (Specification) Signal Name (Specification)	С
57         B(1)           59         B(1)           59         B(1)           66         S(1)           71         1           72         2           73         C           73         C           73         C           73         C           73         C           73         C           74         C           75         C           73         C           73         C           73         C           74         C           75         C           73         C           74         C           75         C           74         C           75         C           76         C           77         C           78         C           79         C           70         C           70         C           71         C           70         C           70         C           70         C      70         C      71	D
	E
	F
Minimum         Communication         Minimum         Communication         Minimum         Minim         Minimum         Minimum	G
No MRE Marcesio Ma	J
Connector Num         Drift           Connector Num         WITE           Connector Num         WITE           Connector Num         WITE           Terminal         Cole           1         BR	DLK
	L
CK SYSTEM WIRE TO WIRE WIRE TO WIRE WIRE TO WIRE WIRE DOWN-GSID CONTRICTION Signal Name (Specification) CONTRICTION Signal Name (Specification) CONTRICTION Signal Name (Specification) CONTRICTION CONTR	M
DODR LOCK SYSTEM       Connector Num       Connector Num     WIFE TO MIE       Connector Num     WIFE TO MIE       Connector Num     MIE TO MIE       Million     Standard	Ν
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< WIRING DIAGRAM >

77 V COMBLEW INPUT 3	78 Y COMBL SW INPUT 2	79 LG COMBI SW INPUT 1	80 L TRLID OPNR SW		Gennector No M15	he	Т	Connector Type TH24FGY-NH			92 91 85 83 82	103 102 101 100 99 97 96 94 80		Terminal Color Of Signal Name [Specification] No. Wire	┢		85 P TR ROOM LAMP CONT	W TURN SI	+	96 V DRIVER DOOR SW	В	GR	100 W INSIDE KEY ANI (I KUNK) + 101 BC DEAD RMDD ANT -	re F	103 Y TURN SIG LH OUTPUT (SIDE,REAR)												
COMBI SW OUTPUT 2	COMBI SW OUTPUT 1	ONE TOUCH UNLK SENS (DR)	ONE TOUCH UNLK SENS (PASS)	RECEIVER/SENSOR GND SECURITY IND LAMD CONT	DETENT SW	STEP LAMP CONT	STOP LAMP SW2	EXTENDED STORAGE FUSE SW STOP LAMP SW	DR DOOR UNLK SENS	TR LID OP CANCEL SW	P/N POSITION		M14	BCM (BODY CONTROL MODULE)	TH40FB-NH				1 13 13 17 15 15 12 17 15 69 69 69 69 69 69 60 62 61			Signal Name [Specification]	DISH-BIN ICN SWITT DWD	DONGLE LINK	COMM LINE	RAIN SENSOR	CAN-L	REAR WINDOW DEF RLY CONT	STARTER RLY CONT	I-KEY WARN BUZZER	OUTS HD LAMP CONT	BLOWER FAN RLY CONT IGN BLYAV (F/B) CONT	DIMMER	A/T SHIFT SELECT PWR SPLY	IGN RLYAY (IPDM E/R) CONT	DR DOOR REQ SW	PASS DOOR REQ SW
13 G	14 P	15 G		17 P	о 20 20	Ĥ	+	26 R	30 W	+	36 39 BR		Connector No.	Connector Name	Connector Type			H.S.				al C	100. WITE	┝	54 V	55 1 R	1 - 80 9	61 G	62 R		+	66 B 67 M/D	╈		$\vdash$	Н	72 SB
DNL				TCM(TRANSMISSION CONTROL MODULE)			*		7	6 7 8 9 10		Signal Name [Specification]	IGNITION POWER SUPPLY	JER SUPPLY (MEMORY BACK-UP) CAN-H	K-LINE	GROUND		CAN-L	STARTER RELAY	GROOND			BCM (BODY CONTROL MODULE)					4 13 12 11 10 5 4 3 1 ~ n n n n n 1				Signal Name [Specification]	MS HSIId	SENS PWR SPLY	OPTICAL SENSOR	-	COMBI SW OUTPUT 5
10 B GROUND			Connector No. F100	Connector Name TCM(TRANS	Connector Tyne SP10FG	1		HS.				Terminal Color Of Sig No. Wire	1 - 10	2 - BATTERY POV 3 -	4	5 -		, 8	- 6			Connector No. M13	Connector Name BCM (BOD)	Connector Type TH40FG-NH			SI	20 18 17 16 15 10 15 10 15				Terminal Color Of Sig	t		4 BG	5 LG	10 W

DOOR LOCK SYSTEM							
Connector No. M16	Η	41	- -		Connector No.	- No. M22	
Connector Name BCM (BODY CONTROL MODULE)	8	42	BR -		Connector Name	Name WIRE TO WIRE	
	135 V FRONT DOOR, FL LID LK OUTPUT	43	BR -				
Connector Type TH24FB-NH	136 V INT ROOM LAMP CONT	44	BR -		Connector Type	Type TH80MW-CS16-TM4	
	_	46					
	138 P REAR DOORS ACT PWR SPLY	15	-				
K	┝	52	-			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	H	54	- -		HS.H		
	œ	55	-				
č	╞	13		Γ			
171 171 771 771		6	. >	Ι			
	2	8 9	- 00	T			
		P	- 50				
Terminal Color Of Signal Name [Specification]		62	BG -	T	Terminal	Color Of Signal Name [Specification]	
	Connector No. M19	59	HK -		-oN		
>	Connector Name WIRE TO WIRE	64	- ~		-		
٩		65	M		2	L -	
111 Y ACC/ON IND	Connector Type TH80MW-CS16-TM4	70	- 10			н н	
113 SR ACCIPELAY CONT		17	-		4	SHIFLD -	
-		62	- -		ď		
}	11 21 21 22 22 22 22 22 22 22 22 22 22 2	: 7	) -	Ι			
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		ę	M				
8//B	380	76	BR -			-	
-		77	8		6	SHELD -	
SB	Ρ	81	B -		10	N	
BG DRIVER DOOR ANT +		83	BG -		Ξ	GR -	
123 R INSIDE KEY ANT (INSTRUMENT LOWER) +	lar C	84	- -		12	- ^	
9	No. Wire Signal Name (Specification)	85	- _		13	- 10	
R NATS ANT AMP	-	98			Į		
3	- 0	8 8		Γ	ų	,	
5		3 5	, <del>,</del>	Ι	9	- Date Doug	
5				Ι		- Immi -	
		94	GR -		16	V – [Without DCM]	
	6 R –	96			17	- 4	
Connector No. M17		97	- >		18	-	
		98	BR -		19	- 5	
Connector Name BCM (BUDY CONTROL MUDULE)					20	GR -	
Connector Tyne FFA09FW-FHA6-SA					16		
1	╀				22		
-	HR :				77	- ×	
	LG				23	-	
	+				24	- >	
1.5. Tist 130 130 130 130 132 133 139 129					25		
	×				26	GR -	
143 144 141 141 141 138	31 BB -				20	, 1	
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Terminal Color Of simul Name [Seconfication]	-				37	R -	
Wire	-				38	M	
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DCK SYSTEM									
-	Terminal	Terminal Color Of	Cinnel Mama [Considention]	22	BG	<ul> <li>[Without DRPO]</li> </ul>	Connector No.	o. M34	_
-	No.	Wire		22	IJ	<ul> <li>[With DRPO]</li> </ul>	Connector Name		_
'		SB	AV COMM (L)	23	-	1	Connector		_
1	4	8	EARTH	24	Y	т	Connector Type	ype NH60MW-TS12	_
	5	8	EARTH	25	BG	<ul> <li>[Without DRPO]</li> </ul>			
,	9	_	CAN-H	25	٦	<ul> <li>[With DRPO]</li> </ul>	۲ <sub>2</sub>		
1	7	>	KLINE	26	7	1			
,		M	IGN_SW	27	GR	1	.H.S.	80 M M M M	
'	=	ГG	AV COMM (H)	28	>	1		2 5 8 11 14 17 20 20 50 20 20 20 20 20 20 20 20 20 20 20 20 20	
,	12	œ	CAN-L	29	8			[69] [9]114233	
	13		CAN-H	30	w	-			
,	41	٩	CAN-L	31	в	1			
,	16	M	POWER	32	SB	,	Terminal Color Of		_
,				33	_	1	No.	Wire Signal Name [Specification]	_
,				18	BR		-	-	_
	Connector No.		M33	35	۲c		~		_
-				36	w		4	G = [With DRPO]	-
	Connector Name		WIRE TO WIRE	37	æ		4		-
	Connector Type	Γ	NH60MW-TS12	40	٩		s.		-
		1		41	. BS				-
'	-			43	>	,			-
'				44	. UB	,		-	-
'	HS	-18	81 22 62 24 55 56 23 23 23 24 24 56 49 25 55 55	46	BB	,	σ		-
,			4 7 10 13 18 19 22 25 28 28 28 28 28 28 28 28 28 28 28 28 28	47	i c		ç	-	-
,			4 0 0 10 10 10 0 0 0 0 0 1 1 2 V	49	, >		2 =	-	-
				20			. 5		_
				52	H		14	- M	-
,	Terminal	Terminal Color Of	- - - - - - - - - - - - - - - - - - -	53			16	۰ ت	_
-	No	Wire	Signal Name [Specification]	55	BG		1		_
,	2	Μ	,	56	ΓC	1	18	- M	_
,	4	9	<ul> <li>[With DRPO]</li> </ul>	57	^	1	19		_
	4	BS	<ul> <li>[Without DRPO]</li> </ul>	58	в	1	20	SB – [With DRPO]	_
	5	5		59	J	1	20	Y – [Without DRPO]	_
	9	¥	1	60	L	1	21	SHIELD -	_
M25	7	a	1	61	0	1	22		_
DATA LINIK CONNECTOR	8	GR	1	62	я	1	23	BG – [Without DRPO]	_
	6	GR	-	63	>	-	23	P – [With DRPO]	_
BD16FW	10	M		64	в		24	- 5	_
	11	SHIELD	1	65	В	1	25	- 57	_
	12	Ч	1	99	BR	1	26	BG – [Without DRPO]	_
	13	SB	1	68	٩	1	26	BR – [With DRPO]	_
11 12 13 14 16	14	LG	-	69	>	-	27	R -	_
	15	>	1	70	w	-	28		_
3 4 5 6 7 8	16	Y	-	71	LG		29	BG – [Without DRPO]	_

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H.S.



DOOR LOCK

16         V         AIR BAG SIGNAL           17         BIR         METERE CONTECLE CONTICUE CONTICUE           18         SIE         TRIP/TRESET SIGNAL           21         B         STEEPING SWITCH SIGNAL           22         P         STEEPING SWITCH SIGNAL           23         P         STEEPING SWITCH SIGNAL           24         PSTERING SWITCH SIGNAL         STERING SWITCH SIGNAL           26         U         PRAME BACK SWITCH SIGNAL           27         Q         PRAME BACK SWITCH SIGNAL           28         LG         BRAME FLUE LEWITCH SIGNAL           29         LG         PRAME BACK SWITCH SIGNAL           28         SET BELI BOUL SWITCH SIGNAL         SWITCH SIGNAL           29         SG         MANUAL MODE SHITT PROWING SIGNAL           31         G         MANUAL MODE SHITT PROWING SIGNAL           33         D         MANUAL MODE SHITT PROWING SIGNAL           34         B         MANUAL MODE SHITT PROWING SIGNAL           35         G         MANUAL MODE SHITT PROWING SIGNAL           36         MANUAL MODE SHITT PROWING SIGNAL           37         G         MANUAL MODE SHITT PROWING SIGNAL           38         L         LULUMMANTON CONTROL	Image: constraint of the state of
57         GA         -           59         GA         -           50         SB         -           50         SB         -           61         W(B)         -           61         W(B)         -           61         V         -           61         V         -           61         LG         -           73         LG         -           73         LG         -           73         LG         -           73         R         -           74	Connector No.         M57           Connector Name         CMBINATION METER           Marchine         CMBINATION METER           None         Connector Name           None         Connector Name           None         CB
	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
Mont Lock SYSTEM       Size     C       Size     Size       Size     Size       Size     Size       Size     Size       Size     Size	a       a       b       b       b       b         b       a       b       b       b       b         b       b       b       b       b       b         b       b       b       b       b       b         b       b       b       b       b       b         b       b       b       b       b       b         b       b       b       b       b       b         b       b       b       b       b       b         b       b       b       b       b       b         b       b       b       b       b       b         b       b       b       b       b       b         b       b       b       b       b       b         b       b       b       b       b       b         b       b       b       b       b       b         b       b       b       b       b       b         b       b       b       b       b       b         b       b       b       b       b

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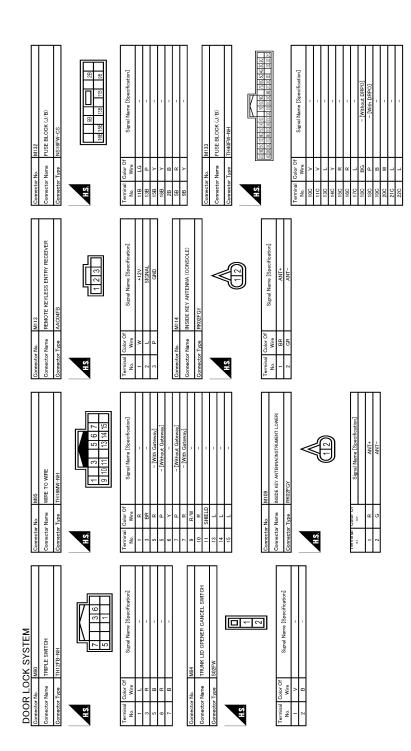
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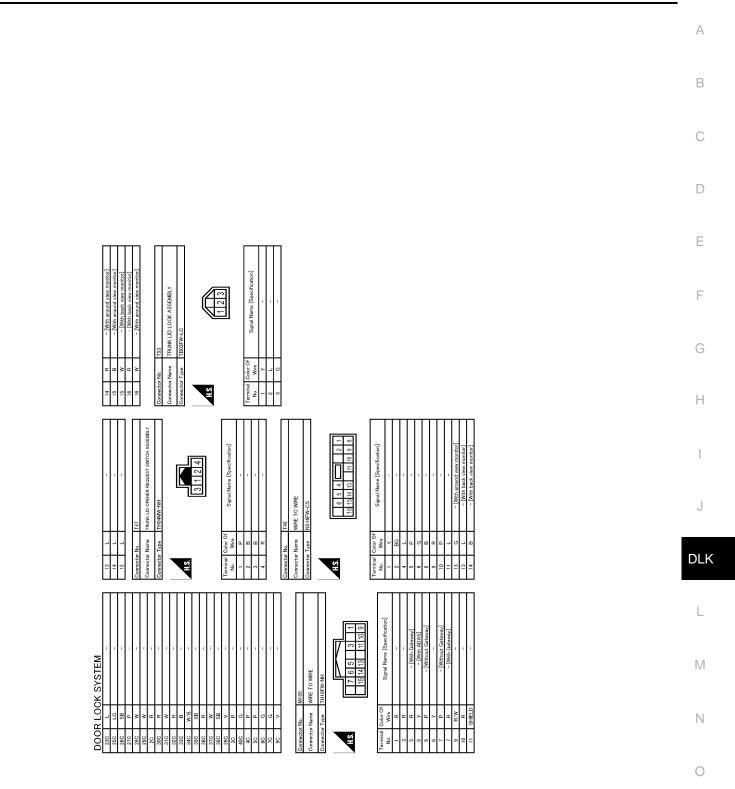
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# DOOR & LOCK SYSTEM

< WIRING DIAGRAM >



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JRKWC4315GB

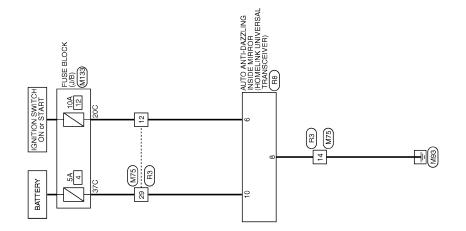
# INTEGRATED HOMELINK TRANSMITTER SYSTEM

< WIRING DIAGRAM >

# INTEGRATED HOMELINK TRANSMITTER SYSTEM

# Wiring Diagram

INFOID:000000009685997



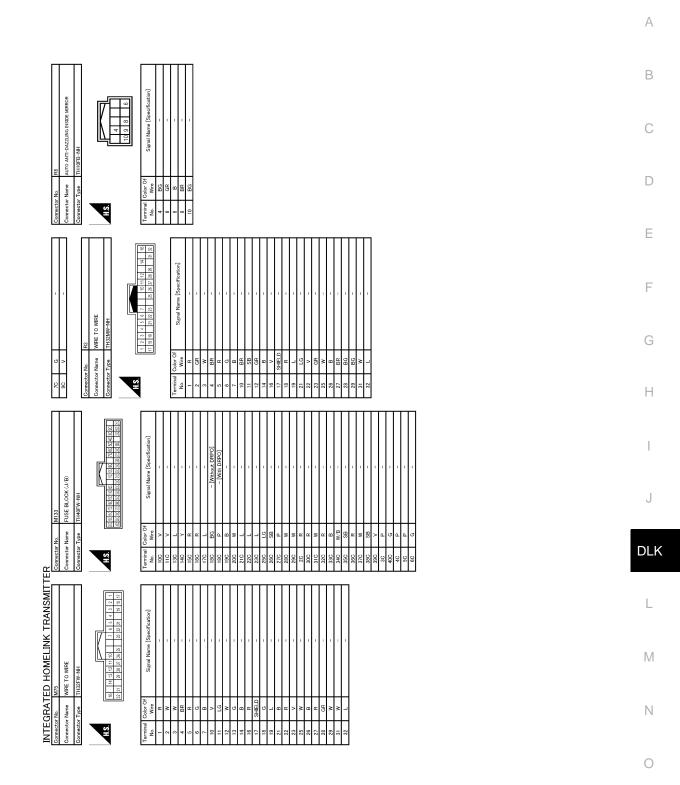
INTEGRATED HOMELINK TRANSMITTER

2013/05/17

JRKWC4316GB

## INTEGRATED HOMELINK TRANSMITTER SYSTEM

< WIRING DIAGRAM >



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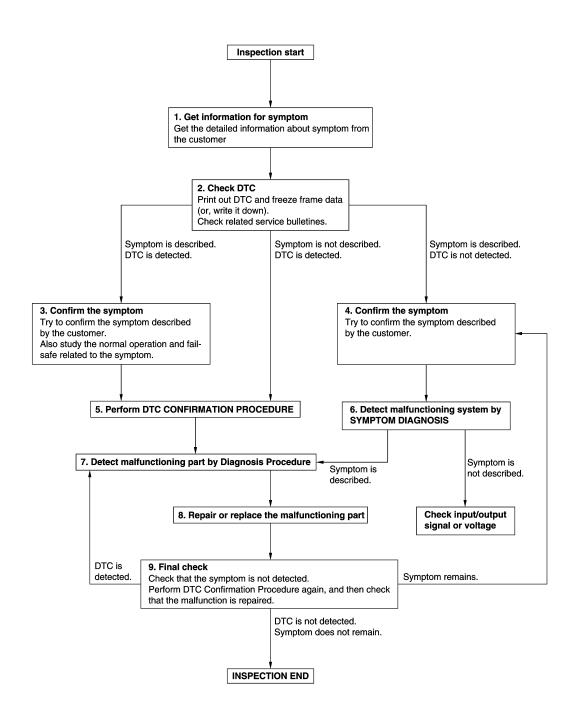
< BASIC INSPECTION >

## BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000009238084

**OVERALL SEQUENCE** 



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DETAILED FLOW

#### < BASIC INSPECTION >

1.GET INFORMATION FOR SYMPTOM
1. Get detailed information from the customer about the symptom (the condition and the environment when
<ul><li>the incident/malfunction occurs).</li><li>Check operation condition of the function that is malfunctioning.</li></ul>
>> GO TO 2.
2.снеск дтс
<ol> <li>Check DTC.</li> <li>Perform the following procedure if DTC is detected.</li> </ol>
<ul> <li>Record DTC and freeze frame data (print them out using CONSULT).</li> </ul>
- Erase DTC.
<ul> <li>Study the relationship between the cause detected by DTC and the symptom described by the customer.</li> <li>Check related service bulletins for information.</li> </ul>
Are any symptoms described or any DTC detected?
Symptom is described, DTC is displayed>>GO TO 3.
Symptom is described, DTC is not displayed>>GO TO 4. Symptom is not described, DTC is displayed>>GO TO 5.
3. CONFIRM THE SYMPTOM
Confirm the symptom described by the customer.
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.
venty 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 diagnostic results in real time.
If two or more DTCs are detected, refer to <u>BCS-61, "DTC Inspection Priority Chart"</u> (BCM), and determine trouble diagnosis order.
NOTE:
<ul> <li>Freeze frame data is useful if the DTC is not detected.</li> <li>Perform Component Function Check if DTC CONFIRMATION PROCEDURE is not included on Service</li> </ul>
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 >> Refer to <u>GI-43, "Intermittent Incident"</u> .
6. DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS
Detect malfunctioning system according to SYMPTOM DIAGNOSIS based on the confirmed symptom in step
4, and determine the trouble diagnosis order based on possible causes and symptom.
IS the symptom described?
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 >

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.

NO >> Check according to <u>GI-43, "Intermittent Incident"</u>.

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 9.

#### **9.**FINAL CHECK

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

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

Is DTC detected and does symptom remain?

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

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

# DTC/CIRCUIT DIAGNOSIS B259B ONE TOUCH UNLOCK SENSOR

### **DTC Description**

### DTC DETECTION LOGIC

_						С
	DTC No.	CONSULT screen items (Tro ble diagnosis content)	ou-	DTC detecting condition	n	
_	B259B	DR TOUCH SENSOR (Driver touch sensor)		When the BCM detects the open circuit of the c (driver door)	ne touch unlock sensor	D
• C • F		k sensor (driver door)	se	ensor (driver door) circuit is open or shor	ted]	E
FA	IL-SAFE					F
		ATION PROCEDURE C CONFIRMATION PRO	CE	DURE		G
	DTC detected?	witch ON. iagnostic Result" mode c to DLK-77, "Diagnosis P		-		Η
N	O-1 >> To che		n be	efore repair: Refer to <u>GI-43, "Intermittent</u>	Incident".	I
Dia	agnosis Pro	cedure			INFOID:000000009643811	1
1.	CHECK ONE T	OUCH UNLOCK SENS	DR	INPUT SIGNAL		0
1. 2. 3.		ont one touch unlock sen		assembly (driver side) connector. unlock sensor assembly (driver side)	harness connector and	DL
-		(+)				
_	Front one touch u	nlock sensor assembly (driver	side	ə) (-)	Voltage	M
_	Connector	- Terminal				IVI
_	D10	2		Ground	9 – 16 V	
YI N	CHECK ONE T	O 3. O 2. OUCH UNLOCK SENS CM connector. uity between BCM harne		CIRCUIT connector and front one touch unlock s	sensor assembly (driver	N O P
		BCM		Front one touch unlock sensor assembly (driver side)	Continuity	

BCM		Front one touch unlock sig	Continuity	
 Connector	Terminal	Connector	Terminal	
 M13	15	D10	2	Existed
-	-			

3. Check continuity between BCM harness connector and ground.

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INFOID:000000009643810

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### **B259B ONE TOUCH UNLOCK SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

BC	Μ		Continuity
Connector	Terminal	Ground	Continuity
M13	15	*	Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

NO >> Repair or replace harness.

## **3.**CHECK ONE TOUCH UNLOCK SENSOR GROUND CIRCUIT

Check continuity between front one touch unlock sensor assembly (driver side) harness connector and ground.

Front one touch unlock sens	or assembly (driver side)		Continuity
Connector	Terminal	Ground	Continuity
D10	3	*	Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

**4.**CHECK ONE TOUCH UNLOCK SENSOR

1. Connect front one touch unlock sensor assembly (driver side) connector.

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

(+) BCM		()	Con	dition	Signal (Reference value)
Connector	Terminal				()
M13	15	Ground	Driver door out- side handle grip (backside)	Touch	(V) 15 10 5 0 10 ms JSMIA1404GB
				Other than the above	9 – 16 V

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace front door outside handle grip LH.

**5.**CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

#### **B259C ONE TOUCH UNLOCK SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

## **B259C ONE TOUCH UNLOCK SENSOR**

### **DTC** Description

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#### INFOID:000000009643887 DTC DETECTION LOGIC В CONSULT screen items (Trou-DTC No. DTC detecting condition ble diagnosis content) PASS TOUCH SENSOR When the BCM detects the open circuit of the one touch unlock sensor B259C (Passenger touch sensor) (passenger door) D POSSIBLE CAUSE One touch unlock sensor (passenger door) Harness or connectors [one touch unlock sensor (passenger door) circuit is open or shorted] Ε BCM FAIL-SAFE F DTC CONFIRMATION PROCEDURE **1.**PERFORM DTC CONFIRMATION PROCEDURE 1. Turn ignition switch ON. Check "Self Diagnostic Result" mode of "BCM" using CONSULT. 2. Is DTC detected? Н YES >> Refer to DLK-79, "Diagnosis Procedure". >> To check malfunction symptom before repair: Refer to GI-43, "Intermittent Incident". NO-1 NO-2 >> Confirmation after repair: INSPECTION END Diagnosis Procedure INFOID:000000009643888 1. CHECK ONE TOUCH UNLOCK SENSOR INPUT SIGNAL 1. Turn ignition switch OFF. Disconnect front one touch unlock sensor assembly (passenger side) connector. 2. 3. Check voltage between front one touch unlock sensor assembly (passenger side) harness connector and DLK ground. (+)L Front one touch unlock sensor assembly (passenger (-) Voltage side) Connector Terminal M D22 2 Ground 9 – 16 V Is the inspection result normal? YES >> GO TO 3. Ν NO >> GO TO 2. 2.CHECK ONE TOUCH UNLOCK SENSOR CIRCUIT Disconnect BCM connector. 1.

Check continuity between BCM harness connector and front one touch unlock sensor assembly (passen-2. ger side) harness connector.

BC	BCM		Front one touch unlock sensor assembly (pas- senger side)		
Connector	Terminal	Connector	Terminal		
M13	16	D22	2	Existed	

Check continuity between BCM harness connector and ground. 3.

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### **B259C ONE TOUCH UNLOCK SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

BC	Μ		Continuity	
Connector	Terminal	Ground	Continuity	
M13	16		Not existed	

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

NO >> Repair or replace harness.

## **3.**CHECK ONE TOUCH UNLOCK SENSOR GROUND CIRCUIT

Check continuity between front one touch unlock sensor assembly (passenger side) harness connector and ground.

Front one touch unlock sensor	assembly (passenger side)		Continuity
Connector	Terminal	Ground	Continuity
D22	3		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

**4.**CHECK ONE TOUCH UNLOCK SENSOR

1. Connect front one touch unlock sensor assembly (passenger side) connector.

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

(+) BCM		(-)	Con	dition	Signal (Reference value)
Connector	Terminal				(
M13	16	Ground	Passenger door outside handle grip (backside)	Touch	(V) 15 10 5 0 10 ms JSMIA1404GB
				Other than the above	9 – 16 V

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace front door outside handle grip RH.

**5.**CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

### **B2621 INSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

## **B2621 INSIDE ANTENNA**

## **DTC** Description

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В

#### INFOID:000000009238087

### DTC DETECTION LOGIC

	CONSULT screen items (Trou- ble diagnosis content)	DTC detecting condition
B2621	INSIDE ANTENNA (Inside antenna)	An excessive high or low voltage from inside key antenna (instrument low- er) is sent to BCM.
OSSIBLE CAU	SE	
	nna (instrument lower) nector [inside key antenna (ir	nstrument lower) circuit is open or shorted]
AIL-SAFE		
	ATION PROCEDURE	
	C CONFIRMATION PROCE	DURE
Select "INTEL	LIGENT KEY" of "BCM" usin	ng CONSULT.
	E ANT DIAGNOSIS" in "WO le key antenna ("INSIDE A	RK SUPPORT" mode. NT DIAGNOSIS") on "WORK SUPPORT" of "INTELLIGENT
Check BCM f		
YES >> Refer	nna DTC detected? to <u>DLK-81, "Diagnosis Proc</u> eck malfunction symptom be rmation after repair: INSPEC	fore repair: Refer to GI-43. "Intermittent Incident".
iagnosis Pro	·	INFOID:00000009238088
-	ceuure	
.CHECK INSID	E KEY ANTENNA INPUT SI	GNAL 1
Turn ignition s	E KEY ANTENNA INPUT SI	GNAL 1 nector and ground with oscilloscope.
Turn ignition s	E KEY ANTENNA INPUT SI	
Turn ignition s	E KEY ANTENNA INPUT SI	

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### **B2621 INSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

(-	+)				
BCM		()	Cor	ndition	Signal (Reference value)
Connector	Terminal				
	123		Ground Ignition switch ON and any door is open	When Intelligent Key is not in the antenna detec- tion area	(V) 60 40 20 0 0 1 s JSMIA1348GB
				When Intelligent Key is in the an- tenna detection area	(V) 60 40 20 0 1 s JSMIA1406GB
M16 -				When Intelligent Key is not in the antenna detec- tion area	(V) 60 20 0 0 1 s JSMIA1413GB
	124			When Intelligent Key is in the an- tenna detection area	(V) 60 40 0 0 1 s JSMIA1406GB

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

NO >> GO TO 2.

## 2. CHECK INSIDE KEY ANTENNA CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect BCM connector and inside key antenna (instrument lower) connector.

3. Check continuity between BCM harness connector and inside key antenna (instrument lower) harness connector.

E	CM	Inside key antenna	Inside key antenna (instrument lower)		
Connector	Terminal	Connector	Terminal	Continuity	
M16	123	M109	1	Existed	
INI I O	124	10109	2	Existed	

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

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M16	123	Giouna	Not existed
IN TO	124		NOL EXISTED

### **B2621 INSIDE ANTENNA**

< DTC/CIRCUIT DIAGNOSIS >

onnect	inside key a BCM conne	Intenna (instr	de key antenna	New antenna or othe (instrument lower) of nd ground with osci	connector.
(	+)				Simol
B	СМ	(-)	Co	ndition	Signal (Reference value)
onnector	Terminal				· · ·
	123			When Intelligent Key is not in the antenna detec- tion area	(V) 60 40 20 0 1 s JSMIA1348GB
Mic		Ignition switch	When Intelligent Key is in the an- tenna detection area	(V) 60 40 20 0 1 s JSMIA1406GB	
M16 -	124	Ground	Ignition switch ON and any door is open	When Intelligent Key is not in the antenna detec- tion area	(V) 60 40 20 0 1 5 JSMIA1413GB
	124			When Intelligent Key is in the an- tenna detection area	(V) 60 40 20 0 •► •

YES >> Replace inside key antenna (instrument lower).
 NO >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

#### < DTC/CIRCUIT DIAGNOSIS >

### B2622 INSIDE ANTENNA

#### **DTC** Description

INFOID:000000009617621

#### DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detecting condition
B2622	INSIDE ANTENNA (Inside antenna)	An excessive high or low voltage from inside key antenna (console) is sent to BCM

#### POSSIBLE CAUSE

BCM

Inside key antenna (console)

• Harness or connector [inside key antenna (console) circuit is open or shorted]

#### FAIL-SAFE

#### 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-84, "Diagnosis Procedure"</u>.
- NO-1 >> To check malfunction symptom before repair: Refer to GI-43, "Intermittent Incident".
- NO-2 >> Confirmation after repair: INSPECTION END

#### **Diagnosis** Procedure

INFOID:000000009617622

### 1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch ON.

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

### **B2622 INSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

B	СМ	()	Con	dition	Signal (Reference value)	
Connector	Terminal					
	116			When Intelli- gent Key is not in the antenna detection area	(V) 60 40 20 0 1 s JSMIA1348GB	
M16		- Ground	Ignition switch ON and any door is open		(V) 60 40 20 0 1 s JSMIA1406GB	
	128					When Intelli- gent Key is not in the antenna detection area
				When Intelli- gent Key is in the antenna detection area	(V) 60 40 20 0 1 s JSMIA1414GB	
6 >> Re >> GC	n result norma place BCM. R TO 2. IDE KEY ANT	efer to <u>BCS</u>		and Installation".		
Furn ignitio Disconnect	n switch OFF. BCM connect	tor and insic	le key antenna	(console) connec	tor. enna (console) harness connector	

В	СМ	Inside key ant	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M16	116	M114	1	Existed
IVI I O	128	11114	2	EXISTED

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

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M16	116	Ground	Not existed
WITO	128		NOL EXISIEU

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### **B2622 INSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

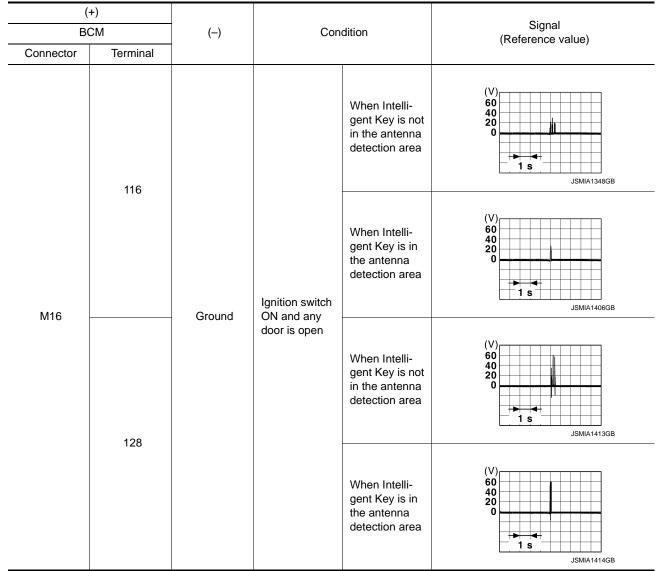
Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

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

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



Is the inspection result normal?

YES >> Replace inside key antenna (console).

NO >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

### **B2623 INSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

## **B2623 INSIDE ANTENNA**

## **DTC** Description

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INFOID:000000009617623

### DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detecting condition
B2623	INSIDE ANTENNA (Inside antenna)	An excessive high or low voltage from inside key antenna (trunk room) is sent to BCM
SSIBLE CAU	SE	
	nna (trunk room) nector [inside key antenna (ti	runk room) circuit is open or shorted]
IL-SAFE		
	ATION PROCEDURE	
	C CONFIRMATION PROCE	DURE
	LIGENT KEY" of "BCM" usi	
		ANT DIAGNOSIS") on "WORK SUPPORT" of "INTELLIGENT
	nna DTC detected?	
IO-1 >> To ch	to <u>DLK-87, "Diagnosis Proc</u> eck malfunction symptom be rmation after repair: INSPEC	efore repair: Refer to <u>GI-43, "Intermittent Incident"</u> .
agnosis Pro	•	INFOID:0000000961762
CHECK INSID	E KEY ANTENNA INPUT SI	GNAL 1
Turn ignition		
Check signal	between BCM harness conr	nector and ground using oscilloscope.

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### **B2623 INSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

(+	-)					
BC	M	(-)	Con	dition	Signal (Reference value)	
Connector	Terminal				· /	
	99			When Intelli- gent Key is not in the antenna detection area	(V) 60 20 0 1 s JSMIA1413GB	
			Ignition switch ON and any door is open	When Intelli- gent Key is in the antenna detection area	(V) 60 40 20 0 1 s JSMIA1414GB	
M15 –	100	Ground			When Intelli- gent Key is not in the antenna detection area	(V) 60 40 0 0 1 5 JSMIA1348GB
				When Intelli- gent Key is in the antenna detection area	(V) 60 40 20 0 1 s JSMIA1406GB	

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

NO >> GO TO 2.

## 2. CHECK INSIDE KEY ANTENNA CIRCUIT

1. Turn ignition switch OFF.

2. 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.

E	BCM	Inside key ante	nna (trunk room)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M15	99	B71	2	Existed
CTIVI	100		1	EXISTED

4. Check continuity between BCM harness connector and ground.

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M15	99	Ground	Not existed
IVI 15	100		NUL EXISTED

### **B2623 INSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

Replace ins Connect BC Turn ignitior	ide key ante M connector n switch ON.	nna (trunk ro r and inside k	key antenna (tru	enna or other anter unk room) connecto ground using oscil	or.
(+					Signal
BC		()	Con	dition	(Reference value)
Connector	Terminal				
	99			When Intelli- gent Key is not in the antenna detection area	(V) 60 40 0 0 1 s JSMIA1413GB
M15		Ground	Ignition switch	When Intelli- gent Key is in the antenna detection area	(V) 60 40 20 0 1 s JSMIA1414GB
MID -	100		Ground ON and any door is open		When Intelli- gent Key is not in the antenna detection area
	100		When Intelli- gent Key is in the antenna detection area	(V) 60 40 20 0 ••••••	

YES >> Replace inside key antenna (trunk room). NO >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

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#### < DTC/CIRCUIT DIAGNOSIS >

## B2626 OUTSIDE ANTENNA

### **DTC** Description

INFOID:000000009617625

#### DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detecting condition
B2626	OUTSIDE ANTENNA (Outside antenna)	An excessive high or low voltage from front door right outside key antenna is sent to BCM

#### POSSIBLE CAUSE

BCM

• Front door right outside key antenna

• Harness or connector (front door right outside key antenna circuit is open or shorted)

#### FAIL-SAFE

#### DTC CONFIRMATION PROCEDURE

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

1. Turn ignition switch ON.

2. Check "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

YES >> Refer to <u>DLK-90, "Diagnosis Procedure"</u>.

NO-1 >> To check malfunction symptom before repair: Refer to GI-43, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

#### **Diagnosis Procedure**

INFOID:000000009617626

### **1.**CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

Check signal between BCM harness connector and ground using oscilloscope.

(+	+)				
BCM		(—)	Condition		Signal (Reference value)
Connector	Terminal				(1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0
M16	114 115	Ground	When press- ing the front door request switch (pas- congor side)	When Intelli- gent Key is not in the antenna detection area	(V) 30 10 0 11 1 1 5 JSMIA1506GB
M16	114, 115	Ground	senger side) with all doors are locked and ignition switch OFF	When Intelli- gent Key is in the antenna detection area	(V) 30 20 10 0 <b>1</b> 1 s JSMIA1507GB

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

NO >> GO TO 2.

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

### **B2626 OUTSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

- 1. Turn ignition switch OFF.
- 2. Disconnect BCM connector and front one touch unlock sensor assembly (passenger side) connector.
- 3. Check continuity between BCM harness connector and front one touch unlock sensor assembly (passenger side) harness connector.

BCM		Front one to	Front one touch unlock sensor assembly (passen- ger side)		
Connector	Terminal	Conn	nector Terminal		
M16	114	114 D22		1	<b>-</b> · · · ·
IVI I O	115			4	Existed
Check continuity b	etween BCM harnes	ss connector	and groun	d.	
	BCM				Continuity
Connector	Term	inal	Ground		Continuity
M16	11	114		Ground	
WITO	11	5			Not existed
	<u>normal?</u> eplace harness. KEY ANTENNA INP	UT SIGNAL	2		
Connect BCM con	outside handle grip nector and front one een BCM harness c	touch unloc	k sensor as	ssembly (passenger s	ide) connector
(+)				Sia	nol

BC	+) CM Terminal	()	Condition		(–) Condition		Signal (Reference value)
M16	114, 115	Ground	When press- ing the front door request switch (pas- senger side) with all doors are locked and ignition switch OFF	When Intelli- gent Key is not in the antenna detection area When Intelli- gent Key is in the antenna detection area	J (V) 20 10 0 15 JSMIA1506GB M N N		

Is the inspection result normal?

YES >> Replace front door outside handle grip RH.

NO >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

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#### < DTC/CIRCUIT DIAGNOSIS >

### B2627 OUTSIDE ANTENNA

#### **DTC** Description

INFOID:000000009617627

#### DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detecting condition
B2627	OUTSIDE ANTENNA (Outside antenna)	An excessive high or low voltage from front door left outside key antenna is sent to BCM

#### POSSIBLE CAUSE

BCM

Front door left outside key antenna

• Harness or connector (front door left outside key antenna circuit is open or shorted)

#### FAIL-SAFE

#### DTC CONFIRMATION PROCEDURE

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

1. Turn ignition switch ON.

2. Check "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

YES >> Refer to <u>DLK-92, "Diagnosis Procedure"</u>.

NO-1 >> To check malfunction symptom before repair: Refer to GI-43, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

#### **Diagnosis Procedure**

INFOID:000000009617628

### **1.**CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

Check signal between BCM harness connector and ground using oscilloscope.

۲) (۱	+)					
BCM		(-)	Con	dition	Signal (Reference value)	
Connector	Terminal				(Reference value)	
M16	101 100	Ground	When press- ing the front door request switch (driver cide) with all	When Intelli- gent Key is not in the antenna detection area	(V) 30 20 10 0 <i>1</i> <i>1</i> <i>1</i> <i>1</i> <i>1</i> <i>1</i> <i>1</i> <i>1</i> <i>1</i> <i>1</i>	
M16	121, 122	Ground	side) with all doors are locked and ig- nition switch OFF	When Intelli- gent Key is in the antenna detection area	(V) 30 20 10 0 15 JSMIA1507GB	

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

NO >> GO TO 2.

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

### **B2627 OUTSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

- 1. Turn ignition switch OFF.
- 2. Disconnect BCM connector and front one touch unlock sensor assembly (driver side) connector.
- 3. Check continuity between BCM harness connector and front one touch unlock sensor assembly (driver side) harness connector.

BCM		Front o	ne touch unlock se side	ensor assembly (driver )	Continuity		
Conr	nector	Terminal	С	onnector	Terminal	-	
M	116	121		D10	4	Existed	
IV	M16 122			D10	1	- Existed	
Check c	ontinuity bet	ween BCM ha	arness connec	tor and ground	I.		
		BCM				Continuity	
С	onnector		Terminal		round	Continuity	
	M16		121	Gi		Not ovisted	
	M16		122			Not existed	
				v antenna or ot lock sensor as		) connector.	
Connect Check si	BCM conne	ector and front en BCM harne	t one touch un	lock sensor as	sembly (driver side ing oscilloscope.		
Connect Check si	BCM conne ignal betwee	ector and front	t one touch un ess connector	lock sensor as	sembly (driver side ing oscilloscope.	) connector. ignal nce value)	
Connect Check si	BCM conne ignal betwee	ector and front en BCM harne	t one touch un ess connector	lock sensor as and ground usi	sembly (driver side ing oscilloscope.	ignal	
Connect Check si (	BCM conne ignal betwee +) CM	ector and front en BCM harne	t one touch un ess connector	lock sensor as and ground usi	sembly (driver side ing oscilloscope.	ignal	

Is the inspection result normal?

YES >> Replace front door outside handle grip LH.

NO >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

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JSMIA1507GB

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#### < DTC/CIRCUIT DIAGNOSIS >

### B2628 OUTSIDE ANTENNA

### **DTC** Description

INFOID:000000009617629

#### DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detecting condition
B2628	OUTSIDE ANTENNA (Outside antenna)	An excessive high or low voltage from outside key antenna (rear bumper) is sent to BCM

#### POSSIBLE CAUSE

BCM

Outside key antenna (rear bumper)

• Harness or connector [outside key antenna (rear bumper) circuit is open or shorted]

#### FAIL-SAFE

#### DTC CONFIRMATION PROCEDURE

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

1. Turn ignition switch ON.

2. Check "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is outside key antenna DTC detected?

YES >> Refer to <u>DLK-94, "Diagnosis Procedure"</u>.

NO-1 >> To check malfunction symptom before repair: Refer to GI-43, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

#### Diagnosis Procedure

INFOID:000000009617630

### **1.**CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

Check signal between BCM harness connector and ground using oscilloscope.

(+ BC	СМ	()	(–) Cond		Signal (Reference value)
M15	Terminal	Ground	When press- ing the trunk lid opener re- quest switch	When Intelli- gent Key is not in the antenna detection area	(V) 60 40 0 0 1 5 JSMIA1504GB
WIG	101, 102	Cround	with all doors are locked and ignition switch OFF	When Intelli- gent Key is in the antenna detection area	(V) 60 40 0 0 1 5 JSMIA1505GB

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

NO >> GO TO 2.

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

### **B2628 OUTSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

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

В	CM	Outside key anter	nna (rear bumper)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M15	101	B96	2	Existed
WI15	102	D90	1	Existed
shook continuity b	etween BCM harness	connector and grou		
	BCM			
Connector	BCM Terminal		Cround	Continuity
Connector M15			Ground	Continuity Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

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

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

	+) CM	( )	Con	dition	Signal
Connector	Terminal	()	Condition		(Reference value)
M15	101, 102	Ground	When press- ing the trunk lid opener re- quest switch	When Intelli- gent Key is not in the antenna detection area	(V) 60 20 0 0 1 s JSMIA1504GB
WIG	101, 102	Cround	with all doors are locked and ignition switch OFF	When Intelli- gent Key is in the antenna detection area	$ \begin{array}{c} (V)\\ 60\\ 40\\ 20\\ 0\\ 1 s \end{array} $
					JSMIA1505GB

#### Is the inspection result normal?

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

NO >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

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### **B26FF REMOTE KEYLESS ENTRY RECEIVER**

#### < DTC/CIRCUIT DIAGNOSIS >

### B26FF REMOTE KEYLESS ENTRY RECEIVER

#### **DTC** Description

INFOID:000000009617631

#### DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detecting condition
B26FF	INTELLIGENT TUNER COMM ERROR (Intelligent tuner communication error)	Inactive communication between BCM and remote keyless entry receiver

#### POSSIBLE CAUSE

- Remote keyless entry receiver
- Harness or connector (remote keyless entry receiver circuit is open or shorted)
- BCM

#### FAIL-SAFE

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#### DTC CONFIRMATION PROCEDURE

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

1. Turn ignition switch ON.

2. Check "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is outside key antenna DTC detected?

YES >> Refer to <u>DLK-96, "Diagnosis Procedure"</u>.

NO-1 >> To check malfunction symptom before repair: Refer to GI-43, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

#### Diagnosis Procedure

INFOID:000000009617632

#### **1.**CHECK FUSE

Check that the following fuse is not fusing.

Signal name	Fuse No.
Power supply	17 (5 A)

#### Is the fuse fusing?

YES >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

NO >> GO TO 2.

## $2. \mathsf{CHECK} \ \mathsf{REMOTE} \ \mathsf{KEYLESS} \ \mathsf{ENTRY} \ \mathsf{RECEIVER} \ \mathsf{POWER} \ \mathsf{SUPPLY} \ \mathsf{CIRCUIT}$

1. Turn ignition switch OFF.

2. Disconnect remote keyless entry receiver connector.

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

(+) Remote keyless entry receiver			
		()	Voltage
Connector	Terminal		
M113	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

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

1. Disconnect BCM connector.

### **B26FF REMOTE KEYLESS ENTRY RECEIVER**

#### < DTC/CIRCUIT DIAGNOSIS >

-	BCM		Remote key	less entry receiver	Continuity
-	Connector	Terminal	Connector	Terminal	Continuity
-	M13	17	M113	3	Existed
	Check continuity betwee	en BCM harnes	s connector and gro	ound.	
	B	СМ			
-	Connector	Termi	nal	Ground	Continuity
-	M13	17			Not existed
s 1	he inspection result norm	al?			
	ES >> GO TO 4.				
	O >> Repair or replac	e harness.			
ł.	CHECK BCM SIGNAL				
1. 2.	Reconnect BCM connect Check voltage between		entry receiver harn	ess connector and c	round
••					
	(+)				
	Remote keyless entry	receiver	(—)	١	/oltage
	Connector	Terminal			
YN	M113 the inspection result norm ES >> GO TO 6. O >> GO TO 5. CHECK REMOTE KEXIS			9	– 16 V
Y N 5.	he inspection result norm ES >> GO TO 6.	al? ESS ENTRY RI	ECEIVER CIRCUIT		
Y N 5.	he inspection result norm ES >> GO TO 6. O >> GO TO 5. CHECK REMOTE KEYLE Disconnect BCM connect	al? ESS ENTRY RI	ECEIVER CIRCUIT		eceiver harness conne
Y N 5.	he inspection result norm ES >> GO TO 6. O >> GO TO 5. CHECK REMOTE KEYLE Disconnect BCM connec Check continuity betwee	al? ESS ENTRY RI	ECEIVER CIRCUIT	note keyless entry re	
Y N 5.	he inspection result norm ES >> GO TO 6. O >> GO TO 5. CHECK REMOTE KEYLE Disconnect BCM connec Check continuity betwee	al? ESS ENTRY RI ctor. en BCM harnes	ECEIVER CIRCUIT s connector and ren Remote key	note keyless entry re	eceiver harness conne
Y N D.	the inspection result norm ES >> GO TO 6. O >> GO TO 5. CHECK REMOTE KEYLE Disconnect BCM connect Check continuity between BCM Connector	al? ESS ENTRY RI ctor. en BCM harnes Terminal 119	ECEIVER CIRCUIT as connector and ren Remote key Connector M113	note keyless entry re less entry receiver Terminal 2	ceiver harness conne
Y N 5. 1. 2.	he inspection result norm ES >> GO TO 6. O >> GO TO 5. CHECK REMOTE KEYLE Disconnect BCM connect Check continuity between BCM Connector M16 Check continuity between	al? ESS ENTRY RI ctor. en BCM harnes Terminal 119 en BCM harnes	ECEIVER CIRCUIT as connector and ren Remote key Connector M113	note keyless entry re less entry receiver Terminal 2	ceiver harness conne
Y N 5. 1. 2.	he inspection result norm ES >> GO TO 6. O >> GO TO 5. CHECK REMOTE KEYLE Disconnect BCM connect Check continuity between BCM Connector M16 Check continuity between	al? ESS ENTRY RI ctor. en BCM harnes Terminal 119	ECEIVER CIRCUIT ss connector and ren Remote key Connector M113 ss connector and gro	note keyless entry re less entry receiver Terminal 2	ceiver harness conne
Y N 5. 1. 2.	the inspection result norm ES >> GO TO 6. O >> GO TO 5. CHECK REMOTE KEYLE Disconnect BCM connect Check continuity between BCM Connector M16 Check continuity between BCM	al? ESS ENTRY RI ctor. en BCM harnes Terminal 119 en BCM harnes	ECEIVER CIRCUIT s connector and ren Remote key Connector M113 s connector and gro	note keyless entry re less entry receiver Terminal 2 pund.	ceiver harness conne Continuity Existed
Y N D	the inspection result norm ES >> GO TO 6. O >> GO TO 5. CHECK REMOTE KEYLE Disconnect BCM connect Check continuity between BCM Connector M16 Br Connector M16 Br Connector M16	al? ESS ENTRY RI ctor. en BCM harnes Terminal 119 en BCM harnes CM Termi 119	ECEIVER CIRCUIT s connector and ren Remote key Connector M113 s connector and gro	note keyless entry re less entry receiver Terminal 2 pund.	ceiver harness conne Continuity Existed Continuity
Y N 5 1. 2. 3.	the inspection result norm ES >> GO TO 6. O >> GO TO 5. CHECK REMOTE KEYLE Disconnect BCM connect Check continuity betwee BCM Connector M16 Check continuity betwee BCM Connector M16 the inspection result norm ES >> Replace BCM. F	al? ESS ENTRY RI ctor. en BCM harnes Terminal 119 en BCM harnes CM CM Termi 119 al? Refer to <u>BCS-9</u>	ECEIVER CIRCUIT s connector and ren Remote key Connector M113 s connector and gro	note keyless entry re less entry receiver Terminal 2 pund. Ground	ceiver harness conne Continuity Existed Continuity
Y N 5 1. 2. 3. 1. 2. 3.	the inspection result norm ES >> GO TO 6. O >> GO TO 5. CHECK REMOTE KEYLE Disconnect BCM connect Check continuity between BCM Connector M16 Check continuity between BCM Connector M16 Check continuity between BCM Connector M16 Check continuity between BCM Connector M16 Check continuity between BCM Connector M16 Connector M16	Al? Al? Also ESSENTRY RI Ctor. An BCM harnes Terminal 119 An BCM harnes CM Termi 119 Also ESSENTRY RI Terminal 119 CM CM Termi 119 CM CM CM CM CM CM CM CM CM CM	ECEIVER CIRCUIT s connector and ren Remote key Connector M113 s connector and gro nal 9	note keyless entry re less entry receiver Terminal 2 pund. Ground	ceiver harness conne Continuity Existed Continuity

### **B26FF REMOTE KEYLESS ENTRY RECEIVER**

#### < DTC/CIRCUIT DIAGNOSIS >

(+ Remote keyle ceiv	ess entry re-	()	Condition		Signal (Reference value)
Connector	Terminal				
M113	2	Ground	Ignition switch ON	Waiting When operating either button on the Intelligent Key	(V) 15 10 5 0 200 ms JMMIA1409GB (V) 15 10 5 0 0 0 0 0 0 0 0 0 0 0 0 0
					200 ms JMMIA1410GB

Is the inspection result normal?

YES >> GO TO 7.

NO >> Replace remote keyless entry receiver.

7. CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

< DTC/CIRCUIT DIAGNOSIS >	
COMBINATION METER BUZZER	А
Component Function Check	~
1.CHECK FUNCTION	В
<ol> <li>Select "INTELLIGENT KEY" of "BCM" using CONSULT.</li> <li>Select "INSIDE BUZZER" in "ACTIVE TEST" mode.</li> <li>Touch "Key", "Knob" or "Take Out" to check that it works normally.</li> <li><u>Is the inspection result normal?</u></li> </ol>	С
Yes >> Combination meter buzzer is OK. No >> Refer to <u>DLK-99, "Diagnosis Procedure"</u> .	D
Diagnosis Procedure	
1.CHECK METER BUZZER CIRCUIT	Е
Refer to WCS-53, "Component Function Check".	
<u>Is the inspection result normal?</u> Yes >> GO TO 2.	F
No >> Repair or replace harness. 2.CHECK INTERMITTENT INCIDENT	G
Refer to GI-43, "Intermittent Incident".	
>> INSPECTION END	Η

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#### < DTC/CIRCUIT DIAGNOSIS >

### DOOR KEY CYLINDER SWITCH

### Component Function Check

INFOID:000000009621976

### 1.CHECK FUNCTION

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

Monitor item	Cor	Status	
KEY CYL LK-SW		Lock	ON
	- Driver side door key cylinder	Neutral / Unlock	OFF
KEY CYL UN-SW		Unlock	ON
REFUTE ON-SW		Neutral / Lock	OFF

#### Is the inspection result normal?

- YES >> Door key cylinder switch is OK.
- NO >> Refer to DLK-100. "Diagnosis Procedure".

#### **Diagnosis Procedure**

INFOID:000000009621977

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

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

	(+)	(-)	Voltage	
Front door lock as	sembly (driver side)			
Connector	Connector Terminal			
D1	1 5 Ground		4 – 6 V	
	6	Ground	4 - 0 V	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK DOOR KEY CYLINDER SWITCH SIGNAL CIRCUIT

1. Disconnect power window main switch connector.

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

Power wind	Power window main switch Front door lock		sembly (driver side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
D8	15	D1	6	Existed
Do	16		5	EXISIEU

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

Power windo	w main switch		Continuity
Connector	Terminal	Ground	Continuity
 D8	15		Not existed
00	16		NOT EXISTED

Is the inspection result normal?

YES >> Replace power window main switch. Refer to <u>PWC-79, "Removal and Installation"</u>.

#### **DLK-100**

### DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >							
NO >> Repair or replace harness.							
<b>3.</b> CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT							
Check continuity between front door lock assembly (driver side) harness connector and ground.							
Front door lock asse	• • •	-	Continuity				
Connector	Terminal	Ground	-				
D1	4		Existed				
Is the inspection result normal	?						
YES >> GO TO 4.							
NO >> Repair or replace							
4.CHECK DOOR KEY CYLIN	NDER SWITCH						
Refer to DLK-101, "Componer	nt Inspection".						
Is the inspection result normal	?						
YES >> GO TO 5.							
	r lock assembly (driver s	ide).					
5. CHECK INTERMITTENT IN	NCIDENT						
Refer to GI-43, "Intermittent In	<u>icident"</u> .						
>> INSPECTION EN	D						
Component Inspection			INFOID:000000009621978				
1. CHECK DOOR KEY CYLIN	NDER SWITCH						
<ol> <li>Turn ignition switch OFF.</li> <li>Disconnect front door lock</li> </ol>	assembly (driver side)						

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

Front door lock ass	embly (driver side)		•		
Term	ninal	Condi	lion	Continuity	
F			Unlock	Existed	DLK
5		Driver eide deer key eylinder	Neutral / Lock	Not existed	
ĉ	4	Driver side door key cylinder	Lock	Existed	
6			Neutral / Unlock	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

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

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< DTC/CIRCUIT DIAGNOSIS >

## DOOR LOCK ACTUATOR DRIVER SIDE

#### **DRIVER 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 <u>DLK-102, "DRIVER SIDE : Diagnosis Procedure"</u>.

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

INFOID:000000009617637

INFOID:000000009617636

### 1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

1. Turn ignition switch OFF.

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

Front door lo	+) ock assembly r side)	()	Condition		Voltage
Connector	Terminal				
D1	1	Ground	Door lock and unlock switch Lock Unlock		9 – 16 V
וט	2	Ground			9 – 16 v

Is the inspection result normal?

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

NO >> GO TO 2.

#### 2.CHECK DOOR LOCK ACTUATOR CIRCUIT

- 1. Disconnect BCM, front door lock assembly (passenger side) and fuel filler lid lock actuator connector.
- 2. Check continuity between BCM harness connector and front door lock assembly (driver side) harness connector.

BCM		Front door lock as	Continuity		
Connector	Terminal	Connector Terminal		Continuity	
M17	135	D1	1	Existed	
1117	137		2	LAISIEU	

3. Check continuity between BCM harness connector and ground.

B	CM		Continuity	
Connector	Terminal	Ground	Continuity	
 M17	135	Ground	Not existed	
M17	137		NUL EXISTED	

#### Is the inspection result normal?

YES >> GO TO 3.

- NO >> Repair or replace harness.
- **3.**CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.

2. Check voltage between BCM harness connector and ground.

### **DLK-102**

#### < DTC/CIRCUIT DIAGNOSIS >

(+)						
BCM		(–) Condition			Voltage	
Connector Terr	minal					
M17	35 37	Ground	Door lock and unlock switch -	Lock Unlock	9 – 16 V	
the inspection result	normal?					
	CM. Refer		loor lock actuator and fu "Removal and Installation		ictuator.	
ASSENGER SID	E : Com	ponent I	Function Check		INFOID:0000000961763	
	l					
. Select "DOOR LOO 2. Select "DOOR LOO 3. Touch "ALL LOCK"	CK" in "AC	TIVE TEST	ONSULT. " mode. eck that it works normally	у.		
s the inspection result		_				
YES >> Door lock a NO >> Refer to D			R SIDE : Diagnosis Proc	edure"		
PASSENGER SID			-			
	· ·				INFOID:00000000961763	
.CHECK DOOR LOO	CK ACTUA	tor input	Γ SIGNAL			
	oor lock as		ssenger side) connector ssembly (passenger side		ector and ground.	
(+)						
Front door lock as (passenger si	•	()	Conditior	ı	Voltage	
Connector	Terminal	-				
D28	1	Ground	Door lock and unlock switc	Unlock	9 – 16 V	
	2	Croana		Lock		
the inspection result						
YES >> Replace fro NO >> GO TO 2.	ont door lo	ck assembly	y (passenger side).			
<b>`</b>		TOR CIRCL	JIT			
CHECK DOOR LOC						
	ront door le	ock assemb	bly (driver side) and fuel s connector and front do		uator connector. bly (passenger side) har	

B	СМ	Front door lock asser	mbly (passenger side)	Continuity	0
 Connector	Terminal	Connector	Terminal	Continuity	
 M17	130	D28	1	Existed	
	135	D20	2	Existed	Р

3. Check continuity between BCM harness connector and ground.

#### < DTC/CIRCUIT DIAGNOSIS >

B	CM		Continuity	
Connector	Terminal	Ground	Continuity	
M17	130	Ground	Not existed	
M17	135		NOT EXISTED	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

**3.**CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.

2. Check voltage between BCM harness connector and ground.

(+)			Condition		Voltage	
BCM		()				
Connector	Terminal					
M17	130	Ground	Door lock and unlock switch	Unlock	9 – 16 V	
M17	135	Gibunu	Door lock and unlock switch	Lock		

#### Is the inspection result normal?

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

NO >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

#### REAR LH

### REAR LH : 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 <u>DLK-104</u>, "REAR LH : Diagnosis Procedure".

#### **REAR LH** : Diagnosis Procedure

1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+)			Condition		Voltage	
Rear door lock assembly LH		()				
Connector	Terminal					
D32	1	Ground	Door lock and unlock switch	Lock	9 – 16 V	
D37	2	Giouna		Unock		

#### Is the inspection result normal?

YES >> Replace rear door lock assembly LH.

### 2. CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM connector and rear door lock assembly RH connector.

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

### **DLK-104**

INFOID:000000009617641

INFOID:000000009617640

#### < DTC/CIRCUIT DIAGNOSIS >

-	BCM		F	Rear door lock assembly LH		Continuity
Connect	or	Terminal	Conr	nector	Terminal	Continuity
M17		132	<u>מ</u>	37	1	Existed
		133		2		Existed
. Check cont	nuity betwee	n BCM harnes	s connector	and ground		
	BC	M				Continuity
Conr	ector	Termir		Gr	ound	
М	17	132		Not exist		Not existed
		133				
the inspection		<u>ul?</u>				
YES >> GO NO >> Rep		harnoss				
CHECK BCN	air or replace					
	CM connector			od around		
Check volta	ige between i	3CM harness c	connector a	na grouna.		
(	+)					
-	СМ	()		Condition		Voltage
Connector	Terminal					
	132				Lock	
M17	133	Ground	Door lock an	d unlock switch	u Unlock	9 – 16 V
the inspection	result norma	12				
NO >> Rep EAR RH EAR RH : (	olace BCM. R Componer	I short of rear efer to <u>BCS-98</u> It Function	3, "Removal		<u>ition"</u> .	INFOID:00000000961764
.CHECK FUN	ICTION					
		"BCM" using C	CONSULT.			
. Select "DO		"ACTIVE TES" LL UNLK" to ch	T" mode.	works norma	ally.	
. Select "DO	LOCK" or "A	"ACTIVE TES" LL UNLK" to ch	T" mode.	works norma	ally.	
. Select "DO . Touch "ALL <u>s the inspection</u> YES >> Doo	LOCK" or "A result norma or lock actuate	"ACTIVE TES" LL UNLK" to ch al? or is OK.	T" mode. heck that it v		ally.	
. Select "DO . Touch "ALL <u>s the inspection</u> YES >> Doo	LOCK" or "A result norma or lock actuate	"ACTIVE TES LL UNLK" to cł <u>\l?</u>	T" mode. heck that it v		ally.	
. Select "DO . Touch "ALL <u>s the inspection</u> YES >> Doo	LOCK" or "A <u>result norma</u> or lock actuate er to <u>DLK-10</u>	"ACTIVE TES" LL UNLK" to ch <u>1?</u> or is OK. 5, "REAR RH :	T" mode. heck that it v		ally.	INFOID:00000000961764
Select "DO Touch "ALL the inspection YES >> Doo NO >> Ref	LOCK" or "A <u>result norma</u> or lock actuate er to <u>DLK-10</u> Diagnosis	"ACTIVE TES" LL UNLK" to ch <u>1?</u> or is OK. 5, "REAR RH :	T" mode. heck that it v Diagnosis I		ally.	INFOID:00000000961764
Select "DO Touch "ALL the inspection YES >> Doo NO >> Ref EAR RH : I CHECK DOO Turn ignition Disconnect	LOCK" or "A <u>n result norma</u> or lock actuate er to <u>DLK-10</u> <b>Diagnosis</b> DR LOCK AC n switch OFF. rear door loc	"ACTIVE TES" LL UNLK" to ch or is OK. 5. "REAR RH : Procedure TUATOR INPL	T" mode. heck that it v <u>Diagnosis I</u> IT SIGNAL I connector.	Procedure".	ally.	
Select "DO Touch "ALL the inspection YES >> Doo NO >> Ref EAR RH : CHECK DOO Turn ignition Disconnect Check volta	LOCK" or "A <u>n result norma</u> or lock actuate er to <u>DLK-10</u> <b>Diagnosis</b> DR LOCK AC n switch OFF. rear door loc	"ACTIVE TES" LL UNLK" to ch or is OK. 5. "REAR RH : Procedure TUATOR INPL	T" mode. heck that it v <u>Diagnosis I</u> IT SIGNAL I connector.	Procedure".	-	
Select "DO Touch "ALL the inspection YES >> Doo NO >> Ref EAR RH : I CHECK DOO Turn ignitio Disconnect Check volta	LOCK" or "A <u>result norma</u> or lock actuate er to <u>DLK-10</u> <b>Diagnosis</b> OR LOCK AC n switch OFF. rear door loc ge between r	"ACTIVE TES" LL UNLK" to ch or is OK. 5. "REAR RH : Procedure TUATOR INPL	T" mode. heck that it v <u>Diagnosis I</u> IT SIGNAL I connector.	Procedure".	onnector and gr	
Select "DO Touch "ALL the inspection YES >> Doo NO >> Ref EAR RH : I CHECK DOO Turn ignitio Disconnect Check volta	LOCK" or "A <u>n result norma</u> or lock actuate er to <u>DLK-10</u> <b>Diagnosis</b> DR LOCK AC n switch OFF. rear door loc ge between r	"ACTIVE TES LL UNLK" to ch <u>al?</u> or is OK. 5, "REAR RH : Procedure TUATOR INPL k assembly RH ear door lock a	T" mode. heck that it v <u>Diagnosis I</u> IT SIGNAL I connector.	<u>Procedure"</u> . H harness c	onnector and gr	ound.
Select "DO Touch "ALL the inspection YES >> Doo NO >> Ref EAR RH : CHECK DOO Turn ignition Disconnect Check volta	LOCK" or "A result norma or lock actuate er to <u>DLK-10</u> <b>Diagnosis</b> DR LOCK AC n switch OFF. rear door loc ge between r +) k assembly RH	"ACTIVE TES LL UNLK" to ch <u>al?</u> or is OK. 5, "REAR RH : Procedure TUATOR INPL k assembly RH ear door lock a	T" mode. heck that it v Diagnosis I IT SIGNAL I connector. assembly R	<u>Procedure"</u> . H harness c	onnector and gr	ound.

Is the inspection result normal?

< DTC/CIRCUIT DIAGNOSIS >

YES >> Replace rear door lock assembly RH.

NO >> GO TO 2.

2. CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM connector and rear door lock assembly LH connector.

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

E	BCM Rear door lock assembly RH			Continuity	
Connector	Terminal	Connector Terminal		Continuity	
M17	132	D46	2	Existed	
11117	133		1	LAISIEU	

3. Check continuity between BCM harness connector and ground.

B	CM		Continuity	
Connector	Terminal	Ground	Continuity	
M17	132		Not existed	
	133		NUL EXISTED	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

**3.**CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.

2. Check voltage between BCM harness connector and ground.

· · · · · · · · · · · · · · · · · · ·	+) CM	()	Condition		Voltage	
Connector	Terminal		Condition		ge	
M17	132	Ground	Door lock and unlock switch	Lock	9 – 16 V	
	133	Giouna	DOOLIDER AND UNIOCK SWITCH	Unlock	3 - 10 V	

Is the inspection result normal?

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

NO >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

#### DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

## DOOR LOCK AND UNLOCK SWITCH **DRIVER SIDE**

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

INFOID:000000009617644

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### 1.CHECK FUNCTION

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

Monitor item	Condition		Status	D
CDL LOCK SW		LOCK	ON	
CDE LOOK SW	Door lock and unlock switch	UNLOCK	OFF	
	(driver door)	LOCK	OFF	
CDL UNLOCK SW		UNLOCK	ON	
Is the inspection result norm	nal?			F
	unlock switch (driver door) 07. "DRIVER SIDE : Diagn			
DRIVER SIDE : Diagnosis Procedure				
1.CHECK POWER WINDO	OW MAIN SWITCH			Н
Does power window operate	peration using power wind	ow main switch.		
	66. "Diagnosis Procedure".			J
PASSENGER SIDE :	Component Function	n Check	INFOID:00000009617647	
1.CHECK FUNCTION				DL

Select "DOOR LOCK" of "BCM" using CONSULT.
 Select "CDL LOCK SW", "CDL UNLOCK SW" in "DATA MONITOR" mode.

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

Monitor item	Condition		Status	
CDL LOCK SW	Door lock and unlock switch (passenger door)	LOCK	ON	M
		UNLOCK	OFF	
CDL UNLOCK SW		LOCK	OFF	N
		UNLOCK	ON	
Is the inspection result norm	nal?			
	Inlock switch (passenger d 07, "PASSENGER SIDE : I			С
PASSENGER SIDE : Diagnosis Procedure			INFOID:00000009617648	P
1.CHECK POWER WINDO	W MAIN SWITCH			
<ol> <li>Turn ignition switch ON</li> <li>Check power window o</li> </ol>	peration using power wind	ow main switch.		
Does power window operate	•			

>> Refer to PWC-66, "Diagnosis Procedure". NO

#### DOOR LOCK AND UNLOCK SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

# $\overline{2}$ .check front power window switch (passenger side)

#### 1. Turn ignition switch ON.

2. Check power window operation using front power window switch (passenger side).

#### Does power window operate?

- >> Replace front power window switch (passenger side).
  >> Refer to <u>PWC-66, "Diagnosis Procedure"</u>. YES
- NO

### DOOR REQUEST SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

### DOOR REQUEST SWITCH

### Component Function Check

#### **1.**CHECK FUNCTION

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

Monitor item	Condition		Status	
REQ SW -DR	Driver eide deer request switch	Pressed	ON	D
REQ SVI -DR	Driver side door request switch	Released	OFF	
REQ SW -AS	Dessenger side deer request quitab	Pressed	ON	_
REQ SVV -AS	Passenger side door request switch	Released	OFF	

#### Is the inspection result normal?

- YES >> Front door request switch is OK.
- NO >> Refer to <u>DLK-109</u>, "Diagnosis Procedure".

#### **Diagnosis Procedure**

### 1.CHECK DOOR REQUEST SWITCH INPUT SIGNAL

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

	(+)				I
Front	Front outside handle assembly		(—)	Voltage	
Con	nector	Terminal			
Driver side	D5			9 – 16 V	J
Passenger side	D19	1	Ground	(V) 15 10 5 0 10 ms JPMIA0016GB	DLK

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect BCM connector.

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

	Fror	nt outside handle asse	embly	B	CM	Continuity	
	Connector		Terminal	Connector	Terminal	Continuity	Р
Driver s	side	D5	1	M14	71	Existed	•
Passen	nger side	D19	I	1114	72	Existed	

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

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INFOID:000000009617650

### DOOR REQUEST SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

Fro	nt outside handle asse	mbly		Continuity
Connector		Terminal	Ground	Continuity
Driver side	D5	1	Giouna	Not existed
Passenger side	D19	- I		NOT EXISTED

#### Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

NO >> Repair or replace harness.

# $\mathbf{3}$ .check door request switch ground circuit

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

	Front outside handle assemb		Continuity	
Connector		Terminal	Ground	Continuity
Driver side	D5	2	Giouna	Existed
Passenger side	D19			Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

**4.**CHECK DOOR REQUEST SWITCH

Refer to DLK-110, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace front door outside handle grip.

**5.**CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

#### >> INSPECTION END

#### Component Inspection

INFOID:000000009617652

### 1. CHECK DOOR REQUEST SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect malfunctioning front outside handle assembly connector.
- 3. Check continuity between malfunctioning front outside handle assembly terminals.

Front outside h	andle assembly	Con	Continuity		
Terminal		Condition		Continuity	
 1	2	Door request switch	Pressed	Existed	
 1	2	Door request switch	Released	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front outside handle grip.

# **DOOR SWITCH**

### **Component Function Check**

INFOID:000000009617653

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INFOID:000000009617654

### **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" 2. mode.
- Check that the function operates normally according to the following conditions. 3.

Monitor item		Condition		D
	Driver eide deer	Open	ON	
DOOR SW-DR	Driver side door	Closed	OFF	
	Deccencer side decr	Open	ON	E
DOOR SW-AS	Passenger side door	Closed	OFF	
	Rear door LH	Open	ON	F
DOOR SW-RL		Closed	OFF	
DOOR SW-RR	Rear door RH	Open	ON	
DOOR SW-RR		Closed	OFF	G

#### Is the inspection result normal?

- YES >> Door switch is OK.
- >> Refer to DLK-111, "Diagnosis Procedure". NO

#### **Diagnosis** Procedure

1. CHECK DOOR SWITCH INPUT SIGNAL

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

Door switch     (-)     (Reference value)       Connector     Terminal     (I)       Driver side     B42     3		(+)				
ConnectorTerminalDriver sideB423Passenger sideB703Rear LHB443Ground50		Door switch		()	Signal (Reference value)	
Passenger side B70 3 Rear LH B44 3 Ground Ground	Connec	ctor	Terminal			
Rear LH B44 3 Ground	Driver side	B42	3			
Rear LH B44 3 Ground 10 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Passenger side	B70	3			
	Rear LH	B44	3	Orregend	10	
JPMIA0011GB 11.8 V	lear RH	B78	3	Ground	10 ms JPMIA0011GB	

NO >> GO TO 2.

2. CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector.

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

### **DOOR SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

	Door switch		BC	Continuity		
Connector		Terminal	Connector	Terminal	Continuity	
Driver side	B42			96		
Passenger side	B70	2	M15	94	Eviated	
Rear LH	B44	3	C I IVI	82	- Existed	
Rear RH	B78			93		

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

	Door switch		Continuity	
Co	nnector	Terminal		Continuity
Driver side	B42		Ground	
Passenger side	B70	3	Ground	Not existed
Rear LH	B44	- J		NOT EXISTED
Rear RH	B78	1		

#### Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

NO >> Repair or replace harness.

### 3. CHECK DOOR SWITCH

#### Refer to DLK-112, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace malfunctioning door switch.

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

Refer to GI-43. "Intermittent Incident".

#### >> INSPECTION END

#### **Component Inspection**

### 1.CHECK DOOR SWITCH

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

Door switch Terminal			Condition		Continuity
					Continuity
Driver side				Pressed	Not existed
Driver side			-	Released	Existed
Description			-	Pressed	Not existed
Passenger side	3	Ground part of door	Door switch	Released	Existed
Rear LH Rear RH		switch	Door Switch	Pressed	Not existed
			-	Released	Existed
				Pressed	Not existed
			-	Released	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace malfunction door switch.

Revision: 2013 October

### **DLK-112**

< DTC/CIRCUIT DI							
FUEL FILLER			AIUK				
Component Fu	nction Ch	eck					INFOID:000000009238133
1.CHECK FUNCTI	ON						
	LOCK" in "AC (" or "ALL UN ult normal? er lid lock act	TIVE TEST" ILK" to check	mode. that it works	norma	ally.		
Diagnosis Proce	_	-					INFOID:000000009238134
1.CHECK FUEL FI							
<ol> <li>Turn ignition sw</li> <li>Disconnect fuel</li> <li>Check voltage b</li> </ol>	filler lid lock			ess co	nnector and gro	und.	
	(+) Fuel filler lid lock actuator (-)			Condit	ion	,	/oltage
Connector	Terminal	()		Condition		voltage	
B76	1	Ground	Door lock and unlock switch     Unlock		g	9 – 16 V	
NO >> GO TO 2.CHECK FUEL FI 1. Disconnect BCI connector. 2. Check continuity	LLER LID LC	lock assemb	oly (driver side				(passenger side) ss connector.
	BCM		Fuel	filler lid	lock actuator		
Connector		rminal	Connector		Terminal		Continuity
M17		135 137	B76		2		Existed
3. Check continuit	y between B	CM harness c	connector and	grou	nd.		
	BCM						
Connector		Terminal			Ground		ontinuity
M17		135 137		Ground		No	t existed
3. CHECK BCM OL	3. or replace ha JTPUT SIGN						
<ol> <li>Connect BCM c</li> <li>Check voltage b</li> </ol>		1 harness cor	nnector and g	round			

### FUEL FILLER LID LOCK ACTUATOR

#### < DTC/CIRCUIT DIAGNOSIS >

(+) BCM		()	Condition		Voltage	
Connector	Terminal		Contaition		·\$90	
M17	135	Ground	Door lock and unlock switch	Lock	9 – 16 V	
	137	Giouna	DOUT TOCK AND UTTOCK SWICH	Unlock	9 – 16 v	

Is the inspection result normal?

YES >> Check for internal short of front door lock actuators and fuel filler lid lock actuator.

NO >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

< DTC/CIRCUIT DIAGNOSIS >
HAZARD FUNCTION
Component Function Check
1.CHECK FUNCTION
<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-115, "Diagnosis Procedure"</u> .
Diagnosis Procedure
1. CHECK HAZARD OPERATION
Refer to EXL-30, "TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM : System Description".         Is the inspection result normal?         YES       >> GO TO 2.         NO       >> Refer to EXL-160, "Symptom Table".
2. CHECK INTERMITTENT INCIDENT
Refer to GI-43, "Intermittent Incident".
>> INSPECTION END

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### INFORMATION DISPLAY

**Diagnosis Procedure** 

INFOID:000000009617658

**1.**CHECK COMBINATION METER

Refer to MWI-62, "On Board Diagnosis Function".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

# INTELLIGENT KEY BATTERY

#### **Component Inspection**

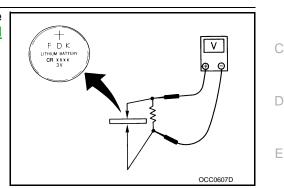
### **1.**CHECK INTELLIGENT KEY BATTERY

Check by connecting a resistance (approximately 300  $\Omega$ ) so that the current value becomes about 10 mA. Refer to <u>DLK-254</u>, "<u>Removal</u> and Installation".

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

Is the measurement value within the specification?

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



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#### Revision: 2013 October

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### INTELLIGENT KEY WARNING BUZZER

#### Component Function Check

#### **1.**CHECK FUNCTION

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "OUTSIDE BUZZER" in "ACTIVE TEST" mode.

3. Touch "On" or "Off" to check that it works normally.

#### Is the inspection result normal?

- YES >> Intelligent Key warning buzzer is OK.
- NO >> Refer to <u>DLK-118</u>, "Diagnosis Procedure".

#### **Diagnosis Procedure**

### 1.CHECK FUSE

1. Turn ignition switch OFF.

2. Check 5 A fuse, [No. 4, located in fuse block (J/B)].

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

#### 2.CHECK INTELLIGENT KEY WARNING BUZZER POWER SUPPLY CIRCUIT

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

(+) Intelligent Key warning buzzer		()	Voltage (Approx.)
Connector	Connector Terminal		
E45	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK INTELLIGENT KEY WARNING BUZZER CIRCUIT

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

BCM		Intelligent Key warning buzzer		Continuity
Connector Terminal		Connector	Terminal	Continuity
M14	64	E45	3	Existed

3. Check continuity between BCM harness connector and ground.

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M14	64		Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

#### **4.**CHECK INTELLIGENT KEY WARNING BUZZER

Refer to DLK-119, "Component Inspection".

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>DLK-252, "Removal and Installation"</u>.

NO >> Replace Intelligent Key warning buzzer.

#### **DLK-118**

INFOID:000000009617660

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### INTELLIGENT KEY WARNING BUZZER

### < DTC/CIRCUIT DIAGNOSIS >

### Component Inspection

INFOID:000000009617662

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# 1. CHECK INTELLIGENT KEY WARNING BUZZER

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

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

Is the inspection result normal?

#### YES >> INSPECTION END

NO >> Replace Intelligent Key warning buzzer.

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### POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

# POWER SUPPLY AND GROUND CIRCUIT FRONT DOOR LOCK

### FRONT DOOR LOCK : Diagnosis Procedure

**1.**CHECK FUSE AND FUSIBLE LINK

Check that the following fuse is not fusing.

Signal name	Fuse No.
Front door lock and fuel filler lid lock actuator power supply	33 (15 A)

#### Is the fuse fusing?

YES >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

NO >> GO TO 2.

# 2. CHECK POWER SUPPLY CIRCUIT

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

	(+) DOM		
BCM		(–)	Voltage
Connector	Terminal		
M17	142	Ground	9 – 16 V

#### Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

 ${f 3.}$ CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector	Terminal	Ground	Continuity
M17	134		Existed
	143		LAISIEU

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

### REAR DOOR LOCK

### **REAR DOOR LOCK : Diagnosis Procedure**

#### **1.**CHECK FUSE AND FUSIBLE LINK

Check that the following fuse is not fusing.

Signal name	Fuse No.
Rear door lock actuator power supply	30 (15 A)

#### Is the fuse fusing?

YES >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

NO	>> GO	TO 2.
----	-------	-------

### 2. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect BCM connector.

#### DLK-120

INFOID:000000009617664

### POWER SUPPLY AND GROUND CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

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

		5		А
(	+)			
BCM		(–)	Voltage	
Connector	Terminal			В
M17	138	Ground	9- 16 V	_

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

**3.**CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM			Orationity	E
Connector	Terminal	Ground	Continuity	
M17	134	Ground	Existed	
	143		Existed	Г

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

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# 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-122</u>, "Diagnosis Procedure".

### **Diagnosis Procedure**

INFOID:000000009640539

INFOID:00000009617665

### **1.**CHECK FUSE

Check that the following fuse is not fusing.

Signal name	Fuse No.
Power supply	17 (5 A)

#### Is the fuse fusing?

YES >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

NO >> GO TO 2.

# 2. CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

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

(	(+)		
Remote keyles	ss entry receiver	()	Voltage
Connector	Terminal	-	
M113	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

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

1. Disconnect BCM connector.

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

B	BCM		Remote keyless entry receiver	
Connector	Terminal	Connector	Terminal	Continuity
M13	17	M113	3	Existed

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

BC	CM		Continuity
Connector	Connector Terminal		Continuity
M13	17		Not existed

Is the inspection result normal?

YES >> GO TO 4.

# **REMOTE KEYLESS ENTRY RECEIVER**

DTC/CIRCL	JII DIAGNC	2010 >					
	• •	ace harness.					
	CM SIGNAL						
	ct BCM conn Itage betwee		s entry receiver	harness connect	or and grou	und.	
	(1)	_	-				
Bom	(+) ote keyless ent	ny roccivor	( )		Volta		
Conne	-	Terminal	()		Volta	ige	
M11		2	Ground		9 – 1	6 V	
	on result nor	mal?			-	-	
'ES >> G	O TO 6.						
	O TO 5.						
CHECK RE	MOTE KEY	LESS ENTRY R	ECEIVER CIRC	CUIT			
	ct BCM conn						
Check col	ntinuity betw	een BCIVI names	as connector an	a remote keyless	entry rece	iver harness connect	or.
	BCM		Remo	te keyless entry recei	iver	Continuity	
Conne	ctor	Terminal	Connecto	or Ter	minal	Continuity	
M1	6	119	M113		2	Existed	
Check co	ntinuity betw	een BCM harnes	ss connector an	d ground.			
		BCM					
Co	nnector	BCM Term	inal	Ground		Continuity	
	nnector M16			Ground		Continuity Not existed	
the inspection	M16 on result nor	Term 119 <u>mal?</u>	9			-	
the inspection ES >> R	<sup>M16</sup> on result nor eplace BCM	Term 119 <u>mal?</u> . Refer to <u>BCS-9</u>	9			-	
the inspecti ES >> R IO >> R	<sup>M16</sup> on result nor eplace BCM epair or repla	Term 111 <u>mal?</u> . Refer to <u>BCS-9</u> ace harness.	9 8, "Removal an	d Installation".		-	
the inspection ES >> Revealed to the second	<sup>M16</sup> on result nor eplace BCM epair or repla EMOTE KEY	Term 111 <u>mal?</u> . Refer to <u>BCS-9</u> ace harness. LESS ENTRY R	9 8, "Removal an ECEIVER SIGN	d Installation".		-	
the inspection (ES >> Re IO >> Ro CHECK RE Reconnect	M16 on result nor eplace BCM epair or repla EMOTE KEY ct remote key	Term 111 <u>mal?</u> . Refer to <u>BCS-9</u> ace harness. LESS ENTRY R /less entry receiv	9 8, "Removal an ECEIVER SIGN /er connector.	d Installation". IAL	r and grour	-	<b> </b>
the inspection (ES >> Re IO >> Re CHECK RE Reconnect Check sig	M16 on result nor eplace BCM epair or repla EMOTE KEY tremote key nal between	Term 111 <u>mal?</u> . Refer to <u>BCS-9</u> ace harness. LESS ENTRY R /less entry receiv	9 8, "Removal an ECEIVER SIGN /er connector.	d Installation". IAL	r and grour	Not existed	 
the inspection ES >> Re IO >> Re CHECK RE Reconned Check sig	M16 on result nor eplace BCM epair or repla EMOTE KEY ot remote key nal between	Term 111 <u>mal?</u> . Refer to <u>BCS-9</u> ace harness. LESS ENTRY R /less entry receiv remote keyless	8, "Removal an ECEIVER SIGN ver connector. entry receiver h	<u>d Installation"</u> . IAL harness connecto	r and grour	Not existed	[ [
the inspection (ES >> Reconnection) CHECK RECT Reconnection Check sig	M16 on result nor eplace BCM epair or repla EMOTE KEY tremote key nal between	Term 111 <u>mal?</u> . Refer to <u>BCS-9</u> ace harness. LESS ENTRY R /less entry receiv	8, "Removal an ECEIVER SIGN ver connector. entry receiver h	d Installation". IAL	_	Not existed	
the inspection (ES >> Reconnection) CHECK RECT Reconnection Check sig	M16 on result nor eplace BCM epair or repla EMOTE KEY ot remote key nal between (+) /less entry re-	Term 111 <u>mal?</u> . Refer to <u>BCS-9</u> ace harness. LESS ENTRY R /less entry receiv remote keyless	8, "Removal an ECEIVER SIGN ver connector. entry receiver h	<u>d Installation"</u> . IAL harness connecto	_	Not existed	<b> </b>
the inspection ES >> Reise Reise Reconnect CHECK RE Reconnect Check sig	M16 on result nor eplace BCM epair or repla EMOTE KEY tremote key nal between (+) /less entry re- eiver	Term 111 <u>mal?</u> . Refer to <u>BCS-9</u> ace harness. LESS ENTRY R /less entry receiv remote keyless	8, "Removal an ECEIVER SIGN ver connector. entry receiver h	<u>d Installation"</u> . IAL harness connecto	(R	Not existed	
the inspection ES >> Reise Reise Reconnect CHECK RE Reconnect Check sig	M16 on result nor eplace BCM epair or repla EMOTE KEY tremote key nal between (+) /less entry re- eiver	Term 111 <u>mal?</u> . Refer to <u>BCS-9</u> ace harness. LESS ENTRY R /less entry receiv remote keyless	8, "Removal an ECEIVER SIGN ver connector. entry receiver h	<u>d Installation"</u> . IAL harness connecto	(R (V)	Not existed	
the inspection ES >> Reise Reise Reconnect CHECK RE Reconnect Check sig	M16 on result nor eplace BCM epair or repla EMOTE KEY tremote key nal between (+) /less entry re- eiver	Term 111 <u>mal?</u> . Refer to <u>BCS-9</u> ace harness. LESS ENTRY R /less entry receiv remote keyless	8, "Removal an ECEIVER SIGN ver connector. entry receiver h	d Installation". IAL narness connecto	(V) 15 10 5	Not existed	 
the inspection ES >> Reise Reise Reconnect CHECK RE Reconnect Check sig	M16 on result nor eplace BCM epair or repla EMOTE KEY tremote key nal between (+) /less entry re- eiver	Term 111 <u>mal?</u> . Refer to <u>BCS-9</u> ace harness. LESS ENTRY R /less entry receiv remote keyless	8, "Removal an ECEIVER SIGN ver connector. entry receiver h	<u>d Installation"</u> . IAL harness connecto	(V) 15 10 5 0	Not existed	
the inspection ES >> Reise Reise Reconnect CHECK RE Reconnect Check sig	M16 on result nor eplace BCM epair or repla EMOTE KEY tremote key nal between (+) /less entry re- eiver	Term 111 <u>mal?</u> . Refer to <u>BCS-9</u> ace harness. LESS ENTRY R /less entry receiv remote keyless	9 8, "Removal an ECEIVER SIGN ver connector. entry receiver h Cor	d Installation". IAL narness connecto	(R (V) 15 10 5 0	Not existed	 
the inspection ES >> Reise Reise Reconnect CHECK RE Reconnect Check sig	M16 on result nor eplace BCM epair or repla EMOTE KEY tremote key nal between (+) /less entry re- eiver	Term 111 <u>mal?</u> . Refer to <u>BCS-9</u> ace harness. LESS ENTRY R /less entry receiv remote keyless	9 8, "Removal an ECEIVER SIGN /er connector. entry receiver h Cor	d Installation". IAL narness connecto	(R (V) 15 10 5 0	Not existed	[
the inspection ES >> Reconnection CHECK RE Reconnection Check sig	M16 on result nor eplace BCM epair or repla EMOTE KEY tremote key nal between (+) /less entry re- eiver Terminal	Term 111 mal? . Refer to <u>BCS-9</u> ace harness. LESS ENTRY R /less entry receiv remote keyless	9 8, "Removal an ECEIVER SIGN ver connector. entry receiver h Cor	d Installation". IAL narness connecto	(R (V) 15 10 5 0 20	Not existed	
the inspection ES >> Reconnection CHECK RE Reconnection Check sig	M16 on result nor eplace BCM epair or repla EMOTE KEY tremote key nal between (+) /less entry re- eiver Terminal	Term 111 mal? . Refer to <u>BCS-9</u> ace harness. LESS ENTRY R /less entry receiv remote keyless	9 8, "Removal an ECEIVER SIGN /er connector. entry receiver h Cor	d Installation". JAL harness connecto ndition Waiting When operating	(V) 15 10 5 0 20 (V) 15 10 10 15 10 10 10 10 10 10 10 10 10 10	Not existed	
the inspection ES >> Reconnection CHECK RE Reconnection Check sig	M16 on result nor eplace BCM epair or repla EMOTE KEY tremote key nal between (+) /less entry re- eiver Terminal	Term 111 mal? . Refer to <u>BCS-9</u> ace harness. LESS ENTRY R /less entry receiv remote keyless	9 8, "Removal an ECEIVER SIGN /er connector. entry receiver h Cor	d Installation". JAL harness connecto ndition Waiting	(R (V) 15 10 5 0 20 (V) 15	Not existed	
the inspection ES >> Reconnection CHECK RE Reconnection Check sig	M16 on result nor eplace BCM epair or repla EMOTE KEY tremote key nal between (+) /less entry re- eiver Terminal	Term 111 mal? . Refer to <u>BCS-9</u> ace harness. LESS ENTRY R /less entry receiv remote keyless	9 8, "Removal an ECEIVER SIGN /er connector. entry receiver h Cor	d Installation". JAL harness connecto ndition Waiting When operating either button on	(R (V) 15 10 5 0 20 (V) 15 10 5 0	Not existed	
the inspection ES >> Reise Reise Reconnect CHECK RE Reconnect Check sig	M16 on result nor eplace BCM epair or repla EMOTE KEY tremote key nal between (+) /less entry re- eiver	Term 111 <u>mal?</u> . Refer to <u>BCS-9</u> ace harness. LESS ENTRY R /less entry receiv remote keyless	8, "Removal an ECEIVER SIGN ver connector. entry receiver h	d Installation". IAL narness connecto	(V) 15 10 5	Not existed	

Is the inspection result normal?

### **REMOTE KEYLESS ENTRY RECEIVER**

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 7.

NO >> Replace remote keyless entry receiver.

7. CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

< DTC/CIRCUIT I					
TRUNK LID	OPENER A	CTUATOR			
Component F	unction Che	ck			INFOID:000000009617668
1.CHECK FUNC	TION				
<ol> <li>Select "TRUN</li> <li>Touch "Open"</li> <li>Is the inspection re YES &gt;&gt; Trunk</li> </ol>	K/BACK DOOR <sup>?</sup> to check that it v esult normal? lid opener actua	-	T" mode.		
Diagnosis Pro	cedure				INFOID:00000009617669
1.CHECK TRUN	K LID OPENER	INPUT SIGNAL			
3. Check voltage	Ink lid lock asse between trunk	mbly connector. lid lock assembly	harness conno	ector and ground.	
	+) ck assembly	()	Co	ondition	Voltage
Connector	Terminal	( )			Vollago
T53	3	Ground	Trunk lid ope pressed	ner switch is	9 – 16 V
NO >> GO TO 2.CHECK TRUN 1. Disconnect BO 2. Check continu	K LID OPENER			lid lock assembly I	narness connector.
	BCM		Trunk lid loc	k assembly	
Connector	Term	ninal C	onnector	Terminal	Continuity
M15	9	1	T53	3	Existed
3. Check continu	iity between BCI	M harness connec	tor and groun	d.	
	BCM				Continuity
Connect	or	Terminal		Ground	Continuity
M15		91			Not existed
	ce BCM. Refer t r or replace harr K LID OPENER	ACTUATOR GRO	UND CIRCUI	Т	
	Trunk lid lock asse	mbly			
	I TUTIN ILU IUUN ASSE	пыу			
Connect		Terminal		Ground	Continuity
Connect T53		Terminal 2		Ground	Existed

YES >> Replace trunk lid lock assembly.

### TRUNK LID OPENER ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness.

### TRUNK LID OPENER CANCEL SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

### TRUNK LID OPENER CANCEL SWITCH

#### Component Function Check

#### **1.**CHECK FUNCTION

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

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

Monitor item	Con	dition	Status	
TR CANCEL SW	Trunk lid opener cancel switch	Set ON	On	D
TR CANCEL SW		Set OFF	Off	-

#### Is the inspection result normal?

- YES >> Trunk lid opener cancel switch is OK.
- NO >> Refer to <u>DLK-127</u>, "Diagnosis Procedure".

#### **Diagnosis Procedure**

### 1. CHECK TRUNK LID OPENER CANCEL INPUT SIGNAL

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

(•	(+)			H
Trunk lid opene	er cancel switch	(-)	Signal (Reference value)	
Connector	Terminal		(101010100101100)	I
M84	1	Ground	(V) 15 0 + 10ms PKIB4956J	J

#### Is the inspection result normal?

YES >> GO TO 3.

### 2.check trunk lid opener switch circuit

#### 1. Disconnect BCM connector.

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

						- N
	BCM		Trunk lid opener cancel switch		Continuity	
-	Connector	Terminal	Connector	Terminal	Continuity	
-	M13	33	M84	1	Existed	0

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

BCM			Continuity	Ρ
Connector	Terminal	Ground	Continuity	
M13	33		Not existed	

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-98, "Removal and Installation".

NO >> Repair or replace harness.

### **DLK-127**

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INFOID:000000009617684

### TRUNK LID OPENER CANCEL SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

# $\mathbf{3}$ . Check trunk Lid opener cancel switch ground circuit

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

Trunk lid opener cancel switch			Continuity
Connector	Terminal	Ground	Continuity
M84	2		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

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

Refer to DLK-128, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace trunk lid opener cancel switch.

**5.**CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

#### >> INSPECTION END

#### Component Inspection

### 1. CHECK TRUNK LID OPENER CANCEL SWITCH

1. Turn ignition switch OFF.

2. Disconnect trunk lid opener cancel switch connector.

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

Trunk lid opener cancel switch		Condition		Continuity
 Terr	minal		onation	Continuity
 1	2	Trunk lid opener can-	Set ON	Existed
1 2	2	cel switch	Set OFF	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace trunk lid opener cancel switch.

### TRUNK LID OPENER REQUEST SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

### TRUNK LID OPENER REQUEST SWITCH

#### Component Function Check

### **1.**CHECK FUNCTION

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "REQ SW -BD/TR" in "DATA MONITOR" mode.

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

•	Monitor item	Con	dition	Status	
-	REQ SW -BD/TR	Trunk lid opener request	Pressed	On	D
		switch	Released	Off	

#### Is the inspection result normal?

- YES >> Trunk lid opener request switch is OK.
- NO >> Refer to <u>DLK-129</u>, "Diagnosis Procedure".

#### **Diagnosis Procedure**

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

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

(+)			Signal	
Trunk lid opener requ	est switch assembly	(—)	(Reference value)	
Connector	Terminal		(	
T47	1	Ground	(V) 15 10 5 0 2 ms JMMIA1408GB	J DLK

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

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

1. Disconnect BCM connector.

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

-	BCM		Trunk lid opener request switch assembly		Continuity	1
_	Connector	Terminal	Connector	Terminal	Continuity	
_	M15	83	T47	1	Existed	

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

BCM			Continuity
Connector	Terminal	Ground	Continuity
M15	83		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

#### **DLK-129**

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INFOID:000000009617676

### TRUNK LID OPENER REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness.

3. CHECK TRUNK LID OPENER REQUEST SWITCH GROUND CIRCUIT

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

Trunk lid opener request switch assembly			Continuity
Connector	Terminal	Ground	Continuity
T47	2		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

**4.**CHECK TRUNK LID OPENER REQUEST SWITCH

Refer to DLK-130, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace trunk lid opener request switch.

**5.**CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

**Component Inspection** 

# 1. CHECK TRUNK LID OPENER REQUEST SWITCH

1. Turn ignition switch OFF.

2. Disconnect trunk lid opener request switch assembly connector.

3. Check continuing between trunk lid opener request switch assembly terminal.

Trunk lid opener req	Trunk lid opener request switch assembly		Condition		
Terr	ninal	Condition		Continuity	
1	1		Pressed	Existed	
-	2	Trunk lid opener re- quest switch	Released	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace trunk lid opener request switch.

	NER SWITC	11				
Component Function	on Check				INFOID:000000009617670	
1.CHECK FUNCTION						
<ol> <li>Select "TRUNK" of "</li> <li>Select "TR/BD OPEI</li> <li>Check that the funct</li> </ol>	N SW" in "ĎATA M	IONITOR" m		ollowing condition	ns.	
Monitor item		Con	dition		Status	
TR/BD OPEN SW	Trunk lid opene	r switch	Pressed Released		On Off	
	ener switch is OK. K-131, "Diagnosis	Procedure".				
1.CHECK TRUNK LID					INFOID:00000009617671	
<ol> <li>Turn ignition switch (</li> <li>Disconnect triple sw</li> <li>Check voltage between</li> </ol>	OFF. itch connector.		ector and	ground.		
(+)						
Triple sw	vitch	(-)			Voltage	
Connector	Terminal	-				
M80	1	Ground	d		9 – 16 V	
YES >> GO TO 3.						
YES >> GO TO 3. NO >> GO TO 2.	OPENER SWITCH		r and triple	e switch harness	connector.	
YES >> GO TO 3. NO >> GO TO 2. 2.CHECK TRUNK LID ( 1. Disconnect BCM con 2. Check continuity bet	OPENER SWITCH nnector. tween BCM harnes		•		connector.	
YES >> GO TO 3. NO >> GO TO 2. 2.CHECK TRUNK LID 0 1. Disconnect BCM con	OPENER SWITCH nnector. tween BCM harnes	ss connecto	•	e switch harness e switch Terminal	connector.	
YES >> GO TO 3. NO >> GO TO 2. 2.CHECK TRUNK LID ( 1. Disconnect BCM con 2. Check continuity bet	OPENER SWITCH nnector. tween BCM harnes	ss connector	Triple	e switch		
YES >> GO TO 3. NO >> GO TO 2. 2.CHECK TRUNK LID ( 1. Disconnect BCM con 2. Check continuity bet BCI Connector M14	OPENER SWITCH nnector. tween BCM harnes M Terminal 80	ss connector	Triple nector 180	e switch Terminal	Continuity	
YES >> GO TO 3. NO >> GO TO 2. 2.CHECK TRUNK LID ( 1. Disconnect BCM con 2. Check continuity bet $\begin{array}{c} BCI \\ Connector \\ M14 \\ \hline $	OPENER SWITCH nnector. tween BCM harnes M Terminal 80 tween BCM harnes BCM	ss connector Conr M ss connector	Triple nector 180	e switch Terminal 1 nd.	Continuity	
YES >> GO TO 3. NO >> GO TO 2. 2.CHECK TRUNK LID ( 1. Disconnect BCM con 2. Check continuity bet BCI Connector M14 3. Check continuity bet Connector	OPENER SWITCH nnector. tween BCM harnes M Terminal 80 tween BCM harnes BCM Term	ss connector Conr ss connector	Triple nector 180	e switch Terminal	Continuity Existed Continuity	
YES >> GO TO 3. NO >> GO TO 2. 2.CHECK TRUNK LID ( 1. Disconnect BCM con 2. Check continuity bet BCI Connector M14 3. Check continuity bet Connector M14	OPENER SWITCH nnector. tween BCM harnes M Terminal 80 tween BCM harnes BCM Term 80	ss connector Conr ss connector	Triple nector 180	e switch Terminal 1 nd.	Continuity Existed	
NO >> GO TO 2. 2.CHECK TRUNK LID ( 1. Disconnect BCM con 2. Check continuity bet BCI Connector M14 3. Check continuity bet Connector M14 Is the inspection result n YES >> Replace BC NO >> Repair or rep 3.CHECK TRUNK LID (	OPENER SWITCH nnector. tween BCM harnes M Terminal 80 tween BCM harnes BCM BCM Term 80 ormal? M. Refer to <u>BCS-9</u> place harness. OPENER SWITCH	ss connector Conr M ss connector inal 0 98. "Remova H GROUND	Triple nector 180 r and grou I and Insta	e switch Terminal 1 nd. Ground Allation".	Continuity Existed Continuity	
$\begin{array}{rrrr} YES &>> GO TO 3.\\ NO &>> GO TO 2.\\ \hline 2. CHECK TRUNK LID (CONTROLLING) \\ \hline 1. Disconnect BCM conditional control of the continuity bet of the continuity bet of the control of th$	OPENER SWITCH nnector. tween BCM harnes M Terminal 80 tween BCM harnes BCM BCM Term 80 ormal? M. Refer to <u>BCS-9</u> place harness. OPENER SWITCH	ss connector Conr M ss connector inal 0 98. "Remova H GROUND	Triple nector 180 r and grou I and Insta	e switch Terminal 1 nd. Ground Allation".	Continuity Existed Continuity	
$\begin{array}{rrrr} YES >> GO TO 3. \\ NO >> GO TO 2. \\ \hline 2. CHECK TRUNK LID (CONTRICT) \\ \hline 1. Disconnect BCM control \\ \hline 2. Check continuity bet \\ \hline \hline \\ \hline $	OPENER SWITCH nnector. tween BCM harnes M Terminal 80 tween BCM harnes BCM BCM Term 80 ormal? M. Refer to <u>BCS-9</u> place harness. OPENER SWITCH	ss connector Conr M ss connector inal 0 98. "Remova H GROUND ness connec	Triple nector 180 r and grou I and Insta	e switch Terminal 1 nd. Ground Allation".	Continuity Existed Continuity	

### **TRUNK LID OPENER SWITCH**

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

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

4. CHECK TRUNK LID OPENER SWITCH

Refer to DLK-132, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace trunk lid opener switch.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

### Component Inspection

INFOID:000000009617672

# 1. CHECK TRUNK LID OPENER SWITCH

1. Turn ignition switch OFF.

2. Disconnect triple switch connector.

3. Check continuity between triple switch terminals.

Triple switch		Condition		Continuity	
Terr	minal			Continuity	
1	5	Trunk lid opener switch	Pressed	Existed	
1	5	Turk in opener switch	Release	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace trunk lid opener switch.

#### < DTC/CIRCUIT DIAGNOSIS > TRUNK ROOM LAMP SWITCH А **Component Function Check** INFOID:000000009617673 1.CHECK FUNCTION В 1. Select "TRUNK" of "BCM" using CONSULT. Select "TRNK/HAT MNTR" in "DATA MONITOR" mode. 2. Check that the function operates normally according to the following conditions. 3. Monitor item Condition Status On Open D **TRNK/HAT MNTR** Trunk lid Off Closed Is the inspection result normal? YES >> Trunk room lamp switch is OK. >> Refer to DLK-133, "Diagnosis Procedure". NO Diagnosis Procedure INFOID:000000009617674 1.CHECK TRUNK ROOM LAMP SWITCH INPUT SIGNAL Turn ignition switch OFF. 1. 2. Disconnect trunk lid lock assembly connector. Check signal between trunk lid lock assembly harness connector and ground using oscilloscope. 3. Н (+) Signal Trunk lid lock assembly (-) (Reference value) Connector Terminal T53 1 Ground DLK 10 ms JPMIA0011GB Is the inspection result normal? YES >> GO TO 3. NO >> GO TO 2. 2.CHECK TRUNK ROOM LAMP SWITCH CIRCUIT M Disconnect BCM connector. 1. 2. Check continuity between BCM connector and trunk lid lock assembly connector. Ν BCM Trunk lid lock assembly Continuity Terminal Connector Terminal Connector M15 97 T53 1 Existed Check continuity between BCM connector and ground. 3. Ρ BCM Continuity Connector Terminal Ground M15 97 Not existed Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

NO >> Repair or replace harness.

### **DLK-133**

### TRUNK ROOM LAMP SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

# **3.**CHECK TRUNK ROOM LAMP SWITCH GROUND CIRCUIT

Check continuity between trunk lid lock assembly connector and ground.

Trunk lid loo	Trunk lid lock assembly		Continuity
Connector	Terminal	Ground	Continuity
T53	2		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

**4.**CHECK TRUNK ROOM LAMP SWITCH

Refer to DLK-134, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace trunk lid lock assembly.

**5.**CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

#### >> INSPECTION END

#### Component Inspection

### 1.CHECK TRUNK ROOM LAMP SWITCH

1. Turn ignition switch OFF.

2. Disconnect trunk lid lock assembly connector.

3. Check continuing between trunk lid lock assembly terminal.

Trunk lid lo	Trunk lid lock assembly		Condition		
Terr	minal			Continuity	
1	2	Trunk lid	Open	Existed	
I	2		Close	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace trunk lid lock assembly.

### **UNLOCK SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

### UNLOCK SENSOR

#### **Component Function Check**

#### **1.**CHECK FUNCTION

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

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

#### Is the inspection result normal?

- YES >> Unlock sensor is OK.
- NO >> Refer to <u>DLK-135, "Diagnosis Procedure"</u>.

#### **Diagnosis Procedure**

### 1.CHECK UNLOCK SENSOR INPUT SIGNAL

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

(+	(+)		<b>O</b> <sup>1</sup>	
Front door lock ass	embly (driver side)	()	Signal (Reference value)	1
Connector	Terminal			
D1	3	Ground	(V) 15 10 5 0 10 ms JPMIA0011GB	J

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

### 2. CHECK UNLOCK SENSOR CIRCUIT

1. Disconnect BCM connector.

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

-	BCM Front door I		Front door lock as	sembly (driver side)	Continuity	
_	Connector	Terminal	Connector	Terminal	Continuity	
_	M13	30	D1	3	Existed	

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

BCM			Continuity
Connector	Terminal	Ground	Continuity
M13	30		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

#### **DLK-135**

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INFOID:000000009617679

### UNLOCK SENSOR

#### < DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness.

# 3. CHECK UNLOCK SENSOR GROUND CIRCUIT

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

Front door lock assembly (driver side)			Continuity
Connector	Terminal	Ground	Continuity
D1	4		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

**4.**CHECK UNLOCK SENSOR

Refer to DLK-136, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

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

**5.**CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

**Component Inspection** 

1.CHECK UNLOCK SENSOR

1. Turn ignition switch OFF.

2. Disconnect front door lock assembly (driver side) connector.

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

Front door lock as	Front door lock assembly (driver side) Terminal		Condition	
Ter				
2	4	Driver door	Unlock	Existed
	4		Lock	Not existed

Is the inspection result normal?

YES >> INSPECTION END

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

< SYMPTOM DIAGNOSIS >
SYMPTOM DIAGNOSIS
ACC WARNING DOES NOT OPERATE

Diagnosis Procedure	INFOID:000000009616530	В
1. CHECK P POSITION WARNING OPERATION		
Check P position warning operation. Refer to WCS-13, "WARNING CHIME : P Position Warning (Buzzer)".		С
Is the inspection result normal?		
YES >> GO TO 2. NO >> Refer to <u>DLK-159, "Diagnosis Procedure"</u> .		D
2.REPLACE BCM		_
<ol> <li>Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ol>		E
Is the result normal?		F
YES >> INSPECTION END NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> .		1
		G

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### AUTO DOOR LOCK OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

### AUTO DOOR LOCK OPERATION DOES NOT OPERATE

**Diagnosis** Procedure

INFOID:000000009616517

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" in "WORK SUPPORT". Refer to <u>DLK-51, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>.

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-98. "Removal and Installation".

2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>.

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

< SYMPTOM DIAGNOSIS >	
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK	Δ
SWITCH	$\square$
ALL DOOR	
ALL DOOR : Description	В
All doors do not lock/unlock using door lock and unlock switch.	С
ALL DOOR : Diagnosis Procedure	C
1. CHECK POWER SUPPLY AND GROUND CIRCUIT	D
Check door lock and unlock power supply and ground circuit. Refer to <u>DLK-120, "FRONT DOOR LOCK : Diagnosis Procedure"</u> (front door) and <u>DLK-120, "REAR DOOR LOCK : Diagnosis Procedure"</u> (rear door).	E
Is the inspection result normal?	
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	F
2. CHECK DOOR LOCK AND UNLOCK SWITCH	Г
Check door lock and unlock switch. Refer to <u>DLK-107, "DRIVER SIDE : Component Function Check"</u> (driver door) and <u>DLK-107, "PASSENGER</u> <u>SIDE : Component Function Check"</u> (passenger door).	G
Is the inspection result normal?	Н
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
<b>3.</b> REPLACE BCM	
1. Replace BCM. Refer to BCS-98, "Removal and Installation".	I
2. Confirm the operation after replacement.	
<u>Is the result normal?</u> YES >> INSPECTION END	J
NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . FRONT DOOR	DLK
FRONT DOOR : Description	
Front doors do not lock/unlock using door lock and unlock switch.	L
FRONT DOOR : Diagnosis Procedure	
1. CHECK POWER SUPPLY AND GROUND CIRCUIT	Μ
Check front door lock and unlock power supply and ground circuit. Refer to DLK-120, "FRONT DOOR LOCK : Diagnosis Procedure".	Ν
Is the inspection result normal?	
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	$\circ$
2. CHECK DOOR LOCK ACTUATOR	0
Check front door lock actuator.	
Refer to <u>DLK-102</u> , " <u>DRIVER SIDE</u> : <u>Component Function Check</u> " (driver door) and <u>DLK-103</u> , " <u>PASSENGER</u> <u>SIDE</u> : <u>Component Function Check</u> " (passenger door).	Ρ
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
3.REPLACE BCM	

DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH
< SYMPTOM DIAGNOSIS > <ol> <li>Replace BCM. Refer to <u>BCS-98. "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> <li><u>Is the result normal?</u></li> <li>YES &gt;&gt; INSPECTION END</li> <li>NO &gt;&gt; Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>.</li> </ol>
REAR DOOR
REAR DOOR : Description
Rear doors do not lock/unlock using door lock and unlock switch.
REAR DOOR : Diagnosis Procedure
1. CHECK POWER SUPPLY AND GROUND CIRCUIT
Check rear doors lock and unlock power supply and ground circuit. Refer to <u>DLK-120, "REAR DOOR LOCK : Diagnosis Procedure"</u> . Is the inspection result normal?
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.
2.CHECK DOOR LOCK ACTUATOR
Check rear door lock actuator. Refer to <u>DLK-104, "REAR LH : Component Function Check"</u> (LH) and <u>DLK-105, "REAR RH :</u> <u>Component Function Check"</u> (RH). <u>Is the inspection result normal?</u> YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. <b>3.</b> REPLACE BCM
<ol> <li>Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement. <u>Is the result normal?</u> YES &gt;&gt; INSPECTION END</li> </ol>
NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . DRIVER SIDE
DRIVER SIDE : Description
Driver door does not lock/unlock using door lock and unlock switch.
DRIVER SIDE : Diagnosis Procedure
1. CHECK DOOR LOCK ACTUATOR
Check front door lock actuator (driver door). Refer to <u>DLK-102, "DRIVER SIDE : Component Function Check"</u> .
Is the inspection result normal? YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts. 2.REPLACE BCM
Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u> .
2. Confirm the operation after replacement.
<u>Is the result normal?</u> YES >> INSPECTION END
NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . PASSENGER SIDE

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

< SYMPTOM DIAGNOSIS >		
PASSENGER SIDE : Description	INFOID:000000009616497	A
Passenger door does not lock/unlock using door lock and unlock switch.		
PASSENGER SIDE : Diagnosis Procedure	INFOID:000000009616498	В
1. CHECK DOOR LOCK ACTUATOR		
Check front door lock actuator (passenger door). Refer to <u>DLK-103, "PASSENGER SIDE : Component Function Check"</u> .		С
Is the inspection result normal?		
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.		D
2. REPLACE BCM		
1. Replace BCM. Refer to BCS-98. "Removal and Installation".		E
<ol> <li>Confirm the operation after replacement.</li> <li>Is the result normal?</li> </ol>		
YES >> INSPECTION END		F
NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . REAR LH		
REAR LH : Description		G
·	INFOID:000000009616499	
Rear LH door does not lock/unlock using door lock and unlock switch.		ŀ
REAR LH : Diagnosis Procedure	INFOID:000000009616500	
1.CHECK DOOR LOCK ACTUATOR		
Check rear door lock actuator LH. Refer to <u>DLK-104, "REAR LH : Component Function Check"</u> .		
Is the inspection result normal?		J
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.		
2.REPLACE BCM		DL
1. Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u> .		
<ol> <li>Confirm the operation after replacement.</li> <li>s the result normal?</li> </ol>		L
YES >> INSPECTION END		
NO >> Check intermittent incident. Refer to <u>GI-43. "Intermittent Incident"</u> . REAR RH		Ν
REAR RH : Description		
	INFOID:000000009616501	Ν
Rear RH door does not lock/unlock using door lock and unlock switch.		
REAR RH : Diagnosis Procedure	INFOID:000000009616502	C
1.CHECK DOOR LOCK ACTUATOR		
Check rear door lock actuator RH. Refer to <u>DLK-105, "REAR RH : Component_Function_Check"</u> .		F
Is the inspection result normal?		
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.		
2.REPLACE BCM		
1. Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u> .		

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

< SYMPTOM DIAGNOSIS >

2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>.

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWI < SYMPTOM DIAGNOSIS >	ТСН
DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWI ALL DOOR REQUEST SWITCHES	TCH
ALL DOOR REQUEST SWITCHES : Description	INFOID:000000009616503
All doors do not lock/unlock using all door request switches.	В
ALL DOOR REQUEST SWITCHES : Diagnosis Procedure	INFOID:000000009616504
1. CHECK REMOTE KEYLESS ENTRY FUNCTION	
Check door lock/unlock using Intelligent Key button operation. <u>Does door lock/unlock with Intelligent Key button?</u> YES >> GO TO 2. NO >> Refer to <u>DLK-146. "Diagnosis Procedure"</u> .	D
<ol> <li>Select "INTELLIGENT KEY" of "BCM" using CONSULT.</li> <li>Select "LOCK/UNLOCK BY I-KEY" in "WORK SUPPORT" mode.</li> <li>Check "LOCK/UNLOCK BY I-KEY" in "WORK SUPPORT". Refer to <u>DLK-51, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>.</li> </ol>	F
Is the inspection result normal? YES >> GO TO 3. NO >> Set "On" in "LOCK/UNLOCK BY I-KEY".	G
3. CHECK DOOR SWITCH	Н
Check door switch. Refer to <u>DLK-111, "Component Function Check"</u> . <u>Is the inspection result normal?</u>	I
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	J
4.CHECK INSIDE KEY ANTENNA	
<ul> <li>Check inside key antenna.</li> <li>Instrument lower: Refer to <u>DLK-81, "DTC Description"</u>.</li> <li>Console: Refer to <u>DLK-84, "DTC Description"</u>.</li> <li>Trunk room: Refer to <u>DLK-87, "DTC Description"</u>.</li> </ul>	DLK
Is the inspection result normal?	L
YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts.	
5. CHECK OUTSIDE KEY ANTENNA	M
<ul> <li>Check outside key antenna.</li> <li>Driver door : Refer to <u>DLK-90, "DTC Description"</u>.</li> <li>Passenger door : Refer to <u>DLK-92, "DTC Description"</u>.</li> <li>Rear bumper: Refer to <u>DLK-94, "DTC Description"</u>.</li> </ul>	N
Is the inspection result normal?	0
YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts.	0
6.REPLACE BCM	P
<ol> <li>Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement. <u>Is the result normal?</u></li> </ol>	r
YES >> INSPECTION END NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> .	

DRIVER SIDE DOOR REQUEST SWITCH

# DLK-143

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SW < SYMPTOM DIAGNOSIS >	ITCH
DRIVER SIDE DOOR REQUEST SWITCH : Description	INFOID:000000009616505
All doors do not lock/unlock using front door request switch (driver door).	
DRIVER SIDE DOOR REQUEST SWITCH : Diagnosis Procedure	INFOID:000000009616506
1.CHECK DOOR REQUEST SWITCH	
Check front door request switch (driver door). Refer to <u>DLK-109, "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 door). Refer to <u>DLK-92, "DTC Description</u> ".	
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
<b>3.</b> REPLACE BCM	
1. Replace BCM. Refer to BCS-98. "Removal and Installation".	
<ol><li>Confirm the operation after replacement.</li><li>Is the result normal?</li></ol>	
YES >> INSPECTION END	
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident"	
PASSENGER SIDE DOOR REQUEST SWITCH	
PASSENGER SIDE DOOR REQUEST SWITCH : Description	INFOID:000000009616507
All doors do not lock/unlock using front door request switch (passenger door).	
PASSENGER SIDE DOOR REQUEST SWITCH : Diagnosis Procedure	INFOID:000000009616508
1.CHECK PASSENGER SIDE DOOR REQUEST SWITCH	
Check front door request switch (passenger door). Refer to <u>DLK-109, "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 (passenger door). Refer to <u>DLK-90, "DTC Description"</u> .	
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
3.REPLACE BCM	
1. Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u> .	
2. Confirm the operation after replacement.	
<u>Is the result normal?</u> YES >> INSPECTION END	
NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> .	

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

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

Diagnosis Procedure	INFOID:000000009238162	В
1. CHECK POWER DOOR LOCK OPERATION		D
Check door lock/unlock using door lock and unlock switch. Does door lock/unlock with door lock and unlock switch?		С
YES >> GO TO 2. NO >> Refer to <u>DLK-139, "ALL DOOR : Diagnosis Procedure"</u> . <b>2.</b> CHECK DOOR KEY CYLINDER SWITCH		D
Check door key cylinder switch. Refer to <u>DLK-100, "Component Function Check"</u> .		E
<u>Is the inspection result normal?</u> YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.		F
3.REPLACE BCM		
<ul> <li>Replace BCM. Refer to <u>BCS-98</u>, "<u>Removal and Installation</u>".</li> <li>Confirm the operation after replacement.</li> </ul>		G
<u>Is the result normal?</u> YES >> INSPECTION END NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> .		Н

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## DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

< SYMPTOM DIAGNOSIS >

# DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

Diagnosis Procedure

INFOID:000000009616509

**1.**CHECK INTELLIGENT KEY

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

Does the Intelligent Key belong to the vehicle to checked?

YES >> GO TO 2.

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

2. CHECK INTELLIGENT KEY LOW BATTERY WARNING

Check that the Intelligent Key low battery warning is operated.

Is the Intelligent Key low battery warning operated?

YES >> GO TO 6.

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

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

3.CHECK INTELLIGENT KEY BUTTON OPERATION

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

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

YES >> GO TO 4.

NO >> GO TO 7.

**4.**CHECK ENGINE START

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

Is the vehicle in START status?

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

5. CHECK INTELLIGENT KEY

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

Is the vehicle in START status?

YES >> GO TO 6.

NO >> Replace Intelligent Key.

**6.**CHECK INTELLIGENT KEY BATTERY

Check the Intelligent Key battery.

Refer to <u>DLK-117</u>, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 7.

NO >> Replace Intelligent Key battery.

7. CHECK POWER DOOR LOCK OPERATION

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

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

YES >> GO TO 8.

NO >> Refer to <u>DLK-139</u>, "ALL DOOR : Diagnosis Procedure".

**8.**CHECK REMOTE KEYLESS ENTRY RECEIVER

Check remote keyless entry receiver.

Refer to DLK-122. "Component Function Check".

# DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

< SYMPTOM DIAGNOSIS >	
Is the inspection result normal?	
YES >> GO TO 9.	A
NO >> Repair or replace the malfunctioning parts.	
9.REPLACE INTELLIGENT KEY	В
1. Replace Intelligent Key.	D
2. Confirm the operation after replacement.	
Is the result normal?	C
YES >> INSPECTION END	0
NO >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u> .	
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# **DOOR DOES NOT UNLOCK WITH ONE TOUCH UNLOCK SENSOR**

# DOOR DOES NOT UNLOCK WITH ONE TOUCH UNLOCK SENSOR ALL DOOR

ALL DOOR : Description

All doors do not unlock using all one touch unlock sensors.

## ALL DOOR : 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 >> Refer to <u>BCS-62, "DTC Index"</u>.

2. CHECK DOOR LOCK FUNCTION

Check door lock using door request switch.

Does door lock with door request switch?

YES >> GO TO 3.

NO >> Refer to <u>DLK-143</u>, "ALL DOOR REQUEST SWITCHES : Diagnosis Procedure".

 ${f 3.}$  CHECK "TOUCH SENSOR UNLOCK FUNCTION SETTING" SETTING IN "WORK SUPPORT"

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "TOUCH SENSOR UNLOCK FUNCTION SETTING" in "WORK SUPPORT" mode.
- 3. Check "TOUCH SENSOR UNLOCK FUNCTION SETTING" in "WORK SUPPORT".
- Refer to <u>DLK-51, "INTELLIGENT KEY : CONSULT Function (BCM INTELLIGENT KEY)</u>".

Is the inspection result normal?

- YES >> GO TO 4.
- NO >> Set "With" in "LOCK/UNLOCK BY I-KEY".

CHECK ONE TOUCH UNLOCK SENSOR

Check one touch unlock sensor

• Driver side: Refer to <u>DLK-77, "DTC Description"</u>.

• Passenger side: Refer to <u>DLK-79, "DTC Description"</u>.

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

## **5.**REPLACE BCM

- 1. Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.
- 2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>.

DRIVER SIDE

## DRIVER SIDE : Description

All doors do not unlock using one touch unlock sensor (driver door).

## DRIVER SIDE : Diagnosis Procedure

1. CHECK DTC WITH BCM

Check that DTC is not detected with BCM

NO >> Refer to <u>BCS-98</u>, "Removal and Installation".

INFOID:000000009616540

INFOID:000000009616541

INFOID:000000009616539

INFOID:000000009616538

# DOOR DOES NOT UNLOCK WITH ONE TOUCH UNLOCK SENSOR

< SYMPTOM DIAGNOSIS >

2. CHECK ONE TOUCH UNLOCK SENSOR	Δ
Check one touch unlock sensor (driver side). Refer to <u>DLK-77</u> , "DTC <u>Description</u> ".	/ \
Is the inspection result normal?	В
YES >> GO TO 3.	_
NO >> Repair or replace the malfunctioning parts. 3.REPLACE BCM	
	С
<ol> <li>Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ol>	
Is the result normal?	D
YES >> INSPECTION END	
NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>	Е
PASSENGER SIDE	
PASSENGER SIDE : Description	
All doors do not unlock using one touch unlock sensor (passenger door).	F
PASSENGER SIDE : Diagnosis Procedure	0
1.снеск отс with всм	G
Check that DTC is not detected with BCM.	
Is the inspection result normal?	Н
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	
NO >> Repair or replace the malfunctioning parts. 2.CHECK ONE TOUCH UNLOCK SENSOR	
Check one touch unlock sensor (passenger door). Refer to <u>DLK-79, "DTC Description"</u> .	J
Is the inspection result normal?	
YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts.	DLK
3.REPLACE BCM	
<ol> <li>Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ol>	L
Is the result normal?	
YES >> INSPECTION END	Μ
NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> .	IVI
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## DOOR LOCK OPERATION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

# DOOR LOCK OPERATION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000009616533

**1.**CHECK DOOR LOCK FUNCTION

Check door lock using door request switch.

Does door lock with door request switch?

YES >> GO TO 2.

NO >> Refer to <u>DLK-143</u>, "ALL DOOR REQUEST SWITCHES : Diagnosis Procedure".

2. CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.

Refer to <u>DLK-118, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

**3.**REPLACE BCM

1. Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>.

# FUEL FILLER LID LOCK ACTUATOR DOES NOT OPERATE

# < SYMPTOM DIAGNOSIS > FUEL FILLER LID LOCK ACTUATOR DOES NOT OPERATE

Diagnosis Procedure	A
1. CHECK POWER DOOR LOCK OPERATION	В
Check door lock/unlock using door lock and unlock switch.	
Does door lock/unlock with door lock and unlock switch?YES>> GO TO 2.NO>> Refer to DLK-139, "ALL DOOR : Diagnosis Procedure".	С
2. CHECK FUEL FILLER LID LOCK ACTUATOR	D
Check fuel filler lid lock actuator. Refer to <u>DLK-113, "Component Function Check"</u> . Is the inspection result normal?	E
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. <b>3.</b> REPLACE BCM	F
<ol> <li>Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement. <u>Is the result normal?</u> YES &gt;&gt; INSPECTION END</li> </ol>	G
NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> .	Н

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

# INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000009616532

**1.**CHECK DTC WITH BCM AND COMBINATION METER

Check that DTC is not detected with BCM and combination meter.

Is the inspection result normal?

YES >> GO TO 2.

NO-1 >> Refer to <u>BCS-62, "DTC Index"</u>. (BCM)

NO-2 >> Refer to MWI-80, "DTC Index". (Combination meter)

2. CHECK INFORMATION DISPLAY

Check information display. Refer to <u>DLK-116, "Diagnosis Procedure"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK INTELLIGENT KEY BATTERY

Check Intelligent Key battery.

Refer to <u>DLK-117</u>, "Component Inspection".

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 lower: Refer to <u>DLK-81, "DTC Description"</u>.
- Console: Refer to <u>DLK-84, "DTC Description"</u>.
- Trunk room: Refer to <u>DLK-87, "DTC Description"</u>.

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-98, "Removal and Installation".
- 2. Confirm the operation after replacement.

### Is the result normal?

- YES >> INSPECTION END
- NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>.

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

## < SYMPTOM DIAGNOSIS >

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

Diagnosis Procedure	A
1.снеск отс with всм	В
Check that DTC is not detected with BCM.	
Is the inspection result normal?	
YES >> GO TO 2.	С
NO >> Refer to <u>BCS-62, "DTC Index"</u> .	
2. CHECK POWER DOOR LOCK OPERATION	Г
Check door lock/unlock using door lock and unlock switch.	
Does door lock/unlock with door lock and unlock switch?	
YES >> GO TO 3.	E
NO >> Refer to <u>DLK-139</u> , " <u>ALL DOOR : Diagnosis Procedure</u> ".	
<b>3.</b> CHECK DOOR SWITCH	_
Check front door switch (driver side).	-
Refer to DLK-111, "Component Function Check".	
Is the inspection result normal?	G
YES >> GO TO 4.	
NO >> Repair or replace the malfunctioning parts.	
4.REPLACE BCM	H
1. Replace BCM. Refer to BCS-98, "Removal and Installation".	
2. Confirm the operation after replacement.	
Is the result normal?	
YES >> INSPECTION END	
NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> .	
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# IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

## < SYMPTOM DIAGNOSIS >

# IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

**Diagnosis Procedure** 

INFOID:000000009616519

1. CHECK "AUTO UNLOCK FUNCTION" SETTING IN "WORK SUPPORT"

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 2. Select "AUTO UNLOCK FUNCTION" in "WORK SUPPORT" mode.
- Check "AUTO UNLOCK FUNCTION" in "WORK SUPPORT". Refer to <u>DLK-49, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.

Is the inspection result normal?

- YES >> GO TO 2.
- NO >> Set "MODE 1" in "AUTO UNLOCK FUNCTION".

2.REPLACE BCM

- 1. Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.
- 2. Confirm the operation after replacement.

Is the result normal?

- YES >> INSPECTION END
- NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>.

# **KEY ID WARNING DOES NOT OPERATE**

< SYMPTOM DIAGNOSIS > KEY ID WARNING DOES NOT OPERATE	
Diagnosis Procedure	А
1. CHECK DTC WITH BCM AND COMBINATION METER	В
Check that DTC is not detected with BCM and combination meter. Is the inspection result normal?	
YES >> GO TO 2. NO-1 >> Refer to <u>BCS-62, "DTC Index"</u> . (BCM)	С
NO-2 >> Refer to <u>MWI-80, "DTC Index"</u> . (Combination meter) 2.CHECK INFORMATION DISPLAY	D
Check information display. Refer to <u>DLK-116, "Diagnosis Procedure"</u> .	Е
Is the inspection result normal? YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts. 3.CHECK INSIDE KEY ANTENNA	F
<ul> <li>Check inside key antenna.</li> <li>Instrument lower: Refer to <u>DLK-81, "DTC Description"</u>.</li> <li>Console: Refer to <u>DLK-84, "DTC Description"</u>.</li> <li>Trunk room: Refer to <u>DLK-87, "DTC Description"</u>.</li> </ul>	G
Is the inspection result normal?	Н
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	
4.REPLACE BCM	
<ol> <li>Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ol>	J
<u>Is the result normal?</u> YES >> INSPECTION END	-
NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> .	DLK

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#### < SYMPTOM DIAGNOSIS >

# KEY REMINDER FUNCTION DOES NOT OPERATE

Diagnosis Procedure

**1.**CHECK DOOR SWITCH

Check door switch.

Refer to DLK-111, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK UNLOCK SENSOR

Check unlock sensor. Refer to <u>DLK-135, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK TRUNK ROOM LAMP SWTICH

Check trunk room lamp switch.

Refer to DLK-133, "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 lower: Refer to <u>DLK-81, "DTC Description"</u>.
- Console: Refer to <u>DLK-84, "DTC Description"</u>.
- Trunk room: Refer to <u>DLK-87, "DTC Description"</u>.

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

**5.**REPLACE BCM

- 1. Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.
- 2. Confirm the operation after replacement.

#### Is the result normal?

- YES >> INSPECTION END
- NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>.

INFOID:000000009616527

#### **OFF POSITION WARNING DOES NOT OPERATE** < SYMPTOM DIAGNOSIS > OFF POSITION WARNING DOES NOT OPERATE А **Diagnosis** Procedure INFOID:000000009616528 1. CHECK DTC WITH BCM AND COMBINATION METER В Check that DTC is not detected with BCM and combination meter. Is the inspection result normal? YES >> GO TO 2. NO-1 >> Refer to <u>BCS-62, "DTC Index"</u>. (BCM) NO-2 >> Refer to <u>MWI-80, "DTC Index"</u>. (Combination meter) D 2. CHECK DOOR SWITCH Check front door switch (driver side). Refer to DLK-111, "Component Function Check". Е Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. F ${ m 3.}$ CHECK COMBINATION METER BUZZER Check combination meter buzzer. Refer to DLK-99, "Component Function Check". Is the inspection result normal? YES >> GO TO 4. Н NO >> Repair or replace the malfunctioning parts. **4.**CHECK INTELLIGENT KEY WARNING BUZZER Check Intelligent Key warning buzzer. Refer to DLK-118, "Component Function Check". Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts. **5.**REPLACE BCM DLK Replace BCM. Refer to BCS-98, "Removal and Installation". 1. Confirm the operation after replacement. 2. Is the result normal? L YES >> INSPECTION END NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident". Μ

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

< SYMPTOM DIAGNOSIS >

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

**Diagnosis Procedure** 

INFOID:000000009616520

- **1.**CHECK "AUTO LOCK FUNCTION" SETTING IN "WORK SUPPORT"
- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 2. Select "AUTO LOCK FUNCTION" in "WORK SUPPORT" mode.
- Check "AUTO LOCK FUNCTION" in "WORK SUPPORT". Refer to <u>DLK-49, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.

Is the inspection result normal?

- YES >> GO TO 2.
- NO >> Set "MODE 2" in "AUTO LOCK FUNCTION".

**2.**CHECK "AUTO UNLOCK FUNCTION" SETTING IN "WORK SUPPORT"

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 2. Select "AUTO UNLOCK FUNCTION" in "WORK SUPPORT" mode.
- 3. Check "AUTO UNLOCK FUNCTION" in "WORK SUPPORT".
- Refer to <u>DLK-49, "DOOR LOCK : CONSULT Function (BCM DOOR LOCK)"</u>.

Is the inspection result normal?

- YES >> GO TO 3.
- NO >> Set "MODE 2" in "AUTO UNLOCK FUNCTION".

**3.**REPLACE BCM

- 1. Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.
- 2. Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>.

#### P POSITION WARNING DOES NOT OPERATE < SYMPTOM DIAGNOSIS > P POSITION WARNING DOES NOT OPERATE А **Diagnosis** Procedure INFOID:000000009616529 **1.**CHECK DTC WITH BCM, TCM AND COMBINATION METER В Check that DTC is not detected with BCM. TCM and combination meter. Is the inspection result normal? >> GO TO 2. YES NO-1 >> Refer to <u>BCS-62, "DTC Index"</u>. (BCM) NO-2 >> Refer to <u>TM-85, "DTC Index"</u>. (TCM) NO-3 >> Refer to <u>MWI-80</u>, "DTC Index". (Combination meter) D 2. CHECK COMBINATION METER BUZZER Check combination meter buzzer. Е Refer to WCS-53, "Component Function Check". Is the inspection result normal? YES >> GO TO 3. F NO >> Repair or replace the malfunctioning parts. 3.CHECK INTELLIGENT KEY WARNING BUZZER Check Intelligent Key warning buzzer. Refer to DLK-118, "Component Function Check". Is the inspection result normal? Н YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. 4.CHECK DOOR SWITCH Check front door switch (driver side). Refer to DLK-111, "Component Function Check". Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts. ${f 5.}$ CHECK INSIDE KEY ANTENNA DLK Check inside kev antenna. Instrument lower: Refer to <u>DLK-81, "DTC Description"</u>. • Console: Refer to DLK-84, "DTC Description". Trunk room: Refer to DLK-87, "DTC Description". Is the inspection result normal? YES >> GO TO 6. M NO >> Repair or replace the malfunctioning parts. **6.**CHECK INFORMATION DISPLAY Ν Check information display. Refer to DLK-116, "Diagnosis Procedure". Is the inspection result normal? YES >> GO TO 7. >> Repair or replace the malfunctioning parts. NO 7.REPLACE BCM Replace BCM. Refer to BCS-98, "Removal and Installation". 1. 2. Confirm the operation after replacement. Is the result normal?

- YES >> INSPECTION END
- NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

< SYMPTOM DIAGNOSIS > REMINDER FUNCTION DOES NOT OPERATE DOOR REQUEST SWITCH DOOR REQUEST SWITCH : Description INFOID-000000009616521 Reminder function does not operate using door request switch. DOOR REQUEST SWITCH : Diagnosis Procedure INFOID:000000009616522 1. CHECK DTC WITH BCM AND COMBINATION METER Check that DTC is not detected with BCM and combination meter. Is the inspection result normal? YES >> GO TO 2. NO-1 >> Refer to <u>BCS-62, "DTC Index"</u>. (BCM) NO-2 >> Refer to MWI-80, "DTC Index". (Combination meter) 2.CHECK "ANSWER BACK" SETTING IN "WORK SUPPORT" 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT. Select "ANSWER BACK" in "WORK SUPPORT" mode. 2. Check the "ANSWER BACK" in "WORK SUPPORT". 3. Refer to DLK-51, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)". Is the inspection result normal? YES >> GO TO 3. NO >> Set "Off" in "ANSWER BACK".  ${f 3.}$ CHECK "ANSWER BACK I-KEY LOCK UNLOCK" SETTING IN "WORK SUPPORT" 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT. Select "ANSWER BACK I-KEY LOCK UNLOCK" in "WORK SUPPORT" mode. 2. Check the "ANSWER BACK I-KEY LOCK UNLOCK" in "WORK SUPPORT". Refer to DLK-51, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)". Is the inspection result normal? YES >> GO TO 4. >> Set "BUZZER", "HORN" or "Off" in "ANSWER BACK I-KEY LOCK UNLOCK". NO 4.CHECK HAZARD FUNCTION Check hazard function. Refer to <u>DLK-115</u>, "Component Function Check". Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts.  ${f 5.}$ CHECK INTELLIGENT KEY WARNING BUZZER Check Intelligent Key warning buzzer. Refer to DLK-118, "Component Function Check". Is the inspection result normal? YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts. 6. CHECK HORN FUNCTION Check horn function. Refer to SEC-117, "Component Function Check". Is the inspection result normal? YES >> GO TO 7. NO >> Repair or replace the malfunctioning parts. **7.**REPLACE BCM

1. Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

< SYMPTOM DIAGNOSIS >	
<ol> <li>Confirm the operation after replacement.</li> <li>Is the result normal?</li> </ol>	А
YES >> INSPECTION END	1 1
NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> .	
INTELLIGENT KEY	В
INTELLIGENT KEY : Description	INFOID:000000009616523
	С
Reminder function does not operate using Intelligent Key.	
INTELLIGENT KEY : Diagnosis Procedure	INFOID:000000009616524
1. CHECK DTC WITH BCM AND COMBINATION METER	D
Check that DTC is not detected with BCM and combination meter.	
Is the inspection result normal?	E
YES >> GO TO 2.	
NO-1 >> Refer to <u>BCS-62, "DTC Index"</u> . (BCM) NO-2 >> Refer to <u>MWI-80, "DTC Index"</u> . (Combination meter)	F
2. CHECK "ANSWER BACK" SETTING IN "WORK SUPPORT"	
1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.	
<ol><li>Select "ANSWER BACK" in "WORK SUPPORT" mode.</li></ol>	G
3. Check the "ANSWER BACK" in "WORK SUPPORT".	
Refer to <u>DLK-51, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u> . <u>Is the inspection result normal?</u>	Н
YES >> GO TO 3.	
NO >> Set "Off" in "ANSWER BACK".	
<b>3.</b> CHECK "ANSWER BACK KEYLESS LOCK UNLOCK" SETTING IN "WORK SUPPORT"	I
1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.	
<ol> <li>Select "ANSWER BACK KEYLESS LOCK UNLOCK" in "WORK SUPPORT" mode.</li> <li>Check the "ANSWER BACK KEYLESS LOCK UNLOCK" in "WORK SUPPORT".</li> </ol>	J
Refer to <u>DLK-51, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u> .	
Is the inspection result normal?	DLł
YES $\rightarrow$ GO TO 4.	
NO >> Set "On" or "Off" in "ANSWER BACK KEYLESS LOCK UNLOCK". 4.CHECK HAZARD FUNCTION	1
Check hazard function. Refer to <u>DLK-115, "Component Function Check"</u> .	
Is the inspection result normal?	M
YES >> GO TO 5.	
NO >> Repair or replace the malfunctioning parts.	Ν
5.CHECK HORN FUNCTION	
Check horn function. Refer to <u>SEC-117, "Component Function Check"</u> .	~
Is the inspection result normal?	0
YES >> GO TO 6.	
NO >> Repair or replace the malfunctioning parts.	Р
6.REPLACE BCM	
1. Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u> .	
<ol> <li>Confirm the operation after replacement.</li> <li><u>Is the result normal?</u></li> </ol>	
YES >> INSPECTION END	
NO >> Check intermittent incident. Refer to <u>GI-43. "Intermittent Incident"</u> .	

## **DLK-161**

< SYMPTOM DIAGNOSIS >

## TRUNK LID OPENER REQUEST SWITCH

TRUNK LID OPENER REQUEST SWITCH : Description

Reminder function does not operate using trunk lid opener request switch.

**TRUNK LID OPENER REQUEST SWITCH : Diagnosis Procedure** 

INFOID:000000009616526

INEOID-000000009616525

**1.**CHECK "TRUNK/GLASS HATCH OPEN" SETTING IN "WORK SUPPORT"

- 1. Select "TRUNK/GLASS HATCH OPEN" of "BCM" using CONSULT.
- 2. Select "TRUNK/GLASS HATCH OPEN" in "WORK SUPPORT" mode.
- 3. Check the "TRUNK/GLASS HATCH OPEN" in "WORK SUPPORT".
  - Refer to DLK-51, "INTELLIGENT KEY : CONSULT Function (BCM INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "On" in "TRUNK/GLASS HATCH OPEN".

2. CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer. Refer to <u>DLK-118, "Component Function Check"</u>.

Is the inspection result normal?

- YES >> GO TO 3.
- NO >> Repair or replace the malfunctioning parts.

## **3.**REPLACE BCM

1. Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.

2. Confirm the operation after replacement.

## Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>.

## TRUNK LID CLOSED

## TRUNK LID CLOSED : Description

Reminder function does not operate using trunk lid closed.

## **TRUNK LID CLOSED : Diagnosis Procedure**

1.CHECK TRUNK ROOM LAMP SWITCH

Check trunk room lamp switch.

Refer to <u>DLK-133</u>, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

- 2. CHECK HAZARD FUNCTION
- Check hazard function.

Refer to DLK-115, "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-98, "Removal and Installation".

2. Confirm the operation after replacement.

### Is the result normal?

YES >> INSPECTION END

INFOID:000000009725705

INFOID:000000009725706

## < SYMPTOM DIAGNOSIS >

NO	>> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

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## TAKE AWAY WARNING DOES NOT OPERATE

# TAKE AWAY WARNING DOES NOT OPERATE

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Diagnosis Procedure	INFOID:000000009616531
1. CHECK DTC WITH BCM AND COMBINATION METER	
Check that DTC is not detected with BCM and combination meter.	
Is the inspection result normal?	
YES >> GO TO 2.	
NO-1 >> Refer to <u>BCS-62, "DTC Index"</u> . (BCM)	
NO-2 >> Refer to MWI-80, "DTC Index". (Combination meter)	
2. CHECK COMBINATION METER BUZZER	
Check combination meter buzzer. Refer to <u>WCS-53, "Component Function Check"</u> .	
Is the inspection result normal?	
· · · · · · · · · · · · · · · · · · ·	
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
3.CHECK INFORMATION DISPLAY	
Check information display. Refer to <u>DLK-116, "Diagnosis Procedure"</u> .	
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 <u>DLK-111, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 5.	
NO >> Repair or replace the malfunctioning parts.	
5. CHECK INTELLIGENT KEY WARNING BUZZER	
Check Intelligent Key warning buzzer. Refer to DLK-118, "Component Function Check".	
· · · · · · · · · · · · · · · · · · ·	
Is the inspection result normal?	
YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts.	
6.CHECK INSIDE KEY ANTENNA	
Check inside key antenna.	
Instrument lower: Refer to <u>DLK-81, "DTC Description"</u> .	
<ul> <li>Console: Refer to <u>DLK-84, "DTC Description"</u>.</li> <li>Trunk room: Refer to <u>DLK-87, "DTC Description"</u>.</li> </ul>	
· · · · · · · · · · · · · · · · · · ·	
Is the inspection result normal?	
YES >> GO TO 7. NO >> Repair or replace the malfunctioning parts.	
<b>7.</b> REPLACE BCM	
1. Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u> .	
2. Confirm the operation after replacement.	
Is the result normal?	
YES >> INSPECTION END	

NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>

## TRUNK LID DOES NOT OPEN

<pre></pre>	
TRUNK LID DOES NOT OPEN	
ALL SWITCHES	
ALL SWITCHES : Description	INFOID:000000009627410
Trunk lid does not open using all switches.	
ALL SWITCHES : Diagnosis Procedure	INFOID:000000009627411
1. CHECK TRUNK LID OPENER CANCEL SWITCH SETTING (EXCEPT FOR MEXICO M	ODELS)
Check trunk lid opener cancel switch is setting in ON position. <u>Is the inspection result normal?</u>	
YES >> GO TO 2.	
NO >> Set trunk lid opener cancel switch to ON position.	
2.CHECK TRUNK LID OPENER CANCEL SWITCH (EXCEPT FOR MEXICO MODELS)	
Check trunk lid opener cancel switch. Refer to <u>DLK-127</u> , "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
<b>3.</b> CHECK TRUNK LID OPENER ACTUATOR	
Check trunk lid opener actuator.	
Refer to DLK-125, "Component Function Check".	
<u>Is the inspection result normal?</u> YES >> GO TO 4.	
NO >> Repair or replace the malfunctioning parts.	
4.REPLACE BCM	
<ol> <li>Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ol>	
Is the result normal?	
YES >> INSPECTION END	
NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . TRUNK LID OPENER SWITCH	
TRUNK LID OPENER SWITCH : Description	
	INFOID:000000009616510
Trunk lid does not open using trunk lid opener switch.	
TRUNK LID OPENER SWITCH : Diagnosis Procedure	INFOID:000000009616511
1.CHECK TRUNK LID OPENER SWITCH	
Check trunk lid opener switch. Refer to DLK-131, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts. 2.REPLACE BCM	
<ol> <li>Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ol>	
Is the result normal?	
YES >> INSPECTION END	

NO

# DLK-165

>> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

< SYMPTOM DIAGNOSIS >	
INTELLIGENT KEY	
INTELLIGENT KEY : Description	INFOID:000000009616512
Trunk lid does not open using Intelligent Key button operation.	
INTELLIGENT KEY : Diagnosis Procedure	INFOID:000000009616513
1. CHECK TRUNK LID OPEN FUNCTION	
Check trunk lid open function with trunk lid opener switch. Does trunk lid open with trunk lid opener switch?	
YES $>>$ GO TO 2.	
NO >> Refer to <u>DLK-165</u> , "TRUNK LID OPENER SWITCH : Diagnosis Procedure".	
2.CHECK REMOTE KEYLESS ENTRY FUNCTION	
Check door lock/unlock using Intelligent Key button operation.	
Does door lock/unlock with Intelligent Key button? YES >> GO TO 3.	
NO >> Refer to <u>DLK-146, "Diagnosis Procedure"</u> .	
<b>3.</b> REPLACE INTELLIGENT KEY	
<ol> <li>Replace Intelligent Key.</li> <li>Confirm the operation after replacement.</li> </ol>	
Is the result normal?	
YES >> INSPECTION END	
NO >> Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u> . TRUNK LID OPENER REQUEST SWITCH	
	INFOID:000000009616514
Trunk lid does not open using trunk lid opener request switch.	
Trunk lid does not open using trunk lid opener request switch.	
TRUNK LID OPENER REQUEST SWITCH : Diagnosis Procedure	INFOID:000000009616515
TRUNK LID OPENER REQUEST SWITCH : Diagnosis Procedure	
TRUNK LID OPENER REQUEST SWITCH : Diagnosis Procedure       Image: Check trunk Lid open FUNCTION         Check trunk lid open function using trunk lid opener switch.       Image: Check trunk lid open function using trunk lid opener switch.	
TRUNK LID OPENER REQUEST SWITCH : Diagnosis Procedure         1.CHECK TRUNK LID OPEN FUNCTION         Check trunk lid open function using trunk lid opener switch.         Does trunk lid open with trunk lid opener switch?         YES       >> GO TO 2.	
TRUNK LID OPENER REQUEST SWITCH : Diagnosis Procedure         1.CHECK TRUNK LID OPEN FUNCTION         Check trunk lid open function using trunk lid opener switch.         Does trunk lid open with trunk lid opener switch?         YES       >> GO TO 2.         NO       >> Refer to DLK-165, "TRUNK LID OPENER SWITCH : Diagnosis Procedure".	
TRUNK LID OPENER REQUEST SWITCH : Diagnosis Procedure         1.CHECK TRUNK LID OPEN FUNCTION         Check trunk lid open function using trunk lid opener switch.         Does trunk lid open with trunk lid opener switch?         YES       >> GO TO 2.         NO       >> Refer to DLK-165, "TRUNK LID OPENER SWITCH : Diagnosis Procedure".         2.CHECK DOOR LOCK FUNCTION	
TRUNK LID OPENER REQUEST SWITCH : Diagnosis Procedure         1.CHECK TRUNK LID OPEN FUNCTION         Check trunk lid open function using trunk lid opener switch.         Does trunk lid open with trunk lid opener switch?         YES         YES         NO         >> Refer to DLK-165, "TRUNK LID OPENER SWITCH : Diagnosis Procedure".         2.CHECK DOOR LOCK FUNCTION         Check door lock/unlock using door request switch.	
TRUNK LID OPENER REQUEST SWITCH : Diagnosis Procedure         1.CHECK TRUNK LID OPEN FUNCTION         Check trunk lid open function using trunk lid opener switch.         Does trunk lid open with trunk lid opener switch?         YES         NO         >> Refer to DLK-165, "TRUNK LID OPENER SWITCH : Diagnosis Procedure".         2.CHECK DOOR LOCK FUNCTION         Check door lock/unlock using door request switch.         Does door lock/unlock with door request switch?	
TRUNK LID OPENER REQUEST SWITCH : Diagnosis Procedure         1.CHECK TRUNK LID OPEN FUNCTION         Check trunk lid open function using trunk lid opener switch.         Does trunk lid open with trunk lid opener switch?         YES       >> GO TO 2.         NO       >> Refer to DLK-165, "TRUNK LID OPENER SWITCH : Diagnosis Procedure".         2.CHECK DOOR LOCK FUNCTION         Check door lock/unlock using door request switch.         Does door lock/unlock with door request switch?         YES       >> GO TO 3.         NO       >> Refer to DLK-143. "ALL DOOR REQUEST SWITCHES : Diagnosis Procedure".	
TRUNK LID OPENER REQUEST SWITCH : Diagnosis Procedure         1.CHECK TRUNK LID OPEN FUNCTION         Check trunk lid open function using trunk lid opener switch.         Does trunk lid open with trunk lid opener switch?         YES         YES         >> GO TO 2.         NO         >> Refer to DLK-165, "TRUNK LID OPENER SWITCH : Diagnosis Procedure".         2.CHECK DOOR LOCK FUNCTION         Check door lock/unlock using door request switch.         Does door lock/unlock with door request switch?         YES       >> GO TO 3.	
TRUNK LID OPENER REQUEST SWITCH : Diagnosis Procedure         1.CHECK TRUNK LID OPEN FUNCTION         Check trunk lid open function using trunk lid opener switch.         Does trunk lid open with trunk lid opener switch?         YES       >> GO TO 2.         NO       >> Refer to DLK-165, "TRUNK LID OPENER SWITCH : Diagnosis Procedure".         2.CHECK DOOR LOCK FUNCTION         Check door lock/unlock using door request switch.         Does door lock/unlock with door request switch?         YES       >> GO TO 3.         NO       >> Refer to DLK-143. "ALL DOOR REQUEST SWITCHES : Diagnosis Procedure".	
TRUNK LID OPENER REQUEST SWITCH : Diagnosis Procedure         1.CHECK TRUNK LID OPEN FUNCTION         Check trunk lid open function using trunk lid opener switch.         Does trunk lid open with trunk lid opener switch?         YES       >> GO TO 2.         NO       >> Refer to DLK-165, "TRUNK LID OPENER SWITCH : Diagnosis Procedure".         2.CHECK DOOR LOCK FUNCTION         Check door lock/unlock using door request switch.         Does door lock/unlock with door request switch?         YES       >> GO TO 3.         NO       >> Refer to DLK-143, "ALL DOOR REQUEST SWITCHES : Diagnosis Procedure".         3.CHECK TRUNK LID OPENER REQUEST SWITCH         Check trunk lid opener request switch.         Refer to DLK-129, "Component Function Check".         Is the inspection result normal?	
$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	
TRUNK LID OPENER REQUEST SWITCH : Diagnosis Procedure         1.CHECK TRUNK LID OPEN FUNCTION         Check trunk lid open function using trunk lid opener switch.         Does trunk lid open with trunk lid opener switch?         YES       >> GO TO 2.         NO       >> Refer to DLK-165, "TRUNK LID OPENER SWITCH : Diagnosis Procedure".         2.CHECK DOOR LOCK FUNCTION         Check door lock/unlock using door request switch.         Does door lock/unlock with door request switch?         YES       >> GO TO 3.         NO       >> Refer to DLK-143, "ALL DOOR REQUEST SWITCHES : Diagnosis Procedure".         3.CHECK TRUNK LID OPENER REQUEST SWITCH         Check trunk lid opener request switch.         Refer to DLK-129, "Component Function Check".         Is the inspection result normal?         YES       >> GO TO 4.         NO       >> Repair or replace the malfunctioning parts.	
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Is the inspection result normal?

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IRUNK LID DOES NOT OPEN	
< SYMPTOM DIAGNOSIS >	
YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts.	^
5. CHECK TRUNK LID ROOM LAMP SWITCH	A
Check trunk lid room lamp switch.	
Refer to <u>DLK-133, "Component Function Check"</u> .	В
Is the inspection result normal?	
YES >> GO TO 6.	С
NO >> Repair or replace the malfunctioning parts. <b>6.</b> REPLACE BCM	
1. Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u> .	D
<ol> <li>Confirm the operation after replacement.</li> </ol>	D
Is the result normal?	
YES >> INSPECTION END	E
NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> .	
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# VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

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

**Diagnosis Procedure** 

INFOID:000000009616518

- 1. CHECK "AUTO LOCK FUNCTION" SETTING IN "WORK SUPPORT"
- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 2. Select "AUTO LOCK FUNCTION" in "WORK SUPPORT" mode.
- Check "AUTO LOCK FUNCTION" in "WORK SUPPORT". Refer to <u>DLK-49, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.

Is the inspection result normal?

- YES >> GO TO 2.
- NO >> Set "MODE 1" in "AUTO LOCK FUNCTION".

2.REPLACE BCM

- 1. Replace BCM. Refer to <u>BCS-98, "Removal and Installation"</u>.
- 2. Confirm the operation after replacement.

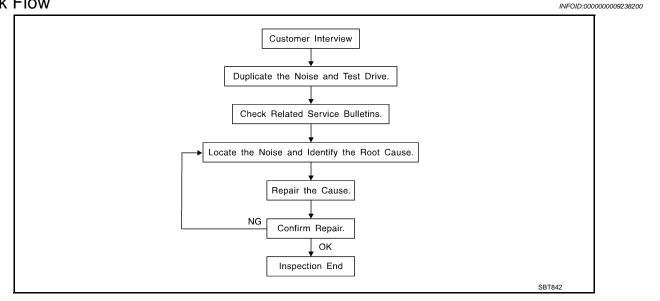
### Is the result normal?

- YES >> INSPECTION END
- NO >> Check intermittent incident. Refer to GI-43. "Intermittent Incident".

### < SYMPTOM DIAGNOSIS >

# SQUEAK AND RATTLE TROUBLE DIAGNOSES

## Work Flow



### CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of customer's comments; refer to <u>DLK-173</u>, "<u>Diagnostic Worksheet</u>". This information is necessary to duplicate the conditions that exist when the noise occurs.

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

### DUPLICATE THE NOISE AND TEST DRIVE

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

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#### < SYMPTOM DIAGNOSIS >

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

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

#### CHECK RELATED SERVICE BULLETINS

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

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

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

- 1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis ear: J-39570, Engine ear and mechanics stethoscope).
- 2. Narrow down the noise to a more specific area and identify the cause of the noise by:
- Removing the components in the area that is are suspected to be the cause of the noise. Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
- Tapping or pushing/pulling the component that is are suspected to be the cause of the noise. Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
- Feeling for a vibration by hand by touching the component(s) that is are suspected to be the cause of the noise.
- Placing a piece of paper between components that are suspected to be the cause of the noise.
- Looking for loose components and contact marks. Refer to DLK-171, "Inspection Procedure".

#### REPAIR THE CAUSE

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

#### CAUTION:

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

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

The following materials are contained in the Nissan Squeak and Rattle Kit (J-50397) are listed on the inside cover of the kit; and can each be ordered separately as needed.

URETHANE PADS [1.5 mm (0.059 in) thick]

Insulates connectors, harness, etc.

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

INSULATOR (Foam blocks)

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

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

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

INSULATOR (Light foam block)

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

FELT CLOTHTAPE

Used to insulate where movement does not occur. Ideal for instrument panel applications.

68370-4B000: 15  $\times$  25 mm (0.59  $\times$  0.98 in) pad/68239-13E00: 5 mm (0.20 in) wide tape roll The following materials, not found in the kit, can also be used to repair squeaks and rattles.

UHMW (TEFLON) TAPE

## **DLK-170**

#### < SYMPTOM DIAGNOSIS > Insulates where slight movement is present. Ideal for instrument panel applications. SILICONE GREASE А Used in place of UHMW tape that is be visible or does not fit. Will only last a few months. SILICONE SPRAY Used when grease cannot be applied. В DUCT TAPE Used to eliminate movement. CONFIRM THE REPAIR Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet. Inspection Procedure D INFOID:000000009238201 Refer to Table of Contents for specific component removal and installation information. INSTRUMENT PANEL Е Most incidents are caused by contact and movement between: 1. The cluster lid A and instrument panel F Acrylic lens and combination meter housing Instrument panel to front pillar garnish Instrument panel to windshield Instrument panel mounting pins Wiring harnesses behind the combination meter A/C defroster duct and duct joint Н These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness. CAUTION: Never use silicone spray to isolate a squeak or rattle. If the area is saturated with silicone, the recheck of repair becomes impossible. CENTER CONSOLE Components to pay attention to include: DLK 1. Shifter assembly cover to finisher A/C control unit and cluster lid C Wiring harnesses behind audio and A/C control unit The instrument panel repair and isolation procedures also apply to the center console. DOORS Pay attention to the following: M 1. Finisher and inner panel making a slapping noise Inside handle escutcheon to door finisher Ν Wiring harnesses tapping 4. Door striker out of alignment causing a popping noise on starts and stops Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. The areas can usually be insulated with felt cloth tape or insulator foam blocks from the Nissan Squeak and Rattle Kit (J-50397) to repair the noise. TRUNK Ρ Trunk noises are often caused by a loose jack or loose items put into the trunk by the customer. In addition look for the following: Trunk lid dumpers out of adjustment Trunk lid striker out of adjustment

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

#### < SYMPTOM DIAGNOSIS >

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

#### SUNROOF/HEADLINING

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

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

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

#### SEATS

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

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

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

#### UNDERHOOD

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

Causes of transmitted underhood noise include:

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

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

< SYMPTOM DIAGNOSIS >

**Diagnostic Worksheet** 



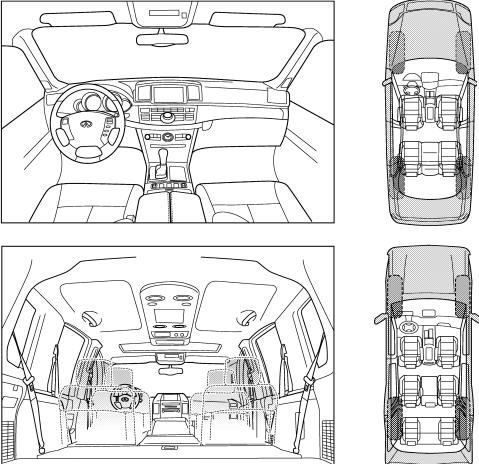
**SQUEAK & RATTLE DIAGNOSTIC WORKSHEET** 

#### Dear Infiniti Customer:

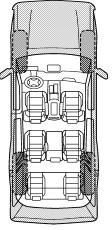
We are concerned about your satisfaction with your Infiniti vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Infiniti right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may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

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

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



Continue to page 2 of the worksheet and briefly describe the location of the noise or rattle. In addition, please indicate the conditions which are present when the noise occurs. PIIB8741E



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#### < SYMPTOM DIAGNOSIS >

## SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

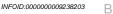
II. WHEN DOES IT OCCUR? (please check	< the boxes that apply)
<ul> <li>anytime</li> <li>1st time in the morning</li> <li>only when it is cold outside</li> <li>only when it is hot outside</li> </ul>	<ul> <li>after sitting out in the rain</li> <li>when it is raining or wet</li> <li>dry or dusty conditions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

#### TO BE COMPLETED BY DEALERSHIP PERSONNEL

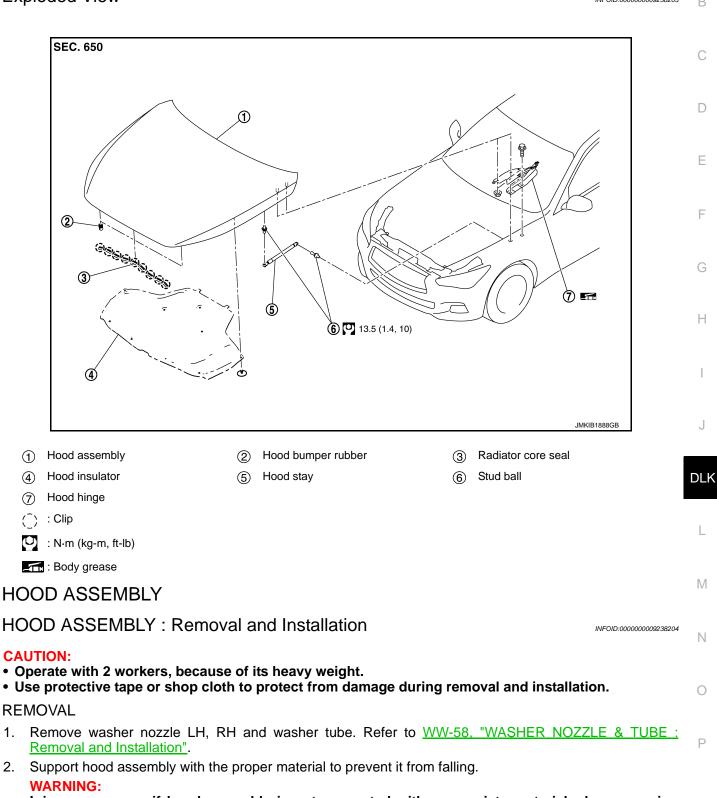
**Test Drive Notes:** 

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

# Exploded View



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HOOD

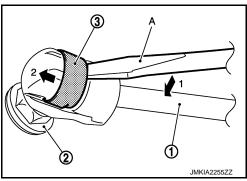
Injury may occur if hood assembly is not supported with appropriate material when removing hood assembly.

# HOOD

## < REMOVAL AND INSTALLATION >

In the order of 1 → 2 as shown in the figure, remove the metal clip ③ located on the connection between the hood stay ① and the stud ball ② (hood side), by using a remover tool (A).
 CAUTION:

Two workers are required to support the hood.



- 4. Disengage the stud ball from the hood stay (hood side).
- 5. Remove hood assembly mounting nuts, and then remove hood assembly.

### INSTALLATION

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

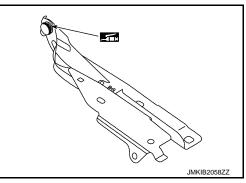
- Before installing hood hinge, apply anticorrosive agent onto the mounting surface of the vehicle body.
- After installing, perform hood fitting adjustment. Refer to <u>DLK-176, "HOOD ASSEMBLY : Adjust-ment"</u>.
- Apply touch-up paint to the body color if the paint around hood hinge is peeled off.

## HOOD ASSEMBLY : Inspection

INFOID:000000009705830

- 1. Open and close the hood. Check that hood hinge rotation portion moves smoothly.
- 2. Check hood hinge rotating part for poor lubrication. If necessary, apply body grease.

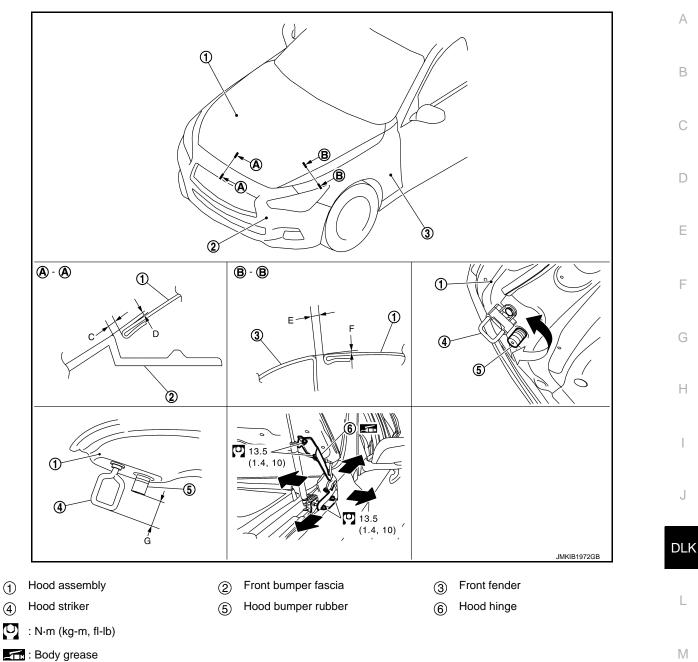




HOOD ASSEMBLY : Adjustment

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FITTING ADJUSTMENT



Fitting Adjustment Standard

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

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

					Unit: mm [in]	0	
	Portion			Standard	Difference (RH/LH, MAX)		
	Hood – Front bumper		С	Clearance	2.0 - 4.0 [0.079 - 0.157]	_	Ρ
	fascia	<b>A</b> -A	D	Surface height	(-1.0) - (+2.0) [(-0.039) - (+0.079)]	_	
	Hood – Front fender	<b>B</b> - <b>B</b>	Е	Clearance	2.0 - 3.0 [0.079 - 0.118]	< 2.0 [0.079]	

Μ

Portion			Standard	Difference (RH/LH, MAX)	
		F	Surface height	(-2.0) - (+1.0) [(-0.079) - (+0.039)]	_
Hood striker – Bumper rubber	_	G	Clearance	36.8 – 40.8 [1.449 – 1.606]	_

Fitting Adjustment Procedure

- 1. Remove hood striker and adjust the surface height of hood, front bumper fascia and front fender according to the fitting standard dimension, by rotating hood bumper rubbers.
- 2. Adjust the height difference of hood striker, hood bumper rubber according to the fitting standard dimension.
- 3. Loosen hood hinge mounting nuts on the hood.
- 4. Adjust the clearance of hood, front bumper fascia and front fender according to the fitting standard dimension, for the hood.
- 5. Check that hood lock secondary latch is securely engaged with striker by dropping hood from approximately 200 mm (7.874 in) height or pressing lightly on the hood. CAUTION:

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

- 6. Install as static closing force of hood is 94 490 N·m (9.6 50.0 kg-m).
  - NOTE:
  - Exercise vertical force on right side and left side of hood lock.
  - Never press simultaneously both sides.
- 7. After adjustment, tighten hood hinge mounting nuts to the specified torque.

#### CAUTION:

- After installation, apply touch-up paint (the body color) onto the heads of hood hinge mounting bolt and nuts.
- After adjustment, adjust the washer nozzle spray position. Refer to <u>WW-59, "WASHER NOZZLE &</u> <u>TUBE : Inspection and Adjustment"</u>.

HOOD HINGE

## HOOD HINGE : Removal and Installation

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## REMOVAL

- 1. Remove hood assembly. Refer to <u>DLK-175, "HOOD ASSEMBLY : Removal and Installation"</u>.
- 2. Remove front fender cover. Refer to <u>DLK-187, "FENDER COVER : Removal and Installation"</u>.
- 3. Remove front fender drip cover. Refer to <u>DLK-188, "HOOD SEAL : Removal and Installation"</u>.
- 4. Remove hood stay. Refer to <u>DLK-178, "HOOD STAY : Removal and Installation"</u>.
- 5. Remove upper mounting bolt of front fender assembly. Refer to <u>DLK-186, "Exploded View"</u>.
- 6. Remove hood hinge mounting bolts, and then remove hood hinge.

### INSTALLATION

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

#### CAUTION:

Before installation of hood hinge, apply anticorrosive agent onto the mounting surface of the hood ledge. HOOD STAY

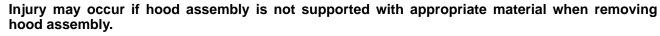
## HOOD STAY : Removal and Installation

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### REMOVAL

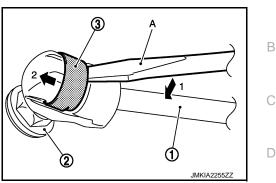
- 1. Remove hoodledge cover. Refer to EXT-26, "Removal and Installation".
- Support hood assembly with a proper material to prevent it from falling. WARNING:

## **DLK-178**



In the order of 1 → 2 as shown in the figure, remove the metal clip ③ located on the connection between the hood stay ① and the stud ball ② (hood side), by using a remover tool (A).
 CAUTION:

Two workers are required to support the hood.



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- 4. Disengage the stud ball from the hood stay (hood side).
- 5. Repeat the same operation to disengage the stud ball from the hood stay (hinge side), then remove the hood stay.

#### INSTALLATION

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

#### CAUTION:

After the installation, check that hood opens and closes normally. Refer to <u>DLK-176, "HOOD ASSEM-</u> <u>BLY : Inspection"</u>.

## HOOD STAY : Disposal

#### **CAUTION:**

#### When performing disposal operation, wear the protective glasses and protective gloves.

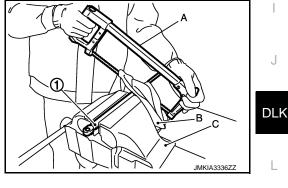
1. Fix hood stay ① using a vise (C).

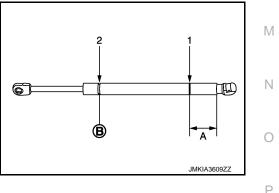
: 20.0 mm (0.787 in)

: Cut at the groove.

2. Using hacksaw (A) slowly make 2 holes in the hood stay, in numerical order  $1 \rightarrow 2$  as shown in the figure. CAUTION:

When cutting a hole on hood stay, always cover a hacksaw using a shop cloth (B) to avoid scattering metal fragments or oil.





# RADIATOR CORE SEAL

## RADIATOR CORE SEAL : Removal and Installation

REMOVAL

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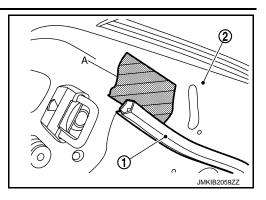
Revision: 2013 October

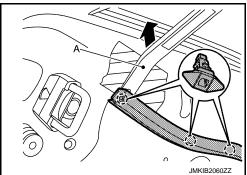
1. Apply protective tape (A) to hood assembly ② around radiator core seal ① fixing clips for preventing damage.

Disengage fixing clips on the reverse side of radiator core seal using a remover tool (A).
 CAUTION:

Never to damage hood assembly.

( ) : Clip





3. Remove radiator core seal.

INSTALLATION Install in the reverse order of removal. HOOD INSULATOR

HOOD INSULATOR : Removal and Installation

REMOVAL Remove hood insulator fixing clips, and then remove hood insulator.

INSTALLATION Install in the reverse order of removal. INFOID:000000009314866

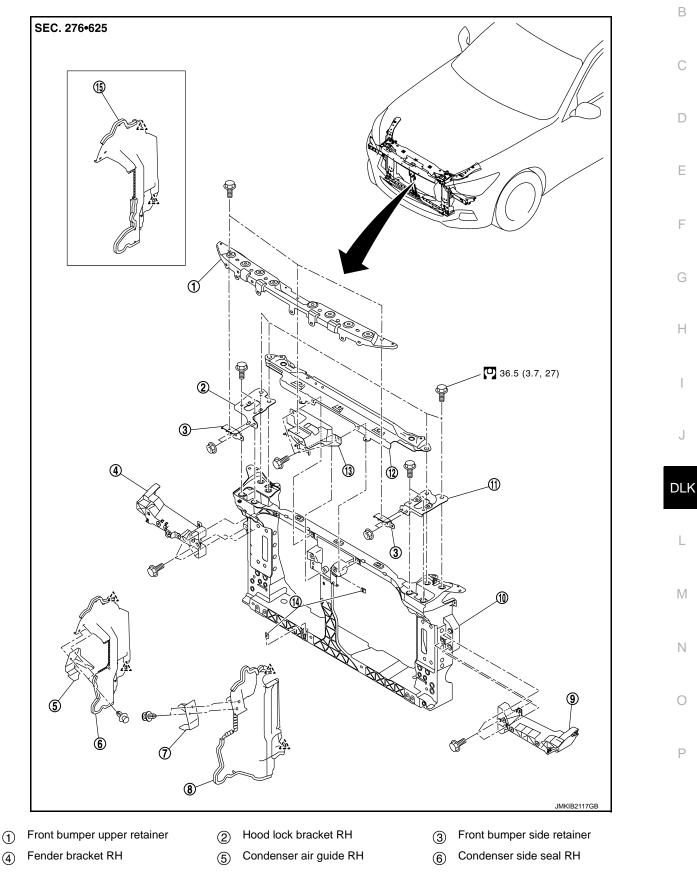
## < REMOVAL AND INSTALLATION >

RADIATOR CORE SUPPORT

## Exploded View

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#### < REMOVAL AND INSTALLATION >

- (8) Condenser side seal LH
- $\widehat{m}$  Radiator core support assembly
- Hood lock support stay

Condenser air guide LH

- (1) Hood lock bracket LH
- 14 J-nut

- (9) Fender bracket LH
- (12) Radiator core support upper

INFOID:000000009238210

(A), 🔊

JMKIB1815Z

(15) Condenser air guide RH (ICC models)

二: Pawl

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: N·m (kg-m, ft-lb)

## Removal and Installation

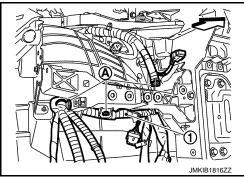
## REMOVAL

- 1. Use a refrigerant collecting equipment to discharge the refrigerant. Refer to <u>HA-20. "Recycle Refrigerant"</u>.
- 2. Remove front under cover. Refer to EXT-34, "FRONT UNDER COVER : Removal and Installation".
- 3. Drain engine coolant from radiator. Refer to CO-7, "Draining".
- Remove front bumper fascia assembly, front bumper energy absorber and front bumper reinforcement. Refer to <u>EXT-14, "Removal and Installation"</u>.
- 5. Remove front combination lamp LH and RH. Refer to EXL-172, "Removal and Installation".
- 6. Remove fender bracket RH.
- a. Remove Intelligent Key warning buzzer. Refer to DLK-252, "Removal and Installation".
- b. Remove horn. Refer to <u>HRN-6, "EXCEPT FOR MEXICO : Removal and Installation"</u> (Except for Mexico).
- c. Remove mounting bolts (A) of harness bracket (1).



e. Remove harness fixing clips (A), and then move harness (1) to a location where it dose not inhibit work.

<□ : Vehicle front



- f. Remove fender bracket mounting bolts, and then remove fender bracket RH.
- 7. Remove fender bracket LH.
- a. Remove washer tank. Refer to WW-60, "WASHER TANK : Removal and Installation".
- b. Remove steering angle main control module. Refer to STC-428. "Removal and Installation".

#### < REMOVAL AND INSTALLATION >

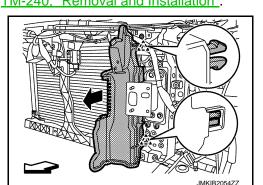
c. Disconnect harness connector (A) of engine room front harness
 ①.
 CAUTION:

Before sufficing turn ignition switch OFF, disconnect battery negative terminal and then wait for at least 3 minutes.

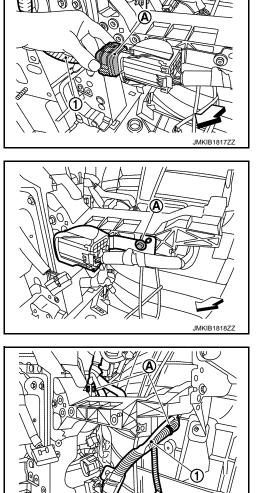
- d. Remove mounting bolt (A) of harness bracket.

e. Remove harness fixing clips (A), and then move harness (1) to a location where it does not inhibit work.

- f. Remove fender bracket mounting bolts, and then remove fender bracket LH.
- 8. Remove air cleaner cover (bank 1 and bank 2). Refer to EM-29, "Removal and Installation".
- 9. Remove reservoir tank of radiator. Refer to CO-13, "Exploded View".
- 10. Disconnect cooling fan control module harness connector, and then remove harness from cooling fan assembly. Refer to <u>CO-17, "Removal and Installation"</u>.
- 11. Remove radiator hoses (lower and upper) from radiator. Refer to CO-13, "Removal and Installation".
- 12. Remove A/T fluid cooler hoses (A and B) from radiator. Refer to TM-240, "Removal and Installation".
- 13. Disengage condenser side seal fixing pawls, and then remove condenser side seal LH and RH.
  - ∠\_\_\_ : Pawl<⊐ : Vehicle front</li>



14. Disconnect hood lock control cable (rear) from hood lock control cable (front). Refer to <u>DLK-219</u>, "HOOD <u>LOCK CONTROL CABLE : Removal and Installation</u>".





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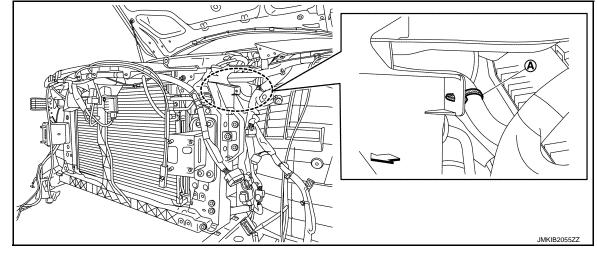
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## **DLK-183**

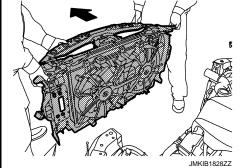
## < REMOVAL AND INSTALLATION >

- 15. Disconnect high-pressure flexible hose and high pressure pipe from condenser pipe assembly. Refer to <u>HA-32, "HIGH-PRESSURE FLEXIBLE HOSE : Removal and Installation"</u> and <u>HA-34, "HIGH-PRESSURE PIPE : Removal and Installation"</u>.
- 16. Remove harness fixing clip (A).



- 17. Remove front bumper stay LH and RH. Refer to EXT-14, "Removal and Installation".
- Remove radiator core support mounting bolts, and then remove radiator core support.
   CAUTION:
  - Operate with 2 workers, because of its heavy weight.
  - Never to damage harness and harness connector.
  - Never to damage A/T fluid cooler hoses. NOTE:

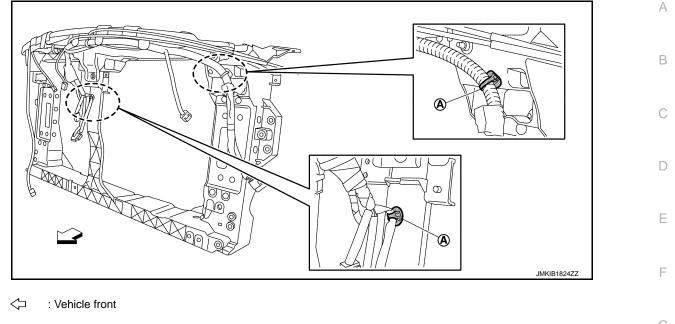
Write a short note to describe the harness layout.



- 19. Remove the following parts after removing radiator core support.
- a. Remove condenser assembly, cooling fan assembly, and radiator.
- i. Disconnect refrigerant pressure sensor harness connector.
- ii. Remove condenser pipe assembly. Refer to <u>HA-38</u>, "CONDENSER PIPE ASSEMBLY : Removal and <u>Installation"</u>.
- iii. Remove hood lock control cable (front) fixing clips from radiator core upper support. Refer to <u>DLK-219</u>, <u>"HOOD LOCK CONTROL CABLE : Removal and Installation"</u>.
- iv. Remove radiator core upper support mounting bolts, and then remove radiator core upper support.
- v. Remove condenser assembly, cooling fan assembly together with radiator.
- b. Remove the following parts.
  - Ambient sensor: Refer to HAC-115, "Removal and Installation".
  - Exhaust gas/outside odor sensor: Refer to HAC-119, "Removal and Installation".
  - Horn: Refer to <u>HRN-6</u>, "EXCEPT FOR MEXICO : Removal and Installation" (Except for Mexico) or <u>HRN-8</u>, "FOR MEXICO : Removal and Installation" (For Mexico).
  - Crash zone sensor: Refer to <u>SR-28, "Removal and Installation"</u>.
- c. Remove front bumper upper retainer.
- i. Disconnect hood lock switch harness connector.

## < REMOVAL AND INSTALLATION >

#### ii. Disengage fixing highness clips (A).



- iii. Remove hood lock control cable (front) fixing clips. Refer to DLK-215, "Exploded View".
- iv. Remove hood lock control cable (front) from cable clip. Refer to DLK-215, "Exploded View".
- v. Remove front bumper upper retainer mounting bolts, and then front bumper upper retainer together with harness.
- vi. Remove front bumper side retainer mounting nut, and then remove front bumper side retainer.
- d. Remove hood lock support stay mounting bolt, and then hood lock support stay.
- e. Remove hood lock bracket mounting bolts, and then remove hood lock (LH and RH) and hood lock control cable (front) together with hood lock bracket.

#### INSTALLATION

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

- Replenish the following parts.
- Refrigerant: Refer to HA-20, "Charge Refrigerant".
- Engine coolant: Refer to CO-8, "Refilling".
- A/T fluid: Refer to <u>CO-8, "Refilling"</u>.

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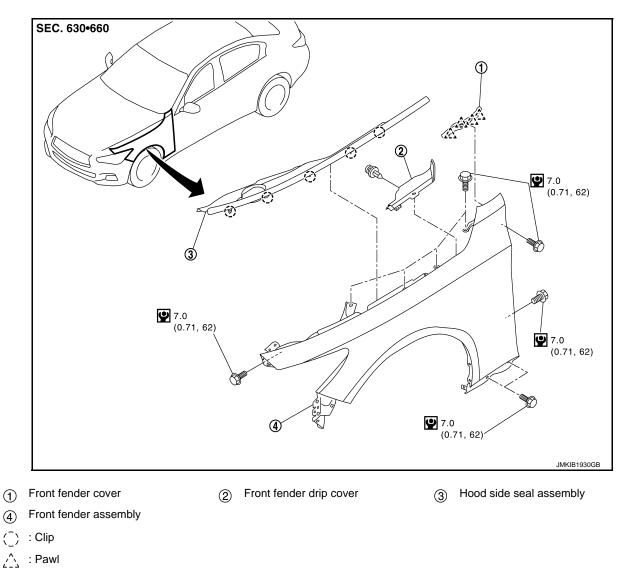
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## < REMOVAL AND INSTALLATION >

## FRONT FENDER

## Exploded View

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: N·m (kg-m, in-lb)

## FRONT FENDER

FRONT FENDER : Removal and Installation

#### INFOID:000000009238212

#### **CAUTION:**

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

## REMOVAL

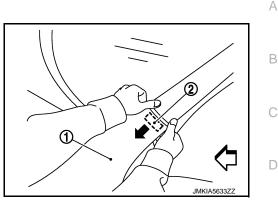
- Remove front fender protector front and front fender protector rear. Refer to <u>EXT-29</u>, "<u>FENDER PROTEC-</u> <u>TOR</u> : <u>Removal and Installation</u>".
- 2. Remove sill cover. Refer to EXT-53, "Removal and Installation".
- 3. Remove front fender drip cover and hood side seal assembly. Refer to <u>DLK-188, "HOOD SEAL : Removal</u> <u>and Installation"</u>.
- Remove front bumper fascia assembly and bumper side bracket. Refer to <u>EXT-14, "Removal and Installa-</u> tion".
- 5. Remove front combination lamp. Refer to <u>EXL-172, "Removal and Installation"</u>.

## **DLK-186**

## **FRONT FENDER**

#### < REMOVAL AND INSTALLATION >

- 6. Remove front fender cover. Refer to <u>DLK-187</u>, "FENDER COVER : Removal and Installation".
- 7. Remove mounting bolts of front fender assembly.
- 8. Remove front fender stiffener ② from the vehicle body while carefully pulling upper portion of front fender ① toward vehicle outside.
  - $\triangleleft$  : Vehicle front



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9. Remove front fender assembly.

#### **CAUTION:**

A viscous urethane foam is installed on the back surface of front fender. When removing the front fender, be careful to not deform the front fender while performing the procedure and removing the viscous urethane foam a little at a time.

#### INSTALLATION

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

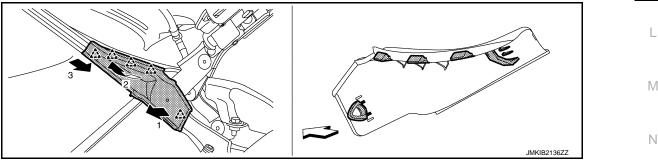
- After installing, perform fitting adjustment of hood assembly and front door assembly.
- Hood assembly: Refer to <u>DLK-176</u>, "HOOD ASSEMBLY : Adjustment".
- Front door assembly: Refer to <u>DLK-193, "DOOR ASSEMBLY : Adjustment"</u>.
- After installation, apply the touch-up paint (the body color) onto the head of front fender mounting bolts.

## FENDER COVER

## FENDER COVER : Removal and Installation

## REMOVAL

- 1. Fully open hood assembly.
- 2. Disengage fixing pawls according to the numerical order  $1 \rightarrow 3$  indicated by arrows as shown in the figure, DLK and then remove front fender cover.



: Pawl

#### CAUTION:

When performing the procedure after removing fender cover, protect the lower of windshield glass P with urethane etc.

#### INSTALLATION

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

#### **CAUTION:**

Install so that there is no clearance between windshield and cowl top cover. HOOD SEAL

## **DLK-187**

## **FRONT FENDER**

#### < REMOVAL AND INSTALLATION >

## HOOD SEAL : Removal and Installation

#### INFOID:000000009314870

#### REMOVAL

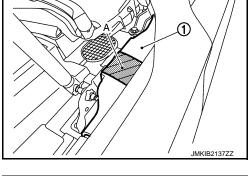
- 1. Remove front fender drip cover.
- a. Apply protective tape (A) to front fender drip cover ① to protect it from damage.

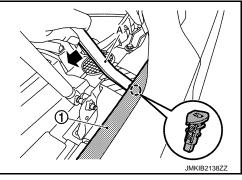
- b. Disengage fixing clips on the reverse side of hood side seal assembly ① using a remover tool (A).
  - ( ]) : Clip

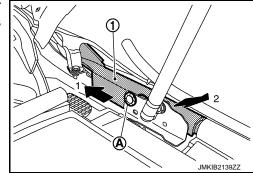
c. Remove fixing clip (A), and then remove front fender drip cover (1) according to the numerical order  $1 \rightarrow 2$  indicated by arrows as shown in the figure.

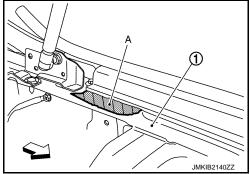
- 2. Remove hoodledge cover. Refer to EXT-26, "Removal and Installation".
- 3. Remove hood side seal assembly.
- a. Disengage rear fixing clip of hood side seal assembly.
- i. Apply protective tape (A) to vehicle body side ① to protect it from damage.











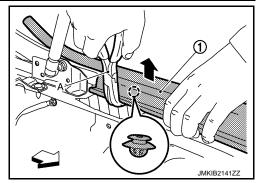
## **FRONT FENDER**

## < REMOVAL AND INSTALLATION >

: Vehicle front

- ii. Disengage fixing clips on the reverse side of hood side seal assembly (1) using a remover tool (A).
  - (<sup>ˆ</sup>) : Clip<⊐ : Vehicle front</li>

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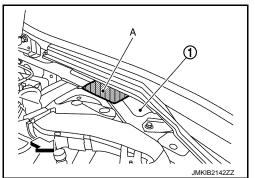
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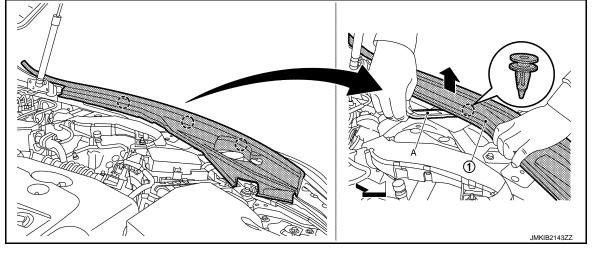
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- b. Remove the fixing clips located at the center of hood side seal assembly.
- i. Apply protective tape (A) to vehicle body side ① to protect it from damage.



ii. Disengage fixing clips on the reverse side of hood side seal assembly ① using a remover tool (A).

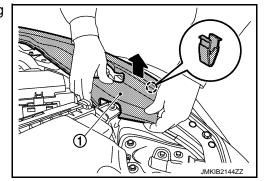


( ]) : Clip

<□ : Vehicle front

- c. Disengage front fixing clip of hood side seal assembly, and then remove hood side seal assembly.
- i. Pull up hood side seal assembly ①, and then disengage fixing clip.

(\_) : Clip



ii. Remove hood side seal assembly.

< REMOVAL AND INSTALLATION >

INSTALLATION Install in the reverse order of removal.

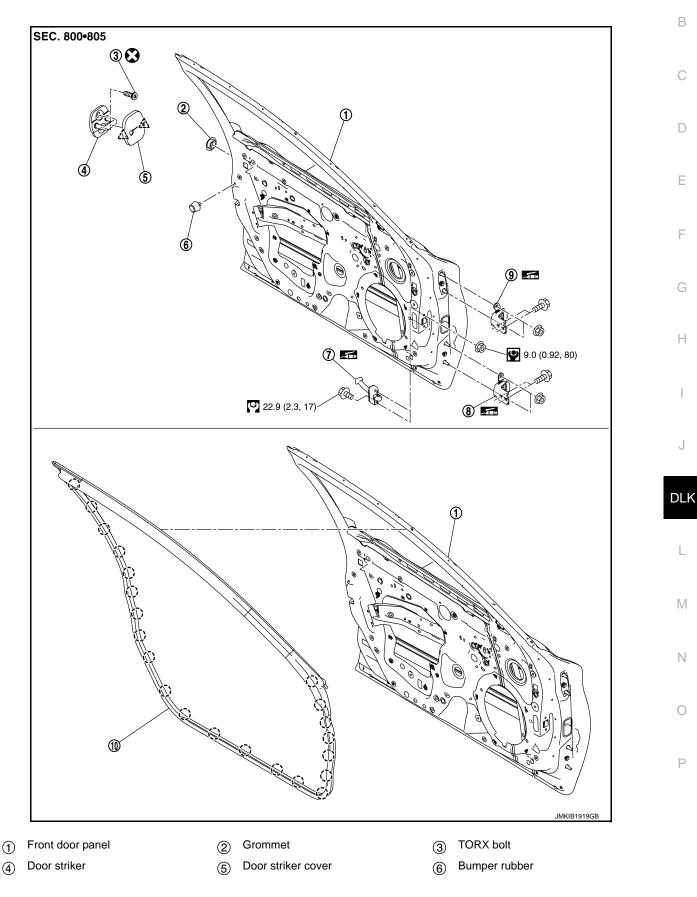
## < REMOVAL AND INSTALLATION >

## FRONT DOOR

Exploded View

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Door hinge (lower)

(8)

#### < REMOVAL AND INSTALLATION >

- ⑦ Door check link
- 10 Front door weather-strip
- ( ]) : Clip
- <u>ک</u> : Pawl
- Always replace after every disassembly.
- : N·m (kg-m, in-lb)
- : N·m (kg-m, ft-lb)
- : Body grease

## DOOR ASSEMBLY

## DOOR ASSEMBLY : Removal and Installation

#### WARNING:

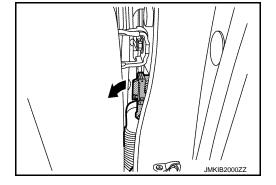
- Before servicing, push ignition switch OFF, disconnect battery negative terminal and wait for 3 minutes or more.
- Never use air tools or electric tools for servicing.

#### **CAUTION:**

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

#### REMOVAL

1. Disconnect front door harness connector.



- 2. Remove door check link mounting bolt on vehicle body side.
- 3. Remove door hinge mounting nuts of door side, and then remove front door assembly.

#### INSTALLATION

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

#### **CAUTION:**

- Apply anticorrosive agent onto the mounting surface.
- After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.
- After installation, check that door opens and closes normally. Refer to <u>DLK-192</u>, "<u>DOOR ASSEMBLY</u> <u>: Inspection</u>".
- If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT. Refer to <u>SRC-15, "On Board Diag-</u> nosis Function" or <u>SRC-20, "CONSULT Function"</u>.

## • After the work is completed, check that no system malfunction is detected by air bag warning lamp. NOTE:

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

## **DOOR ASSEMBLY : Inspection**

INFOID:000000009709502

1. Open and close the door. Check that door hinge and check link rotation portion moves smoothly.

## **DLK-192**

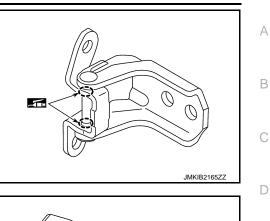
(9) Door hinge (upper)

INFOID:000000009238214

#### < REMOVAL AND INSTALLATION >

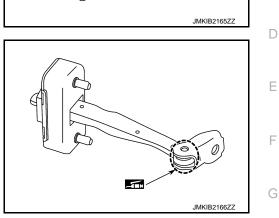
2. Check door hinge rotating part for poor lubrication. If necessary, apply body grease.

: Body grease



3. Check door check link rotating part for poor lubrication. If necessary, apply body grease.

: Body grease



## DOOR ASSEMBLY : Adjustment

FITTING ADJUSTMENT

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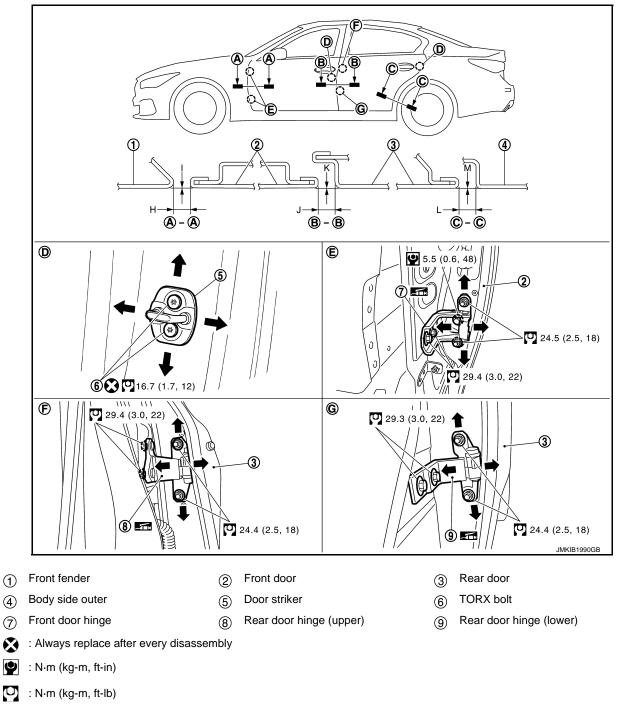
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## < REMOVAL AND INSTALLATION >



: Body grease

Fitting Adjustment Standard

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

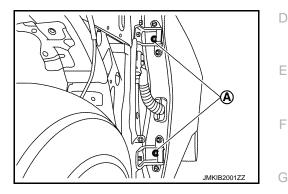
				Unit: mm [in]
Portion				Standard
Front fender – Front door	(A) – (A)	Η	Clearance	2.5 - 3.5 [0.098 - 0.138]
		Surface height	(–1.0) – (+0.5) [(–0.039) – (+0.020)]	

#### < REMOVAL AND INSTALLATION >

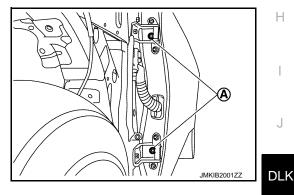
Portion				Standard	Λ
Front door – Rear door		J	Clearance	2.5 – 3.5 [0.098 – 0.138]	A
	<b>B</b> – <b>B</b>	ĸ	Surface height	(-0.5) - (+1.0) [(-0.020) - (+0.039)]	В

Fitting Adjustment Procedure

- Remove front fender assembly. Refer to <u>DLK-186</u>, "FRONT FENDER : Removal and Installation".
- 2. Loosen door hinge mounting nuts on door side.
- 3. Loosen bolts (A).



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



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- 6. Temporarily tighten door hinge mounting nuts on door side.
- Loosen door hinge mounting bolts on body side.
- 8. Raise front door at rear end to adjust clearance of the front door according to the fitting standard dimension.
- 9. After adjustment tighten bolts and nuts to the specified torque. **CAUTION:**

Apply touch-up paint to the body color if the paint around door hinge, door hinge mounting bolts, or nuts is peeled off.

10. Install front fender assembly. Refer to <u>DLK-186, "FRONT FENDER : Removal and Installation"</u>. CAUTION:

After adjusting, perform the camera image calibration (models with side camera). Refer to AV-379. "CALIBRATING CAMERA IMAGE (AROUND VIEW MONITOR) : Work Procedure"

## DOOR STRIKER ADJUSTMENT

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

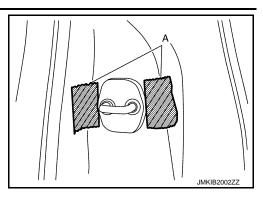
DOOR STRIKER : Removal and Installation

REMOVAL

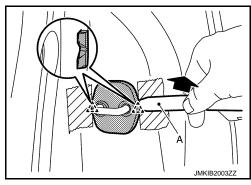
INFOID:000000009238216

## < REMOVAL AND INSTALLATION >

1. Apply protective tapes (A) to vehicle body for preventing damage.



- 2. Disengage fixing pawls of door striker cover using a remover tool (A), and then remove door striker cover.
  - 2 : Pawl



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

#### **INSTALLATION**

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

#### CAUTION:

- Never reuse mounting TORX bolt. Always replace it with a new one when it is removed.
- After installation, perform the fitting adjustment. Refer to <u>DLK-193, "DOOR ASSEMBLY : Adjust-ment"</u>.
- After installation, check that door opens and closes normally. Refer to <u>DLK-192, "DOOR ASSEMBLY</u> : <u>Inspection"</u>.

## DOOR HINGE

## DOOR HINGE : Removal and Installation

INFOID:000000009238217

## REMOVAL

- 1. Remove front fender. Refer to <u>DLK-186, "FRONT FENDER : Removal and Installation"</u>.
- 2. Remove front door assembly. Refer to DLK-192, "DOOR ASSEMBLY : Removal and Installation".
- 3. Remove front door hinge mounting bolts, and then remove front door hinge.

#### INSTALLATION

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

**CAUTION:** 

- Apply anticorrosive agent onto the mounting surface.
- After installation, perform the fitting adjustment. Refer to <u>DLK-193, "DOOR ASSEMBLY : Adjust-</u> <u>ment"</u>.

## DOOR CHECK LINK

## DOOR CHECK LINK : Removal and Installation

#### REMOVAL

- 1. Fully close the front door window.
- 2. Remove front door finisher. Refer to INT-13, "FRONT DOOR FINISHER : Removal and Installation".
- 3. Remove front door speaker or woofer. Refer to the following.
  - Without BOSE audio: Refer to <u>AV-292, "Removal and Installation"</u>.
  - With BOSE audio: Refer to AV-288, "Removal and Installation".

## **DLK-196**

INFOID:000000009238218

## < REMOVAL AND INSTALLATION >

INSTALLATION

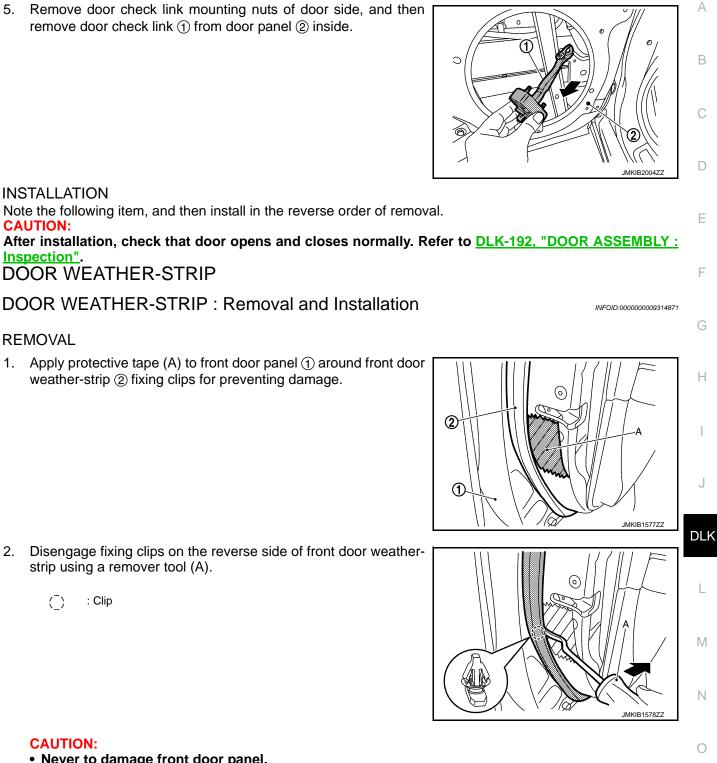
**CAUTION:** 

Inspection".

REMOVAL

DOOR WEATHER-STRIP

- 4. Remove door check link mounting bolt of vehicle body side.
- 5. Remove door check link mounting nuts of door side, and then remove door check link (1) from door panel (2) inside.



#### **CAUTION:**

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• Never to damage front door panel.

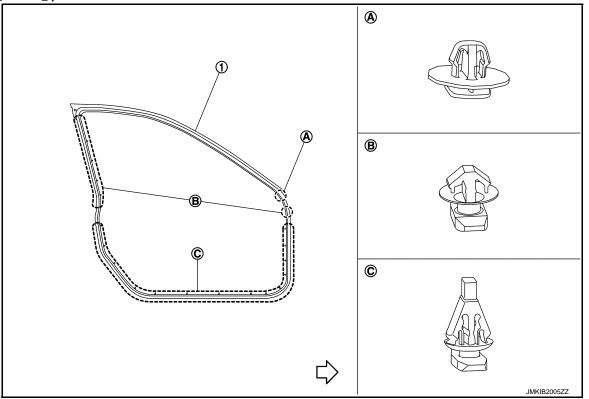
strip using a remover tool (A).

: Clip

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#### < REMOVAL AND INSTALLATION >

• When removing, be careful not to confuse the 3 types of front door weather-strip fixing clips (A, B) and C).



- 3. Remove front door sash cover fixing screw. Refer to EXT-39. "Exploded View".
- 4. Remove door check link mounting bolt of vehicle body side.
- 5. Remove front door weather-strip from front door panel.

#### **INSTALLATION**

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

CAUTION:

Visually check clips for deformation and damage during installation. Replace with new ones if necessary.

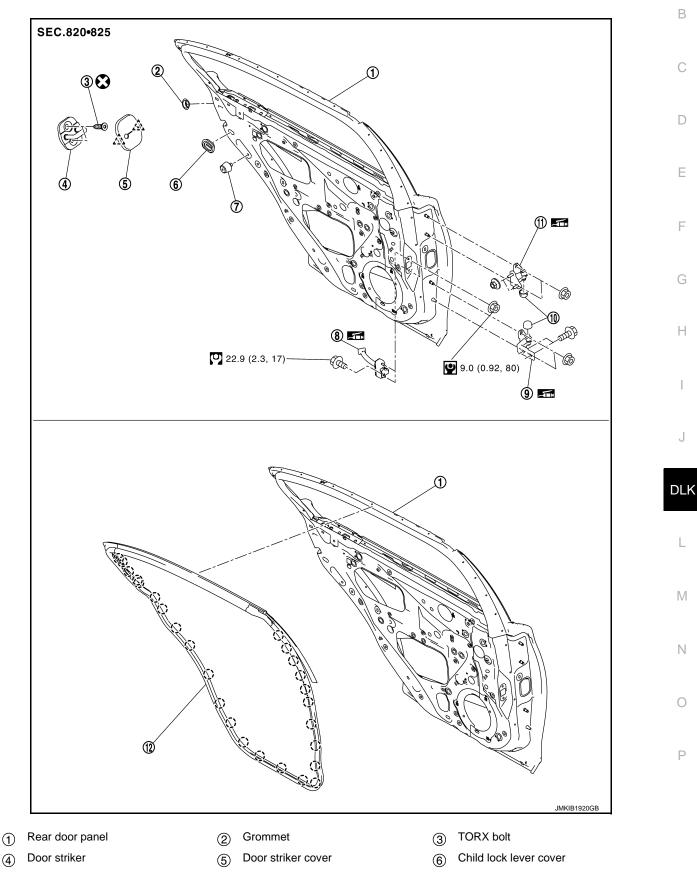
## < REMOVAL AND INSTALLATION >

## REAR DOOR

Exploded View

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DLK-199

#### < REMOVAL AND INSTALLATION >

•••=•		-			
7	Bumper rubber	8	Door check link	9	Door hinge (lower)
10	Nut cap	11	Door hinge (upper)	(12)	Rear door weather-strip
(_)	: Clip				
2	: Pawl				
$\boldsymbol{\otimes}$	: Always replace after every disasser	nbly.			
Ŷ	: N⋅m (kg-m, in-lb)				
O)	: N·m (kg-m, ft-lb)				
<del>,</del>	: Body grease				

## DOOR ASSEMBLY

## DOOR ASSEMBLY : Removal and Installation

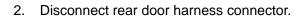
INFOID:000000009238220

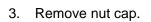
#### **CAUTION:**

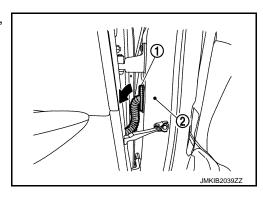
- Perform work with 2 workers, because of it's heavy weight.
- When removing and installing rear door assembly, support door with a jack and cloth to protect door and body.

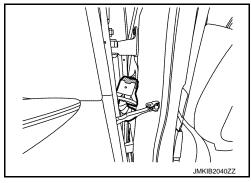
#### REMOVAL

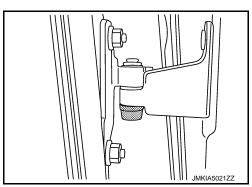
1. Remove rear door harness grommet ① from body side outer ②, and then pull out rear door harness.



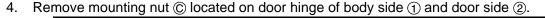


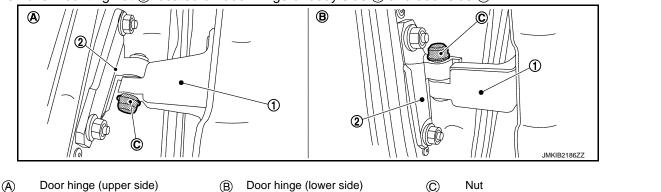






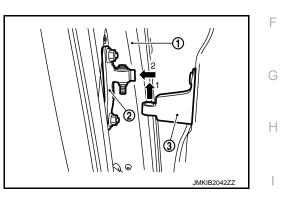
## < REMOVAL AND INSTALLATION >





## Mounting nut tightening torque : 27.0 N·m (2.8 kg-m, 20 ft-lb)

- 5. Remove mounting bolts of door check link on the vehicle.
- 6. Lift up rear door assembly ①. Disconnect door hinge [male-side (door side)] ② from door hinge [female-side (body side)] ③ and remove toward outside of vehicle.



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## INSTALLATION

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

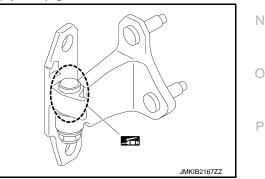
- After installation, check that door opens and closes normally. Refer to <u>DLK-201, "DOOR ASSEMBLY</u> : <u>Inspection"</u>.
- After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts. NOTE:

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

## **DOOR ASSEMBLY : Inspection**

- 1. Open and close the door. Check that door hinge and check link rotation portion moves smoothly.
- 2. Check door hinge rotating part for poor lubrication. If necessary, apply body grease.
  - Door hinge (upper)

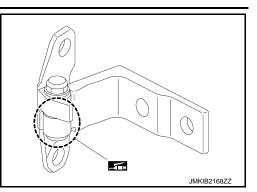
: Body grease



## < REMOVAL AND INSTALLATION >

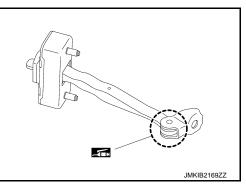
• Door hinge (lower)

: Body grease



3. Check door check link rotating part for poor lubrication. If necessary, apply body grease.

: Body grease

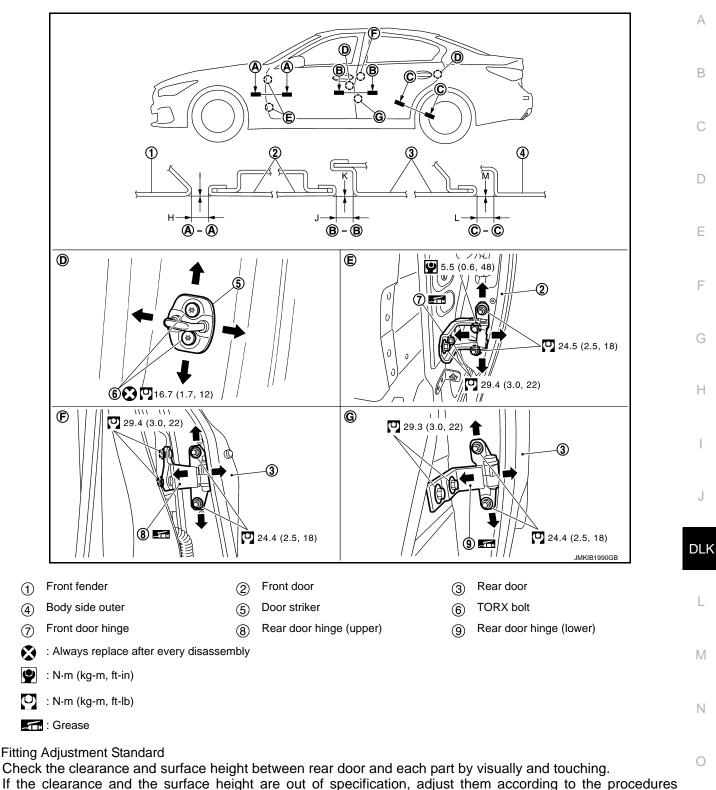


DOOR ASSEMBLY : Adjustment

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FITTING ADJUSTMENT

#### < REMOVAL AND INSTALLATION >



shown below.

Fitting Adjustment Procedure

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#### < REMOVAL AND INSTALLATION >

				Unit: mm [in]
F	Standard			
Front door – Rear door		J	Clearance	2.5 - 3.5 [0.098 - 0.138]
	<b>B</b> – <b>B</b>	κ	Surface height	(+0.5) - (-1.0) [(+0.020) - (-0.039)]
Rear door – Body side out-		L	Clearance	2.5 - 3.5 [0.098 - 0.138]
er	© – ©	Μ	Surface height	(-0.5) - (+1.0) [(-0.020) - (+0.039)]

#### CAUTION:

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

- 1. Remove center pillar lower garnish. Refer to <u>INT-28. "CENTER PILLAR LOWER GARNISH : Removal</u> and Installation".
- 2. Loosen door hinge mounting nuts on door side.
- 3. Adjust the surface height of rear door according to the fitting standard dimension.
- 4. Temporarily tighten door hinge mounting nuts on door side.
- 5. Loosen door hinge mounting nuts and bolts on body side.
- 6. Raise rear door at rear end to adjust clearance of rear door according to the fitting standard dimension.
- After adjustment tighten bolts and nuts to the specified torque.
   CAUTION:
   Apply touch-up paint to the body color if the paint around

Apply touch-up paint to the body color if the paint around door hinge, door hinge mounting bolts, or nuts is peeled off.

8. Install center pillar lower garnish. Refer to <u>INT-28</u>, "CENTER PILLAR LOWER GARNISH : Removal and <u>Installation"</u>.

#### DOOR STRIKER ADJUSTMENT

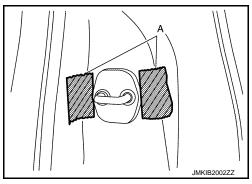
Adjust door striker so that it becomes parallel with door lock insertion direction. DOOR STRIKER

## DOOR STRIKER : Removal and Installation

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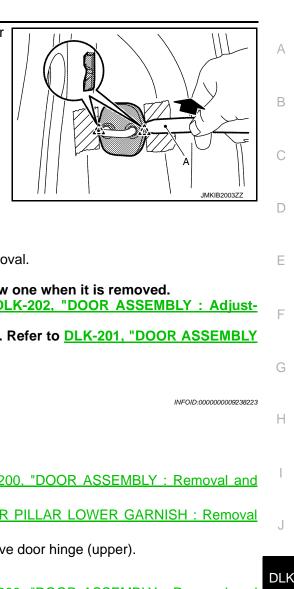
#### REMOVAL

1. Apply protective tapes (A) to vehicle body for preventing damage.



#### < REMOVAL AND INSTALLATION >

- 2. Disengage fixing pawls of door striker cover using a remover tool (A), and then remove door striker cover.
  - $\Delta$ : Pawl



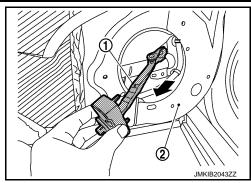
Remove TORX bolts, and then remove door striker. 3.

#### INSTALLATION

Note the following items, and then install in the reverse order of removal. CAUTION: Never reuse mounting TORX bolt. Always replace it with a new one when it is removed. After installation, perform the fitting adjustment. Refer to DLK-202, "DOOR ASSEMBLY : Adjustment". After installation, check that door opens and closes normally. Refer to DLK-201, "DOOR ASSEMBLY : Inspection". DOOR HINGE DOOR HINGE : Removal and Installation REMOVAL Door Hinge (Upper) 1. Remove rear door assembly from door hinge. Refer to <u>DLK-200, "DOOR ASSEMBLY : Removal and</u> Installation". 2. Remove center pillar lower garnish. Refer to INT-28, "CENTER PILLAR LOWER GARNISH : Removal and Installation". Remove door hinge mounting nuts of body side, and then remove door hinge (upper). Door Hinge (Lower) DLK 1. Remove rear door assembly from door hinge. Refer to <u>DLK-200, "DOOR ASSEMBLY : Removal and</u> Installation". Remove rear door hinge mounting bolts of body side, and then remove door hinge (lower). L INSTALLATION Note the following item, and then install in the reverse order of removal. CAUTION: M Apply anticorrosive agent onto the mounting surface. DOOR CHECK LINK Ν DOOR CHECK LINK : Removal and Installation INFOID:000000009238224 REMOVAL 1. Fully close the rear door window. Remove rear door finisher. Refer to <u>INT-18, "REAR DOOR FINISHER : Removal and Installation"</u>. Remove rear door speaker. Refer to AV-289, "Removal and Installation". Ρ Remove door check link mounting bolt of vehicle body side. 4.

#### < REMOVAL AND INSTALLATION >

5. Remove door check link mounting nuts of door side, and then remove door check link ① from door panel ② inside.



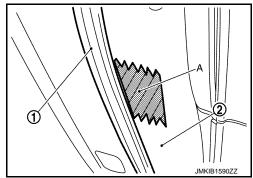
INSTALLATION Note the following item, and then install in the reverse order of removal. CAUTION: After installation, check that door opens and closes normally. Refer to <u>DLK-192, "DOOR ASSEMBLY :</u> Inspection".

DOOR WEATHER-STRIP

DOOR WEATHER-STRIP : Removal and Installation

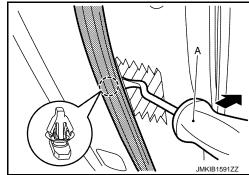
#### REMOVAL

1. Apply protective tape (A) to rear door panel ② around rear door weather-strip ① fixing clips for preventing damage.



INFOID:000000009314872

- 2. Disengage fixing clips on the reverse side of rear door weatherstrip using a remover tool (A).
  - (<sup>^</sup>) : Clip

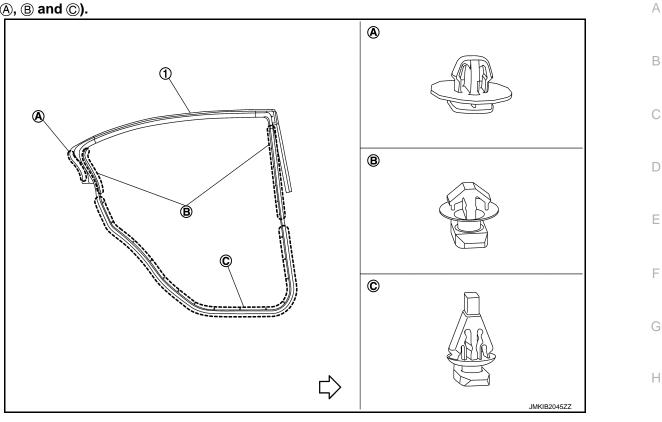


#### **CAUTION:**

• Never to damage rear door panel.

#### < REMOVAL AND INSTALLATION >

• When removing, be careful not to confuse the 3 types of rear door weather-strip ① fixing clips ((A), (B) and (C)).



 ${ \eqref{ integral} : \text{Vehicle front } }$ 

- 3. Remove rear door sash cover fixing screw. Refer to EXT-43, "Exploded View".
- 4. Remove door check link mounting bolt of vehicle body side.
- 5. Remove rear door weather-strip from rear door panel.

#### INSTALLATION

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

Visually check clips for deformation and damage during installation. Replace with new ones if necessary.

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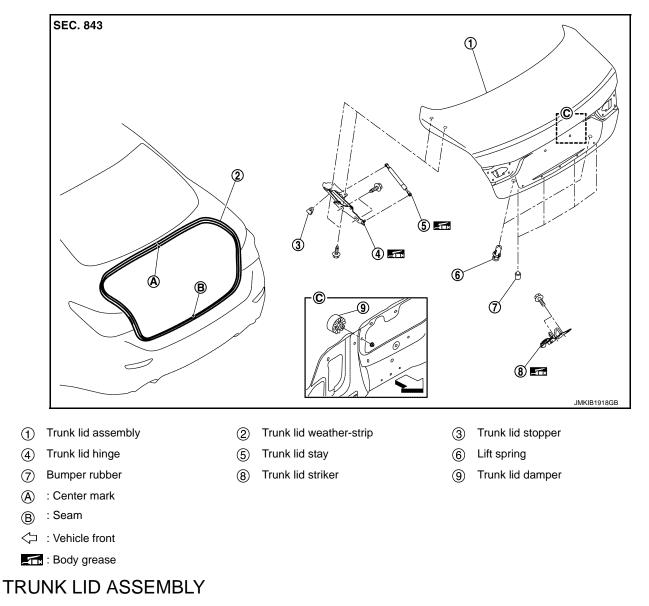
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## < REMOVAL AND INSTALLATION >

## TRUNK LID

Exploded View

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TRUNK LID ASSEMBLY : Removal and Installation

INFOID:000000009238226

## **CAUTION:**

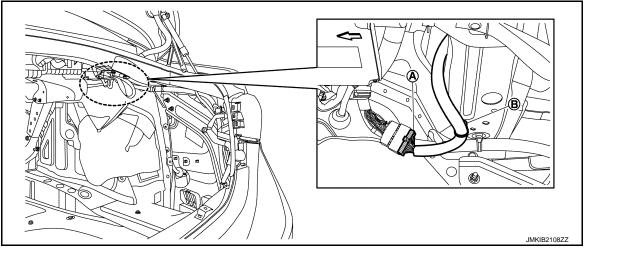
## Operate with 2 workers, because of its heavy weight.

#### REMOVAL

1. Remove trunk side finisher RH. Refer to INT-49. "TRUNK SIDE FINISHER : Removal and Installation"

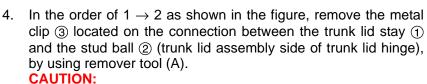
## < REMOVAL AND INSTALLATION >

2. Disconnect harness connector (A), and then remove harness fixing clip (B).

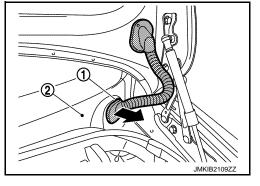


#### $\triangleleft$ : Vehicle front

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



Two workers are required to support the trunk lid assembly.



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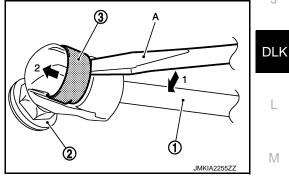
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Disengage trunk lid stay from stud ball (trunk lid assembly side of trunk lid hinge). 5.

Remove trunk lid assembly mounting bolts, and then remove trunk lid assembly. 6.

#### INSTALLATION

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

#### **CAUTION:**

- After installation, perform trunk lid fitting adjustment. Refer to <u>DLK-210, "TRUNK LID ASSEMBLY :</u> Adjustment".
- After installation, check that trunk lid opens and closes normally. Refer to <u>DLK-209, "TRUNK LID</u> ASSEMBLY : Inspection".
- Apply touch-up paint to the body color if the paint around trunk lid hinge, trunk lid hinge mounting bolts is peeled off.

## **TRUNK LID ASSEMBLY : Inspection**

Open and close the trunk lid. Check that trunk lid hinge rotation portion moves smoothly. 1.

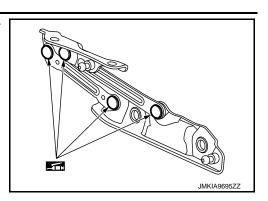
## **DLK-209**

INFOID:000000009696921

#### < REMOVAL AND INSTALLATION >

2. Check trunk lid hinge rotating part for poor lubrication. If necessary, apply body grease.

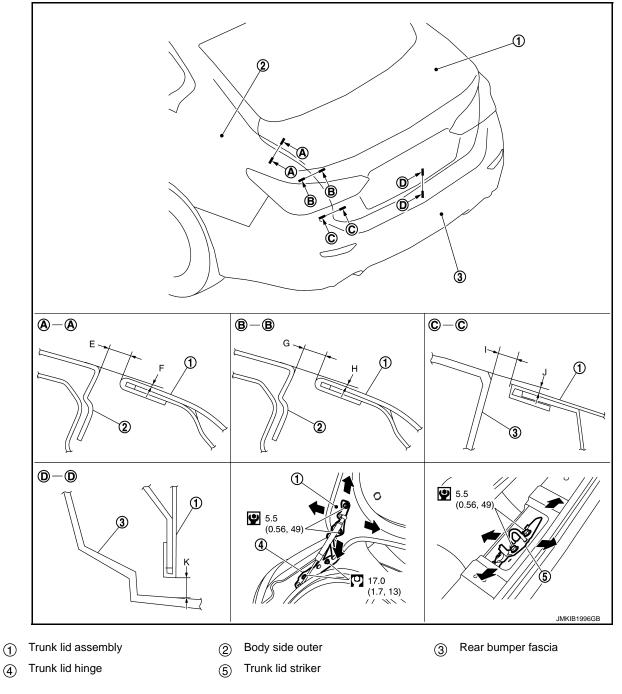
: Body grease



## TRUNK LID ASSEMBLY : Adjustment

INFOID:000000009238227

## FITTING ADJUSTMENT



## < REMOVAL AND INSTALLATION >

eigin a		ut of specification	in, adjust them according to	Unit: mm [in
on			Standard	Difference (RH/LH, MAX)
<b>A</b> – A		Clearance	2.5 - 3.5 [0.098 - 0.138]	0.75 [0.030]
		Surface height	(-0.5) - (+1.0) [(-0.020) - (+0.039)]	1.5 [0.059]
<b>B</b> – <b>B</b>	G	Clearance	2.6 - 3.6 [0.102 - 0.142]	0.75 [0.030]
	н	Surface height	(-0.5) - (+1.0) [(-0.020) - (+0.039)]	1.5 [0.059]
© – © –	I	Clearance	2.0 - 6.0 [0.079 - 0.236]	2.5 [0.098]
	J	Surface height	(-3.5) - (+0.5) [(-0.138) - (+0.020)]	2.5 [0.098]
)) <b>-</b> (D)	κ	Clearance	4.0 – 8.0 [0.157 – 0.315]	_
	olts			
	eight a on ) – (A) – ) – (B) –	eight are o on $ \begin{bmatrix} E \\ F \end{bmatrix} $ $ \begin{bmatrix} G \\ H \end{bmatrix} $ $ \begin{bmatrix} G \\ H \end{bmatrix} $ $ \begin{bmatrix} G \\ H \end{bmatrix} $ $ \begin{bmatrix} J \\ J \end{bmatrix} $	$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \\ \end{array} \end{array} \end{array} \end{array} \\ \begin{array}{c} \begin{array}{c} \\ \end{array} \end{array} \\ \begin{array}{c} \end{array} \end{array} \\ \begin{array}{c} \end{array} \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} $	$ \begin{array}{c c}                                    $

- DLK Lift up trunk lid approximately 100 – 150 mm (3.937 – 5.906 in) height then close it lightly and check that it 4. is engaged firmly with trunk lid closed.
- Check the clearance and surface height.
- 6. Finally tighten trunk lid hinge and trunk lid striker. **CAUTION:** Apply touch-up paint to the body color if the paint around trunk lid hinge, trunk lid hinge mounting bolts is peeled off.

## Install trunk rear plate. Refer to <u>INT-48, "TRUNK REAR PLATE : Removal and Installation"</u>.

## **CAUTION:**

After adjusting, perform the camera image calibration (models with rear camera).

- Ν AROUND VIEW MONITOR SYSTEM: Refer to <u>AV-379, "CALIBRATING CAMERA IMAGE (AROUND</u> VIEW MONITOR) : Work Procedure".
- REAR VIEW MONITOR SYSTEM: Refer to <u>AV-524, "Adjustment"</u>.

TRUNK LID STRIKER ADJUSTMENT Adjust trunk lid striker so that it becomes parallel with trunk lid lock insertion direction. TRUNK LID STRIKER

**TRUNK LID STRIKER : Removal and Installation** 

## REMOVAL

- Remove trunk rear plate. Refer to INT-48, "TRUNK REAR PLATE : Removal and Installation". 1.
- 2. Remove trunk lid striker mounting bolts, and then remove trunk lid striker.

## **DLK-211**

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#### < REMOVAL AND INSTALLATION >

#### INSTALLATION

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

CAUTION:

- After installation, perform trunk lid fitting adjustment. Refer to <u>DLK-210, "TRUNK LID ASSEMBLY :</u> <u>Adjustment"</u>.
- After installation, check that trunk lid opens and closes normally. Refer to <u>DLK-209, "TRUNK LID</u> <u>ASSEMBLY : Inspection"</u>.

TRUNK LID HINGE

## TRUNK LID HINGE : Removal and Installation

## REMOVAL

- 1. Remove trunk lid assembly. Refer to <u>DLK-208, "TRUNK LID ASSEMBLY : Removal and Installation"</u>.
- 2. Remove trunk lid stay. Refer to DLK-212, "TRUNK LID STAY : Removal and Installation".
- 3. Remove trunk lid hinge mounting bolts, and then remove trunk lid hinge.

#### INSTALLATION

Install in the reverse order of removal. TRUNK LID STAY

## TRUNK LID STAY : Removal and Installation

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#### REMOVAL

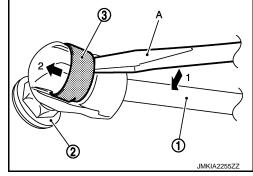
1. Support trunk lid with the proper material to prevent it from falling.

#### WARNING:

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

In the order of 1 → 2 as shown in the figure, remove the metal clip ③ located on the connection between the trunk lid stay ① and the stud ball ② (trunk lid assembly side of trunk lid hinge), by using remover tool (A).
 CAUTION:

Two workers are required to support the trunk lid assembly.



- 3. Disengage trunk lid stay from stud ball (trunk lid assembly side of trunk lid hinge).
- 4. Repeat the same operation to disengage the stud ball (vehicle body side of trunk lid hinge) from trunk lid stay, then remove trunk lid stay.

#### INSTALLATION

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

#### CAUTION:

After installation, check that trunk lid opens and closes normally. Refer to <u>DLK-209, "TRUNK LID</u> <u>ASSEMBLY : Inspection"</u>.

## TRUNK LID STAY : Disposal

#### **CAUTION:**

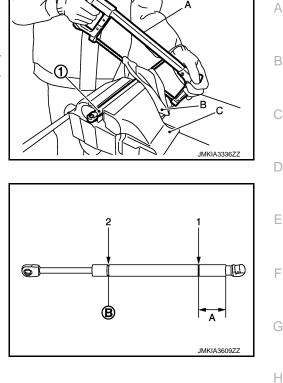
When performing disposal operation, wear the protective glasses and protective gloves.

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#### < REMOVAL AND INSTALLATION >

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

When cutting a hole on hood stay, always cover a hacksaw using a shop cloth (B) to avoid scattering metal fragments or oil.



## TRUNK LID WEATHER-STRIP

: 20.0 mm (0.787 in)

: Cut at the groove.

TRUNK LID WEATHER-STRIP : Removal and Installation

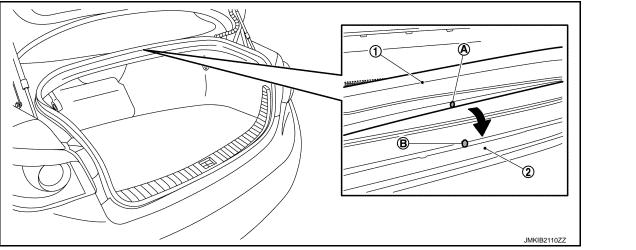
## REMOVAL

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- 1. Remove trunk rear plate. Refer to INT-48, "TRUNK REAR PLATE : Removal and Installation".
- Pull up and remove engagement with body from weather-strip joint. CAUTION: Never pull strongly on weather-strip.

## INSTALLATION



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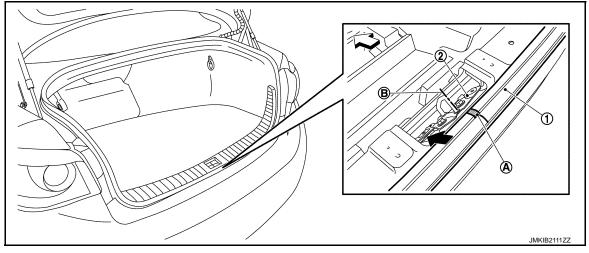
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#### < REMOVAL AND INSTALLATION >

2. Align the connecting point (A) of trunk lid weather-strip (1) to the center (B) of trunk lid striker (2), and then install as shown in the figure.



3. Pull trunk lid weather-strip gently to ensure that there is no loose section. **NOTE:** 

Check that trunk lid weather-strip fits tightly in each corner and trunk rear plate.

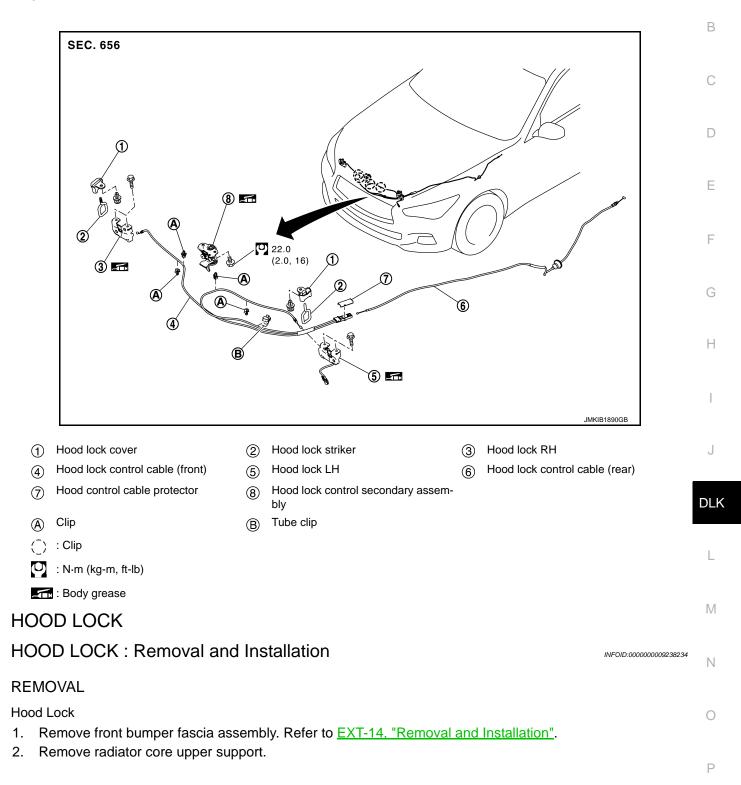
4. Install trunk rear plate. Refer to INT-48. "TRUNK REAR PLATE : Removal and Installation".

# < REMOVAL AND INSTALLATION > HOOD LOCK

## Exploded View

INFOID:000000009238233

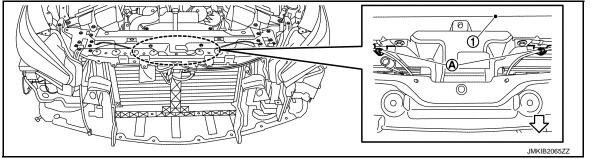
А



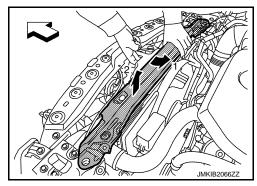
## HOOD LOCK

## < REMOVAL AND INSTALLATION >

a. Remove hood lock control cable (front) fixing clips (A) from radiator core upper support (1).



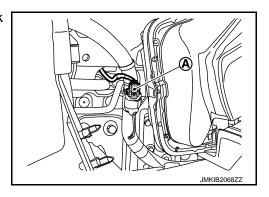
- b. Remove upper mounting bolts of hood lock support stay. Refer to <u>DLK-181, "Exploded View"</u>.
- c. Remove radiator core upper support mounting bolts. Refer to DLK-181, "Exploded View".
- d. Remove radiator core upper support according to the numerical order 1  $\rightarrow$  2 indicated by arrows as shown in the figure.



- 3. Remove front bumper side retainer.
- a. In the order of 1  $\rightarrow$  2 as shown in the figure, disengage upper pawl of condenser side seal, and then move to vehicle center.

2 : Pawl

- b. Remove front bumper side retainer mounting bolt and nuts, and then remove front bumper side retainer. Refer to <u>DLK-181, "Exploded View"</u>.
- 4. Remove hood lock bracket together with hood lock.
- a. Disconnect hood lock switch harness connector (A). (Hood lock LH only)



- b. Loosen hood lock mounting bolts (A).
  - $\triangleleft$ : Vehicle front

shown in the figure.

c.

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assembly.

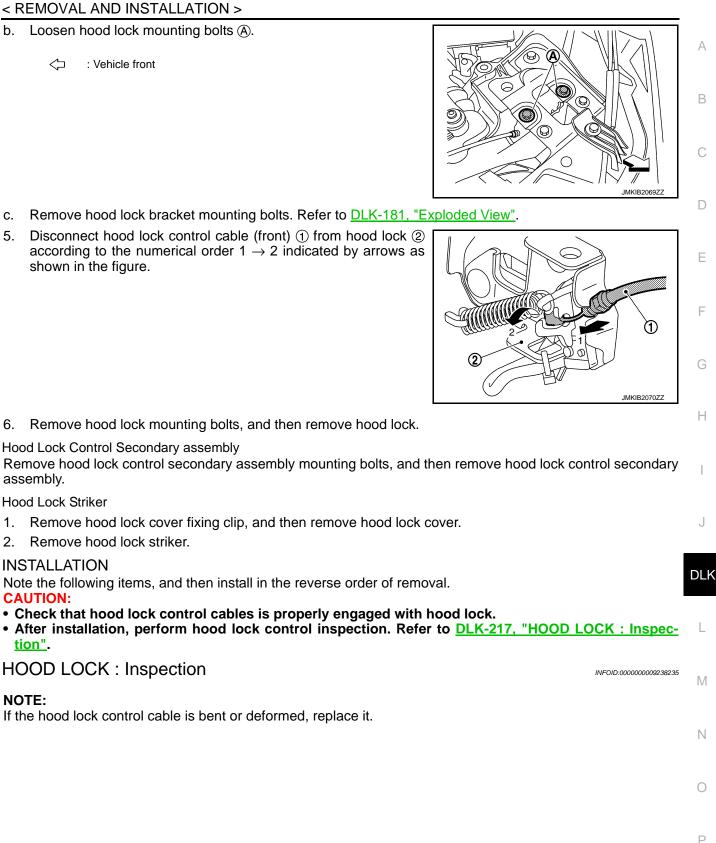
Hood Lock Striker

INSTALLATION

CAUTION:

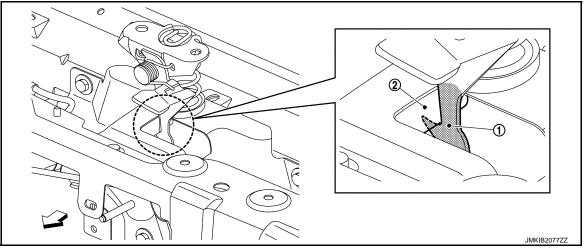
tion".

NOTE:

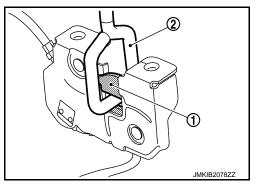


#### < REMOVAL AND INSTALLATION >

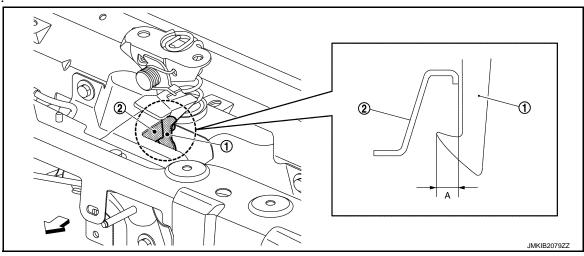
1. Check that secondary latch ① is securely engaged with hood lock support stay ② from the dead load of the hood assembly.



- └□ : Vehicle front
- Check that primary latch ① is securely engaged with hood lock striker ② when hood assembly is closed (when close it in 1.5 m/ sec at the latest).



- 3. While operating the hood opener carefully, check that the front end of the hood is lifted by approximately 20 mm (0.787 in) (A). Also, check that the hood opener returns to the original position.
- Check that secondary latch (1) is properly engaged with hood lock support stay (2) [6.8 mm (0.268 in) MIN] (A).



- └□ : Vehicle front
- 5. Check that the tension of hood opener lever is less than 49.0 N (5.0 kg, 11.02 lb).
- 6. Check hood lock and hood lock control secondary assembly lubrication condition. If necessary, apply body grease.

## **DLK-218**



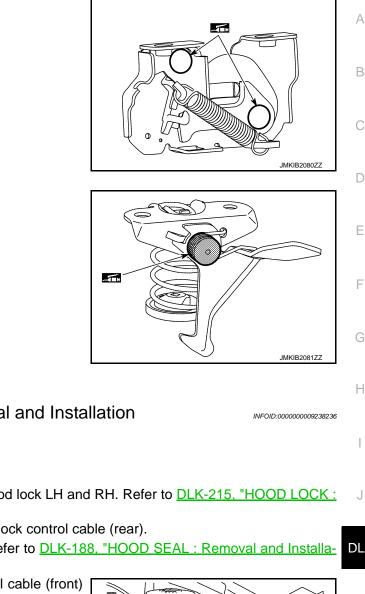


: Body grease

: Body grease

HOOD LOCK CONTROL CABLE

· Hood lock control secondary assembly

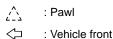


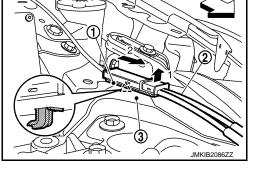
HOOD LOCK CONTROL CABLE : Removal and Installation

#### REMOVAL

Hood Lock Control Cable (Front)

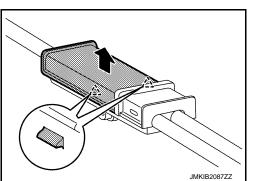
- 1. Disconnect hood lock control cable (front) from hood lock LH and RH. Refer to DLK-215, "HOOD LOCK : Removal and Installation".
- 2. Separate hood lock control cable (front) and hood lock control cable (rear).
- Remove hood side seal assembly (Driver side). Refer to DLK-188, "HOOD SEAL : Removal and Installa-DLK a. tion".
- Disengage case (1) fixing pawl of hood lock control cable (front) b. (2) from radiator core support assembly (3) according to the numerical order  $1 \rightarrow 2$  indicated by arrows as shown in the figure.





Disengage case pawl of hood lock control cable (front) and c. remove hood control cable protector.

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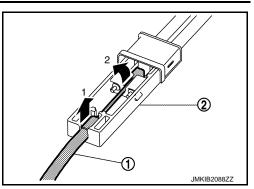
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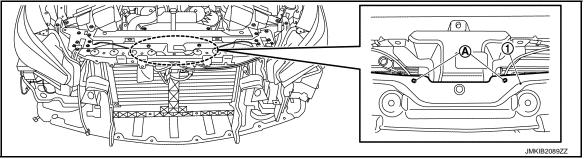
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#### < REMOVAL AND INSTALLATION >

d. Disconnect hood lock control cable (rear) ① from hood lock control cable (front) ② according to the numerical order  $1 \rightarrow 2$  indicated by arrows as shown in the figure.



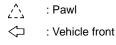
3. Remove hood lock control cable (front) fixing clips (A) from front bumper upper retainer (1).

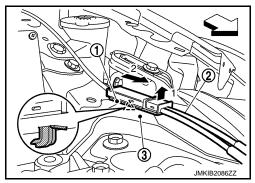


- 4. Remove hood lock control cable (front) from tube clip of front bumper upper retainer.
- 5. Remove hood lock control cable (front) from the vehicle body.

Hood Lock Control Cable (Rear)

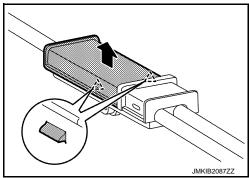
- 1. Remove front fender protector front (driver side) and front fender protector rear (driver side). Refer to <u>EXT-29. "FENDER PROTECTOR : Removal and Installation"</u>.
- 2. Separate hood lock control cable (front) and hood lock control cable (rear).
- a. Remove hood side seal assembly (driver side). Refer to <u>DLK-188, "HOOD SEAL : Removal and Installa-</u> tion".
- b. Disengage case ① fixing pawl of hood lock control cable (front)
   ② from radiator core support assembly ③ according to the numerical order 1 → 2 indicated by arrows as shown in the figure.





c. Disengage case pawl of hood lock control cable (front) and remove hood control cable protector.

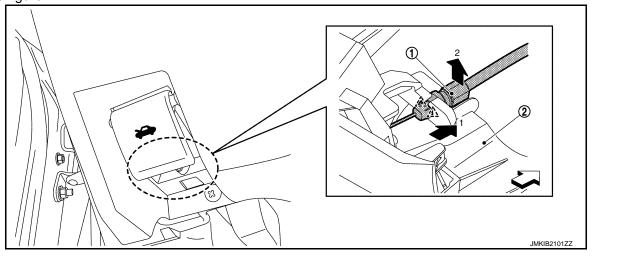
∴ : Pawl



#### < REMOVAL AND INSTALLATION >

d. Disconnect hood lock control cable (rear) ① from hood lock control cable (front) ② according to the numerical order  $1 \rightarrow 2$  indicated by arrows as shown in the figure.

Disengage hood lock control cable (rear) ① fixing pawls, and then remove hood lock control cable (rear) from instrument lower panel ② according to the numerical order 1 → 2 indicated by arrows as shown in the figure.



∴ : Pawl
✓ : Vehicle front

arrows as shown in the figure.

- 4. Disconnect hood lock control cable (rear) (1) from hood opener lever (2) according to the numerical order  $1 \rightarrow 2$  indicated by
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- 5. Remove dash side finisher (driver side). Refer to <u>INT-28. "DASH SIDE FINISHER : Removal and Installa-</u> tion".
- Remove grommet on the lower dash, pull hood lock control cable (rear) toward the passenger compartment.

#### **CAUTION:**

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

#### **INSTALLATION**

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

#### CAUTION:

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

# **DLK-221**

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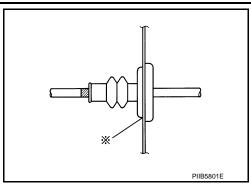
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#### < REMOVAL AND INSTALLATION >

• Check that cable is not offset from the positioning grommet, and apply the sealant to the grommet (at\* mark) properly.



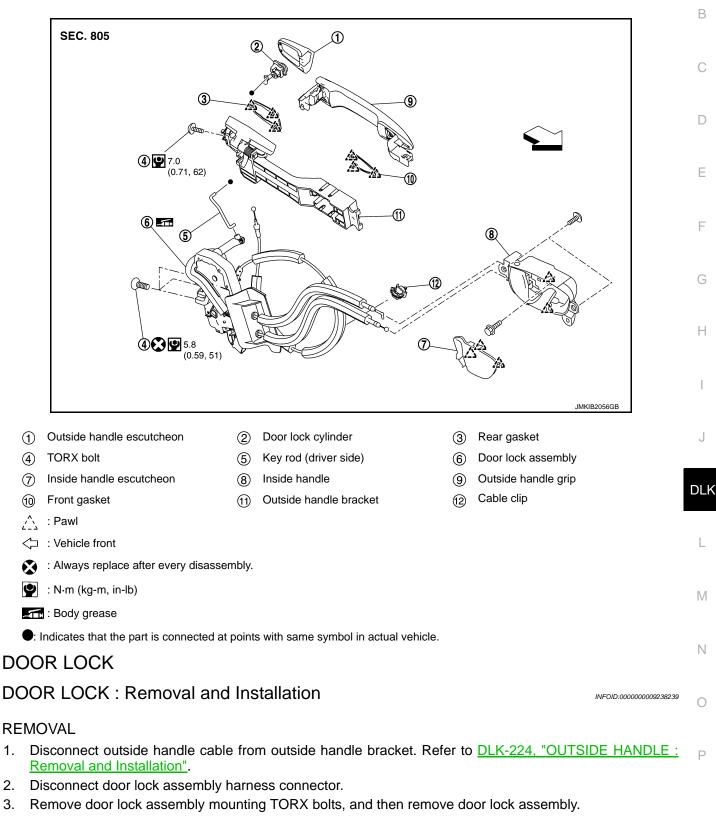
- Check that hood lock control cables is properly engaged with hood lock.
- After installation, perform hood lock control inspection. Refer to <u>DLK-217, "HOOD LOCK : Inspec-</u><u>tion"</u>.

# FRONT DOOR LOCK

# Exploded View

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#### INSTALLATION

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

# **DLK-223**

# FRONT DOOR LOCK

#### < REMOVAL AND INSTALLATION >

- Never reuse TORX bolt. Always replace it with a new one when it is removed.
- After installation, check door lock. Refer to <u>DLK-224, "DOOR LOCK : Inspection"</u>.

## **DOOR LOCK : Inspection**

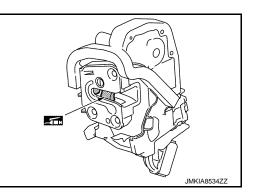
INFOID:000000009696752

INFOID:000000009238240

- 1. After opening and closing the door, check that door is fixed to the vehicle body normally.
- 2. Check the lock/unlock operation of door lock.
- 3. Check door lock assembly for poor lubrication. Apply body grease to door lock if necessary.



: Body grease



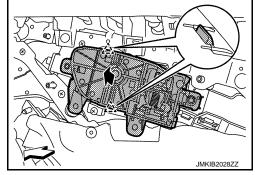
# **INSIDE HANDLE**

# INSIDE HANDLE : Removal and Installation

REMOVAL

- 1. Remove front door finisher. Refer to INT-13, "FRONT DOOR FINISHER : Removal and Installation".
- 2. Remove inside handle fixing screws.
- 3. Disengage inside handle fixing pawls, and then remove inside handle.

: Pawl  $\wedge$ : Vehicle front  $\triangleleft$ 



#### INSTALLATION

Note the following item, and then install in the reverse order of removal. **CAUTION: After installation, check door lock. Refer to DLK-224, "DOOR LOCK : Inspection". OUTSIDE HANDLE** 

# **OUTSIDE HANDLE : Removal and Installation**

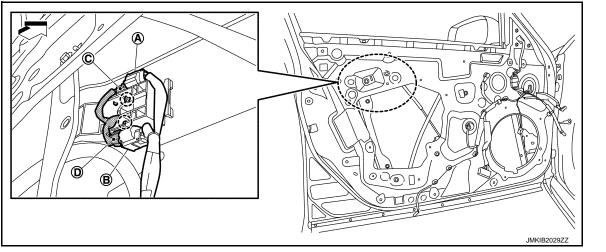
#### REMOVAL

- 1. Fully close the front door glass.
- 2. Remove front door finisher. Refer to INT-13, "FRONT DOOR FINISHER : Removal and Installation".
- 3. Remove front door inner frame. Refer to GW-34, "Exploded View".

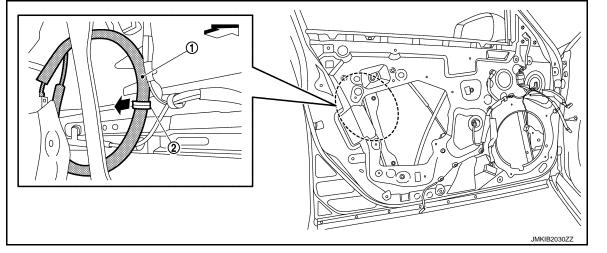
# FRONT DOOR LOCK

#### < REMOVAL AND INSTALLATION >

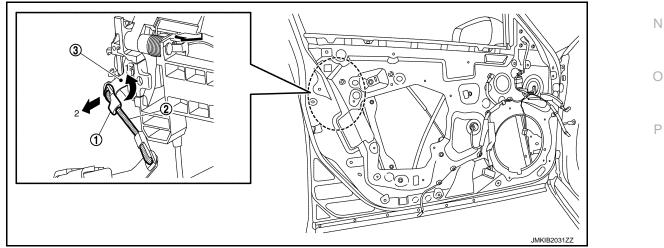
4. Disconnect door harness connector (A) and (B), and then disengage connector fixing clip and remove outside handle harness connector (C) and (D).



- ( ) : Clip
- 5. Disengage outside handle cable ① from cable clip ②.



- In the order of 1 → 2 as shown in the figure, disengage rod holder ①, and then disconnect key rod ② from door lock cylinder ③. (Driver side)



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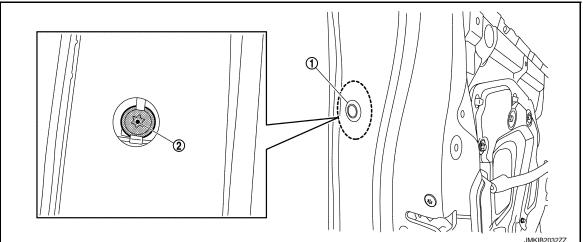
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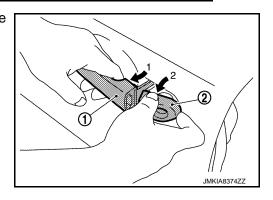
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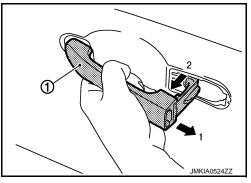
- 7. Remove door side grommet (1), and then loosen TORX bolt (2) from grommet hole.



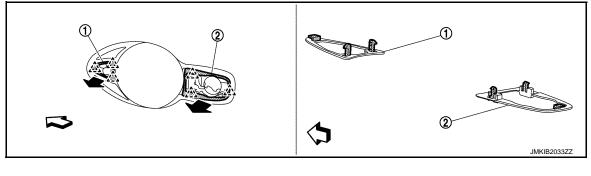
 In the order of 1 → 2 as shown in the figure, while pulling outside handle grip ①, remove outside handle escutcheon ②.



9. In the order of  $1 \rightarrow 2$  as shown in the figure, while pulling outside handle grip (1), slide toward rear of vehicle to remove outside handle grip.



10. Remove front gasket ① and rear gasket ②.

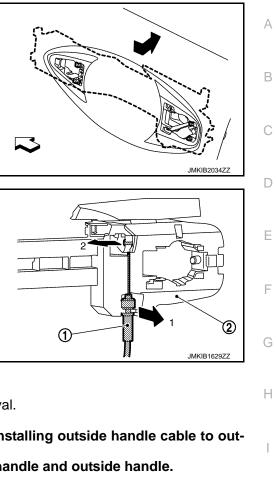


:Pawl

# FRONT DOOR LOCK

#### < REMOVAL AND INSTALLATION >

- 11. Slide outside handle bracket toward rear of vehicle to remove.



12. Disconnect outside handle cable (1) according to the numerical order  $1 \rightarrow 2$  indicated by arrows as shown in the figure from outside handle bracket (2).

INSTALLATION Note the following items, and then install in the reverse order of removal.

CAUTION:
Be careful that outside handle cable is routed normally when installing outside handle cable to outside handle.

- Check that door lock cables are normally engaged with inside handle and outside handle.
- Rotate rod holder until it clicks to securely install key rod.
- After installation, check door lock. Refer to <u>DLK-224, "DOOR LOCK : Inspection"</u>.

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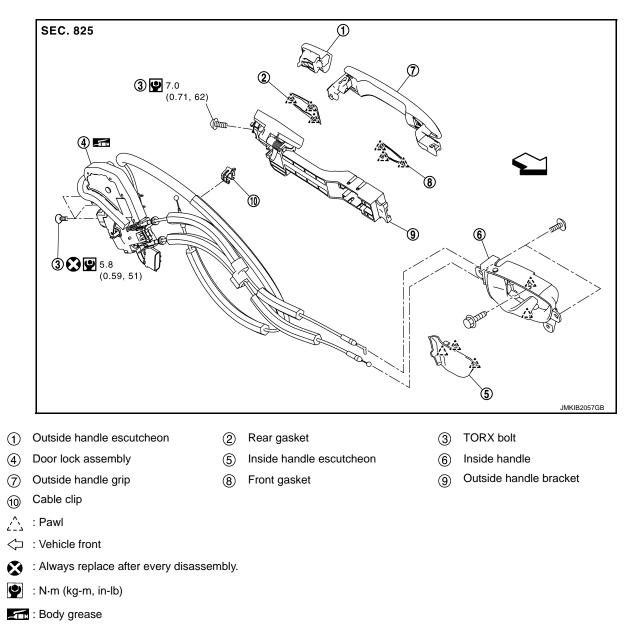
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# REAR DOOR LOCK

# Exploded View

INFOID:000000009238242



# DOOR LOCK

# DOOR LOCK : Removal and Installation

INFOID:000000009238243

#### REMOVAL

- 1. Disconnect outside handle cable from outside handle bracket. Refer to <u>DLK-229</u>, "<u>OUTSIDE HANDLE</u> : <u>Removal and Installation</u>".
- 2. Remove door lock assembly mounting TORX bolts.
- 3. Disconnect door lock assembly harness connector, and then remove door lock assembly.

#### INSTALLATION

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

- Never reuse TORX bolt. Always replace it with a new one when it is removed.
- After installation, check door lock. Refer to DLK-229, "DOOR LOCK : Inspection".

# **DLK-228**

# REAR DOOR LOCK

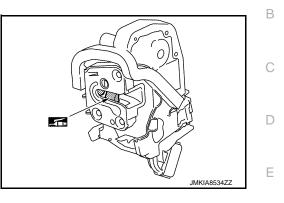
## < REMOVAL AND INSTALLATION >

### DOOR LOCK : Inspection

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- 1. After opening and closing the door, check that door is fixed to the vehicle body normally.
- 2. Check the lock/unlock operation of door lock.
- 3. Check door lock assembly for poor lubrication. Apply body grease to door lock if necessary.

: Body grease

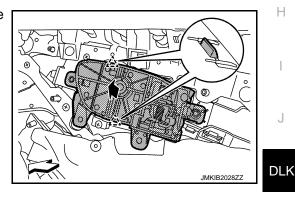


# **INSIDE HANDLE**

# **INSIDE HANDLE : Removal and Installation**

#### REMOVAL

- 1. Remove rear door finisher. Refer to INT-18, "REAR DOOR FINISHER : Removal and Installation".
- 2. Remove inside handle fixing screws.
- 3. Disengage inside handle fixing pawls, and then remove inside handle.
  - ∴ : Pawl
    ∴ : Vehicle front



#### **INSTALLATION** Note the following item, and then install in the reverse order of removal. L CAUTION: After installation, check door lock. Refer to <u>DLK-229, "DOOR LOCK : Inspection"</u>. OUTSIDE HANDLE Μ OUTSIDE HANDLE : Removal and Installation INFOID:000000009238245 REMOVAL Ν 1. Fully close rear door glass. Remove rear door finisher. Refer to <u>INT-18, "REAR DOOR FINISHER : Removal and Installation"</u>. 3. Remove rear side of sealing screen. NOTE: Cut the butyl-tape so that some parts of the butyl-tape do not remain on the sealing screen, if the sealing Ρ screen is reused.

INFOID:000000009238244

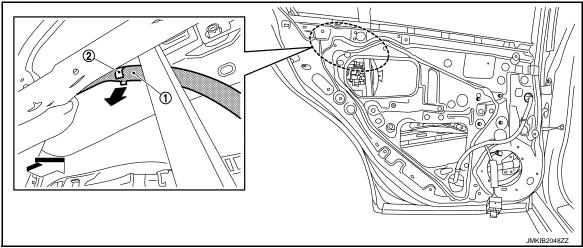
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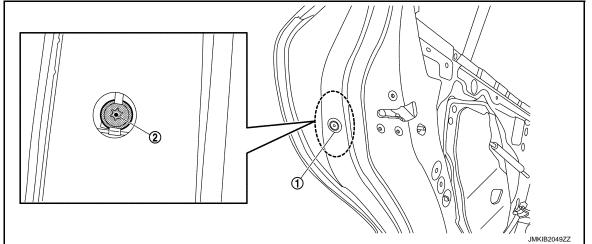
# REAR DOOR LOCK

#### < REMOVAL AND INSTALLATION >

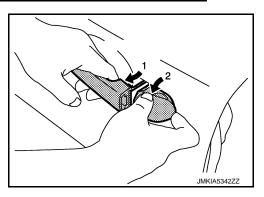
4. Disengage outside handle cable ① from cable clip ②.



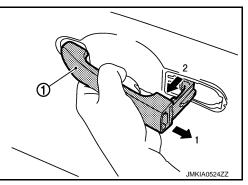
- 5. Remove door side grommet ①, and then loosen TORX bolt ② from grommet hole.



6. In the order of  $1 \rightarrow 2$  as shown in the figure, while pulling outside handle grip, remove outside handle escutcheon.



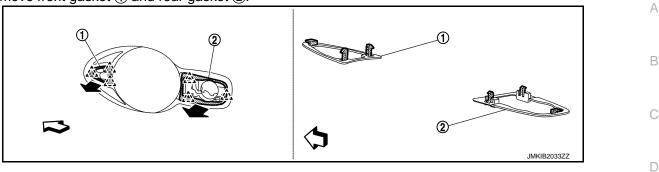
7. In the order of  $1 \rightarrow 2$  as shown in the figure, while pulling outside handle grip (1), slide toward rear of vehicle to remove outside handle grip.



# **REAR DOOR LOCK**

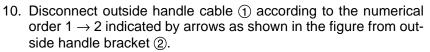
#### < REMOVAL AND INSTALLATION >

#### 8. Remove front gasket (1) and rear gasket (2).



🔨 : Pawl

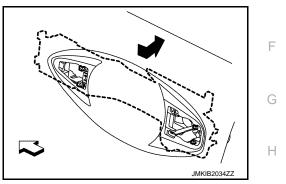
- 9. Slide outside handle bracket toward rear of vehicle to remove.

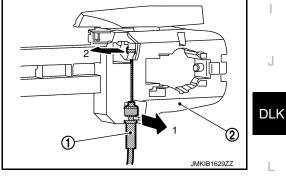


#### INSTALLATION

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

- Be careful that outside handle cable is routed normally when installing outside handle cable to outside handle.
- Check that door lock cables are normally engaged with inside handle and outside handle.
- After installation, check door lock. Refer to <u>DLK-229, "DOOR LOCK : Inspection"</u>.





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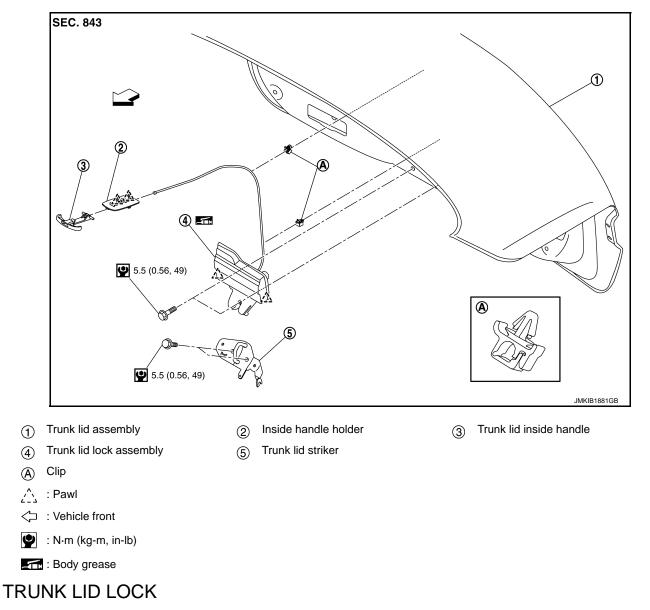
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# TRUNK LID LOCK

# Exploded View

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TRUNK LID LOCK : Removal and Installation

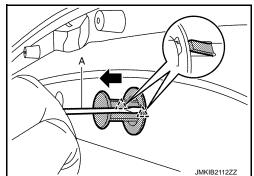
#### INFOID:000000009238247

#### REMOVAL

- 1. Remove lift spring.
- a. Insert a remover tool (A) between lift spring and trunk lid assembly, and then disengage fixing pawls.

: Pawl

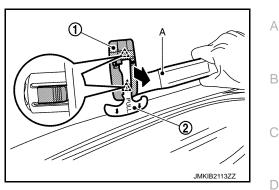
b. Pull back lift spring and remove lift spring.



# TRUNK LID LOCK

#### < REMOVAL AND INSTALLATION >

- Disengage inside handle holder ① fixing pawls using a remover tool (A), and then remove inside handle holder together with trunk lid inside handle ②.
  - 2 : Pawl



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- 3. Remove trunk lid inner finisher. Refer to INT-53, "Removal and Installation".
- 4. Remove wire ① of trunk lid lock assembly from clips ④.

- 5. Disengage pawls of trunk lid lock cover ①. Open trunk lid lock cover in direction indicated by the arrow as shown in the figure.
  - : Pawl

- 6. Disconnect harness connector from trunk lid lock assembly.
- 7. Remove trunk lid lock assembly mounting bolts, and then remove trunk lid lock assembly.

## INSTALLATION

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

CAUTION: After installation, check that trunk lid locks and unlocks normally. Refer to <u>DLK-233, "TRUNK LID</u> <u>LOCK : Inspection"</u>.

# **TRUNK LID LOCK : Inspection**

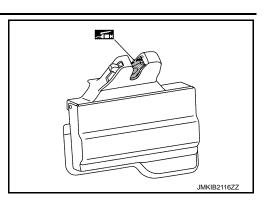
- 1. After opening and closing the trunk lid, check that trunk lid is fixed to the vehicle body normally.
- 2. Check the lock/unlock operation of trunk lid.

# TRUNK LID LOCK

#### < REMOVAL AND INSTALLATION >

3. Check trunk lid lock assembly for poor lubrication. Apply body grease if necessary.

: Body grease



INFOID:000000009683369

# TRUNK LID LOCK : Unlock procedures

# UNLOCK PROCEDURES

#### NOTE:

Release lock according to the following procedures when lock cannot be unlocked due to a malfunction of trunk lid lock assembly or battery discharge.

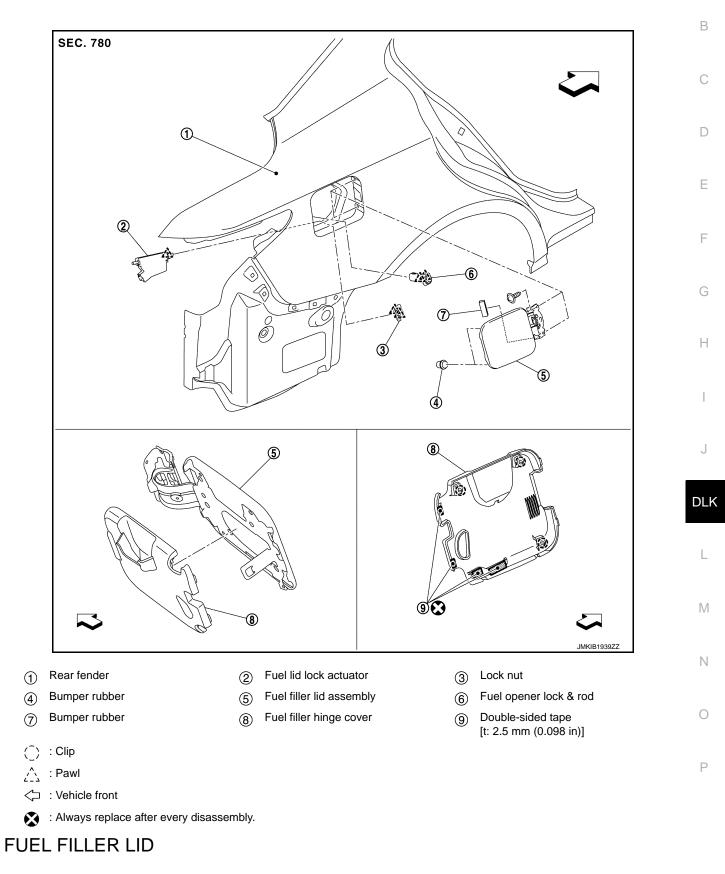
- 1. Fold rear seat center armrest and seatback lid toward vehicle front.
- 2. Pull the trunk lid inside handle to unlock.

# FUEL FILLER LID OPENER

# Exploded View

INFOID:000000009238248

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# FUEL FILLER LID OPENER

#### < REMOVAL AND INSTALLATION >

# FUEL FILLER LID : Removal and Installation

#### INFOID:000000009325994

#### REMOVAL

- 1. Fully open fuel filler lid assembly.
- Disengage fuel filler hinge cover fixing clip, and then remove fuel 2. filler hinge cover.
  - : Clip  $(\overline{})$

- 3. Remove fuel mounting pin (1).

4. Remove fixing screws, and then remove fuel filler lid assembly.

## INSTALLATION

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

#### CAUTION:

- Replace the double-sided tape on the back surface with new double-sided tape when reusing the fuel filler hinge cover.
- Never wash the vehicle within 24 hour after installing so as keep adhesive.
- After installation, check fuel filler lid assembly open/close, lock/unlock operation. NOTE:
- The following table shows the specified values for checking normal installation status.
- Fitting adjustment cannot be performed.

		Unit: mm [in]
Portion	Clearance	Evenness
Fuel filler lid – Body side outer	2.5 – 3.5 [0.098 – 0.138]	(-1.0) – (+1.0) [(-0.039) – (+0.039)]

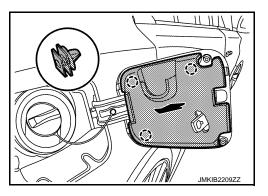
# FUEL LID LOCK ACTUATOR

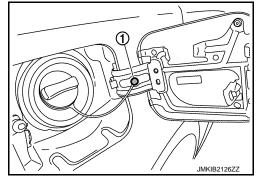
# FUEL LID LOCK ACTUATOR : Removal and Installation

INFOID:000000009238249

# REMOVAL

- 1. Fully open fuel filler lid.
- Remove trunk side finisher RH. Refer to <u>INT-49, "TRUNK SIDE FINISHER : Removal and Installation"</u>.

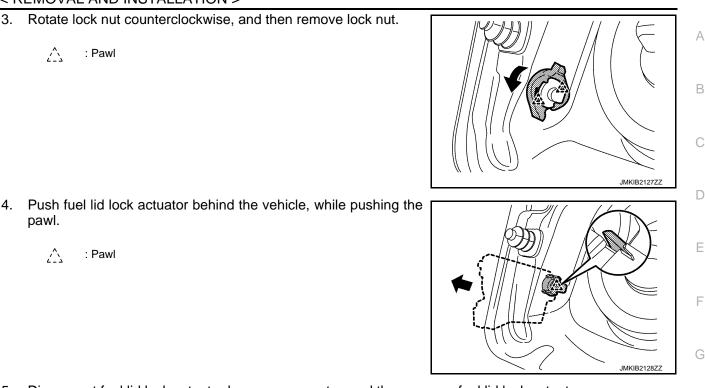




# FUEL FILLER LID OPENER

#### < REMOVAL AND INSTALLATION >

- 3. Rotate lock nut counterclockwise, and then remove lock nut.
  - : Pawl ŵ



5. Disconnect fuel lid lock actuator harness connector, and then remove fuel lid lock actuator.

#### INSTALLATION

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: Pawl

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

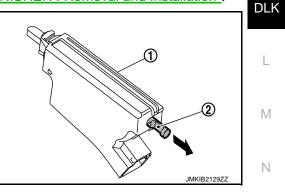
After installation, check fuel filler lid assembly lock/unlock operation.

# FUEL LID LOCK ACTUATOR : Unlock procedure

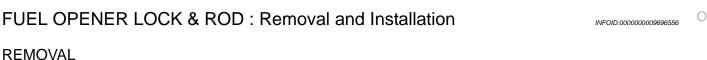
#### NOTE:

Release lock according to the following procedures when fuel lid lock actuator does not operate normally.

- Remove trunk side finisher RH. Refer to <u>INT-49, "TRUNK SIDE FINISHER : Removal and Installation"</u>.
- 2. When fuel lid lock actuator ① is a defective operation, pull the rod 2 to unlock fuel filler lid.



# FUEL OPENER LOCK & ROD



- 1. Fully open fuel filler lid.
- Remove trunk side finisher RH. Refer to INT-49, "TRUNK SIDE FINISHER : Removal and Installation". 2.

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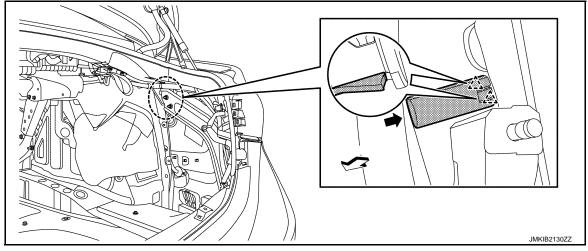
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# FUEL FILLER LID OPENER

#### < REMOVAL AND INSTALLATION >

3. Pull and remove fuel opener lock & rod forward, while pushing the pawls.



∠\_\_\_ : Pawl

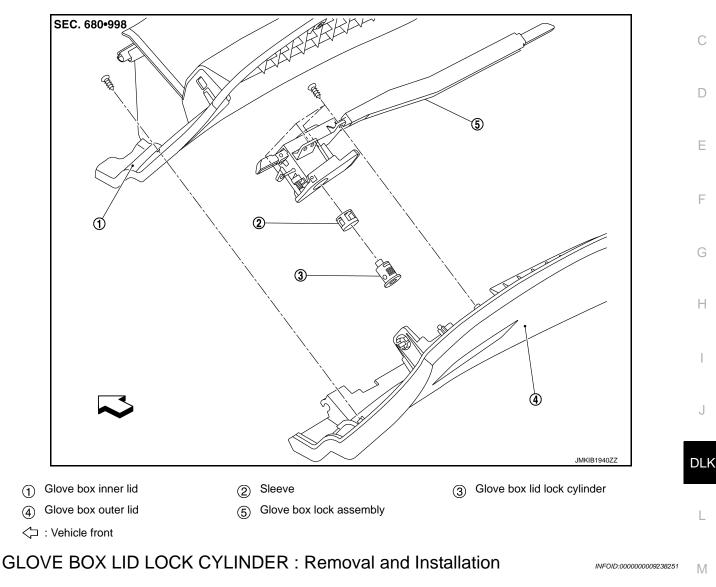
#### INSTALLATION

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

#### **CAUTION:**

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

# < REMOVAL AND INSTALLATION > KEY CYLINDER GLOVE BOX LID LOCK CYLINDER GLOVE BOX LID LOCK CYLINDER : Exploded View



# REMOVAL CAUTION: Replace glove box lock assembly when replacing glove box lid lock cylinder. 1. Remove glove box assembly. Refer to <u>IP-12, "Removal and Installation"</u>. 2. Remove glove box inner lid fixing screws.

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#### < REMOVAL AND INSTALLATION >

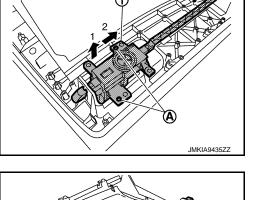
3. In the order of  $1 \rightarrow 2$  as shown in the figure, push rod (1) of glove box lock assembly into the inside of glove box inner lid (2). Remove glove box inner lid.

Revision: 2013 October

- 4. Remove glove box lock assembly fixing screws.
- 5. While preventing contact with the pin portion A, slightly lift up the glove box lock assembly 1 and move it according to the numerical order  $1 \rightarrow 2$  indicated by arrows as shown in the figure.

6. In the order of  $1 \rightarrow 2$  as shown in the figure, disconnect rod (2) from rod slide hole portion (A) while pulling handle (1) of glove box lock assembly.

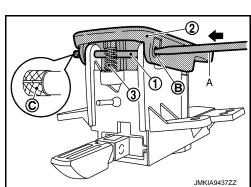
- 7. Remove glove box lock assembly.
- Using a screwdriver (A), insert shaft ① from portion B as shown in the figure. Remove shaft, handle ②, and handle spring ③.
   CAUTION:
  - Be sure to push shaft toward the specified direction, because treatment © is applied on one side of shaft so that shaft can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



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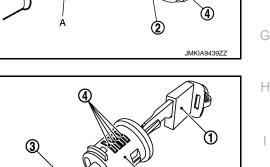
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#### < REMOVAL AND INSTALLATION >

9. Insert mechanical key into glove box lid lock cylinder. Align the position of striker ① to the same position as shown in the figure.

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

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



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11. Remove sleeve ③ from handle, and then install sleeve to glove box lid lock cylinder ②.

#### NOTE:

When removing sleeve, write a short note describing its position against handle.

#### CAUTION:

Never pull out mechanical key (1) from glove box lid lock cylinder while sleeve is uninstalled. Otherwise, tumbler (4) pops out of glove box lid lock cylinder.

#### INSTALLATION

Note the following item, and then install in the reverse order of removal. CAUTION: After installation, check glove box assembly open/close, lock/unlock operation. SEATBACK LID LOCK CYLINDER DLK

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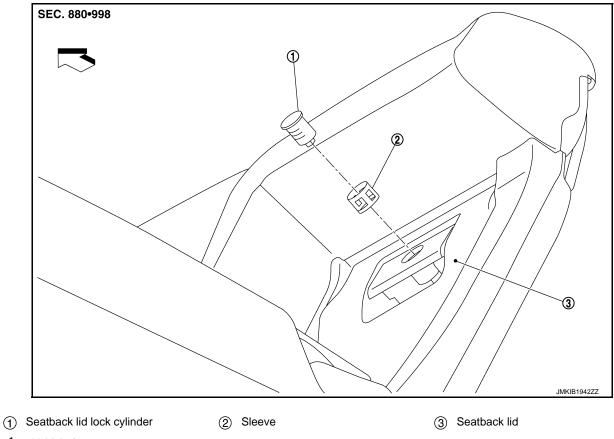
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#### < REMOVAL AND INSTALLATION >

## SEATBACK LID LOCK CYLINDER : Exploded View

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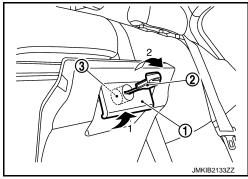


# SEATBACK LID LOCK CYLINDER : Removal and Installation

INFOID:000000009644081

#### REMOVAL

- 1. Open seatback lid.
- 2. Insert mechanical key into seatback lid lock cylinder.
- 3. In the order of 1 → 2 as shown in the figure, set seatback lid knob ① to the pulled-up status, and then rotate mechanical key ② and turn seatback lid lock cylinder ③ to the lock position.

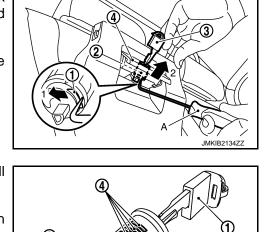


## < REMOVAL AND INSTALLATION >

4. In the order of  $1 \rightarrow 2$  as shown in the figure, press tumbler stopper (1) into seatback lid lock cylinder (2) using a hook and pick tool (A), and then remove mechanical key (3) and seatback lid lock cylinder together from seatback lid knob (4).

#### NOTE:

When removing seatback lid lock cylinder, write a short note describing its position against seatback lid knob.



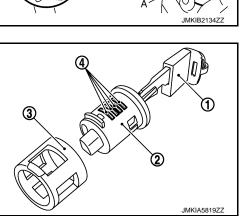
5. Remove sleeve ③ from seatback lid knob, and then install sleeve to seatback lid lock cylinder (2).

## NOTE:

When removing sleeve, write a short note describing its position against seatback lid knob.

#### **CAUTION:**

Never pull out mechanical key (1) from seatback lid lock cylinder while sleeve is uninstalled. Otherwise, tumbler (4) pops out of seatback lid lock cylinder.



#### **INSTALLATION**

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

After installation, check seatback lid lock/unlock operation.

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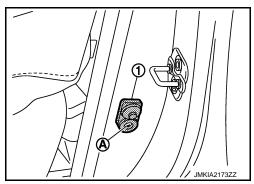
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# DOOR SWITCH

# Removal and Installation

#### REMOVAL

- 1. Remove the TORX bolt (A).
- Disconnect door switch connector and then remove door switch ①.



INSTALLATION Install in the reverse order of removal.

# **TRUNK LID OPENER CANCEL SWITCH**

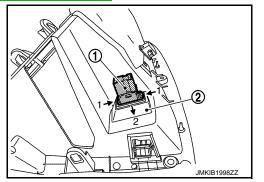
#### < REMOVAL AND INSTALLATION >

# TRUNK LID OPENER CANCEL SWITCH

#### Removal and Installation

#### REMOVAL

- 1. Remove the instrument lower panel RH. Refer to IP-12, "Removal and Installation".
- 2. Pinch trunk lid opener cancel switch ① from both side (in the direction shown by arrow 1) and disengage tab. Press toward outside (in the direction shown by arrow 2) to remove from instrument lower panel RH ②.



INSTALLATION Install in the reverse order of removal.

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## TRUNK LID OPENER SWITCH

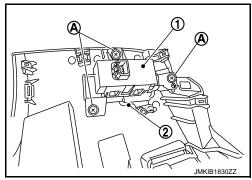
#### < REMOVAL AND INSTALLATION >

# TRUNK LID OPENER SWITCH

## Removal and Installation

REMOVAL

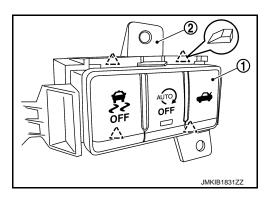
- 1. Remove the instrument lower panel LH. Refer to IP-12. "Removal and Installation".
- 2. Remove screws (A) that retain the triple switch bracket (1) to the
- instrument lower panel LH 2.



INFOID:000000009574702

3. Remove trunk lid opener switch ① from triple switch bracket ②.

2 : Pawl



INSTALLATION Install in the reverse order of removal.

# TRUNK LID OPENER REQUEST SWITCH

#### < REMOVAL AND INSTALLATION >

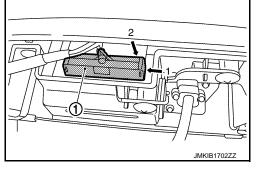
# TRUNK LID OPENER REQUEST SWITCH

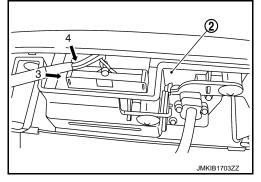
## Removal and Installation

#### REMOVAL

- 1. Remove trunk lid finisher. Refer to EXT-55, "TRUNK LID FINISHER : Removal and Installation".
- 2. Pinch trunk lid opener request switch ① from right side (in the direction shown by arrow 1) and disengage tab. Press toward outside (in the direction shown by arrow 2).

3. Pinch trunk lid opener request switch from left side (in the direction shown by arrow 3) and disengage tab. Press toward outside (in the direction shown by arrow 4) to remove from trunk lid finisher (2).





INSTALLATION Install in the reverse order of removal.

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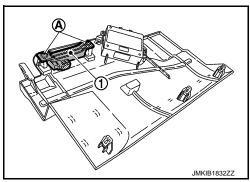
# INSIDE KEY ANTENNA INSTRUMENT

**INSTRUMENT : Removal and Installation** 

INFOID:000000009574704

#### REMOVAL

- 1. Remove instrument lower cover. Refer to IP-12, "Removal and Installation".
- 2. Remove the mounting screw (A), and then remove inside key antenna (instrument lower) (1).

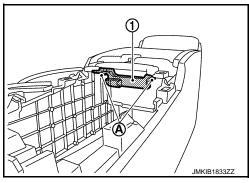


INSTALLATION Install in the reverse order of removal. CONSOLE

# **CONSOLE : Removal and Installation**

REMOVAL

- 1. Remove the center console assembly. Refer to IP-23, "Removal and Installation".
- 2. Remove the mounting screw (A), and then remove inside key antenna (console) (1).



INSTALLATION Install in the reverse order of removal. TRUNK ROOM

**TRUNK ROOM : Removal and Installation** 

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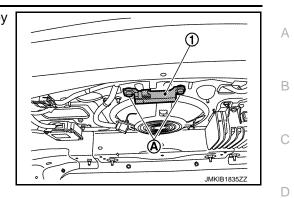
#### REMOVAL

- 1. Remove the trunk lid front finisher. Refer to <u>INT-50, "TRUNK UPPER FINISHER : Removal and Installa-</u> tion".
- 2. Disconnect inside key antenna (trunk room) connector.

# **INSIDE KEY ANTENNA**

#### < REMOVAL AND INSTALLATION >

3. Remove the mounting clips (A) and then remove inside key antenna (trunk room) (1).



INSTALLATION Install in the reverse order of removal.



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# OUTSIDE KEY ANTENNA OUTSIDE HANDLE

## **OUTSIDE HANDLE : Removal and Installation**

INFOID:000000009574707

REMOVAL

Remove the outside handle grip. Refer to <u>DLK-224, "OUTSIDE HANDLE : Removal and Installation"</u>.

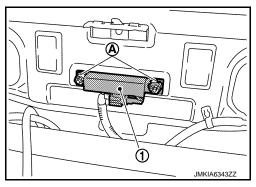
INSTALLATION Install in the reverse order of removal. REAR BUMPER

**REAR BUMPER : Removal and Installation** 

INFOID:000000009574708

#### REMOVAL

- 1. Remove the rear bumper fascia assembly. Refer to EXT-21, "Removal and Installation".
- 2. Remove the outside key antenna (rear bumper) mounting clips (A) and then remove outside key antenna (rear bumper) ①.



INSTALLATION Install in the reverse order of removal.

# ONE TOUCH UNLOCK SENSOR

< REMOVAL AND INSTALLATION >	
ONE TOUCH UNLOCK SENSOR	
DRIVER SIDE	А
DRIVER SIDE : Removal and Installation	В
REMOVAL Remove the front door outside handle grip (driver door). Refer to <u>DLK-224, "OUTSIDE HANDLE : Removal</u> and Installation".	С
INSTALLATION Install in the reverse order of removal. PASSENGER SIDE	D
PASSENGER SIDE : Removal and Installation	E
REMOVAL Remove the front door outside handle grip (passenger door). Refer to <u>DLK-224, "OUTSIDE HANDLE :</u> <u>Removal and Installation"</u> .	F
INSTALLATION Install in the reverse order of removal.	G
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## INTELLIGENT KEY WARNING BUZZER

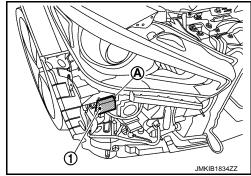
#### < REMOVAL AND INSTALLATION >

# INTELLIGENT KEY WARNING BUZZER

#### Removal and Installation

REMOVAL

- 1. Remove the front bumper fascia assembly. Refer to EXT-14, "Removal and Installation".
- 2. Disconnect Intelligent Key warning buzzer connector.
- Remove the mounting bolt (A), and then remove the Intelligent Key warning buzzer bracket and Intelligent Key warning buzzer (1).



INSTALLATION Install in the reverse order of removal.

# **REMOTE KEYLESS ENTRY RECEIVER**

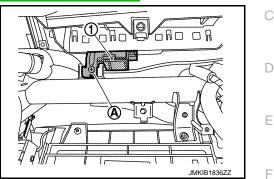
#### < REMOVAL AND INSTALLATION >

# REMOTE KEYLESS ENTRY RECEIVER

# Removal and Installation

#### REMOVAL

- 1. Remove the instrument lower panel RH. Refer to IP-12, "Removal and Installation".
- 2. Remove the front passenger air bag module. Refer to SR-23, "Removal and Installation".
- 3. Remove the mounting bolt (A), and then remove remote keyless entry receiver bracket and remote keyless entry receiver (1).



#### INSTALLATION Install in the reverse order of removal.

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# INTELLIGENT KEY BATTERY

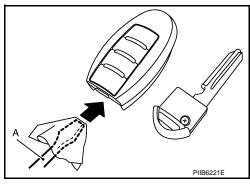
## < REMOVAL AND INSTALLATION >

# INTELLIGENT KEY BATTERY

## Removal and Installation

INFOID:000000009574711

- 1. Release the lock knob at the back of the Intelligent Key and remove the mechanical key.
- 2. Insert remover tool (A) wrapped with a cloth into the slit of the corner and twist it to separate the upper part from the lower part. CAUTION:
  - Never touch the circuit board or battery terminal.
  - The keyfob is water-resistant. However, if it does get wet, immediately wipe it dry.



3. Replace the battery with new one.

**Battery replacement** 

:Coin-type lithium battery (CR2032)

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

