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### < PRECAUTION >

# **PRECAUTION**

# **PRECAUTIONS**

Precaution for Technicians Using Medical Electric

#### INFOID:0000000010639677

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#### OPERATION PROHIBITION

#### **WARNING:**

- Parts with strong magnet is used in this vehicle.
- Technicians using a medical electric device such as pacemaker must never perform operation on the vehicle, as magnetic field can affect the device function by approaching to such parts.

#### NORMAL CHARGE PRECAUTION

#### **WARNING:**

- If a technician uses a medical electric device such as an implantable cardiac pacemaker or an implantable cardioverter defibrillator, the possible effects on the devices must be checked with the device manufacturer before starting the charge operation.
- As radiated electromagnetic wave generated by PDM (Power Delivery Module) at normal charge operation may affect medical electric devices, a technician using a medical electric device such as implantable cardiac pacemaker or an implantable cardioverter defibrillator must not approach motor room [PDM (Power Delivery Module)] at the hood-opened condition during normal charge operation.

#### PRECAUTION AT TELEMATICS SYSTEM OPERATION

#### WARNING:

- If a technician uses implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), avoid the device implanted part from approaching within approximately 220 mm (8.66 in) from interior/exterior antenna.
- The electromagnetic wave of TCU might affect the function of the implantable cardiac pacemaker or the implantable cardioverter defibrillator (ICD), when using the service, etc.
- If a technician uses other medical electric devices than implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), the electromagnetic wave of TCU might affect the function of the device. The possible effects on the devices must be checked with the device manufacturer before TCU use.

#### PRECAUTION AT INTELLIGENT KEY SYSTEM OPERATION

#### **WARNING:**

- If a technician uses implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), avoid the device implanted part from approaching within approximately 220 mm (8.66 in) from interior/exterior antenna.
- The electromagnetic wave of Intelligent Key might affect the function of the implantable cardiac pacemaker or the implantable cardioverter defibrillator (ICD), at door operation, at each request switch operation, or at engine starting.
- If a technician uses other medical electric devices than implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), the electromagnetic wave of Intelligent Key might affect the function of the device. The possible effects on the devices must be checked with the device manufacturer before Intelligent Key use.

# Point to Be Checked Before Starting Maintenance Work

The high voltage system may starts automatically. It is required to check that the timer air conditioner and timer charge (during EVSE connection) are not set before starting maintenance work.

NOTE:

If the timer air conditioner or timer charge (during EVSE connection) is set, the high voltage system starts automatically even when the power switch is in OFF state.

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

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Revision: June 2014 DLK-7 2015 Leaf NAM

### < PRECAUTION >

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 SR and SB section of this Service Manual.

#### **WARNING:**

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

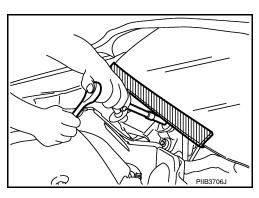
### PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

#### **WARNING:**

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

# Procedure without Cowl Top Cover

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



# **High Voltage Precautions**

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### **DANGER:**

Since hybrid vehicles and electric vehicles contain a high voltage battery, there is the risk of electric shock, electric leakage, or similar accidents if the high voltage component and vehicle are handled incorrectly. Be sure to follow the correct work procedures when performing inspection and maintenance.

#### **WARNING:**

- Be sure to remove the service plug in order to disconnect the high voltage circuits before performing inspection or maintenance of high voltage system harnesses and parts.
- The removed service plug must always be carried in a pocket of the responsible worker or placed in the tool box during the procedure to prevent the plug from being connected by mistake.
- Be sure to wear insulated protective equipment before beginning work on the high voltage system.
- Never allow workers other than the responsible person to touch the vehicle containing high voltage parts. To keep others from touching the high voltage parts, these parts must be covered with an insulating sheet except when using them.

#### **CAUTION:**

Never bring the vehicle into the READY status with the service plug removed unless otherwise instructed in the Service Manual. A malfunction may occur if this is not observed.

HIGH VOLTAGE HARNESS AND EQUIPMENT IDENTIFICATION

### < PRECAUTION >

All the high voltage harnesses and connectors are orange. The Li-ion battery and other high voltage devices include an orange high voltage label. Never touch these harnesses and high voltage parts.

#### HANDLING OF HIGH VOLTAGE HARNESS AND TERMINALS

Immediately insulate disconnected high voltage connectors and terminals with insulating tape.

#### REGULATIONS ON WORKERS WITH MEDICAL ELECTRONICS

#### **WARNING:**

The vehicle contains parts that contain powerful magnets. If a person who is wearing a heart pacemaker or other medical device is close to these parts, the medical device may be affected by the magnets. Such persons must not perform work on the vehicle.

#### PROHIBITED ITEMS TO CARRY DURING THE WORK

Hybrid vehicles and electric vehicles contain parts with high voltage and intense magnetic force. Never carry metal products and magnetic recording media (e.g. cash card, prepaid card) to repair/inspect high voltage parts. If this is not observed, the metal products may create a risk of short circuit and the magnetic recording media may lose their magnetic recording.

POSTING A SIGN OF "DANGER! HIGH VOLTAGE AREA. KEEP OUT"

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DO NOT T	TAGE N PROGRESS.

Precaution for Removing 12V Battery

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1. Check that EVSE is not connected.

### NOTE:

If EVSE is connected, the air conditioning system may be automatically activated by the timer A/C function.

2. Turn the power switch OFF  $\rightarrow$  ON  $\rightarrow$  OFF. Get out of the vehicle. Close all doors (including back door).

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#### < PRECAUTION >

Check that the charge status indicator lamp does not blink and wait for 5 minutes or more.

If the battery is removed within 5 minutes after the power switch is turned OFF, plural DTCs may be detected.

4. Remove 12V battery within 1 hour after turning the power switch OFF  $\rightarrow$  ON  $\rightarrow$  OFF.

#### NOTE:

- The 12V battery automatic charge control may start automatically even when the power switch is in OFF state.
- Once the power switch is turned ON → OFF, the 12V battery automatic charge control does not start for approximately 1 hour.

#### **CAUTION:**

- · After all doors (including back door) are closed, if a door (including back door) is opened before battery terminals are disconnected, start over from Step 1.
- · After turning the power switch OFF, if "Remote A/C" is activated by user operation, stop the air conditioner and start over from Step 1.

# Precaution for Servicing Doors and Locks

# WARNING:

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

- After removing and installing the opening/closing parts, be sure to carry out fitting adjustments to check their operation.
- Check the lubrication level, damage, and wear of each part. If necessary, grease or replace it.
- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with a new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After installation is complete, be sure to check that each part works properly.
- Follow the steps below to clean components:
- Water soluble dirt:
- Dip a soft cloth into lukewarm water, wring the water out of the cloth and wipe the dirty area.
- Then rub with a soft, dry cloth.
- Oily dirt:
- Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%) and wipe the dirty
- Then dip a cloth into fresh water, wring the water out of the cloth and wipe the detergent off.
- Then rub with a soft, dry cloth.
- Do not use organic solvent such as thinner, benzene, alcohol or gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

#### Precaution for Work

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with a new one.
- · Be sure to tighten bolts and nuts securely to the specified torque.
- Water soluble dirt:
- Then rub with a soft, dry cloth.
- Oily dirt:

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After installation is complete, be sure to check that each part works properly.

- Follow the steps below to clean components:
- Dip a soft cloth into lukewarm water, wring the water out of the cloth and wipe the dirty area.
- **DLK-11** Revision: June 2014

### < PRECAUTION >

- Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%) and wipe the dirty area
- Then dip a cloth into fresh water, wring the water out of the cloth and wipe the detergent off.
- Then rub with a soft, dry cloth.
- Do not use organic solvent such as thinner, benzene, alcohol or gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

# **PREPARATION**

# < PREPARATION >

# **PREPARATION**

# **PREPARATION**

(J-43241)

Tester

Remote Keyless Entry

# **Special Service Tools**

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Tool number (TechMate No.) Tool name		Description
— (J-39570) Chassis Ear	SIIAO993E	Locating the noise
— (J-50397) NISSAN Squeak and Rattle Kit	ALJIA1232ZZ	Repairing the cause of noise
— (J-46534) Trim Tool Set	AWJJA0483ZZ	Removing trim components

Used to test keyfobs

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# **PREPARATION**

# < PREPARATION >

Tool number (TechMate No.) Tool name		Description
 (J-50190) Signal Tech II	ALEIA0131ZZ	Activate and display TPMS transmitter IDs     Display tire pressure reported by the TPMS transmitter     Read TPMS DTCs     Register TPMS transmitter IDs     Test remote keyless entry keyfob relative signal strength     Check Intelligent Key relative signal strength     Confirm vehicle Intelligent Key antenna signal strength     Compatible with future sensors     Equipped with a display
KV48105501 (J-45295-A) Transmitter Activation Tool	ALEIA0183ZZ	<ul> <li>Activate TPMS transmitter IDs</li> <li>Compatible with future sensors</li> <li>Equipped with a display (KV48105501 only)</li> </ul>

# Commercial Service Tools

INFOID:0000000010639685

Tool name		Description
Insulated gloves [Guaranteed insulation per- formance for 1000V/300A]		Removing and installing high voltage components
Leather gloves [Use leather gloves that can fasten the wrist tight]	JMCIA0149ZZ	Removing and installing high voltage components     Protect insulated gloves
Insulated safety shoes	JPCIA0011ZZ	Removing and installing high voltage components
Safety glasses [ANSI Z87.1]		<ul> <li>Removing and installing high voltage components</li> <li>To protect eye from the spatter on the work to electric line</li> </ul>

# **PREPARATION**

# < PREPARATION >

Tool name		Description
Face shield		Removing and installing high voltage components     To protect eye from the spatter on the work to electric line
Insulated helmet	JPCIA0167ZZ	Removing and installing high voltage components
Power tool	JPCIA0013ZZ	Loosening nuts, screws and bolts
	PIIB1407E	

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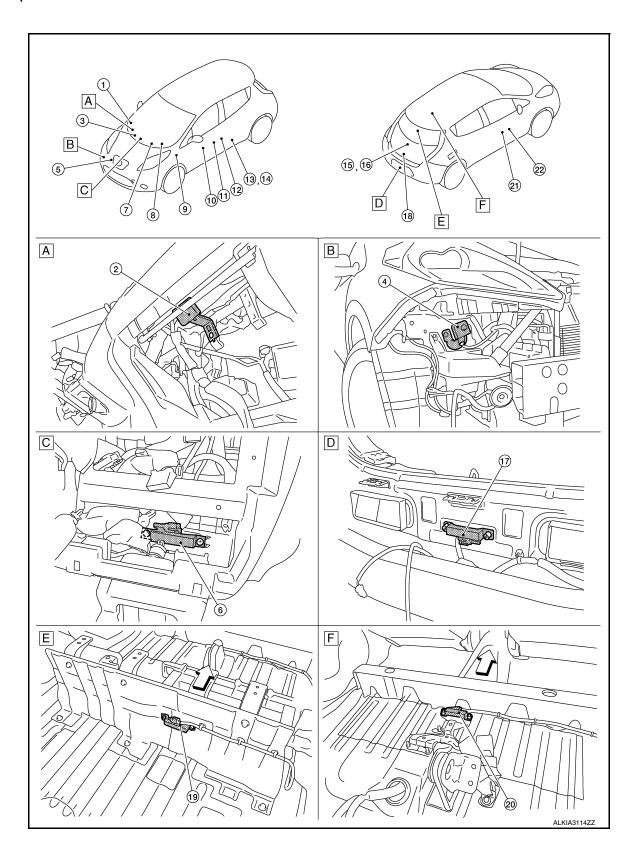
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# SYSTEM DESCRIPTION

# **COMPONENT PARTS**

Component Parts Location

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# < SYSTEM DESCRIPTION >

Α.	View	with	glove	box	lid	removed
----	------	------	-------	-----	-----	---------

- B. View with front bumper removed
- C. View with cluster lid C removed

- D. View with rear bumper removed
- E. View with luggage floor upper finisher F.

. View with rear seat removed

No.	Component	Function
1.	VCM	Transmits P position signal to BCM Refer to TM-32, "Component Parts Location" for detailed installation location
2.	Remote keyless entry receiver	DLK-19. "Remote Keyless Entry Receiver"
3.	BCM	BCM detects the vehicle status according to signals from each door switch, each outside/inside key antenna, and unlock sensor. BCM transmits drive signal to door lock actuator when BCM receives operation signal from remote keyless entry receiver and each switch.  Refer to BCS-5, "BODY CONTROL SYSTEM: Component Parts Location" for detailed installation location
4.	Intelligent Key warning buzzer	DLK-20, "Intelligent Key Warning Buzzer"
5.	Charge port lid opener actuator	DLK-22, "Charge Port Lid Opener Actuator"
6.	Inside key antenna (instrument center)	DLK-18, "Inside Key Antenna (Instrument Center)"
7.	Power switch	Changes power position     Inputs power switch ON/OFF condition to BCM Refer to SEC-9, "Component Parts Location" for detailed installation location
8.	Combination meter	Displays each operation method guide and warning for system malfunction     Performs operation method guide and warning with buzzer     Transmits vehicle speed signal to CAN communication line Refer to <a href="MWI-6">MWI-6</a> , <a href="METER SYSTEM">"METER SYSTEM</a> : <a href="Component Parts Location">Component Parts Location</a> for detailed installation location
9.	Charge port lid opener switch	DLK-22, "Charge Port Lid Opener Switch"
10.	Main power window and door lock and unlock switch (RH similar)	DLK-20, "Door Lock and Unlock Switch"
11.	Front outside handle LH (outside key antenna)	DLK-19, "Outside Key Antenna (LH)"
12.	Front outside handle LH (request switch)	DLK-20, "Front Door Request Switch (LH)"
13.	Front door lock assembly (LH)	DLK-19, "Front Door Lock Assembly (LH)"
14.	Front door switch LH	DLK-21, "Door Switch"
15.	Back door request switch	DLK-21, "Back Door Request Switch"
16.	Back door opener switch	DLK-21, "Back Door Opener Switch"
17.	Outside antenna (rear bumper)	DLK-18, "Outside Key Antenna (Rear Bumper)"
18.	Back door lock assembly (door opener actuator)	DLK-20, "Back Door Lock Assembly"
19.	Inside key antenna (luggage room)	DLK-18, "Inside Key Antenna (Luggage Room)"
20.	Inside key antenna (rear seat)	DLK-18, "Inside Key Antenna (Rear Seat)"
21.	Front outside handle RH (request switch)	DLK-21, "Front Door Request Switch (RH)"
22.	Front outside handle RH (outside key antenna)	DLK-19, "Outside Key Antenna (RH)"

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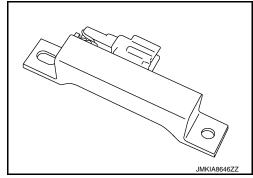
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# Inside Key Antenna (Instrument Center)

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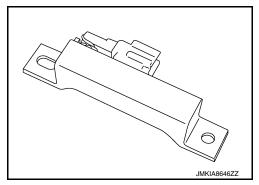
- Inside key antenna (instrument center) detects that Intelligent Key is within the inside detection area, and then transmits detection status to BCM.
- Inside key antenna (instrument center) is installed in the rear of cluster lid C of instrument center.



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# Inside Key Antenna (Rear Seat)

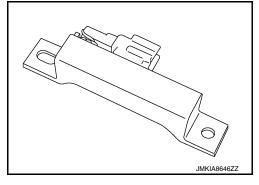
- Inside key antenna (rear seat) detects that Intelligent Key is within the inside detection area, and then transmits detection status to BCM.
- Inside key antenna (rear seat) is installed underneath rear seat cushion.



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# Inside Key Antenna (Luggage Room)

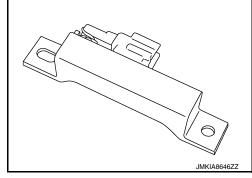
- Inside key antenna (luggage room) detects that Intelligent Key is within the inside detection area, and then transmits detection status to BCM.
- Inside key antenna (luggage room) is installed in the rear of luggage floor upper finisher.



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# Outside Key Antenna (Rear Bumper)

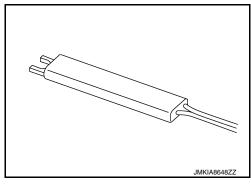
- Outside key antenna (rear bumper) detects that Intelligent Key is within the outside detection area, and then transmits detection status to BCM. Request signal is transmitted simultaneously to Intelligent Key.
- Outside key antenna (rear bumper) is installed in the rear of rear bumper.



#### < SYSTEM DESCRIPTION >

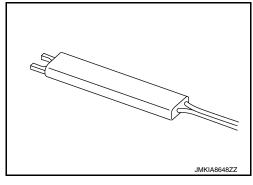
# Outside Key Antenna (LH)

- Outside key antenna (LH) detects that Intelligent Key is within the outside detection area, and then transmits detection status to BCM. Request signal is transmitted simultaneously to Intelligent Key.
- Outside key antenna (LH) is installed in the front outside handle (LH).



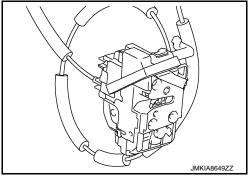
# Outside Key Antenna (RH)

- Outside key antenna (RH) detects that Intelligent Key is within the outside detection area, and then transmits detection status to BCM. Request signal is transmitted simultaneously to Intelligent Key.
- Outside key antenna (RH) is installed in front outside handle (RH).



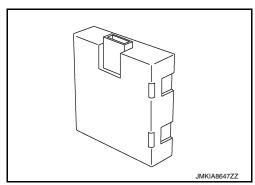
# Front Door Lock Assembly (LH)

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



# Remote Keyless Entry Receiver

- Remote keyless entry receiver receives button operation signal and key ID signal of Intelligent Key, and then transmits them to BCM.
- Remote keyless entry receiver is installed in the rear of glove box lid.



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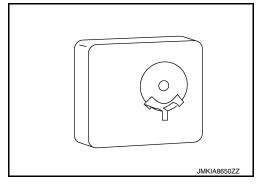
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### < SYSTEM DESCRIPTION >

# Intelligent Key Warning Buzzer

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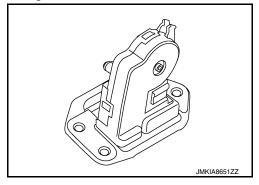
- Intelligent Key warning buzzer warns the user, who is outside vehicle, of operation confirmation according to Intelligent Key operation and door request switch operation, or of an inappropriate operation.
- Intelligent Key warning buzzer is installed in the rear of front bumper and underneath headlight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



# Back Door Lock Assembly

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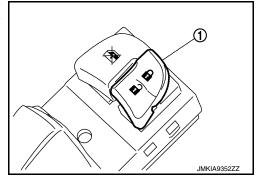
- Back door lock assembly lock assembly integrates door opener actuator and back door switch.
- Door opener actuator opens the back door according to the door open signal from BCM.
- · Back door switch detects open/close status of back door.



# Door Lock and Unlock Switch

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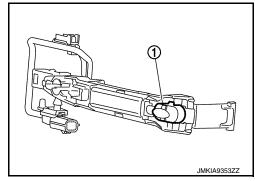
- Door lock and unlock switch transmits door lock/unlock signal operation to BCM.
- Door lock and unlock switch (1) is integrated in the main power window and door lock/unlock switch and power window and door lock/unlock switch RH.



# Front Door Request Switch (LH)

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- Front door request switch (LH) transmits door request switch signal to BCM.
- Front door request switch (LH) (1) is integrated in front outside handle (LH).

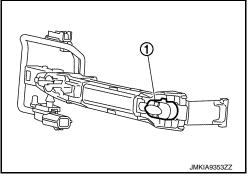


### < SYSTEM DESCRIPTION >

# Front Door Request Switch (RH)

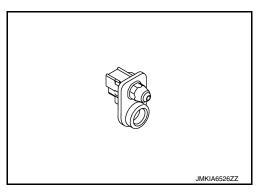
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- Front door request switch (RH) transmits door request switch signal to BCM.
- Front door request switch (RH) (1) is integrated in front outside handle (RH).



Door Switch

Door switch detects open/close status of door and transmits door switch signal to BCM.

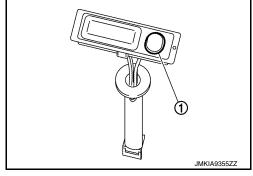


# **Back Door Request Switch**

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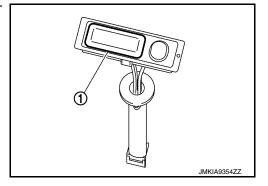
- · Back door request switch transmits back door request switch signal to BCM.
- Back door request switch (1) is integrated in the back door opener switch assembly.



**Back Door Opener Switch** 

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- · Back door opener switch transmits back door opener switch signal to BCM.
- Back door opener switch (1) is integrated in the back door opener switch assembly.



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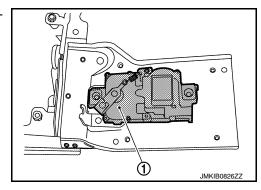
**DLK-21** Revision: June 2014 2015 Leaf NAM

### < SYSTEM DESCRIPTION >

# Charge Port Lid Opener Actuator

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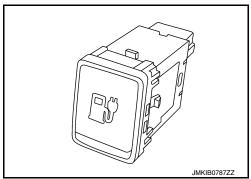
Charge port lid opener actuator ① opens the charge port lid according to the charge port lid open signal from VCM.



# Charge Port Lid Opener Switch

INFOID:0000000010639704

- When charge port lid opener switch is pressed, charge port lid open operation is detected and charge port lid opener switch signal is transmitted to VCM.
- Charge port lid opener switch is installed on instrument lower panel LH



# SYSTEM (POWER DOOR LOCK SYSTEM)

#### < SYSTEM DESCRIPTION >

# SYSTEM (POWER DOOR LOCK SYSTEM)

# System Description

#### INFOID:0000000010639705

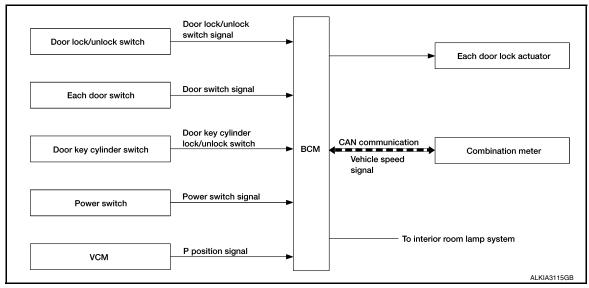
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#### SYSTEM DIAGRAM



#### DOOR LOCK FUNCTION

Door Lock and Unlock Switch

- The door lock and unlock switch (LH) is built into main power window and door lock/unlock switch.
- The door lock and unlock switch (RH) is built into power window and door lock/unlock switch RH.
- Interlocked with the locking operation of door lock and unlock switch, door lock actuators of all doors are locked.
- Interlocked with the unlocking operation of door lock and unlock switch, door lock actuators of all doors are unlocked.

Door Key Cylinder 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.
- 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 5 seconds after the first unlock operation unlocks all of the other doors actuator. (SELECTIVE UNLOCK OPERATION)

Selective unlock operation mode can be changed using CONSULT.

Refer to BCS-20, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

#### POWER POSITION WARNING FUNCTION

When door lock and unlock switch are operated while driver side door is open and power 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 power 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 Position Interlock Door Lock

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

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Revision: June 2014 DLK-23 2015 Leaf NAM

# SYSTEM (POWER DOOR LOCK SYSTEM)

### < SYSTEM DESCRIPTION >

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

Setting change of Automatic Door Lock/Unlock Function

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

#### (P)With CONSULT

The ON/OFF switching of the automatic door lock function and the type selection of the automatic door lock/unlock function can be performed at the "Work support" setting of CONSULT.

#### **®Without CONSULT**

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

- 1. Close all doors (door switch OFF)
- 2. Power switch: OFF→ON
- Press and hold the door lock and unlock switch for 5 seconds or more in the lock direction within 20 seconds after turning the power switch ON.
- 4. The switching 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 power switch position or shift position. It has 2 types as per the following items:

#### POWER OFF Interlock Door Unlock

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

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

#### P Position Interlock Door Unlock

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

BCM outputs the unlock signal to all door lock actuators when it detects that the power switch is in the ON position and the shift signal received from VCM is shifted from any position other than P to P position.

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

The ON/OFF switching of the automatic door lock/unlock function and the type selection of the automatic door lock/unlock function can be performed at the "Work support" setting of CONSULT.

#### ®Without CONSULT

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

- 1. Close all doors below (door switch OFF)
- 2. Power switch: OFF→ON
- 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 switch position ON.
- 4. The switching is complete when the hazard lamp blinks.

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

#### < SYSTEM DESCRIPTION >

# SYSTEM (INTELLIGENT KEY SYSTEM) INTELLIGENT KEY SYSTEM

INTELLIGENT KEY SYSTEM: System Description

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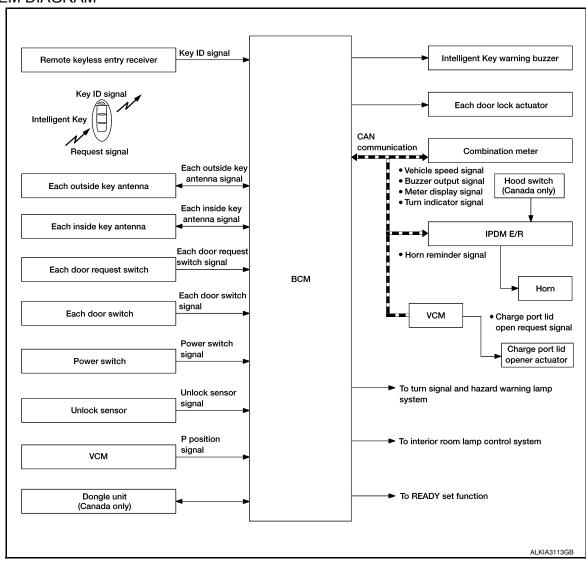
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#### SYSTEM DIAGRAM



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

The driver should always carry the Intelligent Key.

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

Function	Description	Refer
Door lock	Lock/unlock can be performed by pressing the request switch	DLK-26
Back door opener	The back door can be opened by carrying the Intelligent Key and pressing the back door opener switch	DLK-28
Remote keyless entry	Lock/unlock can be performed by pressing the remote controller button of the Intelligent Key	DLK-30

Revision: June 2014 DLK-25 2015 Leaf NAM

### < SYSTEM DESCRIPTION >

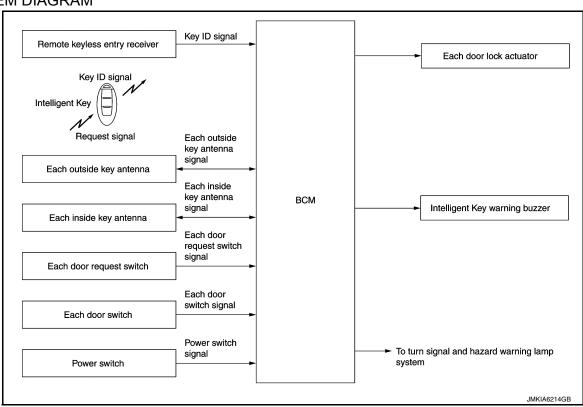
Function Description		Refer
Key reminder	The key reminder buzzer sounds a warning if the door is locked with the key left inside the vehicle	DLK-32
Warning	If an action that does not meet the operating condition of the Intelligent Key system is taken, the buzzer sounds to inform the driver	DLK-33
READY set function	The vehicle can be set READY while carrying the Intelligent Key	SEC-12
Panic alarm	When Intelligent Key panic alarm button is pressed, horn sounds	<u>SEC-18</u>
Interior room lamp control	Interior room lamp is controlled according to door lock/unlock state	INL-9
Charge connector unlock	Charge connector unlock can be performed by a long press of the charge port lid opener button on the Intelligent Key	EVC-62
Charge port lid open	Charge port lid open can be performed by a long press of the charge port lid opener button on the Intelligent Key	EVC-62

# DOOR LOCK FUNCTION

# DOOR LOCK FUNCTION: System Description

INFOID:0000000010639707

#### SYSTEM DIAGRAM



### DOOR REQUEST SWITCH OPERATION

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

#### OPERATION DESCRIPTION

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

#### < SYSTEM DESCRIPTION >

#### OPERATION CONDITION

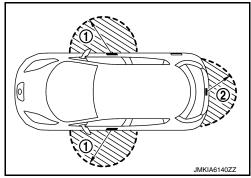
If the following conditions are satisfied, door lock/unlock operation is performed if the door request switch is operated:

Each door request switch operation	Operation condition
Lock	<ul> <li>All doors are closed</li> <li>Panic alarm is not activated</li> <li>Power switch is in the OFF position</li> <li>Intelligent Key is outside the vehicle</li> <li>Intelligent Key is within outside key antenna detection area *</li> </ul>
Unlock	<ul> <li>Power switch is in the OFF position</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 and 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) and back door handle (2). However, this operating range depends on the ambient conditions.



#### SELECTIVE UNLOCK FUNCTION

**Lock Operation** 

When a LOCK signal is sent from door request switch (LH, RH or back door), all doors are locked.

#### **Unlock Operation**

Revision: June 2014

- When an UNLOCK signal from front door request switch (LH) is transmitted, LH door unlocks. When another UNLOCK signal is transmitted within 60 seconds, all door unlocks.
- · When an UNLOCK signal from front door request switch (RH) is transmitted, RH door unlocks. When another UNLOCK signal is transmitted within 60 seconds, all door unlocks.
- · When an UNLOCK signal from back door request switch is transmitted, back door unlocks. When another UNLOCK signal is transmitted within 60 seconds, all door unlocks.

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

Selective unlock operation mode can be changed using CONSULT.

Refer to BCS-20, "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

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

Hazard and buzzer reminder does not operate if power 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 BCS-20, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

**DLK-27** 2015 Leaf NAM DLK

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#### < SYSTEM DESCRIPTION >

#### 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 are automatically locked. However, operation check function does not activate.

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

Auto door lock mode can be changed by the "AUTO LOCK SET" in "Work support". Refer to <u>BCS-20, "INTEL-LIGENT KEY</u>: CONSULT Function (BCM - INTELLIGENT KEY)".

#### LIST OF OPERATION RELATED PARTS

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

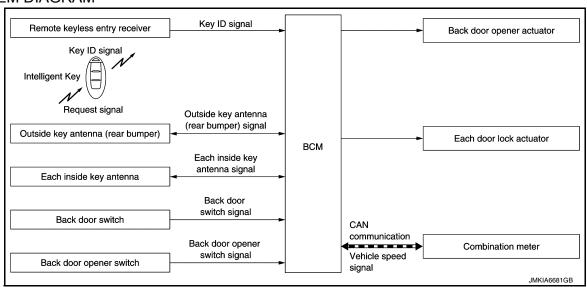
Door lock function	Intelligent Key	Remote keyless entry receiver	Door switch	Door request switch	Door lock actuator	Inside key antenna	Outside key antenna	CAN communication system	BCM	Hazard warning lamp	Power switch	Combination meter
Door lock/unlock function	×	×	×	×	×	×	×		×			
Hazard reminder function								×	×	×		×
Door lock status indicator operation									×			
Selective unlock function	×			×	×	×	×		×			
Auto door lock function	×				×				×		×	

# **BACK DOOR OPEN FUNCTION**

# BACK DOOR OPEN FUNCTION: System Description

INFOID:0000000010639708

#### SYSTEM DIAGRAM



#### **BACK DOOR OPEN OPERATION**

This section describes the operation of the back door opener switch. The operation of the back door opener request switch is the same as the door lock function. Refer to <a href="DLK-36">DLK-36</a>, "System Description".

#### < SYSTEM DESCRIPTION >

- The back door open function can open the back door by pressing the back door opener switch while carrying the Intelligent Key and all doors are locked.
- The back door open function enables the back door to be opened by pressing back door opener switch after BCM transmits UNLOCK signal to each door.

#### BACK DOOR OPEN

- When the BCM detects that back door opener switch is pressed, it starts the outside key antenna (rear bumper) and inside key antenna and transmits the request signal to the Intelligent Key. Then, check that the Intelligent Key is near the back 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 opens back door and simultaneously unlocks all doors.

#### NOTE

In selective unlock mode, only back door opens. All doors do not unlock.

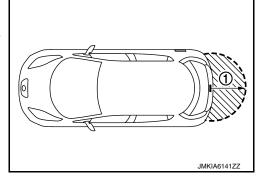
#### OPERATION CONDITION

If the following conditions are satisfied, the back door can be opened:

Back door open function	Operation condition
Back door open operation	Vehicle speed is less than 5 km/h (3 MPH) Panic alarm is not activated Intelligent Key is outside of vehicle Intelligent Key is within outside key antenna detection area Back door is closed

#### OUTSIDE KEY ANTENNA DETECTION AREA

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



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#### LIST OF OPERATION RELATED PARTS

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

Back door open function	Intelligent Key	Remote keyless entry receiver	Back door opener actuator	Door lock actuator	Inside key antenna	Outside key antenna (rear bumper)	CAN communication system	BCM	Back door opener switch	Combination meter
Back door open function	×	×	×	×	×	×	×	×	×	×

# REMOTE KEYLESS ENTRY FUNCTION

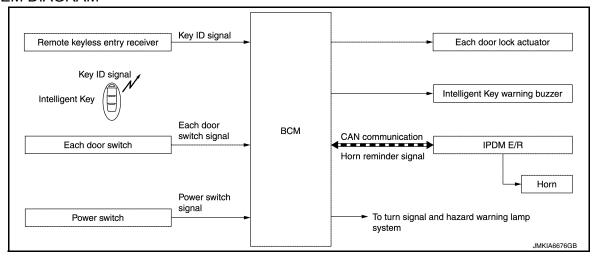
Revision: June 2014 DLK-29 2015 Leaf NAM

#### < SYSTEM DESCRIPTION >

# REMOTE KEYLESS ENTRY FUNCTION: System Description

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#### SYSTEM DIAGRAM



#### BASIC OPERATION

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

#### **OPERATION**

Remote keyless entry system controls operation of the following items:

- Door lock/unlock
- Selective Unlock function
- Hazard reminder function
- Auto door lock

#### **OPERATION AREA**

To check that the Intelligent Key works normally, use within 1 m (3 ft) range of each doors, however the operable range may differ according to surroundings.

#### DOOR LOCK/UNLOCK FUNCTION

- When door lock/unlock button of the Intelligent Key is pressed, lock signal or unlock signal transmitted from Intelligent Key to BCM via remote keyless entry receiver.
- BCM receives the signal and compares it with the registered key ID to the vehicle.
- When BCM receives the door lock/unlock signal, it operates all door lock actuators and the hazard lamp (lock: 2 time, unlock: 1 times) and horn chirp signal to IPDM E/R at the same time as a reminder.
- IPDM E/R honks horn (lock: 1 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 / Unlock	Panic alarm is not activated					

#### SELECTIVE UNLOCK FUNCTION

- When an LOCK signal is transmitted from Intelligent Key, all doors are locked.
- When an UNLOCK signal is transmitted from Intelligent Key once, driver side door is 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 BCS-20, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

#### HAZARD AND HORN REMINDER FUNCTION

#### < SYSTEM DESCRIPTION >

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	eration Lock Unlock Ba		Back door open	Lock	Unlock	Back door open			
Hazard warning lamp blinks	Twice	Once	_	Twice	_	_			
Horn sound	Once	_	_	_	_	_			

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

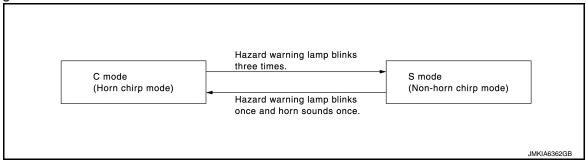
#### How to change hazard and horn reminder mode

### (II) With CONSULT

Refer to BCS-20, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

# **Without CONSULT**

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.

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

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

Auto door lock operation mode can be changed using CONSULT.

Refer to BCS-20, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

#### LIST OF OPERATION RELATED PARTS

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

Remote keyless entry functions	Intelligent Key	Door switch	Door lock actuator	Power switch	Intelligent Key warning buzzer	CAN communication system	BCM	Combination meter	Hazard warning lamp	IPDM E/R
Door lock/unlock function by remote control button	×	×	×			×	×			
Hazard reminder function	×			×	×	×	×	×	×	×

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#### < SYSTEM DESCRIPTION >

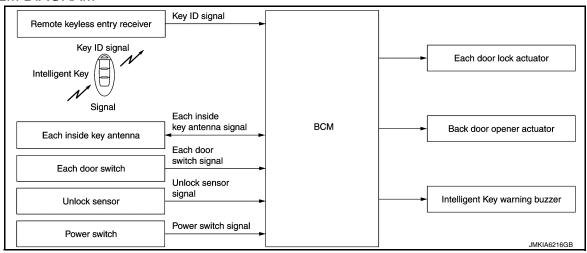
Remote keyless entry functions	Intelligent Key	Door switch	Door lock actuator	Power switch	Intelligent Key warning buzzer	CAN communication system	всм	Combination meter	Hazard warning lamp	IPDM E/R
Selective Unlock function	×	×	×	×		×	×			
Auto door lock function	×					×	×			

# **KEY REMINDER FUNCTION**

# KEY REMINDER FUNCTION: System Description

INFOID:0000000010639710

### SYSTEM DIAGRAM



#### **BASIC OPERATION**

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

Key remainder func- tion	Operation condition	Operation
Driver side door closed*	Right after driver side door is closed under the following conditions  Intelligent Key is inside the vehicle  Driver side door is opened  Driver side door is in unlock state	All doors unlock
Door is open or closed	Right after all doors are closed under the following conditions  Intelligent Key is inside the vehicle  Any door is opened  All doors are locked.	All doors unlock     Honk Intelligent Key warning buzzer
Back door is closed	Right after back door is closed under the following conditions  Intelligent Key is inside the vehicle  All doors (except back door) are closed  All doors (except back door) are locked	All doors unlock     Back door can open with back door opener switch     Honk Intelligent Key warn- ing 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.

#### NOTE

The above function operates when the Intelligent Key is inside the vehicle. However, there may be times
when the Intelligent Key cannot be detected, and this function does not operate when the Intelligent Key is

#### < SYSTEM DESCRIPTION >

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

### WARNING FUNCTION

# WARNING FUNCTION: System Description

#### INFOID:0000000010639711

#### 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
- Take away warning
- Door lock operation warning
- · Key ID warning
- READY set information
- · Plug in information
- Intelligent Key low battery 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 When condition A, B or condition C is satisfied Condition A - Power switch: ACC position - Door switch (driver side): ON (Door is open) · Condition B OFF position warning - Turn power switch from ON to OFF while door is open Condition C Intelligent Key backside is contacted to power switch while brake pedal is depressed and power switch is LOCK or OFF (When the Intelligent Key battery is discharged) Door switch (driver side): ON (Door is open) · Power switch: Except LOCK position Door is open to close Door switch: ON to OFF (Door is open to close) Intelligent Key cannot be detected inside the vehicle · Power switch: Except LOCK position Door switch: ON (Door is open) Take away warning Door is open Key ID verification every 5 seconds when registered Intelligent Key cannot be detected inside the vehicle · Power switch: Except LOCK position · Press power switch Power switch operation Intelligent Key cannot be detected inside the vehicle When door lock operation is requested while door lock operating condition Door lock operation warning of door request switch or Intelligent Key are not satisfied When registered Intelligent Key cannot be detected inside the vehicle after Key ID warning Power switch is turned ON Power switch: ON position Power switch is ON posi- Electric shift selector position: P position tion · The vehicle is not READY · When charge port is not connected READY set information · Power switch: Except ON position Electric shift selector position: P position Power switch is except · Intelligent Key is detected inside the vehicle after driver door is open and ON position then closed When charge port is not connected

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### < SYSTEM DESCRIPTION >

Warning/Information functions	Operation procedure
Plug in indicator*	When charge port is connected
Intelligent Key low battery warning	When Intelligent Key is low battery, BCM is detected after power switch is turned ON
Key ID verification information	<ul> <li>When registered Intelligent Key can not 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>

<sup>\*:</sup>One of either item is displayed according to connection status of charge port connector.

# 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/Inforn	nation functions	(combination meter)	Combination meter buzzer	Intelligent Key warning buzzer				
Intelligent Key system ı	malfunction	I-Key system fault	_	_				
OFF position warning		_	Sounds (beeps continuously)	_				
	Door is open to close		Sounds (beeps 3 times)	Sounds (beeps 1 time)				
	Door is open		_	_				
Take away warning	Power switch operation	Key is not detected	Sounds (beeps 3 times)	_				
Door lock operation	Request switch operation	_	_	Sounds (for 2 seconds)				
warning	Intelligent Key operation	_	_	Sounds (for 2 seconds)				
Key ID warning		Key is not detected	_	_				
READY set information		Brake JMKIA6134GB	_	_				

# < SYSTEM DESCRIPTION >

	Information display	Warning chime					
Warning/Information functions	(combination meter)	Combination meter buzzer	Intelligent Key warning buzzer				
Plug in indicator	JMKIA6370GB	_	_				
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	Power switch	Door switch	Door request switch	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	Combination meter buzzer	CAN communication system	BCM	Information display
Intelligent Key system malfunction										×	×	×
OFF position warning				×					×	×	×	
	Door is open or close	×		×		×		×	×	×	×	×
Take away warning	Door is open	×		×		×				×	×	×
	Power switch operation	×	×			×			×	×	×	×
Door lock operation warning	1	×		×	×	×	×	×			×	
Key ID warning			×			×				×	×	×
DEADY and informati	Power switch is ON position	×	×			×				×	×	×
READY set information	Power switch is except ON position	×	×			×				×	×	×
Plug in indicator												×
Intelligent Key low battery warning		×				×				×	×	×
Key ID verification information		×				×				×	×	×

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# SYSTEM (BACK DOOR OPENER SYSTEM)

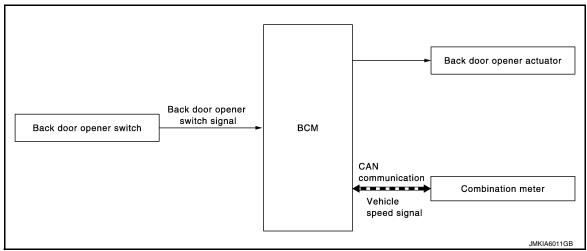
#### < SYSTEM DESCRIPTION >

# SYSTEM (BACK DOOR OPENER SYSTEM)

# System Description

INFOID:0000000010639712

#### SYSTEM DIAGRAM



# **BACK DOOR OPENER OPERATION**

When back door opener switch is pressed, BCM operates back door opener actuator.

#### NOTE:

Back door opener actuator is not for locking the back door. The function is only to open the back door.

#### **OPERATION CONDITION**

If the following conditions are satisfied, back door opener operation is performed:

Back door opener switch operation	Operation condition
Back door open	<ul> <li>When back door opener switch is pressed while all doors are in unlock status.</li> <li>Vehicle speed is less than 5 km/h (3 MPH)</li> </ul>

#### NOTE:

- When 12V battery terminal is disconnected and reconnected during all doors unlock state, back door may not open.
- Regardless of door lock actuator state, BCM resets recognition of all doors unlock state approximately 30 seconds after 12V battery terminal is disconnected and BCM recognizes that all doors are in lock state.
- When 12V battery terminal is reconnected and back door does not open, have BCM recognize that all doors are in unlock state.

# SYSTEM (HOMELINK UNIVERSAL TRANSCEIVER)

## < SYSTEM DESCRIPTION >

# SYSTEM (HOMELINK UNIVERSAL TRANSCEIVER)

# **System Description**

INFOID:0000000010639713

Item	Function
HomeLink® Universal Transceiver	A maximum of 3 radio signals can be stored and transmitted to operate the garage door, etc.

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## SYSTEM (CHARGE PORT LID OPEN CONTROL)

### < SYSTEM DESCRIPTION >

# SYSTEM (CHARGE PORT LID OPEN CONTROL)

**System Description** 

INFOID:0000000010639714

#### **OPERATION DESCRIPTION**

Charge port lid open can be performed by pressing the charge port lid opener button or charge port lid opener switch. Refer to <a href="EVC-62">EVC-62</a>, "CHARGE PORT CONTROL: System Description".

### < SYSTEM DESCRIPTION >

## **DIAGNOSIS SYSTEM (BCM)**

**COMMON ITEM** 

COMMON ITEM: CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000010639715

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#### **APPLICATION ITEM**

CONSULT performs the following functions via CAN communication with BCM.

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

#### SYSTEM APPLICATION

BCM can perform the following functions.

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

**DOOR LOCK** 

< SYSTEM DESCRIPTION >

DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)

INFOID:0000000010639716

SELF DIAGNOSTIC RESULT Refer to BCS-48, "DTC Index".

#### **DATA MONITOR**

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

#### **ACTIVE TEST**

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

#### **WORK SUPPORT**

Support Item	Setting	Description
DOOR LOCK-UNLOCK SET	On*	Selective unlock function ON.
DOOR LOCK-UNLOCK SET	Off	Selective unlock function OFF.
	Lock/Unlock*	Automatic door lock and unlock functions ON.
AUTOMATIC LOCK/UNLOCK SE-	Lock Only	Automatic door lock only function ON.
LECT	Unlock Only	Automatic door unlock only function ON.
	Off	Automatic door lock function OFF.
AUTOMATIC DOOR LOCK SELECT	P RANGE	Doors lock automatically when shifted out of P (park).
	VH SPD	Doors lock automatically when vehicle speed is greater than 24 km/h (15 mph).
	MODE6	This mode is not used.
	MODE5	This mode is not used.
AUTOMATIC DOOR UNLOCK SE-	MODE4	Driver door is unlocked automatically when shifted into P (park).
LECT	MODE3	Driver door is unlocked automatically when ignition is switched from ON to OFF.
	MODE2	All doors unlock automatically when shifted into P (park).
	MODE1*	All doors unlock automatically when ignition is switched from ON to OFF.

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

INTELLIGENT KEY

INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)

INFOID:0000000106339717

SELF DIAGNOSTIC RESULT Refer to BCS-48, "DTC Index".

## < SYSTEM DESCRIPTION >

## **DATA MONITOR**

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

#### **ACTIVE TEST**

Test Item	Description
INSIDE BUZZER	This test is able to check combination meter warning chime operation [Off/Take Out/Knob/Key].

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### < SYSTEM DESCRIPTION >

Test Item	Description				
	B&P N	This test is able to about combination mater traction mater start information			
	B&P I	This test is able to check combination meter traction motor start information.			
	ID NG	This test is able to check combination meter key ID warning information.			
	ROTAT				
	SFT P	This item is displayed, but is not used.			
LCD	INSRT				
	BATT	This test is able to check combination meter Intelligent Key low battery warning information.			
	NO KY	This item is displayed, but is not used.			
	OUTKEY	This test is able to check combination meter take away warning information.			
	LK WN	This test is able to check combination meter OFF position warning information.			
	Off	_			
BATTERY SAVER	This test is able to check interior room lamp battery saver operation [Off/On].				
ENGINE SW ILLUMI	This test is able to check power switch illumination operation [Off/On].				
PUSH SWITCH INDICATOR	This test is able to check power switch ACC/ON indicator operation [Off/On].				
TRUNK/BACK DOOR	This test is able to check back door opener actuator operation [Open].				
INT LAMP	This test is able to check interior room lamp operation [Off/On].				
INDICATOR	This test is able to check combination meter warning lamp operation [Off/KEY ON/KEY IND].				
FLASHER	This test is able to check security hazard lamp operation [RH/LH/Off].				
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation [On/Off].				
HORN	This test is able to check horn operation [On].				

## **WORK SUPPORT**

Support Item	Setting	Description
LOCK/UNLOCK BY I-KEY	On*	Door lock/unlock function from request switch ON.
LOCK/UNLOCK BT I-RET	Off	Door lock/unlock function from request switch OFF.
ANTI KEY LOCK IN-FUNCTI	On*	Key reminder function ON.
ANTI RET LOCK IN-FONCTI	Off	Key reminder function OFF.
ANS BACK I-KEY UNLOCK	On*	Buzzer reminder function when doors are unlocked with request switch ON.
ANO BACK PRET UNLOCK	Off	Buzzer reminder function when doors are unlocked with request switch OFF.
	Horn Chirp	Horn chirp reminder function when doors are locked with request switch.
ANS BACK I-KEY LOCK	Buzzer*	Buzzer reminder function when doors are locked with request switch.
	Off	No reminder function when doors are locked with request switch.
HORN WITH KEYLESS LOCK	On*	Horn reminder function when doors are locked with Intelligent Key ON.
HORN WITH RETLESS LOCK	Off	Horn reminder function when doors are locked with Intelligent Key OFF.
	Lock/Unlock*	Horn reminder function when doors are locked or unlocked with request switch or Intelligent Key.
HAZARD ANSWER BACK	Unlock Only	Horn reminder function when doors are unlocked with request switch or Intelligent Key.
	Lock Only	Horn reminder function when doors are locked with request switch or Intelligent Key.
	Off	Horn reminder function when doors are locked or unlocked with request switch or Intelligent Key OFF.

### < SYSTEM DESCRIPTION >

Support Item	Se	tting	Description	
INSIDE ANT DIAGNOSIS	-	_	This function allows inside key antenna self-diagnosis.	
	MEMORY	1		
	MEMORY	2		
CONFIRM KEY FOB ID	MEMORY	3	Intelligent Key ID code can be checked.	
	MEMORY	4		
	NON REG	IST		
PANIC ALARM SET	MODE 3	1.5 sec.	Panic alarm button set time on Intelligent Key can be set.  Auto door lock time can be set.	
	MODE 2	OFF		
	MODE 1*	0.5 sec.		
	MODE7	5 min.		
	MODE6	4 min.		
	MODE5	3 min.		
AUTO LOCK SET	MODE4	2 min.		
	MODE3*	1 min.		
	MODE2	30 sec.		
	MODE1	OFF		

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

## **TRUNK**

TRUNK: CONSULT Function (BCM - TRUNK)

INFOID:0000000010639718

### **DATA MONITOR**

Monitor Item [Unit]	Description
PUSH SW [On/Off]	Indicates condition of power switch.
UNLK SEN -DR [On/Off]	Indicates condition of door unlock sensor.
VEH SPEED 1 [km/h]	Indicates vehicle speed signal received from ABS on CAN communication line.
TR/BD OPEN SW [On/Off]	Indicates condition of back door opener switch.

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# **ECU DIAGNOSIS INFORMATION**

## **BCM**

## List of ECU Reference

INFOID:0000000010639719

ECU	Reference
	BCS-28, "Reference Value"
BCM	BCS-46, "Fail-safe"
BOW	BCS-47, "DTC Inspection Priority Chart"
	BCS-48, "DTC Index"

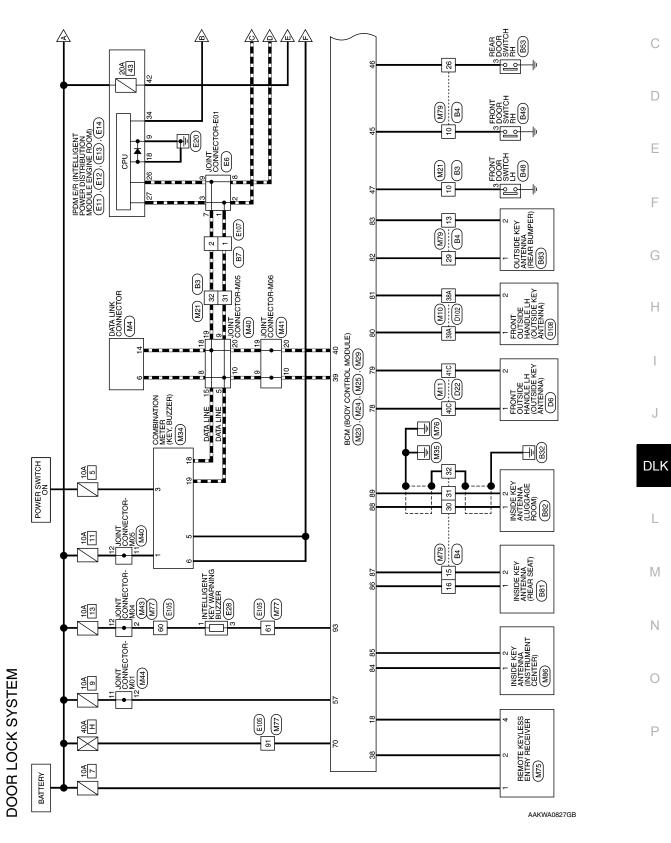
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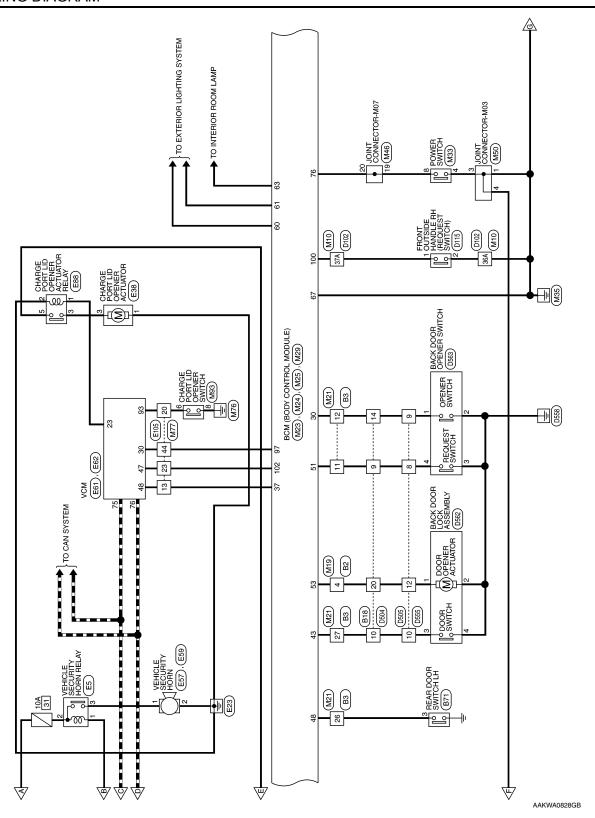
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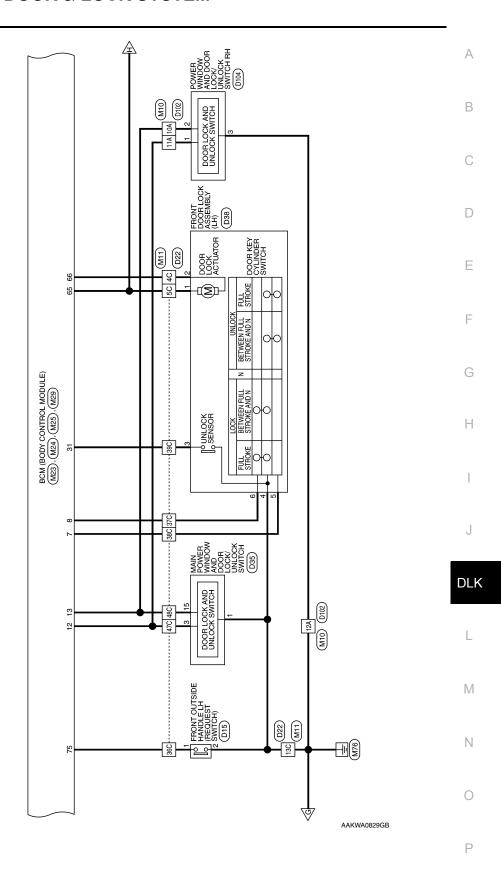
## WIRING DIAGRAM

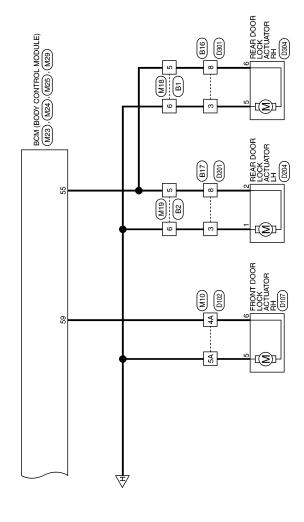
## **DOOR & LOCK SYSTEM**

Wiring Diagram









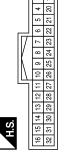
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CONNE	TO LO	LO DENIN		Į.					Signal Name	1										70 80 90 100 110		36C37C38C39C40C 47C48C49C50C							L
STEM -	)	ALTE	J	27 77 07	9 10 11 12 13 14 13 10	3 4 3 0 7		4					I1 PE TO WIR	WHITE	1					ပ္ဖ		32C33C34C35C26C							M
DOOR LOCK SYSTEM - CONNECTORS	Connector No. M4	Connector Color WHITE		10 10	9 7	7		Color	al No. Wire				Connector No. M11	Connector Color Wi	_					2C 3C 4C 5C		16C17C18C19C20C21C22C3							Ν
J HOOK	Connector No.	Connect			J.	5			Terminal No.	9	41		Connector No.			E	S I	5		10 20		160170	1						0
																									AAKIA	1979GE	3		Р

Revision: June 2014 DLK-49 2015 Leaf NAM

lame			
Signal Name	-	1	
Color of Wire	У	٦	Ь
Terminal No.	27	31	32





Signal Name

Color of Wire

Terminal No.

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Connector Name WIRE TO WIRE Connector Color WHITE

M19

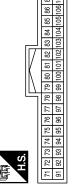
Connector No.



Signal Name	ı	1	I	
Color of Wire	GR	GR	Μ	
Terminal No.	4	5	9	

Signal Name	BACK DOOR ANTENNA +	BACK DOOR ANTENNA –	ROOM ANTENNA 1 +	ROOM ANTENNA 1 -	ROOM ANTENNA 2 +	ROOM ANTENNA 2 -	ROOM ANTENNA 3+	ROOM ANTENNA 3 -	SMART KEYLESS BUZZER OUTPUT	STARTER RELAY OUTPUT	REQUEST SW (AS)	SHIFT N, P	
Color of Wire	Μ	В	BR	Υ	g	В	G	Ж	GR	P	Ь	BG	
Terminal No.	82	83	84	85	98	87	88	89	93	26	100	102	

Connector No.	M23
Connector Name	Connector Name BCM (BODY CONTROL MODULE)
Connector Color WHITE	WHITE



Signal Name	REQUEST SW (DR)	ENGINE START SW	DOOR ANTENNA (DR) +	DOOR ANTENNA (DR) -	DOOR ANTENNA (AS) +	DOOR ANTENNA (AS) -
Color of Wire	ГG	SB	Ь	^	ГG	Υ
Terminal No.	75	9/	8/	62	08	18

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## **DOOR & LOCK SYSTEM**

Signal Name	TRUNK/BACK DOOR OPENER SW	DOOR LOCK STATUS SW (DR)	SHIFT P POSITION, PARKING POSITION SW	INTELLIGENT TUNER	CAN-H	CAN-L
Color of Wire	^	×	>	SB	Г	Ь
Terminal No. Wire	30	31	37	38	36	40

M33	CHING GIVE	OWER SWILCH	WHITE	
Connector No		Connector Name POWER SWILCH	Connector Color V	

Connector Name   POWER SWITCH	TE TE	8 8 2 1	Signal Name	1	
me PO\	lor WHITE	4 0	Color of Wire	В	
Connector Na	Connector Color	H.S.	Terminal No.	4	

Signal Name	KEY CYLINDER UNLOCK SW	KEY CYLINDER LOCK SW	CENTRAL DOOR LOCK SW	CENTRAL DOOR UNLOCK SW	KEYLESS TUNER, AUTO LIGHT SENSOR GND
Color of Wire	GR	В	<b>&gt;</b>	BR	٦
Terminal No. Wire	7	8	12	13	18

	M29	Connector Name BCM (BODY CONTROL MODULE)
	Connector No.	Connector Name



Signal Name	DOOR SW (BACK)	DOOR SW (AS)	DOOR SW (RR)	DOOR SW (DR)	DOOR SW (RL)	REQUEST SW (TRUNK/BACK DOOR)	TRUNK/BACK DOOR OPEN OUTPUT	DOOR UNLOCK OUTPUT (RR, RL)
Color of Wire	Υ	BR	Ж	SB	Μ	Ь	GR	В
Terminal No.	43	45	46	47	48	51	53	55

Connector No.	_	M24	١.										
Connector Name BCM (BODY CONTROL MODULE)	ш2	BCM (BOD MODULE)		世입	<u>`</u>	ŏ	N.	Ĕ	6				
Connector Color BLACK		\7	힣	_									
H.S.			\	1 (	/	H							
1 2 3 4 5 6	_	00	9	-	12	=	10 11 12 13 14 15 16 17 18 19 20	15	16	4	8	6	ನ
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37	27	88	6.	3	1 32	8	8	33	36	37	38 39 40	စ္တ	8

M25	Connector Name BCM (BODY CONTROL MODULE)	WHITE	
Connector No.	Connector Name	Connector Color WHITE	





Signal Name	BATTERY (FUSE)	DOOR UNLOCK OUTPUT (AS)	FLASHER OUTPUT (LEFT)	FLASHER OUTPUT (RIGHT)	ROOM LAMP OUTPUT	DOOR LOCK OUTPUT	DOOR UNLOCK COMMON (DR)	GND	BATTERY (F/L)
Color of Wire	Р	re	^	В	BR	^	g	В	Y
Terminal No.	57	59	09	61	63	99	99	29	70

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ı	אוע	46	אי	411	/1 /
	Connector No. M41	Connector Name JOINT CONNECTOR-M06	Connector Color BLUE		[原] [1] [2] [3] [4] [4] [4] [4] [4] [4] [4] [4] [4] [4
		105			

			_	
Signal Name	-	-	ı	_
Color of Wire	Т	Т	۵	Ь
Terminal No. Wire	6	10	19	20

f Signal Name	-	ı	ı	ı
Color of Wire	7	٦	۵	Ь
Terminal No.	6	10	19	20

M46	Connector Name   JOINT CONNECTOR-CM07	RANGE	7 6 5 4 3 2 1	20 19 18 17 16 15 14 13 12 11	
Connector No.   M	Connector Name JO	Connector Color ORANGE	10 9 8	[ [ 20 19 18	

Signal Name	1	ı
Color of Wire	SB	SB
Terminal No.	19	20

Connector No.	M40
Connector Name	Connector Name JOINT CONNECTOR-MO
Connector Color BLUE	BLUE

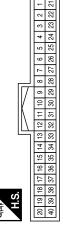


Signal Name	ı	ı	ı	ı	ı	ı	1	ı	ı	I
Color of Wire	_	٦	_	7	LG	LG	Ь	Ь	۵	Ь
Terminal No. Wire	2	8	6	10	1	12	15	18	19	20

		Н							
Connector No.	Š.		M44	4					
Connector Name JOINT CONNECTOR-M01	· Name	-	9	z	2	õ	Į.	CT	OR-MC
Connector Color	Color		15	GRAY	L				
F	10	6	80	10 9 8 7	9	2	6 5 4 3 2	2	-
Į	20	19	18	17	16	15	20 19 18 17 16 15 14 13 12 11	12	11

Signal Na	I	1
Color of Wire	Д	۵
Terminal No.	11	12

e z	Connector No.	M34
Connector Color WHITE	Connector Name	COMBINATION METER
	Connector Color	WHITE



3	JOINT CONNECTOR-M04	AY	7 6 5 4 3 2 1	20 19 18 17 16 15 14 13 12 11		Signal Name
Connector No. M43	Connector Name JOII	Connector Color GRAY	10 9 8	[ [ 20   19   18   1		Terminal No. Wire

Signal Name	-	1
Color of Wire	Υ	Υ
Terminal No.	2	12

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Connector No. M75  Connector Name REMOTE KEYLESS  Connector Color WHITE  Terminal No. Wire Signal Name  1								Connector Name WIRE TO WIRE			14 13 12 11 10 9 8 7 6 5	32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17	Terminal No. Wire Signal Name	10 BR –	13 B –	15 R –	16 G –	26 R –	29 W –	30 R –	31 G –	32 – –
	M75	_	WHITE				30,00															

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Connector No.	). M50	0
Connector Name		JOINT CONNECTOR-CM03
Connector Color	olor PINK	¥
SH	10 9 8 20 19 18	7 6 5 4 3 2 1 17 16 15 14 13 12 11
Terminal No.	Color of Wire	Signal Name
-	В	ı
3	В	-
4	В	ı

							[	-	•	1	ო	4	Ŧ	co	1		
								9	7	-	œ	6		9			
							Ξ	12	55	4	15	9	-	82	- 6	]	
						20	21	22	ಜ	24	25	56	27	83	83	99	
							3	88	83	38	38	98	37	88	စ္တ	]	
	WIRE TO WIRE				Г	18	14	24	43	4	45	46	47	84	64	22	F
	× .					-	_									ш 1	
	)_	Е			L	<b> </b>	22	+-	23	54	22	99	22	88	23	Щ	L
M77	ᆱ	WHITE			٦	8	9	62	ಜ	49	92	99	29	88	89	2	l
Σ		×					7	72	23	74	75	9/	12	82	62		
	me	lor				8	18	82	æ	84	98	98	87	88	88	8	
ž	Na	ပိ					ſ		7			_			7		
ģ	tor	tor	_		.			91		92	8		8	98			
Connector No.	Connector Name	Connector Color		H.S.				96		26	86		8	8			
Ço	Cor	Cor		手			L								_		

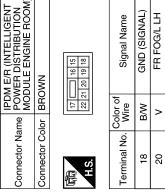
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**DLK-53** Revision: June 2014 2015 Leaf NAM

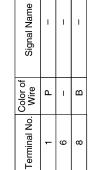
nnector No. M93	M93	Connector No. E5	E5
or Name	nnector Name CHARGE PORT LID	Connector Name	Connector Name ANTI THEFT HORN RELAY
	OPENER SWITCH	Connector Color   WHITE	WHITE
r Color	nnector Color   GREEN		
	1 2 8 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	而.S.H.	2 5

Signal Name	_	_	ı
Color of Wire	Ж	0	G
Terminal No.	-	2	3

E12	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector No.	Connector Name



M93	CHARGE PORT LID OPENER SWITCH	REEN	
Connector No. M	Connector Name CHARGE PORT LID OPENER SWITCH	Connector Color GREEN	



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0	

-	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)	ACK	11 10 9 14 13 12	Signal Name	GND (POWER)
Ξ.		lor BL		Color of Wire	۵
Connector No.	Connector Name	Connector Color BLACK	所 H.S.	Terminal No.	C

M86	Connector Name INSIDE KEY ANTENNA (INSTRUMENT CENTER)	3LUE	
Connector No.	Connector Name	Connector Color BLUE	



Signal Nam	_	_	
Color of Wire	BR	У	
Terminal No.	-	2	

E6	Connector Name JOINT CONNECTOR-E01	BLUE	9 9 8 7 6 5 4 3 2 1
Connector No.	Connector Name	Connector Color BLUE	斯 H.S.

	_	_			_	
Signal Name	1	1	ı	ı	ı	1
Color of Wire	_	_	7	Ь	۵	Ь
Color of Wire	-	2	3	7	8	6

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## **DOOR & LOCK SYSTEM**

E28	VTELLIGENT KEY /ARNING BUZZER	ROWN
Connector No.	Connector Name INTELLIGENT KEY WARNING BUZZER	Connector Color BROWN
	ILLIGENT BUTION	VE HOOM)

Connector Na	me INTI	Connector Name INTELLIGENT KEY WARNING BUZZER
Connector Color		BROWN
H.S.		23
Terminal No.	Color of Wire	Signal Name
1	ยา	1
3	ษย	ı

Connector No.	. E14	
Connector Name		IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color		BROWN
崎 H.S.	39 38 🖂 46 45 44	48   38   37   38   35   36   36
Terminal No.	Color of Wire	Signal Name
42	BR	VCM BAT

Connector No.	E13	
Connector Name		IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color		WHITE
H.S.	28 24 32 27 3 8 22	26 55 24 23 32 33 33 29 33
Terminal No.	Color of Wire	Signal Name
25	В	AUTO STOP SW
56	Ь	CAN-CL
27	٦	CAN-CH
34	M	HORN RLY CONT

E5	7	ä			Color o Wire	ပြ
Ċ.	ame	흥				
Connector No.	Connector Name	Connector Color			Terminal No.	1
Conne	Conne	Conne	僵	H.S.	Termi	
		r			Je	

	ARGE PORT LID ENER ACTUATC	CK		Signal Naı	1
				Color of Wire	2
Connector No.	Connector Nar	Connector Col	H.S.	Terminal No.	-
	Connector No. E38	e e	o g	or ne	Oolo Wii

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Revision: June 2014 DLK-55 2015 Leaf NAM

Connector No. E88 Connector Name CHARGE PORT LID OPENER ACTUATOR RELAY Connector Color BLUE	Terminal No.         Color of Wire         Signal Name           1         R         -           2         B/Y         -           3         P         -           5         BR         -	Connector No. E107  Connector Name WIRE TO WIRE  Connector Color WHITE	Terminal No. Wire Signal Name
Connector No. E62 Connector Name VCM Connector Color BROWN  66 67 68 69 70 71 72 73 74 75 76 77 78 79 60 81 82 83 84 85 86 87 88 89 90 90 90 90 90 90 90 90 90 90 90 90 90	Terminal No.         Color of Wire         Signal Name           75         L         CAN-H           76         P         CAN-L           93         BR         CHARGE PORT           ID OPENER SWITCH         CANTCH	Terminal No. Color of Signal Name  13 W - 20 BR - 23 LG - 44 W - 60 LG -	
Connector No. E61  Connector Name VCM  Connector Color BLACK  Light String 19 20 21 22 23 24 25 26 29 30 31 32 23 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 40 52 40 52 40 52 40 50 50 50 50 50 50 50 50 50 50 50 50 50	Color of Signal Name   Signal Name   CHARGE PORT LID   CHARGE PORT LID   RELAY   SIGNAL   SIGNAL   CHARGE PORT LID   SIGNAL   SIGNAL   CHARGE PAN POSITION SIGNAL   SIGNAL	Connector No. E105 Connector Name WIRE TO WIRE Connector Color WHITE  H.S.	1   6   12   22   32   42   52   62   72   83   95   100

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## **DOOR & LOCK SYSTEM**

### < WIRING DIAGRAM >

r		_		r			İ		_
Connector No. B1	_		Connector No.	B2		Connector No.	No. B3		
Connector Name WIRE TO WIRE	IRE TO WIRE		Connector Name WIRE TO WIRE	ıme WIR	E TO WIRE	Connector	Name WIF	Connector Name WIRE TO WIRE	
Connector Color W	WHITE		Connector Color	olor WHITE	TE	Connector	Connector Color WHITE	ITE	
H.S.	11 12 13 14 15 16		H.S.	8 9 10 11	11 12 13 14 15 16	麻勒 H.S.	1 2 3 4 5 17 18 19 20 21	6 7 8 9 10 11 12 13 14 12 22 23 24 25 26 27 28 29 30	41VI >
Terminal No. Wire	of Signal Name		Terminal No.	Color of Wire	Signal Name	Terminal No.	Color of Wire	Signal Name	
5 G	1		4	GR	1	F	۵	I	
9	ı		5	GR	1	12	BB	ı	
			9	>	ı	26	p_	1	
						27	Υ	1	
						31	7	1	
						32	Д.	ı	
									1
Connector No. B4	4		Connector No.	. B7		Connector No.	No. B16		
Connector Name WIRE TO WIRE	IRE TO WIRE		Connector Name WIRE TO WIRE	me WIR	E TO WIRE	Connector	Name WIF	Connector Name WIRE TO WIRE	
Connector Color WHITE	НТЕ		Connector Color WHITE	lor WHI	TE	Connector	Connector Color WHITE	ITE	
H.S. 17 18 19	4 5 6 7 8 9 10 11 12 20 21 22 23 24 25 26 27 28	13 14 15 16 19 30 31 32	斯 H.S. 12	12 11 10 9 t 24 23 22 21 2	12 11 10 9 8 7 6 5 4 3 2 1 24 23 22 21 20 19 18 17 16 15 14 13	€ S.H	5 4 11 10	2 2 1	
Terminal No. Wire	of Signal Name		Terminal No.	Color of Wire	Signal Name	Terminal No.	o. Color of Wire	Signal Name	
10 BR	ı		1	٦	-	3	В	ı	
13 B	ı		2	Ь	1	8	В	1	

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**DLK-57** 2015 Leaf NAM Revision: June 2014

No.	B18	Connector No.	B48
Name	onnector Name WIRE TO WIRE	Connector Name	Connector Name   FRONT DOOR SWITCH LH
Color	onnector Color WHITE	Connector Color WHITE	WHITE

Connector Name | WIRE TO WIRE Connector Color WHITE

B17

Connector No.

80

Signal Name	ı	
Color of Wire	SB	
Terminal No.	3	

Signal Name	I	_	I	ı
Color of Wire	Д	Ь	٦	GR
Terminal No. Wire	6	10	14	20

Signal Name	1	_	
Color of Wire	8	GR	
Terminal No.	က	8	





Signal Name	1	
Color of Wire	Œ	

Signal Name

Terminal No. Color of Wire

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က



Connector Name REAR DOOR SWITCH RH

B53

Connector No.

B49

Connector No.

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Terminal No.	3

ne or	PRONT DOOR SWITCH RH WHITE
	1 2 3 4



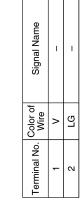
Signal Name	_	
Color of Wire	BR	
Terminal No.	ဗ	

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Connector No.	B83
Connector Name	Connector Name OUTSIDE KEY ANTENNA (REAR BUMPER)
Connector Color BLUE	BLUE

1 2	Signal Name	_
	Color of Wire	W
H.S.	Terminal No. Wire	1

Connector No.	B82
Connector Name	Connector Name INSIDE KEY ANTENNA (LUGGAGE ROOM)
Connector Color BLUE	BLUE
	≪



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Signal Name	_	ı	
Color of Wire	Э	æ	
Terminal No.	1	2	

IT OUTSIDE HANDLE EQUEST SWITCH)	¥

Connector No.		D15
Connector Name	эше	FRONT OUTS LH (REQUES)
Connector Color	olor	BLACK

Connector Name LH (OUTSIDE HANDLE ANTENNA)
ANTENNA)

Connector No.

GRAY

Connector Color

	Signal Name	I	_
	Color of Wire	LG	В
雨 H.S.	Terminal No.	1	2

	Color o	9 <b>7</b>	
H.S.	Terminal No.	1	

2	Signal Name	I	ı
	Color of Wire	d	۸
	ġ.		

H.S.	

Sign			
Color of Wire	Ъ	۸	
Terminal No.	-	2	

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Connector No. D22	D22 WIRE TO WIRE	Terminal No.	Color of Wire	Signal Name	Connector No.		POWER WINDOW
		4C	SB	1	Connector Name		AND DOOR LOCK/UNLOCK
_		2C	^	ı	Connector Color	+	5 u
		13C	В	ı		$\dashv$	
SH		39C	FG	ı		6 5 4	3 2 1
		37C	æ	ı	ď	9 9	
		38C	_	ı			
		39C	В	1			
150 140 130 120 110 100	10C 9C 8C 7C 6C 5C 4C 3C 2C 1C	40C	Ь	ı	Terminal No.	Color of	Signal Name
46C45C44C43C42C41C40C39C38C37C36C	188	41C	>	ı	,	ב ב	
550540530520510500490A	350340	47C	У	ı	- c	< ۵	GND Mg NOC
		48C	BR	1	٥ 4	- 8	LOCK SW
Connector No. D38		Connector No.	. D102		ON Conimport	Color of	Simol Namo
e	FRONT DOOR LOCK	Connector Name		WIRE TO WIRE	elilliai NO.	Wire	olgilal Naille
	EMBLY LH	Connector Color	-		5A	>	ı
Connector Color GRAY	>:		-		11A	>	1
					12A	В	ı
		T.S.			36A	В	ı
H.S.	4 5 6				37A	۵	ı
					38A	>	1
Terminal No. Color of Wire	Signal Name	15A 14A 13A	4 12A 11A 10A	A 94 84 74 64 54 44 34 24 14	39A	<u> </u>	1
>	1	46845844848384284184083983888378368	2441440439438	l			
2 SB	ı	55A54A53A5	55A54A53A52A51A50A49A48A47A	A47A 35A34A33A32A31A30A29A28A27A			
3 G	ı						
4 B	-						
5 L	-						
9	1						

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## **DOOR & LOCK SYSTEM**

	Connector No.	D108	
-ock	FRONT OUTSIDE F Connector Name RH (OUTSIDE KEY ANTENNA)	ne RH (OUTSII ANTENNA)	FRONT OUTSIDE HANDLE RH (OUTSIDE KEY ANTENNA)
	Connector Color GRAY	or GRAY	
	是 H.S.	-	
I Name	Terminal No. Wire	color of Wire	Signal Name
_	1	ГG	_
ı	0	>	1

Connector No.         D107         Connector No.         D108           Connector Name ACTUATOR RH         Connector Name RH (OUTSIDE HANDLE Connector Color GRAY           Connector Color GRAY         Connector Color GRAY           Terminal No. Wire         Signal Name           5         V           6         Y									
Connector No.   Connector No.	38 ONT OUTSIDE HANDLE	TENNA)	AY	<b>«</b>				ı	_
NT DOOR LOCK UATOR RH AY  Signal Name	<u> </u>	N A	or GR		<b>O</b>		Solor of Wire	ГG	Υ
7 UATO 3 4 4 1	Connector No.		Connector Col		H.S.		Terminal No.	-	2
ONT DO THE POPULATION OF THE P						[			
Connector No. D1C Connector Name FRC Connector Color GRA LS. Terminal No. Color of Wire 5 V 6 Y	ONT DOOR LOCK	אין אין אין אין	ī		5			ı	-
Connector No. Connector Col. H.S. Terminal No. C	ne FRC	7 AC	ב ב				Solor of Wire	>	Υ
	Connector No.	Connector Col			H.S.	•	Terminal No.	2	9

Ö	Ö	Ö]		Ter			
4	Connector Name   POWER WINDOW AND	TE	3 4 5	Signal Name	I	-	
D104	POV Ime DOC	lor WHI	6 1 2 8	Color of Wire	>	BR	۵
Connector No.	Connector Na	Connector Color WHITE	师 H.S.	Terminal No. Wire	-	2	6

AR DOOR LOCK	UAIOR LH	٨٢	8 8	Signal Name	-	=
me RE/	S	lor   GR/	2   2	Solor of Wire	>	ď
Connector Na		Connector Co	高 H.S.	Terminal No.	-	6
WIRE			4 11 12 5	Signal Name	1	1
WIRE TO	WHITE		7 8 9	lor of Vire	>	
Connector Name	Connector Color		H.S.	Ferminal No.	က	α
	Connector Name WIRE TO WIRE Connector Name REAR DOOR LOCK				Connector Name REAR DO Connector Color GRAY  MAS.  Terminal No. Color of Wire	Connector Name REAR DO Connector Color GRAY  M.S. (1 2 3 4  Terminal No. Color of Terminal No. Wire

Signal Name	ı	ı	
Color of Wire	۵	В	
Terminal No.	-	2	

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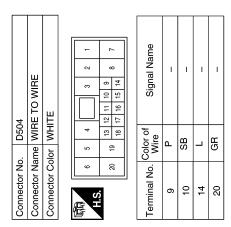
Connector Name FRONT OUTSIDE HANDLE REQUEST SWITCH)

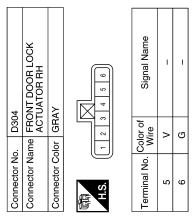
Connector No. D115

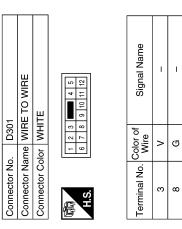
BLACK

Connector Color

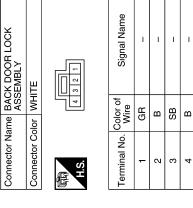
### **DOOR & LOCK SYSTEM**

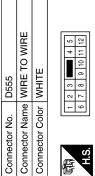


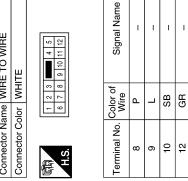




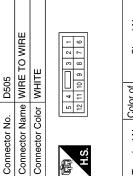
Connector No.	D562
Connector Name	Connector Name BACK DOOR LOCK ASSEMBLY
Connector Color WHITE	WHITE
SH	4 3 2 1











Signal Name	ı	ı	_	ı
Color of Wire	Ь	L	SB	GR
Terminal No. Wire	8	6	10	12

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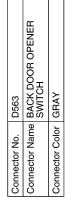
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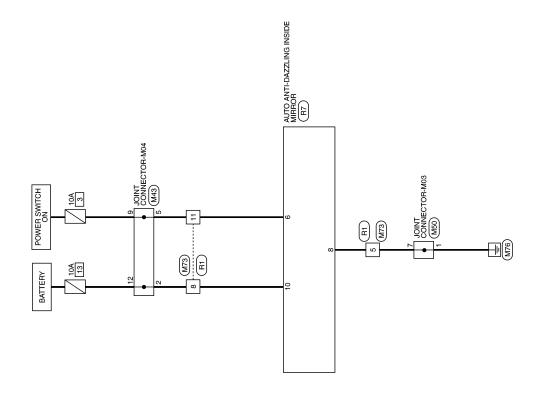
2 3 4	3
H.S.	

Signa				
Color of Wire	٦	В	В	Д
Terminal No. Wire	-	2	က	4

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# HOMELINK UNIVERSAL TRANSCEIVER

Wiring Diagram



HOMELINK UNIVERSAL TRANSCEIVER

AAKWA0831GB

ALI JASAL VINIO ANIIALIONI									
Connector No. M43	o. M43		Connec	Connector No. M50	05	Conr	Connector No. M73	M73	
Connector Na	ame JOIN	Connector Name JOINT CONNECTOR-M04	Connec	tor Name JO	Connector Name JOINT CONNECTOR-CM03	Conr	nector Name	Connector Name WIRE TO WIRE	
Connector Color GRAY	olor GRA	>	Connec	Connector Color PINK	Ϋ́	Conr	Connector Color WHITE	WHITE	
H.S.	20 19 18 17	7 6 5 4 3 2 1 17 16 15 14 13 12 11	H.S.	10 9 8	7 6 5 4 3 2 1 17 16 15 14 13 12 11	H.S.	\(\sigma\)	2 3 4 5 6 7 8 10 11 12 13 14 15 16	
Terminal No. Wire	Color of Wire	Signal Name	Termin	Terminal No. Wire	f Signal Name	Term	Terminal No. Wire		Signal Name
2	>	ı	-	В	ı		2	В	1
5	8	1	7	В	ı		8	<b>&gt;</b>	1
o	8	ı					F	M	ı
12	>	1							

	AUTO ANTI-DAZZLING INSIDE MIRROR	BLACK	2 5 0 1 2 5 4 8 8 4 7 5 7 5 4 9 6 9 9 9 7 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5	Signal Name	1	ı	ı	ı	_	IGN	ı	GND	I	NÐI
. R7			I II\ <del></del>	Color of Wire	1	ı	1	ı	_	B/B	1	В	ı	B√
Connector No.	Connector Name	Connector Color	H.S.	Terminal No.	-	2	3	4	9	9	2	8	6	10

Signal Name

Color of Wire

Terminal No.

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Connector Name WIRE TO WIRE

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Connector No.

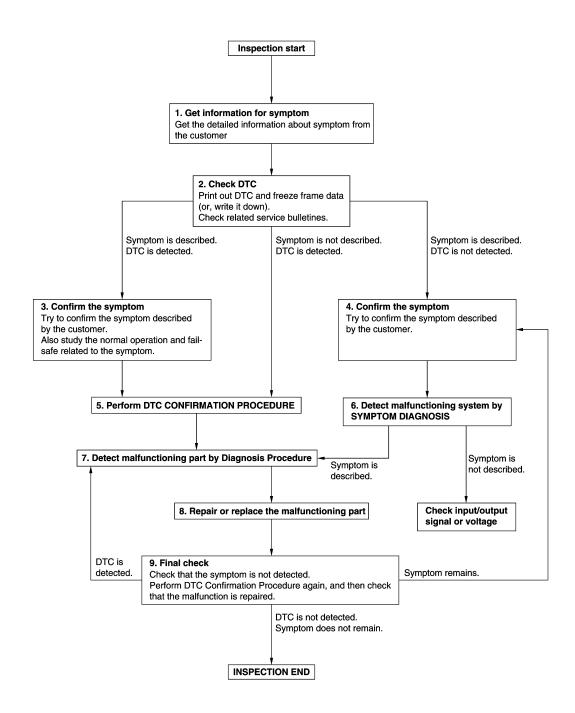
Connector Color WHITE

# **BASIC INSPECTION**

## DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

**OVERALL SEQUENCE** 



JMKIA8652GB

#### 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).
- Check operation condition of the function that is malfunctioning.

>> GO TO 2.

## 2.check dtc

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

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

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

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

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

### ${f 3.}$ CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

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

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

>> GO TO 5.

#### f 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.

## $oldsymbol{5}$ .PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC CONFIRMATION PROCEDURE for the detected DTC, and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle, and check self diagnostic results in real time. If two or more DTCs are detected, refer to BCS-47, "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

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

#### Is DTC detected?

YES >> GO TO 7.

NO >> Check according to GI-53, "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-

### $\emph{/}$ .DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

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

#### < BASIC INSPECTION >

Inspect according to Diagnostic Procedure of the system.

#### Is malfunctioning part detected?

YES >> GO TO 8.

NO >> Check according to GI-53, "Intermittent Incident".

## 8.REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 9.

## 9. FINAL CHECK

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

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

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

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

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

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

### **B2621 INSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

# DTC/CIRCUIT DIAGNOSIS

## **B2621 INSIDE ANTENNA**

DTC Logic

#### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2621	INSIDE ANTENNA 1	An excessive high or low voltage from inside antenna (instrument center) is sent to BCM.	Inside key antenna (instrument center) Harness or connector [Inside key antenna (instrument center) circuit is open or shorted]

#### DTC CONFIRMATION PROCEDURE

## 1. PERFORM DTC CONFIRMATION PROCEDURE

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

### Is inside key antenna DTC detected?

YES >> Refer to <u>DLK-69</u>, "<u>Diagnosis Procedure</u>".

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

### Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-45, "Wiring Diagram".

# 1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM				(-)	Condition	Signal (Reference value)
Connector	Terminal			(**************************************		
M23	84	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB		
M23	85	Clound	When Intelligent Key is not in the antenna detection area	15 10 11 11 11		

Is the inspection result normal?

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#### **B2621 INSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

YES >> Replace BCM. Refer to BCS-72, "Removal and Installation".

NO >> GO TO 2.

# 2.CHECK INSIDE KEY ANTENNA CIRCUIT

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

В	CM	Inside key antenna	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M23	84	M86		Yes
IVIZO	85	IVIOO	2	res

4. Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Terminal	Ground	Continuity	
M23	84	Ground	No	
IVIZS	85		INU	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# ${f 3.}$ 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. Turn power switch ON.
- 4. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM				(-)	Condition	Signal (Reference value)
Connector	Terminal			,		
M23	84	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB		
M23	85	Ground	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA5951GB		

#### Is the inspection result normal?

- YES >> Replace inside key antenna (instrument center). Refer to <u>DLK-206, "INSTRUMENT CENTER:</u> Removal and Installation".
- NO >> Replace BCM. Refer to BCS-72, "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 2	An excessive high or low voltage from inside antenna (rear seat) is sent to BCM.	Inside key antenna (rear seat)     Harness or connector     [Inside key antenna (rear seat) circuit is open or shorted]

#### DTC CONFIRMATION PROCEDURE

# 1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- Select "INSIDE ANT DIAGNOSIS" in "Work support".
- 3. Perform inside key antenna ("INSIDE ANT DIAGNOSIS") in "Work support" of "INTELLIGENT KEY".
- Check BCM for DTC.

#### Is inside key antenna DTC detected?

YES >> Refer to <u>DLK-71</u>, "<u>Diagnosis Procedure</u>".

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

### Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>DLK-45</u>, "Wiring Diagram".

# 1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			(
M23	86	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 1 s JMKIA3839GB
M23	87	G, Gallia	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA5951GB

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-72, "Removal and Installation".

NO >> GO TO 2.

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### **B2622 INSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

# $\overline{2}$ .check inside key antenna circuit

- 1. Turn power switch OFF.
- 2. Disconnect BCM connector and inside key antenna (rear seat) connector.
- 3. Check continuity between BCM harness connector and inside key antenna (rear seat) harness connector.

В	CM	Inside key ante	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M23	86	B81	1	Yes
IVIZ3	87	ВОТ	2	165

4. Check continuity between BCM harness connector and ground.

-	BCM		Continuity
Connector	Terminal	Ground	Continuity
M23	86	Ground	No
IVIZS	87		NU

#### 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 (rear seat). (New antenna or other antenna)
- 2. Connect BCM connector and inside key antenna (rear seat) connector.
- 3. Turn power switch ON.
- 4. Check signal between BCM harness connector and ground using oscilloscope.

	(+) BCM				Condition	Signal (Reference value)	
Connector	Terminal			(Notoronoe value)			
M23	86	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB			
WZ3	87	Glound	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA5951GB			

#### Is the inspection result normal?

YES >> Replace inside key antenna (rear seat). Refer to <u>DLK-206, "REAR SEAT : Removal and Installation".</u>

NO >> Replace BCM. Refer to BCS-72, "Removal and Installation".

## **B2623 INSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

## **B2623 INSIDE ANTENNA**

DTC Logic

#### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2623	INSIDE ANTENNA 3	An excessive high or low voltage from inside antenna (luggage room) is sent to BCM.	Inside key antenna (luggage room)     Harness or connector     [Inside key antenna (luggage room) circuit is open or shorted]

### DTC CONFIRMATION PROCEDURE

# 1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "INSIDE ANT DIAGNOSIS" in "Work support".
- 3. Perform inside key antenna ("INSIDE ANT DIAGNOSIS") in "Work support" of "INTELLIGENT KEY".
- 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 (luggage room) is OK.

## Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>DLK-45</u>, "Wiring Diagram".

# 1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			(1.1010101100 101100)
M23	88	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB
	89		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA5951GB

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-72, "Removal and Installation".

NO >> GO TO 2.

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## **B2623 INSIDE ANTENNA**

### < DTC/CIRCUIT DIAGNOSIS >

# $\overline{2}$ .check inside key antenna circuit

- 1. Turn power switch OFF.
- 2. Disconnect BCM connector and inside key antenna (luggage room) connector.
- Check continuity between BCM harness connector and inside key antenna (luggage room) harness connector.

В	СМ	Inside key antenr	Continuity		
Connector	Terminal	Connector Terminal		Continuity	
M23	88	B82	1	Yes	
IVIZS	89	D02	2	163	

4. Check continuity between BCM harness connector and ground.

E	BCM		Continuity
Connector	Terminal	Ground	Continuity
M23	88	Ground	No
IVIZS	89		INU

#### 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 (luggage room). (New antenna or other antenna)
- 2. Connect BCM connector and inside key antenna (luggage room) connector.
- 3. Turn power switch ON.
- 4. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM		(-)	Condition	Signal (Reference value)	
Connector	Terminal			(1.6.6.6.166.76.166)	
M23	88	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB	
MZJ	89	Giodila	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1   S   JMKIA5951GB	

#### Is the inspection result normal?

- YES >> Replace inside key antenna (luggage room). Refer to <u>DLK-206, "LUGGAGE ROOM : Removal and Installation"</u>.
- NO >> Replace BCM. Refer to BCS-72, "Removal and Installation".

## **B2626 OUTSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

## **B2626 OUTSIDE ANTENNA**

**DTC Logic** INFOID:0000000010639729

#### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2626	OUTSIDE 1 ANTEN- NA	An excessive high or low voltage from outside key antenna (RH) is sent to BCM.	Outside key antenna (RH)     Harness or connector     [Outside key antenna (RH) circuit is open or shorted]

#### DTC CONFIRMATION PROCEDURE

# 1. PERFORM DTC CONFIRMATION PROCEDURE

- Disconnect outside key antenna (RH) connector.
- Perform "Self Diagnostic Result" of "INTELLIGENT KEY" using CONSULT.

#### Is outside key antenna DTC detected?

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

NO >> Outside key antenna (RH) is OK.

## Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-45, "Wiring Diagram".

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

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

(+) BCM		(-)	Condition		Signal (Reference value)
Connector	Terminal				,
M23	80	Ground	When the RH request switch is operated	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 500 ms
IVIZO	81	Glound	with power switch OFF	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	(V) 15 10 5 0 500 ms

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-72, "Removal and Installation".

NO >> GO TO 2.

## 2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

Disconnect BCM connector and outside key antenna (RH) connector.

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## **B2626 OUTSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

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

В	СМ	Outside key	Continuity		
Connector	Terminal	Connector Terminal		Continuity	
M23	80	D108	1	Yes	
IVIZS	81	D100	2	163	

3. Check continuity between BCM harness connector and ground.

-	BCM		Continuity
Connector	Terminal	Ground	Continuity
M23	80	Ground	No
IVIZS	81		INO

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

	+) CM Terminal	(-)	Condition		Signal (Reference value)
M23	80	Ground	When the RH request switch is operated	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0  MKIA5955GB
	81		with power switch OFF	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	(V) 15 10 5 0 500 ms  JMKIA5954GB

#### Is the inspection result normal?

YES >> Replace front outside handle RH (outside key antenna). Refer to <u>DLK-208, "PASSENGER SIDE :</u> Removal and Installation".

NO >> Replace BCM. Refer to BCS-72, "Removal and Installation".

## **B2627 OUTSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

## **B2627 OUTSIDE ANTENNA**

**DTC Logic** INFOID:0000000010639731

#### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2627	OUTSIDE 2 ANTEN- NA	An excessive high or low voltage from outside key antenna (LH) is sent to BCM.	Outside key antenna (LH)     Harness or connector     [Outside key antenna (LH) circuit is open or shorted]

#### DTC CONFIRMATION PROCEDURE

# 1. PERFORM DTC CONFIRMATION PROCEDURE

- Disconnect outside key antenna (LH) connector.
- Perform "Self Diagnostic Result" of "INTELLIGENT KEY" using CONSULT.

#### Is outside key antenna DTC detected?

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

NO >> Outside key antenna (LH) is OK.

## Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-45, "Wiring Diagram".

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

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

(+) BCM		(-)	Con	dition	Signal (Reference value)
Connector	Terminal				
M23	78	Ground	When the LH request switch is operated	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 JMKIA5955GB
WZS	79	Glound	with power switch OFF	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	(V) 15 10 5 0

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-72, "Removal and Installation".

NO >> GO TO 2.

## 2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

Disconnect BCM connector and outside key antenna (LH) connector.

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### **B2627 OUTSIDE ANTENNA**

### < DTC/CIRCUIT DIAGNOSIS >

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

В	CM	Outside key	Continuity		
Connector	Terminal	Connector	Terminal	Continuity	
M23	78	D6	1	Yes	
IVIZS	79	D0	2	163	

3. Check continuity between BCM harness connector and ground.

E	ВСМ		Continuity	
Connector	Connector Terminal		Continuity	
M23	78	Ground	No	
IVIZS	79		INO	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

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

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

	+) CM Terminal	(-)	Condition		Signal (Reference value)
M23	78	Ground	When the LH request switch is operated	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 JMKIA5955GB
	79		with power switch OFF	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	(V) 15 10 5 0  JMKIA5954GB

### Is the inspection result normal?

YES >> Replace front outside handle LH (outside key antenna). Refer to <u>DLK-208, "DRIVER SIDE : Removal and Installation"</u>.

NO >> Replace BCM. Refer to BCS-72, "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 3 ANTEN- NA	An excessive high or low voltage from outside key antenna (rear bumper) is sent to BCM.	Outside key antenna (rear bumper)     Harness or connector [Outside key antenna (rear bumper) circuit is open or shorted]

## DTC CONFIRMATION PROCEDURE

# 1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Disconnect outside key antenna (rear bumper) connector.
- Perform "Self Diagnostic Result" of "INTELLIGENT KEY" using CONSULT.

#### Is outside key antenna DTC detected?

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

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

## Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-45, "Wiring Diagram".

## 1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

Turn power switch OFF.
 Check signal between BCM harness connector and ground using oscilloscope.

(+			Condition		Signal (Reference value)	
BC	CM	(–)				
Connector	Terminal				,	
MOO	82	Crown	When the back door request switch is oper-	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 	
M23	83	Ground	ated with power switch OFF	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	(V) 15 10 5 0  JMKIA5954GB	

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-72, "Removal and Installation".

NO >> GO TO 2.

## 2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

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### **B2628 OUTSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

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

В	CM	Outside key ante	Continuity		
Connector	Terminal	Connector	Terminal	Continuity	
M23	82	B83	1	Yes	
IVIZS	83	603	2	165	

3. Check continuity between BCM harness connector and ground.

ВСМ			
Connector	Terminal	Ground	Continuity
M23	82	Ground	No
IVIZO	83		NO

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

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

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

	+) CM	(–)	Condition		Signal (Reference value)
Connector	Terminal				(
M23	82	Ground	When the back door request switch is oper-	When Intelligent Key is in the antenna de- tection area (The dis- tance between Intelligent Key and an- tenna: 80 cm or less)	(V) 15 10 5 0 
0	83		ated with power switch OFF	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	(V) 15 10 5 0 500 ms  JMKIA5954GB

#### Is the inspection result normal?

YES >> Replace outside key antenna (rear bumper). Refer to <u>DLK-208, "REAR BUMPER : Removal and Installation"</u>.

NO >> Replace BCM. Refer to BCS-72, "Removal and Installation".

## **BACK DOOR OPENER ACTUATOR**

#### < DTC/CIRCUIT DIAGNOSIS >

## **BACK DOOR OPENER ACTUATOR**

## Component Function Check

## 1. CHECK FUNCTION

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "TRUNK/BACK DOOR" in "Active Test".
- 3. Touch "OPEN" to check that it works normally.

#### Is the inspection result normal?

YES >> Back door opener actuator is OK.

NO >> Refer to <u>DLK-81, "Diagnosis Procedure"</u>.

## Diagnosis Procedure

Regarding Wiring Diagram information, refer to <a href="DLK-45">DLK-45</a>, "Wiring Diagram".

## 1. CHECK BACK DOOR OPENER ACTUATOR INPUT SIGNAL

- Turn power switch OFF.
- 2. Disconnect back door lock assembly connector.
- 3. Check voltage between back door lock assembly harness connector and ground.

	(+) Back door lock assembly		Condition		Voltage (Approx.)
Connector	Terminal				(
D562	1	Ground	Back door opener switch	ON	Battery voltage

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2.check back door opener actuator circuit

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

В	BCM Back door lock assembly		Back door lock assembly		
Connector	Terminal	Connector	Terminal	- Continuity	
M29	53	D562	1	Yes	

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Connector Terminal		Continuity
M29	53		No

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-72, "Removal and Installation".

NO >> Repair or replace harness.

# 3.check back door opener actuator ground circuit

Check continuity between back door lock assembly harness connector and ground.

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## **BACK DOOR OPENER ACTUATOR**

### < DTC/CIRCUIT DIAGNOSIS >

Back door lo	Back door lock assembly		Continuity
Connector	Terminal	Ground	Continuity
D562	2		Yes

## Is the inspection normal?

YES >> Replace back door lock assembly. Refer to <u>DLK-201, "DOOR LOCK: Removal and Installation"</u>.

NO >> Repair or replace harness.

#### **BACK DOOR OPENER SWITCH**

### < DTC/CIRCUIT DIAGNOSIS >

## **BACK DOOR OPENER SWITCH**

## Component Function Check

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## 1. CHECK FUNCTION

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

Monitor item	Condition		Status
TR/BD OPEN SW Back door opener switch	Back door opener switch	Pressed	ON
	back door opener switch	Released	OFF

#### Is the inspection result normal?

YES >> Back door opener switch is OK.

NO >> Refer to <u>DLK-83, "Diagnosis Procedure"</u>.

## Diagnosis Procedure

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Regarding Wiring Diagram information, refer to <a href="DLK-45">DLK-45</a>, "Wiring Diagram".

# 1. CHECK BACK DOOR OPENER SWITCH INPUT SIGNAL

- Turn power switch OFF.
- 2. Disconnect back door opener switch assembly connector.
- 3. Check signal between back door opener switch assembly harness connector and ground using oscilloscope.

	+) er switch assembly Terminal	(-)	Signal (Reference value)
D563	1	Ground	(V) 15 10 5 10 ms  JPMIA0012GB

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2.CHECK BACK DOOR OPENER SWITCH CIRCUIT

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

В	CM	Back door opener switch assembly		Continuity
Connector	Terminal	Connector Terminal		Continuity
M24	30	D563	1	Yes

3. Check continuity between BCM harness connector and ground.

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## **BACK DOOR OPENER SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

В	BCM		Continuity
Connector	Connector Terminal		Continuity
M24	30		No

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-72, "Removal and Installation".

NO >> Repair or replace harness.

# 3.check back door opener switch ground circuit

Check continuity between back door opener switch assembly harness connector and ground.

Back door opener switch assembly			Continuity
Connector	Connector Terminal		Continuity
D563	2		Yes

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

## 4. CHECK BACK DOOR OPENER SWITCH

Refer to DLK-84, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace back door opener switch assembly. Refer to <a href="DLK-213">DLK-213</a>, "Removal and Installation".

## 5. CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

>> Inspection End.

## Component Inspection

INFOID:0000000010639739

## 1. CHECK BACK DOOR OPENER SWITCH

- 1. Turn power switch OFF.
- 2. Disconnect back door opener switch assembly connector.
- 3. Check continuity between back door opener switch assembly terminals.

Back door opene	Back door opener switch assembly		Condition		
Terr	Terminal		uition	Continuity	
1	1 2		Pressed	Yes	
ı	2	switch	Released	No	

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door opener switch assembly. Refer to <u>DLK-213</u>, "Removal and Installation".

### BACK DOOR REQUEST SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

## **BACK DOOR REQUEST SWITCH**

## Component Function Check

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## 1. CHECK FUNCTION

- Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- Select "REQ SW-BD/TR" in "Data Monitor".
- Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
REQ SW-BD/TR Back door reques	Rack door request switch	Pressed	ON
	Dack door request switch	Released	OFF

#### Is the inspection result normal?

YES >> Back door request switch is OK.

NO >> Refer to DLK-85, "Diagnosis Procedure".

## Diagnosis Procedure

INFOID:0000000010639741

Regarding Wiring Diagram information, refer to <u>DLK-45</u>, "Wiring Diagram".

# 1. CHECK BACK DOOR REQUEST SWITCH INPUT SIGNAL

- Turn power switch OFF.
- 2. Disconnect back door opener switch assembly connector.
- Check voltage between back door opener switch assembly harness connector and ground.

(+) Back door opener switch assembly		(–)	Voltage (Approx.)	
Connector	Terminal		( 44)	
D563	4	Ground	Battery voltage	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2.check back door request switch circuit

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

В	CM	Back door opener switch assembly		Continuity
Connector	Terminal	Connector Terminal		Continuity
M29	51	D563	4	Yes

Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector Terminal		Ground	Continuity
M29	51		No

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-72, "Removal and Installation".

NO >> Repair harness or connector.

## 3.CHECK BACK DOOR REQUEST SWITCH GROUND CIRCUIT

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## **BACK DOOR REQUEST SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

Check continuity between back door opener switch assembly harness connector and ground.

Back door opener switch assembly			Continuity
Connector	Terminal	Ground	Continuity
D563	3		Yes

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK BACK DOOR REQUEST SWITCH

Refer to DLK-86, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace back door opener switch assembly. Refer to <a href="DLK-213">DLK-213</a>, "Removal and Installation".

## 5. CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

>> Inspection End.

## Component Inspection

INFOID:0000000010639742

## 1. CHECK BACK DOOR REQUEST SWITCH

- 1. Turn power switch OFF.
- Disconnect back door opener switch assembly connector.
- 3. Check continuity between back door opener switch assembly terminals.

Back door opener switch assembly		Condition		Continuity
Terminal				
2	Pack door request switch	Pressed	Yes	
	4	Back door request switch	Released	No

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door opener switch assembly. Refer to <u>DLK-213, "Removal and Installation"</u>.

## **BUZZER (COMBINATION METER)**

### < DTC/CIRCUIT DIAGNOSIS >

## **BUZZER (COMBINATION METER)** Α Component Function Check INFOID:0000000010639743 1. CHECK FUNCTION В Select "INTELLIGENT KEY" of "BCM" using CONSULT. 2. Select "INSIDE BUZZER" in "Active Test". Touch "Key", "Knob" or "Take Out" to check that it works normally. Is the inspection result normal? YES >> Buzzer (combination meter) is OK. NO >> Refer to DLK-87, "Diagnosis Procedure". D Diagnosis Procedure INFOID:0000000010639744 Е 1. CHECK METER BUZZER CIRCUIT Refer to WCS-43, "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-53, "Intermittent Incident". Н >> Inspection End.

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## DOOR KEY CYLINDER SWITCH

### < DTC/CIRCUIT DIAGNOSIS >

## DOOR KEY CYLINDER SWITCH

## Component Function Check

INFOID:0000000010639745

## 1. CHECK FUNCTION

- Select "DOOR LOCK" of "BCM" using CONSULT.
- Select "KEY CYL LK SW", "KEY CYL UN-SW" in "Data Monitor".
- Check that the function operates normally according to the following conditions:

Monitor item	Con	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.

>> Refer to DLK-88, "Diagnosis Procedure". NO

## Diagnosis Procedure

INFOID:0000000010639746

Regarding Wiring Diagram information, refer to <u>DLK-45</u>, "Wiring Diagram".

## 1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

- Turn power switch OFF.
- Disconnect front door lock assembly (LH) connector.
- Check voltage between front door lock assembly (LH) harness connector and ground.

-	(+) Front door lock assembly (LH)		Voltage (V) (Approx.)	
Connector	Terminal		(Αρρίολ.)	
	5		40	
D38	6	Ground	(V) 15 10 5 0 +	

### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2.CHECK DOOR KEY CYLINDER SWITCH SIGNAL CIRCUIT

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

ВСМ		Front door lock assembly (LH)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M24	7	D38	5	Yes
IVIZ4	8	D30	6	163

## DOOR KEY CYLINDER SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

Check continuity between BCM harness connector and ground.

BCM			Continuity	
Connector	Connector Terminal		Continuity	
M24	7	Ground	No	
IVIZ <del>4</del>	8	-	INU	

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-72, "Removal and Installation".

NO >> Repair or replace harness.

## 3.CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

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

Front door lock	assembly (LH)		Continuity	
Connector	Connector Terminal		Continuity	
D38	4		Yes	

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

## 4. CHECK DOOR KEY CYLINDER SWITCH

Refer to DLK-89, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace front door lock assembly (LH). Refer to <u>DLK-194, "OUTSIDE HANDLE: Removal and</u> Installation".

# 5. CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

>> Inspection End.

## Component Inspection

1. CHECK DOOR KEY CYLINDER SWITCH

- Turn power switch OFF.
- 2. Disconnect front door lock assembly (LH) terminal.
- Check continuity between front door lock assembly (LH) terminals.

Front door lock assembly (LH)		Condition		Continuity
Term	inal	Condition		Continuity
5			Unlock	Yes
5	6	III dan II a Badan	Neutral / Lock	No
6		LH door key cylinder	Lock	Yes
0			Neutral / Unlock	No

#### Is the inspection result normal?

YES >> Inspection End.

Revision: June 2014

NO >> Replace front door lock assembly (LH). Refer to <u>DLK-194, "OUTSIDE HANDLE: Removal and</u> Installation".

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#### < DTC/CIRCUIT DIAGNOSIS >

## DOOR LOCK ACTUATOR

## **DRIVER SIDE**

## DRIVER SIDE: Component Function Check

INFOID:0000000010639748

## 1. CHECK FUNCTION

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- Select "DOOR LOCK" in "Active Test".
- Touch "ALL LOCK" or "ALL UNLK" to check that it works normally.

#### Is the inspection result normal?

YES >> Door lock actuator is OK.

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

## DRIVER SIDE: Diagnosis Procedure

INFOID:0000000010639749

Regarding Wiring Diagram information, refer to <u>DLK-45, "Wiring Diagram"</u>.

## 1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

Front door lo	+) ock assembly .H)	(–) Condition Vo		Condition	
Connector	Terminal				
D38	1	Ground	Door lock and unlock switch	Lock	Battery voltage
D36	2	Ground	Door lock and unlock switch	Unlock	Ballery Vollage

#### Is the inspection result normal?

YES >> Replace front door lock assembly (LH). Refer to <u>DLK-193, "DOOR LOCK : Removal and Installation"</u>.

NO >> GO TO 2.

# 2. CHECK DOOR LOCK ACTUATOR CIRCUIT

- 1. Disconnect BCM connector and all door lock assembly connectors.
- 2. Check continuity between BCM harness connector and front door lock assembly (LH) harness connector.

В	BCM		Front door lock assembly (LH)	
Connector	Terminal	Connector	Terminal	Continuity
M25 65		D38	1	Yes
IVIZO	66	D30	2	163

3. Check continuity between BCM harness connector and ground.

ВСМ			Continuity	
Connector	Connector Terminal		Continuity	
M25	65	Ground	No	
IVI25	66		NO	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

#### < DTC/CIRCUIT DIAGNOSIS >

# 3.CHECK BCM OUTPUT SIGNAL

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

	+)	( )	Condition		Voltage
Connector	CM Terminal	(-)			(Approx.)
M25	65	Ground	Door lock and unlock switch		Battery voltage
IVIZS	66	Ground	Door lock and unlock switch	Unlock	Dattery voltage

#### Is the inspection result normal?

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

NO >> Replace BCM. Refer to BCS-72, "Removal and Installation".

#### PASSENGER SIDE

## PASSENGER SIDE: Component Function Check

1.CHECK FUNCTION

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 2. Select "DOOR LOCK" in "Active Test".
- 3. Check that the function operates normally according to the following conditions:

Monitor item		Status	
DOOR LOCK	ALL LOCK	Door lock actuators	LOCK
DOOR LOCK	ALL UNLK	DOOF TOOK actuators	UNLOCK

#### Is the inspection result normal?

YES >> Door lock actuator is OK.

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

## PASSENGER SIDE : Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-45, "Wiring Diagram".

# 1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

	+)				Voltage
Front door loo	Front door lock actuator RH		Condition		(Approx.)
Connector	Terminal				,
D107	5	Ground	Door lock and unlock switch	Lock	Battery voltage
D107	6	Ground	Door lock and unlock switch	Unlock	Dattery voltage

#### Is the inspection result normal?

YES >> Replace front door lock actuator RH. Refer to <u>DLK-193, "DOOR LOCK: Removal and Installation"</u>.

NO >> GO TO 2.

## 2. CHECK DOOR LOCK ACTUATOR CIRCUIT

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

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#### < DTC/CIRCUIT DIAGNOSIS >

ВСМ		Front door lock actuator RH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M25	59	D107	6	Yes
WZS	65	5107	5	165

Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Terminal	Ground	Continuity	
M25	59	Ground	No	
IVIZO	65		INU	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3.CHECK BCM OUTPUT SIGNAL

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

(+) BCM			Condition		Voltage (Approx.)
		(-)			
Connector	Terminal				, , ,
M25	59	Ground	Door lock and unlock switch	Unlock	Battery voltage
WZS	65	Oround	Door lock and unlock switch	Lock	

### Is the inspection result normal?

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

NO >> Replace BCM. Refer to BCS-72, "Removal and Installation".

REAR LH

## REAR LH: Component Function Check

INFOID:0000000010639752

## 1.CHECK FUNCTION

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 2. Select "DOOR LOCK" in "Active Test".
- 3. Check that the function operates normally according to the following conditions:

Monitor item		Status	
DOOR LOCK	ALL LOCK	Door lock actuators	LOCK
	ALL UNLK	Door lock actuators	UNLOCK

#### Is the inspection result normal?

YES >> Door lock actuator is OK.

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

## **REAR LH: Diagnosis Procedure**

INFOID:0000000010639753

Regarding Wiring Diagram information, refer to <a href="DLK-45">DLK-45</a>, "Wiring Diagram".

## 1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

#### < DTC/CIRCUIT DIAGNOSIS >

(+)			Condition		Voltage (Approx.)
Rear door loo	ar door lock actuator LH				
Connector	Terminal				(11 /
D204	1	Ground	Ground Door lock and unlock switch	Lock	Pattory voltage
D204	2	Ground	Door lock and unlock switch	Unlock	Battery voltage

### Is the inspection result normal?

YES >> Replace rear door lock actuator LH. Refer to <u>DLK-197, "DOOR LOCK: Removal and Installation"</u>. NO >> GO TO 2.

# 2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

В	CM	Rear door lock actuator LH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M29	55	D204	2	Yes
M25	65	D20 <del>4</del>	1	163

3. Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector	Terminal	Ground	Continuity
M29	55	Giouna	No
M25	65		INO

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3.CHECK BCM OUTPUT SIGNAL

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

	+) CM	(–)	Condition		Voltage (Approx.)
Connector	Terminal				(11 /
M29	55	Ground	Ground Door lock and unlock switch	Unlock	Patton, voltago
M25	65	Giouna	Door lock and unlock switch	Lock	Battery voltage

#### Is the inspection result normal?

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

NO >> Replace BCM. Refer to BCS-72, "Removal and Installation".

#### REAR RH

## REAR RH: Component Function Check

## 1.CHECK FUNCTION

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 2. Select "DOOR LOCK" in "Active Test".
- 3. Check that the function operates normally according to the following conditions:

Monit	or item	Status	
DOOR LOCK	ALL LOCK	- Door lock actuators	LOCK
	ALL UNLK	DOOF TOCK actuators	UNLOCK

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#### < DTC/CIRCUIT DIAGNOSIS >

#### Is the inspection result normal?

YES >> Door lock actuator is OK.

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

REAR RH: Diagnosis Procedure

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Regarding Wiring Diagram information, refer to <a href="DLK-45">DLK-45</a>, "Wiring Diagram".

# 1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+) Rear door lock actuator RH		(-)	Condition		Voltage
Connector	Terminal	(-)	Condition		(Approx.)
D304	5	Ground	und Door lock and unlock switch	Lock	Battery voltage
D304	6	Ground	DOOL LOCK AND UNIOCK SWILCH	Unlock	Dattery Voltage

### Is the inspection result normal?

YES >> Replace rear door lock actuator RH. Refer to <u>DLK-197, "DOOR LOCK: Removal and Installation"</u>.

NO >> GO TO 2.

# 2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

В	CM	Rear door lock actuator RH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M29	55	D304	6	Yes
M25	65	D304	5	165

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Terminal	Ground	Continuity	
M29	55	Ground	No	
M25	65		INO	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3.CHECK BCM OUTPUT SIGNAL

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

(	+)		Condition		voltage (Approx.)
В	CM	(-)			
Connector	Terminal				( ) ,
M29	55	Ground	Door lock and unlock switch	Unlock	Battery voltage
M25	65	Giodila	Door lock and unlock switch	Lock	Dattery voltage

#### Is the inspection result normal?

< DTC/CIRCUIT DIAGNOSIS > YES >> Check for internal short of each door lock actuator. NO >> Replace BCM. Refer to BCS-72, "Removal and Installation".

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#### < DTC/CIRCUIT DIAGNOSIS >

## DOOR LOCK AND UNLOCK SWITCH

### **DRIVER SIDE**

## DRIVER SIDE: Component Function Check

INFOID:0000000010639756

## 1. CHECK FUNCTION

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

Monitor item	Con	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-96</u>, "<u>DRIVER SIDE</u>: <u>Diagnosis Procedure</u>".

## DRIVER SIDE: Diagnosis Procedure

INFOID:0000000010639757

Regarding Wiring Diagram information, refer to <u>DLK-45</u>, "Wiring Diagram".

# 1. CHECK DOOR LOCK AND UNLOCK SWITCH INPUT SIGNAL

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

(+) Main power window and door lock/unlock switch		(–)	Signal (Reference value)	
Connector	Connector Terminal			
	3			
D35	15	Ground	(V) 15 10 5 0 10 ms 1.0 - 1.5 V	

### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

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

### < DTC/CIRCUIT DIAGNOSIS >

Е	SCM	Main power window and door lock/unlock switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M24	12	D35	3	Yes
IVIZ4	13	D33	15	163

Check continuity between BCM harness connector and ground.

ВС	CM		Continuity
Connector	Terminal	Ground	Continuity
M24	12	Giodila	No
10124	13		INO

## Is the inspection result normal?

>> Replace BCM. Refer to BCS-72, "Removal and Installation". YES

NO >> Repair or replace harness.

## 3.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

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

Main power window and	d door lock/unlock switch		Continuity
Connector	Terminal	Ground	Continuity
D35	1		Yes

### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

## f 4 . CHECK DOOR LOCK AND UNLOCK SWITCH

Refer to DLK-97, "DRIVER SIDE: Component Inspection".

## Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace main power window and door lock/unlock switch. Refer to PWC-63, "Removal and Installation".

## 5. CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

>> Inspection End.

## DRIVER SIDE: Component Inspection

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

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

Main power window and door lock/unlock switch		Condition		Continuity
Terminal				
2			LOCK	Yes
3	1	Door lock and unlock switch	UNLOCK	No
15			LOCK	No
			UNLOCK	Yes

#### Is the inspection result normal?

YES >> Inspection End.

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#### < DTC/CIRCUIT DIAGNOSIS >

NO >> Replace main power window and door lock/unlock switch. Refer to <a href="PWC-63">PWC-63</a>, "Removal and Installation".

## PASSENGER SIDE

## PASSENGER SIDE: Component Function Check

INFOID:0000000010639759

## 1. CHECK FUNCTION

- Select "DOOR LOCK" of "BCM" using CONSULT.
- 2. Select "CDL LOCK SW", "CDL UNLOCK SW" in "Data Monitor".
- 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-98</u>, "<u>PASSENGER SIDE</u>: <u>Diagnosis Procedure</u>".

## PASSENGER SIDE: Diagnosis Procedure

INFOID:000000010639760

Regarding Wiring Diagram information, refer to DLK-45, "Wiring Diagram".

# 1. CHECK DOOR LOCK AND UNLOCK SWITCH INPUT SIGNAL

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

	(+) Power window and door lock/unlock switch RH		Signal (Reference value)	
Connector	Connector Terminal			
	1			
D104	2	Ground	(V) 15 10 10 ms JPMIA0012GB 1.0 - 1.5 V	

### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

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

### < DTC/CIRCUIT DIAGNOSIS >

Е	BCM	Power window and door lock/unlock switch RH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M24	12	D104	1	Yes
1V1Z <del>4</del>	13	D 104	2	165

Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M24	12	Ground	No
IVI24	13		INO

## Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-72, "Removal and Installation".

NO >> Repair or replace harness.

## 3.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

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

Power window and doc	or lock/unlock switch RH		Continuity
Connector	Terminal	Ground	Continuity
D104	3		Yes

### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

## 4. CHECK DOOR LOCK AND UNLOCK SWITCH

Refer to DLK-99, "PASSENGER SIDE: Component Inspection".

## Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace power window and door lock/unlock switch RH. Refer to <a href="PWC-63">PWC-63</a>, "Removal and Installation".

## 5. CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

>> Inspection End.

## PASSENGER SIDE: Component Inspection

# 1. CHECK DOOR LOCK AND UNLOCK SWITCH

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

Power window and door lock/unlock switch RH		Condition		Continuity
Terminal				
1		Door lock and unlock switch	LOCK	Yes
ı	3		UNLOCK	No
2	3		LOCK	No
			UNLOCK	Yes

#### Is the inspection result normal?

YES >> Inspection End.

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NO >> Replace power window and door lock/unlock switch RH. Refer to <a href="PWC-63">PWC-63</a>, "Removal and Installation".

#### DOOR REQUEST SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

## DOOR REQUEST SWITCH

## Component Function Check

#### INFOID:0000000010639762

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## 1. CHECK FUNCTION

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

Monitor item	Condition		Status
REQ SW -DR	LH door request switch	Pressed	ON
	Li i dooi request switch	Released	OFF
REQ SW -AS	RH door request switch	Pressed	ON
	Kirdoor request switch	Released	OFF

#### Is the inspection result normal?

YES >> Door request switch is OK.

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

## Diagnosis Procedure

INFOID:0000000010639763

Regarding Wiring Diagram information, refer to <a href="DLK-45">DLK-45</a>, "Wiring Diagram".

# 1. CHECK DOOR REQUEST SWITCH INPUT SIGNAL

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

(+) Door request switch			(–)	Voltage (Approx.)
Connector Termin		Terminal		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
LH	D15	1	Ground	Pattony voltago
RH	D115	<b>I</b>	Giouria	Battery voltage

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2.CHECK DOOR REQUEST SWITCH CIRCUIT

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

Door request switch			BCM		Continuity	
Coni	nector	Terminal	Connector	Terminal	Continuity	
LH	D15	1	M23	75	Yes	
RH	D115	1	IVIZO	100	168	

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

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### **DOOR REQUEST SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

Door request switch				Continuity	
Connector		Terminal	Ground	Continuity	
LH	D15	1	Giodila	No	
RH	D115	1		INO	

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-72, "Removal and Installation".

NO >> Repair or replace harness.

# 3.check door request switch ground circuit

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

Door request switch				Continuity	
Connector		Terminal	Ground	Continuity	
LH	D15	2	Giouria	Yes	
RH	D115	2		res	

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

## 4. CHECK DOOR REQUEST SWITCH

Refer to DLK-102, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace malfunctioning front outside handle (request switch). Refer to <u>DLK-194, "OUTSIDE HAN-DLE</u>: Removal and Installation".

## 5. CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

>> Inspection End.

# Component Inspection

INFOID:0000000010639764

- 1. CHECK DOOR REQUEST SWITCH
- Turn power switch OFF.
- 2. Disconnect malfunctioning door request switch connector.
- 3. Check continuity between malfunctioning door request switch terminals.

Door request switch		Condition		Continuity
Terminal				Continuity
1	2	Door request switch	Pressed	Yes
'	2	Door request switch	Released	No

### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace malfunctioning Front outside handle (request switch). Refer to <u>DLK-194, "OUTSIDE HANDLE: Removal and Installation"</u>.

## **DOOR SWITCH**

## Component Function Check

#### INFOID:0000000010639765

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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", "DOOR SW-BK" in "Data Monitor".
- 3. Check that the function operates normally according to the following conditions:

Monitor item		Condition	Status
DOOR SW-DR	Front door LH	Open	ON
DOOK 2M-DK	FIOR GOOLER	Closed	OFF
DOOR SW-AS	Front door RH	Open	ON
DOOR SW-AS	FIGHT GOOLKH	Closed	OFF
DOOR SW-RL	Rear door LH	Open	ON
		Closed	OFF
DOOR SW-RR	Rear door RH	Open	ON
DOOR SW-RR		Closed	OFF
DOOR SW-BK	Back door	Open	ON
DOOK SW-BK	Back door	Closed	OFF

### Is the inspection result normal?

YES >> Door switch is OK.

NO >> Refer to <u>DLK-103</u>, "<u>Diagnosis Procedure</u>".

## Diagnosis Procedure

INFOID:0000000010639766

Regarding Wiring Diagram information, refer to <a href="DLK-45">DLK-45</a>, "Wiring Diagram".

# 1. CHECK DOOR SWITCH INPUT SIGNAL

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

(+)				
Door switch		(–)	Signal (Reference value)	
Con	nector	Terminal		(1000.0100 101.00)
Front LH	B48			
Front RH	B49			(V) 15
Rear LH	B71			10 5
Rear RH	B53	3	Ground	0
Back door	D562		Sissilia	+ 10ms PKIB4960J 7.0 - 8.0 V

### Is the inspection result normal?

YES-1 >> Back door: GO TO 3.

YES-2 >> Other door: GO TO 4.

NO >> GO TO 2.

## 2.CHECK DOOR SWITCH CIRCUIT

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## **DOOR SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

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

Door switch			ВС	Continuity	
Con	nector	Terminal	Connector	Terminal	Continuity
Front LH	B48			47	
Front RH	B49			45	
Rear LH	B71	3	3 M29	48	Yes
Rear RH	B53			46	
Back door	D562			43	

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

	Door switch		Continuity	
Connector		Terminal		Continuity
Front LH	B48			
Front RH	B49		Ground	
Rear LH	B71	3		No
Rear RH	B53			
Back door	D562			

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-72, "Removal and Installation".

NO >> Repair or replace harness.

# 3.CHECK BACK DOOR SWITCH GROUND CIRCUIT

Check continuity between back door lock assembly harness connector and ground.

Back door lock assembly			Continuity	
Connector	Terminal	Ground	Continuity	
D562	4		Yes	

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

## 4. CHECK DOOR SWITCH

Refer to DLK-104, "Component Inspection".

### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace malfunctioning door switch.

## 5. CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

>> Inspection End.

## Component Inspection

INFOID:0000000010639767

## 1. CHECK DOOR SWITCH

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

## **DOOR SWITCH**

## < DTC/CIRCUIT DIAGNOSIS >

Door switch Terminal			Condition		Continuity
• Front LH		Consumed a part of door		Pressed	Yes
<ul><li>Front RH</li><li>Rear LH</li><li>Rear RH</li></ul>	3	Ground part of door switch	Door switch	Released	No
Back door	4	Back door lock	Lock	Yes	
		4	Dack GOOI lock	Unlock	No

## Is the inspection result normal?

YES

>> Inspection End.>> Replace malfunctioning door switch. NO

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### HAZARD FUNCTION

### < DTC/CIRCUIT DIAGNOSIS >

## **HAZARD FUNCTION**

## Component Function Check

## 1. CHECK FUNCTION

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "FLASHER" in "Active Test".
- 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-106</u>, "<u>Diagnosis Procedure</u>".

## Diagnosis Procedure

INFOID:0000000010639769

INFOID:0000000010639768

## 1. CHECK HAZARD SWITCH CIRCUIT

Refer to EXL-113, "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-53, "Intermittent Incident".

>> Inspection End.

## **INTELLIGENT KEY**

### < DTC/CIRCUIT DIAGNOSIS >

## INTELLIGENT KEY

## Component Function Check

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## 1. CHECK FUNCTION

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "RKE OPE COUN1" in "Data Monitor".
- 3. Check that the function operates normally according to the following conditions:

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

#### Is the inspection result normal?

YES >> Intelligent Key is OK.

NO >> Refer to <u>DLK-107</u>, "<u>Diagnosis Procedure</u>".

## Diagnosis Procedure

## gnosis procedure

# 1. CHECK INTELLIGENT KEY BATTERY

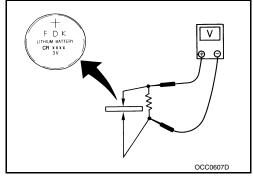
Check by connecting a resistance (approximately 300  $\Omega$ ) so that the current value becomes about 10 mA. Refer to <u>DLK-211</u>, "Removal and Installation".

Standard : Approx. 2.5 - 3.0 V

Is the measurement value within the specification?

YES >> Replace Intelligent Key.

NO >> Replace Intelligent Key battery.



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## INTELLIGENT KEY WARNING BUZZER

INFOID:0000000010639772

INFOID:0000000010639773

#### < DTC/CIRCUIT DIAGNOSIS >

## INTELLIGENT KEY WARNING BUZZER

## Component Function Check

## 1. CHECK FUNCTION

- Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "OUTSIDE BUZZER" in "Active Test".
- 3. Touch "ON" to check that it works normally.

#### Is the inspection result normal?

YES >> Intelligent Key warning buzzer is OK.

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

## Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>DLK-45, "Wiring Diagram"</u>.

## 1.CHECK FUSE

- 1. Turn power switch OFF.
- 2. Check 10 A fuse, [No. 13, 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.

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

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

(+) Intelligent Key warning buzzer		(–)	Voltage (Approx.)	
Connector	Terminal		( +/	
E28	1	Ground	Battery voltage	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3. CHECK INTELLIGENT KEY WARNING BUZZER CIRCUIT

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

ВСМ		Intelligent Key warning buzzer		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M23	93	E28	3	Yes	

Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M23	93		No

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

## 4.CHECK INTELLIGENT KEY WARNING BUZZER

### INTELLIGENT KEY WARNING BUZZER

#### < DTC/CIRCUIT DIAGNOSIS >

Refer to DLK-109, "Component Inspection".

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-72, "Removal and Installation".

NO >> Replace Intelligent Key warning buzzer. Refer to <u>DLK-209</u>, "Removal and Installation".

### Component Inspection

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# 1. CHECK INTELLIGENT KEY WARNING BUZZER

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

Intelligent Key		
Terr	Operation	
(+)		
1 3		Buzzer sounds

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace Intelligent Key warning buzzer. Refer to <u>DLK-209</u>, "Removal and Installation".

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### REMOTE KEYLESS ENTRY RECEIVER

#### < DTC/CIRCUIT DIAGNOSIS >

# REMOTE KEYLESS ENTRY RECEIVER

# Component Function Check

# 1. CHECK FUNCTION

- Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "RKE OPE COUN1" in "Data Monitor".
- 3. Check that the function operates normally according to the following conditions:

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

### Is the inspection result normal?

YES >> Remote keyless entry receiver is OK.

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

# Diagnosis Procedure

INFOID:0000000010639776

INFOID:0000000010639775

Regarding Wiring Diagram information, refer to <a href="DLK-45">DLK-45</a>, "Wiring Diagram".

# 1. CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

- 1. Turn power switch OFF.
- 2. Disconnect remote keyless entry receiver connector.
- 3. Check voltage between remote keyless entry receiver harness connector and ground.

(+)				
Remote keyless entry receiver		(–)	Voltage (Approx.)	
Connector	Terminal		( , , , , , , , , , , , , , , , , , , ,	
M75	1	Ground	Battery voltage	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

# 2.DETECT MALFUNCTIONING PART

#### Check the following:

- 10 A fuse (No. 7)
- · Harness for open or short between remote keyless entry receiver and battery.

#### Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

# 3. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

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

В	CM	Remote keyless entry receiver		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M24	18	M75	4	Yes	

3. Check continuity between BCM harness connector and ground.

BCM			Continuity	
Connector Terminal		Ground	Continuity	
M24	18		No	

### REMOTE KEYLESS ENTRY RECEIVER

#### < DTC/CIRCUIT DIAGNOSIS >

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

# 4. CHECK BCM SIGNAL

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

(+)			
Remote keyless entry receiver		(–)	Voltage (Approx.)
Connector	Terminal		( )
M75	2	Ground	Battery voltage

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

# CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT

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

В	CM	Remote keyless entry receiver		Continuity
Connector	Terminal	Connector Terminal		Continuity
M24	38	M75	2	Yes

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector Terminal		Ground	Continuity
M24	38		No

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-72, "Removal and Installation".

NO >> Repair or replace harness.

# 6. CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT SIGNAL

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

(+) Remote keyless entry receiver		(–) Condition	Signal (Reference value)		
Connector	Terminal			(Transferror value)	
			Waiting	Battery voltage	
M75	2	Ground	Press the Intelligent Key lock or unlock button	(V) 15 10 5 0 200 ms	

#### Is the inspection result normal?

YES >> GO TO 7.

NO >> Replace remote keyless entry receiver. Refer to <u>DLK-210</u>. "Removal and Installation".

### .CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

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# REMOTE KEYLESS ENTRY RECEIVER

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>> Inspection End.

### **UNLOCK SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

### **UNLOCK SENSOR**

# Component Function Check

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# 1. CHECK FUNCTION

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

Monitor item	Con	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-113</u>, "<u>Diagnosis Procedure</u>".

# Diagnosis Procedure

INFOID:000000010639778

Regarding Wiring Diagram information, refer to <a href="DLK-45">DLK-45</a>, "Wiring Diagram".

# 1. CHECK BCM OUTPUT SIGNAL

1. Turn power switch OFF.

2. Disconnect front door lock assembly (LH) connector.

3. Check signal between front door lock assembly (LH) harness connector and ground using oscilloscope.

(+) Front door lock assembly (LH)		(–)	Signal (Reference value)
Connector	Terminal		·
D38	3	Ground	(V) 15 10 5 0 ++10ms PKIB4960J

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

# 2. CHECK UNLOCK SENSOR CIRCUIT

Disconnect BCM connector.

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

В	CM	Front door lock assembly (LH)		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
M24	31	D38	3	Yes	

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Terminal	Ground	Continuity	
M24	31		No	

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### **UNLOCK SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-72, "Removal and Installation".

NO >> Repair or replace harness.

# 3.check unlock sensor ground circuit

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

Front door lock	assembly (LH)		Continuity
Connector	Terminal	Ground	Continuity
D38	4		Yes

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

# 4. CHECK UNLOCK SENSOR

Refer to DLK-114, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace front door lock assembly (LH). Refer to <u>DLK-193, "DOOR LOCK : Removal and Installation"</u>.

# 5. CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

>> Inspection End.

# Component Inspection

INFOID:0000000010639779

# 1. CHECK UNLOCK SENSOR

- 1. Turn power switch OFF.
- 2. Disconnect front door lock assembly (LH) connector.
- 3. Check continuity between front door lock assembly (LH) terminals.

Front door lock assembly (LH)		Condition		Continuity	
Terr	minal	Condition		Continuity	
3	4	Driver side door	Unlock	Yes	
3	4	Driver side door	Lock	No	

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace front door lock assembly (LH). Refer to <u>DLK-193, "DOOR LOCK : Removal and Installation"</u>

### INFORMATION DISPLAY

#### < DTC/CIRCUIT DIAGNOSIS >

### INFORMATION DISPLAY Α Component Function Check INFOID:0000000010639780 1. CHECK FUNCTION В Select "INTELLIGENT KEY" of "BCM" using CONSULT. 2. Select "LCD" in "Active Test". 3. Check each warning display on meter display. Is the inspection result normal? YES >> Information display is OK. NO >> Refer to DLK-115, "Diagnosis Procedure". D Diagnosis Procedure INFOID:0000000010639781 Е 1. CHECK COMBINATION METER Refer to MWI-48, "Description". Is the inspection result normal? F YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2. CHECK INTERMITTENT INCIDENT Refer to GI-53, "Intermittent Incident". Н >> Inspection End. J

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**DLK-115** Revision: June 2014 2015 Leaf NAM

# **CHARGE PORT LID OPENER RELAY**

#### < DTC/CIRCUIT DIAGNOSIS >

# CHARGE PORT LID OPENER RELAY

# Diagnosis Procedure

INFOID:0000000010639782

Regarding Wiring Diagram information, refer to <a href="DLK-45">DLK-45</a>. "Wiring Diagram".

# 1. CHECK CHARGE PORT LID OPENER ACTUATOR RELAY POWER SUPPLY-1

- 1. Turn power switch OFF.
- 2. Disconnect charge port lid opener actuator relay.
- 3. Check the voltage between charge port lid opener actuator relay harness connector and ground.

	+		.,,,
Charge port lid op	ener actuator relay	_	Voltage (Approx.)
Connector	Terminal		( 44.3)
E88	5	Ground	12V battery voltage

#### Is the inspection result normal?

YES >> GO TO 5. NO >> GO TO 2.

# 2.CHECK CHARGE PORT LID OPENER ACTUATOR RELAY POWER SUPPLY-2

Check the voltage between IPDM E/R harness connector and ground.

IPDI	+ // E/R	_	Voltage (Approx.)
Connector Terminal			(Approx.)
E14	42	Ground	12V battery voltage

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 3.

# 3.CHECK FUSE

- 1. Remove 20A fuse #43 from IPDM E/R.
- 2. Check that the fuse is not blown.

#### Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-30, "Removal and Installation".

NO >> Replace the fuse after repairing the applicable circuit.

# f 4.CHECK CHARGE PORT LID OPENER ACTUATOR RELAY POWER SUPPLY CIRCUIT

- Disconnect IPDM E/R harness connector.
- Check the continuity between IPDM E/R harness connector and charge port lid opener actuator relay harness connector.

+		_		
IPD	M E/R	Charge port lid opener actuator relay		Continuity
Connector	Terminal	Connector	Terminal	
E14	42	E88	5	Yes

<sup>3.</sup> Also check harness for short to ground and short to voltage.

#### Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".

NO >> Repair or replace malfunctioning component.

#### **CHARGE PORT LID OPENER RELAY**

#### < DTC/CIRCUIT DIAGNOSIS >

# 5. Charge port Lid opener actuator relay control signal voltage

Check the voltage between charge port lid opener actuator relay harness connector under the following condition:

-	+			
• •	t lid opener or relay	_	Condition	Voltage (Approx.)
Connector	Terminal			
E88	1	Ground	Immediately after the charge port lid opener switch is pressed.	12V battery voltage

#### Is the inspection result normal?

YES >> GO TO 8.

NO >> GO TO 6.

# 6.CHECK CHARGE PORT LID OPENER ACTUATOR RELAY DRIVE CIRCUIT

- Disconnect VCM harness connector.
- Check the continuity between VCM harness connector and charge port lid opener actuator relay harness connector.

+				
V	CM	Charge port lid opener actuator relay		Continuity
Connector	Terminal	Connector	Terminal	
E61	23	E88	1	Yes

3. Also check harness for short to ground and short to voltage.

#### Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace malfunctioning component.

# 7. CHECK CHARGE PORT LID OPENER SWITCH RELATED CIRCUIT

Check charge port lid opener switch related circuit. Refer to DLK-121, "Diagnosis Procedure".

#### Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".

NO >> Repair or replace malfunctioning component.

### 8.CHECK CHARGE PORT LID OPENER ACTUATOR RELAY GROUND CIRCUIT

Check the continuity between charge port lid opener actuator relay harness connector and ground.

	+		
Charge port lid op	ener actuator relay	_	Continuity
Connector	Terminal		
E88	2	Ground	Yes

#### Is the inspection result normal?

YES >> GO TO 9.

NO >> Repair or replace malfunctioning component.

### Component Inspection (Charge Port Lid Opener Actuator Relay)

# 1. CHECK CHARGE PORT LID OPENER ACTUATOR RELAY

- Turn power switch OFF.
- Disconnect charge port lid opener actuator relay.

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INFOID:0000000010639783

### **CHARGE PORT LID OPENER RELAY**

#### < DTC/CIRCUIT DIAGNOSIS >

3. Check the continuity between charge port lid opener actuator relay terminals under the following conditions:

Termi- nals	Conditions	Continuity
3 and 5	12 V direct current supply between terminals 1 and 2	Yes
o and o	No current supply	No

# 3 3 3 3 5 2 2 1 PIIA2636J

### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace charge port lid opener actuator relay.

#### CHARGE PORT LID OPENER

#### < DTC/CIRCUIT DIAGNOSIS >

### CHARGE PORT LID OPENER

# Component Function Check

#### INFOID:0000000010639784

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# $oldsymbol{1}$ . Charge port Lid opener function check

- Close charge port lid.
- Press charge port lid opener switch.

#### Does the charge port lid open?

YES >> Inspection End.

NO >> Proceed to EVC-397, "Diagnosis Procedure".

# Diagnosis Procedure

INFOID:0000000010639785

Regarding Wiring Diagram information, refer to <u>DLK-45</u>, "Wiring Diagram".

# ${f 1}.$ CHECK CHARGE PORT LID OPENER ACTUATOR RELAY RELATED CIRCUIT

Check charge port lid opener actuator relay related circuit. Refer to DLK-116, "Diagnosis Procedure".

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace malfunctioning component.

# 2.CHECK CHARGE PORT LID OPENER ACTUATOR

Check charge port lid opener actuator. Refer to DLK-120, "Component Inspection (Charge Port Lid Opener Actuator)".

#### Is the inspection result normal?

YES >> GO TO 3.

>> Replace charge port lid opener actuator. Refer to DLK-192, "CHARGE PORT LID OPENER NO ACTUATOR: Removal and Installation".

# 3.CHECK CHARGE PORT LID OPENER ACTUATOR CONTROL CIRCUIT

Check the continuity between charge port lid opener actuator relay harness connector and charge port lid opener actuator harness connector.

	+		_	
Charge port lid opener actuator relay		Charge port lid opener actuator		Continuity
Connector	Terminal	Connector	Terminal	
E88	3	E38	3	Yes

Also check harness for short to ground and short to voltage.

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace malfunctioning component.

# $oldsymbol{4}.$ CHECK CHARGE PORT LID OPENER ACTUATOR GROUND CIRCUIT

Check the continuity between charge port lid opener actuator harness connector and ground.

+			
Charge port lid op	ener actuator relay	_	Continuity
Connector	Terminal		
E88	2	Ground	Yes

#### Is the inspection result normal?

YES >> Inspection End.

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### **CHARGE PORT LID OPENER**

#### < DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace malfunctioning component.

# Component Inspection (Charge Port Lid Opener Actuator)

INFOID:0000000010639786

# 1. CHECK CHARGE PORT LID OPENER ACTUATOR

- Turn power switch OFF.
- Remove charge port lid opener actuator. Refer to <u>DLK-192, "CHARGE PORT LID OPENER ACTUATOR: Removal and Installation"</u>.
- 3. Check the resistance between charge port rid opener actuator connector terminals.

Charge port lid	opener actuator		
+	_	Resistance	
Terminal			
1	3	1 – 4 Ω	

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace charge port lid opener actuator. Refer to <u>DLK-192, "CHARGE PORT LID OPENER ACTUATOR: Removal and Installation".</u>

#### CHARGE PORT LID OPENER SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

# CHARGE PORT LID OPENER SWITCH

# Diagnosis Procedure

INFOID:0000000010639787

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Regarding Wiring Diagram information, refer to <a href="DLK-45">DLK-45</a>, "Wiring Diagram".

# 1. CHECK CHARGE PORT LID OPENER SWITCH SIGNAL CIRCUIT

- Disconnect VCM harness connector.
- Check the continuity between charge port lid opener switch harness connector and VCM harness connec-

	+		_	
Charge port lic	d opener switch	VCM		Continuity
Connector	Terminal	Connector	Terminal	
M93	6	E62	93	Yes

Also check harness for short to ground and short to power.

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace malfunctioning component.

# 2.CHECK CHARGE PORT LID OPENER SWITCH GROUND CIRCUIT

Check the continuity between charge port lid opener switch harness connector and ground.

+			
Charge port lic	d opener switch	_	Continuity
Connector	Terminal		
M93	8	Ground	Yes

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace malfunctioning component.

# 3.CHECK CHARGE PORT LID OPENER SWITCH

Check charge port lid opener switch. Refer to DLK-121, "Component Inspection (Charge Port Lid Opener Switch)".

#### Is the inspection result normal?

YES >> Inspection End.

>> Replace charge port lid opener switch. Refer to DLK-212, "Removal and Installation". NO

### Component Inspection (Charge Port Lid Opener Switch)

INFOID:0000000010639788

# 1. CHECK CHARGE PORT LID OPENER SWITCH

- 1. Turn power switch OFF.
- Disconnect charge port lid opener switch harness connector. 2.
- Check the continuity between charge port lid opener switch terminals under the following condition:

Terminal	Condition		Continuity
6 – 8	Charge port lid opener switch	Released	No
	Charge port iid opener switch	Pressed	Yes

#### Is the inspection result normal?

YES >> Inspection End.

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### **CHARGE PORT LID OPENER SWITCH**

### < DTC/CIRCUIT DIAGNOSIS >

NO >> Replace charge port lid opener switch. Refer to <a href="DLK-212">DLK-212</a>, "Removal and Installation".

#### **HOMELINK UNIVERSAL TRANSCEIVER**

#### < DTC/CIRCUIT DIAGNOSIS >

# HOMELINK UNIVERSAL TRANSCEIVER

# Component Function Check

#### INFOID:0000000010639789

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# 1. CHECK FUNCTION

Check that system receiver (garage door opener, etc.) operates with original hand-held transmitter.

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Receiver or hand-held transmitter is malfunctioning.

# 2. CHECK ILLUMINATE

Turn power switch OFF.

2. Does red light of transmitter illuminate when any transmitter button is pressed?

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Refer to <u>DLK-123</u>, "<u>Diagnosis Procedure</u>".

# 3. CHECK TRANSMITTER

Check transmitter with Tool\*.

\*: For details, refer to Technical Service Bulletin.

#### Is the inspection result normal?

YES >> Receiver or hand-held transmitter malfunction, not vehicle related.

NO >> Replace auto anti-dazzling inside mirror (HomeLink® Universal Transceiver).

# Diagnosis Procedure

INFOID:0000000010639790

Regarding Wiring Diagram information, refer to DLK-45, "Wiring Diagram".

# 1. CHECK POWER SUPPLY

1. Turn power switch OFF.

2. Disconnect auto anti-dazzling inside mirror (HomeLink® Universal Transceiver) connector.

 Check voltage between auto anti-dazzling inside mirror (HomeLink® Universal Transceiver) harness connector and ground.

	+)			
Auto anti-dazzling inside mirror (HomeLink® Universal Transceiver)		(–)	Voltage (Approx.)	
Connector	Terminal			
R7	6	Ground	Battery voltage	
137	10	Ground	ballery vollage	

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#### Is the inspection result normal?

YES >> GO TO 2.

NO-1 >> Check 10 A fuse [No. 3, No.13].

NO-2 >> Harness for open or short between fuse and auto anti-dazzling inside mirror (HomeLink® Universal Transceiver).

# 2.CHECK GROUND CIRCUIT

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Check continuity between auto anti-dazzling inside mirror (HomeLink® Universal Transceiver) harness connector and ground.

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### **HOMELINK UNIVERSAL TRANSCEIVER**

### < DTC/CIRCUIT DIAGNOSIS >

Auto anti-dazzling inside mirror (HomeLink® Universal Transceiver)			Continuity
Connector	Terminal	Ground	
R7	8		Yes

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

>> Inspection End.

# 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	1
SWITCH	В	
ALL DOOR	Б	
ALL DOOR : Description	INFOID:0000000010639791	h P
All doors do not lock/unlock using door lock and unlock switch.		
ALL DOOR : Diagnosis Procedure	INFOID:0000000010639792	)
1. CHECK DOOR LOCK AND UNLOCK SWITCH		
Check door lock and unlock switch.  Refer to DLK-96, "DRIVER SIDE: 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		
Check front door lock assembly (LH).	G	i
Refer to <u>DLK-90, "DRIVER SIDE : Component Function Check"</u> . <u>Is the inspection result normal?</u>		
YES >> GO TO 3.	Н	
NO >> Repair or replace the malfunctioning parts.  3.CHECK DOOR SWITCH		
Check door switch.		
Refer to DLK-103, "Component Function Check".		
Is the inspection result normal?  YES >> GO TO 4.	J	
NO >> Repair or replace the malfunctioning parts.		
4.REPLACE BCM	DLI	K
<ol> <li>Replace BCM. Refer to <u>BCS-72, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ol>		
Is the result normal?	L	
YES >> Inspection End. NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".		
DRIVER SIDE	М	
DRIVER SIDE : Description	INFOID:0000000010639793	
Driver side door does not lock/unlock using door lock and unlock switch.	N	
DRIVER SIDE : Diagnosis Procedure	INFOID:0000000010639794	
1. CHECK DOOR LOCK ACTUATOR	0	)
Check front door lock assembly (LH).  Refer to DLK-90, "DRIVER SIDE: Component Function Check".	P	)
Is the inspection result normal?		
YES >> GO TO 2.  NO >> Repair or replace the malfunctioning parts.		
NO >> Repair or replace the malfunctioning parts.  2.REPLACE BCM		
Replace BCM. Refer to <u>BCS-72</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-53, "Intermittent Incident".

#### PASSENGER SIDE

### PASSENGER SIDE: Description

INFOID:0000000010639795

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

### PASSENGER SIDE: Diagnosis Procedure

INFOID:0000000010639796

# 1. CHECK DOOR LOCK ACTUATOR

Check front door lock actuator RH.

Refer to DLK-91, "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 <u>BCS-72, "Removal and Installation"</u>.
- 2. Confirm the operation after replacement.

#### Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".

#### REAR LH

# **REAR LH: Description**

INFOID:0000000010639797

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

# REAR LH: Diagnosis Procedure

INFOID:0000000010639798

# 1. CHECK DOOR LOCK ACTUATOR

Check rear door lock actuator LH.

Refer to DLK-92, "REAR LH: Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

# 2.REPLACE BCM

- Replace BCM. Refer to BCS-72, "Removal and Installation".
- 2. Confirm the operation after replacement.

#### Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".

#### REAR RH

### **REAR RH**: Description

INFOID:0000000010639799

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

# REAR RH: Diagnosis Procedure

INFOID:0000000010639800

# 1. CHECK DOOR LOCK ACTUATOR

Check rear door lock actuator RH.

Refer to DLK-93, "REAR RH: Component Function Check".

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

# < SYMPTOM DIAGNOSIS > Is the inspection result normal? Α YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.REPLACE BCM В Replace BCM. Refer to BCS-72, "Removal and Installation". 2. Confirm the operation after replacement. Is the result normal? C YES >> Inspection End. >> Check intermittent incident. Refer to GI-53, "Intermittent Incident". NO $\mathsf{D}$ Ε F Н J L

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

#### < SYMPTOM DIAGNOSIS >

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

# ALL DOOR REQUEST SWITCHES: Description

INFOID:0000000010639801

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

# ALL DOOR REQUEST SWITCHES: Diagnosis Procedure

INFOID:0000000010639802

# 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-132</u>, "<u>Diagnosis Procedure</u>".

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

- Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "LOCK/UNLOCK BY I-KEY" in "Work support".
- Check "LOCK/UNLOCK BY I-KEY" in "Work support".
   Refer to <u>BCS-20, "INTELLIGENT KEY: CONSULT Function (BCM INTELLIGENT KEY)"</u>.

#### Is the inspection result normal?

YES >> GO TO 3.

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

# 3.check inside key antenna

#### Check inside key antenna.

- Instrument center: Refer to <u>DLK-69</u>, "<u>DTC Logic"</u>.
- Rear seat: Refer to <u>DLK-71, "DTC Logic"</u>.
- Luggage room: Refer to DLK-73, "DTC Logic".

#### 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.

- · LH: Refer to DLK-77, "DTC Logic".
- RH: Refer to <u>DLK-75</u>, "<u>DTC Logic</u>"
- Rear bumper: Refer to <u>DLK-79, "DTC Logic"</u>.

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

### 5.REPLACE BCM

- Replace BCM. Refer to <u>BCS-72</u>, "Removal and Installation".
- 2. Confirm the operation after replacement.

#### Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".

#### DRIVER SIDE DOOR REQUEST SWITCH

#### DRIVER SIDE DOOR REQUEST SWITCH: Description

INFOID:0000000010639803

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

### DRIVER SIDE DOOR REQUEST SWITCH: Diagnosis Procedure

INFOID:0000000010639804

# 1. CHECK DTC WITH BCM

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# DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

< SYMPTOM DIAGNOSIS >	
Check that DTC is not detected with BCM.	
Is the inspection result normal?	Α
YES >> GO TO 2.  NO >> Refer to BCS-48, "DTC Index".	
2.CHECK LH DOOR REQUEST SWITCH	В
Check LH door request switch. Refer to DLK-85, "Component Function Check".	
Is the inspection result normal?	С
YES >> G0 TO 3.	
NO >> Repair or replace the malfunctioning parts.	D
3.CHECK OUTSIDE KEY ANTENNA	
Check outside key antenna (LH). Refer to DLK-77, "DTC Logic".	Е
Is the inspection result normal?	
YES >> GO TO 4.  NO >> Repair or replace the malfunctioning parts.	F
4.REPLACE BCM	
Replace BCM. Refer to BCS-72, "Removal and Installation".	
<ol> <li>Confirm the operation after replacement.</li> </ol>	G
Is the result normal?	
YES >> Inspection End. NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".	Н
PASSENGER SIDE DOOR REQUEST SWITCH	
PASSENGER SIDE DOOR REQUEST SWITCH : Description INFOID:000000010639805	I
All doors do not lock/unlock using RH door request switch.	
PASSENGER SIDE DOOR REQUEST SWITCH : Diagnosis Procedure	J
1.CHECK RH DOOR REQUEST SWITCH	DLK
Check RH door request switch. Refer to DLK-85, "Component Function Check".	
Is the inspection result normal?	
YES >> G0 TO 2.	L
NO >> Repair or replace the malfunctioning parts.	
2.CHECK OUTSIDE KEY ANTENNA	M
Check outside key antenna (RH). Refer to DLK-75, "DTC Logic".	
Is the inspection result normal?	Ν
YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts.	0
3.REPLACE BCM	_
<ol> <li>Replace BCM. Refer to <u>BCS-72, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ol>	
Is the result normal?	Р
YES >> Inspection End.	
NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".	
BACK DOOR REQUEST SWITCH	

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

#### < SYMPTOM DIAGNOSIS >

# **BACK DOOR REQUEST SWITCH: Description**

INFOID:0000000010639807

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

# BACK DOOR REQUEST SWITCH: Diagnosis Procedure

INFOID:0000000010639808

# 1. CHECK BACK DOOR REQUEST SWITCH

Check back door request switch.

Refer to DLK-85, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

# 2. CHECK OUTSIDE KEY ANTENNA

Check outside key antenna (rear bumper).

Refer to BCS-48, "DTC Index".

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

# 3.REPLACE BCM

- 1. Replace BCM. Refer to BCS-72, "Removal and Installation".
- 2. Confirm the operation after replacement.

#### Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".

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

< SYMPTOM DIAGNOSIS >

NO

#### DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERA-Α **TION Diagnosis Procedure** INFOID:0000000010639809 В 1. CHECK POWER DOOR LOCK OPERATION Check power door lock operation. Does door lock/unlock with door lock and unlock switch? YES >> GO TO 2. >> Refer to DLK-96, "DRIVER SIDE: Component Function Check". NO D 2.CHECK DOOR KEY CYLINDER SWITCH Check door key cylinder switch. Е Refer to DLK-88, "Component Function Check". Is the inspection result normal? YES >> GO TO 3. F NO >> Repair or replace the malfunctioning parts. 3. REPLACE BCM 1. Replace BCM. Refer to BCS-72, "Removal and Installation". 2. Confirm the operation after replacement. Is the result normal? YES >> Inspection End. Н

>> Check intermittent incident. Refer to GI-53, "Intermittent Incident".

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

#### < SYMPTOM DIAGNOSIS >

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

# Diagnosis Procedure

INFOID:0000000010639810

# 1. CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to BCS-48, "DTC Index".

# 2.CHECK POWER DOOR LOCK OPERATION

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

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

YES >> GO TO 3.

NO >> Refer to <u>DLK-96</u>, "<u>DRIVER SIDE</u>: <u>Component Function Check</u>".

# 3.check remote keyless entry receiver

#### Check remote keyless entry receiver.

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

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

# 4. CHECK INTELLIGENT KEY

#### Check Intelligent Key.

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

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

### 5.REPLACE BCM

- 1. Replace BCM. Refer to BCS-72, "Removal and Installation".
- 2. Confirm the operation after replacement.

#### Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to <a href="GI-53">GI-53</a>, "Intermittent Incident".

# **POWER POSITION WARNING DOES NOT OPERATE**

#### < SYMPTOM DIAGNOSIS >

POWER POSITION WARNING DOES NOT OPERATE	
Diagnosis Procedure	Α
1. CHECK DTC WITH BCM	В
Check that DTC is not detected with BCM.	•
Is the inspection result normal? YES >> GO TO 2.	С
NO >> Refer to BCS-48, "DTC Index".	
2. CHECK POWER DOOR LOCK OPERATION	D
Check power door lock operation. <u>Does door lock/unlock with driver side door lock knob and door key cylinder?</u>	
YES >> GO TO 3.	Е
NO >> Refer to <u>DLK-23, "System Description"</u> .  3.CHECK DOOR SWITCH	
Check door switch.	F
Refer to <u>DLK-103, "Component Function Check"</u> . <u>Is the inspection result normal?</u>	
YES >> GO TO 4.	G
NO >> Repair or replace the malfunctioning parts.  4.CHECK COMBINATION METER BUZZER	
Check combination meter buzzer.	Н
Refer to DLK-87, "Component Function Check".	
Is the inspection result normal?  YES >> GO TO 5.	I
NO >> Repair or replace the malfunctioning parts.  5.REPLACE BCM	
Replace BCM. Refer to BCS-72, "Removal and Installation".	
Confirm the operation after replacement.	DLK
Is the result normal?  YES >> Inspection End.	
NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".	L
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### SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

# SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE

# Diagnosis Procedure

INFOID:0000000010639812

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

- Select "DOOR LOCK" of "BCM" using CONSULT.
- 2. Select "DOOR LOCK-UNLOCK SET" in "Work support".
- Check "DOOR LOCK-UNLOCK SET" in "Work support" Refer to BCS-15, "DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)".

#### Is the inspection result normal?

YES >> GO TO 2

NO >> Set "DOOR LOCK-UNLOCK SET" in "Work support".

# 2.REPLACE BCM

- 1. Replace BCM. Refer to BCS-72, "Removal and Installation".
- 2. Confirm the operation after replacement.

### Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".

# **BACK DOOR DOES NOT OPEN**

#### < SYMPTOM DIAGNOSIS >

< SYMPTOM DIAGNOSIS >  BACK DOOR DOES NOT OPEN	_
Diagnosis Procedure	A 13
1. CHECK DTC WITH BCM	В
Check that DTC is not detected with BCM.  Is the inspection result normal?  YES >> GO TO 2.  NO >> Refer to BCS-48, "DTC Index".	С
2. CHECK BACK DOOR OPENER SWITCH	D
Check back door opener switch. Refer to DLK-83, "Component Function Check".  Is the inspection result normal?	E
YES >> GO TO 3.  NO >> Repair or replace the malfunctioning parts.  3. CHECK BACK DOOR OPENER ACTUATOR	F
Check back door opener actuator. Refer to DLK-81, "Component Function Check".  Is the inspection result normal?	G
YES >> GO TO 4.  NO >> Repair or replace the malfunctioning parts.  4.CHECK VEHICLE SPEED SIGNAL	Н
Check vehicle speed signal. Refer to MWI-65, "DTC Index". Is the inspection result normal?	-
YES >> GO TO 5.  NO >> Repair or replace the malfunctioning parts.  5.REPLACE BCM	J
<ol> <li>Replace BCM. Refer to <u>BCS-72. "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> <li>Is the result normal?</li> </ol>	DLK
YES >> Inspection End. NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".	L
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### **AUTO DOOR LOCK OPERATION DOES NOT OPERATE**

#### < SYMPTOM DIAGNOSIS >

# AUTO DOOR LOCK OPERATION DOES NOT OPERATE

# Diagnosis Procedure

INFOID:0000000010639814

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

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "AUTO LOCK SET" in "Work support".
- 3. Check "AUTO LOCK SET" in "Work support".

  Refer to BCS-20, "INTELLIGENT KEY: CONSULT Function (BCM INTELLIGENT KEY)".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "AUTO LOCK SET" setting in "Work support".

# 2.REPLACE BCM

- 1. Replace BCM. Refer to BCS-72, "Removal and Installation".
- 2. Confirm the operation after replacement.

### Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".

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

< SYMPTOM DIAGNOSIS >

# VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

INFOID:0000000010639815

# Diagnosis Procedure

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

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- Select "AUTOMATIC LOCK/UNLOCK SELECT" in "Work support".
- Check "AUTOMATIC LOCK/UNLOCK SELECT" in "Work support".
   Refer to <u>BCS-15</u>, "DOOR LOCK: CONSULT Function (BCM DOOR LOCK)".

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#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "AUTOMATIC LOCK/UNLOCK SELECT" in "Work support".

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

- Select "DOOR LOCK" of "BCM" using CONSULT.
- Select "AUTOMATIC DOOR LOCK SELECT" in "Work support".
- Check "AUTOMATIC DOOR LOCK SELECT" in "Work support".
   Refer to BCS-15, "DOOR LOCK: CONSULT Function (BCM DOOR LOCK)".

F

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Set "AUTOMATIC DOOR LOCK SELECT" in "Work support".

### 3. REPLACE BCM

Н

- 1. Replace BCM. Refer to BCS-72, "Removal and Installation".
- 2. Confirm the operation after replacement.

#### Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".

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Revision: June 2014 DLK-137 2015 Leaf NAM

# POWER SWITCH OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

# POWER SWITCH OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

# Diagnosis Procedure

INFOID:0000000010639816

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

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 2. Select "AUTOMATIC LOCK/UNLOCK SELECT" in "Work support".
- Check "AUTOMATIC LOCK/UNLOCK SELECT" in "Work support".
   Refer to <u>BCS-15</u>, "DOOR LOCK: CONSULT Function (BCM DOOR LOCK)".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "AUTOMATIC LOCK/UNLOCK SELECT" in "Work support".

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

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- Select "AUTOMATIC DOOR UNLOCK SELECT" in "Work support".
- 3. Check "AUTOMATIC DOOR UNLOCK SELECT" in "Work support".

  Refer to BCS-15, "DOOR LOCK: CONSULT Function (BCM DOOR LOCK)".

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Set "AUTOMATIC DOOR UNLOCK SELECT" in "Work support".

### 3. REPLACE BCM

- 1. Replace BCM. Refer to BCS-72, "Removal and Installation".
- 2. Confirm the operation after replacement.

#### Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".

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

#### < SYMPTOM DIAGNOSIS >

### P POSITION INTERLOCK DOOR LOCK/UNLOCK FUNCTION DOES NOT Α **OPERATE** Diagnosis Procedure INFOID:0000000010639817 В $1.\mathsf{check}$ "automatic lock/unlock select" setting in "work support" Select "DOOR LOCK" of "BCM" using CONSULT. Select "AUTOMATIC LOCK/UNLOCK SELECT" in "Work support". Check "AUTOMATIC LOCK/UNLOCK SELECT" in "Work support". Refer to BCS-15, "DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)". D Is the inspection result normal? YES >> GO TO 2. NO >> Set "AUTOMATIC LOCK/UNLOCK SELECT" in "Work support". Е 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". Check "AUTOMATIC DOOR LOCK SELECT" in "Work support". Refer to BCS-15, "DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)". Is the inspection result normal? YES >> GO TO 3. NO >> Set "AUTOMATIC DOOR LOCK SELECT" in "Work support". 3.check "automatic door unlock select" setting in "work support" Н Select "DOOR LOCK" of "BCM" using CONSULT. Select "AUTOMATIC DOOR UNLOCK SELECT" in "Work support". Check "AUTOMATIC DOOR UNLOCK SELECT" in "Work support". Refer to BCS-15, "DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)". Is the inspection result normal? YES >> GO TO 4. NO >> Set "AUTOMATIC DOOR UNLOCK SELECT" in "Work support". 4.REPLACE BCM DLK Replace BCM. Refer to BCS-72, "Removal and Installation". Confirm the operation after replacement. Is the result normal? YES >> Inspection End. NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident". Ν Р

#### HAZARD AND BUZZER REMINDER DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

# HAZARD AND BUZZER REMINDER DOES NOT OPERATE

# Diagnosis Procedure

INFOID:0000000010639818

# 1.CHECK DTC WITH BCM AND COMBINATION METER

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

#### Is the inspection result normal?

YES >> GO TO 2.

NO-1 >> Refer to BCS-48, "DTC Index". (BCM)

NO-2 >> Refer to MWI-65, "DTC Index". (Combination meter)

# 2.check "hazard answer back" setting in "work support"

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- Select "HAZARD ANSWER BACK" in "Work support".
- Check the "HAZARD ANSWER BACK" in "Work support".
   Refer to BCS-20, "INTELLIGENT KEY: CONSULT Function (BCM INTELLIGENT KEY)".

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Set "HAZARD ANSWER BACK" in "Work support".

# 3.check "ans back i-key lock" setting in "work support"

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- Select "ANS BACK I-KEY LOCK" in "Work support".
- 3. Check the "ANS BACK I-KEY LOCK" in "Work support".

  Refer to BCS-20, "INTELLIGENT KEY: CONSULT Function (BCM INTELLIGENT KEY)".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Set "ANS BACK I-KEY LOCK" in "Work support".

# 4.CHECK "ANS BACK I-KEY UNLOCK" SETTING IN "WORK SUPPORT"

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- Select "ANS BACK I-KEY UNLOCK" in "Work support".
- Check the "ANS BACK I-KEY UNLOCK" in "Work support".
   Refer to <u>BCS-20. "INTELLIGENT KEY: CONSULT Function (BCM INTELLIGENT KEY)"</u>.

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Set "ANS BACK I-KEY UNLOCK" in "Work support".

### $oldsymbol{5}$ . CHECK HAZARD FUNCTION

Check hazard function.

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

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

#### $\mathsf{6}.$ CHECK INTELLIGENT KEY WARNING BUZZER

#### Check Intelligent Key warning buzzer.

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

#### Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

### 7. REPLACE BCM

- 1. Replace BCM. Refer to BCS-72, "Removal and Installation".
- 2. Confirm the operation after replacement.

#### Is the result normal?

YES >> Inspection End.

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### HAZARD AND BUZZER REMINDER DOES NOT OPERATE

### < SYMPTOM DIAGNOSIS >

NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".

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

#### < SYMPTOM DIAGNOSIS >

### KEY REMINDER FUNCTION DOES NOT OPERATE

# Diagnosis Procedure

INFOID:0000000010639819

# 1. CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to BCS-48, "DTC Index".

# 2.check "anti key lock in functi" setting in "work support"

- Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- Select "ANTI KEY LOCK IN FUNCTI" in "Work support".
- 3. Check "ANTI KEY LOCK IN FUNCTI" in "Work support".

  Refer to BCS-20, "INTELLIGENT KEY: CONSULT Function (BCM INTELLIGENT KEY)".

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Set "ANTI KEY LOCK IN FUNCTI" in "Work support".

# 3.check door switch

Check door switch.

Refer to <u>DLK-103</u>, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

### 4. CHECK INSIDE KEY ANTENNA

Check inside key antenna.

- Instrument center: Refer to <u>DLK-69</u>, "<u>DTC Logic</u>".
- Rear seat: Refer to DLK-71, "DTC Logic".
- Luggage room: Refer to DLK-73, "DTC Logic".

#### 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-113, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

### 6.REPLACE BCM

- 1. Replace BCM. Refer to BCS-72, "Removal and Installation".
- 2. Confirm the operation after replacement.

#### Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".

### OFF POSITION WARNING DOES NOT OPERATE

### < SYMPTOM DIAGNOSIS >

OFF POSITION WARNING DOES NOT OPERATE	^
Diagnosis Procedure	А
1. CHECK DTC WITH BCM AND COMBINATION METER	В
Check that DTC is not detected with BCM and combination meter.	
Is the inspection result normal?	С
YES >> GO TO 2. NO-1 >> Refer to <u>BCS-48, "DTC_Index"</u> . (BCM)	
NO-2 >> Refer to MWI-65, "DTC Index". (Combination meter)	D
2.CHECK COMBINATION METER BUZZER	
Check combination meter buzzer.  Refer to DLK-87, "Component Function Check".	Е
Is the inspection result normal?	
YES >> GO TO 3.  NO >> Repair or replace the malfunctioning parts.	
3. CHECK INTELLIGENT KEY WARNING BUZZER	F
Check Intelligent Key warning buzzer.	
Refer to <u>DLK-108</u> , "Component Function Check".	G
Is the inspection result normal?  YES >> GO TO 4.	
NO >> Repair or replace the malfunctioning parts.	Н
4.CHECK DOOR SWITCH	
Check front door switch (LH). Refer to DLK-103, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 5.	J
NO >> Repair or replace the malfunctioning parts.	
5.REPLACE BCM  1. Popless BCM Refer to BCS 72. "Demoved and Installation"	DLK
<ol> <li>Replace BCM. Refer to <u>BCS-72, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ol>	
Is the result normal?	1
YES >> Inspection End. NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".	L
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#### TAKE AWAY WARNING DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

### TAKE AWAY WARNING DOES NOT OPERATE

# Diagnosis Procedure

INFOID:0000000010639821

# 1. CHECK DTC WITH BCM AND COMBINATION METER

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

#### Is the inspection result normal?

YES >> GO TO 2.

NO-1 >> Refer to BCS-48, "DTC Index". (BCM)

NO-2 >> Refer to <u>MWI-65, "DTC Index"</u>. (Combination meter)

# 2. CHECK COMBINATION METER BUZZER

#### Check combination meter buzzer.

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

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

# 3.CHECK INFORMATION DISPLAY

#### Check information display.

Refer to DLK-115, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

# 4. CHECK INTELLIGENT KEY WARNING BUZZER

#### Check Intelligent Key warning buzzer.

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

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

# 5.check door switch

#### Check door switch.

Refer to DLK-103, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

### 6. CHECK INSIDE KEY ANTENNA

#### Check inside key antenna.

- Instrument center: Refer to DLK-69, "DTC Logic".
- Rear seat: Refer to <u>DLK-71</u>, "<u>DTC Logic</u>".
- Luggage room: Refer to <u>DLK-73, "DTC Logic"</u>.

#### Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

### 7.REPLACE BCM

- Replace BCM. Refer to <u>BCS-72, "Removal and Installation"</u>.
- 2. Confirm the operation after replacement.

#### Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".

## INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE	_
Diagnosis Procedure	A 9822
1. CHECK DTC WITH BCM AND COMBINATION METER	В
Check that DTC is not detected with BCM and combination meter.	_
Is the inspection result normal?	С
YES >> GO TO 2. NO-1 >> Refer to BCS-48, "DTC Index". (BCM)	
NO-2 >> Refer to MWI-65, "DTC Index". (Combination meter)	D
2.CHECK "LO- BATT OF KEY FOB WARN" SETTING IN "WORK SUPPORT"	
<ol> <li>Select "INTELLIGENT KEY" of "BCM".</li> <li>Select "LO- BATT OF KEY FOB WARN" in "Work support".</li> </ol>	E
<ol> <li>Check "LO- BATT OF KEY FOB WARN" in "Work support".</li> <li>Refer to BCS-20, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".</li> </ol>	
Is the inspection result normal?	F
YES >> GO TO 3.  NO >> Set "LO- BATT OF KEY FOB WARN" in "Work support".	
3. CHECK INTELLIGENT KEY	0
Check Intelligent Key.	G
Refer to DLK-107, "Component Function Check".	
Is the inspection result normal? YES >> GO TO 4.	Н
NO >> Repair or replace the malfunctioning parts.	
4.CHECK INFORMATION DISPLAY	
Check information display.  Refer to DLK-115, "Diagnosis Procedure".	
Is the inspection result normal?	J
YES >> GO TO 5.	
NO >> Repair or replace the malfunctioning parts.  5. CHECK INSIDE KEY ANTENNA	DLK
Check inside key antenna.	
<ul> <li>Instrument center: Refer to <u>DLK-69</u>, "<u>DTC Logic</u>".</li> </ul>	L
<ul> <li>Rear seat: Refer to <u>DLK-71, "DTC Logic"</u>.</li> <li>Luggage room: Refer to <u>DLK-73, "DTC Logic"</u>.</li> </ul>	
Is the inspection result normal?	M
YES >> GO TO 6.	
NO >> Repair or replace the malfunctioning parts.  6.REPLACE BCM	NI
Replace BCM. Refer to BCS-72, "Removal and Installation".	N
<ol> <li>Confirm the operation after replacement.</li> </ol>	
Is the result normal?	0
YES >> Inspection End. NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".	
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## DOOR LOCK OPERATION WARNING DOES NOT OPERATE

## < SYMPTOM DIAGNOSIS >

## DOOR LOCK OPERATION WARNING DOES NOT OPERATE

## Diagnosis Procedure

INFOID:0000000010639823

## 1. CHECK DOOR LOCK FUNCTION

Check door lock function.

Does door lock/unlock using door request switch?

YES >> GO TO 2.

NO >> Refer to <u>DLK-101</u>, "Component Function Check".

# 2.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.

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

## Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

# 3.REPLACE BCM

- 1. Replace BCM. Refer to BCS-72, "Removal and Installation".
- 2. Confirm the operation after replacement.

### Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".

## **KEY ID WARNING DOES NOT OPERATE**

## < SYMPTOM DIAGNOSIS >

Diagnosis Procedure	INFOID:000000010639824
1. CHECK DTC WITH BCM AND COMBINATION METER	
Check that DTC is not detected with BCM and combination meter.	
s the inspection result normal?	
YES >> GO TO 2. NO-1 >> Refer to <u>BCS-48, "DTC_Index"</u> . (BCM)	
NO-2 >> Refer to MWI-65, "DTC Index". (Combination meter)	
2.CHECK INTELLIGENT KEY	
Check Intelligent Key.  Refer to DLK-107, "Component Function Check".	
s the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
3. CHECK INFORMATION DISPLAY	
Check information display.	
Refer to DLK-115, "Component Function Check".	
s the inspection result normal? YES >> GO TO 4.	
NO >> Repair or replace the malfunctioning parts.	
1.CHECK INSIDE KEY ANTENNA	
Check inside key antenna.	
Instrument center: Refer to <u>DLK-69, "DTC Logic"</u> . Rear seat: Refer to <u>DLK-71, "DTC Logic"</u> .	
Luggage room: Refer to DLK-73, "DTC Logic".	
s the inspection result normal? YES >> GO TO 5.	_
NO >> Repair or replace the malfunctioning parts.	
REPLACE BCM	
<ul> <li>Replace BCM. Refer to <u>BCS-72, "Removal and Installation"</u>.</li> <li>Confirm the operation after replacement.</li> </ul>	
s the result normal?	
YES >> Inspection End.	
NO >> Check intermittent incident. Refer to <u>GI-53, "Intermittent Incident"</u> .	

## HOMELINK UNIVERSAL TRANSCEIVER DOES NOT OPERATE

## < SYMPTOM DIAGNOSIS >

## HOMELINK UNIVERSAL TRANSCEIVER DOES NOT OPERATE

## Diagnosis Procedure

INFOID:0000000010639825

## 1. CHECK HOMELINK® UNIVERSAL TRANSCEIVER

Check HomeLink® Universal Transceiver.

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

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

## 2.REPLACE AUTO ANTI-DAZZLING INSIDE MIRROR

Replace auto anti-dazzling inside mirror.

Refer to MIR-20, "Removal and Installation".

### Is the result normal?

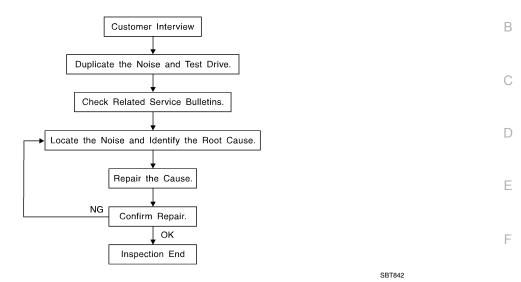
YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".

< SYMPTOM DIAGNOSIS >

## SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow



### **CUSTOMER INTERVIEW**

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any customer's comments; refer to <a href="DLK-153">DLK-153</a>, "Diagnostic Worksheet". This information is necessary to duplicate the conditions that exist when the noise occurs.

- The customer may not be able to provide a detailed description or the location of the noise. Attempt to obtain all the facts and conditions that exist when the noise occurs (or does not occur).
- If there is more than one noise in the vehicle, be sure to diagnose and repair the noise that the customer is concerned about. This can be accomplished by test driving the vehicle with the customer.
- After identifying the type of noise, isolate the noise in terms of its characteristics. The noise characteristics
  are provided so the customer, service adviser and technician are all speaking the same language when
  defining the noise.
- Squeak —(Like tennis shoes on a clean floor)
   Squeak characteristics include the light contact/fast movement/brought on by road conditions/hard surfaces
   higher pitch noise/softer surfaces = lower pitch noises/edge to surface = chirping.
- Creak—(Like walking on an old wooden floor)
   Creak characteristics include firm contact/slow movement/twisting with a rotational movement/pitch dependent on materials/often brought on by activity.
- Rattle—(Like shaking a baby rattle)
   Rattle characteristics include the fast repeated contact/vibration or similar movement/loose parts/missing
- 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.
- Thurst characteristics include a fear knock does not be a fear knock for the country of the
- Thump characteristics include softer knock/dead sound often brought on by activity.

   Buzz—(Like a bumble bee)

  Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending upon the person. A noise that you may judge
  as acceptable may be very irritating to the customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

#### DUPLICATE THE NOISE AND TEST DRIVE

clip or fastener/incorrect clearance.

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

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#### < 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 model, drive position on CVT and A/T models).
- 6) Raise the vehicle on a hoist and hit a tire with a rubber hammer.
- Drive the vehicle and attempt to duplicate the conditions the customer states exist when the noise occurs.
- If it is difficult to duplicate the noise, drive the vehicle slowly on an undulating or rough road to stress the vehicle body.

#### CHECK RELATED SERVICE BULLETINS

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

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

### LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

- 1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis Ear: J-39570, Engine Ear: J-39565 and mechanic's stethoscope).
- 2. Narrow down the noise to a more specific area and identify the cause of the noise by:
  - removing the components in the area that you suspect the noise is coming from.
     Do not use too much force when removing clips and fasteners, otherwise clips and fasteners can be broken or lost during the repair, resulting in the creation of new noise.
  - tapping or pushing/pulling the component that you suspect is causing the noise.
     Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
  - feeling for a vibration with your hand by touching the component(s) that you suspect is (are) causing the noise.
  - placing a piece of paper between components that you suspect are causing the noise.
  - looking for loose components and contact marks.
     Refer to <u>DLK-150</u>, "Generic Squeak and Rattle Troubleshooting".

#### REPAIR THE CAUSE

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

#### **CAUTION:**

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

- Always check with the Parts Department for the latest parts information.
- The materials contained in the NISSAN Squeak and Rattle Kit (J-50397) are listed on the inside cover of the kit; and can each be ordered seperately as needed.
- The following materials not found in the kit can also be used to repair squeaks and rattles.
- SILICONE GREASE: Use instead of UHMW tape that will be visible or does not fit. The silicone grease will only last a few months.
- SILICONE SPRAY: Use when grease cannot be applied.
- DUCT TAPE: Use to eliminate movement.

#### CONFIRM THE REPAIR

Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.

## Generic Squeak and Rattle Troubleshooting

INFOID:0000000010639827

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

#### INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

#### < SYMPTOM DIAGNOSIS >

- Cluster lid A and the instrument panel
- Acrylic lens and combination meter housing
- Instrument panel to front pillar finisher
- 4. Instrument panel to windshield
- Instrument panel pins
- Wiring harnesses behind the combination meter
- 7. A/C defroster duct and duct joint

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicone spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

#### **CAUTION:**

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

#### CENTER CONSOLE

Components to pay attention to include:

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

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

#### DOORS

Pay attention to the:

- Finisher and inner panel making a slapping noise
- Inside handle escutcheon to door finisher
- Wiring harnesses tapping
- Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks from the NISSAN Squeak and Rattle Kit (J-50397) to repair the noise.

#### TRUNK

Trunk noises are often caused by a loose jack or loose items put into the trunk by the owner. In addition look for:

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

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

#### SUNROOF/HEADLINING

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

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

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

### OVERHEAD CONSOLE (FRONT AND REAR)

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

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

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#### < SYMPTOM DIAGNOSIS >

Loose screws at console attachment points.

#### SEATS

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

Cause of seat noise include:

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

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

#### **UNDERHOOD**

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

Causes of transmitted underhood noise include:

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

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

## < SYMPTOM DIAGNOSIS >

## **Diagnostic Worksheet**

INFOID:0000000010639828

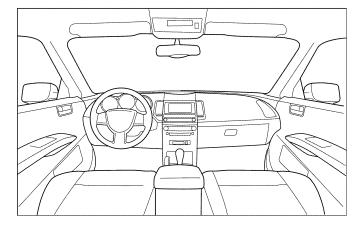
#### Dear Customer:

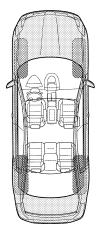
We are concerned about your satisfaction with your vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your vehicle right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may be asked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

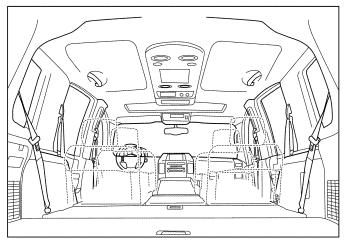
#### **SQUEAK & RATTLE DIAGNOSTIC WORKSHEET**

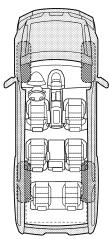
## I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)

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









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

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scribe the location where the n	noise occurs:			
I DOES IT OCCUR? (please of me me in the morning when it is cold outside when it is hot outside	☐ Afte☐ Wh☐ Dry☐ Oth	er sitting ou en it is rain or dusty c	it in the ra ing or wet onditions	
gh driveways rough roads speed bumps about mph sceleration ng to a stop rns: left, right or either (circle) bassengers or cargo : driving miles or m	☐ Squeak (like tennis shoes on a clean floor) ☐ Creak (like walking on an old wooden floor) ☐ Rattle (like shaking a baby rattle) ☐ Knock (like a knock at the door) ☐ Tick (like a clock second hand) ☐ Thump (heavy muffled knock noise) ☐ Buzz (like a bumble bee)			
OMPLETED BY DEALERSHIP e Notes:	PERSONNE			
		YES	NO	Initials of person performing
st driven with customer erified on test drive ource located and repaired up test drive performed to conf	firm repair			
	Custo	omer Name		

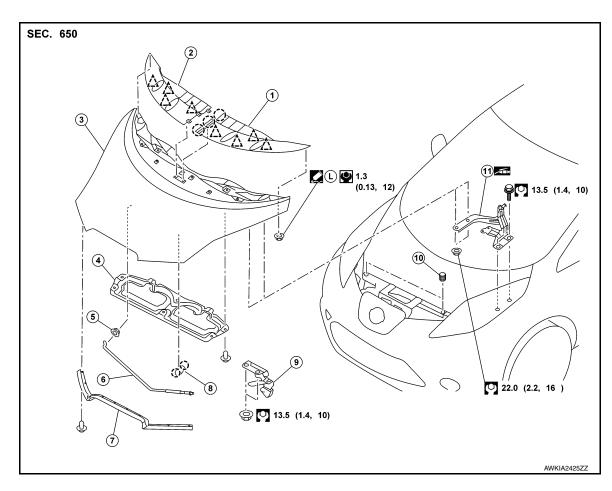
This form must be attached to Work Order

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# REMOVAL AND INSTALLATION

## HOOD

**Exploded View** INFOID:0000000010639829



- Hood cover (LH)
- Hood insulator
- Hood front seal 7.
- 10. Hood bumper rubber
- ∠\_\_\ Clip

- 2. Hood cover (RH)
- Grommet
- Clamp
- 11. Hood hinge
- Grease

- 3. Hood assembly
- 6. Hood support rod
- 9. Hood lock secondary control

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- Pawl
- Sealing point with locking sealant

## **HOOD ASSEMBLY**

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

## **CAUTION:**

- · Operate with two workers, because of its heavy weight.
- Use protective tape or shop cloths to protect surrounding components from damage during removal and installation.

### REMOVAL

1. Support the hood assembly using a suitable tool.

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

Remove hood hinge nuts and hood assembly.

**DLK-155** Revision: June 2014 2015 Leaf NAM

### **INSTALLATION**

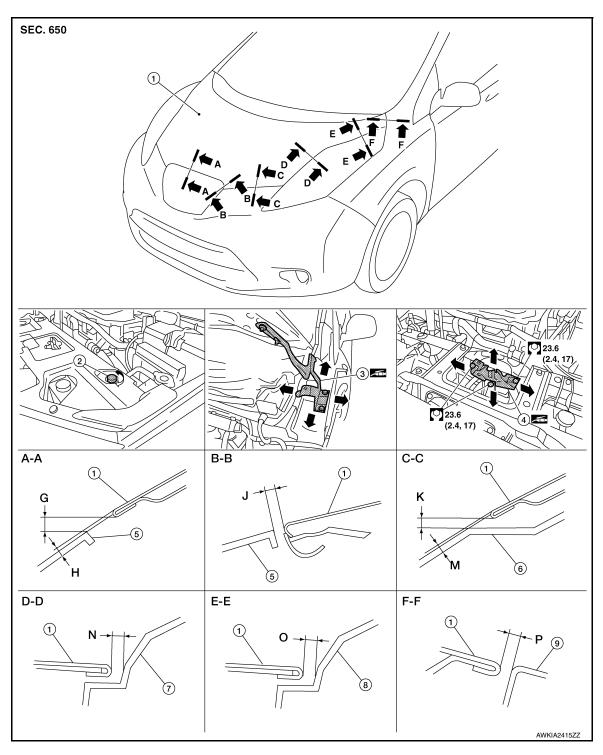
Installation is in the reverse order of removal.

### **CAUTION:**

- After installation, apply touch-up paint (body color) to the heads of the hood hinge nuts.
- After installation, perform hood assembly adjustment procedure. Refer to <u>DLK-156, "HOOD ASSEM-BLY: Adjustment"</u>.

**HOOD ASSEMBLY: Adjustment** 

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- 1. Hood assembly
- 4. Hood lock assembly
- 2. Hood bumper rubber
- 5. Charge port lid

- 3. Hood hinge
- 6. Front bumper fascia

< REMOVAL AND INSTAL	LATIONS		HOOD			
7. Front combination lamp Grease			t side maker lamp	9. Front	fender	
Check the clearance and sulf the clearance and surfact below.						edures shown
Portion	Section	Item	Measurement	Standard	Parallelism	Unit: mm (in) Equality
- Ordon	Jection	G	Clearance	$5.0 \pm 2.7 \ (0.20 \pm 0.11)$	1.9 (0.07)	2.0 (0.08)
Hood – Charge port lid	A – A	Н	Surface height	$1.0 \pm 2.0 \ (0.04 \pm 0.08)$	1.9 (0.07)	2.0 (0.08)
Hood – Charge port lid	B – B	J	Clearance	$5.0 \pm 2.7 \ (0.20 \pm 0.11)$		2.9 (0.11)
		K	Clearance	$5.0 \pm 2.7 \ (0.20 \pm 0.11)$	2.0 (0.08)	2.0 (0.08)
Hood – Front bumper fascia	C – C	М	Surface height	$1.0 \pm 2.0 \ (0.04 \pm 0.08)$	_	1.0 (0.04)
Hood – Front combination lamp	D – D	N	Clearance	4.0 ± 2.5 (0.16 ± 0.10)	1.9 (0.07)	2.9 (0.11)
Hood – Front side marker lamp	E – E	0	Clearance	4.0 ± 2.5 (0.16 ± 0.10)	1.9 (0.07)	2.9 (0.11)
Hood – Front fender	F-F	Р	Clearance	3.5 ± 1.0 (0.14 ± 0.04)	1.0 (0.04)	1.5 (0.06)
FITTING ADJUSTMENT						<u> </u>
Remove the radiator up tion".	per grille. F	Refer to	DLK-166, "RAD	DIATOR UPPER GRI	LLE : Remova	al and Installa-
2. Remove the hood lock	assembly. I	Refer to	DLK-188, "HO	OD LOCK : Removal	and Installation	<u>on"</u> .
3. Adjust the surface heig to the speicified value,					nt bumper fas	scia according
4. Position the hood lock a looseness.	assembly a	nd enga	ige hood striker	. Check hood lock as	sembly and h	ood striker for

- Move hood lock assembly laterally until the center of hood striker and hood lock assembly are vertical when viewed from the front.
- 6. After adjustment, tighten hood lock bolts to specificed torque.
- Open hood and rotate hood bumper rubber counterclockwise between half a turn and three-quarters of a turn.
- 8. Check that secondary latch is securely engaged with secondary striker (charge port bracket) from the dead load of the hood assembly.
- 9. Check the the primary latch is securely engaged with primary striker when hood assembly is closed free-fall from approximately 200 mm (7.874 in) height.
- 10. Install the radiator upper grille. Refer to <a href="DLK-166">DLK-166</a>, "RADIATOR UPPER GRILLE: Removal and Installation".

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**HOOD HINGE**: Removal and Installation

REMOVAL

- 1. Remove hood assembly. Refer to <u>DLK-155</u>, "HOOD ASSEMBLY: Removal and Installation".
- Remove front fender. Refer to <u>DLK-169</u>, "<u>Removal and Installation</u>".
- 3. Remove hood hinge bolts, and then remove hood hinge.

#### INSTALLATION

**HOOD HINGE** 

Installation is in the reverse order of removal.

**CAUTION:** 

- After installation, perform hood assembly adjustment procedure. Refer to <u>DLK-156, "HOOD ASSEM-BLY: Adjustment"</u>.
- After installation, apply touch-up paint (body color) to the head of the hood hinge bolts and nuts.

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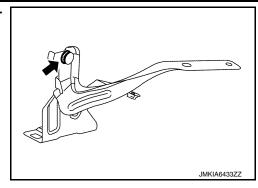
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Revision: June 2014 DLK-157 2015 Leaf NAM

### < REMOVAL AND INSTALLATION >

Check hood hinge rotating part for poor lubrication. If necessary, apply a suitable multi-purpose grease.

: Grease point



## **HOOD SUPPORT ROD**

## **HOOD SUPPORT ROD:** Removal and Installation

INFOID:0000000010639833

### **REMOVAL**

1. Support the hood assembly using a suitable tool.

#### **WARNING:**

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

2. Pull hood support rod from grommet and remove.

### INSTALLATION

Installation is in the reverse order of removal.

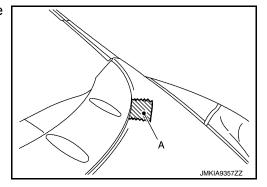
## HOOD COVER

**HOOD COVER**: Removal and Installation

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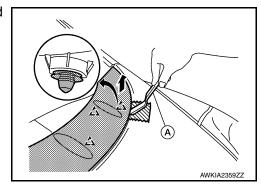
### **REMOVAL**

- 1. Remove hood cover nuts.
- 2. Apply protective tape (A) on the hood assembly to protect the painted surface from damage.



3. Release the hood cover clips using a suitable tool (A) and remove.

,^; Clip



### INSTALLATION

Installation is in the reverse order of removal.

## **CHARGE PORT LID**

## **Exploded View**

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- 1. Charge port lid cover assembly
- 4. Charge port lid lock cable
- 7. Charge port lid lock
- 2. Charge port lid seal
- 5. Charge port lid actuator assembly
- 8. Charge port lid rear cover
- 3. Charge port lid assembly
- 6. Charge port lid
- ∠^ Clip

## CHARGE PORT LID ASSEMBLY

## CHARGE PORT LID ASSEMBLY: Removal and Installation

### REMOVAL

- 1. Remove the charge port lid nuts and charge port lid.
- Remove the front camera, if necessary. Refer to <u>AV-503, "Removal and Installation"</u>.

### **INSTALLATION**

Installation is in the reverse order of removal.

#### **CAUTION:**

After installation, perform charge port lid assembly fitting adjustment. Refer to <u>DLK-160, "CHARGE PORT LID ASSEMBLY: Adjustment"</u>.

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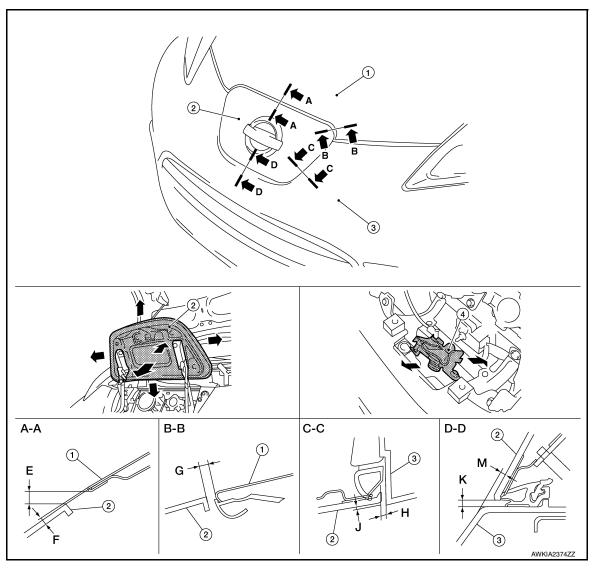
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Revision: June 2014 DLK-159 2015 Leaf NAM

## CHARGE PORT LID ASSEMBLY: Adjustment

INFOID:0000000010639837



1. Hood assembly

- 2. Charge port lid assembly
- 3. Front bumper fascia

4. Charge port lid lock

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

Unit: mm (in)

Portion	Section	Item	Measurement	Standard	Parallelism
Charge port lid – Hood	A – A	E	Clearance	5.0 ± 2.7 (0.20 ± 0.11)	1.9 (0.07)
		F	Surface height	$1.0 \pm 2.0 \; (0.04 \pm 0.08)$	1.9 (0.07)
Charge port lid – Hood	B – B	G	Clearance	5.0 ± 2.7 (0.20 ± 0.11)	2.9 (0.11)
Charge port lid – Front bumper fascia	C – C	Н	Clearance	2.6 ± 1.2 (0.10 ± 0.05)	1.9 (0.07)
		J	Surface height	$1.5 \pm 1.5 \ (0.06 \pm 0.06)$	1.9 (0.07)
Charge port lid – Front bumper fascia	D – D	К	Clearance	$3.3 \pm 1.2 \ (0.13 \pm 0.05)$	1.9 (0.07)
		М	Surface height	$3.5 \pm 1.5 \ (0.14 \pm 0.06)$	1.9 (0.07)

## FITTING ADJUSTMENT PROCEDURE

1. Remove charge port cover. Refer to <a href="DLK-161">DLK-161</a>, "CHARGE PORT COVER: Removal and Installation".

## **CHARGE PORT LID**

#### < REMOVAL AND INSTALLATION >

- Remove charge port lid lock.
- 3. Loosen charge port lid assembly nuts.
- 4. Adjust the clearance of charge port lid assembly, hood assembly and front bumper fascia according to the specified value, by moving charge port lid assembly.
- Tighten charge port lid.
- Temporarily tighten charge port lid lock. 6.
- Adjust the surface height of charge port lid assembly, hood assembly and front bumper fascia according to the specified value, by moving charge port lid lock.
- 8. After adjustment, tighten charge port lid lock bolts.
- Install charge port cover. Refer to DLK-161, "CHARGE PORT COVER: Removal and Installation".

## CHARGE PORT LID HINGE ASSEMBLY

## CHARGE PORT LID HINGE ASSEMBLY: Removal and Installation

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#### REMOVAL

- Remove front bumper fascia. Refer to EXT-13, "Removal and Installation".
- Remove charge port lid lock assembly. Refer to DLK-191, "CHARGE PORT LID LOCK: Removal and Installation".
- 3. Release the charge port rear cover clips using a suitable tool and remove.
- Remove charge port lid hinge bolts and charge port lid hinge assembly.

### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

After installation, perform charge port lid assembly fitting adjustment. Refer to DLK-160, "CHARGE PORT LID ASSEMBLY : Adjustment".

CHARGE PORT COVER

## CHARGE PORT COVER: Removal and Installation

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#### REMOVAL

- Remove the charge port lid. Refer to <u>DLK-159</u>, "CHARGE PORT LID ASSEMBLY: Removal and Installation"
- Remove the radiator upper grille. Refer to DLK-166, "RADIATOR UPPER GRILLE: Removal and Installa-2. tion".
- Release the charge port cover clips using a suitable tool and remove.
- Release the charge port lid seal clips using a suitable tool and remove from charge port cover, if necessary.

### INSTALLATION

Installation is in the reverse order of removal.

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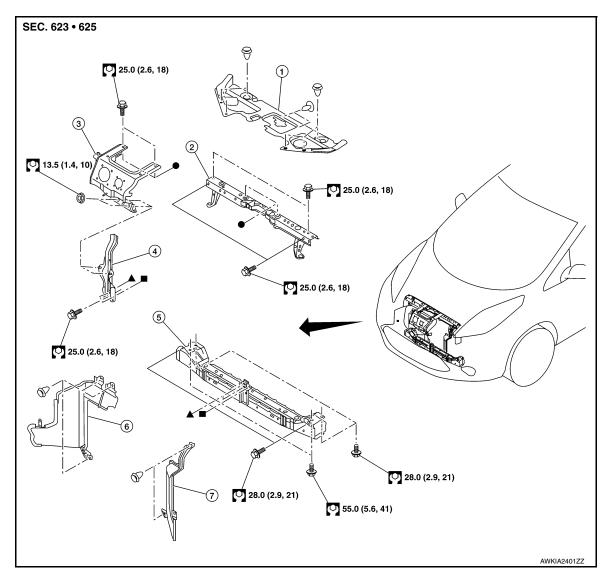
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**DLK-161** Revision: June 2014 2015 Leaf NAM

Exploded View



- 1. Radiator upper grille
- 2. Radiator core support upper
- 4. Radiator core support lower stay
- 5. Radiator core support lower
- Charge port bracket

INFOID:0000000010639841

6. Air guide (RH)

- 7. Air guide (LH)
- ●, ▲, ■: Indicates that the part is connected at points with same symbol in actual vehicle.

## RADIATOR CORE SUPPORT UPPER

## RADIATOR CORE SUPPORT UPPER: Removal and Installation

## **DANGER:**

Since hybrid vehicles and electric vehicles contain a high voltage battery, there is the risk of electric shock, electric leakage, or similar accidents if the high voltage component and vehicle are handled incorrectly. Be sure to follow the correct work procedures when performing inspection and maintenance.

#### **WARNING:**

Be sure to remove the service plug in order to disconnect the high voltage circuits before performing inspection or maintenance of high voltage system harnesses and parts.

#### < REMOVAL AND INSTALLATION >

- The removed service plug must always be carried in a pocket of the responsible worker or placed in the tool box during the procedure to prevent the plug from being connected by mistake.
- Be sure to wear insulating protective equipment consisting of glove, shoes, face shield and glasses before beginning work on the high voltage system.
- Never allow workers other than the responsible person to touch the vehicle containing high voltage parts. To keep others from touching the high voltage parts, these parts must be covered with an insulating sheet except when using them.
- Refer to GI-34, "High Voltage Precautions".

#### **CAUTION:**

Never bring the vehicle into the READY status with the service plug removed unless otherwise instructed in the Service Manual. A malfunction may occur if this is not observed.

REMOVAL

#### **WARNING:**

Disconnect the high voltage. Refer to GI-33, "How to Disconnect High Voltage".

- 1. Check voltage in high voltage circuit. (Check that condenser are discharged.)
- a. Lift up the vehicle and remove the Li-ion battery under covers. Refer to <a href="EVB-181">EVB-181</a>, "Exploded View".
- b. Disconnect high voltage connector from front side of Li-ion battery. Refer to <a href="EVB-181">EVB-181</a>, "Removal and Installation".
- c. Measure voltage between high voltage harness terminals.

#### **DANGER:**

Always use protective equipment as touching high voltage components without using them will cause electrocution. (where high voltage might remain/is present on terminals.)



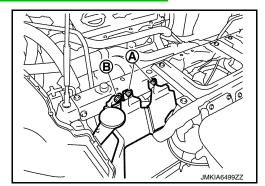
Standard : 5 V or less

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#### **CAUTION:**

For voltage measurements, use a tester which can measure to 500V or higher.

- 2. Remove front bumper fascia, energy absorber and apron bracket. Refer to <u>EXT-13</u>, "Removal and Installation".
- Remove hood lock assembly. Refer to DLK-188, "HOOD LOCK: Removal and Installation"
- Remove air guide (RH) clips (A) and washer tank inlet clip (B).



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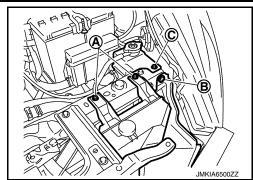
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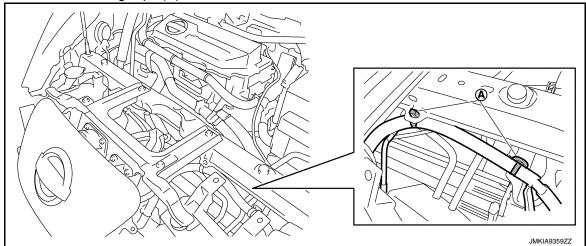
Revision: June 2014 DLK-163 2015 Leaf NAM

#### < REMOVAL AND INSTALLATION >

5. Remove reservoir tank bolts (A), air guide (LH) clip (B) and degas tank bolt (C).



Remove harness fixing clips (A).



- 7. Disconnect guick charge port connector. Refer to VC-128, "Removal and Installation".
- 8. Disconnect normal charge port connector. Refer to <u>VC-135</u>, "Removal and Installation".
- 9. Remove upper mounting bolts of charge port bracket.
- 10. Remove lower mounting nuts and bolt of radiator core support lower stay.
- 11. Move charge port bracket and radiator core support lower stay.
- 12. Support hood assembly using a suitable tool.

#### **WARNING:**

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

13. Remove radiator core support upper bolts and radiator core support upper.

#### INSTALLATION

Installation is in the reverse order of removal.

RADIATOR CORE SUPPORT LOWER

RADIATOR CORE SUPPORT LOWER: Removal and Installation

INFOID:0000000010639842

#### DANGER:

Since hybrid vehicles and electric vehicles contain a high voltage battery, there is the risk of electric shock, electric leakage, or similar accidents if the high voltage component and vehicle are handled incorrectly. Be sure to follow the correct work procedures when performing inspection and maintenance.

#### **WARNING:**

- Be sure to remove the service plug in order to disconnect the high voltage circuits before performing inspection or maintenance of high voltage system harnesses and parts.
- The removed service plug must always be carried in a pocket of the responsible worker or placed in the tool box during the procedure to prevent the plug from being connected by mistake.

#### < REMOVAL AND INSTALLATION >

- Be sure to wear insulating protective equipment consisting of glove, shoes, face shield and glasses before beginning work on the high voltage system.
- Never allow workers other than the responsible person to touch the vehicle containing high voltage parts. To keep others from touching the high voltage parts, these parts must be covered with an insulating sheet except when using them.
- Refer to GI-34, "High Voltage Precautions".

#### **CAUTION:**

Never bring the vehicle into the READY status with the service plug removed unless otherwise instructed in the Service Manual. A malfunction may occur if this is not observed.

**REMOVAL** 

#### **WARNING:**

Disconnect the high voltage. Refer to GI-33, "How to Disconnect High Voltage".

- Check voltage in high voltage circuit. (Check that condenser are discharged.)
- a. Lift up the vehicle and remove the Li-ion battery under covers. refer to EVB-181, "Exploded View".
- b. Disconnect high voltage connector from front side of Li-ion battery. Refer to <a href="EVB-181">EVB-181</a>, "Removal and Installation".
- c. Measure voltage between high voltage harness terminals.

### **DANGER:**

Always use protective equipment as touching high voltage components without using them will cause electrocution. (where high voltage might remain/is present on terminals.)

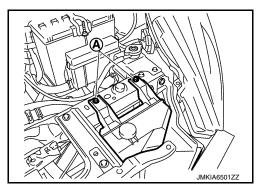


Standard : 5 V or less

## CAUTION:

For voltage measurements, use a tester which can measure to 500V or higher.

- Remove front bumper fascia, energy absorber, and apron bracket. Refer to <u>EXT-13, "Removal and Installation"</u>.
- 3. Remove reservoir tank bolts (A).



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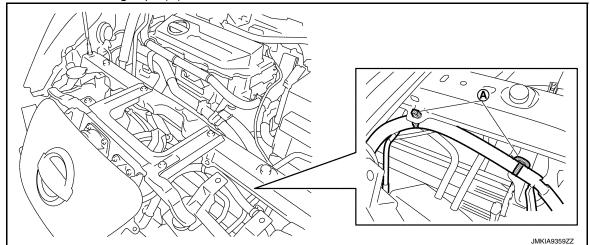
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Revision: June 2014 DLK-165 2015 Leaf NAM

### < REMOVAL AND INSTALLATION >

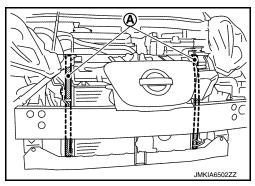
Remove harness fixing clips (A).



- 5. Disconnect quick charge port connector. Refer to VC-128, "Removal and Installation".
- 6. Disconnect normal charge port connector. Refer to VC-135, "Removal and Installation".
- 7. Remove lower mounting bolts of hood lock assembly.
- 8. Remove upper mounting bolts of charge port bracket.
- 9. Remove lower mounting nuts and bolt of radiator core support lower stay.
- 10. Move charge port bracket and radiator core support lower stay.
- 11. Remove air guides (LH/RH).
- 12. Use belts (A) to suspend radiator and condenser to prevent them from falling.

#### CAUTION:

Do not damage radiator and condenser.



- 13. Remove front fixing clip of fender protector (LH/RH) from radiator core support lower.
- 14. Remove radiator core support lower bolts and radiator core support lower.

### INSTALLATION

Installation is in the reverse order of removal.

## RADIATOR UPPER GRILLE

## RADIATOR UPPER GRILLE: Removal and Installation

INFOID:0000000010639843

#### REMOVAL

Remove radiator upper grille clips and radiator upper grille.

## **INSTALLATION**

Installation in the reverse order of removal.

CHARGE PORT BRACKET

## CHARGE PORT BRACKET: Removal and Installation

INFOID:0000000010639844

## **DANGER:**

Since hybrid vehicles and electric vehicles contain a high voltage battery, there is the risk of electric shock, electric leakage, or similar accidents if the high voltage component and vehicle are

#### < REMOVAL AND INSTALLATION >

handled incorrectly. Be sure to follow the correct work procedures when performing inspection and maintenance.

#### **WARNING:**

- Be sure to remove the service plug in order to disconnect the high voltage circuits before performing inspection or maintenance of high voltage system harnesses and parts.
- The removed service plug must always be carried in a pocket of the responsible worker or placed in the tool box during the procedure to prevent the plug from being connected by mistake.
- Be sure to wear insulating protective equipment consisting of glove, shoes, face shield and glasses before beginning work on the high voltage system.
- Never allow workers other than the responsible person to touch the vehicle containing high voltage parts. To keep others from touching the high voltage parts, these parts must be covered with an insulating sheet except when using them.
- Refer to GI-34, "High Voltage Precautions".

#### **CAUTION:**

Never bring the vehicle into the READY status with the service plug removed unless otherwise instructed in the Service Manual. A malfunction may occur if this is not observed.

#### REMOVAL

#### **WARNING:**

Disconnect the high voltage. Refer to GI-33, "How to Disconnect High Voltage".

- Check voltage in high voltage circuit. (Check that condenser are discharged.)
- a. Lift up the vehicle and remove the Li-ion battery under covers. refer to EVB-181, "Exploded View".
- b. Disconnect high voltage connector from front side of Li-ion battery. Refer to <a href="EVB-181">EVB-181</a>, "Removal and Installation".
- c. Measure voltage between high voltage harness terminals.

#### **DANGER:**

Always use protective equipment as touching high voltage components without using them will cause electrocution. (where high voltage might remain/is present on terminals.)

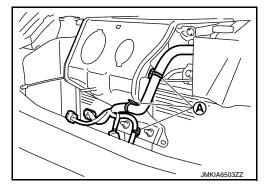


Standard : 5 V or less

#### CAUTION:

For voltage measurements, use a tester which can measure to 500V or higher.

- 2. Remove charge port hinge assembly. Refer to <u>DLK-161</u>, "CHARGE PORT LID HINGE ASSEMBLY: Removal and Installation".
- Remove quick charge port. Refer to <u>VC-128, "Removal and Installation"</u>.
- Remove normal charge port. Refer to <u>VC-135. "Removal and Installation"</u>.
- 5. Remove crash zone sensor. Refer to SR-33, "Removal and Installation".
- Remove harness fixing clips (A).



7. Remove charge port bracket bolts and nuts and charge port bracket.

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## < REMOVAL AND INSTALLATION >

**INSTALLATION** 

Installation is in the reverse order of removal.

## FRONT FENDER

**Exploded View** 

- 1. Rivet
- 4. Front fender upper insulator
- 7. Front fender stiffener
- 2. Front fender cover
- 5. Front fender assembly
- ( Pawl

- 3. Front fender seal
- 6. Front fender seal
- < ☐ Front

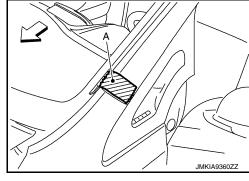
## Removal and Installation

#### **CAUTION:**

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

### REMOVAL

- 1. Remove fender protector. Refer to EXT-21, "FENDER PROTECTOR: Removal and Installation".
- Remove front fender cover. Refer to <u>DLK-169</u>, "Exploded View".
- 3. Remove front combination lamp. Refer to EXL-132, "Removal and Installation".
- 4. Remove the front fender bolts.
- 5. Apply protective tape (A) on the body side outer panel to protect the painted surface from damage.
  - <: Front



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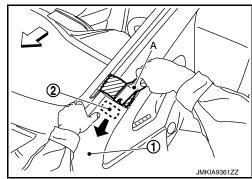
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## FRONT FENDER

### < REMOVAL AND INSTALLATION >

- 6. Using a suitable tool (A), remove front fender stiffener (2) from the vehicle body while carefully pulling the portion of front fender (1) toward vehicle outside.
  - <: Front



7. Remove the front fender assembly.

#### **CAUTION:**

Use care when removing the front fender. The front fender baffle foam adheres the front fender to the body side outer. Carefully release the baffle foam or damage to the front fender may occur.

#### INSTALLATION

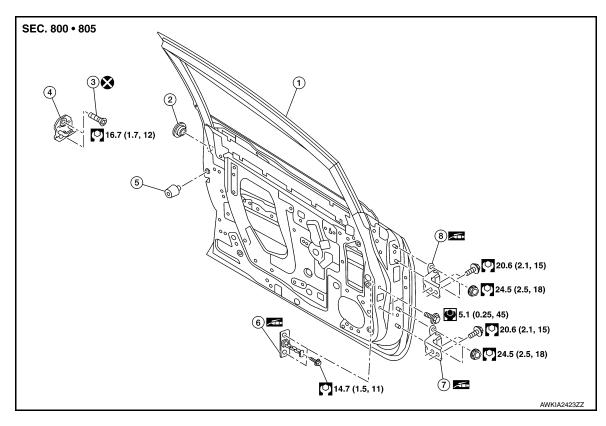
Note the following items, and install in the reverse order of removal.

#### **CAUTION:**

- After installation, apply touch-up paint (body color) to the head of front fender bolts.
- After installation, adjust the following parts:
- Hood assembly: Refer to <u>DLK-156, "HOOD ASSEMBLY: Adjustment"</u>.
- Front door: Refer to DLK-173, "DOOR ASSEMBLY: Adjustment".

## FRONT DOOR

Exploded View



- 1. Front door panel
- 4. Door striker
- 7. Door hinge (lower)
- Grease

- 2. Grommet
- 5. Bumper rubber
- 8. Door hinge (upper)
- 3. Bolt
- 6. Door check link
- Do not reuse

## DOOR ASSEMBLY

DOOR ASSEMBLY: Removal and Installation

#### **WARNING:**

Before servicing, push power switch OFF, disconnect 12V battery negative terminal and wait five minutes or more. Refer to <u>DLK-10, "Precaution for Removing 12V Battery"</u>. CAUTION:

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

#### **REMOVAL**

1. Disconnect the negative battery terminal and wait at least five minutes. Refer to <u>PG-82, "Removal and Installation"</u>.

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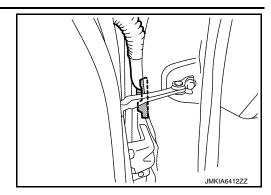
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Revision: June 2014 DLK-171 2015 Leaf NAM

## **FRONT DOOR**

## < REMOVAL AND INSTALLATION >

Disconnect the front door harness connector.



- 3. Remove door check link bolt (body side).
- 4. Remove door hinge nuts (door side) and front door assembly.

#### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

- Apply anticorrosive agent to the mounting surface of the front door.
- After installation, check the front door open/close and lock/unlock operation.
- After installation, perform the front door adjustment procedure. Refer to <u>DLK-173</u>, "<u>DOOR ASSEM-BLY</u>: Adjustment".
- After installation, apply touch-up paint (body color) to the head of the door hinge nuts.

## **DOOR ASSEMBLY: Adjustment**

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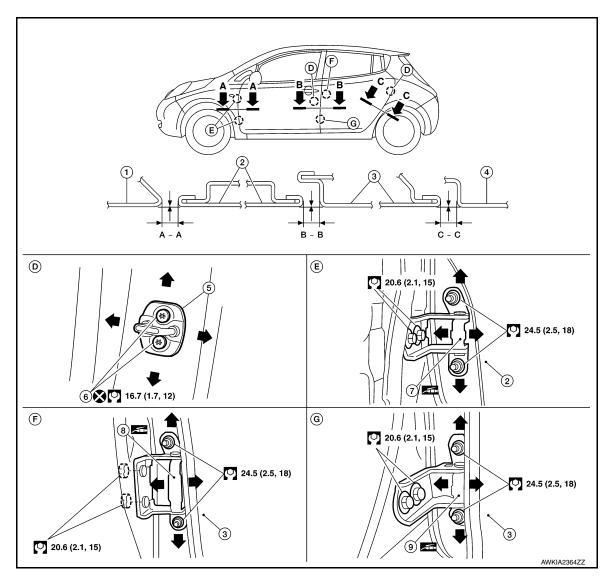
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- 1. Front fender
- 4. Body side outer
- 7. Front door hinge
- Do not reuse

- 2. Front door
- 5. Door striker

Grease

- 8. Rear door hinge (upper)
- 3. Rear door
- 6. Bolt
- 9. Rear door hinge (lower)

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

Unit: mm (in)

Portion	Section	Measurement	Standard
Front fender – Front door	A – A	Clearance	4.0 ± 1.0 (0.16 ± 0.04)
	A-A	Surface height	$0.0 \pm 1.0 \; (0.00 \pm 0.04)$
Front door – Rear door	B – B	Clearance	4.2 ± 1.0 (0.17 ± 0.04)
		Surface height	$0.0 \pm 1.0 \; (0.00 \pm 0.04)$
Front door – Rear door	C – C	Clearance	4.0 ± 1.0 (0.16 ± 0.04)
		Surface height	$0.0 \pm 1.0 \; (0.00 \pm 0.04)$

## FITTING ADJUSTMENT PROCEDURE

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## FRONT DOOR

#### < REMOVAL AND INSTALLATION >

- Remove front fender. Refer to <u>DLK-169</u>, "Removal and Installation".
- 2. Loosen door hinge nuts (door side).
- 3. Adjust the surface height of front door according to the specifications provided.
- 4. Temporarily tighten door hinge nuts (door side).
- 5. Loosen door hinge bolts (body side).
- 6. Raise front door at rear end to adjust clearance of the front door according to the specifications provided.
- 7. Tighten bolts and nuts to the specified torque.

#### **CAUTION:**

- After installation, apply touch-up paint (body color) to the head of door hinge bolts and nuts.
- Check door hinge rotating part for poor lubrication. If necessary, apply a suitable multi-purpose grease.
- 8. Install front fender. Refer to refer to DLK-169, "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:0000000010639850

#### REMOVAL

Remove the door striker bolts and door striker.

#### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

- · Do not reuse door striker bolts.
- After installation, perform the front door adjustment procedure. Refer to <u>DLK-173, "DOOR ASSEM-BLY: Adjustment"</u>.
- After installation, apply touch-up paint (body color) to the head of the door striker bolts.

DOOR HINGE

DOOR HINGE: Removal and Installation

INFOID:0000000010639851

#### WARNING:

Before servicing, push power switch OFF, disconnect 12V battery negative terminal and wait 5 minutes or more. Refer to <u>DLK-10</u>, <u>"Precaution for Removing 12V Battery"</u>.

#### **CAUTION:**

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

#### **REMOVAL**

- 1. Disconnect the negative and positive battery terminals and wait at least three minutes.
- Remove front fender. Refer to <u>DLK-169</u>, "<u>Removal and Installation</u>".
- Remove front door assembly. Refer to DLK-171, "DOOR ASSEMBLY: Removal and Installation".
- 4. Remove front door hinge mounting bolts (body side), and then remove front door hinge.

#### INSTALLATION

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

#### **CAUTION:**

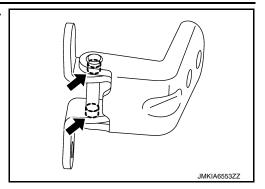
- Apply anticorrosive agent to the hinge mating surface.
- After installation, check front door open/close and lock/unlock operation. If necessary, perform the front door adjustment procedure. Refer to <u>DLK-173</u>, "<u>DOOR ASSEMBLY</u>: <u>Adjustment</u>".
- After installation, apply touch-up paint (body color) to the head of the door hinge nuts.

## FRONT DOOR

#### < REMOVAL AND INSTALLATION >

Check door hinge rotating part for poor lubrication. If necessary, apply a suitable multi-purpose grease.

: Grease point



DOOR CHECK LINK

DOOR CHECK LINK: Removal and Installation

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#### REMOVAL

1. Fully close the front door window.

Remove front door speaker. Refer to <u>AV-70</u>, "Removal and <u>Installation"</u> (AUDIO WITHOUT NAVIGATION) (EXCEPT MEXICO), <u>AV-194</u>, "Removal and <u>Installation"</u> (AUDIO WITHOUT NAVIGATION (FOR MEXICO), <u>AV-320</u>, "Removal and <u>Installation"</u> (NAVIGATION WITHOUT BOSE), <u>AV-490</u>, "Removal and <u>Installation"</u> (NAVIGATION WITH BOSE), <u>AV-593</u>, "Removal and <u>Installation"</u> (TELEMATICS SYSTEM).

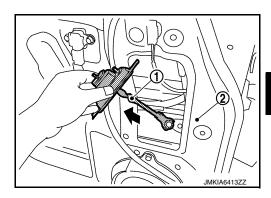
3. Remove sealing screen.

#### NOTE:

Cut the butyl-tape so that some parts of the butyl-tape do not remain on the sealing screen, if the sealing screen is reused.

Remove the door check link bolt (body side).

- Remove the door check link bolts (door side).
- 6. Remove door check link (1) from door panel (2).



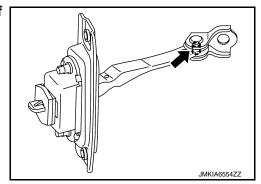
### **INSTALLATION**

Installation is in the reverse order of removal.

#### **CAUTION:**

- Check front door open/close operation after installation.
- Check door check link rotating part for poor lubrication. If necessary, apply a suitable multi-purpose grease.

: Grease point



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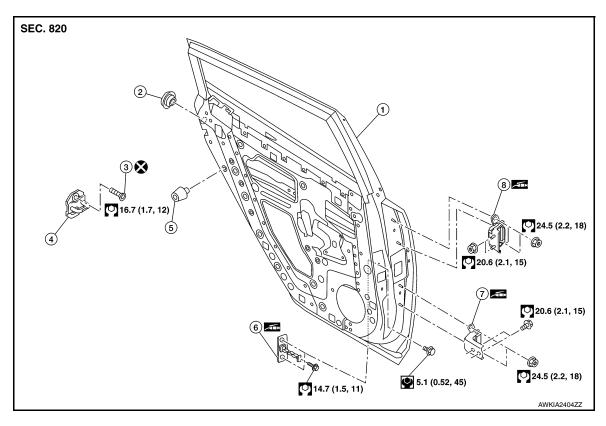
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Revision: June 2014 DLK-175 2015 Leaf NAM

## **REAR DOOR**

Exploded View



- Rear door panel
- 4. Door striker
- 7. Door hinge (lower)
- Grease

- 2. Grommet
- 5. Bumper rubber
- 8. Door hinge (upper)
- 3. Bolt
- Door check link
- Do not reuse

## DOOR ASSEMBLY

## DOOR ASSEMBLY: Removal and Installation

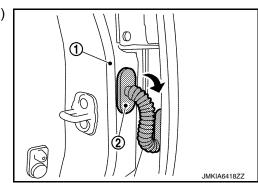
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## **CAUTION:**

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

### **REMOVAL**

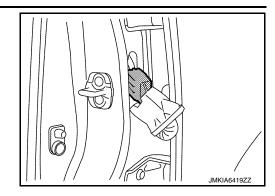
1. Remove rear door harness grommet (2) from body side outer (1) and pull out rear door harness.



## **REAR DOOR**

### < REMOVAL AND INSTALLATION >

Disconnect the harness connector from the rear door.



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

#### INSTALLATION

Installation is in the reverse order of removal.

## **CAUTION:**

- Apply anticorrosive agent onto the mounting surface.
- After installation, check the rear door open/close and lock/unlock operation. If necessary, perform the rear door assembly adjustment procedure. Refer to <a href="DLK-178">DLK-178</a>, "DOOR ASSEMBLY: Adjustment".
- Check door hinge rotating part for poor lubrication. If necessary, apply a suitable multi-purpose grease.
- After installation, apply touch-up paint (body color) to the head of door hinge nuts.

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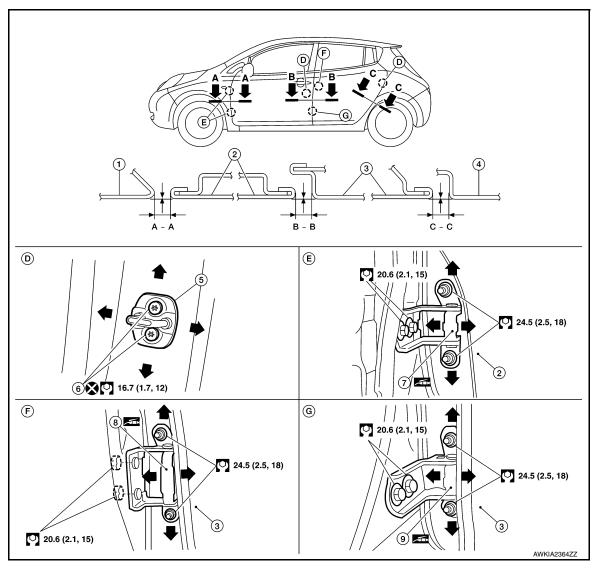
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Revision: June 2014 DLK-177 2015 Leaf NAM

## **DOOR ASSEMBLY: Adjustment**

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- 1. Front fender
- 4. Body side outer
- 7. Front door hinge
- Do not reuse

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

Grease

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

Unit: mm (in)

Portion	Section	Measurement	Standard
Front fender – Front door	A – A	Clearance	$4.0 \pm 1.0 \; (0.16 \pm 0.04)$
	A-A	Surface height	$0.0 \pm 1.0 \; (0.00 \pm 0.04)$
Front door – Rear door	B – B	Clearance	$4.2 \pm 1.0 \; (0.17 \pm 0.04)$
		Surface height	$0.0 \pm 1.0 \; (0.00 \pm 0.04)$
Front door – Rear door	C – C	Clearance	$4.0 \pm 1.0 \; (0.16 \pm 0.04)$
		Surface height	$0.0 \pm 1.0 \; (0.00 \pm 0.04)$

## FITTING ADJUSTMENT PROCEDURE

## **REAR DOOR**

#### < REMOVAL AND INSTALLATION >

< K	EMOVAL AND INSTALLATION >	
1.	Remove center pillar lower garnish. Refer to <a href="INT-30">INT-30</a> , "CENTER PILLAR LOWER GARNISH: Removal and Installation".	А
2.	Loosen door hinge nuts (door side).	
3.	Adjust the surface height of rear door according to the specifications provided.	
4.	Temporarily tighten door hinge nuts (door side).	В
5.	Loosen door hinge nuts and bolts (body side).	
6.	Raise rear door at rear end to adjust clearance of rear door according to the specifications provided.	
7.	Tighten bolts and nuts to the specified torque.	С
	<ul> <li>After installation, apply touch-up paint (body color) to the head of door hinge bolts and nuts.</li> <li>Check door hinge rotating part for poor lubrication. If necessary, apply a suitable multi-purpose grease.</li> </ul>	D
8.	Install center pillar lower garnish. Refer to <a href="INT-30">INT-30</a> , "CENTER PILLAR LOWER GARNISH: Removal and <a <="" a="" href="Installation">.</a>	Е
DO	OR STRIKER ADJUSTMENT	
	ust door striker so that it becomes parallel with door lock insertion direction. OOR STRIKER	F
DC	OOR STRIKER : Removal and Installation	
DE	MOVAL	G
Rer	move the door striker bolts and door striker.	Н
	STALLATION	- 11
	tallation is in the reverse order of removal.  UTION:	
• D	o not reuse door striker bolts. fter installation, perform the rear door adjustment procedure. Refer to <u>DLK-178, "DOOR ASSEMBLY</u>	
_	Adjustment". fter installation, apply touch-up paint (body color) to the head of the door striker bolts.	
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CA	UTION:	DL
٠U	se two people when removing or installing the rear door due to its heavy weight. /hen removing and installing rear door assembly, support the rear door using a suitable tool.	L
RE	MOVAL	
1.	Remove rear door assembly. Refer to <u>DLK-176</u> , " <u>DOOR ASSEMBLY</u> : <u>Removal and Installation</u> ".	B 4
2.	Remove center pillar lower garnish. Refer to <a href="INT-30">INT-30</a> , "CENTER PILLAR LOWER GARNISH: Removal and Installation".	M
3.	Remove the rear door hinge bolts and nuts (body side) and door hinge.	Ν
INS	STALLATION	IN
Inst	tallation is in the reverse order of removal.  UTION:	0
	pply anticorrosive agent onto the mounting surface.	O
th	fter installation, check the rear door open/close and lock/unlock operation. If necessary, perform ne rear door assembly adjustment procedure. Refer to <a href="DLK-178">DLK-178</a> , "DOOR ASSEMBLY: Adjustment". Ifter installation, apply touch-up paint (body color) to the head of door hinge nuts.	Р
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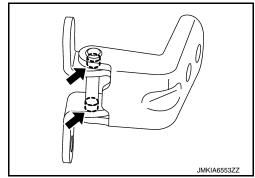
Revision: June 2014 DLK-179 2015 Leaf NAM

## **REAR DOOR**

#### < REMOVAL AND INSTALLATION >

• Check door hinge rotating part for poor lubrication. If necessary, apply a suitable multi-purpose grease.

: Grease point



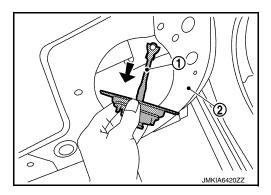
## DOOR CHECK LINK

## DOOR CHECK LINK: Removal and Installation

INFOID:0000000010639858

#### **REMOVAL**

- 1. Fully close the rear door window.
- 2. Remove rear door finisher. Refer to <a href="INT-22">INT-22</a>, "Removal and Installation".
- 3. Remove front door speaker. Refer to <u>AV-70</u>, "Removal and Installation" (AUDIO WITHOUT NAVIGATION) (EXCEPT MEXICO), <u>AV-194</u>, "Removal and Installation" (AUDIO WITHOUT NAVIGATION (FOR MEXICO), <u>AV-320</u>, "Removal and Installation" (NAVIGATION WITHOUT BOSE), <u>AV-490</u>, "Removal and Installation" (NAVIGATION WITH BOSE), <u>AV-593</u>, "Removal and Installation" (TELEMATICS SYSTEM).
- 4. Remove the door check link bolt (body side).
- 5. Remove the door check link bolts (door side).
- 6. Remove door check link (1) from door panel (2).



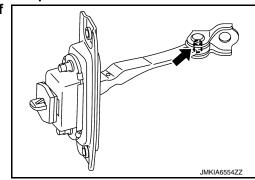
#### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

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

: Grease point



**Exploded View** 

INFOID:0000000010639859

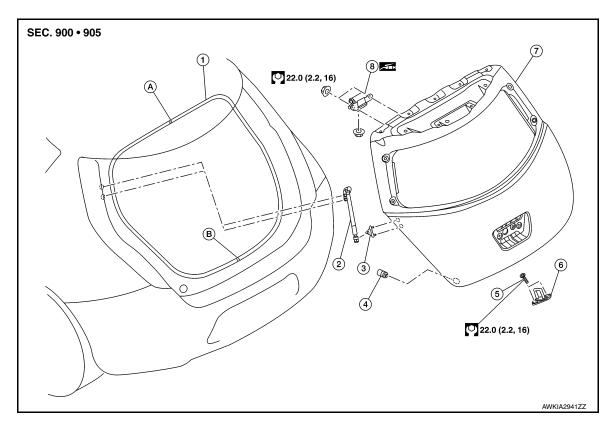
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- 1. Back door weather-strip
- 4. Bumper rubber
- 7. Back door panel
- B. Seam

- 2. Back door stay assembly
- 5. Bolt
- 8. Back door hinge
- Grease

- 3. Back door stay lower bracket
- 6. Back door striker
- A. Center mark

# **BACK DOOR ASSEMBLY**

BACK DOOR ASSEMBLY: Removal and Installation

INFOID:0000000010639860

# **CAUTION:**

- Use two people when removing or installing the back door due to its heavy weight.
- Use shop cloths to protect surrounding components from damage during removal or installation of the back door.

## **REMOVAL**

1. Remove the rear pillar finishers (LH/RH). Refer to <a href="INT-31">INT-31</a>, "REAR PILLAR FINISHER: Removal and Installation".

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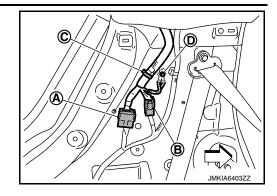
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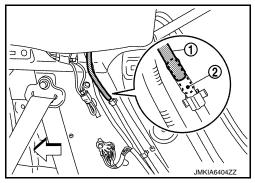
## < REMOVAL AND INSTALLATION >

- Disconnect harness connector (A) and (B).
- 3. Remove harness clip (C).
- 4. Remove ground cable mounting bolt (D).

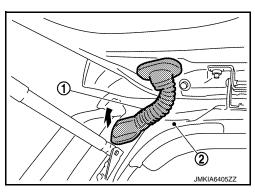
<: Front



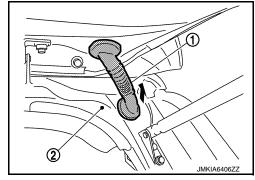
5. Remove rear washer hose (1) from hose joint (2). <a>□: Front</a>



6. Remove grommet (1), and then pull out harness from rear fender extension (LH) (2).



7. Remove grommet (1), and then pull out harness from rear fender extension (RH) (2).



8. Support back door with appropriate material to prevent it from falling.

## **WARNING:**

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

- 9. Remove back door stay assembly (back door side). Refer to <u>DLK-185, "BACK DOOR STAY : Removal and Installation"</u>.
- 10. Remove back door hinge nuts on back door and remove.

## **INSTALLATION**

Installation is in the reverse order of removal.

#### **CAUTION:**

- Check back door hinge rotating part for poor lubrication. If necessary, apply a suitable multi-purpose grease.
- After installation, check back door open/close and lock/unlock operation. If necessary, perform the back door assembly adjustment procedure. Refer to <u>DLK-183, "BACK DOOR ASSEMBLY: Adjust-ment"</u>.

# BACK DOOR ASSEMBLY: Adjustment

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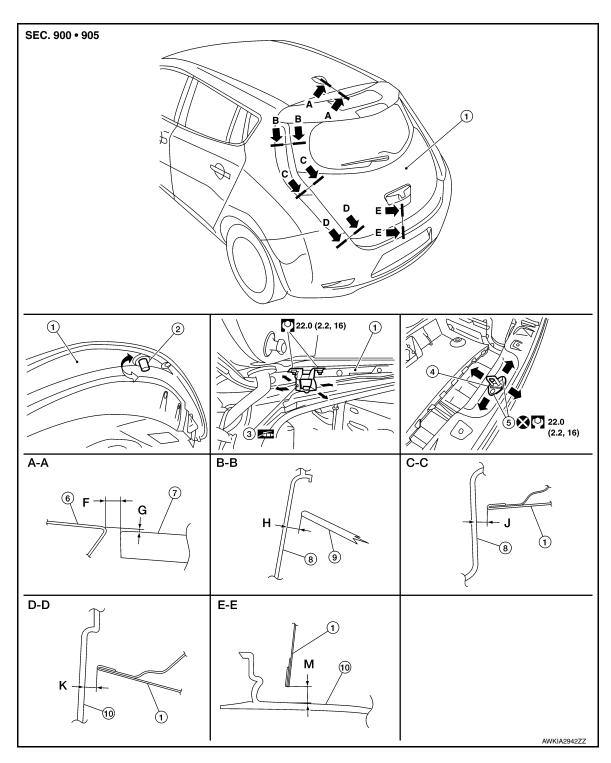
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- 1. Back door assembly
- Back door striker
- 2. Bumper rubber
- 5. Bolt

- Back door hinge
- 6. Roof panel

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Revision: June 2014 DLK-183 2015 Leaf NAM

#### < REMOVAL AND INSTALLATION >

7. Rear spoiler assembly

Rear combination lamp

9. Back door glass

10. Rear bumper fascia

Do not reuse

Grease

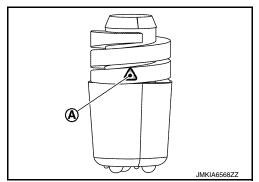
Check the clearance and the surface height between the back door and each part by visual inspection and tactile feel. If the clearance and surface height if out of specification, adjust them according to the adjustment procedure.

Unit: mm (in)

Portion	Section	Item	Measurement	Standard	Parallelism	Equality
Roof panel – Rear spoiler	A – A	F	Clearance	$7.0 \pm 2.0 \; (0.28 \pm 0.08)$	0.0 (0.00)	2.0 (0.08)
		G	Surface height	$0.8 \pm 2.0 \; (0.03 \pm 0.08)$	_	_
Rear combination lamp – Back door glass	B – B	Н	Clearance	$5.0 \pm 2.3 \; (0.20 \pm 0.09)$	1.9 (0.07)	2.9 (0.11)
Rear combination lamp – Back door	C – C	J	Clearance	$5.0 \pm 2.3 \; (0.20 \pm 0.09)$	1.9 (0.07)	2.9 (0.11)
Rear bumper fascia – Back door	D – D	K	Clearance	5.3 ± 2.0 (0.21 ± 0.08)	2.0 (0.08)	2.0 (0.08)
Rear bumper fascia – Back door	E-E	М	Clearance	$8.0 \pm 2.0 \; (0.31 \pm 0.08)$	2.0 (0.08)	_

#### FITTING ADJUSTMENT PROCEDURE

- Loosen back door striker bolts.
- 2. Loosen back door hinge nuts (back door side).
- 3. Adjust back door to specifications provided.
- 4. After adjustment tighten back door striker bolts and back door hinge nuts (back door side) to the specified torque.
- 5. Screw bumper rubber into the stopper position (A), and then loosen by a half turn.



#### **CAUTION:**

After installation, apply touch-up paint (body color) to the head of back door hinge nuts.

BACK DOOR STRIKER ADJUSTMENT

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

BACK DOOR STRIKER

BACK DOOR STRIKER: Removal and Installation

INFOID:0000000010639862

## **REMOVAL**

Remove the door striker bolts and door striker.

#### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

- · Do not reuse door striker bolts.
- After installation, perform the back door adjustment procedure. Refer to <u>DLK-183</u>, "BACK DOOR ASSEMBLY: Adjustment".
- After installation, apply touch-up paint (body color) to the head of the door striker bolts.

## BACK DOOR HINGE

#### < REMOVAL AND INSTALLATION >

# BACK DOOR HINGE: Removal and Installation

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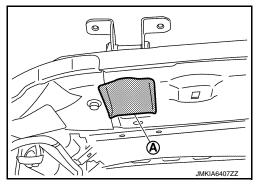
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## REMOVAL

- 1. Remove the luggage floor upper finisher. Refer to INT-41, "LUGGAGE FLOOR BOARD: Removal and Installation".
- Remove back door assembly. Refer to <u>DLK-181</u>, "BACK <u>DOOR ASSEMBLY</u>: Removal and Installation".
- Partially remove the back door weather-strip. Refer to DLK-186, "BACK DOOR WEATHER-STRIP: Removal and Installation".
- 4. Remove rear assist grips (LH/RH) and mounting clips for rear portion of headlining, and then remove rear portion of headlining. Refer to INT-36, "Exploded View".
- Remove insulator (A).



Remove back door hinge nut (body side) and back door hinge.

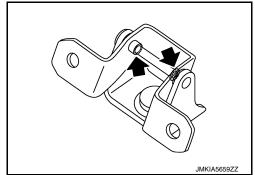
#### INSTALLATION

Installation is in the reverse order of removal.

## **CAUTION:**

- After installation, check back door open/close and lock/unlock operation. If necessary, perform the back door assembly adjustment procedure. Refer to DLK-183, "BACK DOOR ASSEMBLY: Adjust-
- Check back door hinge rotating part for poor lubrication. If necessary, apply a suitable multi-purpose grease.

: Grease point



**BACK DOOR STAY** 

BACK DOOR STAY: Removal and Installation

INFOID:0000000010639864

# REMOVAL

1. Support the back door using a suitable tool.

#### WARNING:

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

Remove back door stay bolts (body side).

**DLK-185** Revision: June 2014 2015 Leaf NAM

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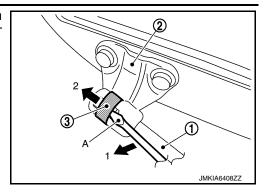
#### < REMOVAL AND INSTALLATION >

 Remove the metal clip (3) located on the connection between the back door stay assembly (1) and the back door stay lower bracket (2) by using a suitable tool (A).

## **CAUTION:**

Be careful not to damage painted surface.

4. Remove back door stay assembly (back door side).



Remove back door stay bolts and back door stay assembly.

#### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

- Apply anticorrosive agent onto the mounting surface.
- After installation, check back door open/close and lock/unlock operation.

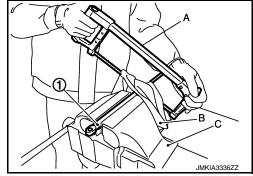
# **BACK DOOR STAY: Disposal**

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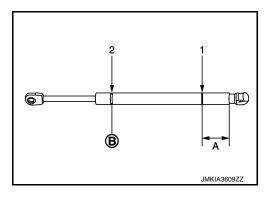
- 1. Fix back door stay (1) using a vise (C).
- 2. Using hacksaw (A) slowly make 2 holes in the back door stay, in numerical order as shown in the figure.

#### **CAUTION:**

- When cutting a hole on back door stay, always cover the 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.



# BACK DOOR WEATHER-STRIP

# BACK DOOR WEATHER-STRIP: Removal and Installation

INFOID:0000000010639866

#### REMOVAL

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

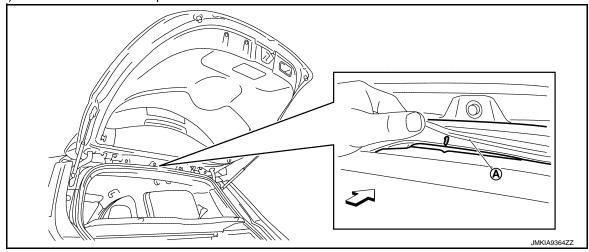
#### **CAUTION:**

Do not pull strongly on weather-strip.

INSTALLATION

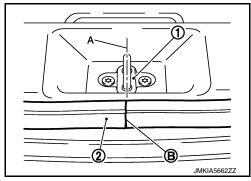
# < REMOVAL AND INSTALLATION >

1. Working from the upper section, align weather-strip center mark (A) with vehicle center mark (cutting position) and install weather-strip onto the vehicle.



< → Front

2. Align the connecting point (B) of weather-strip (2) to the center (A) of striker (1), and then install as shown in the figure.



Pull weather-strip gently to ensure that there is no loose section.

NOTE:

Check that weather-strip fits tightly in each corner.

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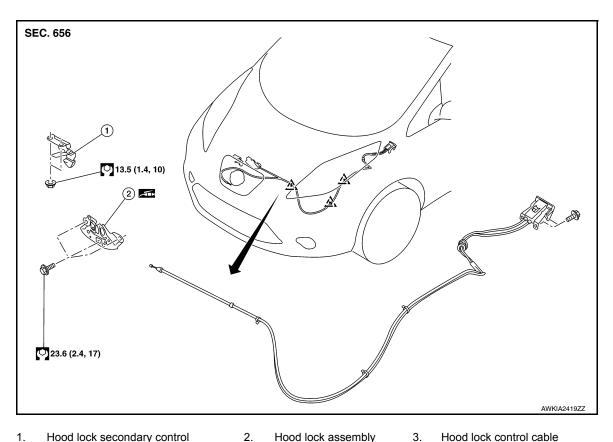
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# **HOOD LOCK**

**Exploded View** INFOID:0000000010639867



- Hood lock secondary control
- To charge port lid lock
- Hood lock assembly Clip
- Grease

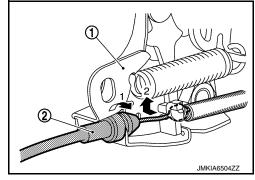
# **HOOD LOCK**

# **HOOD LOCK**: Removal and Installation

**REMOVAL** 

Remove radiator upper grille. Refer to <u>DLK-166</u>, "RADIATOR UPPER GRILLE: Removal and Installa-

- Remove hood lock assembly. Refer to <u>DLK-188</u>, "HOOD LOCK: Removal and Installation".
- Disconnect hood lock control cable (2) from hood lock assembly (1).



INFOID:0000000010639868

- Disconnect the harness connector from the hood lock assembly (if equipped).
- Remove the hood lock assembly.

## INSTALLATION

# **HOOD LOCK**

#### < REMOVAL AND INSTALLATION >

Installation is in the reverse order of removal.

#### **CAUTION:**

- Check that hood lock control cable is properly engaged with hood lock.
- After installation, perform hood assembly adjustment procedure. Refer to DLK-156, "HOOD ASSEM-**BLY: Adjustment".**
- After installation, perform hood lock control inspection. Refer to <u>DLK-189</u>, "Inspection".

HOOD LOCK SECONDARY CONTROL

# HOOD LOCK SECONDARY CONTROL: Removal and Installation

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#### REMOVAL

Remove the hood lock secondary control nuts and hood lock secondary control.

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#### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

After installation, perform hood lock control inspection. Refer to DLK-189, "Inspection".

# HOOD LOCK CONTROL CABLE

# HOOD LOCK CONTROL CABLE: Removal and Installation

INFOID:0000000010639870

#### REMOVAL

- 1. Disconnect the hood lock control cable from the hood lock assembly.
- Disconnect the charge port lid control cable from the charge port lid lock.
- 3. Disconnect the hood lock control cable and charge port lid control cable from the hood lock release handle and charge port lid lock release handle.
- Remove the fender protector (LH). Refer to EXT-21, "FENDER PROTECTOR: Removal and Installation".
- 5. Release hood lock control cable clips using a suitable tool.
- Remove grommet on the lower dash, and pull the hood lock control cable toward the passenger compartment.

## **CAUTION:**

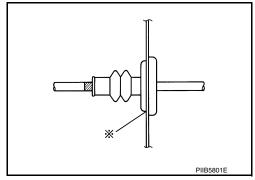
While pulling, do not damage the outside of hood lock control cable.

#### INSTALLATION

Installation is in the reverse order of removal.

## **CAUTION:**

- Do not bend cable too much, keep the radius 100 mm (3.937 in) or more.
- Check that cable is not offset from the positioning grommet and apply sealant to the grommet (at \* mark).



- Check that hood lock control cable is properly engaged with hood lock.
- After installation, perform hood assembly adjustment procedure. Refer to <u>DLK-156, "HOOD ASSEM-</u> **BLY: Adjustment".**
- After installation, perform hood lock control inspection. Refer to DLK-189, "Inspection".

Inspection INFOID:0000000010639871

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

**DLK-189** Revision: June 2014 2015 Leaf NAM DLK

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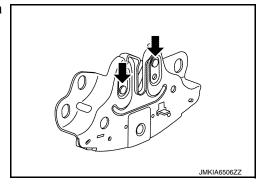
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# **HOOD LOCK**

## < REMOVAL AND INSTALLATION >

- 1. Check that secondary latch is properly engaged with secondary striker with hoods own weight.
- 2. While operating hood lock release lever, carefully check that the front end of the hood is raised by approximately 20.0 mm (0.79 in). Also check that the hood lock release lever returns to the original position.
- 3. Check that the hood lock release lever operates at 49 N (5.0 kg-m, 11.0 ft-lb) or below.
- 4. Install so that the static closing force of the hood is 120 564 N (12.2 57.6 kg-m, 89 416 ft-lb). **NOTE:** 
  - Do not exert vertical force on the right or left side of hood lock.
  - Do not press simultaneously on both sides.
- 5. Check the hood lock lubrication condition. If necessary, apply a suitable multi-purpose grease.

: Grease point



# CHARGE PORT LID LOCK

**Exploded View** 

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6.1 (0.6, 54)

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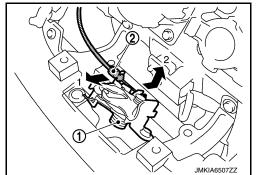
- 1. Charge port lid cover assembly
- 4. Charge port lid lock cable
- 7. Charge port lid lock
- 2. Charge port lid seal
- 5. Charge port lid actuator assembly
- 8. Charge port lid rear cover
- 3. Charge port lid assembly
- 6. Charge port lid
- ∠^ Clip

# CHARGE PORT LID LOCK

# CHARGE PORT LID LOCK: Removal and Installation

REMOVAL

- 1. Remove charge port lid rear cover. Refer to <a href="DLK-159">DLK-159</a>, "Exploded View".
- Disconnect charge port lid control cable (2) from charge port lid lock (1), as shown.



3. Remove charge port lid lock bolts and charge port lid lock.

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# **CHARGE PORT LID LOCK**

## < REMOVAL AND INSTALLATION >

#### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

- Check that charge port lid lock control cable is properly engaged with charge port lid lock.
- After installation, perform charge port lid fitting adjustment. Refer to <u>DLK-160, "CHARGE PORT LID ASSEMBLY: Adjustment"</u>.

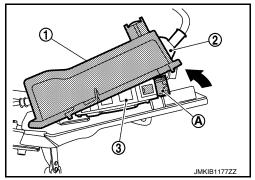
# CHARGE PORT LID OPENER ACTUATOR

## CHARGE PORT LID OPENER ACTUATOR: Removal and Installation

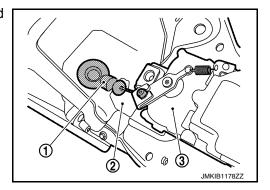
INFOID:0000000010639874

## **REMOVAL**

- 1. Remove charge port lid rear cover. Refer to <a href="DLK-159">DLK-159</a>, "Exploded View".
- 2. Remove actuator cover.
- a. Remove actuator cover screws.
- b. Pull up actuator cover (1) from harness grommet (2) side, and the disconnect harness connector (A) from charge port lid opener actuator (3).



c. Remove charge port lid control cable (1) from charge port lid hinge assembly (2) and charge port lid opener actuator (3).



- d. Remove actuator cover, charge port lid control cable and harness at the same time.
- 3. Remove charge port lid opener actuator bolts and charge port lid opener actuator.

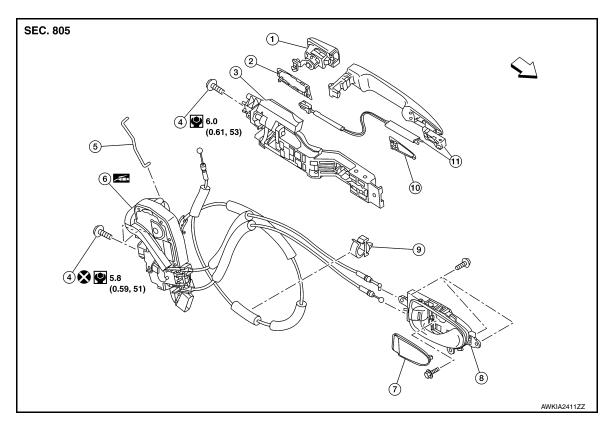
#### **INSTALLATION**

Installation is in the reverse order of removal.

#### **CAUTION:**

- Check that charge port lid lock control cable is properly engaged with charge port lid opener actuator.
- When replace charge port lid control cable and charge port lid opener actuator, replace with actuator cover.
- After installation, perform charge port lid fitting adjustment. Refer to <u>DLK-160, "CHARGE PORT LID ASSEMBLY: Adjustment"</u>.
- Check charge port lid assembly lock/unlock operation after installation.

**Exploded View** INFOID:0000000010639875



- Door key cylinder assembly (driver
  - Outside handle escutcheon (passenger side)
- 4. Bolt
- Inside handle escutcheon
- 10. Front gasket
- Do not reuse

- Rear gasket
- Key rod (driver side)
- Inside handle
- 11. Outside handle
- Grease

- Outside handle bracket
- Door lock assembly
- Cable clip
- <□ Front

# DOOR LOCK

DOOR LOCK: Removal and Installation

- 1. Remove outside handle bracket. Refer to <u>DLK-194, "OUTSIDE HANDLE: Removal and Installation"</u>.
- Remove front door lower sash. Refer to <u>GW-20, "Exploded View"</u>.
- 3. Remove door lock assembly bolts.
- 4. Disconnect the harness connector from the door lock actuator and remove door lock assembly.

#### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

REMOVAL

- Do not reuse door lock assembly bolts.
- After installation, check the door open/close and lock/unlock operation.
- After installation, check door lock cable is properly engaged with outside handle bracket.

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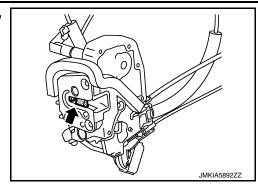
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**DLK-193** Revision: June 2014 2015 Leaf NAM

#### < REMOVAL AND INSTALLATION >

- Check door lock assembly for poor lubrication. If necessary, apply a suitable multi-purpose grease.
  - : Grease point



# **INSIDE HANDLE**

# INSIDE HANDLE: Removal and Installation

INFOID:0000000010639877

#### **REMOVAL**

- 1. Remove front door finisher. Refer to <a href="INT-19">INT-19</a>, "Removal and Installation".
- 2. Remove inside handle screws and inside handle.

#### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION**

After installation, check the door open/close and lock/unlock operation.

# **OUTSIDE HANDLE**

# **OUTSIDE HANDLE: Removal and Installation**

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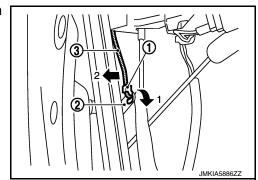
## **REMOVAL**

- 1. Fully close the front door glass.
- 2. Remove front door finisher. Refer to <a href="INT-19">INT-19</a>, "Removal and Installation".
- 3. Remove sealing screen.

# NOTE:

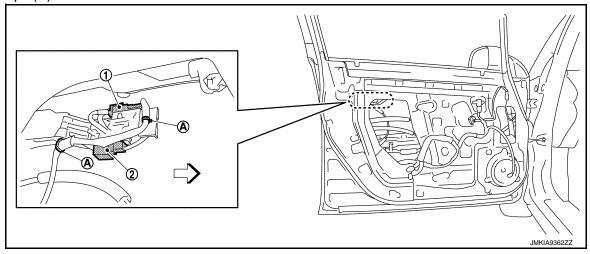
Cut the butyl-tape so that some parts of the butyl-tape do not remain on the sealing screen, if the sealing screen is reused.

4. Disengage rod holder (1), and then separate key rod (3) from door lock assembly (2) (driver side).



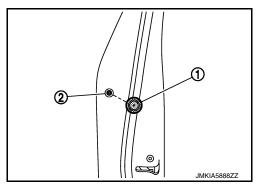
# < REMOVAL AND INSTALLATION >

5. Disconnect harness connector from door antenna (1) and door request switch (2) and remove harness clamps (A).

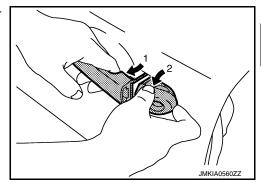


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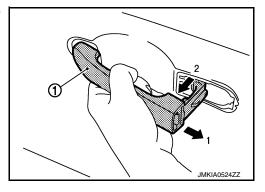
6. Remove grommet (1) (door side). Loosen bolt (2) that retains door lock cylinder. (For passenger side, bolt fixes outside handle escutcheon.)



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



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



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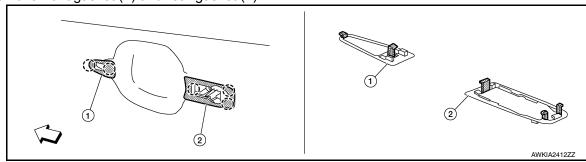
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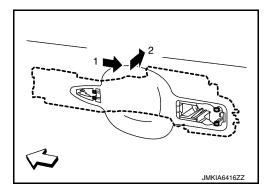
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# < REMOVAL AND INSTALLATION >

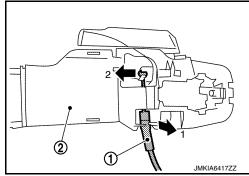
9. Remove front gasket (1) and rear gasket (2).



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- < → Front
- 10. Slide outside handle bracket toward rear of vehicle to remove.
  - <□ Front



11. Disconnect outside handle cable (1) from outside handle bracket (2).



## **INSTALLATION**

Installation is in the reverse order of removal.

#### **CAUTION:**

- When installing key rod, rotate key rod holder until a click is felt (driver side only).
- Check that door lock cables are properly engaged with inside handle and outside handle.
- After installation, check door open/close and lock/unlock operation.

**Exploded View** 

SEC. 825

(a) 5.0 (0.51, 44)

(b) 5.8 (0.59, 51)

(c) 5.1 (0.59, 51)

- 1. Outside handle escutcheon
- 4. Bolt
- 7. Inside handle
- 10. Outside handle

- 2. Rear gasket
- 5. Door lock assembly
- 8. Cable clip
- < ☐ Front

- 3. Outside handle bracket
- 6. Inside handle escutcheon
- 9. Front gasket
- Do not reuse

Grease

**DOOR LOCK** 

DOOR LOCK: Removal and Installation

INFOID:0000000010639880

**REMOVAL** 

1. Remove outside handle bracket. Refer to <u>DLK-198</u>, "OUTSIDE HANDLE: Removal and Installation".

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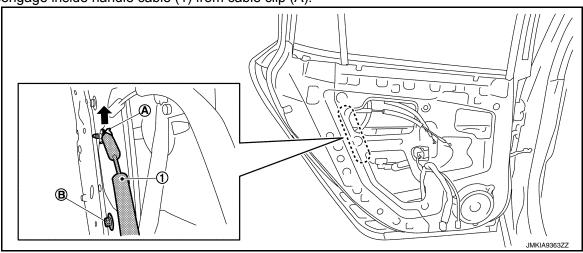
INFOID:0000000010639879

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Revision: June 2014 DLK-197 2015 Leaf NAM

#### < REMOVAL AND INSTALLATION >

2. Disengage inside handle cable (1) from cable clip (A).



- 3. Remove lower bolt (B) of partition sash.
- 4. Disconnect the harness connector from the door lock actuator.
- 5. Remove door lock assembly bolts.
- 6. Remove door lock assembly while locating Inside handle cable and door lock cable to the bottom side of rear partition sash.

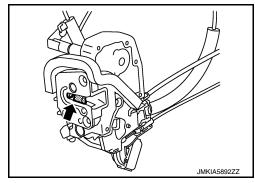
## INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

- · Do not reuse door lock assembly bolts.
- After installation, check the door open/close and lock/unlock operation.
- · After installation, check door lock cable is properly engaged with outside handle bracket.
- Check door lock assembly for poor lubrication. If necessary, apply a suitable multi-purpose grease.

: Grease point



# **INSIDE HANDLE**

**INSIDE HANDLE:** Removal and Installation

INFOID:0000000010639881

## **REMOVAL**

- 1. Remove rear door finisher. Refer to INT-22, "Removal and Installation".
- 2. Remove inside handle screws and inside handle.

#### INSTALLATION

Installation is in the reverse order of removal.

## **CAUTION:**

After installation, check door open/close and lock/unlock operation.

# OUTSIDE HANDLE

OUTSIDE HANDLE: Removal and Installation

INFOID:0000000010639882

## REMOVAL

Fully close rear door glass.

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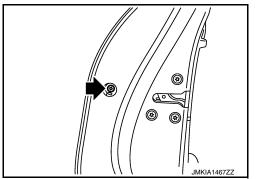
# < REMOVAL AND INSTALLATION >

- Remove rear door finisher. Refer to <u>INT-22, "Removal and Installation"</u>.
- 3. Remove sealing screen.

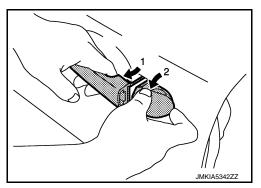
## NOTE:

Cut the butyl-tape so that some parts of the butyl-tape do not remain on the sealing screen, if the sealing screen is reused.

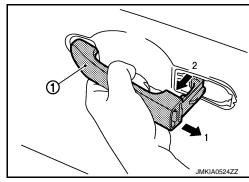
4. Remove door side grommet and loosen bolt from grommet hole.



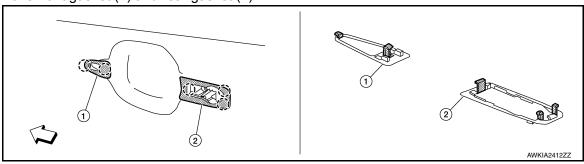
While pulling outside handle, remove outside handle escutcheon.



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



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



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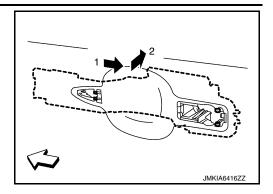
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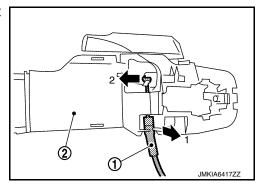
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# < REMOVAL AND INSTALLATION >



9. Disconnect outside handle cable (1) from outside handle bracket (2).



## **INSTALLATION**

Installation is in the reverse order of removal.

#### **CAUTION:**

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

# **BACK DOOR LOCK**

# **Exploded View**

**SEC. 905** 22.0 (2.2, 16) 10.0 (1.0, 7) (3) AWKIA2413ZZ

- Back door lock assembly
- Outside handle

- Bolt
- Do not reuse

- Back door striker
- Grease

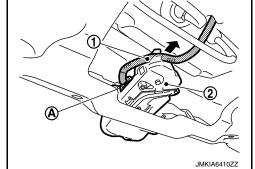
# **DOOR LOCK**

**REMOVAL** 

# DOOR LOCK: Removal and Installation

Remove the back door lower finisher. Refer to INT-46, "BACK DOOR LOWER FINISHER: Removal and Installation".

- 2. Remove back door lock harness (1) from back door lock assembly (2).
- 3. Disconnect the harness connector (A) from the back door lock assembly.



Remove back door lock assembly bolts and back door lock assembly.

#### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

After installation, check back door open/close and lock/unlock operation. **OUTSIDE HANDLE** 

# OUTSIDE HANDLE: Removal and Installation

#### REMOVAL

Remove the back door lower finisher. Refer to INT-46, "BACK DOOR LOWER FINISHER: Removal and Installation".

**DLK-201** Revision: June 2014 2015 Leaf NAM DLK

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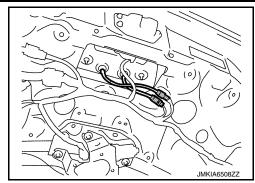
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INFOID:0000000010639885

# **BACK DOOR LOCK**

# < REMOVAL AND INSTALLATION >

2. Disconnect the harness connectors from the outside handle and rear view camera (if equipped).



- 3. Remove outside handle nuts.
- 4. Remove harness grommet from back door panel, then remove the outside handle.

## INSTALLATION

Installation is in the reverse order of removal.

# **CAUTION:**

After installation, check back door open/close and lock/unlock operation.

# **KEY CYLINDER**

## < REMOVAL AND INSTALLATION >

# KEY CYLINDER

# **GLOVE BOX LID KEY CYLINDER**

# GLOVE BOX LID KEY CYLINDER: Removal and Installation

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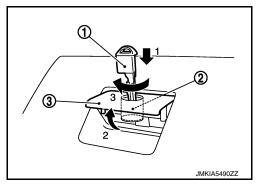
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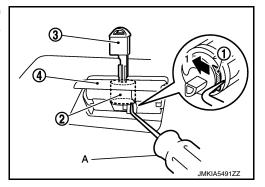
#### REMOVAL

- 1. Insert key (1) into glove box lid lock cylinder (2).
- 2. Pull upward on glove box lid release handle (3).
- 3. Rotate key (1) and turn glove box lid key cylinder (2) to the lock position.



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

When removing glove box lid lock cylinder (2) note the position of cylinder to glove box lid release handle (4).



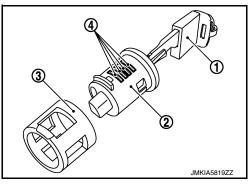
5. Remove sleeve (3) from glove box lid release handle and then install sleeve to glove box lid lock cylinder.

#### NOTE:

When removing sleeve note the position of sleeve to glove box lid release handle.

## **CAUTION:**

Do not pull out key (1) from glove box lid lock cylinder (2) while sleeve (3) is removed. Otherwise, tumblers (4) may be lost from glove box lid lock cylinder.



#### **INSTALLATION**

Installation is 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 >

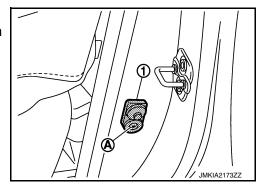
# **DOOR SWITCH**

# Removal and Installation

#### INFOID:0000000010639887

# **REMOVAL**

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



# **INSTALLATION**

Installation is in the reverse order of removal.

# DOOR REQUEST SWITCH < REMOVAL AND INSTALLATION > DOOR REQUEST SWITCH Α **DRIVER SIDE** DRIVER SIDE: Removal and Installation INFOID:0000000010639888 В The door request switch (driver side) is serviced as an assembly with the outside handle. Refer to DLK-194, "OUTSIDE HANDLE: Removal and Installation". PASSENGER SIDE C PASSENGER SIDE: Removal and Installation INFOID:0000000010639889 D The door request switch (passenger side) is serviced as an assembly with the outside handle. Refer to DLK-194, "OUTSIDE HANDLE: Removal and Installation" **BACK DOOR** Е BACK DOOR: Removal and Installation INFOID:0000000010639890 The back door request switch is serviced as an assembly with the back door opener switch. Refer to DLK-213, "Removal and Installation". Н

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Revision: June 2014 DLK-205 2015 Leaf NAM

# **INSIDE KEY ANTENNA**

# < REMOVAL AND INSTALLATION >

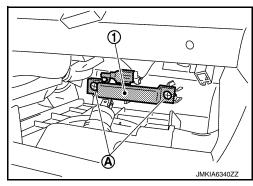
# INSIDE KEY ANTENNA INSTRUMENT CENTER

# **INSTRUMENT CENTER:** Removal and Installation

#### INFOID:0000000010639891

#### REMOVAL

- 1. Remove the cluster lid C. Refer to IP-17, "Removal and Installation".
- 2. Remove the inside key antenna (instrument center) screw (A). **CAUTION:** 
  - Be careful not to drop mounting screw (A) into instrument panel.
- 3. Disconnect the harness connector and remove the inside key antenna (instrument center) (1).



#### **INSTALLATION**

Installation is in the reverse order of removal.

## CENTER CONSOLE

CENTER CONSOLE: Removal and Installation

INFOID:0000000010639892

#### **REMOVAL**

- 1. Remove the shift selector finisher. Refer to IP-28, "Exploded View".
- Disconnect the harness connector from the inside key antenna (center console).
- 3. Remove the inside key antenna (center console) screws and inside key antenna.

#### INSTALLATION

Installation is in the reverse order of removal.

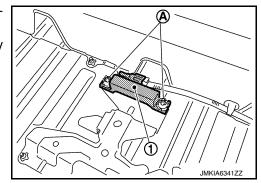
REAR SEAT

**REAR SEAT: Removal and Installation** 

INFOID:0000000010639893

## **REMOVAL**

- 1. Remove the rear seat. Refer to SE-40, "SEAT CUSHION: Removal and Installation".
- Release the inside key antenna (rear seat) clip (A) using a suitable tool.
- 3. Disconnect the harness connector and remove the inside key antenna (rear seat) (1).



## **INSTALLATION**

Installation is in the reverse order of removal.

LUGGAGE ROOM

**LUGGAGE ROOM**: Removal and Installation

INFOID:0000000010639894

#### **REMOVAL**

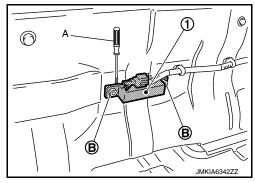
# **INSIDE KEY ANTENNA**

# < REMOVAL AND INSTALLATION >

- 1. Remove the luggage floor board. Refer to INT-41, "LUGGAGE REAR PLATE: Removal and Installation".
- 2. Disconnect the harness connector and remove the inside key antenna (luggage room) (1) using a suitable tool (A).

#### **CAUTION:**

- When removing and installing, use shop cloths to protect the inside key antenna (luggage room) from damage.
- Be aware that mounting clips (B) may pop put.



# **INSTALLATION**

Installation is 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:0000000010639895

The outside key antenna (driver side) is serviced as an assembly with the outside handle. Refer to <u>DLK-194</u>, <u>"OUTSIDE HANDLE: Removal and Installation"</u>.

PASSENGER SIDE

PASSENGER SIDE: Removal and Installation

INFOID:0000000010639896

The outside key antenna (passenger side) is serviced as an assembly with the outside handle. Refer to <u>DLK-194. "OUTSIDE HANDLE: Removal and Installation"</u>.

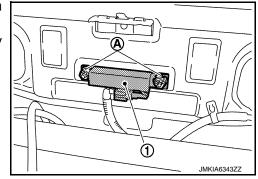
REAR BUMPER

REAR BUMPER: Removal and Installation

INFOID:0000000010639897

#### **REMOVAL**

- Remove the rear bumper fascia. Refer to <u>EXT-17</u>, "Removal and Installation".
- 2. Release the outside key antenna (rear bumper) clip (A) using a suitable tool.
- 3. Disconnect the harness connector and remove the outside key antenna (rear bumper) (1).



## **INSTALLATION**

Installation is in the reverse order of removal.

# INTELLIGENT KEY WARNING BUZZER

# < REMOVAL AND INSTALLATION >

# INTELLIGENT KEY WARNING BUZZER

# Removal and Installation

#### INFOID:0000000010639898

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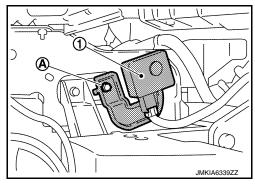
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## **REMOVAL**

- 1. Remove the front bumper fascia. Refer to EXT-13, "Removal and Installation".
- 2. Disconnect the harness connector from the Intelligent Key warning buzzer.
- 3. Remove the Intelligent Key warning buzzer bolt (A) and Intelligent Key warning buzzer (1).



## **INSTALLATION**

Installation is in the reverse order of removal.

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# REMOTE KEYLESS ENTRY RECEIVER

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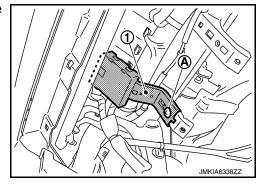
# REMOTE KEYLESS ENTRY RECEIVER

# Removal and Installation

#### INFOID:0000000010639899

## **REMOVAL**

- 1. Remove the glove box assembly. Refer to <u>IP-17</u>, "Removal and Installation"
- 2. Disconnect the harness connector from the remote keyless entry receiver.
- 3. Remove the remote keyless entry receiver bolt (A) and remote keyless entry receiver (1).



## **INSTALLATION**

Installation is in the reverse order of removal.

# INTELLIGENT KEY BATTERY

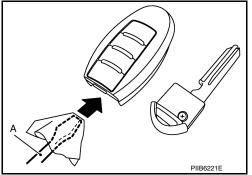
## < REMOVAL AND INSTALLATION >

# INTELLIGENT KEY BATTERY

# Removal and Installation

1. Release the lock knob at the back of the Intelligent Key and remove the mechanical key.

- Insert a suitable tool (A) wrapped with a cloth into the slit of the corner and twist it to separate the upper part from the lower part. CAUTION:
  - Do not touch the circuit board or battery terminal.
  - The key fob is water-resistant. However, if it does get wet, immediately wipe it dry.



3. Replace the battery with new one.

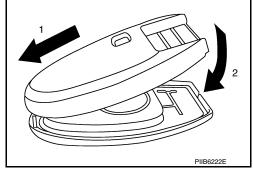
**Battery replacement** 

:Coin-type lithium battery (CR2025)

4. Align the tips of the upper and lower parts, and then push them together until it is securely closed.

## **CAUTION:**

- When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.
- After replacing the battery, check that all Intelligent Key functions work normally.



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# **CHARGE PORT LID OPENER SWITCH**

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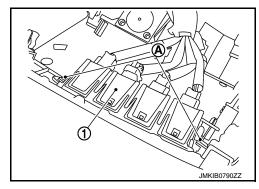
# CHARGE PORT LID OPENER SWITCH

# Removal and Installation

#### INFOID:0000000010639901

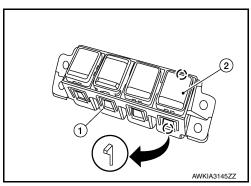
# **REMOVAL**

- 1. Remove instrument lower panel LH. Refer to IP-17, "Removal and Installation".
- 2. Remove the switch finisher screws (A) and switch finisher (1).



3. Remove charge port lid opener switch (2) from switch finisher (1).

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# **INSTALLATION**

Installation is in the reverse order of removal.

# **BACK DOOR OPENER SWITCH ASSEMBLY**

< REMOVAL AND INSTALLATION >

# BACK DOOR OPENER SWITCH ASSEMBLY

# Removal and Installation

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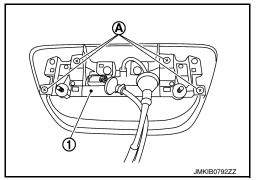
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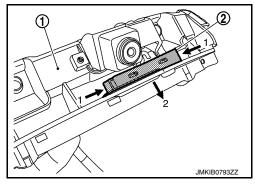
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## **REMOVAL**

- 1. Remove back door outside handle. Refer to <a href="DLK-201">DLK-201</a>, "OUTSIDE HANDLE: Removal and Installation".
- 2. Remove the switch finisher screws (A) and switch finisher (1).



3. Pinch back door opener switch assembly (2) from both side (in the direction shown by arrow 1) and disengage tab. Press toward outside (in the direction shown by arrow 2) to remove from back door outside handle (1).



## **INSTALLATION**

Installation is in the reverse order of removal.

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