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### **PRECAUTION**

### **PRECAUTIONS**

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

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

#### WARNING:

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

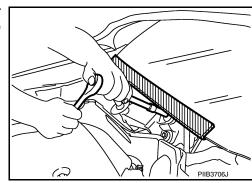
#### **WARNING:**

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

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



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### **Precautions for Removing Battery Terminal**

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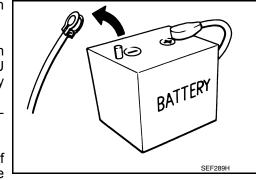
 When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.

#### NOTE:

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

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

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



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

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

Work

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

# **PREPARATION**

### **PREPARATION**

**Special Service Tools** 

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The actual shapes of TechMate tools may differ from those of special service tools illustrated here.

| Tool number<br>(TechMate No.)<br>Tool name     |           | Description                |
|--|-----------|----------------------------|
| (J-39570)<br>Chassis ear                       | SIIAO993E | Locates the noise          |
| (J-50397)<br>NISSAN Squeak and Rat-<br>tle Kit | SIIA0994E | Repairs the cause of noise |

### **Commercial Service Tools**

|              | Tool name   | Description                          |   |
|--------------|-------------|--------------------------------------|---|
| Engine ear   | SIIA0995E   | Locates the noise                    |   |
| Remover tool | JMKIA3050ZZ | Removes clips, pawls and metal clips |   |
| Power tool   | PIIB1407E   | Loosening bolts, nuts and screws     | _ |

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# SYSTEM DESCRIPTION

COMPONENT PARTS DOOR LOCK SYSTEM

DOOR LOCK SYSTEM: Component Parts Location

B **(A) © (D)** € JMKIA5285ZZ

- 1. Inside key antenna (trunk room)
- 4. Remote keyless entry receiver
- 7. BCM
  Refer to BCS-5, "BODY CONTROL
  SYSTEM: Component Parts Location"
- 10. Outside key antenna (driver side)
- 13. Front door request switch (driver side)
- View with trunk lid upper finisher removed
- D. View with glove box assembly removed

- 2. Inside key antenna (console)
- 5. Intelligent Key warning buzzer
- 8. TCM
  Refer to TM-11, "A/T CONTROL
  SYSTEM: Component Parts Location"

View with center console assembly

View with front bumper removed

11. Front door switch (driver side)

removed

E.

- Inside key antenna (instrument center)
- 6. Combination meter
- Power window main switch (door lock and unlock switch)

Front door lock assembly (driver side)

C. View with cluster lid C removed

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

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## DOOR LOCK SYSTEM : Component Description

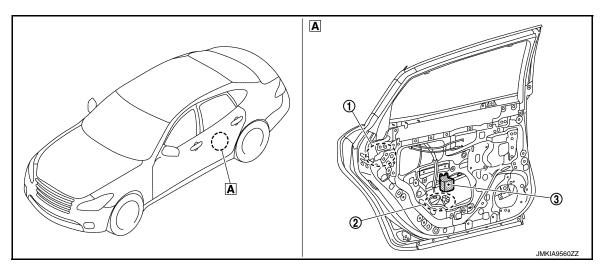
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| Item                            | Function   |
|---------------------------------|--|
| BCM                             | Controls the door lock system.   |
| IPDM E/R                        | Sounds horn and blinks head lamp via CAN communication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

### **REAR DOOR AUTO CLOSURE SYSTEM**

# REAR DOOR AUTO CLOSURE SYSTEM : Component Parts Location

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#### **COMPONENT PARTS**

#### < SYSTEM DESCRIPTION >

- Rear door lock assembly LH
- 2. Rear door closure motor assembly LH
- 3. Rear door closure control unit LH

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 View with rear door finisher LH removed

### REAR DOOR AUTO CLOSURE SYSTEM : Component Description

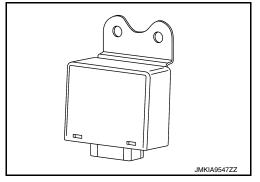
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| Item                             | Function   |
|----------------------------------|--|
| Rear door closure control unit   | DLK-13, "REAR DOOR AUTO CLOSURE SYSTEM: Rear Door Closure Control Unit"    |
| Rear door lock assembly          | DLK-13, "REAR DOOR AUTO CLOSURE SYSTEM : Rear Door Lock Assembly"          |
| Rear door closure motor assembly | DLK-13, "REAR DOOR AUTO CLOSURE SYSTEM : Rear Door Closure Motor Assembly" |

### REAR DOOR AUTO CLOSURE SYSTEM: Rear Door Closure Control Unit

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Operates rear door closure motor with signal from each switch.

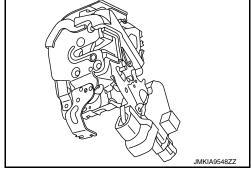


### REAR DOOR AUTO CLOSURE SYSTEM: Rear Door Lock Assembly

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Handle switch, operation switch and reverse switch are installed.

- Handle switch: detects operation/non-operation status of rear door handle and transmits signal to rear door closure control unit.
- Operation switch: detects half latch status of rear door.
- Reverse switch: detects full closed status of rear door.

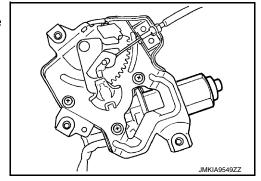


### REAR DOOR AUTO CLOSURE SYSTEM: Rear Door Closure Motor Assembly

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Rear door closure motor and neutral switch are installed.

- Rear door closure motor: Inputs close signal from rear door closure control unit and activates the rear door auto closure operation.
- Neutral switch: detects neutral position of rear door closure motor.



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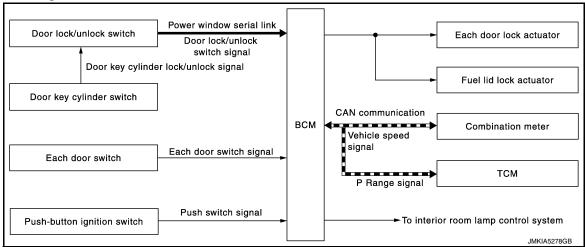
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### SYSTEM (POWER DOOR LOCK SYSTEM)

### System Diagram

INFOID:0000000012352626



### System Description

INFOID:0000000012352627

#### DOOR LOCK FUNCTION

Door Lock and Unlock Switch

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

#### Door Key Cylinder Switch

- With the mechanical key inserted in the door key cylinder on driver side, turning it to lock position, locks door lock actuator of all doors and fuel lid lock actuator.
- With the mechanical key inserted in the door key cylinder on driver side, turning it to unlock position once unlocks the driver side door, turning it to unlock position again within 60 seconds after the first unlock operation unlocks all of the other doors actuator and fuel lid lock actuator. (SELECTIVE UNLOCK OPERATION) Selective unlock operation mode can be changed using CONSULT.

Refer to DLK-36, "DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)".

#### DOOR KEY CYLINDER SWITCH POWER WINDOW FUNCTION

Driver side door key cylinder LOCK/UNLOCK operation can activate power window operation. Refer to <a href="PWC-8">PWC-8</a>, "System Description".

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

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

#### INTERIOR ROOM LAMP CONTROL FUNCTION

Interior room lamp is controlled according to door lock/unlock state, refer to <a href="INL-9">INL-9</a>, "INTERIOR ROOM LAMP CONTROL SYSTEM: System Description".

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

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

#### Vehicle Speed Sensing Auto Door Lock

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

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

P Range Interlock Door Lock

### SYSTEM (POWER DOOR LOCK SYSTEM)

#### < SYSTEM DESCRIPTION >

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

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

Setting change of Automatic Door Lock/Unlock Function

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

#### (P) With CONSULT

Refer to DLK-38, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

#### 

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

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

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

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

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

IGN OFF Interlock Door Unlock\*

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

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

P Range Interlock Door Unlock

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

Setting change of Automatic Door Lock/Unlock Function

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

#### (P) With CONSULT

Refer to <a href="DLK-38">DLK-38</a>, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

#### **⋈** Without CONSULT

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

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

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

: This function is set to ON before delivery.

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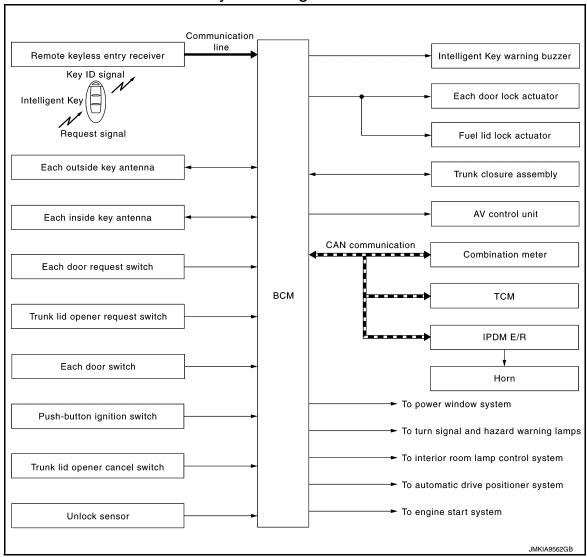
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# SYSTEM (INTELLIGENT KEY SYSTEM) INTELLIGENT KEY SYSTEM

### INTELLIGENT KEY SYSTEM: System Diagram

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### INTELLIGENT KEY SYSTEM: System Description

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

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

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

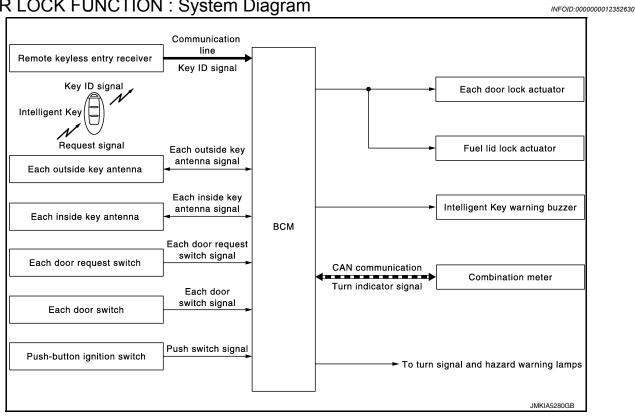
| Function             | Description  | Refer         |
|----------------------|--|---------------|
| Door lock            | Lock/unlock can be performed by pressing the request switch  | <u>DLK-17</u> |
| Trunk open           | The trunk lid can be opened by carrying the Intelligent Key and pressing the trunk lid opener request switch | DLK-20        |
| Remote keyless entry | Lock/unlock can be performed by pressing the remote controller button of the Intelligent Key                 | DLK-21        |

#### < SYSTEM DESCRIPTION >

| Function                   | Description  |                            | Refer         |
|----------------------------|--|----------------------------|---------------|
| Key reminder               | The key reminder buzzer sounds a warning if the door is local left inside the vehicle  | ked with the key           | DLK-24        |
| Welcome light              | When the Intelligent Key is carried, and vehicle doors are appeared illuminates interior room lamps and operates heart beap push-button ignition switch    | •                          | <u>DLK-25</u> |
| Warning                    | If an action that does not meet the operating condition of the I tem is taken, the buzzer sounds to inform the driver                                      | ntelligent Key sys-        | DLK-26        |
| Engine start               | The engine can be turned on while carrying the Intelligent K   | <u>SEC-11</u>              |               |
| Interior room lamp control | Interior room lamp is controlled according to door lock/unloc  | INL-9                      |               |
| Power window               | Power window can be operated by Intelligent Key button op  | PWC-8                      |               |
| Panic alarm                | When Intelligent Key panic alarm button is pressed, horn so lamp blinks  | <u>SEC-16</u>              |               |
|                            | Setting of auto driving position can be automatically set, according to key ID of Intelligent Key, to the position that is registered in advance           | Automatic drive positioner | ADP-22        |
| Intelligent Key interlock  | Setting of air conditioning system can be set, according to key ID of Intelligent Key, to the setting value that is set before turning ignition switch OFF | Air conditioning system    | HAC-17        |
|                            | Setting of multi AV system can be set, according to key ID of Intelligent Key, to the setting value that is set before turning ignition switch OFF         | Multi AV system            | <u>AV-157</u> |

### DOOR LOCK FUNCTION

### DOOR LOCK FUNCTION: System Diagram



## DOOR LOCK FUNCTION: System Description

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

#### OPERATION DESCRIPTION

**DLK-17 Revision: September 2015** 2016 Q70

#### < SYSTEM DESCRIPTION >

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

#### **OPERATION CONDITION**

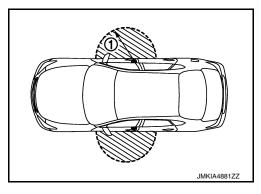
If the following conditions are satisfied, door lock/unlock operation is performed if the request switch is operated.

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

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

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

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



#### SELECTIVE UNLOCK FUNCTION

#### **Lock Operation**

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

#### **Unlock Operation**

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

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

Selective unlock operation mode can be changed using CONSULT.

Refer to DLK-38, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

#### HAZARD AND BUZZER REMINDER FUNCTION

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

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

Operating Function of Hazard and Buzzer Reminder

#### < SYSTEM DESCRIPTION >

| Operation | Hazard warning lamp blinks | Intelligent Key warning buzzer honk |
|-----------|----------------------------|-------------------------------------|
| Unlock    | Once                       | Once                                |
| Lock      | Twice                      | Twice                               |

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

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

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

Refer to DLK-38, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

#### AUTO DOOR LOCK FUNCTION

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

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

Auto door lock operation mode can be changed using CONSULT.

Refer to DLK-38, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

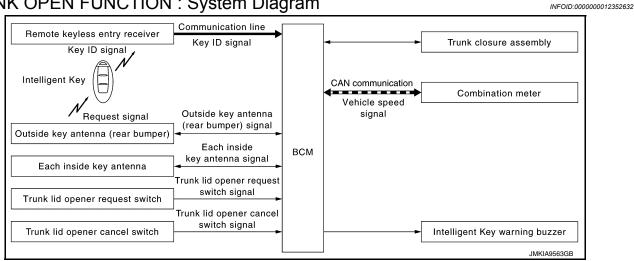
#### LIST OF OPERATION RELATED PARTS

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

| Door lock function                  | Intelligent Key | Remote keyless entry receiver | Doorswitch | Door request switch | Door lock actuator and fuel lid lock actuator | Inside key antenna | Outside key antenna | Intelligent Key warning buzzer | CAN communication system | ВСМ | Hazard warning lamp | Push-button ignition switch | Combination meter |
|-------------------------------------|-----------------|-------------------------------|------------|---------------------|---|--------------------|---------------------|--------------------------------|--------------------------|-----|---------------------|-----------------------------|-------------------|
| Door lock/unlock function           | ×               | ×                             | ×          | ×                   | ×   | ×                  | ×                   |                                |                          | ×   |                     |                             |                   |
| Hazard and buzzer reminder function |                 |                               |            |                     |   |                    |                     | ×                              | ×                        | ×   | ×                   |                             | ×                 |
| Selective unlock function           | ×               |                               |            | ×                   | ×   | ×                  | ×                   |                                |                          | ×   |                     |                             |                   |
| Auto door lock function             | ×               |                               | ×          | ×                   | ×   |                    |                     |                                |                          | ×   |                     | ×                           |                   |

#### TRUNK OPEN FUNCTION

### TRUNK OPEN FUNCTION: System Diagram



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#### < SYSTEM DESCRIPTION >

### TRUNK OPEN FUNCTION: System Description

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#### TRUNK LID OPEN FUNCTION

- When BCM detects that trunk lid opener request switch is pressed, it activates outside key antenna (rear bumper) and inside key antenna to transmit request signals to the Intelligent Key. And then, BCM checks that the Intelligent Key is near trunk lid.
- If the Intelligent Key is within the outside key antenna detection area, it receives the request signal and transmits the key ID signal to BCM.
- BCM receives the key ID signal via remote keyless entry receiver and compares it with the registered key ID.
- BCM transmits the trunk lid open request signal to trunk closure assembly and sounds Intelligent Key warning buzzer 4 times at the same time (buzzer reminder). However, buzzer reminder does not operate when ignition switch is in the ON position.
- When trunk closure control unit, integrated into the trunk closure assembly, receives the trunk lid open request signal, it operates trunk closure motor to release the interlocking of trunk lid lock and trunk lid striker, and then trunk lid opens.
- To prevent performing open operation due to mis-operation of trunk lid opener request switch by owner, the trunk lid open function is activated when trunk closure control unit receives the trunk lid open request signal from BCM for more than 0.2 sec.
- After closure control unit detects that the trunk is opened, it stops the trunk closure motor and then operates in reverse direction to the neutral position.
- The trunk closure control unit transmits trunk lid open/closed status signal to BCM.
- If trunk lid open operation stops accidentally (because of mis-latching, etc.), trunk lid can be open mechanically using trunk key cylinder.
- For trunk lid auto closure system, refer to <u>DLK-33, "System Description"</u>.

#### OPERATION CONDITION

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

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

#### BUZZER REMINDER FUNCTION

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

Operating Function Of Buzzer Reminder

| Operation      | Intelligent Key warning buzzer honks |
|----------------|--------------------------------------|
| Trunk lid open | Four times                           |

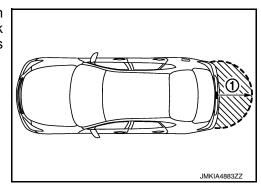
#### How to change buzzer reminder mode

#### (II) With CONSULT

Refer to DLK-38, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

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

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



#### < SYSTEM DESCRIPTION >

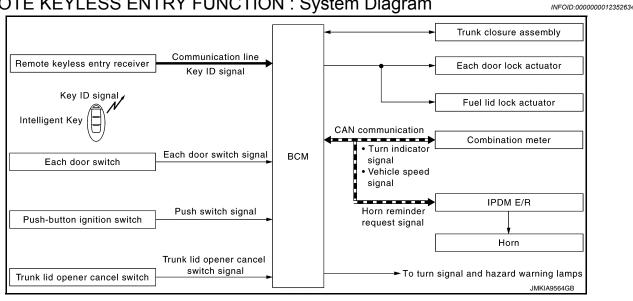
#### LIST OF OPERATION RELATED PARTS

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

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

### REMOTE KEYLESS ENTRY FUNCTION

### REMOTE KEYLESS ENTRY FUNCTION: System Diagram



### REMOTE KEYLESS ENTRY FUNCTION: System Description

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

### **OPERATION**

Remote keyless entry system controls operation of the following items

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

#### OPERATION AREA

To ensure the Intelligent Key works effectively, use with-in 1 m (3 ft) range of each door, however the operable range may differ according to surroundings.

#### DOOR LOCK/UNLOCK FUNCTION

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

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#### < SYSTEM DESCRIPTION >

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

#### OPERATION CONDITION

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

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

#### SELECTIVE UNLOCK FUNCTION

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

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

Selective unlock operation mode can be changed using CONSULT.

Refer to DLK-36, "DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)".

#### TRUNK OPEN FUNCTION

- When trunk button of the Intelligent Key is pressed, the trunk open signal is transmitted from the Intelligent Key to the BCM via remote keyless entry receiver.
- When BCM receives the trunk open request signal, it performs the trunk lid open function. For details of trunk lid open function, refer to <u>DLK-20</u>, "TRUNK OPEN FUNCTION: System Description".

#### **OPERATION CONDITION**

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

<sup>\*:</sup> Pattern of trunk open button can be selected using CONSULT. Refer to <u>DLK-38, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".</u>

#### HAZARD AND HORN REMINDER FUNCTION

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

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

Operating Function of Hazard and Horn Reminder

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

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

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

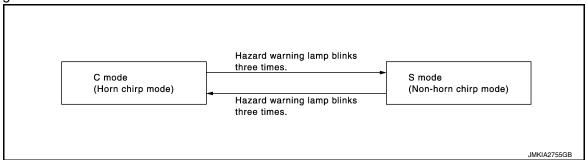
(II) With CONSULT

Refer to DLK-38, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

**Without CONSULT** 

#### < SYSTEM DESCRIPTION >

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



#### **AUTO DOOR LOCK FUNCTION**

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

| Operating condition | <ul><li>Door switch is ON (door is open)</li><li>Door is locked</li><li>Push switch is pressed</li></ul> |
|---------------------|--|
|---------------------|--|

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

Auto door lock operation mode can be changed using CONSULT.

Refer to DLK-38, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

#### LIST OF OPERATION RELATED PARTS

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

| Function                          | Intelligent Key | Door switch | Trunk lid opener cancel switch | Door lock actuator<br>and fuel lid lock actuator | Trunk closure assembly | CAN communication system | BCM | Hazard warning lamp | Door lock status indicator | Push-button ignition switch |
|-----------------------------------|-----------------|-------------|--------------------------------|--|------------------------|--------------------------|-----|---------------------|----------------------------|-----------------------------|
| Door lock/unlock function         | ×               | ×           |                                | ×  |                        |                          | ×   |                     |                            | ×                           |
| Trunk lid open function           | ×               |             | ×                              |  | ×                      |                          | ×   |                     |                            |                             |
| Auto door lock function           | ×               | ×           |                                |  |                        |                          | ×   |                     |                            | ×                           |
| Selective unlock function         | ×               | ×           |                                | ×  |                        |                          | ×   |                     |                            |                             |
| Hazard and horn reminder function | ×               |             |                                |  |                        | ×                        | ×   | ×                   |                            |                             |

### **KEY REMINDER FUNCTION**

**Revision: September 2015** 

**DLK-23** 2016 Q70

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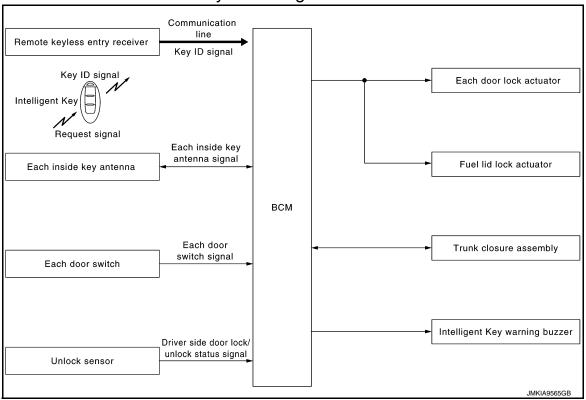
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### KEY REMINDER FUNCTION: System Diagram

INFOID:0000000012352636



### KEY REMINDER FUNCTION: System Description

INFOID:0000000012352637

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

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

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

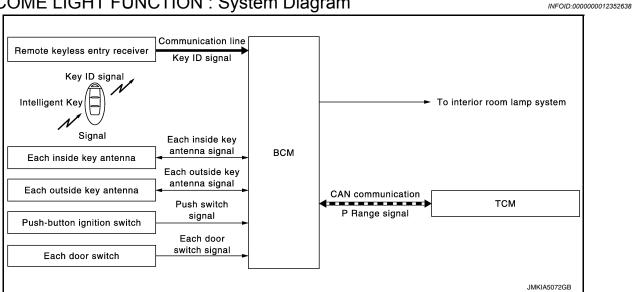
#### CAUTION:

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

WELCOME LIGHT FUNCTION

#### < SYSTEM DESCRIPTION >

### WELCOME LIGHT FUNCTION: System Diagram



### WELCOME LIGHT FUNCTION: System Description

INFOID:0000000012352639

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

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

#### **OPERATION DESCRIPTION**

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

#### TIMER FUNCTION

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

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

#### OPERATION CONDITION

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

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

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

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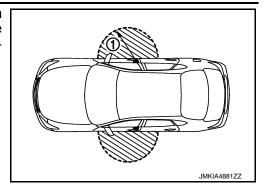
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#### < SYSTEM DESCRIPTION >

The outside key antenna detection area of door lock/unlock function is in the range of approximately 80 cm (31.50 in) surrounding the driver, passenger door handles (1) and back door handle (2). However, this operating range depends on the ambient conditions.



#### WELCOME LIGHT FUNCTION SETTING

Welcome light function operation mode can be changed using CONSULT

(P)With CONSULT

Refer to DLK-38, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

N Without CONSULT

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

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

#### WARNING FUNCTION

### WARNING FUNCTION: System Description

INFOID:0000000012352640

#### OPERATION DESCRIPTION

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

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

#### OPERATION CONDITION

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

| Warning/Information functions      | Operation procedure                   |  |  |  |  |
|------------------------------------|---------------------------------------|--|--|--|--|
| Intelligent Key system malfunction | When a malfunction is detected on BCM |  |  |  |  |

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### < SYSTEM DESCRIPTION >

| Warning/Inforr                  | nation functions                               | Operation procedure  |  |  |  |  |  |
|---------------------------------|--|--|--|--|--|--|--|
| OFF position warning            | For internal                                   | <ul> <li>When condition A, B or condition C is satisfied</li> <li>Condition A</li> <li>Ignition switch: ACC position</li> <li>Door switch (driver side): ON (Door is open)</li> <li>Condition B</li> <li>Turn ignition switch from ON to OFF while door is open</li> <li>Condition C</li> <li>Intelligent Key backside is contacted to ignition switch while brake pedal is depressed and ignition switch is LOCK or OFF (When the Intelligent Key battery is discharged)</li> <li>Door switch (driver side): ON (Door is open)</li> </ul> |  |  |  |  |  |
|                                 | For external                                   | OFF position warning (For internal) is in active mode, driver side door is closed NOTE:  OFF position (For external) active only when each of the sequence occurs as below: P position warning → ACC warning → OFF position warning (For internal)   |  |  |  |  |  |
| P position warning              | For internal                                   | Shift position: Except P position     Engine is running to stopped (Ignition switch is ON to OFF)  |  |  |  |  |  |
|                                 | For external                                   | Warning is activated when driver door is closed from the open position while the P position warning (for inside vehicle) is ON   |  |  |  |  |  |
| ACC warning                     |  | <ul> <li>When P position warning is in active mode, shift position changes P position.</li> <li>Ignition switch: ACC position</li> </ul>   |  |  |  |  |  |
|                                 | Door is open to close                          | <ul> <li>Ignition switch: Except LOCK position</li> <li>Door switch: ON to OFF (Door is open to close)</li> <li>Intelligent Key cannot be detected inside the vehicle</li> </ul>   |  |  |  |  |  |
| Take away warning               | Door is open                                   | <ul> <li>Ignition switch: Except LOCK position</li> <li>Door switch: ON (Door is open)</li> <li>Key ID verification every 5 seconds when registered Intelligent Key cannot be detected inside the vehicle</li> </ul>   |  |  |  |  |  |
|                                 | Push button-ignition switch operation          | <ul> <li>Ignition switch: Except LOCK position</li> <li>Press push-button ignition switch</li> <li>Intelligent Key cannot be detected inside the vehicle</li> </ul>  |  |  |  |  |  |
| Door lock operation warn        | ing  | When door lock operation is requested while door lock operating condition of door request switch or Intelligent Key are not satisfied  |  |  |  |  |  |
|                                 | Ignition switch is ON position                 | <ul><li>Ignition switch: ON position</li><li>Shift position: P position</li><li>Engine is stopped</li></ul>  |  |  |  |  |  |
| Engine start information        | Ignition switch is except ON position          | <ul> <li>Ignition switch: Except ON position</li> <li>Shift position: P position</li> <li>Intelligent Key is in the passenger room after driver door is opened and closed.</li> </ul>  |  |  |  |  |  |
|                                 | Ignition switch is ON position to OFF position | Ignition switch: ON position to OFF position     Shift position: P position     NOTE:     Engine start information turns ON for several seconds and then turns OFF, when ignition switch is turned to the ON position from the OFF position. Engine start information does not turn ON until opening and closing of driver door is detected again.   |  |  |  |  |  |
| Steering lock information       |  | When steering lock cannot be released after ignition switch is turned ON   |  |  |  |  |  |
| Intelligent Key low batter      | y warning                                      | When Intelligent Key is low battery, BCM is detected after ignition switch is turned ON  |  |  |  |  |  |
| Key ID warning                  |  | When registered intelligent Key cannot be detected inside the vehicle after ignition switch is turned ON   |  |  |  |  |  |
| Key ID verification information |  | <ul> <li>When registered Intelligent Key cannot be detected inside the vehicle</li> <li>Intelligent Key battery is discharged</li> <li>When NATS antenna amp cannot be detected NATS ID</li> </ul>   |  |  |  |  |  |

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### < SYSTEM DESCRIPTION >

#### WARNING METHOD

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

|                          |                                | Information display | Warning chime            |                                |  |  |  |
|--------------------------|--------------------------------|---------------------|--------------------------|--------------------------------|--|--|--|
| Warning/Inform           | ation functions                | (combination meter) | Combination meter buzzer | Intelligent Key warning buzzer |  |  |  |
| Intelligent Key system n | nalfunction                    | KEY<br>SYSTEM       | _                        | _                              |  |  |  |
|                          | For internal                   |                     | Activate                 | _                              |  |  |  |
| OFF position warning     | For external                   |                     | _                        | Activate                       |  |  |  |
|                          | For internal                   |                     | Activate                 |                                |  |  |  |
|                          |                                |                     | 7.00.70.0                |                                |  |  |  |
| P position warning       | For external                   | SHIFT JMKIA0037GB   | _                        | Active                         |  |  |  |
| ACC warning              |                                | PUSH  JMKIA0047GB   | _                        | _                              |  |  |  |
|                          | Door is open to close          |                     | Activate                 | Activate                       |  |  |  |
|                          | Door is open                   |                     | _                        | _                              |  |  |  |
| Take away warning        | Push-ignition switch operation | NO KEY  JMKIA4906ZZ | Activate                 | _                              |  |  |  |
| Door lock operation      | Request switch op-<br>eration  | _                   | _                        | Activate                       |  |  |  |
| warning                  | Intelligent Key operation      | _                   | _                        | Activate                       |  |  |  |
| Key ID warning           |                                | NO KEY  JMKIA4906ZZ | _                        | _                              |  |  |  |

### < SYSTEM DESCRIPTION >

|                                     | Information display | Warning chime            |                                |  |  |  |  |
|-------------------------------------|---------------------|--------------------------|--------------------------------|--|--|--|--|
| Warning/Information functions       | (combination meter) | Combination meter buzzer | Intelligent Key warning buzzer |  |  |  |  |
| Engine start information            | BRAKE JMKIA0032GB   | _                        | _                              |  |  |  |  |
| Steering lock information           | JMKIA0033GB         | _                        |                                |  |  |  |  |
| Intelligent Key low battery warning | JMKIA3049ZZ         | _                        | _                              |  |  |  |  |
| Key ID verification information     | JMKIA4907ZZ         |                          | _                              |  |  |  |  |

### LIST OF OPERATION RELATED PARTS

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

| Warning function              |              | Intelligent Key | Ignition switch | Door switch | Door request switch | Inside key antenna | Outside key antenna | Intelligent Key warning buzzer | Combination meter buzzer | CAN communication system | ВСМ | Information display |
|-------------------------------|--------------|-----------------|-----------------|-------------|---------------------|--------------------|---------------------|--------------------------------|--------------------------|--------------------------|-----|---------------------|
| Intelligent Key system malfun | ction        |                 |                 |             |                     |                    |                     |                                |                          | ×                        | ×   | ×                   |
| OFF position worning          | For internal |                 |                 | ×           |                     |                    |                     |                                | ×                        | ×                        | ×   |                     |
| OFF position warning          | For external |                 |                 | ×           |                     |                    |                     | ×                              |                          |                          | ×   |                     |
| P position warning            |              |                 | ×               |             |                     |                    |                     |                                | ×                        | ×                        | ×   | ×                   |
| ACC warning                   |              |                 | ×               |             |                     |                    |                     |                                | ×                        | ×                        | ×   | ×                   |

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# < SYSTEM DESCRIPTION >

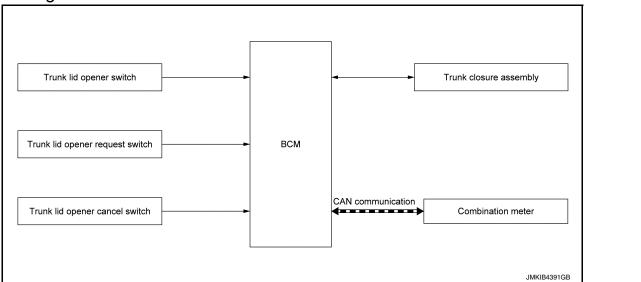
| Warning function                    |                                       | Intelligent Key | Ignition switch | Door switch | Door request switch | Inside key antenna | Outside key antenna | Intelligent Key warning buzzer | Combination meter buzzer | CAN communication system | BCM | Information display |
|-------------------------------------|---------------------------------------|-----------------|-----------------|-------------|---------------------|--------------------|---------------------|--------------------------------|--------------------------|--------------------------|-----|---------------------|
|                                     | Door is open or close                 | ×               |                 | ×           |                     | ×                  |                     | ×                              | ×                        | ×                        | ×   | ×                   |
| Take away warning                   | Door is open                          | ×               |                 | ×           |                     | ×                  |                     |                                |                          | ×                        | ×   | ×                   |
| , c                                 | Push-button ignition switch operation | ×               | ×               |             |                     | ×                  |                     |                                | ×                        | ×                        | ×   | ×                   |
| Door lock operation warning         |                                       | ×               |                 | ×           | ×                   | ×                  | ×                   | ×                              |                          |                          | ×   |                     |
| Key ID warning                      |                                       |                 | ×               |             |                     | ×                  |                     |                                |                          | ×                        | ×   | ×                   |
|                                     | Ignition switch is ON position        | ×               | ×               |             |                     | ×                  |                     |                                |                          | ×                        | ×   | ×                   |
| Engine start information            | Ignition switch is except ON position | ×               | ×               |             |                     | ×                  |                     |                                |                          | ×                        | ×   | ×                   |
| Steering lock information           |                                       |                 | ×               |             |                     |                    |                     |                                |                          | ×                        | ×   | ×                   |
| Intelligent Key low battery warning |                                       | ×               |                 |             |                     | ×                  |                     |                                |                          | ×                        | ×   | ×                   |
| Key ID verification information     |                                       | ×               |                 |             |                     | ×                  |                     |                                |                          | ×                        | ×   | ×                   |

### SYSTEM (TRUNK LID OPENER SYSTEM)

#### < SYSTEM DESCRIPTION >

### SYSTEM (TRUNK LID OPENER SYSTEM)

### System Diagram



### System Description

INFOID:0000000012352642

#### TRUNK LID OPENER SWTICH OPERATION

- When trunk lid opener switch is turned ON, BCM transmits trunk lid open request signal to trunk closure assembly.
- When trunk closure control unit, integrated into the trunk closure assembly, receives the trunk lid open request signal, it operates trunk closure motor to release the interlocking of trunk lid lock and trunk lid striker, and then trunk lid opens.
- To prevent performing open operation due to mis-operation of trunk lid opener switch by owner, the trunk lid open function is activated when trunk closure control unit receives the trunk lid open request signal from BCM for more than 0.2 sec.
- After trunk closure control unit detects that the trunk is opened, it stops the trunk closure motor and then operates in reverse direction to the neutral position.
- The trunk closure control unit transmits trunk lid open/closed status signal to BCM.
- If trunk lid open operation stops accidentally (because of mislatching, etc.), trunk lid can be open mechanically using trunk key cylinder.
- For trunk lid auto closure system, refer to <u>DLK-33, "System Description"</u>.

#### **Operation Condition**

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

| Trunk lid opener switch operation | Operation condition  |
|-----------------------------------|--|
| Trunk lid open                    | Trunk lid opener cancel switch is ON Vehicle speed is less than 5 km/h (3 MPH) Vehicle security system is in the disarmed or pre-armed phase (Refer to SEC-16, "VEHICLE SECURITY SYSTEM: System Description".) |

# TRUNK LID OPENER REQUEST SWTICH OPERATION (DO NOT USE INTELLIGENT KEY SYSTEM)

- When trunk lid opener request switch is turned ON, BCM transmits trunk lid open request signal to trunk closure assembly.
- When trunk closure control unit, integrated into the trunk closure assembly, receives the trunk lid open request signal, it operates trunk closure motor to release the interlocking of trunk lid lock and trunk lid striker, and then trunk lid opens.
- To prevent performing open operation due to mis-operation of trunk lid opener switch by owner, the trunk lid open function is activated when trunk closure control unit receives the trunk lid open request signal from BCM for more than 0.2 sec.

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### **SYSTEM (TRUNK LID OPENER SYSTEM)**

#### < SYSTEM DESCRIPTION >

- After trunk closure control unit detects that the trunk is opened, it stops the trunk closure motor and then operates in reverse direction to the neutral position.
- The trunk closure control unit transmits trunk lid open/closed status signal to BCM.
- If trunk lid open operation stops accidentally (because of mislatching, etc.), trunk lid can be open mechanically using trunk key cylinder.
- For trunk lid auto closure system, refer to <u>DLK-33, "System Description"</u>.

#### **Operation Condition**

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

| Trunk lid opener request switch operation | Operation condition   |
|---|---|
| Trunk lid open                            | All doors are unlocked     Trunk lid opener cancel switch is ON     Vehicle speed is less than 5 km/h (3 MPH)     Vehicle security system is in the disarmed or pre-armed phase (Refer to SEC-16, "VEHICLE SECURITY SYSTEM: System Description".) |

### SYSTEM (TRUNK LID AUTO CLOSURE SYSTEM)

#### < SYSTEM DESCRIPTION >

### SYSTEM (TRUNK LID AUTO CLOSURE SYSTEM)

System Diagram

Trunk closure assembly

Trunk closure motor

Open switch signal

Open switch

Gear switch signal

Gear switch

Gear switch

Gear switch

### System Description

INFOID:0000000012352644

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

#### OPERATION DESCRIPTION

- Trunk closure control unit operates trunk closure motor and performs retracting operation when trunk lid is judged to be in the half latch status.
- Trunk closure control unit stops retracting operation of trunk closure motor when trunk is judged to be in fully closed status.
- After stopping retracting operation, trunk closure control unit operates trunk closure motor in reverse direction to the neutral position.
- When any of the following conditions is met during auto closure operation, trunk closure control unit stops retracting operation, and operates trunk closure motor in reverse direction to open trunk lid.
- Trunk closure control unit receives trunk lid open request signal
- The specified time (Approx. 4.6 sec) is past before trunk lid reaches the fully closed position
- For trunk lid open system, refer to <u>DLK-20, "TRUNK OPEN FUNCTION: System Description"</u>, <u>DLK-21, "REMOTE KEYLESS ENTRY FUNCTION: System Description"</u>, and <u>DLK-31, "System Description"</u>,

#### **FAIL-SAFE**

The fail-safe function is adopted for the trunk closure control unit. Refer to DLK-44, "Fail-safe".

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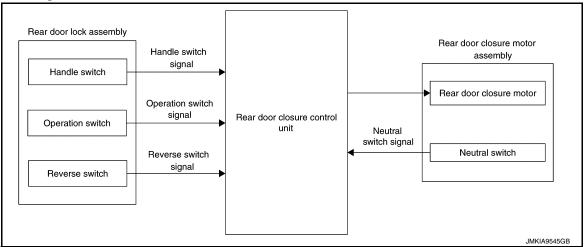
### SYSTEM (REAR DOOR AUTO CLOSURE SYSTEM)

### < SYSTEM DESCRIPTION >

### SYSTEM (REAR DOOR AUTO CLOSURE SYSTEM)

### System Diagram

INFOID:0000000012352645



### System Description

INFOID:0000000012352646

Rear door auto closure system closes automatically rear door to the fully closed position when rear door is in half latch status (lock and striker are in engage status).

#### **OPERATION DESCRIPTION**

- Rear door closure control unit operates rear door closure motor and performs retracting operation when rear door is judged to be in half latch status according to operation switch signal.
- Rear door closure control unit stops retracting operation of rear door closure motor when rear door is judged
  to be in fully closed status according to operation switch signal and reverse switch signal.
- In preparation of auto closure operation that may be repeated, rear door closure control unit operates rear door closure motor in reverse direction to the neutral position continuously after stopping retracting operation
- Rear door closure control unit detects the neutral position of rear door closure motor according to neutral switch signal and stops reverse operation of rear door closure motor.
- When outside door handle or inside door handle is operated during auto closure operation, rear door closure
  control unit detects handle switch signal, stops retracting operation of rear door closure motor, and operates
  rear door closure motor in reverse direction to the neutral position.

Fail-safe

- Rear door closure control unit judges that a malfunction (foreign material pinching, motor malfunction, or reverse switch malfunction) occurs if fully closed status of rear door cannot be detected when more than 2.5 seconds are passed after retracting operation of rear door closure motor is started. Rear door closure control unit stops retracting operation of rear door closure motor and operates rear door closure motor in reverse direction to the neutral position. Rear door auto closure system is not operative until rear door closure control unit detects operation of outside door handle or inside door handle.
- Rear door closure control unit judges that a malfunction (motor malfunction or neutral switch malfunction)
  occurs if neutral switch signal cannot be detected when more than 0.5 seconds are passed after retracting
  operation of rear door closure motor is started. Rear door closure control unit stops retracting operation of
  rear door closure motor and operates rear door closure motor in reverse direction to the neutral position.

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

#### < SYSTEM DESCRIPTION >

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

**COMMON ITEM** 

COMMON ITEM: CONSULT Function (BCM - COMMON ITEM)

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#### APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

| 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.

x: Applicable item

| 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                   | ×              | ×            | ×           |
| <del>-</del>   | AIR CONDITONER*           |                | ×            | ×           |
| <ul><li>Intelligent Key system</li><li>Engine start system</li></ul> | INTELLIGENT KEY           | ×              | ×            | ×           |
| Combination switch   | COMB SW                   |                | ×            |             |
| Body control system  | ВСМ                       | ×              |              |             |
| 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             |                | ×            | ×           |
| _  | AIR PRESSURE MONITOR*     | ×              | ×            | ×           |

<sup>\*:</sup> 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.

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

#### < 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  |  |  |  |
| Vehicle Condition   | SLEEP>LOCK      | Power position status of the moment a particular DTC is detected*  | 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" (Veh is stopping and selector lever is except P position.) |  |  |
|                     | CRANK>RUN       |  | While turning power supply position from "CRANKING" to "RUI" (From cranking up the engine to run it)               |  |  |
|                     | RUN>URGENT      |  | While turning power supply position from "RUN" to "ACC" (Emegency stop operation)                                  |  |  |
|                     | ACC>OFF         |  | While turning power supply position from "ACC" to "OFF"  |  |  |
|                     | OFF>LOCK        |  | While turning power supply position from "OFF" to "LOCK"*  |  |  |
|                     | 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 tion is "OFF".) to low power consumption mode              |  |  |
|                     | LOCK>SLEEP      |  | While turning BCM status from normal mode (Power supply position is "LOCK"*.) to low power consumption mode        |  |  |
|                     | LOCK            |  | Power supply position is "LOCK" (Ignition switch OFF with sting is locked.)*                                       |  |  |
|                     | OFF             |  | Power supply position is "OFF" (Ignition switch OFF with steel is unlocked.)                                       |  |  |
|                     | ACC             |  | Power supply position is "ACC" (Ignition switch ACC)   |  |  |
|                     | ON              |  | Power supply position is "IGN" (Ignition switch ON with engine stopped)  |  |  |
|                     | ENGINE RUN      |  | Power supply position is "RUN" (Ignition switch ON with engine running)  |  |  |
|                     | CRANKING        |  | Power supply position is "CRANKING" (At engine cranking)   |  |  |
| IGN Counter         | 0 - 39          | <ul> <li>The number of times that ignition switch is turned ON after DTC is detected</li> <li>The number is 0 when a malfunction is detected now.</li> <li>The number increases like 1 → 2 → 338 → 39 after returning to the normal condition whenever ignition switch OFF → ON.</li> <li>The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.</li> </ul> |  |  |  |

#### NOTE:

- \*: Power supply position shifts to "LOCK" from "OFF", when ignition switch is in the OFF position, selector lever is in the P position, and any of the following conditions are met.
- · Closing door
- Opening door
- · Door is locked using door request switch
- Door is locked using Intelligent Key

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

#### DOOR LOCK

DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)

INFOID:0000000012352649

#### **BCM CONSULT FUNCTION**

CONSULT performs the following functions via CAN communication with BCM.

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# < SYSTEM DESCRIPTION >

# **WORK SUPPORT**

| Monitor item                    | Description  |  |
|---------------------------------|--|--|
| DOOR LOCK-UNLOCK SET            | Selective unlock function mode can be changed to operation with this mode  On: Operate  Off: Non-operation   |  |
| AUTOMATIC DOOR LOCK SE-<br>LECT | <ul> <li>Automatic door lock function mode can be selected from the following in this mode</li> <li>VH SPD: All doors are locked when vehicle speed more than 24 km/h (15MPH)</li> <li>P RANGE: All doors are locked when shifting the selector lever from P position to other than the P position</li> </ul>  |  |
| AUTOMATIC DOOR UNLOCK<br>SELECT | <ul> <li>Automatic door unlock function mode can be selected from the following in the mode</li> <li>MODE 1: All doors are unlocked when the power supply position is changed from ON to OFF</li> <li>MODE 2: All doors are unlocked when shifting the selector lever from any position other than the P to P position</li> <li>MODE 3: Driver side door is unlocked when the power supply position is changed from ON to OFF</li> <li>MODE 4: Driver side door is unlocked when shifting the selector lever from any position other than the P to P position</li> <li>MODE 5: This item is displayed, but cannot be used</li> <li>MODE 6: This item is displayed, but cannot be used</li> </ul> |  |
| AUTOMATIC LOCK/UNLOCK<br>SET    | Automatic door lock/unlock function mode can be selected from the following in this mode  Off: Non-operational  Unlock Only: Door unlock operation only  Lock Only: Door lock operation only  Lock/Unlock: Lock and unlock operation   |  |
| SIGNATURE LIGHT SETTING         | Signature light function can be changed to operation with this mode  On: Operate Off: Non-operation  |  |

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

# **ACTIVE TEST**

# < SYSTEM DESCRIPTION >

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

# **INTELLIGENT KEY**

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

INFOID:0000000012352650

# **WORK SUPPORT**

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

# < SYSTEM DESCRIPTION >

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

# **SELF-DIAG RESULT**

Refer to BCS-59, "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 door request switch (driver side)    |
| REQ SW -AS    | Indicates [On/Off] condition of door request switch (passenger side) |
| REQ SW -BD/TR | Indicates [On/Off] condition of trunk lid opener request switch      |
| PUSH SW       | Indicates [On/Off] condition of push-button ignition switch          |
| CLUTCH SW     | NOTE: This item is displayed, but cannot be monitored                |
| BRAKE SW 1    | Indicates [On/Off]* condition of stop lamp switch power supply       |
| BRAKE SW 2    | Indicates [On/Off] condition of stop lamp switch                     |
| DETE/CANCL SW | Indicates [On/Off] condition of P position                           |
| SFT PN/N SW   | Indicates [On/Off] condition of P or N position                      |
| S/L -LOCK     | NOTE: This item is displayed, but cannot be monitored                |

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# < SYSTEM DESCRIPTION >

| Monitor Item   | Condition   |
|----------------|---|
| S/L -UNLOCK    | NOTE: This item is displayed, but cannot be monitored   |
| S/L RELAY -F/B | NOTE: This item is displayed, but cannot be monitored   |
| UNLK SEN -DR   | Indicates [On/Off] condition of driver door UNLOCK status   |
| PUSH SW -IPDM  | Indicates [On/Off] condition of push-button ignition switch   |
| IGN RLY1 -F/B  | Indicates [On/Off] condition of ignition relay 1  |
| DETE SW -IPDM  | Indicates [On/Off] condition of P position  |
| SFT PN -IPDM   | Indicates [On/Off] condition of P or N position   |
| SFT P -MET     | Indicates [On/Off] condition of P position  |
| SFT N -MET     | Indicates [On/Off] condition of N position  |
| ENGINE STATE   | Indicates [Stop/Stall/Crank/Run] condition of engine states   |
| S/L LOCK-IPDM  | NOTE: This item is displayed, but cannot be monitored   |
| S/L UNLK-IPDM  | NOTE: This item is displayed, but cannot be monitored   |
| S/L RELAY-REQ  | NOTE: This item is displayed, but cannot be monitored   |
| VEH SPEED 1    | Display the vehicle speed signal received from combination meter by numerical value [Km/h]  |
| VEH SPEED 2    | Display the vehicle speed signal received from ABS or VDC or TCM by numerical value [Km/h]  |
| DOOR STAT-DR   | Indicates [LOCK/READY/UNLK] condition of driver side door status  |
| DOOR STAT-AS   | Indicates [LOCK/READY/UNLK] condition of passenger side door status   |
| ID OK FLAG     | Indicates [Set/Reset] condition of key ID   |
| PRMT ENG STRT  | Indicates [Set/Reset] condition of engine start possibility   |
| PRMT RKE STRT  | NOTE: This item is displayed, but cannot be monitored   |
| TRNK/HAT MNTR  | Indicates [On/Off] condition of trunk room lamp switch  |
| RKE-LOCK       | Indicates [On/Off] condition of LOCK signal from Intelligent Key  |
| RKE-UNLOCK     | Indicates [On/Off] condition of UNLOCK signal from Intelligent Key  |
| RKE-TR/BD      | Indicates [On/Off] condition of trunk open signal from Intelligent Key  |
| RKE-PANIC      | Indicates [On/Off] condition of panic alarm button of Intelligent Key   |
| RKE-MODE CHG   | Indicates [On/Off] condition of MODE CHANGE signal from Intelligent Key   |
| RKE OPE COUN1  | When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing |
| RKE OPE COUN2  | NOTE: This item is displayed, but cannot be monitored   |

<sup>\*:</sup> OFF is displayed when brake pedal is depressed while brake switch power supply is OFF.

# **ACTIVE TEST**

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

# < SYSTEM DESCRIPTION >

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

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### < SYSTEM DESCRIPTION >

| Test item                  | Description   |
|----------------------------|---|
| INTELLIGENT KEY LINK       | This test is able to check Intelligent Key interlock function  ID No1: BCM transmits Intelligent Key ID No1 to each control unit  ID No2: BCM transmits Intelligent Key ID No2 to each control unit   |
| INTELLIGENT KEY LINK (CAN) | <ul> <li>This test is able to check Intelligent Key interlock function</li> <li>Off: Non-operation</li> <li>ID No1: BCM transmits Intelligent Key ID No1 to each control unit via CAN communication line</li> <li>ID No2: BCM transmits Intelligent Key ID No2 to each control unit via CAN communication line</li> <li>ID No3: BCM transmits Intelligent Key ID No3 to each control unit via CAN communication line</li> <li>ID No4: BCM transmits Intelligent Key ID No4 to each control unit via CAN communication line</li> <li>ID No5: This item is displayed, but cannot be used</li> </ul> |

# **TRUNK**

TRUNK: CONSULT Function (BCM - TRUNK)

INFOID:0000000012352651

### **DATA MONITOR**

### NOTE:

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

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

# **ECU DIAGNOSIS INFORMATION**

# **BCM**

# List of ECU Reference

| ECU   | Reference                               |
|-------|---|
|       | BCS-37, "Reference Value"               |
| BCM   | BCS-57, "Fail-safe"                     |
| DCIVI | BCS-58, "DTC Inspection Priority Chart" |
|       | BCS-59, "DTC Index"                     |

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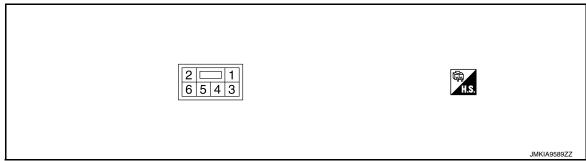
# TRUNK CLOSURE CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

# TRUNK CLOSURE CONTROL UNIT

Reference Value

# **TERMINAL LAYOUT**



# PHYSICAL VALUES

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

Fail-safe

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

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

# < ECU DIAGNOSIS INFORMATION >

# REAR DOOR CLOSURE CONTROL UNIT LH LH : Reference Value TERMINAL LAYOUT

1 2 3 5 6 7 8 9

# PHYSICAL VALUES

Ground

(P)

Battery power supply

|           | ninal No.<br>re color) | Description                            |                  | Condition  | Voltage  |
|-----------|------------------------|--|------------------|--|--|
| (+)       | (-)                    | Signal name                            | Input/<br>Output | Condition  | (Approx.)  |
| 1<br>(V)  | Ground                 | Neutral switch signal                  | Input            | Fully open → half latch → fully closed                                 | (V) 6 Fully open—Fully close— 4 2 0  +                   |
| 2<br>(B)  | Ground                 | Ground                                 | _                | _  | 0 V  |
| 3<br>(LG) | Ground                 | Rear door closure motor (close signal) | Output           | Fully open → half latch → fully closed                                 | (V) 15 10 5 0 Retarn operation Close operation SIIA1113E |
| 5<br>(W)  | Ground                 | Handle switch signal                   | Input            | Fully open → half latch → fully closed → handle operation → fully open | (V) 6 open   |

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Battery voltage

Input

### < ECU DIAGNOSIS INFORMATION >

|          | ninal No.<br>re color) | Description                                |                  | Condition                              | Voltage  |
|----------|------------------------|--|------------------|--|--|
| (+)      | (-)                    | Signal name                                | Input/<br>Output | Condition                              | (Approx.)  |
| 7<br>(R) | Ground                 | Reverse switch signal                      | Input            | Fully open → half latch → fully closed | Fully close  Fully close  Fully close  Fully close  Fully close  SIIA1115E |
| 8<br>(G) | Ground                 | Operation switch signal                    | Input            | Fully open → half latch → fully closed | (V) 6 4 2 Fully close 4 2 Fully close  4 SIIA1116E                         |
| 9<br>(L) | Ground                 | Rear door closure motor<br>(Return signal) | Output           | Fully open → half latch → fully closed | (V) 15 10 50 Retarn operation Close operation                              |

LH : Fail-safe

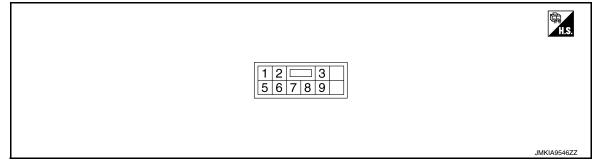
- Rear door closure control unit judges that a malfunction (foreign material pinching, motor malfunction, or reverse switch malfunction) occurs if fully closed status of rear door cannot be detected when more than 2.5 seconds are passed after retracting operation of rear door closure motor is started. Rear door closure control unit stops retracting operation of rear door closure motor and operates rear door closure motor in reverse direction to the neutral position. Rear door auto closure system is not operative until rear door closure control unit detects operation of outside door handle or inside door handle.
- Rear door closure control unit judges that a malfunction (motor malfunction or neutral switch malfunction)
  occurs if neutral switch signal cannot be detected when more than 0.5 seconds are passed after retracting
  operation of rear door closure motor is started. Rear door closure control unit stops retracting operation of
  rear door closure motor and operates rear door closure motor in reverse direction to the neutral position.

RH

RH : Reference Value

INFOID:0000000012352657

## TERMINAL LAYOUT



PHYSICAL VALUES

# < ECU DIAGNOSIS INFORMATION >

|           | ninal No.<br>re color) | Description                                |                  |  | Voltage   |
|-----------|------------------------|--|------------------|--|---|
| (+)       | (-)                    | Signal name                                | Input/<br>Output | Condition  | (Approx.)   |
| 1<br>(V)  | Ground                 | Neutral switch signal                      | Input            | Fully open → half latch → fully closed                                 | (V) 6 Fully open — Fully close — 4 manual — 2 0                     |
| 2<br>(B)  | Ground                 | Ground                                     | _                | _  | 0 V   |
| 3<br>(LG) | Ground                 | Rear door closure motor (close signal)     | Output           | Fully open → half latch → fully closed                                 | (V) 15 10 Retarn operation Close operation SIIA1113E                |
| 5<br>(W)  | Ground                 | Handle switch signal                       | Input            | Fully open → half latch → fully closed → handle operation → fully open | (V) 6 open open open open open open open open                       |
| 6<br>(P)  | Ground                 | Battery power supply                       | Input            | _  | Battery voltage   |
| 7<br>(R)  | Ground                 | Reverse switch signal                      | Input            | Fully open → half latch → fully closed                                 | Fully close  4 Fully close  4 Fully close  5 Fully slose  SliA1115E |
| 8<br>(G)  | Ground                 | Operation switch signal                    | Input            | Fully open → half latch → fully closed                                 | (V) 6 4 2 Fully close 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9         |
| 9<br>(L)  | Ground                 | Rear door closure motor<br>(Return signal) | Output           | Fully open → half latch → fully closed                                 | (V) 15 10 Retarn operation Close operation                          |

### < ECU DIAGNOSIS INFORMATION >

RH: Fail-safe

 Rear door closure control unit judges that a malfunction (foreign material pinching, motor malfunction, or reverse switch malfunction) occurs if fully closed status of rear door cannot be detected when more than 2.5 seconds are passed after retracting operation of rear door closure motor is started. Rear door closure control unit stops retracting operation of rear door closure motor and operates rear door closure motor in reverse direction to the neutral position. Rear door auto closure system is not operative until rear door closure control unit detects operation of outside door handle or inside door handle.

• Rear door closure control unit judges that a malfunction (motor malfunction or neutral switch malfunction) occurs if neutral switch signal cannot be detected when more than 0.5 seconds are passed after retracting operation of rear door closure motor is started. Rear door closure control unit stops retracting operation of rear door closure motor and operates rear door closure motor in reverse direction to the neutral position.

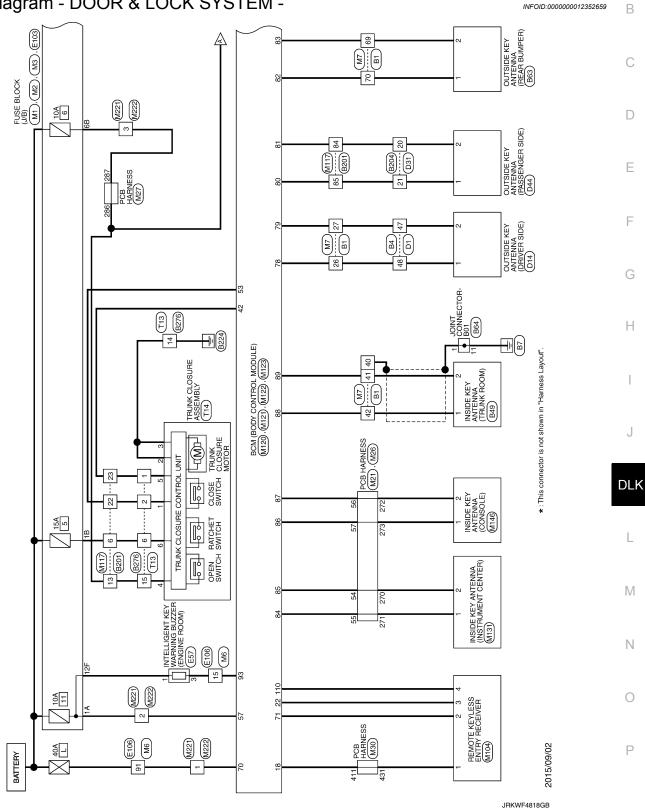
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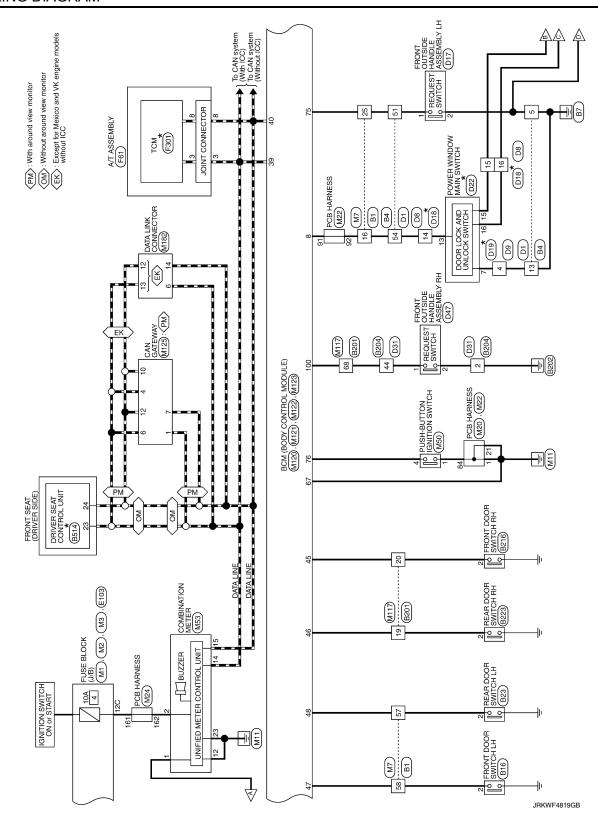
DOOR LOCK SYSTEM

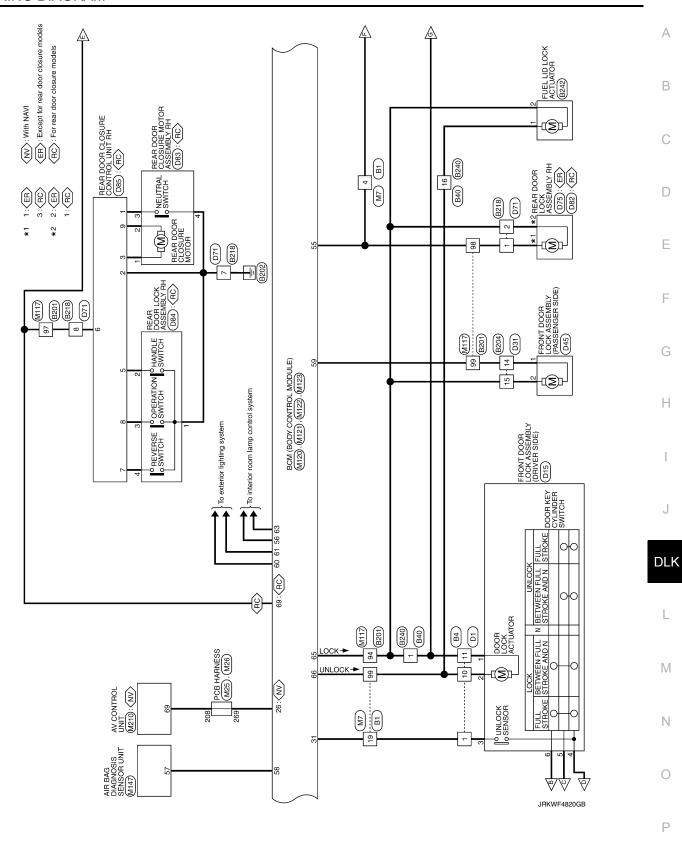
# WIRING DIAGRAM

# **DOOR & LOCK SYSTEM**

Wiring Diagram - DOOR & LOCK SYSTEM -

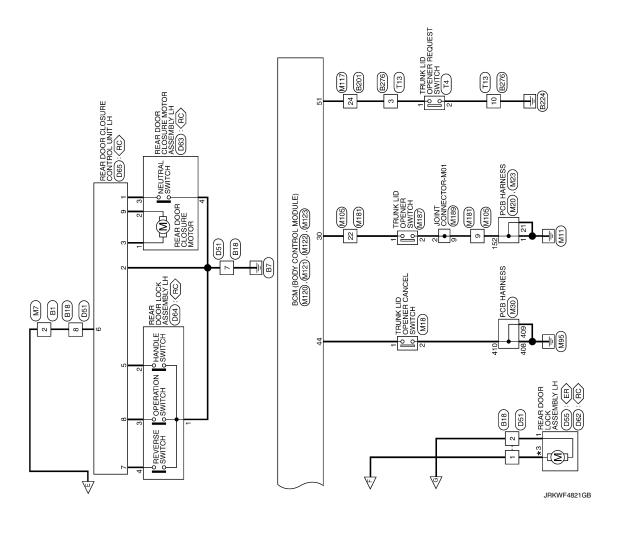












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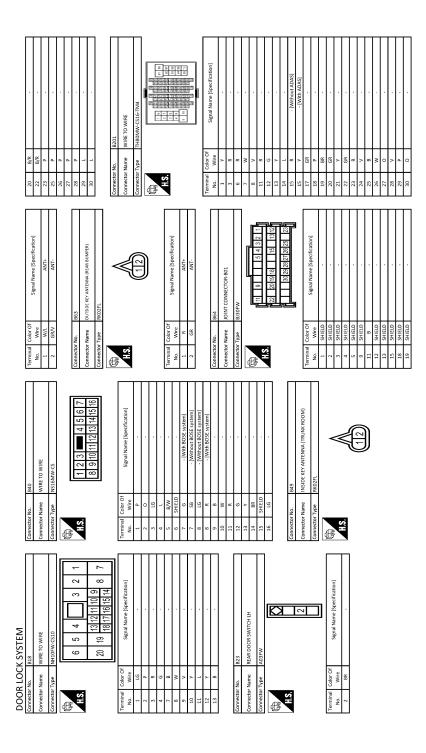
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| 36   P   |             |
|--|-------------|
| Connector No.   94   Connector No.   94   Connector No.   94   Connector No.   94   Connector No.   95   Connector No.   95   Connector Type   TH40MW-CS15   Connector Type   TH40MW-CS15   Connector Type   TH40MW-CS15   Connector Type   Connec |             |
| M/V<br>M/V<br>M/V<br>M/V<br>M/V<br>M/V<br>M/V<br>M/V   |             |
| 8  |             |
| Connector Name   Wife To Write   |             |
|  | JRKWF4822GB |

Revision: September 2015 DLK-53 2016 Q70



JRKWF4823GB

| DOOR | LOCK         | DOOR LOCK SYSTEM                 |               |                 |  |                   |          |  |                   |  |
|------|--------------|----------------------------------|---------------|-----------------|--|-------------------|----------|--|-------------------|--|
| Н    | B/R          |                                  | 93            | 0               |  | 32                | 9        |  | 8<br>8            |  |
| 32   | <b>*</b>     |                                  | 93            | ٨               | - [With climate controlled seat]   | 33                | œ        |  | 0 6               |  |
| H    | SHIELD       |                                  | 94            | GR              | ,  | 35                | ۵        |  | 10 W              |  |
| 41   | W/R          |                                  | 96            | >               |  | 36                | B/R      |  | 11 0              |  |
| 42   | >            |                                  | 46            | 4               |  | 37                | BB       |  | 12 Y              |  |
| 45   | SB           |                                  | 86            | 91              |  | 38                | SB       |  | 13 B              |  |
| 46   | æ            | - [With climate controlled seat] | 66            | 91              |  | 39                | Ь        |  |                   |  |
| Н    | ^            | - [With heated seat]             | 100           | ٨               | •  | 44                | SB       |  |                   |  |
| Н    | 9            | - [With climate controlled seat] |               |                 |  | 46                | В        |  | Connector No.     | B223   |
| -    | GR           | - [With heated seat]             |               |                 |  | 53                | ٦        | -  | Connector Name    | REAR DOOR SWITCH RH  |
| 48   | ^            |                                  | Conne         | Connector No.   | 8204   | 54                | В        |  | olliector reguler | The state of the s |
| 49   | 0            |                                  | outo          | Connector Name  | WIRE TO WIRE   | 55                | >        | -  | Connector Type    | A03FW  |
| 20   | В            |                                  | 9             | all lager lager |  |                   |          |  | Ç                 | E  |
| 5.1  | GR           |                                  | Conne         | Connector Type  | TH40MW-CS1S  |                   |          |  | B                 | <u> </u>   |
| 52   | PI           |                                  | 4             |                 |  | Connector No.     |          | 8216   | Ę                 | <u>T</u>   |
| 53   | Ь            |                                  | 3             | _               |  | Connector Name    |          | Ha HOTIMS GOOD INCOM   | ŹĮ.               | <u> </u>   |
| 95   | ۵.           |                                  | •             |                 | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15  |                   |          |  |                   | 2  |
| 57   | >            |                                  | 2             | ā               |  | Connector Type    | ı        | AO3FW  |                   | <u>ग</u>   |
| 28   | 0            |                                  |               |                 | 18 1/18 18 20 21 22 23 24 25 20 30 30 30 30 30 30 30 30 30 30 30 30 30   |                   |          |  |                   |  |
| 59   | >            |                                  |               |                 | DO NO INCIDENTAL OF THE PROPERTY OF THE PROPER | Œ                 |          | C  |                   | ]]   |
| 61   | 8S           |                                  |               |                 |  | i.                |          | K  | Terminal Color Of | L  |
| 3 3  | 3 -          |                                  |               |                 |  | Š                 |          | _  | No Mire           | Signal Name [Specification]  |
| 2 5  | . 3          |                                  | To the second | 2011-0          | 90   |                   |          | T  | +                 |  |
| 69   | > ;          |                                  |               |                 | Signal Name [Specification]  |                   |          | 7.   | 1                 |  |
| 64   | 22           | •                                | No.           | wire            | e  |                   |          |  |                   |  |
| 9    | 2            |                                  | 7             | B/W             | ,  |                   |          | _  |                   |  |
| 99   | _            |                                  | 3             | B/W             |  |                   |          | ]  | Connector No.     | B240   |
| - 67 | ^            |                                  | S             | ٨               |  | Terminal Color Of | Color Of | Signal Name (Specification)  | Connector Name    | WIRETOWIRE   |
| 89   | SB           | *                                | 6             | В               | ,  | No.               | Wire     | OBJECT CONTRACTOR  |                   |  |
| 69   | В            |                                  | 10            | Ь               |  | 2                 | GR       |  | Connector Type    | NS16FW-CS  |
| 7.1  | _            |                                  | 11            | >               |  |                   |          |  | (                 |  |
| 7.2  | 1            |                                  | 12            | Y               |  |                   |          |  | ß                 |  |
| 7.3  | В            |                                  | 13            | BR              |  | Connector No.     |          | 8218   | Ę                 | ֭֝֟֝֞֜֟֝֞֜֟֝֟֝֞֟֝֟֞֟֟֝֞֟֟֞֟֟֞֟֟֞֟֞֟֟֞֟֞֟   |
| 7.4  | 8            |                                  | 14            | 91              |  | Connector Nome    | Г        | 20 MARCH 20  | ė.                | 1 0 0 4 1 3 2 1  |
| 7.5  | 7            |                                  | 15            | GR              |  |                   |          | The lower of the last of the l |                   | 16 15 14 13 12 11 10 9 8   |
| Н    | SHIELD       |                                  | 16            | 9               |  | Connector Type    | Г        | NH10FW-CS10  |                   | 0 0 0 0 0  |
| t    | 9            |                                  | 17            | L               |  |                   | 1        |  |                   |  |
| 78   | ~            |                                  | 18            | L               |  | 1                 |          |  |                   |  |
| 79   | _            |                                  | 13            | ┝               |  |                   |          | 6 5 4  | Terminal Color Of |  |
| 80   | 9            |                                  | 20            | >               |  | Ź                 |          | ]  | No. Wire          | olgnai Name (opecification)  |
| 81   | 0            |                                  | 21            | 91              |  |                   |          | 40 44 40   | 1 GR              |  |
| 82   | 88           | ,                                | 22            | ╁               |  |                   |          | 20 10 13 15 11 10 9 8 7  | 2 ^               |  |
| ╀    | SR.          |                                  | 23            | ╀               |  |                   |          | 18 17 16 15 14   | en                |  |
| +    | 5 >          |                                  | 24            | ╀               |  |                   |          | 10 10  | +                 |  |
| 85   | . 9          |                                  | 25            | BB              |  | Terminal          | Color Of |  | - 88              |  |
| 86   | ×            |                                  | 2 2           | ╀               |  | Š                 | Wire     | Signal Name [Specification]  | 17                |  |
| 8 5  |              |                                  | 3 5           | +               |  |                   | 2 9      |  | t                 |  |
| /s   | 0 :          |                                  | 7 2           | +               |  | ٠,                | 2 5      |  | +                 |  |
| 88   | <del>-</del> |                                  | 28            | +               |  | 2                 | GR       |  | +                 |  |
| 88   | æ            |                                  | <sup>2</sup>  | ┪               |  | е                 | ٥        |  | 9<br>BR           |  |
| 06   | ٦            |                                  | 30            | ŝ               | . 01   | 4                 | ۵        |  | 10 Y              |  |
| 91   | BR           |                                  | 31            | 9               |  | 7                 | 8        |  | 11 P              |  |

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| DOOR           | LOCK S   | DOOR LOCK SYSTEM                |                |                |                                       |                   |                                     |          |                |   |
|----------------|----------|---------------------------------|----------------|----------------|---------------------------------------|-------------------|-------------------------------------|----------|----------------|---|
| 12             | 0        |                                 | 12             | NΛ             | - [Without around view monitor]       | Connector No.     | D1                                  | 37       | 7 GR           |   |
| +              | _        |                                 | 12             | œ              | - [With around view monitor]          | Connector Name    | WIRETOWIRE                          | 38       | 0              |   |
| 14             | B/W      |                                 | 13             | 8              | - [With around view monitor]          |                   |                                     | 39       | Α .            | -                                       |
| _              | SHIELD   |                                 | 13             | L/R            | - [Without around view monitor]       | Connector Type    | TH40FW-CS15                         | 40       | R              |   |
| 16             | 91       |                                 | 14             | B/R            | ,                                     | ٥                 |                                     | 41       | . M            |   |
|                |          |                                 | 15             | ٨              |                                       | ß                 |                                     | 42       | 8 B            |   |
|                |          |                                 |                |                |                                       | Ě                 | 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 | 43       | 3<br>R         |   |
| Connector No.  | o. B242  | 42                              |                |                |                                       | Ć.                | to be the first and and and and and | 44       | 9              |   |
| Connection     | Г        | action wood and all             | Connector No.  | or No.         | B514                                  |                   | 26.25.24                            | 45       | 97             |   |
| COILLECTO      |          | ELLID LOCK ACTORION             | Connect        | Connector Name | TIMIT TOUTNOUT TOUS BEAUTION          |                   |                                     | 46       | S BR           |   |
| Connector Type | Г        | M04FW-LC                        | COLLECT        | all Mallie     | DAIVER SEAT CONTROL ON!               |                   |                                     | 47       | ۷              |   |
|                |          |                                 | Connector Type | or Type        | TH32FW-NH                             |                   |                                     | 48       | ×              |   |
| B              |          |                                 | C              |                |                                       | Terminal Color Of | Of Stand Name (Specification)       | 46       | d 6            |   |
| Ę              |          | ŀ                               | B              |                |                                       | No. Wire          |                                     | 20       | W/8 c          |   |
| 2              |          | 2                               | ŧ              |                | <u> </u>                              | 1 W               |                                     | 51       | 1 6            |   |
|                |          | Ī                               | Ĉ.             | _              | 22 27 17 15 20 25 14 142 17 15 23     | 2 6               |                                     | 25       | ۸ .            |   |
|                |          |                                 |                |                | 20 01 20 20 10 13                     | 3 8               |                                     | 23       | 3 B/W          |   |
|                |          |                                 |                |                | 2419[22[21]30[27]20[2]12[34]18[18[23] | 4                 |                                     | 54       | Α.             |   |
|                |          |                                 |                |                |                                       | 2                 |                                     | SS       | SHIELD         |   |
| Terminal Co    | Color Of | (1000)                          |                |                |                                       | 9                 |                                     |          |                |   |
| No.            | Wire     | ognal Name [opecification]      | Terminal       | I Color Of     |                                       | 7<br>R            |                                     |          |                |   |
|                | 91       |                                 | No.            | Wire           | Signal Name [Specification]           | 8<br>GR           |                                     | Conne    | Connector No.  | D8                                      |
| 2              | g        |                                 | 11             | 8/9            | SLIDE SW (BACKWARD)                   | 9                 |                                     | ,        |                |   |
|                |          |                                 | 12             | W/9            | SLIDE SW (FORWARD)                    | 10                |                                     | Conn     | Connector Name | WIRE TO WIRE                            |
|                |          |                                 | 13             | R/G            | RECLINER SW (BACKWARD)                | 11 P              |                                     | Conne    | Connector Type | TH24FW-NH                               |
| Connector No.  | o. B276  | 92                              | 14             | R/W            | RECLINER SW (FORWARD)                 | 12 16             |                                     |          |                | 1                                       |
|                | Т        | La como Children                | 12             | ٨/8            | REAR LIFTER SW (DOWNWARD)             | H                 |                                     | Œ        | •              |   |
| CONTRACTOR     |          | INE IO WINE                     | 16             | Y/R            | REAR LIFTER SW (UPWARD)               | 14 Y              |                                     | •        | ć              |   |
| Connector Type | П        | NS16MW-CS                       | 17             | 8/91           | FRONT LIFTER SW (DOWNWARD)            | 15 0              |                                     | 1        | ė              | 121110987654321                         |
| 4              |          |                                 | 18             | LG/R           | FRONT LIFTER SW (UPWARD)              | 16 R              |                                     |          |                | 0 |
| ß              |          |                                 | 19             | 6/Y            | PULSE (SLIDE)                         | 17 Y              |                                     |          |                | C                                       |
| Ę              |          | 7 0 0                           | 20             | R/Y            | PULSE (RECLINER)                      | 18 BR             |                                     |          |                |   |
| 2              |          |                                 | 21             | ٨              | PULSE (REAR LIFTER)                   | 19 W              |                                     |          |                |   |
|                |          | 8 9 10 11 12 13 14 15 16        | 22             | В              | PULSE (FRONT LIFTER)                  | 20 0              |                                     | Terminal | inal Color Of  | Of Simul Name (Secretion)               |
|                |          |                                 | 23             | ۵              | CAN-H                                 | 21 GR             |                                     | No       | . Wire         |   |
|                |          |                                 | 24             | T/d            | CAN-L                                 | 22 G              |                                     | 4        | ۵              |   |
|                |          |                                 | 25             | 0/9            | IND 1                                 | 23 1.6            |                                     | 7        | >              |   |
| Terminal Co    | Color Of | Cinnal Massa (Connification)    | 56             | 0/1            | IND 2                                 | 24 B              |                                     | 00       | >              |   |
| No.            | Wire     | officer regime (observed only   | 27             | ۸              | ADDRESS 1                             | 7 72              |                                     | 6        | GR             |   |
| 1              | ч        |                                 | 28             | M/A            | ADDRESS 2                             | 26 P              |                                     | 10       | 9 0            |   |
| 2              | GR       |                                 | 53             | _              | SETSW                                 | 27 V              |                                     | 11       | 1 M            |   |
| 9              | >        |                                 | 30             | BR             | PULSE(TILT)                           | 28 W              |                                     | 12       | 0              | ,                                       |
| 2              | *        |                                 | 31             | BR/W           | PULSE(TELESCOPIC)                     | 29 GR             |                                     | 13       | 0              |   |
| 9              | ~        |                                 | 32             | W/L            | UART (TX/RX)                          | 30 6              |                                     | 14       | >              |   |
| 7              | 8        |                                 | 33             | Μ              | POWER SUPPLY (ENCODER)                | 31 Y              |                                     | 15       | 8<br>8         |   |
| 80             | 8        |                                 |                |                |                                       | 32 0              |                                     | 16       | 9              |   |
| 6              | 0        |                                 |                |                |                                       | 33 BR             |                                     | 19       | 9R             |   |
| 10             | B/R      |                                 |                |                |                                       | 34 L              |                                     | 20       | gs c           |   |
| 11             | _        | - [Without around view monitor] |                |                |                                       | 35 P              |                                     | 21       | H.             |   |
| 11             | W        | - [With around view monitor]    |                |                |                                       | 36 V              |                                     | 23       | 9<br>8         |   |

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| 6 G S S S S S S S S S S S S S S S S S S                                 | ctor No.   | H.S.   3 4   5 6 7   9 10 11 12 13   15 16   | Terminal Color Of Signal Name (Specification)    | 9 B B B B B B B B B B B B B B B B B B B   | r Name W   | 15   4   15   4   15   15   15   15   |
|---|--|--|--|---|--|---|
| Connector No. D18 Connector Name WIRE TO WIRE                           | Connector Type T712 3.4 4 5 6 7 8 9 10 11 12 2 3 4 15 16 17 18 19 20 21 22 22 22 4 | Terminal Color Of   Signal Name   Specification   No. Wire   Signal Name   Specification   4 | 9 V/8  |   | Connector No. D19 Connector Name WIRE TO WIRE Connector Type NSOBMW-CS   | Terminal Color Of Signal Name [Specification] No. Wire Signal Name [Specification] 2 LG |
| Connector No. 015 Connector Name RROYT DOOR LOCK ASSEMBLY (DRIVER SIDE) |  | Terminal Color Of Signal Name [Specification]   No. Wire                                     | 4 m 0  | Connector No. 017  Connector Name RNOVI OUTSIOE HANDLE ASSENSIV UN  Connector Type SAZDSEPW | Terminal Color Of   Signal Name (Specification)   No. Whre   Vince   Signal Name (Specification)   1   0   0   0   0   0   0   0   0   0 |   |
| DOOR LOCK SYSTEM  | Connector No. 09 Connector Name Wife TO Wife Connector Type NSOSSW.CS              | Color Of Signal Name (St   | <del>                                     </del> | 7 7 7 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7   | H.S.  Tremmal Colec Cf Signal Name [Specification]   | ++1   |

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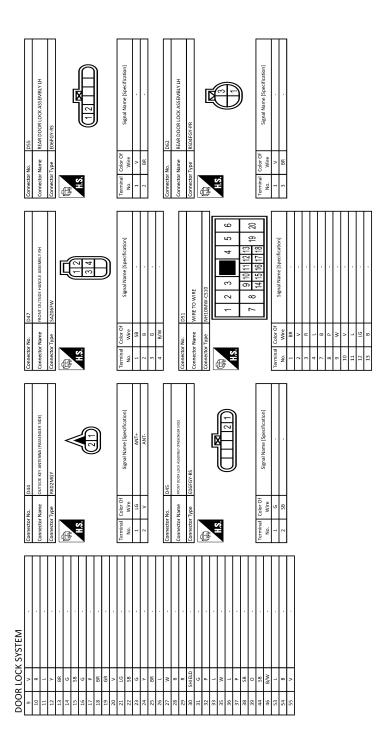
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| Connector No. 1983 Connector Name Read BOOK CLOSJEE NOTOR ASSENBLY RIN Connector Type REGARDE-PR   | Terminal   Color Of   Signal Name   Specification     1   1   1   1   1   1   1   1   1 |
|--|---|
| Connector No. 075 Connector Name REAR DOOR LOCK ASSEMBLY RH Connector Type (E06FOY-RS)   | Terminal Color Of Signal Name [Specification]  2  |
| Connector No. D65 Connector Name RGA DOOR COSME CONTROL UNIT IN Connector Type MS10FW/GS  112  | Terminal Color Of Signal Name (Specification)  1  |
| DOOR LOCK SYSTEM  Connector Name Read book closure, horror, ASSTABLY LIV  Connector Type READ FOR COLOURE ASSTABLY LIV  CONNECTOR TYPE READ FOR THE STABLE FOR T | Terminal   Color Of   Signal Name   Specification     1   16                            |

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| DOOR LOCK SYSTEM   |                |   |      |        |   |            |                |                             |  |
|--|----------------|---|------|--------|---|------------|----------------|-----------------------------|--|
| Connector No. D85  | Connector No.  | o. E103   | 11   | SB     |   | 80         | >              |                             |  |
| Г  |                | Г   | 12   | -      |   | 82         | SB             |                             |  |
| Connector Name REAR DOOR CLOSURE CONTROL UNIT RH   | Connector Name | ime FUSE BLOCK (J/B)  | 7    | SR     | , | æ          | +              |                             |  |
| Connector Type NS10FW-CS   | Connector Type | DP NC16FW-CS  | 14   | ╀      |   | 84         | ╀              |                             |  |
| 1  |                | 1   | į    | +      |   | 8          | . ,            |                             |  |
| Œ  | Œ              |   | 1 2  | Ŧ      |   | 3 3        | -              |                             |  |
| A STATE OF THE STA | 李              |   | 10   | - 6    |   | 000        |                |                             |  |
| 1 2 1 3  | Š              | 6F 4F 7 2F 1F   | 7    | +      |   | ò          | +              |                             |  |
| 1  |                |   | 9    | +      |   | 0          | +              |                             |  |
| 5 6 7 8 9  |                | 15F 14F 12F 10F 9F 8F   | 20   | _      |   | 88         | +              |                             |  |
|  |                |   | 21   | Ь      |   | 90         | ×              | -                           |  |
|  |                |   | 22   | _      | , | 91         | ×              |                             |  |
|  |                |   | 23   | ۵      |   | 92         | ۵              |                             |  |
| Terminal Color Of  | Terminal Co    | Color Of  | 27   | SHIELD |   | 93         | 97             |                             |  |
|  | No.            | Wire Signal Name [Specification]  | 28   | ۲      |   | 96         | ╀              |                             |  |
| t  | t              | GR  | 29   | ╁      | , | 56         | ╀              |                             |  |
| 2 B  | 12F            | >   | 5    | ╁      |   | 76         | ╀              |                             |  |
|  | 145            |   | 2    | ╀      |   | ő          | ļ              |                             |  |
| +  | 150            |   | 33 2 | ╀      |   | 8          | .   >          |                             |  |
| \$ 0   | 2              |   | 3 5  | +      |   | S          | 1              |                             |  |
| +  | 4 8            | 98  | ñ    | +      |   | 3          | 4              | 4.                          |  |
| 7 R  | 2F             | . 91  | 36   | o      |   |            |                |                             |  |
|  | 4F             | . 9   | 37   | 4      |   | l          |                |                             |  |
| - 1 6  | - 6F           | - 0   | 41   | BR     |   | Conne      | Connector No.  | F61                         |  |
|  | 8F             |   | 44   | Μ      |   | Jones      | Constant Mano  | VI ACCERADIO                |  |
|  | 96             |   | 45   | 1      |   |            | allia indi     | M/ I MODELVIOLT             |  |
| Connector No. E57  |                |   | 46   | GR     |   | Conne      | Connector Type | RK10FG-DGY                  |  |
| Γ  |                |   | 47   | ┞      |   |            |                | •                           |  |
| Connector Name INTELLIGENT KEY WARMING BUZZER (ENGINE ROOM)  | Connector No.  | . F106  | 48   | ╀      |   | ₫ <u>E</u> | _              | ≪                           |  |
| Connector Type RKO3EBR   |                | Γ   | 9    | ╀      |   | 事          |                |                             |  |
| 1  | Connector Name | ime WIRE TO WIRE  | 9    | +      |   | H.S.       | vi             | 17                          |  |
| Œ  | T. consequent  | THE CASE LANGE OF THE PARTY OF | 3    | +      | , |            |                | #5 4 3 2 1                  |  |
|  | connector lype | ٦   | 40   | +      |   |            |                | 40 0 0 7 6                  |  |
| <b>SE</b>  | 1              |   | 2 :  | +      |   |            |                |                             |  |
|  | 手              | 100   | 9    | +      | • |            |                |                             |  |
| ((1   3))  | Ě              |   | 61   | U      |   | L          |                |                             |  |
|  |                |   | 62   | 4      |   | Terminal   | 0              | Signal Name (Specification) |  |
|  |                |   | 63   | BR     |   | No.        | Wire           |                             |  |
|  |                |   | 64   | 80     | , | T          | >              | POWER SUPPLY (BACK UP)      |  |
| Terminal Color Of  |                |   | 9    | >      |   | 2          | ~              | POWER SUPPLY (BACK UP)      |  |
| No. Wire Signal Name [Specification]   |                |   | 99   | œ      |   |            | 1              | CAN-H                       |  |
| 1 Y (+)8AT   | Terminal Co    | Color Of  | 29   | SB     |   | 4          | >              | K-LINE                      |  |
| 3 V BUZZER SIGNAL  | No.            | Wire Signal Name [Specification]  | 89   | ┞      |   | 2          | 8              | GND                         |  |
|  | 1              |   | 69   | SHIELD |   | 9          | g              | POWER SUPPLY (IGN)          |  |
|  | 2              |   | 20   | ۲      |   | _          | SB             | BACK-UP LAMP RELAY          |  |
|  | ~              |   | 7    | ╀      |   | 00         | F              | CAN-I                       |  |
|  |                |   |      | ╀      |   | 0          | ł              | D/N SIGNAL                  |  |
|  |                | 2 0   | 2 5  | ╀      |   | , [        | +              | Services/                   |  |
|  | n              |   | 2    | 9 :    |   | 1          | 2              | GROUND                      |  |
|  | م ۵            | W   | 4 4  | -      |   |            |                |                             |  |
|  | ,              |   | 2 1  | †      |   |            |                |                             |  |
|  | xo -           |   | 9    | 7      |   |            |                |                             |  |
|  | +              | , , , , , , , , , , , , , , , , , , ,   | 1    | 0      |   |            |                |                             |  |
|  | 10             | BR .  | 78   | 4      |   |            |                |                             |  |

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| Total   Connector Name   Statistical   Connector Name   Connector N   | Secretary Name   Control   Control | DOUR LOCK SYSTEM  Connector No.   F301 | Connector No. M2        | Connector No.  | Me   | 48  | 5      |                 |
|--|--|--|-------------------------|----------------|--|-----|--------|-----------------|
| Signature   Secretarion   Se   | STATE   Concentration   Conc | l                                      | Т                       | Т              |  | 2   | , a    |                 |
| System times   Syst   | Signature  |  |                         |                | WIRE TO WIRE   | 50  | 2 >    |                 |
| Control   Cont   | Figure   F | Т                                      | Γ                       | Connector Type | TH80MW-CS16-TM4  | 54  | . >    |                 |
| Control   Cont   | The state of the | 1                                      | 1                       |                |  | 55  | 9      |                 |
| Control   Cont   | The control of the  |  |                         | Œ              | 33 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A   | 09  | GR     |                 |
| Common Part  | Comparison   Com |  |                         |                | 8 5 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8  | 61  | 8      |                 |
| Control   Signat Name   Specification  | Control   Cont |  | 45                      | Ġ.             | A COLUMN TO SERVICE STATE OF SERVICE STA | 62  | 91     |                 |
| Control   Cont   | Consist No. 12   Cons | 4 0 7                                  | מין מין מיל מיל מין מין |                |  | ğ   | æ      |                 |
| Control   Cont   | Control 19   Co  | 9                                      |                         |                | क स्था आध्य अवस्था आध्य  | 3   |        |                 |
| Control   Cont   | Control   Signal barre   Specification    Signal barre   Signal barre | 0 /                                    |                         |                |  | å   | -      | - [with ICC]    |
|  |  |  |                         |                |  | 64  | SB     | - [Without ICC] |
| 2   2   2   2   2   2   2   2   2   2  | Training   Check   Separa Name   Specification   Training   Trainin |  |                         |                |  | 65  | œ      | - [With ICC]    |
| Signal Name Specification   15 mark   Signal Name Specification   15   | Signal Name Specification   15   |  | Color Of                |                |  | 9   | ,      | DAGBOUT LCC1    |
| Miles   Control   Contro   | COUNTY   C |  |                         |                | Signal Name [Specification]  | S   | - 6    | [winiparies]    |
|  | Content   Cont | VVIIC                                  | +                       | +              |  | 90  | -      |                 |
| Content   Cont   | Control   Cont | NIGN -                                 | 4                       | +              |  | /9  | -      |                 |
| NOTE INCOCCUPIO)   | Think the part   Thin | PATT BATT                              |                         | +              |  | 89  | œ      |                 |
| Converter No.   Converter No   | NOTIFICATION   Sig   W   NOTIFICATION   Sig  |  |                         | _              |  | 69  | SHIELD |                 |
| Content   Cont   | Signal Name   Specification   Specification  | ,                                      | H                       | H              |  | 70  | 9      |                 |
| Note  | Figure   F |  | 3                       | ł              |  | 12  | ╀      |                 |
| Signal Name Specification  | Miles   Mile |  | : >                     | +              |  | 1 5 | +      |                 |
| Signal Name (Specification)   100  | Maintain   |  |                         | +              |  | 7/  | +      |                 |
| M1   | STANKTRUY   SIGN   STANKTRUY   SIGN   SIGN   STANKTRUY   SIGN   |  | 78 Y                    | $\dashv$       |  | 73  | 4      |                 |
| M1   | Mail   |  | _                       |                |  | 74  | _      |                 |
| Mathematical Mat   | Mathematic Name   Convector Name   Con |  | L                       | L              |  | 75  | 8      |                 |
| Flast Block (1/8)   Connector Name   Connector Nam   | 1   1   1   1   1   1   1   1   1   1  |  |                         | ł              |  | 34  | t      |                 |
| M1   Connector No.   Connector No.   M2   Connector No.   M3   Connector No.   M4   Connector No.   M4   Connector No.   M5   Connector No.   M6   Connector No.   M6   Connector No.   M6   Connector No.   M6   Connector No.   M7   Connector No.   Connec   | Float Block (1/0)   Connector No.   M3.12 PAV.   S.   M3.12 PAV. |  | 1                       | +              |  |     | +      |                 |
| M11   Connector Name   M3   M3   M3   M3   M3   M3   M3   M  | M11   Commerciar Man.   Comm |  | ١                       | 4              |  | `   | ۵      |                 |
| M1   | MATE   Connector Name   FLASE BLOCK (UP)    14   15   16   15   16   15   16   15   16   15   16   15   16   15   16   15   16   15   16   15   16   15   16   15   16   15   16   15   16   16  |  |                         | _              |  | 78  | >      |                 |
| 14   1   1   1   1   1   1   1   1   1   | 14   1   14   1   15   15   15   15  |  |                         | _              |  | 80  | 9      |                 |
| FINSE BLOCK (//B)   Connector Type   NS12F9L-CS   FIS   V   Connector Type   NS12F9L-CS   FIS   Conn   | FLOS BLOCK (//B)   Connector Type   NSJ2F9L-CS   15   V  | Γ                                      |                         | ╀              |  | 83  | æ      |                 |
| NSIONSYNAME   Specification   Time  | NSIGNS WANTAL   SECTION   SECTION  |  | Τ                       | +              |  | 6   | , ;    |                 |
| MSGREWANZ  | MSGREW-WARZ    | T                                      | 1                       | 4              |  | 8   | 20     |                 |
| Signal Name   Specification    No.   Wire  | State   Stat |  | 4                       |                |  | 84  | SB     |                 |
| State   Stat   | State   Stat | _                                      |                         | _              |  | 82  | >      |                 |
| State   Stat   | A  |  |                         | H              |  | 86  | -      |                 |
| Signal Name   Specification  | Signal Name   Specification     2  |  |                         | +              |  | 8   | , ;    |                 |
| Color Critication   Colo   | Signal Name (Specification)   100  | 34                                     |                         | +              |  | ò   | >      |                 |
| Cyan  | A  | 1                                      | 07 08 00 UI             | _              |  | 88  | >      |                 |
| Comparison   Com   | Company   Comp |  |                         | 22 L           |  | 88  | 91     |                 |
| Signal Name (Specification)   No.   Wire   Signal Name (Specification)   11C   Lid   Color   | Signal Name (Specification)   No.   Wire   Signal Name (Specification)   11C   Lis   Lis |  |                         | L              | ,  | 06  | BG     |                 |
| Signal Name (Specification)   No. Whre   Signal Name (Specification)   10C   LiG   Signal Name (Specification)   10C   LiG   Signal Name (Specification)   11C   LiG   Signal Name (Specification)   12C   Signal Name (Spec   | Formation   Color Of   Signal Name (Specification)   10C   Color Of    |  |                         | t              |  | 6   | 141    |                 |
| Signal Name (Specification)   Total Name (S   | Figure   F |  |                         | †              |  | 5   | 3      |                 |
| Signal Mame (Specification)         No. Wire         Wire         Company (Company)         25         SS         C         C           11C         LiG          94         Y         Y         Y           11C         LiG          95         W         Y         Y           6C         R         R          95         W         Y           8C         R          97         W         Y         Y           8C         B          100         L         100         L           44         B           99         W           45         B           99         W           45         B           99         W           45         B           99         W           46         B            100         L           46         B                46         B   | Signal brane (Specification)         No. Wire         Wire         Wire         Wire         Proposition         120         C   |  | Color Of                | +              | The second secon | 95  | BB     |                 |
| 11C   LiG   12   RiG   Right   Rig   | 110C   1/2 |  | Wire                    | _              |  | 93  | Ø      |                 |
| R         11C         LG          95         97           W          12C         0          97           Y          8C         8C          98           Y          9C         L          99           Y             99           Y                 Y </td <td>  No.   No.</td> <td>Wire</td> <td>L</td> <td>H</td> <td></td> <td>96</td> <td>&gt;</td> <td></td> | No.   No.  | Wire                                   | L                       | H              |  | 96  | >      |                 |
| N  | W     127     0.0     3.3     R     97       Y     127     0.0     0.0     0.0     0.0     0.0       W     0.0     0.0     0.0     0.0     0.0     0.0       Y     0.0     0.0     0.0     0.0     0.0     0.0       Y     0.0     0.0     0.0     0.0     0.0     0.0       Y     0.0     0.0     0.0     0.0     0.0     0.0     0.0       Y     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0       Y     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0       Y     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0       Y     0.0   | t                                      | ļ                       | ł              |  | ů   | /4/    |                 |
| W         .         12C         O         .         97           Y         .   | W     137     0     .     33     R     .     98       W     .     7C     B     .     .     98     .     .     98       Y     .     <   | +                                      | 4                       | +              |  | 8   | •      |                 |
| Y         Y         C         R         Y         S         S         Y  | Y         Y         C         R         Y         S         Y         S         Y         S         Y  | _                                      |                         | _              |  | 97  | SB     |                 |
| W         T         T         F  | W         T  | *                                      | L                       | H              |  | 86  | ~      |                 |
| Y   Y   Y   Y   Y   Y   Y   Y   Y   Y  | Y     8C     8     37     6     100       Y     8C     1     8     100     100       Y     8C     1     8C     1     100       41     8R     .     100     100       45     8C     .     100       47     Y     .     .  | ł                                      | ł                       | ╀              |  | ď   | , VI   |                 |
| V         -  | V     - <td>+</td> <td>4</td> <td>+</td> <td></td> <td>66</td> <td>4</td> <td></td>  | +                                      | 4                       | +              |  | 66  | 4      |                 |
| γ γ · · · · · · · · · · · · · · · · · ·  | γ γ γ γ γ γ γ γ γ γ γ γ γ γ γ γ γ γ γ  | 4                                      | 8                       | 4              |  | 100 | _      |                 |
| Y 44 68 46 87 46 89 47 V   | Y  | _                                      | - 1 26                  | _              |  |     |        |                 |
| 45 Y 46 BG 47 V  | 46 46 46 47 47 47 47 47 47 47 47 47 47 47 47 47  | × ××                                   |                         | ┞              |  |     |        |                 |
| 09 >   | 98 >   |  | 1                       | ╀              |  |     |        |                 |
| +  | Н  |  |                         | +              |  |     |        |                 |
| _  | -  |  |                         | +              |  |     |        |                 |
|  |  |  |                         | 4              |  |     |        |                 |
|  |  |  |                         |                |  |     |        |                 |
|  |  |  |                         |                |  |     |        |                 |
|  |  |  |                         |                |  |     |        |                 |
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| Vivin Corporated Seed   Vivi   |          | 24 L -    | 27 P · ·                      | 33 V            | 4        | 36 P                                      | 7 88     |   |     | Commenced Man | T   | Connector Name PCB HARNESS | Connector Type TH40FW-NH    |     |   |   | 60 59 57 59 55 54 53 52 51 | 80 79 78 77 75 75 74 73 72 71 70 69 68 67 66 66 64 63 62 61 |            |          | Terminal Color Of    | No. Wire Signal Name [Specification] | 41 LG .              | 42 SHIELD .                             | 43 V - [Without BOSE system] | ٨     | 44 BR - [With BOSE system] | Ь | SHIELD                      | 46 G - [Without BOSE system] | 85<br>85        | >  | 48 SHIELD - | 49 R . | 50 BR - [Without BOSE system] | 9        | SHIELD |          | Ь     | . 9  | 53 L - [With BOSE system] | 4 | 55 BR -  | 4            | 4               | 61 SB .      |
|--|----------|-----------|-------------------------------|-----------------|----------|---|----------|---|-----|---------------|-----|----------------------------|-----------------------------|-----|---|---|----------------------------|---|------------|----------|----------------------|--------------------------------------|----------------------|---|------------------------------|-------|----------------------------|---|-----------------------------|------------------------------|-----------------|----|-------------|--------|-------------------------------|----------|--------|----------|-------|------|---------------------------|---|----------|--------------|-----------------|--------------|
| Mail   |          | 2         | 27                            | 3               | 8        | 8   |          |   |     |               |     |                            |                             |     |   | _ | •<br>[                     |   |            |          | Term                 | ž                                    | 4                    | 4 3 2 4                                 | 2 2 2 4                      | 4     | 4                          | 4 |                             |                              | 4               | 4  | 4           | 4      | 2                             | 2        | 2      | 2        | 2     | 2    | 2                         | 2 | 2        | 2            | <u>-</u>        | 9            |
| No.    |          | 18        | TONK LID OPENER CANCEL SWITCH | 2FW             | [        | <u>[</u>                                  | <u> </u> | _                                       | c   | 7             | ]   |                            | Signal Name [Specification] |     |   |   |                            | 70  | 3B HARNESS | 140FB-NH |                      |                                      | [                    | 10 18 17 16 15 14 13 17 11 10 0 8 7 8 5 | 14 00 00 34                  |       |                            |   | Signal Name [Specification] |                              | 1               |    |             |        |                               |          |        |          |       |      |                           |   |          | - [With ICC] | - [Without ICC] | - [With ICC] |
| A  |          |           |                               | П               | d        | 逐   | S        |   |     |               |     | Tarminal Color Of          | No. Wire                    | 1 ^ | Н |   | 1                          |   |            | Ť        | 1                    | Œ                                    |                      | Ž.                                      | 3 5                          |       |                            |   |                             | +                            | 2 8             | >- | Н           | 5 R    | Н                             | $\dashv$ | 4      | ┪        | H     | 17 R | Н                         | 4 | $\dashv$ | +            | 4               | 23 L         |
| Mary Counting   Mary Countin   |          |           |                               |                 |          |   |          |   |     |               | 9 0 |                            |                             |     |   |   |                            |   |            |          |                      |                                      |                      |   |                              |       |                            |   |                             | > 0                          |                 | 9  |             |        |                               | -        |        |          |       | ٠ .  |                           |   |          |              |                 |              |
| 11480MWW   14480MWW   14480MW   14480MWW     |          | 42        | +                             | Н               | $\dashv$ | +   | +        | 1                                       | 4   | +             | +   | $^{+}$                     | ╀                           |     | Н | + | +                          | +   | +          | ł        | ╀                    | H                                    | 7.2                  | L                                       | 7.4                          | Н     |                            |   | +                           | +                            | ł               | ╀  |             |        |                               | $\dashv$ | 4      | $\dashv$ |       |      | Н                         | 4 | $\dashv$ |              |                 |              |
| Color of    | K SYSTEM | M7        | WIRE TO WIRE                  | TH80MW-CS16-TM4 |          | 27 26 26 26 26 26 26 26 26 26 26 26 26 26 |          | 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 | 8 3 |               |     |                            |                             |     |   |   |                            |   |            |          | - [With heated seat] | - [With climate controlled seat]     | - [With heated seat] | - [With climate controlled seat]        |                              |       |                            |   |                             | - [Without CAN gateway]      | (Annual Control |    |             |        |                               |          |        |          |       |      |                           |   |          |              | •               |              |
| Connection of Co | OR LOC   | ector No. | Connector Name                | Connector Type  |          |   | S<br>H   | ı                                       |     |               |     |                            |                             | 9   | * | 4 | ۵                          | +   | +          | ╁        | 11 1                 | 11 V                                 | 12 GR                | 12 P                                    | 13 BR                        | 14 GR | Н                          | _ | +                           | ,                            | ╁               | ╀  | 21 B        | 22 LG  | Н                             | 4        | 4      | $\dashv$ | 27 SB | 28 P | Н                         | ┪ | - I      | +            | +               | 37 SB        |

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| 120   1  | DOOR LOCK SYSTEM  | П              | Н            |  | 152            | ω       |  | 191             | 91     |                             |
|--|---|----------------|--------------|--|----------------|---------|--|-----------------|--------|-----------------------------|
| 112   6   1   1   1   1   1   1   1   1   1  |   | I              | H            |  | 153            | >       |  | 192             | В      |                             |
| 113   6   1   15   16   15   15   15   15  |   | <br>           | -            |  | 154            | *       |  | 193             | SB     |                             |
| 136   6   6   6   7   7   7   7   7   7  |   |                | L            |  | 155            | >       |  | 194             | BR     |                             |
| 110   15   10   10   10   10   10   10   |   |                | Н            |  | 157            | Μ       |  | 195             | SB     |                             |
| 115   8   140    |   |                | 114 L        |  | 158            | ~       |  | 198             | Я      |                             |
| 117   8   10   10   10   10   10   10   10   |   |                |              |  | 159            | œ       |  | 199             | 8      |                             |
| 117   126   127  |   | <br>T          | +            |  | 160            | SB      | -  | 200             | SB     |                             |
| 13   15   15   15   15   15   15   15  |   | 1              | +            |  |                |         |  |                 |        |                             |
| 120   V  |   | <u> </u>       | ╀            |  | Connect        | or No.  | M24  | Connecto        | l      | M25                         |
| Connector No.   M.33   Connector No.   Conne |   | П              |              |  | Connect        | or Name | PCB HARNESS  | Connecto        |        | PCB HARNESS                 |
| Connector No.   Connector No |   |                |              |  | Connect        | or Type | THADEW.NH  | Connecto        | Т      | TH40FB.NH                   |
| Connector Name   Clear Afficial Color of   |   | 8              | nnector No.  | M23  |                |         |  | <u></u>         |        |                             |
| Connector Type   Place   Pla |   | <u>  8</u><br> | nnector Name | ı  | Œ              |         |  | Œ               |        |                             |
|  | <u> </u>  | 8              | nnector Type | TH40FW-NH                                    | S.<br>F.       | _       | is to be led by the feet of th | Š               |        |                             |
| Mathematical and a control   No.   Signal Name   Specification   No.   Water   No.   No.   Water   No.   No.   Water   No.   | 91 99 89 88 87 85 85 84 83 81 111 111 111 111 111 111 111 111 1 |                | Œ            |  |                |         | 200 198 198 198 198 198 198 198 198 198 198  |                 |        |                             |
| The control of the  |   | _              | Z.           | स्वास्त्रकामान्नाम् व्याव्यक्षाम् व्याव्यक्ष |                |         |  |                 |        |                             |
| Ferminal Cohe Of Signal Name [Specification]   164   | 3   | Γ              |              | 158 159 159 159 159 150                      | Termina<br>No. |         | Signal Name [Specification]  | Terminal<br>No. |        | Signal Name [Specification] |
| Code   | me [Specification]  |                |              |  | 161            | BG      |  | 201             | ٦      |                             |
| Wine Signal Name (Spacification)         1654         V         ·         200         C         V           R V         166         R         ·         ·         200         C         C           R V         166         R         ·         ·         200         C         L           R V         177         R V         ·         200         C         L           R V         177         R V         ·         200         L         L           R V         177         R V         ·         211         SH D         R           L L         178         V         ·         213         R R         R           L L         178         V         ·         213         R R         R           L L         178         V         ·         213         R R         R           L L         178         V         ·         214         SH R         R           L L         178         V         ·         121         C         121         C           L L         178         R R         ·         ·         ·         C         121         C <td< td=""><td></td><td></td><td></td><td></td><td>162</td><td>BG</td><td></td><td>206</td><td>Ь</td><td></td></td<>   |   |                |              |  | 162            | BG      |  | 206             | Ь      |                             |
| Wire         165         V         209         G           V         167         167         -         209         G           F         157         167         -         209         G           F         157         17         8         -         200         C           F         177         8         -         210         F         1           16         -         177         7         -         212         BR           16         -         177         7         -         213         RR           1 L         -         177         7         -         213         RR           1 L         -         177         7         -         213         SR           1 L         -         177         7         -         213         RR           1 L         -         177         7         -         213         SR           1 L         -         177         7         -         213         RR           1 L         -         177         7         -         121         SR           1 L         -         -  |   | Ţ              | rminal Color |  | 164            | >       |  | 207             | >      |                             |
| No.   No.  |   |                | +            |  | 165            | > 0     |  | 208             | 9      |                             |
| 157   158  |   | 1<br>T         | +            |  | Top            | × !     |  | 502             | . و    | - [without BOSE system]     |
| 177   186  |   | T              | +            |  | 169            | 2 "     |  | 210             | 1      | - [Without BOSE system]     |
| 172   8   211   591   511   591   511   591   511   591   511   591   511   591   511   591   511   591   511   591   511   591    |   | T              | ╀            |  | 171            | . BG    |  | 210             | 4      | - IWith ROSF system]        |
| 174   W  |   | T              | ╀            |  | 172            | œ       |  | 211             | SHIELD | Tunnedo neces unual         |
| 1, 0    |   |                | H            |  | 174            | Μ       |  | 212             | N8     | - [Without BOSE system]     |
| 1  |   |                | Н            |  | 176            | ٦       |  | 212             | 9      | - [With BOSE system]        |
| 178   Y  |   | _              | 133 L        |  | 177            | ۵       | -  | 213             | ж      |                             |
| P   P   130   LG   LG   LG   LG   LG   LG   LG   L   |   | <br>           | 4            |  | 178            | >       |  | 214             | SHIELD |                             |
| Y   Y   S   S   S   S   S   S   S   S  |   |                | 4            |  | 179            | _       |  | 215             | GR     | - [Without BOSE system]     |
| Y   Y   S   S   S   S   S   S   S   S  |   |                | 4            |  | 180            | 97      |  | 215             | >      | - [With BOSE system]        |
| V   V   V   V   V   V   V   V   V   V  |   |                | 137 Y        |  | 182            | BR      | - [With VQ37 engine or with VK56 engine without ICC]   | 216             | 9      | - [Without BOSE system]     |
| W         W         S         C         2.18         PR           W         -         184         V         -         2.18         BR           P         -         185         P         -         2.18         BR           R         -         185         R         -         2.18         B           R         -         185         R         -         2.18         B           R         -         185         R         -         -         -         2.19         V           R         -         -         187         V         -   |   |                | 138 L        |  | 182            | В       | - [With VK56 engine with ICC]  | 216             | 16     | - [With BOSE system]        |
| W          184         V          218         BR           P           186         P          219         P           8           187         l           129         V           8               V           9                  10                  10                   10 </td <td></td> <td></td> <td></td> <td></td> <td>183</td> <td>9</td> <td></td> <td>217</td> <td>SHIELD</td> <td></td>   |   |                |              |  | 183            | 9       |  | 217             | SHIELD |                             |
| P   P   P   P   P   P   P   P   P   P  |   |                |              |  | 184            | ۸       |  | 218             | NB.    | - [With BOSE system]        |
| 15   15   15   15   15   15   15   15  |   |                | Н            |  | 185            | Ь       |  | 218             | Ь      | - [Without BOSE system]     |
| 1.6   1.6   1.87   1   Without CAM gateway    21.9   V   |   |                | Н            |  | 186            | R       |  | 219             | SR     | - [With BOSE system]        |
| B  |   |                |              |  | 187            | ٦       | - [Without CAN gateway]  | 219             | ۸      | - [Without BOSE system]     |
| B  |   |                |              |  | 187            | ^       | - [With CAN gateway]   | 220             | SHIELD | •                           |
| 01) 7777<br>01 7777<br>1 4 60F   |   | <br>           | 4            |  | 188            | _ (     |  | 221             | ا ۵    |                             |
|  |   | 1<br>T         | +            |  | 109            | 2       |  | 777             | 3 5    |                             |

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| H                | 431 B -    | 432 Y - | 435 V - | 436 BG . | 437 B - | 438 Р | 439 L | 440 B |       |       | Connector No. M50 | Connector Name PIISH-BUTTON IGNITION SWITCH |               | 1             | [ ] [ ]        | 1.5.           | 4 5 6 7 8      |                | Terminal Color Of Signal Name [Specification]                      | 1 B  | 3 R   | 4 BR - |        | +                           |              |                 | Connector No. M53 | Connector Name COMBINATION METER |            | 7            |       |                      |                                  | 2 2 4 5 5 7 8 9 10 11 12 14 15 16 17 18 16 17 18 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18 | 70 73 27 |                 |       |       |
|------------------|------------|---------|---------|----------|---------|-------|-------|-------|-------|-------|-------------------|---|---------------|---------------|----------------|----------------|----------------|----------------|--|--|---|--------|--------|-----------------------------|--------------|-----------------|-------------------|----------------------------------|------------|--------------|-------|----------------------|----------------------------------|---|----------|-----------------|-------|-------|
|                  | . 0        |         |         |          |         |       |       |       |       |       |                   |   |               |               |                | M30            | PCB HARNESS    | TH40FW-NH      |  | 1.00 (2.00 ( | 124 124 125 125 125 125 125 125 125 125 125 125 |        |        | Signal Name [Specification] |              |                 |                   |                                  |            |              |       |                      |                                  |   |          |                 |       |       |
| $\Box$           | 304 SHIELD | 305 P   | 306 V   | 309 6    | 310 R   | 311 W | 312 B | 313 B | 314 Y | 315 6 | 316 R             | Н   | 318 SHIELD    | +             | 1              | Connector No.  | Connector Name | Connector Type | 匮  | 119  |   |        | Tomina | No. Wire                    | 402 R        | 403 R           | Ĺ                 | Ц                                | 409 B      | $\downarrow$ | 413 Y | 414 BR               | 4                                | 410 69  | ľ        | +               | 427 P | V 854 |
|                  | . 9        |         | BR .    | . 9      |         |       |       |       |       |       |                   |   |               | M27           | e              | TH40FB-NH      |                |                | M 经现场的增加 医   |  | rr Of Sirrual Mama (Spaniffication)             |        |        | 9 (9                        | BG .         | * >             |                   | SHIELD -                         |            |              |       | ,                    |                                  | GR  |          | 9               |       |       |
| Н                | 4          | 4       | 271 B   | 272 6    | 273 F   | 274 F | 275   | L     | L     | L     | H                 | 280   |               | Connector No. | Connector Name | Connector Type | 4              | S I            |  |  | Terminal Color Of                               |        | 281 (  | +                           | Н            | 286             | 288 W             | Н                                | 290 B      | +            | 293 E | 294 E                | 4                                | 296 6   | +        | +               | L     | L     |
| (SYSIEM)         | •          |         |         |          |         |       |       |       |       |       |                   |   | 200           |               | PCB HARNESS    |                |                |                | सिक्त का का कि का व्यावक का वा का सिक्त का का कि कि सिक्त का का का |  | Signal Name (Specification)                     |        |        | - [Without]CC]              | - [With ICC] | - [Without ICC] |                   |                                  |            |              |       | - [With heated seat] | - [With climate controlled seat] |   |          |                 |       |       |
| DOOK LOCK SYSTEM | 225 LG     |         | 229 SB  | 230 BR   | 231 SB  | 232 V | 233 L | 234 P | 235 B | 7 × × | 240 W             |   | Connector No. | Т             | Connector Name | 1              | 修              | 2              |  | Terminal Color Of  |   | 241 L  | 242 L  | +                           | Н            | 244 SB          | 246 B             | -                                | 248 SHIELD | +            | 253 B | 254 B                |                                  | 255 B   | X .      | 259 L<br>260 BG | ╀     | u 130 |

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|                   |                    |  |        |                                |                                |                                |                             | eat]                             | eat]                             |                      |  |  |                             |                                  |                 |                  |         |           |                                    |                                       |   |                             |    |                           |                            |                            |                                  |   |  |  |                                      |                          |                      |                              |                            |               |        |       |       |    |       |      |      |      |    |     |          |             |     |          |        |
|-------------------|--------------------|--|--------|--------------------------------|--------------------------------|--------------------------------|-----------------------------|----------------------------------|----------------------------------|----------------------|--|--|-----------------------------|----------------------------------|-----------------|------------------|---------|-----------|------------------------------------|---------------------------------------|---|-----------------------------|----|---------------------------|----------------------------|----------------------------|----------------------------------|---|--|--|--------------------------------------|--------------------------|----------------------|------------------------------|----------------------------|---------------|--------|-------|-------|----|-------|------|------|------|----|-----|----------|-------------|-----|----------|--------|
|                   |                    |  |        |                                |                                |                                | - [With heated seat]        | - [With climate controlled seat] | - [With climate controlled seat] | - [With heated seat] |  |  |                             |                                  |                 |                  |         |           |                                    |                                       |   |                             |    |                           |                            |                            |                                  | ,   |  |  |                                      |                          |                      |                              |                            |               |        |       |       |    |       |      |      |      |    |     |          |             |     |          |        |
|                   | 9                  | >  | SHIELD | œ                              | ^                              | SB                             | BG                          | ٦                                | ŋ                                | GR                   | >  | BG                                     | 91                          | SB                               | ٨               | W                | 8       | 9         | œ                                  | ×                                     | 91  | >                           | В  | SB                        | 91                         | 7                          | ٨                                | SB  | 8  | ٦  | _                                    | Ь                        | 8                    | _                            | SHIELD                     | 9             | œ      | 1     | 9     | BG | BR    | g.   | >    | 2 .  | 2  | > ( | <u>~</u> | <b>&gt;</b> | #a  |          | >      |
|                   | 31                 | 32   | 40     | 41                             | 42                             | 45                             | 46                          | 46                               | 47                               | 47                   | 48                                       | 49                                     | 20                          | 51                               | 52              | 53               | 95      | 57        | 28                                 | 59                                    | 61  | 62                          | 63 | 64                        | 9                          | 99                         | -67                              | 89  | 69   | 7.1  | 7.2                                  | 73                       | 74                   | 75                           | 9/                         | 7.7           | 78     | 79    | 80    | 81 | 82    | 83   | 84   | 58   | 90 | 0 0 | 87       | 88          | 88  | 06       | 91     |
|                   |                    |  |        |                                |                                |                                |                             | •                                |                                  |                      |  | M117                                   | MIDETOWIDE                  | WINE IO WINE                     | TH80FW-CS16-TM4 |                  |         |           |                                    | 1   1   1   1   1   1   1   1   1   1 | 5 01 02 02 02 02 02 02 02 02 02 02 02 02 02 |                             |    | Signal Name Specification | ognarivanie [openiication] |                            | •                                |   | •  |  |                                      |                          |                      |                              | - [Without ADAS]           | - [With ADAS] |        |       | •     |    |       |      |      |      |    |     | •        |             |     |          |        |
|                   | Μ                  | ď  | æ      | ٦                              | Ь                              | 97                             | ^                           | 97                               | 7                                |                      |  | l                                      | Г                           |                                  | П               |                  |         |           |                                    |                                       |   |                             |    | Color Of                  | Wire                       | ٨                          | ٨                                | ч   | W  | ^  | œ                                    | 9                        | Μ                    | 7                            | ~                          | >             | GR     | Ь     | BR    | GR | ٨     | 97   | ~    | . BG | 2  | 2 : | >        | В           | >   | a.       | ω      |
|                   | 25                 | 30   | 31     | 32                             | 33                             | 34                             | 32                          | 36                               | 37                               |                      |  | Connector No.                          | Connector Name              | connecto                         | Connector Type  | 4                | B       | ŧ         | 2                                  |                                       |   |                             |    | Terminal                  | No.                        | 1                          | 3                                | 9   | 7  | 8  | 11                                   | 12                       | 13                   | 14                           | 15                         | 15            | 17     | 18    | 19    | 20 | 2.1   | 22   | ž    | 24   | ž  | 3 3 | 56       | 27          | 28  | 59       | 30     |
| ı                 | _                  |  |        |                                |                                |                                |                             |                                  |                                  |                      |  |  |                             |                                  |                 |                  |         |           |                                    |                                       |   |                             |    |                           |                            |                            |                                  |   |  |  |                                      |                          |                      |                              |                            |               |        |       |       |    |       |      |      |      |    |     |          |             |     |          | _      |
|                   | M104               | REMOTE KEYLESS ENTRY RECEIVER                |        | TH04FW-NH                      |                                |                                | K                           | 1                                | 1 2 3 4                          | + 0 7                |  |  | Constitution (Constitution) | olginal ivame [openiication]     | GND             | SIGNAL OUTPUT    | RSSI    | BATTERY   |                                    |                                       | M105  | WIRETOWIRE                  |    | TH40FW-NH                 |                            |                            | K                                | 201918171818141317171111918171818171                          |  |  |                                      |                          | (                    | office independent of        |                            |               |        |       |       |    |       | ,    |      |      |    |     |          |             |     |          | •      |
|                   |                    |  | . T    |                                |                                |                                | R                           | 7.                               | 1 2 3 4                          | + 6 5 -              |  |  | Color Of                    | Wire Signal Name (Specification) | B GND           | BR SIGNAL OUTPUT | GR RSSI | R BATTERY |                                    |                                       |   |                             |    | İ                         |                            |                            | K                                | 2   2   3   3   5   6   6   6   6   7   6   5   4   3   2   1 | 40 130 130 130 130 130 130 130 130 130 13        |  |                                      |                          | Color Of             | Wire Ognanianie (Specimanon) |                            |               | . 91   |       | - 1   |    |       | , .  |      | : 5  |    | 90  | BR       | ٧ .         | . 9 |          |        |
|                   | Connector No. M104 | Connector Name REMOTE KEYLESS ENTRY RECEIVER | . T    | Connector Type TH04FW-NH       |                                |                                |                             |                                  | 1 2 3 4                          | 1501                 |  |  |                             |                                  | 1 B GND         |                  |         |           |                                    |                                       | Connector No. M105                          | Connector Name WIRE TO WIRE |    | Connector Type TH40FW-NH  | 4                          |                            |                                  | 11.3.   | 40 130 381 781 781 781 781 781 781 781 781 781 7 |  |                                      |                          |                      |                              | 2 R                        |               | . 91 5 | . e   | - 1 2 |    | . 8 6 | 10 W | w 11 | +    | ╀  | +   | +        | 16 V -      | +   | $\dashv$ | 23 B . |
| SYSTEIN           |                    | Connector Name                               | PLY    |                                | VEHICLE SPEED SIGNAL (2-PULSE) | VEHICLE SPEED SIGNAL (8-PULSE) | ILLUMINATION CONTROL SIGNAL | Q NOO                            | ENTER SWITCH SIGNAL              |                      | ILLUMINATION CONTROL SWITCH SIGNAL (+)   | ILLUMINATION CONTROL SWITCH SIGNAL (-) | Color Of                    | Wire                             | CAN-H 1 B GND   |                  | GR      | 4 R       | LED HEADLAMP (LH) WARNING SIGNAL   |                                       | JND Connector No.                           | Connector Name              |    | I SIGNAL Connector Type   | SECURITY SIGNAL            | WASHER LEVEL SWITCH SIGNAL | PADDLE SHIFTER SHIFT DOWN SIGNAL | PADDLE SHIFTER SHIFT UP SIGNAL                                | FUEL LEVEL SENSOR SIGNAL                         | SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)   | PASSENGER SEAT BELT WARNING SIGNAL   | NON-MANUAL MODE SIGNAL   | AL Terminal Color Of | No. Wire                     | MANUAL MODE SIGNAL 2 R -   |               | . 91 5 | - d 9 | 2 1   |    | L     | ┞    | H    | +    | ╀  | +   | +        | -           | +   | $\dashv$ | _      |
| DOOR LOCK STSTEIN | f Connector No.    | Connector Name                               | ,      | IGNITION SIGNAL Connector Type | VEHICLE SPEED SIGNAL (2-PULSE) |                                |                             |                                  |                                  |                      | G ILLUMINATION CONTROL SWITCH SIGNAL (+) | ۰                                      | Terminal Color Of           | No. Wire                         | 1 8             | 2 BR             | 3 GR    | 4 R       | V LED HEADLAMP (LH) WARNING SIGNAL |                                       | FUEL LEVEL SENSOR GROUND Connector No.      | Connector Name              |    | Connector Type            |                            |                            |                                  | •   | 6 FUEL LEVEL SENSOR SIGNAL                       | W SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE) | G PASSENGER SEAT BELT WARNING SIGNAL | G NON-MANUAL MODE SIGNAL | Terminal Color Of    | No. Wire                     | W MANUAL MODE SIGNAL 2 R - | 3 8           | 91 5   |       | . ב   |    | L     | ┞    | H    | +    | ╀  | +   | +        | -           | +   | $\dashv$ | _      |

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|                  | 91 GR                            | 92 B PUSH-BTNIGN SWILL GND       | LY 1-KEY WARN BUZZER    | 96 SB ACC RELAY CONT | 97 SB STARTER RELAY CONT | JT 98 B IGN RELAY (IPDM E/R) CONT | 99 R                              | <u> </u> | 102 BR             | 104 GR A/TS                       | 105 R                       | PUT 106 B BLWR RELAY CONT      | 109 Y ACCIND  | 110 R RECEIVER PWR SPLY | T                 | Connector No. M125 | ي ا                       | Т   | Connector Type TH12FW-NH  |  |                   | 1 3 4 5 6 | 10  | 2111016 /                          |                               | Terminal Color Of | No. Wire Signal Marile (Specification) | 1 1                              | 3 GR     | 4                         | 1              | L CAN-FI       |                       | 10 P CAN-L                               | 11 B GND                       | + 12 P CAN-L         |                    |                        |          |  |                                |           |  |  |  |  |
|------------------|----------------------------------|----------------------------------|-------------------------|----------------------|--------------------------|-----------------------------------|-----------------------------------|----------|--------------------|-----------------------------------|-----------------------------|--------------------------------|---------------|-------------------------|-------------------|--------------------|---------------------------|---|---------------------------|--|-------------------|-----------|-----|------------------------------------|-------------------------------|-------------------|--|----------------------------------|----------|---------------------------|----------------|----------------|-----------------------|--|--------------------------------|----------------------|--------------------|------------------------|----------|--|--------------------------------|-----------|--|--|--|--|
|                  | r Of Signal Name (Specification) |                                  | INT ROOM LAMP PWR SPLY  | R BAT (FUSE)         | AIR BAG SIGNAL           | G PASS DOOR UNLK OUTPUT           | G TURN SIG LH OUTPUT (SIDE, REAR) |          | STEP LAMP CONT     | ROOM LAMP TIMER CONT              | ALL DOOR, FL LID LOCK OUTPU | 5 DR DOOR, FL LID UNLK OUTPUT  | B GND         |                         | PW PWR SPLY (BAT) |                    |                           | M123  | BCM (BODY CONTROL MODULE) | TH40FW-NH  | 1                 |           |     | 71 72 73 75 78 78 78 80 81 82 83 8 | 91 92 93 96 97 98 99 10 10 10 |                   |  | r Of Signal Name [Specification] |          |                           | OUTSH          | ONINO          |                       | 3 DRIVER DOOR ANT                        |                                | 5 PASSENGER DOOR ANT | PASSENGER DOOR ANT |                        |          |  |                                |           |  |  |  |  |
|                  | ferminal Color Of                | No. Wire                         | S6 R                    | L                    | 1 85                     | 59 G                              | 09                                | 61 V     | 62 V               | P 69                              | v 59                        | 99                             | 8 L9          | 0 89                    | . k               | ┨                  |                           | Connector No.                                     | Connector Name            | Connector Type   |                   | 曆         | S I |                                    |                               |                   |  | Ferminal Color Of                | 4        | +                         | 72 B           | 2 2            | ╁                     | 78 BR                                    | H                              | 91 08                | 81 V               |                        | 82 v     | Щ  |                                |           | ++++   | +++++  |  |  |
|                  | 34 V COMBISW OUTPUT 3            | 35 Y COMBI SW OUTPUT 2           | 36 LG COMBI SW OUTPUT 1 | H                    | 39 L CAN-H               | 40 P CAN-L                        |                                   |          | Connector No. M121 | (SILIDON LOGINOS MODIS CONTRACTOR |                             | Connector Type FEA09FB-FHA6-SA | (             |                         | 18                | 54 52              | 200                       | [ <del>-</del>                                    | -                         | lerminal Color Uf Signal Name [Specification] No. Wire | H                 | R TRUN    | > 1 | 45 GR PASSENGER DOOR SW            | 51                            | } a               | 49 SB TROOM LAMP CONT                  | BG                               | L 91     | 55 BR RR DOOR UNLK OUTPUT |                | Connection No. | Т                     | Connector Name BCM (BUDY CONTROL MUDULE) | Connector Type FEA09FW-FHA6-SA |                      | 1                  | 333                    | <u>'</u> | H.S.   1   1   1   1   1   1   1   1   1 | 1.5.   56 57 58 59 60 61 62 63 | <u> </u>  | .s.<br>  56 57 58 59 60 61 62 63<br>  65 66 67 68 69 | .53<br>  56 57 58 59 60 61 62 63<br>  65 66 67 68 69 | (S)   C6   C6   C7   C8   C9   C9   C9   C9   C9   C9   C9 | (S)  |
| DOOR LOCK SYSTEM | - [With heated seat]             | - [With climate controlled seat] |                         |                      |                          |                                   |                                   |          |                    |                                   | M120                        | (SILIGON LOSINOS AGOS) MOS     |               | TH40FB-NH               |                   |                    | 123456 89 11 14 161718192 | 21 22 23 24 25 26 29 39 31 32 33 34 35 35 37 38 4 |                           |  | L                 |           | RRV | COMBI SW INPUTS                    |                               |                   | COMBI SW INPUT 1                       | POWER WINDOW SW COMM             |          | AS.                       | OPTICAL SENSOR |                | RECEIVER / SENSOR GND | TURN SIG RH OUTPUT (FRONT)               | TURN                           |                      |                    | KYLS ENT RECEIVER RSSI | 2        | 2  | 2                              | 2 -       | \$   -   | § S ±  | \$ 1- 10   | ∑, S ± 80 0 1                                      |
| OR LC            | Н                                | 3 %                              | L                       | M<br>9               | L                        | L                                 | 9                                 | L        |                    |                                   | Connector No.               | Connector Name                 | ector ivallic | Connector Type          |                   | Ţ                  | ю<br>Н                    |   |                           |  | Terminal Color Of | $\dashv$  | 9   | 2 BG                               | +                             | 9                 | 9<br>9                                 | >                                | $\dashv$ | +                         | y 8            | +              | - 8                   | ^  | 20 G                           | L                    |                    | 2 GR                   | +        | +  | +HH                            | ++++      | +++++  |  | <del></del>  | <del></del>  |
| 8                | 93                               | 16                               | 94                      | 96                   | 97                       | 86                                | 96                                | 10       |                    |                                   | űuö                         | 0                              | Ĭ             | Conne                   | Æ.                | 剢                  | ₹                         |   |                           |  | Termi             | No.       | "   | 2 8                                | , 4                           | 2                 | 9                                      | ×                                | 6        | 11                        | 14             | =              | 18                    | [=                                       | 20                             | 2                    |                    | 22                     | 22       | 22 22                                    | 2 2 2 2                        | 2 2 2 2 2 | 22<br>23<br>24<br>25<br>26<br>29                     | 22<br>23<br>24<br>25<br>25<br>26<br>29<br>30         | 23<br>24<br>24<br>25<br>25<br>26<br>29<br>30<br>31         | 22<br>23<br>24<br>25<br>26<br>26<br>29<br>30<br>31 |

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| Control to the cont   | Concept the bird   Miles   Miles   Concept the bird   Miles   Mi | Control for the control for  | Control to the control of the cont | ۲I               |            |            |                               |          | ſ        |                             |                |           |
|--|--|--|--|------------------|------------|------------|-------------------------------|----------|----------|-----------------------------|----------------|-----------|
| The contract based and another larger   Manual   Contract based   Manual   Manual   Contract based   Manual   | Secretary   Concerts based   March 10   Ma | Control No.    | Concern the part of the part | Т                |            | IOI NO.    | M14/                          | Connecto | T        | MISI                        | Connector No.  | †         |
| Septiment   Connecting   Conn   | Signature   Concept Type   Muster   Concept Type   Concept Type   Muster   Concept Type   Concept Ty | Signature   Concert   Free   Muster   Concert   Free   Concert   Free   Muster   Concert   Free   | Signature functional   |                  |            | tor Name   | AIR BAG DIAGNOSIS SENSOR UNIT | Connecto |          | WIRE TO WIRE                | Connector Name |           |
| Separation   Sep   | Separation   Sep | Specific control of the control of | Separation   Sep | П                | Connec     | tor Type   | NH28FY-EX                     | Connecto | ır Type  | TH40MW-NH                   | Connector Type | BD16FW    |
| Sign of them (porticion)   We will be continued at the    | Signature Specification   No. 20   Signature Specification   Signatu | Signature   pocition of   1  | Signature   Sign | <b>€</b>         | Œ          |            |                               | Œ        |          |                             | Œ              | 7707      |
| Signal brane Specification   Amrited   Cote of the control of th   | Signal Name (Specification)   Fremman   Califor Cali | Signal Name Specification    | Signal Numb Specification   Number Specific |                  |            | <i>5</i> 1 | 52 5423 2422<br>51 5360592557 | Ž.       |          | 27 28                       | e e            | 4 5 6 7   |
| 1   1   1   1   1   1   1   1   1   1  | 1   1   1   1   1   1   1   1   1   1  | March   Marc | Signatural psecification   No. 9, reg. Signatural pseci |                  |            | 3 Color Of |                               | Terminal | Color Of |                             |                |           |
| Miles   Mile   | MATT-   1   1   1   1   1   1   1   1   1  | Miles  | Mile   |                  |            | Wire       |                               | No.      | Wire     | Signal Name [Specification] |                |           |
| March   Marc   | 1  | 1  | March   Marc | BR               |            | 97         | IGN                           | 2        | œ        | •                           | +              |           |
| March   Marc   | Mathematic   Mat | Signal frame   Sign | Signature   Control   Co | `<br>_<br>_<br>_ |            | so >       | GND<br>GND                    | m u      | m 0      |                             | +              |           |
| Main for   | Middle   | Middle   | March   Marc |                  | 9          | - >-       | D81 (-) D82 (-)               | 6 9      | - BB     |                             | +              |           |
| MODE FOR THE PARK (CONSCIE)   C  | March Factor (CHORGO E)   C   Y   ASSIC)   C   R   R   R   R   R   R   R   R   R   | MODE SET ANTERNAL CONCOLE)   S   | MODE SET ANTENNAL CONCOLE)   S   | ı                | <u></u>    | >          | DR2 (+)                       | _        | _        |                             | 7              | KLINE     |
| MODITAL   1  | No. 271   1  | Separate    MODEL   MODE |                  | 9          | >          | AS1 (+)                       | 88       | ۵        |                             | Н              |           |
| Signal Name (Specification)   Sign   | No.21   Signal Name Specification   Signature Read   Si | No.21   Sign Name (Specification)   Sign Name (Specifica | 1  |                  | 7          | >          | AS1 (-)                       | 6        | В        |                             |                |           |
| Secondary   Seco   | 18   18   18   18   18   18   18   18  | 1  | 1  |                  | <u>«</u> ] | >          | AS2 (+)                       | 10       | ≥        |                             | 4              |           |
| 18   18   19   19   19   19   19   19  | 18   59   675 (-1)   14   58   | 18   59   17   17   18   18   19   19   19   19   19   19  | 18   19   19   19   19   19   19   19  | d                | 6          | +          | AS2 (-)                       | 11       | 91       |                             | +              |           |
| 12   12   13   14   15   14   15   14   15   14   15   14   15   14   15   14   15   14   15   14   15   14   15   14   15   14   15   14   15   14   15   14   15   14   15   14   15   14   14   | 12   13   14   15   15   14   15   14   15   14   15   14   15   14   15   14   15   14   15   14   14   | 12   13   14   15   15   14   15   15   14   15   14   15   15   | 12   15   16   17   18   18   18   19   19   19   19   19  | ₹ P              | 8 9        | +          | ECS (+)                       | 2 :      | 2 2      |                             | +              |           |
| 1   2   2   6   5   5   5   5   5   5   5   5   5  | The state of the | Signal Name [Specification]   Signal Baltin   Signal Name [Specification]   Signal Name [Speci | Signal Name [Specification]   Signal Rate   Satisfies (A)    | \\\              | F .        | > 0        |                               | 10       | 8 8      |                             | ┨              |           |
| Signal Name (Specification)   Sign   | Signal Name (Specification)   Sign | Signal Name (Specification)   Sign | Signal Name [Specification]   Sign | Ţ                | 23 22      | 8          |                               | 91       | ś >      |                             |                |           |
| Signal Name (Specification)   Sign   | Signal Name (Specification)   Sign | Signal Name (Specification)   Sign | Signal Mame (Specification)   Sign |                  | 24         | 0          | SEATBELT                      | 18       | . 0      |                             | Connector No.  | M187      |
| Signal Name   Secure action   Signal Name   Secure action      | Signal Name (Specification)   Sign | Signal Name [Specification]   S.S.   Connector Figure   Connector Fi | Signal Name (Specification)   S.S.   B   SATELLITE ROLE)   S.S.   S | )                | 25         | æ          | CUTOFF TELLTALE               | 22       | BG       |                             |                | П         |
| Signal Name   Specification   S.3   R   SAFELLITE RINZ   1   25   W  | Signal Name   Specification   S.3   R   SAFELLITE RRUZ- -   2.0   R   SAFELLITE RRUZ- -   2.1   R   SAFELLITE RRUZ- -  -   2.1   R   SAFELLITE RRUZ- | Signal Name (Specification)   S.3  | Signal Name   Specification   Specific |                  | 51         | 9          | SATELLITE RH2 (+)             | 23       | 89       |                             | Connector Name |           |
| Wife   | Wire   | Wire   | Wire   |                  | 52         | æ          | SATELLITE RH2 (-)             | 25       | ٨        |                             | Connector Type | TH08FB-NH |
| ANT-   SAFE      | ANT:   ST   L   SARTH   ST   L   L   L   L   L   L   L   L   L   | ANT-   SAFE    | ANT-   SAFE    | Wire             | 53         | Ь          | SATELLITE RH2 (+)             | 30       | ď        | •                           | þ              |           |
| AMT-   ST   L  | AMT-   ST   L  | AMT-   ST   L  | AMT-   ST   L  |                  | 54         | _          | SATELLITE RH2 (-)             | 31       | BR       |                             | 修              | K         |
| 1   CANH   34   LG   | 1   CANH   34   16   | 1   CANH   34   LG   | 1   CANH   33   P  |                  | 52         | _          | IVCS                          | 32       | _        |                             | Ě              | 1         |
| 25   16  | 25    V   CANE.     State   Cane.  | 25   16  | 25    V   CANE     35  |                  | 59         | _          | CAN-H                         | 33       | ۵        |                             | i              |           |
| LG   Terminal Color of   | 16   | LG   Terminal Color of Myre   LG   LG   LG   LG   LG   LG   LG   L   | LG   Terminal Color of   No.   Wife   No.   Wife   LG   LG   LG   LG   LG   LG   LG   L  |                  | 09         | ۵          | CAN-L                         | 34       | 97       |                             |                | Ì         |
| 16     Terminal Color of   | 1   1   1   1   1   1   1   1   1   1  | 16   | Correction   Color of   Color o |                  |            |            |                               | 35       | >        |                             |                | 2 1       |
| Terminal Color of No. Wire No. Wire 2 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8  | Terminal Color Of   No. Wire    | Terminal Color of No. Wive No. Wive 1 BG G G G G G G G G G G G G G G G G G   | Terminal Color of  |                  |            |            |                               | 36       | 97       |                             |                |           |
| Color of Merican Barrier Barri | Color of Merce BS  | Color of Color of Big  | Color of I   |                  |            |            |                               | 37       | ٦        |                             |                |           |
| Wire<br>BG G<br>B R R R  | W/r c  | Wire BG G  | Wire BG G G G G G G G G G G G G G G G G G G  |                  |            |            |                               |          |          |                             |                |           |
| ++++   | +++  | ++++   | +++  |                  |            |            |                               |          |          |                             | +              |           |
| +++  | +++  | +++  | ++   |                  |            |            |                               |          |          |                             | 1 80           |           |
| +  | +  | $\mathbf{H}$   | $\mathbf{H}$   |                  |            |            |                               |          |          |                             | +              |           |
| -  | -  | -  | -  |                  |            |            |                               |          |          |                             | +              |           |
|  |  |  |  |                  |            |            |                               |          |          |                             | 4              |           |
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| DOOR LOCK SYSTEM                        |                   |                                     |                   |  |                    |                                |  |
|---|-------------------|-------------------------------------|-------------------|--|--------------------|--------------------------------|--|
| M189                                    | 71 SHIELD         | _                                   | Connector No.     | M222   | Connector No.      | T13                            |  |
| JOINT CONNECTOR-M01                     | 72 G<br>73 BR     | MICROPHONE VCC<br>COMM (CONT->DISP) | Connector Name    | WIRE TO WIRE   | Connector Name     | WIRE TO WIRE                   |  |
| NH20FL-DC                               | $\vdash$          | CAN-L                               | Connector Type    | M03MW-LC   | Connector Type     | NS16FW-CS                      |  |
|   | +                 | AV COMM (L)                         | ą.                |  | 4                  |                                |  |
|   | 79 88             | DIMMER SIGNAL                       | 李                 |  | 季                  | Ш                              |  |
| 987 5 321                               | H                 | IGNITION SIGNAL                     | Ś                 | _  | 2                  | 7654 321                       |  |
| 20 19 18 15 13 12 11 10                 | 1                 | REVERSE SIGNAL                      |                   | 2 3  |                    | 16 15 14 13 12 11 10 9 8       |  |
|   | 83 SHIELD         |                                     |                   |  |                    |                                |  |
|   | t                 | COMPOSITE                           |                   |  |                    |                                |  |
| Color Of Signal Name (Specification)    | 87 R              | MICROPHONE SIGNAL                   | Terminal Color Of | Signal Name (Specification)  | lal                | Of Signal Name (Specification) |  |
| Wire                                    | 88 SHIELD         |                                     | No. Wire          | liganous del suma puglic   | No. Wire           |                                |  |
|   | ٧ 68              | COMM (DISP->CONT)                   | 1 W               | •  | 1 ×                |                                |  |
|   | 7 06              | CAN-H                               | 2 R               |  | 2 6                |                                |  |
|   | $\dashv$          | AV COMM (H)                         | 3                 |  | 3                  |                                |  |
| 8                                       | 92 SB             | AV COMM (H)                         |                   |  | »                  |                                |  |
|   |                   |                                     |                   |  | 9                  |                                |  |
|   |                   |                                     | Connector No.     | T4   | +                  |                                |  |
|   | Connector No.     | M221                                | Connector Name    | TRUNK LID OPENER REQUEST SWITCH  | +                  |                                |  |
| 200                                     | Connector Name    | WIRE TO WIRE                        |                   | 4  | 5 5                |                                |  |
|   |                   |                                     | connector 1ype    | IRUZMBK-P  | +                  |                                |  |
|   | Connector Type    | MU3FW-LC                            | ą.                |  | +                  |                                |  |
|   | ą                 |                                     | 李                 |  | +                  |                                |  |
|   | NAT.              |                                     | SE                | <u>[</u>   | 13<br>R            |                                |  |
| 23 15                                   | S                 | Ţ.                                  |                   | 7  | 14                 |                                |  |
|   |                   | <u>-</u> }                          |                   | 1 7  | T S                |                                |  |
|   |                   | 3 2                                 |                   |  |                    |                                |  |
|   |                   | ]                                   |                   |  | Connector No.      | T14                            |  |
| M210                                    |                   |                                     | Terminal Color Of | [acitatification of control of co | Construction Manua | VIGNASSA SGLISO DAMIGE         |  |
| TIMIT IORDINOS AV                       | Terminal Color Of | f Signal Namo (Spoolfication)       | No. Wire          | olgiai ivanie [opecincatori]   | COILIGERO MAINE    |                                |  |
|   | No. Wire          |                                     | 1<br>P            |  | Connector Type     | NS06FW-CS                      |  |
| TH32FW-NH                               | 1<br>W            |                                     | 2 L               |  | ģ                  |                                |  |
|   | 2 R               |                                     |                   |  | 手                  |                                |  |
|   | 3                 |                                     |                   |  | Y.                 | 1                              |  |
| 7                                       |                   |                                     |                   |  |                    | - 0                            |  |
| 57 68 69 70 71                          |                   |                                     |                   |  |                    | 6 5 4 3                        |  |
| 79 80 81 82 83 84    87 88 89 90 91 92] |                   |                                     |                   |  |                    |                                |  |
|   |                   |                                     |                   |  |                    |                                |  |
| 30-1-06                                 |                   |                                     |                   |  | Terminal Color Of  | Of Signal Name [Specification] |  |
| Wire Signal Name [Specification]        |                   |                                     |                   |  | +                  |                                |  |
| PARKING BRAKE SIGNAL                    |                   |                                     |                   |  | 7<br>7             |                                |  |
| COMPOSITE IMAGE SIGNAL GND              |                   |                                     |                   |  | 3 Γ                |                                |  |
| COMPOSITE IMAGE SIGNAL                  |                   |                                     |                   |  | 4 P                |                                |  |
| I-KEY IDENTIFICATION SIGNAL             |                   |                                     |                   |  | +                  |                                |  |
|   |                   |                                     |                   |  | 9                  |                                |  |

JRKWF4837GB

# **BASIC INSPECTION**

# DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

**OVERALL SEQUENCE** 

D Inspection start Е 1. Get information for symptom Get the detailed information about symptom from the customer 2. Check DTC Print out DTC and freeze frame data (or, write it down). Check related service bulletines. Symptom is described. Symptom is not described. Symptom is described. DTC is detected. DTC is detected. DTC is not detected. 3. Confirm the symptom 4. Confirm the symptom Try to confirm the symptom described Try to confirm the symptom described by the customer. by the customer. Also study the normal operation and failsafe related to the symptom. DLK 5. Perform DTC CONFIRMATION PROCEDURE 6. Detect malfunctioning system by SYMPTOM DIAGNOSIS 7. Detect malfunctioning part by Diagnosis Procedure Symptom is Symptom is not described. 8. Repair or replace the malfunctioning part Check input/output signal or voltage DTC is 9. Final check Ν Symptom remains. detected. Check that the symptom is not detected. Perform DTC Confirmation Procedure again, and then check that the malfunction is repaired. DTC is not detected. Symptom does not remain. Р INSPECTION END

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### DIAGNOSIS AND REPAIR WORK FLOW

### < BASIC INSPECTION >

# 1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

# 2.CHECK DTC

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

### Are any symptoms described 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.

>> 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 <a href="https://example.com/BCS-58">BCS-58</a>, "DTC Inspection Priority Chart" (BCM), and determine trouble diagnosis order.

### NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC CONFIRMATION PROCEDURE is not included on Service Manual. This simplified 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 GI-45, "Intermittent Incident".

# 6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

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

### IS the symptom described?

YES >> GO TO 7.

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

# 7. DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

# **DIAGNOSIS AND REPAIR WORK FLOW**

### < BASIC INSPECTION >

Inspect according to Diagnosis Procedure of the system.

### Is malfunctioning part detected?

YES >> GO TO 8.

NO >> Check according to GI-45, "Intermittent Incident".

# 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.

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### INSPECTION AND ADJUSTMENT

### < BASIC INSPECTION >

# INSPECTION AND ADJUSTMENT

### ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

# ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Description

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Perform the following operations when replacing BCM. [For details, refer to <u>DLK-72, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Work Procedure".</u>]

### BEFORE REPLACEMENT

When replacing BCM, save or print current vehicle specification with CONSULT configuration before replacement.

### NOTE:

If "Before Replace ECU" of "Read / Write Configuration" cannot be used, use the "Manual Configuration" after replacing BCM.

### AFTER REPLACEMENT

### **CAUTION:**

When replacing BCM, always perform "Read / Write Configuration" or "Manual Configuration" with CONSULT. Or not doing so, BCM control function does not operate normally.

- Complete the procedure of "Read / Write Configuration" in order.
- Configuration is different for each vehicle model. Confirm configuration of each vehicle model.
- If you set incorrect "Read / Write Configuration" or "Manual Configuration", incidents might occur. NOTE:

When replacing BCM, perform the system initialization (NATS).

# ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Work Procedure

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# 1. SAVING VEHICLE SPECIFICATION

## ©CONSULT Configuration

Perform "Before Replace ECU" of "Read / Write Configuration" to save or print current vehicle specification. Refer to BCS-80, "CONFIGURATION (BCM): Description".

### NOTE:

If "Before Replace ECU" of "Read / Write Configuration" cannot be used, use the "Manual Configuration" after replacing BCM.

>> GO TO 2.

### 2.REPLACE BCM

Replace BCM. Refer to BCS-95, "Removal and Installation".

>> GO TO 3.

# 3. WRITING VEHICLE SPECIFICATION

### © CONSULT Configuration

Perform "After Replace ECU" of "Read / Write Configuration" or "Manual Configuration" to write vehicle specification. Refer to BCS-80, "CONFIGURATION (BCM): Work Procedure".

>> GO TO 4.

# 4. INITIALIZE BCM (NATS)

Perform BCM initialization. (NATS)

>> WORK END

## DTC/CIRCUIT DIAGNOSIS

### **B2621 INSIDE ANTENNA**

DTC Logic

#### DTC DETECTION LOGIC

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

### DTC CONFIRMATION PROCEDURE

## 1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "INSIDE ANT DIAGNOSIS" in "WORK SUPPORT" mode.
- 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-73</u>, "<u>Diagnosis Procedure</u>".

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

### Diagnosis Procedure

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

| (+)<br>BCM |                     | (–) Condition |   | Signal<br>(Reference value)                     |
|------------|---------------------|---------------|---|---|
| Connector  | Terminal            |               |   | (Noterense value)                               |
| M123       | 84, 85              | Ground        | When Intelligent Key is in the antenna detection area | (V)<br>15<br>10<br>5<br>0<br>1 s<br>JMKIA3839GB |
| WILE       | 0 <del>1</del> , 00 | Sibulu        | When Intelligent Key is not in antenna detection area | (V) 15 10 5 0 JMKIA5951GB                       |

### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".

NO >> GO TO 2.

## 2.CHECK INSIDE KEY ANTENNA CIRCUIT

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

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### **B2621 INSIDE ANTENNA**

### < DTC/CIRCUIT DIAGNOSIS >

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

| ВСМ       |          | Inside key antenna | (instrument center) | Continuity |  |
|-----------|----------|--------------------|---------------------|------------|--|
| Connector | Terminal | Connector          | Terminal            | Continuity |  |
| M123      | 84       | M131               | 1                   | Existed    |  |
| IVI 123   | 85       | WITST              | 2                   | Existed    |  |

3. Check continuity between BCM harness connector and ground.

| В         | CM       |        | Continuity  |  |
|-----------|----------|--------|-------------|--|
| Connector | Terminal | Ground | Continuity  |  |
| M123      | 84       | Ground | Not existed |  |
| WIIZS     | 85       |        | Not existed |  |

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

| (+)<br>BCM |          | (–)    | Condition   | Signal<br>(Reference value)      |
|------------|----------|--------|---|----------------------------------|
| Connector  | Terminal |        |   | (Reference value)                |
| M123       | 84, 85   | Ground | When Intelligent Key is in the antenna detection area | (V) 15 10 5 0 JMKIA3839GB        |
|            | .,,      |        | When Intelligent Key is not in antenna detection area | (V)<br>15<br>10<br>5<br>0<br>1 s |

### Is the inspection result normal?

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

NO >> Replace BCM. Refer to <u>BCS-95</u>, "Removal and Installation".

### **B2622 INSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

### **B2622 INSIDE ANTENNA**

DTC Logic

#### DTC DETECTION LOGIC

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

#### DTC CONFIRMATION PROCEDURE

## 1. PERFORM DTC CONFIRMATION PROCEDURE

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

### Is inside key antenna DTC detected?

YES >> Refer to <u>DLK-75</u>, "<u>Diagnosis Procedure</u>".

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

### Diagnosis Procedure

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

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

| (+)<br>BCM |          | (-)    | Condition   | Signal<br>(Reference value)                     |
|------------|----------|--------|---|---|
| Connector  | Terminal |        |   | ((1010)0100 10100)                              |
| M123       | 86, 87   | Ground | When Intelligent Key is in the antenna detection area | (V)<br>15<br>10<br>5<br>0<br>1 s<br>JMKIA3839GB |
| WIZS       | 00, 07   | Ground | When Intelligent Key is not in antenna detection area | (V)<br>15<br>10<br>5<br>0<br>1 s<br>JMKIA5951GB |

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".

NO >> GO TO 2.

## 2.CHECK INSIDE KEY ANTENNA CIRCUIT

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

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### **B2622 INSIDE ANTENNA**

### < DTC/CIRCUIT DIAGNOSIS >

| В         | CM       | Inside key ant | enna (console) | Continuity |  |
|-----------|----------|----------------|----------------|------------|--|
| Connector | Terminal | Connector      | Terminal       | Continuity |  |
| M123      | 86       | M146           | 1              | Existed    |  |
| IVI IZO   | 87       | IVI 140        | 2              | Existed    |  |

3. Check continuity between BCM harness connector and ground.

|           | BCM      |        | Continuity  |  |
|-----------|----------|--------|-------------|--|
| Connector | Terminal | Ground | Continuity  |  |
| M123      | 86       | Ground | Not existed |  |
| IVI 123   | 87       |        | Not existed |  |

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

| (+)<br>BCM |          | (-)    | Condition   | Signal<br>(Reference value)      |
|------------|----------|--------|---|----------------------------------|
| Connector  | Terminal |        |   | (1.16.6.6.166 14.146)            |
| M123       | 86, 87   | Ground | When Intelligent Key is in the antenna detection area | (V)<br>15<br>10<br>5<br>0<br>1 s |
| WIIZS      | 60, 67   | Giounu | When Intelligent Key is not in antenna detection area | (V) 15 10 5 0 JMKIA5951GB        |

### Is the inspection result normal?

YES >> Replace inside key antenna (console).

NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

### **B2623 INSIDE ANTENNA**

DTC Logic

### DTC DETECTION LOGIC

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

#### DTC CONFIRMATION PROCEDURE

## 1. PERFORM DTC CONFIRMATION PROCEDURE

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

### Is inside key antenna DTC detected?

YES >> Refer to <u>DLK-77</u>, "<u>Diagnosis Procedure</u>".

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

### Diagnosis Procedure

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

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

| (+)<br>BCM |          | (–)    | Condition   | Signal<br>(Reference value)                     |
|------------|----------|--------|---|---|
| Connector  | Terminal |        |   | (Reference value)                               |
| M123       | 88, 89   | Ground | When Intelligent Key is in the antenna detection area | (V)<br>15<br>10<br>5<br>0<br>1 s<br>JMKIA3839GB |
| WIIZS      | 00, 09   | Giounu | When Intelligent Key is not in antenna detection area | (V) 15 10 5 0 JMKIA5951GB                       |

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".

NO >> GO TO 2.

## 2. CHECK INSIDE KEY ANTENNA CIRCUIT

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

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### **B2623 INSIDE ANTENNA**

### < DTC/CIRCUIT DIAGNOSIS >

| F         | BCM      | Inside key antenna (trunk room) |          | Continuity |
|-----------|----------|---------------------------------|----------|------------|
| Connector | Terminal | Connector                       | Terminal | Continuity |
| M123      | 88       | B49                             | 1        | Existed    |
| IVITZS    | 89       | D49                             | 2        | LAISteu    |

3. Check continuity between BCM harness connector and ground.

| В         | CM       |         |              |
|-----------|----------|---------|--------------|
| Connector | Terminal | Ground  | Continuity   |
| M123      | 88       | Giodila | Not existed  |
| IVI 123   | 89       |         | INOL EXISTED |

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

| (+)<br>BCM |          | (-)    | Condition   | Signal<br>(Reference value)                     |  |
|------------|----------|--------|---|---|--|
| Connector  | Terminal |        |   | ( 10101011011101)                               |  |
| M123       | 88, 89   | Ground | When Intelligent Key is in the antenna detection area | (V)<br>15<br>10<br>5<br>0<br>JMKIA3839GB        |  |
| IVITZO     | 00, 09   | Cround | When Intelligent Key is not in antenna detection area | (V)<br>15<br>10<br>5<br>0<br>1 s<br>JMKIA5951GB |  |

### Is the inspection result normal?

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

NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

### **B2626 OUTSIDE ANTENNA**

### < DTC/CIRCUIT DIAGNOSIS >

### **B2626 OUTSIDE ANTENNA**

DTC Logic

### DTC DETECTION LOGIC

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

### DTC CONFIRMATION PROCEDURE

### 1. PERFORM DTC CONFIRMATION PROCEDURE

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

#### Is DTC detected?

YES >> Refer to <u>DLK-79</u>, "<u>Diagnosis Procedure</u>".

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

### Diagnosis Procedure

## 1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

|           | +)<br>CM | (-)    | Condition  |  | Signal<br>(Reference value)                                  |
|-----------|----------|--------|--|--|--|
| Connector | Terminal |        |  |  | (Holofolisa value)   |
| M123      | 78<br>79 | Ground | When the driver<br>door request<br>switch is operated<br>with ignition switch<br>OFF | When Intelligent Key is in the antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)  When Intelligent Key is not in the antenna detection area (distance between Intelligent Key and antenna: Approx. 2 m) | (V) 15 10 500 ms  JMKIA5955GB  (V) 15 10 500 ms  JMKIA5954GB |

### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".

NO >> GO TO 2.

## 2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

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

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### **B2626 OUTSIDE ANTENNA**

### < DTC/CIRCUIT DIAGNOSIS >

| E         | ВСМ      |           | Outside key antenna (driver side) |            |
|-----------|----------|-----------|-----------------------------------|------------|
| Connector | Terminal | Connector | Terminal                          | Continuity |
| M123      | 78       | D14       | 1                                 | Existed    |
| WIIZS     | 79       | 014       | 2                                 | LAISteu    |

3. Check continuity between BCM harness connector and ground.

| В         | CM                 |        | Continuity  |  |
|-----------|--------------------|--------|-------------|--|
| Connector | Connector Terminal |        | Continuity  |  |
| M123      | 78                 | Ground | Not existed |  |
| IVITZS    | 79                 |        | Not existed |  |

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

|           | +)<br>CM | (-)    | Condition                                       |   | Signal<br>(Reference value)                                 |
|-----------|----------|--------|---|---|---|
| Connector | Terminal |        |   |   | (Reference value)   |
| M123      | 78       | Ground | When the driver door request switch is operated | When Intelligent Key is in the antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)   | (V)<br>15<br>10<br>5<br>0<br>5<br>0<br>5<br>0<br>MKIAS955GB |
|           | 79       |        | with ignition switch<br>OFF                     | When Intelligent Key is not in the antenna detection area (distance between Intelligent Key and antenna: Approx. 2 m) | (V) 15 10 5 0 JMKIA5954GB                                   |

### Is the inspection result normal?

YES

>> Replace outside key antenna (driver side).
>> Replace BCM. Refer to BCS-95, "Removal and Installation". NO

### **B2627 OUTSIDE ANTENNA**

### < DTC/CIRCUIT DIAGNOSIS >

### **B2627 OUTSIDE ANTENNA**

DTC Logic

#### DTC DETECTION LOGIC

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

#### DTC CONFIRMATION PROCEDURE

### 1. PERFORM DTC CONFIRMATION PROCEDURE

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

### Is DTC detected?

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

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

### Diagnosis Procedure

1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

|           | +)<br>CM | (-)    | Condition                                       |   | Signal<br>(Reference value)   |
|-----------|----------|--------|---|---|-------------------------------|
| Connector | Terminal |        |   |   | , ,                           |
| M123      | 78       | Ground | When the driver door request switch is operated | When Intelligent Key is in the antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)   | (V) 15 10 5 0  JMKIA5955GB    |
| WIIZO     | 79       | Glound | with ignition switch<br>OFF                     | When Intelligent Key is not in the antenna detection area (distance between Intelligent Key and antenna: Approx. 2 m) | (V)<br>15<br>10<br>5<br>0<br> |

#### Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-95, "Removal and Installation"</u>.

NO >> GO TO 2.

## 2.check outside key antenna circuit

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

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### **B2627 OUTSIDE ANTENNA**

### < DTC/CIRCUIT DIAGNOSIS >

| В         | CM       | Outside key antenna (passenger side) |          | Continuity |
|-----------|----------|--------------------------------------|----------|------------|
| Connector | Terminal | Connector                            | Terminal | Continuity |
| M123      | 80       | D44                                  | 1        | Existed    |
| WIIZJ     | 81       | D44                                  | 2        | LAISIGU    |

3. Check continuity between BCM harness connector and ground.

| В         | CM                 |        | Continuity  |  |
|-----------|--------------------|--------|-------------|--|
| Connector | Connector Terminal |        | Continuity  |  |
| M123      | 80                 | Ground | Not existed |  |
| WITZS     | 81                 |        | Not existed |  |

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## ${\it 3.}$ CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

| (+)<br>BCM |          | (-)    | (–) Condition                                   |   | Signal<br>(Reference value) |  |
|------------|----------|--------|---|---|-----------------------------|--|
| Connector  | Terminal |        |   |   | (Netereffice Value)         |  |
| M123       | 78       | Ground | When the driver door request switch is operated | When Intelligent Key is in the antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)   | (V) 15 10 5 0  MKIA5955GB   |  |
| WITZO      | 79       | Ground | with ignition switch<br>OFF                     | When Intelligent Key is not in the antenna detection area (distance between Intelligent Key and antenna: Approx. 2 m) | (V) 15 10 5 0 JMKIA5954GB   |  |

### Is the inspection result normal?

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

NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

### **B2628 OUTSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

### **B2628 OUTSIDE ANTENNA**

DTC Logic

### DTC DETECTION LOGIC

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

### DTC CONFIRMATION PROCEDURE

## 1. PERFORM DTC CONFIRMATION PROCEDURE

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

#### Is DTC detected?

YES >> Refer to <u>DLK-83</u>, "<u>Diagnosis Procedure</u>".

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

### Diagnosis Procedure

1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

| (+)<br>BCM |          | (-)    | Condition  |  | Signal<br>(Reference value)                                  |
|------------|----------|--------|--|--|--|
| Connector  | Terminal |        |  |  | ,  |
| M123       | 78<br>79 | Ground | When the driver<br>door request<br>switch is operated<br>with ignition switch<br>OFF | When Intelligent Key is in the antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)  When Intelligent Key is not in the antenna detection area (distance between Intelligent Key and antenna: Approx. 2 m) | (V) 15 10 500 ms  JMKIA5955GB  (V) 15 10 500 ms  JMKIA5954GB |

### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".

NO >> GO TO 2.

## 2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

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

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### **B2628 OUTSIDE ANTENNA**

### < DTC/CIRCUIT DIAGNOSIS >

| E         | BCM      | Outside key ante | Continuity |            |
|-----------|----------|------------------|------------|------------|
| Connector | Terminal | Connector        | Terminal   | Continuity |
| M123      | 82       | B63              | 1          | Existed    |
| WIIZO     | 83       |                  | 2          | LXISIEU    |

3. Check continuity between BCM harness connector and ground.

| В         | CM       |        |             |  |
|-----------|----------|--------|-------------|--|
| Connector | Terminal | Ground | Continuity  |  |
| M123      | 82       | Ground | Not existed |  |
| WITZS     | 83       |        | NOT EXISTED |  |

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## ${\it 3.}$ CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

| (+) BCM        |          | (-)    | Condition  |  | Condition Signal (Reference value                  |  | Signal<br>(Reference value) |
|----------------|----------|--------|--|--|--|--|-----------------------------|
| Connector M123 | 78<br>79 | Ground | When the driver<br>door request<br>switch is operated<br>with ignition switch<br>OFF | When Intelligent Key is in the antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)  When Intelligent Key is not in the antenna detection area | (V)<br>15<br>10<br>5<br>0<br>500 ms<br>JMKIA5955GB |  |                             |
|                |          |        | (distance between Intelligent Key and antenna: Approx. 2 m)                          | 0<br>500 ms<br>JMKIA5954GB   |  |  |                             |

### Is the inspection result normal?

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

NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

### POWER SUPPLY AND GROUND CIRCUIT

| < | D                | rc/ | CIR              | CU     | IIT | DIA                   | (GN  | IOSI | S > | > |
|---|------------------|-----|------------------|--------|-----|-----------------------|------|------|-----|---|
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# POWER SUPPLY AND GROUND CIRCUIT TRUNK CLOSURE CONTROL UNIT

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### 1. CHECK FUSES

- 1. Turn ignition switch OFF.
- 2. Check that the following fuses are not blown (open).

| Signal name          | Fuse No. |
|----------------------|----------|
| Pattory power supply | 1 (15 A) |
| Battery power supply | 6 (10 A) |

### Is the fuse blown (open)?

YES >> Replace the blown (open) fuse after repairing the affected circuit.

TRUNK CLOSURE CONTROL UNIT: Diagnosis Procedure

NO >> GO TO 2.

## 2.CHECK POWER SUPPLY CIRCUIT

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

| (           | +)           |         | Vi-II                |  |
|-------------|--------------|---------|----------------------|--|
| Trunk closu | ire assembly | (–)     | Voltage<br>(Approx.) |  |
| Connector   | Terminal     |         | ( )                  |  |
| T14         | 4            | Ground  | Battery voltage      |  |
|             | 6            | Giodila | Dattery Voltage      |  |

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

### 3. CHECK GROUND CIRCUIT

Check continuity between trunk closure assembly harness connector and ground.

| Trunk closu | re assembly |         | Continuity |
|-------------|-------------|---------|------------|
| Connector   | Terminal    | Ground  | Continuity |
| T14         | 2           | Giodila | Existed    |
| 114         | 3           |         | Existeu    |

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

### REAR DOOR CLOSURE CONTROL UNIT

REAR DOOR CLOSURE CONTROL UNIT: Diagnosis Procedure

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### 1. CHECK REAR DOOR CLOSURE CONTROL UNIT POWER SUPPLY

- 1. Turn ignition switch OFF.
- Disconnect rear door closure control unit connector.
- Check voltage between rear door closure control unit harness connector and ground.

| (+)                     |          |     | Valtara              |  |
|-------------------------|----------|-----|----------------------|--|
| Rear door closure contr | ol unit  | (–) | Voltage<br>(Approx.) |  |
| Connector               | Terminal |     | ( FF - /             |  |
|                         |          |     |                      |  |

### Revision: September 2015 DLK-85 2016 Q70

### POWER SUPPLY AND GROUND CIRCUIT

### < DTC/CIRCUIT DIAGNOSIS >

| LH | D65 | 6 | Ground | 12.1/ |
|----|-----|---|--------|-------|
| RH | D85 | U | Ground | 12 V  |

### Is the inspection result normal?

YES >> GO TO 3. NO >> GO TO 2.

## 2.CHECK REAR DOOR CLOSURE CONTROL UNIT CIRCUIT

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

| В         | СМ       | Rear door closure control unit |     |          | Continuity |
|-----------|----------|--------------------------------|-----|----------|------------|
| Connector | Terminal | Connector                      |     | Terminal | Continuity |
| M122      | 69       | LH                             | D65 | 6        | Existed    |
| IVI IZZ   | 09       | RH                             | D85 | 0        | LAISIEU    |

3. Check continuity between BCM harness connector and ground.

| В         | CM                 |  | Continuity  |
|-----------|--------------------|--|-------------|
| Connector | Connector Terminal |  | Continuity  |
| M122      | 69                 |  | Not existed |

### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".

NO >> Repair or replace harness.

### 3. CHECK GROUND CIRCUIT

Check continuity between rear door closure control unit harness connector and ground.

| Rear door closure control unit |                    |   |        | Continuity |
|--------------------------------|--------------------|---|--------|------------|
| Con                            | Connector Terminal |   | Ground | Continuity |
| LH                             | D65                | 2 | Ground | Existed    |
| RH                             | D85                | 2 |        | Existed    |

### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

### **DOOR SWITCH**

### < DTC/CIRCUIT DIAGNOSIS >

### **DOOR SWITCH**

### Component Function Check

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### 1. CHECK FUNCTION

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

| Monitor item | Condition           |        | Status |
|--------------|---------------------|--------|--------|
| DOOR SW-DR   | Driver side door    | Open   | On     |
| DOOK SW-DK   | Driver side door    | Closed | Off    |
| DOOR SW-AS   | Passenger side door | Open   | On     |
|              |                     | Closed | Off    |
| DOOR SW-RL   | Rear side door LH   | Open   | On     |
|              |                     | Closed | Off    |
| DOOR SW-RR   | Rear side door RH   | Open   | On     |
|              |                     | Closed | Off    |

#### Is the inspection result normal?

YES >> Door switch is OK.

NO >> Refer to <u>DLK-87</u>, "<u>Diagnosis Procedure</u>".

### Diagnosis Procedure

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## 1. CHECK DOOR SWITCH INPUT SIGNAL

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

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|          | (+)<br>Door switch |          | (-)    | Signal  |
|----------|--------------------|----------|--------|---|
| Con      | nector             | Terminal |        | (Reference value)                                 |
| Front LH | B16                |          |        | (V) 15 10 5 0 JPMIA0011GB                         |
| Front RH | B216               | 2        | Ground | (V)<br>15<br>10<br>5<br>0<br>10 ms<br>JPMIA0011GB |
| Rear LH  | B23                | 2        | Glound | (V) 15 10 5 0 10 ms  JPMIA0011GB                  |
| Rear RH  | B223               |          |        | (V)<br>15<br>10<br>5<br>0<br>10 ms<br>JPMIA0011GB |

### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2.CHECK DOOR SWITCH CIRCUIT

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

| В         | M Door switch |                 | BCM      |            | Door switch |  |
|-----------|---------------|-----------------|----------|------------|-------------|--|
| Connector | Terminal      | Connector       | Terminal | Continuity |             |  |
|           | 47            | B16 (Front LH)  |          |            |             |  |
| M121      | 45            | B216 (Front RH) | 2        | Existed    |             |  |
| IVITZT    | 48            | B23 (Rear LH)   | 2        |            |             |  |
|           | 46            | B223 (Rear RH)  |          |            |             |  |

3. Check continuity between BCM harness connector and ground.

### **DOOR SWITCH**

### < DTC/CIRCUIT DIAGNOSIS >

| Ī.        | BCM      |        | Continuity  |  |
|-----------|----------|--------|-------------|--|
| Connector | Terminal |        | Continuity  |  |
|           | 47       | Ground |             |  |
| M121      | 45       | Giouna | Not existed |  |
| IVI 12 I  | 48       |        | Not existed |  |
|           | 46       |        |             |  |

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".

NO >> Repair or replace harness.

## 3. CHECK DOOR SWITCH

Refer to DLK-89, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace malfunctioning door switch.

### 4. CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

#### >> INSPECTION END

### Component Inspection

## 1. CHECK DOOR SWITCH

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

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

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace malfunctioning door switch.

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### DOOR REQUEST SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

### DOOR REQUEST SWITCH

### Component Function Check

### 1. CHECK FUNCTION

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

| Monitor item | Condition                           |          | Status |
|--------------|-------------------------------------|----------|--------|
| REQ SW -DR   | Driver side door request switch     | Pressed  | On     |
| NEQ 3W -DIX  | Driver side door request switch     | Released | Off    |
| REQ SW -AS   | Passenger side door request switch  | Pressed  | On     |
| NEW OW -AO   | r assenger side door request switch | Released | Off    |

#### Is the inspection result normal?

YES >> Door request switch is OK.

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

### Diagnosis Procedure

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### 1. CHECK DOOR REQUEST SWITCH INPUT SIGNAL

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

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

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2. CHECK DOOR REQUEST SWITCH CIRCUIT

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

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

3. Check continuity between BCM harness connector and ground.

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

#### Is the inspection result normal?

### DOOR REQUEST SWITCH

### < DTC/CIRCUIT DIAGNOSIS >

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".

NO >> Repair or replace harness.

## 3.check door request switch ground circuit

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

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

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4. CHECK DOOR REQUEST SWITCH

Refer to DLK-91, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace malfunctioning front outside handle assembly.

### 5. CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

## Component Inspection

1. CHECK DOOR REQUEST SWITCH

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

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

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front outside handle.

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### DOOR KEY CYLINDER SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

### DOOR KEY CYLINDER SWITCH

### Component Function Check

INFOID:0000000012352683

### 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  | Condition                       |                  | Status |
|---------------|---------------------------------|------------------|--------|
| KEY CYL LK-SW |                                 | Lock             | ON     |
|               | - Driver side door key cylinder | Neutral / Unlock | OFF    |
| KEY CYL UN-SW |                                 | Unlock           | ON     |
|               |                                 | Neutral / Lock   | OFF    |

### Is the inspection result normal?

YES >> Door key cylinder switch is OK.

NO >> Refer to <u>DLK-92, "Diagnosis Procedure"</u>.

### Diagnosis Procedure

INFOID:0000000012352684

## 1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

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

| (+)                                    |          |        |                      |  |
|--|----------|--------|----------------------|--|
| Front door lock assembly (driver side) |          | (–)    | Voltage<br>(Approx.) |  |
| Connector                              | Terminal |        | ( 44)                |  |
| D15                                    | 5        | Ground | 5 V                  |  |
| טוט                                    | 6        | Giouna | 5 V                  |  |

#### Is the inspection result normal?

YES >> GO TO 3. NO >> GO TO 2.

## 2.CHECK DOOR KEY CYLINDER SWITCH SIGNAL CIRCUIT

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

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

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

| Power window main switch |          |         | Continuity  |
|--------------------------|----------|---------|-------------|
| Connector                | Terminal | Ground  | Continuity  |
| D22                      | 15       | Giodila | Not existed |
| DZZ                      | 16       |         | NOT EXISTED |

#### Is the inspection result normal?

YES >> Replace power window main switch. Refer to <a href="PWC-74">PWC-74</a>, "Removal and Installation".

### DOOR KEY CYLINDER SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness.

## ${f 3.}$ CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

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

| Front door lock as: | Front door lock assembly (driver side) |        | Continuity |
|---------------------|--|--------|------------|
| Connector           | Terminal                               | Ground | Continuity |
| D15                 | 4                                      |        | Existed    |

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4. CHECK DOOR KEY CYLINDER SWITCH

Refer to DLK-93, "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-45, "Intermittent Incident".

>> INSPECTION END

### Component Inspection

1. CHECK DOOR KEY CYLINDER SWITCH

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

| Front door lock assembly (driver side) |                               | Condition |                  | Continuity  |
|--|-------------------------------|-----------|------------------|-------------|
| Terminal                               |                               |           |                  | Continuity  |
| 5                                      |                               |           | Unlock           | Existed     |
| 3                                      | 4                             |           | Neutral / Lock   | Not existed |
| 6                                      | Driver side door key cylinder | Lock      | Existed          |             |
|  |                               |           | Neutral / Unlock | Not existed |

### Is the inspection result normal?

YES >> INSPECTION END

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

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### DOOR LOCK AND UNLOCK SWITCH

### < DTC/CIRCUIT DIAGNOSIS >

### DOOR LOCK AND UNLOCK SWITCH

### Component Function Check

#### INFOID:0000000012352686

### 1. CHECK FUNCTION

- 1. 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   |                               | Lock   | ON     |
|               | - Door lock and unlock switch | Unlock | OFF    |
| CDL UNLOCK SW |                               | Lock   | OFF    |
|               |                               | Unlock | ON     |

#### Is the inspection result normal?

YES >> Door lock and unlock switch is OK.

NO >> Refer to <u>DLK-94, "Diagnosis Procedure"</u>.

### Diagnosis Procedure

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### 1. CHECK POWER WINDOW SWITCH

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

### Does power window operate?

YES >> Replace power window main switch.

NO >> Refer to <u>PWC-61</u>, "<u>Diagnosis Procedure</u>".

#### < DTC/CIRCUIT DIAGNOSIS >

### DOOR LOCK ACTUATOR

### DRIVER SIDE

### DRIVER SIDE : Component Function Check

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### 1. CHECK FUNCTION

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

### Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to <u>DLK-95</u>, "<u>DRIVER SIDE</u>: <u>Diagnosis Procedure</u>".

## DRIVER SIDE : Diagnosis Procedure

## INFOID:0000000012352689

## 1. CHECK DOOR LOCK ACTUATOR OUTPUT SIGNAL

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

| (+) Front door lock assembly (driver side) |                      | (–)         | Condition         |      | Voltage<br>(Approx.) |
|--|----------------------|-------------|-------------------|------|----------------------|
| Connector                                  | Terminal             |             |                   |      | ( ) 7                |
| D15  | 1                    | Ground      | Door lock and un- | Lock | 12 V                 |
| פום  | 2 Ground lock switch | lock switch | Unlock            | 12 V |                      |

#### Is the inspection result normal?

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

NO >> GO TO 2.

## 2.CHECK DOOR LOCK ACTUATOR CIRCUIT

Disconnect BCM connector.

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

| В         | СМ       | Front door lock assembly (driver side) |   | Continuity |  |
|-----------|----------|--|---|------------|--|
| Connector | Terminal | Connector Terminal                     |   | Continuity |  |
| M122      | 65       | D15                                    | 1 | Existed    |  |
| IVI 122   | 66       | D13                                    | 2 | LXISIGU    |  |

3. Check continuity between BCM harness connector and ground.

| BCM       |          |         | Continuity  |
|-----------|----------|---------|-------------|
| Connector | Terminal | Ground  | Continuity  |
| M122      | 65       | Giodila | Not existed |
| IVITZZ    | 66       |         | Not existed |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### $oldsymbol{3}.$ CHECK BCM OUTPUT SIGNAL

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

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#### < DTC/CIRCUIT DIAGNOSIS >

|           | +)<br>CM | (–)    | Condition                   |        | Voltage<br>(Approx.) |
|-----------|----------|--------|-----------------------------|--------|----------------------|
| Connector | Terminal |        |                             |        | ( + )                |
| M122      | 65       | Ground | Door lock and unlock switch | Lock   | - 12 V               |
| 101122    | 66       | Ground |                             | Unlock |                      |

#### Is the inspection result normal?

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

NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

### PASSENGER SIDE

### PASSENGER SIDE: Component Function Check

INFOID:0000000012352690

### 1. CHECK FUNCTION

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

### Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to <u>DLK-96</u>, "PASSENGER SIDE : <u>Diagnosis Procedure"</u>.

### PASSENGER SIDE: Diagnosis Procedure

INFOID:0000000012352691

### 1. CHECK DOOR LOCK ACTUATOR OUTPUT SIGNAL

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

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

#### Is the inspection result normal?

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

NO >> GO TO 2.

### 2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

| BCM       |          | Front door lock asser | Continuity |            |  |
|-----------|----------|-----------------------|------------|------------|--|
| Connector | Terminal | Connector             | Terminal   | Continuity |  |
| M122      | 59       | D45                   | 1          | Existed    |  |
| IVI122    | 65       | D40                   | 2          | LXISTEG    |  |

3. Check continuity between BCM harness connector and ground.

#### < DTC/CIRCUIT DIAGNOSIS >

| В         | CM       |        | Continuity  |  |
|-----------|----------|--------|-------------|--|
| Connector | Terminal | Ground |             |  |
| M122      | 59       | Ground | Not existed |  |
| IVI IZZ   | 65       |        | Not existed |  |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3. CHECK BCM OUTPUT SIGNAL

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

| (+)<br>BCM |          | (–)     | Condition                   |        | Voltage<br>(Approx.) |
|------------|----------|---------|-----------------------------|--------|----------------------|
| Connector  | Terminal |         |                             |        |                      |
| M122       | 59       | Ground  | Door lock and unlock switch | Unlock | 12 V                 |
| IVITZZ     | 65       | Giodila | Door lock and unlock switch | Lock   | 12 V                 |

### Is the inspection result normal?

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

NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

#### REAR LH

### REAR LH: Component Function Check

## 1. CHECK FUNCTION

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

#### Is the inspection result normal?

YES >> Door lock actuator is OK.

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

### REAR LH: Diagnosis Procedure

## 1. CHECK DOOR LOCK ACTUATOR OUTPUT SIGNAL

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

### Without rear door auto closure system

|           | (+) Rear door lock assembly LH |        | Condition         |        | Voltage<br>(Approx.) |
|-----------|--------------------------------|--------|-------------------|--------|----------------------|
| Connector | Terminal                       |        |                   |        | (rippiox.)           |
| D55       | 1                              | Ground | Door lock and un- | Lock   | 12 V                 |
| D33       | 2                              | Ground | lock switch       | Unlock | - 12 V               |

#### With rear door auto closure system

| (+) Rear door lock assembly LH |          | (–)    | Condition         |        | Voltage<br>(Approx.) |
|--------------------------------|----------|--------|-------------------|--------|----------------------|
| Connector                      | Terminal |        |                   |        | (                    |
| D62                            | 1        | Ground | Door lock and un- | Lock   | 12 V                 |
|                                | 3        | Ground | lock switch       | Unlock | 12 V                 |

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#### < DTC/CIRCUIT DIAGNOSIS >

#### Is the inspection result normal?

YES >> Replace rear door lock assembly LH.

NO >> GO TO 2.

## 2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM connector.

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

Without rear door auto closure system

| BCM                      |                | Rear door lock | 0                          |                     |
|--------------------------|----------------|----------------|----------------------------|---------------------|
| Connector                | Terminal       | Connector      | Terminal                   | - Continuity        |
| M122                     | 55             | DEE            | 2                          | Cylintod            |
| IVI 122                  | 65             | _ D55          | 1                          | Existed             |
| ith rear door auto closu | re system      |                |                            |                     |
| ВС                       | BCM            |                | Rear door lock assembly LH |                     |
|                          |                |                |                            | Continuity          |
| Connector                | Terminal       | Connector      | Terminal                   | - Continuity        |
| Connector M122           | Terminal<br>55 | Connector D62  | Terminal<br>3              | Continuity  Existed |

3. Check continuity between BCM harness connector and ground.

| В         | CM       |        | Continuity  |  |
|-----------|----------|--------|-------------|--|
| Connector | Terminal | Ground | Continuity  |  |
| M122      | 55       | Ground | Not existed |  |
| M122      | 65       |        | NOT EXISTED |  |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3.CHECK BCM OUTPUT SIGNAL

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

|           | +)<br>CM | (–)    | Condition                   |        | Voltage<br>(Approx.) |
|-----------|----------|--------|-----------------------------|--------|----------------------|
| Connector | Terminal |        |                             |        | (, (ppiox.)          |
| M122      | 55       | Ground | Door lock and unlock switch | Unlock | - 12 V               |
| IVI 1 Z Z | 65       | Giouna | Door lock and unlock switch | Lock   |                      |

### Is the inspection result normal?

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

NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

#### REAR RH

### REAR RH: Component Function Check

INFOID:0000000012352694

### 1. CHECK FUNCTION

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

### Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to <u>DLK-99</u>, "<u>REAR RH</u>: <u>Diagnosis Procedure</u>".

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#### < DTC/CIRCUIT DIAGNOSIS >

### REAR RH: Diagnosis Procedure

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## 1. CHECK DOOR LOCK ACTUATOR OUTPUT SIGNAL

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

Without rear door auto closure system

| (+)                        |          |        |                                |        | Valla a              |
|----------------------------|----------|--------|--------------------------------|--------|----------------------|
| Rear door lock assembly RH |          | (–)    | Con                            | dition | Voltage<br>(Approx.) |
| Connector                  | Terminal |        |                                |        | ( ) ,                |
| D75                        | 1        | Ground | nd Door lock and unlock switch | Unlock | 12 V                 |
| <i>D1</i> 3                | 2        | Ground |                                | Lock   |                      |

With rear door auto closure system

| (+) Rear door lock assembly RH |          | (–)     | (–) Condition |        | Voltage<br>(Approx.) |
|--------------------------------|----------|---------|---------------|--------|----------------------|
| Connector                      | Terminal |         |               |        | (·                   |
| D82                            | 3        | Ground  | Door lock and | Unlock | 12 V                 |
|                                | 1        | Gloulia | unlock switch | Lock   | 12 V                 |

#### Is the inspection result normal?

YES >> Replace rear door lock assembly RH.

NO >> GO TO 2.

### 2. CHECK DOOR LOCK ACTUATOR CIRCUIT

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

Without rear door auto closure system

| Bo                                 | CM       | Rear door lock assembly RH |          | Continuity |
|------------------------------------|----------|----------------------------|----------|------------|
| Connector                          | Terminal | Connector                  | Terminal | Continuity |
| M122                               | 55       | D75                        | 1        | Existed    |
| IVITZZ                             | 65       | J D/3                      | 2        |            |
| With rear door auto closure system |          |                            |          |            |

| ВСМ       |          | Rear door lock assembly RH |          | Continuity |
|-----------|----------|----------------------------|----------|------------|
| Connector | Terminal | Connector                  | Terminal | Continuity |
| M122      | 55       | D82                        | 3        | Existed    |
| IVITZZ    | 65       | D02                        | 1        | LXISIEU    |

3. Check continuity between BCM harness connector and ground.

| E         | BCM      |        | Continuity  |
|-----------|----------|--------|-------------|
| Connector | Terminal | Ground | Continuity  |
| M122      | 55       |        | Not Existed |
| IVI 122   | 65       |        |             |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3.CHECK BCM OUTPUT SIGNAL

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

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### < DTC/CIRCUIT DIAGNOSIS >

| (+)<br>BCM |          | (–)    | Condition                   |        | Voltage<br>(Approx.) |
|------------|----------|--------|-----------------------------|--------|----------------------|
| Connector  | Terminal |        |                             |        | (Αρρίολ.)            |
| M122       | 55       | Ground | Door lock and unlock switch | Unlock | 12 V                 |
| IVI I ZZ   | 65       | Giouna | Door lock and unlock switch | Lock   | 12 V                 |

### Is the inspection result normal?

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

NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

### TRUNK LID OPEN SIGNAL CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

### TRUNK LID OPEN SIGNAL CIRCUIT

Description INFOID:0000000012352696

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

### Component Function Check

## INFOID:0000000012352697

### ${f 1}$ .CHECK TRUNK LID OPENER CANCEL SWITCH

Check trunk lid opener cancel switch position.

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

YES >> Turn on trunk lid opener cancel switch.

NO >> GO TO 2.

## 2.CHECK BCM OUTPUT SIGNAL CIRCUIT

Turn ignition switch ON.

- Select "TRUNK/BACK DOOR" in "Active Test" mode of "INTELLIGENT KEY" of "BCM" using CONSULT. 2.
- Touch "OPEN".
- Check that trunk lid opens normally.

#### Is the inspection result normal?

YES >> GO TO 3.

>> Refer to DLK-101, "Diagnosis Procedure". NO

### ${f 3.}$ CHECK BCM INPUT SIGNAL CIRCUIT

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

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

#### Is the inspection result normal?

YES >> INSPECTION END

>> Refer to DLK-101, "Diagnosis Procedure". NO

### Diagnosis Procedure

1.INSPECTION START

Check that which circuit is malfunctioning. Refer to DLK-101, "Component Function Check".

### Which circuit is malfunctioning?

Output signal circuit>>GO TO 2.

Input signal circuit>>GO TO 4.

## 2.CHECK TRUNK LID OPEN REQUEST SIGNAL

1. Turn ignition switch ON.

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

|           | re assembly | (–)    | CONSULT Active Test condition |      | Voltage (V)<br>(Approx.)         |
|-----------|-------------|--------|-------------------------------|------|----------------------------------|
| Connector | Terminal    |        |                               |      |                                  |
| T14       | 1           | Ground | TRUNK/GLASS HATCH             | OPEN | $0 \rightarrow 12 \rightarrow 0$ |

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 3. DLK

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### TRUNK LID OPEN SIGNAL CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

## 3. CHECK TRUNK LID OPEN REQUEST SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect negative battery cable.
- Disconnect BCM connector.
- 4. Disconnect trunk closure assembly harness connector.
- 5. Check continuity between BCM harness connector and trunk closure assembly harness connector.

| В         | ВСМ      |           | re assembly | Continuity |
|-----------|----------|-----------|-------------|------------|
| Connector | Terminal | Connector | Terminal    | Continuity |
| M121      | 53       | T14       | 1           | Existed    |

6. Check continuity between BCM harness connector and ground.

| В         | CM       |        | Continuity  |
|-----------|----------|--------|-------------|
| Connector | Terminal | Ground | Continuity  |
| M121      | 53       |        | Not existed |

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".

NO >> Repair harness or connector.

### 4. CHECK TRUNK LID OPEN/CLOSE STATUS SIGNAL

1. Check voltage between BCM harness connector and ground under the following conditions.

|           | (+)<br>CM | (–)    | Condition  |        | Voltage (V)<br>(Approx.) |
|-----------|-----------|--------|------------|--------|--------------------------|
| Connector | Terminal  |        |            |        |                          |
| M121      | 42        | Ground | Trunk lid  | Open   | 0                        |
| IVITZT    | 42        | Ground | TTUTIK IIU | Closed | 12                       |

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

### ${f 5}.$ CHECK TRUNK LID OPEN/CLOSE STATUS SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect negative battery cable.
- 3. Disconnect BCM connector.
- 4. Disconnect trunk closure assembly harness connector.
- 5. Check continuity between BCM harness connector and trunk closure assembly harness connector.

| В         | СМ       | Trunk closure assembly |          | Continuity |
|-----------|----------|------------------------|----------|------------|
| Connector | Terminal | Connector              | Terminal | Continuity |
| M121      | 42       | T14                    | 5        | Existed    |

6. Check continuity between BCM harness connector and ground.

| _ | ВС        | CM       |        | Continuity  |
|---|-----------|----------|--------|-------------|
| _ | Connector | Terminal | Ground | Continuity  |
|   | M121      | 42       |        | Not existed |

#### Is the inspection result normal?

YES >> Replace trunk closure assembly. Refer to <u>DLK-221, "Removal and Installation"</u>.

NO >> Repair harness or connector.

### **O.**CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

### TRUNK LID OPEN SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

>> INSPECTION END

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### TRUNK LID OPENER REQUEST SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

### TRUNK LID OPENER REQUEST SWITCH

### Component Function Check

#### INFOID:0000000012352699

### 1. CHECK FUNCTION

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

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

#### Is the inspection result normal?

YES >> Trunk lid opener request switch is OK.

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

### Diagnosis Procedure

INFOID:0000000012352700

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

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

| (                               | (+)      |        | Voltage<br>(Approx.) |  |
|---------------------------------|----------|--------|----------------------|--|
| Trunk lid opener request switch |          | (–)    |                      |  |
| Connector                       | Terminal |        | <b>,</b> , ,         |  |
| T4                              | 1        | Ground | 12 V                 |  |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

### 2.CHECK TRUNK LID OPENER REQUEST SWITCH CIRCUIT

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

| В         | CM       | Trunk lid opener request switch |          | Continuity |
|-----------|----------|---------------------------------|----------|------------|
| Connector | Terminal | Connector                       | Terminal | Continuity |
| M121      | 51       | T4                              | 1        | Existed    |

Check continuity between BCM harness connector and ground.

| BCM       |          |        | Continuity  |  |
|-----------|----------|--------|-------------|--|
| Connector | Terminal | Ground | Continuity  |  |
| M121      | 51       |        | Not existed |  |

#### Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-95</u>, "Removal and Installation".

NO >> Repair or replace harness.

## 3.check trunk lid opener request switch ground circuit

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

### TRUNK LID OPENER REQUEST SWITCH

### < DTC/CIRCUIT DIAGNOSIS >

| Trunk lid opener request switch |          |        | Continuity |
|---------------------------------|----------|--------|------------|
| Connector                       | Terminal | Ground | Continuity |
| T4                              | 2        |        | Existed    |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK TRUNK LID OPENER REQUEST SWITCH

Refer to DLK-105, "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-45, "Intermittent Incident".

>> INSPECTION END

## Component Inspection

INFOID:0000000012352701

## 1. CHECK TRUNK LID OPENER REQUEST SWITCH

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

| Trunk lid opener request switch Terminal |   | Condition    |          | Continuity  |
|--|---|--------------|----------|-------------|
|  |   |              |          |             |
| '  | 2 | quest switch | Released | Not existed |

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace trunk lid opener request switch. DLK

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### TRUNK LID OPENER SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

### TRUNK LID OPENER SWITCH

### Component Function Check

## 1. CHECK FUNCTION

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

| Monitor item           | Condition               |          | Status |
|------------------------|-------------------------|----------|--------|
| TR/BD OPEN SW Trunk li | Trunk lid opener switch | Pressed  | On     |
| TIVED OF LIVOW         | Trunk lid opener switch | Released | Off    |

### Is the inspection result normal?

YES >> Trunk lid opener switch is OK.

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

### Diagnosis Procedure

INFOID:0000000012352703

INFOID:0000000012352702

## 1. CHECK TRUNK LID OPENER INPUT SIGNAL

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

|      | +) pener switch Terminal | (-)    | Signal<br>(Reference value)                       |
|------|--------------------------|--------|---|
| M187 | 1                        | Ground | (V)<br>15<br>10<br>5<br>0<br>10 ms<br>JPMIA0012GB |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2.CHECK TRUNK LID OPENER SWITCH CIRCUIT

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

| В         | BCM      |           | Trunk lid opener switch |            |
|-----------|----------|-----------|-------------------------|------------|
| Connector | Terminal | Connector | Terminal                | Continuity |
| M120      | 30       | M187      | 1                       | Existed    |

3. Check continuity between BCM harness connector and ground.

| ВСМ       |          |        | Continuity  |
|-----------|----------|--------|-------------|
| Connector | Terminal | Ground | Continuity  |
| M120      | 30       |        | Not existed |

### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".

NO >> Repair or replace harness.

### TRUNK LID OPENER SWITCH

### < DTC/CIRCUIT DIAGNOSIS >

## 3. CHECK TRUNK LID OPENER SWITCH GROUND CIRCUIT

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

| Trunk lid opener switch |          |        | Continuity |
|-------------------------|----------|--------|------------|
| Connector               | Terminal | Ground | Continuity |
| M187                    | 2        |        | Existed    |

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4. CHECK TRUNK LID OPENER SWITCH

Refer to DLK-107, "Component Inspection".

### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace trunk lid opener switch.

### 5. CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

## Component Inspection

1. CHECK TRUNK LID OPENER SWITCH

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

| Trunk lid opener switch |       | Condition               |         | Continuity  |
|-------------------------|-------|-------------------------|---------|-------------|
| Terr                    | minal | Con                     | aition  | Continuity  |
| 1                       | 2     | Trunk lid opener switch | Pressed | Existed     |
| · ·                     | 2     | Trunk ilu opener switch | Release | Not existed |

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace trunk lid opener switch.

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### TRUNK LID OPENER CANCEL SWITCH

### < DTC/CIRCUIT DIAGNOSIS >

### TRUNK LID OPENER CANCEL SWITCH

### Component Function Check

#### INFOID:0000000012352705

### 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                            | Status   |     |
|----------------|--------------------------------|----------|-----|
| TR CANCEL SW   | Trunk lid opener cancel switch | Pressed  | On  |
| THE OFFICE OVE |                                | Released | Off |

#### Is the inspection result normal?

YES >> Trunk lid opener cancel switch is OK.

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

### Diagnosis Procedure

INFOID:0000000012352706

## 1. CHECK TRUNK LID OPENER CANCEL INPUT SIGNAL

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

| (+) Trunk lid opener cancel switch Connector Terminal |   | (–)    | Signal<br>(Reference value)    |  |
|---|---|--------|--------------------------------|--|
| M18   | 1 | Ground | (V) 15 10 5 10 ms  JPMIA0012GB |  |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2.CHECK TRUNK LID OPENER SWITCH CIRCUIT

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

| ВСМ       |          | Trunk lid opener cancel switch |          | Continuity |
|-----------|----------|--------------------------------|----------|------------|
| Connector | Terminal | Connector                      | Terminal | Continuity |
| M121      | 44       | M18                            | 1        | Existed    |

3. Check continuity between BCM harness connector and ground.

| В         | CM       | Ground | Continuity  |
|-----------|----------|--------|-------------|
| Connector | Terminal |        |             |
| M121      | 44       |        | Not existed |

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".

NO >> Repair or replace harness.

### TRUNK LID OPENER CANCEL SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

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

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

| Trunk lid open | er cancel switch   |  | Continuity |
|----------------|--------------------|--|------------|
| Connector      | Connector Terminal |  | Continuity |
| M18            | 2                  |  | Existed    |

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4. CHECK TRUNK LID OPENER CANCEL SWITCH

Refer to DLK-109, "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-45, "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 Terminal |   | Condition             |                | Continuity  |  |
|---|---|-----------------------|----------------|-------------|--|
|   |   |                       |                | Continuity  |  |
| 1                                       | 2 | Trunk lid opener can- | Press and hold | Existed     |  |
| 1                                       | 2 | cel switch            | Release        | Not existed |  |

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace trunk lid opener cancel switch.

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### TRUNK CLOSURE ASSEMBLY

#### < DTC/CIRCUIT DIAGNOSIS >

### TRUNK CLOSURE ASSEMBLY

### Component Function Check

#### INFOID:0000000012352708

### 1. CHECK TRUNK LID OPEN OPERATION

- 1. Check that trunk lid is fully closed.
- Check that trunk lid opener cancel switch is turned ON.
- 3. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- Select "TRUNK/GLASS HATCH" in "ACTIVE TEST" mode.
- Touch "OPEN" to check that trunk lid opens normally.

#### Is the inspection result normal?

YES >> GO TO 2.

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

### 2.CHECK TRUNK LID AUTO CLOSE OPERATION

- 1. Close trunk lid manually to the half latched position. (Clicking noise is heard.)
- Check that trunk lid is retracted to the fully closed position and locked.

### Is the inspection result normal?

YES >> INSPECTION END

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

### Diagnosis Procedure

INFOID:0000000012352709

### 1. CHECK POWER SUPPLY AND GROUND CIRCUIT

Check trunk closure assembly power supply and ground circuit.

Refer to <u>DLK-85</u>, "TRUNK CLOSURE CONTROL UNIT : Diagnosis Procedure".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

### 2.CHECK TRUNK LID OPEN SIGNAL CIRCUIT

Check trunk lid open signal circuit.

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

#### Is the inspection result normal?

YES >> Replace trunk closure assembly. Refer to <u>DLK-221, "Removal and Installation"</u>.

NO >> Repair harness or connector.

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

#### < DTC/CIRCUIT DIAGNOSIS >

### **FUEL LID LOCK ACTUATOR**

### Component Function Check

### 1. CHECK FUNCTION

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

#### Is the inspection result normal?

YES >> Fuel lid lock actuator is OK.

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

### Diagnosis Procedure

### 1. CHECK FUEL LID LOCK ACTUATOR INPUT SIGNAL

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

| (+                     | )        |         |               |        | Mallana              |
|------------------------|----------|---------|---------------|--------|----------------------|
| Fuel lid lock actuator |          | (–)     | Condition     |        | Voltage<br>(Approx.) |
| Connector              | Terminal |         |               |        | ( 11 - 7             |
| B242                   | 1        | Ground  | Door lock and | Unlock | 12 V                 |
|                        | 2        | Giodila | unlock switch | Lock   | 12 V                 |

#### Is the inspection result normal?

YES >> Replace fuel lid lock actuator.

NO >> GO TO 2.

### 2. CHECK FUEL LID LOCK ACTUATOR CIRCUIT

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

| Е         | BCM      | Fuel lid lock actuator |   | Continuity |
|-----------|----------|------------------------|---|------------|
| Connector | Terminal | Connector Terminal     |   | Continuity |
| M122      | 65       | B242                   | 2 | Existed    |
| IVI I Z Z | 66       | D242                   | 1 | Existed    |

3. Check continuity between BCM harness connector and ground.

|           | BCM      |        | Continuity  |
|-----------|----------|--------|-------------|
| Connector | Terminal | Ground | Continuity  |
| M122      | 65       | Giouna | Not existed |
| IVITZZ    | 66       |        | Not existed |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### 3.CHECK BCM OUTPUT SIGNAL

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

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### **FUEL LID LOCK ACTUATOR**

### < DTC/CIRCUIT DIAGNOSIS >

| `         | (+)<br>BCM (–) Condition |         | Condition                   |        | Voltage<br>(Approx.) |
|-----------|--------------------------|---------|-----------------------------|--------|----------------------|
| Connector | Terminal                 |         |                             |        | (                    |
| M122      | 65                       | Ground  | Door lock and unlock switch | Lock   | 12 V                 |
| IVITZZ    | 66                       | Giodila | Door lock and unlock switch | Unlock | 12 V                 |

### Is the inspection result normal?

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

NO >> Replace BCM. Refer to <u>BCS-95</u>, "Removal and Installation".

#### < DTC/CIRCUIT DIAGNOSIS >

### REMOTE KEYLESS ENTRY RECEIVER

### Component Function Check

1. CHECK FUNCTION

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

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

#### Is the inspection result normal?

YFS >> Remote keyless entry receiver is OK.

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

### Diagnosis Procedure

### 1. CHECK BCM SIGNAL 1

Turn ignition switch OFF.

2. Disconnect remote keyless entry receiver connector.

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

| (-            | +)               |        | Mallana (10)             |
|---------------|------------------|--------|--------------------------|
| Remote keyles | s entry receiver | (-)    | Voltage (V)<br>(Approx.) |
| Connector     | Terminal         |        | (11 - )                  |
| M104          | 4                | Ground | 5                        |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

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

Disconnect BCM connector.

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

| В         | CM       | Remote keyles | s entry receiver | Continuity |
|-----------|----------|---------------|------------------|------------|
| Connector | Terminal | Connector     | Terminal         | Continuity |
| M123      | 110      | M104          | 4                | Existed    |

Check continuity between BCM harness connector and ground.

| ВС                 | CM  |        | Continuity  |
|--------------------|-----|--------|-------------|
| Connector Terminal |     | Ground | Continuity  |
| M123               | 110 |        | Not existed |

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".

NO >> Repair or replace harness.

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

Reconnect remote keyless entry receiver connector.

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

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#### < DTC/CIRCUIT DIAGNOSIS >

| Remote keyles Connector | s entry receiver  Terminal | (-)    | Signal<br>(Reference value)                              |
|-------------------------|----------------------------|--------|--|
| M104                    | 4                          | Ground | (V)<br>15<br>10<br>5<br>0<br>10<br>500 ms<br>JMKIA3838GB |

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace remote keyless entry receiver. Refer to <u>DLK-235</u>, "Removal and Installation".

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

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

| ВСМ       |          | Remote keyless entry receiver |   | Continuity |  |
|-----------|----------|-------------------------------|---|------------|--|
| Connector | Terminal | Connector Terminal            |   | Continuity |  |
| M120      | 18       | M104                          | 1 | Existed    |  |

4. Check continuity between BCM harness connector and ground.

| В         | CM       |        | Continuity  |
|-----------|----------|--------|-------------|
| Connector | Terminal | Ground | Continuity  |
| M120      | 18       |        | Not existed |

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

### 5. CHECK BCM SIGNAL 2

- 1. Reconnect BCM connector.
- Check voltage between remote keyless entry receiver harness connector and ground.

|           | (+)  Remote keyless entry receiver |        | Voltage (V)<br>(Approx.) |
|-----------|------------------------------------|--------|--------------------------|
| Connector | Terminal                           | (0)    | (Approxi)                |
| M104      | 2                                  | Ground | 5                        |

#### Is the inspection result normal?

YES >> GO TO 7.

NO >> GO TO 6.

### 6. CHECK REMOTE KEYLESS ENTRY RECEIVER SIGNAL CIRCUIT

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

| В         | BCM      |                    | s entry receiver | Continuity |
|-----------|----------|--------------------|------------------|------------|
| Connector | Terminal | Connector Terminal |                  | Continuity |
| M123      | 71       | M104               | 2                | Existed    |

3. Check continuity between BCM harness connector and ground.

#### < DTC/CIRCUIT DIAGNOSIS >

| ВСМ       |                    |  | Continuity  |  |
|-----------|--------------------|--|-------------|--|
| Connector | Connector Terminal |  | Continuity  |  |
| M123      | 71                 |  | Not existed |  |

### Is the inspection result normal?

>> Replace BCM. Refer to BCS-95, "Removal and Installation". YES

NO >> Repair or replace harness.

### 7.CHECK REMOTE KEYLESS ENTRY RECEIVER SIGNAL

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

| (+) Remote keyless er | (+) Remote keyless entry receiver |         | Condition   | Signal<br>(Reference value)                      |  |
|-----------------------|-----------------------------------|---------|---|--|--|
| Connector             | Terminal                          |         |   | ,  |  |
| M104                  | 2                                 | Ground  | During waiting                                      | (V)<br>15<br>10<br>5<br>0<br>1 ms                |  |
| WITO                  |                                   | Ciodila | When operating either button on the Intelligent Key | (V)<br>15<br>10<br>5<br>0<br>1 ms<br>JMKIA0065GB |  |

#### Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace remote keyless entry receiver. Refer to <u>DLK-235, "Removal and Installation"</u>.

### 8.CHECK BCM SIGNAL 3

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

| (+) Remote keyless entry receiver |          |        | V II                     |  |
|-----------------------------------|----------|--------|--------------------------|--|
|                                   |          | (–)    | Voltage (V)<br>(Approx.) |  |
| Connector                         | Terminal |        | (11 - )                  |  |
| M104                              | 3        | Ground | 5                        |  |

#### Is the inspection result normal?

YES >> GO TO 10.

NO >> GO TO 9.

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

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

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

Check continuity between BCM harness connector and ground.

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#### < DTC/CIRCUIT DIAGNOSIS >

| ВСМ       |                    |  | Continuity  |  |
|-----------|--------------------|--|-------------|--|
| Connector | Connector Terminal |  | Continuity  |  |
| M120      | 22                 |  | Not existed |  |

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".

NO >> Repair or replace harness.

## 10. CHECK REMOTE KEYLESS ENTRY RECEIVER RSSI SIGNAL

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

| (+) Remote keyless en | (+) Remote keyless entry receiver |        | Condition   | Signal<br>(Reference value)                      |  |
|-----------------------|-----------------------------------|--------|---|--|--|
| Connector             | Terminal                          |        |   | (13.3.3.3.3)                                     |  |
| M104                  | 3                                 | Ground | During waiting  | (V)<br>6<br>4<br>2<br>0<br>100 ms<br>JMKIA5952GB |  |
| IVI 104               | 3                                 | Glound | When pressing<br>and holding either<br>button on Intelli-<br>gent Key | (V)<br>6 4 2 0 100 ms JMKIA5953GB                |  |

#### Is the inspection result normal?

YES >> GO TO 11.

NO >> Replace remote keyless entry receiver. Refer to <u>DLK-235, "Removal and Installation"</u>.

11. CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

### UNLOCK SENSOR

### Component Function Check

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### 1. CHECK FUNCTION

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

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

#### Is the inspection result normal?

YES >> Unlock sensor is OK.

NO >> Refer to <u>DLK-117</u>, "<u>Diagnosis Procedure</u>".

### Diagnosis Procedure

#### INFOID:0000000012352715

### 1. CHECK BCM OUTPUT SIGNAL

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

| (+) Front door lock assembly (driver side) |          | Front door lock assembly (driver side) (-) |  |
|--|----------|--|--|
| Connector                                  | Terminal |  |  |
| D15  | 3        | Ground                                     | (V)<br>15<br>10<br>5<br>0<br>++10ms<br>PKIB4960J |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

### 2.check unlock sensor circuit

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

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

3. Check continuity between BCM harness connector and ground.

| В         | CM       |        | Continuity  |
|-----------|----------|--------|-------------|
| Connector | Terminal | Ground | Continuity  |
| M120      | 31       |        | Not existed |

#### Is the inspection result normal?

>> Replace BCM. Refer to BCS-95, "Removal and Installation". YES

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### **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 as | sembly (driver side) |        | Continuity |
|--------------------|----------------------|--------|------------|
| Connector          | Terminal             | Ground | Continuity |
| D15                | 4                    |        | Existed    |

### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4. CHECK UNLOCK SENSOR

Refer to DLK-118, "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-45, "Intermittent Incident".

#### >> INSPECTION END

### Component Inspection

INFOID:0000000012352716

### 1. CHECK UNLOCK SENSOR

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

| Front door lock assembly (driver side)  Terminal |          | Con                             | Continuity |             |
|--|----------|---------------------------------|------------|-------------|
|  |          | Con                             |            |             |
| 3  | 4        | Front door lock assembly (driv- | Unlock     | Existed     |
|  | er side) |                                 | Lock       | Not existed |

#### Is the inspection result normal?

YES >> INSPECTION END

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

### INTELLIGENT KEY WARNING BUZZER

#### < DTC/CIRCUIT DIAGNOSIS >

### INTELLIGENT KEY WARNING BUZZER

### Component Function Check

### 1. CHECK FUNCTION

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

#### Is the inspection result normal?

YES >> Intelligent Key warning buzzer is OK.

NO >> Refer to <u>DLK-119</u>, "<u>Diagnosis Procedure</u>".

### Diagnosis Procedure

### 1. CHECK FUSE

1. Turn ignition switch OFF.

2. Check 10 A fuse, [No.11, located in fuse block (J/B)].

#### Is the inspection result normal?

YES >> GO TO 2.

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

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

1. Disconnect Intelligent Key warning buzzer connector.

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

| (+)                            |          |        | Malla a a            |  |
|--------------------------------|----------|--------|----------------------|--|
| Intelligent Key warning buzzer |          | (–)    | Voltage<br>(Approx.) |  |
| Connector                      | Terminal |        | ,                    |  |
| E57                            | 1        | Ground | 12 V                 |  |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### ${f 3.}$ 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 |
| M123      | 93       | E57                            | 3 | Existed    |

Check continuity between BCM harness connector and ground.

| В         | CM       |        | Continuity  |
|-----------|----------|--------|-------------|
| Connector | Terminal | Ground | Continuity  |
| M123      | 93       |        | Not existed |

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4. CHECK INTELLIGENT KEY WARNING BUZZER

### Check DLK-120, "Component Inspection".

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".

NO >> Replace Intelligent Key warning buzzer.

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### INTELLIGENT KEY WARNING BUZZER

### < DTC/CIRCUIT DIAGNOSIS >

### **Component Inspection**

INFOID:0000000012352719

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

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

| Intelligent Key | warning buzzer |               |
|-----------------|----------------|---------------|
| Teri            | Operation      |               |
| (+)             | (-)            |               |
| 1               | 3              | Buzzer sounds |

#### Is the inspection result normal?

YES >> INSPECTION END

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

### INTELLIGENT KEY BATTERY

#### < DTC/CIRCUIT DIAGNOSIS >

### INTELLIGENT KEY BATTERY

### Component Inspection

### 1. CHECK INTELLIGENT KEY BATTERY

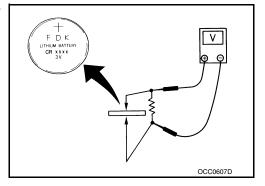
Check by connecting a resistance (approximately 300  $\Omega$ ) so that the current value becomes approximately 10 mA.

Standard : Approx. 2.5 - 3.0 V

Is the measurement value within the specification?

YES >> INSPECTION END

NO >> Replace Intelligent Key battery.



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#### INFORMATION DISPLAY

#### < DTC/CIRCUIT DIAGNOSIS >

### INFORMATION DISPLAY

### Component Function Check

#### INFOID:0000000012352721

### 1. CHECK FUNCTION

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "LCD" in "ACTIVE TEST" mode.
- 3. Check each warning display on meter display.

#### Is the inspection result normal?

- YES >> Information display is OK.
- NO >> Refer to <u>DLK-122</u>, "<u>Diagnosis Procedure</u>".

### Diagnosis Procedure

INFOID:0000000012352722

### 1. CHECK COMBINATION METER

Refer to MWI-31, "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-45, "Intermittent Incident".

>> INSPECTION END

#### **COMBINATION METER BUZZER**

### < DTC/CIRCUIT DIAGNOSIS > COMBINATION METER BUZZER Α Component Function Check INFOID:0000000012352723 1. CHECK FUNCTION В Select "INTELLIGENT KEY" of "BCM" using CONSULT. 2. Select "INSIDE BUZZER" in "ACTIVE TEST" mode. Touch "Take out", "Knob" or "Key" to check that it works normally. Is the inspection result normal? Yes >> Warning buzzer into combination meter is OK. No >> Refer to DLK-123, "Diagnosis Procedure". D Diagnosis Procedure INFOID:0000000012352724 Е 1. CHECK METER BUZZER CIRCUIT Refer to WCS-44, "Component Function Check". Is the inspection result normal? F Yes >> GO TO 2. No >> Repair or replace the malfunctioning parts. 2. CHECK INTERMITTENT INCIDENT Refer to GI-45, "Intermittent Incident". Н >> INSPECTION END

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### **HAZARD FUNCTION**

#### < DTC/CIRCUIT DIAGNOSIS >

### **HAZARD FUNCTION**

### Component Function Check

#### INFOID:0000000012352725

### 1. CHECK FUNCTION

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "FLASHER" in "ACTIVE TEST" mode.
- 3. Touch "LH" or "RH" to check that it works normally.

#### Is the inspection result normal?

- YES >> Hazard warning lamp circuit is OK.
- NO >> Refer to <u>DLK-124</u>, "<u>Diagnosis Procedure</u>".

### Diagnosis Procedure

INFOID:0000000012352726

### 1. CHECK HAZARD SWITCH CIRCUIT

Check hazard switch circuit.

Refer to EXL-123, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

### 2. CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

#### REAR DOOR CLOSURE MOTOR

#### < DTC/CIRCUIT DIAGNOSIS >

### REAR DOOR CLOSURE MOTOR

LH

### LH: Diagnosis Procedure

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### 1. CHECK REAR DOOR CLOSURE MOTOR INPUT SIGNAL

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

| (+)  Rear door closure motor ass bly LH |          | (–)    | Condition    |                  | Voltage<br>(Approx.) |
|---|----------|--------|--------------|------------------|----------------------|
| Connector                               | Terminal |        |              |                  |                      |
|   |          |        |              | Close operation  | Battery voltage      |
| D63                                     | 1        | Ground | Rear door LH | Other than above | 0 V                  |
| D63                                     | 2        | Ground |              | Return signal    | Battery voltage      |
|   | 2        |        |              | Other than above | 0 V                  |

#### Is the inspection result normal?

YES >> Replace rear door closure motor assembly LH.

NO >> GO TO 2.

### 2. CHECK REAR DOOR CLOSURE MOTOR CIRCUIT

- Disconnect rear door closure control unit LH connector.
- Check continuity between rear door closure control unit LH harness connector and rear door closure motor assembly LH harness connector.

| Rear door closure | control unit LH Rear door closure motor assembly LH |                    | Rear door closure motor assembly LH |            |
|-------------------|---|--------------------|-------------------------------------|------------|
| Connector         | Terminal  | Connector Terminal |                                     | Continuity |
| D65               | 3   | D63                | 1                                   | Existed    |
| Б03               | 9   | D03                | 2                                   | LXISIEU    |

Check continuity between rear door closure control unit LH harness connector and ground.

| Rear door closure | Rear door closure control unit LH |         |             |
|-------------------|-----------------------------------|---------|-------------|
| Connector         | Terminal                          | Ground  | Continuity  |
| D65               | 3                                 | Giouria | Not existed |
| 503               | 9                                 |         | NOT EXISTED |

#### Is the inspection result normal?

YES >> Replace rear door closure control unit LH. Refer to <u>DLK-237</u>, "Removal and Installation".

>> Repair or replace harness.

NO RH

### RH: Diagnosis Procedure

INFOID:0000000012352728

### 1. CHECK REAR DOOR CLOSURE MOTOR INPUT SIGNAL

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

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### **REAR DOOR CLOSURE MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

| (+<br>Rear door closur<br>bly | e motor assem- | (-)    | Condition    |                  | Voltage<br>(Approx.) |
|-------------------------------|----------------|--------|--------------|------------------|----------------------|
| Connector                     | Terminal       |        |              |                  |                      |
|                               |                |        |              |                  | Battery voltage      |
| D83                           | 1              | Cround | Rear door RH | Other than above | 0 V                  |
| D03                           | 2              | Ground |              | Return signal    | Battery voltage      |
|                               | 2              |        |              | Other than above | 0 V                  |

#### Is the inspection result normal?

YES >> Replace rear door closure motor assembly RH.

NO >> GO TO 2.

### 2.CHECK REAR DOOR CLOSURE MOTOR CIRCUIT

- 1. Disconnect rear door closure control unit RH connector.
- Check continuity between rear door closure control unit RH harness connector and rear door closure motor assembly RH harness connector.

| Rear door closure | control unit RH | Rear door closure motor assembly RH |   | Continuity |
|-------------------|-----------------|-------------------------------------|---|------------|
| Connector         | Terminal        | Connector Terminal                  |   | Continuity |
| D85               | 3               | D83                                 | 1 | Existed    |
| 203               | 9               |                                     | 2 | LAISIEU    |

3. Check continuity between rear door closure control unit RH harness connector and ground.

| Rear door closure control unit RH |          |        | Continuity  |
|-----------------------------------|----------|--------|-------------|
| Connector                         | Terminal | Ground | Continuity  |
| D85                               | 3        | Ground | Not existed |
| D03                               | 9        |        | Not existed |

#### Is the inspection result normal?

YES >> Replace rear door closure control unit RH. Refer to <u>DLK-237</u>, "Removal and Installation".

NO >> Repair or replace harness.

### **NEUTRAL SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

### **NEUTRAL SWITCH**

LH

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### LH: Diagnosis Procedure

### 1. CHECK NEUTRAL SWITCH INPUT SIGNAL

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

| (+)                                 |          |        | Voltage<br>(Approx.) |
|-------------------------------------|----------|--------|----------------------|
| Rear door closure motor assembly LH |          | (–)    |                      |
| Connector                           | Terminal |        | ( ) ; ,              |
| D63                                 | 3        | Ground | 5 V                  |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

### 2.check neutral switch circuit

- Disconnect rear door closure control unit LH connector.
- 2. Check continuity between rear door closure control unit LH harness connector and rear door closure motor assembly LH harness connector.

| Rear door closu | re control unit LH | Rear door closure motor assembly LH |          | Continuity |
|-----------------|--------------------|-------------------------------------|----------|------------|
| Connector       | Terminal           | Connector                           | Terminal | Continuity |
| D65             | 1                  | D63                                 | 3        | Existed    |

3. Check continuity between rear door closure control unit LH harness connector and ground.

| Rear door closure control unit LH |          |        | Continuity  |
|-----------------------------------|----------|--------|-------------|
| Connector                         | Terminal | Ground | Continuity  |
| D65                               | 1        |        | Not existed |

#### Is the inspection result normal?

YES >> Replace rear door closure control unit LH. Refer to <u>DLK-237, "Removal and Installation"</u>.

NO >> Repair or replace harness.

### 3.CHECK NEUTRAL SWITCH GROUND CIRCUIT

Check continuity between rear door closure control unit LH harness connector and ground.

| Rear door closure motor assembly LH |          |        | Continuity |
|-------------------------------------|----------|--------|------------|
| Connector                           | Terminal | Ground | Continuity |
| D63                                 | 4        |        | Existed    |

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### CHECK NEUTRAL SWITCH

Refer to DLK-128, "LH: Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace rear door closure motor assembly LH.

### 5. CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

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#### >> INSPECTION END

### LH: Component Inspection

INFOID:0000000012352730

### 1. CHECK NEUTRAL SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect rear door closure motor assembly LH connector.
- 3. Check continuity between rear door closure motor assembly LH terminals.

| Rear door closure motor assembly LH |   | Condition         |                  | Continuity  |
|-------------------------------------|---|-------------------|------------------|-------------|
| Terminal                            |   |                   |                  | Continuity  |
| 3                                   | 4 | Rear door closure | Neutral position | Not existed |
|                                     |   | motor LH          | Other than above | Existed     |

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace rear door closure motor assembly LH.

RH

### RH: Diagnosis Procedure

INFOID:0000000012352731

### 1. CHECK NEUTRAL SWITCH INPUT SIGNAL

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

| (+)  Rear door closure motor assembly RH |          | (–)    | Voltage   |
|--|----------|--------|-----------|
| Connector                                | Terminal |        | (Approx.) |
| D83                                      | 3        | Ground | 5 V       |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

### 2.CHECK NEUTRAL SWITCH CIRCUIT

- 1. Disconnect rear door closure control unit RH connector.
- Check continuity between rear door closure control unit RH harness connector and rear door closure motor assembly RH harness connector.

| Rear door closu | re control unit RH | Rear door closure motor assembly RH |          | Continuity |
|-----------------|--------------------|-------------------------------------|----------|------------|
| Connector       | Terminal           | Connector                           | Terminal | Continuity |
| D85             | 1                  | D83                                 | 3        | Existed    |

3. Check continuity between rear door closure control unit RH harness connector and ground.

| Rear door closure control unit RH |          |        | Continuity  |
|-----------------------------------|----------|--------|-------------|
| Connector                         | Terminal | Ground | Continuity  |
| D85                               | 1        |        | Not existed |

#### Is the inspection result normal?

YES >> Replace rear door closure control unit RH. Refer to <u>DLK-237</u>, "Removal and Installation".

NO >> Repair or replace harness.

### 3.CHECK NEUTRAL SWITCH GROUND CIRCUIT

Check continuity between rear door closure control unit RH harness connector and ground.

### **NEUTRAL SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

| Rear door closure motor assembly RH |          |        | Continuity |
|-------------------------------------|----------|--------|------------|
| Connector                           | Terminal | Ground | Continuity |
| D83                                 | 4        |        | Existed    |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK NEUTRAL SWITCH

Refer to DLK-129, "RH: Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace rear door closure motor assembly RH.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

### **RH**: Component Inspection

1. CHECK NEUTRAL SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect rear door closure motor assembly RH connector.
- 3. Check continuity between rear door closure motor assembly RH terminals.

| Rear door closure motor assembly RH |     | Condition         |                  | Continuity  |
|-------------------------------------|-----|-------------------|------------------|-------------|
| Terminal                            |     |                   |                  | Continuity  |
| 3                                   | 3 4 | Rear door closure | Neutral position | Not existed |
| 3                                   | 4   | motor RH          | Other than above | Existed     |

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace rear door closure motor assembly RH.

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#### < DTC/CIRCUIT DIAGNOSIS >

### HANDLE SWITCH

LH

### LH: Diagnosis Procedure

INFOID:0000000012352733

### 1. CHECK HANDLE SWITCH INPUT SIGNAL

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

| (+) Rear door lock assembly LH |          |        | Voltage<br>(Approx.) |
|--------------------------------|----------|--------|----------------------|
|                                |          | (–)    |                      |
| Connector                      | Terminal |        | ( FF - )             |
| D64                            | 2        | Ground | 5 V                  |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

### 2. CHECK HANDLE SWITCH CIRCUIT

- 1. Disconnect rear door closure control unit LH connector.
- Check continuity between rear door closure control unit LH harness connector and rear door lock assembly LH harness connector.

| Rear door closu | re control unit LH | Rear door lock assembly LH |          | Continuity |
|-----------------|--------------------|----------------------------|----------|------------|
| Connector       | Terminal           | Connector                  | Terminal | Continuity |
| D65             | 5                  | D64                        | 2        | Existed    |

3. Check continuity between rear door closure control unit LH harness connector and ground.

| Rear door closure control unit LH |          |        | Continuity  |
|-----------------------------------|----------|--------|-------------|
| Connector                         | Terminal | Ground | Continuity  |
| D65                               | 5        |        | Not existed |

#### Is the inspection result normal?

YES >> Replace rear door closure control unit LH. Refer to <u>DLK-237</u>, "Removal and Installation".

NO >> Repair or replace harness.

### 3.CHECK HANDLE SWITCH GROUND CIRCUIT

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

| Rear door lock assembly LH |          |        | Continuity |
|----------------------------|----------|--------|------------|
| Connector                  | Terminal | Ground | Continuity |
| D64                        | 1        |        | Existed    |

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4. CHECK HANDLE SWITCH

Refer to <u>DLK-131</u>, "LH: Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace rear door lock assembly LH.

### 5. CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

### INFOID:0000000012352734

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### LH : Component Inspection

### 1. CHECK HANDLE SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect rear door lock assembly LH connector.
- 3. Check continuity between rear door lock assembly LH terminals.

| Rear door lock assembly LH |   | Condition             |         | Continuity  |
|----------------------------|---|-----------------------|---------|-------------|
| Terminal                   |   |                       |         | Continuity  |
| 2                          | 1 | Rear door handle LH   | Pull    | Existed     |
| 2                          | 1 | incai dooi nandie Lin | Release | Not existed |

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace rear door lock assembly LH.

RH

### RH: Diagnosis Procedure

### 1. CHECK HANDLE SWITCH INPUT SIGNAL

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

| (+                         | )        |        |                      |
|----------------------------|----------|--------|----------------------|
| Rear door lock assembly RH |          | (–)    | Voltage<br>(Approx.) |
| Connector                  | Terminal |        | ( ##. 5)             |
| D84                        | 2        | Ground | 5 V                  |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

### 2. CHECK HANDLE SWITCH CIRCUIT

- 1. Disconnect rear door closure control unit RH connector.
- Check continuity between rear door closure control unit RH harness connector and rear door lock assembly RH harness connector.

| Rear door closu | re control unit RH | Rear door lock assembly RH |          | Continuity |
|-----------------|--------------------|----------------------------|----------|------------|
| Connector       | Terminal           | Connector                  | Terminal | Continuity |
| D85             | 5                  | D84                        | 2        | Existed    |

Check continuity between rear door closure control unit RH harness connector and ground.

| Rear door closure control unit RH |          |        | Continuity  |
|-----------------------------------|----------|--------|-------------|
| Connector                         | Terminal | Ground | Continuity  |
| D85                               | 5        |        | Not existed |

#### Is the inspection result normal?

YES >> Replace rear door closure control unit RH. Refer to <u>DLK-237</u>, "Removal and Installation".

NO >> Repair or replace harness.

### 3.CHECK HANDLE SWITCH GROUND CIRCUIT

Check voltage between rear door lock assembly RH harness connector and ground.

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### **HANDLE SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

| Rear door lock | Rear door lock assembly RH |        | Continuity |
|----------------|----------------------------|--------|------------|
| Connector      | Terminal                   | Ground | Continuity |
| D84            | 1                          |        | Existed    |

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4. CHECK HANDLE SWITCH

Refer to DLK-132, "RH: Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace rear door lock assembly RH.

### 5. CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

#### >> INSPECTION END

### **RH**: Component Inspection

INFOID:0000000012352736

### 1. CHECK HANDLE SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect rear door lock assembly RH connector.
- 3. Check continuity between rear door lock assembly RH terminals.

| Rear door lock assembly RH |   | Condition           |         | Continuity  |
|----------------------------|---|---------------------|---------|-------------|
| Terminal                   |   |                     |         | Continuity  |
| 2 1                        |   | Rear door handle RH | Pull    | Existed     |
|                            | I | Neal door handle KH | Release | Not existed |

### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace rear door lock assembly RH.

#### **OPERATION SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

### **OPERATION SWITCH**

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### LH: Diagnosis Procedure

### 1. CHECK OPERATION SWITCH INPUT SIGNAL

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

| (+) Rear door lock assembly LH |   | (-)    | Voltage<br>(Approx.) |  |
|--------------------------------|---|--------|----------------------|--|
| Connector                      |   |        | (Approx.)            |  |
| D64                            | 3 | Ground | 5 V                  |  |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

### 2 .CHECK OPERATION SWITCH CIRCUIT

- Disconnect rear door closure control unit LH connector.
- 2. Check continuity between rear door closure control unit LH harness connector and rear door lock assembly LH harness connector.

| Rear door closu | re control unit LH | Rear door lock assembly LH |          | Continuity |
|-----------------|--------------------|----------------------------|----------|------------|
| Connector       | Terminal           | Connector                  | Terminal | Continuity |
| D65             | 8                  | D64                        | 3        | Existed    |

3. Check continuity between rear door closure control unit LH harness connector and ground.

| Rear door closure control unit LH |          |        | Continuity  |
|-----------------------------------|----------|--------|-------------|
| Connector                         | Terminal | Ground | Continuity  |
| D65                               | 8        |        | Not existed |

#### Is the inspection result normal?

YES >> Replace rear door closure control unit LH. Refer to <u>DLK-237, "Removal and Installation"</u>.

NO >> Repair or replace harness.

### 3.CHECK OPERATION SWITCH GROUND CIRCUIT

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

| Rear door lock assembly LH |          |        | Continuity |
|----------------------------|----------|--------|------------|
| Connector                  | Terminal | Ground | Continuity |
| D64                        | 1        |        | Existed    |

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4. CHECK OPERATION SWITCH

Refer to DLK-134, "LH: Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace rear door lock assembly LH.

### 5.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

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#### < DTC/CIRCUIT DIAGNOSIS >

>> INSPECTION END

### LH: Component Inspection

INFOID:0000000012352738

### 1. CHECK OPERATION SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect rear door lock assembly LH connector.
- 3. Check continuity between rear door lock assembly LH terminals.

| Rear door lock assembly LH |     | Condition    |   | Continuity  |
|----------------------------|-----|--------------|---|-------------|
| Terminal                   |     |              |   | Continuity  |
| 3                          | 3 1 | Rear door LH | Latch open – less than half latch/ half latch | Existed     |
|                            |     |              | Fully latch/half latch                        | Not existed |

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace rear door lock assembly LH.

RH

### RH: Diagnosis Procedure

INFOID:0000000012352739

### 1. CHECK OPERATION SWITCH INPUT SIGNAL

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

| (+)       |  | ( )    | Voltage              |  |
|-----------|--|--------|----------------------|--|
| Connector | Rear door lock assembly RH  Connector Terminal |        | Voltage<br>(Approx.) |  |
| D84       | 3  | Ground | 5 V                  |  |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

### 2. CHECK OPERATION SWITCH CIRCUIT

- 1. Disconnect rear door closure control unit RH connector.
- Check continuity between rear door closure control unit RH harness connector and rear door lock assembly RH harness connector.

| Rear door closure control unit RH |          | Rear door lock assembly RH |          | Continuity |
|-----------------------------------|----------|----------------------------|----------|------------|
| Connector                         | Terminal | Connector                  | Terminal | Continuity |
| D85                               | 8        | D84                        | 3        | Existed    |

3. Check continuity between rear door closure control unit RH harness connector and ground.

| Rear door closure control unit RH |          |        | Continuity  |
|-----------------------------------|----------|--------|-------------|
| Connector                         | Terminal | Ground | Continuity  |
| D85                               | 8        |        | Not existed |

### Is the inspection result normal?

YES >> Replace rear door closure control unit RH. Refer to <u>DLK-237</u>, "Removal and Installation".

NO >> Repair or replace harness.

### 3.CHECK OPERATION SWITCH GROUND CIRCUIT

### **OPERATION SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

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

| Rear door lock assembly RH |          |        | Continuity |
|----------------------------|----------|--------|------------|
| Connector                  | Terminal | Ground | Continuity |
| D84                        | 1        |        | Existed    |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK OPERATION SWITCH

Refer to DLK-135, "RH: Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace rear door lock assembly RH.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

### **RH**: Component Inspection

1. CHECK OPERATION SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect rear door lock assembly RH connector.
- 3. Check continuity between rear door lock assembly RH terminals.

| Rear door lock assembly RH |                  | Condition                                     |                        | Continuity  |
|----------------------------|------------------|---|------------------------|-------------|
| Terminal                   |                  |   |                        | Continuity  |
| 3                          | 3 1 Rear door RH | Latch open – less than half latch/ half latch | Existed                |             |
|                            |                  |   | Fully latch/half latch | Not existed |

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace rear door lock assembly RH.

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#### < DTC/CIRCUIT DIAGNOSIS >

### REVERSE SWITCH

LH

### LH: Diagnosis Procedure

INFOID:0000000012352741

### 1. CHECK REVERSE SWITCH INPUT SIGNAL

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

| (+)            |                            |        | Voltage<br>(Approx.) |  |
|----------------|----------------------------|--------|----------------------|--|
| Rear door lock | Rear door lock assembly LH |        |                      |  |
| Connector      | Terminal                   |        | , , ,                |  |
| D64            | 4                          | Ground | 5 V                  |  |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

### 2.check reverse switch circuit

- Disconnect rear door closure control unit LH connector.
- Check continuity between rear door closure control unit LH harness connector and rear door lock assembly LH harness connector.

| Rear door closu | Rear door closure control unit LH |           | Rear door lock assembly LH |            |
|-----------------|-----------------------------------|-----------|----------------------------|------------|
| Connector       | Terminal                          | Connector | Terminal                   | Continuity |
| D65             | 7                                 | D64       | 4                          | Existed    |

3. Check continuity between rear door closure control unit LH harness connector and ground.

| Rear door closure control unit LH |          |        | Continuity  |
|-----------------------------------|----------|--------|-------------|
| Connector                         | Terminal | Ground | Continuity  |
| D65                               | 7        |        | Not existed |

#### Is the inspection result normal?

YES >> Replace rear door closure control unit LH. Refer to <u>DLK-237</u>, "Removal and Installation".

NO >> Repair or replace harness.

### 3.CHECK REVERSE SWITCH GROUND CIRCUIT

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

| Rear door lock assembly LH |          |        | Continuity |
|----------------------------|----------|--------|------------|
| Connector                  | Terminal | Ground | Continuity |
| D64                        | 1        |        | Existed    |

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4. CHECK REVERSE SWITCH

Refer to DLK-138, "RH: Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace rear door lock assembly LH.

### 5. CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

#### REVERSE SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

>> INSPECTION END

### INFOID:0000000012352742

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### LH: Component Inspection

### 1. CHECK REVERSE SWITCH

- Turn ignition switch OFF.
- Disconnect rear door lock assembly LH connector.
- Check continuity between rear door lock assembly LH terminals.

| Rear door lock assembly LH |   | Condition     |                  | Continuity  |
|----------------------------|---|---------------|------------------|-------------|
| Terminal                   |   |               |                  | Continuity  |
| 4                          |   | Rear door LH  | Fully close      | Not existed |
| 4                          | 1 | Real door LFI | Other than above | Existed     |

### Is the inspection result normal?

>> INSPECTION END YES

NO >> Replace rear door lock assembly LH.

RH

### RH: Diagnosis Procedure

### 1. CHECK REVERSE SWITCH INPUT SIGNAL

Turn ignition switch OFF.

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

| (+)                        |          |        | Voltage<br>(Approx.) |  |
|----------------------------|----------|--------|----------------------|--|
| Rear door lock assembly RH |          | (–)    |                      |  |
| Connector                  | Terminal |        | ( FF - 7             |  |
| D84                        | 4        | Ground | 5 V                  |  |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

### 2.check reverse switch circuit

Disconnect rear door closure control unit RH connector.

Check continuity between rear door closure control unit RH harness connector and rear door lock assembly RH harness connector.

| Rear door closu | re control unit RH | Rear door lock assembly RH |          | Continuity |  |
|-----------------|--------------------|----------------------------|----------|------------|--|
| Connector       | Terminal           | Connector                  | Terminal | Continuity |  |
| D85             | 7                  | D84                        | 4        | Existed    |  |

Check continuity between rear door closure control unit RH harness connector and ground.

| Rear door closure control unit RH |          |        | Continuity  |
|-----------------------------------|----------|--------|-------------|
| Connector                         | Terminal | Ground | Continuity  |
| D85                               | 7        |        | Not existed |

#### Is the inspection result normal?

YES >> Replace rear door closure control unit RH. Refer to DLK-237, "Removal and Installation".

NO >> Repair or replace harness.

### 3.check reverse switch ground circuit

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

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### **REVERSE SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

| Rear door lock assembly RH |          |        | Continuity |
|----------------------------|----------|--------|------------|
| Connector                  | Terminal | Ground | Continuity |
| D84                        | 1        |        | Existed    |

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4. CHECK REVERSE SWITCH

Refer to DLK-138, "RH: Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace rear door lock assembly RH.

### 5. CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

#### >> INSPECTION END

### **RH**: Component Inspection

INFOID:0000000012352744

### 1. CHECK REVERSE SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect rear door lock assembly RH connector.
- 3. Check continuity between rear door lock assembly RH terminals.

| Rear door lock assembly RH  Terminal |   | Condition    |                  | Continuity |
|--------------------------------------|---|--------------|------------------|------------|
|                                      |   |              |                  |            |
| 4                                    | ı | Real door KH | Other than above | Existed    |

### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace rear door lock assembly RH.

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

< SYMPTOM DIAGNOSIS >

| SYMPTOM DIAGNOSIS  |                         |     |
|--|-------------------------|-----|
| DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND   | UNLOCK                  | А   |
| SWITCH<br>ALL DOOR   |                         | В   |
|  |                         |     |
| ALL DOOR : Description   | INFOID:0000000012352745 | С   |
| All doors do not lock/unlock using door lock and unlock switch.  |                         |     |
| ALL DOOR : Diagnosis Procedure   | INFOID:0000000012352746 | D   |
| 1. CHECK DOOR LOCK AND UNLOCK SWITCH   |                         |     |
| Check door lock and unlock switch.  Refer to DLK-94, "Component Function Check"  |                         | Е   |
| Is the inspection result normal?   |                         |     |
| YES >> GO TO 2.  NO >> Repair or replace the malfunctioning parts.   |                         | F   |
| 2. CHECK DOOR LOCK ACTUATOR CIRCUIT  |                         |     |
| Check front door lock assembly (driver side).  Refer to DLK-95, "DRIVER SIDE: Component Function Check".                               |                         | G   |
| Is the inspection result normal?   |                         | Н   |
| YES >> GO TO 3.  NO >> Repair or replace the malfunctioning parts.   |                         | 11  |
| 3.REPLACE BCM  |                         | ı   |
| <ul> <li>Replace BCM. Refer to <u>BCS-95, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ul> |                         | 1   |
| Is the result normal?  |                         | J   |
| YES >> INSPECTION END NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".                                      | •                       |     |
| DRIVER SIDE  |                         | DLK |
| DRIVER SIDE : Description  | INFOID:0000000012352747 |     |
| Driver side door does not lock/unlock using door lock and unlock switch.   |                         | L   |
| DRIVER SIDE : Diagnosis Procedure  | INFOID:0000000012352748 |     |
| 1. CHECK DOOR LOCK ACTUATOR  |                         | M   |
| Check front door lock assembly (driver side).  Refer to DLK-95, "DRIVER SIDE: Component Function Check".                               |                         | N   |
| Is the inspection result normal?   |                         | 14  |
| YES >> GO TO 2.  NO >> Repair or replace the malfunctioning parts.   |                         | 0   |
| 2.REPLACE BCM  |                         | 0   |
| Replace BCM. Refer to BCS-95, "Removal and Installation".     Confirm the operation after replacement.                                 |                         | Р   |
| <ul> <li>Confirm the operation after replacement.</li> <li>Is the result normal?</li> </ul>  |                         |     |
| YES >> INSPECTION END  |                         |     |
| NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".  PASSENGER SIDE  |                         |     |

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

< SYMPTOM DIAGNOSIS >

PASSENGER SIDE: Description

INFOID:0000000012352749

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

PASSENGER SIDE: Diagnosis Procedure

INFOID:0000000012352750

### 1. CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (passenger side).

Refer to DLK-96, "PASSENGER SIDE: Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

### 2.REPLACE BCM

- Replace BCM. Refer to BCS-95, "Removal and Installation".
- · Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

#### REAR LH

### **REAR LH: Description**

INFOID:0000000012352751

Rear LH side door does not lock/unlock using door lock and unlock switch.

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

INFOID:0000000012352752

### 1. CHECK DOOR LOCK ACTUATOR

Check rear door lock assembly LH.

Refer to DLK-97, "REAR LH: Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

### 2.REPLACE BCM

- Replace BCM. Refer to <u>BCS-95</u>, "Removal and Installation".
- Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

#### REAR RH

### REAR RH: Description

INFOID:0000000012352753

Rear RH side door does not lock/unlock using door lock and unlock switch.

### REAR RH: Diagnosis Procedure

INFOID:0000000012352754

### 1. CHECK DOOR LOCK ACTUATOR

Check rear door lock assembly RH.

Refer to DLK-98, "REAR RH: Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

### 2.REPLACE BCM

Replace BCM. Refer to <u>BCS-95</u>, "Removal and Installation".

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

### < SYMPTOM DIAGNOSIS >

• Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

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

< SYMPTOM DIAGNOSIS >

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

### Diagnosis Procedure

INFOID:0000000012352755

### 1. CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

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

### 2. CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.

Refer to DLK-92, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

### 3.REPLACE BCM

- Replace BCM. Refer to BCS-95, "Removal and Installation".
- · Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

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

< SYMPTOM DIAGNOSIS >

| DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST S  | WITCH                  |
|--|------------------------|
| ALL DOOR : Description   | INFOID:000000012352756 |
| All doors do not lock/unlock using all door request switches.  |                        |
| ALL DOOR : Diagnosis Procedure   | INFOID:000000012352757 |
| 1. CHECK REMOTE KEYLESS ENTRY FUNCTION   |                        |
| Check remote keyless entry function.   |                        |
| Does door lock/unlock with Intelligent Key button?   |                        |
| YES >> GO TO 2.  NO >> Refer to <u>DLK-145</u> , " <u>Diagnosis Procedure</u> ".   |                        |
| 2.CHECK "LOCK/UNLOCK BY I-KEY" SETTING IN "WORK SUPPORT"   |                        |
| Check "LOCK/UNLOCK BY I-KEY" in "WORK SUPPORT".  Refer to DLK-38, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".         |                        |
| ls the inspection result normal?   |                        |
| YES >> GO TO 3.  |                        |
| NO >> Set "LOCK/UNLOCK BY I-KEY" in "WORK SUPPORT".  |                        |
| 3.CHECK DOOR SWITCH  |                        |
| Check door switch.  Refer to DLK-87, "Component Function Check".   |                        |
| Is the inspection result normal?   |                        |
| YES >> GO TO 4.  |                        |
| NO >> Repair or replace the malfunctioning parts.  |                        |
| 4.CHECK INSIDE KEY ANTENNA   |                        |
| Check inside key antenna.  • Instrument center: Refer to DLK-73, "DTC Logic".  |                        |
| Console: Refer to <u>DLK-75, "DTC Logic"</u> .   |                        |
| Trunk room: Refer to <u>DLK-77</u> , " <u>DTC Logic"</u> .   |                        |
| Is the inspection result normal?  YES >> GO TO 5.  |                        |
| NO >> Repair or replace the malfunctioning parts.  |                        |
| 5. CHECK OUTSIDE KEY ANTENNA   |                        |
| Check outside key antenna.   |                        |
| Driver side: Refer to <u>DLK-79, "DTC Logic"</u> .     December side: Refer to <u>DLK-81, "DTC Logic"</u> .                            |                        |
| <ul> <li>Passenger side: Refer to <u>DLK-81, "DTC Logic"</u>.</li> <li>Rear bumper: Refer to <u>DLK-83, "DTC Logic"</u>.</li> </ul>    |                        |
| Is the inspection result normal?   |                        |
| YES >> GO TO 6.  |                        |
| NO >> Repair or replace the malfunctioning parts.  6. REPLACE BCM  |                        |
|  |                        |
| <ul> <li>Replace BCM. Refer to <u>BCS-95, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ul> |                        |
| Is the result normal?  |                        |
| YES >> INSPECTION END  |                        |
| NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".  |                        |
| DRIVER SIDE  |                        |

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

#### < SYMPTOM DIAGNOSIS >

**DRIVER SIDE: Description** 

INFOID:0000000012352758

All doors do not lock/unlock using driver side door request switch.

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000012352759

### 1. CHECK DRIVER SIDE DOOR REQUEST SWITCH

Check driver side door request switch.

Refer to DLK-90, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

### 2.REPLACE BCM

- Replace BCM. Refer to BCS-95, "Removal and Installation".
- · Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

#### PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000012352760

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

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000012352761

### 1. CHECK PASSENGER SIDE DOOR REQUEST SWITCH

Check passenger side door request switch.

Refer to DLK-90, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

### 2.REPLACE BCM

- Replace BCM. Refer to <u>BCS-95</u>, "Removal and Installation".
- Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

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

#### < SYMPTOM DIAGNOSIS > DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY Α Diagnosis Procedure INFOID:0000000012352762 1. CHECK INTELLIGENT KEY В 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 D Check that the Intelligent Key low battery warning is operated. Is the Intelligent Key low battery warning operated? Е YES >> GO TO 6. >> 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 Can door lock and unlock be performed with another registered Intelligent Key? YES >> GO TO 4. Н NO >> GO TO 7. 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. ${f 5}$ .CHECK INTELLIGENT KEY DLK Check the inside of the Intelligent Key for rust or corrosion by water. Simultaneously check the internal circuits for damage. L Is the vehicle in START status? YES >> GO TO 6. NO >> Replace Intelligent Key. M **6.**CHECK INTELLIGENT KEY BATTERY Check the Intelligent Key battery. Refer to DLK-121, "Component Inspection". N 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. Р Does door lock/unlock using door lock and unlock switch? YES >> GO TO 8.

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

8. CHECK REMOTE KEYLESS ENTRY RECEIVER

Check remote keyless entry receiver.

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

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

### < SYMPTOM DIAGNOSIS >

### Is the inspection result normal?

YES >> GO TO 9.

NO >> Repair or replace the malfunctioning parts.

# 9. CHECK DOOR SWITCH

Check door switch.

Refer to DLK-87, "Component Function Check".

### Is the inspection result normal?

YES >> GO TO 10.

NO >> Repair or replace the malfunctioning parts.

# 10.REPLACE INTELLIGENT KEY

- 1. Replace Intelligent Key.
- 2. Confirm the operation after replacement.

### Is the result normal?

YES >> INSPECTION END

NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

### TRUNK LID DOES NOT OPEN

| < SYMPTOM DIAGNOSIS >   |                         |
|---|-------------------------|
| TRUNK LID ODEN OPEN   | А                       |
| TRUNK LID OPENER SWITCH   |                         |
| TRUNK LID OPENER SWITCH : Description   | INFOID:0000000012352763 |
| Trunk lid does not open by trunk lid opener switch operation.   |                         |
| TRUNK LID OPENER SWITCH : Diagnosis Procedure   | INFOID:0000000012352764 |
| 1. CHECK TRUNK LID OPENER SWITCH CIRCUIT  |                         |
| Check trunk lid opener switch circuit.  Refer to <a check".<="" component="" function="" href="https://doi.org/ld/linear.pubm.new.new.new.new.new.new.new.new.new.new&lt;/td&gt;&lt;td&gt;D&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Is the inspection result normal?&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;YES &gt;&gt; GO TO 2.  NO &gt;&gt; Repair or replace the malfunctioning parts.&lt;/td&gt;&lt;td&gt;Е&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;2.CHECK TRUNK LID OPENER CANCEL SWITCH CIECUIT&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Check trunk lid opener cancel switch circuit.&lt;/td&gt;&lt;td&gt;F&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Refer to DLK-108, " td=""><td></td></a> |                         |
| Is the inspection result normal? YES >> GO TO 3.  | G                       |
| NO >> Repair or replace the malfunctioning parts.   |                         |
| 3.CHECK TRUNK LID OPEN SIGNAL CIRCUIT   | Н                       |
| Check trunk lid open signal circuit. Refer to DLK-101, "Component Function Check".  |                         |
| Is the inspection result normal?  | 1                       |
| YES >> GO TO 4.  NO >> Repair or replace the malfunctioning parts.  |                         |
| 4.CHECK TRUNK CLOSURE ASSENBLY  | J                       |
| Check trunk closure assembly.   |                         |
| Refer to DLK-110, "Component Function Check".   | DLk                     |
| Is the inspection result normal? YES >> GO TO 5.  | BEI                     |
| NO >> Repair or replace the malfunctioning parts.   |                         |
| 5.REPLACE BCM   | L                       |
| <ul> <li>Replace BCM. Refer to <u>BCS-95</u>, "<u>Removal and Installation</u>".</li> <li>Confirm the operation after replacement.</li> </ul>   | <del></del>             |
| Is the result normal?   | M                       |
| YES >> INSPECTION END   |                         |
| NO >> Check intermittent incident. Refer to <a href="GI-45">GI-45</a> , "Intermittent Incident".  INTELLIGENT KEY   | N                       |
|   |                         |
| INTELLIGENT KEY: Description  | INFOID:000000012352765  |
| Trunk lid does not open by Intelligent Key operation.   |                         |
| INTELLIGENT KEY : Diagnosis Procedure   | INFOID:0000000012352766 |
| 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-147</u> , "TRUNK LID OPENER SWITCH : Diagnosis Procedure".  |                         |

### TRUNK LID DOES NOT OPEN

#### < SYMPTOM DIAGNOSIS >

# $\overline{2}$ .CHECK REMOTE KEYLESS ENTRY FUNCTION

Check remote keyless entry function.

Does door lock/unlock with Intelligent Key button?

YES >> GO TO 3.

NO >> Refer to <u>DLK-145</u>, "<u>Diagnosis Procedure</u>".

# ${f 3}.$ check intelligent key battery

Check Intelligent Key battery.

Refer to DLK-121, "Component Inspection".

### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

### 4.REPLACE BCM

- Replace BCM. Refer to BCS-95, "Removal and Installation".
- · Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

### TRUNK LID OPENER REQUEST SWITCH

### TRUNK LID OPENER REQUEST SWITCH: Description

INFOID:0000000012352767

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

### TRUNK LID OPENER REQUEST SWITCH: Diagnosis Procedure

INFOID:0000000012352768

### 1. CHECK TRUNK LID OPEN FUNCTION

Check trunk lid open function with Intelligent Key.

### Does trunk lid open with Intelligent Key?

YES >> GO TO 2.

NO >> Refer to <u>DLK-147</u>, "INTELLIGENT KEY: <u>Diagnosis Procedure"</u>.

### 2.CHECK TRUNK LID OPENER REQUEST SWITCH

Check trunk lid opener request switch.

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

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

# 3. CHECK OUTSIDE KEY ANTENNA (REAR BUMPER)

Check outside key antenna (rear bumper).

Refer to DLK-83, "DTC Logic".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

### f 4.CHECK TRUNK LID OPEN SIGNAL CIRCUIT

Check trunk lid open signal circuit.

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

### Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

### 5.REPLACE BCM

• Replace BCM. Refer to BCS-95, "Removal and Installation".

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### TRUNK LID DOES NOT OPEN

### < SYMPTOM DIAGNOSIS >

• Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

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### TRUNK LID AUTO CLOSURE SYSTEM DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

# TRUNK LID AUTO CLOSURE SYSTEM DOES NOT OPERATE OPEN/CLOSURE FUNCTION

OPEN/CLOSURE FUNCTION: Description

INFOID:0000000012352769

Trunk lid auto closure system does not operate when trunk lid opening and closing operations are performed.

OPEN/CLOSURE FUNCTION: Diagnosis Procedure

INFOID:0000000012352770

### 1. CHECK TRUNK CLOSURE CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT

Check trunk closure control unit power supply and ground circuit.

Refer to DLK-85, "TRUNK CLOSURE CONTROL UNIT: Diagnosis Procedure".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

# 2.REPLACE TRUNK CLOSURE ASSEMBLY

- Replace trunk closure assembly. Refer to <u>DLK-221, "Removal and Installation"</u>.
- Confirm the operation after replacement.

### Is the inspection result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

### CLOSURE FUNCTION

### **CLOSURE FUNCTION: Description**

INFOID:0000000012352771

Trunk lid auto closure system does not operate when trunk lid closing operation is performed.

### **CLOSURE FUNCTION: Diagnosis Procedure**

INFOID:0000000012352772

# 1. REPLACE TRUNK CLOSURE ASSEMBLY

- · Replace trunk closure assembly. Refer to DLK-221, "Removal and Installation".
- Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

### OPEN FUNCTION

### **OPEN FUNCTION**: Description

INFOID:0000000012352773

Trunk lid auto closure system does not operate when trunk lid opening operation is performed.

### OPEN FUNCTION : Diagnosis Procedure

INFOID:0000000012352774

### 1. CHECK TRUNK LID OPEN SIGNAL CIRCUIT

Check trunk lid open signal circuit.

Refer to <u>DLK-101</u>, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

### 2.REPLACE TRUNK CLOSURE ASSEMBLY

- Replace trunk closure assembly. Refer to DLK-221, "Removal and Installation".
- Confirm the operation after replacement.

### Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

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### FUEL LID LOCK ACTUATOR DOES NOT OPERATE

### < SYMPTOM DIAGNOSIS >

### FUEL LID LOCK ACTUATOR DOES NOT OPERATE Α Diagnosis Procedure INFOID:0000000012352775 1. CHECK POWER DOOR LOCK OPERATION В Check power door lock operation. Does door lock/unlock with door lock and unlock switch? C YES >> GO TO 2. NO >> Refer to DLK-139, "ALL DOOR: Diagnosis Procedure". 2.CHECK FUEL LID LOCK ACTUATOR D Check fuel lid lock actuator. Refer to DLK-111, "Component Function Check". Is the inspection result normal? Е YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3.REPLACE BCM F • Replace BCM. Refer to BCS-95, "Removal and Installation". · Confirm the operation after replacement. Is the result normal? YES >> INSPECTION END NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident". Н

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

#### < SYMPTOM DIAGNOSIS >

### IGNITION POSITION WARNING FUNCTION DOES NOT OPERATE

### Diagnosis Procedure

INFOID:0000000012352776

### 1. CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

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

### 2. CHECK DOOR SWITCH

Check door switch.

Refer to DLK-87, "Component Function Check".

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

# 3.CHECK TRUNK LID OPEN SIGNAL CIRCUIT

Check trunk lid open signal circuit.

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

### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

### 4.REPLACE BCM

- Replace BCM. Refer to BCS-95, "Removal and Installation".
- · Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

### SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE

# < SYMPTOM DIAGNOSIS > SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE Α Diagnosis Procedure INFOID:0000000012352777 1. CHECK "DOOR LOCK-UNLOCK SET" SETTING IN "WORK SUPPORT" В Select "DOOR LOCK" of "BCM" using CONSULT. Select "DOOR LOCK-UNLOCK SET" in "WORK SUPPORT" mode. Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT". Refer to DLK-36, "DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)". Is the inspection result normal? YES >> GO TO 2. D NO >> Set "ON" in "DOOR LOCK-UNLOCK SET". 2.REPLACE BCM Е • Replace BCM. Refer to BCS-95, "Removal and Installation". · Confirm the operation after replacement. Is the result normal? >> INSPECTION END YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident". NO Н

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

< SYMPTOM DIAGNOSIS >

# VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

### Diagnosis Procedure

INFOID:0000000012352778

# $1. {\sf check "automatic lock/unlock select" setting in "work support"}\\$

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 2. Select "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT" mode.
- Check "AUTOMATIC LOCK/UNLOCK SELECT" setting in "WORK SUPPORT". Refer to <u>DLK-36</u>, "<u>DOOR LOCK</u>: <u>CONSULT Function</u> (<u>BCM - DOOR LOCK</u>)".

#### Is the inspection result normal?

YES >> GO TO 2.

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

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

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 2. Select "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT" mode.
- 3. Check "AUTOMATIC DOOR LOCK SELECT" setting in "WORK SUPPORT". Refer to <a href="DLK-36">DLK-36</a>, "DOOR LOCK: CONSULT Function (BCM DOOR LOCK)".

### Is the inspection result normal?

YES >> GO TO 3.

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

### 3. REPLACE BCM

- Replace BCM. Refer to <u>BCS-95</u>. "Removal and Installation".
- Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

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

### < SYMPTOM DIAGNOSIS > IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE Α Diagnosis Procedure INFOID:0000000012352779 1. CHECK "AUTOMATIC LOCK/UNLOCK SELECT" SETTING IN "WORK SUPPORT" В Select "DOOR LOCK" of "BCM" using CONSULT. Select "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT" mode. Check "AUTOMATIC LOCK/UNLOCK SELECT" setting in "WORK SUPPORT". Refer to DLK-36, "DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)". Is the inspection result normal? YES >> GO TO 2. D NO >> Set "Unlock Only" or "Lock/Unlock" in "AUTOMATIC LOCK/UNLOCK SELECT". 2.check "automatic door unlock select" setting in "work support" Е Select "DOOR LOCK" of "BCM" using CONSULT. Select "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT" mode. Check "AUTOMATIC DOOR UNLOCK SELECT" setting in "WORK SUPPORT". F Refer to DLK-36, "DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)". Is the inspection result normal? YES >> GO TO 3. NO >> Set "MODE 1" or "MODE 3" in "AUTOMATIC DOOR UNLOCK SELECT". 3.REPLACE BCM • Replace BCM. Refer to BCS-95, "Removal and Installation". Н Confirm the operation after replacement. Is the result normal? YES >> INSPECTION END NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident". DLK

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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:0000000012352780

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

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 2. Select "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT" mode.
- Check "AUTOMATIC LOCK/UNLOCK SELECT" setting in "WORK SUPPORT". Refer to <u>DLK-36</u>, "<u>DOOR LOCK</u>: <u>CONSULT Function</u> (<u>BCM - DOOR LOCK</u>)".

#### Is the inspection result normal?

YES >> GO TO 2.

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

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

- Select "DOOR LOCK" of "BCM" using CONSULT.
- Select "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT" mode.
- Check "AUTOMATIC DOOR LOCK SELECT" setting in "WORK SUPPORT". Refer to <u>DLK-36, "DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)"</u>.

#### Is the inspection result normal?

YES >> GO TO 3.

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

# 3.check "automatic door unlock select" setting in "work support"

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 2. Select "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT" mode.
- Check "AUTOMATIC DOOR UNLOCK SELECT" setting in "WORK SUPPORT". Refer to DLK-36, "DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)".

#### Is the inspection result normal?

YES >> GO TO 4.

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

### 4.REPLACE BCM

- Replace BCM. Refer to BCS-95, "Removal and Installation".
- Confirm the operation after replacement.

### Is the result normal?

YES >> INSPECTION END

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

### < SYMPTOM DIAGNOSIS >

## AUTO DOOR LOCK OPERATION DOES NOT OPERATE

### Diagnosis Procedure

INFOID:0000000012352781

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

- Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "AUTO LOCK SET" in "WORK SUPPORT" mode.
- Check "AUTO LOCK SET" setting in "WORK SUPPORT".
   Refer to <u>DLK-38</u>, "INTELLIGENT KEY: CONSULT Function (BCM INTELLIGENT KEY)".

#### Is the inspection result normal?

YES >> GO TO 2.

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

### 2.REPLACE BCM

- Replace BCM. Refer to BCS-95, "Removal and Installation".
- · Confirm the operation after replacement.

### Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-45. "Intermittent Incident".

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### HAZARD AND HORN REMINDER DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

### HAZARD AND HORN REMINDER DOES NOT OPERATE

### Diagnosis Procedure

INFOID:0000000012352782

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

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- Select "HAZARD ANSWER BACK" in "WORK SUPPORT" mode.
- Check the "HAZARD ANSWER BACK" setting in "WORK SUPPORT".
   Refer to <u>DLK-38</u>, "INTELLIGENT KEY: CONSULT Function (BCM INTELLIGENT KEY)".

#### Is the inspection result normal?

YES >> GO TO 2.

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

# 2.check "horn with keyless lock" setting in "work support"

- Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "HORN WITH KEYLESS LOCK in "WORK SUPPORT" mode.
- Check the "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT".
   Refer to <u>DLK-38</u>, "INTELLIGENT KEY: CONSULT Function (BCM INTELLIGENT KEY)".

### Is the inspection result normal?

YES >> GO TO 3.

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

# 3. CHECK HAZARD FUNCTION

#### Check hazard function.

Refer to DLK-124, "Component Function Check".

### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

### CHECK HORN FUNCTION

#### Check horn function.

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

### Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

### 5.REPLACE BCM

- Replace BCM. Refer to BCS-95, "Removal and Installation".
- · Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

### HAZARD AND BUZZER REMINDER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

| HAZARD AND BUZZER REMINDER DOES NOT OPERATE   |                         |
|---|-------------------------|
| Diagnosis Procedure   | INFOID:0000000012352783 |
| 1.CHECK "HAZARD ANSWER BACK" SETTING IN "WORK SUPPORT"  |                         |
| <ol> <li>Select "INTELLIGENT KEY" of "BCM" using CONSULT.</li> <li>Select "HAZARD ANSWER BACK" in "WORK SUPPORT" mode.</li> <li>Check the "HAZARD ANSWER BACK" setting in "WORK SUPPORT".<br/>Refer to <a href="DLK-38">DLK-38</a>, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".</li> </ol> |                         |
| Is the inspection result normal?  YES >> GO TO 2.  NO >> Set "Lock Only", "Unlock Only" or "Lock/Unlock" in "HAZARD ANSWER BACK".   |                         |
| 2.CHECK "ANS BACK I-KEY LOCK" SETTING IN "WORK SUPPORT"   |                         |
| <ol> <li>Select "INTELLIGENT KEY" of "BCM" using CONSULT.</li> <li>Select "ANS BACK I-KEY LOCK" in "WORK SUPPORT" mode.</li> <li>Check the "ANS BACK I-KEY LOCK" setting in "WORK SUPPORT".</li> <li>Refer to <u>DLK-38</u>, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".</li> </ol>        |                         |
| Is the inspection result normal?  YES >> GO TO 3.  NO >> Set "Horn Chirp" or "Buzzer" in "ANS BACK I-KEY LOCK".  3.CHECK "ANS BACK I-KEY UNLOCK" SETTING IN "WORK SUPPORT"  |                         |
| <ol> <li>Select "INTELLIGENT KEY" of "BCM" using CONSULT.</li> <li>Select "ANS BACK I-KEY UNLOCK" in "WORK SUPPORT" mode.</li> <li>Check the "ANS BACK I-KEY UNLOCK" setting in "WORK SUPPORT".</li> </ol>  |                         |
| Refer to <u>DLK-38</u> , "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".  Is the inspection result normal?  YES >> GO TO 4.  |                         |
| NO >> Set the "On" in "ANS BACK I-KEY UNLOCK".  4.CHECK HAZARD FUNCTION   |                         |
| Check hazard function. Refer to <u>DLK-124, "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-119, "Component Function Check".   |                         |
| Is the inspection result normal?  YES >> GO TO 6.  NO >> Repair or replace the malfunctioning parts.  |                         |
| 6.REPLACE BCM   |                         |
| <ul> <li>Replace BCM. Refer to <u>BCS-95</u>, "<u>Removal and Installation</u>".</li> <li>Confirm the operation after replacement.</li> <li>Is the result normal?</li> </ul>  | <del></del>             |
| YES >> INSPECTION END NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".   |                         |

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

#### < SYMPTOM DIAGNOSIS >

### KEY REMINDER FUNCTION DOES NOT OPERATE

### Diagnosis Procedure

INFOID:0000000012352784

### 1. CHECK "ANTI KEY LOCK IN FUNCTI" SETTING IN "WORK SUPPORT"

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "ANTI KEY LOCK IN FUNCTI" in "WORK SUPPORT" mode.
- Check "ANTI KEY LOCK IN FUNCTI" setting in "WORK SUPPORT".
   Refer to <u>DLK-38</u>, "INTELLIGENT KEY: CONSULT Function (BCM INTELLIGENT KEY)".

#### Is the inspection result normal?

YES >> GO TO 2.

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

### 2. CHECK INSIDE KEY ANTENNA

### Check inside key antenna.

- Instrument center: Refer to DLK-73, "DTC Logic".
- Console: Refer to DLK-75, "DTC Logic".
- Trunk room: Refer to <u>DLK-77</u>, "<u>DTC Logic</u>".

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

# 3. CHECK DOOR SWITCH

#### Check door switch.

Refer to <u>DLK-87</u>, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

### f 4.CHECK TRUNK LID OPEN SIGNAL CIRCUIT

#### Check trunk lid open signal circuit.

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

### Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

### 5. CHECK UNLOCK SENSOR

#### Check unlock sensor.

Refer to DLK-117, "Component Function Check".

### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

### 6.REPLACE BCM

- Replace BCM. Refer to BCS-95, "Removal and Installation".
- · Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

### WELCOME LIGHT FUNCTION DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

#### WELCOME LIGHT FUNCTION DOES NOT OPERATE Α Diagnosis Procedure INFOID:0000000012352785 ${f 1}$ .CHECK "WELCOME LIGHT OP SET" SETTING IN "WORK SUPPORT" В Select "INTELLIGENT KEY" of "BCM" using CONSULT. Select "WELCOME LIGHT OP SET" in "WORK SUPPORT" mode. Check "WELCOME LIGHT OP SET" setting in "WORK SUPPORT". Refer to DLK-38, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)". Is the inspection result normal? YES >> GO TO 2. D NO >> Set "On" and "WELCOME LIGHT SELECT" in "WORK SUPPORT". $oldsymbol{2}.$ CHECK "WELCOME LIGHT SELECT" SETTING IN "WORK SUPPORT" Select "INTELLIGENT KEY" of "BCM" using CONSULT. Select "WELCOME LIGHT SELECT" in "WORK SUPPORT" mode. Check "WELCOME LIGHT SELECT" setting in "WORK SUPPORT". Refer to DLK-38, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)". Is the inspection result normal? YES >> GO TO 3. NO >> Set "WELCOME LIGHT SELECT" setting in "WORK SUPPORT". 3. CHECK INSIDE KEY ANTENNA Check inside key antenna. Н Instrument center: Refer to <u>DLK-73</u>, "<u>DTC Logic</u>". Console: Refer to <u>DLK-75</u>, "<u>DTC Logic</u>". Trunk room: Refer to <u>DLK-77</u>, "<u>DTC Logic</u>". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. 4.CHECK OUTSIDE KEY ANTENNA Check outside key antenna. • Driver side: Refer to DLK-79, "DTC Logic". DLK Passenger side: Refer to DLK-81, "DTC Logic". • Rear bumper: Refer to DLK-83, "DTC Logic". Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts. ${f 5.}$ CHECK REMOTE KEYLESS ENTRY FUNCTION M Check remote keyless entry function <u>Does door lock/unlock with Intelligent Key button?</u> N YES >> GO TO 6. >> Refer to DLK-145, "Diagnosis Procedure". NO O.CHECK INTERIOR ROOM LAMP CONTROL SYSTEM Check interior room lamp control system. Refer to INL-9, "INTERIOR ROOM LAMP CONTROL SYSTEM System Description". Does the room lamp and puddle lamp turn ON? P YES >> GO TO 7. >> Refer to INL-72, "Symptom Table". NO / .REPLACE BCM Replace BCM. Refer to BCS-95, "Removal and Installation". Confirm the operation after replacement.

Is the result normal?

### WELCOME LIGHT FUNCTION DOES NOT OPERATE

### < SYMPTOM DIAGNOSIS >

YES >> INSPECTION END

### OFF POSITION WARNING DOES NOT OPERATE

### < SYMPTOM DIAGNOSIS >

| OFF POSITION WARNING DOES NOT OPERATE  |                |
|--|----------------|
| Diagnosis Procedure  | A<br>2786      |
| 1. CHECK DTC WITH BCM  | В              |
| Check that DTC is not detected with BCM.   |                |
| Is the inspection result normal?   | С              |
| YES >> GO TO 2.  NO >> Perform trouble diagnosis relevant to DTC indicated.  |                |
| 2.CHECK DTC WITH COMBINATION METER   | D              |
| Check that DTC is not detected with combination meter.   | D              |
| Is the inspection result normal?   |                |
| YES >> GO TO 3.  NO >> Perform trouble diagnosis relevant to DTC indicated.  | Е              |
| 3.CHECK COMBINATION METER BUZZER   |                |
| Check combination meter buzzer.  | <del>-</del> г |
| Refer to DLK-123, "Component Function Check".  |                |
| Is the inspection result normal?   | G              |
| YES >> GO TO 4.  NO >> Repair or replace the malfunctioning parts.   |                |
| 4.CHECK INTELLIGENT KEY WARNING BUZZER   | Н              |
| Check Intelligent Key warning buzzer.  | _              |
| Refer to DLK-119, "Component Function Check".  |                |
| Is the inspection result normal?  YES >> GO TO 5.  | I              |
| NO >> Repair or replace the malfunctioning parts.  |                |
| 5.CHECK DOOR SWITCH  | J              |
| Check door switch (driver side). Refer to DLK-87, "Component Function Check".  |                |
| Is the inspection result normal?   | DLK            |
| YES >> GO TO 6.  |                |
| NO >> Repair or replace the malfunctioning parts.  | L              |
| 6.REPLACE BCM  |                |
| <ul> <li>Replace BCM. Refer to <u>BCS-95, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ul> | M              |
| Is the result normal?  | 1 1 1          |
| YES >> INSPECTION END  |                |
| NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".  | N              |
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### P POSITION WARNING DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

### P POSITION WARNING DOES NOT OPERATE

### Diagnosis Procedure

INFOID:0000000012352787

### 1. CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

### 2 .CHECK DTC WITH COMBINATION METER

Check that DTC is not detected with combination meter.

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Perform trouble diagnosis relevant to DTC indicated.

# 3.check intelligent key warning buzzer

Check Intelligent Key warning buzzer.

Refer to DLK-119, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

### 4. CHECK COMBINATION METER BUZZER

#### Check combination meter buzzer.

Refer to DLK-123, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

### 5. CHECK DOOR SWITCH

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

Refer to DLK-87, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

### **6.**CHECK INFORMATION DISPLAY

### Check information display.

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

### Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

### 7.REPLACE BCM

- · Replace BCM. Refer to BCS-95, "Removal and Installation".
- · Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

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

### < SYMPTOM DIAGNOSIS >

| ACC WARNING DOES NOT OPERATE  |                         |
|---|-------------------------|
| Diagnosis Procedure   | INFOID:0000000012352788 |
| 1. CHECK DTC WITH BCM   |                         |
| Check that DTC is not detected with BCM.  |                         |
| Is the inspection result normal?  YES >> GO TO 2.   |                         |
| NO >> Perform trouble diagnosis relevant to DTC indicated.  |                         |
| 2. CHECK DTC WITH COMBINATION METER   |                         |
| Check that DTC is not detected with combination meter.  |                         |
| Is the inspection result normal?  |                         |
| YES >> GO TO 3.  NO >> Perform trouble diagnosis relevant to DTC indicated.                       |                         |
| 3.CHECK COMBINATION METER BUZZER  |                         |
| Check combination meter buzzer.   |                         |
| Refer to DLK-123, "Component Function Check".   |                         |
| Is the inspection result normal?  YES >> GO TO 4.   |                         |
| NO >> Repair or replace the malfunctioning parts.   |                         |
| 4.CHECK INFORMATION DISPLAY   |                         |
| Check information display.  Refer to DLK-122, "Component Function Check".                         |                         |
| Is the inspection result normal?  |                         |
| YES >> GO TO 5.   |                         |
| NO >> Repair or replace the malfunctioning parts.  5.REPLACE BCM                                  |                         |
| Replace BCM. Refer to BCS-95, "Removal and Installation".   |                         |
| • Confirm the operation after replacement.  |                         |
| Is the result normal?   |                         |
| YES >> INSPECTION END NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident". |                         |
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### TAKE AWAY WARNING DOES NOT OPERATE

INFOID:0000000012352789

#### < SYMPTOM DIAGNOSIS >

### TAKE AWAY WARNING DOES NOT OPERATE

### Diagnosis Procedure

## 1. CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

### 2 .CHECK DTC WITH COMBINATION METER

Check that DTC is not detected with combination meter.

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Perform trouble diagnosis relevant to DTC indicated.

# 3. CHECK DOOR SWITCH

Check door switch.

Refer to DLK-87, "Component Function Check".

### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

### 4. CHECK TRUNK LID OPEN SIGNAL CIRCUIT

Check trunk lid open signal circuit.

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

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

### 5. CHECK COMBINATION METER BUZZER

Check combination meter buzzer.

Refer to DLK-123, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

### **6.**CHECK INFORMATION DISPLAY

Check information display.

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

#### Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

### 7.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.

Refer to DLK-119, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace the malfunctioning parts.

### 8.REPLACE BCM

- · Replace BCM. Refer to BCS-95, "Removal and Installation".
- Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

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### TAKE AWAY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS > >> Check intermittent incident. Refer to GI-45, "Intermittent Incident". Α В С D Е F G Н J DLK L M Ν 0 Р

### INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

### INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

### Diagnosis Procedure

INFOID:0000000012352790

### 1. CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

### 2 .CHECK DTC WITH COMBINATION METER

Check that DTC is not detected with combination meter.

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Perform trouble diagnosis relevant to DTC indicated.

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

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "LO- BATT OF KEY FOB WARN" in "WORK SUPPORT" mode.
- Check "LO-BATT OF KEY FOB WARN" setting in "WORK SUPPORT".
   Refer to <u>DLK-38</u>, "INTELLIGENT KEY: CONSULT Function (BCM INTELLIGENT KEY)".

#### Is the inspection result normal?

YES >> GO TO 4.

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

### 4. CHECK INTELLIGENT KEY BATTERY

Check Intelligent Key battery.

Refer to <u>DLK-121</u>, "Component Inspection".

### Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

# 5.CHECK INFORMATION DISPLAY

Check information display.

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

### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

### **6.**REPLACE BCM

- Replace BCM. Refer to BCS-95, "Removal and Installation".
- · Confirm the operation after replacement.

#### Is the result normal?

YES >> INSPECTION END

### DOOR LOCK OPERATION WARNING DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

| < SYMPTOM DIAGNOSIS > DOOR LOCK OPERATION WARNING DOES NOT OPERATE   | • |
|--|---|
| Diagnosis Procedure  | Α |
| 1. CHECK DOOR LOCK FUNCTION  | В |
| Check door lock function.  |   |
| Does door lock/unlock using door request switch?   | С |
| YES >> GO TO 2.  NO >> Refer to DLK-143, "ALL DOOR : Diagnosis Procedure".   |   |
| 2. CHECK INTELLIGENT KEY WARNING BUZZER  | D |
| Check Intelligent Key warning buzzer. Refer to DLK-119, "Component Function Check".  |   |
| Is the inspection result normal?   | Е |
| YES >> GO TO 3.  |   |
| NO >> Repair or replace the malfunctioning parts.  | _ |
| 3.REPLACE BCM  | F |
| <ul> <li>Replace BCM. Refer to <u>BCS-95, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ul> |   |
| Is the result normal?  | G |
| YES >> INSPECTION END  |   |
| NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".  | Н |
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### **KEY ID WARNING DOES NOT OPERATE**

#### < SYMPTOM DIAGNOSIS >

### KEY ID WARNING DOES NOT OPERATE

### Diagnosis Procedure

INFOID:0000000012352792

### 1. CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

# 2.check dtc with combination meter

Check that DTC is not detected with combination meter.

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Perform trouble diagnosis relevant to DTC indicated.

# 3.CHECK INTELLIGENT KEY BATTERY

### Check Intelligent Key battery.

Refer to DLK-121, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

### 4. CHECK INFORMATION DISPLAY

### Check information display

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

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

### **5.**CHECK INSIDE KEY ANTENNA

#### Check inside key antenna.

- Instrument center: Refer to <u>DLK-73, "DTC Logic"</u>.
- Console: Refer to DLK-75, "DTC Logic".
- Trunk room: Refer to <u>DLK-77</u>, "<u>DTC Logic</u>".

### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

### 6.REPLACE BCM

- Replace BCM. Refer to BCS-95, "Removal and Installation".
- · Confirm the operation after replacement.

#### Is the result normal?

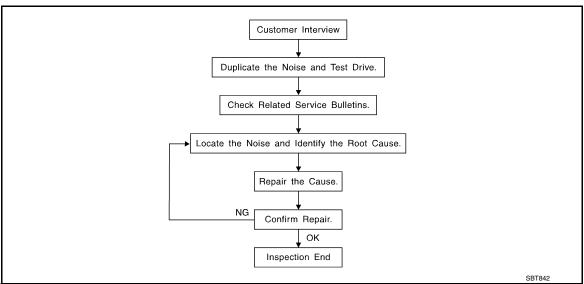
YES >> INSPECTION END

### REAR DOOR AUTO CLOSURE SYSTEM DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

| REAR DOOR AUTO CLOSURE SYSTEM DOES NOT OPERATE   |             |
|--|-------------|
| Diagnosis Procedure  | ρ<br>52793  |
| 1. CHECK POWER SUPPLY AND GROUND CIRCUIT   | Е           |
| Check rear door closure control unit power supply and ground circuit.  Refer to <a "rh:="" (lh)="" (rh).<="" diagnosis="" dlk-125,="" href="https://docs.org/learning-new-normalization-new-normalization-new-normalization-new-normalization-new-normalization-new-normalization-new-normalization-new-normalization-new-normalization-new-normalization-new-normalization-new-new-normalization-new-normalization-new-normalization-new-normalization-new-normalization-new-new-new-new-new-new-new-new-new-ne&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Is the inspection result normal?  YES &gt;&gt; GO TO 2.&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;NO &gt;&gt; Repair or replace the malfunctioning parts.  2.CHECK REAR DOOR CLOSURE MOTOR&lt;/td&gt;&lt;td&gt;С&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Check rear door closure motor. Refer to DLK-125, " lh:="" or="" procedure"="" td=""><td><br/>E</td></a> | <br>E       |
| Is the inspection result normal?  YES >> GO TO 3.  NO >> Repair or replace the malfunctioning parts.   | F           |
| 3. CHECK NEUTRAL SWITCH  |             |
| Check neutral switch. Refer to <u>DLK-127, "LH: Diagnosis Procedure"</u> (LH) or <u>DLK-128, "RH: Diagnosis Procedure"</u> (RH). <u>Is the inspection result normal?</u>   | G           |
| YES >> GO TO 4.  NO >> Repair or replace the malfunctioning parts.   | F           |
| 4.CHECK HANDLE SWITCH Check handle switch.   | — .         |
| Refer to <u>DLK-130, "LH: Diagnosis Procedure"</u> (LH) or <u>DLK-131, "RH: Diagnosis Procedure"</u> (RH).  Is the inspection result normal?   |             |
| YES >> GO TO 5.  | J           |
| NO >> Repair or replace the malfunctioning parts.  5.CHECK OPERATION SWITCH  |             |
| Check operation switch. Refer to <u>DLK-133</u> , " <u>LH</u> : <u>Diagnosis Procedure</u> " (LH) or <u>DLK-134</u> , " <u>RH</u> : <u>Diagnosis Procedure</u> " (RH). Is the inspection result normal?  | DL          |
| YES >> GO TO 6.  NO >> Repair or replace the malfunctioning parts.   | L           |
| 6. CHECK REVERSE SWITCH  | N           |
| Check reverse switch. Refer to <u>DLK-136, "LH: Diagnosis Procedure"</u> (LH) or <u>DLK-137, "RH: Diagnosis Procedure"</u> (RH).  Is the inspection result normal?   | _           |
| YES >> GO TO 7.  NO >> Repair or replace the malfunctioning parts.   | N           |
| 7.REPLACE REAR DOOR CLOSURE CONTROL UNIT   | C           |
| <ol> <li>Replace rear door closure control unit.</li> <li>Confirm the operation after replacement.</li> </ol>  | <del></del> |
| Is the result normal?  | F           |
| YES >> INSPECTION END NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".  |             |

Work Flow INFOID:000000012352794



#### **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 <a href="DLK-176">DLK-176</a>, "Diagnostic Worksheet". This information is necessary to duplicate the conditions that exist when the noise occurs.

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

#### DUPLICATE THE NOISE AND TEST DRIVE

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

### < 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 tem-

porarily.

- 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-174, "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.

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** 

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(0.20 in) wide tape roll queaks and rattles.

#### < SYMPTOM DIAGNOSIS >

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

SILICONE GREASE

Used in place of UHMW tape that is be visible or does not fit. Will only last a few months.

SILICONE SPRAY

Used when grease cannot be applied.

**DUCT TAPE** 

Used to eliminate movement.

#### CONFIRM THE REPAIR

Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.

### Inspection Procedure

INFOID:0000000012352795

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

#### **INSTRUMENT PANEL**

Most incidents are caused by contact and movement between:

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

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

#### **CAUTION:**

Never use silicone spray to isolate a squeak or rattle. If the area is saturated with silicone, the recheck of repair becomes impossible.

#### **CENTER CONSOLE**

Components to pay attention to include:

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

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

#### **DOORS**

Pay attention to the following:

- 1. Finisher and inner panel making a slapping noise
- Inside handle escutcheon to door finisher
- Wiring harnesses tapping
- 4. Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. The areas can usually be insulated with felt cloth tape or insulator foam blocks from the Nissan Squeak and Rattle Kit (J-50397) to repair the noise.

#### **TRUNK**

Trunk noises are often caused by a loose jack or loose items put into the trunk by the customer. In addition look for the following:

- 1. Trunk lid dumpers out of adjustment
- 2. Trunk lid striker out of adjustment
- 3. The trunk lid torsion bars knocking together
- 4. A loose license plate or bracket

#### < 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:

- 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:

- 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:

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

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

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### Diagnostic Worksheet

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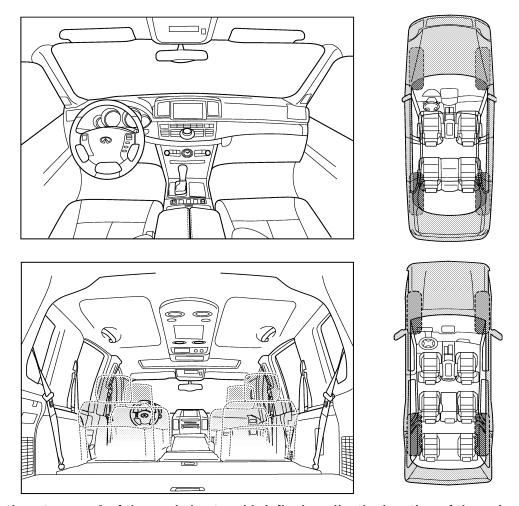
# SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

#### 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.

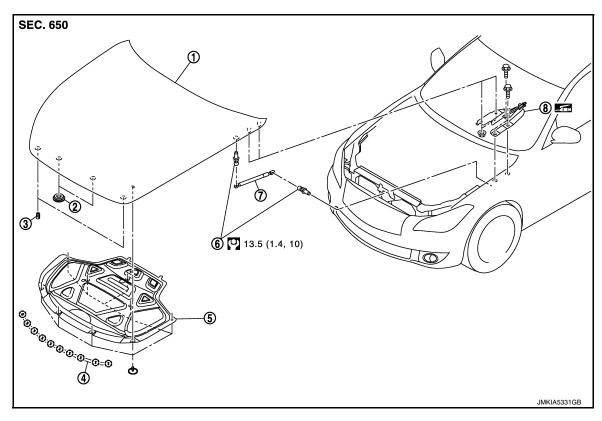
| II. WHEN DOES IT OCCUR? (pleas  | se check the boxes that apply)   |
|---|--|
| anytime   | after sitting out in the rain  |
| 1st time in the morning   | when it is raining or wet  |
| only when it is cold outside  | dry or dusty conditions  |
| only when it is hot outside   | other:   |
| III. WHEN DRIVING:  | IV. WHAT TYPE OF NOISE   |
| ☐ through driveways   | squeak (like tennis shoes on a clean floor)  |
| over rough roads  | creak (like walking on an old wooden floor)  |
| over speed bumps  | rattle (like shaking a baby rattle)  |
| only about mph  | knock (like a knock at the door)   |
| on acceleration   | tick (like a clock second hand)  |
| ☐ coming to a stop ☐ on turns: left, right or either (circle  | <ul><li>☐ thump (heavy, muffled knock noise)</li><li>e)</li><li>☐ buzz (like a bumble bee)</li></ul> |
| ☐ with passengers or cargo  |  |
|   |  |
| other:  |  |
|   | <br>minutes  |
| ☐ other: miles or   |  |
| other: after driving miles or  TO BE COMPLETED BY DEALERS   |  |
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| other: after driving miles or  TO BE COMPLETED BY DEALERS  Test Drive Notes:  Vehicle test driven with customer - Noise verified on test drive                                      | SHIP PERSONNEL  YES NO Initials of person performing   |
| other:  after driving miles or  TO BE COMPLETED BY DEALERS  Test Drive Notes:  Vehicle test driven with customer - Noise verified on test drive - Noise source located and repaired | YES NO Initials of person performing   |
| other: after driving miles or  TO BE COMPLETED BY DEALERS  Test Drive Notes:  Vehicle test driven with customer - Noise verified on test drive                                      | YES NO Initials of person performing   |
| other:  after driving miles or  TO BE COMPLETED BY DEALERS  Test Drive Notes:  Vehicle test driven with customer - Noise verified on test drive - Noise source located and repaired | YES NO Initials of person performing  U U U U U U U U U U U U U U U U U U U                          |

Revision: September 2015 DLK-177 2016 Q70

# REMOVAL AND INSTALLATION

### **HOOD**

Exploded View



- 1. Hood assembly
- 4. Radiator core seal
- 7. Hood stay
- ( ) : Clip
- : Body grease
- : N·m (kg-m, ft-lb)

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

- 3. Bumper rubber
- Stud ball

### **HOOD ASSEMBLY**

**HOOD ASSEMBLY: Removal and Installation** 

INFOID:0000000012352798

### **CAUTION:**

Operate with 2 workers, because of its heavy weight.

#### REMOVAL

- 1. Remove washer nozzle (LH and RH) and washer tube. Refer to WW-52, "Removal and Installation".
- 2. Support hood lock assembly with a proper material to prevent it from falling.

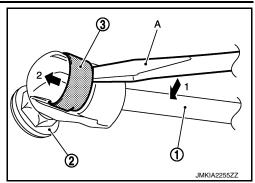
#### WARNING.

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

#### HOOD

#### < REMOVAL AND INSTALLATION >

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



- 4. Disengage the stud ball from the hood stay (hood side).
- 5. Remove hood hinge mounting nuts on the hood to remove the hood assembly.
- 6. Remove following parts after removing the hood assembly.
  - Radiator core seal
  - · Hood insulator
  - Hood bumper rubber
  - · Hood striker

#### **INSTALLATION**

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

**CAUTION:** 

- Before installing hood hinge, apply anticorrosive agent onto the mounting surface of the vehicle body.
- After installing, perform hood fitting adjustment. Refer to <u>DLK-180, "HOOD ASSEMBLY: Adjust-ment"</u>.
- After installing, perform front washer nozzle and tube inspection and adjustment. Refer to <u>WW-53</u>, <u>"Inspection and Adjustment"</u>.

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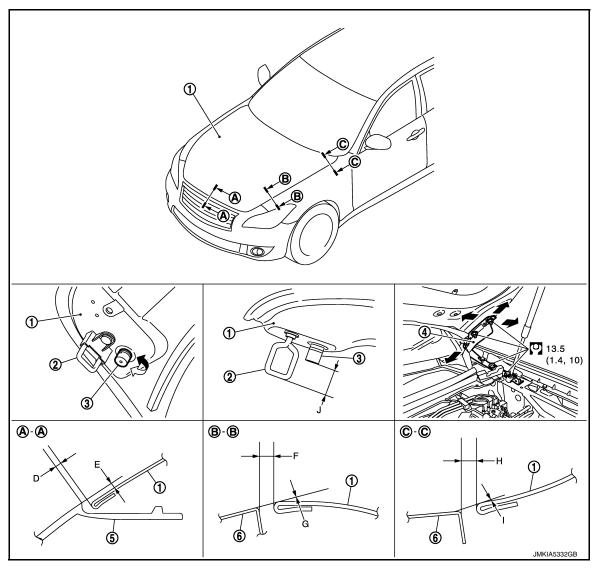
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### **HOOD ASSEMBLY: Adjustment**

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- 1. Hood assembly
- 4. Hood hinge

- 2. Hood striker
- 5. Front bumper fascia
- Hood bumper rubber
- 6. Front fender

: N·m (kg-m, ft-lb)

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

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

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

| -                            | Portion |   |                | Standard                                       | Difference<br>(LH/RH, MAX) |
|------------------------------|---------|---|----------------|--|----------------------------|
| Hood – Fender                | B – B   | F | Clearance      | 2.5 – 4.5 mm<br>(0.098 – 0.177 in)             | 1.0 mm<br>(0.039 in)       |
|                              |         | G | Surface height | (-1.5) - (+1.5) mm<br>[(-0.059) - (+0.059) in] | _                          |
|                              | C – C   | н | Clearance      | 2.5 – 4.5 mm<br>(0.098 – 0.177 in)             | 1.0 mm<br>(0.039 in)       |
|                              |         | I | Surface height | (-1.5) - (+1.5) mm<br>[(-0.059) - (+0.059) in] | _                          |
| Hood striker – Bumper rubber | _       | J | Clearance      | 32.0 – 36.0 mm<br>(1.260 – 1.417 in)           | _                          |

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

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

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

NOTE:

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

### **HOOD HINGE**

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

INFOID:0000000012352800

### REMOVAL

- Remove hood assembly. Refer to <u>DLK-178</u>, "HOOD ASSEMBLY: Removal and Installation".
- Remove front fender cover. Refer to <u>EXT-23</u>, "Exploded View".
- 3. Remove brake master cylinder cover, battery cover, and hood ledge cover (LH and RH). Refer to <a href="EXT-23">EXT-23</a>, <a href="Exploded View"</a>.
- Remove clips of hood seal, and then remove hood seal assembly (side). Refer to <u>DLK-186, "Exploded View"</u>.
- Remove front fender mounting bolt.
- 6. Remove hood hinge mounting bolts, and then remove hood hinge.

#### INSTALLATION

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

### **CAUTION:**

- Before installation of hood hinge, apply anticorrosive agent onto the surface of the vehicle body.
- Before installation of hood hinge, drop genuine high strength locking sealant or equivalent into bolt hole of hood hinge (body side).
- After installation, apply touch-up paint (the body color) onto the head of the hinge mounting bolts and nuts.
- After installation, perform hood fitting adjustment. Refer to <u>DLK-180, "HOOD ASSEMBLY: Adjust-ment"</u>.

**HOOD STAY** 

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Revision: September 2015 DLK-181 2016 Q70

# **HOOD STAY: Removal and Installation**

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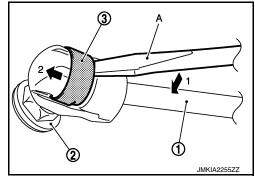
### **REMOVAL**

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

#### WARNING

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

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



### **INSTALLATION**

Install in the reverse order of removal.

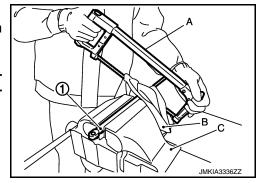
## **HOOD STAY**: Disposal

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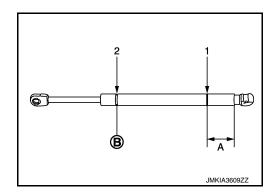
- 1. Fix hood stay (1) using a vise (C).
- 2. Using hacksaw (A) slowly make 2 holes in the hood stay, in numerical order as shown in the figure.

### **CAUTION:**

- When cutting a hole on hood stay, always cover a hacksaw using a shop cloth (B) to avoid scattering metal fragments or oil.
- · Wear eye protection (safety glasses).
- · Wear gloves.

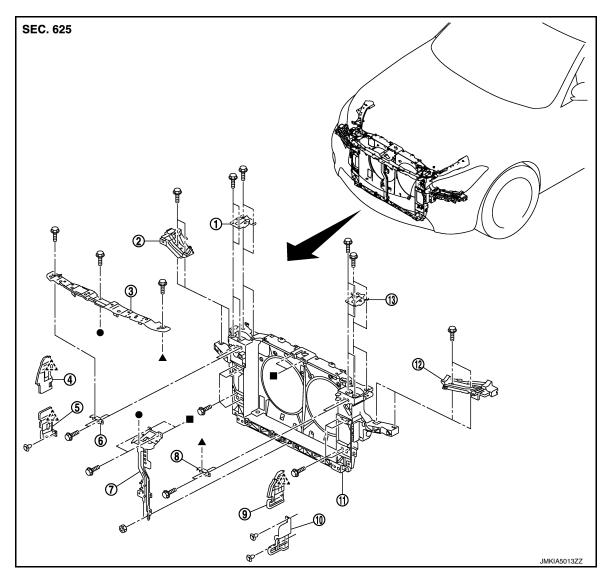


A: 20.0 mm (0.787 in)B: Cut at the groove.



# RADIATOR CORE SUPPORT

**Exploded View** INFOID:0000000012352803



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

- Head lamp bracket RH
- Condenser side seal lower RH
- Front bumper side retainer LH
- Radiator core support assembly
- Front bumper upper retainer 3.
- 6. Front bumper side retainer RH
- Condenser side seal upper LH
- 12. Head lamp bracket LH

\_^` : Pawl

●, ▲, ■: Indicates that the part is connected at points with same symbol in actual vehicle.

### Removal and Installation

### **REMOVAL**

- 1. Remove brake master cylinder cover, battery cover, and hood ledge cover (LH and RH). Refer to EXT-23. "Exploded View".
- 2. Use a refrigerant collecting equipment to discharge the refrigerant. Refer to HA-21, "Recycle Refrigerant".
- Remove engine under cover. Refer to EXT-32, "ENGINE UNDER COVER: Removal and Installation".
- Drain engine coolant from radiator.

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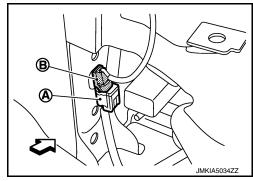
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**DLK-183 Revision: September 2015** 2016 Q70

### RADIATOR CORE SUPPORT

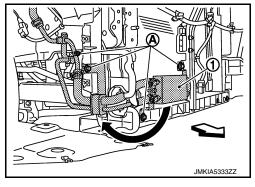
### < REMOVAL AND INSTALLATION >

- VQ engine models: Refer to <u>CO-11, "Draining"</u>.
- VK engine models: Refer to CO-39, "Draining".
- Remove air duct (inlet) assembly.
  - VQ engine models: Refer to EM-29, "Removal and Installation".
  - VK engine models: Refer to EM-192, "Removal and Installation".
- Remove front bumper fascia, energy absorber, and reinforcement. Refer to <u>EXT-16</u>, "Removal and Installation".
- Remove front combination lamp (LH and RH). Refer to <u>EXL-137</u>, "Removal and Installation".
- 8. Remove head lamp bracket.
  - 1. Disconnect harness connector of Intelligent Key warning buzzer.
  - 2. Remove mounting bolts and remove head lamp bracket.
- 9. Remove washer tank. Refer to <a href="https://www.49">WW-49</a>, "Removal and Installation".
- 10. Remove mounting bolts and remove hood lock bracket (LH and RH).
  - Remove hood lock control cable (front) fixing clips from hood lock support stay and condenser upper bracket. Refer to <u>DLK-205</u>, "<u>Exploded View</u>".
  - 2. Remove hood lock control cable (front) from tube clip of front bumper upper retainer. Refer to <a href="DLK-205">DLK-205</a>, "Exploded View".
  - 3. Remove hood lock bracket mounting bolts.
  - 4. Remove air cleaner assembly (VK engine models only). Refer to EM-192, "Removal and Installation".
  - 5. Disconnect harness connector (A), and then remove hood lock switch harness connector (B) from vehicle.



- 6. Move hood lock bracket to a location where it does not inhibit work.
- Remove horn (HIGH and LOW). Refer to HRN-7, "Removal and Installation".
- 12. Disconnect harness connector of refrigerant pressure sensor. Refer to <a href="HA-42">HA-42</a>, "REFRIGERANT PRES-SURE SENSOR: Removal and Installation".
- Disconnect harness connector of ambient sensor. Refer to HAC-127, "Removal and Installation".
- 14. Remove ICC sensor integrated unit (with intelligent cruise control model). Refer to <a href="CCS-133">CCS-133</a>, "Removal and Installation".
- Move power steering oil cooler to a location where it does not inhibit work.
  - Remove under side cover RH. Refer to <u>EXT-26</u>, "<u>FENDER PROTECTOR</u>: <u>Exploded View</u>".
  - 2. Remove mounting bolts (A) and remove power steering oil cooler (1).
  - 3. Remove power steering oil cooler as show in the figure.

: Vehicle front



- 16. Remove condenser pipe assembly. Refer to <a href="HA-41">HA-41</a>, "CONDENSER PIPE ASSEMBLY: Removal and Installation".
- 17. Remove radiator reservoir tank.
  - VQ engine models: Refer to <u>CO-16, "Exploded View"</u>.
  - VK engine models: Refer to <u>CO-45</u>, "Exploded View".
- Remove radiator hose (upper) and radiator hose (lower) at radiator side.
  - VQ engine models: Refer to <u>CO-17, "Removal and Installation"</u>.

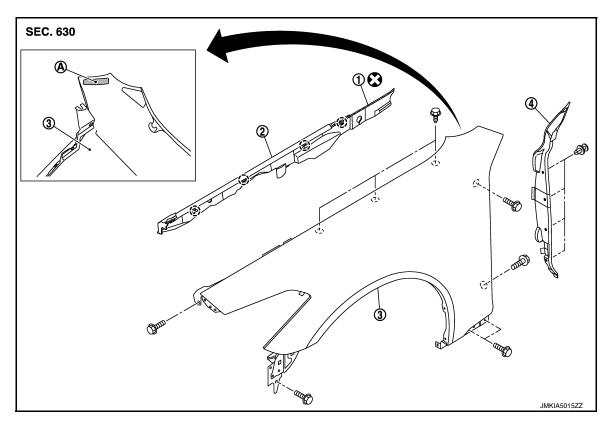
### RADIATOR CORE SUPPORT

< REMOVAL AND INSTALLATION > VK engine models: Refer to CO-45, "Removal and Installation". 19. Disconnect AT fluid cooler hose (A and B) from fan shroud and remove AT fluid cooler hose (A and B) from radiator. VQ engine (2WD) models: Refer to TM-215, "VQ37VHR (2WD): Removal and Installation". VQ engine (AWD) models: Refer to TM-217, "VQ37VHR (AWD): Removal and Installation". В • VK engine (2WD) models: Refer to TM-219, "VK56VD (2WD): Removal and Installation". • VK engine (AWD) models: Refer to TM-222, "VK56VD (AWD): Removal and Installation". 20. Disconnect harness connector of cooling fan control modules. VQ engine models: Refer to <u>CO-21, "Removal and Installation"</u>. VK engine models: Refer to <u>CO-49</u>, "Removal and Installation". Disconnect harness connector of crash zone sensor. Refer to SR-21, "Removal and Installation". 22. Remove harness fixing clips from the following components. Front bumper upper retainer Hood lock support stay Е Cooling fan assembly Radiator core support assembly 23. Remove mounting bolts, and then remove radiator core support assembly. **CAUTION:** Operate with two workers, because of its heavy weight. 24. Remove the following parts after removing radiator core support assembly. Front bumper upper retainer Front bumper side retainer (LH and RH) Hood lock support stay condenser assembly: Refer to HA-40, "CONDENSER: Removal and Installation". Н Crash zone sensor: Refer to <u>SR-21, "Removal and Installation"</u>. Cooling fan assembly VQ engine models: Refer to CO-21, "Removal and Installation". VK engine models: Refer to <u>CO-49</u>, "Removal and Installation". Remove radiator. - VQ engine models: Refer to CO-17, "Removal and Installation". - VK engine models: Refer to CO-45, "Removal and Installation". · Condenser side seal upper and lower INSTALLATION Note the following item, and install in the reverse order of removal. **CAUTION:**  Replenish the following parts. - Refrigerant: Refer to HA-21, "Charge Refrigerant". - Engine coolant (VQ engine models): Refer to CO-11, "Refilling". Engine coolant (VK engine models): Refer to <u>CO-40, "Refilling"</u>. - AT fluid: Refer to TM-182, "Changing". - Power steering oil: Refer to ST-30, "Inspection". Adjust the following parts. - Front combination lamp: Refer to EXL-133, "Aiming Adjustment Procedure". - ICC sensor integrated unit (with intelligent cruise control model): Refer to CCS-81, "TYPE 1 <u>Description</u>" (TYPE 1) or <u>CCS-85</u>, "TYPE 2 : <u>Description</u>" (TYPE 2).

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### FRONT FENDER

Exploded View



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

- Front fender baffle
- ( ) : Clip
- : Always replace after every disassembly

### **CAUTION:**

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

### Removal and Installation

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### **CAUTION:**

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

### REMOVAL

- Remove front fender cover (RH and LH): Refer to <u>EXT-23</u>. "Exploded View".
- Remove brake master cylinder cover, battery cover, hood ledge cover (LH and RH). Refer to <u>EXT-23.</u> <u>"Exploded View"</u>.
- 3. Remove hood seal assembly (side).
- 4. Remove air duct (inlet).
  - VQ37: Refer to EM-29, "Removal and Installation".
  - VK56: Refer to EM-192, "Removal and Installation".
- 5. Remove front bumper fascia. Refer to <a href="EXT-16">EXT-16</a>. "Removal and Installation".
- 6. Remove front combination lamp. Refer to <a>EXL-137</a>, "Removal and Installation"</a>.
- Remove fender protector. Refer to <u>EXT-26</u>, "<u>FENDER PROTECTOR</u>: Removal and <u>Installation</u>".
- 8. Remove front door assembly. Refer to <a href="DLK-188">DLK-188</a>, "DOOR ASSEMBLY: Removal and Installation".

### FRONT FENDER

### < REMOVAL AND INSTALLATION >

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

### INSTALLATION

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

**CAUTION:** 

- After installation, check front fender adjustment.
- Hood side: Refer to DLK-180, "HOOD ASSEMBLY: Adjustment".
- Front door side: Refer to DLK-190, "DOOR ASSEMBLY: Adjustment".
- After installation, apply the touch-up paint (the body color) onto the head of front fender mounting bolts.
- Adjust the following part.
- Front combination lamp: Refer to EXL-133, "Aiming Adjustment Procedure".

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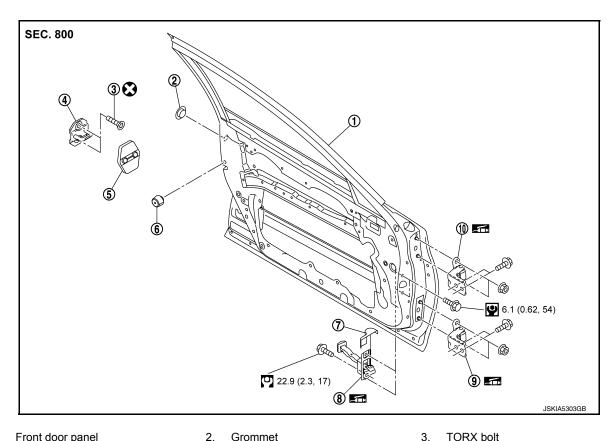
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# FRONT DOOR

**Exploded View** INFOID:0000000012352807



- 1. Front door panel
- 4. Door striker
- Check link cover
- 10. Door hinge (upper)
- : Always replace after every disassembly
- : Body grease
- : N·m (kg-m, ft-lb)
- : N·m (kg-m, in-lb)

# DOOR ASSEMBLY

DOOR ASSEMBLY: Removal and Installation

# INFOID:0000000012352808

### **CAUTION:**

• Perform work with 2 workers, because of its heavy weight.

5.

Door striker cover

Door check link

· When removing and installing front door assembly, support door with a jack and cloth to protect door and body.

**REMOVAL** 

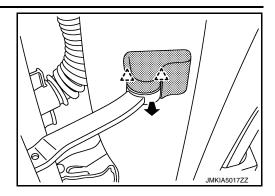
- 6. Bumper rubber
- Door hinge (lower)

### **FRONT DOOR**

### < REMOVAL AND INSTALLATION >

1. Remove check link cover toward vehicle rear.





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

3. Disconnect front door harness connector.

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

### NOTE:

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

### **INSTALLATION**

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

#### **CAUTION:**

- Check front door open/close, lock/unlock operation after installation.
- Check door hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installation, perform the fitting adjustment. Refer to <u>DLK-190, "DOOR ASSEMBLY: Adjust-ment".</u>
- After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.

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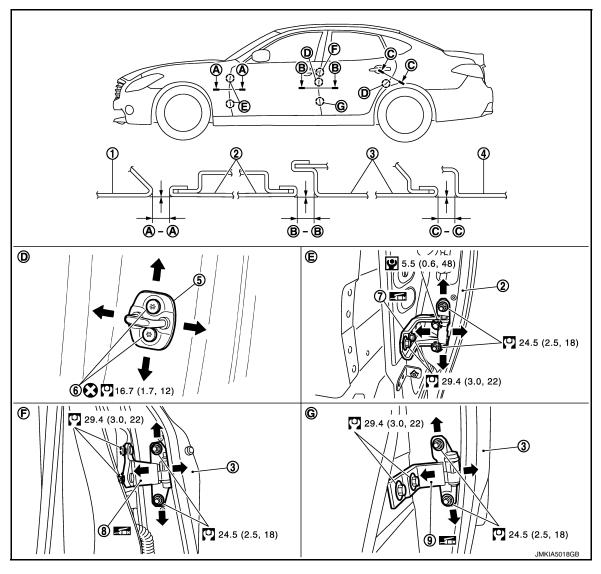
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# DOOR ASSEMBLY: Adjustment

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

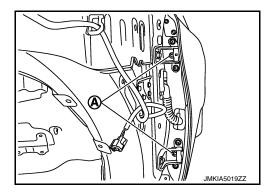
- : Always replace after every disassembly
- : Body grease
- : N·m (kg-m, ft-lb)
- : N·m (kg-m, in-lb)

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.

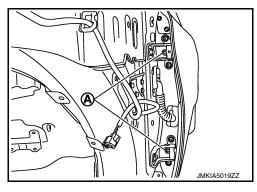
| Portion                   |       |                | Standard                                       |  |
|---------------------------|-------|----------------|--|--|
| Front fender – Front door | Λ _ Λ | Clearance      | 2.7 – 4.7 mm<br>(0.106 – 0.185 in)             |  |
| Tront lender – Front door | A-A   | Surface height | (-1.0) - (+1.0) mm<br>[(-0.039) - (+0.039) in] |  |

| Po                     | Portion Standard |                                    | Standard  |
|------------------------|------------------|------------------------------------|---|
| Front door – Rear door | Clearance        | 2.9 – 4.7 mm<br>(0.114 – 0.185 in) |   |
| Tiont door - Real door | 5-6              | Surface height                     | -1.0) <b>–</b> (+1.0) mm<br>[(-0.039) <b>–</b> (+0.039) in] |

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



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



- 6. Temporarily tighten door hinge mounting nuts on door side.
- 7. Loosen door hinge mounting bolts on body side.
- Raise front door at rear end to adjust clearance of the front door according to the fitting standard dimension.
- 9. After adjustment tighten bolts and nuts to the specified torque.
- 10. Install front fender. Refer to DLK-186, "Removal and Installation".

### DOOR STRIKER ADJUSTMENT

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

### DOOR STRIKER

### DOOR STRIKER: Removal and Installation

### REMOVAL

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

### INSTALLATION

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

#### **CAUTION:**

- Check front door open/close, lock/unlock operation after installation.
- After installation, check to perform the fitting adjustment. Refer to <u>DLK-190, "DOOR ASSEMBLY:</u>
   <u>Adjustment"</u>.

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### **FRONT DOOR**

### < REMOVAL AND INSTALLATION >

### DOOR HINGE: Removal and Installation

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### **REMOVAL**

- 1. Remove front fender. Refer to <u>DLK-186, "Removal and Installation"</u>.
- 2. Remove front door assembly. Refer to <a href="DLK-188">DLK-188</a>, "DOOR ASSEMBLY: Removal and Installation".
- 3. Remove front door hinge mounting bolts, and then remove front door hinge.

#### INSTALLATION

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

### **CAUTION:**

- · Check front door open/close, lock/unlock operation after installation.
- · Check door hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installation, perform the fitting adjustment. Refer to <u>DLK-190, "DOOR ASSEMBLY: Adjust-ment"</u>.
- After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.
   DOOR CHECK LINK

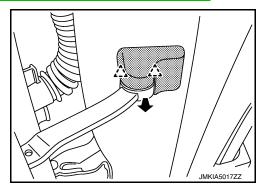
### DOOR CHECK LINK: Removal and Installation

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#### **REMOVAL**

- 1. Fully close the front door window.
- 2. Remove front door finisher. Refer to <a href="INT-31">INT-31</a>, "FRONT DOOR FINISHER: Removal and Installation".
- 3. Remove front door speaker or front door woofer.
  - Front door speaker (base audio without navigation): Refer to AV-127, "Removal and Installation".
  - Front door woofer (BOSE audio without navigation): Refer to AV-408, "Removal and Installation".
- 4. Remove check link cover toward vehicle rear.





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

### INSTALLATION

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

#### **CAUTION:**

Check front door open/close operation after installation.

# **REAR DOOR**

**Exploded View** 

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- 1. Rear door panel
- Door striker
- Bumper rubber 7.
- 10. Door hinge (lower)
- : Always replace after every disassembly
- : Body grease
- : N·m (kg-m, ft-lb)
- : N·m (kg-m, in-lb)

- Grommet 2.
- 5. Door striker cover
- 8. Door check link cover
- 11. Door hinge (upper)
- TORX bolt 3.
- Child lock lever cover 6.
- Door check link

### DOOR ASSEMBLY

DOOR ASSEMBLY: Removal and Installation

- 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** 

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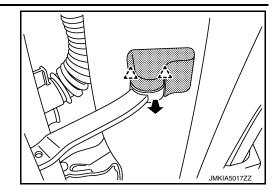
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### **REAR DOOR**

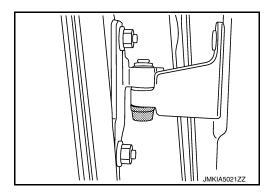
### < REMOVAL AND INSTALLATION >

Remove check link cover toward vehicle rear.

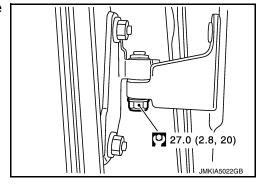




- 2. Remove mounting bolts of door check link on the vehicle.
- 3. Remove rear door harness grommet, and then pull out door harness from the vehicle.
- 4. Disconnect rear door harness connector.
- 5. Remove nut cup.



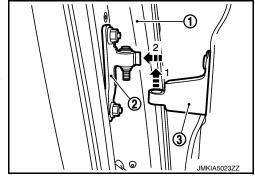
6. Remove door hinge mounting nuts (door side), and then remove rear door assembly.



7. Lift up rear door assembly (1). Disconnect door hinge [male-side (door side)] (2) from door hinge [female-side (body side)] (3) and remove toward outside of vehicle.

#### NOTE:

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



### **INSTALLATION**

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

### **CAUTION:**

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

# DOOR ASSEMBLY: Adjustment

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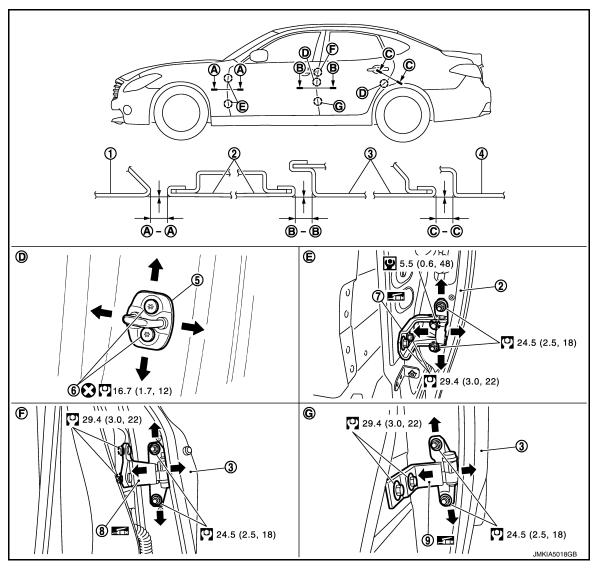
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- 1. Front fender
- 4. Body side outer
- 7. Front door hinge

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

: Always replace after every disassembly

: Body grease

: N·m (kg-m, ft-lb)

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

| Por                    | Portion |                | Standard                                       |
|------------------------|---------|----------------|--|
| Front door – Rear door | B – B   | Clearance      | 2.9 – 4.7 mm<br>(0.114 – 0.185 in)             |
| - Near door            | 5-6     | Surface height | (-1.0) - (+1.0) mm<br>[(-0.039) - (+0.039) in] |

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| Portion                     |       |                | Standard                                       |  |
|-----------------------------|-------|----------------|--|--|
| Rear door – Body side outer | C – C | Clearance      | 2.7 – 4.7 mm<br>(0.106 – 0.185 in)             |  |
|                             |       | Surface height | (-1.0) - (+1.0) mm<br>[(-0.039) - (+0.039) in] |  |

#### **CAUTION:**

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

- Remove center pillar lower garnish. Refer to <u>INT-46, "CENTER PILLAR LOWER GARNISH: Removal and Installation".</u>
- 2. Loosen door hinge mounting nuts on door side.
- 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.
- 7. After adjustment tighten bolts and nuts to the specified torque.
- 8. Install center pillar lower garnish. Refer to <a href="INT-46">INT-46</a>, "CENTER PILLAR LOWER GARNISH: Removal and Installation".

#### DOOR STRIKER ADJUSTMENT

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

### DOOR STRIKER

### DOOR STRIKER: Removal and Installation

INFOID:0000000012352816

### **REMOVAL**

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

#### INSTALLATION

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

#### **CAUTION:**

- Check rear door open/close, lock/unlock operation after installation.
- After installation, check to perform the fitting adjustment. Refer to <u>DLK-195</u>, "<u>DOOR ASSEMBLY</u>:
   Adjustment".

### DOOR HINGE

### DOOR HINGE: Removal and Installation

INFOID:0000000012352817

### **REMOVAL**

- Remove center pillar lower garnish. Refer to <u>INT-46, "CENTER PILLAR LOWER GARNISH: Removal and Installation"</u>.
- Remove rear door assembly. Refer to DLK-193, "DOOR ASSEMBLY: Removal and Installation".
- 3. Remove rear door hinge mounting bolts and nuts (body side), and then remove door hinge.

#### INSTALLATION

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

#### **CAUTION:**

- Check rear door open/close operation after installation.
- Check door hinge rotating part for poor lubrication. If necessary, apply body grease.
- When removing and installing rear door assembly, perform the fitting adjustment. Refer to <u>DLK-195</u>, <u>"DOOR ASSEMBLY: Adjustment"</u>.
- After installing, apply the touch-up paint (the body color) onto the head of door hinge mounting nuts. DOOR CHECK LINK

### **REAR DOOR**

### < REMOVAL AND INSTALLATION >

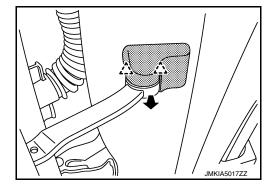
### DOOR CHECK LINK: Removal and Installation

INFOID:0000000012352818

### REMOVAL

- 1. Fully close the rear door window.
- Remove rear door finisher. Refer to <u>INT-34, "REAR DOOR FINISHER: Removal and Installation"</u>.
- 3. Remove rear door speaker.
  - Base audio without navigation: Refer to <u>AV-129</u>, "Removal and Installation".
  - BOSE audio without navigation: Refer to <u>AV-411, "Removal and Installation"</u>.
- 4. Remove check link cover toward vehicle rear.





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

### **INSTALLATION**

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

### **CAUTION:**

Check rear door open/close operation after installation.

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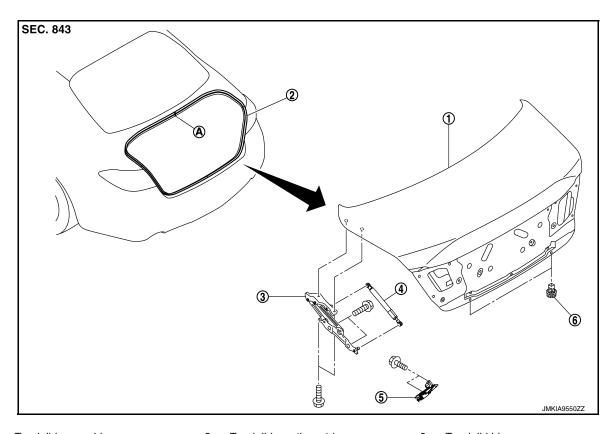
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# **TRUNK LID**

Exploded View



- 1. Trunk lid assembly
- 4. Trunk lid stay
- A : Center mark (upper)
- 2. Trunk lid weather-strip
- 5. Trunk lid striker

- 3. Trunk lid hinge
- 6. Bumper rubber

# TRUNK LID ASSEMBLY

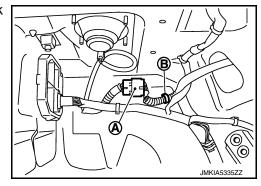
### TRUNK LID ASSEMBLY: Removal and Installation

#### CAUTION:

Operate with two workers, because of its heavy weight.

### **REMOVAL**

- 1. Remove the trunk lid finisher inner. Refer to <a href="INT-64">INT-64</a>, "Removal and Installation"
- 2. Disconnect harness connector (A) and harness clip (B) in trunk room.

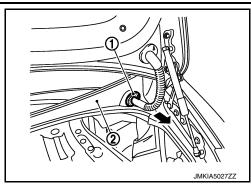


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### **TRUNK LID**

### < REMOVAL AND INSTALLATION >

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



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

### **INSTALLATION**

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

### **CAUTION:**

- After installing, apply touch-up paint (the body color) onto the head of the hinge mounting bolts.
- Check trunk lid open/close, lock/unlock operation after installation.
- After installation, perform fitting adjustment. Refer to <u>DLK-200, "TRUNK LID ASSEMBLY: Adjust-ment"</u>.

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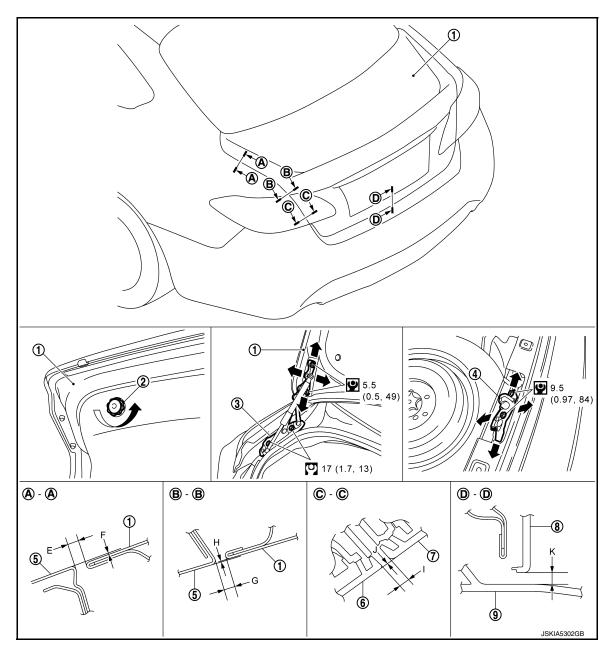
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# TRUNK LID ASSEMBLY : Adjustment

INFOID:0000000012352821



- 1. Trunk lid assembly
- 4. Trunk lid striker
- 7. Reverse lamp
- : N·m (kg-m, ft-lb)
- : N·m (kg-m, in-lb)

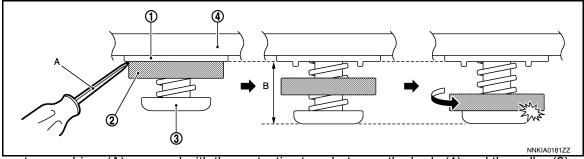
- 2. Bumper rubber
- 5. Body side outer
- 8. Trunk lid finisher

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

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

| Portion                               |       |   |                   | Standard                                       | Difference<br>(RH/LH, MAX) |
|---------------------------------------|-------|---|-------------------|--|----------------------------|
| Trunk lid – Body side<br>outer        | A – A | E | Clearance         | 2.5 – 4.5 mm<br>(0.098 – 0.177 in)             | 1.4 mm<br>(0.055 in)       |
|                                       |       | F | Surface<br>height | (-1.5) – (+0.5) mm<br>[(-0.059) – (+0.020) in] | 1.4 mm<br>(0.055 in)       |
|                                       | B – B | G | Clearance         | 3.0 – 5.0 mm<br>(0.118 – 0.197 in)             | 1.4 mm<br>(0.055 in)       |
|                                       |       | Н | Surface<br>height | (-1.5) – (+0.5) mm<br>[(-0.059) – (+0.020) in] | 1.4 mm<br>(0.055 in)       |
| Rear combination lamp  - Reverse lamp | C-C   | I | Clearance         | 2.1 – 5.9 mm<br>(0.083 – 0.232 in)             | 2.5 mm<br>(0.098 in)       |
|                                       |       | J | Surface<br>height | (-1.9) – (+1.9) mm<br>[(-0.075) – (+0.075) in] | 2.2 mm<br>(0.087 in)       |
| Trunk lid – Rear bumper fascia        | D – D | K | Clearance         | 2.4 – 6.6 mm<br>(0.094 – 0.260 in)             | _                          |

- 1. Loosen trunk lid hinge mounting bolts (trunk lid side).
- 2. Remove trunk rear plate. Refer to INT-62, "TRUNK REAR PLATE: Removal and Installation".
- 3. Loosen trunk lid striker mounting bolts.
- 4. Lift up trunk lid approximately 100 150 mm (3.937 5.906 in) height then close it lightly and check that it is engaged firmly with trunk lid closed.
- 5. Check the clearance and surface height.
- 6. Finally tighten trunk lid hinge and trunk lid striker.
- 7. Install trunk rear plate. Refer to INT-62, "TRUNK REAR PLATE: Removal and Installation".
- 8. Initialize the height of bumper rubber.



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

### NOTE:

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

#### **CAUTION:**

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

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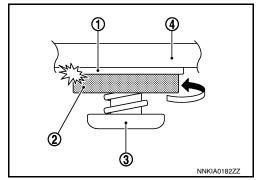
### **TRUNK LID**

### < REMOVAL AND INSTALLATION >

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

> (1) : Body (2) : Collar

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



#### **CAUTION:**

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

### TRUNK LID STRIKER ADJUSTMENT

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

TRUNK LID STRIKER

TRUNK LID STRIKER: Removal and Installation

INFOID:0000000012352822

### **REMOVAL**

- Remove trunk rear plate. Refer to <u>INT-62, "TRUNK REAR PLATE: Removal and Installation"</u>.
- 2. Remove mounting bolts, and then remove trunk lid striker.

#### INSTALLATION

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

### **CAUTION:**

- Check trunk lid open/close, lock/unlock operation after installation.
- When removing and installing trunk lid striker, perform the fitting adjustment. Refer to <u>DLK-200</u>, <u>"TRUNK LID ASSEMBLY: Adjustment"</u>.

TRUNK LID HINGE

TRUNK LID HINGE: Removal and Installation

INFOID:0000000012352823

### **REMOVAL**

- 1. Remove trunk lid assembly. Refer to <a href="https://doi.org/10.15/2016/bj.10.15/">DLK-198, "TRUNK LID ASSEMBLY: Removal and Installation"</a>.
- Remove trunk lid stay from trunk lid hinge. Refer to <u>DLK-202</u>, "TRUNK LID STAY: Removal and Installation".
- 3. Remove trunk lid hinge mounting nuts (body side), and then remove trunk lid hinge.

#### INSTALLATION

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

#### **CAUTION:**

- Check trunk lid open/close, lock/unlock operation after installation.
- Check trunk lid hinge rotating part for poor lubrication. If necessary, apply body grease.
- When removing and installing trunk lid assembly, perform the fitting adjustment. Refer to <u>DLK-200</u>, "TRUNK LID ASSEMBLY: Adjustment".
- After installation, apply touch-up paint (the body color) onto the head of trunk lid hinge mounting bolts.

TRUNK LID STAY

TRUNK LID STAY: Removal and Installation

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### REMOVAL

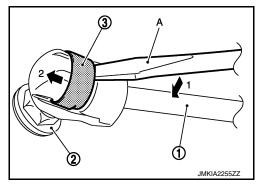
### < REMOVAL AND INSTALLATION >

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

#### WARNING:

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

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



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

### INSTALLATION

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

#### **CAUTION:**

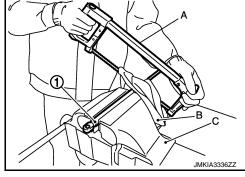
Check trunk lid open/close operation after installation.

## TRUNK LID STAY: Disposal

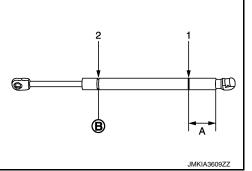
- 1. Fix trunk lid stay (1) using a vise (C).
- 2. Using hacksaw (A) slowly make 2 holes in the trunk lid stay, in numerical order as shown in the figure.

#### **CAUTION:**

- When cutting a hole on trunk lid stay, always cover a hacksaw using a shop cloth (B) to avoid scattering metal fragments or oil.
- Wear eye protection (safety glasses).
- · Wear gloves.



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



### TRUNK LID WEATHER-STRIP

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

### **REMOVAL**

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

Never pull strongly on weather-strip.

#### INSTALLATION

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### **TRUNK LID**

### < REMOVAL AND INSTALLATION >

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

NOTE:

Check that weather-strip fits tightly in each corner.

## **HOOD LOCK**

Exploded View

SEC. 656

(a) (0.61, 53)

(b) (0.0 (0.61, 53)

(c) (22.0 (2.2, 16.0)

(d) (d) (0.61, 53)

(e) (0.61, 53)

(f) (22.0 (2.2, 16.0)

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

( ) : Clip

: Body grease

: N·m (kg-m, ft-lb)

: N·m (kg-m, in-lb)

### **HOOD LOCK**

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

### REMOVAL

### **CAUTION:**

## Check wiring of hood lock control before removal.

- 1. Remove air duct (inlet).
  - VQ engine models: Refer to EM-29, "Exploded View".
  - VK engine models: Refer to EM-192, "Exploded View".
- 2. Remove hood lock control cable (front) clips from hood lock stay and condenser upper bracket.
- 3. Remove hood lock control cable (front) from tube clip of front bumper upper retainer.
- 4. Remove air cleaner assembly (VK engine models only). Refer to <a>EM-192</a>. "Removal and Installation"</a>.

ner lever

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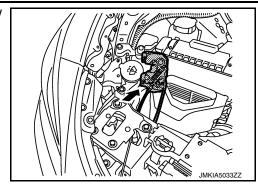
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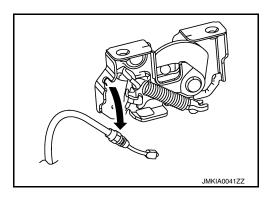
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### < REMOVAL AND INSTALLATION >

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

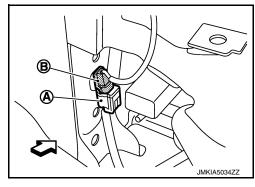


Disconnect hood lock control cable (front) from hood lock.



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





8. Remove hood lock.

### INSTALLATION

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

#### **CAUTION:**

- Check that hood lock control cable is properly engaged with hood lock.
- After installation, perform hood fitting adjustment. Refer to <u>DLK-180, "HOOD ASSEMBLY: Adjust-ment"</u>.
- After installation, perform hood lock control inspection. Refer to <u>DLK-206, "HOOD LOCK: Inspection"</u>.

**HOOD LOCK**: Inspection

INFOID:0000000012352829

#### NOTE:

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

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

Revision: September 2015 D. L. K. - 2 0 6 2016 Q70

### **HOOD LOCK**

### < REMOVAL AND INSTALLATION >

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

### HOOD LOCK CONTROL CABLE

### HOOD LOCK CONTROL CABLE: Removal and Installation

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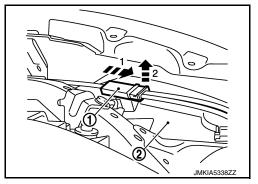
#### FRONT

Removal

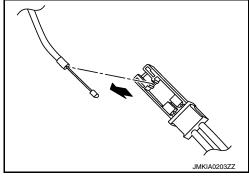
### **CAUTION:**

Check wiring of hood lock control before removal.

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

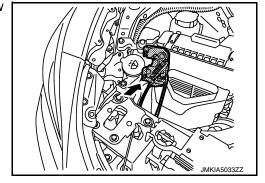


- 3. Remove hood lock control cable cover from hood lock control cable protector.
- 4. Disconnect hood lock control cable (front) hood lock control cable protector.



5. Remove air duct (inlet).

- VQ engine models: Refer to <u>EM-29</u>, "<u>Exploded View</u>".
- VK engine models: Refer to EM-192, "Exploded View".
- Remove hood lock control cable (front) fixing clips from hood lock stay and condenser upper bracket.
- 7. Remove hood lock control cable (front) from tube clip of front bumper upper retainer.
- 8. Remove air cleaner assembly (VK engine models only). Refer to EM-192, "Removal and Installation".
- Remove mounting bolts of hood lock then reward the arrow direction.



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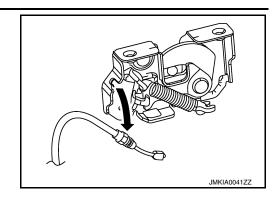
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10. Disconnect hood lock control cable (front) from hood lock.



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

Installation

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

#### **CAUTION:**

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

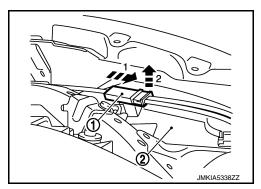
### **REAR**

#### Removal

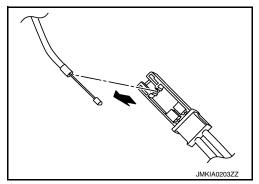
#### **CAUTION:**

Check wiring of hood lock control before removal.

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



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



- 5. Remove fender protector LH. Refer to EXT-26, "FENDER PROTECTOR: Removal and Installation".
- 6. Remove mounting bolts and remove hood lock opener lever.
- 7. Remove front kicking plate inner LH and dash side finisher LH. Refer to INT-38, "Exploded View".
- Remove grommet on the lower dash, pull hood lock control cable (rear) toward the passenger compartment.

### **CAUTION:**

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

Installation

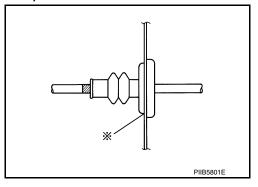
### **HOOD LOCK**

### < REMOVAL AND INSTALLATION >

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

### **CAUTION:**

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



- Check that hood lock control cable is properly engaged with hood lock.
- After installation, perform hood fitting adjustment. Refer to <u>DLK-180, "HOOD ASSEMBLY: Adjust-ment"</u>.
- After installation, perform hood lock control inspection. Refer to <u>DLK-206, "HOOD LOCK: Inspection"</u>.

### HOOD LOCK CONTROL CABLE: Inspection

### INFOID:0000000012352831

#### NOTE:

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

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

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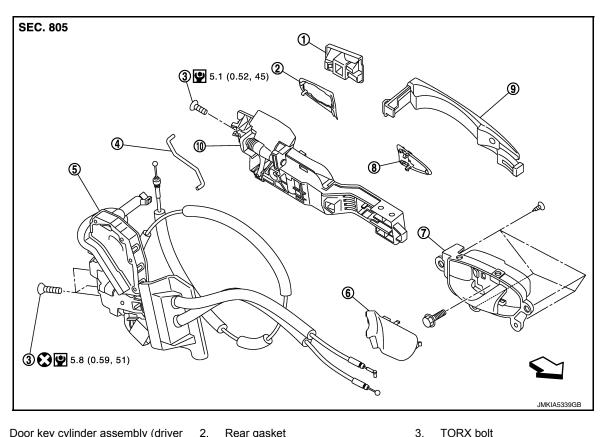
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**Exploded View** INFOID:0000000012352832



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

7. Inside handle

- : Always replace after every disassembly
- : N·m (kg-m, in-lb)

# DOOR LOCK

DOOR LOCK: Removal and Installation

INFOID:0000000012352833

Inside handle escutcheon

Outside handle

### **REMOVAL**

1. Remove front door finisher. Refer to INT-31, "FRONT DOOR FINISHER: Removal and Installation".

Rear gasket

5. Door lock assembly

Front gasket

- 2. Remove front door glass. Refer to GW-18, "Removal and Installation".
- 3. Remove front door module assembly. Refer to GW-20, "Removal and Installation".
- Disconnect door antenna and door request switch connector and remove harness clamp (with Intelligent Key system model) on outside handle bracket.

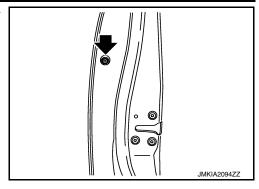
### < REMOVAL AND INSTALLATION >

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

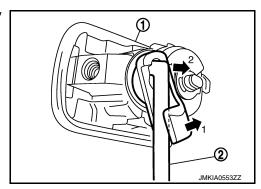
### **CAUTION:**

**Never remove TORX bolt forcibly.** 

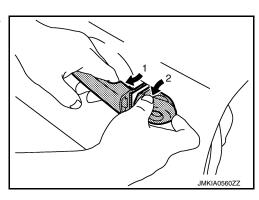
**←** : TORX bolt



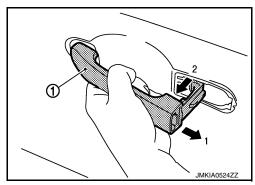
6. Reach in to separate key rod (2) connection [on the door key cylinder assembly (1)] (driver side).



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



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



9. Remove front gasket and rear gasket.

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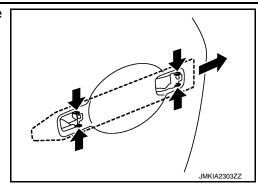
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### < REMOVAL AND INSTALLATION >

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



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

### INSTALLATION

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

#### **CAUTION:**

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

INSIDE HANDLE

INSIDE HANDLE: Removal and Installation

INFOID:0000000012352834

### **REMOVAL**

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

#### INSTALLATION

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

#### CAUTION:

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

OUTSIDE HANDLE

**OUTSIDE HANDLE: Removal and Installation** 

INFOID:0000000012352835

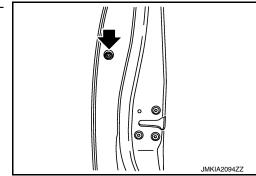
### **REMOVAL**

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

### **CAUTION:**

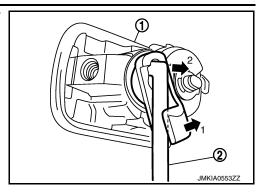
Never remove TORX bolt forcibly.

= : TORX bolt

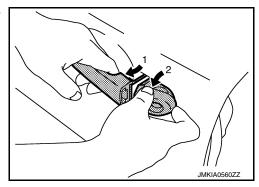


### < REMOVAL AND INSTALLATION >

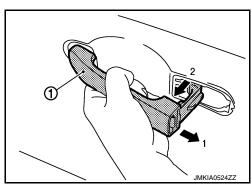
6. Reach in to separate key rod (2) connection [on the door key cylinder assembly (1)] (driver side).



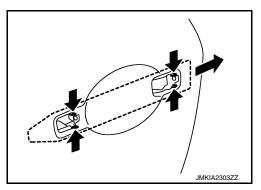
7. While pulling outside handle, remove door key cylinder assembly (driver side) or outside handle escutcheon (passenger side).



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



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



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

### INSTALLATION

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

#### **CAUTION:**

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

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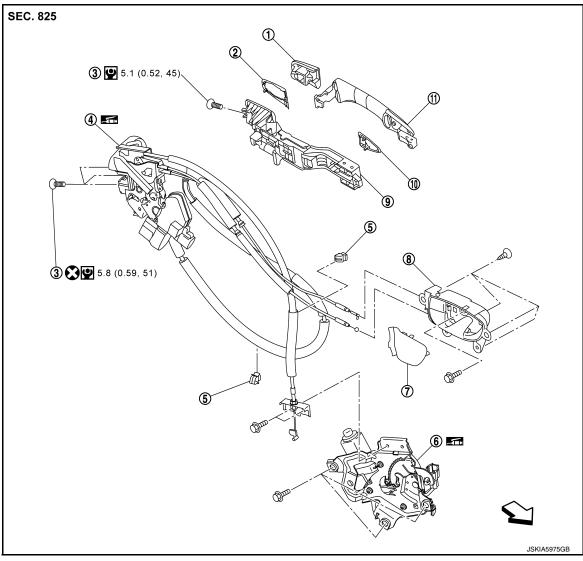
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# **REAR DOOR LOCK**

**Exploded View** INFOID:0000000012352836

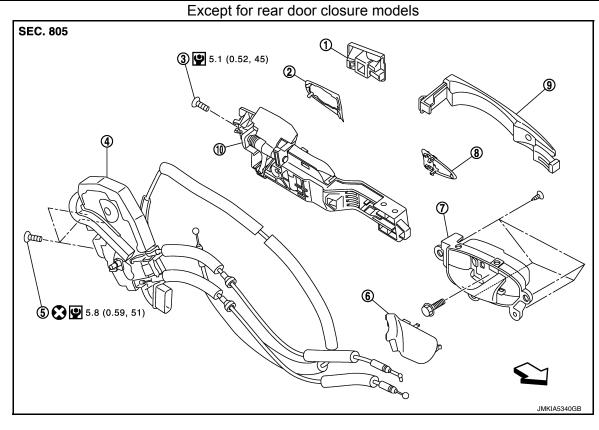
### For rear door closure models



- Outside handle escutcheon
- Door lock assembly
- Inside handle escutcheon
- 10. Front gasket
- : Always replace after every disassembly
- : Body grease
- : N·m (kg-m, in-lb)

- Rear gasket
- 5. Cable clip
- 8. Inside handle
- 11. Outside handle

- TORX bolt
- Door closure motor assembly
- Outside handle bracket



- Outside handle escutcheon
- Door lock assembly
- Inside handle
- 10. Outside handle bracket
- ⟨□ : Vehicle front
- : Always replace after every disassembly
- : N·m (kg-m, in-lb)

- Rear gasket 2.
- TORX bolt
- Front gasket

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

DOOR LOCK

DOOR LOCK: Removal and Installation

REMOVAL

For Rear Door Closure Models

- Remove rear door finisher. Refer to <u>INT-34, "REAR DOOR FINISHER: Removal and Installation"</u>.
- Remove rear door auto closure control unit. Refer to <u>DLK-237</u>, "Removal and Installation".
- Remove sealing screen. Refer to <u>GW-23</u>, "<u>Removal and Installation</u>".
- 4. Remove rear door sash inner cover. Refer to <a href="INT-37">INT-37</a>, "REAR DOOR SASH INNER COVER: Removal and Installation".
- Remove rear door corner outer cover. Refer to EXT-37, "Removal and Installation".
- Remove rear door sash and rear door glass. Refer to <u>GW-21, "Removal and Installation"</u>.
- Remove outside handle and outside handle bracket. Refer to DLK-218, "OUTSIDE HANDLE: Removal and Installation".
- 8. Disconnect door closure cable from door closure motor assembly. Refer to <a href="DLK-217">DLK-217</a>, "DOOR CLOSURE MOTOR ASSEMBLY: Removal and Installation"
- 9. Remove door lock assembly mounting TORX bolts.
- 10. Disconnect harness connectors, and then remove door lock assembly.

**Except For Rear Door Closure Models** 

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### **REAR DOOR LOCK**

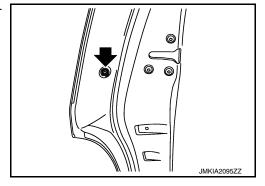
### < REMOVAL AND INSTALLATION >

- 1. Remove rear door finisher. Refer to INT-34, "REAR DOOR FINISHER: Removal and Installation".
- 2. Remove sealing screen. Refer to GW-23, "Exploded View".
- 3. Fully close the rear door glass.
- Remove door side grommet, and loosen TORX bolt from grommet hole.

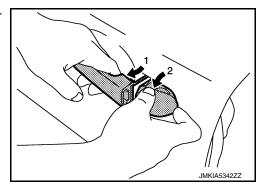
### **CAUTION:**

Never remove TORX bolt forcibly.

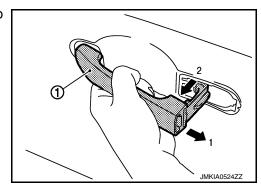
= : TORX bolt



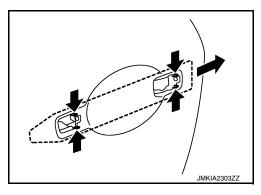
While pulling outside handle, remove outside handle escutcheon.



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



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



- 9. Reach in to separate outside handle cable connection on outside handle bracket.
- 10. Remove door lock assembly mounting TORX bolts.
- 11. Disconnect door lock actuator connector, and then remove door lock assembly.

### INSTALLATION

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

### < REMOVAL AND INSTALLATION >

### **CAUTION:**

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

### DOOR CLOSURE MOTOR ASSEMBLY

### DOOR CLOSURE MOTOR ASSEMBLY: Removal and Installation

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### **REMOVAL**

For Rear Door Closure Models

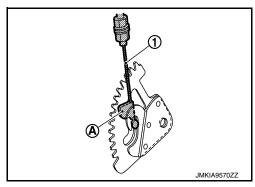
- Remove rear door finisher. Refer to INT-34, "REAR DOOR FINISHER: Removal and Installation".
- Remove rear door auto closure control unit. Refer to DLK-237, "Removal and Installation".
- Remove sealing screen. Refer to <u>GW-23</u>, "<u>Removal and Installation</u>".
- 4. Remove door closure cable bracket mounting bolts.
- 5. Disconnect door closure cable and harness connector from door closure motor assembly.
- Remove mounting bolts and then remove door closure motor assembly.

### INSTALLATION

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

### **CAUTION:**

 When installing door closure cable (1), be sure to install so that door closure cable front end (A) faces to the outside of the gear.



Perform adjustment after installing door closure cable. Refer to <u>DLK-217, "DOOR CLOSURE MOTOR ASSEMBLY: Adjustment"</u>.

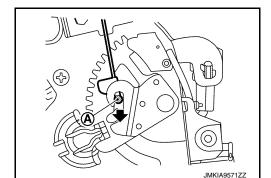
# DOOR CLOSURE MOTOR ASSEMBLY : Adjustment

# INFOID:0000000012352839

### DOOR CLOSURE CABLE ADJUSTMENT METHOD

For Rear Door Closure Models

1. Pull door closure cable end (A) lightly.



- Check the following status.
  - Check that clearance C between cable end (A) and gear bracket (B) is not 0.3 mm or less.

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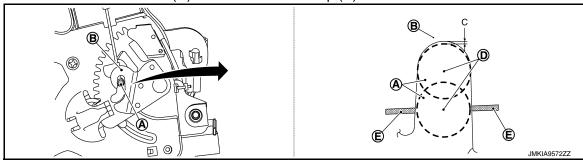
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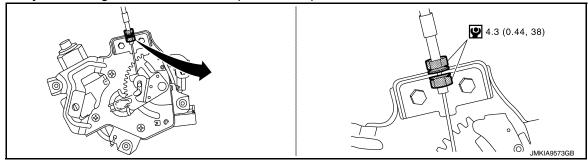
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### < REMOVAL AND INSTALLATION >

· Check that cable end center (D) is not outside of stamp (E).



- 3. When cable end center is not within the range, loosen lock nut and adjust door closure cable.
- After adjustment, tighten lock nut to the specified torque.



: N·m (kg-m, in-lb)

### **INSIDE HANDLE**

INSIDE HANDLE: Removal and Installation

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### **REMOVAL**

- 1. Remove rear door finisher. Refer to INT-34, "REAR DOOR FINISHER: Removal and Installation".
- 2. Remove inside handle mounting screws, and then remove inside handle.

### INSTALLATION

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

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

### OUTSIDE HANDLE

OUTSIDE HANDLE: Removal and Installation

INFOID:0000000012352841

### REMOVAL

For Rear Door Closure Models

- 1. Remove rear door finisher. Refer to INT-34, "REAR DOOR FINISHER: Removal and Installation".
- 2. Remove rear door auto closure control unit. Refer to DLK-237, "Removal and Installation".
- 3. Remove sealing screen. Refer to GW-23, "Removal and Installation".
- 4. Fully close rear door glass.

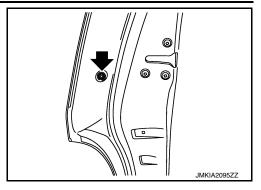
### < REMOVAL AND INSTALLATION >

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

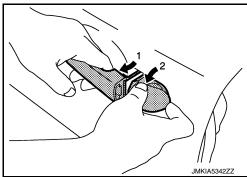
### **CAUTION:**

**Never remove TORX bolt forcibly.** 

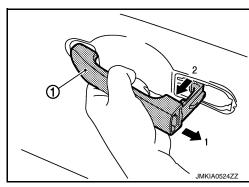
**←** : TORX bolt



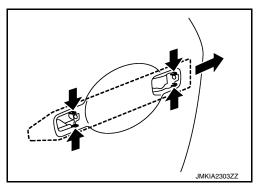
6. While pulling outside handle, remove outside handle escutcheon



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



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



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

**Except For Rear Door Closure Models** 

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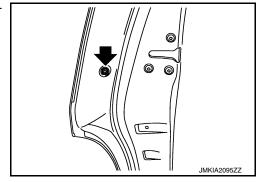
### < REMOVAL AND INSTALLATION >

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

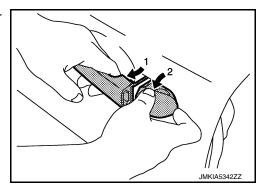
### **CAUTION:**

**Never remove TORX bolt forcibly.** 

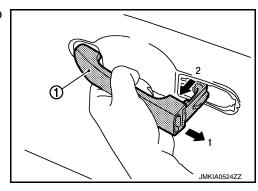
= : TORX bolt



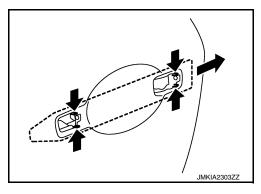
While pulling outside handle, remove outside handle escutcheon.



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



- 4. Remove rear door finisher. Refer to INT-34, "REAR DOOR FINISHER: Removal and Installation".
- 5. Remove sealing screen. Refer to GW-23, "Removal and Installation".
- 6. Fully close rear door glass.
- 7. Remove front gasket and rear gasket.
- 8. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.



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

### **INSTALLATION**

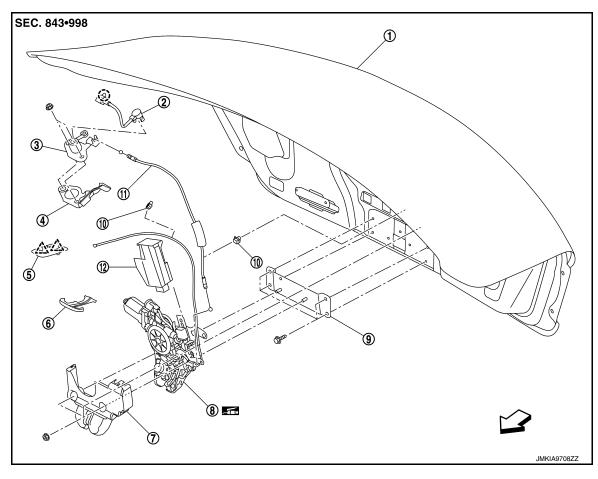
Note the following item, and install in the reverse order of removal.

### **CAUTION:**

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

# TRUNK LID LOCK

Exploded View



- 1. Trunk lid
- 4. Trunk lid outer protector
- 7. Trunk lid lock cover
- 10. Cable clip
- ( ) : Clip
- 八:Pawl
- : Vehicle front
- : Body grease

- 2. Trunk lid cylinder switch
- 5. Emergency holder
- 8. Trunk closure assembly
- 11. Trunk lid cable

- 3. Trunk lid cylinder assembly
- 6. Emergency inside handle
- 9. Trunk opener bracket assembly
- 12. Trunk lid closure control unit

# Removal and Installation

REMOVAL

- 1. Remove trunk lid inner finisher. Refer to <a href="INT-64">INT-64</a>, "Removal and Installation".
- Disconnect trunk lid cable from trunk lid cylinder assembly.
- Disconnect trunk closure assembly harness connector. CAUTION:

When disconnecting harness connector, disconnect battery cable from negative terminal, and then disconnect harness connector.

- Remove trunk closure assembly.
- a. Remove emergency inside handle from emergency holder.
- b. Remove cable from emergency inside handle.

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### TRUNK LID LOCK

### < REMOVAL AND INSTALLATION >

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

### INSTALLATION

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

### **CAUTION:**

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

# **FUEL FILLER LID OPENER**

# **Exploded View**

SEC. 844-905

- 1. Fuel filler lid opener actuator
- 4. Fuel filler lid assembly
- ^` : Pawl

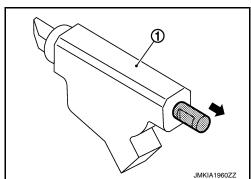
- 2. Lock nut
- 5. Bumper rubber

- 3. Bumper rubber
- 6. Lock and rod assembly

### Removal and Installation

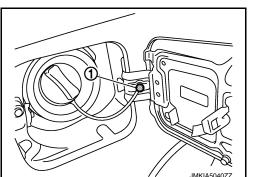
### NOTE:

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



### **REMOVAL**

- 1. Fully open fuel filler lid.
- 2. Remove fuel mounting pin (1).



- 3. Remove mounting screws and then remove fuel filler lid.
- 4. Rotate lock nut counterclockwise, and then remove lock nut.

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### **FUEL FILLER LID OPENER**

### < REMOVAL AND INSTALLATION >

- 5. Remove trunk side finisher RH. Refer to INT-63, "TRUNK SIDE FINISHER: Removal and Installation".
- 6. Push fuel filler lid opener actuator behind the vehicle, while pushing the pawl.
- 7. Disconnect harness connector and remove fuel filler lid opener actuator.
- 8. Pull and remove lock & rod assembly forward, while pushing the pawls.

### **INSTALLATION**

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

### **CAUTION:**

- After installation, check fuel filler lid assembly open/close, lock/unlock operation.
- After installation, apply the touch-up paint (the body color) onto the head of the mounting screws.

# KEY CYLINDER

# **GLOVE BOX LID KEY CYLINDER**

# GLOVE BOX LID KEY CYLINDER: Exploded View

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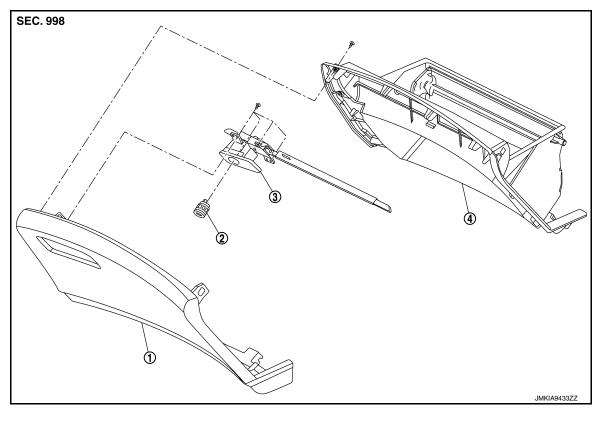
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- 1. Glove box outer lid
- 2. Glove box lid lock cylinder
- 3. Glove box lock assembly

4. Glove box inner lid

### GLOVE BOX LID KEY CYLINDER: Removal and Installation

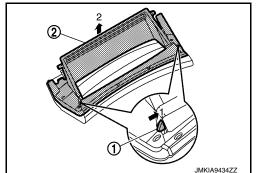
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### **REMOVAL**

### **CAUTION:**

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

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



Remove fixing screws of glove box lock assembly.

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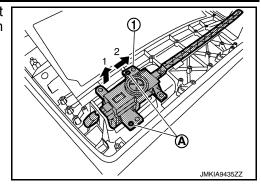
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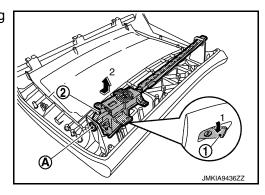
### **KEY CYLINDER**

### < REMOVAL AND INSTALLATION >

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



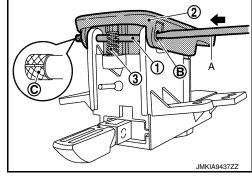
6. Disconnect rod (2) from rod slide hole portion (A) while pulling handle (1) of glove box lock assembly.

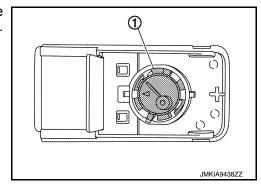


- 7. Remove glove box lock assembly.
- 8. Using a screwdriver (A), insert shaft (1) from portion (B) as shown in the figure. Remove shaft, handle (2), and handle spring (3).

### **CAUTION:**

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



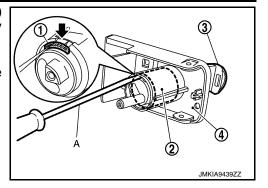


### **KEY CYLINDER**

### < REMOVAL AND INSTALLATION >

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

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



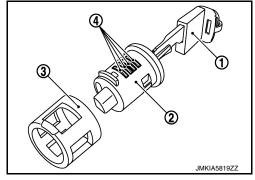
11. Remove sleeve (3) from handle, and then install sleeve to glove box lid key cylinder (2).

### NOTE:

When removing sleeve, write a short note describing its position against handle.

### **CAUTION:**

Never pull out mechanical key (1) from glove box lid key cylinder while sleeve is uninstalled. Otherwise, tumbler (4) pops out of glove box lid key 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.

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# **DOOR SWITCH**

# < REMOVAL AND INSTALLATION >

# **DOOR SWITCH**

# Removal and Installation

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**REMOVAL** 

Remove the door switch mounting bolt, and then remove door switch.

**INSTALLATION** 

Install in the reverse order of removal.

### **INSIDE KEY ANTENNA**

### < REMOVAL AND INSTALLATION >

# INSIDE KEY ANTENNA INSTRUMENT CENTER

# **INSTRUMENT CENTER:** Removal and Installation

### INFOID:0000000012352849

### REMOVAL

- 1. Remove the cluster lid C. Refer to IP-13, "Removal and Installation".
- 2. Remove the inside key antenna (instrument center) mounting screw, and then remove inside key antenna (instrument center).

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### INSTALLATION

Install in the reverse order of removal.

### CONSOLE

# **CONSOLE**: Removal and Installation

# INFOID:0000000012352850

### **REMOVAL**

- 1. Remove the console ashtray.
- 2. Remove the center console assembly. Refer to IP-24, "Removal and Installation".
- 3. Remove the inside key antenna mounting (console) screw, and then remove inside key antenna (console).

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### **INSTALLATION**

Install in the reverse order of removal.

### TRUNK ROOM

### INFOID:0000000012352851

# TRUNK ROOM: Removal and Installation

### **REMOVAL**

- 1. Remove the trunk lid upper finisher. Refer to <a href="INT-62">INT-62</a>, "TRUNK FINISHER FRONT: Removal and Installation".
- Remove the inside key antenna (trunk room) mounting nuts, and then remove inside key antenna (trunk room).

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### **INSTALLATION**

Install in the reverse order of removal.

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### **OUTSIDE KEY ANTENNA**

### < REMOVAL AND INSTALLATION >

# **OUTSIDE KEY ANTENNA**

**DRIVER SIDE** 

DRIVER SIDE: Removal and Installation

INFOID:0000000012352852

### **REMOVAL**

Remove the front outside handle LH. Refer to <u>DLK-212</u>, "OUTSIDE HANDLE: Removal and Installation".

### INSTALLATION

Install in the reverse order of removal.

PASSENGER SIDE

PASSENGER SIDE: Removal and Installation

INFOID:0000000012352853

### **REMOVAL**

Remove the front outside handle RH. Refer to DLK-212, "OUTSIDE HANDLE: Removal and Installation".

### INSTALLATION

Install in the reverse order of removal.

REAR BUMPER

REAR BUMPER: Removal and Installation

INFOID:0000000012352854

### **REMOVAL**

- 1. Remove the rear bumper. Refer to EXT-20, "Removal and Installation".
- 2. Remove the outside key antenna (rear bumper) mounting nuts, and then remove outside key antenna (rear bumper).

### **INSTALLATION**

Install in the reverse order of removal.

### INTELLIGENT KEY WARNING BUZZER

### < REMOVAL AND INSTALLATION >

# INTELLIGENT KEY WARNING BUZZER

# Removal and Installation

### INFOID:0000000012352855

### **REMOVAL**

- 1. Remove the front bumper. Refer to EXT-16, "Removal and Installation".
- 2. Remove the Intelligent Key warning buzzer mounting bolt, and then remove the Intelligent Key warning buzzer.

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### **INSTALLATION**

Install in the reverse order of removal.

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# TRUNK OPENER REQUEST SWITCH

### < REMOVAL AND INSTALLATION >

# TRUNK OPENER REQUEST SWITCH

# Removal and Installation

### INFOID:0000000012352856

### **REMOVAL**

- 1. Remove the trunk lid finisher. Refer to EXT-46, "Removal and Installation".
- 2. Remove trunk lid request switch from trunk lid finisher.

### **INSTALLATION**

Install in the reverse order of removal.

### TRUNK LID OPENER SWITCH

### < REMOVAL AND INSTALLATION >

# TRUNK LID OPENER SWITCH

# Removal and Installation

INFOID:0000000012352857

### **REMOVAL**

- 1. Remove the instrument driver lower panel. Refer to <a href="IP-13">IP-13</a>, "Removal and Installation".
- 2. Remove the trunk lid opener switch from instrument driver lower panel, and then remove pawl. Press trunk lid opener switch front side to disengage from instrument driver lower panel.

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### **INSTALLATION**

Install in the reverse order of removal.

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### TRUNK LID OPENER CANCEL SWITCH

### < REMOVAL AND INSTALLATION >

# TRUNK LID OPENER CANCEL SWITCH

## Removal and Installation

### INFOID:0000000012352858

### **REMOVAL**

- 1. Remove the instrument assist lower panel. Refer to IP-13, "Removal and Installation".
- 2. Remove the trunk lid opener cancel switch instrument assist lower panel, and then remove pawl. Press trunk lid opener cancel switch backside to disengage from instrument assist lower panel.

### **INSTALLATION**

Install in the reverse order of removal.

### REMOTE KEYLESS ENTRY RECEIVER

< REMOVAL AND INSTALLATION >

# REMOTE KEYLESS ENTRY RECEIVER

# Removal and Installation

### INFOID:0000000012352859

### **REMOVAL**

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

### **INSTALLATION**

Install in the reverse order of removal.

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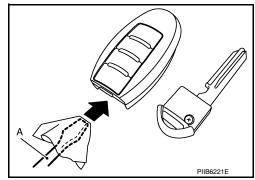
### INTELLIGENT KEY BATTERY

### < REMOVAL AND INSTALLATION >

### INTELLIGENT KEY BATTERY

## Removal and Installation

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



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3. Replace the battery with new one.

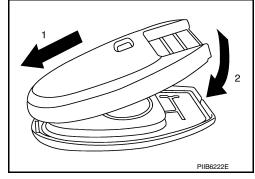
**Battery replacement** 

: Coin-type lithium battery (CR2025)

4. Align the tips of the upper and lower parts, and then push them together until it is securely closed.

### **CAUTION:**

- When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.
- After replacing the battery, check that all Intelligent Key functions work normally.



### REAR DOOR AUTO CLOSURE CONTROL UNIT

< REMOVAL AND INSTALLATION >

# REAR DOOR AUTO CLOSURE CONTROL UNIT

## Removal and Installation

INFOID:0000000012352861

### **REMOVAL**

- 1. Remove the rear door finisher. Refer to INT-34, "REAR DOOR FINISHER: Removal and Installation".
- 2. Remove the rear door closure control unit mounting bolt, and then remove rear door auto closure control unit.

### **INSTALLATION**

Install in the reverse order of removal.

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