

SECTION DLK
DOOR & LOCK

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WITH INTELLIGENT KEY SYSTEM

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PRECAUTION

PRECAUTIONS

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

INFOID:000000012423486

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

WARNING:

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

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

WARNING:

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

Precaution for Servicing Doors and Locks

INFOID:000000012423487

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 area.
 - Then dip a cloth into fresh water, wring the water out of the cloth and wipe the detergent off.
 - Then rub with a soft, dry cloth.
- Do not use organic solvent such as thinner, benzene, alcohol or gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

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PRECAUTIONS

[WITH INTELLIGENT KEY SYSTEM]

< PRECAUTION >

Precaution for Work

INFOID:000000012918338

- 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 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

[WITH INTELLIGENT KEY SYSTEM]

< PREPARATION >

PREPARATION

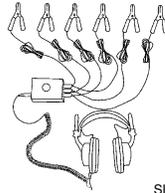
PREPARATION

Special Service Tool

INFOID:000000012423488

The actual shape of the tools may differ from those illustrated here.

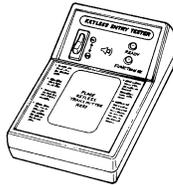
Tool number (TechMate No.) Tool name	Description
— (J-39570) Chassis Ear	Locating the noise
— (J-50397) NISSAN Squeak and Rattle Kit	Repairing the cause of noise
— (J-43241) Remote Keyless Entry Tester	Used to test keyfobs
— (J-50190) Signal Tech II	<ul style="list-style-type: none"> • Activate and display TPMS transmitter IDs • Display tire pressure reported by the TPMS transmitter • Read TPMS DTCs • Register TPMS transmitter IDs • Check Intelligent Key relative signal strength • Confirm vehicle Intelligent Key antenna signal strength • Compatible with future sensors • Equipped with a display



SIIA0993E



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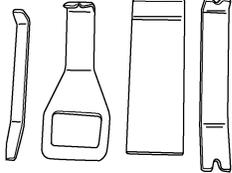
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PREPARATION

< PREPARATION >

[WITH INTELLIGENT KEY SYSTEM]

Tool number (TechMate No.) Tool name	Description
KV48105501 (J-45295-A) Transmitter Activation Tool  ALEIA0183ZZ	<ul style="list-style-type: none"> • Activate TPMS transmitter IDs • Compatible with future sensors • Equipped with a display (KV48105501 only)
— (J-46534) Trim Tool Set  AWJIA0483ZZ	Removing trim components

Commercial Service Tool

INFOID:0000000012423489

(TechMate No.) Tool name	Description
(J-39565) Engine Ear  SIIA0995E	Locating the noise
(—) Power Tool  PIIB1407E	Loosening nuts, screws and bolts

COMPONENT PARTS

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

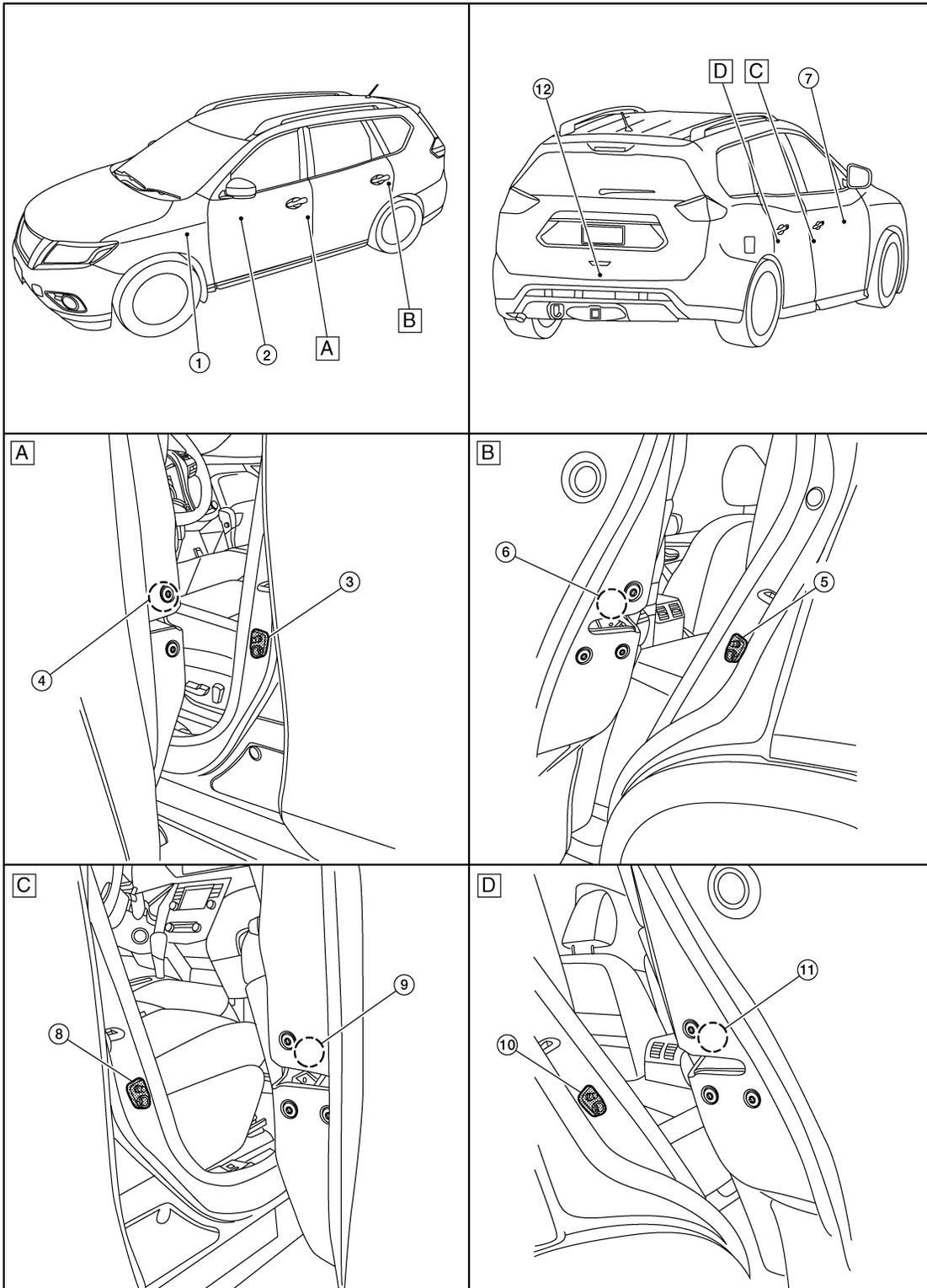
SYSTEM DESCRIPTION

COMPONENT PARTS

POWER DOOR LOCK SYSTEM

POWER DOOR LOCK SYSTEM : Component Parts Location

INFOID:000000012423490



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COMPONENT PARTS

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

No.	Component	Function
1.	BCM	Controls the door lock system. Refer to BCS-7. "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location
2.	Main power window and door lock/unlock switch	DLK-23. "Door Lock and Unlock Switch (Driver Side)"
3.	Front door switch LH	DLK-26. "Front Door Switch"
4.	Front door lock assembly LH	DLK-26. "Front Door Lock Assembly (LH)"
5.	Rear door switch LH	DLK-26. "Rear Door Switch"
6.	Rear door lock actuator LH	Rear door lock actuator locks/unlocks the rear door latch assembly.
7.	Power window and door lock/unlock switch RH	DLK-23. "Door Lock and Unlock Switch (Passenger Side)"
8.	Front door switch RH	DLK-26. "Front Door Switch"
9.	Front door lock actuator RH	Rear door lock actuator locks/unlocks the rear door latch assembly.
10.	Rear door switch RH	DLK-26. "Rear Door Switch"
11.	Rear door lock actuator RH	Rear door lock actuator locks/unlocks the rear door latch assembly.
12.	Back door lock assembly (door ajar switch)	DLK-22. "Back Door Lock Assembly"

INTELLIGENT KEY SYSTEM

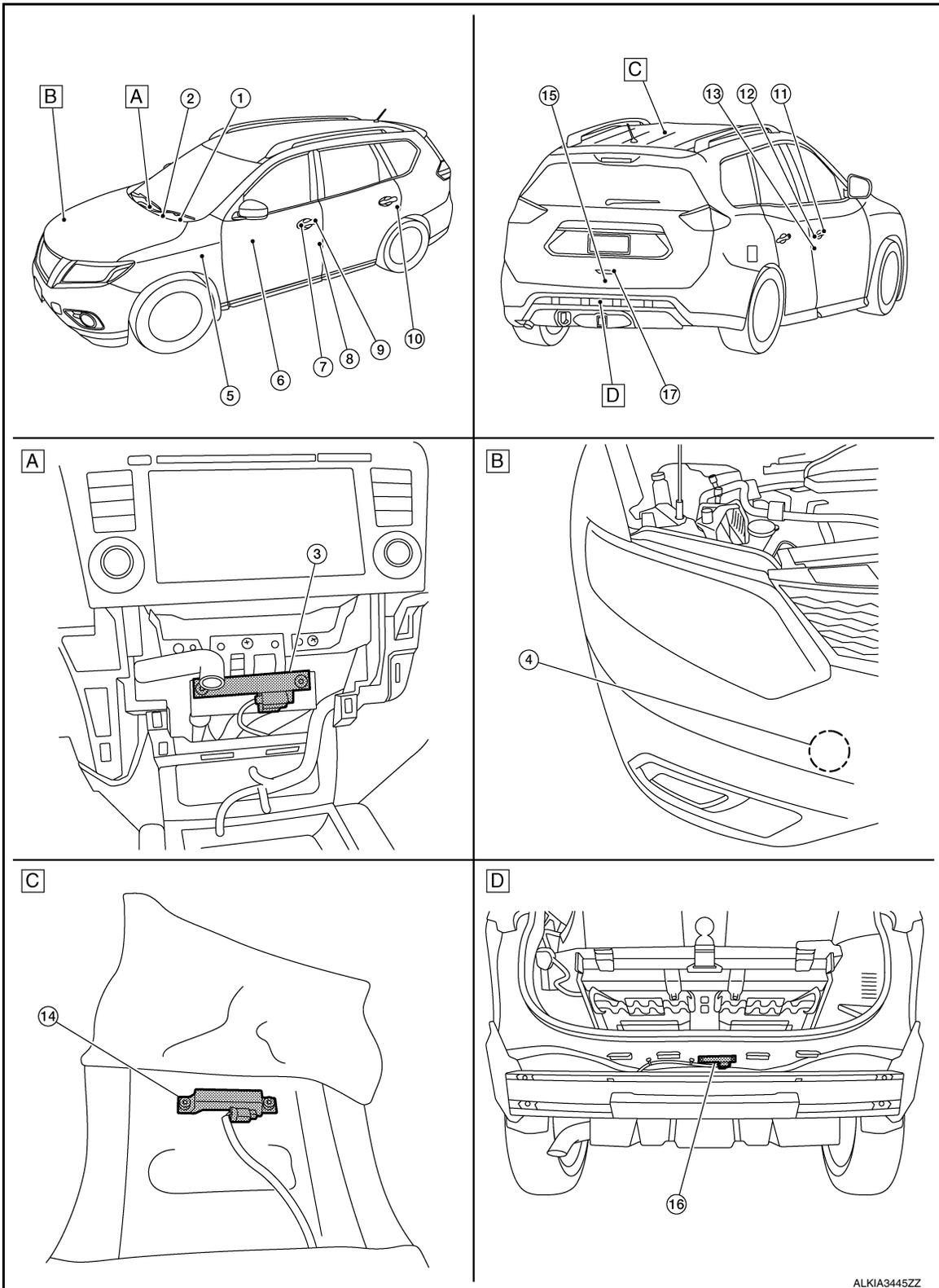
COMPONENT PARTS

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM : Component Parts Location

INFOID:000000012423491



A. View with A/C Switch (auto A/C) or front air control (manual A/C) assembly removed.

C. View of center of rear floor behind console.

D. View with rear bumper fascia removed.

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COMPONENT PARTS

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

No.	Component	Function
1.	Combination meter	Combination meter transmits the vehicle speed signal to BCM via CAN communication. BCM also receives the vehicle speed signal from ABS actuator and electric unit (control unit) via CAN communication. BCM compares both signals to detect the vehicle speed. Security indicator lamp is located on combination meter. Security indicator lamp blinks when ignition switch is in any position other than ON to warn that NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS [NVIS (NATS)] is on board. Refer to MWI-6, "METER SYSTEM : Component Parts Location" .
2.	Push-button ignition switch	Push-button ignition switch has push switch inside which detects that push-button ignition switch is pressed, and then transmits ON/OFF signal to BCM. BCM changes the ignition switch position with the operation of push-button ignition switch. BCM maintains the ignition switch position status while push-button ignition switch is not operated.
3.	Inside key antenna (instrument center)	Inside key antenna (instrument center) detects whether Intelligent Key is inside the vehicle or not, and then transmits the signal to the BCM. Refer to DLK-24, "Inside Key Antenna (Instrument Center)" .
4.	Intelligent Key warning buzzer	Intelligent Key warning buzzer warns the user, who is outside the vehicle, of operation confirmation according to Intelligent Key operation and door request switch operation, or of an inappropriate operation.
5.	BCM	BCM controls INTELLIGENT KEY SYSTEM (ENGINE START FUNCTION), NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS [NVIS (NATS)] and VEHICLE SECURITY SYSTEM. BCM performs the ID verification between BCM and Intelligent Key when the Intelligent Key is carried into the detection area of inside key antenna, and push-button ignition switch is pressed. If the ID verification result is OK, ignition switch operation is available. Then, when the ignition switch is turned ON, BCM performs ID verification between BCM and ECM. If the ID verification result is OK, ECM can start engine. Refer to BCS-7, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
6.	Main power window and door lock/unlock switch	Door lock and unlock switch is integrated into the main power window and door lock/unlock switch. Door lock and unlock switch transmits door lock/unlock operation signal to BCM. Refer to PWC-7, "Main Power Window And Door Lock/Unlock Switch" .
7.	Outside key antenna LH	Outside key antenna (LH) detects whether Intelligent Key is outside the vehicle or not, and then transmits the signal to the BCM. Refer to DLK-24, "Outside Key Antenna (LH)" .
8.	Front door lock assembly LH	Door key cylinder switch is integrated into front door lock assembly (driver side). Door key cylinder switch detects door LOCK/UNLOCK operation using mechanical key, and then transmits the operation signal to BCM. Refer to DLK-26, "Front Door Lock Assembly (LH)" .
9.	Door request switch LH	Door request switch transmits door lock/unlock request signal to the BCM.
10.	Rear door lock actuator LH	Rear door lock actuator locks/unlocks the rear door latch assembly.
11.	Outside key antenna RH	Outside key antenna (RH) detects whether Intelligent Key is outside the vehicle or not, and then transmits the signal to the BCM. Refer to DLK-25, "Outside Key Antenna (RH)" .
12.	Door request switch RH	Door request switch transmits door lock/unlock request signal to the BCM.
13.	Door switch RH	Door switch detects door open/close condition and then transmits ON/OFF signal to BCM.
14.	Inside key antenna (console)	Inside key antenna (console) detects whether Intelligent Key is inside the vehicle or not, and then transmits the signal to the BCM. Refer to DLK-24, "Inside Key Antenna (Console)" .
15.	Back door lock assembly	Back door lock actuator locks/unlocks the back door latch assembly.

COMPONENT PARTS

< SYSTEM DESCRIPTION >

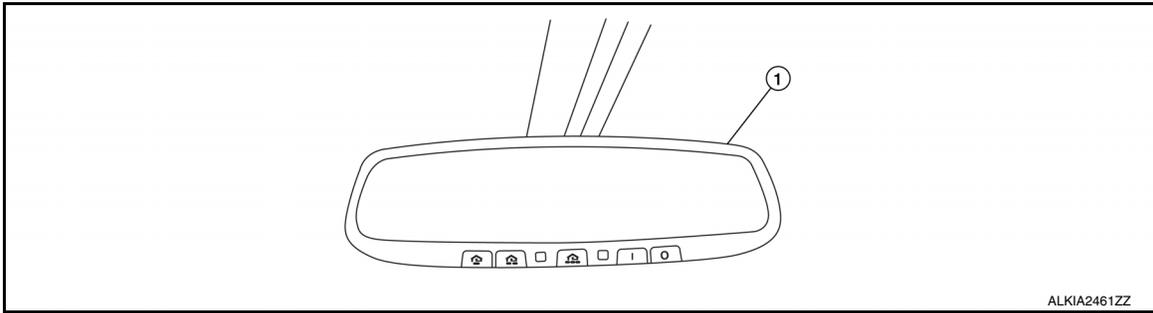
[WITH INTELLIGENT KEY SYSTEM]

No.	Component	Function
16.	Outside key antenna (rear bumper)	Outside key antenna (Rear bumper) detects whether Intelligent Key is outside the vehicle or not, and then transmits the signal to the BCM. Refer to DLK-24, "Outside Key Antenna (Rear Bumper)" .
17.	Back door opener switch	Back door request switch transmits door lock/unlock request signal to the BCM.

INTEGRATED HOMELINK TRANSMITTER

INTEGRATED HOMELINK TRANSMITTER : Component Parts Location

INFOID:000000012423492



No.	Component	Function
1.	Auto anti-dazzling inside mirror	DLK-27, "Integrated Homelink Transmitter"

AUTOMATIC BACK DOOR SYSTEM

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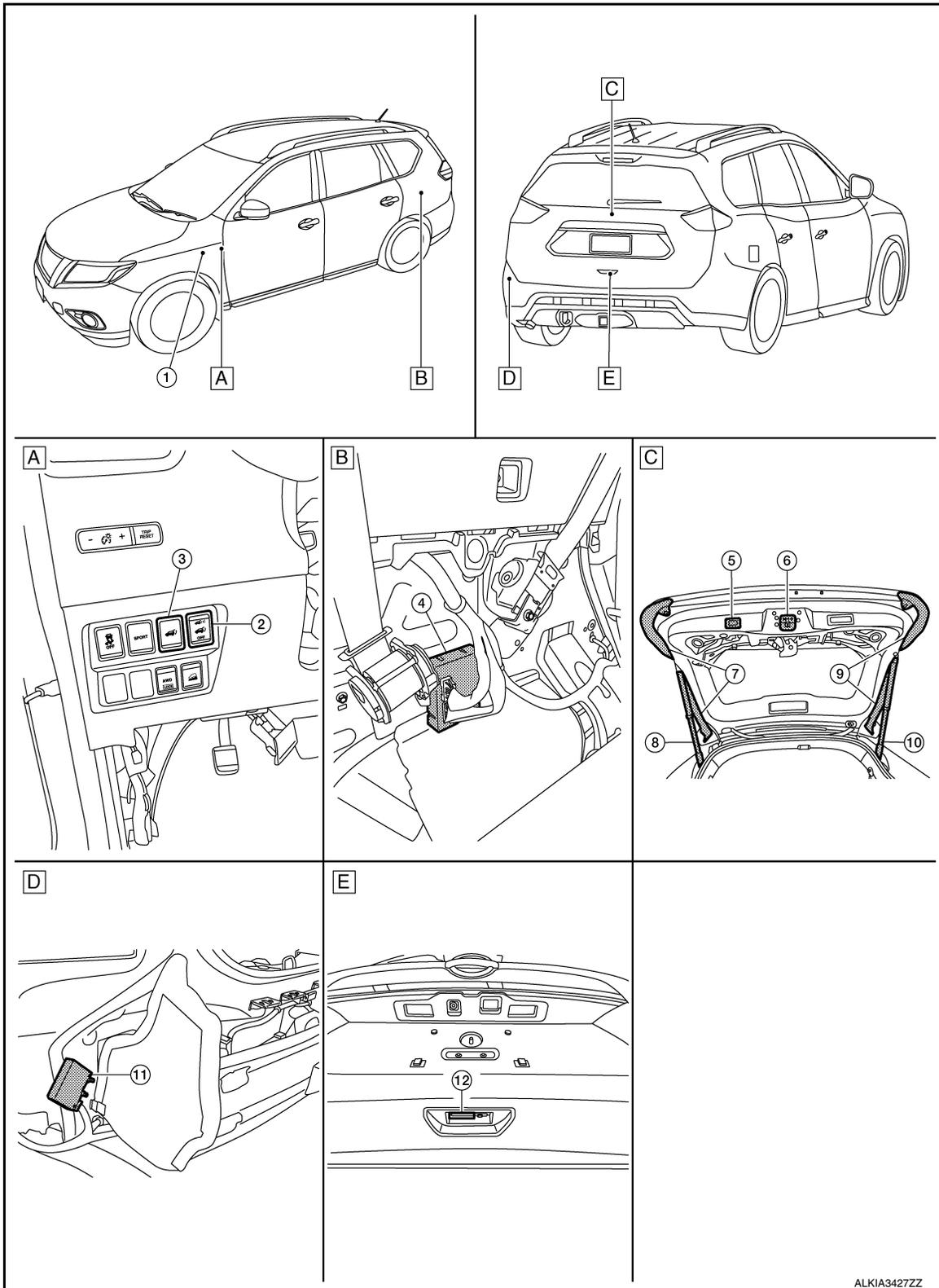
COMPONENT PARTS

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

AUTOMATIC BACK DOOR SYSTEM : Component Parts Location

INFOID:000000012998297



ALKIA3427ZZ

- A. View of LH side of instrument panel. B. View with luggage side lower finisher removed. C. View of back door open.
 D. View with rear fascia removed. E. View of back door.

COMPONENT PARTS

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

No.	Component	Function
1.	BCM	Transmits and receives signal to the automatic back door control module. Refer to BCS-7, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
2.	Automatic back door main switch	DLK-21, "Automatic Back Door Main Switch"
3.	Automatic back door switch	DLK-21, "Automatic Back Door Switch"
4.	Automatic back door control module	DLK-21, "Automatic Back Door Control Unit"
5.	Automatic back door close switch	DLK-22, "Automatic Back Door Close Switch"
6.	Back door lock assembly	DLK-22, "Back Door Lock Assembly"
7.	Touch sensor LH	DLK-23, "Back Door Touch Sensor"
8.	Spindle unit LH	DLK-26, "Spindle Unit"
9.	Touch sensor RH	DLK-23, "Back Door Touch Sensor"
10.	Spindle unit RH	DLK-26, "Spindle Unit"
11.	Automatic back door warning buzzer	DLK-22, "Automatic Back Door Warning Buzzer"
12.	Back door opener switch	DLK-23, "Automatic Back Door Opener Switch"

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Automatic Back Door Control Unit

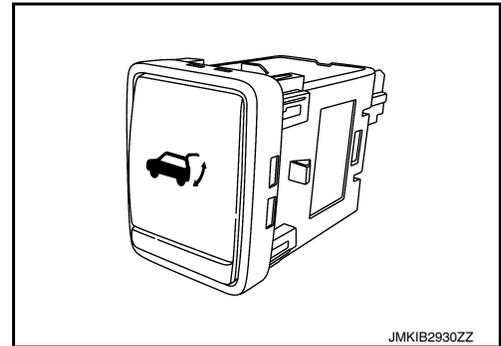
INFOID:000000012807471

- Automatic back door control unit controls the automatic back door system.
- Automatic back door control unit is installed behind luggage side lower finisher LH.

Automatic Back Door Switch

INFOID:000000012807472

- When automatic back door switch is pressed, back door auto open/close operation is detected and transmits automatic back door switch signal to automatic back door control unit. Pressing the switch while the automatic back door is in motion will stop the movement.
- Automatic back door switch is installed in the instrument lower panel LH.

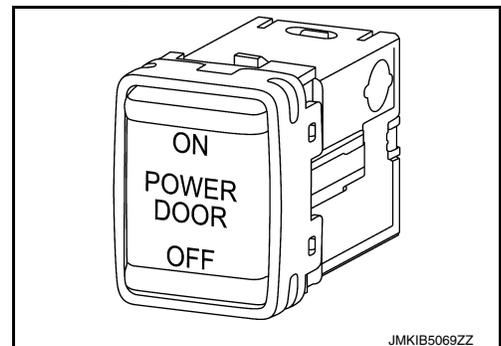


DLK

Automatic Back Door Main Switch

INFOID:000000012807473

- Controls automatic back door open/close operation of automatic back door open/close function.
- Automatic back door main switch is installed in the instrument lower panel LH.



COMPONENT PARTS

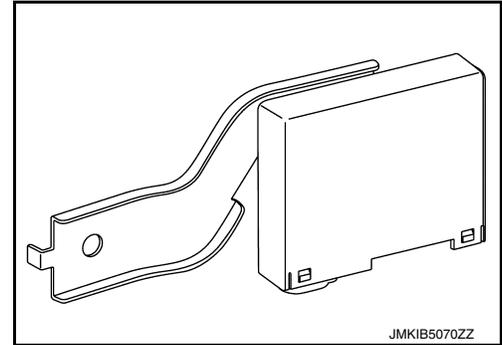
< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Automatic Back Door Warning Buzzer

INFOID:000000012807474

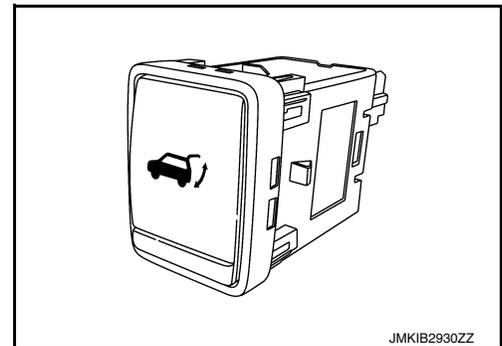
- Warns the user of the automatic back door condition and inappropriate operations with the buzzer sounds.
- Automatic back door warning buzzer is installed behind rear bumper fascia assembly.



Automatic Back Door Close Switch

INFOID:000000012807475

- When automatic back door close switch is pressed, back door auto close or reverse operation is detected and transmits automatic back door close switch signal to automatic back door control unit.
- Automatic back door close switch is installed in the back door inner finisher.

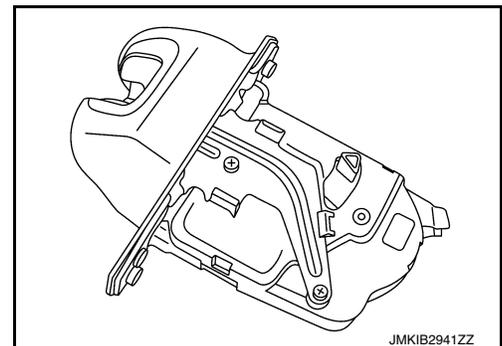


Back Door Lock Assembly

INFOID:000000012807476

WITHOUT AUTOMATIC BACK DOOR SYSTEM MODELS

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



WITH AUTOMATIC BACK DOOR SYSTEM MODELS

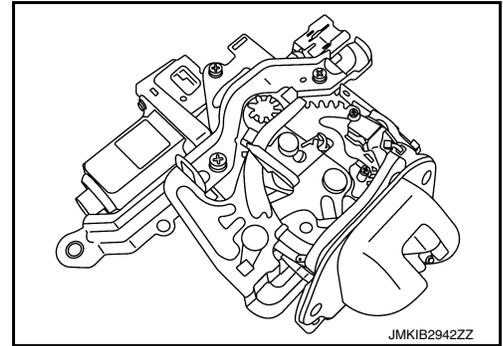
- Back door lock assembly integrates back door closure motor, half latch switch, open switch, close switch and back door switch.
- Closure motor: Inputs open/close signal from automatic back door control unit and activates the back door auto closure operation.
- Half latch switch: Detects the half latch status of back door.
- Open switch: Detects the open status of back door.
- Close switch: Detects the fully closed status of back door.
- Back door switch: Detects open/close status of back door.

COMPONENT PARTS

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

- Back door lock assembly is installed in the back door panel.



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Automatic Back Door Opener Switch

INFOID:000000012423500

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

- Detects open operation of automatic back door.
- Transmits automatic back door opener switch signal to automatic back door control module.

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Back Door Touch Sensor

INFOID:000000012423501

During back door close operation, the touch sensor detects any trapped foreign material.

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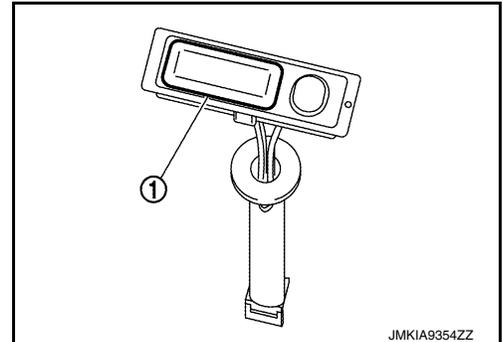
Back Door Opener Switch

INFOID:000000012423502

- Back door opener switch (1) transmits back door opener switch signal to BCM.
- Back door opener switch (1) is integrated in outside handle (back door).

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Back Door Request Switch

INFOID:000000012423503

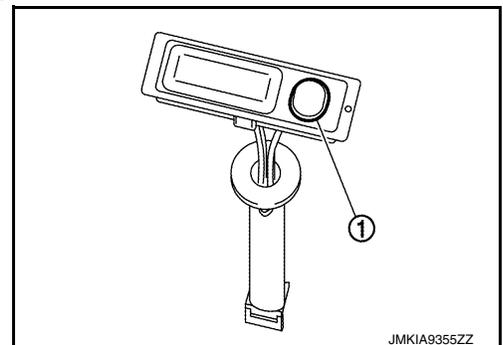
- Back door request switch (1) transmits back door request switch signal to BCM.
- Back door request switch (1) is integrated in outside handle (back door).

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Door Lock and Unlock Switch (Driver Side)

INFOID:000000012423504

- Door lock and unlock switch transmits door lock/unlock signal operation to BCM.
- Door lock and unlock switch is Integrated in the main power window and door lock/unlock switch.

Door Lock and Unlock Switch (Passenger Side)

INFOID:000000012423505

- Door lock and unlock switch transmits door lock/unlock signal operation to BCM.

COMPONENT PARTS

< SYSTEM DESCRIPTION >

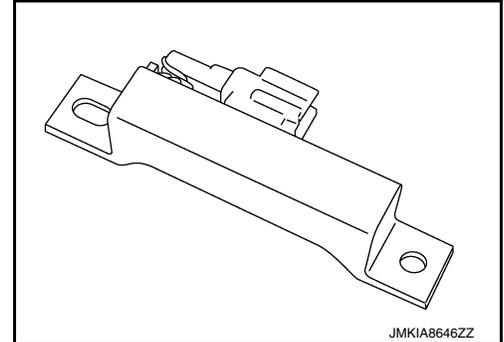
[WITH INTELLIGENT KEY SYSTEM]

- Door lock and unlock switch is Integrated in the power window and door lock/unlock switch RH.

Inside Key Antenna (Instrument Center)

INFOID:000000012423506

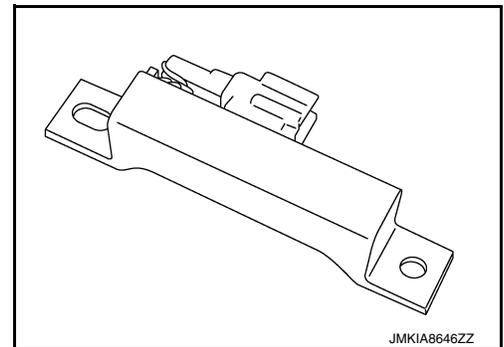
- Inside key antenna (instrument center) detects that Intelligent Key is within the inside detection area, and then transmits detection status to BCM.



Inside Key Antenna (Console)

INFOID:000000012423507

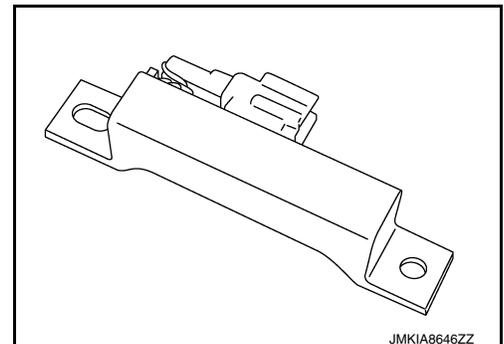
- Inside key antenna (console) detects that Intelligent Key is within the inside detection area, and then transmits detection status to BCM.



Outside Key Antenna (Rear Bumper)

INFOID:000000012423508

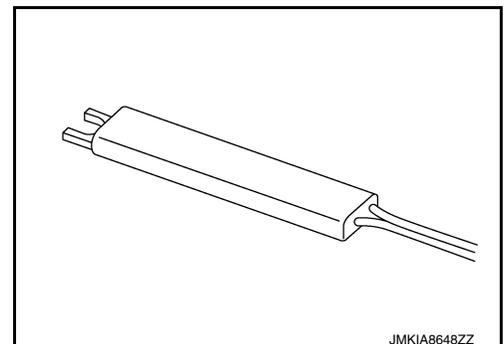
- Outside key antenna (rear bumper) detects that Intelligent Key is within the outside detection area, and then transmits detection status to BCM. Request signal is transmitted simultaneously to Intelligent Key.
- Outside key antenna (rear bumper) is installed in the rear of rear bumper.



Outside Key Antenna (LH)

INFOID:000000012423509

- 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 driver side outside handle.



COMPONENT PARTS

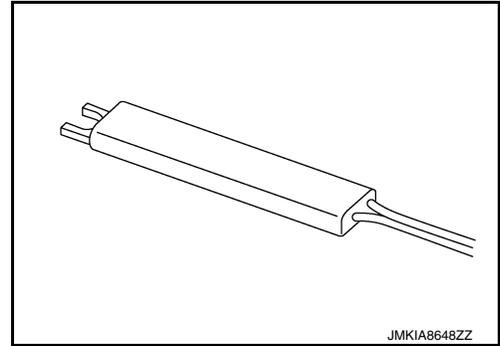
< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Outside Key Antenna (RH)

INFOID:000000012423510

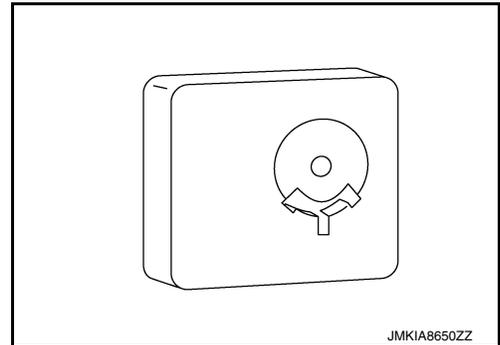
- Outside key antenna (RH) detects that Intelligent Key is within the outside detection area, and then transmits detection status to BCM. Request signal is transmitted simultaneously to Intelligent Key.
- Outside key antenna (RH) is installed in passenger side outside handle.



Intelligent Key Warning Buzzer

INFOID:000000012423511

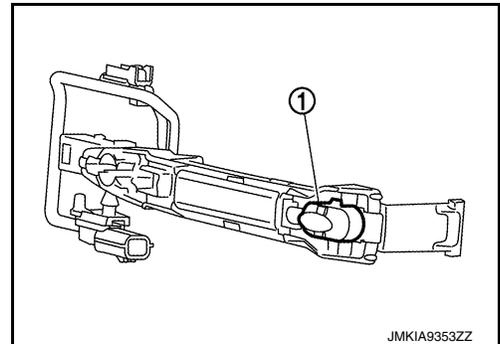
- Intelligent Key warning buzzer warns the user, who is outside vehicle, of operation confirmation according to Intelligent Key operation and door request switch operation, or of an inappropriate operation.
- Intelligent Key warning buzzer is installed in the rear of front bumper and behind RH headlight.



Front Door Request Switch (LH)

INFOID:000000012423512

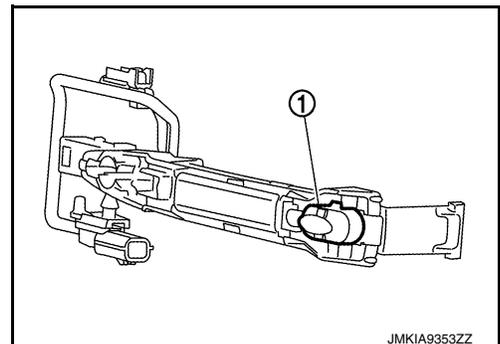
- Front door request switch (LH) transmits door request switch signal to BCM.
- Front door request switch (LH) (1) is integrated in driver side outside handle.



Front Door Request Switch (RH)

INFOID:000000012423513

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



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COMPONENT PARTS

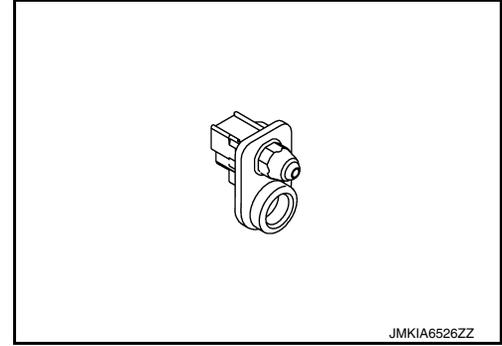
< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Front Door Switch

INFOID:000000012423514

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

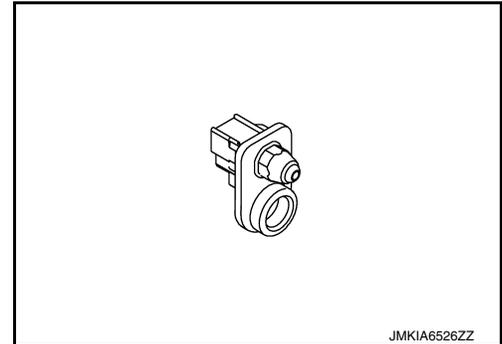


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Rear Door Switch

INFOID:000000012423515

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

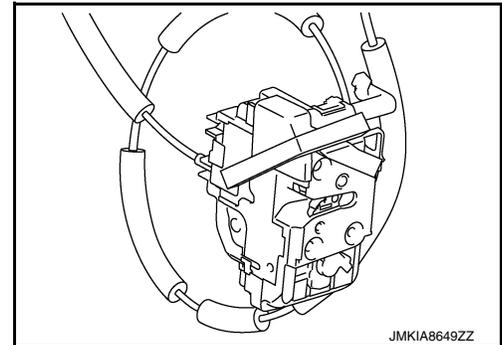


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Front Door Lock Assembly (LH)

INFOID:000000012423516

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

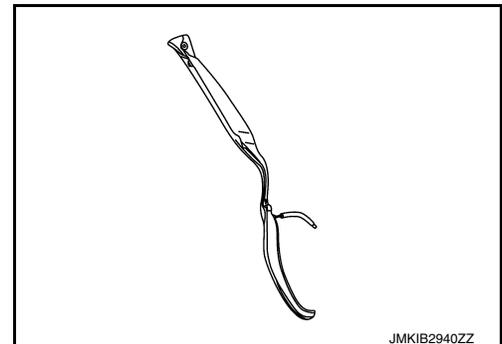


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Touch Sensor

INFOID:000000012807478

During back door close operation, the touch sensor detects any trapped foreign material.



JMKIB2940ZZ

Spindle Unit

INFOID:000000012807477

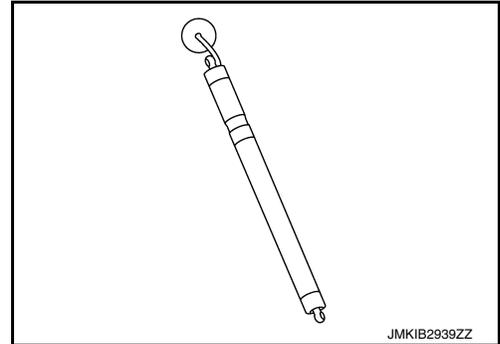
- Spindle unit integrates encoder

COMPONENT PARTS

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

- Encoder: Automatic back door control unit receives the pulse signals from encoders A and B that occurred due to synchronization with the back door operation. The automatic back door control unit calculates the back door position, operation direction, and operation speed according to the received pulse signals.
- Spindle motor: Inputs open/close signal from automatic back door control unit and activates the automatic back door open/close operation.



Integrated Homelink Transmitter

INFOID:0000000012423518

Within the Homelink® transmitter a maximum of 3 radio signals can be stored and transmitted to operate the garage door, etc.

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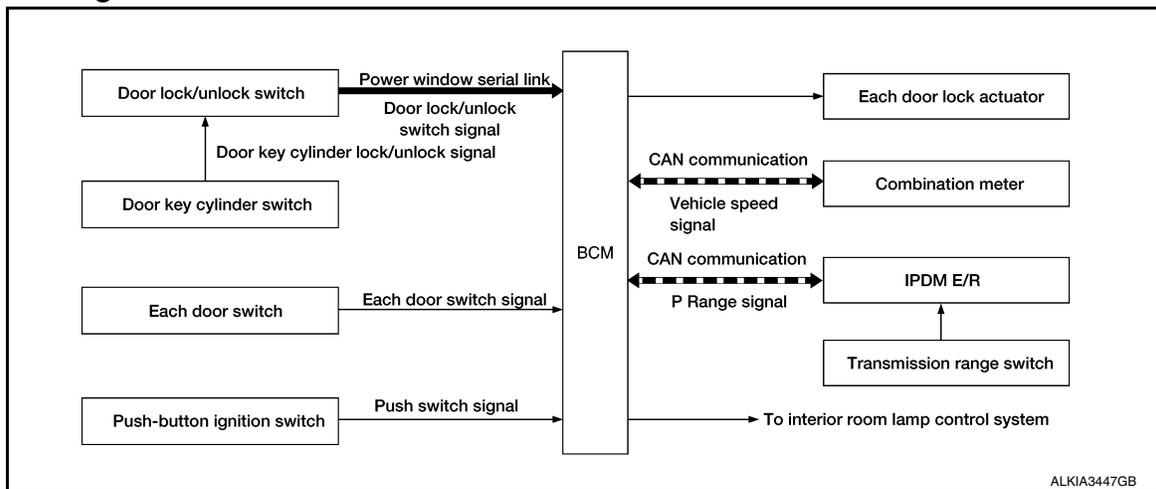
SYSTEM (POWER DOOR LOCK SYSTEM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

SYSTEM (POWER DOOR LOCK SYSTEM)

System Diagram



System Description

INFOID:000000012423520

DOOR LOCK FUNCTION

Door Lock and Unlock Switch

- The door lock and unlock switch (driver side) is built into main power window and door lock/unlock switch.
- The door lock and unlock switch (passenger side) 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 actuator are unlocked.

Door Key Cylinder Switch

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

Selective unlock operation mode can be changed using CONSULT.

Refer to [BCS-17, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

IGNITION POSITION WARNING FUNCTION

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

INTERIOR ROOM LAMP CONTROL FUNCTION

Interior room lamp is controlled according to door lock/unlock state, refer to [INL-7, "INTERIOR ROOM LAMP CONTROL SYSTEM : System Description"](#).

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (LOCK OPERATION)

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

Vehicle Speed Sensing Auto Door Lock

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

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

P Range Interlock Door Lock

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

SYSTEM (POWER DOOR LOCK SYSTEM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

BCM outputs the lock signal to all door lock actuators when it detects that the ignition switch is in the ON position, all doors are closed and the shift signal received from the park position switch when shifted from the P (Park) position to any position other than P (Park).

Setting change of Automatic Door Lock/Unlock Function

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

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.

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. Ignition switch: OFF→ON
3. Press and hold the door lock and unlock switch for 5 seconds or more in the lock direction within 20 seconds after turning the ignition switch ON.
4. The switching complete when the hazard lamp blinks.

OFF → ON : 2 blinks

ON → OFF : 1 blink

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (UNLOCK OPERATION)

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

IGN OFF Interlock Door Unlock

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

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

P Range Interlock Door Unlock

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

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

Setting change of Automatic Door Lock/Unlock Function

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

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.

Without CONSULT

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

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

OFF → ON : 2 blinks

ON → OFF : 1 blink

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SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

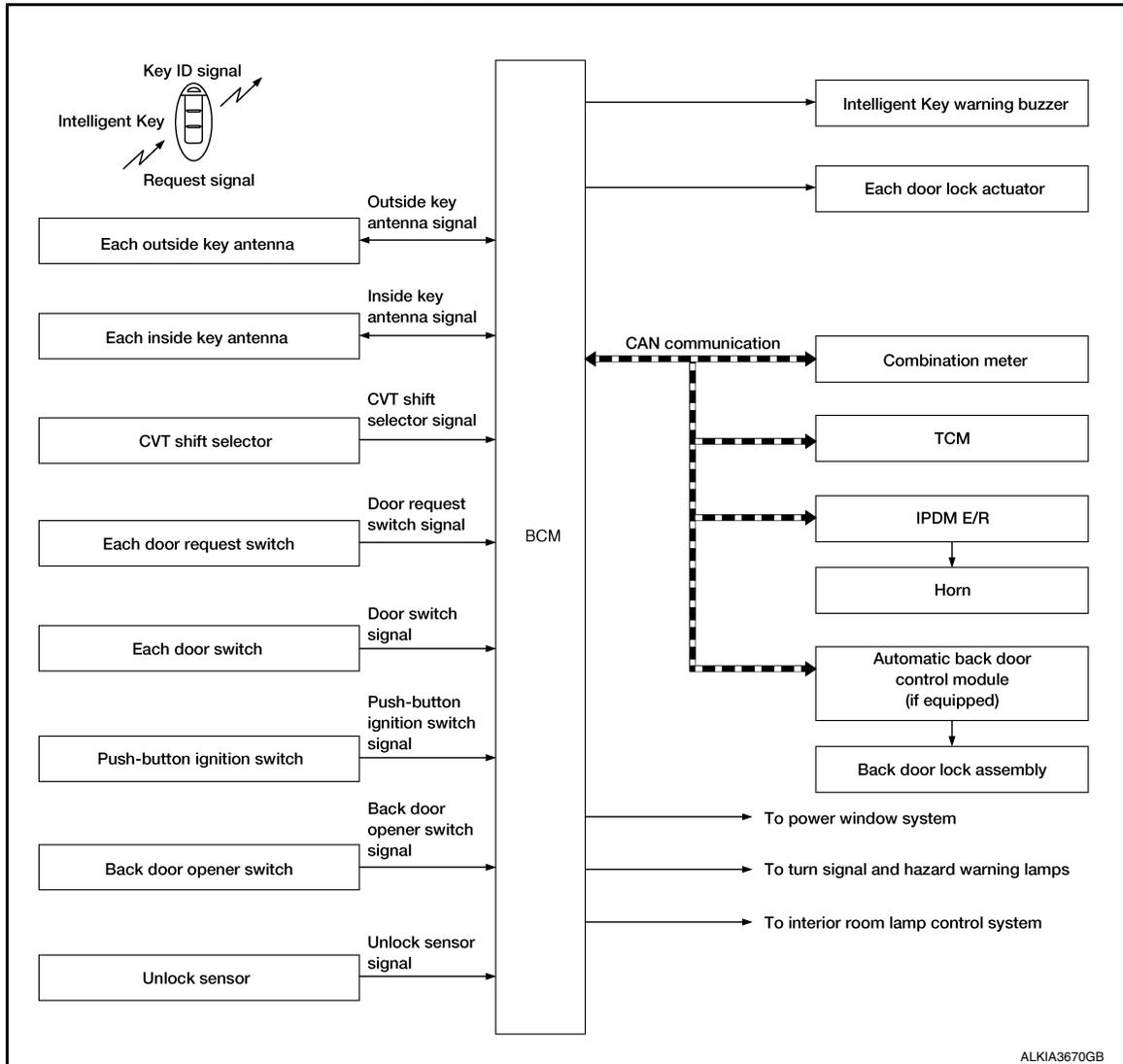
[WITH INTELLIGENT KEY SYSTEM]

SYSTEM (INTELLIGENT KEY SYSTEM)

INTELLIGENT KEY SYSTEM

INTELLIGENT KEY SYSTEM : System Diagram

INFOID:000000012423521



INTELLIGENT KEY SYSTEM : System Description

INFOID:000000012423522

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

CAUTION:

The driver should always carry the Intelligent Key.

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

Function	Description	Refer
Door lock	Lock/unlock can be performed by pressing the request switch.	DLK-30
Back door opener	The back door can be opened by carrying the Intelligent Key and pressing the back door opener switch.	DLK-33
Remote keyless entry	Lock/unlock can be performed by pressing the remote controller button of the Intelligent Key.	DLK-31

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

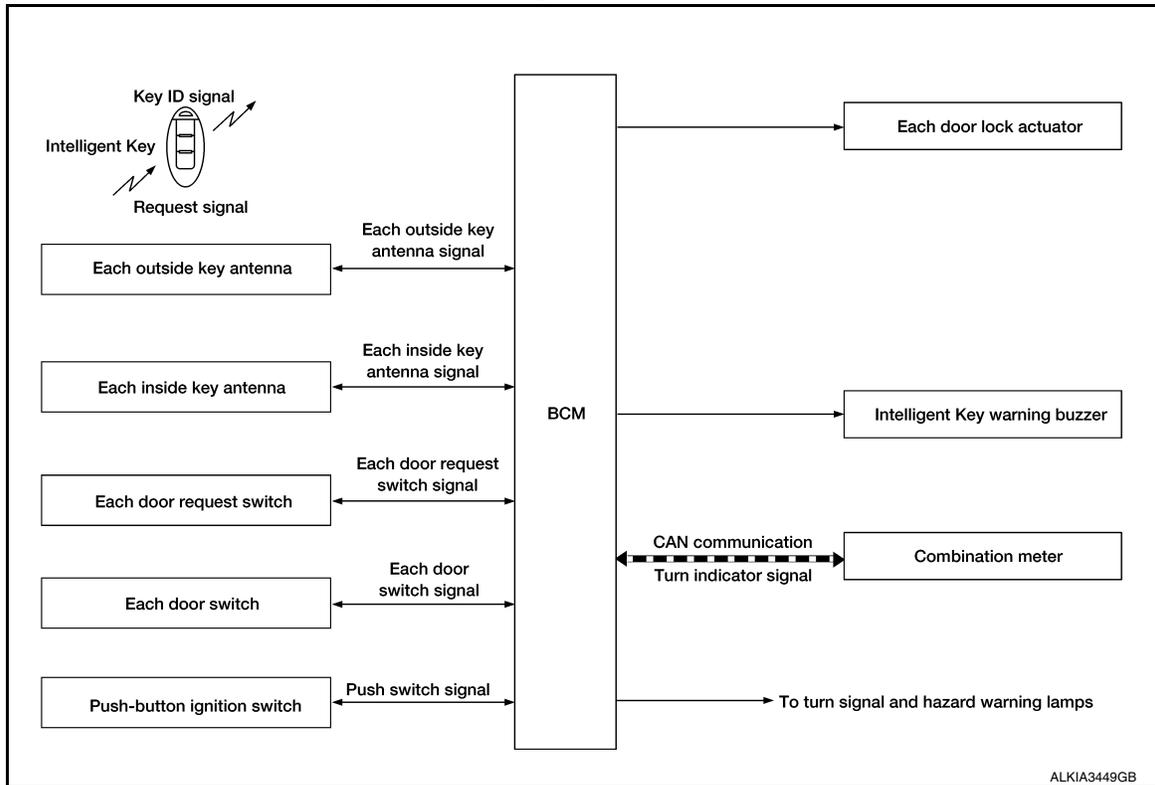
[WITH INTELLIGENT KEY SYSTEM]

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-37
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-37
Interior room lamp control	Interior room lamp is controlled according to door lock/unlock state.	DLK-30
Panic alarm	When Intelligent Key panic alarm button is pressed, horn sounds.	DLK-37

DOOR LOCK FUNCTION

DOOR LOCK FUNCTION : System Diagram

INFOID:0000000012423523



DOOR LOCK FUNCTION : System Description

INFOID:0000000012423524

Only 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. 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.
- BCM receives the key ID signal and compares it with the registered key ID.
- BCM locks/unlocks each doors (except back door).
- BCM sounds Intelligent Key warning buzzer (lock: 2 times, unlock: 1 time) and blinks hazard warning lamps (lock: 2 times, unlock: 1 time) at the same time as a reminder.

OPERATION CONDITION

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

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SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

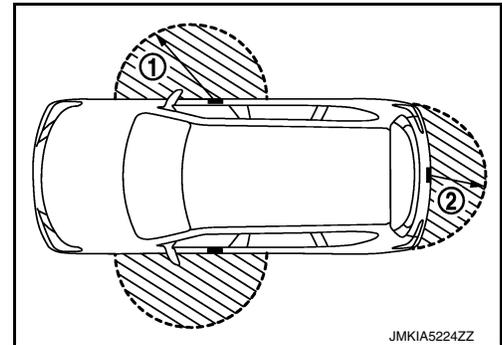
[WITH INTELLIGENT KEY SYSTEM]

Each door request switch operation	Operation condition
Lock	<ul style="list-style-type: none"> All doors are closed. Panic alarm is not activated. P (Park) position warning is not activated. Intelligent Key is outside the vehicle. Intelligent Key is within outside key antenna detection area*.
Unlock	<ul style="list-style-type: none"> Panic alarm is not activated. Intelligent Key is outside the vehicle. Intelligent Key is within outside key antenna detection area*.

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

OUTSIDE KEY ANTENNA DETECTION AREA

The outside key antenna detection area of door lock/unlock function is in the range of approximately 80 cm (31.50 in) surrounding the driver, passenger door handles (1) 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 (driver side, passenger side, back door), all doors are locked.

Unlock Operation

- When an UNLOCK signal from driver side door request switch is transmitted, driver side door are unlocked. When another UNLOCK signal is transmitted within 60 seconds, all other doors (except back door) are unlocked.
- When an UNLOCK signal from passenger side door request switch is transmitted, passenger side door is unlocked. When another UNLOCK signal is transmitted within 60 seconds, all other doors (except back door) are unlocked.
- When an UNLOCK signal from back door request switch is transmitted, back door open permission is set. When another UNLOCK signal is transmitted within 60 seconds, all doors (except back door) are unlocked.

How To Change Selective Unlock Operation Mode

Selective unlock operation mode can be changed using CONSULT.

Refer to [BCS-22. "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

HAZARD AND BUZZER REMINDER FUNCTION

During lock or unlock operation by each door request switch, the hazard warning lamps and Intelligent Key warning buzzer blinks or honks as a reminder.

Operating Function Of Hazard And buzzer Reminder

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

Hazard and buzzer reminder does not operate in the following conditions:

- Ignition switch position is ON.
- Door is open (only lock operation).

How To Change Hazard And Buzzer Reminder Mode

Hazard and buzzer reminder mode can be changed using CONSULT.

Refer to [BCS-22. "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

SYSTEM (INTELLIGENT KEY SYSTEM)

[WITH INTELLIGENT KEY SYSTEM]

< 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 style="list-style-type: none"> • Door switch is ON (door is open). • Door is locked. • Push switch is pressed.
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How To Change Auto Door Lock Operation Mode

Auto door lock operation mode can be changed using CONSULT.

Refer to [BCS-22, "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

LIST OF OPERATION RELATED PARTS

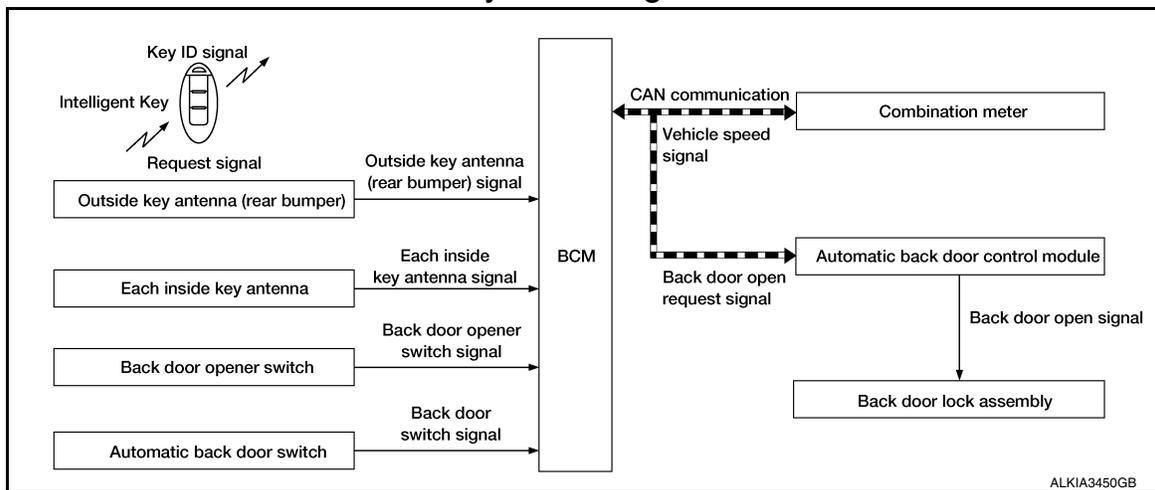
Parts marked with × are the parts related to operation.

Function	Intelligent Key	Door switch	Door request switch	Door lock actuator	Inside key antenna	Outside key antenna	CAN communication system	BCM	Hazard warning lamp	Intelligent Key warning buzzer	Push-button ignition switch
Door lock/unlock function	×	×	×	×	×	×		×			
Hazard reminder function							×	×	×	×	
Selective unlock function	×		×	×	×	×		×			
Auto door lock function	×			×				×			×

BACK DOOR OPEN FUNCTION

BACK DOOR OPEN FUNCTION : System Diagram

INFOID:0000000012423525



DLK

BACK DOOR OPEN FUNCTION : System Description

INFOID:0000000012423526

This section describes the operation of the back door opener switch.

- 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 (except back door) 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

SYSTEM (INTELLIGENT KEY SYSTEM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

While back door open in the permitted state, back door opens when back door opener switch is pressed after back door request switch is operated. Back door open also can be operated according to the following procedure.

- When the BCM detects that back door opener switch is pressed, it activates the outside key antenna (rear bumper) and inside key antenna and transmits the request signal to the Intelligent Key and then, checks 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.
- BCM receives the key ID signal and compares it with the registered key ID.
- If the verification result is OK, BCM transmits the back door open request signal to automatic back door control module via CAN communication.
- Automatic back door control module transmits back door open request signal to back door lock assembly and back door is open.
- When the back door is open, automatic back door system performs waiting operation for next back door close operation.

The operation of then back door open is the same as the automatic back door system, refer to [DLK-41, "System Diagram"](#).

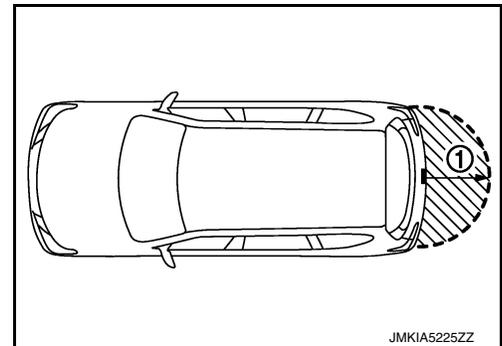
OPERATION CONDITION

If the following conditions are not satisfied, back door open operation is not performed even if the back door opener switch is operated.

Back door opener switch operation	Operation condition
Back door open	<ul style="list-style-type: none"> • Vehicle speed is less than 5 km/h (3 MPH). • Intelligent Key is within outside key antenna (rear bumper) detection area. • Back door is closed. • Panic alarm is not activated.

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 outside key antenna (rear bumper) (1). However, this operating range depends on the ambient conditions.



LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

Function	Intelligent Key	Back door opener switch	Back door lock assembly	Inside key antenna	Outside key antenna (rear bumper)	CAN communication system	BCM	Automatic back door control module
Back door open function	×	×	×	×	×	×	×	×

REMOTE KEYLESS ENTRY FUNCTION

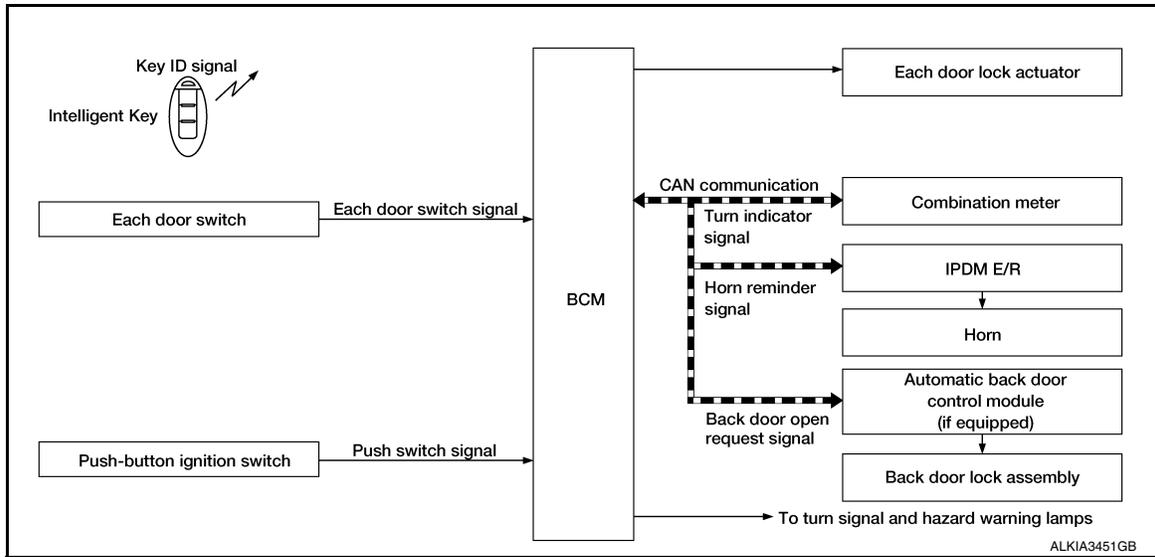
SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

REMOTE KEYLESS ENTRY FUNCTION : System Diagram

INFOID:000000012423527



REMOTE KEYLESS ENTRY FUNCTION : System Description

INFOID:000000012423528

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 function
- Selective unlock function
- Auto door lock function
- Hazard and horn reminder function
- Automatic back door open/close function

OPERATION AREA

The remote keyless entry operating range is approximately 60 m (197 ft) from the vehicle.

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.
- When BCM receives the door lock/unlock signal, it operates all door lock actuators, blinks 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 time) as a reminder.

OPERATION CONDITION

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

Remote controller operation	Operation condition
Lock	<ul style="list-style-type: none"> • Panic alarm is not activated. • P (Park) position warning is not activated.
Unlock	Panic alarm is not activated.

SELECTIVE UNLOCK FUNCTION

- When a LOCK signal is transmitted from Intelligent Key, all doors are locked.
- When an UNLOCK signal is transmitted from Intelligent Key once, driver side door are unlocked.
- Then, if an UNLOCK signal is transmitted from Intelligent Key again within 60 seconds, all other doors (except for back door) are unlocked.

How to change selective unlock operation mode.

Selective unlock operation mode can be changed using CONSULT.

Refer to [BCS-17, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

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SYSTEM (INTELLIGENT KEY SYSTEM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

AUTO DOOR LOCK FUNCTION

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

Operating condition	<ul style="list-style-type: none"> • Door switch is ON. (door is open) • Door is locked. • Push switch is pressed.
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How to change auto door lock operation mode.

Auto door lock mode can be changed using CONSULT.

Refer to [BCS-22. "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

HAZARD AND HORN REMINDER FUNCTION

When doors are locked or unlocked by Intelligent Key, BCM blinks hazard warning lamps 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	
	Lock	Unlock	Lock	Unlock
Intelligent Key operation	Lock	Unlock	Lock	Unlock
Hazard warning lamp blinks	Twice	Once	Twice	—
Horn sound	Once	—	—	—

Hazard and horn reminder does not operate in the following conditions:

- Ignition switch position is ON.
- Door is open (only lock operation).

How to Change Hazard and Horn Reminder Mode

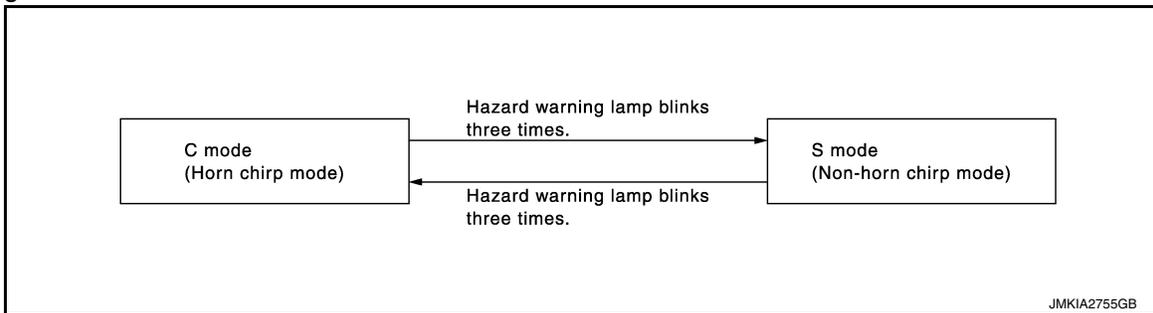
📖 With CONSULT

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

Refer to [BCS-22. "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:



AUTOMATIC BACK DOOR OPEN/CLOSE FUNCTION

When back door button of Intelligent Key is pressed for 0.4 second or more, back door open automatically for detailed description, refer to [DLK-41. "System Description"](#).

LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Function	Intelligent Key	Door switch	Door lock actuator	Push-button ignition switch	CAN communication system	BCM	IPDM E/R	Horn	Combination meter	Hazard warning lamp	Automatic back door control module	Back door lock assembly
Door lock/unlock function	x	x	x			x						
Selective unlock function	x	x	x			x						
Auto door lock function	x	x	x	x		x						
Hazard and horn reminder function					x	x	x	x	x	x		
Automatic back door open/close function	x				x	x					x	x

WARNING FUNCTION

WARNING FUNCTION : System Description

INFOID:0000000012423529

OPERATION DESCRIPTION

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

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

OPERATION CONDITION

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

Warning/Information functions	Operation procedure
Intelligent Key system malfunction	When a malfunction is detected on BCM, "KEY" warning lamp illuminates.
OFF position warning	When condition A, B or condition C is satisfied <ul style="list-style-type: none"> • Condition A <ul style="list-style-type: none"> - Ignition switch: ACC position - Door switch (driver side): ON (Door is open) • Condition B <ul style="list-style-type: none"> - Turn ignition switch from ON to OFF while door is open • Condition C <ul style="list-style-type: none"> - Intelligent Key backside is contacted to ignition switch while brake pedal is depressed and ignition switch is LOCK or OFF (When the Intelligent Key battery is discharged) - Door switch (driver side): ON (Door is open)
	OFF position warning (For internal) is in active mode, driver side door is closed. NOTE: OFF position (For external) active only when each of the sequence occurs as below: P position warning → ACC warning → OFF position warning (For internal) → OFF position warning (For internal)

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SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Warning/Information functions		Operation procedure
P position warning	For internal	<ul style="list-style-type: none"> Shift position: Except P (Park) position Engine is running to stopped (ignition switch is ON to OFF)
	For external	Warning is activated when driver door is closed from the open position while the P (Park) position warning (for inside vehicle) is ON.
ACC warning		<ul style="list-style-type: none"> When P (Park) position warning is in active mode, shift position changes P (Park) position Ignition switch: ACC position
Take away warning	Door is open to close	<ul style="list-style-type: none"> Ignition switch: Except Lock position Door switch: ON to OFF (Door is open to close) Intelligent Key cannot be detected inside the vehicle
	Door is open	<ul style="list-style-type: none"> Ignition switch: Except Lock position Door switch: ON (Door is open) Key ID verification every 5 seconds when registered Intelligent Key cannot be detected inside the vehicle
	Push-button ignition switch operation	<ul style="list-style-type: none"> Ignition switch: Except Lock position Press push-button ignition switch Intelligent Key cannot be detected inside the vehicle
Door lock operation warning		When door lock operation is requested while door lock operating condition of door request switch or Intelligent Key are not satisfied
Engine start information	Ignition switch is ON position	<ul style="list-style-type: none"> Ignition switch: ON position Shift position: P (Park) position* Engine is stopped
	Ignition switch is except ON position	<ul style="list-style-type: none"> Ignition switch: Except ON position Shift position: P (Park) position* Intelligent Key is inserted in key slot or Intelligent Key can be detected inside the vehicle
Intelligent Key low battery warning		When Intelligent Key is low battery, BCM is detected after ignition switch is turned ON
Key ID warning		When registered Intelligent Key cannot be detected inside the vehicle after ignition switch is turned ON
Key ID verification information		<ul style="list-style-type: none"> When registered Intelligent Key cannot be detected inside the vehicle Intelligent Key battery is discharged When NATS antenna amp cannot be detected NATS ID

WARNING METHOD

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

Warning/Information functions		"KEY" warning lamp	Information display (combination meter)	Warning chime	
				Combination meter buzzer	Intelligent Key warning buzzer
Intelligent Key system malfunction		Indicate	—	—	—
OFF position warning	For internal	—	—	Activate	—
	For external	—	—	—	Activate
P position warning	For internal	—	 Shift to Park	Activate	—
	For external			—	Active

ALKIA2515GB

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Warning/Information functions		"KEY" warning lamp	Information display (combination meter)	Warning chime	
				Combination meter buzzer	Intelligent Key warning buzzer
Take away warning	Door is open to close	—	 <small>ALKIA2517GB</small>	Activate	Activate
	Door is open			—	—
	Push-button ignition switch operation			Activate	—
Door lock operation warning	Request switch operation	—	—	—	Activate
	Intelligent Key	—	—	—	Activate
Key ID warning		—	 <small>ALKIA2518GB</small>	—	—
Intelligent Key low battery warning		—	 <small>ALKIA2520GB</small>	—	—
Key ID verification information		—	 <small>ALKIA2521ZZ</small>	—	—

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LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

Warning function	Intelligent Key	Ignition switch	Door switch	Door request switch	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	Combination meter buzzer	CAN communication system	BCM	Information display	"KEY" warning lamp
Intelligent Key system malfunction									×	×		×
OFF position warning	For internal		×					×	×	×		
	For external			×			×			×		
P (Park) position warning		×						×	×	×	×	×

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

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

SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

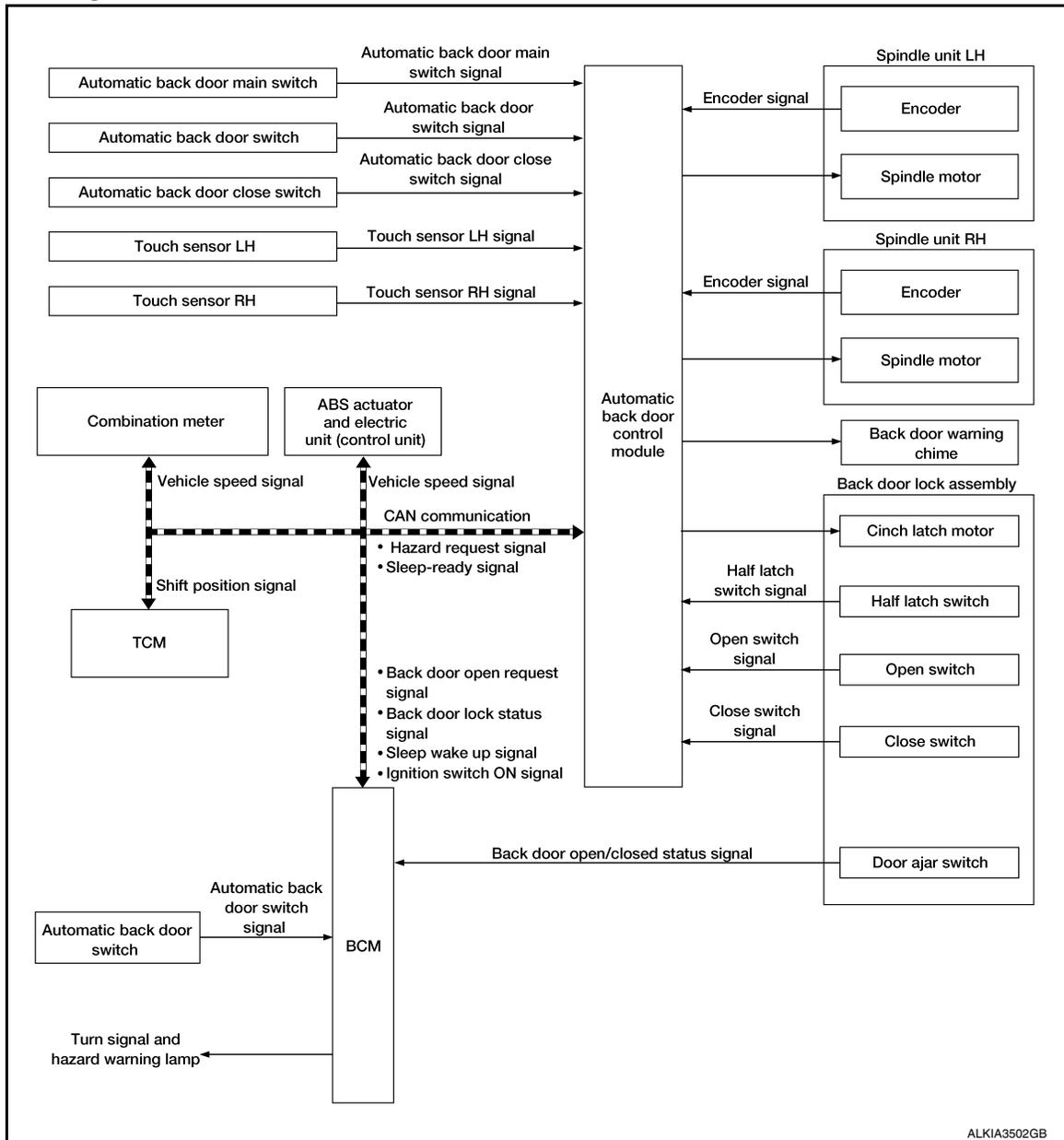
< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

System Diagram

INFOID:000000012998298



ALKIA3502GB

System Description

INFOID:000000012998298

The automatic back door system performs the automatic open/close operation of the back door by operating the automatic back door switch, the automatic back door close switch, the back door opener switch, and Intelligent Key.

AUTOMATIC BACK DOOR OPEN/CLOSE FUNCTION

- In the case of the back door fully closed, operate the automatic back door switch, Intelligent Key or back door opener switch with the back door unlock. The back door closure motor releases the latch, then the spindle motor opens the back door to the fully open position. The closure motor reverses to the neutral position simultaneously.
- In the case of the back door fully open, operate the automatic back door switch, Intelligent Key or automatic back door close switch. The spindle motor closes the back door to the half-latch position, then the back door closure motor to the full latch position. Then, the closure motor reverses to the neutral position.

AUTOMATIC OPEN/CLOSE TEMPORARY STOP FUNCTION

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SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

Automatic open/close temporary stop function temporarily stops the open/close operation by operating back door opener switch during automatic open/close operation or by turning automatic back door main switch OFF.

Back Door Opener Switch Operation

- Automatic open/close operation stops when back door opener switch is operated during automatic open/close operation.
- Back door performs automatic open operation in an open direction when back door opener switch is operated again during automatic open/close temporary stop function operation.
- Back door performs automatic close operation in a close direction when automatic back door close switch is operated during automatic open/close temporary stop function operation.
- Automatic operation is performed again, in the direction that automatic back door switch operated before stopping, when automatic back door switch or Intelligent Key button is operated during automatic open/close temporary stop function operation.

Automatic Back Door Main Switch Operation

- While automatic back door main switch is ON, automatic open/close operation stops when automatic back door main switch is turned OFF during automatic open/close operation.
- While automatic back door main switch is OFF, automatic open/close operation stops when automatic back door main switch is turned ON then turned OFF during automatic open/close operation.
- Back door performs automatic open operation in an open direction when back door opener switch is operated again during auto open/close temporary stop function operation.
- Back door performs automatic close operation in a close direction when automatic back door close switch is operated during automatic open/close temporary stop function operation.
- Automatic operation is performed again, in the direction that automatic back door switch operated before stopping, when automatic back door switch or Intelligent Key button is operated during automatic open/close temporary stop function operation.

BACK DOOR OPEN POSITION SETTING FUNCTION

Back door open position setting function enables a user to set stop position for automatic open operation.

Setting Procedure

Stop position for back door open position setting function can be set by the following procedure:

1. Manually move the back door to a stop setting position.
2. Press and hold the automatic back door close switch for 3 seconds while maintaining the back door position.
3. The switching is complete when the buzzer sounds (pattern E).
4. Fully close the back door.

Cancellation Procedure

Setting of back door open position setting function can be cancelled by the following procedure:

1. Manually move the back door to a fully open position.
2. Press and hold the automatic back door close switch for 3 seconds.
3. The switching is complete when the buzzer sounds (pattern E).
4. Fully close the back door.

BACK DOOR AUTO CLOSURE FUNCTION

Open Function

When back door opener switch is pressed and automatic back door main switch in the OFF position, BCM transmits the back door open request signal to automatic back door control module via CAN communication, and automatic back door control module opens back door lock assembly.

Closure Function

When the back door is closed to the half-latch position, the motor drives to rotate the latch lever and pulls it in from half latched to fully latched and automatically closes the door. Then, the closure motor reverses to the neutral position.

WARNING FUNCTION

The warning function is as follows and gives the user warning information using automatic back door warning chime and hazard warning lamps:

Chime Operation Condition

SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

	Pattern	Time	Description
A		0.75 sec.	Operation start announcement.
			Anti-pinch operation start announcement.
B	Pi---	2.0 sec.	<ul style="list-style-type: none"> • Closure function operates when automatic back door main switch is in OFF position. • During the closure operation, when touch sensor detects any trapped foreign material, the back door stops halfway.
C	Pi-----.....	Back door fully closed or vehicle is stopped	The conditions are not satisfied in the fully open position or during the operation, and then the operation continues.
D		During open/close operation	During operation announcement.
E		2.5 sec.	<ul style="list-style-type: none"> • Calibration of automatic back door position information is complete. • Back door open position setting procedure is complete.

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ANTI-PINCH FUNCTION

During auto open operation, if an object is detected by encoder pulse in the door's path, a warning chime sounds and the back door operates in the reverse direction to prevent pinching.

During auto close operation, if an object is detected by the touch sensors and encoder pulse in the door's path, a warning chime sounds and the back door operates in the open direction until it is fully open.

Operation Condition

Detection method	Encoder pulse	Touch sensor
Applicable operation	Open/close operation	Close operation
Operation when any trapped foreign material is detected.	Stop the vehicle.	<ul style="list-style-type: none"> • Buzzer sounds (pattern A) and the back door stops in the fully-open position after reverse operation. • During closure (close) operation (at main switch OFF): Closure [open (neutral position return)] operation.
	Running the vehicle.	<ul style="list-style-type: none"> • The back door reverses a certain amount, and then it reverses automatically to perform the auto close operation. • During closure (close) operation (at main switch ON): Closure (open) operation.
Non-reverse area.	<ul style="list-style-type: none"> • Just after starting the motor operation. • Full range of closure operation. • Driving 	<ul style="list-style-type: none"> • Back door open operation. • Closure [open (return the latch to the neutral position)].

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SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Detection method	Encoder pulse	Touch sensor
Switch operation during reverse operation.	Receive	
Number of allowable reverse operations.	Perform the automatic open/close temporary stop function after 2 reverse operations regardless of the operation direction.	

AUTOMATIC BACK DOOR OPEN/CLOSE OPERATION CONDITION

Operating direction	Automatic back door switch		Intelligent Key		Automatic back door close switch	Back door opener switch	
	Fully closed → Open	Fully open → Closed	Fully closed → Open	Fully open → Closed	Fully open → Closed	Fully closed → Open	
Main switch	—	—	—	—	ON	ON	
Ignition position	ON/ACC/LOCK	OFF	—	—	—	ON/ACC/LOCK	OFF
Shift selector lever	P position	—	—	—	—	P position	—
Vehicle speed	0 km/h						
Back door lock condition	—	—	—	—	—	Unlock*	
Touch sensor	Normal						
Power supply (Automatic power back door control module)	Approx. 11 V or more						

*: If the registered Intelligent Key is used, the operation can be performed even if the back door is in the LOCK position.

CONTROL IF NOT WITHIN THE OPERATION CONDITIONS DURING THE OPERATION

If the back door is not within the operation conditions during the operation, the automatic back door control module performs the control as follows:

Item (Condition)	Back door condition	
Vehicle stop condition (open operation) • IGN ON and shift P (Park) position → IGN ON and other than P (Park) position.	The operation is continued.	
Operation condition release during the operation start announcement condition.	Automatic back door function does not operate.	
Vehicle speed (0 km/h → More than 0 km/h)	Open operation	Operation stop [Back door fully closed or chime sounds until the vehicle stops (pattern C)].
	Close operation	The operation is continued [chime sounds (pattern C) until back door fully closed].
Touch sensor (Normal → Open)	Open operation	The operation is continued (If the pinch is detected after that, the system switches to the automatic open/close temporary stop function).
	Close operation	Automatic open/close temporary stop function.
	Closure (close) operation	Closure (open) operation and chime sounds (pattern B).
	Closure [open (return the latch to the neutral position)]	The operation is continued.
Operation time (More than approx. 180 sec.)	Inhibit automatic back door operation.	

SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

< SYSTEM DESCRIPTION >

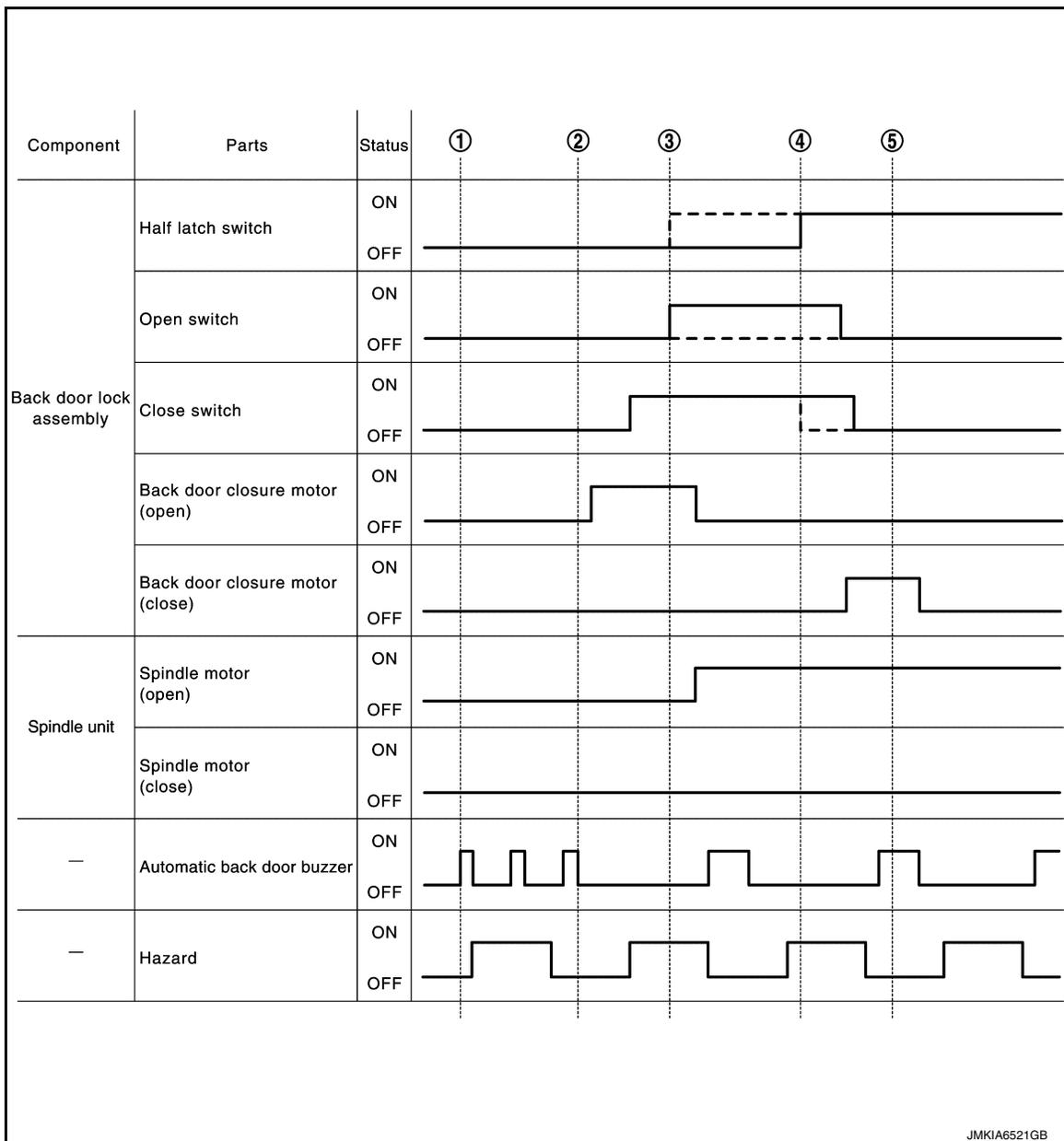
[WITH INTELLIGENT KEY SYSTEM]

Item (Condition)	Back door condition	
Back door opener switch (OFF → ON)	Closure (close) operation	Closure (open) operation and back door open.
	Closure [open (return the latch to the neutral position)]	Back door open.
Malfunction detected	IGN circuit	Automatic open/close temporary stop function.
	Half latch switch	Operation is possible up to 3 times.

TIME CHART FOR AUTOMATIC BACK DOOR SYSTEM

Fully Closed to Fully Open Operation

When operating the automatic back door switch, automatic back door opener switch and Intelligent Key in the fully closed position, the system operates as follows:



1. Operates the chime and hazard after the operation enable conditions are established.
2. The back door closure motor performs the open operation after the chime (pattern A) stops sounding.
3. Stops the back door closure motor open operation after turning the open switch to ON

SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

Then, operate the spindle motor to perform the back door open operation.

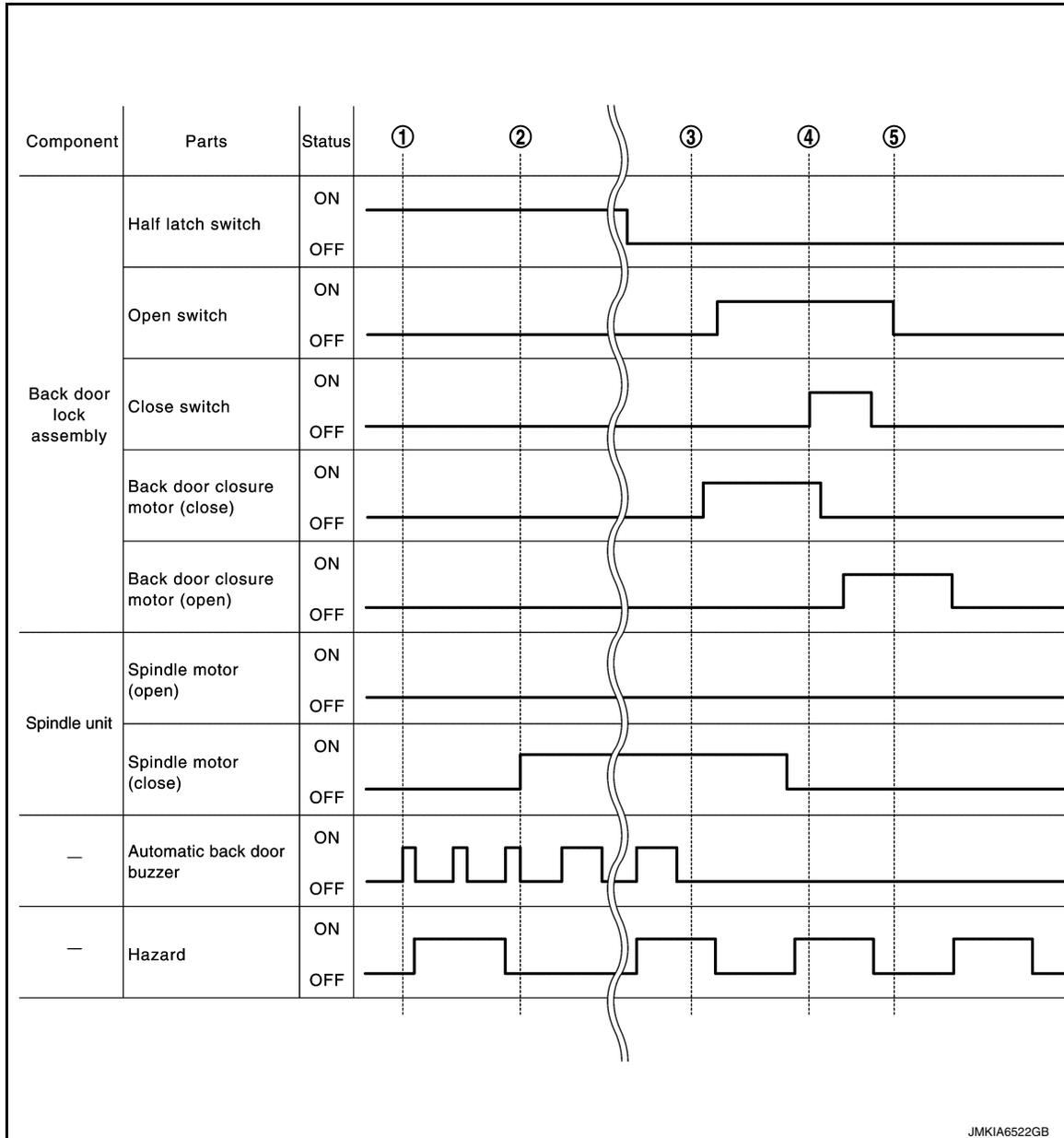
4. The back door closure motor performs the close operation after turning the half latch switch to ON.
5. Stop the back door closure motor close operation and return the latch to the neutral position after turning the close switch to OFF.

NOTE:

In the operation of steps 3 and 4, the inputs of half latch switch, open switch, and close switch may be different according to the reaction force of the back door weatherstrip. Refer to the area encircled by a broken line in the Time chart (fully closed to fully open operation).

Fully Open to Fully Closed Operation

When operating the automatic back door switch, automatic back door close switch and Intelligent Key, the automatic back door system operates as follows:



1. Operates the chime and hazard after the operation enable conditions are established.
2. After the chime (pattern A) stops sounding, operates the spindle motor to perform the back door close operation.
3. The back door closure motor performs the close operation in 300 msec. or more after turning the half latch switch to OFF.
4. The back door closure motor performs the open operation after turning the close switch to ON.

SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

5. Stop the back door closure motor open operation and return the latch to the neutral position after turning the close switch to OFF.

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SYSTEM (INTEGRATED HOMELINK TRANSMITTER)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

SYSTEM (INTEGRATED HOMELINK TRANSMITTER)

System Description

INFOID:000000012423532

Item	Function
Integrated Homelink [®] transmitter	A maximum of 3 radio signals can be stored and transmitted to operate the garage door, etc.

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000012816083

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 style="list-style-type: none"> The vehicle specification can be read and saved. The vehicle specification can be written when replacing BCM.
CAN Diag Support Mntr	The result of transmit/receive diagnosis of CAN communication is displayed.

SYSTEM APPLICATION

BCM can perform the following functions.

System	Sub System	Direct Diagnostic Mode						
		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			×	×			
Intelligent Key system	INTELLIGENT KEY		×	×	×	×		
Combination switch	COMB SW			×				
BCM	BCM	×	×			×	×	×
Immobilizer	IMMU		×	×	×			
Interior room lamp battery saver	BATTERY SAVER			×	×			
Back door open	TRUNK			×				
Vehicle security system	THEFT ALM			×	×	×		
RAP system	RETAINED PWR			×				
Signal buffer system	SIGNAL BUFFER			×				
Air conditioner	AIR CONDITIONER				×			

DOOR LOCK

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DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)

INFOID:000000012816084

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 back door 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].
DOOR LOCK IND	This test is able to check door lock indication [On/Off].

WORK SUPPORT

Support Item	Setting	Description
DOOR LOCK-UNLOCK SET	On*	Automatic door locks function ON.
	Off	Automatic door locks function OFF.
AUTO UNLOCK TYPE	MODE2	Driver door only unlocks automatically.
	MODE1*	All doors unlock automatically.
AUTO LOCK FUNCTION	MODE3	This mode is not used.
	MODE2	Doors lock automatically when shifted out of P (park).
	MODE1*	Doors lock automatically when vehicle speed reaches 24 km/h (15 mph).
	Off	—
AUTO UNLOCK FUNCTION	MODE3	This mode is not used.
	MODE2	Doors unlock automatically when shifted into P (park).
	MODE1*	Doors unlock automatically when ignition is switched from ON to OFF.
	Off	—
SIGNATURE LIGHT SETTING	On*	Signature light mode function is ON.
	Off	Signature light mode function if OFF.

* : Initial setting

INTELLIGENT KEY

INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)

INFOID:000000012816085

SELF DIAGNOSTIC RESULT

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

Refer to [BCS-48, "DTC Index"](#).

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 push-button ignition switch.
BRAKE SW 1 [On/Off]	×	Indicates condition of brake pedal position switch.
BRAKE SW 2 [On/Off]		Indicates condition of stop lamp switch.
DETE/CANCL SW [On/Off]	×	Indicates condition of park position switch.
PUSH SW -IPDM [On/Off]		Indicates condition of push-button ignition switch received from IPDM E/R on CAN communication line.
IGN RLY1 -F/B [On/Off]		Indicates condition of ignition relay 1 received from IPDM E/R on CAN communication line.
NEUTRAL SW -IPDM [On/Off]		Indicates condition of transmission range switch received from IPDM E/R on CAN communication line.
SFT PN -IPDM [On/Off]		Indicates condition of P (park) or N (neutral) position from TCM on CAN communication line.
STARTER RELAY -IPDM [On/Off]		Indicates condition of starter relay received 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.
ST/INH RELAY - IPDM [On/Off]		Indicates condition of starter relay and starter control relay status signal from IPDM E/R.
REVERSE SIGNAL -IPDM [On/Off]		Indicates condition of transmission range switch received from IPDM E/R on CAN communication line.
CRANKING PERMIT -ECM [PERMIT]		Indicates condition of engine start possibility from ECM on CAN communication line.
IS STATUS -ECM [On/Off]		Indicates IS status from ECM on CAN communication line.
STARTER CUT RELAY -ECM [On/Off]		Indicates condition of starter cut relay 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.
IGN REQ -IPDM [On/Off]		Indicates condition of ignition request from IPDM E/R on CAN communication line.
STARTER REQ -IPDM [On/Off]		Indicates condition of starter request received from IPDM E/R 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.
DOOR STAT -RR [LOCK/READY/UNLK]	×	Indicates condition of rear right side door status.
DOOR STAT -RL [LOCK/READY/UNLK]	×	Indicates condition of rear left side door status.
BK DOOR STATE [LOCK/READY/UNLK]	×	Indicates condition of back door status.
ID OK FLAG [Set/Reset]		Indicates condition of Intelligent Key ID.
PRMT ENG STRT [Set/Reset]		Indicates condition of engine start possibility.
PRMT RKE STRT [Set/Reset]		Indicates condition of engine start possibility from Intelligent Key.
I-KEY OK FLAG [Key ON/Key OFF]	×	Indicates condition of Intelligent Key OK flag.
PRBT ENG STRT [Set/Reset]		Indicates condition of engine start prohibit.
ID AUTHENT CANCEL TIMER [STOP]		Indicates condition of Intelligent Key ID authentication.

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DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

Monitor Item [Unit]	Main	Description
ACC BATTERY SAVER [STOP]		Indicates condition of battery saver.
CRNK PRBT TMR [On/Off]		Indicates condition of crank prohibit timer.
AUT CRNK TMR [On/Off]		Indicates condition of automatic engine crank timer from Intelligent Key.
CRNK PRBT TME [sec]		Indicates condition of engine crank prohibit time.
AUTO CRNK TME [sec]		Indicates condition of automatic engine crank time from Intelligent Key.
CRANKING TME [sec]		Indicates condition of engine cranking time from Intelligent Key.
RKE OPE COUN1 [0-19]	×	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing.
RKE OPE COUN2 [0-19]	×	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing.
RKE-LOCK [On/Off]		Indicates condition of lock signal from Intelligent Key.
RKE-UNLOCK [On/Off]		Indicates condition of unlock signal from Intelligent Key.
RKE-TR/BD [On/Off]		Indicates condition of back door open signal from Intelligent Key.
RKE-PANIC [On/Off]		Indicates condition of panic signal from Intelligent Key.
RKE-MODE CHG [On/Off]		Indicates condition of mode change signal from Intelligent Key.
RKE PBD [On/Off]		Indicates condition of automatic back door signal from Intelligent Key.

ACTIVE TEST

Test Item	Description
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation [On/Off].
INSIDE BUZZER	This test is able to check combination meter warning chime operation [Take Out/Knob/Key/Off].
INDICATOR	This test is able to check combination meter warning lamp operation [KEY ON/KEY IND/Off].
FLASHER	This test is able to check flasher operation [On/Off].
HORN	This test is able to check horn operation [On/Off].
IGN CONT2	This test is able to check ignition relay-2 control operation [On/Off].
ENGINE SW ILLUMI	This test is able to check push-button ignition switch START indicator operation [On/Off].
ENGINE START REQUEST	This test is able to check BCM starter request switch signal to IPDM E/R via CAN communication [MODE 1/MODE 2/MODE 3/OFF].
IGNITION RELAY	This test is able to check ignition relay operation [On/Off].
STARTER CUT RELAY	This test is able to check the starter control relay [On/Off].
AUTO ACC 2	This test is able to check BCM sends power supply to audio unit or NAVI control unit [On/Off].
AUTOMATIC BACK DOOR	This test is able to check automatic back door operation [On/Off].
AUTO ACC 1	This test is able to check BCM sends power supply to ACC relay [MODE 1/MODE 2/MODE 3/OFF].
TRUNK LUGGAGE LAMP TEST	This test is able to check luggage room lamp test operation [On/Off].

WORK SUPPORT

Support Item	Setting	Description
SHORT CRANKING OUTPUT	Start	Starter motor operation duration times.
	100 msec	
	End	—
INSIDE ANT DIAGNOSIS	—	This function allows inside key antenna self-diagnosis.
LOCK/UNLOCK BY I-KEY	On*	Door lock/unlock by I-Key ON.
	Off	Door lock/unlock by I-Key OFF.

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

Support Item	Setting	Description
AUTO LOCK SET	Mode 1	OFF
	Mode 2	30 sec.
	Mode 3*	1 min.
	Mode 4	2 min.
	Mode 5	3 min.
	Mode 6	4 min.
	Mode 7	5 min.
IGN/ACC BATTERY SAVER	On*	Battery saver system ON.
	Off	Battery saver system OFF.
ENGINE START BY I-KEY	On*	Engine start function from Intelligent Key ON.
	Off	Engine start function from Intelligent Key OFF.
TRUNK/GLASS HATCH OPEN	On*	Buzzer reminder function by back door request switch ON.
	Off	Buzzer reminder function by back door request switch OFF.
ANSWER BACK	On	Horn chirp reminder when doors are locked with Intelligent Key.
	Off*	No horn chirp reminder when doors are locked with Intelligent Key.
ANSWER BACK I-KEY LOCK UN-LOCK	BUZZER*	Buzzer reminder function by door lock/unlock request switch ON.
	HORN	Horn chirp reminder function by door lock request switch ON.
	Off	No reminder function by door lock/unlock request switch.
	INVALID	This mode is not used.
ANSWERBACK KEYLESS LOCK UN-LOCK	On*	Buzzer or horn chirp reminder when doors are locked/unlocked with Intelligent Key.
	Off	No buzzer or horn chirp reminder when doors are locked/unlocked with Intelligent Key.

TRUNK

TRUNK : CONSULT Function (BCM - TRUNK)

INFOID:000000012816086

DATA MONITOR

Monitor Item [Unit]	Description
PUSH SW [On/Off]	Indicates condition of push-button ignition switch.
STARTER CUT RELAY [On/Off]	Indicates condition of starter cut relay.
VEH SPEED 1 [km/h]	Indicates vehicle speed signal received from ABS on CAN communication line.
BACK DOOR OPENER SW [On/Off]	Indicates condition of back door opener switch.
RKE-TR/BD [On/Off]	Indicates condition of back door open signal from Intelligent Key.

DIAGNOSIS SYSTEM (AUTOMATIC BACK DOOR CONTROL UNIT)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

DIAGNOSIS SYSTEM (AUTOMATIC BACK DOOR CONTROL UNIT)

CONSULT Function

INFOID:000000012423537

APPLICATION ITEMS

CONSULT performs the following functions via CAN communication with automatic back door control module:

Diagnosis mode	Function Description
Self diagnostic result	Displays the diagnosis results judged by automatic back door control module.
Data monitor	The automatic back door control module input/output signals are displayed.
Work support	Changes the setting for each setting function.
ECU identification	The automatic back door control module part number is displayed.

SELF DIAGNOSTIC RESULTS

Refer to [DLK-60, "DTC Index"](#).

DATA MONITOR

Monitor Item	Unit	Description
SPINDLE SENSOR LH	[Pulse]	Displays the condition of the LH encoder.
SPINDLE LH SPEED	[mm/s]	Displays the LH spindle operation speed.
SPINDLE MOTOR LH DUTY	[%]	Displays the condition of the spindle motor LH duty.
VHCL SPEED MTR	[km/h]	Displays the vehicle speed signal received from combination meter by numerical value.
VHCL SPEED ABS	[km/h]	Displays the vehicle speed signal received from ABS actuator and electrical unit by numerical value.
MAIN SW	[ON/OFF]	Indicates condition of automatic back door main switch.
AUTO BD SW	[ON/OFF]	Indicates condition of automatic back door switch.
BK DOOR CL SW	[ON/OFF]	Indicates condition of automatic back door close switch.
BACK DOOR LOCK STATUS	[ON/OFF]	Indicates condition of back door lock status.
PKB SW	[ON/OFF]	Indicates condition of park brake switch.
OPEN SW	[ON/OFF]	Indicates condition of open switch.
CLOSE SW	[ON/OFF]	Indicates condition of close switch.
HALF LATCH SW	[ON/OFF]	Indicates condition of half latch switch.
TOUCH SEN RH	[ON/OFF/OPEN]	Indicates condition of touch sensor RH.
TOUCH SEN LH	[ON/OFF/OPEN]	Indicates condition of touch sensor LH.
P RANGE IND	[ON/OFF]	Indicates condition of P range signal from combination meter.
RKE REQ	[OFF/MOVE/REV]	Indicates condition of remote keyless entry signal from BCM.
IGN SW	[ON/OFF]	Indicates condition of IGN power supply.
SPINDLE LH ENCODER A	[LO/HI]	Indicates condition of encoder signal from encoder A.
SPINDLE LH ENCODER B	[LO/HI]	Indicates condition of encoder signal from encoder B.
UNLOCK SEN BD	[LOCKUNLKI]	Indicates condition of back door unlock sensor.
DESTINATION	[JPN/NAM]	Indicates specification of destination of the automatic back door system.
AUTO BCK DR POS LEARN	[YET/DONE]	Indicates condition of calibration of automatic back door position information.
AUTO BCK DR POS INITIAL	[YET/DONE]	Indicates condition of additional service when removing battery negative cable.
SPINDLE SENSOR RH	[Pulse]	Displays the condition of the RH encoder.
SPINDLE RH SPEED	[mm/s]	Displays the RH spindle operation speed.

DIAGNOSIS SYSTEM (AUTOMATIC BACK DOOR CONTROL UNIT)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Monitor Item	Unit	Description
SPINDLE MOTOR RH DUTY	[%]	Displays the condition of the spindle motor RH duty.
SPINDLE RH ENCODER A	[LO/HI]	Indicates condition of encoder signal from encoder A.
SPINDLE RH ENCODER B	[LO/HI]	Indicates condition of encoder signal from encoder B.
TRANSMISSION TYPE	[AT/CVT]	Indicates type of transmission the vehicle is equipped with.
CLOSURE OPERATION	[ON/OFF]	Indicates condition of back door closure function.
IGN SW	[ON/OFF]	Indicates condition of IGN power supply.
KEY VERIFICATION REQ SIG	[ON/OFF]	Indicates condition of key ID verification request signal.
AUTO OPEN (BCM)	[ON/OFF]	Indicates condition of key ID verification completed signal, when back door is closed.
AUTO CLOSE (BCM)	[ON/OFF]	Indicates condition of key ID verification completed signal, when back door is open.

WORK SUPPORT

Work item	Description	Refer to
RESET AUTO BACK DOOR STATUS	This item is for calibration of automatic back door position information.	DLK-114. "Work Procedure"

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AUTOMATIC BACK DOOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

ECU DIAGNOSIS INFORMATION

AUTOMATIC BACK DOOR CONTROL UNIT

Reference Value

INFOID:0000000012423538

VALUES ON THE DIAGNOSIS TOOL

CONSULT MONITOR ITEM

Monitor Item	Condition	Value/Status	
SPINDLE SENSOR LH	Back door: Moving	0 – 65535	
SPINDLE LH SPEED	Back door: Moving	0 – 6553.5	
SPINDLE MOTOR LH DUTY	Back door: Moving	0 – 255	
VHCL SPEED MTR	While driving	Equivalent to speedometer reading	
VHCL SPEED ABS	While driving	Equivalent to speedometer reading	
MAIN SW	Automatic back door main switch	OFF	OFF
		ON	ON
AUTO BD SW	Automatic back door switch	Release	OFF
		Press	ON
BK DOOR CL SW	Automatic back door close switch	Release	OFF
		Press	ON
BACK DOOR LOCK STATUS	Back door lock	Lock	OFF
		Unlock	ON
PKB SW	Parking brake	Not applied	OFF
		Applied	ON
OPEN SW	Back door	Half latch/fully closed	OFF
		Applied	ON
CLOSE SW	Back door	Open/half latch	OFF
		Fully closed	ON
HALF LATCH SW	Back door	Half latch/fully closed	OFF
		Open	ON
TOUCH SEN RH	Touch sensor RH	Other than below	OFF
		Detect obstruction	ON
TOUCH SEN LH	Touch sensor LH	Other than below	OFF
		Detect obstruction	ON
P RANGE IND	Selector lever	Other than P position	OFF
		P position	ON
RKE REQ	Intelligent Key button (back door)	Release	OFF
		Press (more than 0.5 second)	MOVE
		Press (just after)	REV
IGN SW	Ignition switch	Other than ON position	OFF
		ON position	ON
SPINDLE LH ENCODER A	Automatic back door	Not operate	No change HI or LO
		Operate	Change HI or LO
SPINDLE LH ENCODER B	Automatic back door	Not operate	No change HI or LO
		Operate	Change HI or LO

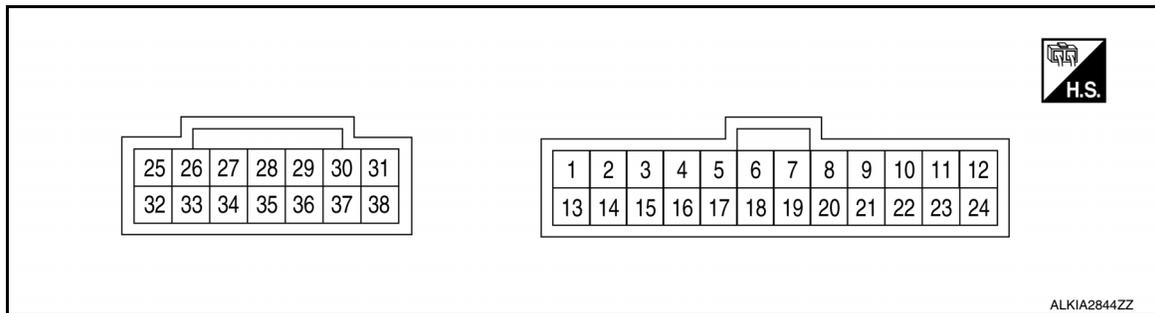
AUTOMATIC BACK DOOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Monitor Item	Condition		Value/Status
UNLOCK SEN BD	Back door lock	Lock	LOCK
		Unlock	UNLK
DESTINATION	—		OTHER
AUTO BCK DR POS INITIAL	Calibration of automatic back door position information	Not complete	YET
		Complete	DONE
AUTO BCK DR POS LEARN	Additional service when removing battery negative terminal	Not complete	YET
		Complete	DONE
SPINDLE SENSOR RH	Back door: Moving		0 – 65535
SPINDLE RH SPEED	Back door: Moving		0 – 6553.5
SPINDLE MOTOR RH DUTY	Back door: Moving		0 – 255
SPINDLE RH ENCODER A	Automatic back door	Not operate	No change HI or LO
		Operate	Change HI or LO
SPINDLE RH ENCODER B	Automatic back door	Not operate	No change HI or LO
		Operate	Change HI or LO
TRANSMISSION TYPE	—		AT/CVT
CLOSURE OPERATION	Back door closure	Other than below	OFF
		Open operation	ON
IGN SW	Ignition switch	Other than ON position	OFF
		On position	ON

TERMINAL LAYOUT



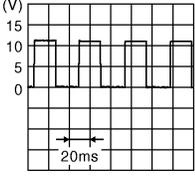
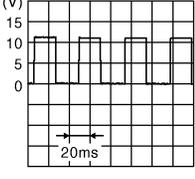
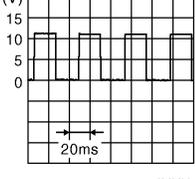
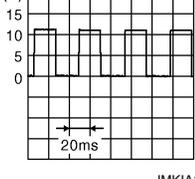
PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Voltage (Approx.)
(+)	(-)	Signal name	Input/Output			
1 (LG)	13 (SB)	Touch sensor RH signal	Input	Touch sensor RH	Detect obstruction	1.8 – 2.72 V
					Other than above	2.72 – 7.27 V
2 (G)	13 (SB)	Touch sensor LH signal	Input	Touch sensor LH	Detect obstruction	1.8 – 2.72 V
					Other than above	2.72 – 7.27 V
3 (SB)	Ground	Half latch switch signal	Input	Back door	Open	0 V
					Fully closed/half latch	Battery voltage
4 (B)	Ground	Ground	—	—	—	0 V

AUTOMATIC BACK DOOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition		Voltage (Approx.)
(+)	(-)	Signal name	Input/ Output			
5 (BR)	Ground	Close switch signal	Input	Back door	Fully closed	0 V
					Open/half latch	Battery voltage
6 (W)	Ground	Encoder LH A signal	Input	Back door	Moving (auto or manual)	 <p style="text-align: right; font-size: small;">JMKIA1864ZZ</p> <p>NOTE: Waveform width changes according to back door open/close speed</p>
					When stopped	0 V or Battery voltage
7 (L)	Ground	Encoder LH B signal	Input	Back door	Moving (auto or manual)	 <p style="text-align: right; font-size: small;">JMKIA1864ZZ</p> <p>NOTE: Waveform width changes according to back door open/close speed</p>
					When stopped	0 V or 12 V
8 (R)	Ground	Encoder RH A signal	Input	Back door	Moving (auto or manual)	 <p style="text-align: right; font-size: small;">JMKIA1864ZZ</p> <p>NOTE: Waveform width changes according to back door open/close speed</p>
					When stopped	0 V or 12 V
9 (SB)	Ground	Encoder RH B signal	Input	Back door	Moving (auto or manual)	 <p style="text-align: right; font-size: small;">JMKIA1864ZZ</p> <p>NOTE: Waveform width changes according to back door open/close speed</p>
					When stopped	0 V or 12 V
10 (BG)	Ground	Automatic back door main switch	Input	Automatic back door main switch	ON	Battery voltage
					OFF	0 V
11 (V)	Ground	Open switch signal	Input	Back door	Open	0 V
					Half latch/fully closed	Battery voltage

AUTOMATIC BACK DOOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition		Voltage (Approx.)
(+)	(-)	Signal name	Input/ Output			
12 (P)	Ground	CAN low	Input/ Output	—		—
13 (GR)	Ground	Touch sensor ground	Input	—		0.01 – 0 V
16 (B)	Ground	Ground	—	—		0.01 – 0 V
17 (G)	Ground	Digital output ON/OFF	—	—		—
19 (V)	Ground	Encoder LH power supply	Output	—		Battery voltage
20 (P)	Ground	Encoder RH power supply	Output	—		Battery voltage
21 (G)	Ground	Encoder ground	—	—		0 V
22 (LG)	Ground	Automatic back door switch	Input	Automatic back door switch	Pressed	Battery voltage
					Released	0 V
23 (W)	Ground	Automatic back door close switch	Input	Automatic back door close switch	Pressed	Battery voltage
					Released	0 V
24 (L)	Ground	CAN high	Input/ Output	—		—
25 (W)	Ground	Power supply (BAT)	Input	—		Battery voltage
27 (BR)	Ground	Spindle motor LH (open)	Output	—		Battery voltage
29 (BR)	Ground	Spindle motor RH (open)	Output	Back door	Auto open operation	Battery voltage
31 (L)	Ground	Back door closure motor (open)	Output	Back door	Open operation	Battery voltage
					Other than above	0 V
32 (B)	Ground	Ground	—	—		0 V
34 (G)	Ground	Spindle motor LH (close)	Output	Back door	Auto close operation	Battery voltage
35 (B)	Ground	Ground (noise shield spindle)	—	—		0.01 – 0 V
36 (G)	Ground	Spindle motor RH (close)	Output	Back door	Auto close operation	Battery voltage
37 (Y)	Ground	Back door warning chime	Output	Automatic back door warning chime	Sounding	0 V
					Not sounding	Battery voltage
38 (SB)	Ground	Back door closure motor (close)	Output	Back door	Close operation	Battery voltage
					Other than above	0 V

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DLK

Fail Safe

INFOID:0000000012423539

Display contents of CONSULT	Fail-safe	Cancellation
U1000 CAN COMM	Inhibit automatic back door operation	Return to normal status.
U1010 CONTROL UNIT (CAN)	Inhibit automatic back door operation	Return to normal status.

AUTOMATIC BACK DOOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Display contents of CONSULT	Fail-safe	Cancellation
B2401 IGN OPEN	Inhibit automatic back door operation	Automatic back door control module detects ignition switch ON signal via CAN communication.
B2409 HALF LATCH SW	Inhibit automatic back door operation	Automatic back door control module detects that half latch switch changes from ON to OFF when back door fully closes.
B2416 TOUCH SEN R OPEN	Inhibit automatic back door operation	Return to normal status.
B2417 TOUCH SEN L OPEN	Inhibit automatic back door operation	Return to normal status.
B2419 OPEN SW	Inhibit automatic back door operation	Reconnect battery.
B2420 CLOSE SW	Inhibit automatic back door operation	Reconnect battery.
B2422 BACK DOOR STATE	Inhibit automatic back door operation	Half latch switch is ON from OFF.
B2423 ABD MTR TIME OUT	Inhibit automatic back door operation	At least 180 seconds are passed after automatic back door operation is inhibited.
B2426 SPINDLE SENSOR LH	Inhibit automatic back door operation	Return to normal status.
B2427 SPINDLE SENSOR RH	Inhibit automatic back door operation	Return to normal status.
B2428 AUTO BACK DR CNT MODULE	Inhibit automatic back door operation	Return to normal status.
B242A CLSR CONDITION	Inhibit automatic back door operation	Reconnect battery.

DTC Inspection Priority Chart

INFOID:000000012423540

If some DTCs are displayed at the same time, perform inspections one by one based on the following priority chart.

Priority	DTC
1	<ul style="list-style-type: none"> • B2428 AUTO BK DR CNT UNIT • U1000 CAN COMM • U1010 CONTROL UNIT (CAN) • B2401 IGN OPEN
2	<ul style="list-style-type: none"> • B2409 HALF LATCH SW • B2416 TOUCH SEN R OPEN • B2417 TOUCH SEN L OPEN • B2419 OPEN SW • B2420 CLOSE SW • B2422 BACK DOOR STATE • B2423 ABD MTR TIME OUT • B2426 SPINDLE SENSOR LH • B2427 SPINDLE SENSOR RH • B242A CLSR CONDITION

DTC Index

INFOID:000000012423541

NOTE:

Details of time display

- 1 - 39: Displayed if any previous malfunction is present when current condition is normal. It increases 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The counter remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch OFF → ON after returning to the normal condition if the malfunction is detected again.

CONSULT display	Fail-safe	Reference page
U1000: CAN COMM	×	BCS-65, "DTC Logic"
U1010: CONTROL UNIT(CAN)	×	BCS-66, "DTC Logic"
B2401: IGN OPEN	×	DLK-117, "DTC Logic"
B2409: HALF LATCH SW	×	DLK-118, "DTC Logic"

AUTOMATIC BACK DOOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

CONSULT display	Fail-safe	Reference page
B2416: TOUCH SEN R OPEN	×	DLK-121, "DTC Logic"
B2417: TOUCH SEN L OPEN	×	DLK-124, "DTC Logic"
B2419: OPEN SW	×	DLK-127, "DTC Logic"
B2420: CLOSE SW	×	DLK-130, "DTC Logic"
B2422: BACK DOOR STATE	×	DLK-133, "DTC Logic"
B2423: ABD MTR TIME OUT	×	DLK-136, "DTC Logic"
B2426: SPINDLE SENSOR LH	×	DLK-138, "DTC Logic"
B2427: SPINDLE SENSOR RH	×	DLK-141, "DTC Logic"
B2428: AUTO BACK DR CNT UNIT	×	DLK-144, "DTC Logic"
B242A: CLSR CONDITION	×	DLK-145, "DTC Logic"

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BCM

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

BCM

List of ECU Reference

INFOID:000000012423542

ECU	Reference
BCM	BCS-29. "Reference Value"
	BCS-47. "Fail Safe"
	BCS-47. "DTC Inspection Priority Chart"
	BCS-48. "DTC Index"

POWER DOOR LOCK SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

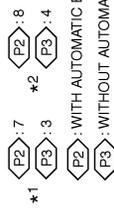
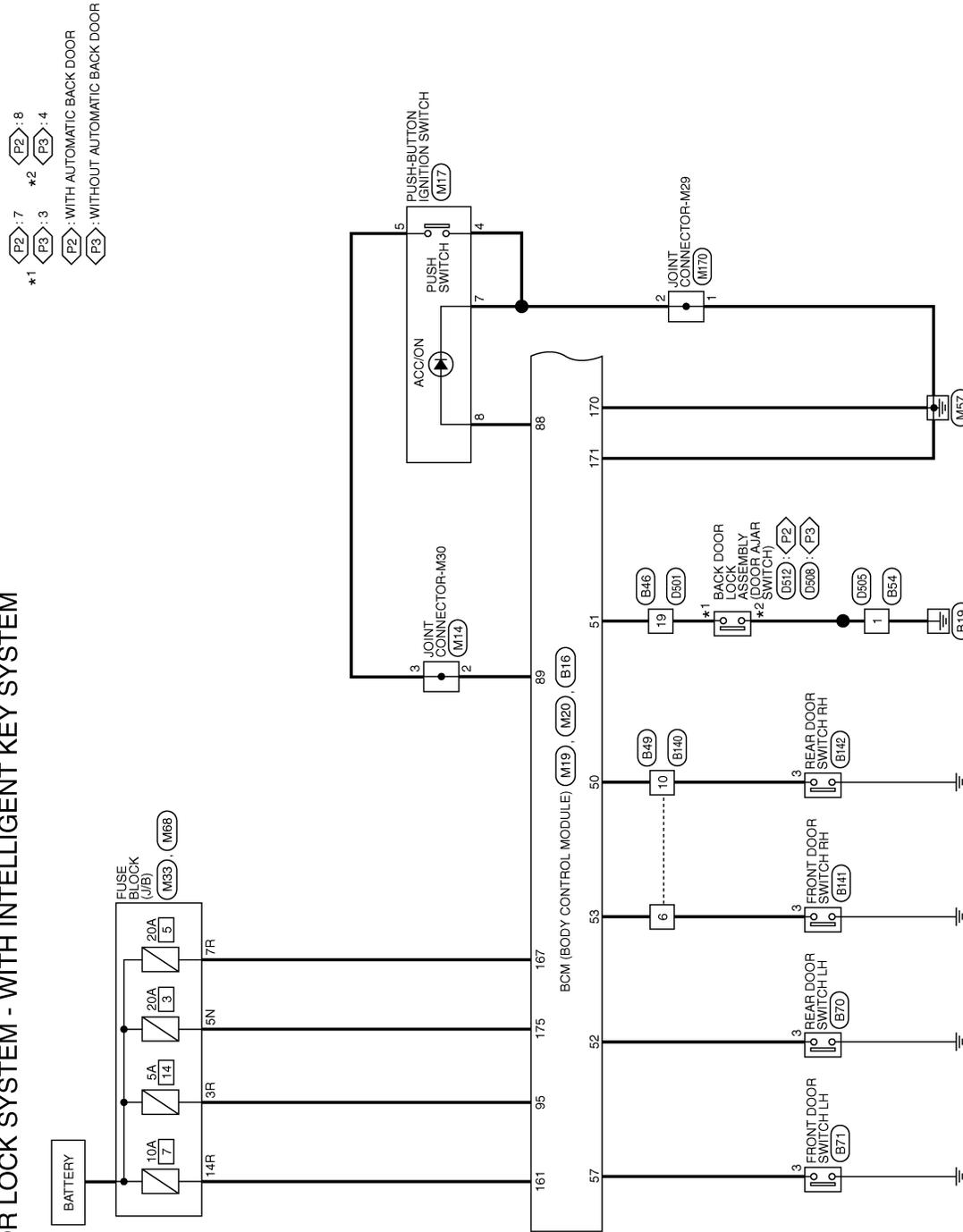
WIRING DIAGRAM

POWER DOOR LOCK SYSTEM

Wiring Diagram

INFOID:0000000012423543

POWER DOOR LOCK SYSTEM - WITH INTELLIGENT KEY SYSTEM



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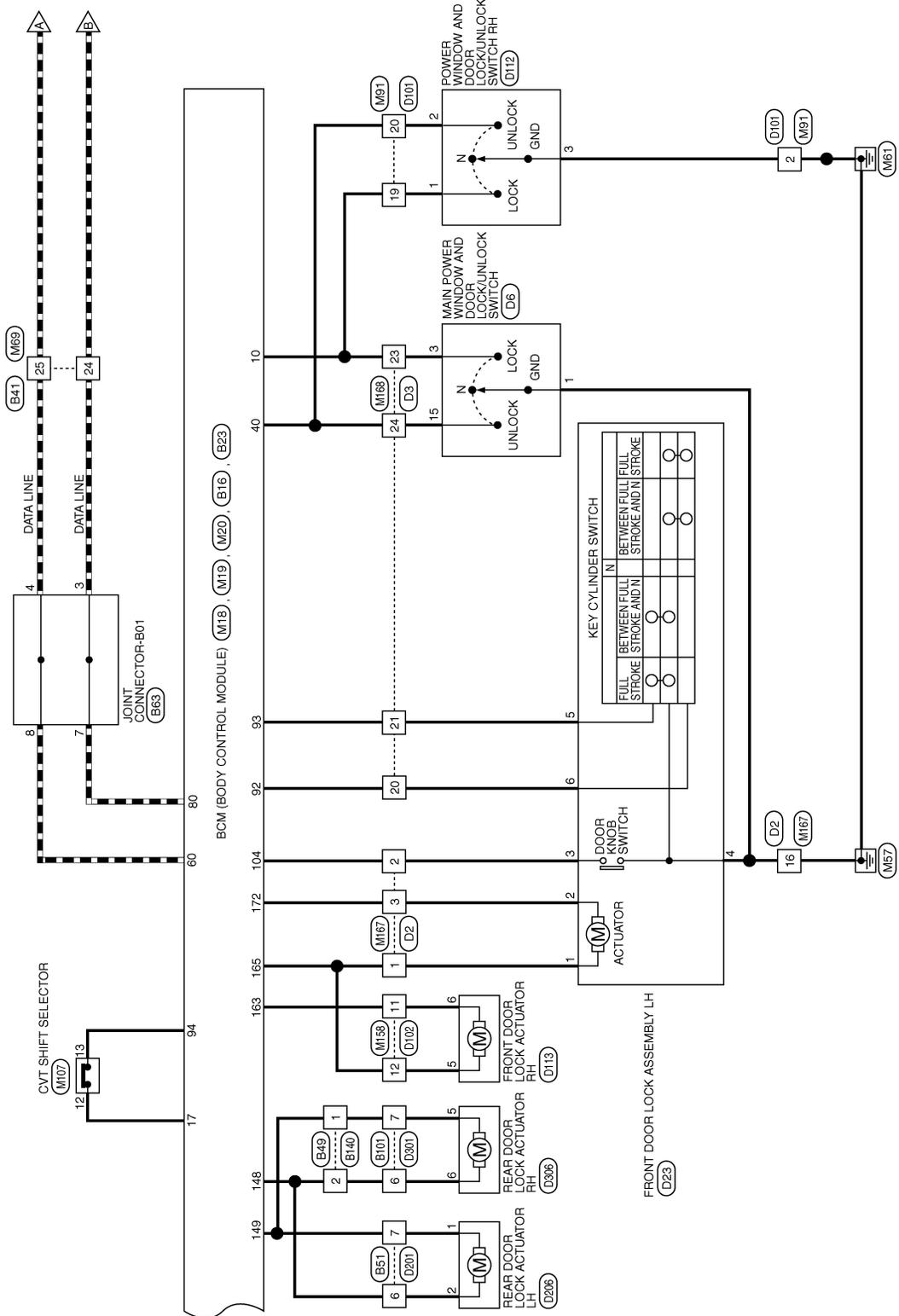
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AAKWA1333GB

POWER DOOR LOCK SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

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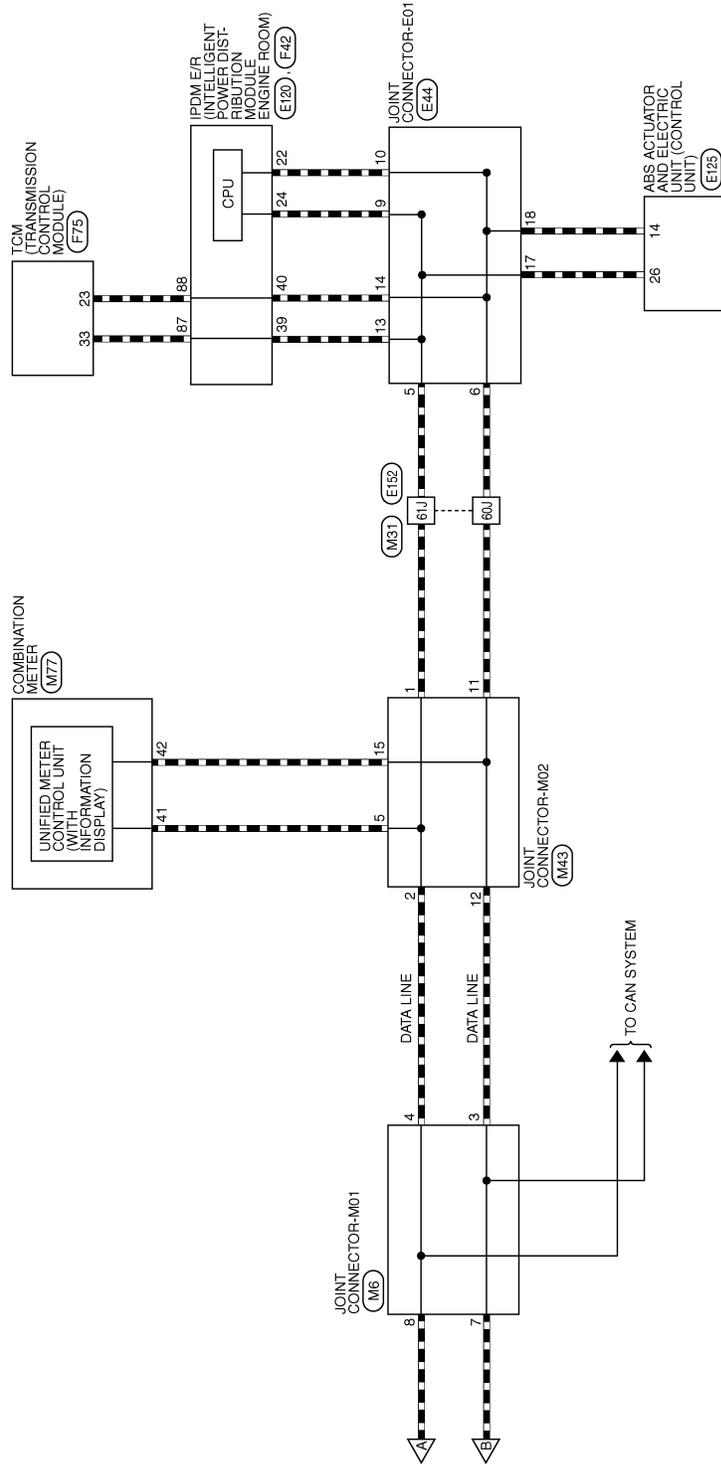


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POWER DOOR LOCK SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >



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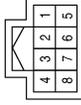
POWER DOOR LOCK SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

POWER DOOR LOCK SYSTEM CONNECTORS - WITH INTELLIGENT KEY SYSTEM

Connector No.	M17
Connector Name	PUSH-BUTTON (IGNITION SWITCH)
Connector Color	WHITE



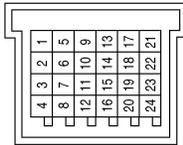
Terminal No.	Color of Wire	Signal Name
4	B	-
5	Y	-
7	B	-
8	W	-

Connector No.	M14
Connector Name	JOINT CONNECTOR-M30
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	Y	-
3	Y	-

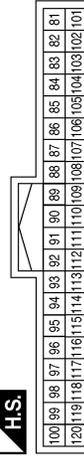
Connector No.	M6
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY



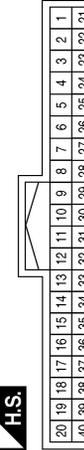
Terminal No.	Color of Wire	Signal Name
3	P	-
4	L	-
7	P	-
8	L	-

Terminal No.	Color of Wire	Signal Name
88	W	O START SW BACKLIGHT LED
89	Y	I START WO ESCL SW
92	BR	I KEY CYLINDER LOCK SW
93	P	I KEY CYLINDER UNLOCK SW
94	G	I AT LOCKED IN PARK SW
95	V	I SHORTING PIN
104	R	I DR KNOB SW

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
10	BG	I DOORLOCK SW
17	L	O PWR ATDVC
40	SB	I DOORUNLOCK SW

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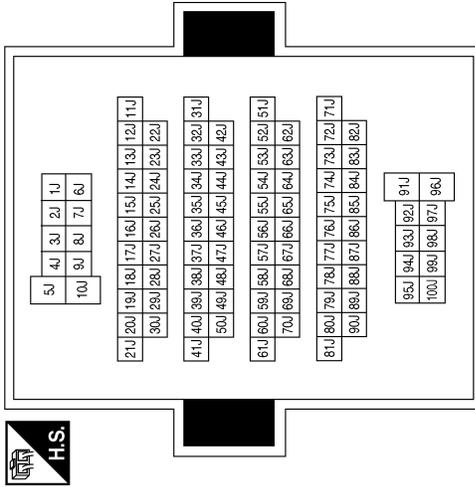
POWER DOOR LOCK SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

Terminal No.	Color of Wire	Signal Name
60J	P	-
61J	L	-

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BROWN

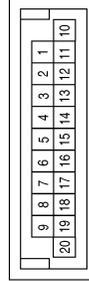


Terminal No.	Color of Wire	Signal Name
161	W	I PWR ECU
163	L	O AS LOCK OR UNLOCK D
165	V	O DR OR FR LOCK D
167	LA/V	I PWR DOORLOCK1
170	B	I GND1
171	B	I GND2
172	G	O FR OR DR UNLOCK D
175	R	I PWR DOORLOCK2

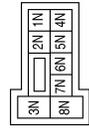
Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN



Connector No.	M43
Connector Name	JOINT CONNECTOR-M02
Connector Color	BLUE



Connector No.	M33
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3R	V	-
7R	LA/V	-
14R	W	-

Terminal No.	Color of Wire	Signal Name
1	L	-
2	L	-
5	L	-
11	P	-
12	P	-
15	P	-

Terminal No.	Color of Wire	Signal Name
5N	R	-

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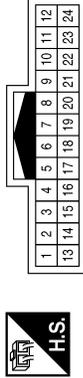
DLK

POWER DOOR LOCK SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

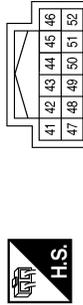
< WIRING DIAGRAM >

Connector No.	M91
Connector Name	WIRE TO WIRE
Connector Color	WHITE



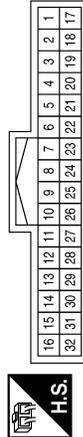
Terminal No.	Color of Wire	Signal Name
2	GR	-
19	LG	-
20	BR	-

Connector No.	M77
Connector Name	COMBINATION METER
Connector Color	WHITE



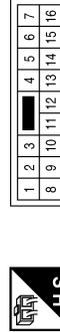
Terminal No.	Color of Wire	Signal Name
41	L	CAN+H
42	P	CAN-L

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
24	L	-
25	P	-

Connector No.	M167
Connector Name	WIRE TO WIRE
Connector Color	WHITE



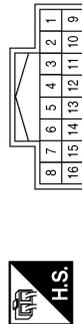
Terminal No.	Color of Wire	Signal Name
1	V	-
2	R	-
3	G	-
16	B	-

Connector No.	M158
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
11	L	-
12	Y	-

Connector No.	M107
Connector Name	CVT SHIFT SELECTOR
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
12	L	-
13	G	-

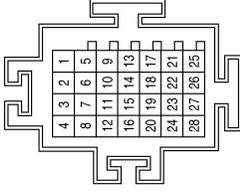
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POWER DOOR LOCK SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

Connector No.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Color	WHITE



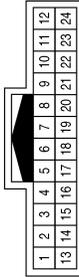
Terminal No.	Color of Wire	Signal Name
5	L	-
6	P	-
9	L	-
10	P	-
13	L	-
14	P	-
17	L	-
18	P	-

Connector No.	M170
Connector Name	JOINT CONNECTOR-M29
Connector Color	WHITE



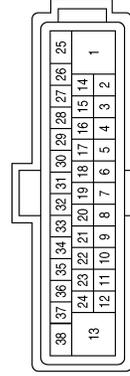
Terminal No.	Color of Wire	Signal Name
1	B	-
2	B	-

Connector No.	M168
Connector Name	WIRE TO WIRE
Connector Color	WHITE



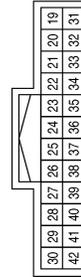
Terminal No.	Color of Wire	Signal Name
20	BR	-
21	P	-
23	BG	-
24	SB	-

Connector No.	E125
Connector Name	ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
22	P	CAN-L
24	L	CAN-H
39	L	CAN-H
40	P	CAN-L

Connector No.	E120
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY



AAKIA3215GB

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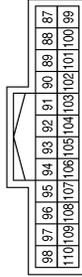
DLK

POWER DOOR LOCK SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

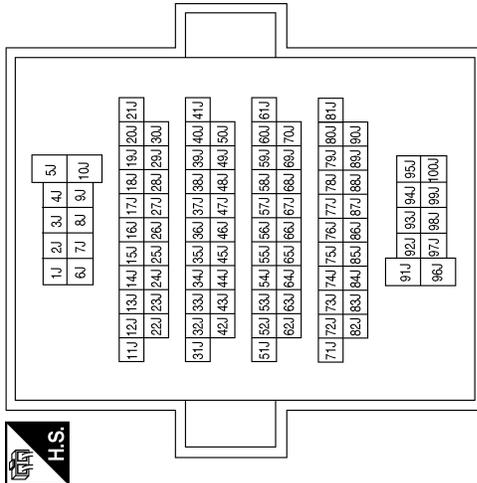
Connector No.	F42
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
87	L	CAN-H
88	P	CAN-L

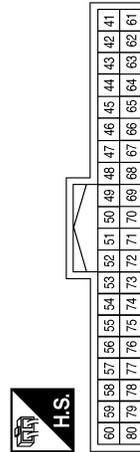
Terminal No.	Color of Wire	Signal Name
60J	P	-
61J	L	-

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE

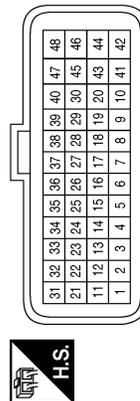


Terminal No.	Color of Wire	Signal Name
50	W	I RR DOOR SW
51	LG	I TGATE SW
52	R	I RL DOOR SW
53	SB	I AS DOOR2 SW
57	SB	I DR DOOR2 SW
60	L	CAN-H
80	P	CAN-L

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN



Connector No.	F75
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
23	P	CAN-L
33	L	CAN-H

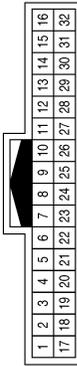
AAKIA3216GB

POWER DOOR LOCK SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

Connector No.	B46
Connector Name	WIRE TO WIRE
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
19	LG	-

Connector No.	B41
Connector Name	WIRE TO WIRE
Connector Color	WHITE




Terminal No.	Color of Wire	Signal Name
24	P	-
25	L	-

Connector No.	B23
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GRAY




Terminal No.	Color of Wire	Signal Name
148	W	O RR UNLOCK B
149	L	O RR LOCK B

Connector No.	B54
Connector Name	WIRE TO WIRE
Connector Color	WHITE




Terminal No.	Color of Wire	Signal Name
1	B	-

Connector No.	B51
Connector Name	WIRE TO WIRE
Connector Color	WHITE




Terminal No.	Color of Wire	Signal Name
6	W	-
7	L	-

Connector No.	B49
Connector Name	WIRE TO WIRE
Connector Color	WHITE




Terminal No.	Color of Wire	Signal Name
1	V	-
2	G	-
6	SB	-
10	W	-

AAKIA2403GB

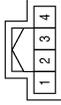
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POWER DOOR LOCK SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

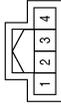
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Connector No.	B71
Connector Name	FRONT DOOR SWITCH LH
Connector Color	WHITE



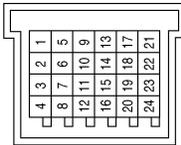
Terminal No.	Color of Wire	Signal Name
3	SB	-

Connector No.	B70
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	R	-

Connector No.	B63
Connector Name	JOINT CONNECTOR-B01
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
3	P	-
4	L	-
7	P	-
8	L	-

Connector No.	B141
Connector Name	FRONT DOOR SWITCH RH
Connector Color	WHITE



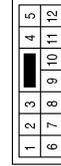
Terminal No.	Color of Wire	Signal Name
3	GR	-

Connector No.	B140
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	LA/LG	-
2	LA/GR	-
6	GR	-
10	W	-

Connector No.	B101
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6	LA/GR	-
7	LA/LG	-

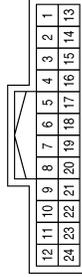
AAKIA2404GB

POWER DOOR LOCK SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

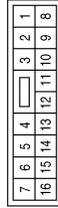
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Connector No.	D3
Connector Name	WIRE TO WIRE
Connector Color	WHITE



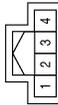
Terminal No.	Color of Wire	Signal Name
20	BR	-
21	P	-
23	L	-
24	BG	-

Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Color	WHITE



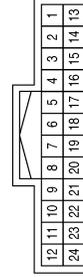
Terminal No.	Color of Wire	Signal Name
1	LAV	-
2	R	-
3	LA/G	-
16	B	-

Connector No.	B142
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE



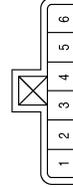
Terminal No.	Color of Wire	Signal Name
3	W	-

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Color	WHITE



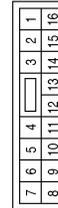
Terminal No.	Color of Wire	Signal Name
2	B	-
19	LG	-
20	BR	-

Connector No.	D23
Connector Name	FRONT DOOR LOCK ASSEMBLY LH
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
1	LAV	-
2	LA/G	-
3	R	-
4	B	-
5	P	-
6	BR	-

Connector No.	D6
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	B	-
3	L	-
15	BG	-

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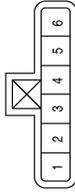
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POWER DOOR LOCK SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

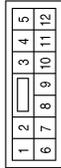
< WIRING DIAGRAM >

Connector No.	D113
Connector Name	FRONT DOOR LOCK ACTUATOR RH
Connector Color	GRAY



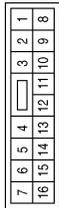
Terminal No.	Color of Wire	Signal Name
5	LAV	-
6	LAL	-

Connector No.	D112
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH
Connector Color	WHITE



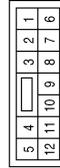
Terminal No.	Color of Wire	Signal Name
1	LG	-
2	BR	-
3	B	-

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Color	WHITE



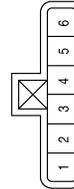
Terminal No.	Color of Wire	Signal Name
11	LAL	-
12	LAV	-

Connector No.	D301
Connector Name	WIRE TO WIRE
Connector Color	WHITE



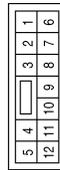
Terminal No.	Color of Wire	Signal Name
6	LAW	-
7	LAL	-

Connector No.	D206
Connector Name	REAR DOOR LOCK ACTUATOR LH
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
1	LA/G	-
2	LAV	-

Connector No.	D201
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6	LAV	-
7	LA/G	-

AAKIA2406GB

POWER DOOR LOCK SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

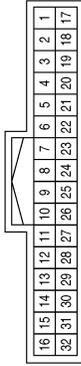
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Connector No.	D505
Connector Name	WIRE TO WIRE
Connector Color	WHITE



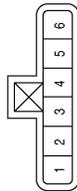
Terminal No.	1	Color of Wire	B	Signal Name	-
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Connector No.	D501
Connector Name	WIRE TO WIRE
Connector Color	WHITE



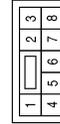
Terminal No.	19	Color of Wire	W	Signal Name	-
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Connector No.	D306
Connector Name	REAR DOOR LOCK ACTUATOR RH
Connector Color	GRAY



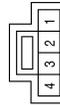
Terminal No.	5	Color of Wire	LA/L	Signal Name	-
6	LA/W	-	-	-	-

Connector No.	D512
Connector Name	BACK DOOR LOCK ASSEMBLY (WITH AUTOMATIC BACK DOOR SYSTEM)
Connector Color	WHITE



Terminal No.	7	Color of Wire	W	Signal Name	-
8	B	-	-	-	-

Connector No.	D508
Connector Name	BACK DOOR LOCK ASSEMBLY (WITHOUT AUTOMATIC BACK DOOR SYSTEM)
Connector Color	WHITE



Terminal No.	3	Color of Wire	W	Signal Name	-
4	GR	-	-	-	-

AAKIA3217GB

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INTELLIGENT KEY SYSTEM

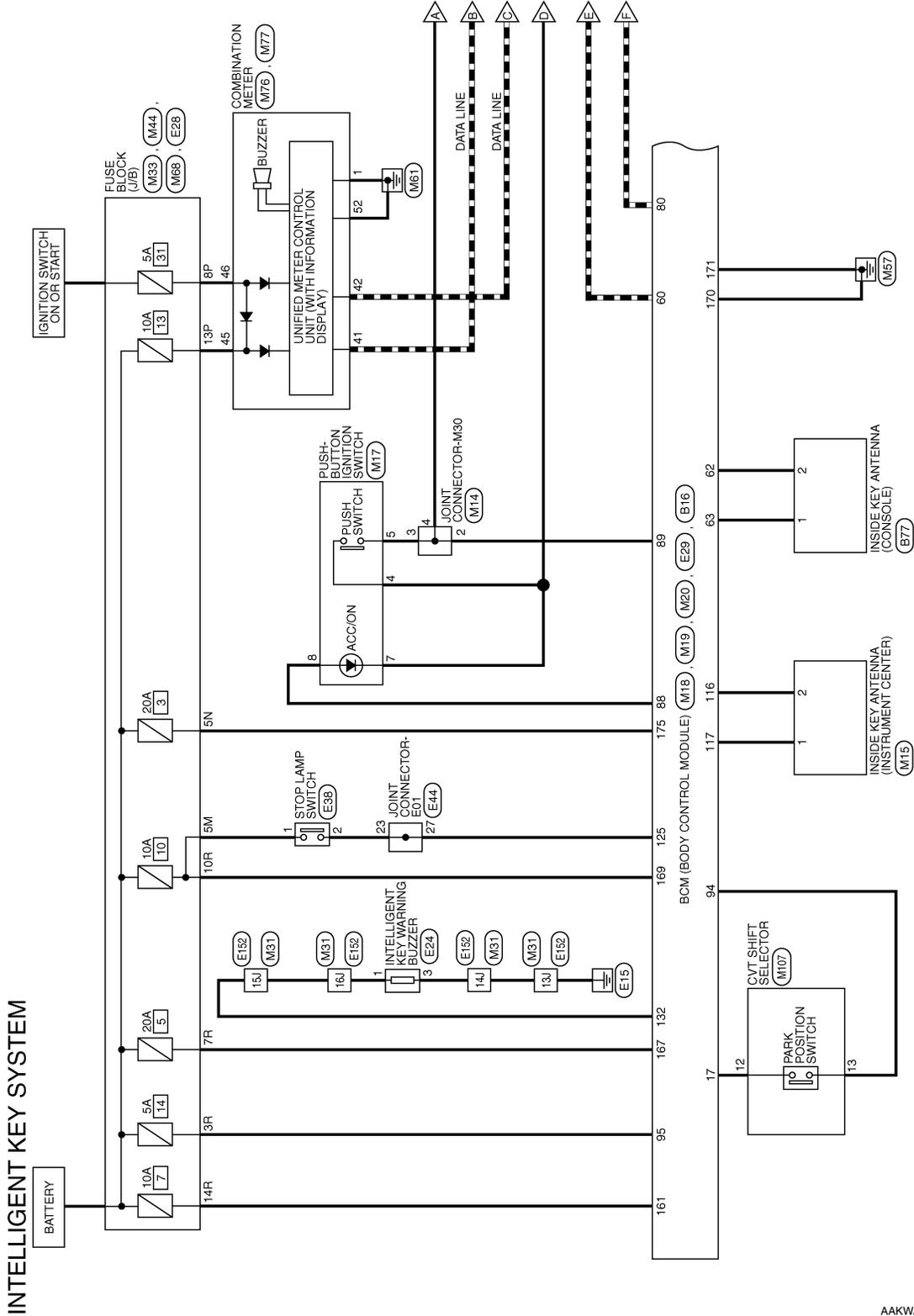
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[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM

Wiring Diagram

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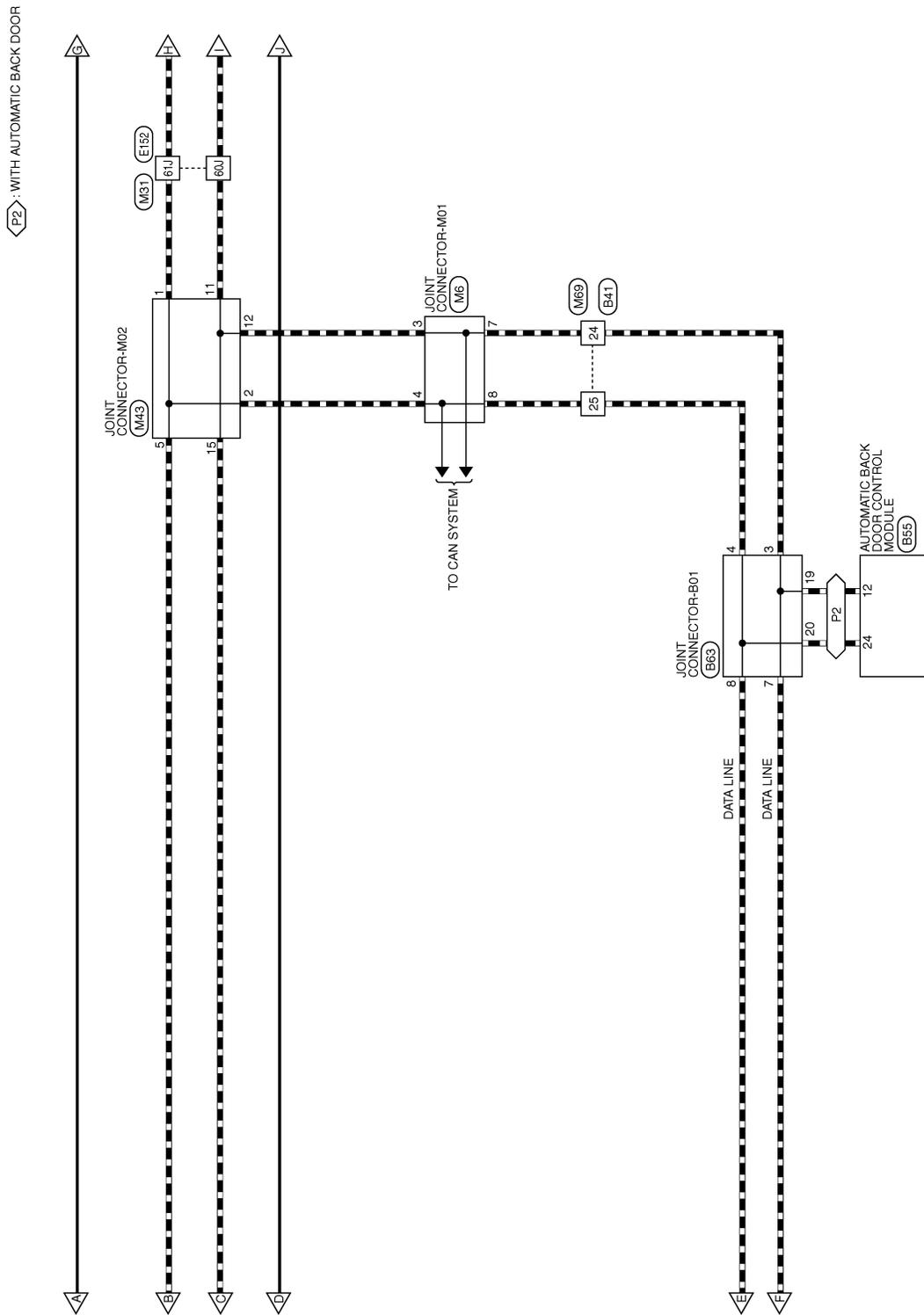


AAKWA1320GB

INTELLIGENT KEY SYSTEM

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[WITH INTELLIGENT KEY SYSTEM]



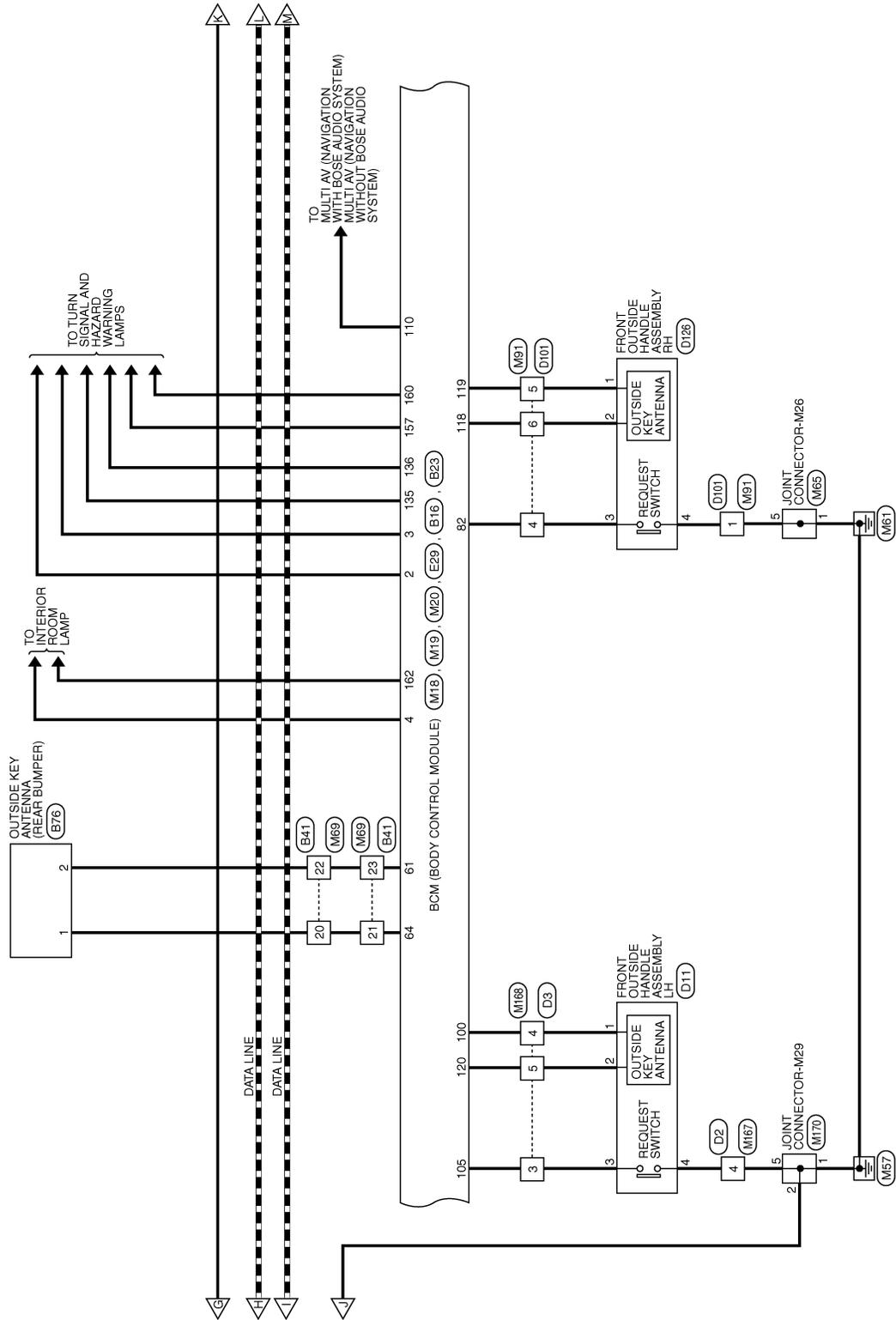
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AAKWA1330GB

INTELLIGENT KEY SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

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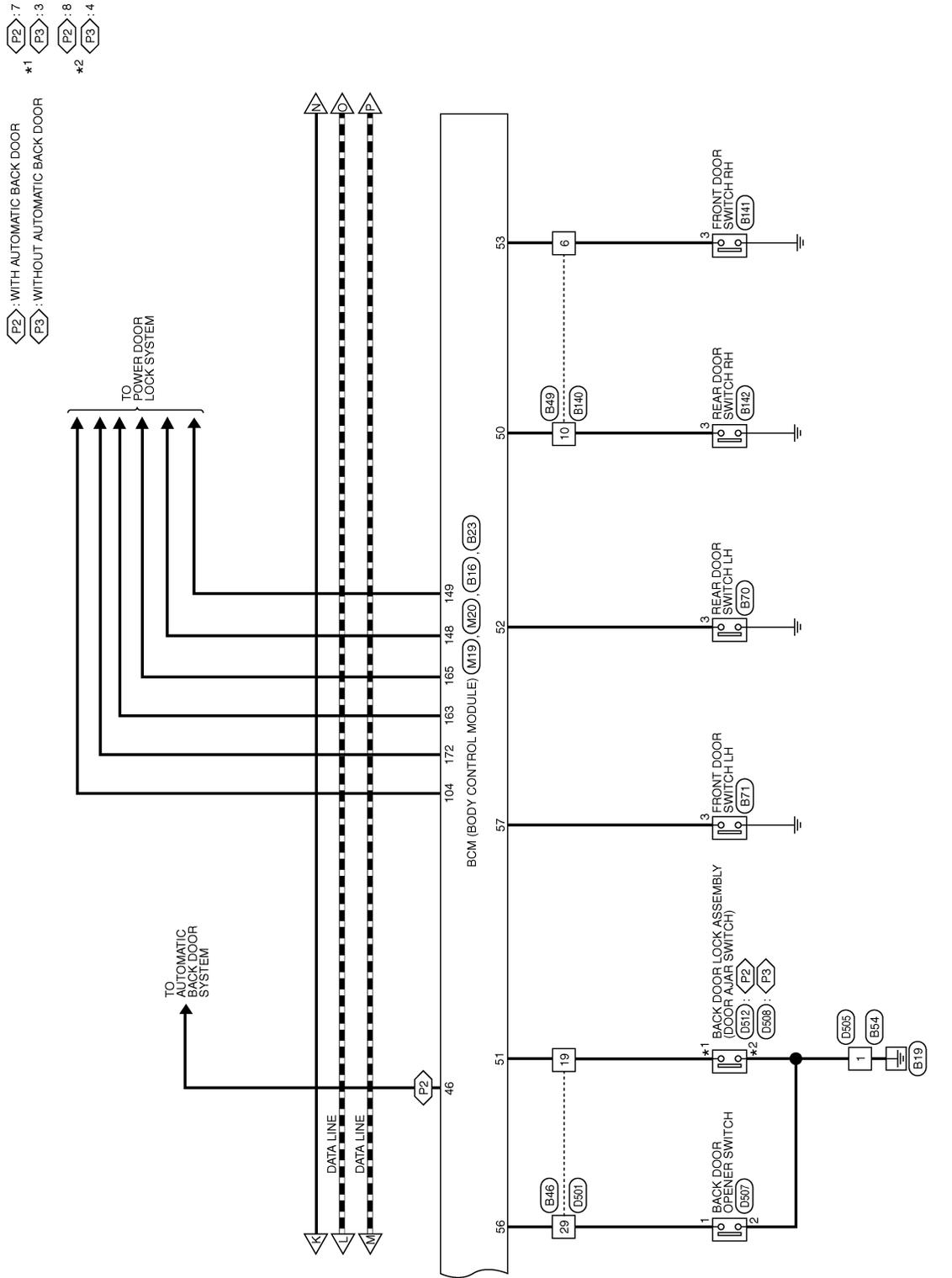


AAKWA1331GB

INTELLIGENT KEY SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >



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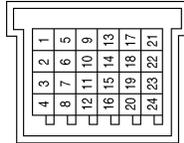
INTELLIGENT KEY SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

INTELLIGENT KEY SYSTEM CONNECTORS

Connector No.	M6
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
3	P	-
4	L	-
7	P	-
8	L	-

Connector No.	M14
Connector Name	JOINT CONNECTOR-M30
Connector Color	WHITE



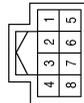
Terminal No.	Color of Wire	Signal Name
2	Y	-
3	Y	-
4	Y	-

Connector No.	M15
Connector Name	INSIDE KEY ANTENNA (INSTRUMENT CENTER)
Connector Color	GRAY



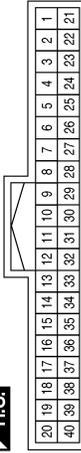
Terminal No.	Color of Wire	Signal Name
1	GR	-
2	BG	-

Connector No.	M17
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
4	B	-
5	Y	-
7	B	-
8	W	-

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
2	LA/G	O DI FR LEFT D
3	LAY	O DI FR RIGHT D
4	P	O SPARE4 RL N
17	L	O PWR ATDVC

AAKIA3189GB

A B C D E F G H I J L M N O P

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INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No.	Color of Wire	Signal Name
116	BG	SES INT FRONT ANTENNA B (WITH INTELLIGENT KEY SYSTEM)
117	GR	SES INT FRONT ANTENNA A (WITH INTELLIGENT KEY SYSTEM)
118	SB	SES EXT RIGHT ANTENNA B (WITH INTELLIGENT KEY SYSTEM)
119	P	SES EXT RIGHT ANTENNA A (WITH INTELLIGENT KEY SYSTEM)
120	BR	SES EXT LEFT ANTENNA B (WITH INTELLIGENT KEY SYSTEM)

Terminal No.	Color of Wire	Signal Name
88	W	O START SW BACKLIGHT LED
89	Y	I START WO ESCL SW
94	G	I AT LOCKED IN PARK SW
95	V	I SHORTING PIN
100	V	SES EXT LEFT ANTENNA A
104	R	I DR KNOB SW
105	Y	I SES FL HANDLE BUTTON SW (WITH INTELLIGENT KEY SYSTEM)
110	BG	O MR OUTPUT

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

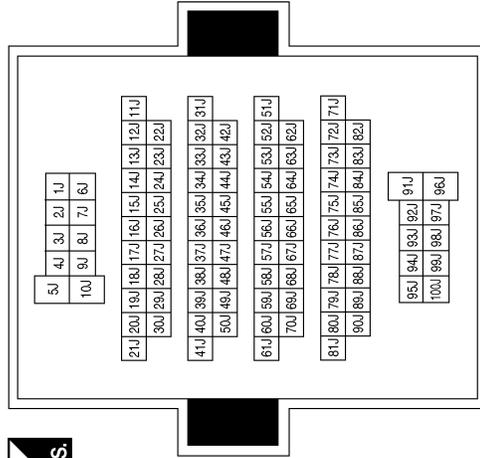


100	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
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Terminal No.	Color of Wire	Signal Name
82	W	I SES FR HANDLE BUTTON SW (WITH INTELLIGENT KEY SYSTEM)

Terminal No.	Color of Wire	Signal Name
13J	B	-
14J	B	-
15J	G	-
16J	G	-
37J	Y	-
60J	P	-
61J	L	-

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BROWN



167	166	165	164	163	162	161	160	159	158	157	156	155	154	153	152	151	150	149	148	147	146	145	144	143	142	141	140	139	138	137	136	135	134	133	132	131	130	129	128	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
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Terminal No.	Color of Wire	Signal Name
161	W	I PWR ECU
162	SB	O PWM ROOMLAMP 1
163	L	O AS LOCK OR UNLOCK D
165	V	O DR OR FR LOCK D
167	LAV	I PWR DOOR LOCK 1
169	GR	I PWR STOP LAMP
170	B	I GND1
171	B	I GND2
172	G	O FR OR DR UNLOCK D
175	R	I PWR DOORLOCK2

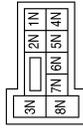
AAKIA3190GB

INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

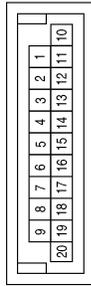
[WITH INTELLIGENT KEY SYSTEM]

Connector No.	M33
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
5N	R	-

Connector No.	M43
Connector Name	JOINT CONNECTOR-M02
Connector Color	BLUE



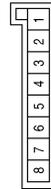
Terminal No.	Color of Wire	Signal Name
1	L	-
2	L	-
5	L	-
11	P	-
12	P	-
15	P	-

Connector No.	M44
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
8P	LA/BR	-
13P	LA/G	-

Connector No.	M65
Connector Name	JOINT CONNECTOR-M26
Connector Color	WHITE



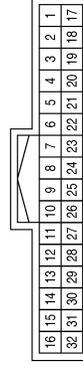
Terminal No.	Color of Wire	Signal Name
1	B	-
5	B	-

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
3R	V	-
7R	LAV	-
10R	GR	-
14R	W	-

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
20	BG	-
21	BG	-
22	GR	-
23	GR	-
24	P	-
25	L	-

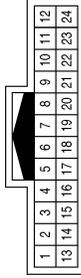
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INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]

Connector No.	M91
Connector Name	WIRE TO WIRE
Connector Color	WHITE



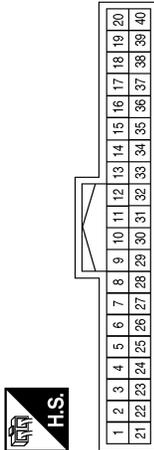
Terminal No.	Color of Wire	Signal Name
1	B	-
4	W	-
5	P	-
6	SB	-

Connector No.	M77
Connector Name	COMBINATION METER
Connector Color	WHITE



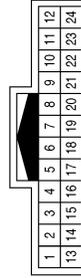
Terminal No.	Color of Wire	Signal Name
41	L	CAN-H
42	P	CAN-L
45	LA/G	BAT
46	LA/BR	IGN
52	B	G1

Connector No.	M76
Connector Name	COMBINATION METER
Connector Color	WHITE



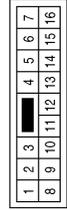
Terminal No.	Color of Wire	Signal Name
1	B	GND

Connector No.	M168
Connector Name	WIRE TO WIRE
Connector Color	WHITE



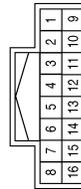
Terminal No.	Color of Wire	Signal Name
3	Y	-
4	V	-
5	BR	-

Connector No.	M167
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
4	B	-

Connector No.	M107
Connector Name	CVT SHIFT SELECTOR
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
12	L	-
13	G	-

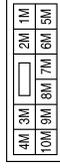
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INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]

Connector No.	E28
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



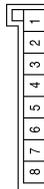
Terminal No.	Color of Wire	Signal Name
5M	V	-

Connector No.	E24
Connector Name	INTELLIGENT KEY WARNING BUZZER
Connector Color	BROWN



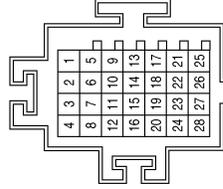
Terminal No.	Color of Wire	Signal Name
1	G	-
3	B	-

Connector No.	M170
Connector Name	JOINT CONNECTOR-M29
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	B	-
2	B	-
5	B	-

Connector No.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
5	L	-
6	P	-
9	L	-
10	P	-
17	L	-
18	P	-
23	LG	-
27	LG	-

Connector No.	E38
Connector Name	STOP LAMP SWITCH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	V	-
2	LG	-

Connector No.	E29
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
125	LG	I BRAKE SW2
132	Y	O BUZZER (WITH INTELLIGENT KEY SYSTEM)
135	BR	O DI FR LEFT E
136	GR	O DI FR RIGHT E

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INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]

Connector No.	E48
Connector Name	HORN (LOW)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
2	B	-

Connector No.	E47
Connector Name	HORN
Connector Color	BLACK



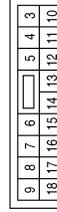
Terminal No.	Color of Wire	Signal Name
1	R	-

Connector No.	E46
Connector Name	HORN
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
2	B	-

Connector No.	E119
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
9	L	LO HORN RLY
12	B	SIGNAL GROUND

Connector No.	E101
Connector Name	ANTI-THEFT HORN RELAY
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	L	-
2	R	-
3	GR	-

Connector No.	E49
Connector Name	HORN (LOW)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	R	-

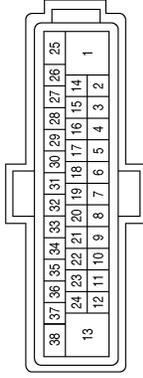
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INTELLIGENT KEY SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

Connector No.	E125
Connector Name	ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
Connector Color	BLACK



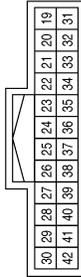
Terminal No.	Color of Wire	Signal Name
14	P	CAN-L
26	L	CAN-H

Connector No.	E121
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	RED



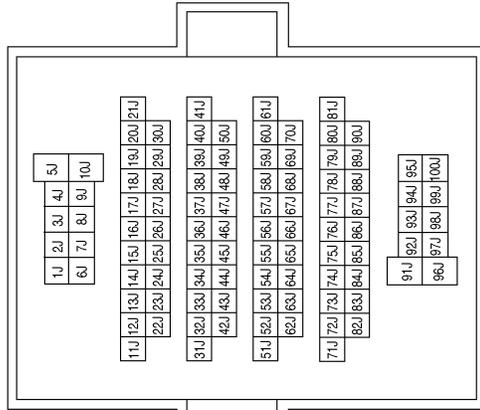
Terminal No.	Color of Wire	Signal Name
47	B	POWER GROUND

Connector No.	E120
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
22	P	CAN-L
24	L	CAN-H
31	B	2ND SIGNAL GROUND
32	GR	LIPUSH SWITCH

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
13J	B	-
14J	B	-
15J	Y	-
16J	G	-
37J	GR	-
60J	P	-
61J	L	-

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INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]

Connector No.	B23
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GRAY



15	160	159	158	157	156	155	154	153	152
148	147	146	145						

Terminal No.	Color of Wire	Signal Name
148	W	O RR UNLOCK B
149	L	O RR LOCK B
157	GR	O DI RR LEFT B
160	P	O DI RR RIGHT B

Terminal No.	Color of Wire	Signal Name
52	R	I RL DOOR SW
53	SB	I AS DOOR2 SW
56	Y	I TGATE OPENER SW
57	SB	I DR DOOR2 SW
60	L	CAN-H
61	BR	SES EXT REAR ANTENNA B
62	Y	SES INT MIDDLE ANTENNA B
63	L	SES INT MIDDLE ANTENNA A
64	G	SES EXT REAR ANTENNA A
80	P	CAN-L

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN



60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41
80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61

Terminal No.	Color of Wire	Signal Name
46	R	I SES BACKDOOR BUTTON SW
50	W	I RR DOOR SW
51	LG	I TGATE SW

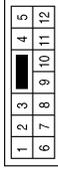
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INTELLIGENT KEY SYSTEM

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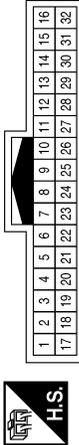
[WITH INTELLIGENT KEY SYSTEM]

Connector No.	B49
Connector Name	WIRE TO WIRE
Connector Color	WHITE



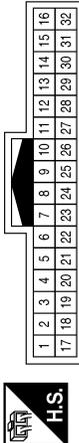
Terminal No.	Color of Wire	Signal Name
6	SB	-
10	W	-

Connector No.	B46
Connector Name	WIRE TO WIRE
Connector Color	WHITE



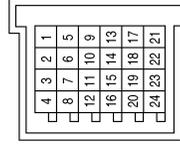
Terminal No.	Color of Wire	Signal Name
19	LG	-
29	Y	-

Connector No.	B41
Connector Name	WIRE TO WIRE
Connector Color	WHITE



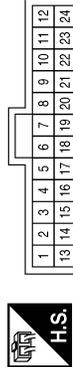
Terminal No.	Color of Wire	Signal Name
20	LG	-
21	G	-
22	V	-
23	BR	-
24	P	-
25	L	-

Connector No.	B63
Connector Name	JOINT CONNECTOR-B01
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
3	P	-
4	L	-
7	P	-
8	L	-
19	P	-
20	L	-

Connector No.	B55
Connector Name	AUTOMATIC BACK DOOR CONTROL MODULE
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
12	P	CAN-L
24	L	CAN-H

Connector No.	B54
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	B	-

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INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

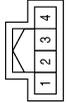
[WITH INTELLIGENT KEY SYSTEM]

Connector No.	B76
Connector Name	OUTSIDE KEY ANTENNA (REAR BUMPER)
Connector Color	GRAY



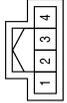
Terminal No.	Color of Wire	Signal Name
1	LG	-
2	V	-

Connector No.	B71
Connector Name	FRONT DOOR SWITCH LH
Connector Color	WHITE



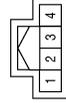
Terminal No.	Color of Wire	Signal Name
3	SB	-

Connector No.	B70
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE



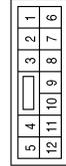
Terminal No.	Color of Wire	Signal Name
3	R	-

Connector No.	B141
Connector Name	FRONT DOOR SWITCH RH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	GR	-

Connector No.	B140
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6	GR	-
10	W	-

Connector No.	B77
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
1	L	-
2	Y	-

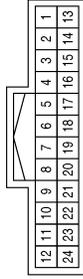
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INTELLIGENT KEY SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

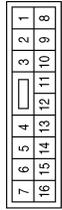
< WIRING DIAGRAM >

Connector No.	D3
Connector Name	WIRE TO WIRE
Connector Color	WHITE



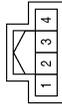
Terminal No.	Color of Wire	Signal Name
3	W	-
4	V	-
5	SB	-

Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Color	WHITE



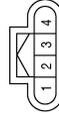
Terminal No.	Color of Wire	Signal Name
4	B	-

Connector No.	B142
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE



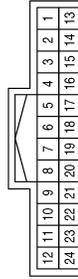
Terminal No.	Color of Wire	Signal Name
3	W	-

Connector No.	D126
Connector Name	FRONT OUTSIDE HANDLE ASSEMBLY RH
Connector Color	BLACK



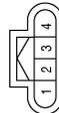
Terminal No.	Color of Wire	Signal Name
1	R	-
2	SB	-
3	P	-
4	B	-

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	B	-
4	P	-
5	R	-
6	SB	-

Connector No.	D11
Connector Name	FRONT OUTSIDE HANDLE ASSEMBLY LH
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	V	-
2	SB	-
3	W	-
4	B	-

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INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]

Connector No.	D507
Connector Name	BACK DOOR OPENER SWITCH
Connector Color	WHITE



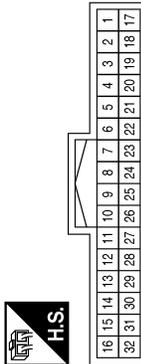
Terminal No.	Color of Wire	Signal Name
1	V	-
2	GR	-

Connector No.	D505
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	B	-

Connector No.	D501
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
19	W	-
29	V	-

Connector No.	D512
Connector Name	BACK DOOR LOCK ASSEMBLY (WITH AUTOMATIC BACK DOOR SYSTEM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
7	W	-
8	B	-

Connector No.	D508
Connector Name	BACK DOOR LOCK ASSEMBLY (WITHOUT AUTOMATIC BACK DOOR SYSTEM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	W	-
4	GR	-

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AUTOMATIC BACK DOOR SYSTEM

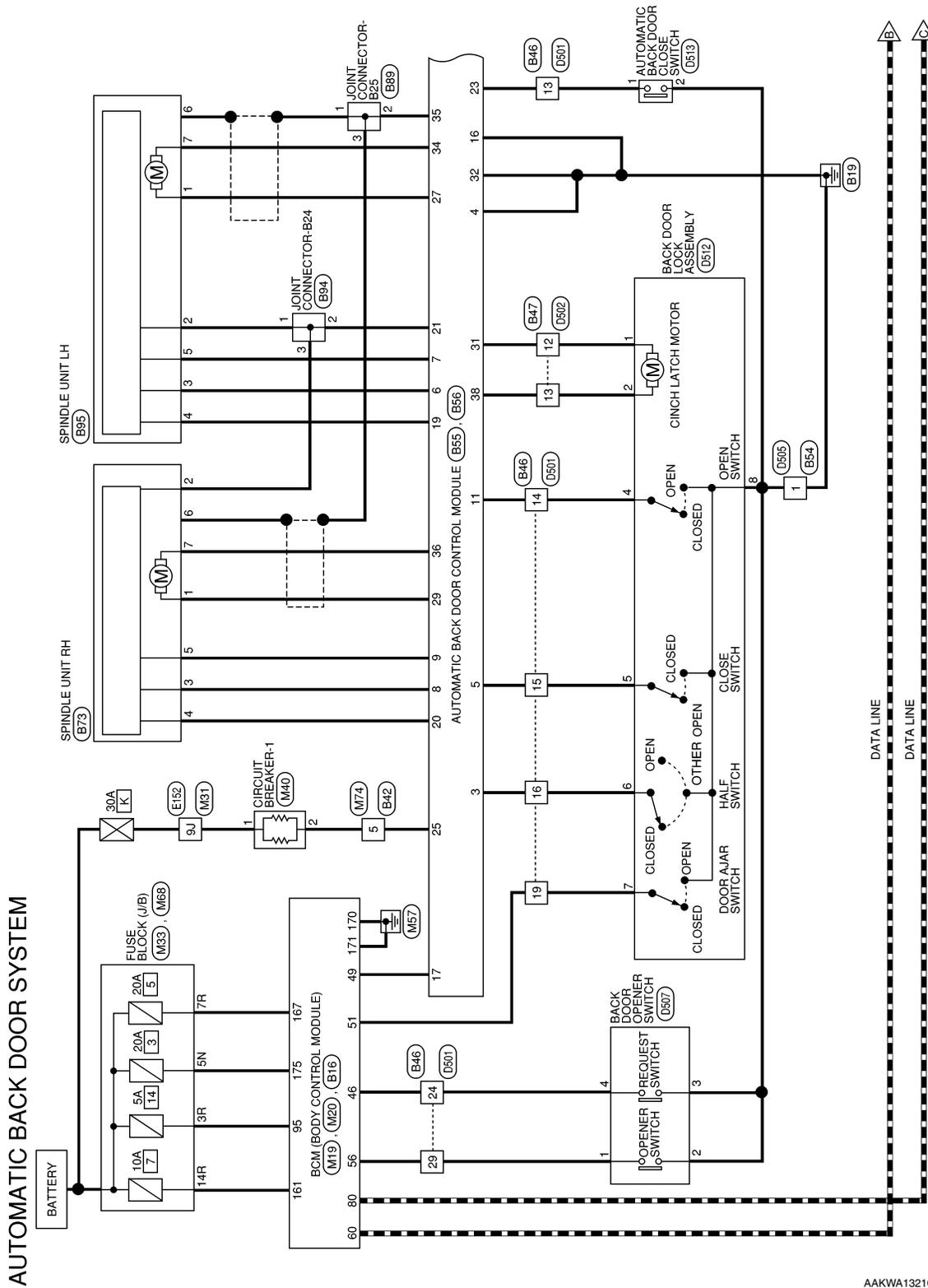
[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

AUTOMATIC BACK DOOR SYSTEM

Wiring Diagram

INFOID:000000012423545



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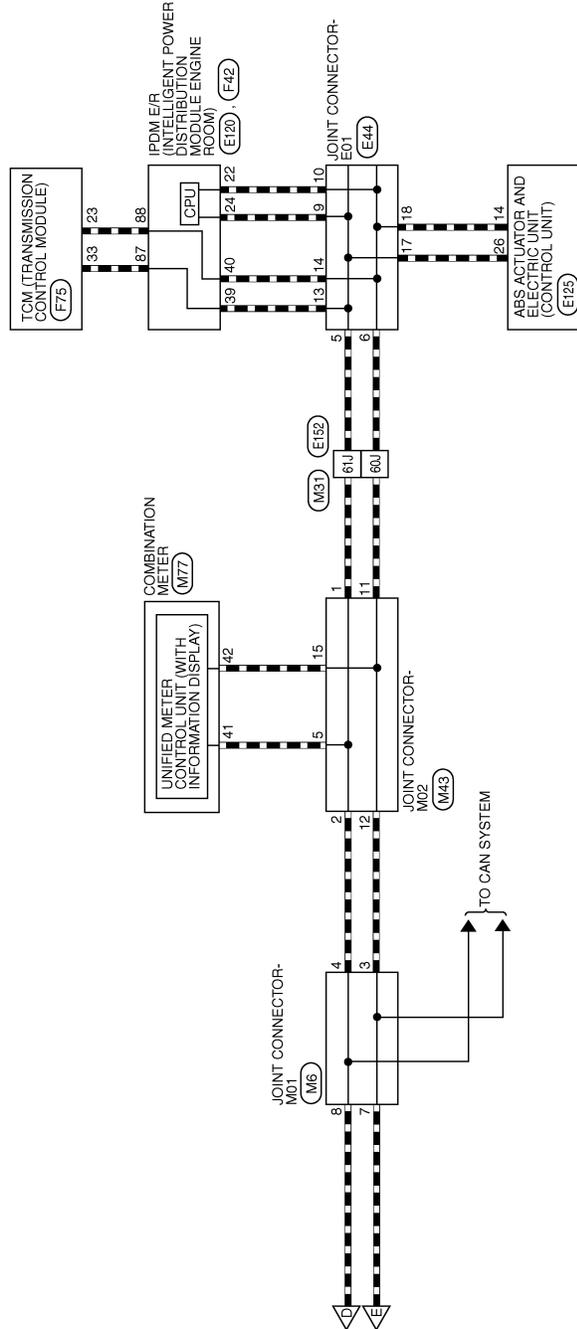
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AUTOMATIC BACK DOOR SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >



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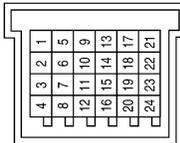
AUTOMATIC BACK DOOR SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

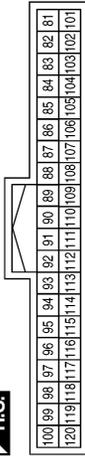
AUTOMATIC BACK DOOR SYSTEM CONNECTORS

Connector No.	M6
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
3	P	-
4	L	-
7	P	-
8	L	-

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



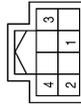
Terminal No.	Color of Wire	Signal Name
95	V	I SHORTING PIN

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BROWN

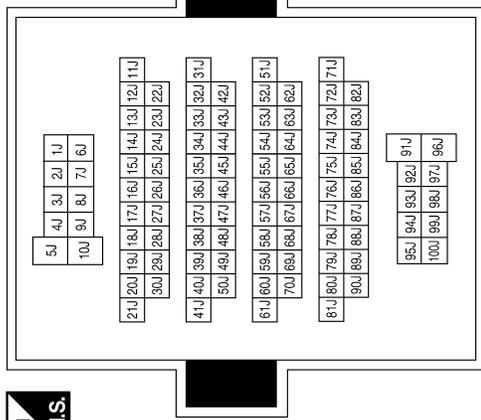


Terminal No.	Color of Wire	Signal Name
161	W	I PWR ECU
167	LA/V	I PWR DOORLOCK1
170	B	I GND1
171	B	I GND2
175	R	I PWR DOORLOCK2

Connector No.	M24
Connector Name	AUTOMATIC BACK DOOR SWITCH
Connector Color	GREEN



Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Color	WHITE



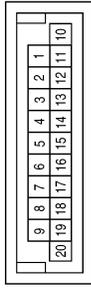
Terminal No.	Color of Wire	Signal Name
1	LG	-
2	B	-

AUTOMATIC BACK DOOR SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

Connector No.	M43
Connector Name	JOINT CONNECTOR-M02
Connector Color	BLUE



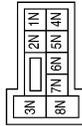
Terminal No.	Color of Wire	Signal Name
1	L	-
2	L	-
5	L	-
11	P	-
12	P	-
15	P	-

Connector No.	M40
Connector Name	CIRCUIT BREAKER-1
Connector Color	WHITE



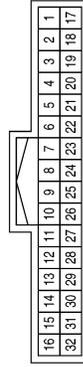
Terminal No.	Color of Wire	Signal Name
1	W	-
2	W	-

Connector No.	M33
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
5N	R	-

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE



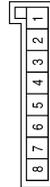
Terminal No.	Color of Wire	Signal Name
7	LG	-
8	BG	-
24	L	-
25	P	-

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
3R	V	-
7R	LA/V	-
14R	W	-

Connector No.	M67
Connector Name	JOINT CONNECTOR-M27
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	B	-
3	B	-
4	B	-

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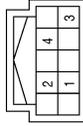
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AUTOMATIC BACK DOOR SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

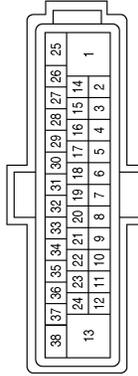
< WIRING DIAGRAM >

Connector No.	M178
Connector Name	AUTOMATIC BACK DOOR MAIN SWITCH
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	BG	-
3	B	-

Connector No.	E125
Connector Name	ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
Connector Color	BLACK



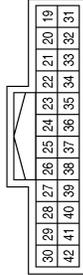
Terminal No.	Color of Wire	Signal Name
14	P	CAN-L
26	L	CAN-H

Connector No.	M77
Connector Name	COMBINATION METER
Connector Color	WHITE



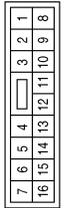
Terminal No.	Color of Wire	Signal Name
41	L	CAN-H
42	P	CAN-L

Connector No.	E120
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY



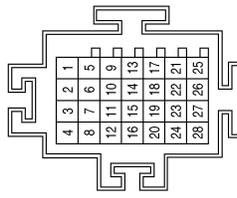
Terminal No.	Color of Wire	Signal Name
22	P	CAN-L
24	L	CAN-H
39	L	CABIN MOTOR 1
40	P	CABIN MOTOR 2

Connector No.	M74
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
5	W	-

Connector No.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
5	L	-
6	P	-
9	L	-
10	P	-
13	L	-
14	P	-
17	L	-
18	P	-

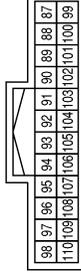
AAKIA3195GB

AUTOMATIC BACK DOOR SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

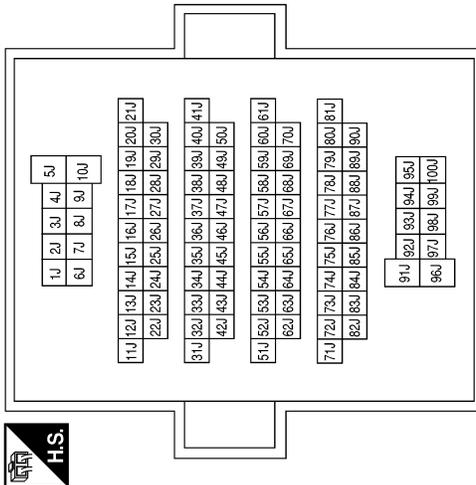
Connector No.	F42
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
87	L	CAN-H
88	P	CAN-L

Terminal No.	Color of Wire	Signal Name
9J	BR	-
60J	P	-
61J	L	-

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Connector No.	B41
Connector Name	WIRE TO WIRE
Connector Color	WHITE



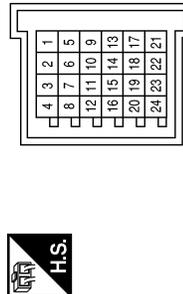
Terminal No.	Color of Wire	Signal Name
7	LG	-
8	BG	-
24	P	-
25	L	-

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN



Terminal No.	Color of Wire	Signal Name
46	R	I SES BACKDOOR BUTTON SW
49	G	-
51	LG	ITGATE SW
56	Y	ITGATE OPENER SW
60	L	CAN-H
80	P	CAN-L

Connector No.	F75
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
23	P	CAN-H
33	L	CAN-L

AAKIA3196GB

A B C D E F G H I J L M N O P

DLK

AUTOMATIC BACK DOOR SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

Connector No.	B42
Connector Name	WIRE TO WIRE
Connector Color	WHITE



1	2	3	4	5	6	7		
8	9	10	11	12	13	14	15	16

Terminal No.	Color of Wire	Signal Name
5	W	-

Connector No.	B46
Connector Name	WIRE TO WIRE
Connector Color	WHITE



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32

Terminal No.	Color of Wire	Signal Name
13	W	-
14	V	-
15	BR	-
16	SB	-
19	LG	-
24	R	-
29	Y	-
30	G	-
31	GR	-
32	LG	-

Connector No.	B47
Connector Name	WIRE TO WIRE
Connector Color	WHITE



1	2	3	4	5	6	7		
8	9	10	11	12	13	14	15	16

Terminal No.	Color of Wire	Signal Name
12	L	-
13	SB	-

Connector No.	B54
Connector Name	WIRE TO WIRE
Connector Color	WHITE



1	2
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Terminal No.	Color of Wire	Signal Name
1	B	-

Connector No.	B55
Connector Name	AUTOMATIC BACK DOOR CONTROL MODULE
Connector Color	BLACK



1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24

Terminal No.	Color of Wire	Signal Name
1	LG	TOUCH SENS RH
2	G	TOUCH SENS LH
3	SB	HALF LATCH SW
4	B	AUT UNLK REG
5	BR	CLOSE SW
6	W	A SIGN LH
7	L	B SIGN LH
8	R	A SIGN RH

Terminal No.	Color of Wire	Signal Name
9	SB	B SIGN RH
10	BG	MAIN SW
11	V	OPEN SW
12	P	CAN-L
13	GR	TOUCH SENS GND
14	-	-
15	-	-
16	B	HZD LMP OFF REQ
17	G	DIGITAL OUTPUT ON/OFF
18	-	-
19	V	POWER LH
20	P	POWER RH
21	G	GND
22	LG	DRIVER SW
23	W	INSIDE CLOSE SW
24	L	CAN-H

AAKIA3197GB

AUTOMATIC BACK DOOR SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

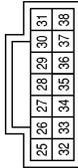
Connector No.	B61
Connector Name	AUTOMATIC BACK DOOR WARNING BUZZER
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
1	Y	-
2	B	-

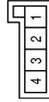
Terminal No.	Color of Wire	Signal Name
31	L	LATCH MTR OPEN
32	B	GND (POWER 1)
33	-	-
34	G	P B/D LH MTR CLOSE
35	B	SPINDLE NOISE
36	G	P B/D RH MTR CLOSE
37	Y	BUZZER
38	SB	LATCH MTR CLOSE

Connector No.	B56
Connector Name	AUTOMATIC BACK DOOR CONTROL MODULE
Connector Color	GRAY



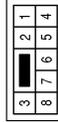
Terminal No.	Color of Wire	Signal Name
25	W	+B(1)
27	BR	P B/D LH MTR OPEN
28	-	-
29	BR	P B/D RH MTR OPEN

Connector No.	B89
Connector Name	JOINT CONNECTOR-B25
Connector Color	WHITE



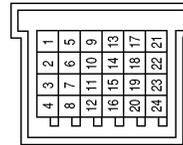
Terminal No.	Color of Wire	Signal Name
1	SHIELD	-
2	B	-
3	SHIELD	-

Connector No.	B73
Connector Name	SPINDLE UNIT RH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	BR	-
2	G	-
3	R	-
4	P	-
5	SB	-
6	SHIELD	-
7	G	-

Connector No.	B63
Connector Name	JOINT CONNECTOR-B01
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
3	P	-
4	L	-
7	P	-
8	L	-
19	P	-
20	L	-

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A B C D E F G H I J DLK L M N O P

AUTOMATIC BACK DOOR SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

Connector No.	D501
Connector Name	WIRE TO WIRE
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
13	G	-
14	LA/GR	-
15	LA/W	-
16	LA/LG	-
19	W	-
24	BR	-
29	V	-
30	G	-
31	BG	-
32	LG	-

Connector No.	B95
Connector Name	SPINDLE UNIT LH
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
1	BR	-
2	G	-
3	W	-
4	V	-
5	L	-
6	SHIELD	-
7	G	-

Connector No.	B94
Connector Name	JOINT CONNECTOR-B24
Connector Color	WHITE

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

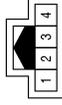
AAKIA3199GB

AUTOMATIC BACK DOOR SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

Connector No.	D507
Connector Name	BACK DOOR OPENER SWITCH
Connector Color	WHITE



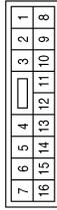
Terminal No.	Color of Wire	Signal Name
1	V	-
2	GR	-
3	GR	-
4	BR	-

Connector No.	D505
Connector Name	WIRE TO WIRE
Connector Color	WHITE



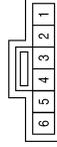
Terminal No.	Color of Wire	Signal Name
1	B	-

Connector No.	D502
Connector Name	WIRE TO WIRE
Connector Color	WHITE



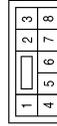
Terminal No.	Color of Wire	Signal Name
12	LA/L	-
13	LA/G	-

Connector No.	D513
Connector Name	AUTOMATIC BACK DOOR CLOSE SWITCH
Connector Color	GRAY



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

Connector No.	D512
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	LA/L	-
2	LA/G	-
4	LA/GR	-
5	LA/W	-
6	LA/LG	-
7	W	-
8	B	-

Connector No.	D511
Connector Name	TOUCH SENSOR LH
Connector Color	WHITE



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

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AUTOMATIC BACK DOOR SYSTEM

< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]

Connector No.	D515
Connector Name	TOUCH SENSOR RH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	W	-
2	LG	-

AAKIA3219GB

HOMELINK UNIVERSAL TRANSCEIVER

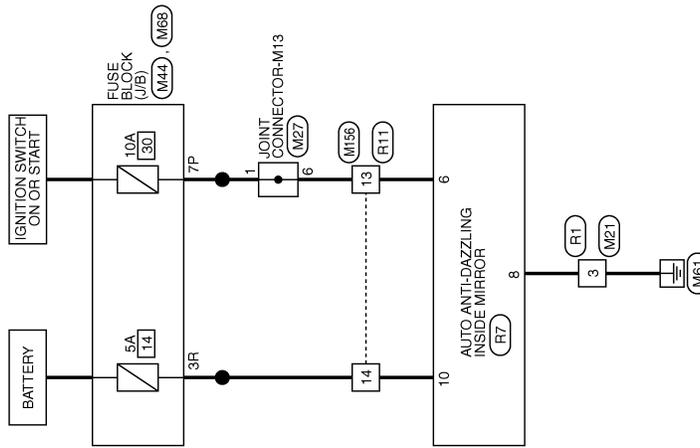
< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]

HOMELINK UNIVERSAL TRANSCEIVER

Wiring Diagram

INFOID:000000012423546



HOMELINK UNIVERSAL TRANSCEIVER

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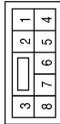
HOMELINK UNIVERSAL TRANSCEIVER

[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

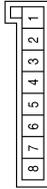
HOMELINK UNIVERSAL TRANSCEIVER CONNECTORS

Connector No.	M21
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	3	Color of Wire	B	Signal Name	-
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Connector No.	M27
Connector Name	JOINT CONNECTOR-M13
Connector Color	WHITE



Terminal No.	1	6	Color of Wire	SB	SB	Signal Name	-	-
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Connector No.	M44
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



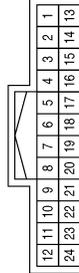
Terminal No.	7P	Color of Wire	Y	Signal Name	-
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Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN



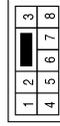
Terminal No.	3R	Color of Wire	V	Signal Name	-
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Connector No.	M156
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	13	14	Color of Wire	SB	GR	Signal Name	-	-
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Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	3	Color of Wire	B	Signal Name	-
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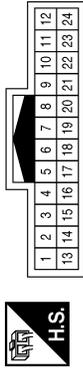
HOMELINK UNIVERSAL TRANSCEIVER

< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]

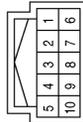
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Connector No.	R11
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
13	SB	-
14	P	-

Connector No.	R7
Connector Name	AUTO ANTI-DAZZLING INSIDE MIRROR (WITH HOMELINK UNIVERSAL TRANSCEIVER)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
6	SB	-
8	B	-
10	P	-

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DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

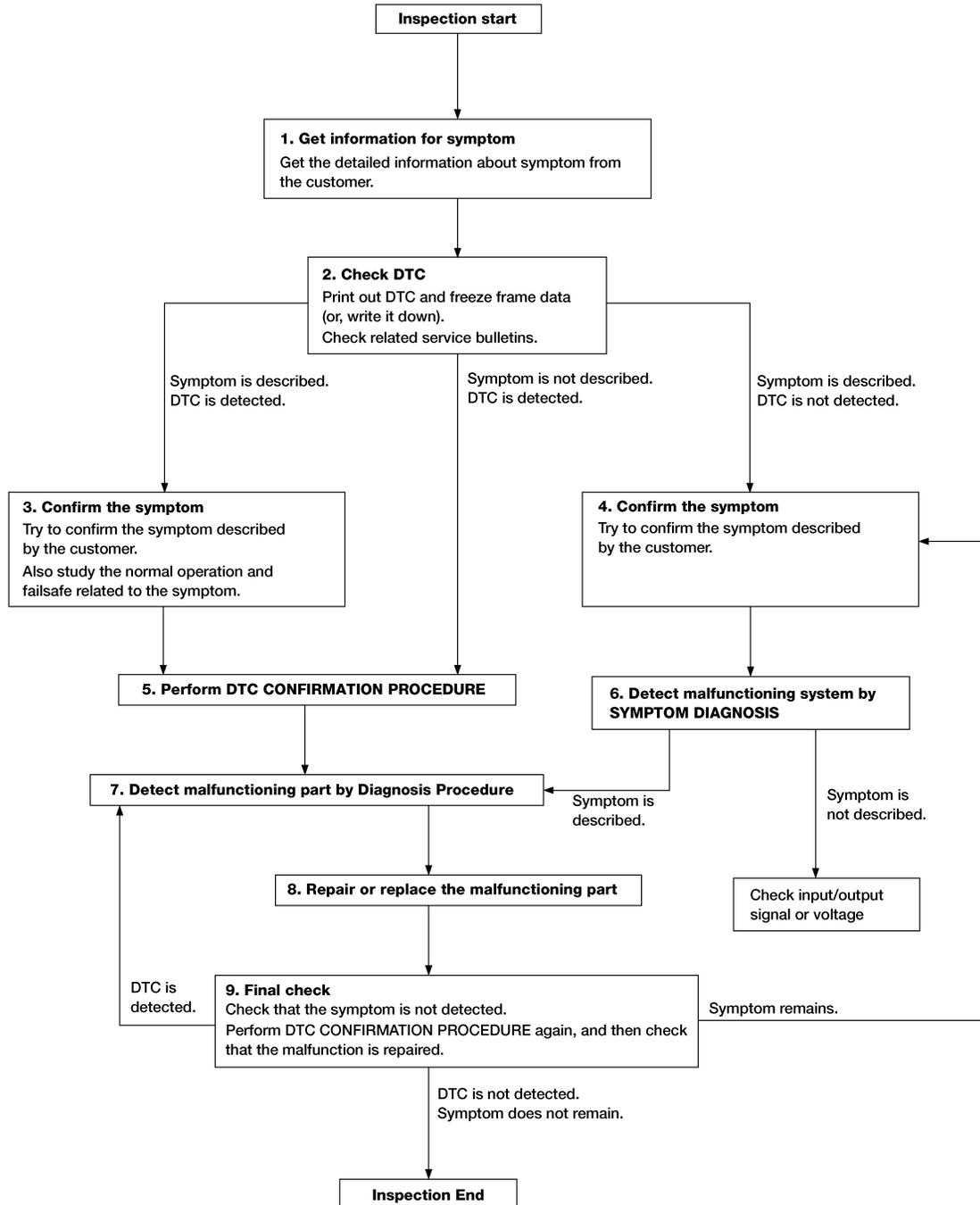
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000012423547

OVERALL SEQUENCE



ALAI0158GB

DETAILED FLOW

Revision: September 2015

DLK-108

2016 Rogue NAM

DIAGNOSIS AND REPAIR WORK FLOW

[WITH INTELLIGENT KEY SYSTEM]

< BASIC INSPECTION >

1. GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2. CHECK DTC

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

Are any symptoms described and any DTC detected?

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

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

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

3. CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

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

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

>> GO TO 5.

4. CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

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

>> GO TO 6.

5. PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC CONFIRMATION PROCEDURE for the detected DTC and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle and check self diagnostic results in real time.

If two or more DTCs are detected, refer to [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 this check.

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

Is DTC detected?

YES >> GO TO 7.

NO >> Check according to [GI-45. "Intermittent Incident"](#).

6. DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

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

Is the symptom described?

YES >> GO TO 7.

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

7. DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

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DIAGNOSIS AND REPAIR WORK FLOW

[WITH INTELLIGENT KEY SYSTEM]

< BASIC INSPECTION >

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.

NO >> Check according to [GI-45. "Intermittent Incident"](#).

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

1. Repair or replace the malfunctioning part.
2. Reconnect parts or connectors disconnected during Diagnosis 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.

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

Description

INFOID:000000012423548

When the battery is disconnected from the negative terminal, it is necessary to perform initial setting to operate automatic back door control system normally.

NOTE:

The following specified operations are not performed under the non-initialized condition.

- Automatic back door open/close function
- Anti-pinch function

Work Procedure

INFOID:000000012423549

1. INITIALIZATION

1. Fully close the back door manually. (When back door is already fully closed, this operation is not necessary).
2. Perform automatic back door open/close operation of back door.
3. Check for noise or malfunctioning during operation.
4. Check that hazard lamp blinks and that warning buzzer operates.

NOTE:

Never touch back door or allow foreign materials to be pinched in door when performing automatic back door open/close operation of back door until it is in the fully closed or fully open position.

>> Inspection End.

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ADDITIONAL SERVICE WHEN REPLACING BCM

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

ADDITIONAL SERVICE WHEN REPLACING BCM

Description

INFOID:000000012423550

Perform the system initialization when replacing BCM, replacing Intelligent Key or registering an additional Intelligent Key.

Work Procedure

INFOID:000000012423551

Refer to the CONSULT Immobilizer mode and follow the on-screen instructions.

ADDITIONAL SERVICE WHEN REPLACING AUTOMATIC BACK DOOR CONTROL UNIT

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

ADDITIONAL SERVICE WHEN REPLACING AUTOMATIC BACK DOOR CONTROL UNIT

Description

INFOID:000000012423552

When replacing control module or removing connector terminal, it is necessary to perform initial setting to operate automatic back door system normally.

NOTE:

The following specified operations are not performed under the non-initialized condition:

- Automatic back door open/close function
- Anti-pinch function

Work Procedure

INFOID:000000012423553

1. INITIALIZATION

1. Fully close the back door manually. (When back door is already fully closed, this operation is not necessary.)
2. Perform automatic back door open/close operation of back door.
3. Check for noise or malfunctioning during operation.
4. Check that hazard lamp blinks and that warning buzzer operates.

NOTE:

Never touch back door or allow foreign materials to be pinched in door when performing automatic back door open/close operation of back door until it is in the fully closed or fully open position.

>> Inspection End.

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CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

Description

INFOID:000000012423554

When the following work is performed, it is necessary to perform initial setting of automatic back door position information to operate automatic back door system:

- After removing and installing or replacing back door assembly.
- After removing and installing or replacing spindle unit.
- After adjustment or position change of the back door hinges or striker.

Work Procedure

INFOID:000000012423555

1.STEP 1

Fully close the back door manually.

>> GO TO 2.

2.STEP 2

1. Select "AUTO BACK DOOR" using CONSULT.
2. Select "RESET AUTO BACK DOOR STATUS" of "Work support".
3. Touch "START" to erase automatic back door position information.

>> GO TO 3.

3.STEP 3

Operate back door opener switch and perform automatic open operation.

NOTE:

At this time, automatic operation of back door is performed at half speed.

>> GO TO 4.

4.STEP 4

1. The back door fully opens.
2. Check that hazard warning lamp blinks and automatic back door warning buzzer sounds normally.

Does hazard warning lamp blink and automatic back door warning buzzer sound normally?

- YES >> GO TO 5.
NO >> GO TO 1.

5.STEP 5

Fully close the back door.

>> Inspection End.

U1000 CAN COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000012816092

Refer to [LAN-11, "System Description"](#).

DTC Logic

INFOID:0000000012816093

DTC DETECTION LOGIC

NOTE:

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

CONSULT Display	DTC Detection Condition	Possible cause
CAN COMM CIRCUIT [U1000]	When any listed module cannot communicate with CAN communication signal continuously for 2 seconds or more with ignition switch ON.	In CAN communication system, any item (or items) of the following listed below is malfunctioning: <ul style="list-style-type: none">• Transmission• Receiving (ECM)• Receiving (VDC/TCS/ABS)• Receiving (METER/M&A)• Receiving (TCM)• Receiving (IPDM E/R)

Diagnosis Procedure

INFOID:0000000012816094

1. PERFORM SELF DIAGNOSTIC

1. Turn ignition switch ON and wait for 2 second or more.
2. Check "Self Diagnostic Result".

Is "CAN COMM CIRCUIT" displayed?

- YES >> Perform CAN Diagnosis as described in DIAGNOSIS section of CONSULT Operation Manual.
NO >> Refer to [GI-45, "Intermittent Incident"](#).

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U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

U1010 CONTROL UNIT (CAN)

DTC Logic

INFOID:000000012816095

DTC DETECTION LOGIC

CONSULT Display	DTC Detection Condition	Possible Cause
CAN COMM CIRCUIT [U1010]	BCM detected internal CAN communication circuit malfunction.	BCM

Diagnosis Procedure

INFOID:000000012816096

1. REPLACE BCM

When DTC U1010 is detected, replace BCM.

>> Replace BCM. Refer to [BCS-76. "Removal and Installation"](#).

B2401 IGNITION POWER SUPPLY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2401 IGNITION POWER SUPPLY CIRCUIT

DTC Logic

INFOID:000000012423561

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2401	IGN OPEN	Automatic back door control module cannot detect ignition switch ON signal via CAN communication with BCM.	<ul style="list-style-type: none">• BCM• Automatic back door control module• CAN communication system

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check "Self Diagnostic Result" of "AUTO BACK DOOR" using CONSULT.

Is DTC detected?

- YES >> Refer to [DLK-117, "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:000000012423562

1. CHECK BCM OUTPUT SIGNAL

1. Select "IPDM E/R" using CONSULT.
2. Select "PUSH SW" in "Data Monitor".
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition	Status	
PUSH SW	Ignition switch	Pressed	Close
		Not pressed	Open

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).
NO >> Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

B2409 HALF LATCH SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2409 HALF LATCH SWITCH

DTC Logic

INFOID:000000012423563

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2409	HALF LATCH SW	Automatic back door control module detects a malfunction of half latch switch during automatic operation of back door.	<ul style="list-style-type: none">• Entry of foreign materials to back door lock assembly• Back door mechanism• Automatic back door control module• Half latch switch• Harness or connectors

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check "Self Diagnostic Result" of "AUTO BACK DOOR" using CONSULT.

Is DTC detected?

- YES >> Refer to [DLK-118, "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:000000012423564

Regarding Wiring Diagram information, refer to [DLK-93, "Wiring Diagram"](#).

1. CHECK FOR FOREIGN MATERIALS IN BACK DOOR LOCK ASSEMBLY

Check for entry of foreign materials in back door lock assembly.

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Remove foreign materials.

2. CHECK BACK DOOR OPEN/CLOSE OPERATION

Manually check open and close operation of back door.

Is the inspection result normal?

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

3. CHECK HALF LATCH SWITCH MONITOR ITEM

1. Select "AUTO BACK DOOR" using CONSULT.
2. Select "HALF LATCH SW" in "Data Monitor".
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition	Status
HALF LATCH SW	Fully closed/Half latch	OFF
	Open	ON

Is the inspection result normal?

- YES >> GO TO 8.
NO >> GO TO 4.

4. CHECK HALF LATCH SWITCH INPUT SIGNAL

B2409 HALF LATCH SWITCH

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

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

(+)		(-)	Voltage (Approx.)
Back door lock assembly			
Connector	Terminal	Ground	Battery voltage
D512	6		

Is the inspection result normal?

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

5.CHECK HALF LATCH SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B55	3	D512	6	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	3		No

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).
NO >> Repair or replace harness.

6.CHECK HALF LATCH SWITCH GROUND CIRCUIT

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D512	8		Yes

Is the inspection result normal?

- YES >> GO TO 7.
NO >> Repair or replace harness or connector.

7.CHECK HALF LATCH SWITCH

Refer to [DLK-119, "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 8.
NO >> Replace back door lock assembly. Refer to [DLK-274, "DOOR LOCK : Removal and Installation"](#).

8.CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:000000012423565

COMPONENT INSPECTION

B2409 HALF LATCH SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

1. CHECK SWITCH

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

Back door lock assembly		Condition		Continuity
Terminal				
4	8	Back door lock	Open	Yes
			Fully closed/Half latch	No
5		Back door lock	Fully close	Yes
			Open/Half latch	No
6		Back door lock	Open	Yes
			Fully closed/Half latch	No
7	Back door switch	On	Yes	
		Off	No	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to [DLK-274, "DOOR LOCK : Removal and Installation"](#).

B2416 TOUCH SENSOR RH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2416 TOUCH SENSOR RH

DTC Logic

INFOID:000000012423566

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2416	TOUCH SEN R OPEN	Automatic back door control module detects a malfunction of touch sensor RH during automatic operation of back door.	<ul style="list-style-type: none">• Improper installation of touch sensor• Touch sensor RH• Harness or connectors• Automatic back door control module

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self Diagnostic Result" of "AUTO BACK DOOR" using CONSULT.

Is DTC detected?

- YES >> Refer to [DLK-121. "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:000000012423567

Regarding Wiring Diagram information, refer to [DLK-93. "Wiring Diagram"](#).

1. CHECK INSTALLATION OF TOUCH SENSOR RH

Check that touch sensor RH is installed normally.

Refer to [DLK-275. "TOUCH SENSOR : Removal and Installation"](#).

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Refer to [DLK-275. "TOUCH SENSOR : Removal and Installation"](#).

2. CHECK TOUCH SENSOR MONITOR ITEM

1. Select "AUTO BACK DOOR" using CONSULT.
2. Select "TOUCH SEN RH" in "Data Monitor".
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition	Status
TOUCH SEN RH	Touch sensor RH	Other than below
		Detect obstruction
		OFF
		ON

Is the inspection result normal?

- YES >> GO TO 8.
NO >> GO TO 3.

3. CHECK TOUCH SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between touch sensor RH harness connector and automatic back door control module harness connector.

B2416 TOUCH SENSOR RH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

(+)		(-)		Condition	Voltage (Approx.)	
Touch sensor RH		Automatic back door control module				
Connector	Terminal	Connector	Terminal			
D515	1	B55	13	Touch sensor RH	Detect obstruction	1.8 – 5 V
					Other than above	2.72 – 7.27 V

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4. CHECK TOUCH SENSOR RH CIRCUIT

1. Disconnect automatic back door control module and touch sensor RH connector.
2. Check continuity between automatic back door control module harness connector and touch sensor RH harness connector.

Automatic back door control module		Touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B55	1	D515	2	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	1		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

NO >> Repair or replace harness.

5. CHECK TOUCH SENSOR RH GROUND CIRCUIT

1. Disconnect automatic back door control module and touch sensor RH connector.
2. Check continuity between automatic back door control module harness connector and touch sensor RH harness connector.

Automatic back door control module		Touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B55	13	D515	1	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	13		No

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6. CHECK TOUCH SENSOR RH GROUND CIRCUIT 2

1. Connect automatic back door control module and touch sensor RH connector.
2. Check voltage between automatic back door control module harness connector and ground.

B2416 TOUCH SENSOR RH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

(+)		(-)	Voltage (Approx.)
Automatic back door control module			
Connector	Terminal		
B55	13	Ground	0.01 – 0 V

Is the inspection result normal?

YES >> GO TO 7.

NO >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

7.CHECK TOUCH SENSOR RH

Refer to [DLK-123, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace touch sensor RH. Refer to [DLK-275, "TOUCH SENSOR : Removal and Installation"](#).

8.CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000012423568

1.CHECK TOUCH SENSOR RH

1. Turn ignition switch OFF.
2. Disconnect touch sensor RH connector.
3. Check resistance between touch sensor RH terminals.

Touch sensor RH		Condition		Resistance (Approx.)
Terminal				
1	2	Touch sensor RH	Detect obstruction	380 – 420 kΩ
			Other than above	0.95 – 1.05 kΩ

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace touch sensor RH. Refer to [DLK-275, "TOUCH SENSOR : Removal and Installation"](#).

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B2417 TOUCH SENSOR LH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2417 TOUCH SENSOR LH

DTC Logic

INFOID:000000012423569

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2417	TOUCH SEN L OPEN	Automatic back door control module detects a malfunction of touch sensor LH during automatic operation of back door.	<ul style="list-style-type: none">• Improper installation of touch sensor• Touch sensor LH• Harness or connectors• Automatic back door control module

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self Diagnostic Result" of "AUTO BACK DOOR" using CONSULT.

Is DTC detected?

- YES >> Refer to [DLK-124. "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:000000012423570

Regarding Wiring Diagram information, refer to [DLK-93. "Wiring Diagram"](#).

1. CHECK INSTALLATION OF TOUCH SENSOR LH

Check that touch sensor LH is installed normally.
Refer to [DLK-275. "TOUCH SENSOR : Removal and Installation"](#).

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Refer to [DLK-275. "TOUCH SENSOR : Removal and Installation"](#).

2. CHECK TOUCH SENSOR MONITOR ITEM

1. Select "AUTO BACK DOOR" using CONSULT.
2. Select "TOUCH SEN LH" in "Data Monitor".
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition	Status
TOUCH SEN LH	Touch sensor LH	Other than below
		Detect obstruction
		OFF
		ON

Is the inspection result normal?

- YES >> GO TO 8.
NO >> GO TO 3.

3. CHECK TOUCH SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between touch sensor LH harness connector and automatic back door control module harness connector.

B2417 TOUCH SENSOR LH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

(+)		(-)		Condition	Voltage (Approx.)	
Touch sensor LH		Automatic back door control module				
Connector	Terminal	Connector	Terminal			
D511	2	B55	13	Touch sensor LH	Detect obstruction	1.8 – 5 V
				Other than above	2.72 – 7.27 V	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4. CHECK TOUCH SENSOR LH CIRCUIT

1. Disconnect automatic back door control module and touch sensor LH connector.
2. Check continuity between automatic back door control module harness connector and touch sensor LH harness connector.

Automatic back door control module		Touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B55	2	D511	1	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	2		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

NO >> Repair or replace harness.

5. CHECK TOUCH SENSOR LH GROUND CIRCUIT

1. Disconnect automatic back door control module and touch sensor LH connector.
2. Check continuity between automatic back door control module harness connector and touch sensor LH harness connector.

Automatic back door control module		Touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B55	13	D511	2	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	13		No

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6. CHECK TOUCH SENSOR LH GROUND CIRCUIT 2

1. Connect automatic back door control module and touch sensor LH connector.
2. Check voltage between automatic back door control module harness connector and ground.

B2417 TOUCH SENSOR LH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

(+)		(-)	Voltage (Approx.)
Automatic back door control module			
Connector	Terminal		
B55	13	Ground	0.01 – 0 V

Is the inspection result normal?

YES >> GO TO 7.

NO >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

7. CHECK TOUCH SENSOR LH

Refer to [DLK-123, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace touch sensor LH. Refer to [DLK-275, "TOUCH SENSOR : Removal and Installation"](#)

8. CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000012423571

1. CHECK TOUCH SENSOR LH

1. Turn ignition switch OFF.
2. Disconnect touch sensor LH connector.
3. Check resistance between touch sensor LH terminals.

Touch sensor LH		Condition	Resistance (Approx.)
Terminal			
1	2	Touch sensor LH	
		Detect obstruction	380 – 420 k Ω
		Other than above	0.95 – 1.05 k Ω

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace touch sensor LH. Refer to [DLK-275, "TOUCH SENSOR : Removal and Installation"](#).

B2419 OPEN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2419 OPEN SWITCH

DTC Logic

INFOID:0000000012423572

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2419	OPEN SW	Automatic back door control module detects a malfunction of open switch during automatic operation of back door.	<ul style="list-style-type: none"> • Entry of foreign materials to back door lock assembly • Back door mechanism • Automatic back door control module • Open switch • Harness or connectors

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check "Self Diagnostic Result" of "AUTO BACK DOOR" using CONSULT.

Is DTC detected?

- YES >> Refer to [DLK-127, "Diagnosis Procedure"](#).
- NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000012423573

Regarding Wiring Diagram information, refer to [DLK-93, "Wiring Diagram"](#).

1. CHECK FOR FOREIGN MATERIALS IN BACK DOOR LOCK ASSEMBLY

Check for entry of foreign materials in back door lock assembly.

Is the inspection result normal?

- YES >> GO TO 2.
- NO >> Remove foreign materials.

2. CHECK BACK DOOR OPEN/CLOSE OPERATION

Manually check open and close operation of back door.

Is the inspection result normal?

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

3. CHECK OPEN SWITCH SIGNAL

1. Select "AUTO BACK DOOR" using CONSULT.
2. Select "OPEN SW" in "Data Monitor".
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition	Status
OPEN SW	Back door Fully closed/Half latch	OFF
	Open	ON

Is the inspection result normal?

- YES >> GO TO 8.
- NO >> GO TO 4.

4. CHECK OPEN SWITCH INPUT SIGNAL

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DLK

B2419 OPEN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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

(+)		(-)	Voltage (Approx.)
Back door lock assembly			
Connector	Terminal		
D512	4	Ground	Battery voltage

Is the inspection result normal?

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

5.CHECK OPEN SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B55	11	D512	4	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	11		No

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).
NO >> Repair or replace harness.

6.CHECK OPEN SWITCH GROUND CIRCUIT

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D512	8		Yes

Is the inspection result normal?

- YES >> GO TO 7.
NO >> Repair or replace harness.

7.CHECK OPEN SWITCH

Refer to [DLK-119, "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 8.
NO >> Replace back door lock assembly. Refer to [DLK-274, "DOOR LOCK : Removal and Installation"](#).

8.CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:000000012423574

COMPONENT INSPECTION

B2419 OPEN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

1. CHECK SWITCH

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

Back door lock assembly		Condition		Continuity
Terminal				
4	8	Back door lock	Open	Yes
5			Fully closed/Half latch	No
			Fully close	Yes
6			Open/Half latch	No
		Open	Yes	
7		Back door switch	Fully closed/Half latch	No
	On		Yes	
		Off	No	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to [DLK-274, "DOOR LOCK : Removal and Installation"](#).

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B2420 CLOSE SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2420 CLOSE SWITCH

DTC Logic

INFOID:0000000012423575

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2420	CLOSE SW	Automatic back door control module detects a malfunction of close switch during automatic operation of back door.	<ul style="list-style-type: none"> Entry of foreign materials to back door lock assembly Back door mechanism Automatic back door control module Close switch Harness or connectors

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON.
- Check "Self Diagnostic Result" of "AUTO BACK DOOR" using CONSULT.

Is DTC detected?

- YES >> Refer to [DLK-130, "Diagnosis Procedure"](#).
 NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000012423576

Regarding Wiring Diagram information, refer to [DLK-93, "Wiring Diagram"](#).

1. CHECK FOR FOREIGN MATERIALS IN BACK DOOR LOCK ASSEMBLY

Check for entry of foreign materials in back door lock assembly.

Is the inspection result normal?

- YES >> GO TO 2.
 NO >> Remove foreign materials.

2. CHECK BACK DOOR OPEN/CLOSE OPERATION

Manually check open and close operation of back door.

Is the inspection result normal?

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

3. CHECK CLOSE SWITCH SIGNAL

- Select "AUTO BACK DOOR" using CONSULT.
- Select "CLOSE SW" in "Data Monitor".
- Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
CLOSE SW	Back door	Open/Half latch	OFF
		Fully closed	ON

Is the inspection result normal?

- YES >> GO TO 8.
 NO >> GO TO 4.

4. CHECK CLOSE SWITCH INPUT SIGNAL

- Turn ignition switch OFF.

B2420 CLOSE SWITCH

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

2. Disconnect back door lock assembly connector.
3. Check voltage between back door lock assembly harness connector and ground.

(+)		(-)	Voltage (Approx.)
Back door lock assembly			
Connector	Terminal	Ground	Battery voltage
D512	5		

Is the inspection result normal?

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

5.CHECK CLOSE SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B55	5	D512	5	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	5		No

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).
 NO >> Repair or replace harness.

6.CHECK CLOSE SWITCH GROUND CIRCUIT

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D512	8		Yes

Is the inspection result normal?

- YES >> GO TO 7.
 NO >> Repair or replace harness.

7.CHECK CLOSE SWITCH

Refer to [DLK-119, "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 8.
 NO >> Replace back door lock assembly. Refer to [DLK-274, "DOOR LOCK : Removal and Installation"](#).

8.CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:000000012423577

COMPONENT INSPECTION

B2420 CLOSE SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

1. CHECK SWITCH

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly.
3. Check continuity between back door lock assembly terminals.

Back door lock assembly		Condition		Continuity
Terminal				
4	8	Back door lock	Open	Yes
5			Fully closed/Half latch	No
			Fully close	Yes
6			Open/Half latch	No
		Open	Yes	
7		Back door switch	Fully closed/Half latch	No
	On		Yes	
		Off	No	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to [DLK-274, "DOOR LOCK : Removal and Installation"](#).

B2422 BACK DOOR STATE

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2422 BACK DOOR STATE

DTC Logic

INFOID:000000012423578

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2422	BACK DOOR STATE	When the automatic back door control module detects back door position malfunction according to the pulse signal.	<ul style="list-style-type: none">• Improper installation of back door assembly• [CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION]: not complete• Back door mechanism• Encoder• Automatic back door control module• Harness or connectors

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check "Self Diagnostic Result" of "AUTO BACK DOOR" using CONSULT.

Is DTC detected?

- YES >> Refer to [DLK-133, "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:000000012423579

Regarding Wiring Diagram information, refer to [DLK-93, "Wiring Diagram"](#).

1.CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

1. Perform initialization setting of automatic back door position information.
Refer to [DLK-113, "Work Procedure"](#).
2. Erase DTC, and then repeat "PERFORM DTC CONFIRMATION PROCEDURE".

Is DTC detected?

- YES >> GO TO 2.
NO >> Inspection End.

2.CHECK INSTALLATION OF BACK DOOR ASSEMBLY

1. Check that back door assembly is installed normally.
Refer to [DLK-261, "BACK DOOR ASSEMBLY : Adjustment"](#).
2. Check back door assembly mechanism deformation, looseness, rattle, interference with other parts and pinched foreign materials.

Is the inspection result normal?

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

3.CHECK ENCODER SIGNAL

1. Select "AUTOMATIC BACK DOOR" using CONSULT.
2. Select "SPINDLE SENSOR LH" and "SPINDLE SENSOR RH" in "Data Monitor".
3. Check that the function operates normally according to the following conditions:

B2422 BACK DOOR STATE

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Monitor item	Status
SPINDLE SENSOR LH	0 – 65535
SPINDLE SENSOR RH	0 – 65535

Is the difference between the 2 monitor items 10 or more?

YES >> GO TO 4.

NO >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

4. CHECK ENCODER POWER SUPPLY

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

(+)		Spindle unit	Terminal	(-)	Voltage (Approx.)
Connector	Terminal				
LH	B95	4	Ground	Battery voltage	
RH	B73				

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5. CHECK ENCODER CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and spindle unit harness connector.

Automatic back door control module		Spindle unit		Continuity
Connector	Terminal	Connector	Terminal	
B55	19	LH	B95	Yes
	20	RH	B73	

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	19	Ground	No
	20		

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

NO >> Repair or replace harness.

6. CHECK ENCODER CIRCUIT 2

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and spindle unit harness connector.

B2422 BACK DOOR STATE

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

Automatic back door control module		Spindle unit		Continuity	
Connector	Terminal	Connector	Terminal		
B55	6	LH	B95	3	Yes
	7			5	
	8	RH	B73	3	
	9			5	

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	6	Ground	No
	7		
	8		
	9		

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness.

7. CHECK ENCODER CIRCUIT 3

1. Connect automatic back door control module and spindle unit connector
2. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Voltage (Approx.)
Connector	Terminal		
B55	21		0 V

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

8. CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning parts.

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B2423 AUTOMATIC BACK DOOR MOTOR OPERATION TIME

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2423 AUTOMATIC BACK DOOR MOTOR OPERATION TIME

DTC Logic

INFOID:000000012423580

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2423	ABD MTR TIME OUT	When the automatic back door control module and spindle motor operate in the same direction for 180 seconds or more continuously.	<ul style="list-style-type: none"> Spindle motor Automatic back door control module Harness or connector

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON.
- Operate automatic back door.
- Check "Self Diagnostic Result" of "AUTO BACK DOOR" using CONSULT.

Is DTC detected?

- YES >> Refer to [DLK-136, "Diagnosis Procedure"](#).
- NO >> Inspection End.

Diagnosis Procedure

INFOID:000000012423581

Regarding Wiring Diagram information, refer to [DLK-93, "Wiring Diagram"](#).

1. ERASE DTC

- At least 180 seconds are passed after automatic back door operation is inhibited.
- Erase DTC, and then repeat "PERFORM DTC CONFIRMATION PROCEDURE".

Is DTC detected?

- YES >> GO TO 2.
- NO >> Inspection End.

2. CHECK SPINDLE MOTOR CIRCUIT

- Turn ignition switch OFF.
- Disconnect automatic back door control module and spindle unit connector.
- Check continuity between automatic back door control module harness connector and spindle unit harness connector.

Automatic back door control module		Spindle unit		Continuity	
Connector	Terminal	Connector	Terminal		
B56	27	LH	B95	1	Yes
	34				
	29	RH	B73	1	
	36				

- Check continuity between automatic back door control module harness connector and ground.

B2423 AUTOMATIC BACK DOOR MOTOR OPERATION TIME

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	27		No
	29		
	34		
	36		

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

NO >> Repair or replace harness.

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B2426 ENCODER

DTC Logic

INFOID:000000012423582

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2426	SPINDLE SENSOR LH	When the automatic back door control module can not receive the pulse signal from the encoder just after starting the open/close operation.	<ul style="list-style-type: none"> • Improper installation of back door assembly • [CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION]: not complete • Back door mechanism • Automatic back door control module • Encoder • Harness or connectors

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check "Self Diagnostic Result" of "AUTO BACK DOOR" using CONSULT.

Is DTC detected?

- YES >> Refer to [DLK-138, "Diagnosis Procedure"](#).
- NO >> Inspection End.

Diagnosis Procedure

INFOID:000000012423583

Regarding Wiring Diagram information, refer to [DLK-93, "Wiring Diagram"](#).

1.CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

1. Perform initialization setting of automatic back door position information.
Refer to [DLK-113, "Work Procedure"](#).
2. Erase DTC, and then repeat "PERFORM DTC CONFIRMATION PROCEDURE".

Is DTC detected?

- YES >> GO TO 2.
- NO >> Inspection End.

2.CHECK INSTALLATION OF BACK DOOR ASSEMBLY

1. Check that back door assembly is installed normally.
Refer to [DLK-261, "BACK DOOR ASSEMBLY : Adjustment"](#).
2. Check back door assembly mechanism deformation, looseness, rattle, interference with other parts, and pinched foreign materials.

Is the inspection result normal?

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

3.CHECK ENCODER SIGNAL

1. Select "AUTO BACK DOOR" using CONSULT.
2. Select "SPINDLE LH ENCODER A" and "SPINDLE LH ENCODER B" in "Data Monitor".
3. Check that the function operates normally according to the following conditions:

B2426 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Monitor item	Condition		Status
SPINDLE LH ENCODER A	Back door	Moving (auto or manual)	HI ⇔ LO
		When stopped	HI or LO
SPINDLE LH ENCODER B		Moving (auto or manual)	HI ⇔ LO
		When stopped	HI or LO

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

4. CHECK ENCODER POWER SUPPLY

- Turn ignition switch OFF.
- Disconnect spindle unit LH connector.
- Check voltage between spindle unit LH harness connector and ground.

(+)		(-)	Voltage (Approx.)
Spindle unit LH			
Connector	Terminal	Ground	Battery voltage
B95	4		

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5. CHECK ENCODER CIRCUIT

- Disconnect automatic back door control module connector.
- Check continuity between automatic back door control module harness connector and spindle unit LH harness connector.

Automatic back door control module		Spindle unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B55	19	B95	4	Yes

- Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	19		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

NO >> Repair or replace harness.

6. CHECK ENCODER CIRCUIT 2

- Disconnect automatic back door control module connector.
- Check continuity between automatic back door control module harness connector and spindle unit LH harness connector.

Automatic back door control module		Spindle unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B55	6	B95	3	Yes
	7		5	

- Check continuity between automatic back door control module harness connector and ground.

B2426 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	6		No
	7		

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness.

7. CHECK ENCODER CIRCUIT 3

1. Connect automatic back door control module and spindle unit LH connector.
2. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Voltage (Approx.)
Connector	Terminal		
B55	21		0 V

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

8. CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning parts.

B2427 ENCODER

DTC Logic

INFOID:000000012423584

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2427	SPINDLE SENSOR RH	When the automatic back door control module can not receive the pulse signal from the encoder just after starting the open/close operation.	<ul style="list-style-type: none"> • Improper installation of back door assembly • [CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION]: not complete • Back door mechanism • Automatic back door control module • Encoder • Harness or connectors

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check "Self Diagnostic Result" of "AUTO BACK DOOR" using CONSULT.

Is DTC detected?

- YES >> Refer to [DLK-141, "Diagnosis Procedure"](#).
 NO >> Inspection End.

Diagnosis Procedure

INFOID:000000012423585

Regarding Wiring Diagram information, refer to [DLK-93, "Wiring Diagram"](#).

1.CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

1. Perform initialization setting of automatic back door position information.
Refer to [DLK-113, "Work Procedure"](#).
2. Erase DTC, and then repeat "PERFORM DTC CONFIRMATION PROCEDURE".

Is DTC detected?

- YES >> GO TO 2.
 NO >> Inspection End.

2.CHECK INSTALLATION OF BACK DOOR ASSEMBLY

1. Check that back door assembly is installed normally.
Refer to [DLK-261, "BACK DOOR ASSEMBLY : Adjustment"](#).
2. Check back door assembly mechanism deformation, looseness, rattle, interference with other parts, and pinched foreign materials.

Is the inspection result normal?

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

3.CHECK ENCODER SIGNAL

1. Select "AUTO BACK DOOR" using CONSULT.
2. Select "SPINDLE RH ENCODER A" and "SPINDLE RH ENCODER B" in "Data Monitor".
3. Check that the function operates normally according to the following conditions:

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B2427 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Monitor item	Condition		Status
SPINDLE RH ENCODER A	Back door	Moving (auto or manual)	HI ⇔ LO
		When stopped	HI or LO
SPINDLE RH ENCODER B		Moving (auto or manual)	HI ⇔ LO
		When stopped	HI or LO

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

4. CHECK ENCODER POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect spindle unit RH connector.
3. Check voltage between spindle unit RH harness connector and ground.

(+)		(-)	Voltage (Approx.)
Spindle unit RH			
Connector	Terminal		
B73	4	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5. CHECK ENCODER CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and spindle unit RH harness connector.

Automatic back door control module		Spindle unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B55	20	B73	4	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	20		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

NO >> Repair or replace harness.

6. CHECK ENCODER CIRCUIT 2

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and spindle unit RH harness connector.

Automatic back door control module		Spindle unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B55	8	B73	3	Yes
	9		5	

3. Check continuity between automatic back door control module harness connector and ground.

B2427 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	8		No
	9		

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness.

7. CHECK ENCODER CIRCUIT 3

1. Connect automatic back door control module spindle unit RH connector.
2. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Voltage (Approx.)
Connector	Terminal		
B55	21		0 V

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

8. CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning parts.

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B2428 AUTOMATIC BACK DOOR CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2428 AUTOMATIC BACK DOOR CONTROL UNIT

DTC Logic

INFOID:0000000012423586

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2428	AUTO BACK DR CNT UNIT	Automatic back door control module detected CPU malfunction	Automatic back door control module

Diagnosis Procedure

INFOID:0000000012423587

1. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

When DTC [B2428] is detected, replace automatic back door control module.

>> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

B242A CLOSURE CONDITION

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B242A CLOSURE CONDITION

DTC Logic

INFOID:0000000012423588

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B242A	CLSR CONDITION	Automatic back door control module detects malfunctions of open switch, close switch and half latch switch when auto closure of back door operates.	<ul style="list-style-type: none">• Entry of foreign materials to back door lock assembly• Back door mechanism• Automatic back door control module• Open switch• Close switch• Half latch switch• Harness or connectors

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate back door auto closure operation.
3. Check "Self Diagnostic Result" of "AUTO BACK DOOR" using CONSULT.

Is DTC detected?

- YES >> Refer to [DLK-145, "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000012423589

Regarding Wiring Diagram information, refer to [DLK-93, "Wiring Diagram"](#).

1. CHECK FOR FOREIGN MATERIALS IN BACK DOOR LOCK ASSEMBLY

Check for entry of foreign materials in back door lock assembly.

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Remove foreign materials.

2. CHECK BACK DOOR OPEN/CLOSE OPERATION

Manually check open and close operation of back door.

Is the inspection result normal?

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

3. CHECK MONITOR ITEM

1. Select "AUTO BACK DOOR" using CONSULT.
2. Select "HALF LATCH SW", "OPEN SW" and "CLOSE SW" in "Data Monitor".
3. Check that the function operates normally according to the following conditions:

B242A CLOSURE CONDITION

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Monitor item	Condition	Status
HALF LATCH SW	Fully closed/Half latch	OFF
	Open	ON
OPEN SW	Fully closed/Half latch	OFF
	Open	ON
CLOSE SW	Open/Half latch	OFF
	Fully closed	ON

Is the inspection result normal?

YES >> GO TO 8.

NO >> GO TO 4.

4. CHECK SWITCH INPUT SIGNAL

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

(+)		(-)	Voltage (Approx.)
Connector	Terminal		
D512	4	Ground	Battery voltage
	5		
	6		

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5. CHECK SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B55	3	D512	6	Yes
	5		5	
	11		4	

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	3	Ground	No
	5		
	11		

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

NO >> Repair or replace harness.

6. CHECK SWITCH GROUND CIRCUIT

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

B242A CLOSURE CONDITION

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D512	8		Yes

Is the inspection result normal?

- YES >> GO TO 7.
- NO >> Repair or replace harness or connector.

7.CHECK SWITCH

Refer to [DLK-119, "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 8.
- NO >> Replace back door lock assembly. Refer to [DLK-274, "DOOR LOCK : Removal and Installation"](#).

8.CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:000000012423590

COMPONENT INSPECTION

1.CHECK SWITCH

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

Back door lock assembly		Condition	Continuity	
Terminal				
4	8	Back door lock	Open	Yes
			Fully closed/Half latch	No
5			Fully close	Yes
			Open/Half latch	No
6			Open	Yes
			Fully closed/Half latch	No
7	Back door switch	On	Yes	
		Off	No	

Is the inspection result normal?

- YES >> Inspection End.
- NO >> Replace back door lock assembly. Refer to [DLK-274, "DOOR LOCK : Removal and Installation"](#).

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B2621 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2621 INSIDE ANTENNA

DTC Logic

INFOID:000000012423591

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2621	INSIDE ANTENNA	An excessive high or low voltage from inside antenna (instrument center) is sent to BCM.	<ul style="list-style-type: none"> 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") on "Work support" of "INTELLIGENT KEY".
4. Check BCM for DTC.

Is inside key antenna DTC detected?

- YES >> Refer to [DLK-148, "Diagnosis Procedure"](#).
- NO >> Inside key antenna (instrument center) is OK.

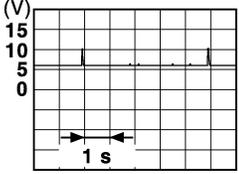
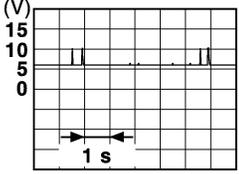
Diagnosis Procedure

INFOID:000000012423592

Regarding Wiring Diagram information, refer to [DLK-76, "Wiring Diagram"](#).

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+)		(-)	Condition	Signal (Reference value)
BCM				
Connector	Terminal			
M19	116, 117	Ground	When Intelligent Key is in the antenna detection area.	 <p style="text-align: right; font-size: small;">JMKIA3839GB</p>
			When Intelligent Key is not in the antenna detection area.	 <p style="text-align: right; font-size: small;">JMKIA5951GB</p>

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).
- NO >> GO TO 2.

B2621 INSIDE ANTENNA

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

2. CHECK INSIDE KEY ANTENNA CIRCUIT

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

BCM		Inside key antenna (instrument center)		Continuity
Connector	Terminal	Connector	Terminal	
M19	117	M15	1	Yes
	116		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M19	117		No
	116		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M19	116, 117	Ground	When Intelligent Key is in the antenna detection area.	<p style="text-align: right; font-size: small;">JMKIA3839GB</p>
			When Intelligent Key is not in the antenna detection area.	<p style="text-align: right; font-size: small;">JMKIA5951GB</p>

Is the inspection result normal?

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

NO >> Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

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B2622 INSIDE ANTENNA

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

B2622 INSIDE ANTENNA

DTC Logic

INFOID:000000012423593

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2622	INSIDE ANTENNA	An excessive high or low voltage from inside antenna (console) is sent to BCM.	<ul style="list-style-type: none"> Inside key antenna (console) Harness or connector [Inside key antenna (console) 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") on "Work support" of "INTELLIGENT KEY".
4. Check BCM for DTC.

Is inside key antenna DTC detected?

- YES >> Refer to [DLK-150. "Diagnosis Procedure"](#).
 NO >> Inside key antenna (console) is OK.

Diagnosis Procedure

INFOID:000000012423594

Regarding Wiring Diagram information, refer to [DLK-76. "Wiring Diagram"](#).

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+)		(-)	Condition	Signal (Reference value)
BCM				
Connector	Terminal			
B16	62, 63	Ground	When Intelligent Key is in the antenna detection area.	<p style="text-align: right;">JMKIA3839GB</p>
			When Intelligent Key is not in the antenna detection area.	<p style="text-align: right;">JMKIA5951GB</p>

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-76. "Removal and Installation"](#).
 NO >> GO TO 2.

B2622 INSIDE ANTENNA

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

2. CHECK INSIDE KEY ANTENNA CIRCUIT

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

BCM		Inside key antenna (console)		Continuity
Connector	Terminal	Connector	Terminal	
B16	63	B77	1	Yes
	62		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
B16	63		No
	62		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
B16	62, 63	Ground	When Intelligent Key is in the antenna detection area.	
			When Intelligent Key is not in the antenna detection area.	

Is the inspection result normal?

YES >> Replace inside key antenna (console). Refer to [DLK-282, "CONSOLE : Removal and Installation"](#).

NO >> Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

POWER SUPPLY AND GROUND CIRCUIT

AUTOMATIC BACK DOOR CONTROL UNIT

AUTOMATIC BACK DOOR CONTROL UNIT : Diagnosis Procedure

INFOID:000000012423595

Regarding Wiring Diagram information, refer to [DLK-76, "Wiring Diagram"](#).

1. CHECK FUSIBLE LINK

Check that the following fusible link is not open.

Fusible link No.	Signal name
K (30A)	Battery power supply

Is the fusible link open?

YES >> Replace the open fusible link after repairing the affected circuit.

NO >> GO TO 2.

2. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door control module connector.
3. Check voltage between automatic back door control module harness connector and ground.

(+)		(-)	Voltage (Approx.)
Automatic back door control module			
Connector	Terminal		
B56	25	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK GROUND CIRCUIT

Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	32		Yes
B55	4		
B55	16		

Does continuity exist?

YES >> Inspection End.

NO >> Repair or replace harness.

BCM

BCM : Diagnosis Procedure

INFOID:000000012816097

Regarding Wiring Diagram information, refer to [BCS-51, "Wiring Diagram"](#).

1. CHECK FUSE

Check that the following fuse is not blown.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No.	Signal name	Fuse No.
161	BCM power supply	7 (10A)

Is the fuse blown?

- YES >> Replace the blown fuse after repairing the affected circuit.
NO >> GO TO 2.

2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector M20.
2. Check voltage between BCM connector M20 and ground.

BCM		Ground	Voltage (Approx.)
Connector	Terminal		
M20	161	—	Battery voltage

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Repair or replace harness or connectors.

3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M20 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	170	—	Yes
	171		

Is the inspection result normal?

- YES >> Inspection End.
NO >> Repair or replace harness or connectors.

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OUTSIDE KEY ANTENNA (PASSENGER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

OUTSIDE KEY ANTENNA (PASSENGER SIDE)

Component Function Check

INFOID:000000012423597

1. CHECK OUTSIDE KEY ANTENNA (RH)

- Place the Intelligent Key into the detection area of the outside key antenna (RH).
- Press the door request switch (RH).

Does the door unlock?

- YES >> Inspection End.
 NO >> Refer to [DLK-154, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012423598

Regarding Wiring Diagram information, refer to [DLK-76, "Wiring Diagram"](#).

1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+)		(-)	Condition	Signal (Reference value)
BCM				
Connector	Terminal			
M19	118, 119	Ground	When Intelligent Key is in the antenna detection area. (The distance between Intelligent Key and antenna: 80 cm or less.)	<p style="text-align: right; font-size: small;">JMKIA5955GB</p>
			When Intelligent Key is not in the antenna detection area. (The distance between Intelligent Key and antenna: Approx. 2 m.)	<p style="text-align: right; font-size: small;">JMKIA5954GB</p>

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).
 NO >> GO TO 2.

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

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

BCM		Outside key antenna (RH)		Continuity
Connector	Terminal	Connector	Terminal	
M19	119	D126	1	Yes
	118		2	

- Check continuity between BCM harness connector and ground.

OUTSIDE KEY ANTENNA (PASSENGER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

BCM		Ground	Continuity
Connector	Terminal		
M19	119		No
	118		

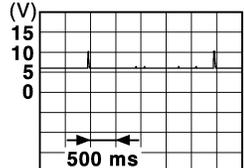
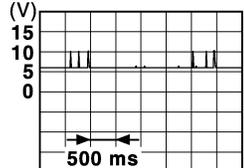
Is the inspection result normal?

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.

(+)		(-)	Condition	Signal (Reference value)
BCM				
Connector	Terminal			
M19	118, 119	Ground	When the driver door request switch is operated with ignition switch OFF.	When Intelligent Key is in the antenna detection area. (The distance between Intelligent Key and antenna: 80 cm or less.)  <small>JMKIA5955GB</small>
			When Intelligent Key is not in the antenna detection area. (The distance between Intelligent Key and antenna: Approx. 2 m.)	 <small>JMKIA5954GB</small>

Is the inspection result normal?

YES >> Replace outside key antenna (RH). Refer to [DLK-283. "PASSENGER SIDE : Removal and Installation"](#).

NO >> Replace BCM. Refer to [BCS-76. "Removal and Installation"](#).

OUTSIDE KEY ANTENNA (DRIVER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

OUTSIDE KEY ANTENNA (DRIVER SIDE)

Component Function Check

INFOID:000000012423599

1. CHECK OUTSIDE KEY ANTENNA (LH)

1. Place the Intelligent Key into the detection area of the outside key antenna (LH).
2. Press the door request switch (LH).

Does the door unlock?

- YES >> Inspection End.
 NO >> Refer to [DLK-156, "Diagnosis Procedure"](#).

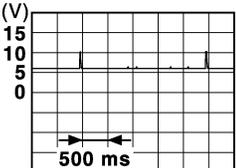
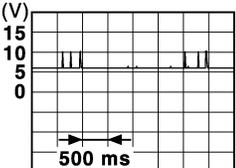
Diagnosis Procedure

INFOID:000000012423600

Regarding Wiring Diagram information, refer to [DLK-76, "Wiring Diagram"](#).

1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+)		(-)	Condition	Signal (Reference value)
BCM				
Connector	Terminal			
M19	100, 120	Ground	When the driver door request switch is operated with ignition switch OFF.	 <p style="text-align: right; font-size: small;">JMKIA5955GB</p>
			When Intelligent Key is in the antenna detection area. (The distance between Intelligent Key and antenna: 80 cm or less.)	 <p style="text-align: right; font-size: small;">JMKIA5954GB</p>

Is the inspection result normal?

- YES >> Replace BCM. Refer to [DLK-287, "Removal and Installation"](#).
 NO >> GO TO 2.

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

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

BCM		Outside key antenna (LH)		Continuity
Connector	Terminal	Connector	Terminal	
M19	100	D11	1	Yes
	120		2	

3. Check continuity between BCM harness connector and ground.

OUTSIDE KEY ANTENNA (DRIVER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

BCM		Ground	Continuity
Connector	Terminal		
M19	100		No
	120		

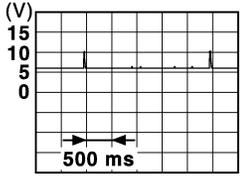
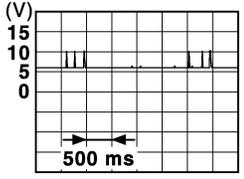
Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace outside key antenna (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.

(+)		(-)	Condition	Signal (Reference value)
BCM				
Connector	Terminal			
M19	100, 120	Ground	When the driver door request switch is operated with ignition switch OFF.	When Intelligent Key is in the antenna detection area. (The distance between Intelligent Key and antenna: 80 cm or less.)  <small>JMKIA5955GB</small>
			When Intelligent Key is not in the antenna detection area. (The distance between Intelligent Key and antenna: Approx. 2 m.)	 <small>JMKIA5954GB</small>

Is the inspection result normal?

YES >> Replace outside key antenna (LH). Refer to [DLK-283, "DRIVER SIDE : Removal and Installation"](#).

NO >> Replace BCM. Refer to [DLK-287, "Removal and Installation"](#).

OUTSIDE KEY ANTENNA (REAR BUMPER)

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

OUTSIDE KEY ANTENNA (REAR BUMPER)

Component Function Check

INFOID:000000012423601

1. CHECK OUTSIDE KEY ANTENNA (REAR BUMPER)

- Place the Intelligent Key into the detection area of the outside key antenna (rear bumper).
- Press the door request switch (back door).

Does the door unlock?

- YES >> Inspection End.
 NO >> Refer to [DLK-158, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012423602

Regarding Wiring Diagram information, refer to [DLK-76, "Wiring Diagram"](#).

1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+)		(-)	Condition	Signal (Reference value)
BCM				
Connector	Terminal			
B16	61, 64	Ground	When Intelligent Key is in the antenna detection area. (The distance between Intelligent Key and antenna: 80 cm or less.)	<p style="text-align: right;">JMKIA5955GB</p>
			When Intelligent Key is not in the antenna detection area. (The distance between Intelligent Key and antenna: Approx. 2 m.)	<p style="text-align: right;">JMKIA5954GB</p>

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).
 NO >> GO TO 2.

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

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

BCM		Outside key antenna (rear bumper)		Continuity
Connector	Terminal	Connector	Terminal	
B16	64	B76	1	Yes
	61		2	

- Check continuity between BCM harness connector and ground.

OUTSIDE KEY ANTENNA (REAR BUMPER)

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

BCM		Ground	Continuity
Connector	Terminal		
B16	64		No
	61		

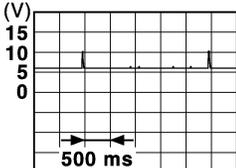
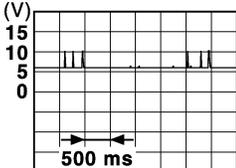
Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+)		(-)	Condition	Signal (Reference value)
BCM				
Connector	Terminal			
B16	61, 64	Ground	When the driver door request switch is operated with ignition switch OFF.	When Intelligent Key is in the antenna detection area. (The distance between Intelligent Key and antenna: 80 cm or less.)  <small>JMKIA5955GB</small>
			When Intelligent Key is not in the antenna detection area. (The distance between Intelligent Key and antenna: Approx. 2 m.)	 <small>JMKIA5954GB</small>

Is the inspection result normal?

YES >> Replace outside key antenna (rear bumper). Refer to [DLK-283, "REAR BUMPER : Removal and Installation"](#).

NO >> Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

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DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DOOR SWITCH

Component Function Check

INFOID:000000012423603

1. CHECK FUNCTION

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

Monitor item	Condition		Status
DOOR SW-DR	Front door LH	Open	On
		Closed	Off
DOOR SW-AS	Front door RH	Open	On
		Closed	Off
DOOR SW-RL	Rear door LH	Open	On
		Closed	Off
DOOR SW-RR	Rear door RH	Open	On
		Closed	Off

Is the inspection result normal?

- YES >> Door switch is OK.
 NO >> Refer to [DLK-160, "Diagnosis Procedure"](#).

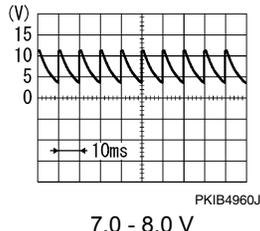
Diagnosis Procedure

INFOID:000000012423604

Regarding Wiring Diagram information, refer to [DLK-76, "Wiring Diagram"](#).

1. CHECK DOOR SWITCH INPUT SIGNAL

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

(+)		Terminal	(-)	Signal (Reference value)
Door switch				
Connector	Terminal			
Front LH	B71	3	Ground	
Front RH	B141			
Rear LH	B70			
Rear RH	B142			

Is the inspection result normal?

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

2. CHECK DOOR SWITCH CIRCUIT

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

DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Door switch		BCM		Continuity
Connector	Terminal	Connector	Terminal	
Front LH	B71	3	B16	Yes
Front RH	B141			
Rear LH	B70			
Rear RH	B142			

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

Door switch		Ground	Continuity
Connector	Terminal		
Front LH	B71	3	No
Front RH	B141		
Rear LH	B70		
Rear RH	B142		

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

NO >> Repair or replace harness.

3.CHECK DOOR SWITCH

Refer to [DLK-161, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace malfunctioning door switch. Refer to [DLK-280, "Removal and Installation"](#).

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:000000012423605

DLK

1.CHECK DOOR SWITCH

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

Door switch		Condition		Continuity
Terminal		Door switch		
3	Ground contact is part of the switch.		Pressed	No
		Released	Yes	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace malfunctioning door switch. Refer to [DLK-280, "Removal and Installation"](#).

BACK DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

BACK DOOR SWITCH

Component Function Check

INFOID:000000012423606

1. CHECK FUNCTION

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

Monitor item	Condition		Status
DOOR SW-BK	Back door	Open	On
		Closed	Off

Is the inspection result normal?

YES >> Door switch is OK.

NO >> Refer to [DLK-162, "Diagnosis Procedure \(With Automatic Back Door\)"](#).

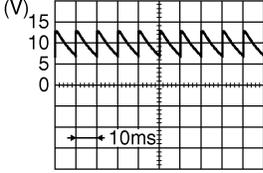
Diagnosis Procedure (With Automatic Back Door)

INFOID:000000012423607

Regarding Wiring Diagram information, refer to [DLK-93, "Wiring Diagram"](#).

1. CHECK BACK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check signal between back door lock assembly harness connector and ground using oscilloscope.

(+)		(-)	Signal (Reference value)
Connector	Terminal		
D512	7	Ground	 <p>9.0 - 10.0 V</p>

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK BACK DOOR SWITCH CIRCUIT

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

Back door lock assembly		BCM		Continuity
Connector	Terminal	Connector	Terminal	
D512	7	B16	51	Yes

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

BACK DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D512	7		No

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-76, "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		Ground	Continuity
Connector	Terminal		
D512	8		Yes

Is the inspection result normal?

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

4.CHECK BACK DOOR SWITCH

Refer to [DLK-164, "Component Inspection \(With Automatic Back Door\)"](#).

Is the inspection result normal?

- YES >> GO TO 5.
- NO >> Replace back door lock assembly. Refer to [DLK-274, "DOOR LOCK : Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

Diagnosis Procedure (Without Automatic Back Door)

INFOID:0000000012423608

Regarding Wiring Diagram information, refer to [DLK-76, "Wiring Diagram"](#).

1.CHECK BACK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check signal between back door lock assembly harness connector and ground using oscilloscope.

(+)		(-)	Signal (Reference value)
Connector	Terminal		
D508	3	Ground	<p style="text-align: center;">9.0 - 10.0 V</p>

Is the inspection result normal?

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

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BACK DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

2. CHECK BACK DOOR SWITCH CIRCUIT

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

Back door lock assembly		BCM		Continuity
Connector	Terminal	Connector	Terminal	
D508	3	B16	51	Yes

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D508	3		No

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-76, "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		Ground	Continuity
Connector	Terminal		
D508	4		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK BACK DOOR SWITCH

Refer to [DLK-165, "Component Inspection \(Without Automatic Back Door\)"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace back door lock assembly. Refer to [DLK-274, "DOOR LOCK : Removal and Installation"](#).

5. CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection (With Automatic Back Door)

INFOID:000000012423609

1. CHECK BACK DOOR SWITCH

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

Back door lock assembly		Condition		Continuity
Terminal				
7	8	Door switch	Pressed	No
			Released	Yes

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to [DLK-274, "DOOR LOCK : Removal and Installation"](#).

BACK DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Component Inspection (Without Automatic Back Door)

INFOID:000000012423610

1. CHECK BACK DOOR SWITCH

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

Back door lock assembly		Condition		Continuity
Terminal				
3	4	Door switch	Pressed	No
			Released	Yes

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to [DLK-274, "DOOR LOCK : Removal and Installation"](#).

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DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DOOR LOCK AND UNLOCK SWITCH

DRIVER SIDE

DRIVER SIDE : Description

INFOID:000000012423611

Transmits door lock/unlock operation to BCM.

DRIVER SIDE : Component Function Check

INFOID:000000012423612

1. CHECK FUNCTION

With CONSULT

Check "CDL LOCK SW", "CDL UNLOCK SW" in "Data Monitor".

Monitor item	Condition
CDL LOCK SW	LOCK : ON
	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 [DLK-166, "DRIVER SIDE : Diagnosis Procedure"](#).

DRIVER SIDE : Diagnosis Procedure

INFOID:000000012423613

Regarding Wiring Diagram information, refer to [DLK-63, "Wiring Diagram"](#).

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage at the main power window and door lock/unlock switch connector when the switch (driver side) is turned to "LOCK" or "UNLOCK".

Connector	Main power window and door lock/unlock switch state	Terminal	Voltage (Approx.)
D6	Neutral → Unlock	15	Battery voltage → 0
	Neutral → Lock	3	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 2.

2. CHECK POWER WINDOW SWITCH GROUND

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch connector.
3. Check continuity between main power window and door lock/unlock switch connector and ground.

Main power window and door lock/unlock switch connector	Terminal	Continuity
D6	1 Ground	Yes

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK POWER WINDOW SWITCH

DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Check continuity between main power window and door lock/unlock switch terminals.

Main power window and door lock/unlock switch state	Terminals	Continuity
Unlock	1 - 3	Yes
Lock	1 - 15	
Neutral/Unlock	1 - 15	No
Neutral/Lock	1 - 3	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace main power window and door lock/unlock switch. Refer to [PWC-65, "Removal and Installation"](#).

4.CHECK POWER WINDOW SWITCH CIRCUITS

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

BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
M18	40	D6	15	Yes
	10		3	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Continuity
M18	40	Ground
	10	

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:000000012423614

Transmits door lock/unlock operation to BCM.

PASSENGER SIDE : Component Function Check

INFOID:000000012423615

1.CHECK FUNCTION

With CONSULT

Check "CDL LOCK SW", "CDL UNLOCK SW" in "Data Monitor".

Monitor item	Condition
CDL LOCK SW	LOCK : ON
	UNLOCK : OFF
CDL UNLOCK SW	LOCK : OFF
	UNLOCK : ON

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DOOR LOCK AND UNLOCK SWITCH

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

- YES >> Door lock and unlock switch is OK.
- NO >> Refer to [DLK-168. "PASSENGER SIDE : Diagnosis Procedure"](#).

PASSENGER SIDE : Diagnosis Procedure

INFOID:000000012423616

Regarding Wiring Diagram information, refer to [DLK-63. "Wiring Diagram"](#).

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage at the power window and door lock/unlock switch RH connector when the switch (passenger side) is changed to "LOCK" or "UNLOCK".

Connector	Power window and door lock/unlock switch RH state	Terminal		Voltage (Approx.)
D112	Neutral → Lock	1	Ground	Battery voltage → 0
	Neutral → Unlock	2		

Is the inspection result normal?

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

2. CHECK POWER WINDOW SWITCH GROUND

1. Turn ignition switch OFF.
2. Disconnect power window and door lock/unlock switch RH connector.
3. Check continuity between power window and door lock/unlock switch RH connector and ground.

Power window and door lock/unlock switch RH connector	Terminal		Continuity
D112	3	Ground	Yes

Is the inspection result normal?

- YES >> GO TO 3.
- NO >> Repair or replace harness.

3. CHECK POWER WINDOW SWITCH

Check continuity between power window and door lock/unlock switch RH terminals.

Power window and door lock/unlock switch RH state	Terminals	Continuity
Lock	1 - 3	Yes
Unlock	2 - 3	
Neutral/Unlock	1 - 3	No
Neutral/Lock	2 - 3	

Is the inspection result normal?

- YES >> GO TO 4.
- NO >> Replace power window and door lock/unlock switch RH. Refer to [PWC-66. "Removal and Installation"](#).

4. CHECK POWER WINDOW SWITCH CIRCUITS

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

DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

BCM connector	Terminal	Power window and door lock/unlock switch RH connector	Terminal	Continuity
M18	10	D112	1	Yes
	40		2	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Continuity	
M18	10	Ground	No
	40		

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5. CHECK INTERMITTENT INCIDENT

Refer to [GI-45. "Intermittent Incident"](#).

>> Inspection End.

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DOOR LOCK ACTUATOR

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

DOOR LOCK ACTUATOR DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:000000012423617

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to [DLK-170, "DRIVER SIDE : Diagnosis Procedure"](#).

DRIVER SIDE : Diagnosis Procedure

INFOID:000000012423618

Regarding Wiring Diagram information, refer to [DLK-63, "Wiring Diagram"](#).

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+)		(-)	Condition	Voltage (Approx.)
Front door lock assembly LH Connector	Terminal			
D23	1	Ground	Door lock and unlock switch	Battery voltage
	2		Lock Unlock	

Is the inspection result normal?

YES >> Replace front door lock assembly LH. Refer to [DLK-267, "DOOR LOCK : Removal and Installation"](#).

NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM		Front door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
M20	165	D23	1	Yes
	172		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	165		No
	172		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

DOOR LOCK ACTUATOR

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

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

(+)		(-)	Condition	Voltage (Approx.)
BCM				
Connector	Terminal	Ground	Door lock and unlock switch	Lock Unlock
M20	165			
	172			

Is the inspection result normal?

YES >> Replace front door lock assembly LH. Refer to [DLK-267, "DOOR LOCK : Removal and Installation"](#).

NO >> Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

PASSENGER SIDE

PASSENGER SIDE : Component Function Check

INFOID:000000012423619

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to [DLK-171, "PASSENGER SIDE : Diagnosis Procedure"](#).

PASSENGER SIDE : Diagnosis Procedure

INFOID:000000012423620

Regarding Wiring Diagram information, refer to [DLK-63, "Wiring Diagram"](#).

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+)		(-)	Condition	Voltage (Approx.)
Front door lock actuator RH				
Connector	Terminal	Ground	Door lock and unlock switch	Unlock Lock
D113	5			
	6			

Is the inspection result normal?

YES >> Replace front door lock actuator RH. Refer to [DLK-267, "DOOR LOCK : Removal and Installation"](#).

NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM		Front door lock actuator RH		Continuity
Connector	Terminal	Connector	Terminal	
M20	165	D113	5	Yes
	163		6	

DOOR LOCK ACTUATOR

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[WITH INTELLIGENT KEY SYSTEM]

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	165		No
	163		

Is the inspection result normal?

- YES >> GO TO 3.
 NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

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

(+)		(-)	Condition	Voltage (Approx.)
BCM				
Connector	Terminal	Ground	Door lock and unlock switch	Unlock Lock
M20	165			
	163			

Is the inspection result normal?

- YES >> Replace front door lock actuator RH. Refer to [DLK-267, "DOOR LOCK : Removal and Installation"](#).
 NO >> Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

REAR LH

REAR LH : Component Function Check

INFOID:0000000012423621

1.CHECK FUNCTION

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

Is the inspection result normal?

- YES >> Door lock actuator is OK.
 NO >> Refer to [DLK-172, "REAR LH : Diagnosis Procedure"](#).

REAR LH : Diagnosis Procedure

INFOID:0000000012423622

Regarding Wiring Diagram information, refer to [DLK-63, "Wiring Diagram"](#).

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+)		(-)	Condition	Voltage (Approx.)
Rear door lock actuator LH				
Connector	Terminal	Ground	Door lock and unlock switch	Lock Unlock
D206	1			
	2			

Is the inspection result normal?

- YES >> Replace rear door lock actuator LH. Refer to [DLK-271, "DOOR LOCK : Removal and Installation"](#).

DOOR LOCK ACTUATOR

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM		Rear door lock actuator LH		Continuity
Connector	Terminal	Connector	Terminal	
B23	148	D206	2	Yes
	149		1	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
B23	148		No
	149		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

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

(+)		(-)	Condition	Voltage (Approx.)
Connector	Terminal			
B23	148	Ground	Door lock and unlock switch	Battery voltage
	149		Unlock Lock	

Is the inspection result normal?

YES >> Replace rear door lock actuator LH. Refer to [DLK-271. "DOOR LOCK : Removal and Installation"](#).

NO >> Replace BCM. Refer to [BCS-76. "Removal and Installation"](#).

REAR RH

REAR RH : Component Function Check

INFOID:000000012423623

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to [DLK-173. "REAR RH : Diagnosis Procedure"](#).

REAR RH : Diagnosis Procedure

INFOID:000000012423624

Regarding Wiring Diagram information, refer to [DLK-63. "Wiring Diagram"](#).

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect rear door lock actuator RH connector.

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DOOR LOCK ACTUATOR

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[WITH INTELLIGENT KEY SYSTEM]

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

(+)		(-)	Condition		Voltage (Approx.)
Rear door lock actuator RH					
Connector	Terminal				
D306	5	Ground	Door lock and unlock switch	Unlock	Battery voltage
	6			Lock	

Is the inspection result normal?

- YES >> Replace rear door lock actuator RH. Refer to [DLK-271, "DOOR LOCK : Removal and Installation"](#).
 NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM		Rear door lock actuator RH		Continuity
Connector	Terminal	Connector	Terminal	
B23	148	D306	6	Yes
	149		5	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
B23	148		No
	149		

Is the inspection result normal?

- YES >> GO TO 3.
 NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

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

(+)		(-)	Condition		Voltage (Approx.)
BCM					
Connector	Terminal				
B23	148	Ground	Door lock and unlock switch	Unlock	Battery voltage
	149			Lock	

Is the inspection result normal?

- YES >> Replace rear door lock actuator RH. Refer to [DLK-271, "DOOR LOCK : Removal and Installation"](#).
 NO >> Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

UNLOCK SENSOR

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

UNLOCK SENSOR

Component Function Check

INFOID:000000012423625

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	Condition		Status
UNLK SEN -DR	Driver side door	Lock	OFF
		Unlock	ON

Is the inspection result normal?

YES >> Unlock sensor is OK.

NO >> Refer to [DLK-175, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012423626

Regarding Wiring Diagram information, refer to [DLK-63, "Wiring Diagram"](#).

1.CHECK UNLOCK SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly LH connector.
3. Check signal between front door lock assembly LH harness connector and ground with oscilloscope.

(+)		(-)	Signal (Reference value)
Connector	Terminal		
D23	3	Ground	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK UNLOCK SENSOR CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and front door lock assembly LH harness connector.

BCM		Front door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
M19	104	D23	3	Yes

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M19	104		No

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UNLOCK SENSOR

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-76, "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		Ground	Continuity
Connector	Terminal		
D23	4		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK UNLOCK SENSOR

Refer to [DLK-176, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace front door lock assembly LH. Refer to [DLK-267, "DOOR LOCK : Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:000000012423627

1.CHECK UNLOCK SENSOR

1. Turn ignition 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
Terminal				
3	4	Driver side door	Unlock	Yes
			Lock	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace front door lock assembly LH. Refer to [DLK-267, "DOOR LOCK : Removal and Installation"](#).

DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DOOR KEY CYLINDER SWITCH

Component Function Check

INFOID:000000012423628

1. CHECK FUNCTION

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

Monitor item	Condition	Status
KEY CYL LK-SW	Lock	ON
	Neutral / Unlock	OFF
KEY CYL UN-SW	Unlock	ON
	Neutral / Lock	OFF

Is the inspection result normal?

- YES >> Door key cylinder switch is OK.
 NO >> Refer to [DLK-177. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012423629

Regarding Wiring Diagram information, refer to [DLK-63. "Wiring Diagram"](#).

1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

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

(+)		(-)	Voltage (Approx.)
Front door lock assembly LH			
Connector	Terminal	Ground	5 V
D23	5		
	6		

Is the inspection result normal?

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

2. CHECK DOOR KEY CYLINDER SWITCH SIGNAL CIRCUIT

1. Disconnect the BCM connector.
2. Check continuity between BCM harness connector and front door lock assembly LH harness connector.

BCM		Front door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
M19	92	D23	6	Yes
	93		5	

3. Check continuity between BCM harness connector and ground.

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DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

BCM		Ground	Continuity
Connector	Terminal		
M19	92		
	93		

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-76, "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		Ground	Continuity
Connector	Terminal		
D23	4		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK DOOR KEY CYLINDER SWITCH

Refer to [DLK-178, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace front door lock assembly LH. Refer to [DLK-267, "DOOR LOCK : Removal and Installation"](#).

5. CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000012423630

1. CHECK DOOR KEY CYLINDER SWITCH

1. Turn ignition 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	
Terminal				
5	4			Driver side door key cylinder
		Neutral / Lock	No	
6		Lock	Yes	
		Neutral / Unlock	No	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace front door lock assembly LH. Refer to [DLK-267, "DOOR LOCK : Removal and Installation"](#).

DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DOOR REQUEST SWITCH

Component Function Check

INFOID:000000012423631

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
		Released	OFF
REQ SW -AS	RH door request switch	Pressed	ON
		Released	OFF

Is the inspection result normal?

YES >> Front door request switch is OK.

NO >> Refer to [DLK-179, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012423632

Regarding Wiring Diagram information, refer to [DLK-63, "Wiring Diagram"](#).

1.CHECK DOOR REQUEST SWITCH INPUT SIGNAL

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

(+)		Terminal	(-)	Voltage (Approx.)
Front door request switch				
Connector		3	Ground	Battery voltage
LH	D11			
RH	D126			

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK DOOR REQUEST SWITCH CIRCUIT

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

Front door request switch		Terminal	BCM		Continuity
Connector	Terminal		Connector	Terminal	
LH	D11	3	M19	105	Yes
RH	D126			82	

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

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DOOR REQUEST SWITCH

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[WITH INTELLIGENT KEY SYSTEM]

Front door request switch		Terminal	Ground	Continuity
Connector				No
LH	D11	3		
RH	D126			

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

NO >> Repair or replace harness.

3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

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

Front door request switch		Terminal	Ground	Continuity
Connector				Yes
LH	D11	4		
RH	D126			

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK DOOR REQUEST SWITCH

Refer to [DLK-180, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace malfunctioning front outside handle assembly. Refer to [DLK-281, "DRIVER SIDE : Removal and Installation"](#) or [DLK-281, "PASSENGER SIDE : Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:000000012423633

1.CHECK DOOR REQUEST SWITCH

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

Front door request switch		Condition	Continuity	
Terminal				
3	4	Door request switch	Pressed	Yes
			Released	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace malfunctioning front door request switch. Refer to [DLK-281, "DRIVER SIDE : Removal and Installation"](#) or [DLK-281, "PASSENGER SIDE : Removal and Installation"](#).

BACK DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

BACK DOOR REQUEST SWITCH

Component Function Check

INFOID:000000012423634

1.CHECK FUNCTION

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

Monitor item	Condition		Status
REQ SW-BD/TR	Back door request switch	Pressed	On
		Released	Off

Is the inspection result normal?

- YES >> Back door request switch is OK.
NO >> Refer to [DLK-181, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012423635

Regarding Wiring Diagram information, refer to [DLK-93, "Wiring Diagram"](#).

1.CHECK BACK DOOR REQUEST SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door opener switch connector.
3. Check voltage between back door opener switch harness connector and ground.

(+)		(-)	Voltage (Approx.)
Back door opener switch			
Connector	Terminal	Ground	Battery voltage
D509	4		

Is the inspection result normal?

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

2.CHECK BACK DOOR REQUEST SWITCH CIRCUIT

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

BCM		Back door opener switch		Continuity
Connector	Terminal	Connector	Terminal	
B16	46	D509	4	Yes

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
B16	46		No

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).
NO >> Repair or replace harness.

3.CHECK BACK DOOR REQUEST SWITCH GROUND CIRCUIT

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

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BACK DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Back door opener switch		Ground	Continuity
Connector	Terminal		Yes
D509	3		

Is the inspection result normal?

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

4.CHECK BACK DOOR REQUEST SWITCH

Refer to [DLK-182, "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 5.
NO >> Replace back door opener switch. Refer to [DLK-289, "Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:000000012423636

1.CHECK BACK DOOR REQUEST SWITCH

1. Turn ignition switch OFF.
2. 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			Yes
3	4	Back door request switch Pressed	Yes
		Released	No

Is the inspection result normal?

- YES >> Inspection End.
NO >> Replace back door opener switch assembly. Refer to [DLK-289, "Removal and Installation"](#).

BACK DOOR OPENER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

BACK DOOR OPENER SWITCH

Component Function Check

INFOID:000000012423637

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	Pressed	ON
		Released	OFF

Is the inspection result normal?

- YES >> Back door opener switch is OK.
 NO >> Refer to [DLK-183, "Diagnosis Procedure"](#).

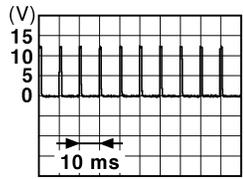
Diagnosis Procedure

INFOID:000000012423638

Regarding Wiring Diagram information, refer to [DLK-93, "Wiring Diagram"](#).

1. CHECK BACK DOOR OPEN INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door opener switch connector.
3. Check signal between back door opener switch harness connector and ground.

(+)		(-)	Signal (Reference value)
Back door opener switch			
Connector	Terminal		
D507	1	Ground	 <p style="text-align: right;">JPMIA0012GB</p>

Is the inspection result normal?

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

2. CHECK BACK DOOR OPENER SWITCH CIRCUIT

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

BCM		Back door opener switch		Continuity
Connector	Terminal	Connector	Terminal	
B16	56	D507	1	Yes

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
B16	56		No

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BACK DOOR OPENER SWITCH

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

NO >> Repair or replace harness.

3. CHECK BACK DOOR OPENER SWITCH GROUND CIRCUIT

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

Back door opener switch		Ground	Continuity
Connector	Terminal		
D507	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-184, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace back door opener switch. Refer to [DLK-289, "Removal and Installation"](#).

5. CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000012423639

1. CHECK BACK DOOR OPENER SWITCH

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

Back door opener switch assembly		Condition		Continuity
Terminal		Back door opener switch	Pressed	Yes
1	2		Released	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door opener switch. Refer to [DLK-289, "Removal and Installation"](#).

INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY WARNING BUZZER

Component Function Check

INFOID:000000012423640

1. CHECK FUNCTION

1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
2. Select "OUTSIDE BUZZER" in "Active Test".
3. Touch "On" or "Off" to check that it works normally.

Is the inspection result normal?

- YES >> Intelligent Key warning buzzer is OK.
NO >> Refer to [DLK-185. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012423641

Regarding Wiring Diagram information, refer to [DLK-76. "Wiring Diagram"](#).

1. CHECK INTELLIGENT KEY WARNING BUZZER CIRCUIT

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

BCM		Intelligent Key warning buzzer		Continuity
Connector	Terminal	Connector	Terminal	
E29	132	E24	1	Yes

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
E29	132		No

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Repair or replace harness.

2. CHECK INTELLIGENT KEY WARNING BUZZER

Refer to [DLK-185. "Component Inspection"](#).

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-76. "Removal and Installation"](#).
NO >> Replace Intelligent Key warning buzzer. Refer to [DLK-284. "Removal and Installation"](#).

Component Inspection

INFOID:000000012423642

1. CHECK INTELLIGENT KEY WARNING BUZZER

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

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

Is the inspection result normal?

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INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

YES >> Inspection End.

NO >> Replace Intelligent Key warning buzzer. Refer to [DLK-284, "Removal and Installation"](#).

INTELLIGENT KEY

Component Function Check

INFOID:000000012423643

NOTE:

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

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

1. CHECK FUNCTION

1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
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 [DLK-187. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012423644

NOTE:

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

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

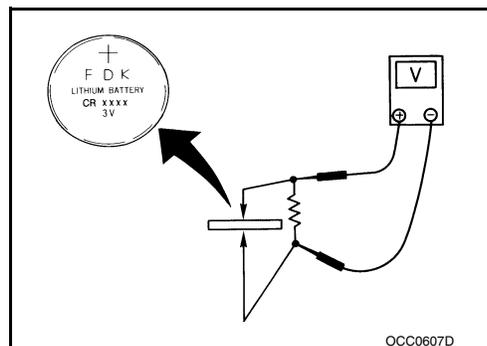
1. CHECK INTELLIGENT KEY BATTERY

Check by connecting a resistance (approximately 300Ω) so that the current value becomes about 10 mA. Refer to [DLK-286. "Removal and Installation"](#).

Standard : Approx. 2.5 - 3.0V

Is the measurement value within the specification?

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



DLK

METER BUZZER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

METER BUZZER CIRCUIT

Description

INFOID:000000012423645

- The buzzer for the warning chime system is installed in the combination meter.
- The combination meter sounds the buzzer based on the signals transmitted from various units.

Component Function Check

INFOID:000000012423646

1. CHECK OPERATION OF METER BUZZER

1. Select "BUZZER" of "BCM" on CONSULT.
2. Perform "LIGHT WARN ALM" or "SEAT BELT WARN TEST" of "Active Test".

Does meter buzzer activate?

- YES >> Inspection End.
NO >> Refer to [DLK-188, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012423647

1. CHECK COMBINATION METER INPUT SIGNAL

Select the "Data Monitor" for the "METER/M&A" and check the "BUZZER" monitor value.

BUZZER
Under the condition of buzzer input : On
Except above : Off

Is the inspection result normal?

- YES >> Replace combination meter. Refer to [MWI-84, "Removal and Installation"](#).
NO >> Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

KEY WARNING LAMP

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

KEY WARNING LAMP

Component Function Check

INFOID:000000012423648

1.CHECK FUNCTION

1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
2. Select "INDICATOR" in "Active Test".
3. Touch "KEY IND" or "KEY ON" to check that it works normally.

Is the inspection result normal?

YES >> Key warning lamp is OK.

NO >> Refer to [DLK-189. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012423649

1.CHECK KEY WARNING LAMP

Refer to [MWI-21. "CONSULT Function \(METER/M&A\)"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK INTERMITTENT INCIDENT

Refer to [GI-45. "Intermittent Incident"](#).

>> Inspection End.

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< DTC/CIRCUIT DIAGNOSIS >

HAZARD FUNCTION

Component Function Check

INFOID:000000012423650

1.CHECK FUNCTION

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

Is the inspection result normal?

- YES >> Hazard warning lamp circuit is OK.
- NO >> Refer to [DLK-190, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012423651

1.CHECK HAZARD SWITCH CIRCUIT

Refer to [DLK-190, "Component Function Check"](#).

Is the inspection result normal?

- YES >> GO TO 2.
- NO >> Repair or replace the malfunctioning parts.

2.CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

AUTOMATIC BACK DOOR CLOSE SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

AUTOMATIC BACK DOOR CLOSE SWITCH

Component Function Check

INFOID:0000000012423652

1.CHECK FUNCTION

1. Select "AUTO BACK DOOR" using CONSULT.
2. Select "BK DOOR CL SW" in "Data Monitor".
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
BK DOOR CL SW	Automatic back door close switch	Pressed	ON
		Released	OFF

Is the inspection result normal?

- YES >> Automatic back door close switch is OK.
NO >> Refer to [DLK-191, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012423653

Regarding Wiring Diagram information, refer to [DLK-93, "Wiring Diagram"](#).

1.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect automatic back door close switch connector.
3. Check voltage between automatic back door close switch harness connector and ground.

(+)		(-)	Voltage (Approx.)
Connector	Terminal		
D513	1	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and automatic back door close switch harness connector.

Automatic back door control module		Automatic back door close switch		Continuity
Connector	Terminal	Connector	Terminal	
B55	23	D513	1	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	23		No

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).
NO >> Repair or replace harness.

3.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH GROUND CIRCUIT

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AUTOMATIC BACK DOOR CLOSE SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Check continuity between automatic back door close switch harness connector and ground.

Automatic back door close switch		Ground	Continuity
Connector	Terminal		
D513	2		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH

Refer to [DLK-192. "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace automatic back door close switch. Refer to [DLK-290. "Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-45. "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:000000012423654

1.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH

1. Turn ignition switch OFF.
2. Disconnect automatic back door close switch connector.
3. Check continuity between automatic back door close switch terminals.

Automatic back door close switch		Condition		Continuity
Terminal				
1	2	Automatic back door close switch	Pressed	Yes
			Released	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace automatic back door close switch. Refer to [DLK-290. "Removal and Installation"](#).

AUTOMATIC BACK DOOR MAIN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

AUTOMATIC BACK DOOR MAIN SWITCH

Component Function Check

INFOID:000000012423655

1.CHECK FUNCTION

1. Select "AUTO BACK DOOR" using CONSULT.
2. Select "MAIN SW" in "Data Monitor".
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
MAIN SW	Automatic back door main switch	ON	ON
		OFF	OFF

Is the inspection result normal?

- YES >> Automatic back door main switch is OK.
 NO >> Refer to [DLK-193, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012423656

Regarding Wiring Diagram information, refer to [DLK-93, "Wiring Diagram"](#).

1.CHECK AUTOMATIC BACK DOOR MAIN SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect automatic back door main switch connector.
3. Check voltage between automatic back door main switch harness connector and ground.

(+)		(-)	Voltage (Approx.)
Connector	Terminal		
M178	1	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK AUTOMATIC BACK DOOR MAIN SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and automatic back door main switch harness connector.

Automatic back door control module		Automatic back door main switch		Continuity
Connector	Terminal	Connector	Terminal	
B55	10	M178	1	Yes

3. Check continuity between automatic back door control module connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	10		No

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).
 NO >> Repair or replace harness.

3.CHECK AUTOMATIC BACK DOOR MAIN SWITCH GROUND CIRCUIT

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AUTOMATIC BACK DOOR MAIN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Check continuity between automatic back door main switch connector and ground.

Automatic back door main switch		Ground	Continuity
Connector	Terminal		
M178	3		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Refer to [DLK-194. "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace automatic back door main switch. Refer to [DLK-288. "Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-45. "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:000000012423657

1.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

1. Turn ignition switch OFF.
2. Disconnect automatic back door switch connector.
3. Check continuity between automatic back door main switch terminals.

Automatic back door main switch		Condition		Continuity
Terminal				
1	3	Automatic back door main switch	ON	Yes
			OFF	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace automatic back door main switch. Refer to [DLK-288. "Removal and Installation"](#).

AUTOMATIC BACK DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

AUTOMATIC BACK DOOR SWITCH

Component Function Check

INFOID:000000012423658

1.CHECK FUNCTION

1. Select "AUTO BACK DOOR" using CONSULT.
2. Select "AUTO BD SW" in "Data Monitor".
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
AUTO BD SW	Automatic back door switch	Pressed	ON
		Released	OFF

Is the inspection result normal?

- YES >> Automatic back door switch is OK.
NO >> Refer to [DLK-195, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012423659

Regarding Wiring Diagram information, refer to [DLK-93, "Wiring Diagram"](#).

1.CHECK AUTOMATIC BACK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect automatic back door switch connector.
3. Check voltage between automatic back door switch harness connector and ground.

(+)		(-)	Voltage (Approx.)
Connector	Terminal		
M24	1	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK AUTOMATIC BACK DOOR SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and automatic back door switch harness connector.

Automatic back door control module		Automatic back door switch		Continuity
Connector	Terminal	Connector	Terminal	
B55	22	M24	1	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	22		No

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).
NO >> Repair or replace harness.

3.CHECK AUTOMATIC BACK DOOR SWITCH GROUND CIRCUIT

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AUTOMATIC BACK DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Check continuity between automatic back door switch harness connector and ground.

Automatic back door switch		Ground	Continuity
Connector	Terminal		
M24	2		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK AUTOMATIC BACK DOOR SWITCH

Refer to [DLK-196. "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace automatic back door switch. Refer to [DLK-289. "Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-45. "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:000000012423660

1.CHECK AUTOMATIC BACK DOOR SWITCH

1. Turn ignition switch OFF.
2. Disconnect automatic back door switch connector.
3. Check continuity between automatic back door switch terminals.

Automatic back door switch		Condition	Continuity	
Terminal				
1	2	Automatic back door switch	Pressed	Yes
			Released	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace automatic back door switch. Refer to [DLK-289. "Removal and Installation"](#).

HALF LATCH SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

HALF LATCH SWITCH

Component Function Check

INFOID:000000012423661

1.CHECK FUNCTION

1. Select "AUTO BACK DOOR" using CONSULT.
2. Select "HALF LATCH SW" in "Data Monitor".
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
HALF LATCH SW	Back door	Fully closed/Half latch	OFF
		Open	ON

Is the inspection result normal?

- YES >> Half latch switch is OK.
NO >> Refer to [DLK-197, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012423662

Regarding Wiring Diagram information, refer to [DLK-93, "Wiring Diagram"](#).

1.CHECK HALF LATCH SWITCH INPUT SIGNAL

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

(-)		(-)	Voltage (Approx.)
Back door lock assembly			
Connector	Terminal	Ground	Battery voltage
D512	6		

Is the inspection result normal?

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

2.CHECK HALF LATCH SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B55	3	D512	6	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	3		No

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).
NO >> Repair or replace harness.

3.CHECK HALF LATCH SWITCH GROUND CIRCUIT

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

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HALF LATCH SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D512	3		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK HALF LATCH SWITCH

Refer to [DLK-198. "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace back door lock assembly. Refer to [DLK-274. "DOOR LOCK : Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-45. "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:000000012423663

COMPONENT INSPECTION

1.CHECK HALF LATCH SWITCH

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

Back door lock assembly		Condition		Continuity
Terminal				
6	8	Back door	Open	Yes
			Fully closed/Half latch	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to [DLK-274. "DOOR LOCK : Removal and Installation"](#).

TOUCH SENSOR

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

TOUCH SENSOR

RH

RH : Component Function Check

INFOID:0000000012423664

1. CHECK FUNCTION

1. Select "AUTOMATIC BACK DOOR" using CONSULT.
2. Select "TOUCH SEN RH" in "Data Monitor".
3. Check that the function operates normally according to the following conditions:

Monitor item		Condition		Status
TOUCH SEN RH	Touch sensor RH	Other than below		OFF
		Detect obstruction		ON

Is the inspection result normal?

- YES >> Touch sensor RH is OK.
 NO >> Refer to [DLK-199, "RH : Diagnosis Procedure"](#).

RH : Diagnosis Procedure

INFOID:0000000012423665

Regarding Wiring Diagram information, refer to [DLK-93, "Wiring Diagram"](#).

1. CHECK TOUCH SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between touch sensor RH harness connector and automatic back door control module harness connector.

(+)		(-)		Condition	Voltage (Approx.)	
Touch sensor RH		Automatic back door control module				
Connector	Terminal	Connector	Terminal			
D515	1	B55	13	Touch sensor RH	Detect obstruction	1.8 – 5 V
					Other than above	2.72 – 7.27 V

Is the inspection result normal?

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

2. CHECK TOUCH SENSOR RH CIRCUIT

1. Disconnect automatic back door control module and touch sensor RH connector.
2. Check continuity between automatic back door control module harness connector and touch sensor RH harness connector.

Automatic back door control module		Touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B55	1	D515	2	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	2		No

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TOUCH SENSOR

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

NO >> Repair or replace harness.

3.CHECK TOUCH SENSOR RH GROND CIRCUIT

1. Disconnect automatic back door control module and touch sensor RH connector.
2. Check continuity between automatic back door control module harness connector and touch sensor RH harness connector.

Automatic back door control module		Touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B55	13	D515	2	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	13		No

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK TOUCH SENSOR RH GROND CIRCUIT 2

1. Connect automatic back door control module and touch sensor RH connector.
2. Check voltage between automatic back door control module harness connector and ground.

(+)		(-)	Voltage (Approx.)
Automatic back door control module			
Connector	Terminal		
B55	13	Ground	0.01 – 0 V

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5.CHECK TOUCH SENSOR RH

Refer to [DLK-200, "RH : Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace touch sensor RH. Refer to [DLK-275, "TOUCH SENSOR : Removal and Installation"](#).

6.CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

RH : Component Inspection

INFOID:000000012423666

1.CHECK TOUCH SENSOR RH

1. Turn ignition switch OFF.
2. Disconnect touch sensor RH connector.
3. Check resistance between touch sensor RH terminals.

TOUCH SENSOR

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Touch sensor RH		Condition		Resistance (Approx.)
Terminal				
1	2	Touch sensor RH	Detect obstruction	380 – 420 kΩ
			Other than above	0.95 – 1.05 kΩ

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace touch sensor RH. Refer to [DLK-275, "TOUCH SENSOR : Removal and Installation"](#).

LH

LH : Component Function Check

INFOID:0000000012423667

1.CHECK FUNCTION

1. Select "AUTOMATIC BACK DOOR" using CONSULT.
2. Select "TOUCH SEN LH" in "Data Monitor".
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
TOUCH SEN LH	Touch sensor LH	Other than below	OFF
		Detect obstruction	ON

Is the inspection result normal?

YES >> Touch sensor LH is OK.

NO >> Refer to [DLK-201, "LH : Diagnosis Procedure"](#).

LH : Diagnosis Procedure

INFOID:0000000012423668

Regarding Wiring Diagram information, refer to [DLK-93, "Wiring Diagram"](#).

1.CHECK TOUCH SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between touch sensor LH harness connector and automatic back door control module harness connector.

DLK

(+)		(-)		Condition	Voltage (Approx.)	
Touch sensor LH		Automatic back door control module				
Connector	Terminal	Connector	Terminal			
D511	2	B55	13	Touch sensor LH	Detect obstruction	1.8 – 5 V
				Other than above	2.72 – 7.27 V	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK TOUCH SENSOR LH CIRCUIT

1. Disconnect automatic back door control module and touch sensor LH connector.
2. Check continuity between automatic back door control module harness connector and touch sensor LH harness connector.

TOUCH SENSOR

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Automatic back door control module		Touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B55	2	D511	1	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	2		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

NO >> Repair or replace harness.

3. CHECK TOUCH SENSOR LH GROND CIRCUIT

1. Disconnect automatic back door control module and touch sensor LH connector.
2. Check continuity between automatic back door control module harness connector and touch sensor LH harness connector.

Automatic back door control module		Touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B55	13	D511	2	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	13		No

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK TOUCH SENSOR LH GROND CIRCUIT 2

1. Connect automatic back door control module and touch sensor LH connector.
2. Check voltage between automatic back door control module harness connector and ground.

(+)			Voltage (Approx.)
Automatic back door control module			
Connector	Terminal	(-)	
B55	13	Ground	0.01 – 0 V

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5. CHECK TOUCH SENSOR LH

Refer to [DLK-203, "LH : Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace touch sensor LH. Refer to [DLK-275, "TOUCH SENSOR : Removal and Installation"](#).

6. CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

TOUCH SENSOR

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

LH : Component Inspection

INFOID:000000012423669

1. CHECK TOUCH SENSOR LH

1. Turn ignition switch OFF.
2. Disconnect touch sensor LH connector.
3. Check resistance between touch sensor LH terminals.

Touch sensor LH		Condition	Resistance (Approx.)	
Terminal				
1	2	Touch sensor LH	Detect obstruction	380 – 420 kΩ
			Other than above	0.95 – 1.05 kΩ

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace touch sensor LH. Refer to [DLK-275, "TOUCH SENSOR : Removal and Installation"](#).

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SPINDLE MOTOR

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

SPINDLE MOTOR

RH

RH : Diagnosis Procedure

INFOID:000000012423670

Regarding Wiring Diagram information, refer to [DLK-93, "Wiring Diagram"](#).

1. CHECK SPINDLE MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect spindle unit RH connector.
3. Check voltage between spindle unit RH harness connector and ground.

(+)		(-)	Condition		Voltage (Approx.)
Spindle unit RH					
Connector	Terminal				
B73	1	Ground	Back door	Auto open operation	Battery voltage
	7			Auto close operation	

Is the inspection result normal?

- YES >> Replace spindle unit RH. Refer to [DLK-274, "SPINDLE UNIT : Removal and Installation"](#).
 NO >> GO TO 2.

2. CHECK SPINDLE MOTOR CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and spindle unit harness connector.

Automatic back door control module		Spindle unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B56	29	B73	1	Yes
	36		7	

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	29		No
	36		

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).
 NO >> Repair or replace harness.

LH

LH : Diagnosis Procedure

INFOID:000000012423671

Regarding Wiring Diagram information, refer to [DLK-93, "Wiring Diagram"](#).

1. CHECK SPINDLE MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.

SPINDLE MOTOR

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

2. Disconnect spindle unit LH connector.
3. Check voltage between spindle unit LH harness connector and ground.

(+)		(-)	Condition		Voltage (Approx.)
Spindle unit LH					
Connector	Terminal				
B95	1	Ground	Back door	Auto open operation	Battery voltage
	7			Auto close operation	

Is the inspection result normal?

- YES >> Replace spindle unit LH. Refer to [DLK-274, "SPINDLE UNIT : Removal and Installation"](#).
 NO >> GO TO 2.

2.CHECK SPINDLE MOTOR CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and spindle unit LH harness connector.

Automatic back door control module		Spindle unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B56	27	B95	1	Yes
	34		7	

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	27		No
	34		

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).
 NO >> Repair or replace harness.

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BACK DOOR CLOSURE MOTOR

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

BACK DOOR CLOSURE MOTOR

Diagnosis Procedure

INFOID:000000012423672

Regarding Wiring Diagram information, refer to [DLK-93, "Wiring Diagram"](#).

1. CHECK BACK DOOR CLOSURE MOTOR INPUT SIGNAL

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

(+)		(-)	Condition		Voltage (Approx.)
Back door lock assembly					
Connector	Terminal	Ground	Back door opener switch	Pressed	Battery voltage
D512	1			Released	
	2				

Is the inspection result normal?

- YES >> Replace back door lock assembly. Refer to [DLK-274, "DOOR LOCK : Removal and Installation"](#).
NO >> GO TO 2.

2. CHECK BACK DOOR CLOSURE MOTOR CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B56	31	D512	1	Yes
	38		2	

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	31		No
	38		

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).
NO >> Repair or replace harness.

AUTOMATIC BACK DOOR WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

AUTOMATIC BACK DOOR WARNING BUZZER

Diagnosis Procedure

INFOID:000000012423673

Regarding Wiring Diagram information, refer to [DLK-93. "Wiring Diagram"](#).

1. CHECK BACK DOOR WARNING CHIME POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect back door warning chime connector.
3. Check voltage between back door warning chime harness connector and ground.

(+)		(-)	Voltage (Approx.)
Back door warning chime			
Connector	Terminal	Ground	Battery voltage
B61	1		

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK BACK DOOR WARNING CHIME OUTPUT SIGNAL CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door warning chime harness connector.

Automatic back door control module		Back door warning chime		Continuity
Connector	Terminal	Connector	Terminal	
B56	37	B61	1	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	37	No	

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-287. "Removal and Installation"](#).

NO >> Repair or replace harness.

3. CHECK BACK DOOR WARNING CHIME GROUND CIRCUIT

Check continuity between back door warning chime harness connector and ground.

Back door warning chime		Ground	Continuity
Connector	Terminal		
B61	2	Yes	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK BACK DOOR WARNING CHIME

Refer to [DLK-208. "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace back door warning chime. Refer to [DLK-285. "Removal and Installation"](#).

AUTOMATIC BACK DOOR WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

5. CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000012423674

1. CHECK BACK DOOR WARNING CHIME

1. Turn ignition switch OFF.
2. Disconnect back door warning chime connector.
3. Check battery power supply directly to back door warning chime terminals and check the operation.

back door warning chime		Operation
Terminal		
(+)	(-)	Chime sounds
1	2	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door warning chime. Refer to [DLK-285, "Removal and Installation"](#).

INTEGRATED HOMELINK TRANSMITTER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTEGRATED HOMELINK TRANSMITTER

Component Function Check

INFOID:000000012423675

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

1. Turn ignition 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 [DLK-209. "Diagnosis Procedure"](#).

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). Refer to [MIR-20. "Removal and Installation"](#).

Diagnosis Procedure

INFOID:000000012423676

Regarding Wiring Diagram information, refer to [DLK-105. "Wiring Diagram"](#).

1.CHECK POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect auto anti-dazzling inside mirror (Homelink® universal transceiver) connector.
3. Check voltage between auto anti-dazzling inside mirror (Homelink® universal transceiver) harness connector and ground.

Auto anti-dazzling inside mirror (Homelink® universal transceiver) connector	Terminal		Condition	Voltage (V) (Approx.)
R7	10	Ground	Ignition switch position: OFF	Battery voltage
	6		Ignition switch position: ON	

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Check the following items:
- 5A fuse 14 located in the fuse block (J/B).
 - 10A fuse 30 located in the fuse block (J/B).
 - Harness for open or short between fuse and auto anti-dazzling inside mirror (Homelink® universal transceiver).

2.CHECK GROUND CIRCUIT

Check continuity between auto anti-dazzling inside mirror (Homelink® universal transceiver) harness connector and ground.

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INTEGRATED HOMELINK TRANSMITTER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Auto anti-dazzling inside mirror (Homelink® universal transceiver) connector	Terminal	Ground	Continuity
R7	8		Yes

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness.

3.CHECK INTERMITTENT INCIDENT

Refer to [GI-45. "Intermittent Incident"](#).

>> Inspection End.

INTELLIGENT KEY SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

SYMPTOM DIAGNOSIS

INTELLIGENT KEY SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000012423677

CAUTION:

Perform the self-diagnosis with CONSULT before the symptom diagnosis. Perform the trouble diagnosis if any DTC is detected.

Symptom	Inspection item
Door does not lock/unlock with door lock and unlock switch.	<ul style="list-style-type: none"> All doors inoperative. Refer to DLK-212. Drivers side door inoperative. Refer to DLK-212. Passenger side door inoperative. Refer to DLK-213. Rear LH door inoperative. Refer to DLK-213. Rear RH door inoperative. Refer to DLK-213.
Door does not lock/unlock with door key cylinder operation.	Refer to DLK-215 .
Door does not lock/unlock with door request switch.	<ul style="list-style-type: none"> All door request switches. Refer to DLK-216. Drivers side door request switch. Refer to DLK-217. Passenger side door request switch. Refer to DLK-217. Back door request switch. Refer to DLK-217.
Door does not lock/unlock with Intelligent Key.	Refer to DLK-219 .
Ignition position warning function does not operate.	Refer to DLK-220 .
OFF position warning does not operate.	Refer to DLK-221 .
Take away warning does not operate.	Refer to DLK-222 .
Key ID warning does not operate.	Refer to DLK-224 .
Intelligent Key low battery warning does not operate.	Refer to DLK-225 .
Door lock operation warning does not operate.	Refer to DLK-226 .
Automatic back door operation does not operate.	<ul style="list-style-type: none"> All switches. Refer to DLK-227. Automatic back door switch. Refer to DLK-228. Automatic back door close switch. Refer to DLK-228. Intelligent Key. Refer to DLK-229. Back door opener switch. Refer to DLK-229. Open/closure function. Refer to DLK-230. Open function. Refer to DLK-231. Closure function. Refer to DLK-232.
Automatic back door warning does not operate.	Refer to DLK-233 .
Automatic back door functions do not cancel.	Refer to DLK-235 .
Automatic back door anti-pinch functions do not operate.	Refer to DLK-236 .
Integrated homelink transmitter does not operate.	Refer to DLK-237 .
Squeak and rattle trouble diagnosis.	Refer to DLK-239 .

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

< SYMPTOM DIAGNOSIS >

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

ALL DOOR : Description

INFOID:000000012423678

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

ALL DOOR : Diagnosis Procedure

INFOID:000000012423679

1.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch.

- Driver side: Refer to [DLK-166, "DRIVER SIDE : Component Function Check"](#).
- Passenger side: Refer to [DLK-167, "PASSENGER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK DOOR LOCK ACTUATOR

Check front door lock assembly LH.

Refer to [DLK-170, "DRIVER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.REPLACE BCM

- Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45, "Intermittent Incident"](#).

DRIVER SIDE

DRIVER SIDE : Description

INFOID:000000012423680

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

DRIVER SIDE : Diagnosis Procedure

INFOID:000000012423681

1.CHECK DOOR LOCK ACTUATOR

Check front door lock assembly LH.

Refer to [DLK-170, "DRIVER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.REPLACE BCM

- Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45, "Intermittent Incident"](#).

PASSENGER SIDE

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

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

PASSENGER SIDE : Description

INFOID:000000012423682

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

PASSENGER SIDE : Diagnosis Procedure

INFOID:000000012423683

1.CHECK DOOR LOCK ACTUATOR

Check front door lock actuator RH.

Refer to [DLK-171, "PASSENGER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.REPLACE BCM

- Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45, "Intermittent Incident"](#).

REAR LH

REAR LH : Description

INFOID:000000012423684

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

REAR LH : Diagnosis Procedure

INFOID:000000012423685

1.CHECK DOOR LOCK ACTUATOR

Check rear door lock actuator LH.

Refer to [DLK-172, "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-76, "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45, "Intermittent Incident"](#).

REAR RH

REAR RH : Description

INFOID:000000012423686

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

REAR RH : Diagnosis Procedure

INFOID:000000012423687

1.CHECK DOOR LOCK ACTUATOR

Check rear door lock actuator RH.

Refer to [DLK-173, "REAR RH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.REPLACE BCM

- Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

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

< SYMPTOM DIAGNOSIS >

- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45. "Intermittent Incident"](#).

DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERATION
< SYMPTOM DIAGNOSIS > **[WITH INTELLIGENT KEY SYSTEM]**

DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERATION

Diagnosis Procedure

INFOID:000000012423688

1.CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

NO >> Refer to [DLK-212, "ALL DOOR : Diagnosis Procedure"](#).

2.CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.

Refer to [DLK-177, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.REPLACE BCM

• Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

• Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45, "Intermittent Incident"](#).

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DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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

ALL DOOR REQUEST SWITCHES : Description

INFOID:000000012423689

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

ALL DOOR REQUEST SWITCHES : Diagnosis Procedure

INFOID:000000012423690

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 [DLK-187, "Component Function Check"](#).

2. CHECK DOOR SWITCH

Check door switch.

Refer to [DLK-160, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CHECK INSIDE KEY ANTENNA

Check inside key antenna.

• Instrument center: Refer to [DLK-148, "DTC Logic"](#).

• Console: Refer to [DLK-150, "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.

• Driver side: Refer to [DLK-156, "Component Function Check"](#).

• Passenger side: Refer to [DLK-154, "Component Function Check"](#).

• Rear bumper: Refer to [DLK-158, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5. CHECK BACK DOOR SWITCH

Check back door switch.

Refer to [DLK-162, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6. REPLACE BCM

• Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

• Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45, "Intermittent Incident"](#).

DRIVER SIDE DOOR REQUEST SWITCH

DRIVER SIDE DOOR REQUEST SWITCH : Description

INFOID:000000012423691

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

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DRIVER SIDE DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:000000012423692

1.CHECK DOOR REQUEST SWITCH

Check front door request switch (driver side).
Refer to [DLK-179. "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-76. "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

- YES >> Inspection End.
- NO >> Check intermittent incident. Refer to [GI-45. "Intermittent Incident"](#).

PASSENGER SIDE DOOR REQUEST SWITCH

PASSENGER SIDE DOOR REQUEST SWITCH : Description

INFOID:000000012423693

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

PASSENGER SIDE DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:000000012423694

1.CHECK DOOR REQUEST SWITCH

Check front door request switch (passenger side).
Refer to [DLK-179. "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-76. "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

- YES >> Inspection End.
- NO >> Check intermittent incident. Refer to [GI-45. "Intermittent Incident"](#).

BACK DOOR REQUEST SWITCH

BACK DOOR REQUEST SWITCH : Description

INFOID:000000012423695

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

BACK DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:000000012423696

1.CHECK BACK DOOR REQUEST SWITCH

Check back door request switch.
Refer to [DLK-181. "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-76. "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

- YES >> Inspection End.

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DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

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[WITH INTELLIGENT KEY SYSTEM]

NO >> Check intermittent incident. Refer to [GI-45. "Intermittent Incident"](#).

DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

Diagnosis Procedure

INFOID:000000012423697

1.CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

NO >> Refer to [DLK-212, "ALL DOOR : Diagnosis Procedure"](#).

2.CHECK INTELLIGENT KEY

Check Intelligent Key.

Refer to [DLK-187, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.REPLACE BCM

• Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

• Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45, "Intermittent Incident"](#).

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IGNITION POSITION WARNING FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

IGNITION POSITION WARNING FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000012423698

1. CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

NO >> Refer to [DLK-212, "ALL DOOR : Diagnosis Procedure"](#).

2. CHECK DOOR SWITCH

Check door switch

Refer to [DLK-160, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CHECK BACK DOOR SWITCH

Check door switch

Refer to [DLK-162, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4. REPLACE BCM

• Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

• Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45, "Intermittent Incident"](#).

OFF POSITION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

OFF POSITION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000012423699

1. CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

2. CHECK DTC WITH COMBINATION METER

Check that DTC is not detected with combination meter.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Perform trouble diagnosis relevant to DTC indicated.

3. CHECK DOOR SWITCH

Check front door switch LH.

Refer to [DLK-160, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4. CHECK COMBINATION METER BUZZER

Check combination meter buzzer.

Refer to [DLK-188, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5. CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.

Refer to [DLK-185, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6. REPLACE BCM

• Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

• Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45, "Intermittent Incident"](#).

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TAKE AWAY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

TAKE AWAY WARNING DOES NOT OPERATE

Description

INFOID:0000000012423700

Take away warning function does not operate for vehicle with information display models.

NOTE:

Warning functions operating condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to [DLK-37. "WARNING FUNCTION : System Description"](#).

Diagnosis Procedure

INFOID:0000000012423701

1.CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK DTC WITH COMBINATION METER

Check that DTC is not detected with combination meter.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Perform trouble diagnosis relevant to DTC indicated.

3.CHECK INSIDE KEY ANTENNA

Check inside key antenna.

• Instrument center: Refer to [DLK-148. "DTC Logic"](#).

• Console: Refer to [DLK-150. "DTC Logic"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK DOOR SWITCH

Check front door switch LH.

Refer to [DLK-160. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5.CHECK COMBINATION METER BUZZER

Check combination meter buzzer.

Refer to [DLK-188. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.

Refer to [DLK-185. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

7.REPLACE BCM

• Replace BCM. Refer to [BCS-76. "Removal and Installation"](#).

• Confirm the operation after replacement.

Is the result normal?

TAKE AWAY WARNING DOES NOT OPERATE

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YES >> Inspection End.
NO >> Check intermittent incident. Refer to [GI-45, "Intermittent Incident"](#).

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KEY ID WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

KEY ID WARNING DOES NOT OPERATE

Description

INFOID:0000000012423702

Key ID warning function does not operate for vehicle with information display models.

NOTE:

Warning functions operating condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to [DLK-37. "WARNING FUNCTION : System Description"](#).

Diagnosis Procedure

INFOID:0000000012423703

1. CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

2. CHECK DTC WITH COMBINATION METER

Check that DTC is not detected with combination meter.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Perform trouble diagnosis relevant to DTC indicated.

3. CHECK INTELLIGENT KEY

Check Intelligent Key.

Refer to [DLK-187. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4. CHECK INSIDE KEY ANTENNA

Check inside key antenna.

• Instrument center: Refer to [DLK-148. "DTC Logic"](#).

• Console: Refer to [DLK-150. "DTC Logic"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5. REPLACE BCM

• Replace BCM. Refer to [BCS-76. "Removal and Installation"](#).

• Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45. "Intermittent Incident"](#).

INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

Description

INFOID:000000012423704

Intelligent Key low battery warning does not operate for vehicle with information display models.

NOTE:

Warning functions operating condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to [DLK-37, "WARNING FUNCTION : System Description"](#).

Diagnosis Procedure

INFOID:000000012423705

1. CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

2. CHECK DTC WITH COMBINATION METER

Check that DTC is not detected with combination meter.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Perform trouble diagnosis relevant to DTC indicated.

3. CHECK "LO- BATT OF KEY FOB WARN" SETTING IN "WORK SUPPORT"

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

2. Select "LO- BATT OF KEY FOB WARN" in "Work support".

3. Check "LO- BATT OF KEY FOB WARN" setting in "Work support".

Refer to [BCS-22, "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Set "ON" in "LO- BATT OF KEY FOB WARN".

4. CHECK INTELLIGENT KEY

Check Intelligent Key.

Refer to [DLK-187, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5. CHECK INSIDE KEY ANTENNA

Check inside key antenna.

• Instrument center: Refer to [DLK-148, "DTC Logic"](#).

• Console: Refer to [DLK-150, "DTC Logic"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6. REPLACE BCM

• Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

• Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45, "Intermittent Incident"](#).

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DOOR LOCK OPERATION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DOOR LOCK OPERATION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000012423706

1.CHECK DOOR LOCK FUNCTION

Check door lock function.

Does door lock/unlock using door request switch?

YES >> GO TO 2.

NO >> Refer to [DLK-216, "ALL DOOR REQUEST SWITCHES : Diagnosis Procedure"](#).

2.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.

Refer to [DLK-185, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.REPLACE BCM

• Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

• Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45, "Intermittent Incident"](#).

AUTOMATIC BACK DOOR OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

AUTOMATIC BACK DOOR OPERATION DOES NOT OPERATE

ALL SWITCHES

ALL SWITCHES : Description

INFOID:0000000012423707

Automatic back door open/close function does not operate using all switches.

NOTE:

Automatic back door open/close operation condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to [DLK-41, "System Description"](#).

ALL SWITCHES : Diagnosis Procedure

INFOID:0000000012423708

1.CHECK DTC WITH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK BACK DOOR AUTO CLOSURE FUNCTION

Check back door auto closure function.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Refer to [DLK-230, "OPEN/CLOSURE FUNCTION : Diagnosis Procedure"](#).

3.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check automatic back door control module power supply and ground circuit.

Refer to [DLK-117, "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK GROUND CIRCUIT

Check automatic back door control module ground circuit.

Refer to [DLK-144, "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5.CHECK TOUCH SENSOR LH

Check touch sensor LH.

Refer to [DLK-126, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6.CHECK TOUCH SENSOR RH

Check touch sensor RH.

Refer to [DLK-123, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

7.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

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AUTOMATIC BACK DOOR OPERATION DOES NOT OPERATE

[WITH INTELLIGENT KEY SYSTEM]

< SYMPTOM DIAGNOSIS >

NO >> Check intermittent incident. Refer to [GI-45, "Intermittent Incident"](#).

AUTOMATIC BACK DOOR SWITCH

AUTOMATIC BACK DOOR SWITCH : Description

INFOID:0000000012423709

Automatic back door open/close function does not operate using automatic back door switch.

NOTE:

Automatic back door open/close operation condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to [DLK-41, "System Description"](#).

AUTOMATIC BACK DOOR SWITCH : Diagnosis Procedure

INFOID:0000000012423710

1. CHECK AUTOMATIC BACK DOOR SWITCH

Check automatic back door switch.

Refer to [DLK-195, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45, "Intermittent Incident"](#).

AUTOMATIC BACK DOOR CLOSE SWITCH

AUTOMATIC BACK DOOR CLOSE SWITCH : Description

INFOID:0000000012423711

Automatic back door open/close function does not operate using automatic back door close switch.

NOTE:

Automatic back door open/close operation condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to [DLK-41, "System Description"](#).

AUTOMATIC BACK DOOR CLOSE SWITCH : Diagnosis Procedure

INFOID:0000000012423712

1. CONFIRM THE OPERATION

1. Turn ON automatic back door main switch.

2. Confirm the operation.

Is the result normal?

YES >> Automatic back door system is normal.

NO >> GO TO 2.

2. CHECK AUTOMATIC BACK DOOR CLOSE SWITCH

Check automatic back door close switch.

Refer to [DLK-191, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Check automatic back door main switch.

Refer to [DLK-193, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

AUTOMATIC BACK DOOR OPERATION DOES NOT OPERATE

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1. Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45, "Intermittent Incident"](#).

INTELLIGENT KEY

INTELLIGENT KEY : Description

INFOID:000000012423713

Automatic back door open/close function does not operate using Intelligent Key.

NOTE:

Automatic back door open/close operation condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to [DLK-30, "INTELLIGENT KEY SYSTEM : System Description"](#).

INTELLIGENT KEY : Diagnosis Procedure

INFOID:000000012423714

1.CHECK DTC WITH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Perform trouble diagnosis relevant to DTC indicated.

3.CHECK REMOTE KEYLESS ENTRY FUNCTION

Check remote keyless entry function.

Does door lock/unlock with Intelligent Key button?

YES >> GO TO 4.

NO >> Refer to [DLK-219, "Diagnosis Procedure"](#).

4.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45, "Intermittent Incident"](#).

BACK DOOR OPENER SWITCH

BACK DOOR OPENER SWITCH : Description

INFOID:000000012423715

Automatic back door open/close function does not operate using back door opener switch.

NOTE:

Automatic back door open/close operation condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to [DLK-41, "System Description"](#).

BACK DOOR OPENER SWITCH : Diagnosis Procedure

INFOID:000000012423716

1.CONFIRM THE OPERATION

1. Turn ON automatic back door main switch.
2. Confirm the operation.

Is the result normal?

YES >> Automatic back door system is normal.

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NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Check automatic back door main switch.

Refer to [DLK-193, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.

Refer to [DLK-183, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45, "Intermittent Incident"](#).

OPEN/CLOSURE FUNCTION

OPEN/CLOSURE FUNCTION : Description

INFOID:000000012423717

Back door auto closure function does not operate when back door opening and closing operations are performed.

OPEN/CLOSURE FUNCTION : Diagnosis Procedure

INFOID:000000012423718

1.CONFIRM THE OPERATION

1. Turn ON automatic back door main switch.

2. Confirm the operation.

Is the result normal?

YES >> Automatic back door system is normal.

NO >> GO TO 2.

2.CHECK DTC WITH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Perform trouble diagnosis relevant to DTC indicated.

3.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Check automatic back door main switch.

Refer to [DLK-193, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.

Refer to [DLK-183, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

AUTOMATIC BACK DOOR OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

5. CHECK BACK DOOR CLOSURE MOTOR

Check back door closure motor.

Refer to [DLK-206. "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to [DLK-287. "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45. "Intermittent Incident"](#).

OPEN FUNCTION

OPEN FUNCTION : Description

INFOID:0000000012423719

Back door auto closure function does not operate when back door opening operations are performed.

OPEN FUNCTION : Diagnosis Procedure

INFOID:0000000012423720

1. CONFIRM THE OPERATION

1. Turn ON automatic back door main switch.

2. Confirm the operation.

Is the result normal?

YES >> Automatic back door system is normal.

NO >> GO TO 2.

2. CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Check automatic back door main switch.

Refer to [DLK-193. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.

Refer to [DLK-183. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to [DLK-287. "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45. "Intermittent Incident"](#).

CLOSURE FUNCTION

CLOSURE FUNCTION : Description

INFOID:0000000012423721

Back door auto closure function does not operate when back door closing operations are performed.

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AUTOMATIC BACK DOOR OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

CLOSURE FUNCTION : Diagnosis Procedure

INFOID:000000012423722

1. CHECK HALF LATCH SWITCH

Check half latch switch.

Refer to [DLK-197, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK BACK DOOR CLOSURE MOTOR

Check back door closure motor.

Refer to [DLK-206, "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45, "Intermittent Incident"](#).

AUTOMATIC BACK DOOR WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

AUTOMATIC BACK DOOR WARNING DOES NOT OPERATE BUZZER

BUZZER : Description

INFOID:0000000012423723

Automatic back door warning chime does not operate when automatic back door warning function are performed.

BUZZER : Diagnosis Procedure

INFOID:0000000012423724

1.CHECK DTC WITCH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK BACK DOOR WARNING CHIME

Check back door warning chime.

Refer to [DLK-207. "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to [DLK-287. "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45. "Intermittent Incident"](#).

HAZARD WARNING LAMP

HAZARD WARNING LAMP : Description

INFOID:0000000012423725

Hazard warning lamp does not operate when automatic back door warning function are performed.

HAZARD WARNING LAMP : Diagnosis Procedure

INFOID:0000000012423726

1.CHECK DTC WITCH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK DTC WITCH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Perform trouble diagnosis relevant to DTC indicated.

3.CHECK GROUND CIRCUIT

Check automatic back door control module ground circuit.

Refer to [DLK-152. "AUTOMATIC BACK DOOR CONTROL UNIT : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK HAZARD AND HORN REMINDER FUNCTION

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AUTOMATIC BACK DOOR WARNING DOES NOT OPERATE

[WITH INTELLIGENT KEY SYSTEM]

< SYMPTOM DIAGNOSIS >

Check hazard and horn reminder function.

Is the inspection result normal?

YES >> GO TO 5.

NO >> Refer to [DLK-190, "Diagnosis Procedure"](#).

5.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45, "Intermittent Incident"](#).

AUTOMATIC BACK DOOR FUNCTIONS DO NOT CANCEL

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

AUTOMATIC BACK DOOR FUNCTIONS DO NOT CANCEL

Diagnosis Procedure

INFOID:000000012423727

1.CHECK THE OPERATION

Check automatic back door main switch function.

NOTE:

When the main switch is OFF, the automatic back door operation is not available by back door opener switch and automatic back door close switch.

Is the inspection result normal?

- YES >> Automatic back door system is normal.
- NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Check automatic back door main switch.

Refer to [DLK-193. "Component Function Check"](#).

Is the inspection result normal?

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

3.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to [DLK-287. "Removal and Installation"](#).
2. Confirm the operation after replacement.

Is the result normal?

- YES >> Inspection End.
- NO >> Check intermittent incident. Refer to [GI-45. "Intermittent Incident"](#).

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AUTOMATIC BACK DOOR ANTI-PINCH FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

AUTOMATIC BACK DOOR ANTI-PINCH FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000012423728

1. CHECK POWER SUPPLY AND GROUND CIRCUIT

Check automatic back door control module power supply and ground circuit.

Refer to [DLK-117, "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK TOUCH SENSOR LH

Check touch sensor LH.

Refer to [DLK-201, "LH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CHECK TOUCH SENSOR RH

Check touch sensor RH.

Refer to [DLK-199, "RH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to [DLK-287, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-45, "Intermittent Incident"](#).

INTEGRATED HOMELINK TRANSMITTER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTEGRATED HOMELINK TRANSMITTER DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000012423729

1. CHECK INTEGRATED HOMELINK® TRANSMITTER

Check integrated Homelink® transmitter.

Refer to [DLK-209. "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-45. "Intermittent Incident"](#).

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SQUEAK AND RATTLE TROUBLE DIAGNOSES

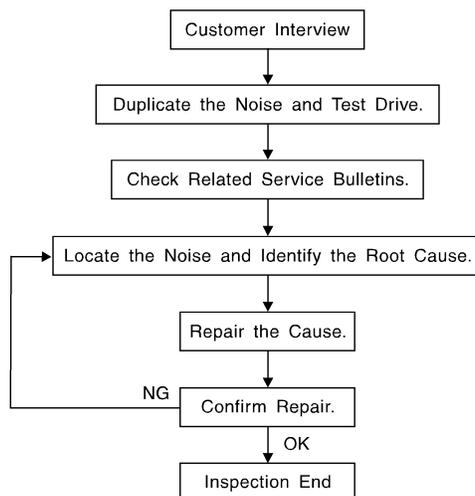
< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:000000012423730



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CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any customer's comments; refer to [DLK-242, "Diagnostic Worksheet"](#). This information is necessary to duplicate the conditions that exist when the noise occurs.

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

DUPLICATE THE NOISE AND TEST DRIVE

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

SQUEAK AND RATTLE TROUBLE DIAGNOSES

[WITH INTELLIGENT KEY SYSTEM]

< 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 [DLK-239, "Generic Squeak and Rattle Troubleshooting"](#).

REPAIR THE CAUSE

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

CAUTION:

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

NOTE:

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

CONFIRM THE REPAIR

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

Generic Squeak and Rattle Troubleshooting

INFOID:000000012423731

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

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

SQUEAK AND RATTLE TROUBLE DIAGNOSES

[WITH INTELLIGENT KEY SYSTEM]

< SYMPTOM DIAGNOSIS >

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

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or 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
2. A/C control unit and cluster lid C
3. Wiring harnesses behind audio and A/C control unit

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

DOORS

Pay attention to the:

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

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. 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:

1. Trunk lid bumpers out of adjustment
2. Trunk lid striker out of adjustment
3. The trunk lid torsion bars knocking together
4. A loose license plate or bracket

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

SUNROOF/HEADLINING

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

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

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

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:

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

SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

3. Loose screws at console attachment points.

SEATS

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

Cause of seat noise include:

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

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

UNDERHOOD

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

Causes of transmitted underhood noise include:

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

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

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SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Diagnostic Worksheet

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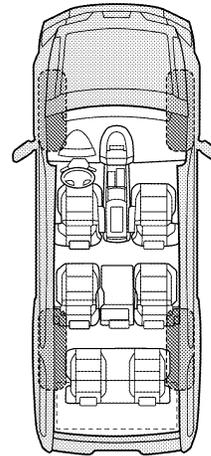
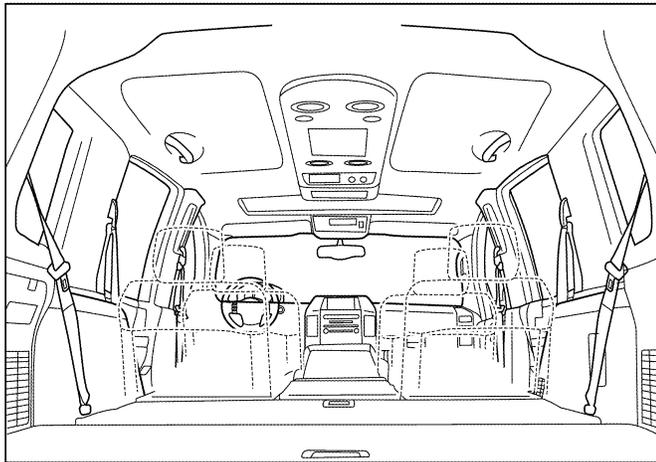
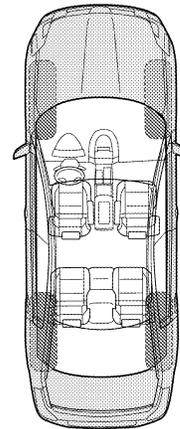
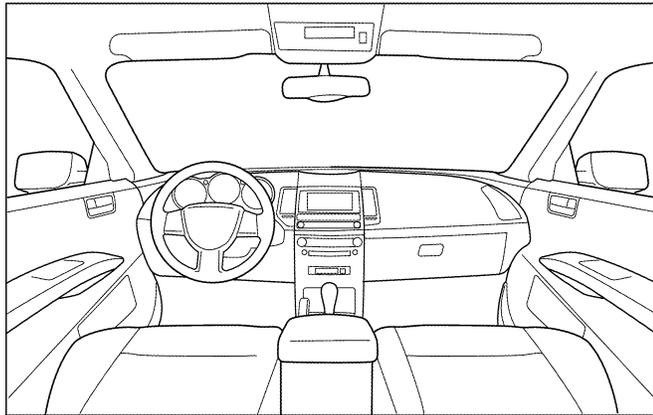
Dear Customer:

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

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

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

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



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

SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

II. WHEN DOES IT OCCUR? (please check the boxes that apply)

- | | |
|---|--|
| <input type="checkbox"/> Anytime | <input type="checkbox"/> After sitting out in the rain |
| <input type="checkbox"/> 1st time in the morning | <input type="checkbox"/> When it is raining or wet |
| <input type="checkbox"/> Only when it is cold outside | <input type="checkbox"/> Dry or dusty conditions |
| <input type="checkbox"/> Only when it is hot outside | <input type="checkbox"/> Other: |

III. WHEN DRIVING:

- Through driveways
- Over rough roads
- Over speed bumps
- Only about ____ mph
- On acceleration
- Coming to a stop
- On turns: left, right or either (circle)
- With passengers or cargo
- Other: _____
- After driving ____ miles or ____ minutes

IV. WHAT TYPE OF NOISE

- 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)

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

	YES	NO	Initials of person performing
Vehicle test driven with customer	<input type="checkbox"/>	<input type="checkbox"/>	_____
- Noise verified on test drive	<input type="checkbox"/>	<input type="checkbox"/>	_____
- Noise source located and repaired	<input type="checkbox"/>	<input type="checkbox"/>	_____
- Follow up test drive performed to confirm repair	<input type="checkbox"/>	<input type="checkbox"/>	_____

VIN: _____ Customer Name _____

W.O.# _____ Date: _____

This form must be attached to Work Order

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HOOD

< REMOVAL AND INSTALLATION >

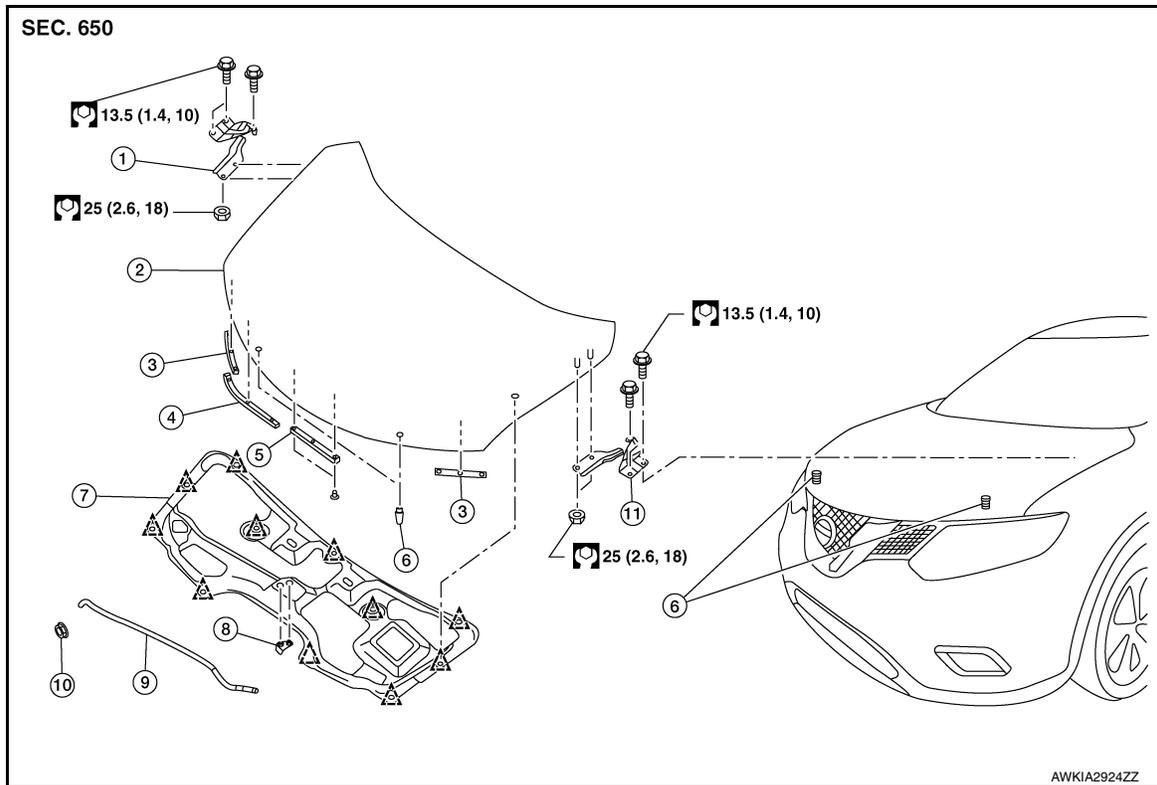
[WITH INTELLIGENT KEY SYSTEM]

REMOVAL AND INSTALLATION

HOOD

Exploded View

INFOID:000000012423733



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|----------------------|---------------------|---------------------|
| 1. Hood hinge (RH) | 2. Hood | 3. Hood side seal |
| 4. Hood front seal | 5. Hood center seal | 6. Bumper rubber |
| 7. Hood insulator | 8. Hood rod clamp | 9. Hood support rod |
| 10. Hood rod grommet | 11. Hood hinge (LH) | △ Clip |

HOOD ASSEMBLY

HOOD ASSEMBLY : Removal and Installation

INFOID:000000012423734

CAUTION:

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

REMOVAL

1. Support the hood assembly using a suitable tool.

WARNING:

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

HOOD

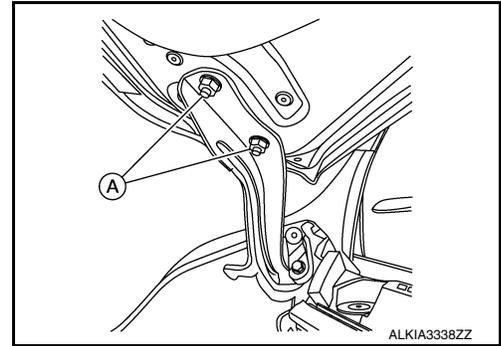
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

- Remove hood hinge to hood nuts (A) and hood assembly.

NOTE:

RH side shown; LH similar.



INSTALLATION

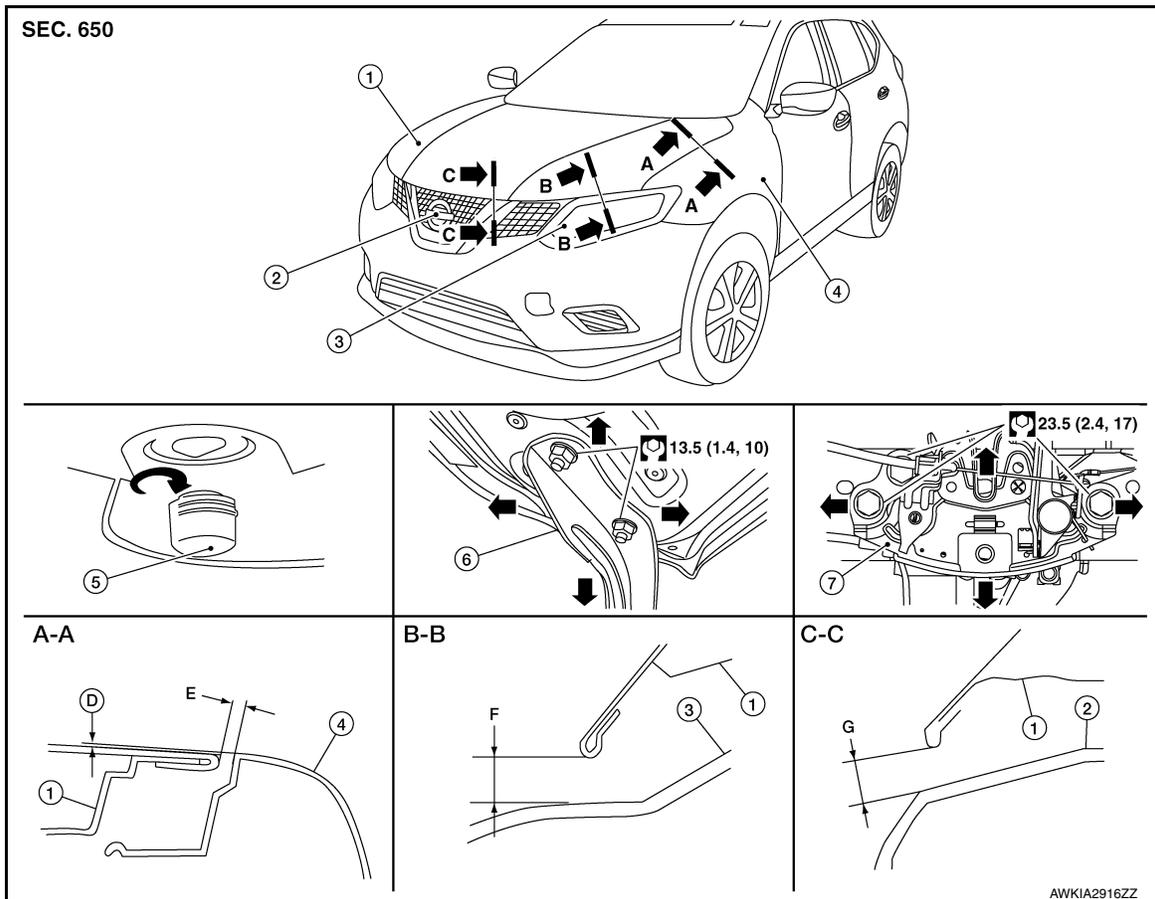
Installation is in the reverse order of removal.

CAUTION:

- Before installing the hood hinge, apply anticorrosive agent onto the surface of the vehicle.
- After installation, perform the hood assembly adjustment procedure. Refer to [DLK-245, "HOOD ASSEMBLY : Adjustment"](#).

HOOD ASSEMBLY : Adjustment

INFOID:000000012423735



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|------------------|------------------|---------------------------|
| 1. Hood assembly | 2. Front grille | 3. Front combination lamp |
| 4. Fender | 5. Bumper rubber | 6. Hood hinge |
| 7. Hood lock | | |

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

HOOD

< REMOVAL AND INSTALLATION >

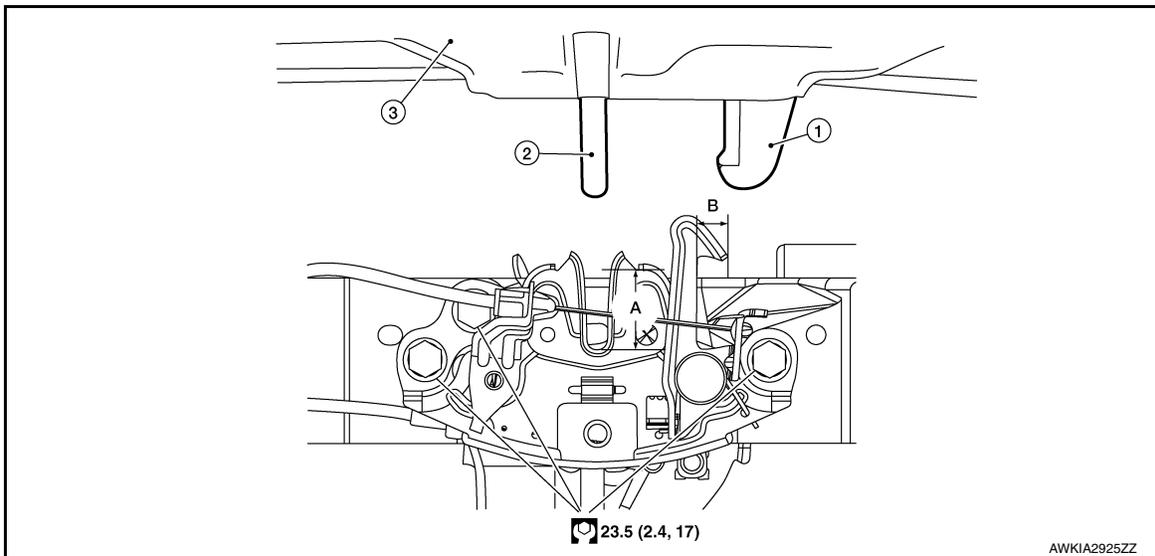
[WITH INTELLIGENT KEY SYSTEM]

Unit: mm (in)

Portion	Section	Item	Measurement	Standard	Parallelism
Hood - Fender	A - A	D	Surface height	0.0 ± 1.0 (0.0 ± 0.04)	1.4 (0.06)
		E	Clearance	3.5 ± 1.5 (0.14 ± 0.04)	1.4 (0.06)
Fender - Front combination lamp	B - B	F	Clearance	9.0 ± 2.0 (0.35 ± 0.08)	2.0 (0.08)
Hood - Front combination lamp	C - C	G	Clearance	1.9 ± 1.1 (0.07 ± 0.04)	1.5 (0.06)

HEIGHT ADJUSTMENT

- Loosen the hood lock assembly bolts.
- Adjust the surface height of hood assembly to front grille and front fender according to the specified values by rotating hood bumper rubber.
- Temporarily tighten hood lock assembly bolts.
- Adjust (A) and (B) as shown to the following value with hood's own weight by dropping it from approximately 200 mm (7.87 in) height or by pressing hood lightly [approximately 29 N (3.0 kg, 6.5 lb)].



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|----------------------|---------------------|------------------|
| 1. Secondary striker | 2. Primary striker | 3. Hood assembly |
| A. 20 mm (0.79 in) | B. 6.8 mm (0.27 in) | |

- After adjustment, tighten hood hinge nuts and bolts to the specified torque.

CAUTION:

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

CLEARANCE ADJUSTMENT

- Loosen hood hinge nuts and bolts.
- Loosen the hood lock assembly bolts.
- Adjust the hood assembly so the clearance measurements are within specifications.
- Tighten the hood hinge nuts and bolts to specified torque.
- Tighten the hood lock assembly bolts to specified torque.

HOOD HINGE

HOOD HINGE : Removal and Installation

INFOID:000000012423736

REMOVAL

- Remove hood assembly. Refer to [DLK-244, "HOOD ASSEMBLY : Removal and Installation"](#).

HOOD

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

2. Remove front fender. Refer to [DLK-249, "Removal and Installation"](#).
3. Remove hood hinge bolts, and then remove hood hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Before installing the hood hinge, apply anticorrosive agent onto the surface of the vehicle.
- After installation, perform hood assembly adjustment procedure. Refer to [DLK-245, "HOOD ASSEMBLY : Adjustment"](#).

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RADIATOR CORE SUPPORT

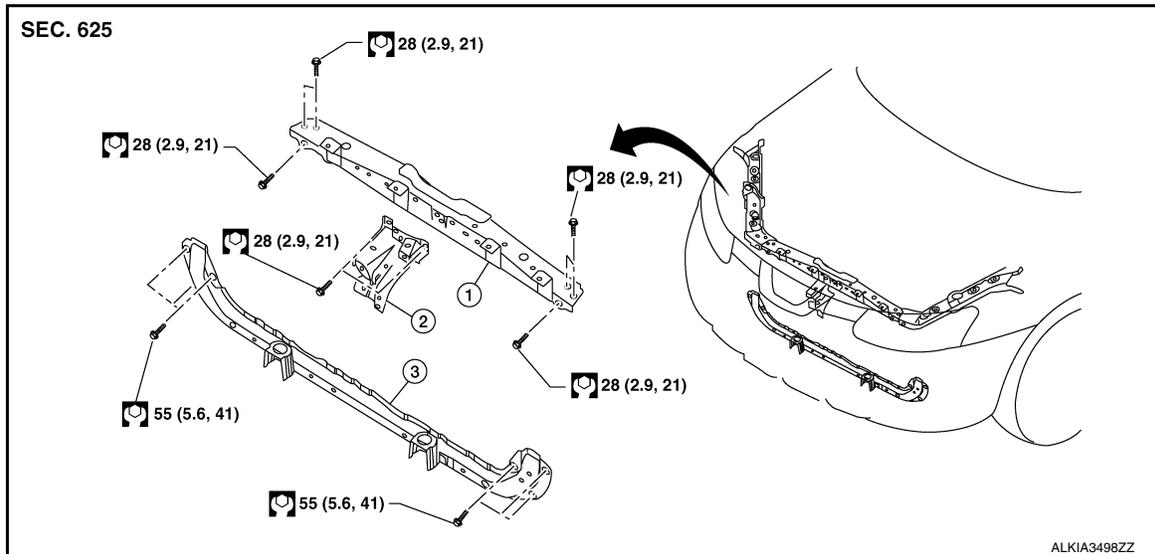
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

RADIATOR CORE SUPPORT

Exploded View

INFOID:000000012423737



1. Radiator core upper support
2. Secondary latch bracket
3. Radiator core lower support

Removal and Installation

INFOID:000000012423738

CAUTION:

When removing radiator core support upper, be careful not to damage the painted surface.

REMOVAL

Radiator Core Upper Support

1. Remove front combination lamp (LH). Refer to [EXL-120, "Removal and Installation"](#) (HALOGEN HEADLAMP) or [EXL-253, "Removal and Installation"](#) (LED HEADLAMP).
2. Remove front air duct. Refer to [EM-26, "Exploded View"](#).
3. Remove hood lock. Refer to [DLK-264, "HOOD LOCK : Removal and Installation"](#).
4. Remove secondary latch. Refer to [DLK-265, "SECONDARY LATCH : Removal and Installation"](#).
5. Remove crash zone sensor. Refer to [SR-22, "Removal and Installation"](#).
6. Remove bolts and radiator core upper support.

Radiator Core Lower Support

1. Remove front bumper fascia. Refer to [EXT-17, "Removal and Installation"](#).
2. Support the radiator using a suitable tool.
3. Remove bolts and radiator core lower support.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Tighten bolts to specified torque. Refer to [DLK-248, "Exploded View"](#).

FRONT FENDER

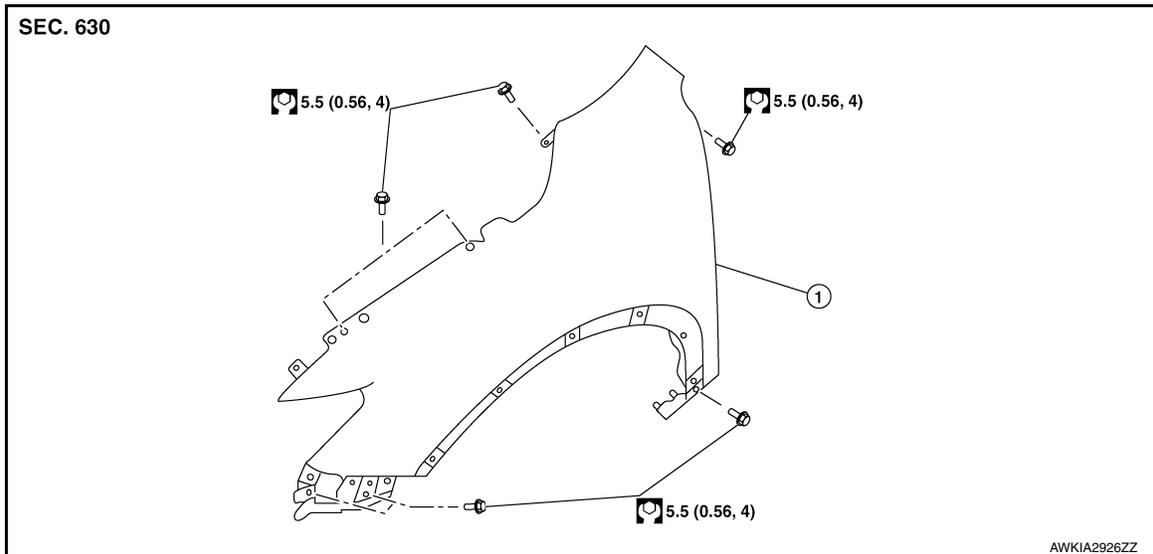
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

FRONT FENDER

Exploded View

INFOID:000000012423739



1. Front fender

Removal and Installation

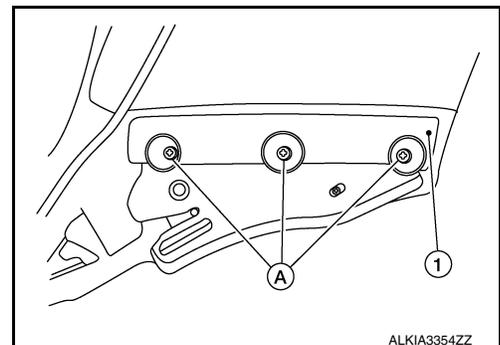
INFOID:000000012423740

CAUTION:

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

REMOVAL

1. Remove front bumper fascia. Refer to [EXT-17, "Removal and Installation"](#).
2. Remove front combination lamp. Refer to [EXL-120, "Removal and Installation"](#) (HALOGEN HEADLAMP) or [EXL-253, "Removal and Installation"](#) (LED HEADLAMP).
3. Remove center mudguard. Refer to [EXT-34, "Removal and Installation - Center Mudguard"](#).
4. Remove screws (A) and front fender bracket (1).



5. Remove bolts and front fender.

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

Installation is 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 components as necessary:
 - Hood assembly: Refer to [DLK-245, "HOOD ASSEMBLY : Adjustment"](#).
 - Front door: Refer to [DLK-252, "DOOR ASSEMBLY : Adjustment"](#).

FRONT FENDER

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

- Tighten bolts to specification. Refer to [DLK-249, "Exploded View"](#).

FRONT DOOR

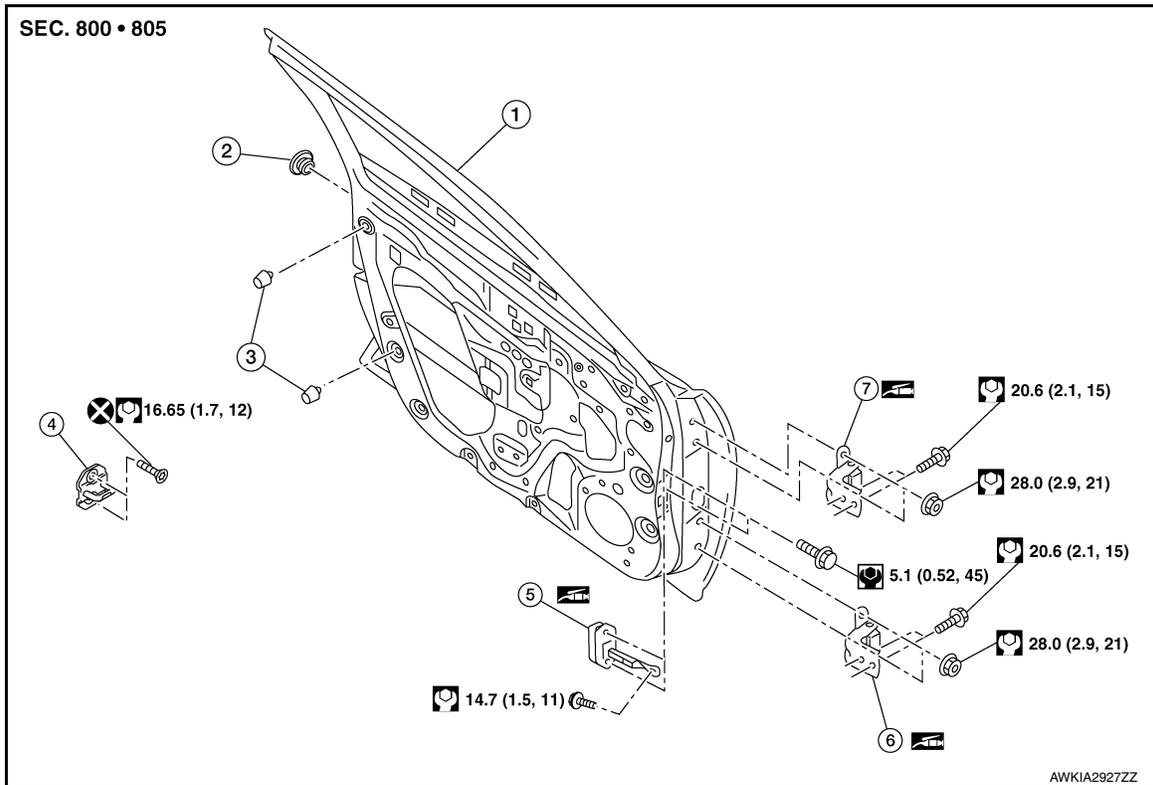
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

FRONT DOOR

Exploded View

INFOID:000000012423741



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|---------------------------|--------------------|---------------------------|
| 1. Front door panel | 2. Grommet | 3. Bumper rubber |
| 4. Door striker | 5. Door check link | 6. Front door lower hinge |
| 7. Front door upper hinge | | |

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

INFOID:000000012423742

CAUTION:

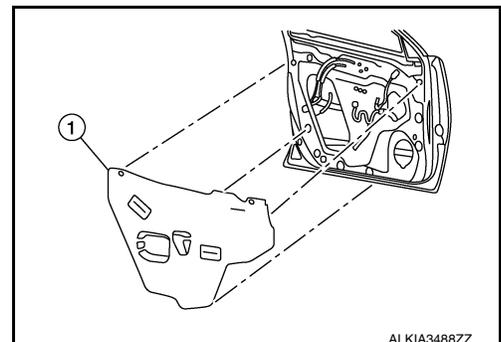
- Use two people when removing or installing the front door due to its heavy weight.
- When removing and installing front door assembly, support front door with a suitable tool.

REMOVAL

1. Disconnect the battery negative and positive terminals and wait at least three minutes with the side air bag (satellite) sensor.
2. Remove front door finisher. Refer to [INT-15. "Removal and Installation"](#).
3. Remove front door vapor barrier (1).

NOTE:

LH side shown; RH similar.



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FRONT DOOR

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

4. Disconnect the harness connectors from the front door.
5. Remove front door harness grommet, then harness from the front door.
6. Remove front door check link bolt (body side).
7. Remove front door hinge nuts (door side) and front door assembly.

INSTALLATION

Installation is in the reverse order of removal.

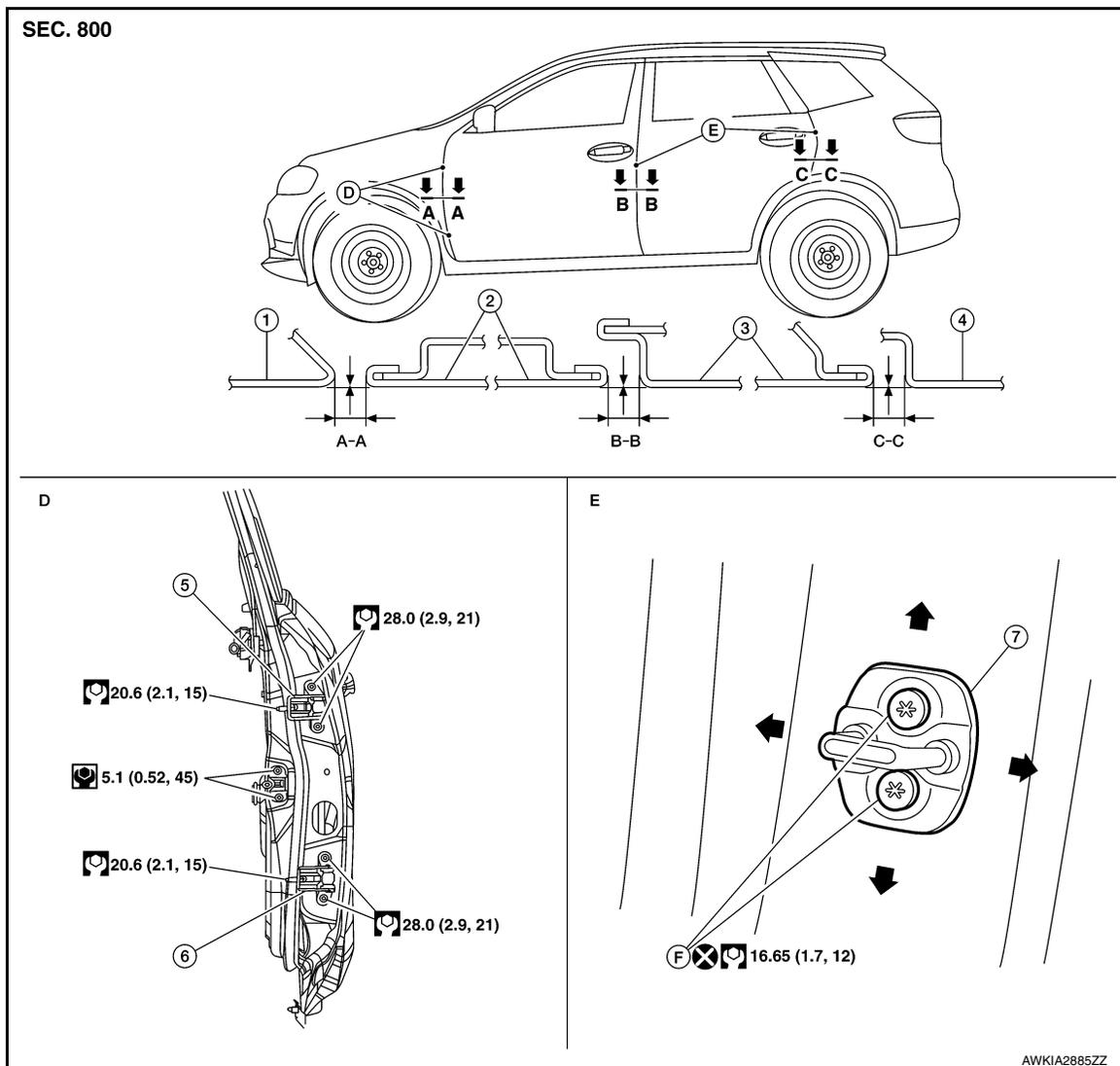
CAUTION:

- Tighten nuts/bolts to specified torque. Refer to [DLK-251, "Exploded View"](#).
- Apply anticorrosive agent where necessary.
- After installation, check front door open/close and lock/unlock operation.
- After installation, perform the front door adjustment procedure. Refer to [DLK-252, "DOOR ASSEMBLY : Adjustment"](#).
- Perform camera image calibration (with around view monitor). Refer to [AV-148, "CALIBRATING CAMERA IMAGE \(AROUND VIEW MONITOR\) : Description"](#) (NAVIGATION WITHOUT BOSE) or [AV-304, "CALIBRATING CAMERA IMAGE \(AROUND VIEW MONITOR\) : Description"](#) (NAVIGATION WITH BOSE)

DOOR ASSEMBLY : Adjustment

INFOID:000000012423743

ADJUSTMENT



FRONT DOOR

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

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

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	$4.2 \pm 1.0 (0.17 \pm 0.04)$
		Surface height	$\pm 1.0 (\pm 0.04)$
Front door - Rear door	B - B	Clearance	$4.3 \pm 1.0 (0.17 \pm 0.04)$
		Surface height	$\pm 1.0 (\pm 0.04)$
Rear door - Body side outer	C - C	Clearance	$4.0 \pm 1.0 (0.16 \pm 0.04)$
		Surface height	$\pm 1.0 (\pm 0.04)$

1. Remove front fender. Refer to [DLK-249, "Removal and Installation"](#).
2. Loosen front door hinge nuts (door side).
3. Adjust the surface height of front door according to the specifications provided.
4. Temporarily tighten front door hinge nuts (door side).
5. Loosen front 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. After adjustment tighten bolts and nuts to the specified torque.
CAUTION:
 - Check door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.
 - After adjusting, apply touch-up paint (body color) to the head of front door hinge bolts and nuts.
8. Install front fender. Refer to refer to [DLK-249, "Removal and Installation"](#).

DOOR STRIKER

DOOR STRIKER : Removal and Installation

INFOID:000000012423744

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REMOVAL

Remove bolts and front door striker.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Do not reuse front door striker bolts.
- After installation, check front door open/close operation. If necessary, adjust the front door striker. Refer to [DLK-253, "DOOR STRIKER : Adjustment"](#).
- Tighten bolts to specified torque. Refer to [DLK-251, "Exploded View"](#).

DOOR STRIKER : Adjustment

INFOID:000000012423745

DOOR STRIKER ADJUSTMENT

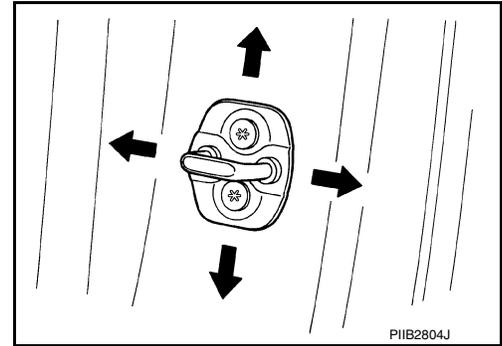
1. Loosen door striker bolts

FRONT DOOR

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

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



- Tighten door striker bolts to specification. Refer to [DLK-251, "Exploded View"](#).

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:000000012423746

REMOVAL

- Remove front fender. Refer to [DLK-249, "Removal and Installation"](#).
- Remove front door assembly. Refer to [DLK-251, "DOOR ASSEMBLY : Removal and Installation"](#).
- Remove front door hinge bolts (body side) and front door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Tighten nuts/bolts to specified torque. Refer to [DLK-251, "Exploded View"](#).
- Apply anticorrosive agent to the hinge mating surface.
- After installation, check front door open/close and lock/unlock operation.
- Check door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.
- After installation, perform the front door adjustment procedure. Refer to [DLK-252, "DOOR ASSEMBLY : Adjustment"](#).

DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:000000012423747

REMOVAL

- Fully close the front door window.
- Remove front door speaker. Refer to [AV-75, "Removal and Installation"](#) (DISPLAY AUDIO), [AV-218, "Removal and Installation"](#) (NAVIGATION WITHOUT BOSE) or [AV-386, "Removal and Installation"](#) (NAVIGATION WITH BOSE).
- Remove door check link bolt (body side).
- Remove door check link bolts (door side).
- Remove door check link through the hole in door assembly.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Tighten nuts/bolts to specified torque. Refer to [DLK-251, "Exploded View"](#).
- After installation, check front door open/close and lock/unlock operation.
- Check door check link rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.

REAR DOOR

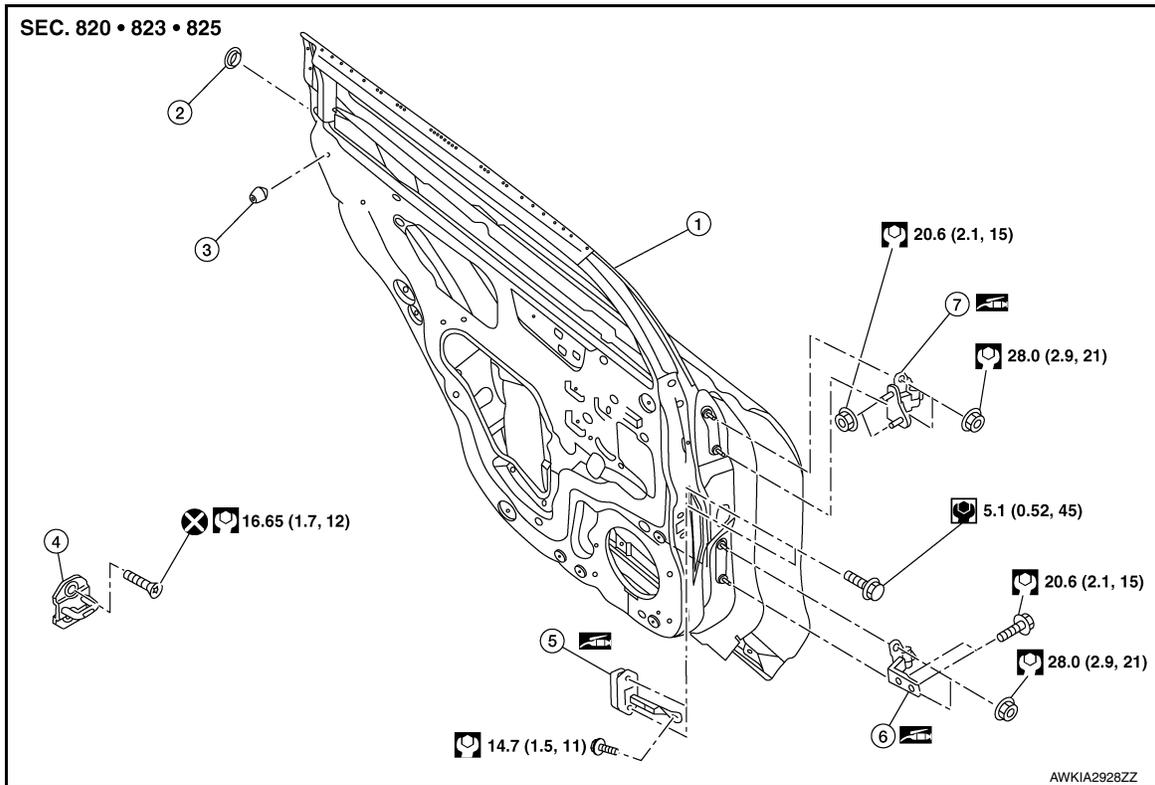
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

REAR DOOR

Exploded View

INFOID:000000012423748



- | | | |
|--------------------------|--------------------|--------------------------|
| 1. Rear door panel | 2. Grommet | 3. Bumper rubber |
| 4. Door striker | 5. Door check link | 6. Rear door lower hinge |
| 7. Rear door upper hinge | | |

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

INFOID:000000012423749

CAUTION:

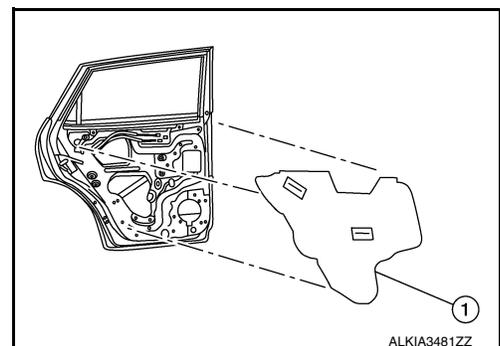
- Use two people when removing or installing the rear door due to its heavy weight.
- When removing and installing rear door assembly, support rear door using a suitable tool.

REMOVAL

1. Remove rear door finisher. Refer to [INT-18. "Removal and Installation"](#).
2. Remove rear door vapor barrier (1).

NOTE:

LH side shown; RH similar.



3. Disconnect the harness connectors from rear door.
4. Remove harness grommet from rear door, then pull out rear door harness from the rear door.

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REAR DOOR

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

5. Remove rear door check link bolt (body side).
6. Remove rear door hinge nuts (door side) and rear door assembly.

INSTALLATION

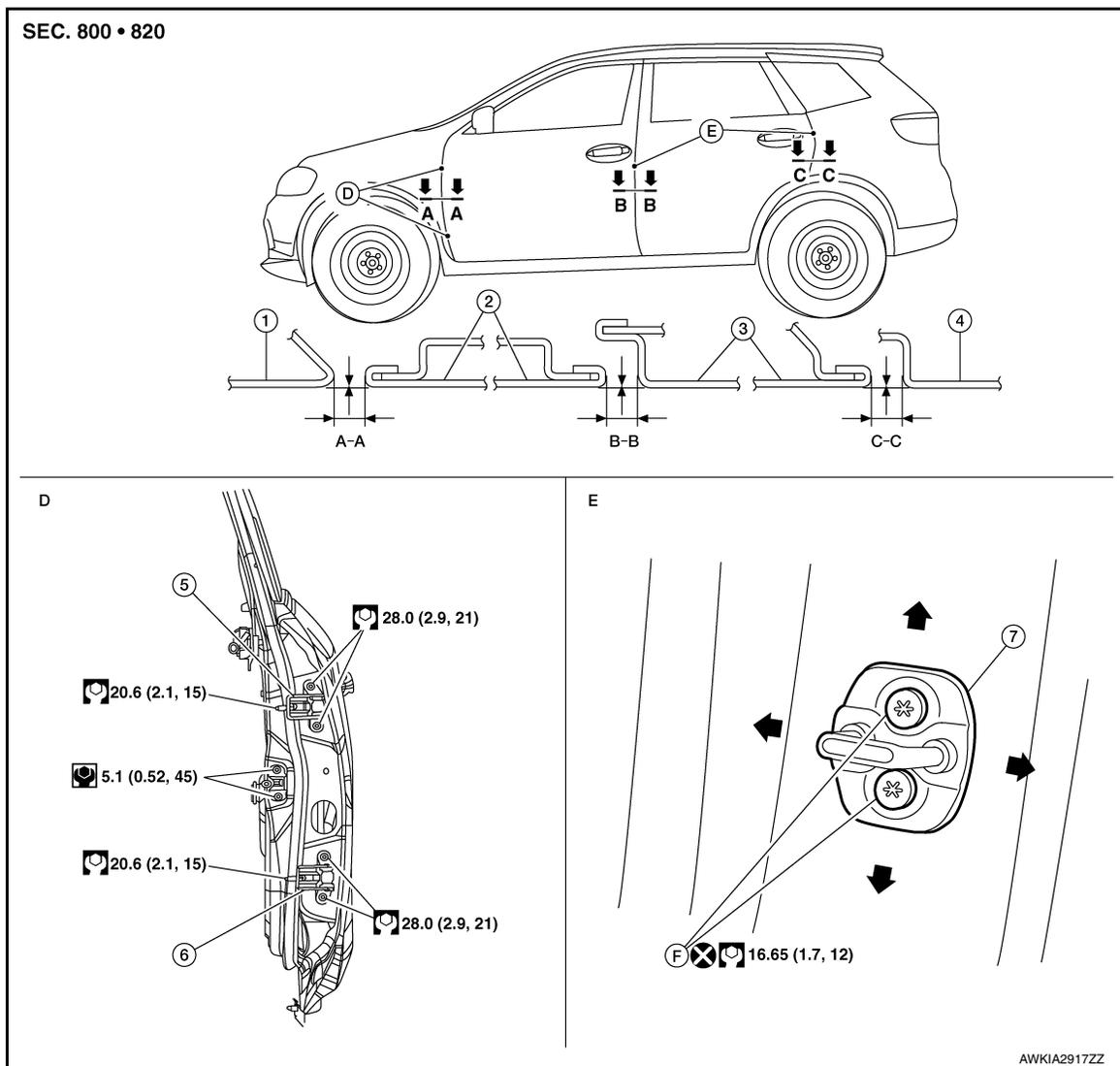
Installation is in the reverse order of removal.

CAUTION:

- Tighten nuts/bolts to specification. Refer to [DLK-255, "Exploded View"](#).
- Apply anticorrosive agent where necessary.
- After installation, check rear door open/close and lock/unlock operation.
- After installation, perform the rear door adjustment procedure. Refer to [DLK-256, "DOOR ASSEMBLY : Adjustment"](#).

DOOR ASSEMBLY : Adjustment

INFOID:000000012423750



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

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 procedures.

REAR DOOR

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

Unit: mm (in)

Portion	Section	Measurement	Standard
Front fender - Front door	A - A	Clearance	4.2 ± 1.0 (0.17 ± 0.04)
		Surface height	± 1.0 (± 0.04)
Front door - Rear door	B - B	Clearance	4.3 ± 1.0 (0.17 ± 0.04)
		Surface height	± 1.0 (± 0.04)
Rear door - Body side outer	C - C	Clearance	4.0 ± 1.0 (0.16 ± 0.04)
		Surface height	± 1.0 (± 0.04)

1. Remove center pillar lower finisher. Refer to [INT-22, "CENTER PILLAR LOWER FINISHER : Removal and Installation"](#).
2. Loosen rear door hinge nuts (door side).
3. Adjust the surface height of rear door according to specifications provided.
4. Temporarily tighten rear door hinge nuts (door side).
5. Loosen rear 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. After adjustment tighten bolts and nuts to the specified torque.
CAUTION:
 - Check rear door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.
 - After adjusting, apply touch-up paint (body color) to the head of rear door hinge bolts and nuts.
8. Install center pillar lower finisher. Refer to [INT-22, "CENTER PILLAR LOWER FINISHER : Removal and Installation"](#).

DOOR STRIKER

DOOR STRIKER : Removal and Installation

INFOID:0000000012423751

REMOVAL

Remove bolts and rear door striker.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

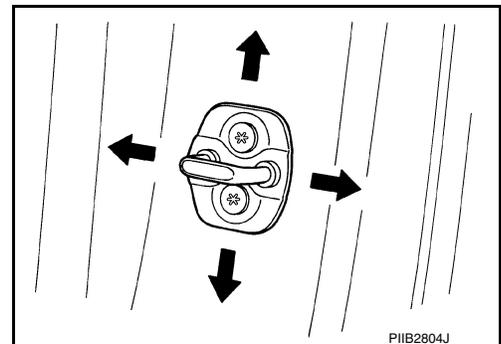
- Do not reuse rear door striker bolts.
- Tighten bolts to specification. Refer to [DLK-255, "Exploded View"](#).
- After installation, check rear door open/close operation. If necessary, adjust the door striker. Refer to [DLK-257, "DOOR STRIKER : Adjustment"](#).

DOOR STRIKER : Adjustment

INFOID:0000000012423752

DOOR STRIKER ADJUSTMENT

1. Loosen door striker bolts
2. Adjust door striker so that it becomes parallel with front door lock insertion direction.



3. Tighten door striker bolts to specification. Refer to [DLK-255, "Exploded View"](#).

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:000000012423753

REMOVAL

1. Remove rear door assembly. Refer to [DLK-255, "DOOR ASSEMBLY : Removal and Installation"](#).
2. Remove center pillar lower finisher (rear door lower hinge only). Refer to [INT-22, "CENTER PILLAR LOWER FINISHER : Removal and Installation"](#).
3. Remove rear door hinge bolts and nuts and rear door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Tighten nuts/bolts to specification. Refer to [DLK-255, "Exploded View"](#).
- Apply anticorrosive agent onto the hinge mating surface.
- After installation, check rear door open/close and lock/unlock operation.
- After installation, perform the rear door adjustment procedure. Refer to [DLK-256, "DOOR ASSEMBLY : Adjustment"](#).

DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:000000012423754

REMOVAL

1. Fully close the rear door window.
2. Remove rear door speaker. Refer to [AV-76, "Removal and Installation"](#) (DISPLAY AUDIO), [AV-218, "Removal and Installation"](#) (NAVIGATION WITHOUT BOSE) or [AV-388, "Removal and Installation"](#) (NAVIGATION WITH BOSE).
3. Remove rear door check link bolt (body side).
4. Remove rear door check link bolts (door side).
5. Remove rear door check link through the hole in rear door panel.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Tighten bolts to specification. Refer to [DLK-255, "Exploded View"](#).
- After installation, check rear door open/close and lock/unlock operation.
- Check rear door check link rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.

BACK DOOR

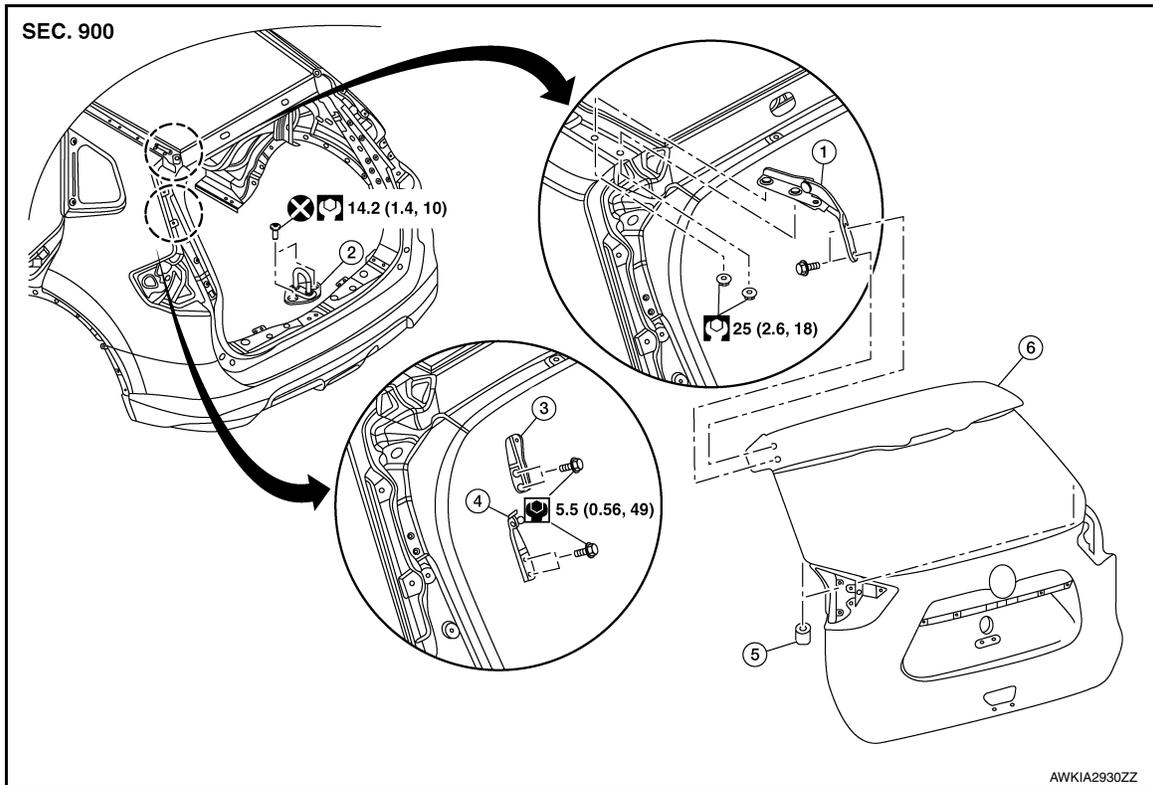
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

BACK DOOR

Exploded View

INFOID:000000012423755



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|-------------------------|----------------------|--|
| 1. Back door hinge | 2. Back door striker | 3. Spindle unit hinge (with automatic back door) |
| 4. Back door stay hinge | 5. Bumper rubber | 6. Back door |

BACK DOOR ASSEMBLY

BACK DOOR ASSEMBLY : Removal and Installation

INFOID:000000012423756

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 and installation of back door.
- Perform calibration of automatic back door position information. Refer to [DLK-114, "Description"](#).

REMOVAL

1. Support the back door assembly using a suitable tool.

WARNING:

Bodily injury may occur if back door assembly is not supported properly when removing the back door spindle unit.

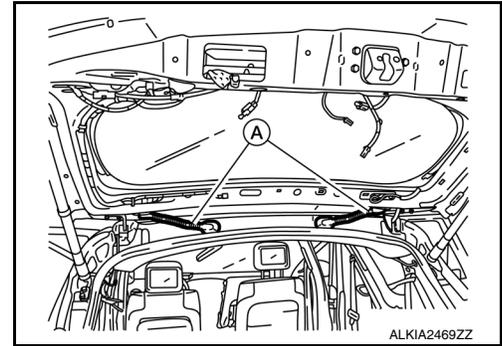
2. Remove spindle units (LH/RH) or back door stays (LH/RH). Refer to [DLK-274, "SPINDLE UNIT : Removal and Installation"](#) (WITH AUTOMATIC BACK DOOR) or [DLK-275, "BACK DOOR STAY : Removal and Installation"](#) (WITHOUT AUTOMATIC BACK DOOR).

BACK DOOR

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

3. Disconnect harness connectors (A) from back door.



4. Remove back door harness grommet, then pull harness from the back door.
5. Disconnect washer tube.
6. Remove washer tube grommet and washer tube from the back door.
7. Remove back door hinge bolts (door side) and back door assembly.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Tighten bolts to specification. Refer to [DLK-259, "Exploded View"](#).
- Apply anticorrosive agent onto the surface between hinge and door side.
- When reusing stud ball, always apply locking sealant before installing stud ball to back door.
- After installation, perform the back door assembly adjustment procedure. Refer to [DLK-261, "BACK DOOR ASSEMBLY : Adjustment"](#).
- Perform calibration of automatic back door position information. Refer to [DLK-114, "Description"](#).
- Perform camera image calibration (with around view monitor). Refer to [AV-148, "CALIBRATING CAMERA IMAGE \(AROUND VIEW MONITOR\) : Description"](#) (NAVIGATION WITHOUT BOSE) or [AV-304, "CALIBRATING CAMERA IMAGE \(AROUND VIEW MONITOR\) : Description"](#) (NAVIGATION WITH BOSE).

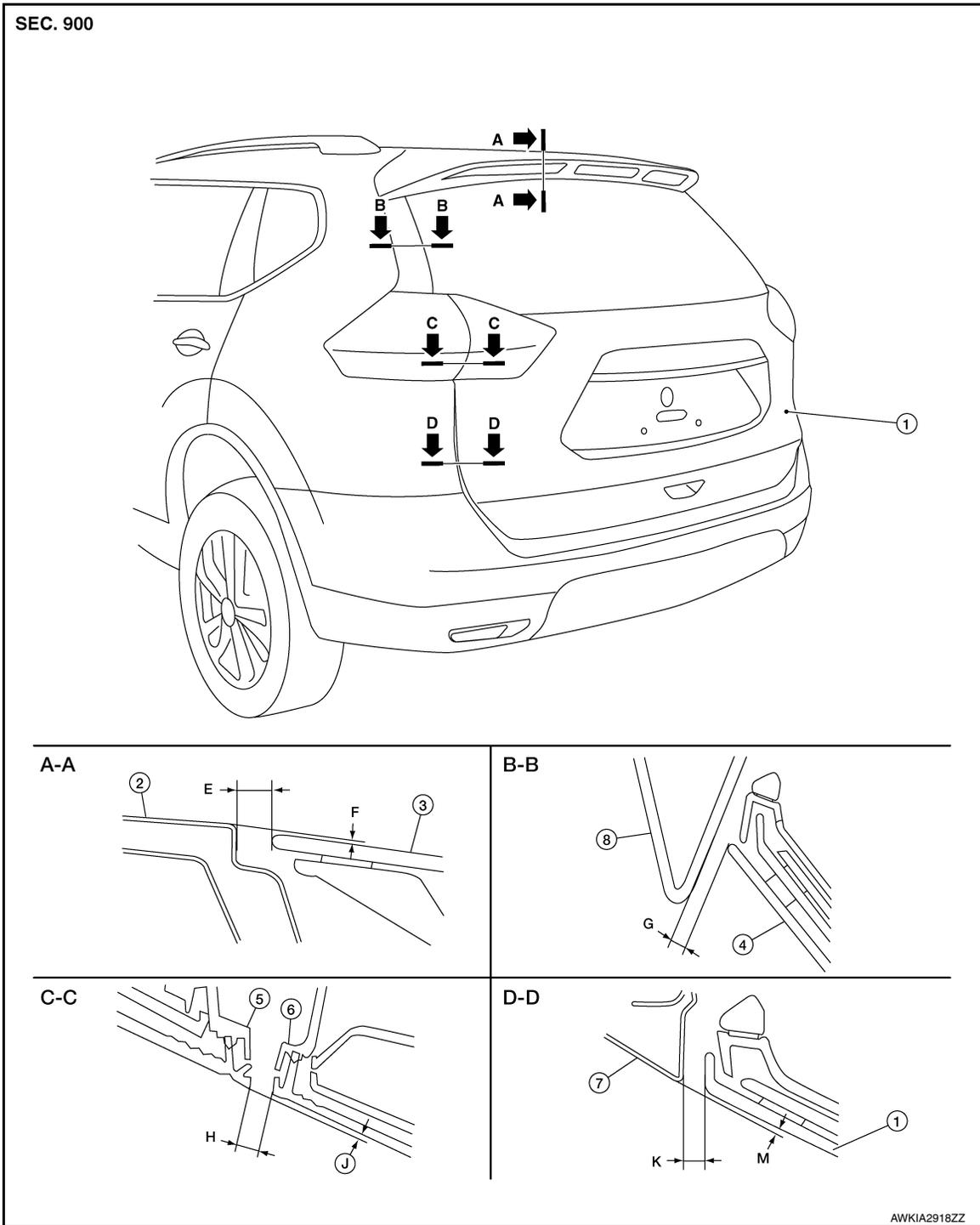
BACK DOOR

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

BACK DOOR ASSEMBLY : Adjustment

INFOID:000000012423757



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|-----------------------|--------------------------|-----------------|
| 1. Back door assembly | 2. Roof panel | 3. Rear spoiler |
| 4. Back door glass | 5. Rear combination lamp | 6. Back-up lamp |
| 7. Rear fender | 8. Side spoiler | |

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

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BACK DOOR

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

Unit: mm (in)

Portion	Section	Item	Measurement	Standard	Paralleism
Roof panel – Rear spoiler	A – A	E	Clearance	7.0 ± 2.0 (0.28 ± 0.08)	2.0 (0.08)
		F	Surface height	1.7 ± 2.0 (0.07 ± 0.08)	2.0 (0.08)
Side spoiler – Back door glass	B – B	G	Clearance	5.5 ± 2.0 (0.22 ± 0.08)	2.0 (0.08)
		H	Surface height	—	—
Rear combination lamp – Back-up lamp	C – C	J	Clearance	4.5 ± 2.0 (0.18 ± 0.08)	2.0 (0.08)
		K	Surface height	2.2 ± 2.0 (0.09 ± 0.08)	2.0 (0.08)
Rear fender – Back door	D – D	M	Clearance	4.7 ± 2.0 (0.19 ± 0.08)	2.0 (0.08)
		N	Surface height	2.5 ± 2.0 (0.10 ± 0.08)	2.0 (0.08)

- Loosen back door hinge nuts (door side).
- Lift up back door approximately 100 – 150 mm (3.94 – 5.91 in) height then close it lightly and check that it is engaged firmly with back door closed.
- Check the clearance and surface height according to the specifications provided.
- Tighten back door hinge nuts to specified torque.

CAUTION:

- After installation, check back door open/close, lock/unlock operation.
- Check back door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.
- After adjusting, apply touch-up paint (body color) to the head of rear door hinge bolts and nuts.
- Perform calibration of automatic back door position information. Refer to [DLK-114, "Description"](#).

BACK DOOR STRIKER

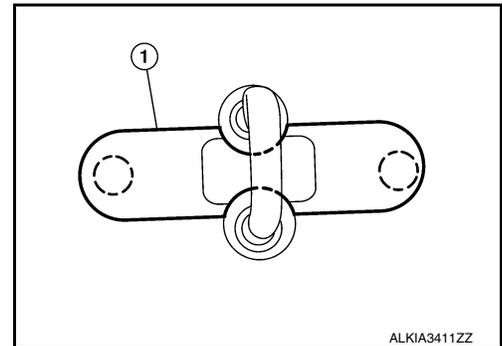
BACK DOOR STRIKER : Removal and Installation

INFOID:0000000012423758

REMOVAL

- Release back door striker cover (1) pawls using a suitable tool and remove.

○: Pawl



- Remove back door welt. Refer to [DLK-263, "BACK DOOR WEATHER-STRIP : Removal and Installation"](#).
- Remove bolts and back door striker.

CAUTION:

- Do not reuse back door striker bolts.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Do not reuse back door striker bolts.
- Tighten bolts to specification. Refer to [DLK-259, "Exploded View"](#).
- After installation, check back door open/close operation. If necessary, adjust the door striker. Refer to [DLK-263, "BACK DOOR STRIKER : Adjustment"](#).

BACK DOOR

< REMOVAL AND INSTALLATION >

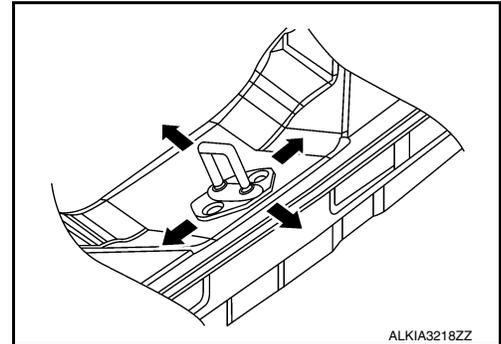
[WITH INTELLIGENT KEY SYSTEM]

BACK DOOR STRIKER : Adjustment

INFOID:000000012423759

DOOR STRIKER ADJUSTMENT

1. Loosen door striker bolts
2. Adjust door striker so that it becomes parallel with front door lock insertion direction.



3. Tighten door striker bolts to specification. Refer to [DLK-259, "Exploded View"](#).

BACK DOOR HINGE

BACK DOOR HINGE : Removal and Installation

INFOID:000000012423760

REMOVAL

1. Remove back door assembly. Refer to [DLK-259, "BACK DOOR ASSEMBLY : Removal and Installation"](#).
2. Partially remove the rear of the headlining. Refer to [INT-30, "Removal and Installation"](#).
3. Remove nuts and back door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Tighten nuts to specification. Refer to [DLK-259, "Exploded View"](#).
- Apply anticorrosive agent onto the surface between hinge and body side.
- After installation, perform the back door assembly adjustment procedure. Refer to [DLK-261, "BACK DOOR ASSEMBLY : Adjustment"](#).

BACK DOOR WEATHER-STRIP

BACK DOOR WEATHER-STRIP : Removal and Installation

INFOID:000000012423761

REMOVAL

Carefully remove back door weather-strip from opening door joint.

INSTALLATION

1. Beginning with upper section, align weather-strip mark with vehicle center position mark and install weather strip to the vehicle.
2. For the lower section, align weather-strip seam with center of back door striker.

NOTE:

Pull weather-strip gently to ensure that there are no loose sections.

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HOOD LOCK

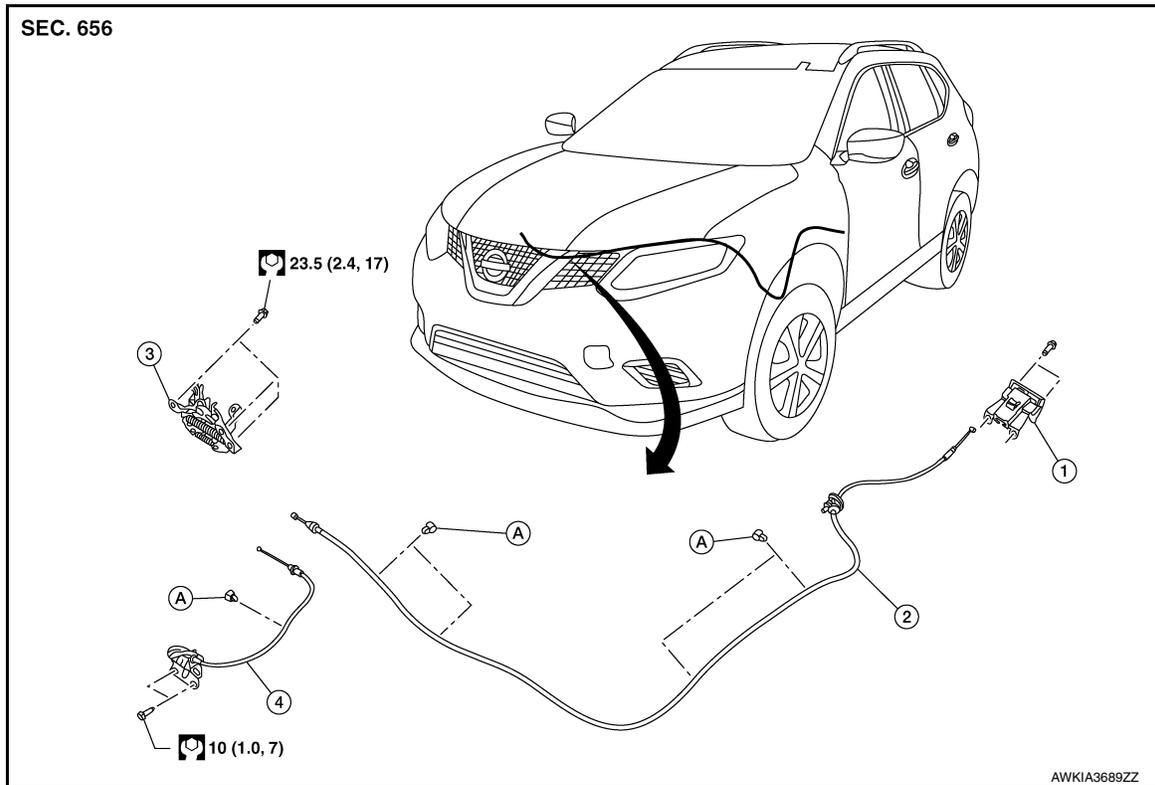
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

HOOD LOCK

Exploded View

INFOID:000000012423762



- | | | |
|-----------------------------|----------------------------|--------------|
| 1. Hood lock release handle | 2. Hood lock release cable | 3. Hood lock |
| 4. Secondary latch | A. Clip | |

HOOD LOCK

HOOD LOCK : Removal and Installation

INFOID:000000012423763

REMOVAL

1. Disconnect hood lock release cable and secondary latch cable from hood lock.
2. Remove bolts and hood lock.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Tighten bolts to specified torque. Refer to [DLK-264, "Exploded View"](#).
- Check that hood lock release cable and secondary latch cable are properly engaged with hood lock.
- After installation, perform hood assembly adjustment procedure. Refer to [DLK-245, "HOOD ASSEMBLY : Adjustment"](#).
- After adjusting, perform hood lock inspection. Refer to [DLK-264, "HOOD LOCK : Inspection"](#).

HOOD LOCK : Inspection

INFOID:000000012423764

NOTE:

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

1. Check that secondary latch is properly engaged with secondary striker with hoods own weight.
2. While operating hood lock release handle, carefully check that the front end of hood assembly is raised by approximately 20.0 mm (0.79 in). Also check that hood lock release handle returns to the original position.
3. Check that hood lock release handle operates at 49 N (5.0 kg-m, 11.0 ft-lb) or below.

HOOD LOCK

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

4. Install so that static closing force of hood is 315-490 N (32.1-50.0 kg-m, 70.8-110.2 ft-lb).

NOTE:

- Do not exert vertical force on right side and 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 to hood lock assembly.

SECONDARY LATCH

SECONDARY LATCH : Removal and Installation

INFOID:000000012423765

REMOVAL

1. Remove front grille. Refer to [EXT-24, "Removal and Installation"](#).
2. Disconnect secondary latch cable from hood lock assembly.
3. Remove bolts and secondary latch.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Tighten bolts to specified torque. Refer to [DLK-264, "Exploded View"](#).
- Check that secondary latch cable is properly engaged with hood lock.

HOOD LOCK RELEASE CABLE

HOOD LOCK RELEASE CABLE : Removal and Installation

INFOID:000000012423766

REMOVAL

1. Remove fender protector (LH). Refer to [EXT-29, "FENDER PROTECTOR : Removal and Installation"](#).
2. Remove front grille. Refer to [EXT-24, "Removal and Installation"](#).
3. Disconnect hood lock release cable from hood lock release handle and hood lock.
4. Release hood lock release cable clips using a suitable tool.
5. Remove grommet on the lower dash and carefully pull the hood lock release cable into the passenger compartment.

CAUTION:

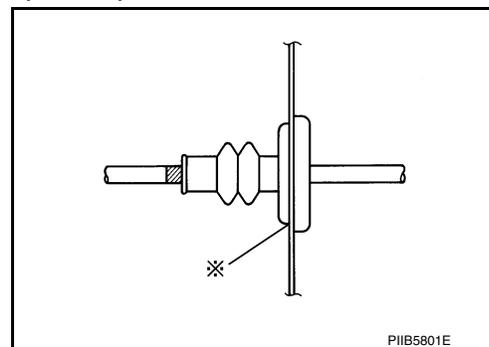
While pulling, be careful not to damage (peel) the outside of hood lock release cable.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Be careful not to bend cable too much, keep the radius 100 mm (3.94 in) or more.
- Check that cable is not offset from the positioning grommet, and apply the sealant to the grommet (at * mark) properly.



- Check that hood lock release cable is properly engaged with hood lock assembly.
- After installation, perform hood assembly adjustment procedure. Refer to [DLK-245, "HOOD ASSEMBLY : Adjustment"](#).
- After adjusting, perform hood lock inspection. Refer to [DLK-264, "HOOD LOCK : Inspection"](#).

HOOD LOCK RELEASE HANDLE

HOOD LOCK

< REMOVAL AND INSTALLATION >

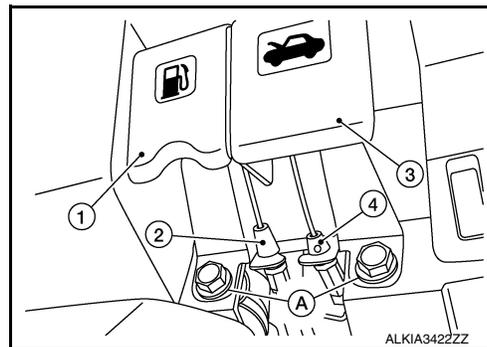
[WITH INTELLIGENT KEY SYSTEM]

HOOD LOCK RELEASE HANDLE : Removal and Installation

INFOID:000000012423767

REMOVAL

1. Remove fuel filler lid/hood lock release handle bolts (A).
2. Disconnect fuel filler lid release cable (2) from fuel filler lid release handle (1).
3. Disconnect hood lock release cable (4) from hood lock release handle (3).
4. Remove hood lock release handle.



INSTALLATION

Installation is in the reverse order of removal.

FRONT DOOR LOCK

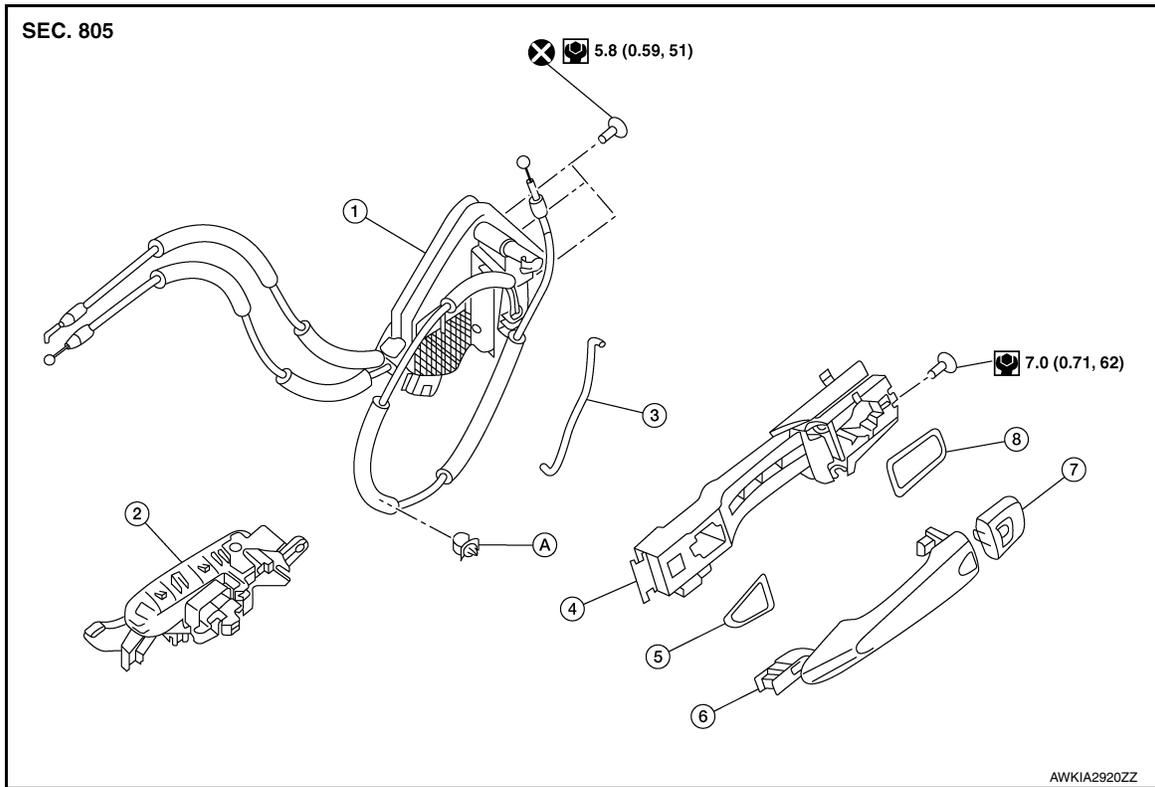
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

FRONT DOOR LOCK

Exploded View

INFOID:000000012423768



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|--|------------------|------------------------------------|
| 1. Front door lock | 2. Inside handle | 3. Door key cylinder rod (LH only) |
| 4. Outside handle bracket | 5. Front gasket | 6. Outside handle |
| 7. Outside handle escutcheon / door key cylinder (LH only) | 8. Rear gasket | A. Clip |

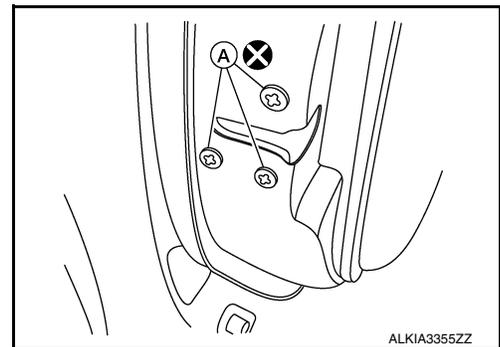
DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:000000012423769

REMOVAL

1. Remove front door finisher. Refer to [INT-15. "Removal and Installation"](#).
2. Remove vapor barrier.
3. Remove front door lock bolts (A).



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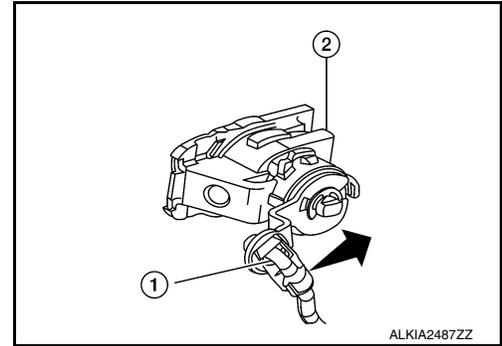
DLK

FRONT DOOR LOCK

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

4. Disconnect door key cylinder rod (LH only) (1) from front door lock (2) (LH only).



5. Disconnect door lock cables from inside handle and outside handle..
6. Disconnect the harness connector from the front door lock and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Do not reuse front door lock bolts.
- Tighten bolts to specification. Refer to [DLK-267, "Exploded View"](#).
- After installation, check door lock cables are properly engaged to inside handle and outside handle bracket.
- When installing door key cylinder rod (LH only), be sure to rotate door key cylinder rod holder until a click is felt.
- After installation, check door open/close and lock/unlock operation.
- Check door lock assembly for poor lubrication. If necessary apply a suitable multi-purpose grease.

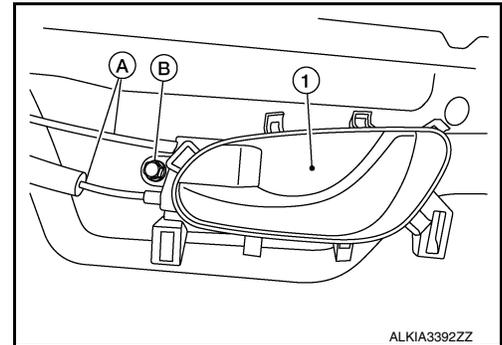
INSIDE HANDLE

INSIDE HANDLE : Removal and Installation

INFOID:000000012423770

REMOVAL

1. Remove front door finisher. Refer to [INT-15, "Removal and Installation"](#).
2. Remove inside handle bolt (B).
3. Disconnect the door lock cables (A) and remove inside handle (1).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

OUTSIDE HANDLE

OUTSIDE HANDLE : Removal and Installation

INFOID:000000012423771

REMOVAL

1. Fully close front door glass.
2. Remove front door finisher. Refer to [INT-15, "Removal and Installation"](#).

FRONT DOOR LOCK

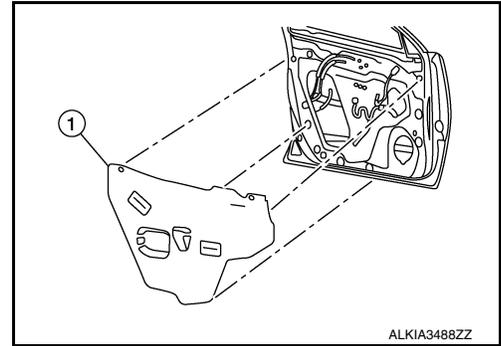
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

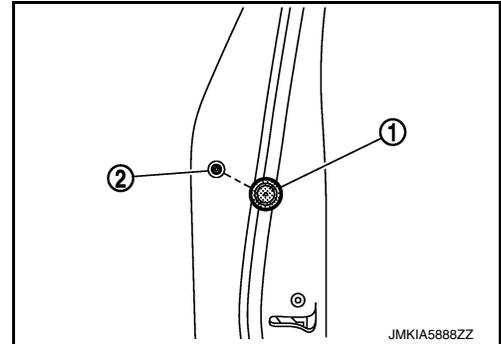
3. Remove front door vapor barrier (1).

NOTE:

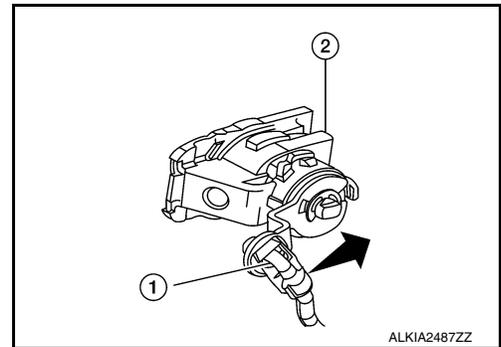
LH side shown; RH similar.



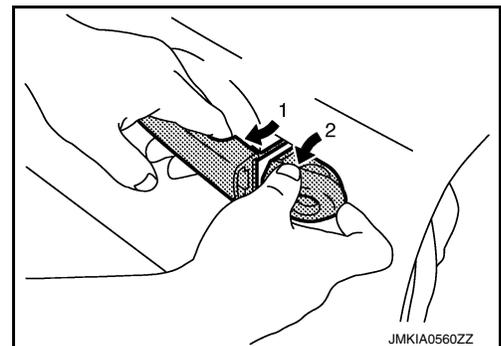
4. Remove door side grommet (1), and remove bolt from grommet hole (2).



5. Separate door key cylinder rod (LH only) (1) from door key cylinder assembly (LH only) (2).



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



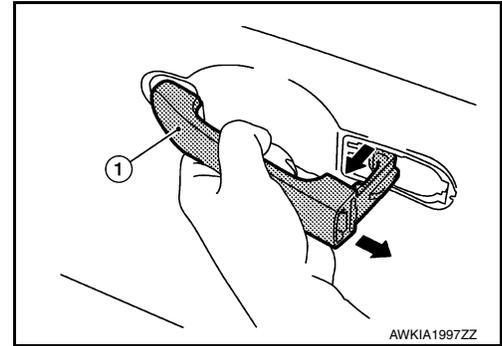
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FRONT DOOR LOCK

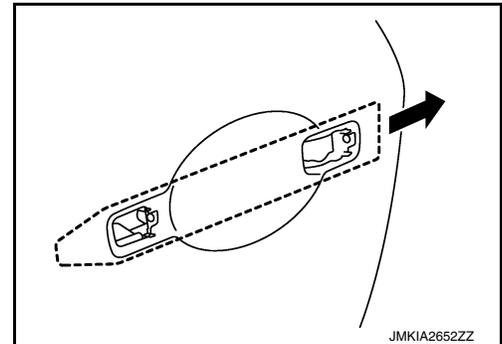
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

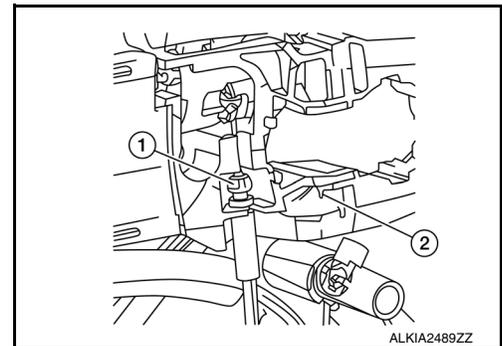
7. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



8. Remove front gasket and rear gasket.
9. Slide outside handle bracket toward rear of vehicle to remove.



10. Disconnect outside handle cable (1) from outside handle bracket (2) as shown.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

REAR DOOR LOCK

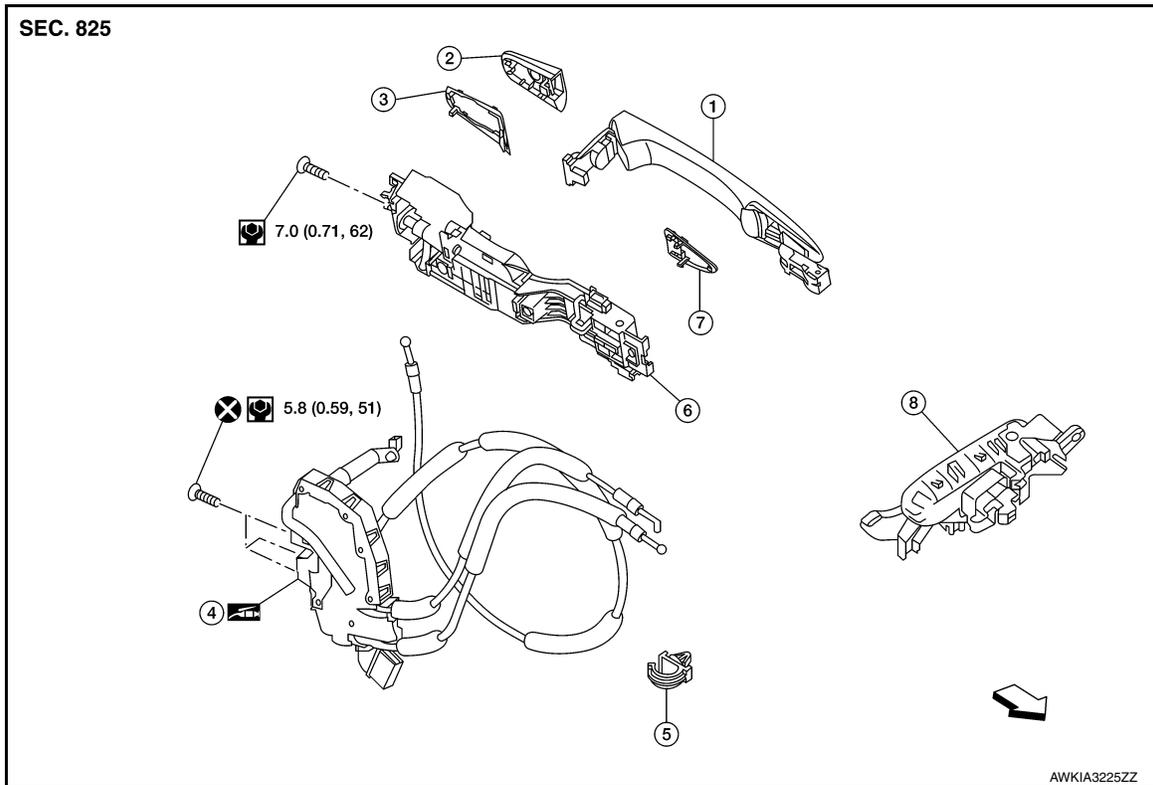
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

REAR DOOR LOCK

Exploded View

INFOID:000000012423772



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|-------------------|------------------------------|---------------------------|
| 1. Outside handle | 2. Outside handle escutcheon | 3. Rear gasket |
| 4. Rear door lock | 5. Cable clip | 6. Outside handle bracket |
| 7. Front gasket | 8. Inside handle | ← Front |

DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:000000012423773

REMOVAL

1. Remove rear door finisher. Refer to [INT-18, "Removal and Installation"](#).
2. Remove vapor barrier.
3. Remove rear door lock bolts.
4. Disconnect the door lock cables.
5. Disconnect the harness connector from the rear door lock and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Do not reuse rear door lock bolts.
- Tighten bolts to specification. Refer to [DLK-271, "Exploded View"](#).
- After installation, check door lock cables are properly engaged to inside handle and outside handle.
- After installation, check door open/close and lock/unlock operation.

INSIDE HANDLE

INSIDE HANDLE : Removal and Installation

INFOID:000000012423774

REMOVAL

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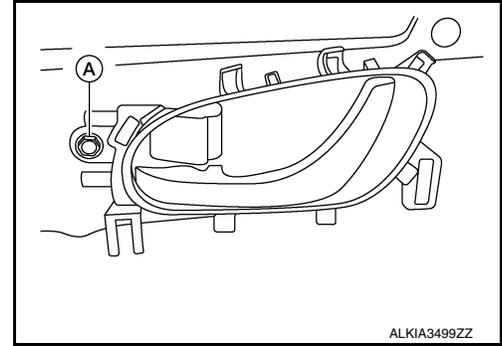
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REAR DOOR LOCK

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

1. Remove rear door finisher. Refer to [INT-18. "Removal and Installation"](#).
2. Remove inside handle bolt (A).



3. Disconnect door lock cables from inside handle and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

OUTSIDE HANDLE

OUTSIDE HANDLE : Removal and Installation

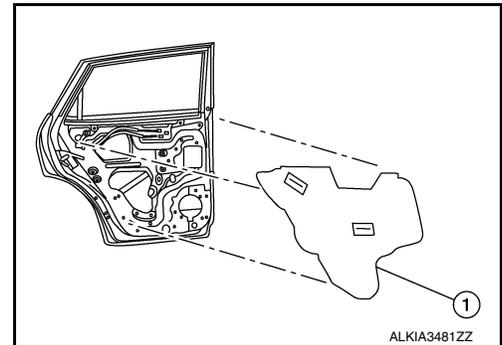
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REMOVAL

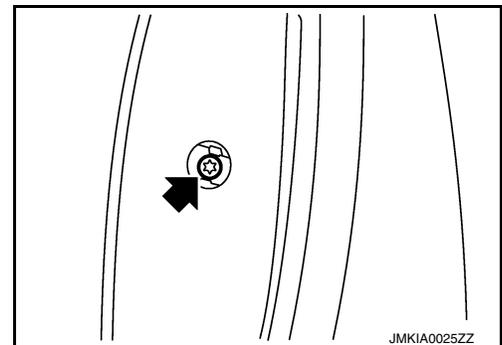
1. Fully close rear door glass.
2. Remove rear door finisher. Refer to [INT-18. "Removal and Installation"](#).
3. Remove rear door vapor barrier (1).

NOTE:

LH side shown; RH similar.



4. Remove door side grommet and bolt from grommet hole.

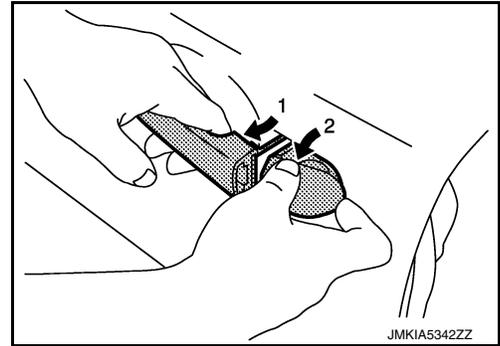


REAR DOOR LOCK

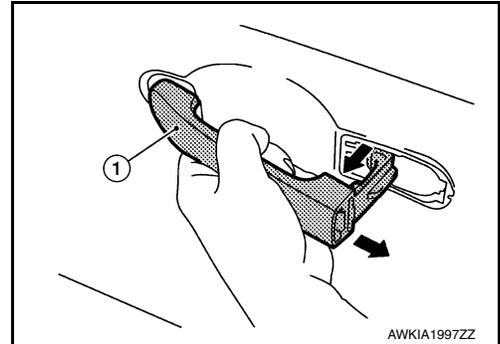
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[WITH INTELLIGENT KEY SYSTEM]

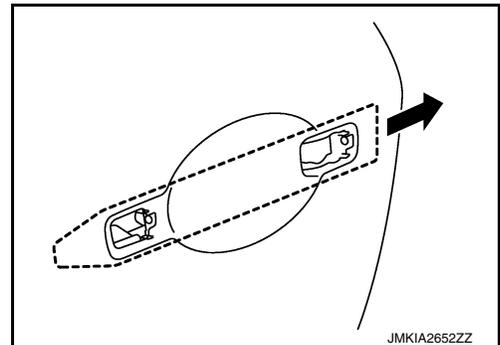
5. While pulling (1) outside handle, remove (2) outside handle escutcheon.



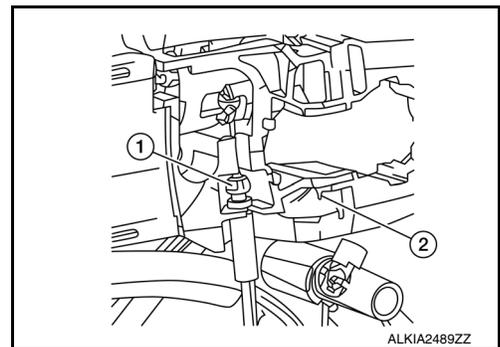
6. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



7. Remove front gasket and rear gasket.
8. Slide outside handle bracket toward rear of vehicle to remove.



9. Disconnect outside handle cable (1) from outside handle bracket (2) as shown.



INSTALLATION

Installation in the reverse order of removal.

CAUTION:

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

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BACK DOOR LOCK

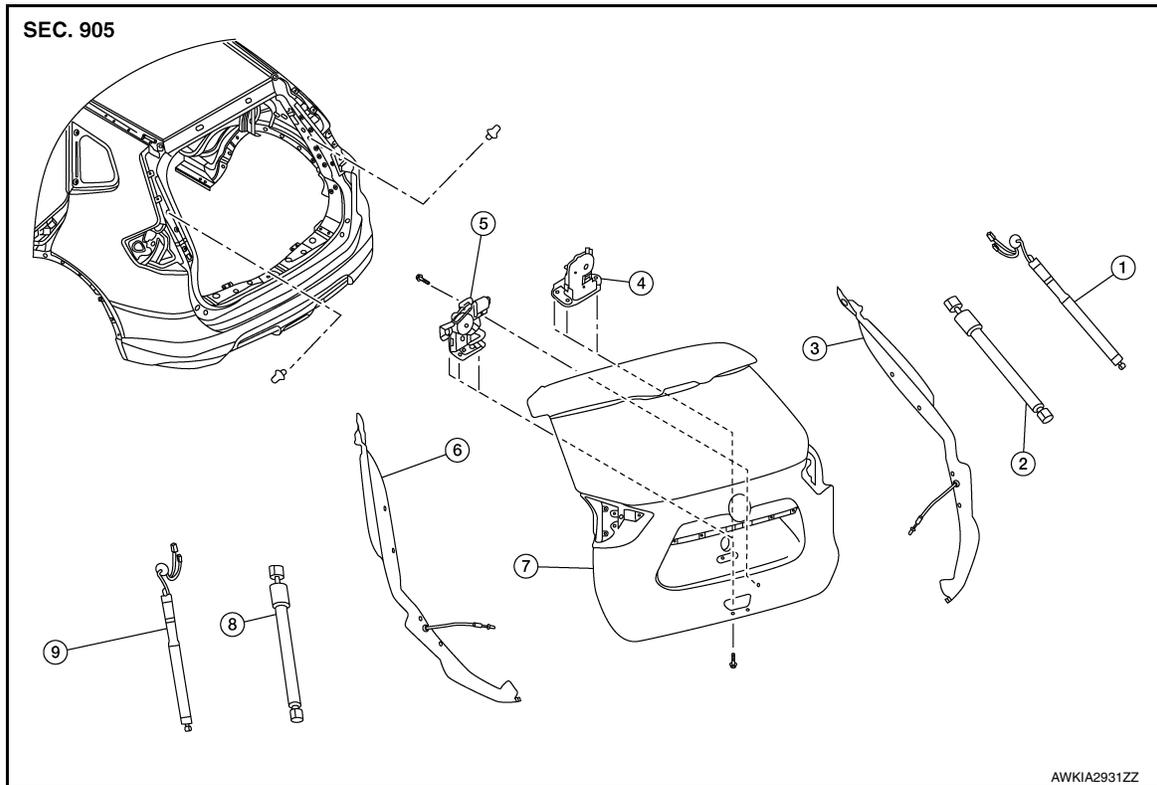
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

BACK DOOR LOCK

Exploded View

INFOID:000000012423776



- | | | |
|---|--|---|
| 1. Spindle unit (RH) (with automatic back door) | 2. Back door stay (RH) | 3. Back door touch sensor (RH) (with automatic back door) |
| 4. Back door lock | 5. Back door lock (with automatic back door) | 6. Back door touch sensor (LH) (with automatic back door) |
| 7. Back door | 8. Back door stay (LH) | 9. Spindle unit (LH) (with automatic back door) |

DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:000000012423777

REMOVAL

1. Remove back door finisher. Refer to [INT-38, "Removal and Installation"](#).
2. Disconnect the harness connector from the back door lock.
3. Remove bolts and back door lock.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Tighten bolts to specification. Refer to [DLK-274, "Exploded View"](#).
- After installation, check back door open/close and lock/unlock operation.

SPINDLE UNIT

SPINDLE UNIT : Removal and Installation

INFOID:000000012423778

REMOVAL

1. Support back door using a suitable tool.

BACK DOOR LOCK

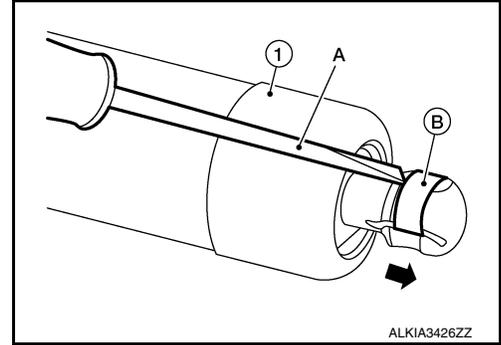
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

WARNING:

Bodily injury may occur if the back door is not supported properly when removing the back door spindle unit.

- Partially remove headlining (rear edge). Refer to [INT-29, "Exploded View"](#).
- Remove ball socket spring (B) from spindle unit (1) using a suitable tool (A).



- Disconnect the harness connector from the spindle unit and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- When reusing stud ball, always apply locking sealant before installing stud ball to back door.
- After installation, check back door open/close, lock/unlock operation.
- Perform calibration of automatic back door position information. Refer to [DLK-114, "Description"](#).

BACK DOOR STAY

BACK DOOR STAY : Removal and Installation

INFOID:000000012423779

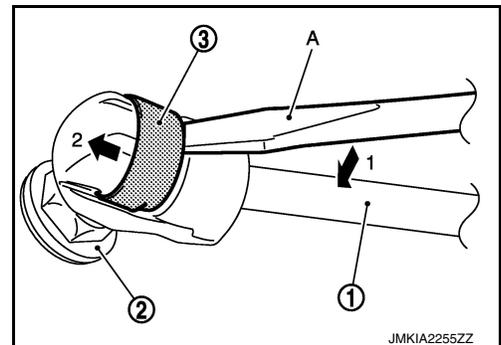
REMOVAL

- Support the back door using a suitable tool.

WARNING:

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

- Release the metal clip (3) located on the connection between the back door stay (1) and the stud ball (2) (back door side) using a suitable tool (A).
- Remove the back door stay (back door side).



- Repeat procedure for removing back door stay from body side.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

After installation, check the back door open/close operation.

TOUCH SENSOR

TOUCH SENSOR : Removal and Installation

INFOID:000000012423780

CAUTION:

Use care not to bend touch sensor.

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BACK DOOR LOCK

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

1. Release the spindle unit from the stud ball (with power back door).
2. Release the back door stay from the stud ball (without power back door).
3. Release touch sensor clips using a suitable tool.
4. Disconnect the harness connector from the touch sensor and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

After installation, check back door open/close and lock/unlock operation.

EMERGENCY LEVER

EMERGENCY LEVER : Unlock procedures

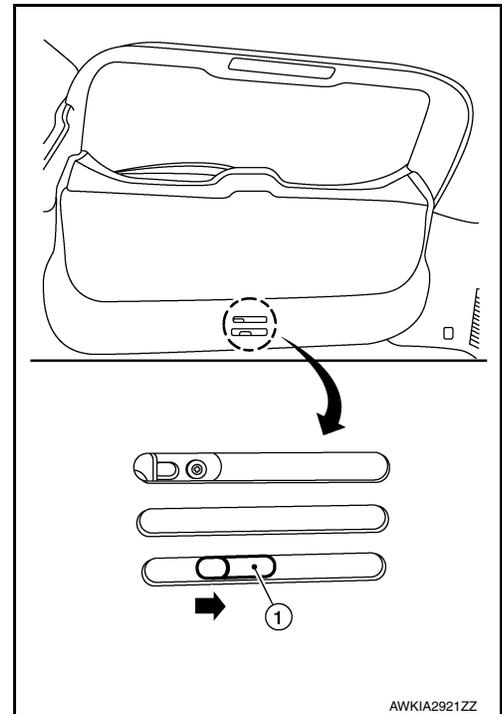
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UNLOCK PROCEDURES

NOTE:

If back door lock cannot be unlocked due to a malfunction or battery discharge, perform the following procedures to unlock back door assembly.

1. From inside the vehicle, rotate emergency lever (1) in the direction shown to unlock.



FUEL FILLER LID OPENER

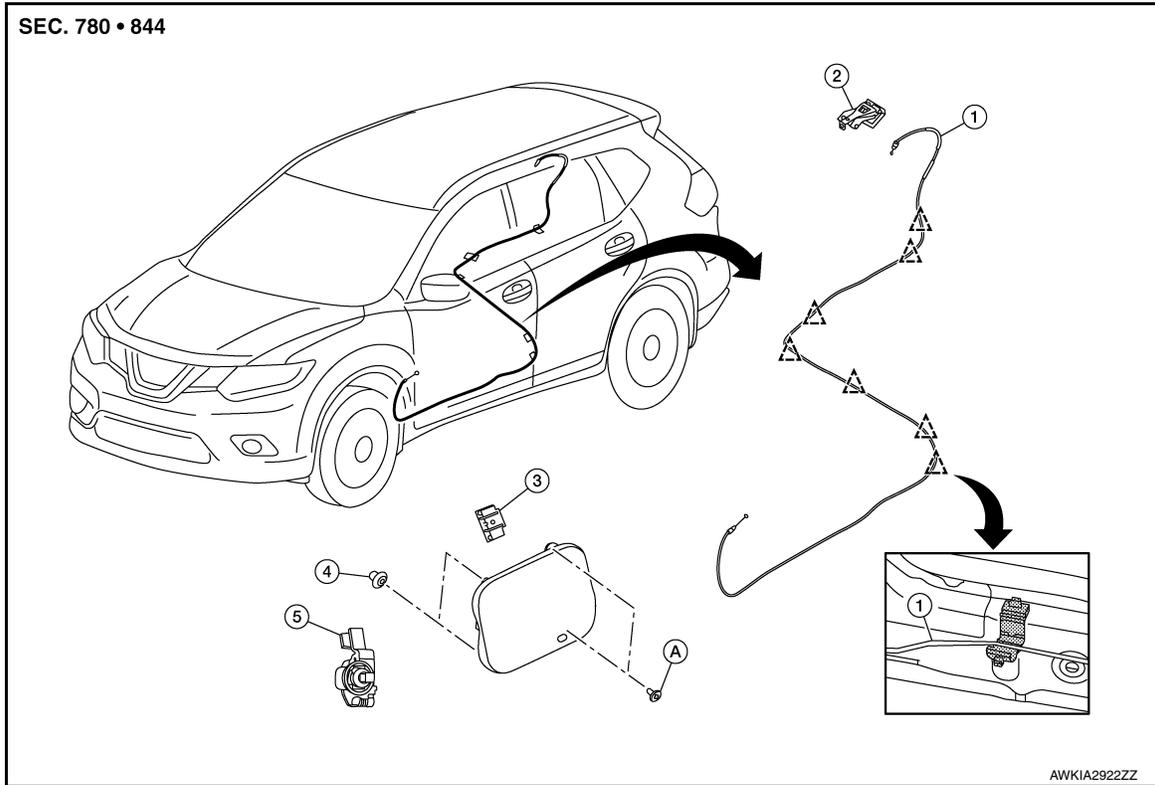
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

FUEL FILLER LID OPENER

Exploded View

INFOID:000000012423782



- 1. Fuel filler lid release cable
- 4. Bumper rubber

- 2. Fuel filler lid release handle
- 5. Fuel filler lid lock

- 3. Spring
- A. Screw

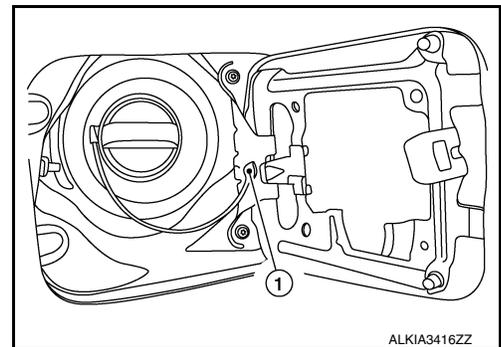
FUEL FILLER LID

FUEL FILLER LID : Removal and Installation

INFOID:000000012423783

REMOVAL

1. Remove fuel cap pin (1).



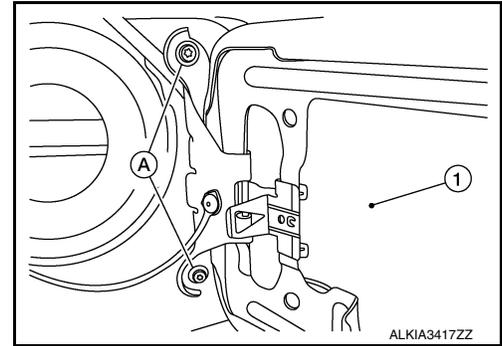
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FUEL FILLER LID OPENER

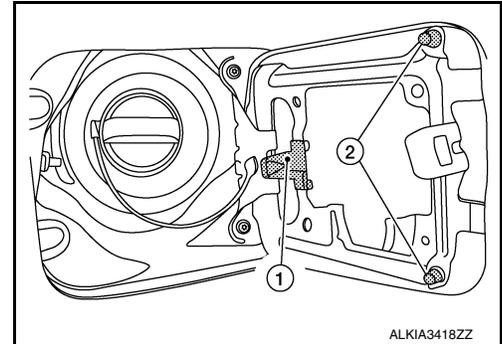
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

2. Remove screws (2) and fuel filler lid (1).



3. Remove fuel filler lid spring (1) and bumper rubber (2) from fuel filler lid (if necessary).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

FUEL FILLER LID LOCK

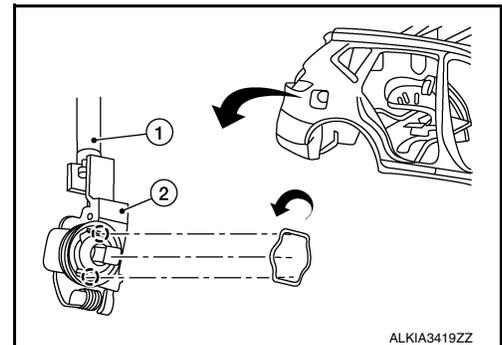
FUEL FILLER LID LOCK : Removal and Installation

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REMOVAL

1. Remove luggage side lower finisher (RH). Refer to [INT-34, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation - With Third Row Seat"](#) (With Third Row Seat) or [INT-35, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation - Without Third Row Seat"](#) (Without Third Row Seat).
2. Disconnect the fuel filler lid release cable (1) from the fuel filler lid lock (2).
3. Rotate fuel filler lid lock to release pawls and remove.

○: Pawl



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

FUEL FILLER LID RELEASE CABLE

FUEL FILLER LID RELEASE CABLE : Removal and Installation

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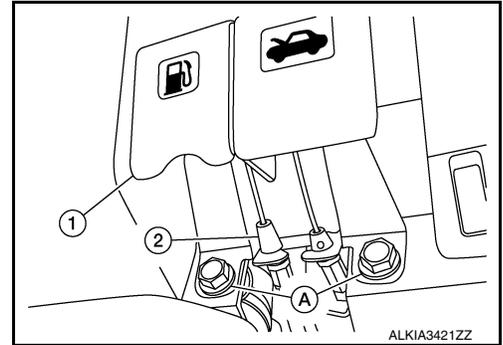
REMOVAL

FUEL FILLER LID OPENER

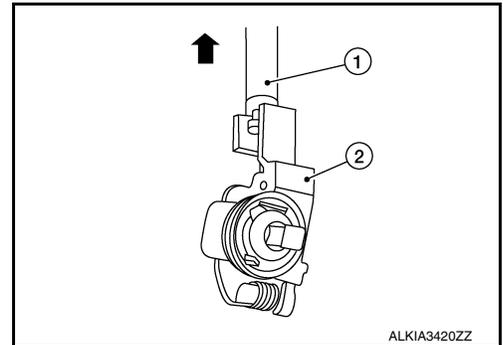
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

1. Partially remove front floor trim. Refer to [INT-26, "Removal and Installation"](#).
2. Remove rear floor trim. Refer to [INT-26, "Removal and Installation"](#).
3. Remove the fuel filler lid/hood lock release handle bolts (A)
4. Disconnect the fuel filler lid release cable (2) from fuel filler lid release handle (1).



5. Disconnect the fuel filler lid release cable (1) from fuel filler lid lock (2).



6. Release the clips and remove fuel filler lid release cable.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

FUEL FILLER LID RELEASE HANDLE

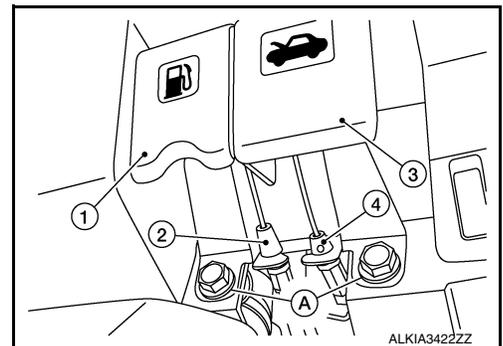
FUEL FILLER LID RELEASE HANDLE : Removal and Installation

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DLK

REMOVAL

1. Remove fuel filler lid/hood lock release handle bolts (A).
2. Disconnect fuel filler lid release cable (2) from fuel filler lid release handle (1).
3. Disconnect hood lock release cable (4) from hood lock release handle (3).
4. Remove fuel filler lid release handle.



INSTALLATION

Installation is in the reverse order of removal.

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DOOR SWITCH

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

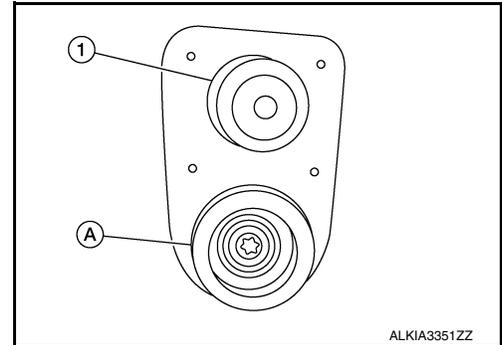
DOOR SWITCH

Removal and Installation

INFOID:000000012423787

REMOVAL

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



INSTALLATION

Installation is in the reverse order of removal.

DOOR REQUEST SWITCH

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

DOOR REQUEST SWITCH

DRIVER SIDE

A

DRIVER SIDE : Removal and Installation

INFOID:0000000012423788

B

The driver side door request switch and driver side outside handle are serviced as an assembly. Refer to [DLK-268. "OUTSIDE HANDLE : Removal and Installation"](#).

PASSENGER SIDE

C

PASSENGER SIDE : Removal and Installation

INFOID:0000000012423789

D

The passenger side door request switch and passenger side outside handle are serviced as an assembly. Refer to [DLK-268. "OUTSIDE HANDLE : Removal and Installation"](#).

BACK DOOR

E

BACK DOOR : Removal and Installation

INFOID:0000000012423790

REMOVAL

F

1. Remove back door finisher. Refer to [INT-38. "Removal and Installation"](#).
2. Disconnect the harness connector from the back door request switch.
3. Release pawls and remove back door request switch.

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INSTALLATION

Installation is in the reverse order of removal.

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INSIDE KEY ANTENNA

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

INSIDE KEY ANTENNA INSTRUMENT CENTER

INSTRUMENT CENTER : Removal and Installation

INFOID:0000000012423791

REMOVAL

1. Remove front air control or A/C switch assembly. Refer to [HAC-190. "Removal and Installation"](#) (MANUAL AIR CONDITIONING) or [HAC-106. "Removal and Installation"](#) (AUTOMATIC AIR CONDITONING).
2. Disconnect the harness connector from the inside key antenna (instrument center).
3. Release pawls and remove inside key antenna (instrument center).

INSTALLATION

Installation is in the reverse order of removal.

CONSOLE

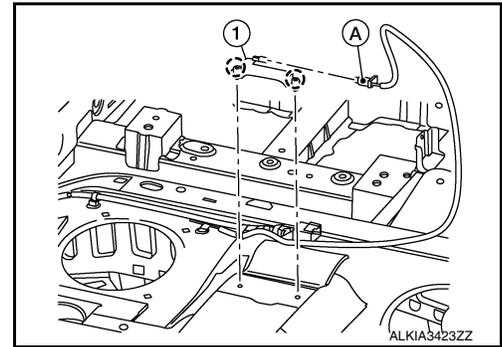
CONSOLE : Removal and Installation

INFOID:0000000012423792

REMOVAL

1. Remove rear floor trim. Refer to [INT-26. "Removal and Installation"](#).
2. Disconnect the harness connector (A) from the inside key antenna (console) (1).
3. Release pawls and remove inside key antenna (console).

○: Pawl



INSTALLATION

Installation is in the reverse order of removal.

OUTSIDE KEY ANTENNA

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

OUTSIDE KEY ANTENNA

DRIVER SIDE

DRIVER SIDE : Removal and Installation

INFOID:0000000012423793

The driver side outside key antenna and driver side outside handle are serviced as an assembly. Refer to [DLK-268. "OUTSIDE HANDLE : Removal and Installation"](#).

PASSENGER SIDE

PASSENGER SIDE : Removal and Installation

INFOID:0000000012423794

The passenger side outside key antenna and passenger side outside handle are serviced as an assembly. Refer to [DLK-268. "OUTSIDE HANDLE : Removal and Installation"](#).

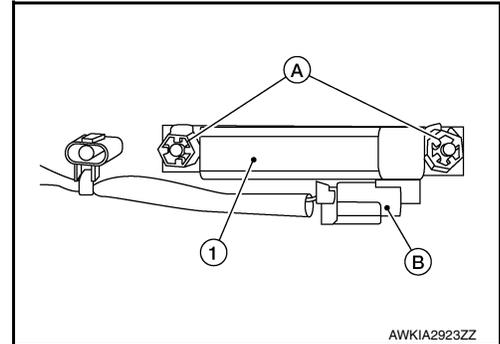
REAR BUMPER

REAR BUMPER : Removal and Installation

INFOID:0000000012423795

REMOVAL

1. Remove rear bumper fascia. Refer to [EXT-20. "Removal and Installation"](#).
2. Disconnect the harness connector (B) from the outside key antenna (rear bumper).
3. Release clips (A) and remove outside key antenna (1).



INSTALLATION

Installation is in the reverse order of removal.

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INTELLIGENT KEY WARNING BUZZER

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

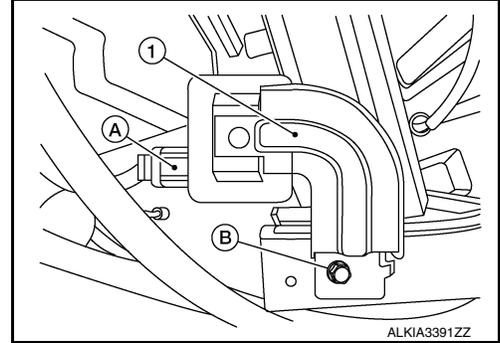
INTELLIGENT KEY WARNING BUZZER

Removal and Installation

INFOID:000000012423796

REMOVAL

1. Remove front bumper fascia. Refer to [EXT-17, "Removal and Installation"](#).
2. Disconnect the harness connector (A) from the Intelligent Key warning buzzer (1).
3. Remove bolt (B) and Intelligent Key warning buzzer.



INSTALLATION

Installation is in the reverse order of removal.

BACK DOOR WARNING CHIME

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

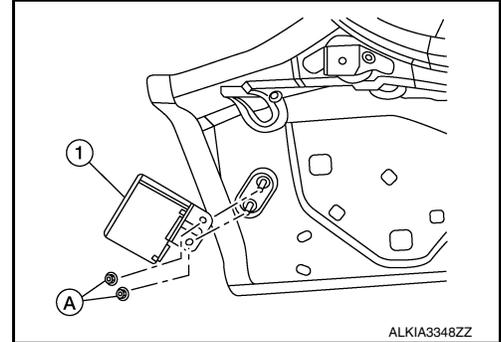
BACK DOOR WARNING CHIME

Removal and Installation

INFOID:000000012423797

REMOVAL

1. Remove the rear bumper fascia. Refer to [EXT-20. "Removal and Installation"](#).
2. Disconnect the harness connector from the back door warning chime.
3. Remove nuts (A) and back door warning chime (1).



INSTALLATION

Installation is in the reverse order of removal.

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INTELLIGENT KEY BATTERY

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY BATTERY

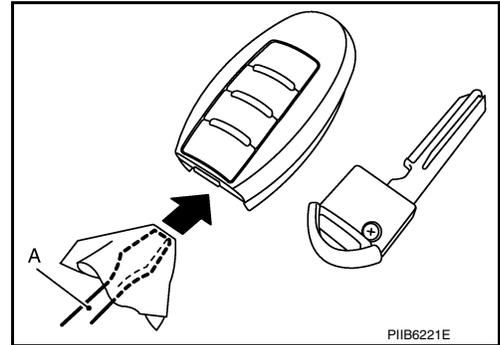
Removal and Installation

INFOID:000000012423798

1. Release the lock knob on the back of the Intelligent Key and remove the key.
2. 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 insert a tool into the notches of the Intelligent Key to pry it open, as this may damage the circuit board.
- Do not use excessive force when opening the intelligent key, as this may result in damage to the internal components.
- Do not touch the circuit board or battery terminal.
- The key fob is water-resistant. However, if it does get wet, immediately wipe it dry.



3. Replace the battery with a new one.

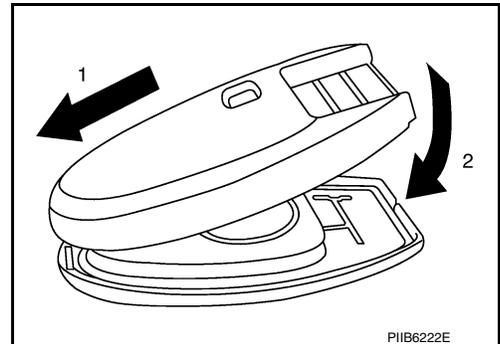
Battery replacement

:Coin-type lithium battery (CR2025)

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

CAUTION:

- When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.
- After replacing the battery, check that all Intelligent Key functions work normally.



AUTOMATIC BACK DOOR CONTROL MODULE

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

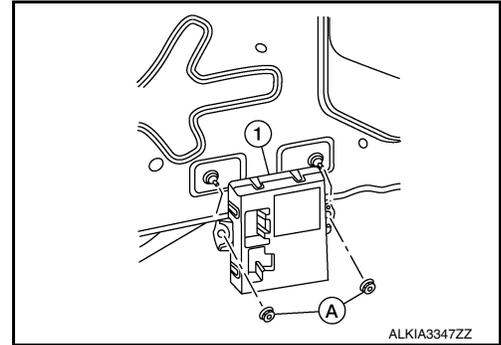
AUTOMATIC BACK DOOR CONTROL MODULE

Removal and Installation

INFOID:000000012423799

REMOVAL

1. Remove the luggage side lower finisher (LH). Refer to [INT-34, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation - With Third Row Seat"](#).
2. Disconnect the harness connectors from the automatic back door control module.
3. Remove nuts (A) and automatic back door control module (1).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Perform calibration of automatic back door position information. Refer to [DLK-114, "Description"](#).

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AUTOMATIC BACK DOOR MAIN SWITCH

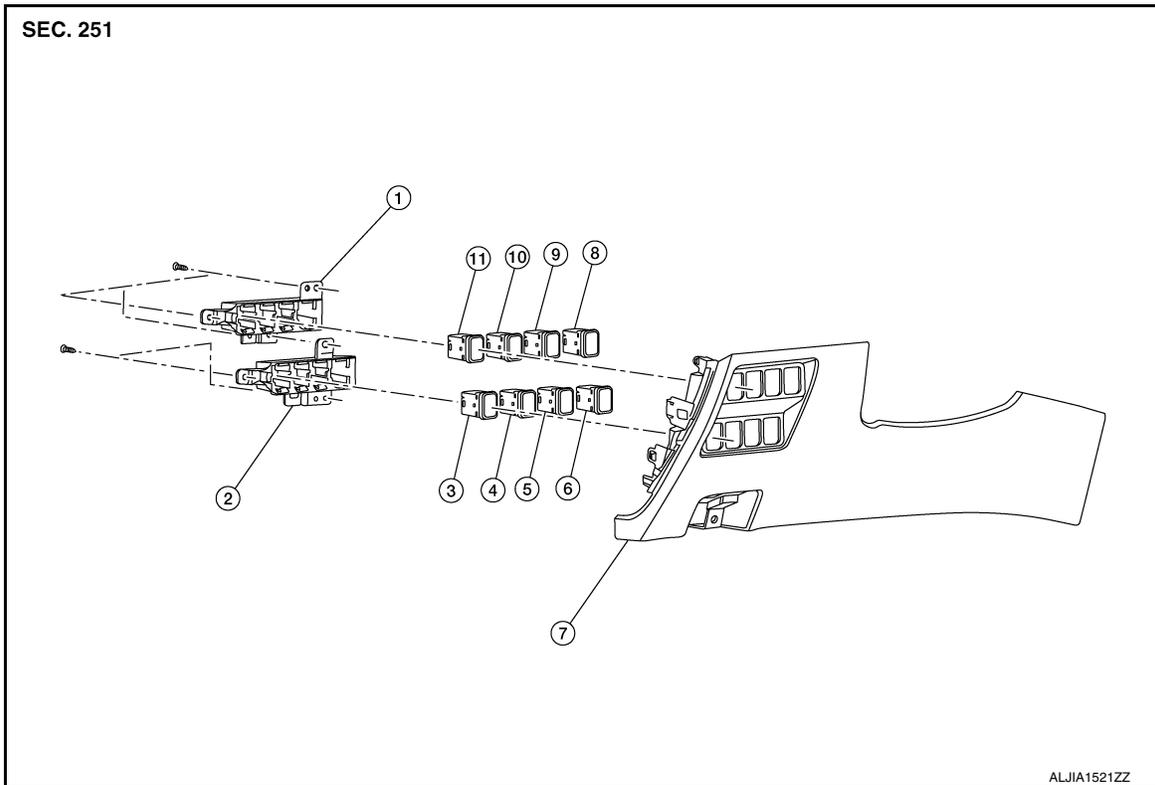
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

AUTOMATIC BACK DOOR MAIN SWITCH

Exploded View

INFOID:000000012423800



- | | | |
|------------------------------|------------------------------------|--|
| 1. Upper switch carrier | 2. Lower switch carrier | 3. ECO mode switch (If equipped) |
| 4. Warning system switch | 5. AWD lock switch (If equipped) | 6. Hill descent control switch (If equipped) |
| 7. Instrument lower panel LH | 8. Automatic back door main switch | 9. Automatic back door switch |
| 10. Sport mode switch | 11. VDC OFF switch | |

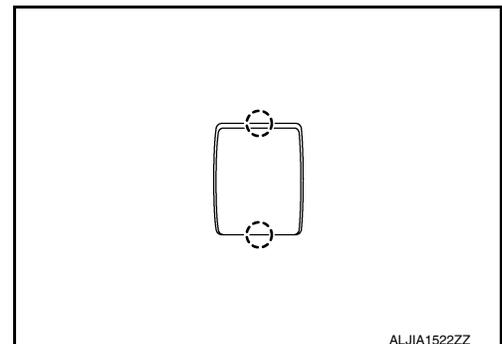
Removal and Installation

INFOID:000000012423801

REMOVAL

1. Remove the instrument lower panel LH. Refer to [IP-23. "Removal and Installation"](#).
2. Remove the screws and upper switch carrier from the instrument lower panel LH.
3. Release pawls using suitable tool and remove the automatic back door main switch from the upper switch carrier.

○: Pawl



INSTALLATION

Installation is in the reverse order of removal.

AUTOMATIC BACK DOOR SWITCH

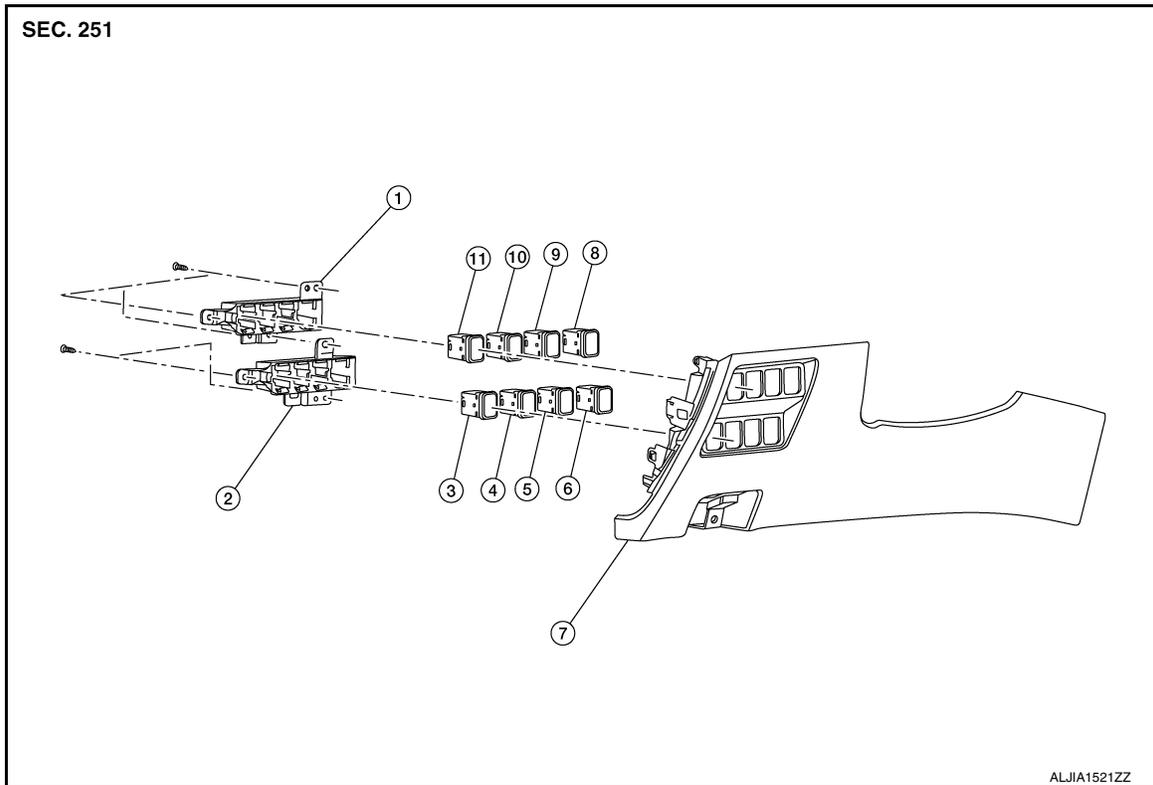
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

AUTOMATIC BACK DOOR SWITCH

Exploded View

INFOID:000000012423802



- | | | |
|------------------------------|------------------------------------|--|
| 1. Upper switch carrier | 2. Lower switch carrier | 3. ECO mode switch (If equipped) |
| 4. Warning system switch | 5. AWD lock switch (If equipped) | 6. Hill descent control switch (If equipped) |
| 7. Instrument lower panel LH | 8. Automatic back door main switch | 9. Automatic back door switch |
| 10. Sport mode switch | 11. VDC OFF switch (If equipped) | |

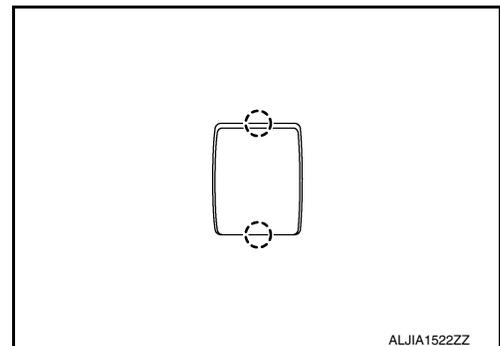
Removal and Installation

INFOID:000000012423803

REMOVAL

1. Remove the instrument lower panel LH. Refer to [IP-23, "Removal and Installation"](#).
2. Remove the screws and upper switch carrier from the instrument lower panel LH.
3. Release pawls using suitable tool and remove the automatic back door switch switch from the upper switch carrier.

○: Pawl



INSTALLATION

Installation is in the reverse order of removal.

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AUTOMATIC BACK DOOR CLOSE SWITCH

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

AUTOMATIC BACK DOOR CLOSE SWITCH

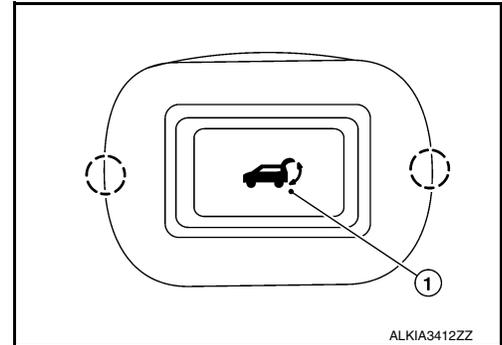
Removal and Installation

INFOID:000000012423804

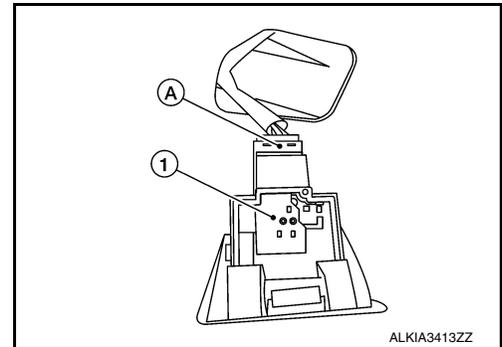
REMOVAL

1. Release the automatic back door close switch (1) pawls using a suitable tool.

○: Pawl

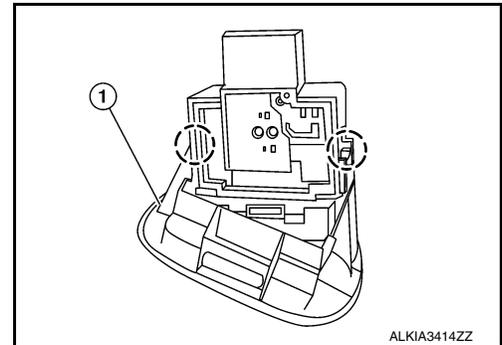


2. Disconnect the harness connector (A) from the automatic back door close switch (1) and remove.



3. Release pawls and remove automatic back door request switch finisher (1).

○: Pawl



INSTALLATION

Installation is in the reverse order of removal.

PRECAUTIONS

< PRECAUTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

PRECAUTION

PRECAUTIONS

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

INFOID:000000012423805

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

WARNING:

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

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

WARNING:

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

Precaution for Servicing Doors and Locks

INFOID:000000012423806

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 area.
 - Then dip a cloth into fresh water, wring the water out of the cloth and wipe the detergent off.
 - Then rub with a soft, dry cloth.
 - Do not use organic solvent such as thinner, benzene, alcohol or gasoline.
 - For genuine leather seats, use a genuine leather seat cleaner.

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PRECAUTIONS

[WITHOUT INTELLIGENT KEY SYSTEM]

< PRECAUTION >

Precaution for Work

INFOID:000000012918339

- 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 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

[WITHOUT INTELLIGENT KEY SYSTEM]

< PREPARATION >

PREPARATION

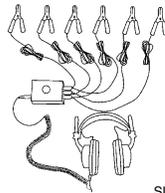
PREPARATION

Special Service Tool

INFOID:000000012423807

The actual shape of the tools may differ from those illustrated here.

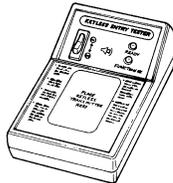
Tool number (TechMate No.) Tool name	Description
— (J-39570) Chassis Ear	Locating the noise
— (J-50397) NISSAN Squeak and Rattle Kit	Repairing the cause of noise
— (J-43241) Remote Keyless Entry Tester	Used to test keyfobs
— (J-50190) Signal Tech II	<ul style="list-style-type: none"> • Activate and display TPMS transmitter IDs • Display tire pressure reported by the TPMS transmitter • Read TPMS DTCs • Register TPMS transmitter IDs • Check Intelligent Key relative signal strength • Confirm vehicle Intelligent Key antenna signal strength • Compatible with future sensors • Equipped with a display



SIIA0993E



ALJIA1232ZZ



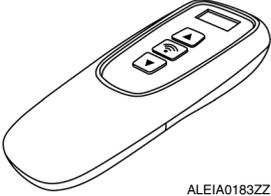
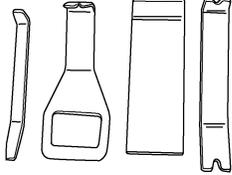
ALEIA0131ZZ

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PREPARATION

< PREPARATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

Tool number (TechMate No.) Tool name	Description
KV48105501 (J-45295-A) Transmitter Activation Tool <div style="text-align: center;">  <small>ALEIA0183ZZ</small> </div>	<ul style="list-style-type: none"> • Activate TPMS transmitter IDs • Compatible with future sensors • Equipped with a display (KV48105501 only)
— (J-46534) Trim Tool Set <div style="text-align: center;">  <small>AWJIA0483ZZ</small> </div>	Removing trim components

Commercial Service Tool

INFOID:0000000012423808

(TechMate No.) Tool name	Description
(J-39565) Engine Ear <div style="text-align: center;">  <small>SIIA0995E</small> </div>	Locating the noise
(—) Power Tool <div style="text-align: center;">  <small>PIIB1407E</small> </div>	Loosening nuts, screws and bolts

COMPONENT PARTS

< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

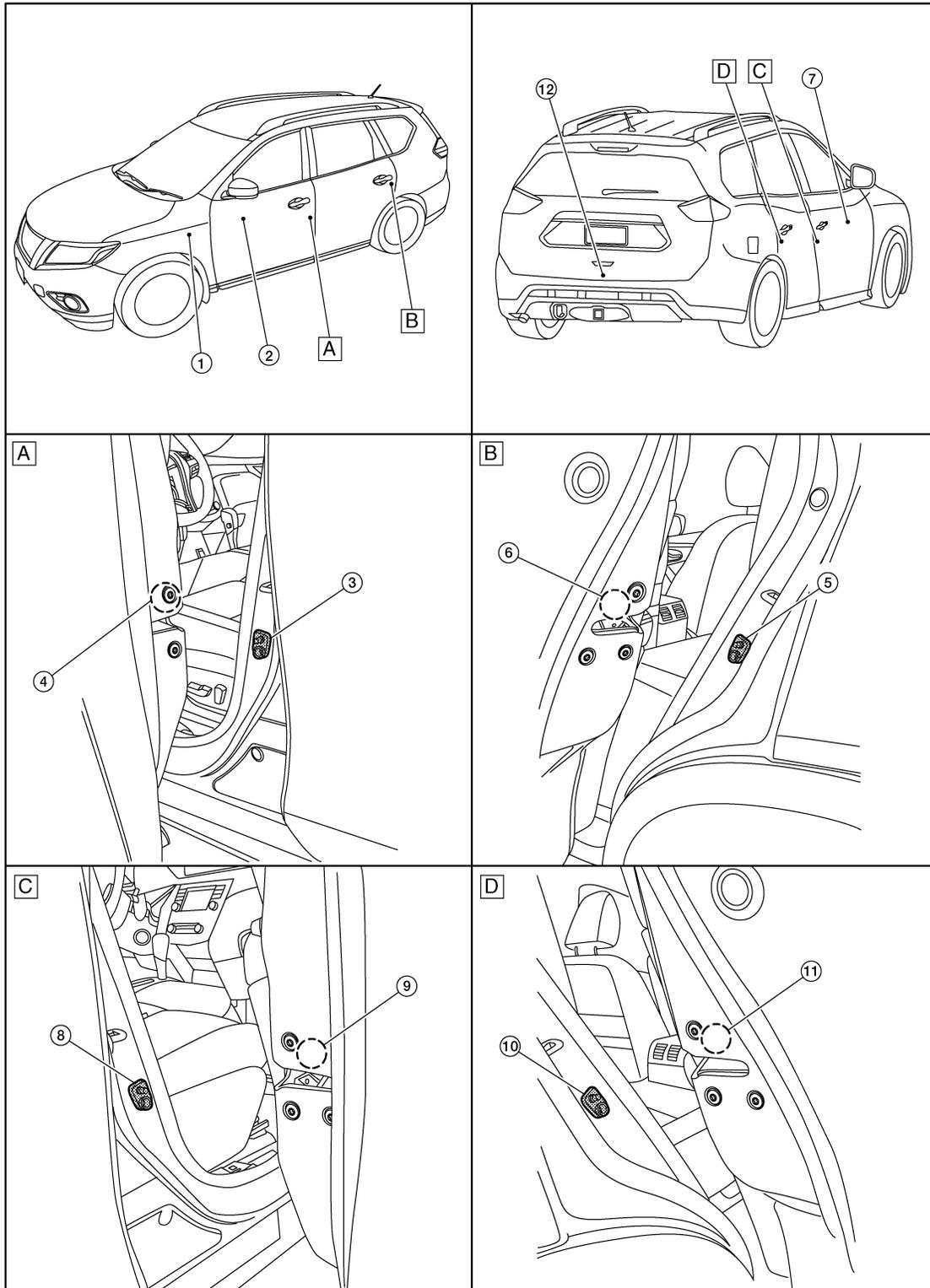
SYSTEM DESCRIPTION

COMPONENT PARTS

POWER DOOR LOCK SYSTEM

POWER DOOR LOCK SYSTEM : Component Parts Location

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COMPONENT PARTS

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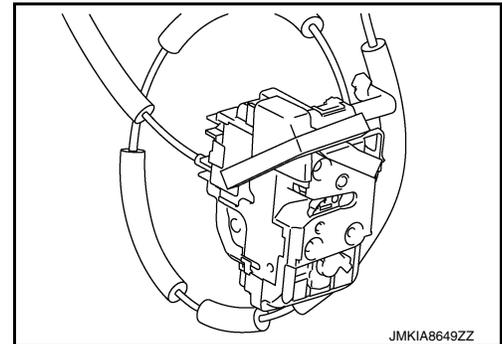
[WITHOUT INTELLIGENT KEY SYSTEM]

No.	Component	Function
1.	BCM	Controls the door lock system. Refer to BCS-80. "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location
2.	Main power window and door lock/unlock switch	DLK-23. "Door Lock and Unlock Switch (Driver Side)"
3.	Front door switch LH	DLK-297. "Front Door Switch"
4.	Front door lock assembly LH	DLK-26. "Front Door Lock Assembly (LH)"
5.	Rear door switch LH	DLK-297. "Rear Door Switch"
6.	Rear door lock actuator LH	Rear door lock actuator locks/unlocks the rear door latch assembly.
7.	Power window and door lock/unlock switch RH	DLK-23. "Door Lock and Unlock Switch (Passenger Side)"
8.	Front door switch RH	DLK-297. "Front Door Switch"
9.	Front door lock actuator RH	Rear door lock actuator locks/unlocks the rear door latch assembly.
10.	Rear door switch RH	DLK-297. "Rear Door Switch"
11.	Rear door lock actuator RH	Rear door lock actuator locks/unlocks the rear door latch assembly.
12.	Back door lock assembly (door ajar switch)	DLK-296. "Back Door Lock Assembly"

Front Door Lock Assembly (Driver Side)

INFOID:0000000012423810

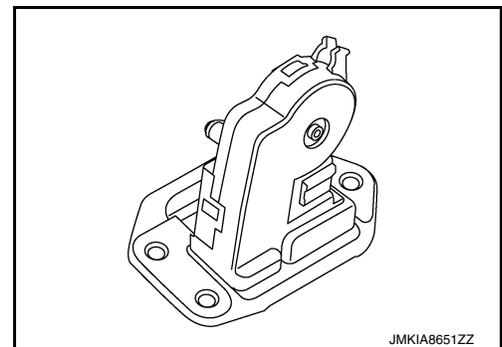
- Door lock actuator and unlock sensor are Integrated in driver door lock assembly.
- Door lock actuator receives lock/unlock signal from BCM, and then locks/unlocks driver door.
- Only front door lock assembly (driver side) integrates unlock sensor. Unlock sensor transmits lock/unlock status of driver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



Back Door Lock Assembly

INFOID:0000000012423811

- Back door lock assembly lock assembly integrates door lock actuator and back door latch.
- Door lock actuator locks/unlocks the back door according to the door lock/unlock signal from BCM.



COMPONENT PARTS

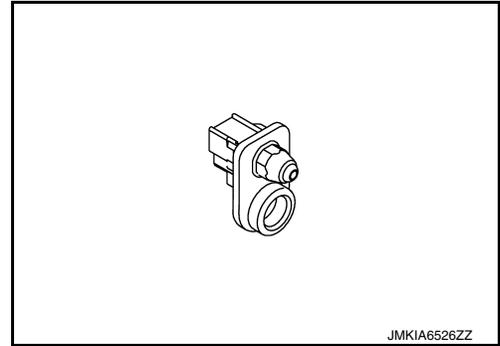
[WITHOUT INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

Rear Door Switch

INFOID:000000012423812

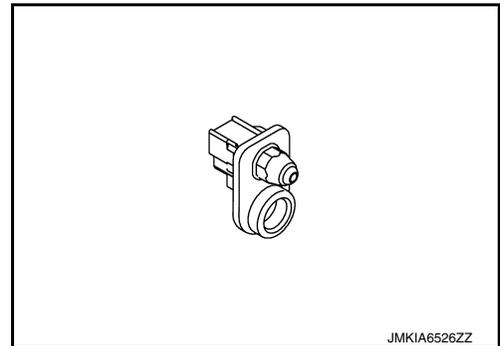
Door switch detects open/close status of door and transmits door switch signal to BCM.



Front Door Switch

INFOID:000000012423813

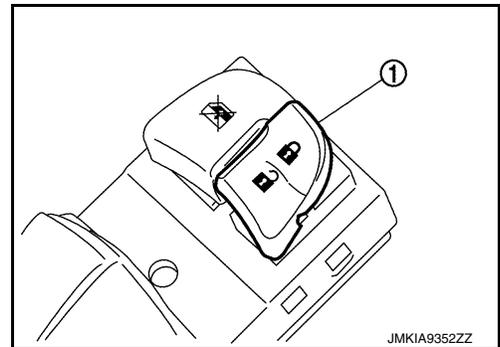
Door switch detects open/close status of door and transmits door switch signal to BCM.



Door Lock and Unlock Switch

INFOID:000000012423814

- 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.



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SYSTEM

< SYSTEM DESCRIPTION >

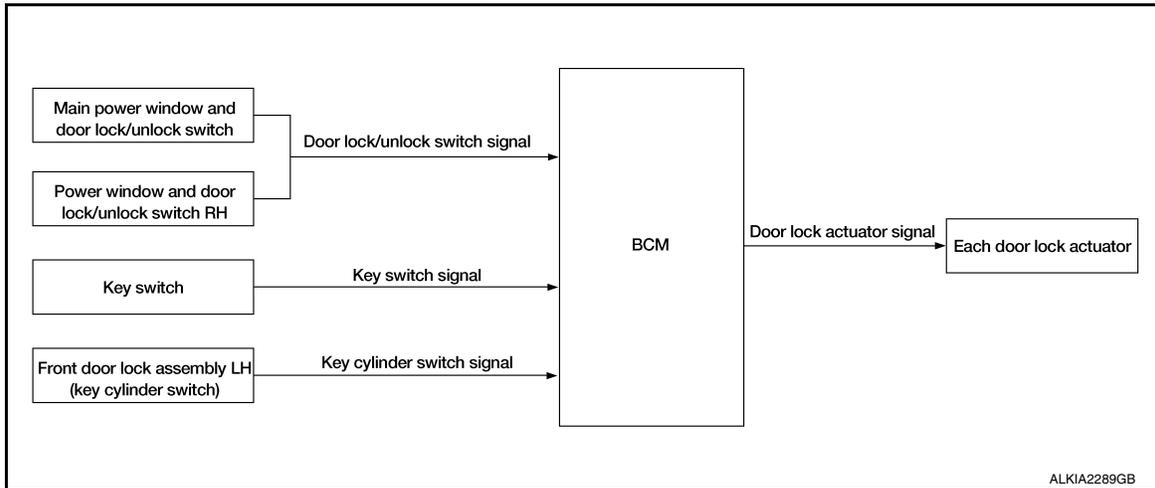
[WITHOUT INTELLIGENT KEY SYSTEM]

SYSTEM

POWER DOOR LOCK SYSTEM

POWER DOOR LOCK SYSTEM : System Diagram

INFOID:000000012423815



POWER DOOR LOCK SYSTEM : System Description

INFOID:000000012423816

Switch	Input/output signal to BCM	BCM function	Actuator
Main power window and door lock/unlock switch	Door lock/unlock signal	Door lock/unlock control	Door lock actuator
Power window and door lock/unlock switch RH			
Front door lock key cylinder switch LH			

DOOR LOCK FUNCTION

Functions Available by Operating the Door Lock and Unlock Switches on Driver Door and Passenger Door

- Interlocked with the locking operation of door lock and unlock switch, door lock actuators of all door lock actuators are locked.
- Interlocked with the unlocking operation of door lock and unlock switch, door lock actuators of all door lock actuators are unlocked.

Functions Available by Operating the Key Cylinder Switch on Driver Door

- Interlocked with the locking operation of door key cylinder, door lock actuators of all door lock actuators are locked.

Selective Unlock Operation

- When door key cylinder is unlocked, door lock actuator driver side is unlocked.
- When door key cylinder is unlocked for the second time within 5 seconds after the first operation, door lock actuators on all doors are unlocked.

Select unlock operation mode can be changed using "DOOR LOCK-UNLOCK SET" in "Work support". Refer to [BCS-88. "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)".](#)

REMOTE KEYLESS ENTRY SYSTEM

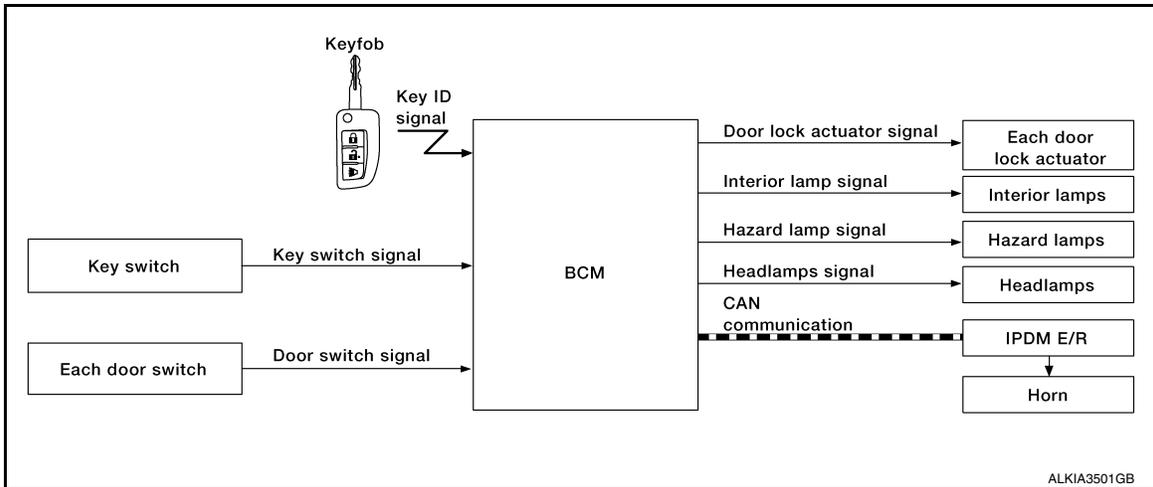
SYSTEM

< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

REMOTE KEYLESS ENTRY SYSTEM : System Diagram

INFOID:000000012423817



REMOTE KEYLESS ENTRY SYSTEM : System Description

INFOID:000000012423818

The remote keyless entry system can be locked and unlocked by pressing door lock and unlock button of keyfob.

DOOR LOCK AND UNLOCK OPERATION

- When door lock and unlock button of keyfob is pressed, door lock and unlock signal transmits from keyfob to BCM.
- When BCM receives the door lock and unlock signal, it operates door lock actuator, flashes the hazard lamp (lock: 2 times, unlock: 1 time) and horn chirp signal to IPDM E/R at the same time as a reminder.
- IPDM E/R honks horn (lock: 1 time) as a reminder.

OPERATION CONDITION

Remote controller operation	Operation condition
Lock/unlock	Key switch is OFF. Mechanical key is removed from the ignition cylinder.

OPERATION AREA

To ensure that the keyfob works effectively, use within 10 m (33ft) range of the vehicle, however the operable range may differ according to surroundings.

SELECTIVE UNLOCK OPERATION

When door lock is unlocked, pressing LOCK button on keyfob once will lock all doors. When door lock is locked, pressing UNLOCK button on keyfob will unlock driver side door. Pressing UNLOCK button on keyfob second time within 5 seconds from the first time will unlock all doors.

HAZARD AND HORN REMINDER

When the doors are locked or unlocked by keyfob, power is supplied to sound horn and flash hazard warning lamps as a reminder

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

How to Change Hazard and Horn Reminder Modes

With CONSULT

Hazard and horn reminders can be changed using "Work support" in "MULTI REMOTE ENT".

Hazard reminder setting	Mode 1		Mode 2		Mode 3		Mode 4	
	Lock	Unlock	Lock	Unlock	Lock	Unlock	Lock	Unlock
Keyfob operation	Lock	Unlock	Lock	Unlock	Lock	Unlock	Lock	Unlock
Hazard warning lamp blink	—	—	—	Once	Twice	—	Twice	Once

SYSTEM

< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

Horn reminder setting	ON		OFF	
Keyfob operation	Lock	Unlock	Lock	Unlock
Horns sound	Once	—	—	—

Hazard and horn reminders do not operate if any door switch is ON (any door is OPEN).

Hazard reminder can be changed using "HAZARD LAMP SET" in "Work support".

Horn reminder can be changed using "HORN CHIRP SET" in "Work support".

Refer to [BCS-91, "MULTI REMOTE ENT : CONSULT Function \(BCM - MULTI REMOTE ENT\)"](#).

⊗ Without CONSULT

Refer to Owner's Manual for instructions.

AUTO DOOR LOCK OPERATION

When all doors are locked, ignition switch is OFF and key switch is OFF (mechanical key is removed from the ignition cylinder), doors are unlocked with keyfob button. When BCM does not receive the following signals within 1 minute, all doors are locked.

- Door switch is ON (door is opened)
- Door is locked
- Ignition switch is ON
- Key switch is ON (mechanical key is inserted in the ignition cylinder)

Auto door lock mode can be changed by "AUTO LOCK SET" in "Work support". Refer to [BCS-91, "MULTI REMOTE ENT : CONSULT Function \(BCM - MULTI REMOTE ENT\)"](#).

PANIC ALARM OPERATION

When key switch is OFF (mechanical key is removed from the ignition cylinder), BCM turns ON and OFF horn and headlamp intermittently with input of PANIC ALARM signal from keyfob.

BCM outputs to headlamps and IPDM E/R for panic alarm signal (horn signal) via CAN communication lines.

The alarm automatically turns OFF after 25 seconds or when BCM receives any signal from keyfob.

Panic alarm operation mode can be changed using "PANIC ALARM SET" in "Work support".

Refer to [BCS-91, "MULTI REMOTE ENT : CONSULT Function \(BCM - MULTI REMOTE ENT\)"](#).

INTERIOR LAMP TIMER OPERATION

When the following conditions occur, remote keyless entry system turns on interior lamp for 15 seconds with input of UNLOCK signal from keyfob. For detailed description, refer to [INL-7, "INTERIOR ROOM LAMP CONTROL SYSTEM : System Description"](#).

- Interior room lamp switch is in the DOOR position
- Door switch OFF (when all the doors are closed).

DIAGNOSIS SYSTEM (BCM)

[WITHOUT INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000012816087

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 style="list-style-type: none"> The vehicle specification can be read and saved. The vehicle specification can be written when replacing BCM.
CAN Diag Support Mntr	The result of transmit/receive diagnosis of CAN communication is displayed.

SYSTEM APPLICATION

BCM can perform the following functions.

System	Sub System	Direct Diagnostic Mode						
		Ecu Identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN Diag Support Mntr
Door lock	DOOR LOCK			x	x	x		
Rear window defogger	REAR DEFOGGER			x	x	x		
Warning chime	BUZZER			x	x			
Interior room lamp timer	INT LAMP			x	x	x		
Remote keyless entry system	MULTI REMOTE ENT					x		
Exterior lamp	HEADLAMP			x	x			
Wiper and washer	WIPER			x	x	x		
Turn signal and hazard warning lamps	FLASHER			x	x			
Combination switch	COMB SW			x				
BCM	BCM	x	x			x	x	x
Immobilizer	IMMU		x		x			
Interior room lamp battery saver	BATTERY SAVER			x	x			
Back door open	TRUNK			x				
Vehicle security system	THEFT ALM			x	x	x		
RAP system	RETAINED PWR			x				
TPMS	AIR PRESSURE MONITOR		x	x	x	x		

DOOR LOCK

DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)

INFOID:0000000012816088

SELF DIAGNOSTIC RESULT

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DIAGNOSIS SYSTEM (BCM)

[WITHOUT INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

Refer to [BCS-109, "DTC Index"](#).

DATA MONITOR

Monitor Item [Unit]	Description
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 back door 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].

WORK SUPPORT

Support Item	Setting	Description
DOOR LOCK-UNLOCK SET	On*	Automatic door locks function ON.
	Off	Automatic door locks function OFF.
AUTO UNLOCK TYPE	MODE2	Driver door only unlocks automatically.
	MODE1*	All doors unlock automatically.
AUTO LOCK FUNCTION	MODE3	This mode is not used.
	MODE2	Doors lock automatically when shifted out of P (park).
	MODE1*	Doors lock automatically when vehicle speed reaches 24 km/h (15 mph).
	Off	—
AUTO UNLOCK FUNCTION	MODE3	This mode is not used.
	MODE2	Doors unlock automatically when shifted into P (park).
	MODE1*	Doors unlock automatically when ignition is switched from ON to OFF.
	Off	—

* : Initial setting

MULTI REMOTE ENT

MULTI REMOTE ENT : CONSULT Function (BCM - MULTI REMOTE ENT)

INFOID:0000000012816089

WORK SUPPORT

Support Item	Setting	Description
REMO CONT ID CONFIR	—	Keyfob ID code registration is displayed.

ECU DIAGNOSIS INFORMATION

BCM, IPDM E/R

List of ECU Reference

INFOID:0000000012423822

ECU	Reference
BCM	BCS-97, "Reference Value"
	BCS-112, "Wiring Diagram"
	BCS-108, "Fail Safe"
	BCS-109, "DTC Inspection Priority Chart"
	BCS-109, "DTC Inspection Priority Chart"
IPDM E/R	PCS-17, "Reference Value"
	PCS-29, "Wiring Diagram"
	PCS-25, "Fail-safe"
	PCS-26, "DTC Index"

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POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

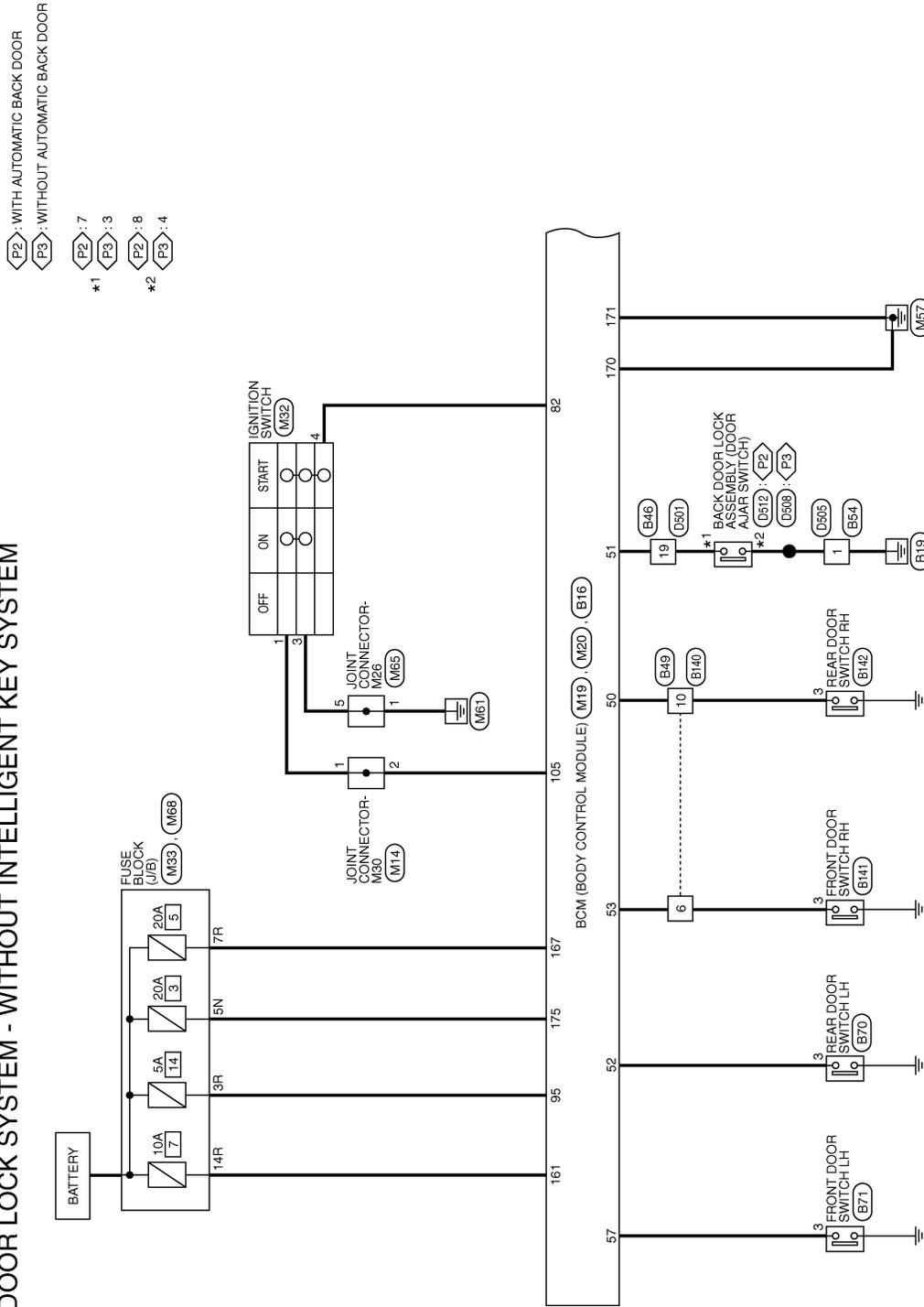
WIRING DIAGRAM

POWER DOOR LOCK SYSTEM

Wiring Diagram

INFOID:0000000012423823

POWER DOOR LOCK SYSTEM - WITHOUT INTELLIGENT KEY SYSTEM

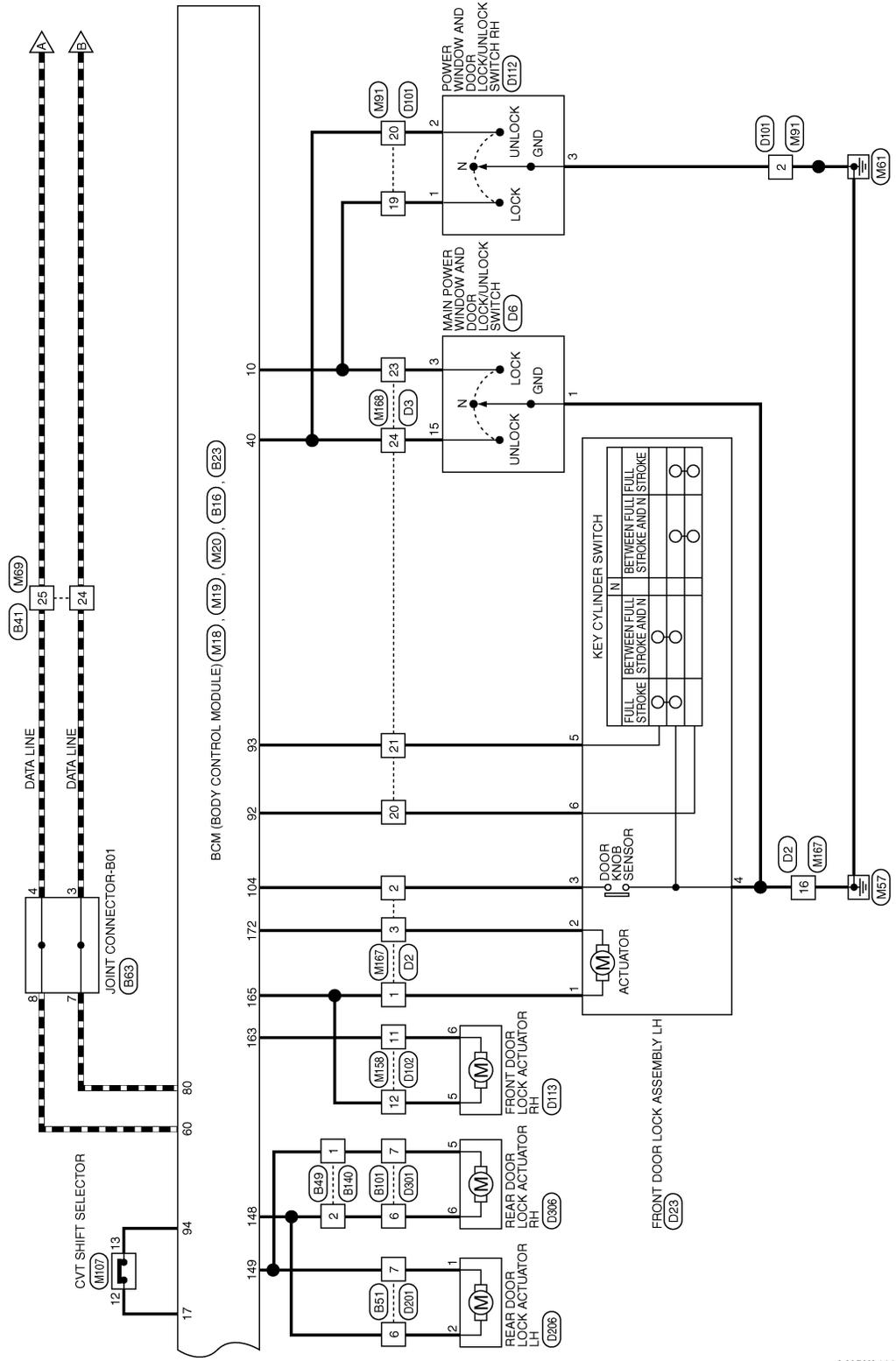


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POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

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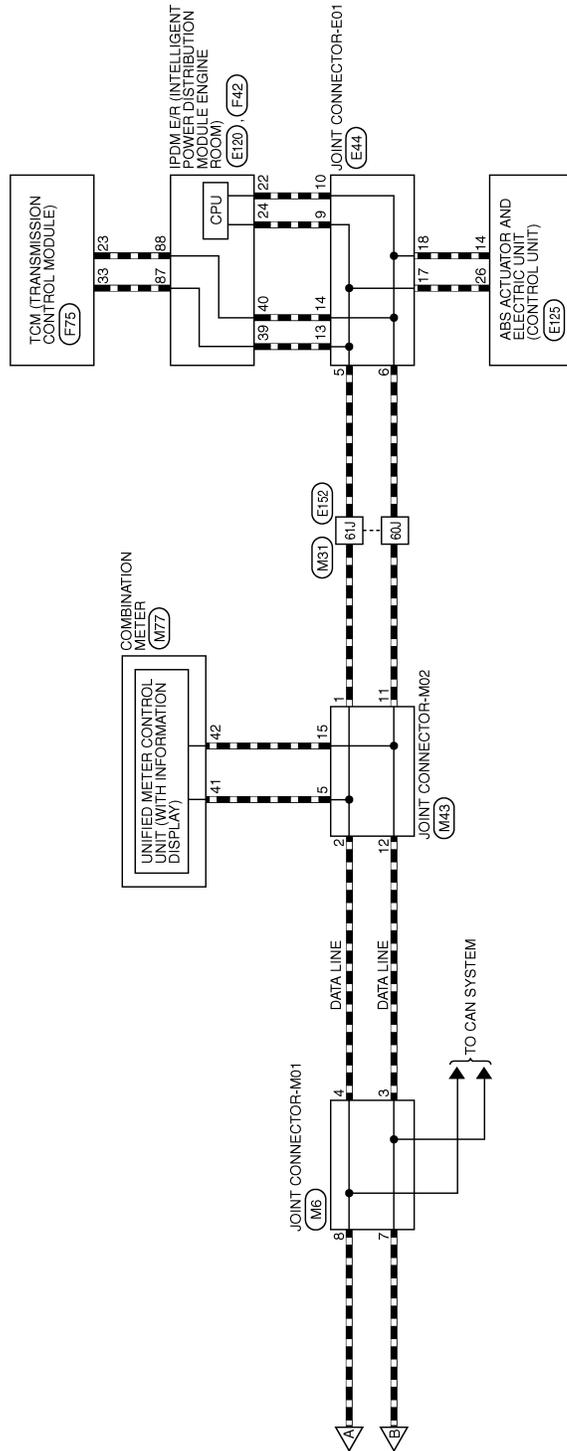
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POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >



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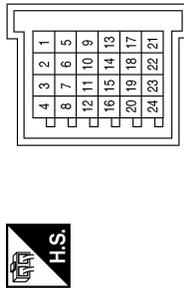
POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

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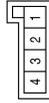
POWER DOOR LOCK SYSTEM CONNECTORS - WITHOUT INTELLIGENT KEY SYSTEM

Connector No.	M6
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY



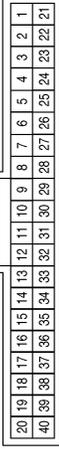
Terminal No.	Color of Wire	Signal Name
3	P	-
4	L	-
7	P	-
8	L	-

Connector No.	M14
Connector Name	JOINT CONNECTOR-M30
Connector Color	WHITE



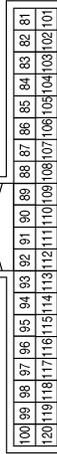
Terminal No.	Color of Wire	Signal Name
1	Y	-
2	Y	-

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
10	BG	I DOORLOCK SW
17	L	O PWR ATDVC
40	SB	I DOORUNLOCK SW

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
82	LA/R	I STARTER SW (WO IKEY)
92	BR	I KEY CYLINDER LOCK SW
93	P	I KEY CYLINDER UNLOCK SW

Terminal No.	Color of Wire	Signal Name
94	G	AT LOCKED IN PARK SWITCH
95	V	I SHORTING PIN
104	R	I DR KNOB SW
105	Y	I IGN SW (WITHOUT IKEY)



Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BROWN

Terminal No.	Color of Wire	Signal Name
161	W	I PWR ECU
163	L	O AS LOCK OR UNLOCK D
165	V	O DR OR FR LOCK D
167	LA/V	I PWR DOORLOCK1
170	B	I GND1
171	B	I GND2
172	G	O FR OR DR UNLOCK D
175	R	I PWR DOORLOCK2

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POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

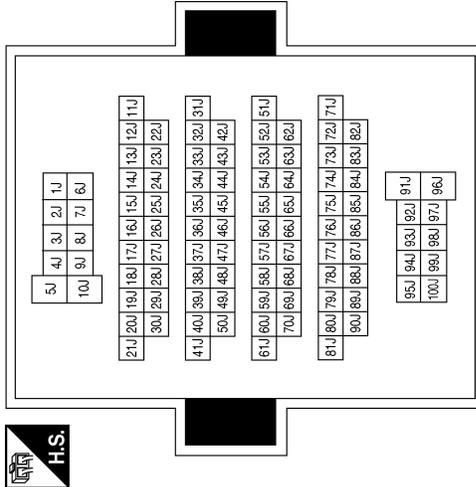
Connector No.	M32
Connector Name	IGNITION SWITCH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	Y	-
3	B	-
4	LA/R	-

Terminal No.	Color of Wire	Signal Name
60J	P	-
61J	L	-

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Color	WHITE

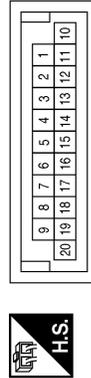


Connector No.	M65
Connector Name	JOINT CONNECTOR-M26
Connector Color	WHITE



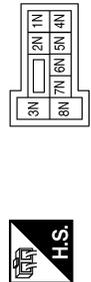
Terminal No.	Color of Wire	Signal Name
1	B	-
5	B	-

Connector No.	M43
Connector Name	JOINT CONNECTOR-M02
Connector Color	BLUE



Terminal No.	Color of Wire	Signal Name
1	L	-
2	L	-
5	L	-
11	P	-
12	P	-
15	P	-

Connector No.	M33
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
5N	R	-

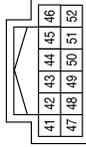
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POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

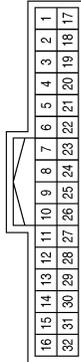
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Connector No.	M77
Connector Name	COMBINATION METER
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
41	L	CAN-H
42	P	CAN-L

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE



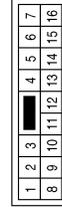
Terminal No.	Color of Wire	Signal Name
24	L	-
25	P	-

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN



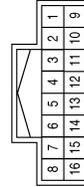
Terminal No.	Color of Wire	Signal Name
3R	V	-
7R	LA/V	-
14R	W	-

Connector No.	M158
Connector Name	WIRE TO WIRE
Connector Color	WHITE



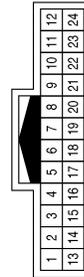
Terminal No.	Color of Wire	Signal Name
11	L	-
12	Y	-

Connector No.	M107
Connector Name	CVT SHIFT SELECTOR
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
12	L	-
13	G	-

Connector No.	M91
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	GR	-
19	LG	-
20	BR	-

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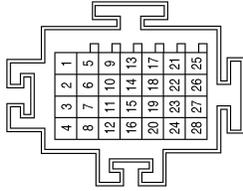
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POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

Connector No.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Color	WHITE



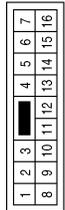
Terminal No.	Color of Wire	Signal Name
5	L	-
6	P	-
9	L	-
10	P	-
13	L	-
14	P	-
17	L	-
18	P	-

Connector No.	M168
Connector Name	WIRE TO WIRE
Connector Color	WHITE



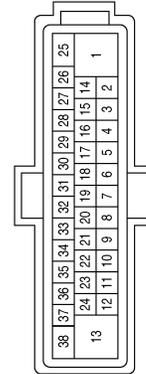
Terminal No.	Color of Wire	Signal Name
20	BR	-
21	P	-
23	BG	-
24	SB	-

Connector No.	M167
Connector Name	WIRE TO WIRE
Connector Color	WHITE



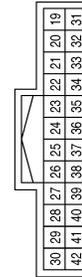
Terminal No.	Color of Wire	Signal Name
1	V	-
2	R	-
3	G	-
16	B	-

Connector No.	E125
Connector Name	ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
14	P	CAN-L
26	L	CAN-H

Connector No.	E120
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
22	P	CAN-L
24	L	CAN-H
39	L	CAN-H
40	P	CAN-L

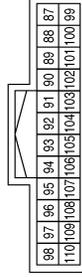
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POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

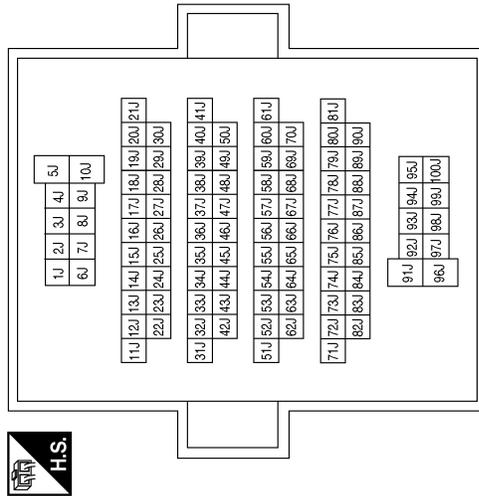
Connector No.	F42
Connector Name	IPDM/E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
87	L	CAN-H
88	P	CAN-L

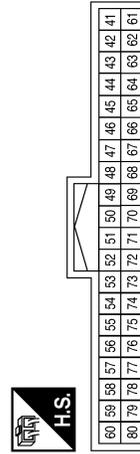
Terminal No.	Color of Wire	Signal Name
60J	P	-
61J	L	-

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE



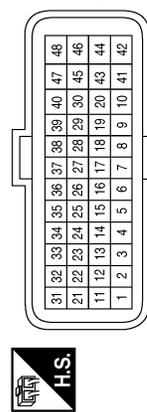
Terminal No.	Color of Wire	Signal Name
52	R	I RL DOOR SW
53	SB	I AS DOOR2 SW
57	SB	I DR DOOR2 SW
60	L	CAN-H
80	P	CAN-L

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN



Terminal No.	Color of Wire	Signal Name
50	W	I RR DOOR SW
51	LG	I TGATE SW

Connector No.	F75
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
23	P	CAN-L
33	L	CAN-H

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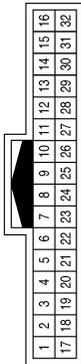
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POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

Connector No.	B46
Connector Name	WIRE TO WIRE
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
19	LG	-

Connector No.	B41
Connector Name	WIRE TO WIRE
Connector Color	WHITE




Terminal No.	Color of Wire	Signal Name
24	P	-
25	L	-

Connector No.	B23
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GRAY




Terminal No.	Color of Wire	Signal Name
148	W	O RR UNLOCK B
149	L	O RR LOCK B

Connector No.	B54
Connector Name	WIRE TO WIRE
Connector Color	WHITE




Terminal No.	Color of Wire	Signal Name
1	B	-

Connector No.	B51
Connector Name	WIRE TO WIRE
Connector Color	WHITE




Terminal No.	Color of Wire	Signal Name
6	W	-
7	L	-

Connector No.	B49
Connector Name	WIRE TO WIRE
Connector Color	WHITE




Terminal No.	Color of Wire	Signal Name
1	V	-
2	G	-
6	SB	-
10	W	-

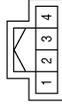
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POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

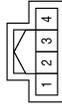
< WIRING DIAGRAM >

Connector No.	B71
Connector Name	FRONT DOOR SWITCH LH
Connector Color	WHITE



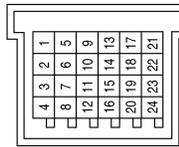
Terminal No.	Color of Wire	Signal Name
3	SB	-

Connector No.	B70
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	R	-

Connector No.	B63
Connector Name	JOINT CONNECTOR-B01
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
3	P	-
4	L	-
7	P	-
8	L	-

Connector No.	B141
Connector Name	FRONT DOOR SWITCH RH
Connector Color	WHITE



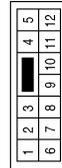
Terminal No.	Color of Wire	Signal Name
3	GR	-

Connector No.	B140
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	LA/LG	-
2	LA/GR	-
6	GR	-
10	W	-

Connector No.	B101
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6	LA/GR	-
7	LA/LG	-

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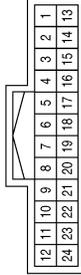
DLK

POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

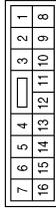
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Connector No.	D3
Connector Name	WIRE TO WIRE
Connector Color	WHITE



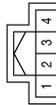
Terminal No.	Color of Wire	Signal Name
20	BR	-
21	P	-
23	L	-
24	BG	-

Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Color	WHITE



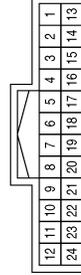
Terminal No.	Color of Wire	Signal Name
1	LA/V	-
2	R	-
3	LA/G	-
16	B	-

Connector No.	B142
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE



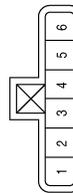
Terminal No.	Color of Wire	Signal Name
3	W	-

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	B	-
19	LG	-
20	BR	-

Connector No.	D23
Connector Name	FRONT DOOR LOCK ASSEMBLY LH
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
1	LA/V	-
2	LA/G	-
3	R	-
4	B	-
5	P	-
6	BR	-

Connector No.	D6
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	B	-
3	L	-
15	BG	-

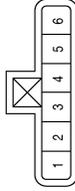
AAKIA3176GB

POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

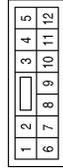
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Connector No.	D113
Connector Name	FRONT DOOR LOCK ACTUATOR RH
Connector Color	GRAY



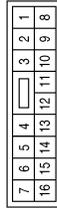
Terminal No.	Color of Wire	Signal Name
5	LA/V	-
6	LA/L	-

Connector No.	D112
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH
Connector Color	WHITE



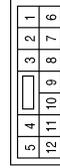
Terminal No.	Color of Wire	Signal Name
1	LG	-
2	BR	-
3	B	-

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Color	WHITE



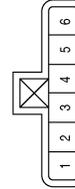
Terminal No.	Color of Wire	Signal Name
11	LA/L	-
12	LA/V	-

Connector No.	D301
Connector Name	WIRE TO WIRE
Connector Color	WHITE



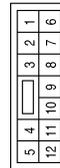
Terminal No.	Color of Wire	Signal Name
6	LA/W	-
7	LA/L	-

Connector No.	D206
Connector Name	REAR DOOR LOCK ACTUATOR LH
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
1	LA/G	-
2	LA/V	-

Connector No.	D201
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6	LA/V	-
7	LA/G	-

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POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

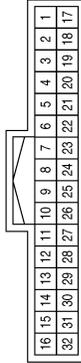
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Connector No.	D505
Connector Name	WIRE TO WIRE
Connector Color	WHITE



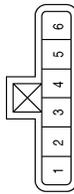
Terminal No.	1	Color of Wire	B	Signal Name	-
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Connector No.	D501
Connector Name	WIRE TO WIRE
Connector Color	WHITE



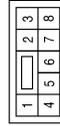
Terminal No.	19	Color of Wire	W	Signal Name	-
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Connector No.	D306
Connector Name	REAR DOOR LOCK ACTUATOR RH
Connector Color	GRAY



Terminal No.	5	Color of Wire	LA/L	Signal Name	-
6	LA/W	-	-	-	

Connector No.	D512
Connector Name	BACK DOOR LOCK ASSEMBLY (WITH AUTOMATIC BACK DOOR SYSTEM)
Connector Color	WHITE



Terminal No.	7	Color of Wire	W	Signal Name	-
8	B	-	-	-	

Connector No.	D508
Connector Name	BACK DOOR LOCK ASSEMBLY (WITHOUT AUTOMATIC BACK DOOR SYSTEM)
Connector Color	WHITE



Terminal No.	3	Color of Wire	W	Signal Name	-
4	GR	-	-	-	

AAKIA3178GB

REMOTE KEYLESS ENTRY SYSTEM

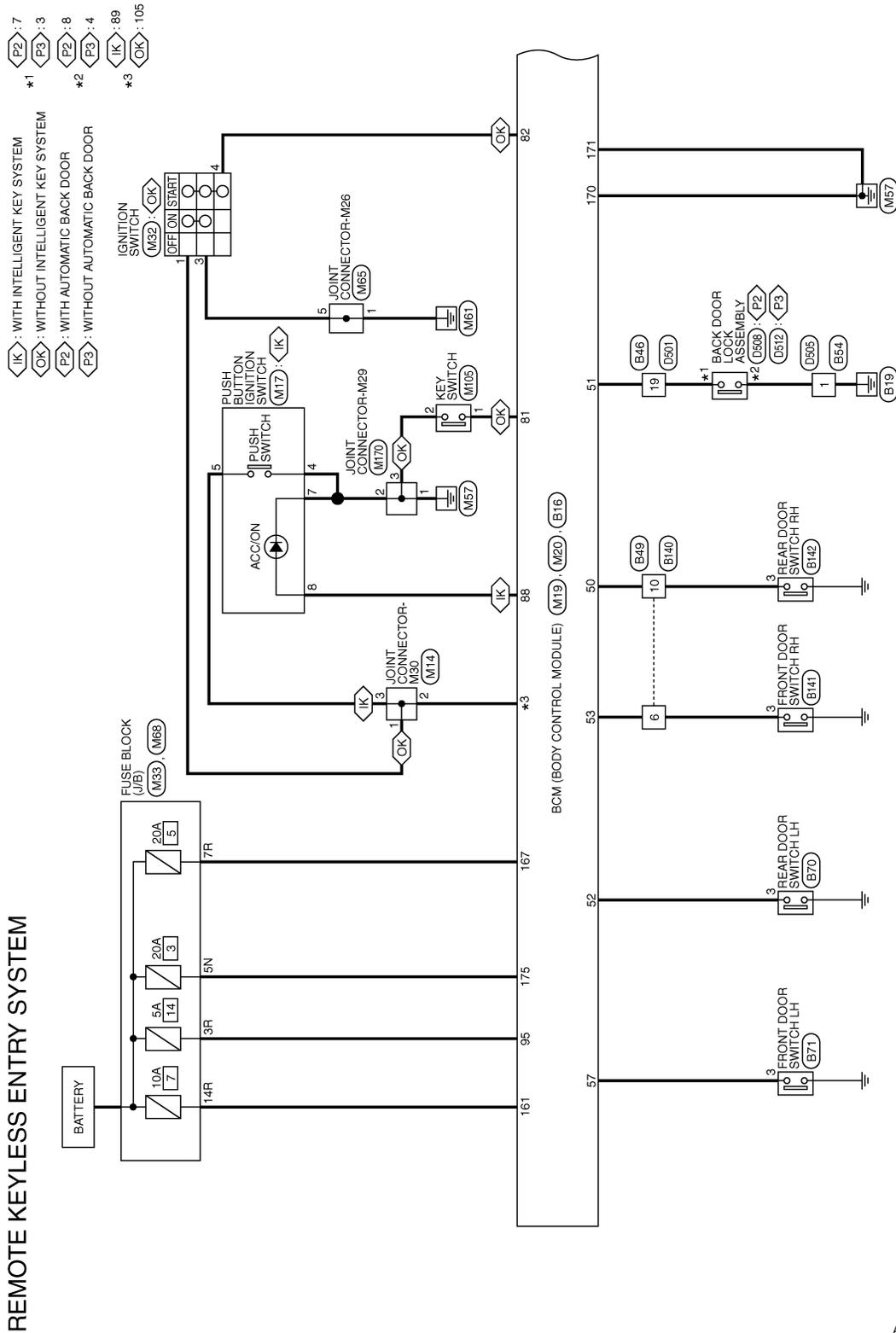
[WITHOUT INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

REMOTE KEYLESS ENTRY SYSTEM

Wiring Diagram

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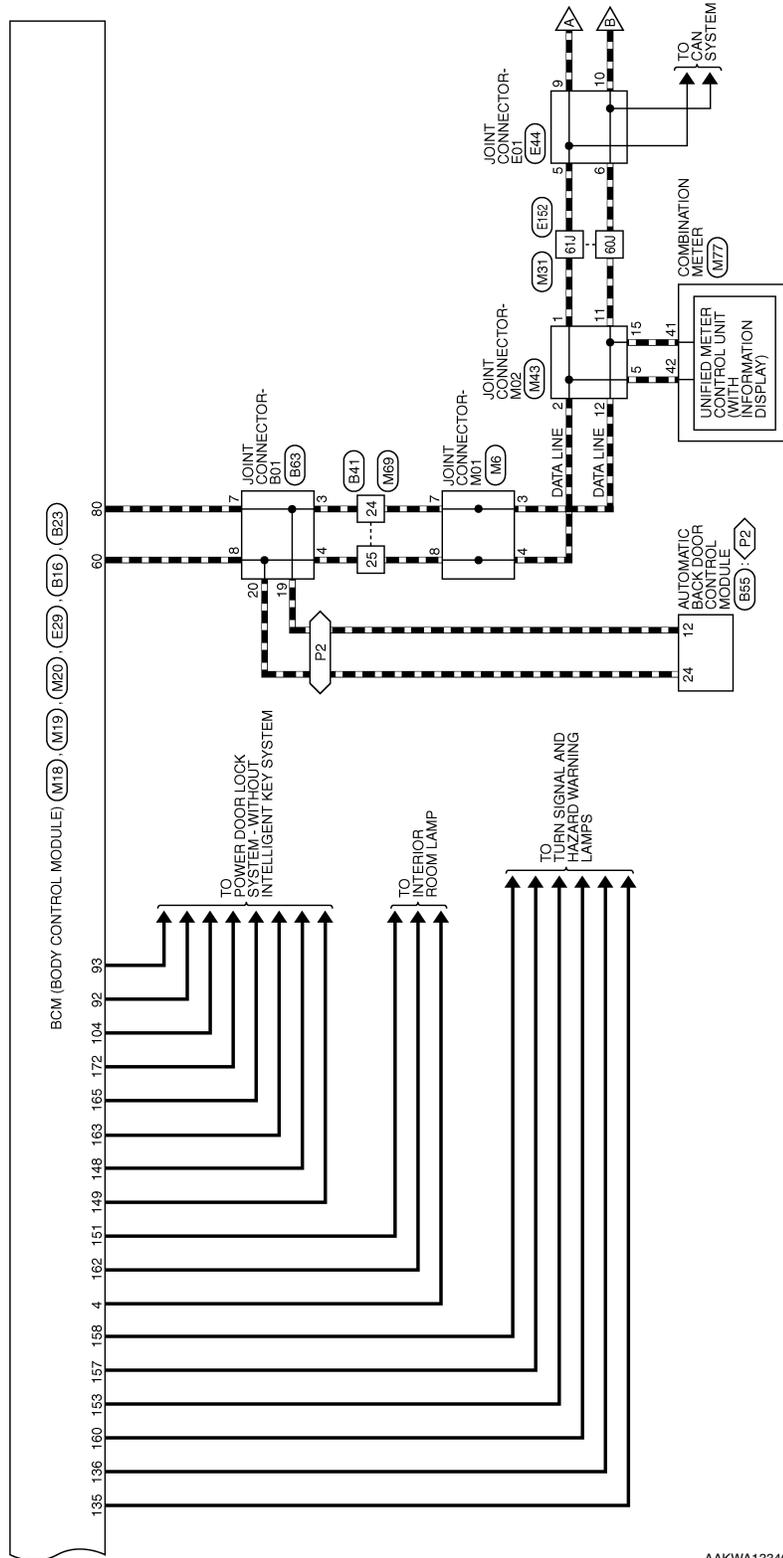
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REMOTE KEYLESS ENTRY SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

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◁ P2 ▷ : WITH AUTOMATIC BACK DOOR

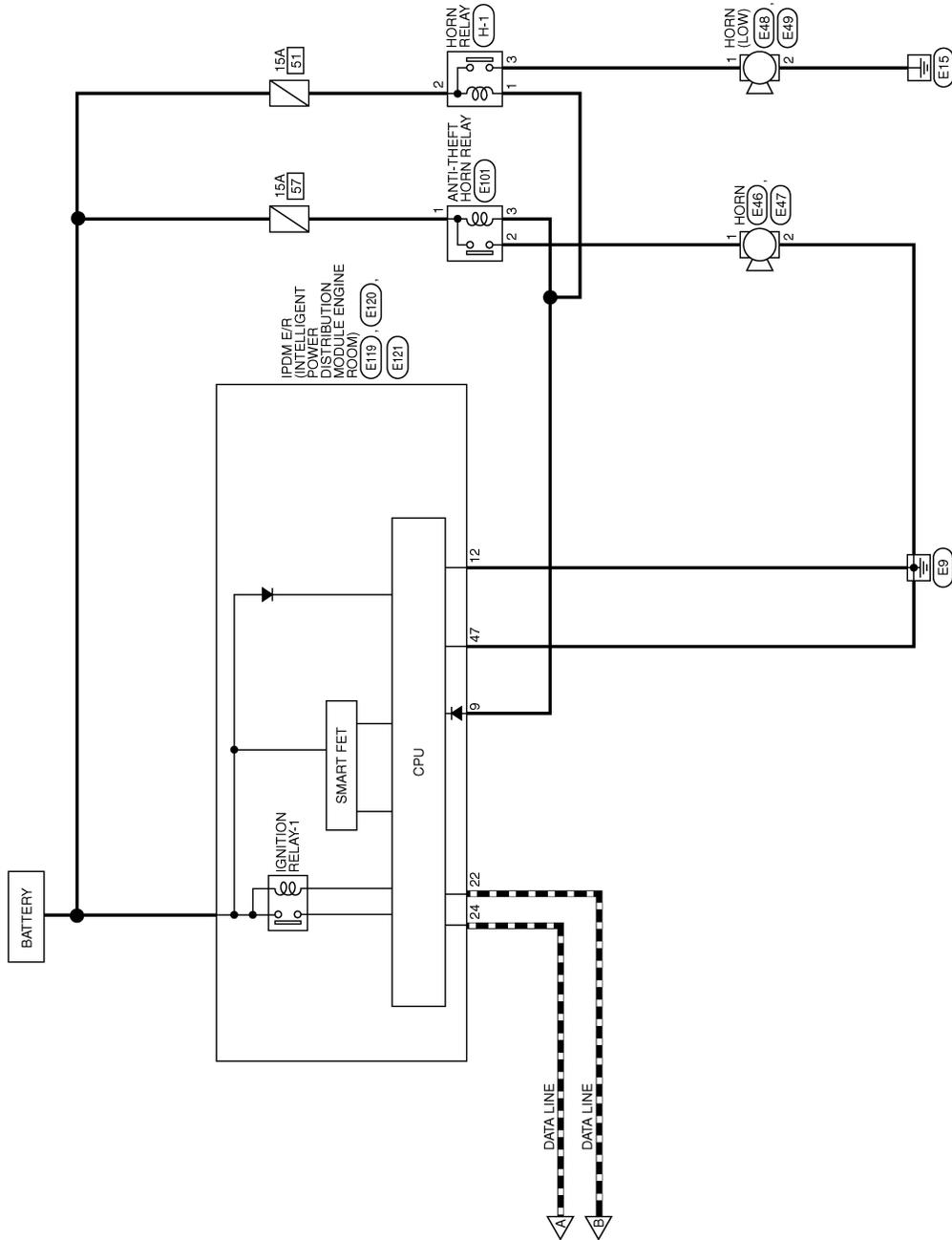


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REMOTE KEYLESS ENTRY SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >



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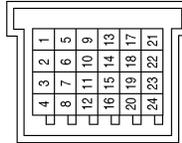
REMOTE KEYLESS ENTRY SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

REMOTE KEYLESS ENTRY SYSTEM CONNECTORS

Connector No.	M6
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY



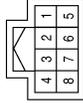
Terminal No.	Color of Wire	Signal Name
3	P	-
4	L	-
7	P	-
8	L	-

Connector No.	M14
Connector Name	JOINT CONNECTOR-M30
Connector Color	WHITE



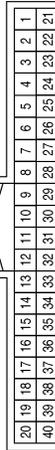
Terminal No.	Color of Wire	Signal Name
1	Y	-
2	Y	-
3	Y	-

Connector No.	M17
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Color	WHITE



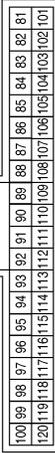
Terminal No.	Color of Wire	Signal Name
4	B	-
5	Y	-
7	B	-
8	W	-

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
4	P	O SPARE4 PL N

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
81	L	I KEY SW (WITHOUT INTELLIGENT KEY SYSTEM)
82	LA/R	I STARTER SW (WITHOUT INTELLIGENT KEY SYSTEM)

Terminal No.	Color of Wire	Signal Name
88	W	O START SW BACKLIGHT LED (WITH INTELLIGENT KEY SYSTEM)
89	Y	I START WO ESCL SW (WITH INTELLIGENT KEY SYSTEM)
92	BR	I KEY CYLINDER LOCK SW
93	P	I KEY CYLINDER UNLOCK SW
95	V	I SHORTING PIN
104	R	I DR KNOB SW
105	Y	I IGN SW (WITHOUT INTELLIGENT KEY SYSTEM)

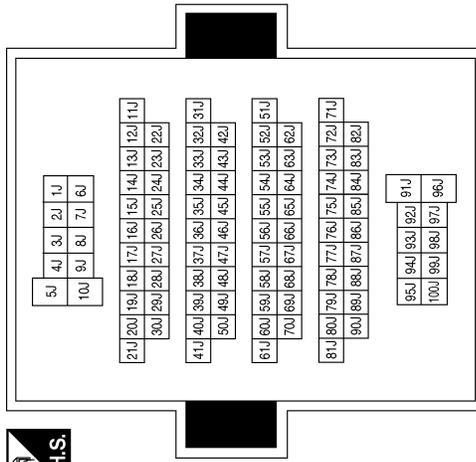
REMOTE KEYLESS ENTRY SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

Terminal No.	Color of Wire	Signal Name
60J	P	-
61J	L	-

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Color	WHITE

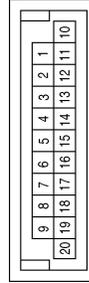


Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BROWN



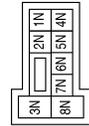
Terminal No.	Color of Wire	Signal Name
161	W	I PWR ECU
162	SB	O PWM ROOMLAMP 1
163	L	O AS UNLOCK D
165	V	O DR OR FR LOCK
167	LA/V	I PWR DOORLOCK1
170	B	I GND1
171	B	I GND2
172	G	O FR OR DR UNLOCK D
175	R	I PWR DOORLOCK2

Connector No.	M43
Connector Name	JOINT CONNECTOR-M02
Connector Color	BLUE



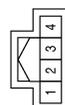
Terminal No.	Color of Wire	Signal Name
1	L	-
2	L	-
5	L	-
11	P	-
12	P	-
15	P	-

Connector No.	M33
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
5N	R	-

Connector No.	M32
Connector Name	IGNITION SWITCH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	Y	-
3	B	-
4	LA/R	-

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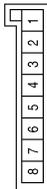
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REMOTE KEYLESS ENTRY SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

Connector No.	M65
Connector Name	JOINT CONNECTOR-M26
Connector Color	WHITE



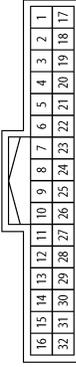
Terminal No.	Color of Wire	Signal Name
1	B	-
5	B	-

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
3R	V	-
7R	LAV	-
14R	W	-

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
24	P	-
25	L	-

Connector No.	M77
Connector Name	COMBINATION METER
Connector Color	WHITE



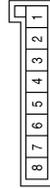
Terminal No.	Color of Wire	Signal Name
41	L	CAN-H
42	P	CAN-L

Connector No.	M105
Connector Name	KEY SWITCH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	L	-
2	B	-

Connector No.	M170
Connector Name	JOINT CONNECTOR-M29
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	B	-
2	B	-
3	B	-

REMOTE KEYLESS ENTRY SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

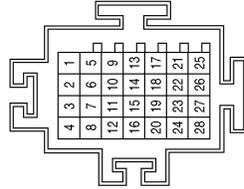
< WIRING DIAGRAM >

Connector No.	E46
Connector Name	HORN
Connector Color	BLACK



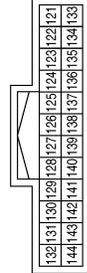
Terminal No.	Color of Wire	Signal Name
2	B	-

Connector No.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
5	L	-
6	P	-
9	L	-
10	P	-

Connector No.	E29
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
135	BR	O DI FR LEFT
136	GR	O DI FR RIGHT E

Connector No.	E49
Connector Name	HORN (LOW)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	R	-

Connector No.	E48
Connector Name	HORN (LOW)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
2	B	-

Connector No.	E47
Connector Name	HORN
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
1	R	-

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REMOTE KEYLESS ENTRY SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

Connector No.	E101
Connector Name	ANTI-THEFT HORN RELAY
Connector Color	WHITE



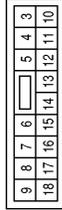
Terminal No.	Color of Wire	Signal Name
1	L	-
2	R	-
3	GR	-



Connector No.	E121
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	RED

Terminal No.	47
Color of Wire	B
Signal Name	POWER GROUND

Connector No.	E119
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY



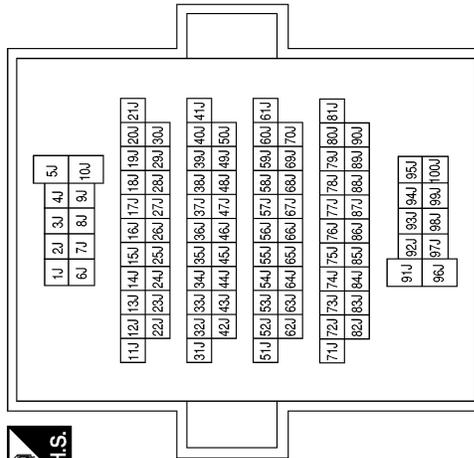
Terminal No.	Color of Wire	Signal Name
9	L	LO HORN RLY
12	B	SIGNAL GROUND

Connector No.	E120
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
22	P	CAN-L
24	L	CAN-H

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE



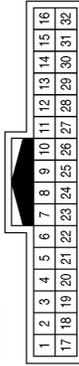
Terminal No.	Color of Wire	Signal Name
60J	P	-
61J	L	-

REMOTE KEYLESS ENTRY SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

Connector No.	B41
Connector Name	WIRE TO WIRE
Connector Color	WHITE



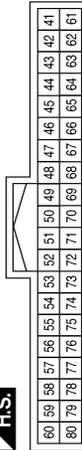
Terminal No.	Color of Wire	Signal Name
24	P	-
25	L	-

Connector No.	B23
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
148	W	O RR UNLOCK B
149	L	O RR LOCK B
151	R	O PWM ROOMLAMP 5
153	LAW	O STOP LAMP1
157	GR	O DI RR LEFT B
158	LA/Y	O STOP LAMP2 NISSAN/ EUR
160	P	O DI RR RIGHT B

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN



Terminal No.	Color of Wire	Signal Name
50	W	I RR DOOR SW
51	LG	I TGATE SW
52	R	I RL DOOR SW
53	SB	I AS DOOR2 SW
57	SB	I DR DOOR2 SW
60	L	CAN-H
80	P	CAN-L

Connector No.	B54
Connector Name	WIRE TO WIRE
Connector Color	WHITE



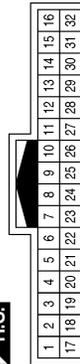
Terminal No.	Color of Wire	Signal Name
1	B	-

Connector No.	B49
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6	SB	-
10	W	-

Connector No.	B46
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
19	LG	-

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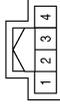
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REMOTE KEYLESS ENTRY SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

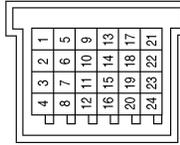
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Connector No.	B70
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE



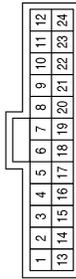
Terminal No.	Color of Wire	Signal Name
3	R	-

Connector No.	B63
Connector Name	JOINT CONNECTOR-B01
Connector Color	GRAY



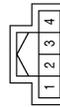
Terminal No.	Color of Wire	Signal Name
3	P	-
4	L	-
7	P	-
8	L	-
19	P	-
20	L	-

Connector No.	B55
Connector Name	AUTOMATIC BACK DOOR CONTROL MODULE
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
12	P	CAN-L
24	L	CAN-H

Connector No.	B141
Connector Name	FRONT DOOR SWITCH RH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	GR	-

Connector No.	B140
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6	GR	-
10	W	-

Connector No.	B71
Connector Name	FRONT DOOR SWITCH LH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	SB	-

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REMOTE KEYLESS ENTRY SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

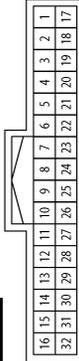
< WIRING DIAGRAM >

Connector No.	D505
Connector Name	WIRE TO WIRE
Connector Color	WHITE



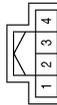
Terminal No.	Color of Wire	Signal Name
1	B	-

Connector No.	D501
Connector Name	WIRE TO WIRE
Connector Color	WHITE



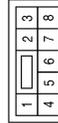
Terminal No.	Color of Wire	Signal Name
19	W	-

Connector No.	B142
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	W	-

Connector No.	D512
Connector Name	BACK DOOR LOCK ASSEMBLY (WITH AUTOMATIC BACK DOOR SYSTEM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
7	W	-
8	B	-

Connector No.	D508
Connector Name	BACK DOOR LOCK ASSEMBLY (WITHOUT AUTOMATIC BACK DOOR SYSTEM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	W	-
4	GR	-

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DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

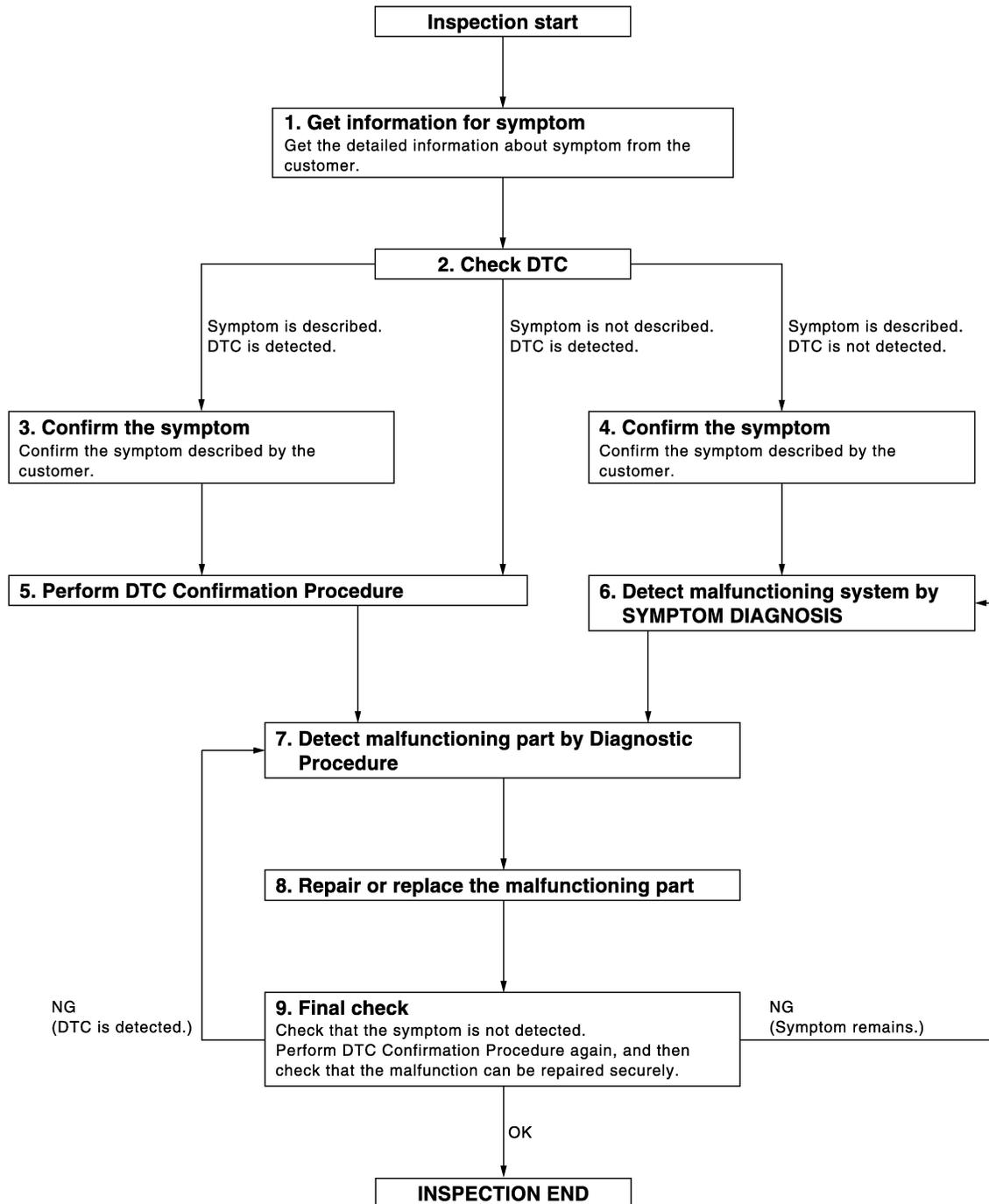
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:000000012423825

OVERALL SEQUENCE



DETAILED FLOW

Revision: September 2015

DLK-328

JMKIA2270GB

2016 Rogue NAM

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

1.GET INFORMATION FOR SYMPTOM

Get the detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurred).

>> GO TO 2.

2.CHECK DTC

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

Is any symptom described and any DTC detected?

- Symptom is described, DTC is displayed>>GO TO 3.
- Symptom is described, DTC is not displayed>>GO TO 4.
- Symptom is not described, DTC is displayed>>GO TO 5.

3.CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.
Connect CONSULT to the vehicle in "Data Monitor" and check real time diagnosis results.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5.

4.CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.
Connect CONSULT to the vehicle in "Data Monitor" and check real time diagnosis results.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 6.

5.PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected again.
At this time, always connect CONSULT to the vehicle, and check diagnostic results in real time.
If two or more DTCs are detected, refer to [BCS-109. "DTC Inspection Priority Chart"](#) and determine trouble diagnosis order.

NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC Confirmation Procedure is not included in Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check.
If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC Confirmation Procedure.

Is DTC detected?

- Yes >> GO TO 7.
- No >> Refer to [GI-45. "Intermittent Incident"](#).

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

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

>> GO TO 7.

7.DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the system.

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DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

The Diagnostic Procedure described based on open circuit inspection. A short circuit inspection is also required for the circuit check in the Diagnostic Procedure.

Is malfunctioning part detected?

YES >> GO TO 8.

NO >> Check voltage of related BCM terminals using CONSULT.

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 9.

9. FINAL CHECK

When DTC was detected in step 2, perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunction have been repaired securely.

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

Is the inspection result normal?

NO (DTC is detected)>>GO TO 7.

NO (Symptom remains)>>GO TO 6.

YES >> Inspection End.

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

A

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:000000012423826

B

Perform the system initialization when replacing BCM, replacing keyfob or registering an additional keyfob.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:000000012423827

C

Refer to the CONSULT Immobilizer mode and follow the on-screen instructions.

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U1000 CAN COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000012816099

Refer to [LAN-11, "System Description"](#).

DTC Logic

INFOID:0000000012816100

DTC DETECTION LOGIC

NOTE:

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

CONSULT Display	DTC Detection Condition	Possible cause
CAN COMM CIRCUIT [U1000]	When any listed module cannot communicate with CAN communication signal continuously for 2 seconds or more with ignition switch ON.	In CAN communication system, any item (or items) of the following listed below is malfunctioning: <ul style="list-style-type: none">• Transmission• Receiving (ECM)• Receiving (VDC/TCS/ABS)• Receiving (METER/M&A)• Receiving (TCM)• Receiving (IPDM E/R)

Diagnosis Procedure

INFOID:0000000012816101

1. PERFORM SELF DIAGNOSTIC

1. Turn ignition switch ON and wait for 2 second or more.
2. Check "Self Diagnostic Result".

Is "CAN COMM CIRCUIT" displayed?

- YES >> Perform CAN Diagnosis as described in DIAGNOSIS section of CONSULT Operation Manual.
NO >> Refer to [GI-45, "Intermittent Incident"](#).

U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

U1010 CONTROL UNIT (CAN)

DTC Logic

INFOID:000000012816102

DTC DETECTION LOGIC

CONSULT Display	DTC Detection Condition	Possible Cause
CAN COMM CIRCUIT [U1010]	BCM detected internal CAN communication circuit malfunction.	BCM

Diagnosis Procedure

INFOID:000000012816103

1. REPLACE BCM

When DTC U1010 is detected, replace BCM.

>> Replace BCM. Refer to [BCS-137. "Removal and Installation"](#).

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:000000012816104

Regarding Wiring Diagram information, refer to [BCS-112. "Wiring Diagram"](#).

1. CHECK FUSE

Check that the following fuse is not blown.

Terminal No.	Signal name	Fuse No.
161	BCM power supply	7 (10A)

Is the fuse blown?

YES >> Replace the blown fuse after repairing the affected circuit.

NO >> GO TO 2.

2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector M20.
2. Check voltage between BCM connector M20 and ground.

BCM		Ground	Voltage (Approx.)
Connector	Terminal		
M20	161	—	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connectors.

3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M20 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	170	—	Yes
	171		

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness or connectors.

DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

DOOR SWITCH

Description

INFOID:0000000012423834

Detects door open/close condition.

Component Function Check

INFOID:0000000012423835

1.CHECK FUNCTION

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

Monitor item	Condition		Status
DOOR SW-DR	Front door LH	Open	On
		Closed	Off
DOOR SW-AS	Front door RH	Open	On
		Closed	Off
DOOR SW-RL	Rear door LH	Open	On
		Closed	Off
DOOR SW-RR	Rear door RH	Open	On
		Closed	Off

Is the inspection result normal?

YES >> Door switch is OK.

NO >> Refer to [DLK-335. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012423836

Regarding Wiring Diagram information, refer to [DLK-304. "Wiring Diagram"](#).

1.CHECK DOOR SWITCH INPUT SIGNAL

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

(+)		Terminal	(-)	Signal (Reference value)
Door switch				
Connector				
Front LH	B71	3	Ground	
Front RH	B141			
Rear LH	B70			
Rear RH	B142			

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector.

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DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

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

Door switch		BCM		Continuity
Connector	Terminal	Connector	Terminal	
Front LH	B71	3	B16	57
Front RH	B141			53
Rear LH	B70			52
Rear RH	B142			50
Yes				

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

Door switch		Terminal	Ground	Continuity
Connector	Terminal			
Front LH	B71	3	Ground	No
Front RH	B141			
Rear LH	B70			
Rear RH	B142			

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-137, "Removal and Installation"](#).
- NO >> Repair or replace harness.

3.CHECK DOOR SWITCH

Refer to [DLK-161, "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 4.
- NO >> Replace malfunctioning door switch. Refer to [DLK-398, "Removal and Installation"](#).

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000012423837

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Disconnect door switch connector.
3. Check door switch.

Terminal		Door switch condition	Continuity
Door switch			
3	Ground part of door switch	Pressed	No
		Released	Yes

Is the inspection result normal?

- YES >> Inspection End.
- NO >> Replace malfunctioning door switch. Refer to [DLK-398, "Removal and Installation"](#).

DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

DOOR LOCK AND UNLOCK SWITCH

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000012423838

Transmits door lock/unlock operation to BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000012423839

1.CHECK FUNCTION

With CONSULT

Check "CDL LOCK SW", "CDL UNLOCK SW" in "Data Monitor".

Monitor item	Condition
CDL LOCK SW	LOCK : ON
	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 [DLK-337, "DRIVER SIDE : Diagnosis Procedure"](#).

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000012423840

Regarding Wiring Diagram information, refer to [DLK-304, "Wiring Diagram"](#).

1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage at the main power window and door lock/unlock switch connector when the switch is turned to "LOCK" or "UNLOCK".

Connector	Main power window and door lock/unlock switch state	Terminal	Voltage (Approx.)
D6	Neutral → Unlock	15	Battery voltage → 0
	Neutral → Lock	3	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 2.

2.CHECK POWER WINDOW SWITCH GROUND

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch connector.
3. Check continuity between main power window and door lock/unlock switch connector and ground.

Main power window and door lock/unlock switch connector	Terminal	Continuity
D6	1 Ground	Yes

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK POWER WINDOW SWITCH

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DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Check continuity between main power window and door lock/unlock switch terminals.

Main power window and door lock/unlock switch state	Terminals	Continuity
Unlock	1 - 3	Yes
Lock	1 - 15	
Neutral/Unlock	1 - 15	No
Neutral/Lock	1 - 3	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace main power window and door lock/unlock switch. Refer to [PWC-65, "Removal and Installation"](#).

4. CHECK POWER WINDOW SWITCH CIRCUITS

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

BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
M18	40	D6	15	Yes
	10		3	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Continuity
M18	40	Ground
	10	

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5. CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:000000012423841

Transmits door lock/unlock operation to BCM.

PASSENGER SIDE : Component Function Check

INFOID:000000012423842

1. CHECK FUNCTION

 **With CONSULT**

Check "CDL LOCK SW", "CDL UNLOCK SW" in "Data Monitor".

Monitor item	Condition
CDL LOCK SW	LOCK : ON
	UNLOCK : OFF

DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Monitor item	Condition
CDL UNLOCK SW	LOCK : OFF
	UNLOCK : ON

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.

NO >> Refer to [DLK-339, "PASSENGER SIDE : Diagnosis Procedure"](#).

PASSENGER SIDE : Diagnosis Procedure

INFOID:000000012423843

Regarding Wiring Diagram information, refer to [DLK-304, "Wiring Diagram"](#).

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage at the power window and door lock/unlock switch RH connector when the switch is changed to "LOCK" or "UNLOCK".

Connector	Power window and door lock/unlock switch RH state	Terminal	Voltage (Approx.)
D112	Neutral → Lock	1	Battery voltage → 0
	Neutral → Unlock	2	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 2.

2. CHECK POWER WINDOW SWITCH GROUND

1. Turn ignition switch OFF.
2. Disconnect power window and door lock/unlock switch RH connector.
3. Check continuity between power window and door lock/unlock switch RH connector and ground.

Power window and door lock/unlock switch RH connector	Terminal	Continuity
D112	3 Ground	Yes

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK POWER WINDOW SWITCH

Check continuity between power window and door lock/unlock switch RH terminals.

Power window and door lock/unlock switch RH state	Terminals	Continuity
Lock	1 - 3	Yes
Unlock	2 - 3	
Neutral/Unlock	1 - 3	No
Neutral/Lock	2 - 3	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power window and door lock/unlock switch RH. Refer to [PWC-66, "Removal and Installation"](#).

4. CHECK POWER WINDOW SWITCH CIRCUITS

1. Disconnect BCM connector.

DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

2. Check continuity between BCM connector and power window and door lock/unlock switch RH connector.

BCM connector	Terminal	Power window and door lock/unlock switch RH connector	Terminal	Continuity
M18	10	D112	1	Yes
	40		2	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M18	10	Ground	No
	40		

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5. CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

DOOR KEY CYLINDER SWITCH

Description

INFOID:0000000012423844

When the mechanical key is inserted and turned into the front door lock key cylinder switch LH, the switch transmits the LOCK or UNLOCK signal directly to the BCM.

Component Function Check

INFOID:0000000012423845

1. CHECK FUNCTION

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

Monitor item	Condition	Status
KEY CYL LK-SW	Lock	ON
	Neutral / Unlock	OFF
KEY CYL UN-SW	Unlock	ON
	Neutral / Lock	OFF

Is the inspection result normal?

- YES >> Door key cylinder switch is OK.
NO >> Refer to [DLK-341, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012423846

Regarding Wiring Diagram information, refer to [DLK-304, "Wiring Diagram"](#).

1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage between BCM connector and ground.

Terminals		Key position	Voltage (V) (Approx.)
(+)	(-)		
BCM connector	Terminal		
M19	92	Lock	0
		Neutral / Unlock	8
	93	Unlock	0
		Neutral / Lock	8

Is the inspection result normal?

- YES >> Front door lock key cylinder switch LH is OK.
NO >> GO TO 2.

2. CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect front door lock key assembly LH connector.
3. Check continuity between front door lock assembly LH connector and ground.

Front door lock assembly LH connector	Terminal	Ground	Continuity
D23	4		Yes

Is the inspection result normal?

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DOOR KEY CYLINDER SWITCH

[WITHOUT INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

- YES >> GO TO 3.
 NO >> Repair or replace harness.

3. CHECK DOOR KEY CYLINDER SIGNAL CIRCUIT

1. Disconnect BCM connector M18.
2. Check continuity between front door lock assembly LH connector and BCM connector M18.

Front door lock assembly LH connector	Terminal	BCM connector	Terminal	Continuity
D23	6	M19	92	Yes
	5		93	

3. Check continuity between front door lock assembly LH connector and ground.

Front door lock assembly LH connector	Terminal	Ground	Continuity
D23	6	Ground	No
	5		

Is the inspection result normal?

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

4. CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.
 Refer to [DLK-342, "Component Inspection"](#).

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to [GI-45, "Intermittent Incident"](#).
 NO >> Replace front door lock assembly LH. Refer to [DLK-386, "DOOR LOCK : Removal and Installation"](#).

Component Inspection

INFOID:000000012423847

COMPONENT INSPECTION

1. CHECK DOOR KEY CYLINDER SWITCH

Check front door lock key cylinder switch LH.

Terminal		Key position	Continuity
Front door lock key cylinder switch LH connector			
6	4	Lock	Yes
		Neutral / Unlock	No
5		Unlock	Yes
		Neutral / Lock	No

Is the inspection result normal?

- YES >> Key cylinder switch is OK.
 NO >> Replace front door lock assembly LH. Refer to [DLK-386, "DOOR LOCK : Removal and Installation"](#).

KEY SWITCH (BCM INPUT)

[WITHOUT INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

KEY SWITCH (BCM INPUT)

Diagnosis Procedure

INFOID:000000012423848

Regarding Wiring Diagram information, refer to [DLK-304. "Wiring Diagram"](#).

1. CHECK KEY SWITCH INPUT SIGNAL

 With CONSULT

Check key switch "KEY SW" in "Data Monitor". Refer to [BCS-88. "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

- When key is inserted to ignition key cylinder:

KEY SW : ON

- When key is removed from ignition key cylinder:

KEY SW : OFF

 Without CONSULT

Check voltage between BCM connector M18 terminal 37 and ground.

Connector	Terminal		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M19	104	Ground	Key is inserted.	Battery voltage
			Key is removed.	0

Is the inspection result normal?

- YES >> Key switch (insert) circuit is OK.
- NO >> GO TO 2.

2. CHECK KEY SWITCH (INSERT)

- Turn ignition switch OFF.
- Disconnect key switch connector.
- Check continuity between key switch terminals.

Terminals	Condition	Continuity
3 - 4	Key is inserted.	Yes
	Key is removed.	No

Is the inspection result normal?

- YES >> Repair or replace harness or fuse.
- NO >> Replace key switch.

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DOOR LOCK ACTUATOR

[WITHOUT INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

DOOR LOCK ACTUATOR DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:000000012423849

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to [DLK-344, "DRIVER SIDE : Diagnosis Procedure"](#).

DRIVER SIDE : Diagnosis Procedure

INFOID:000000012423850

Regarding Wiring Diagram information, refer to [DLK-304, "Wiring Diagram"](#).

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+)		(-)	Condition	Voltage (Approx.)
Front door lock assembly LH Connector	Terminal			
D23	1	Ground	Door lock and unlock switch	Battery voltage
	2		Lock Unlock	

Is the inspection result normal?

YES >> Replace front door lock assembly LH. Refer to [DLK-386, "DOOR LOCK : Removal and Installation"](#).

NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM		Front door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
M20	165	D23	1	Yes
	172		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	165		No
	172		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

DOOR LOCK ACTUATOR

[WITHOUT INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

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

(+)		(-)	Condition	Voltage (Approx.)
BCM				
Connector	Terminal	Ground	Door lock and unlock switch	Battery voltage
M20	165			
	172	Unlock		

Is the inspection result normal?

YES >> Replace front door lock assembly LH. Refer to [DLK-386, "DOOR LOCK : Removal and Installation"](#).

NO >> Replace BCM. Refer to [BCS-137, "Removal and Installation"](#).

PASSENGER SIDE

PASSENGER SIDE : Component Function Check

INFOID:000000012423851

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to [DLK-345, "PASSENGER SIDE : Diagnosis Procedure"](#).

PASSENGER SIDE : Diagnosis Procedure

INFOID:000000012423852

Regarding Wiring Diagram information, refer to [DLK-304, "Wiring Diagram"](#).

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+)		(-)	Condition	Voltage (Approx.)
Front door lock actuator RH				
Connector	Terminal	Ground	Door lock and unlock switch	Battery voltage
D113	5			
	6	Lock		

Is the inspection result normal?

YES >> Replace front door lock actuator RH. Refer to [DLK-386, "DOOR LOCK : Removal and Installation"](#).

NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM		Front door lock actuator RH		Continuity
Connector	Terminal	Connector	Terminal	
M20	165	D113	5	Yes
	163		6	

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DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	165		No
	163		

Is the inspection result normal?

- YES >> GO TO 3.
 NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

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

(+)		(-)	Condition	Voltage (Approx.)
BCM				
Connector	Terminal			
M20	165	Ground	Door lock and unlock switch	Unlock
	163			Lock
				Battery voltage

Is the inspection result normal?

- YES >> Replace front door lock actuator RH. Refer to [DLK-386, "DOOR LOCK : Removal and Installation"](#).
 NO >> Replace BCM. Refer to [BCS-137, "Removal and Installation"](#).

REAR LH

REAR LH : Component Function Check

INFOID:000000012423853

1.CHECK FUNCTION

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

Is the inspection result normal?

- YES >> Door lock actuator is OK.
 NO >> Refer to [DLK-346, "REAR LH : Diagnosis Procedure"](#).

REAR LH : Diagnosis Procedure

INFOID:000000012423854

Regarding Wiring Diagram information, refer to [DLK-304, "Wiring Diagram"](#).

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+)		(-)	Condition	Voltage (Approx.)
Rear door lock actuator LH				
Connector	Terminal			
D206	1	Ground	Door lock and unlock switch	Lock
	2			Unlock
				Battery voltage

Is the inspection result normal?

- YES >> Replace rear door lock actuator LH. Refer to [DLK-390, "DOOR LOCK : Removal and Installation"](#).

DOOR LOCK ACTUATOR

[WITHOUT INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM		Rear door lock actuator LH		Continuity
Connector	Terminal	Connector	Terminal	
B23	148	D206	2	Yes
	149		1	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
B23	148		No
	149		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

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

(+)		(-)	Condition	Voltage (Approx.)
Connector	Terminal			
B23	148	Ground	Door lock and unlock switch	Battery voltage
	149		Unlock Lock	

Is the inspection result normal?

YES >> Replace rear door lock actuator LH. Refer to [DLK-390. "DOOR LOCK : Removal and Installation"](#).

NO >> Replace BCM. Refer to [BCS-137. "Removal and Installation"](#).

REAR RH

REAR RH : Component Function Check

INFOID:000000012423855

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to [DLK-347. "REAR RH : Diagnosis Procedure"](#).

REAR RH : Diagnosis Procedure

INFOID:000000012423856

Regarding Wiring Diagram information, refer to [DLK-304. "Wiring Diagram"](#).

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect rear door lock actuator RH connector.

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DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

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

(+)		(-)	Condition		Voltage (Approx.)
Rear door lock actuator RH					
Connector	Terminal				
D306	5	Ground	Door lock and unlock switch	Unlock	Battery voltage
	6			Lock	

Is the inspection result normal?

- YES >> Replace rear door lock actuator RH. Refer to [DLK-390, "DOOR LOCK : Removal and Installation"](#).
 NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM		Rear door lock actuator RH		Continuity
Connector	Terminal	Connector	Terminal	
B23	148	D306	6	Yes
	149		5	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
B23	148		No
	149		

Is the inspection result normal?

- YES >> GO TO 3.
 NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

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

(+)		(-)	Condition		Voltage (Approx.)
BCM					
Connector	Terminal				
B23	148	Ground	Door lock and unlock switch	Unlock	Battery voltage
	149			Lock	

Is the inspection result normal?

- YES >> Replace rear door lock actuator RH. Refer to [DLK-390, "DOOR LOCK : Removal and Installation"](#).
 NO >> Replace BCM. Refer to [BCS-137, "Removal and Installation"](#).

KEYFOB BATTERY AND FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

KEYFOB BATTERY AND FUNCTION

Description

INFOID:000000012423857

The following functions are available when having and carrying the keyfob:

- Door lock/unlock
- Panic mode (horn and head-lamp operation)

Remote control entry function and panic alarm function are available when operating the remote buttons.

Component Function Check

INFOID:000000012423858

NOTE:

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

- Check keyfob relative signal strength
- Confirm vehicle antenna signal strength

1.CHECK FUNCTION

With CONSULT

Check remote keyless entry receiver "KEYLESS LOCK", "KEYLESS UNLOCK", and "KEYLESS PANIC" in "Data Monitor".

Monitor item	Condition
KEYLESS LOCK	Checks whether value changes from "Off" to "On" when operating keyfob lock button.
KEYLESS UNLOCK	Checks whether value changes from "Off" to "On" when operating keyfob unlock button.
KEYLESS PANIC	Checks whether value changes from "Off" to "On" when operating keyfob panic button.

Is the inspection result normal?

YES >> Keyfob is OK.

NO >> Refer to [DLK-349, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012423859

NOTE:

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

- Check keyfob relative signal strength
- Confirm vehicle antenna signal strength

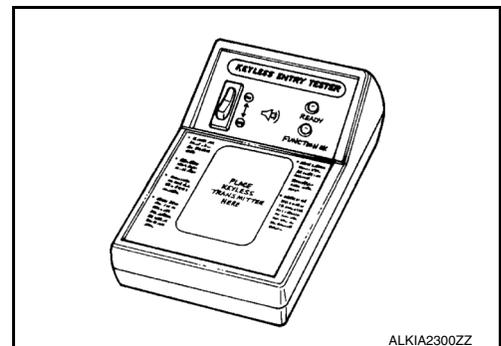
1.CHECK KEYFOB FUNCTION

Check keyfob function using Signal Tech II Tool [- (J-50190)] or Remote Keyless Entry Tester [- (J-43241)] (shown).

Does the test pass?

YES >> Keyfob is OK.

NO >> GO TO 2.



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2.CHECK KEYFOB BATTERY

KEYFOB BATTERY AND FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

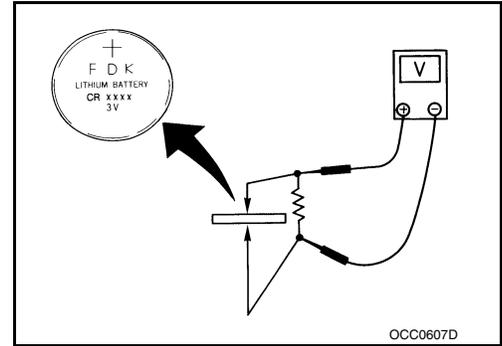
[WITHOUT INTELLIGENT KEY SYSTEM]

Check by connecting a resistance (approximately 300Ω) so that the current value becomes about 10 mA.

Standard : Approx. 2.5 - 3.0V

Is the measurement value within specification?

- YES >> Keyfob battery is OK.
NO >> GO TO 3.



3. REPLACE KEYFOB BATTERY

1. Replace the keyfob battery with a new one (CR2032 or equivalent).

CAUTION:

- When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.
 - Make sure that the + side faces the bottom of the case.
2. Align the tips of the upper and lower parts, and then push them together until it is securely closed.
 3. After replacing the battery, check that all keyfob functions work properly.

Is the inspection result normal?

- YES >> Keyfob is OK.
NO >> Check BCM.

HORN FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

HORN FUNCTION

Component Function Check

INFOID:000000012423860

1.CHECK FUNCTION 1

1. Perform "SIREN" in "Active Test" of "THEFT ALM" of "BCM" using CONSULT.
2. Check the horn operation.

Test item		Description	
HORN	ON	Horn	Sounds (for 0.5 sec)

Is the operation normal?

- YES >> Inspection End.
NO >> Go to [HRN-3. "Wiring Diagram"](#).

Component Inspection

INFOID:000000012423861

1.CHECK ANTI-THEFT HORN RELAY

1. Turn ignition switch OFF.
2. Disconnect anti-theft horn relay.
3. Check voltage between anti-theft horn relay E101 terminal 2 and ground under the following conditions:

(+)	(-)	Condition	Voltage (V) (Approx.)
Anti-theft horn relay Terminal	Ground	12 V direct current supply between terminals 1 and 2	12
2		No current supply	0

Is the inspection result normal?

- YES >> Inspection End.
NO >> Replace anti-theft horn relay.

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WARNING CHIME FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

WARNING CHIME FUNCTION

Description

INFOID:000000012423862

Performs operation method guide and warning with buzzer.

Component Function Check

INFOID:000000012423863

1. CHECK FUNCTION

With CONSULT

1. Check the operation with "BUZZER" in the "Active Test".
2. Touch "IGN KEY WARN ALM", "SEAT BELT WARN TEST" or "LIGHT WARN ALM" on screen.

Is the inspection result normal?

- YES >> Warning buzzer into combination meter is OK.
NO >> Refer to [DLK-352, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012423864

1. CHECK METER BUZZER CIRCUIT

Operate the hazard lights by turning ON the hazard warning switch.

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Replace combination meter. Refer to [MWI-84, "Removal and Installation"](#).

2. CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

HAZARD FUNCTION

[WITHOUT INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

HAZARD FUNCTION

Description

INFOID:000000012423865

Perform answer-back for each operation with number of blinks.

Component Function Check

INFOID:000000012423866

1.CHECK FUNCTION

Check hazard warning lamp "FLASHER" in "Active Test".

Is the inspection result normal?

YES >> Hazard warning lamp circuit is OK.

NO >> Refer to [DLK-353, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012423867

1.CHECK HAZARD SWITCH CIRCUIT

Operate the hazard lights by turning ON the hazard warning switch.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace hazard warning switch circuit. Refer to [EXL-126, "Removal and Installation"](#).

2.CHECK INTERMITTENT INCIDENT

Refer to [GI-45, "Intermittent Incident"](#).

>> Inspection End.

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POWER DOOR LOCK SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

SYMPTOM DIAGNOSIS

POWER DOOR LOCK SYSTEM SYMPTOMS

Symptom Table

INFOID:000000012423868

DOOR LOCK/UNLOCK FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to [DLK-328, "Work Flow"](#).
- Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.
- If the following symptoms are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Symptom	Diagnosis/service procedure	Reference page	
Key reminder door function does not operate properly.	1. Check door switch.	DLK-335	
	2. Check key switch.	DLK-343	
	3. Check Intermittent Incident.	GI-45	
Power door lock does not operate with main power window and door lock/unlock switch or power window and door lock/unlock switch RH.	1. Check BCM Power supply and ground circuit.	BCS-130	
	2. Check main power window and door lock and unlock switch.	DLK-337	
	3. Check power window and door lock and unlock switch RH.	DLK-338	
	4. Check Intermittent Incident.	GI-45	
Specific door lock actuator does not operate.	1. Check door lock actuator.	Driver side	DLK-344
		Passenger side	DLK-345
		Rear LH	DLK-346
		Rear RH	DLK-347
	2. Check Intermittent Incident.	GI-45	
Power door locks do not operate with front door lock key cylinder switch LH.	1. Check key cylinder switch.	DLK-341	
	2. Replace BCM.	BCS-137	
Vehicle speed sensing auto door LOCK operation does not operate.	1. Ensure automatic door lock/unlock function (lock operation) is enabled.	DLK-298	
	2. Check combination meter vehicle speed signal.	MWI-57	
	3. Check intermittent incident.	GI-45	
Ignition OFF interlock auto door UNLOCK function does not operate.	1. Ensure automatic door lock/unlock function (unlock operation) is enabled.	DLK-298	
	2. Check BCM for DTCs.	BCS-109	
	3. Check intermittent incident.	GI-45	

REMOTE KEYLESS ENTRY SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

REMOTE KEYLESS ENTRY SYSTEM SYMPTOMS

Symptom Table

INFOID:000000012423869

REMOTE KEYLESS ENTRY SYSTEM

Symptom	Diagnoses/service procedure	Reference page
All functions of remote keyless entry system do not operate.	1. Keyfob battery and function check (use Remote Keyless Entry Tester [- (J-43241)]) NOTE: If the result of keyfob function check is OK, keyfob is not malfunctioning.	DLK-349
The new ID of keyfob cannot be entered.	1. Keyfob battery and function check (use Remote Keyless Entry Tester [- (J-43241)]) NOTE: If the result of keyfob function check is OK, keyfob is not malfunctioning.	DLK-349
	2. Door switch check	DLK-335
	3. Replace BCM.	BCS-137
Door lock or unlock does not function. (If the power door lock system does not operate manually, check power door lock system)	1. Keyfob battery and function check (use Remote Keyless Entry Tester [- (J-43241)]) NOTE: If the result of keyfob function check is OK, keyfob is not malfunctioning.	DLK-349
	2. Replace BCM.	BCS-137
Hazard and horn reminder does not activate properly when pressing lock or unlock button of keyfob.	1. Check hazard and horn reminder mode with CONSULT NOTE: Hazard and horn reminder mode can be changed. First check the hazard and horn reminder mode setting.	DLK-299
	2. Door switch check	DLK-335
	3. Replace BCM.	BCS-137
Hazard reminder does not activate properly when pressing lock or unlock button of keyfob. (Horn reminder OK)	1. Check hazard reminder mode with CONSULT NOTE: Hazard reminder mode can be changed. First check the hazard reminder mode setting.	DLK-299
	2. Check hazard function with hazard switch	—
	3. Replace BCM.	BCS-137
Horn reminder does not activate properly when pressing lock or unlock button of keyfob. (Hazard reminder OK)	1. Check horn reminder mode with CONSULT NOTE: Horn reminder mode can be changed. First check the horn reminder mode setting.	DLK-299
	2. Check horn function with horn switch	—
	3. IPDM E/R operation check	PCS-7
	4. Replace BCM.	BCS-137
Room lamp illumination does not operate properly.	1. Room lamp operation check	INL-7
	2. Door switch check	DLK-335
	3. Replace BCM.	BCS-137
Panic alarm (horn and headlamp) does not activate when panic alarm button is continuously pressed.	1. Keyfob battery and function check (use Remote Keyless Entry Tester [- (J-43241)]) NOTE: If the result of keyfob function check is OK, keyfob is not malfunctioning.	DLK-349
	2. Replace BCM.	BCS-137

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REMOTE KEYLESS ENTRY SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Symptom	Diagnoses/service procedure	Reference page
Auto door lock operation does not activate properly. (All other remote keyless entry functions OK.)	1. Check auto door lock operation mode with CONSULT NOTE: Auto door lock operation mode can be changed. First check the auto door lock operation mode setting.	DLK-298
	2. Replace BCM.	BCS-137

SQUEAK AND RATTLE TROUBLE DIAGNOSES

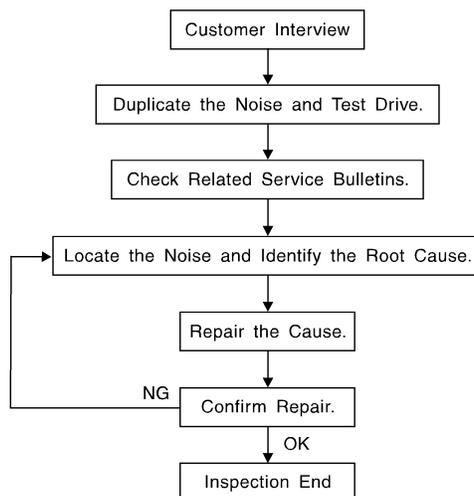
< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:000000012423870



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CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any customer's comments; refer to [DLK-361, "Diagnostic Worksheet"](#). This information is necessary to duplicate the conditions that exist when the noise occurs.

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

DUPLICATE THE NOISE AND TEST DRIVE

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

SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

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

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

CHECK RELATED SERVICE BULLETINS

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

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

LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis Ear: J-39570, Engine Ear: J-39565 and mechanic's stethoscope).
2. Narrow down the noise to a more specific area and identify the cause of the noise by:
 - removing the components in the area that you suspect the noise is coming from.
Do not use too much force when removing clips and fasteners, otherwise clips and fasteners can be broken or lost during the repair, resulting in the creation of new noise.
 - tapping or pushing/pulling the component that you suspect is causing the noise.
Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
 - feeling for a vibration with your hand by touching the component(s) that you suspect is (are) causing the noise.
 - placing a piece of paper between components that you suspect are causing the noise.
 - looking for loose components and contact marks.Refer to [DLK-358. "Generic Squeak and Rattle Troubleshooting"](#).

REPAIR THE CAUSE

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

CAUTION:

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

NOTE:

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

CONFIRM THE REPAIR

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

Generic Squeak and Rattle Troubleshooting

INFOID:000000012423871

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

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

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

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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.

D

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.

E

CENTER CONSOLE

Components to pay attention to include:

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

F
G

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

DOORS

Pay attention to the:

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

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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.

J

TRUNK

Trunk noises are often caused by a loose jack or loose items put into the trunk by the owner.

In addition look for:

1. Trunk lid bumpers out of adjustment
2. Trunk lid striker out of adjustment
3. The trunk lid torsion bars knocking together
4. A loose license plate or bracket

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

SUNROOF/HEADLINING

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

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

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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.

P

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:

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

SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

3. Loose screws at console attachment points.

SEATS

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

Cause of seat noise include:

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

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

UNDERHOOD

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

Causes of transmitted underhood noise include:

1. Any component installed to the engine wall
2. Components that pass through the engine wall
3. Engine wall mounts and connectors
4. 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.

SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Diagnostic Worksheet

INFOID:000000012423872

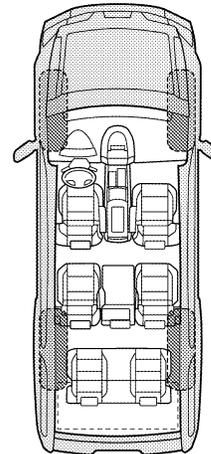
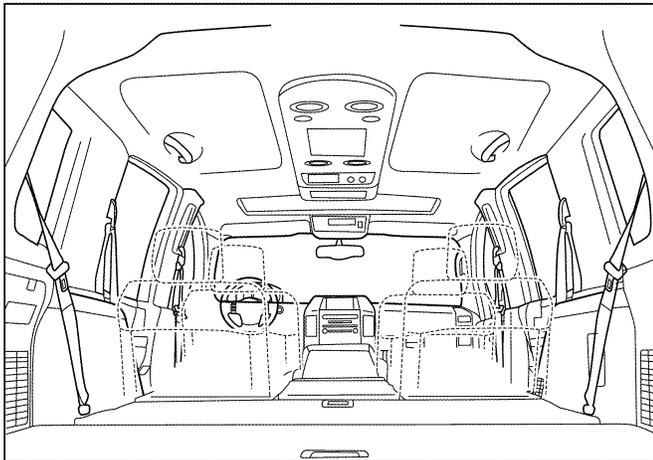
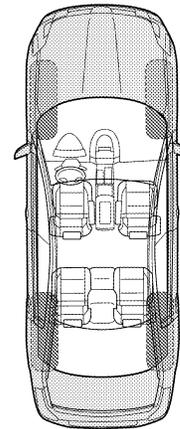
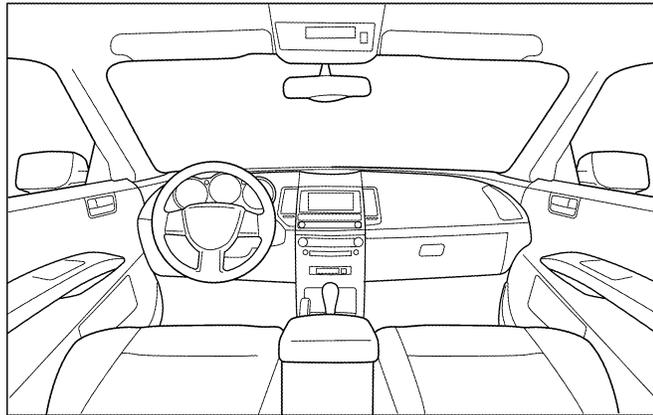
Dear Customer:

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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SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

II. WHEN DOES IT OCCUR? (please check the boxes that apply)

- | | |
|---|--|
| <input type="checkbox"/> Anytime | <input type="checkbox"/> After sitting out in the rain |
| <input type="checkbox"/> 1st time in the morning | <input type="checkbox"/> When it is raining or wet |
| <input type="checkbox"/> Only when it is cold outside | <input type="checkbox"/> Dry or dusty conditions |
| <input type="checkbox"/> Only when it is hot outside | <input type="checkbox"/> Other: |

III. WHEN DRIVING:

- Through driveways
- Over rough roads
- Over speed bumps
- Only about ____ mph
- On acceleration
- Coming to a stop
- On turns: left, right or either (circle)
- With passengers or cargo
- Other: _____
- After driving ____ miles or ____ minutes

IV. WHAT TYPE OF NOISE

- 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)

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

	YES	NO	Initials of person performing
Vehicle test driven with customer	<input type="checkbox"/>	<input type="checkbox"/>	_____
- Noise verified on test drive	<input type="checkbox"/>	<input type="checkbox"/>	_____
- Noise source located and repaired	<input type="checkbox"/>	<input type="checkbox"/>	_____
- Follow up test drive performed to confirm repair	<input type="checkbox"/>	<input type="checkbox"/>	_____

VIN: _____ Customer Name _____
W.O.# _____ Date: _____

This form must be attached to Work Order

LAI0071E

HOOD

< REMOVAL AND INSTALLATION >

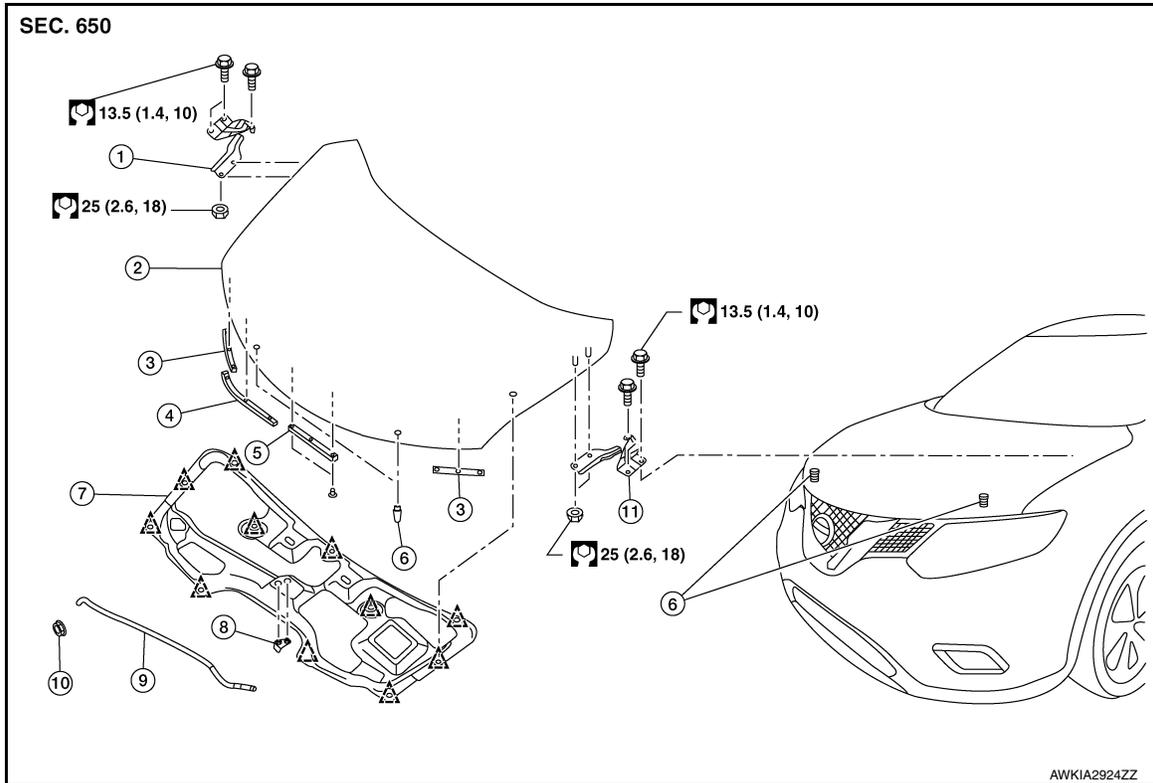
[WITHOUT INTELLIGENT KEY SYSTEM]

REMOVAL AND INSTALLATION

HOOD

Exploded View

INFOID:0000000012423873



- | | | |
|----------------------|---------------------|---------------------|
| 1. Hood hinge (RH) | 2. Hood | 3. Hood side seal |
| 4. Hood front seal | 5. Hood center seal | 6. Bumper rubber |
| 7. Hood insulator | 8. Hood rod clamp | 9. Hood support rod |
| 10. Hood rod grommet | 11. Hood hinge (LH) | △ Clip |

HOOD ASSEMBLY

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000012423874

CAUTION:

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

REMOVAL

1. Support the hood assembly using a suitable tool.

WARNING:

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

HOOD

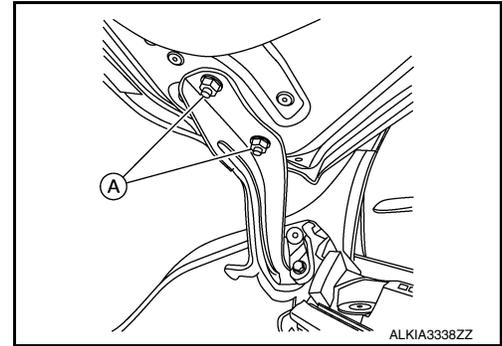
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

2. Remove hood hinge to hood nuts (A) and hood assembly.

NOTE:

RH side shown; LH similar.



INSTALLATION

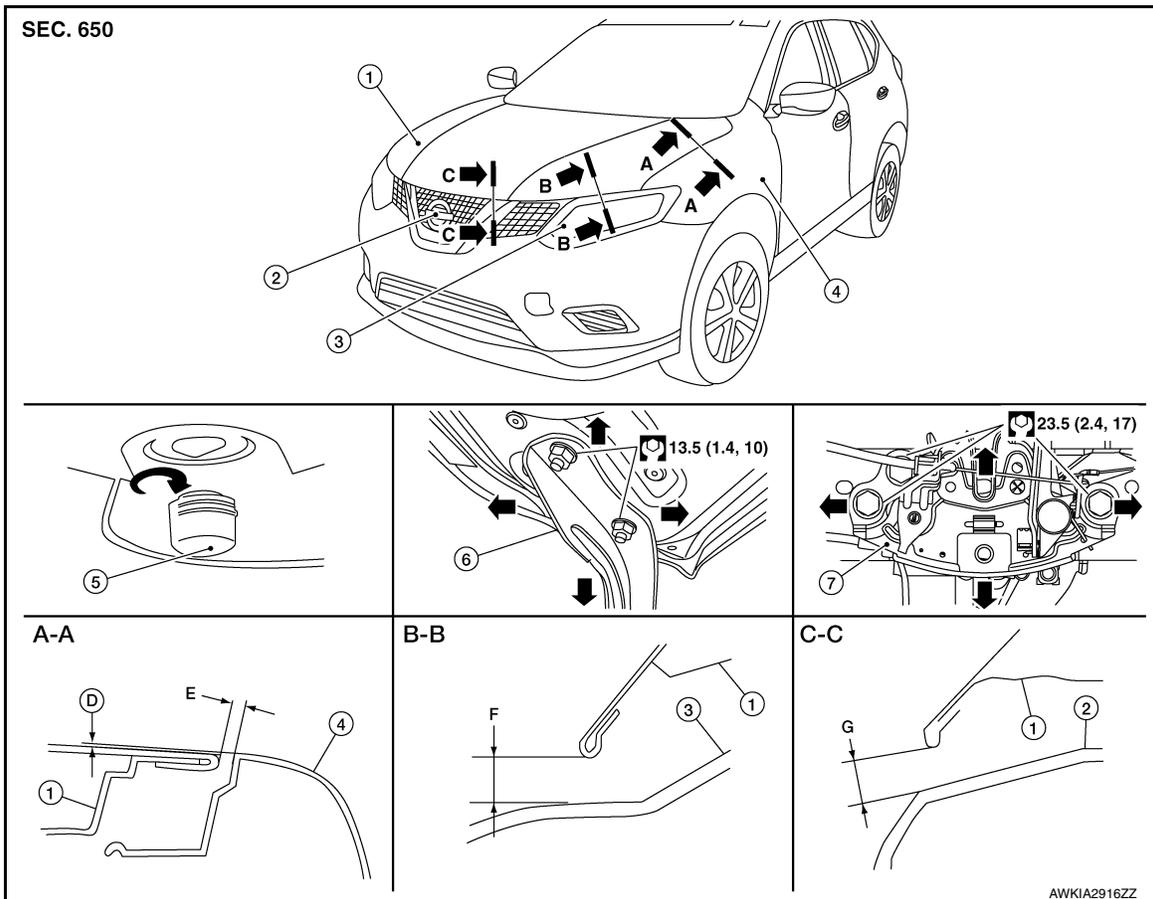
Installation is in the reverse order of removal.

CAUTION:

- Before installing the hood hinge, apply anticorrosive agent onto the surface of the vehicle.
- After installation, perform the hood assembly adjustment procedure. Refer to [DLK-364, "HOOD ASSEMBLY : Adjustment"](#).

HOOD ASSEMBLY : Adjustment

INFOID:000000012423875



- 1. Hood assembly
- 4. Fender
- 7. Hood lock

- 2. Front grille
- 3. Front combination lamp
- 5. Bumper rubber

- 6. Hood hinge

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

HOOD

< REMOVAL AND INSTALLATION >

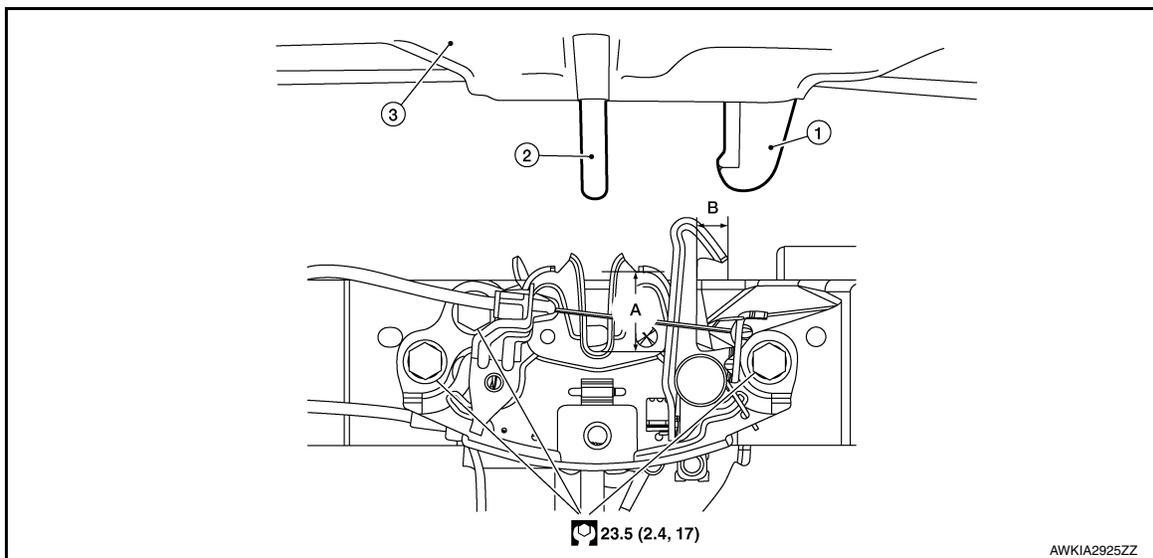
[WITHOUT INTELLIGENT KEY SYSTEM]

Unit: mm (in)

Portion	Section	Item	Measurement	Standard	Parallelism
Hood - Fender	A - A	D	Surface height	0.0 ± 1.0 (0.0 ± 0.04)	1.4 (0.06)
		E	Clearance	3.5 ± 1.5 (0.14 ± 0.04)	1.4 (0.06)
Fender - Front combination lamp	B - B	F	Clearance	9.0 ± 2.0 (0.35 ± 0.08)	2.0 (0.08)
Hood - Front combination lamp	C - C	G	Clearance	1.9 ± 1.1 (0.07 ± 0.04)	1.5 (0.06)

HEIGHT ADJUSTMENT

1. Loosen the hood lock assembly bolts.
2. Adjust the surface height of hood assembly to front grille and front fender according to the specified values by rotating hood bumper rubber.
3. Temporarily tighten hood lock assembly bolts.
4. Adjust (A) and (B) as shown to the following value with hood's own weight by dropping it from approximately 200 mm (7.87 in) height or by pressing hood lightly [approximately 29 N (3.0 kg, 6.5 lb)].



1. Secondary striker 2. Primary striker 3. Hood assembly
A. 20 mm (0.79 in) B. 6.8 mm (0.27 in)

5. After adjustment, tighten hood hinge nuts and bolts to the specified torque.

CAUTION:

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

CLEARANCE ADJUSTMENT

1. Loosen hood hinge nuts and bolts.
2. Loosen the hood lock assembly bolts.
3. Adjust the hood assembly so the clearance measurements are within specifications.
4. Tighten the hood hinge nuts and bolts to specified torque.
5. Tighten the hood lock assembly bolts to specified torque.

HOOD HINGE

HOOD HINGE : Removal and Installation

INFOID:0000000012423876

REMOVAL

1. Remove hood assembly. Refer to [DLK-363, "HOOD ASSEMBLY : Removal and Installation"](#).

HOOD

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

2. Remove front fender. Refer to [DLK-368, "Removal and Installation"](#).
3. Remove hood hinge bolts, and then remove hood hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Before installing the hood hinge, apply anticorrosive agent onto the surface of the vehicle.
- After installation, perform hood assembly adjustment procedure. Refer to [DLK-364, "HOOD ASSEMBLY : Adjustment"](#).

RADIATOR CORE SUPPORT

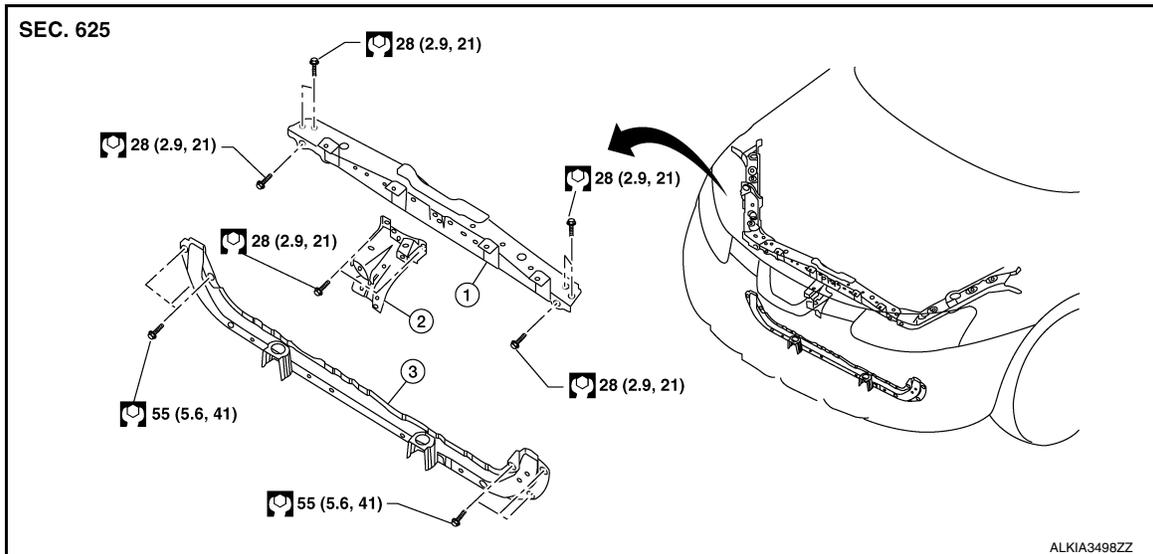
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

RADIATOR CORE SUPPORT

Exploded View

INFOID:000000012423877



1. Radiator core upper support 2. Secondary latch bracket 3. Radiator core lower support

Removal and Installation

INFOID:000000012423878

CAUTION:

When removing radiator core support upper, be careful not to damage the painted surface.

REMOVAL

Radiator Core Upper Support

1. Remove front combination lamp (LH). Refer to [EXL-120, "Removal and Installation"](#) (HALOGEN HEADLAMP) or [EXL-253, "Removal and Installation"](#) (LED HEADLAMP).
2. Remove front air duct. Refer to [EM-26, "Exploded View"](#).
3. Remove hood lock. Refer to [DLK-264, "HOOD LOCK : Removal and Installation"](#).
4. Remove secondary latch. Refer to [DLK-265, "SECONDARY LATCH : Removal and Installation"](#).
5. Remove crash zone sensor. Refer to [SR-22, "Removal and Installation"](#).
6. Remove bolts and radiator core upper support.

Radiator Core Lower Support

1. Remove front bumper fascia. Refer to [EXT-17, "Removal and Installation"](#).
2. Support the radiator using a suitable tool.
3. Remove bolts and radiator core lower support.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Tighten bolts to specified torque. Refer to [DLK-367, "Exploded View"](#).

FRONT FENDER

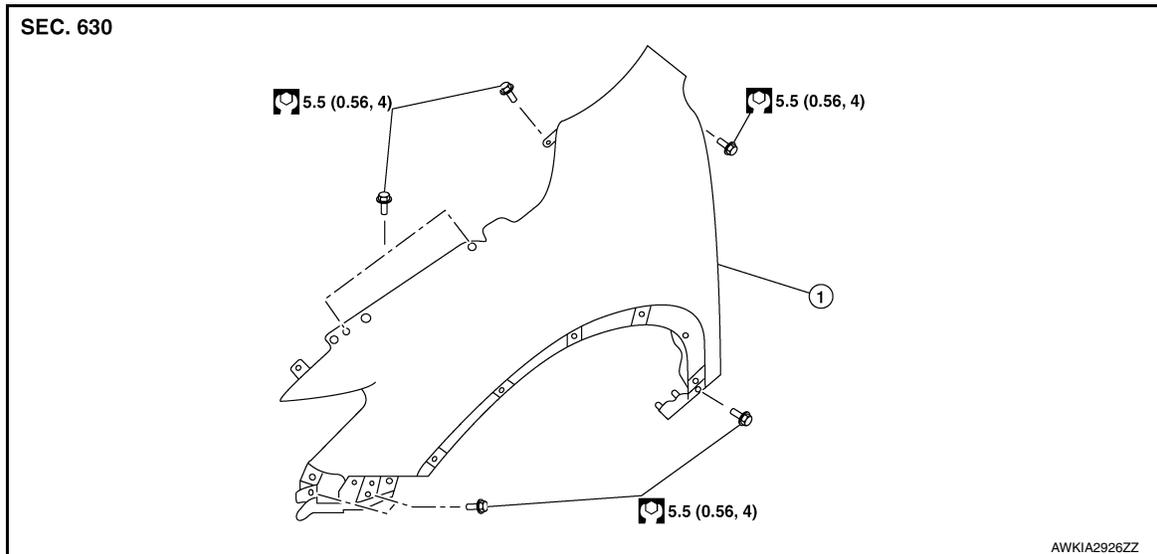
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

FRONT FENDER

Exploded View

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1. Front fender

Removal and Installation

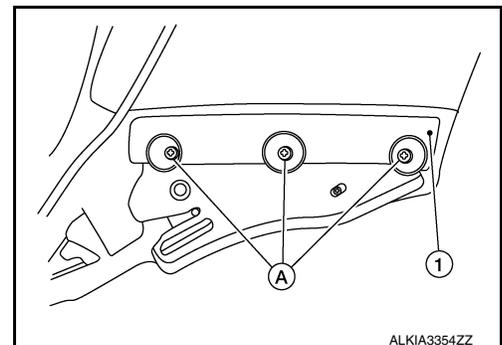
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CAUTION:

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

REMOVAL

1. Remove front bumper fascia. Refer to [EXT-17, "Removal and Installation"](#).
Remove front combination lamp. Refer to [EXL-120, "Removal and Installation"](#) (HALOGEN HEADLAMP) or [EXL-253, "Removal and Installation"](#). (LED HEADLAMP).
2. Remove center mudguard. Refer to [EXT-42, "Removal and Installation"](#).
3. Remove screws (A) and front fender bracket (1).



4. Remove bolts and front fender.

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

Installation is 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 components as necessary:
 - Hood assembly: Refer to [DLK-364, "HOOD ASSEMBLY : Adjustment"](#).
 - Front door: Refer to [DLK-371, "DOOR ASSEMBLY : Adjustment"](#).

FRONT FENDER

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

- Tighten bolts to specification. Refer to [DLK-368, "Exploded View"](#).

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FRONT DOOR

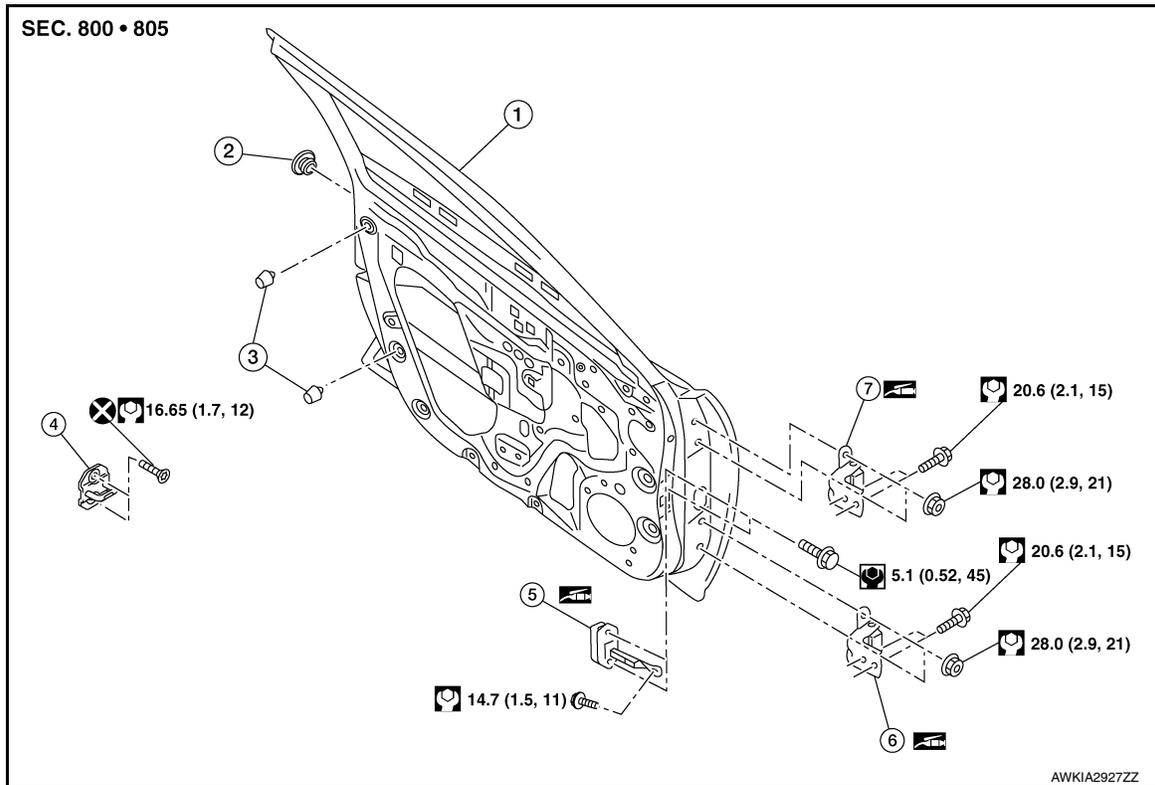
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

FRONT DOOR

Exploded View

INFOID:000000012423881



- | | | |
|---------------------------|--------------------|---------------------------|
| 1. Front door panel | 2. Grommet | 3. Bumper rubber |
| 4. Door striker | 5. Door check link | 6. Front door lower hinge |
| 7. Front door upper hinge | | |

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

INFOID:000000012423882

CAUTION:

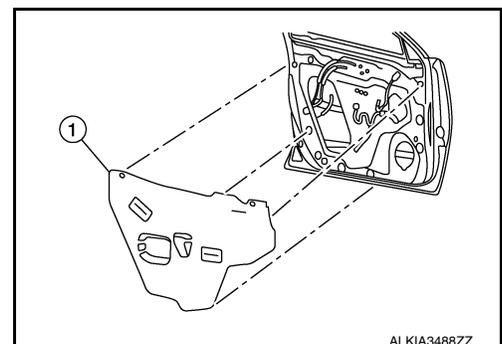
- Use two people when removing or installing the front door due to its heavy weight.
- When removing and installing front door assembly, support front door with a suitable tool.

REMOVAL

1. Disconnect the battery negative and positive terminals and wait at least three minutes with the side air bag (satellite) sensor.
2. Remove front door finisher. Refer to [INT-15. "Removal and Installation"](#).
3. Remove front door vapor barrier (1).

NOTE:

LH side shown; RH similar.



FRONT DOOR

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

4. Disconnect the harness connectors from the front door.
5. Remove front door harness grommet, then harness from the front door.
6. Remove front door check link bolt (body side).
7. Remove front door hinge nuts (door side) and front door assembly.

INSTALLATION

Installation is in the reverse order of removal.

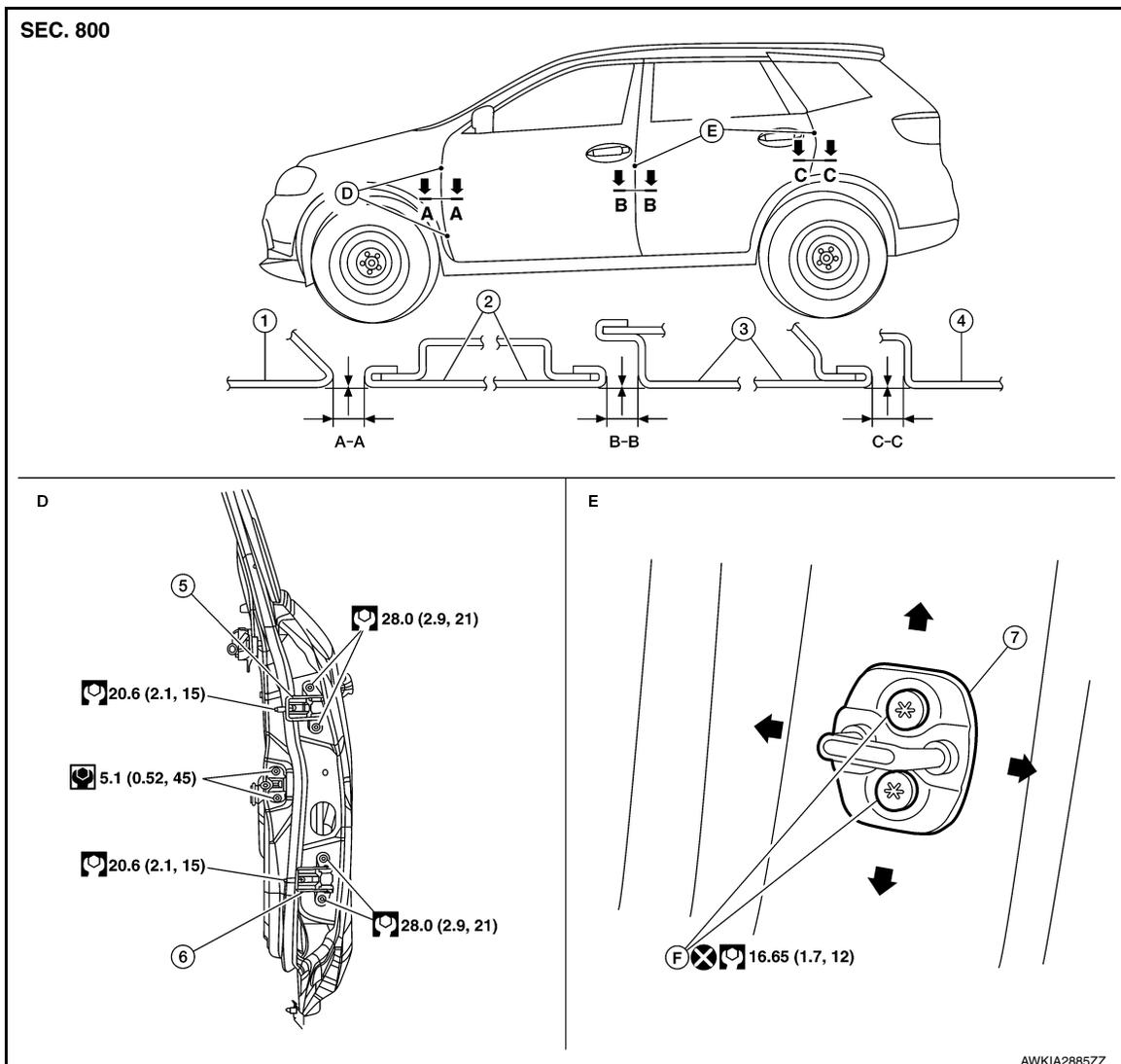
CAUTION:

- Tighten nuts/bolts to specified torque. Refer to [DLK-370, "Exploded View"](#).
- Apply anticorrosive agent where necessary.
- After installation, check front door open/close and lock/unlock operation.
- After installation, perform the front door adjustment procedure. Refer to [DLK-371, "DOOR ASSEMBLY : Adjustment"](#).

DOOR ASSEMBLY : Adjustment

INFOID:000000012423883

ADJUSTMENT



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

Check the clearance and surface height between front door and each part by visual inspection and tactile feel.

FRONT DOOR

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

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	4.2 ± 1.0 (0.17 \pm 0.04)
		Surface height	± 1.0 (\pm 0.04)
Front door - Rear door	B – B	Clearance	4.3 ± 1.0 (0.17 \pm 0.04)
		Surface height	± 1.0 (\pm 0.04)
Rear door - Body side outer	C – C	Clearance	4.0 ± 1.0 (0.16 \pm 0.04)
		Surface height	± 1.0 (\pm 0.04)

1. Remove front fender. Refer to [DLK-368, "Removal and Installation"](#).
2. Loosen front door hinge nuts (door side).
3. Adjust the surface height of front door according to the specifications provided.
4. Temporarily tighten front door hinge nuts (door side).
5. Loosen front 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. After adjustment tighten bolts and nuts to the specified torque.

CAUTION:

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

8. Install front fender. Refer to refer to [DLK-368, "Removal and Installation"](#).

DOOR STRIKER

DOOR STRIKER : Removal and Installation

INFOID:000000012423884

REMOVAL

Remove bolts and front door striker.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

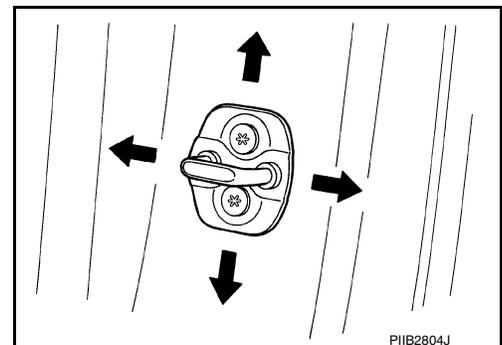
- Do not reuse front door striker bolts.
- After installation, check front door open/close operation. If necessary, adjust the front door striker. Refer to [DLK-372, "DOOR STRIKER : Adjustment"](#).
- Tighten bolts to specified torque. Refer to [DLK-370, "Exploded View"](#).

DOOR STRIKER : Adjustment

INFOID:000000012423885

DOOR STRIKER ADJUSTMENT

1. Loosen door striker bolts
2. Adjust door striker so that it becomes parallel with front door lock insertion direction.



3. Tighten door striker bolts to specification. Refer to [DLK-370, "Exploded View"](#).

FRONT DOOR

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:000000012423886

REMOVAL

1. Remove front fender. Refer to [DLK-368, "Removal and Installation"](#).
2. Remove front door assembly. Refer to [DLK-370, "DOOR ASSEMBLY : Removal and Installation"](#).
3. Remove front door hinge bolts (body side) and front door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Tighten nuts/bolts to specified torque. Refer to [DLK-370, "Exploded View"](#).
- Apply anticorrosive agent to the hinge mating surface.
- After installation, check front door open/close and lock/unlock operation.
- Check door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.
- After installation, perform the front door adjustment procedure. Refer to [DLK-371, "DOOR ASSEMBLY : Adjustment"](#).

DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:000000012423887

REMOVAL

1. Fully close the front door window.
2. Remove front door speaker. Refer to [AV-75, "Removal and Installation"](#) (DISPLAY AUDIO), [AV-218, "Removal and Installation"](#) (NAVIGATION WITHOUT BOSE) or [AV-386, "Removal and Installation"](#) (NAVIGATION WITH BOSE).
3. Remove door check link bolt (body side).
4. Remove door check link bolts (door side).
5. Remove door check link through the hole in door assembly.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Tighten nuts/bolts to specified torque. Refer to [DLK-370, "Exploded View"](#).
- After installation, check front door open/close and lock/unlock operation.
- Check door check link rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.

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REAR DOOR

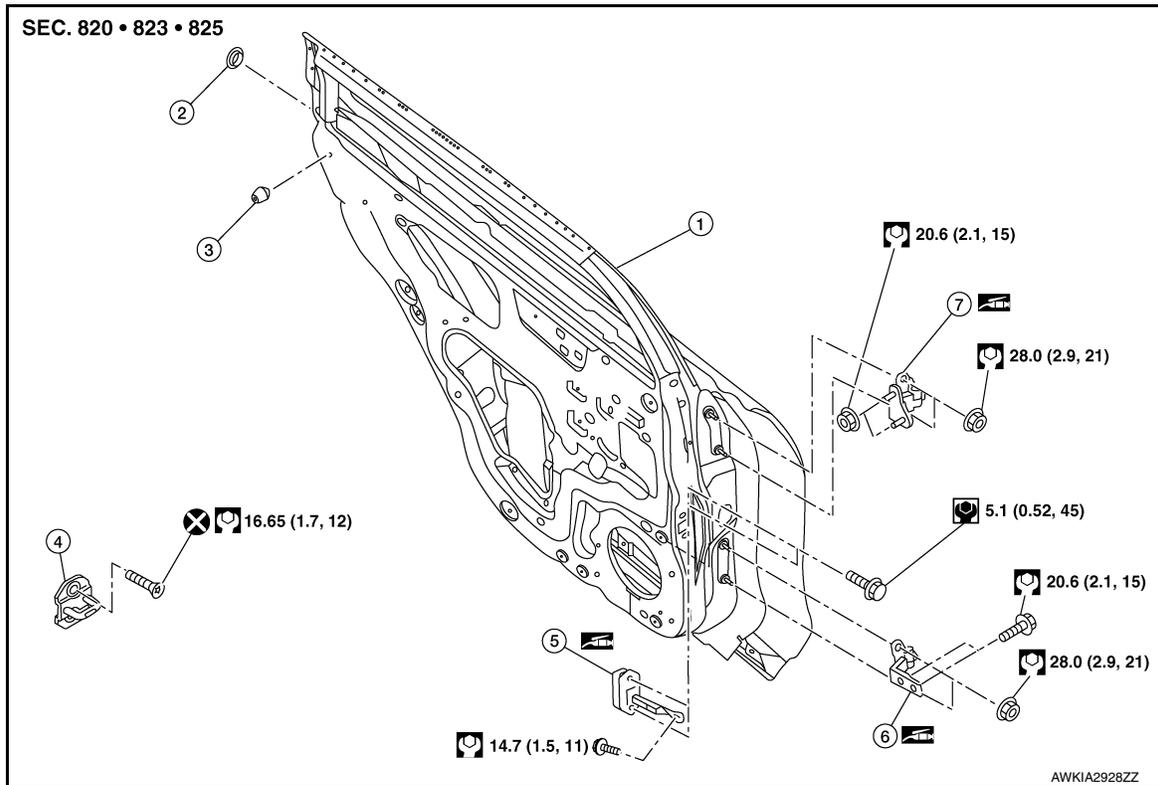
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

REAR DOOR

Exploded View

INFOID:000000012423888



- | | | |
|--------------------------|--------------------|--------------------------|
| 1. Rear door panel | 2. Grommet | 3. Bumper rubber |
| 4. Door striker | 5. Door check link | 6. Rear door lower hinge |
| 7. Rear door upper hinge | | |

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

INFOID:000000012423889

CAUTION:

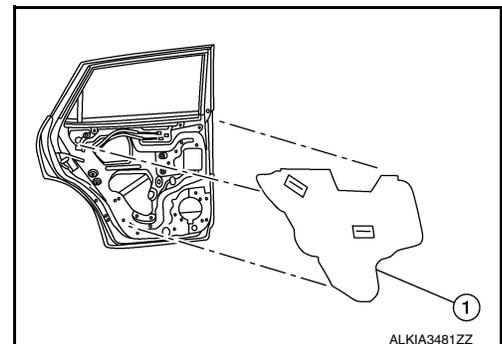
- Use two people when removing or installing the rear door due to its heavy weight.
- When removing and installing rear door assembly, support rear door using a suitable tool.

REMOVAL

1. Remove rear door finisher. Refer to [INT-18. "Removal and Installation"](#).
2. Remove rear door vapor barrier (1).

NOTE:

LH side shown; RH similar.



3. Disconnect the harness connectors from rear door.
4. Remove harness grommet from rear door, then pull out rear door harness from the rear door.

REAR DOOR

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

5. Remove rear door check link bolt (body side).
6. Remove rear door hinge nuts (door side) and rear door assembly.

INSTALLATION

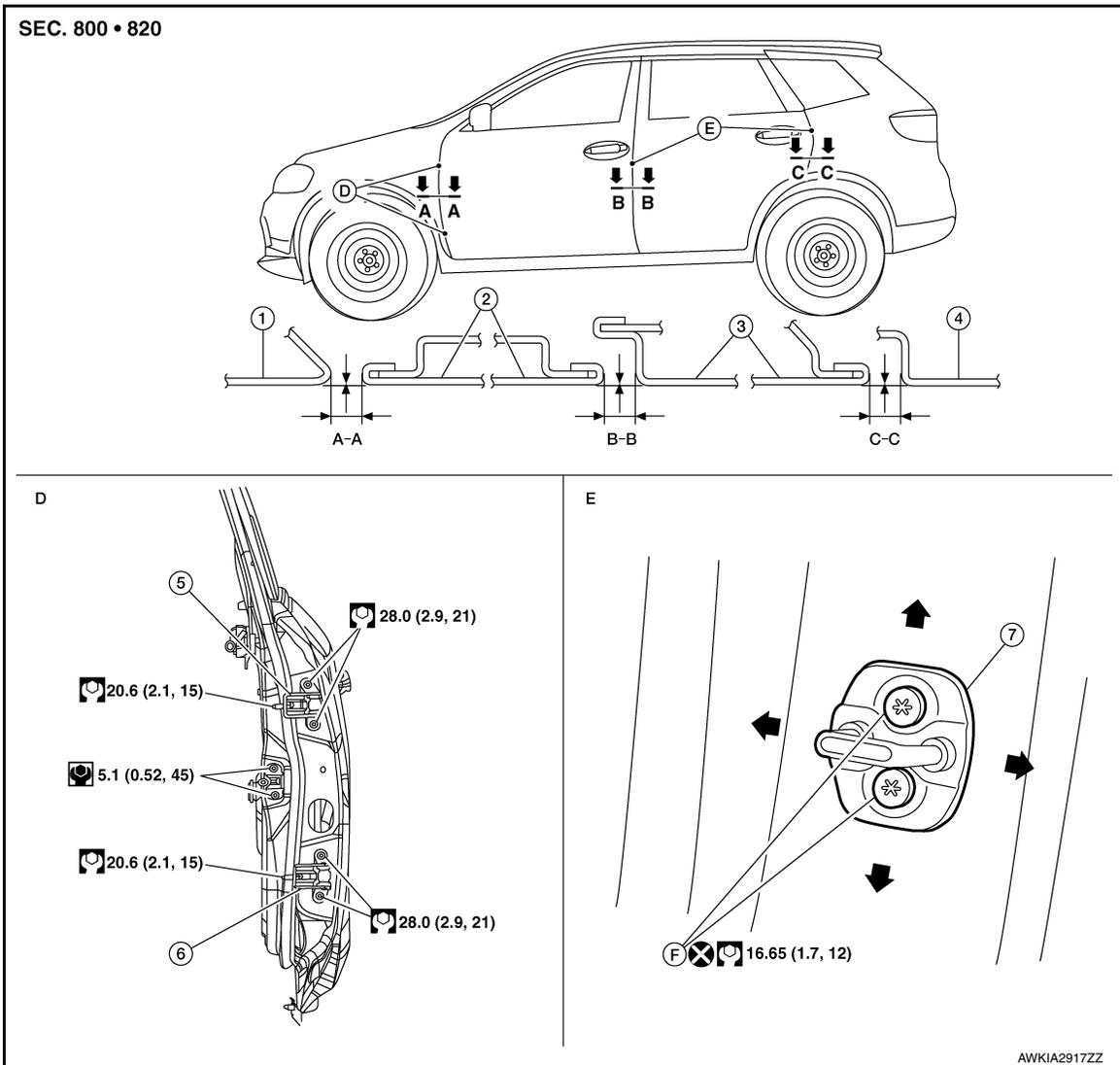
Installation is in the reverse order of removal.

CAUTION:

- Tighten nuts/bolts to specification. Refer to [DLK-374, "Exploded View"](#).
- Apply anticorrosive agent where necessary.
- After installation, check rear door open/close and lock/unlock operation.
- After installation, perform the rear door adjustment procedure. Refer to [DLK-375, "DOOR ASSEMBLY : Adjustment"](#).

DOOR ASSEMBLY : Adjustment

INFOID:000000012423890



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

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 procedures.

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REAR DOOR

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

Unit: mm (in)

Portion	Section	Measurement	Standard
Front fender - Front door	A – A	Clearance	4.2 ± 1.0 (0.17 ± 0.04)
		Surface height	± 1.0 (± 0.04)
Front door - Rear door	B – B	Clearance	4.3 ± 1.0 (0.17 ± 0.04)
		Surface height	± 1.0 (± 0.04)
Rear door - Body side outer	C – C	Clearance	4.0 ± 1.0 (0.16 ± 0.04)
		Surface height	± 1.0 (± 0.04)

1. Remove center pillar lower finisher. Refer to [INT-22, "CENTER PILLAR LOWER FINISHER : Removal and Installation"](#).
2. Loosen rear door hinge nuts (door side).
3. Adjust the surface height of rear door according to specifications provided.
4. Temporarily tighten rear door hinge nuts (door side).
5. Loosen rear 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. After adjustment tighten bolts and nuts to the specified torque.
CAUTION:
 - Check rear door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.
 - After adjusting, apply touch-up paint (body color) to the head of rear door hinge bolts and nuts.
8. Install center pillar lower finisher. Refer to [INT-22, "CENTER PILLAR LOWER FINISHER : Removal and Installation"](#).

DOOR STRIKER

DOOR STRIKER : Removal and Installation

INFOID:000000012423891

REMOVAL

Remove bolts and rear door striker.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

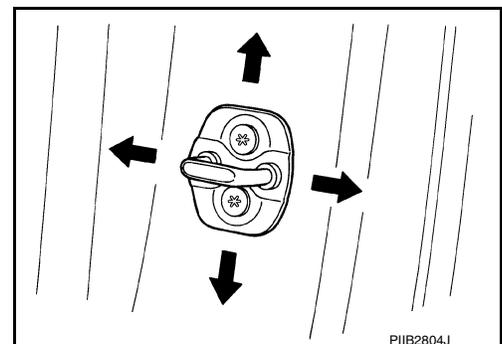
- Do not reuse rear door striker bolts.
- Tighten bolts to specification. Refer to [DLK-374, "Exploded View"](#).
- After installation, check rear door open/close operation. If necessary, adjust the door striker. Refer to [DLK-376, "DOOR STRIKER : Adjustment"](#).

DOOR STRIKER : Adjustment

INFOID:000000012423892

DOOR STRIKER ADJUSTMENT

1. Loosen door striker bolts
2. Adjust door striker so that it becomes parallel with front door lock insertion direction.



3. Tighten door striker bolts to specification. Refer to [DLK-374, "Exploded View"](#).

REAR DOOR

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:0000000012423893

REMOVAL

1. Remove rear door assembly. Refer to [DLK-374, "DOOR ASSEMBLY : Removal and Installation"](#).
2. Remove center pillar lower finisher (rear door lower hinge only). Refer to [INT-22, "CENTER PILLAR LOWER FINISHER : Removal and Installation"](#).
3. Remove rear door hinge bolts and nuts and rear door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Tighten nuts/bolts to specification. Refer to [DLK-374, "Exploded View"](#).
- Apply anticorrosive agent onto the hinge mating surface.
- After installation, check rear door open/close and lock/unlock operation.
- After installation, perform the rear door adjustment procedure. Refer to [DLK-375, "DOOR ASSEMBLY : Adjustment"](#).

DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:0000000012423894

REMOVAL

1. Fully close the rear door window.
2. Remove rear door speaker. Refer to [AV-76, "Removal and Installation"](#) (DISPLAY AUDIO), [AV-218, "Removal and Installation"](#) (NAVIGATION WITHOUT BOSE) or [AV-388, "Removal and Installation"](#) (NAVIGATION WITH BOSE).
3. Remove rear door check link bolt (body side).
4. Remove rear door check link bolts (door side).
5. Remove rear door check link through the hole in rear door panel.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Tighten bolts to specification. Refer to [DLK-374, "Exploded View"](#).
- After installation, check rear door open/close and lock/unlock operation.
- Check rear door check link rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.

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BACK DOOR

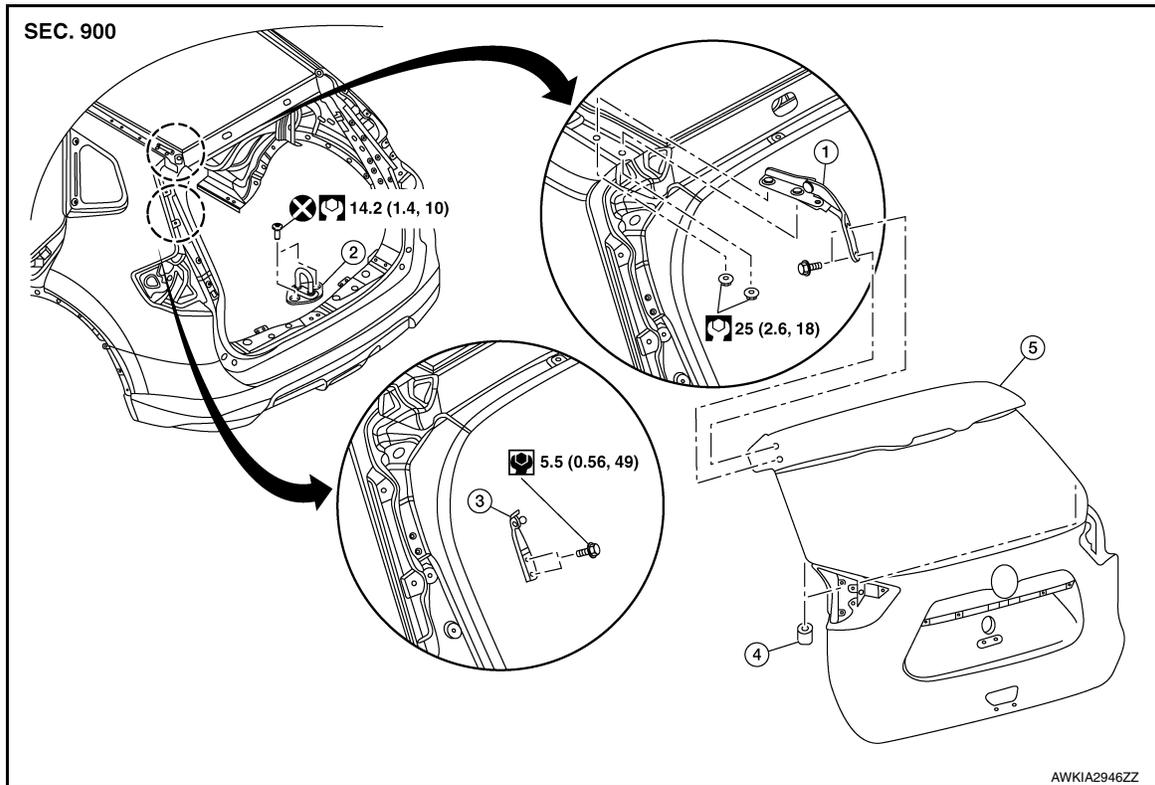
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

BACK DOOR

Exploded View

INFOID:000000012423895



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|--------------------|----------------------|-------------------------|
| 1. Back door hinge | 2. Back door striker | 3. Back door stay hinge |
| 4. Bumper rubber | 5. Back door | |

BACK DOOR ASSEMBLY

BACK DOOR ASSEMBLY : Removal and Installation

INFOID:000000012423896

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 and installation of back door.

REMOVAL

1. Support the back door assembly using a suitable tool.

WARNING:

Bodily injury may occur if back door assembly is not supported properly when removing the back door spindle unit.

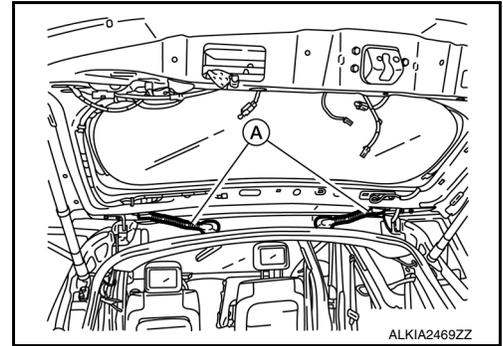
2. Remove back door stays (LH/RH). Refer to [DLK-275, "BACK DOOR STAY : Removal and Installation"](#).

BACK DOOR

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

3. Disconnect harness connectors (A) from back door.



4. Remove back door harness grommet, then pull harness from the back door.
5. Disconnect washer tube.
6. Remove washer tube grommet and washer tube from the back door.
7. Remove back door hinge bolts (door side) and back door assembly.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Tighten bolts to specification. Refer to [DLK-378, "Exploded View"](#).
- Apply anticorrosive agent onto the surface between hinge and door side.
- When reusing stud ball, always apply locking sealant before installing stud ball to back door.
- After installation, perform the back door assembly adjustment procedure. Refer to [DLK-380, "BACK DOOR ASSEMBLY : Adjustment"](#).
- Perform calibration of automatic back door position information. Refer to [DLK-114, "Description"](#).

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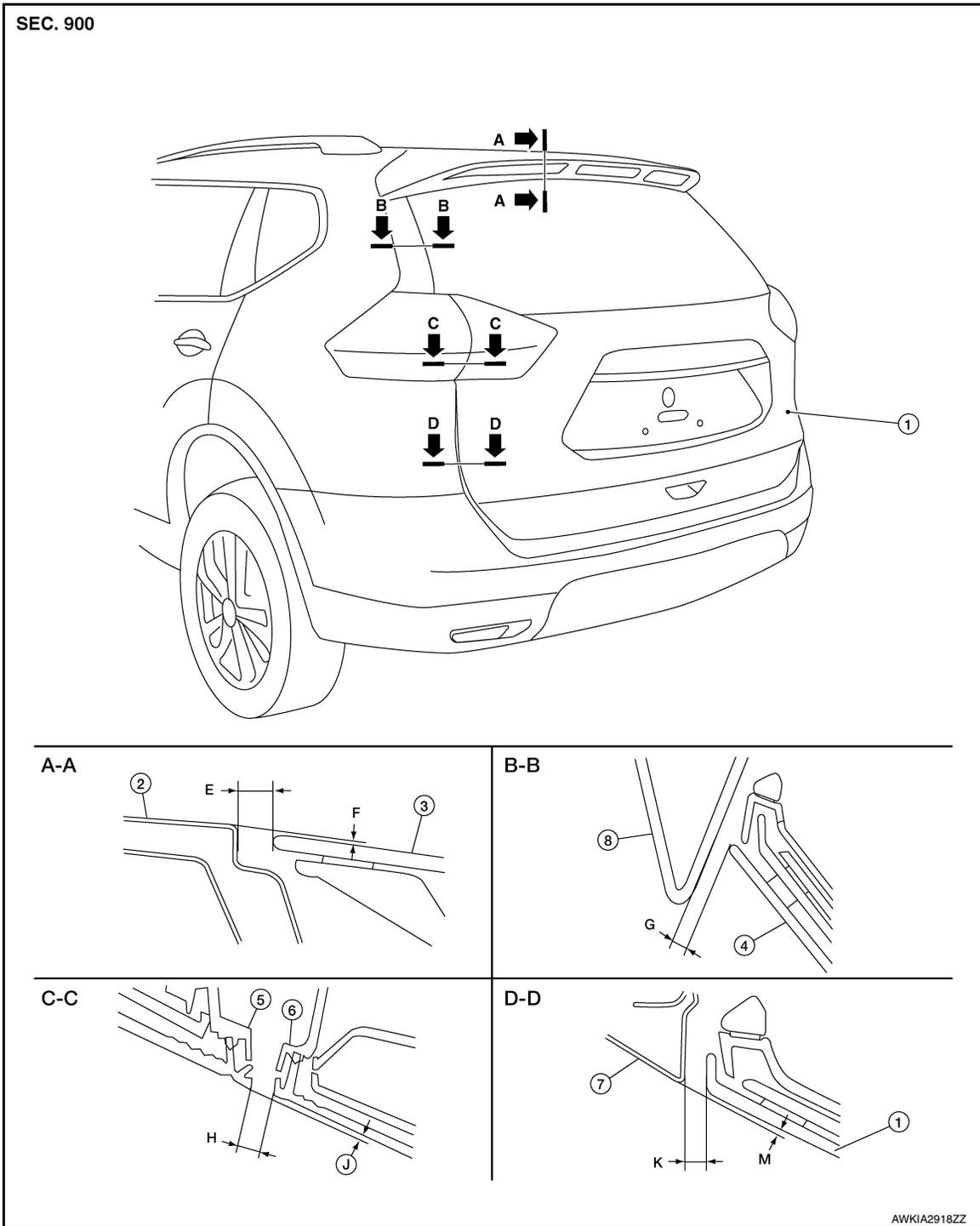
BACK DOOR

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

BACK DOOR ASSEMBLY : Adjustment

INFOID:000000012423897



- | | | |
|-----------------------|--------------------------|-----------------|
| 1. Back door assembly | 2. Roof panel | 3. Rear spoiler |
| 4. Back door glass | 5. Rear combination lamp | 6. Back-up lamp |
| 7. Rear fender | 8. Side spoiler | |

Check the clearance and the surface height between back 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.

BACK DOOR

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

Unit: mm (in)

Portion	Section	Item	Measurement	Standard	Paralleism
Roof panel – Rear spoiler	A – A	E	Clearance	7.0 ± 2.0 (0.28 ± 0.08)	2.0 (0.08)
		F	Surface height	1.7 ± 2.0 (0.07 ± 0.08)	2.0 (0.08)
Side spoiler – Back door glass	B – B	G	Clearance	5.5 ± 2.0 (0.22 ± 0.08)	2.0 (0.08)
		H	Surface height	—	—
Rear combination lamp – Back-up lamp	C – C	J	Clearance	4.5 ± 2.0 (0.18 ± 0.08)	2.0 (0.08)
		K	Surface height	2.2 ± 2.0 (0.09 ± 0.08)	2.0 (0.08)
Rear fender – Back door	D – D	M	Clearance	4.7 ± 2.0 (0.19 ± 0.08)	2.0 (0.08)
		N	Surface height	2.5 ± 2.0 (0.10 ± 0.08)	2.0 (0.08)

- Loosen back door hinge nuts (door side).
- Lift up back door approximately 100 – 150 mm (3.94 – 5.91 in) height then close it lightly and check that it is engaged firmly with back door closed.
- Check the clearance and surface height according to the specifications provided.
- Tighten back door hinge nuts to specified torque.

CAUTION:

- After installation, check back door open/close, lock/unlock operation.
- Check back door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.
- After adjusting, apply touch-up paint (body color) to the head of rear door hinge bolts and nuts.
- Perform calibration of automatic back door position information. Refer to [DLK-114, "Description"](#).

BACK DOOR STRIKER

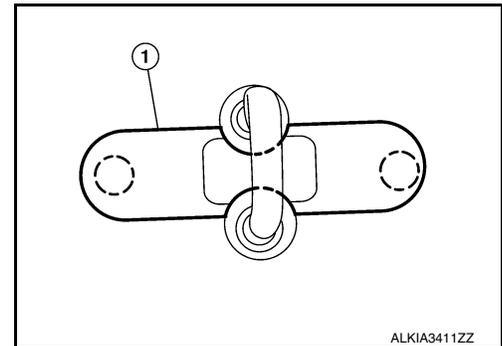
BACK DOOR STRIKER : Removal and Installation

INFOID:0000000012423898

REMOVAL

- Release back door striker cover (1) pawls using a suitable tool and remove.

○: Pawl



- Remove the back door welt. Refer to [DLK-382, "BACK DOOR WEATHER-STRIP : Removal and Installation"](#).
- Remove bolts and back door striker.

CAUTION:

- Do not reuse back door striker bolts.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Do not reuse back door striker bolts.
- Tighten bolts to specification. Refer to [DLK-378, "Exploded View"](#).
- After installation, check back door open/close operation. If necessary, adjust the door striker. Refer to [DLK-382, "BACK DOOR STRIKER : Adjustment"](#).

BACK DOOR

< REMOVAL AND INSTALLATION >

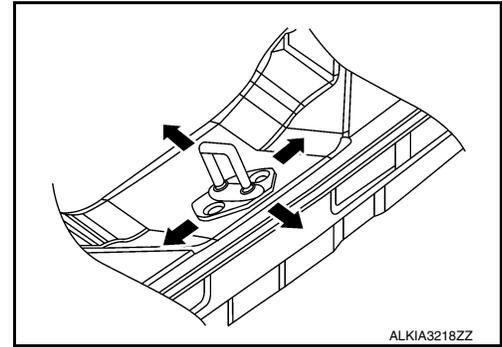
[WITHOUT INTELLIGENT KEY SYSTEM]

BACK DOOR STRIKER : Adjustment

INFOID:000000012423899

DOOR STRIKER ADJUSTMENT

1. Loosen door striker bolts
2. Adjust door striker so that it becomes parallel with front door lock insertion direction.



3. Tighten door striker bolts to specification. Refer to [DLK-378, "Exploded View"](#).

BACK DOOR HINGE

BACK DOOR HINGE : Removal and Installation

INFOID:000000012423900

REMOVAL

1. Remove back door assembly. Refer to [DLK-378, "BACK DOOR ASSEMBLY : Removal and Installation"](#).
2. Partially remove the rear of the headlining. Refer to [INT-30, "Removal and Installation"](#).
3. Remove nuts and back door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Tighten nuts to specification. Refer to [DLK-378, "Exploded View"](#).
- Apply anticorrosive agent onto the surface between hinge and body side.
- After installation, perform the back door assembly adjustment procedure. Refer to [DLK-380, "BACK DOOR ASSEMBLY : Adjustment"](#).

BACK DOOR WEATHER-STRIP

BACK DOOR WEATHER-STRIP : Removal and Installation

INFOID:000000012423901

REMOVAL

Carefully remove back door weather-strip from opening door joint.

INSTALLATION

1. Beginning with upper section, align weather-strip mark with vehicle center position mark and install weather strip to the vehicle.
2. For the lower section, align weather-strip seam with center of back door striker.

NOTE:

Pull weather-strip gently to ensure that there are no loose sections.

HOOD LOCK

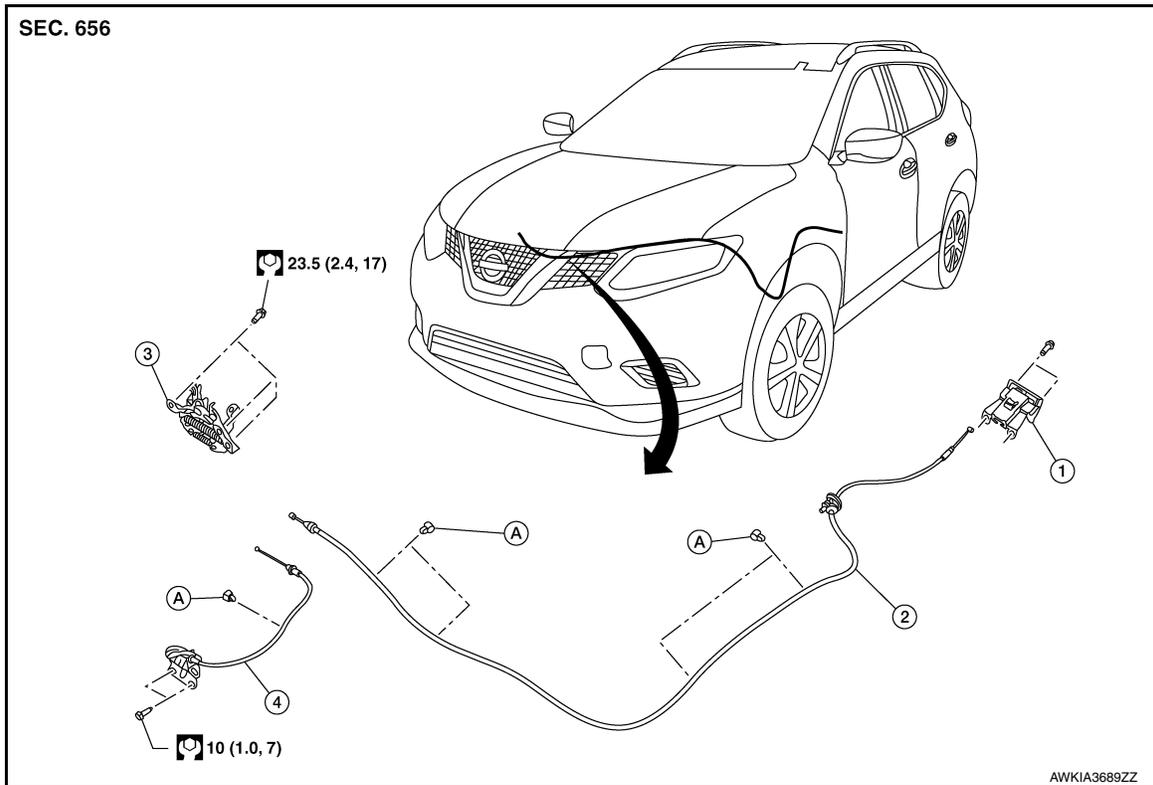
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

HOOD LOCK

Exploded View

INFOID:000000012423902



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|-----------------------------|----------------------------|--------------|
| 1. Hood lock release handle | 2. Hood lock release cable | 3. Hood lock |
| 4. Secondary latch | A. Clip | |

HOOD LOCK

HOOD LOCK : Removal and Installation

INFOID:000000012423903

REMOVAL

1. Disconnect hood lock release cable and secondary latch cable from hood lock.
2. Remove bolts and hood lock.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Tighten bolts to specified torque. Refer to [DLK-383, "Exploded View"](#).
- Check that hood lock release cable and secondary latch cable are properly engaged with hood lock.
- After installation, perform hood assembly adjustment procedure. Refer to [DLK-364, "HOOD ASSEMBLY : Adjustment"](#).
- After adjusting, perform hood lock inspection. Refer to [DLK-383, "HOOD LOCK : Inspection"](#).

HOOD LOCK : Inspection

INFOID:000000012423904

NOTE:

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

1. Check that secondary latch is properly engaged with secondary striker with hoods own weight.
2. While operating hood lock release handle, carefully check that the front end of hood assembly is raised by approximately 20.0 mm (0.79 in). Also check that hood lock release handle returns to the original position.
3. Check that hood lock release handle operates at 49 N (5.0 kg-m, 11.0 ft-lb) or below.

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HOOD LOCK

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

4. Install so that static closing force of hood is 315-490 N (32.1-50.0 kg-m, 70.8-110.2 ft-lb).

NOTE:

- Do not exert vertical force on right side and 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 to hood lock assembly.

SECONDARY LATCH

SECONDARY LATCH : Removal and Installation

INFOID:000000012423905

REMOVAL

1. Remove front grille. Refer to [EXT-24, "Removal and Installation"](#).
2. Disconnect secondary latch cable from hood lock assembly.
3. Remove bolts and secondary latch.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Tighten bolts to specified torque. Refer to [DLK-383, "Exploded View"](#).
- Check that secondary latch cable is properly engaged with hood lock.

HOOD LOCK RELEASE CABLE

HOOD LOCK RELEASE CABLE : Removal and Installation

INFOID:000000012423906

REMOVAL

1. Remove fender protector (LH). Refer to [EXT-29, "FENDER PROTECTOR : Removal and Installation"](#).
2. Remove front grille. Refer to [EXT-24, "Removal and Installation"](#).
3. Disconnect hood lock release cable from hood lock release handle and hood lock.
4. Release hood lock release cable clips using a suitable tool.
5. Remove grommet on the lower dash and carefully pull the hood lock release cable into the passenger compartment.

CAUTION:

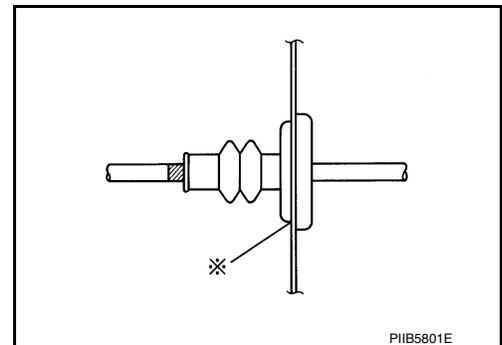
While pulling, be careful not to damage (peel) the outside of hood lock release cable.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Be careful not to bend cable too much, keep the radius 100 mm (3.94 in) or more.
- Check that cable is not offset from the positioning grommet, and apply the sealant to the grommet (at * mark) properly.



PIIB5801E

- Check that hood lock release cable is properly engaged with hood lock assembly.
- After installation, perform hood assembly adjustment procedure. Refer to [DLK-364, "HOOD ASSEMBLY : Adjustment"](#).
- After adjusting, perform hood lock inspection. Refer to [DLK-383, "HOOD LOCK : Inspection"](#).

HOOD LOCK RELEASE HANDLE

HOOD LOCK

< REMOVAL AND INSTALLATION >

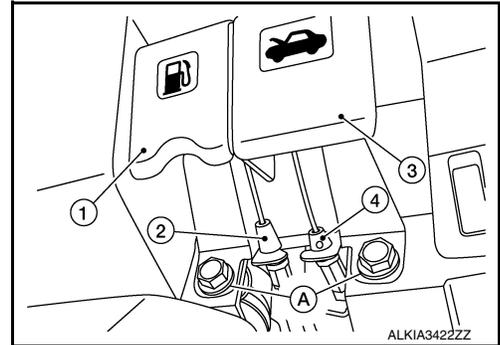
[WITHOUT INTELLIGENT KEY SYSTEM]

HOOD LOCK RELEASE HANDLE : Removal and Installation

INFOID:000000012423907

REMOVAL

1. Remove fuel filler lid/hood lock release handle bolts (A).
2. Disconnect fuel filler lid release cable (2) from fuel filler lid release handle (1).
3. Disconnect hood lock release cable (4) from hood lock release handle (3).
4. Remove hood lock release handle.



INSTALLATION

Installation is in the reverse order of removal.

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FRONT DOOR LOCK

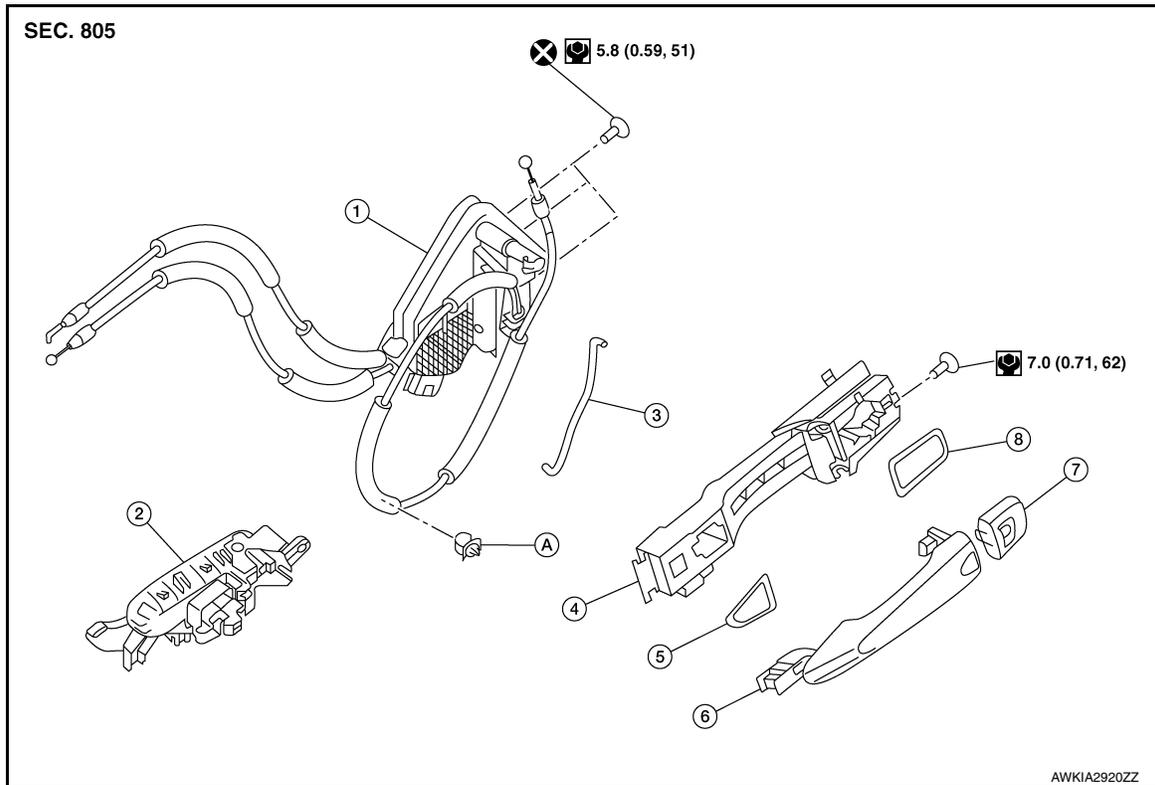
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

FRONT DOOR LOCK

Exploded View

INFOID:000000012423908



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|--|------------------|------------------------------------|
| 1. Front door lock | 2. Inside handle | 3. Door key cylinder rod (LH only) |
| 4. Outside handle bracket | 5. Front gasket | 6. Outside handle |
| 7. Outside handle escutcheon / door key cylinder (LH only) | 8. Rear gasket | A. Clip |

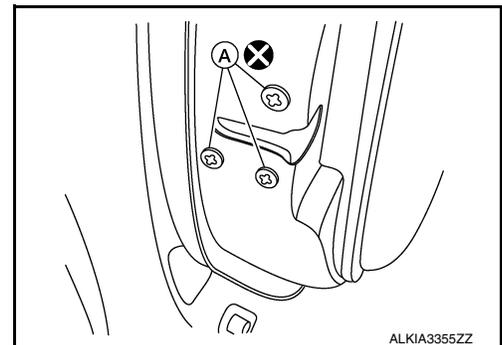
DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:000000012423909

REMOVAL

1. Remove front door finisher. Refer to [INT-15. "Removal and Installation"](#).
2. Remove vapor barrier.
3. Remove front door lock bolts (A).

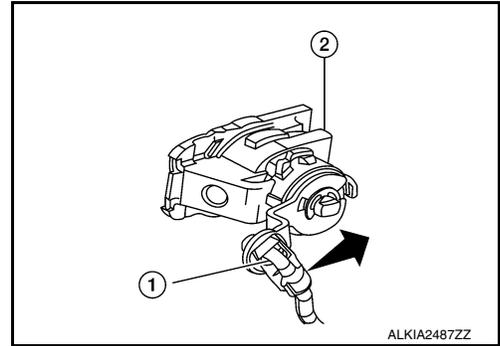


FRONT DOOR LOCK

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

4. Disconnect door key cylinder rod (LH only) (1) from front door lock (2) (LH only).



5. Disconnect door lock cables from inside handle and outside handle..
6. Disconnect the harness connector from the front door lock and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Do not reuse front door lock bolts.
- Tighten bolts to specification. Refer to [DLK-386, "Exploded View"](#).
- After installation, check door lock cables are properly engaged to inside handle and outside handle bracket.
- When installing door key cylinder rod (LH only), be sure to rotate door key cylinder rod holder until a click is felt.
- After installation, check door open/close and lock/unlock operation.
- Check door lock assembly for poor lubrication. If necessary apply a suitable multi-purpose grease.

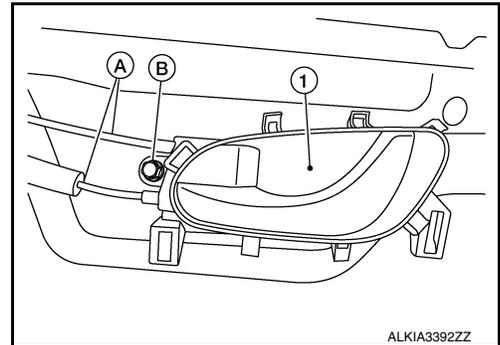
INSIDE HANDLE

INSIDE HANDLE : Removal and Installation

INFOID:0000000012423910

REMOVAL

1. Remove front door finisher. Refer to [INT-15, "Removal and Installation"](#).
2. Remove inside handle bolt (B).
3. Disconnect the door lock cables (A) and remove inside handle (1).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

OUTSIDE HANDLE

OUTSIDE HANDLE : Removal and Installation

INFOID:0000000012423911

REMOVAL

1. Fully close front door glass.
2. Remove front door finisher. Refer to [INT-15, "Removal and Installation"](#).

FRONT DOOR LOCK

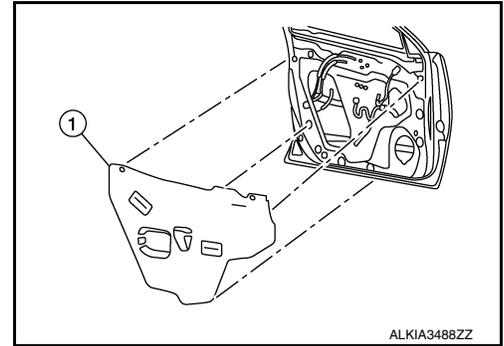
< REMOVAL AND INSTALLATION >

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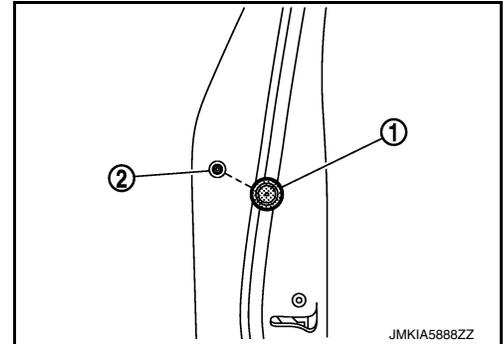
3. Remove front door vapor barrier (1).

NOTE:

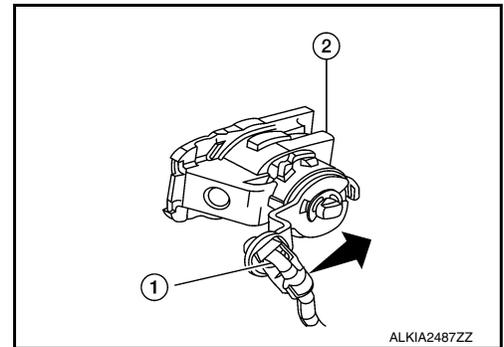
LH side shown; RH similar.



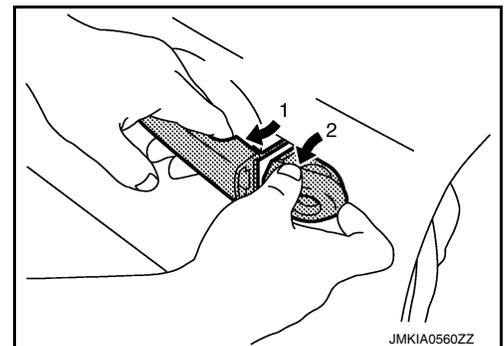
4. Remove door side grommet (1), and remove bolt from grommet hole (2).



5. Separate door key cylinder rod (LH only) (1) from door key cylinder assembly (LH only) (2).



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

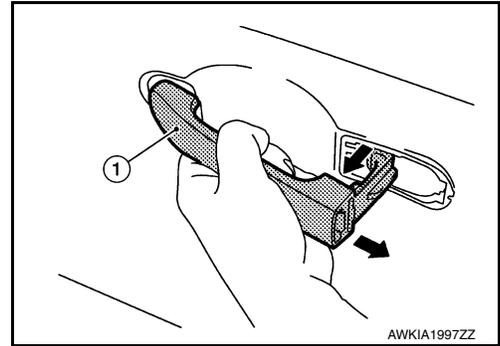


FRONT DOOR LOCK

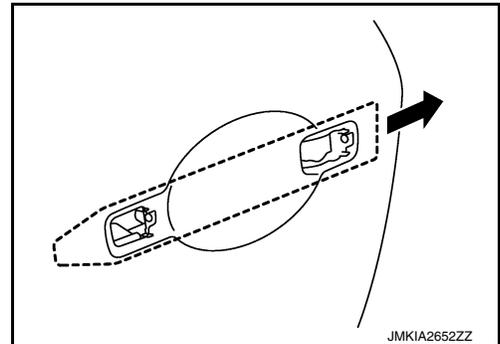
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[WITHOUT INTELLIGENT KEY SYSTEM]

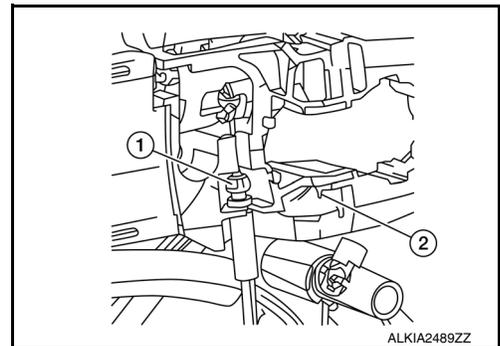
7. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



8. Remove front gasket and rear gasket.
9. Slide outside handle bracket toward rear of vehicle to remove.



10. Disconnect outside handle cable (1) from outside handle bracket (2) as shown.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

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REAR DOOR LOCK

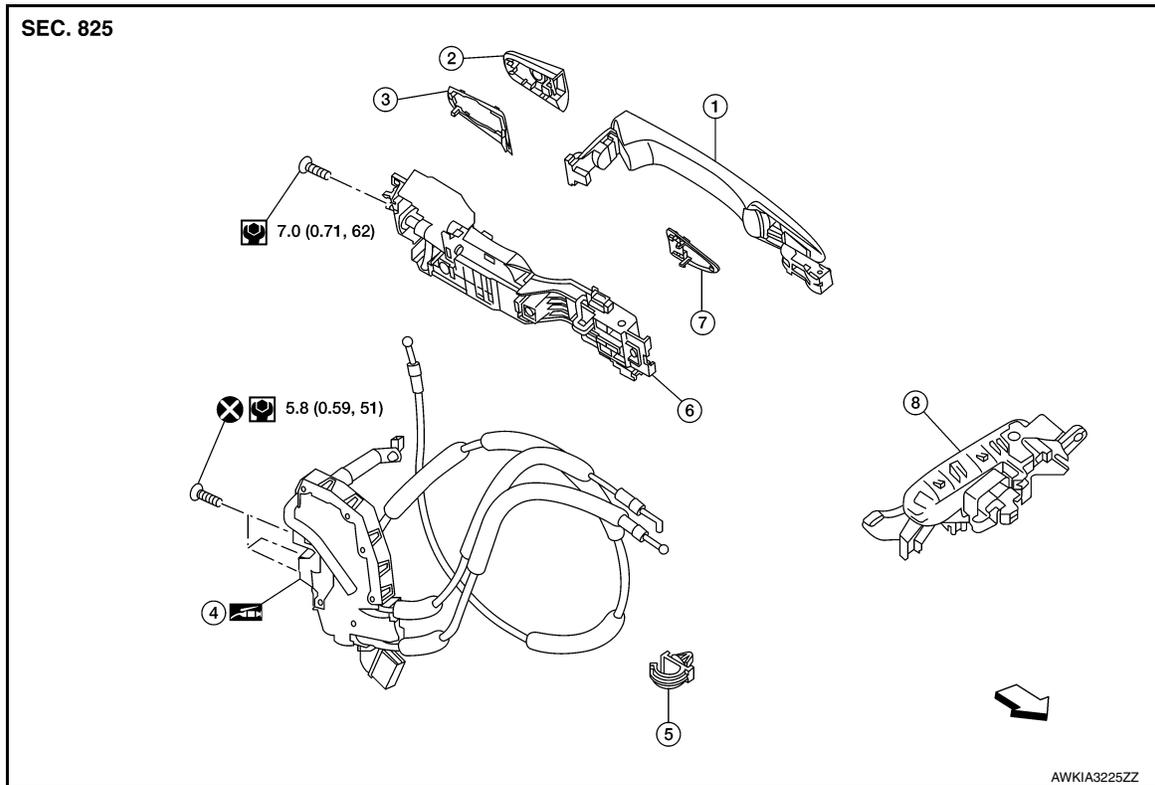
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

REAR DOOR LOCK

Exploded View

INFOID:000000012423912



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|-------------------|------------------------------|---------------------------|
| 1. Outside handle | 2. Outside handle escutcheon | 3. Rear gasket |
| 4. Rear door lock | 5. Cable clip | 6. Outside handle bracket |
| 7. Front gasket | 8. Inside handle | ← Front |

DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:000000012423913

REMOVAL

1. Remove rear door finisher. Refer to [INT-18, "Removal and Installation"](#).
2. Remove vapor barrier.
3. Remove rear door lock bolts.
4. Disconnect the door lock cables.
5. Disconnect the harness connector from the rear door lock and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Do not reuse rear door lock bolts.
- Tighten bolts to specification. Refer to [DLK-390, "Exploded View"](#).
- After installation, check door lock cables are properly engaged to inside handle and outside handle.
- After installation, check door open/close and lock/unlock operation.

INSIDE HANDLE

INSIDE HANDLE : Removal and Installation

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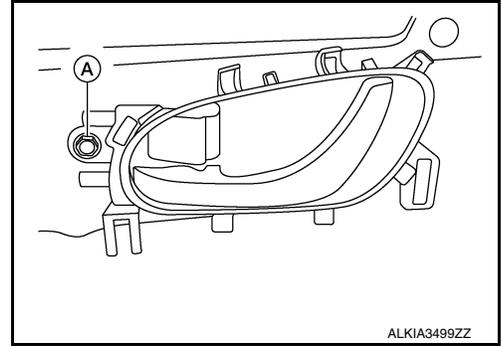
REMOVAL

REAR DOOR LOCK

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

1. Remove rear door finisher. Refer to [INT-18, "Removal and Installation"](#).
2. Remove inside handle bolt (A).



3. Disconnect door lock cables from inside handle and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

OUTSIDE HANDLE

OUTSIDE HANDLE : Removal and Installation

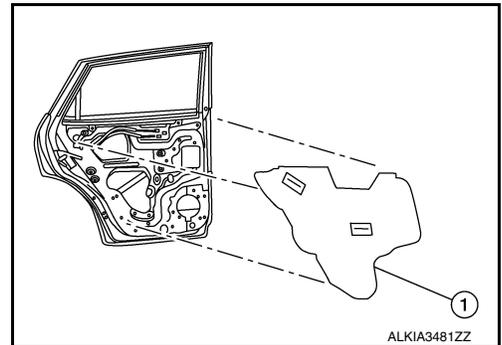
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REMOVAL

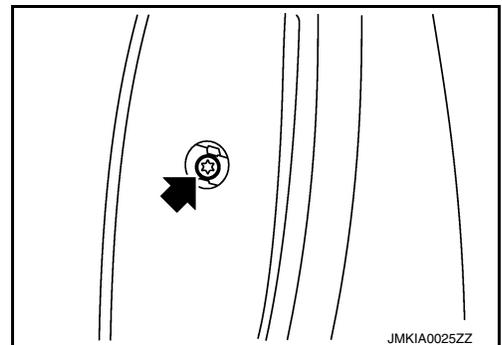
1. Fully close rear door glass.
2. Remove rear door finisher. Refer to [INT-18, "Removal and Installation"](#).
3. Remove rear door vapor barrier (1).

NOTE:

LH side shown; RH similar.



4. Remove door side grommet and bolt from grommet hole.



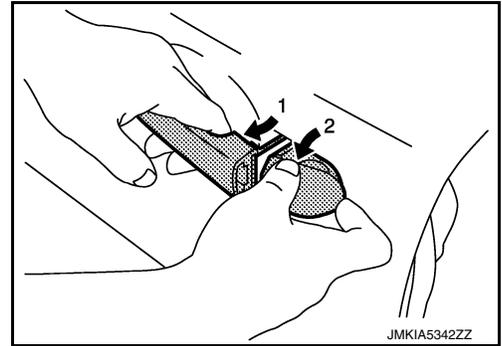
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REAR DOOR LOCK

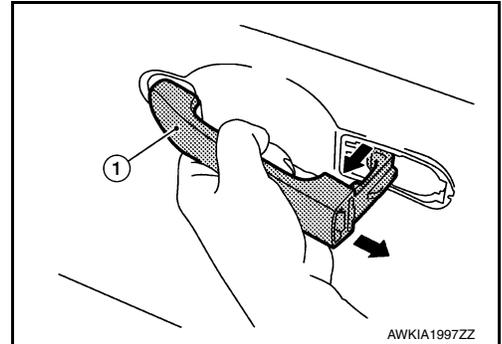
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

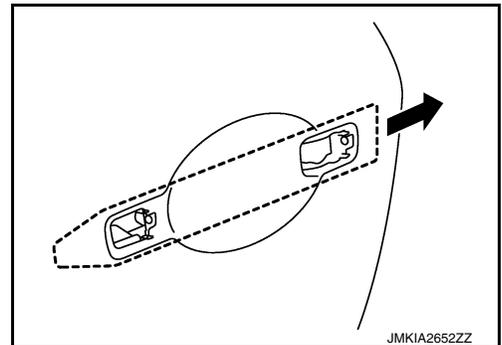
5. While pulling (1) outside handle, remove (2) outside handle escutcheon.



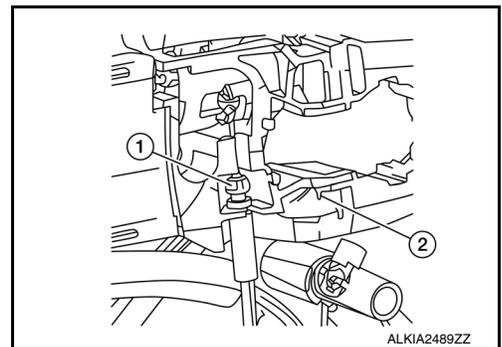
6. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



7. Remove front gasket and rear gasket.
8. Slide outside handle bracket toward rear of vehicle to remove.



9. Disconnect outside handle cable (1) from outside handle bracket (2) as shown.



INSTALLATION

Installation in the reverse order of removal.

CAUTION:

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

BACK DOOR LOCK

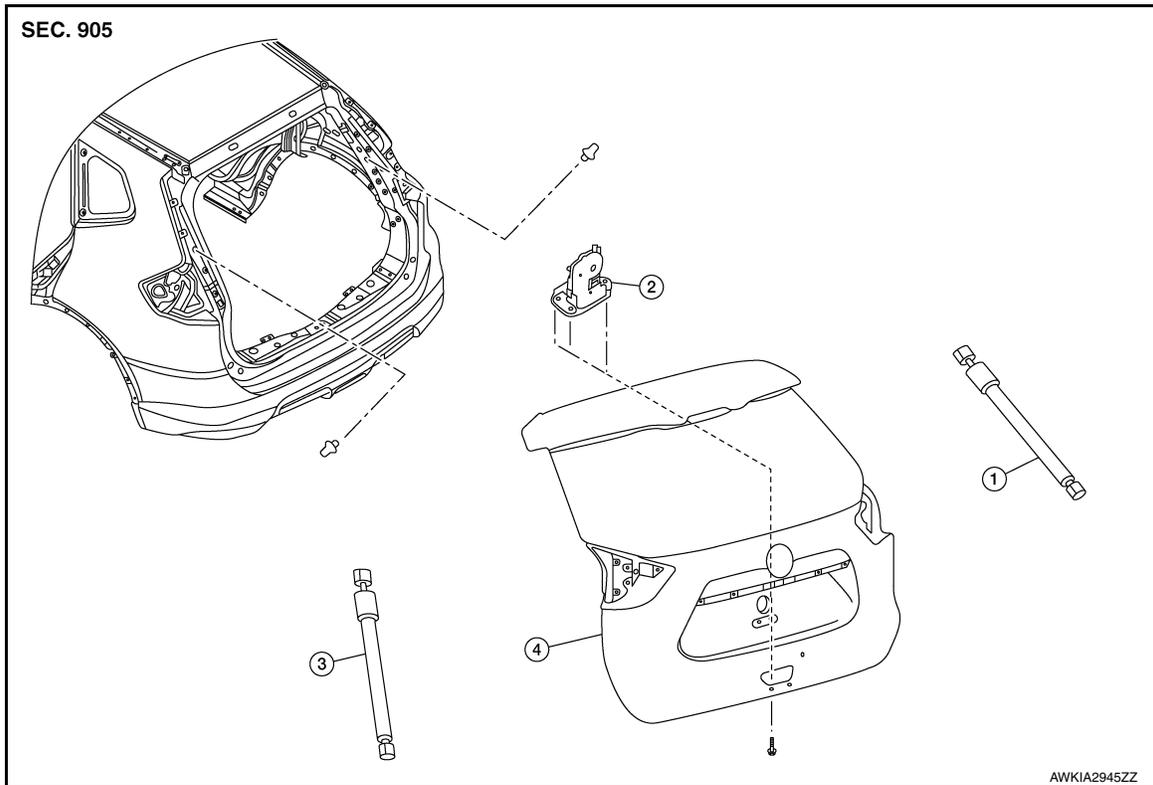
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

BACK DOOR LOCK

Exploded View

INFOID:000000012423916



1. Back door stay (RH)
4. Back door

2. Back door lock

3. Back door stay (LH)

DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:000000012423917

REMOVAL

1. Remove back door finisher. Refer to [INT-38, "Removal and Installation"](#).
2. Disconnect the harness connector from the back door lock.
3. Remove bolts and back door lock.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Tighten bolts to specification. Refer to [DLK-393, "Exploded View"](#).
- After installation, check back door open/close and lock/unlock operation.

BACK DOOR STAY

BACK DOOR STAY : Removal and Installation

INFOID:000000012423918

REMOVAL

1. Support the back door using a suitable tool.

WARNING:

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

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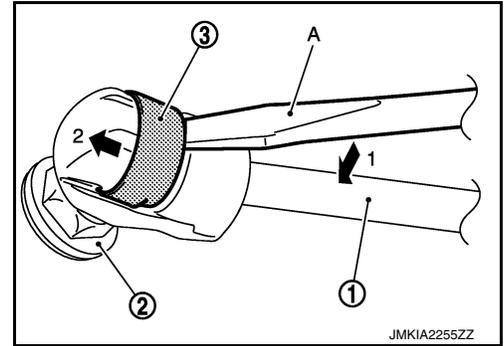
DLK

BACK DOOR LOCK

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

2. Release the metal clip (3) located on the connection between the back door stay (1) and the stud ball (2) (back door side) using a suitable tool (A).
3. Remove the back door stay (back door side).



4. Repeat procedure for removing back door stay from body side.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

After installation, check the back door open/close operation.

EMERGENCY LEVER

EMERGENCY LEVER : Unlock procedures

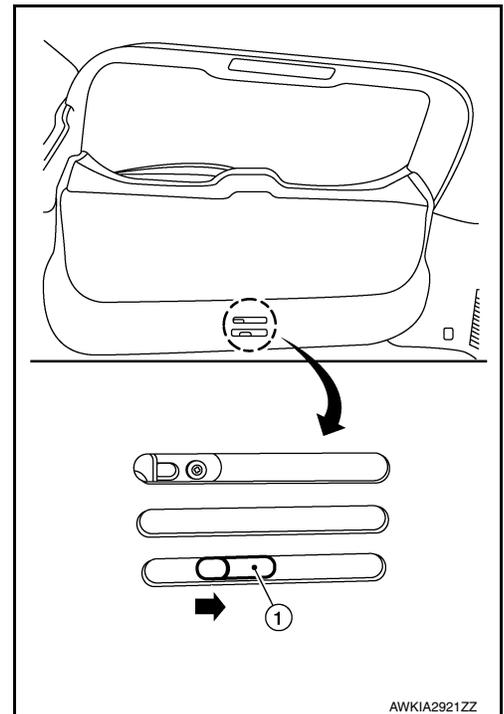
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UNLOCK PROCEDURES

NOTE:

If back door lock cannot be unlocked due to a malfunction or battery discharge, perform the following procedures to unlock back door assembly.

1. From inside the vehicle, rotate emergency lever (1) in the direction shown to unlock.



FUEL FILLER LID OPENER

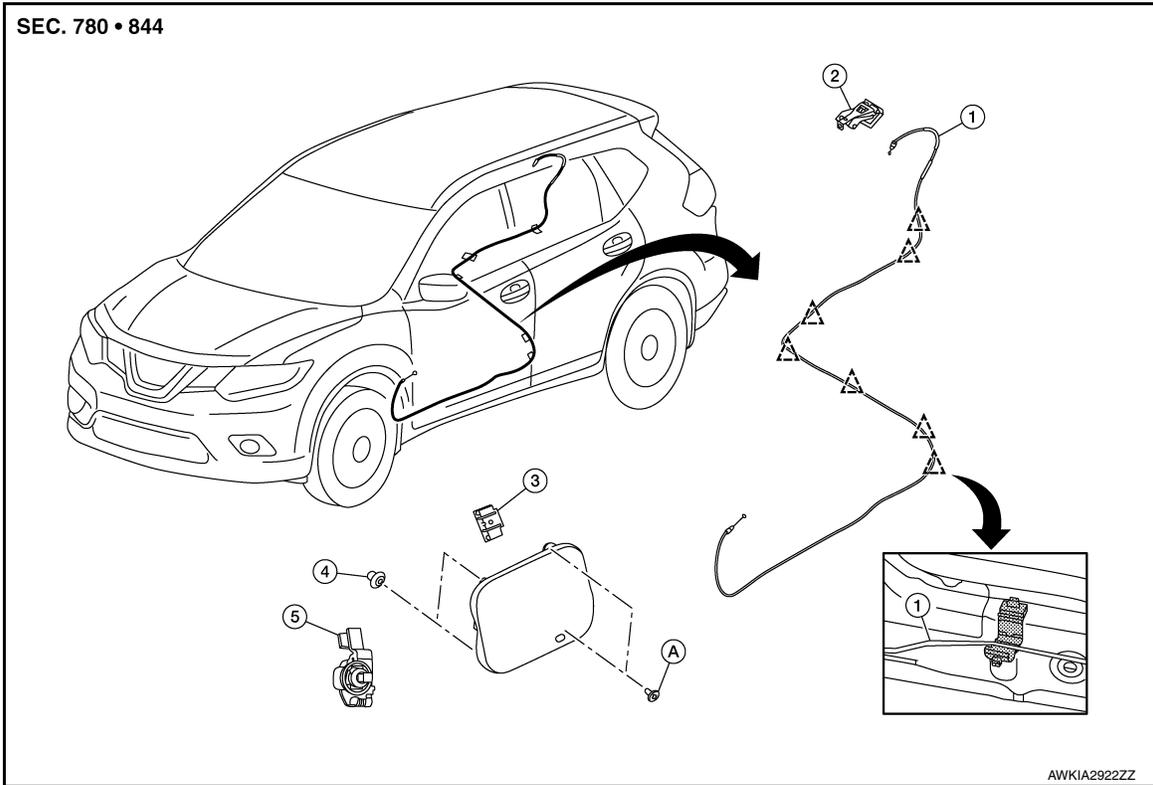
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

FUEL FILLER LID OPENER

Exploded View

INFOID:000000012423920



- 1. Fuel filler lid release cable
- 4. Bumper rubber

- 2. Fuel filler lid release handle
- 5. Fuel filler lid lock

- 3. Spring
- A. Screw

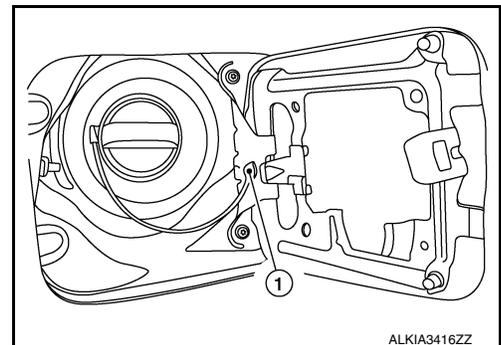
FUEL FILLER LID

FUEL FILLER LID : Removal and Installation

INFOID:000000012423921

REMOVAL

1. Remove fuel cap pin (1).



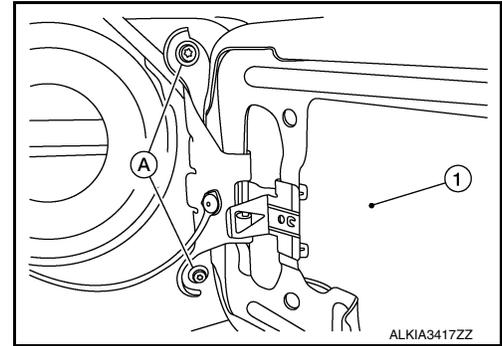
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FUEL FILLER LID OPENER

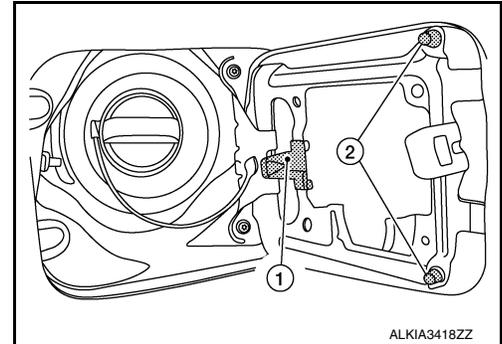
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

2. Remove screws (2) and fuel filler lid (1).



3. Remove fuel filler lid spring (1) and bumper rubber (2) from fuel filler lid (if necessary).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

FUEL FILLER LID LOCK

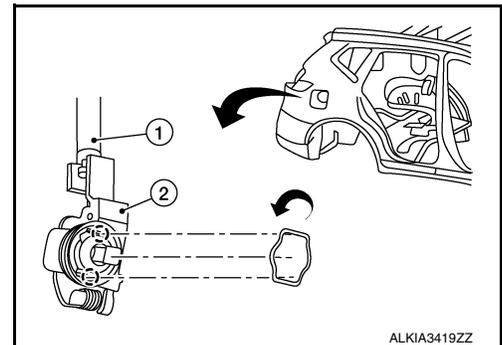
FUEL FILLER LID LOCK : Removal and Installation

INFOID:0000000012423922

REMOVAL

1. Remove luggage side lower finisher (RH). Refer to [INT-34, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation - With Third Row Seat"](#) (With Third Row Seat) or [INT-35, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation - Without Third Row Seat"](#) (Without Third Row Seat).
2. Disconnect the fuel filler lid release cable (1) from the fuel filler lid lock (2).
3. Rotate fuel filler lid lock to release pawls and remove.

○: Pawl



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

FUEL FILLER LID RELEASE CABLE

FUEL FILLER LID RELEASE CABLE : Removal and Installation

INFOID:0000000012423923

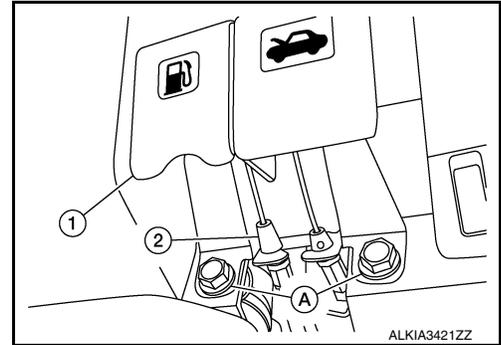
REMOVAL

FUEL FILLER LID OPENER

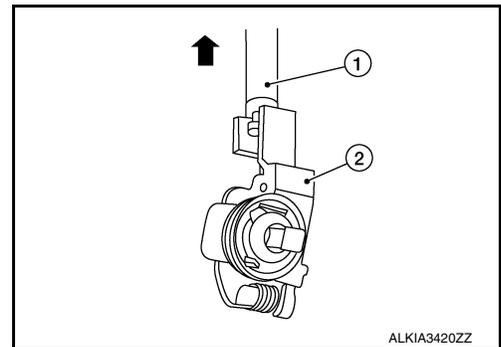
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

1. Partially remove front floor trim. Refer to [INT-26, "Removal and Installation"](#).
2. Remove rear floor trim. Refer to [INT-26, "Removal and Installation"](#).
3. Remove the fuel filler lid/hood lock release handle bolts (A)
4. Disconnect the fuel filler lid release cable (2) from fuel filler lid release handle (1).



5. Disconnect the fuel filler lid release cable (1) from fuel filler lid lock (2).



6. Release the clips and remove fuel filler lid release cable.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

FUEL FILLER LID RELEASE HANDLE

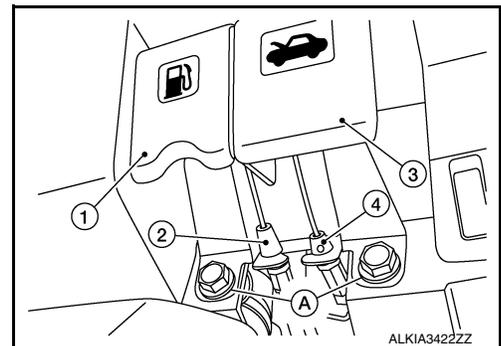
FUEL FILLER LID RELEASE HANDLE : Removal and Installation

INFOID:000000012423924

DLK

REMOVAL

1. Remove fuel filler lid/hood lock release handle bolts (A).
2. Disconnect fuel filler lid release cable (2) from fuel filler lid release handle (1).
3. Disconnect hood lock release cable (4) from hood lock release handle (3).
4. Remove fuel filler lid release handle.



INSTALLATION

Installation is in the reverse order of removal.

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DOOR SWITCH

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

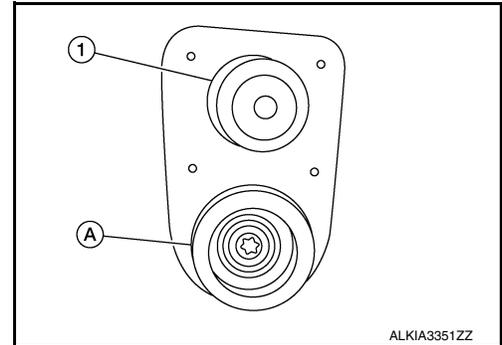
DOOR SWITCH

Removal and Installation

INFOID:000000012423925

REMOVAL

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



INSTALLATION

Installation is in the reverse order of removal.

BACK DOOR WARNING CHIME

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

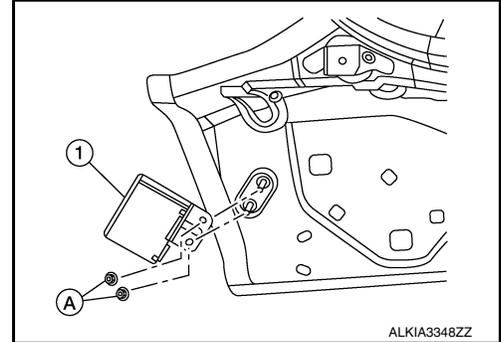
BACK DOOR WARNING CHIME

Removal and Installation

INFOID:000000012423926

REMOVAL

1. Remove the rear bumper fascia. Refer to [EXT-20. "Removal and Installation"](#).
2. Disconnect the harness connector from the back door warning chime.
3. Remove nuts (A) and back door warning chime (1).



INSTALLATION

Installation is in the reverse order of removal.

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KEY FOB BATTERY

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

KEY FOB BATTERY

Removal and Installation

INFOID:000000012423927

REPLACEMENT

1. Remove screw from the rear of key fob.
2. Place the key with the lower case facing up. Use a suitable tool wrapped with tape between upper case and lower case and separate the lower case from the upper case.

CAUTION:

- Do not touch the circuit board or battery terminal. Doing so could cause the key fob to malfunction
- The key fob is water-resistant. However, if it does get wet, immediately wipe it dry.

3. When replacing the circuit board assembly, remove circuit board assembly from the upper case.
[Circuit board assembly: Switch rubber + Board surface]

CAUTION:

Do not touch the printed circuits directly.

4. Remove the battery from the lower case and replace it.

Battery replacement : Coin-type lithium battery (CR2025)

CAUTION:

When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.

5. After replacement, fit the lower and upper cases together and tighten with the screw.

CAUTION:

After replacing the battery, Be sure to check that door locking operates normally using the key fob.

Refer to [DLK-349, "Component Function Check"](#).

STEERING LOCK UNIT

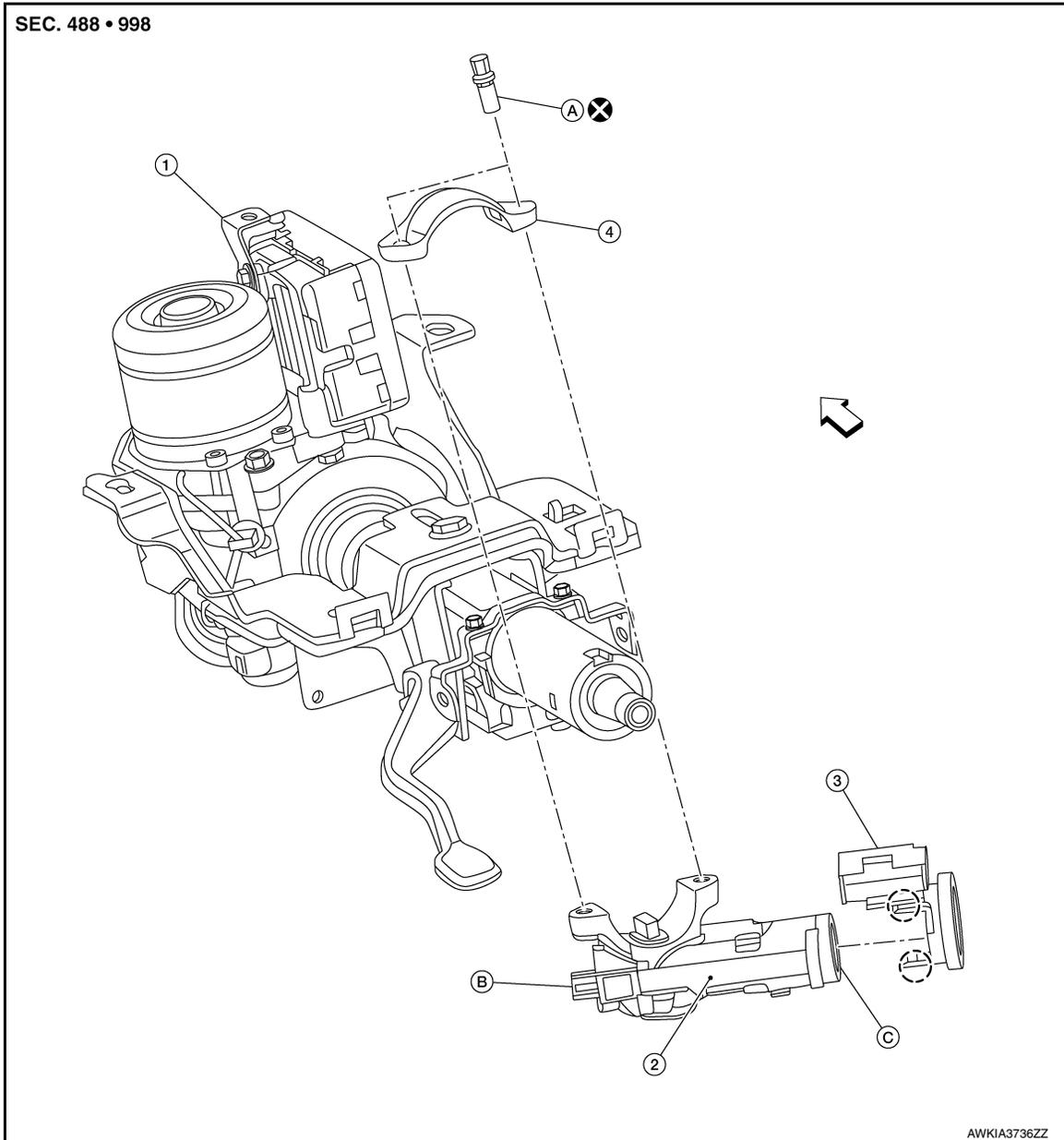
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

STEERING LOCK UNIT

Exploded View

INFOID:000000012562863



- | | | |
|--------------------------|---|----------------------|
| 1. Steering column | 2. Steering lock unit | 3. NATS antenna amp. |
| 4. Steering lock bracket | A. Tamper resistant self-shear type screw | B. Ignition switch |
| C. Key cylinder | ← Front | ○ Pawl |

NOTE:

The steering lock unit, ignition switch, and key cylinder are serviced as an assembly.

Removal and Installation

INFOID:000000012562864

REMOVAL

1. Disconnect battery cables. Refer to [PG-80, "Removal and Installation \(Battery\)"](#).
2. Remove steering wheel. Refer to [ST-11, "Removal and Installation"](#)
3. Remove steering column covers. Refer to [JP-18, "Removal and Installation"](#)
4. Disconnect harness connector from combination switch.
5. Disconnect harness connector from steering angle sensor.

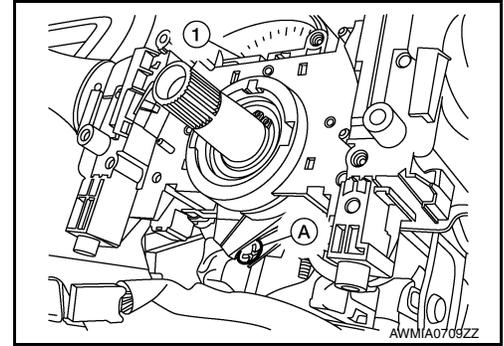
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STEERING LOCK UNIT

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

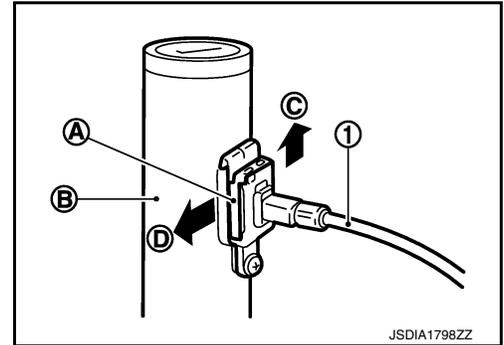
6. Disconnect harness connector from spiral cable.
7. Remove screw (A).
8. Remove combination switch (1), steering angle sensor and spiral cable as a unit.



9. Remove combination meter. Refer to [MWI-84, "Removal and Installation"](#).
10. Perform the following steps to separate key interlock cable from steering lock unit:
 - a. Lift clip (A) in the direction of the arrow (←C) and remove in the direction of the arrow (←D).

- (1) :Key interlock cable
- (B) :Steering lock unit

- b. Disconnect the key interlock cable from the steering lock unit.



11. Disconnect harness connector from ignition switch.
12. Disconnect harness connector from key switch.
13. Disconnect harness connector from NATS antenna amp.
14. Using suitable tool, remove tamper resistant self-shear type screws.

CAUTION:

Do not reuse screws. Replace with new tamper resistant self-shear type screws.

15. Remove steering lock bracket and steering lock unit.
16. Remove NATS antenna amp. (if necessary). Refer to [SEC-201, "Removal and Installation"](#).

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Do not reuse screws. Replace with new tamper resistant self-shear type screws.**
- **Tighten tamper resistant self-shear type screws until head breaks off.**
- Adjust the neutral position of the steering angle sensor. Refer to [BRC-72, "Description"](#).
- For initialization and registration of mechanical keys, refer to CONSULT Immobilizer mode and follow the on-screen instructions.