

SECTION **DLK** DOOR & LOCK

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PRECAUTION

PRECAUTIONS

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

INFOID:0000000012429960

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

WARNING:

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

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

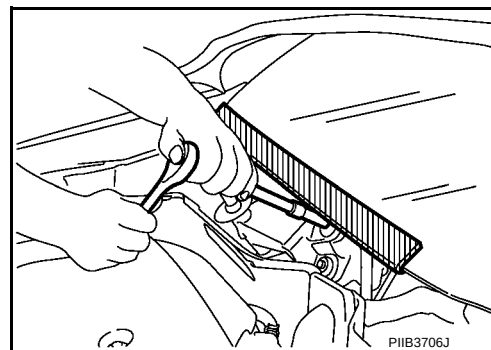
WARNING:

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

Procedure without Cowl Top Cover

INFOID:0000000012429961

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



Precaution for Servicing Doors and Locks

INFOID:0000000012429962

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.

PRECAUTIONS

< PRECAUTION >

[WITH INTELLIGENT KEY SYSTEM]

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

Precaution for Work

INFOID:0000000012918340

- 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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< PREPARATION >

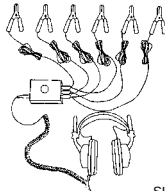
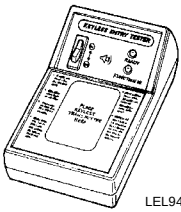
PREPARATION

PREPARATION

Special Service Tools

INFOID:0000000012429963

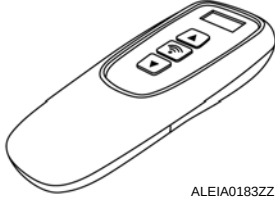
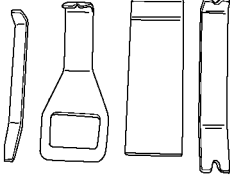
The actual shape of the tools may differ from those illustrated here.

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		• Activate and display TPMS transmitter IDs • Display tire pressure reported by the TPMS transmitter • Read TPMS DTCs • Register TPMS transmitter IDs • Test remote keyless entry keyfob relative signal strength • Compatible with future sensors • Equipped with a display • Check Intelligent Key relative signal strength • Confirm vehicle Intelligent Key antenna signal strength

PREPARATION

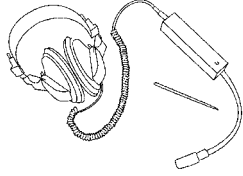
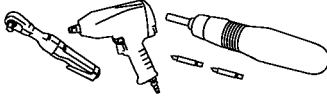
< PREPARATION >

[WITH INTELLIGENT KEY SYSTEM]

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

Commercial Service Tools

INFOID:0000000012429964

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

cardiagn.com

COMPONENT PARTS

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

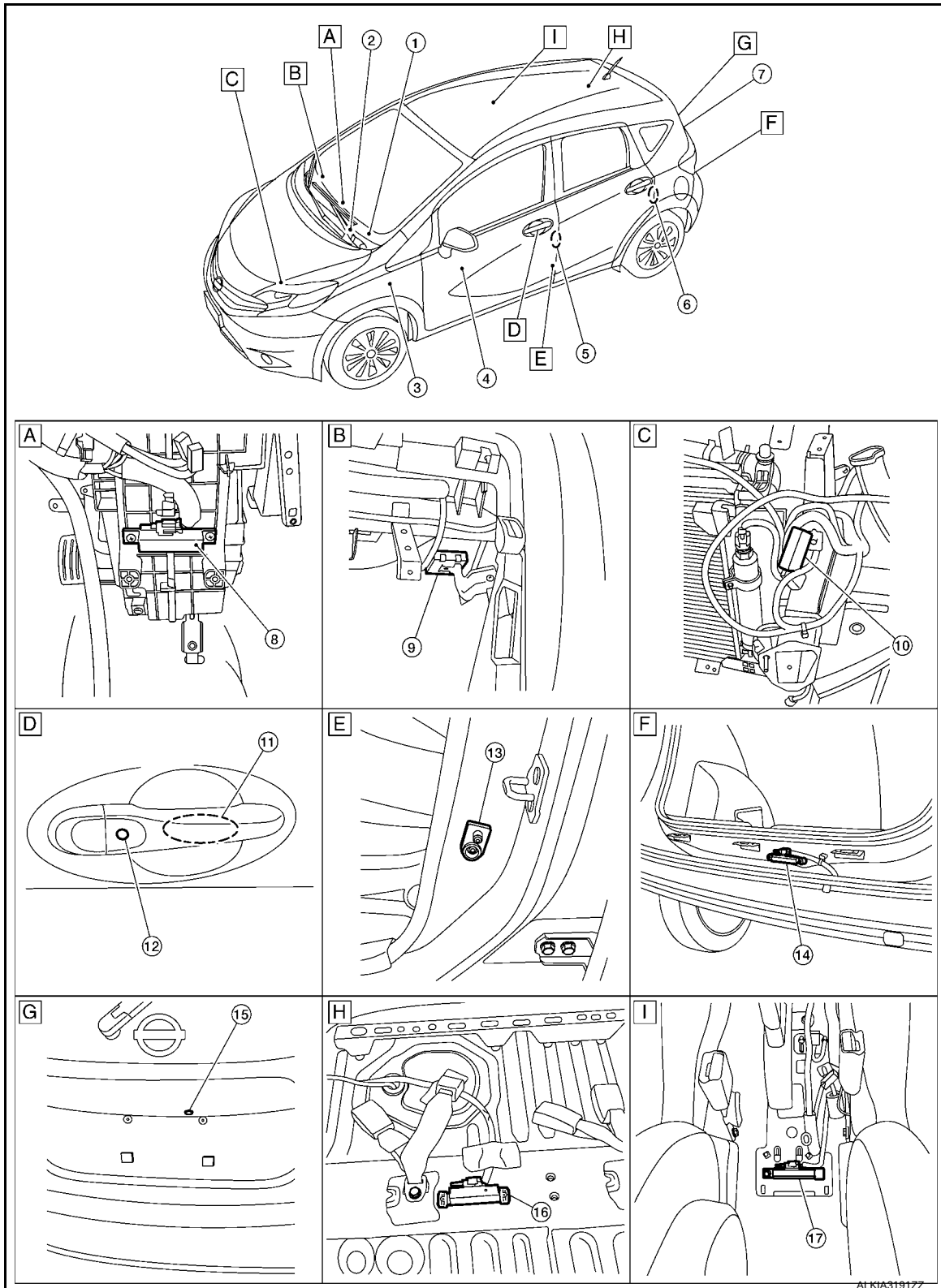
SYSTEM DESCRIPTION

COMPONENT PARTS

INTELLIGENT KEY SYSTEM

INTELLIGENT KEY SYSTEM : Component Parts Location

INFOID:0000000012429965



COMPONENT PARTS

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

- A. View with instrument panel assembly removed B. View with glove box door removed C. View with front grille removed
- D. View of LH door (RH similar) E. View of LH door switch (RH similar) F. View with rear bumper cover removed
- G. View from rear of vehicle H. View with rear seat cushion removed I. View with center console removed

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-59, "METER SYSTEM : Combination Meter" .
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.	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-6, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
4.	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" .
5.	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-17, "INTELLIGENT KEY SYSTEM : Front Door Lock Assembly (Driver Side)" .
6.	Rear door lock actuator LH	Rear door lock actuator locks/unlocks the rear door latch assembly.

COMPONENT PARTS

< SYSTEM DESCRIPTION >

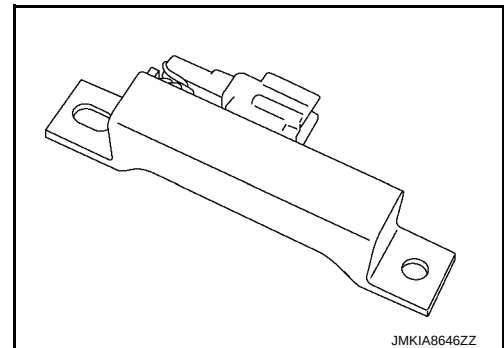
[WITH INTELLIGENT KEY SYSTEM]

No.	Component	Function
7.	Back door lock actuator	Back door lock actuator locks/unlocks the back door latch assembly.
8.	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-15, "INTELLIGENT KEY SYSTEM : Inside Key Antenna (Instrument Center)" .
9.	Remote keyless entry receiver	Remote keyless entry receiver receives button operation signal and key ID signal of Intelligent Key, and then transmits them to the BCM. Refer to DLK-17, "INTELLIGENT KEY SYSTEM : Remote Keyless Entry Receiver" .
10.	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. Refer to DLK-17, "INTELLIGENT KEY SYSTEM : Intelligent Key Warning Buzzer" .
11.	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-16, "INTELLIGENT KEY SYSTEM : Outside Key Antenna (Driver Side)" .
12.	Door request switch	Door request switch transmits door lock/unlock request signal to the BCM.
13.	Door switch	Door switch detects door open/close condition and then transmits ON/OFF signal to BCM.
14.	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-16, "INTELLIGENT KEY SYSTEM : Outside Key Antenna (Rear Bumper)" .
15.	Back door request switch	Back door request switch transmits door lock/unlock request signal to the BCM.
16.	Inside key antenna (trunk room)	Inside key antenna (trunk room) detects whether Intelligent Key is inside the vehicle or not, and then transmits the signal to the BCM. Refer to DLK-16, "INTELLIGENT KEY SYSTEM : Inside Key Antenna (Trunk Room)" .
17.	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-16, "INTELLIGENT KEY SYSTEM : Inside Key Antenna (Console)" .

INTELLIGENT KEY SYSTEM : Inside Key Antenna (Instrument Center)

INFOID:0000000012429966

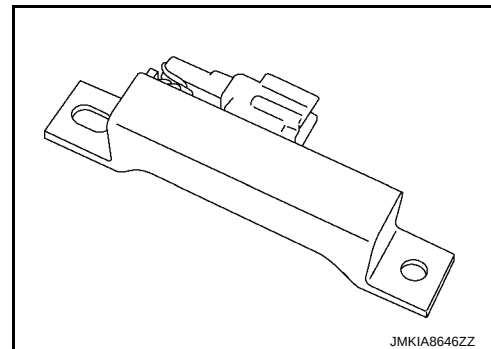
- Inside key antenna (instrument center) detects that Intelligent Key is within the inside detection area, and then transmits detection status to BCM.
- Inside key antenna (instrument center) is installed in the rear of cluster lid C of instrument center.



INTELLIGENT KEY SYSTEM : Inside Key Antenna (Console)

INFOID:000000012429967

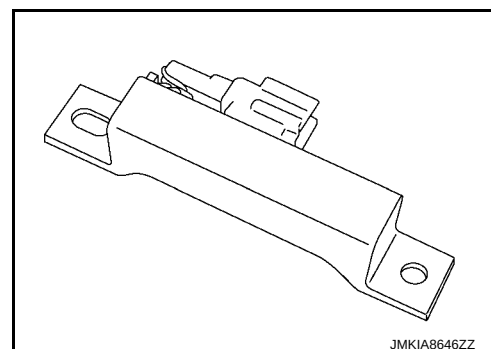
- Inside key antenna (console) detects that Intelligent Key is within the inside detection area, and then transmits detection status to BCM.
- Inside key antenna (console) is installed underneath the center console.



INTELLIGENT KEY SYSTEM : Inside Key Antenna (Trunk Room)

INFOID:000000012429968

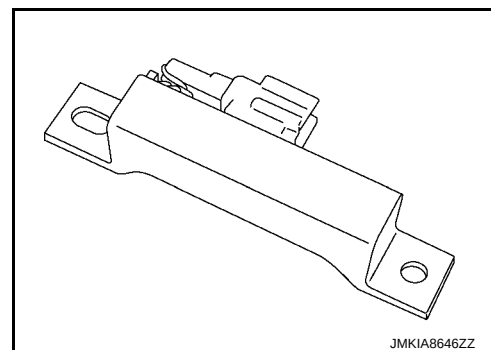
- Inside key antenna (trunk room) detects that Intelligent Key is within the inside detection area, and then transmits detection status to BCM.
- Inside key antenna (trunk room) is installed under the rear seat cushion.



INTELLIGENT KEY SYSTEM : Outside Key Antenna (Rear Bumper)

INFOID:000000012429969

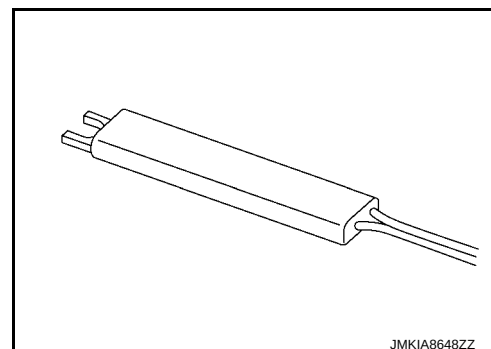
- Outside key antenna (rear bumper) detects that Intelligent Key is within the outside detection area, and then transmits detection status to BCM. Request signal is transmitted simultaneously to Intelligent Key.
- Outside key antenna (rear bumper) is installed in the rear of rear bumper.



INTELLIGENT KEY SYSTEM : Outside Key Antenna (Driver Side)

INFOID:000000012429970

- 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 front outside handle LH.



COMPONENT PARTS

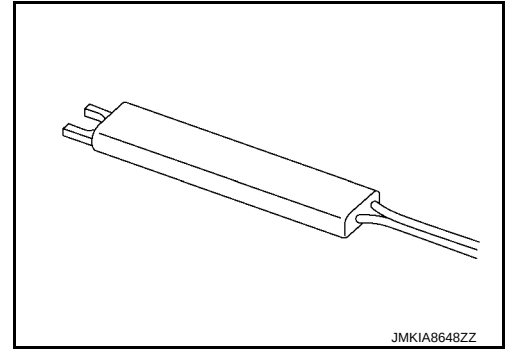
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[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM : Outside Key Antenna (Passenger Side)

INFOID:000000012429971

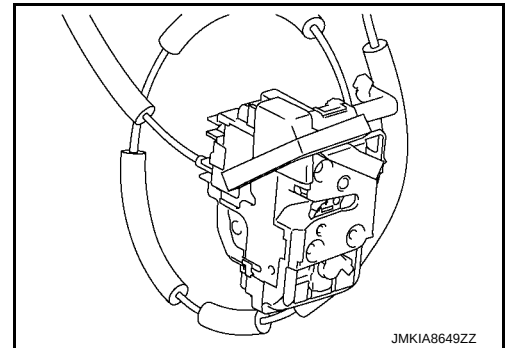
- Outside key antenna RH detects that Intelligent Key is within the outside detection area, and then transmits detection status to BCM. Request signal is transmitted simultaneously to Intelligent Key.
- Outside key antenna RH is installed in front outside handle RH.



INTELLIGENT KEY SYSTEM : Front Door Lock Assembly (Driver Side)

INFOID:000000012429972

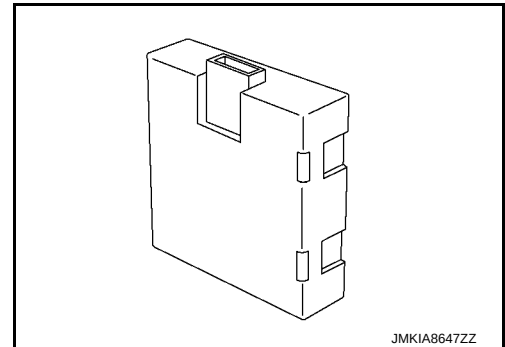
- Door lock actuator and unlock sensor are Integrated in front door lock assembly LH.
- Door lock actuator receives lock/unlock signal from BCM, and then locks/unlocks driver door.
- Only front door lock assembly LH integrates unlock sensor. Unlock sensor transmits lock/unlock status of LH door to BCM.



INTELLIGENT KEY SYSTEM : Remote Keyless Entry Receiver

INFOID:000000012429973

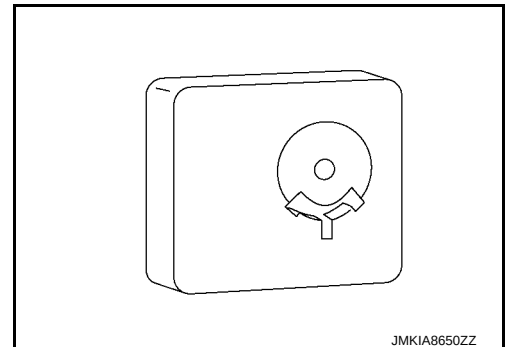
- Remote keyless entry receiver receives button operation signal and key ID signal of Intelligent Key, and then transmits them to BCM.
- Remote keyless entry receiver is installed in the rear of glove box lid.



INTELLIGENT KEY SYSTEM : Intelligent Key Warning Buzzer

INFOID:000000012429974

- 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 LH headlight.



COMPONENT PARTS

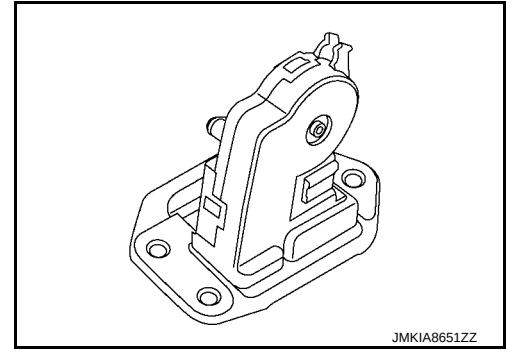
< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM : Back Door Lock Assembly

INFOID:000000012429975

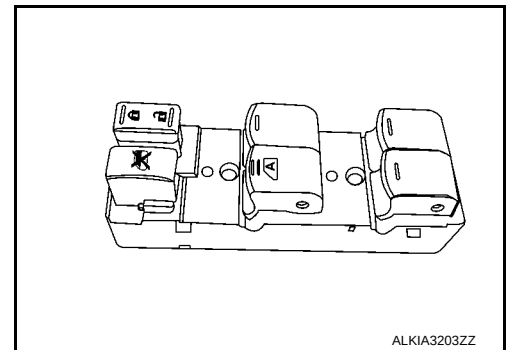
- Back door lock assembly integrates door lock actuator and back door latch.
- Door lock actuator locks/unlocks the back door according to the door lock/unlock signal from BCM.



INTELLIGENT KEY SYSTEM : Door Lock and Unlock Switch

INFOID:000000012429976

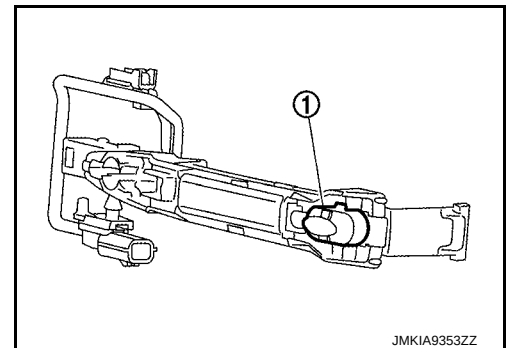
- Door lock and unlock switch transmits door lock/unlock signal operation to BCM.
- Door lock and unlock switch is integrated in the main power window and door lock/unlock switch and power window and door lock/unlock switch RH.



INTELLIGENT KEY SYSTEM : Front Door Request Switch (Driver Side)

INFOID:000000012429977

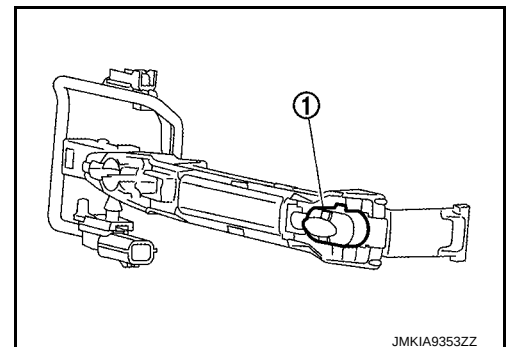
- Front door request switch LH transmits door request switch signal to BCM.
- Front door request switch (LH) (1) is integrated in front outside handle LH.



INTELLIGENT KEY SYSTEM : Front Door Request Switch (Passenger Side)

INFOID:000000012429978

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



COMPONENT PARTS

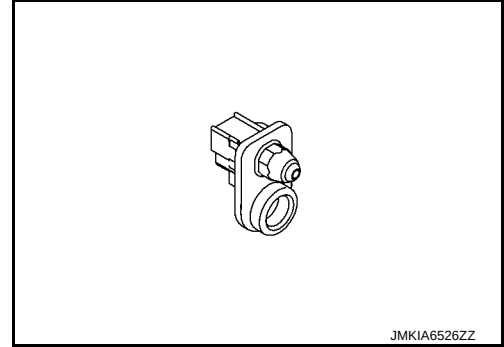
< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM : Door Switch

INFOID:0000000012429979

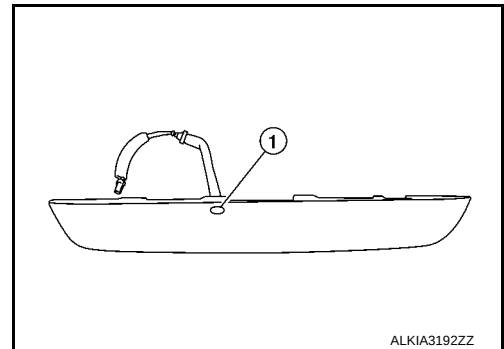
Door switch detects open/close status of door and transmits door switch signal to BCM.



INTELLIGENT KEY SYSTEM : Back Door Request Switch

INFOID:0000000012429980

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



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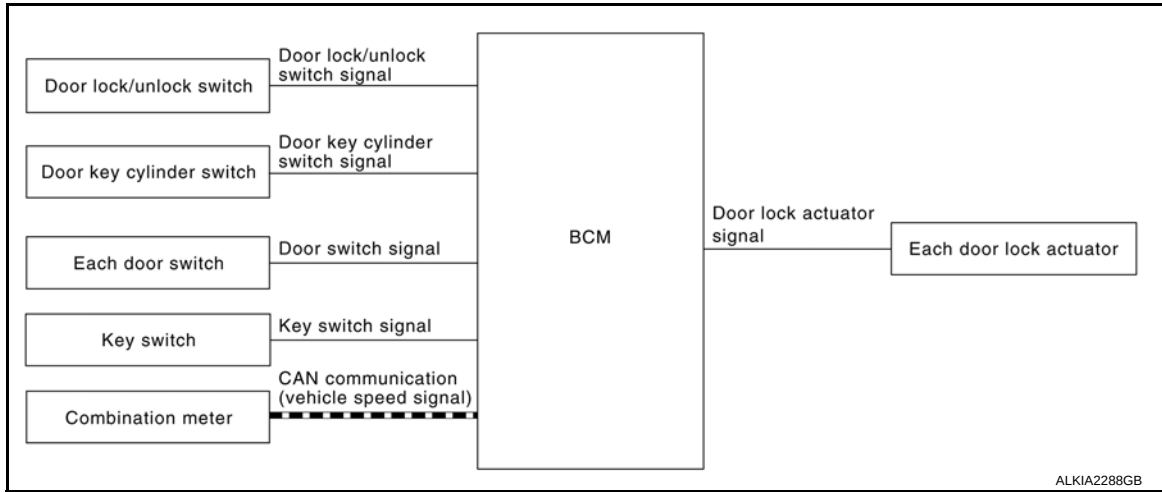
SYSTEM (POWER DOOR LOCK SYSTEM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

SYSTEM (POWER DOOR LOCK SYSTEM)

System Diagram



System Description

INFOID:0000000012429982

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

DOOR LOCK FUNCTION

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

Door Key Cylinder

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

Selective unlock operation mode can be changed using “AUTO LOCK SET” in “Work support”. Refer to [BCS-18, “DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)”](#).

AUTOMATIC DOOR LOCKS (LOCK OPERATION)

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

Vehicle Speed Sensing Auto Door Lock^{*1}

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

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

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

SYSTEM (POWER DOOR LOCK SYSTEM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Setting change of Automatic Door Locks (LOCK) Function

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

With CONSULT

The ON/OFF switching of the automatic door locks (LOCK) function and the type selection of the automatic door locks (LOCK) function can be performed at the "Work support" setting. Refer to [BCS-18, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

Without CONSULT

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

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

OFF → ON : 2 blinks

ON → OFF : 1 blink

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

AUTOMATIC DOOR LOCKS (UNLOCK OPERATION)

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

IGN OFF Interlock Door Unlock^{*1}

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

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

Setting change of Automatic Door Locks (UNLOCK) Function

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

With CONSULT

The ON/OFF switching of the automatic door locks (UNLOCK) function and the type selection of the automatic door locks (UNLOCK) function can be performed at the "Work support" setting. Refer to [BCS-18, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

Without CONSULT

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

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

OFF → ON : 2 blinks

ON → OFF : 1 blink

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

^{*1}: This function is set to ON before delivery.

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

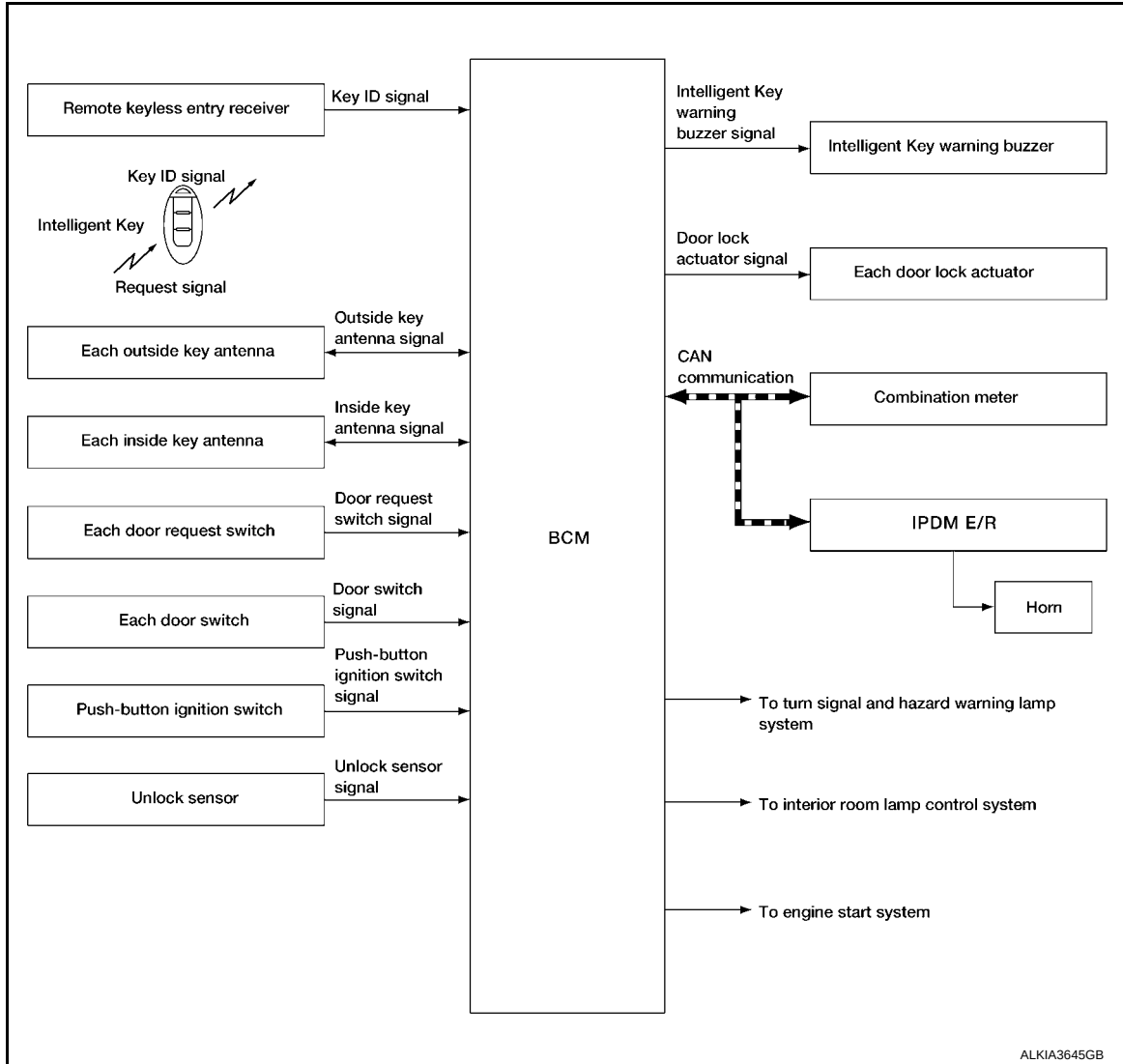
SYSTEM (INTELLIGENT KEY SYSTEM)

INTELLIGENT KEY SYSTEM

INTELLIGENT KEY SYSTEM : System Description

INFOID:000000012429983

SYSTEM DIAGRAM



SYSTEM DESCRIPTION

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

NOTE:

The driver should always carry the Intelligent Key.

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

Function	Description	Refer
Door lock	Lock/unlock can be performed by pressing the request switch.	DLK-23
Remote keyless entry	Lock/unlock can be performed by pressing the remote controller button of the Intelligent Key.	DLK-25

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

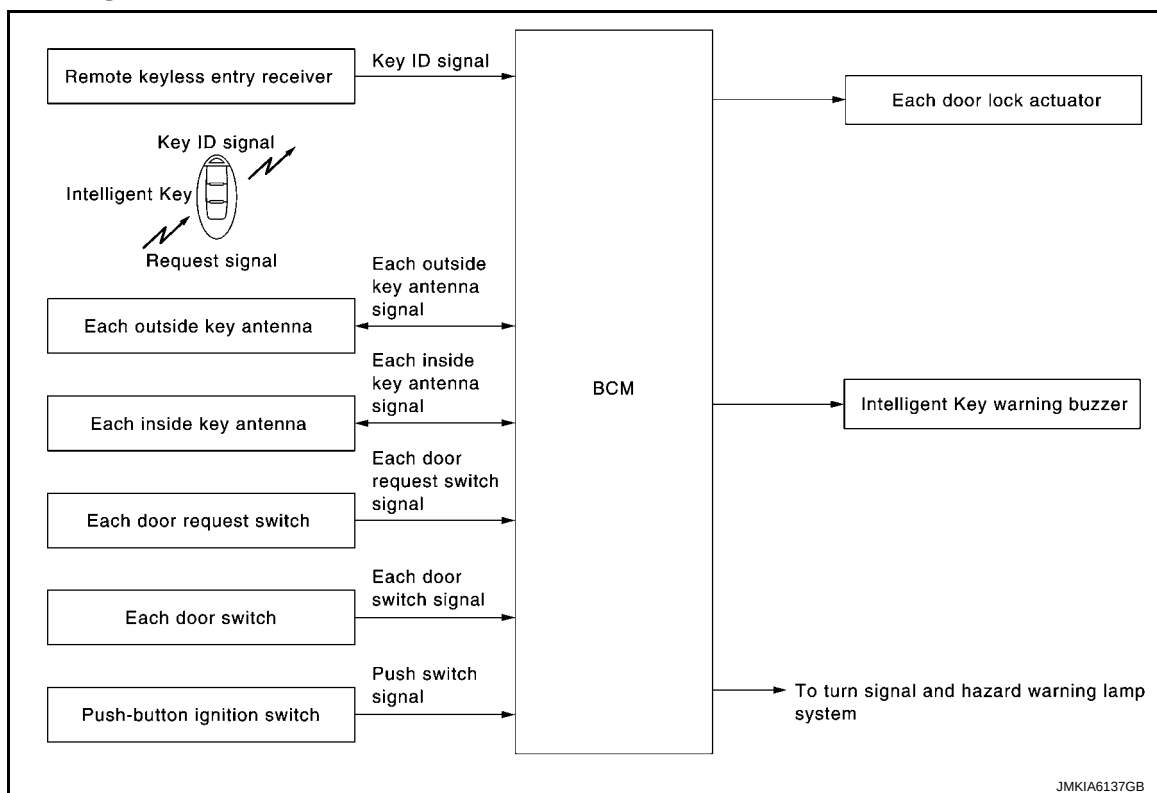
Function	Description	Refer
Key reminder	The key reminder buzzer sounds a warning if the door is locked with the key left inside the vehicle.	DLK-27
Warning	If an action that does not meet the operating condition of the Intelligent Key system is taken, the buzzer sounds to inform the driver.	DLK-27
Engine start	The engine can be turned on while carrying the Intelligent Key.	DLK-22
Interior room lamp control	Interior room lamp is controlled according to door lock/unlock state.	DLK-20

DOOR LOCK FUNCTION

DOOR LOCK FUNCTION : System Description

INFOID:0000000012429984

SYSTEM DIAGRAM



DOOR REQUEST SWITCH OPERATION

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

OPERATION DESCRIPTION

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

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

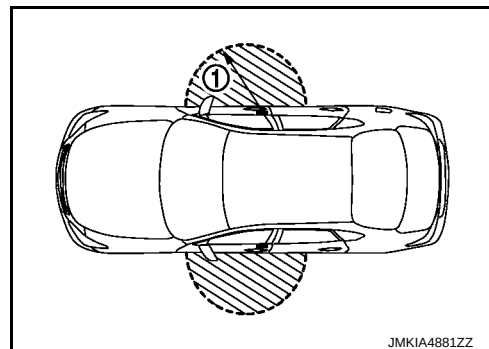
Each request switch operation	Operation condition
Lock	• All doors are closed. • Ignition switch is in the LOCK or OFF position. • Panic alarm is not activated. • Intelligent Key is outside the vehicle. • Intelligent Key is within outside key antenna detection area. • P position warning is not activated.
Unlock	• All doors are closed. • Ignition switch is in the LOCK or OFF position. • 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 unlocked from outside of the vehicle with a spare Intelligent Key as long as key IDs are different.

Door lock function can be changed using "LOCK/UNLOCK BY I-KEY" in "Work support". Refer to [BCS-22. "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

OUTSIDE KEY ANTENNA DETECTION AREA

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



HAZARD AND BUZZER REMINDER FUNCTION

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

How to Change Hazard and Buzzer Reminder Mode

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

AUTO DOOR LOCK FUNCTION

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

Operating condition	• Door switch is ON. (door is open) • BCM receives lock signal. • Push switch is pressed.
---------------------	---

Auto door lock mode can be changed by the "AUTO LOCK SET" in "Work support". 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.

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

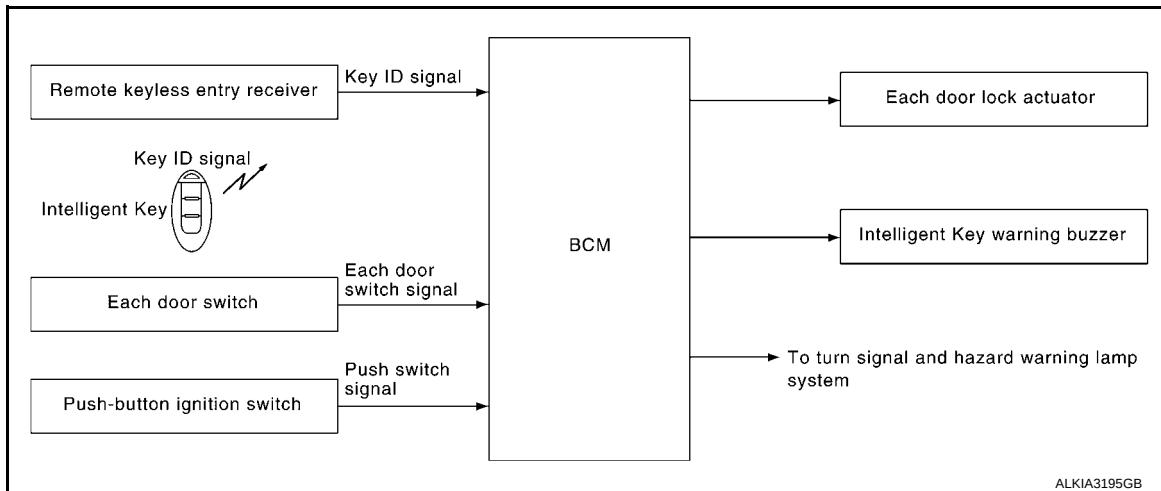
Door lock function	Intelligent Key	Remote keyless entry receiver	Door switch	Door request switch	Door lock actuator	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	CAN communication system	BCM	Hazard warning lamp	Push-button ignition switch	Combination meter
Door lock/unlock function	x	x	x	x	x	x	x			x			
Hazard and buzzer reminder function								x	x	x	x		x
Auto door lock function	x	x	x	x	x		x			x		x	

REMOTE KEYLESS ENTRY FUNCTION

REMOTE KEYLESS ENTRY FUNCTION : System Description

INFOID:0000000012429985

SYSTEM DIAGRAM



REMOTE KEYLESS ENTRY OPERATION

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

Remote keyless entry system controls operation of the following items:

- Auto door lock
- Door lock/unlock
- Hazard and buzzer reminder

OPERATION AREA

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

DOOR LOCK/UNLOCK FUNCTION

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

OPERATION CONDITION

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Remote controller operation	Operation condition
Lock	• All door are closed. • Ignition switch is in the LOCK or OFF position. • P position warning is not activated.
Unlock	• Ignition switch is in the LOCK or OFF position. • Intelligent Key is outside the vehicle. • P position warning is not activated.

HAZARD AND BUZZER REMINDER FUNCTION

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

How to Change Hazard and Buzzer Reminder Mode

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

AUTO DOOR LOCK FUNCTION

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

Operating condition	• Door switch is ON. (door is open) • BCM receives lock signal. • Push switch is pressed.
---------------------	---

Auto door lock mode can be changed by the "AUTO LOCK SET" in "Work support". 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.

Remote keyless entry functions	Intelligent Key	Remote keyless entry receiver	Door switch	Door lock actuator	Push-button ignition switch	Intelligent Key warning buzzer	CAN communication system	BCM	Combination meter	Hazard warning lamp	IPDM E/R	Horn
Door lock/unlock function by remote control button	×	×	×	×	×			×				
Hazard and buzzer reminder function	×	×				×	×	×	×	×		
Auto door lock function	×	×	×	×	×			×				

KEY REMINDER FUNCTION

SYSTEM (INTELLIGENT KEY SYSTEM)

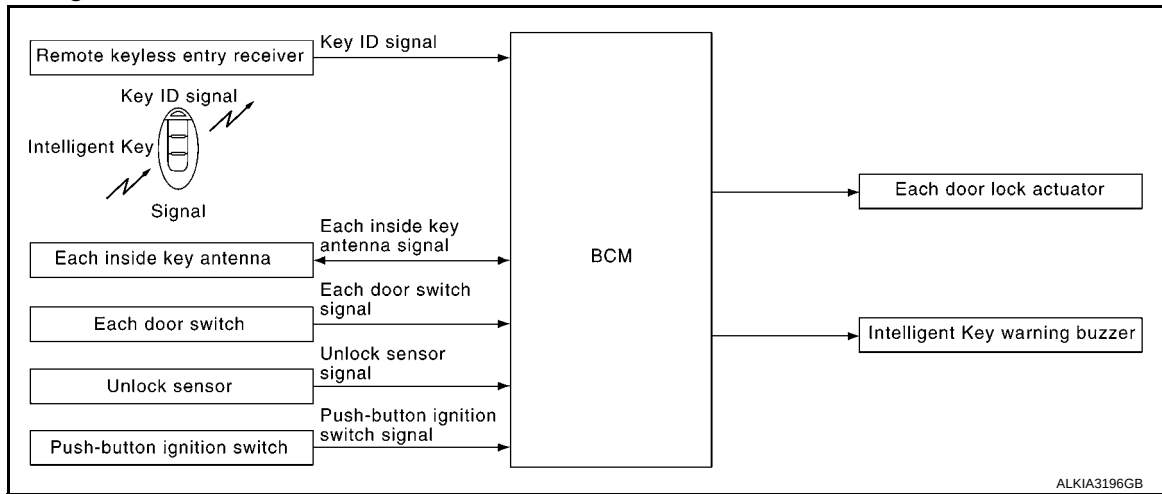
< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

KEY REMINDER FUNCTION : System Description

INFOID:000000012429986

System Diagram



BASIC OPERATION

Key reminder is the function that prevents the key from being left in the vehicle.

Key reminder has the following 3 functions:

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

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

NOTE:

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

WARNING FUNCTION

WARNING FUNCTION : System Description

INFOID:000000012429987

OPERATION DESCRIPTION

The warning function are as per the following items and are given to the user as warning information and warnings using combinations of Intelligent Key warning buzzer, combination meter buzzer, KEY warning lamp, shift P warning lamp and engine start operation indicator lamp:

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

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

- Intelligent Key low battery warning
- Key ID warning

OPERATION CONDITION

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

Warning/Information functions		Operation procedure
Intelligent Key system malfunction		A malfunction is detected on BCM and key warning lamp turns ON
OFF position warning		When condition A, B or condition C is satisfied: • Condition A - Ignition switch: ACC position - Door switch (driver side): ON (Door is open) • Condition B - Turn ignition switch from ON to OFF while door is open. • Condition C - Intelligent Key backside is contacted to push-button ignition switch while brake pedal is depressed and ignition switch is LOCK or OFF. (When the Intelligent Key battery is discharged.) - Door switch (driver side): ON (Door is open)
P position warning	For internal	• Shift position: Other than P • Engine is stopped. (Ignition switch is turned from ON to OFF.)
	For external	• P position warning (For internal) operates. • Door switch: ON to OFF (Door is open to close.) • Intelligent Key cannot be detected inside the vehicle.
ACC warning		• After P position warning operates, or when ignition switch is turned ON immediately after P position warning operates. • Ignition switch: ACC
Take away warning	Door status changes from open to close	• Ignition switch: Other than LOCK and OFF. • Door switch: ON to OFF (Door status changes from open to close.) • Registered Intelligent Key is not detected inside the vehicle.
	Door status is open	• Ignition switch: Other than LOCK and OFF. • Door switch: ON (Door is open.) • Registered Intelligent Key is not detected inside the vehicle during Key ID verification for 5 seconds.
	Push-button ignition switch operation	• Ignition switch: Other than LOCK position. • Push-button ignition switch is pressed. • Registered Intelligent Key is not detected inside the vehicle.
Door lock operation warning		Door lock operation is requested while door lock operation condition of door request switch is not satisfied.
Engine start information	Ignition switch is ON position	• Ignition switch: ON position • Shift position: P • Engine is stopped.
	Ignition switch is other than ON position	• Ignition switch: Other than ON. • Shift position: P • Intelligent Key is in the passenger room after driver door is opened and closed.
	Ignition switch is ON position to OFF position	• Ignition switch: ON position to OFF position. • Shift position: P position NOTE: Engine start information turns ON for several seconds and then turns OFF, when ignition switch is turned to the ON position from the OFF position. Engine start information does not turn ON until opening and closing of driver door is detected again.
Intelligent Key low battery warning		BCM detects that Intelligent Key is low battery, after ignition switch is turned ON.
Key ID warning		• Push-button ignition switch is pressed. • Registered Intelligent Key is not detected inside the vehicle.

WARNING METHOD

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

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Warning/Information functions		"KEY" warning lamp	Shift P warning lamp	Warning chime		Engine start operation indicator lamp
				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	Blink (yellow)	Indicate	Activate	—	—
	For external		—	—	Active	—
ACC warning		—	—	Activate	—	—
Take away warning	Door is open to close	Blink (yellow)	—	Activate	Activate	—
	Door is open		—	—	—	—
	Push-ignition switch operation		—	Activate	—	—
Door lock operation warning		—	—	—	Activate	—
Engine start information		—	—	—	—	Indicate
Intelligent Key low battery warning		Blink (green)	—	—	—	—
Key ID warning		Blink (yellow)	—	—	—	—

LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

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

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000012542542

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	- 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			
Warning chime	BUZZER			x	x			
Interior room lamp timer	INT LAMP			x	x	x		
Exterior lamp	HEAD LAMP			x	x	x		
Wiper and washer	WIPER			x	x	x		
Turn signal and hazard warning lamps	FLASHER			x	x	x		
Air conditioner	AIR CONDITIONER			x				
Intelligent Key system	INTELLIGENT KEY		x	x	x	x		
Combination switch	COMB SW			x				
BCM	BCM	x	x			x	x	x
Immobilizer	IMMU		x	x	x	x		
Interior room lamp battery saver	BATTERY SAVER			x	x	x		
Vehicle security system	THEFT ALM			x	x			
RAP system	RETAINED PWR			x				
Signal buffer system	SIGNAL BUFFER			x				
TPMS	AIR PRESSURE MONITOR		x	x	x	x		
Panic alarm system	PANIC ALARM				x			

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

DOOR LOCK

DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)

INFOID:0000000012542543

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 [OTR ULK/AS UNLK/DR UNLK/ALL UNLK/ALL LOCK].

WORK SUPPORT

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

*: Initial setting

INTELLIGENT KEY

INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)

INFOID:0000000012542544

SELF DIAGNOSTIC RESULT

Refer to [BCS-50, "DTC Index"](#).

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

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.
CLUCH SW [On/Off]	×	Indicates condition of clutch interlock switch.
BRAKE SW 1 [On/Off]	×	Indicates condition of brake switch.
BRAKE SW 2 [On/Off]		Indicates condition of brake switch.
DETE/CANCL SW [On/Off]	×	Indicates condition of P (park) position.
SFT PN/N SW [On/Off]	×	Indicates condition of P (park) or N (neutral) position.
UNLK SEN -DR [On/Off]	×	Indicates condition of door unlock sensor.
PUSH SW -IPDM [On/Off]		Indicates condition of push-button ignition switch received from IPDM E/R on CAN communication line.
IGN RLY1 -F/B [On/Off]		Indicates condition of ignition relay 1 received from IPDM E/R on CAN communication line.
DETE SW -IPDM [On/Off]		Indicates condition of detent switch received from TCM on CAN communication line.
SFT PN -IPDM [On/Off]		Indicates condition of P (park) or N (neutral) position from TCM on CAN communication line.
SFT P -MET [On/Off]		Indicates condition of P (park) position from TCM on CAN communication line.
SFT N -MET [On/Off]		Indicates condition of N (neutral) position from IPDM E/R on CAN communication line.
ENGINE STATE [Stop/Start/Crank/Run]	×	Indicates condition of engine state from ECM on CAN communication line.
VEH SPEED 1 [mph/km/h]	×	Indicates condition of vehicle speed signal received from ABS on CAN communication line.
VEH SPEED 2 [mph/km/h]	×	Indicates condition of vehicle speed signal received from combination meter on CAN communication line.
DOOR STAT -DR [LOCK/READY/UNLK]	×	Indicates condition of driver side door status.
DOOR STAT -AS [LOCK/READY/UNLK]	×	Indicates condition of passenger side door status.
ID OK FLAG [Set/Reset]		Indicates condition of Intelligent Key ID.
PRMT ENG STRT [Set/Reset]		Indicates condition of engine start possibility.
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-PANIC [On/Off]		Indicates condition of panic signal from Intelligent Key.
RKE-MODE CHG [On/Off]		Indicates condition of mode change signal from Intelligent Key.

ACTIVE TEST

Test Item	Description
INSIDE BUZZER	This test is able to check combination meter warning chime operation [Take Out/Knob/Key/Off].
LCD	This test is able to check combination meter display information [Off/LK WN/OUTKEY/NO KY/BATT/INSRT/SFT P/ROTAT/ID NG/B&P I/B&P N].
BATTERY SAVER	This test is able to check battery saver operation [On/Off].

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

Test Item	Description
ENGINE SW ILLUMI	This test is able to check push-button ignition switch START indicator operation [On/Off].
PUSH SWITCH INDICATOR	This test is able to check push-button ignition switch indicator operation [On/Off].
INT LAMP	This test is able to check interior room lamp operation [On/Off].
INDICATOR	This test is able to check combination meter warning lamp operation [KEY ON/KEY IND/Off].
FLASHER	This test is able to check hazard lamp operation [LH/RH/Off].
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation [On/Off].
HORN	This test is able to check horn operation [On].
P RANGE	This test is able to check CVT shift selector illumination operation [On/Off].

WORK SUPPORT

Support Item	Setting	Description
LOCK/UNLOCK BY I-KEY	On*	Door lock/unlock function from Intelligent Key ON.
	Off	Door lock/unlock function from Intelligent Key OFF.
ANTI KEY LOCK IN FUNCTI	On*	Anti lock out setting ON.
	Off	Anti lock out setting OFF.
ANS BACK I-KEY UNLOCK	Off	No buzzer reminder when doors are unlocked with request switch.
	On*	Buzzer reminder when doors are unlocked with request switch.
ANS BACK I-KEY LOCK	Horn Chirp	Horn chirp reminder when doors are locked with request switch.
	Buzzer*	Buzzer reminder when doors are locked with request switch.
	Off	No reminder when doors are locked with request switch.
HORN WITH KEYLESS LOCK	Off	Horn chirp reminder when doors are locked with Intelligent Key.
	On*	No horn chirp reminder when doors are locked with Intelligent Key.
HAZARD ANSWER BACK	Lock/Unlock*	Hazard warning lamp activation when doors are locked/unlocked with Intelligent Key or request switch.
	Unlock Only	Hazard warning lamp activation when doors are unlocked with Intelligent Key or request switch.
	Lock Only	Hazard warning lamp activation when doors are locked with Intelligent Key or request switch.
	Off	No hazard warning lamp activation when doors are locked/unlocked with Intelligent Key or request switch.
INSIDE ANT DIAGNOSIS	—	This function allows inside key antenna self-diagnosis.
CONFIRM KEY FOB ID	—	Intelligent Key ID code can be checked.
SHORT CRANKING OUTPUT	Start	70 msec
		100 msec
		200 msec
	End	—
PANIC ALARM SET	MODE 3	1.5 sec
	MODE 2	OFF
	MODE 1*	0.5 sec
LO- BATT OF KEY FOB WARN	On*	Intelligent Key low battery warning ON.
	Off	Intelligent Key low battery warning OFF.

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Support Item	Setting		Description
AUTO LOCK SET	MODE7	5 min	Auto door lock time setting.
	MODE6	4 min	
	MODE5	3 min	
	MODE4	2 min	
	MODE3*	1 min	
	MODE2	30 sec	
	MODE1	Off	

*: Initial Setting

ECU DIAGNOSIS INFORMATION

BCM

List of ECU Reference

INFOID:0000000012429991

ECU	Reference
BCM	BCS-30, "Reference Value"
	BCS-48, "Fail-safe"
	BCS-49, "DTC Inspection Priority Chart"
	BCS-50, "DTC Index"

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

POWER DOOR LOCK SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

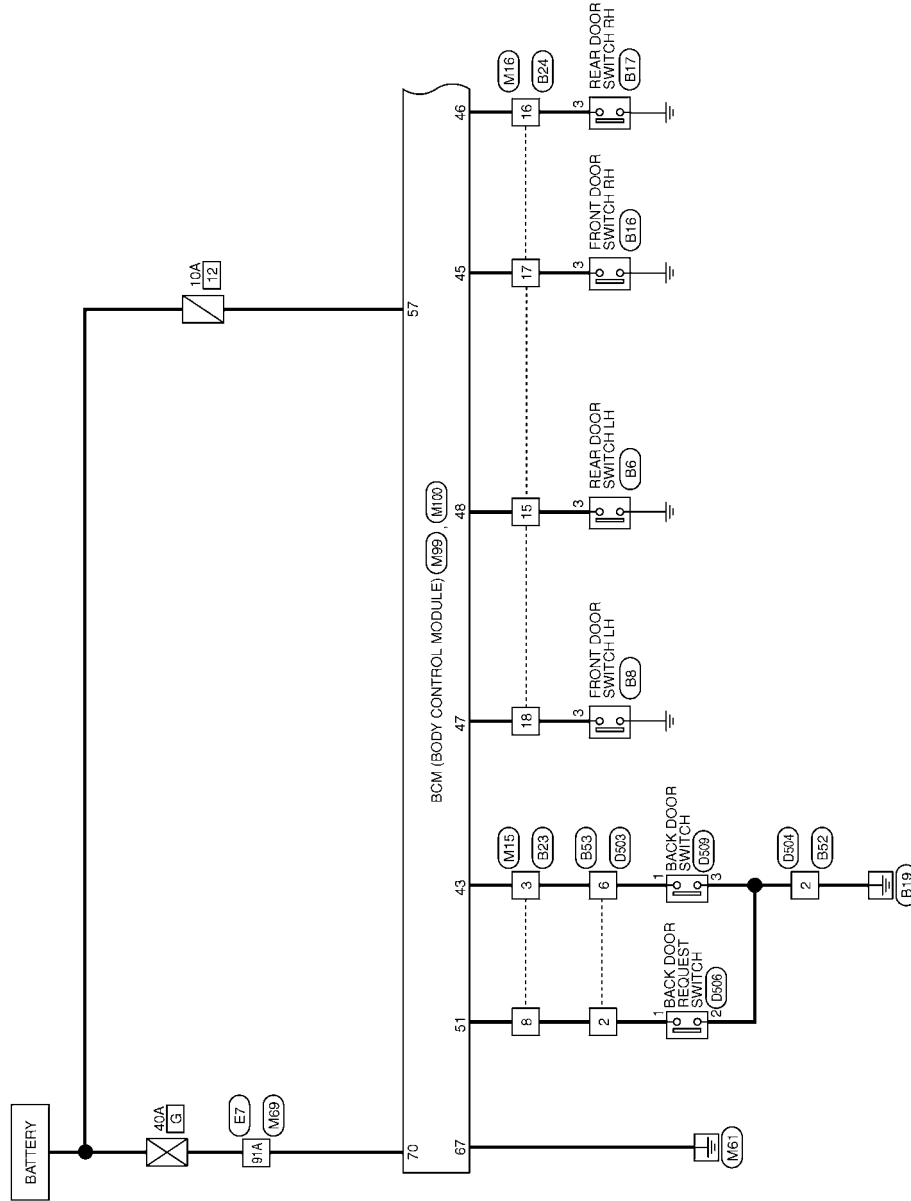
WIRING DIAGRAM

POWER DOOR LOCK SYSTEM

Wiring Diagram

INFOID:0000000012429993

POWER DOOR LOCK SYSTEM - WITH INTELLIGENT KEY SYSTEM

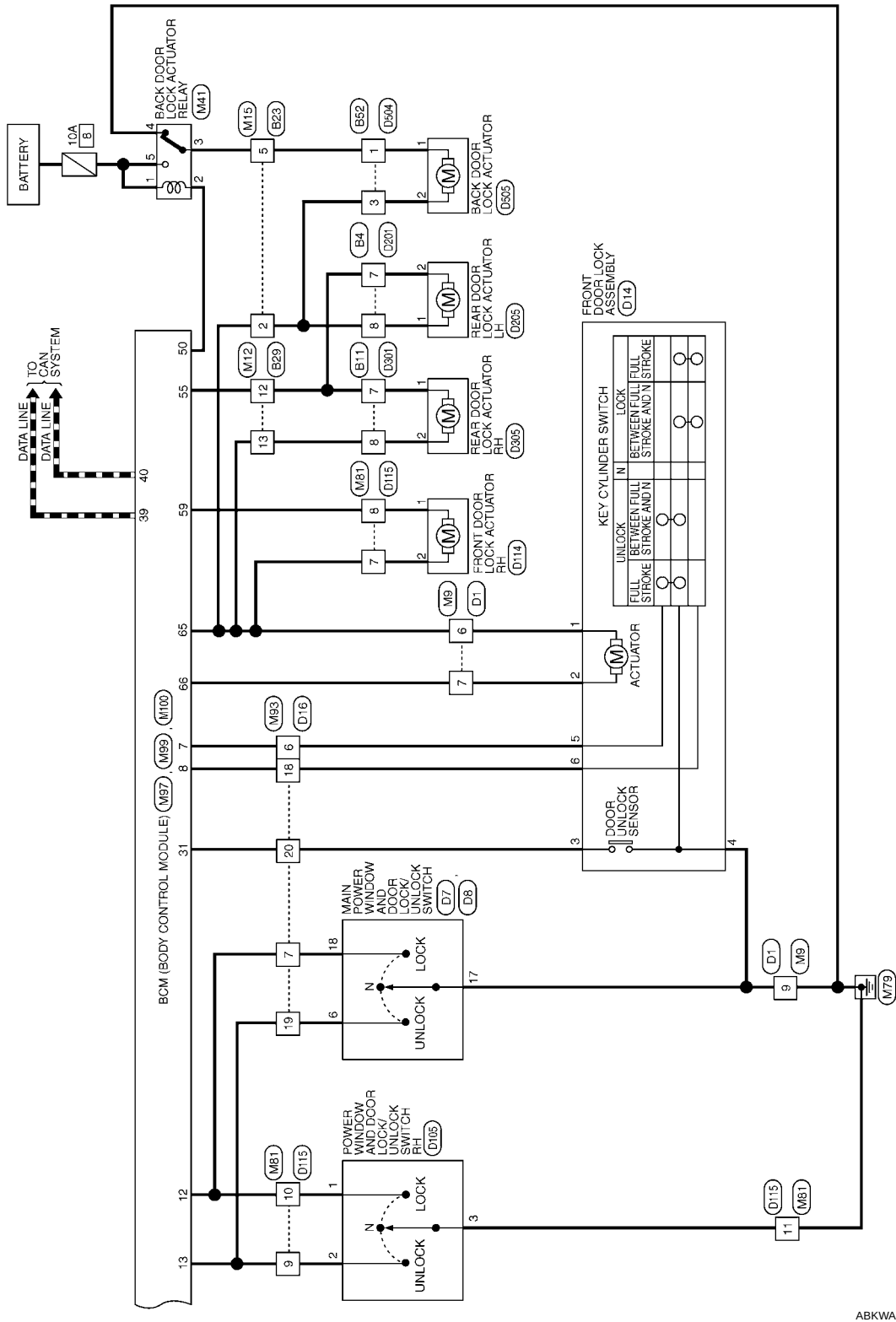


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POWER DOOR LOCK SYSTEM

< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]



POWER DOOR LOCK SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

POWER DOOR LOCK SYSTEM CONNECTORS - WITH INTELLIGENT KEY SYSTEM

Connector No.	M9
Connector Name	WIRE TO WIRE
Connector Color	WHITE

1	2	3	4	5
6	7	8	9	10
11	12			



Terminal No.	Color of Wire	Signal Name
6	SB	-
7	G	-
9	B	-

Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Color	WHITE

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



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

Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Color	WHITE

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



Terminal No.	Color of Wire	Signal Name
2	SB	-
3	P	-
5	G	-
8	W	-

Connector No.	M16
Connector Name	WIRE TO WIRE
Connector Color	WHITE

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



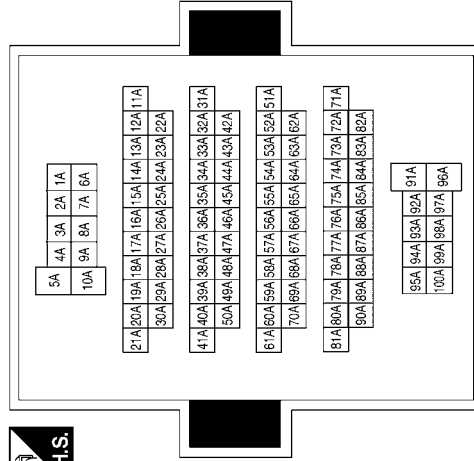
Connector No.	M41
Connector Name	BACK DOOR LOCK ACTUATOR RELAY
Connector Color	BLACK

3	5	2	4	1
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Terminal No.	Color of Wire	Signal Name
15	W	-
16	BR	-
17	BG	-
18	SB	-

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



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POWER DOOR LOCK SYSTEM

< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]

Connector No.	M93
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

Terminal No.	Color of Wire	Signal Name
6	W	-
7	GR	-
18	GR	-
19	BR	-
20	Y	-

Connector No.	M81
Connector Name	WIRE TO WIRE
Connector Color	WHITE



1	2	3	4	5
6	7	8	9	10
11	12			

Terminal No.	Color of Wire	Signal Name
7	SB	-
8	G	-
9	BR	-
10	GR	-
11	B	-

Connector No.	M99
Connector Name	BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM)
Connector Color	WHITE



56	57	58	59	60	61	62	63	64
65	66	67	68	69	70			

Terminal No.	Color of Wire	Signal Name
7	W	KEY CYLINDER UNLOCK SW
8	GR	KEY CYLINDER LOCK SW
12	GR	CENTRAL DOOR LOCK SW
13	BR	CENTRAL DOOR UNLOCK SW
31	Y	DOOR LOCK STATUS SW (DR)
39	L	CAN-H
40	P	CAN-L

Connector No.	M97
Connector Name	BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM)
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	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

Terminal No.	Color of Wire	Signal Name
57	Y	BATTERY (FUSE)
59	G	DOOR UNLOCK OUTPUT (AS)
65	SB	DOOR LOCK OUTPUT
66	G	DOOR UNLOCK COMMON (DR)
67	B	GND
70	G	BATTERY (FIL)

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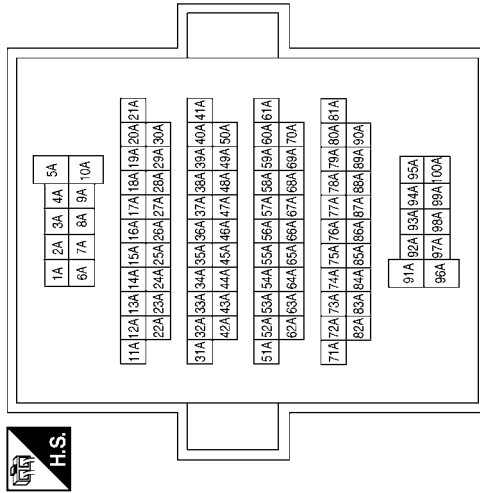
POWER DOOR LOCK SYSTEM

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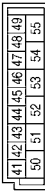
[WITH INTELLIGENT KEY SYSTEM]

Terminal No.	Color of Wire	Signal Name
91A	Y	—

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Connector No.	M100
Connector Name	BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
43	P	DOOR SW BACK
45	BG	DOOR SW (AS)
46	BR	DOOR SW (RR)
47	SB	DOOR SW (OR)
48	W	DOOR SW (RL)
50	G	DOOR UNLOCK OUTPUT (BACK)
51	W	REQUEST SW (TRUNK/BACK DOOR)
55	G	DOOR UNLOCK OUTPUT (RR, RL)

Connector No.	B8
Connector Name	FRONT DOOR SWITCH LH
Connector Color	WHITE



Connector No.	B6
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE



Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	LG	—

Terminal No.	Color of Wire	Signal Name
3	V	—

Terminal No.	Color of Wire	Signal Name
7	G	—
8	W	—

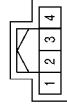
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POWER DOOR LOCK SYSTEM

< WIRING DIAGRAM >

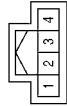
[WITH INTELLIGENT KEY SYSTEM]

Connector No.	B17
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE



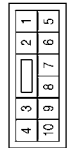
Terminal No.	Color of Wire	Signal Name
3	R	—

Connector No.	B16
Connector Name	FRONT DOOR SWITCH RH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	L	—

Connector No.	B11
Connector Name	WIRE TO WIRE
Connector Color	WHITE



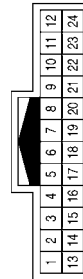
Terminal No.	Color of Wire	Signal Name
7	G	—
8	SB	—

Connector No.	B29
Connector Name	WIRE TO WIRE
Connector Color	WHITE



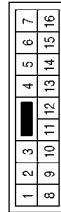
Terminal No.	Color of Wire	Signal Name
12	G	—
13	SB	—

Connector No.	B24
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
15	V	—
16	R	—
17	L	—
18	LG	—

Connector No.	B23
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	SB	—
3	P	—
5	G	—
8	W	—

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POWER DOOR LOCK SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

5	4			3	2	1
12	11	10	9	8	7	6



Terminal No.	Color of Wire	Signal Name
6	LG	-
7	R	-
9	B	-

Connector No.	B53
Connector Name	WIRE TO WIRE
Connector Color	WHITE

4	3	2	1
8	7	6	5



Terminal No.	Color of Wire	Signal Name
2	W	-
6	P	-

Connector No.	B52
Connector Name	WIRE TO WIRE
Connector Color	WHITE

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

Connector No.	D14
Connector Name	FRONT DOOR LOCK ASSEMBLY LH
Connector Color	GRAY

1	2	3	4	5	6
---	---	---	---	---	---



Terminal No.	Color of Wire	Signal Name
1	LG	-
2	R	-
3	P	-
4	B	-
5	W	-
6	GR	-

Connector No.	D8
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Color	WHITE

17	18	19
----	----	----



Terminal No.	Color of Wire	Signal Name
17	B	GND
18	GR	LOCK SW

Connector No.	D7
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
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
6	L	UNLOCK SW

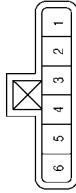
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POWER DOOR LOCK SYSTEM

< WIRING DIAGRAM >

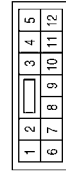
[WITH INTELLIGENT KEY SYSTEM]

Connector No.	D114
Connector Name	FRONT DOOR LOCK ACTUATOR RH
Connector Color	GRAY



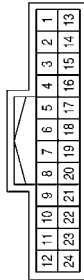
Terminal No.	Color of Wire	Signal Name
1	R	-
2	LG	-

Connector No.	D105
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH
Connector Color	WHITE



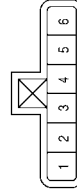
Terminal No.	Color of Wire	Signal Name
1	GR	-
2	BR	-
3	B	-

Connector No.	D16
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6	W	-
7	GR	-
18	GR	-
19	L	-
20	P	-

Connector No.	D205
Connector Name	REAR DOOR LOCK ACTUATOR LH
Connector Color	GRAY



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

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



Terminal No.	Color of Wire	Signal Name
7	G	-
8	SB	-

Connector No.	D115
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
7	LG	-
8	R	-
9	BR	-
10	GR	-
11	B	-

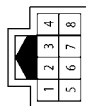
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POWER DOOR LOCK SYSTEM

< WIRING DIAGRAM >

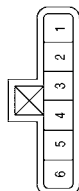
[WITH INTELLIGENT KEY SYSTEM]

Connector No.	D503
Connector Name	WIRE TO WIRE
Connector Color	WHITE



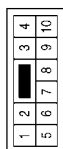
Terminal No.	Color of Wire	Signal Name
2	W	-
6	P	-

Connector No.	D305
Connector Name	REAR DOOR LOCK ACTUATOR RH
Connector Color	GRAY



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

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



Terminal No.	Color of Wire	Signal Name
7	G	-
8	SB	-

Connector No.	D506
Connector Name	BACK DOOR REQUEST SWITCH
Connector Color	BROWN



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

Connector No.	D505
Connector Name	BACK DOOR LOCK ACTUATOR
Connector Color	WHITE



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

Connector No.	D504
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

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POWER DOOR LOCK SYSTEM

< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]

Connector No.	D509
Connector Name	BACK DOOR SWITCH
Connector Color	WHITE

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

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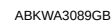
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[WITH INTELLIGENT KEY SYSTEM]

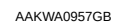
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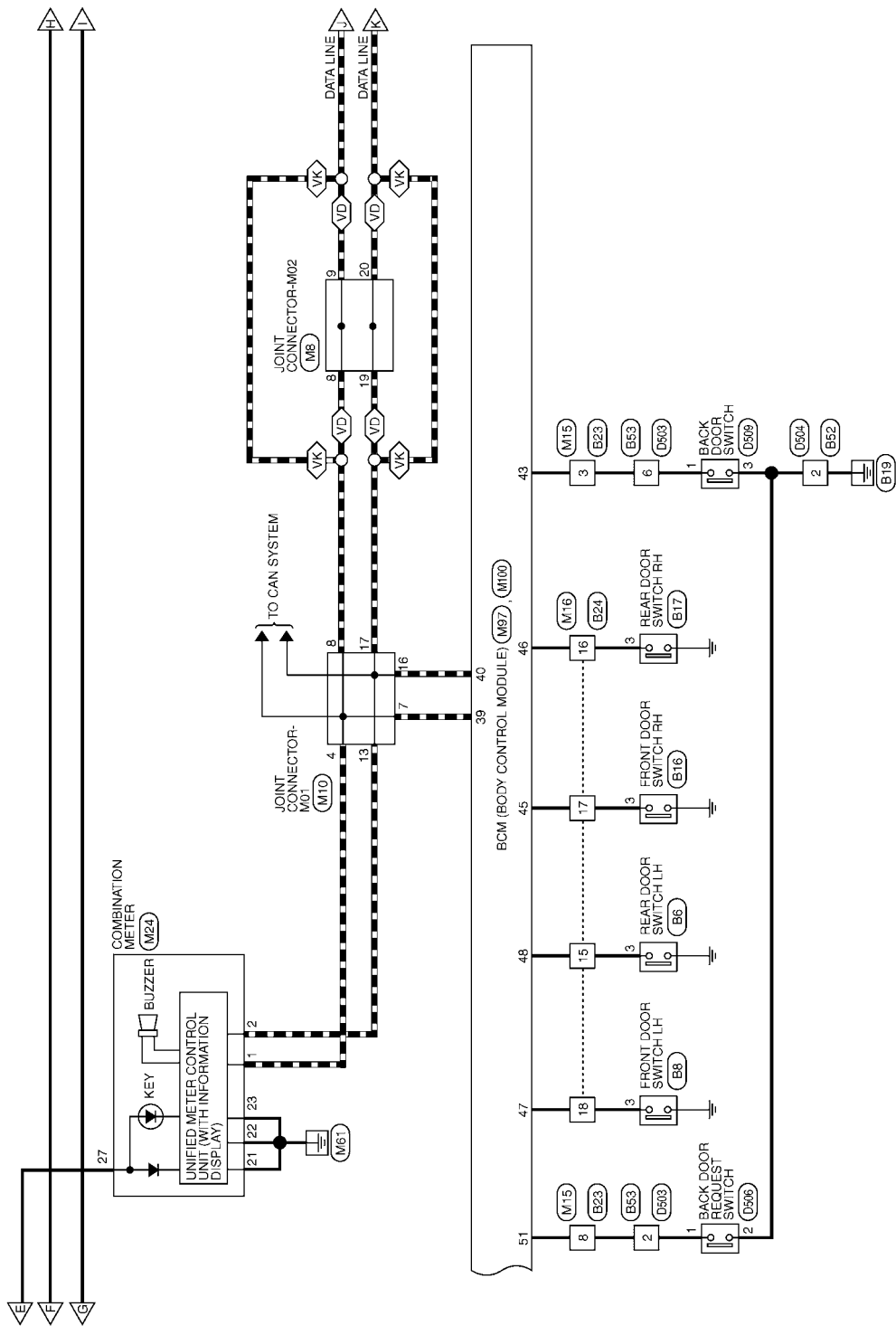


INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]

VD : WITH AROUND VIEW MONITOR
VK : WITHOUT AROUND VIEW MONITOR



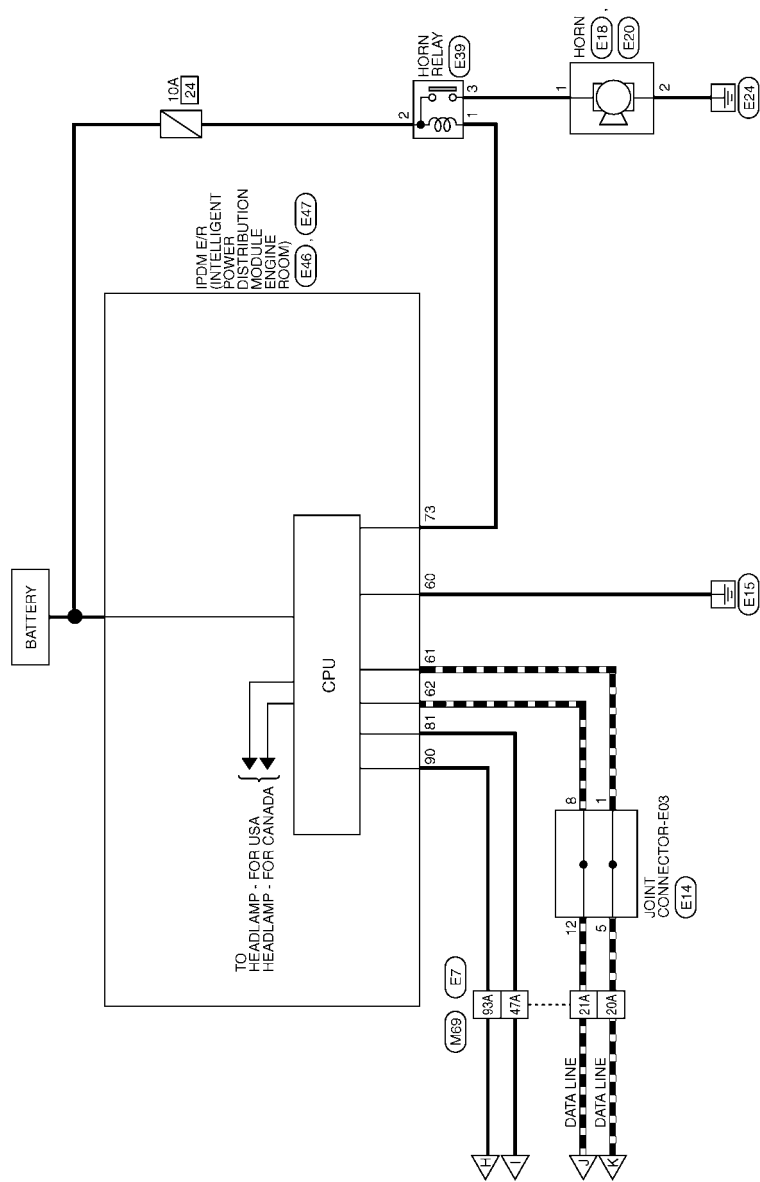
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INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]



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INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM CONNECTORS

Connector No.	M5
Connector Name	JOINT CONNECTOR- M03
Connector Color	WHITE

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Terminal No.	Color of Wire	Signal Name
4	B	-
5	B	-
6	B	-
7	LG	-
9	R	-

Connector No.	M8
Connector Name	JOINT CONNECTOR-M02
Connector Color	GREEN

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Terminal No.	Color of Wire	Signal Name
8	L	-
9	L	-
19	P	-
20	P	-

Connector No.	M9
Connector Name	WIRE TO WIRE
Connector Color	WHITE

1	2	3	4		5
6	7	8	9	10	11
					12



Terminal No.	Color of Wire	Signal Name
9	B	-

Connector No.	M10
Connector Name	JOINT CONNECTOR-M01
Connector Color	BLUE

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Terminal No.	Color of Wire	Signal Name
4	L	-
7	L	-
8	L	-
13	P	-
16	P	-
17	P	-
18	L	-
19	R	-
20	W	-

Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Color	WHITE

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



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

Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Color	WHITE

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



Terminal No.	Color of Wire	Signal Name
3	P	-
8	W	-

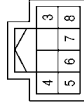
ABKIA7072GB

INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

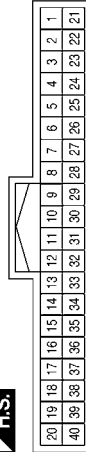
[WITH INTELLIGENT KEY SYSTEM]

Connector No.	M25
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Color	WHITE



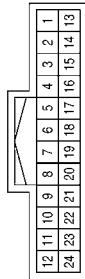
Terminal No.	Color of Wire	Signal Name
3	G	-
4	B	-
7	V	-
8	R	-

Connector No.	M24
Connector Name	COMBINATION METER (WITH TYPE B)
Connector Color	WHITE



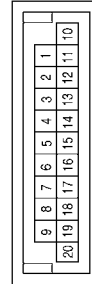
Terminal No.	Color of Wire	Signal Name
1	L	CAN-H
2	P	CAN-L
21	B	GND (LL)
22	B	GND (POWER)
23	B	GND (CIRCUIT)
27	R/W	BAT

Connector No.	M16
Connector Name	WIRE TO WIRE
Connector Color	WHITE



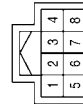
Terminal No.	Color of Wire	Signal Name
10	V	-
15	W	-
16	BR	-
17	BG	-
18	SB	-
22	LG	-

Connector No.	M51
Connector Name	JOINT CONNECTOR-M04
Connector Color	BLUE



Terminal No.	Color of Wire	Signal Name
18	LG	-
20	V	-

Connector No.	M38
Connector Name	CVT SHIFT SELECTOR
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
7	V	-
8	R	-

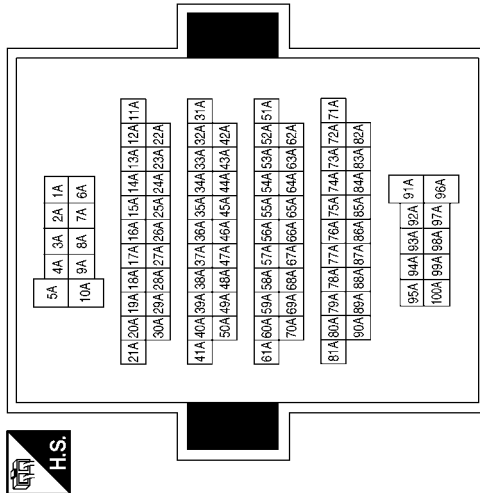
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INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]

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



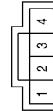
Terminal No.	Color of Wire	Signal Name
20A	P	-
21A	L	-
37A	V	-
38A	R	-
39A	SB	-
47A	W	-
91A	G	-
92A	R	-
93A	BG	- (WITH INTELLIGENT KEY SYSTEM)

Connector No.	M89
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Color	BLUE



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

Connector No.	M90
Connector Name	REMOTE KEYLESS ENTRY RECEIVER (WITH INTELLIGENT KEY SYSTEM WITHOUT TIRE PRESSURE MONITORING SYSTEM)
Connector Color	BLACK



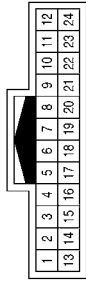
Terminal No.	Color of Wire	Signal Name
1	V	-
2	G	-
3	W	-
4	LG	-

Connector No.	M92
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	L	-
2	B	-
7	Y	-
8	LG	-

Connector No.	M93
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
21	V	-
22	P	-
23	GR	-

INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

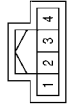
[WITH INTELLIGENT KEY SYSTEM]

Connector No.	M95
Connector Name	INSIDE KEY ANTENNA (INSTRUMENT CENTER)
Connector Color	BLUE



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

Connector No.	M94
Connector Name	REMOTE KEYLESS ENTRY RECEIVER (WITH INTELLIGENT KEY SYSTEM WITH TIRE PRESSURE MONITORING SYSTEM)
Connector Color	WHITE



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

Connector No.	M97
Connector Name	BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM)
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	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

Terminal No.	Color of Wire	Signal Name
7	W	KEY CYLINDER UNLOCK SW
8	GR	KEY CYLINDER LOCK SW
9	LG	BRAKE SW1
12	GR	CENTRAL DOOR LOCK SW
13	BR	CENTRAL DOOR UNLOCK SW

Terminal No.	Color of Wire	Signal Name
18	V	KEYLESS TUNER GND
19	LG	KEYLESS TUNER POWER SUPPLY
20	G	KEYLESS TUNER SIGNAL
22	W	KEYLESS TUNER RSSI
29	BG	HAZARD SW
37	R	SHIFT P POSITION, PARKING POSITION SW
38	G	INTELLIGENT TUNER
39	L	CAN-H
40	P	CAN-L

ABKIA7075GB

INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]

Connector No.	M100
Connector Name	BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM)
Connector Color	BLACK

41	42	43	44	45	46	47	48	49
50	51	52	53	54	55			



Terminal No.	Color of Wire	Signal Name
43	P	DOOR SW (BACK)
45	BG	DOOR SW (AS)
46	BR	DOOR SW (RF)
47	SB	DOOR SW (DR)
48	W	DOOR SW (RL)
49	L	LUGGAGE LAMP OUTPUT
51	W	REQUEST SW (TRUNK)
55	G	DOOR UNLOCK OUTPUT (RR, RL)

Connector No.	M99
Connector Name	BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM)
Connector Color	WHITE

56	57	58	59	60	61	62	63	64
65	66	67	68	69	70			



Terminal No.	Color of Wire	Signal Name
56	W	BATTERY SAVER OUTPUT
57	Y	BATTERY (FUSE)
59	G	DOOR UNLOCK OUTPUT (AS)
60	V	FLASHER OUTPUT (LEFT)
61	W	FLASHER OUTPUT (RIGHT)
63	R	ROOM LAMP OUTPUT
65	SB	DOOR LOCK OUTPUT
66	G	DOOR UNLOCK COMMON (DR)
67	B	GND
70	G	BATTERY (F/L)

Connector No.	M98
Connector Name	BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM)
Connector Color	WHITE



71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110

Terminal No.	Color of Wire	Signal Name
75	GR	REQUEST SW (DR)
76	L	ENGINE START SW
78	P	DOOR ANTENNA (DR) +
79	V	DOOR ANTENNA (DR) -
80	LG	DOOR ANTENNA (AS) +
81	Y	DOOR ANTENNA (AS) -
82	W	BACK DOOR ANTENNA +
83	B	BACK DOOR ANTENNA -
84	P	ROOM ANTENNA 1 +
85	L	ROOM ANTENNA 1 -
86	G	ROOM ANTENNA 2 +
87	R	ROOM ANTENNA 2 -
88	V	ROOM ANTENNA 3 +
89	LG	ROOM ANTENNA 3 -
91	V	POWER POSITION LED (LOCK POSITION LED)
93	R	SMART KEYLESS BUZZER OUTPUT
98	BG	IGN RELAY OUTPUT 1 (USM)
100	L	REQUEST SW (AS)
104	V	AT DEVICE OUTPUT
105	SB	BRAKE SW2

ABKIA7076GB

INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]

Connector No.	E13
Connector Name	STOP LAMP SWITCH (WITH CVT)
Connector Color	WHITE

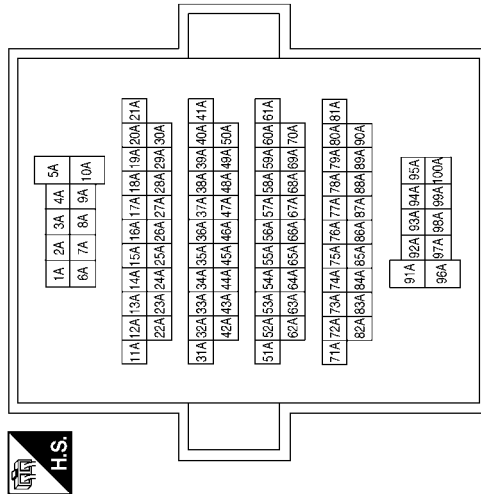
3	4
1	2



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

Terminal No.	Color of Wire	Signal Name
20A	P	-
21A	L	-
37A	W	-
38A	R	-
39A	SB	-
47A	SB	-
91A	Y	-
92A	LG	-
93A	L	-

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Connector No.	E20
Connector Name	HORN
Connector Color	BLACK

2



Terminal No.	Color of Wire	Signal Name
2	B	-

Connector No.	E18
Connector Name	HORN
Connector Color	BLACK

1



Terminal No.	Color of Wire	Signal Name
1	G	-

Connector No.	E14
Connector Name	JOINT CONNECTOR-E03
Connector Color	BLUE

12	11	10	9	8	7	6	5	4	3	2	1
----	----	----	---	---	---	---	---	---	---	---	---



Terminal No.	Color of Wire	Signal Name
1	P	-
5	P	-
8	L	-
12	L	-

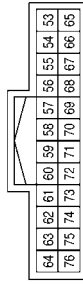
AAKIA2289GB

INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]

Connector No.	E46
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



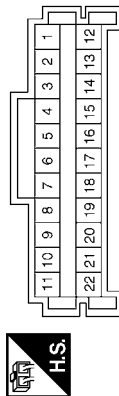
Terminal No.	Color of Wire	Signal Name
60	B	S GND
61	P	CAN-L
62	L	CAN-H
73	SB	HORN RLY

Connector No.	E39
Connector Name	HORN RELAY
Connector Color	WHITE



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

Connector No.	E22
Connector Name	JOINT CONNECTOR-E02
Connector Color	WHITE



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

Connector No.	E70
Connector Name	INTELLIGENT KEY WARNING BUZZER
Connector Color	BROWN



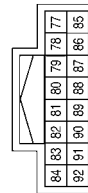
Terminal No.	Color of Wire	Signal Name
1	W	-
3	R	-

Connector No.	E57
Connector Name	STOP LAMP SWITCH (WITH M/T)
Connector Color	BLACK



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

Connector No.	E47
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
81	SB	PUSH START SW
90	L	IGN SIGNAL

ABKIA7077GB

INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]

Connector No.	B16
Connector Name	FRONT DOOR SWITCH RH
Connector Color	WHITE



Terminal No.	3	Color of Wire	L	Signal Name	—
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Connector No.	B8
Connector Name	FRONT DOOR SWITCH LH
Connector Color	WHITE



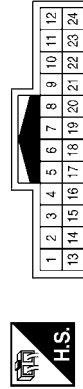
Terminal No.	3	Color of Wire	LG	Signal Name	—
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Connector No.	B6
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE



Terminal No.	3	Color of Wire	V	Signal Name	—
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Connector No.	B24
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	10	Color of Wire	V	Signal Name	—
	15	Color of Wire	V	Signal Name	—
	16	Color of Wire	R	Signal Name	—
	17	Color of Wire	L	Signal Name	—
	18	Color of Wire	LG	Signal Name	—
	22	Color of Wire	LG	Signal Name	—

Connector No.	B23
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	3	Color of Wire	P	Signal Name	—
	8	Color of Wire	W	Signal Name	—

Connector No.	B17
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE



Terminal No.	3	Color of Wire	R	Signal Name	—
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AAKIA2327GB

INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]

Connector No.	B49
Connector Name	OUTSIDE KEY ANTENNA (REAR BUMPER)
Connector Color	BLUE



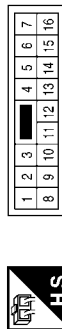
Terminal No.	Color of Wire	Signal Name
1	W	-
2	B	-

Connector No.	B48
Connector Name	INSIDE KEY ANTENNA (TRUNK ROOM)
Connector Color	BLUE



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

Connector No.	B29
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
9	B	-

Connector No.	B53
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	W	-
6	P	-

Connector No.	B52
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	B	-

AAKIA1315GB

INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]

Connector No.	D17
Connector Name	FRONT OUTSIDE HANDLE LH (REQUEST SWITCH)
Connector Color	GRAY



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

Connector No.	D16
Connector Name	WIRE TO WIRE
Connector Color	WHITE

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



Terminal No.	Color of Wire	Signal Name
21	Y	-
22	LG	-
23	L	-

Connector No.	D6
Connector Name	FRONT OUTSIDE HANDLE LH (OUTSIDE KEY ANTENNA)
Connector Color	GRAY



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

Connector No.	D116
Connector Name	WIRE TO WIRE
Connector Color	WHITE

6	5	4	3	2	1
12	11	10	9	8	7



Terminal No.	Color of Wire	Signal Name
1	L	-
2	B	-
7	Y	-
8	LG	-

Connector No.	D113
Connector Name	FRONT OUTSIDE HANDLE RH (REQUEST SWITCH)
Connector Color	GRAY



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

Connector No.	D106
Connector Name	FRONT OUTSIDE HANDLE RH (OUTSIDE KEY ANTENNA)
Connector Color	GRAY



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

AAKIA2290GB

INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

[WITH INTELLIGENT KEY SYSTEM]

Connector No.	D506
Connector Name	BACK DOOR REQUEST SWITCH
Connector Color	BROWN



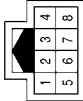
Terminal No.	Color of Wire	Signal Name
1	W	-
2	B	-

Connector No.	D504
Connector Name	WIRE TO WIRE
Connector Color	WHITE



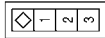
Terminal No.	Color of Wire	Signal Name
2	B	-

Connector No.	D503
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	W	-
6	P	-

Connector No.	D509
Connector Name	BACK DOOR SWITCH
Connector Color	WHITE



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

AAKIA2328GB

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

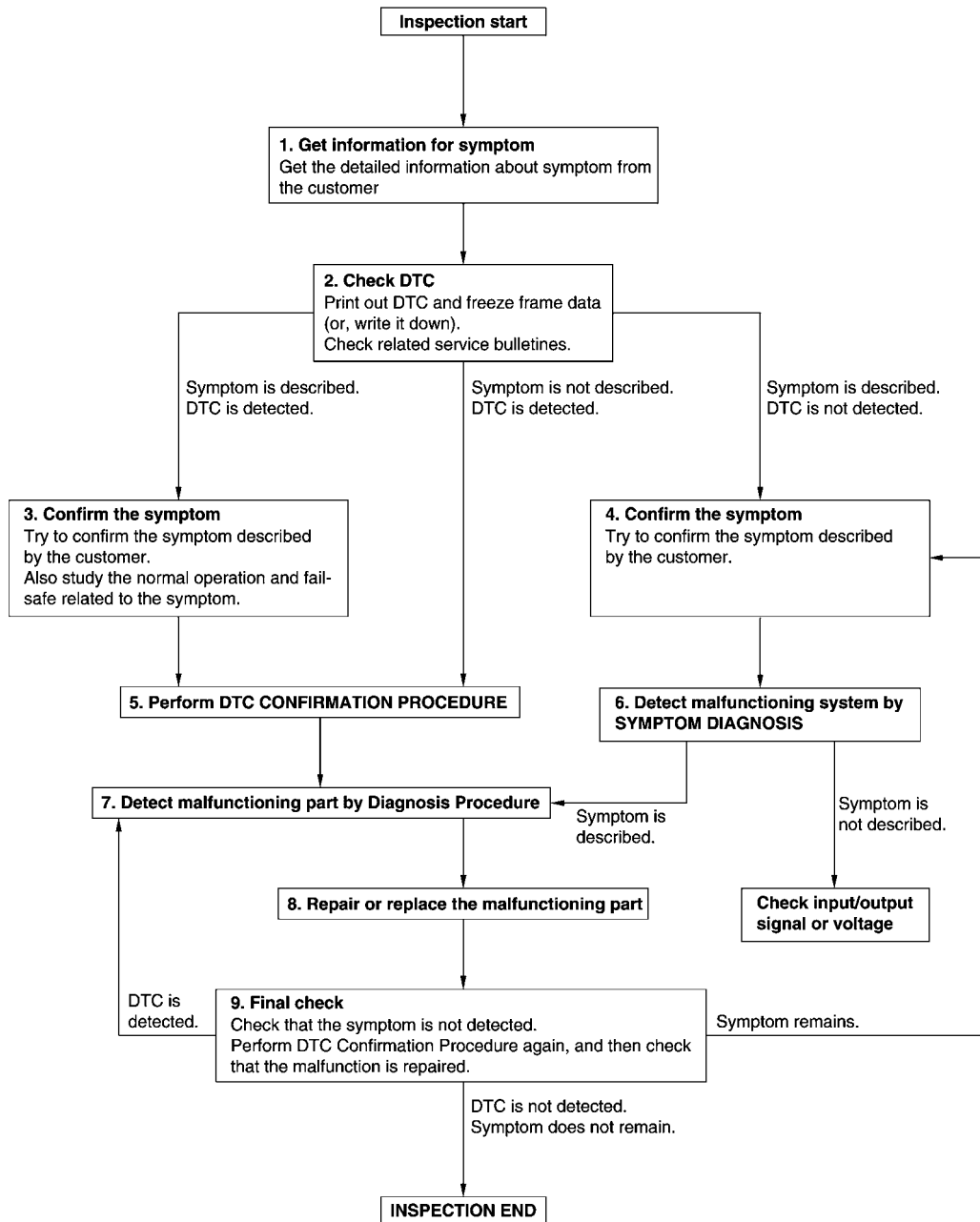
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000012429994

OVERALL SEQUENCE



DETAILED FLOW

Revision: August 2015

DLK-61

JMKIA8652GB

2016 Versa Note

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

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-49. "DTC Inspection Priority Chart"](#) and determine trouble diagnosis order.

NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC CONFIRMATION PROCEDURE is not included on Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check.
If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC CONFIRMATION PROCEDURE.

Is DTC detected?

YES >> GO TO 7.

NO >> Check according to [GI-42. "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

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.

NO >> Check according to [GI-42. "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.

A
B
C
D
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P

DLK

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM)

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM) : Description

INFOID:0000000012542545

BEFORE REPLACEMENT

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

NOTE:

If "READ CONFIGURATION" can not be used, use the "WRITE CONFIGURATION - Manual selection" after replacing BCM.

AFTER REPLACEMENT

CAUTION:

When replacing BCM, always perform "WRITE CONFIGURATION" with CONSULT. Or not doing so, BCM control function does not operate normally.

- Complete the procedure of "WRITE CONFIGURATION" in order.
- Configuration is different for each vehicle model. Confirm configuration of each vehicle model.
- If you set incorrect "WRITE CONFIGURATION", incidents might occur.

NOTE:

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

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM) : Work Procedure

INFOID:0000000012542546

1. SAVING VEHICLE SPECIFICATION CONSULT Configuration

Perform "READ CONFIGURATION" to save or print current vehicle specification. Refer to [BCS-59, "Description"](#).

NOTE:

If "READ CONFIGURATION" can not be used, use the "WRITE CONFIGURATION - Manual selection" after replacing BCM.

>> GO TO 2.

2. REPLACE BCM

Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

>> GO TO 3.

3. WRITING VEHICLE SPECIFICATION CONSULT Configuration

Perform "WRITE CONFIGURATION - Config file" or "WRITE CONFIGURATION - Manual selection" to write vehicle specification. Refer to [BCS-59, "Work Procedure"](#).

>> GO TO 4.

4. REGISTER INTELLIGENT KEYS

For initialization and registration of Intelligent Keys, refer to CONSULT immobilizer mode and follow the on-screen instructions.

>> WORK END

B2621 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DTC/CIRCUIT DIAGNOSIS

B2621 INSIDE ANTENNA

DTC Logic

INFOID:0000000012429997

DTC DETECTION LOGIC

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

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".
4. Check BCM for DTC.

Is inside key antenna DTC detected?

- YES >> Refer to [DLK-65, "Diagnosis Procedure"](#).
- NO >> Inside key antenna (instrument center) is OK.

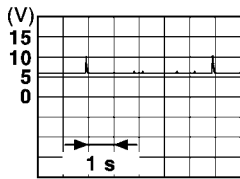
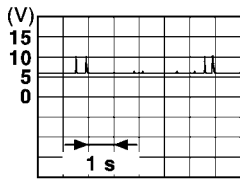
Diagnosis Procedure

INFOID:0000000012429998

Regarding Wiring Diagram information, refer to [DLK-46, "Wiring Diagram"](#).

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M98	84	Ground	When Intelligent Key is in the antenna detection area.	 JMKIA3839GB
	85		When Intelligent Key is not in the antenna detection area.	 JMKIA5951GB

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

B2621 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

NO >> GO TO 2.

2. CHECK INSIDE KEY ANTENNA CIRCUIT

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

BCM		Inside key antenna (instrument center)		Continuity
Connector	Terminal	Connector	Terminal	
M98	84	M95	1	Yes
	85		2	

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M98	84		No
	85		

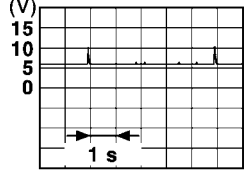
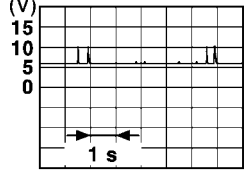
Is the inspection result normal?

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M98	84	Ground	When Intelligent Key is in the antenna detection area.	
	85		When Intelligent Key is not in the antenna detection area.	

Is the inspection result normal?

YES >> Replace inside key antenna (instrument center). Refer to [DLK-182, "INSTRUMENT CENTER : Removal and Installation"](#).

NO >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

B2622 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2622 INSIDE ANTENNA

DTC Logic

INFOID:000000012429999

DTC DETECTION LOGIC

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

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 ANT DIAGNOSIS".
4. Check BCM for DTC.

Is inside key antenna DTC detected?

- YES >> Refer to [DLK-67, "Diagnosis Procedure"](#).
NO >> Inside key antenna (console) is OK.

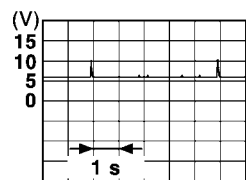
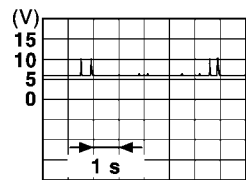
Diagnosis Procedure

INFOID:000000012430000

Regarding Wiring Diagram information, refer to [DLK-46, "Wiring Diagram"](#).

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M98	86	Ground	When Intelligent Key is in the antenna detection area.	 JMKIA3839GB
	87		When Intelligent Key is not in the antenna detection area.	 JMKIA5951GB

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).
NO >> GO TO 2.

2.CHECK INSIDE KEY ANTENNA CIRCUIT

B2622 INSIDE ANTENNA

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

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

BCM		Inside key antenna (console)		Continuity
Connector	Terminal	Connector	Terminal	
M98	86	M89	1	Yes
	87		2	

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M98	86		No
	87		

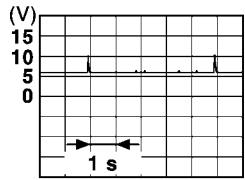
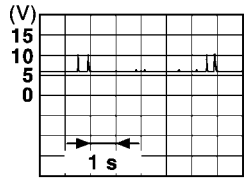
Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M98	86 87	Ground	When Intelligent Key is in the antenna detection area.	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area.	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace inside key antenna (console). Refer to [DLK-182, "CONSOLE : Removal and Installation"](#).

NO >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

B2623 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2623 INSIDE ANTENNA

DTC Logic

INFOID:000000012430001

DTC DETECTION LOGIC

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

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 ANT DIAGNOSIS".
4. Check BCM for DTC.

Is inside key antenna DTC detected?

- YES >> Refer to [DLK-69, "Diagnosis Procedure"](#).
NO >> Inside key antenna (trunk room) is OK.

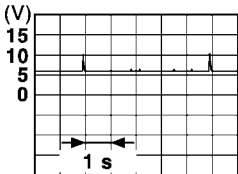
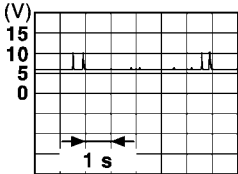
Diagnosis Procedure

INFOID:000000012430002

Regarding Wiring Diagram information, refer to [DLK-46, "Wiring Diagram"](#).

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M98	88	Ground	When Intelligent Key is in the antenna detection area.	
	89		When Intelligent Key is not in the antenna detection area.	

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).
NO >> GO TO 2.

2.CHECK INSIDE KEY ANTENNA CIRCUIT

B2623 INSIDE ANTENNA

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

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

BCM		Inside key antenna (trunk room)		Continuity
Connector	Terminal	Connector	Terminal	
M98	88	B48	1	Yes
	89		2	

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M98	88		No
	89		

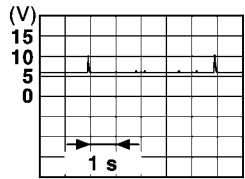
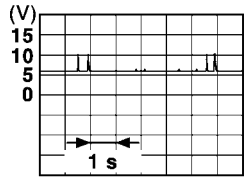
Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M98	88	Ground	When Intelligent Key is in the antenna detection area.	 JMKIA3839GB
	89		When Intelligent Key is not in the antenna detection area.	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace inside key antenna (trunk room). Refer to [DLK-182, "LUGGAGE ROOM : Removal and Installation"](#).

NO >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

B2626 OUTSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2626 OUTSIDE ANTENNA

DTC Logic

INFOID:0000000012430005

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2626	OUTSIDE ANTENNA 1	An excessive high or low voltage from outside key antenna (LH) is sent to BCM.	• Outside key antenna (LH) • Between BCM and Outside key antenna (LH)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is outside key antenna DTC detected?

- YES >> Refer to [DLK-71, "Diagnosis Procedure"](#).
NO >> Outside key antenna (LH) is OK.

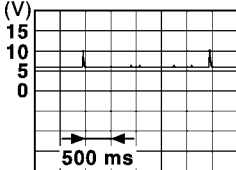
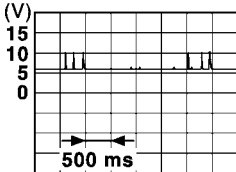
Diagnosis Procedure

INFOID:0000000012430006

Regarding Wiring Diagram information, refer to [DLK-46, "Wiring Diagram"](#).

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+)		(-)	Condition		Signal (Reference value)
BCM					
Connector	Terminal				
M98	78	Ground	When the driver side 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.)	 JMKIA5955GB
	79			When Intelligent Key is not in the antenna detection area. (The distance between Intelligent Key and antenna: Approx. 2 m.)	 JMKIA5954GB

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).
NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector and outside key antenna (LH) connector.

B2626 OUTSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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

BCM		Outside key antenna (LH)		Continuity
Connector	Terminal	Connector	Terminal	
M98	78	D6	1	Yes
	79		2	

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M98	78		No
	79		

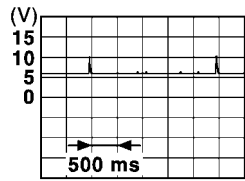
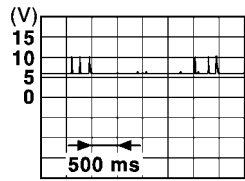
Is the inspection result normal?

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M98	78	Ground	When Intelligent Key is in the antenna detection area. (The distance between Intelligent Key and antenna: 80 cm or less.)	 JMKIA5955GB
	79		When the driver side door request switch is operated with ignition switch OFF.	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace outside key antenna (LH). Refer to [DLK-184, "OUTSIDE HANDLE : Removal and Installation"](#).

NO >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

B2627 OUTSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2627 OUTSIDE ANTENNA

DTC Logic

INFOID:0000000012430003

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2627	OUTSIDE ANTENNA 2	An excessive high or low voltage from outside key antenna (RH) is sent to BCM.	• Outside key antenna (RH) • Between BCM and Outside key antenna (RH)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

- YES >> Refer to [DLK-73, "Diagnosis Procedure"](#).
- NO >> Outside key antenna (RH) is OK.

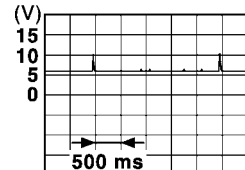
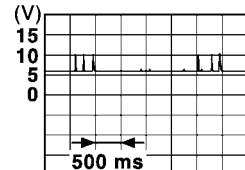
Diagnosis Procedure

INFOID:0000000012430004

Regarding Wiring Diagram information, refer to [DLK-46, "Wiring Diagram"](#).

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M98	80 81	Ground	When the passenger door request switch is operated with ignition switch OFF.	 JMkia5955GB
			When Intelligent Key is not in the antenna detection area. (The distance between Intelligent Key and antenna: Approx. 2 m.)	 JMkia5954GB

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).
- NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector and outside key antenna (RH) connector.

B2627 OUTSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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

BCM		Outside key antenna (RH)		Continuity
Connector	Terminal	Connector	Terminal	
M98	80	D106	1	Yes
	81		2	

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M98	80		No
	81		

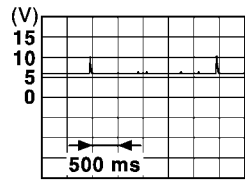
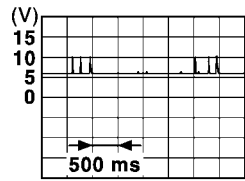
Is the inspection result normal?

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M98	80	Ground	When Intelligent Key is in the antenna detection area. (The distance between Intelligent Key and antenna: 80 cm or less.)	 JMKIA5955GB
	81		When the passenger door request switch is operated with ignition switch OFF.	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace outside key antenna (RH). Refer to [DLK-184, "OUTSIDE HANDLE : Removal and Installation"](#).

NO >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

B2628 OUTSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2628 OUTSIDE ANTENNA

DTC Logic

INFOID:000000012430007

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is outside key antenna DTC detected?

- YES >> Refer to [DLK-75, "Diagnosis Procedure"](#).
NO >> Outside key antenna (rear bumper) is OK.

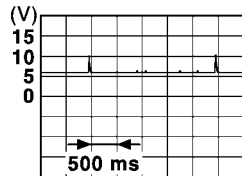
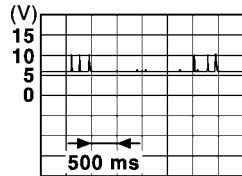
Diagnosis Procedure

INFOID:000000012430008

Regarding Wiring Diagram information, refer to [DLK-46, "Wiring Diagram"](#).

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM		(-)	Condition		Signal (Reference value)
Connector	Terminal				
M98	82	Ground	When the back 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.)	 JMKIA5955GB
	83			When Intelligent Key is not in the antenna detection area. (The distance between Intelligent Key and antenna: Approx. 2 m.)	 JMKIA5954GB

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).
NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Turn ignition switch OFF.

B2628 OUTSIDE ANTENNA

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

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

BCM		Outside key antenna (rear bumper)		Continuity
Connector	Terminal	Connector	Terminal	
M98	82	B49	1	Yes
	83		2	

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M98	82		No
	83		

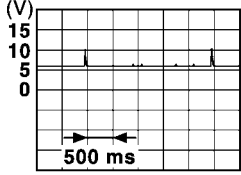
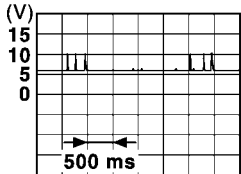
Is the inspection result normal?

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M98	82	Ground	When Intelligent Key is in the antenna detection area. (The distance between Intelligent Key and antenna: 80 cm or less.)	 JMKIA5955GB
	83		When the back door request switch is operated with ignition switch OFF.	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace outside key antenna (rear bumper). Refer to [DLK-184, "REAR BUMPER : Removal and Installation"](#).

NO >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:0000000012542547

Regarding Wiring Diagram information, refer to [BCS-52. "Wiring Diagram"](#).

1.CHECK FUSES AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuses and fusible link No.
57	Battery power supply	12 (10A)
70		G (40A)

Is the fuse blown?

- YES >> Replace the blown fuse or fusible link after repairing the affected circuit.
NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector M99.
2. Check voltage between BCM connector M99 and ground.

BCM		Ground	Voltage
Connector	Terminal		
M99	57	—	Battery voltage
	70		

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM connector M99 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M99	67	—	Yes

Is the inspection result normal?

- YES >> Inspection End.
NO >> Repair harness or connector.

COMBINATION METER BUZZER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

COMBINATION METER BUZZER

Component Function Check

INFOID:0000000012430010

1.CHECK FUNCTION

1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
2. Select "INSIDE BUZZER" in "Active Test".
3. Touch "Key", "Knob" or "Take Out" to check that it works normally.

Is the inspection result normal?

- Yes >> Combination meter buzzer is OK.
No >> Refer to [DLK-78, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012430011

1.CHECK METER BUZZER CIRCUIT

Refer to [WCS-38, "Component Function Check"](#).

Is the inspection result normal?

- Yes >> GO TO 2.
No >> Repair or replace harness.

2.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> Inspection End.

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DOOR LOCK ACTUATOR

DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:0000000012430012

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-79, "DRIVER SIDE : Diagnosis Procedure"](#).

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000012430013

Regarding Wiring Diagram information, refer to [DLK-36, "Wiring Diagram"](#).

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+)		(-)	Condition		Voltage (Approx.)
Front door lock actuator LH					
Connector	Terminal				
D14	1	Ground	Door lock and unlock switch	Lock	Battery voltage
	2			Unlock	

Is the inspection result normal?

YES >> Replace front door lock actuator LH .

NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM		Front door lock actuator LH		Continuity
Connector	Terminal	Connector	Terminal	
M99	65	D14	1	Yes
	66		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M99	65		No
	66		

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 front door lock actuator LH harness connector and ground.

(+)		(-)	Condition		Voltage (Approx.)
BCM					
Connector	Terminal				
M99	65	Ground	Door lock and unlock switch	Lock	Battery voltage
	66			Unlock	

Is the inspection result normal?

- YES >> Check for internal short of each door lock actuator.
 NO >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

PASSENGER SIDE

PASSENGER SIDE : Component Function Check

INFOID:0000000012430014

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-80, "PASSENGER SIDE : Diagnosis Procedure"](#).

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000012430015

Regarding Wiring Diagram information, refer to [DLK-36, "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				
D114	2	Ground	Door lock and unlock switch	Lock	Battery voltage
	1			Unlock	

Is the inspection result normal?

- YES >> Replace front door lock actuator RH.
 NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM		Front door lock actuator RH		Continuity
Connector	Terminal	Connector	Terminal	
M99	65	D114	2	Yes
	59		1	

3. Check continuity between BCM harness connector and ground.

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

BCM		Ground	Continuity
Connector	Terminal		
M99	65		No
	59		

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 front door lock actuator RH harness connector and ground.

(+)		(-)	Condition		Voltage (Approx.)
BCM					
Connector	Terminal				
M99	65	Ground	Door lock and unlock switch	Lock	Battery voltage
	59			Unlock	

Is the inspection result normal?

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

NO >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

REAR LH

REAR LH : Component Function Check

INFOID:0000000012430016

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-81, "REAR LH : Diagnosis Procedure"](#).

REAR LH : Diagnosis Procedure

INFOID:0000000012430017

Regarding Wiring Diagram information, refer to [DLK-36, "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				
D205	1	Ground	Door lock and unlock switch	Lock	Battery voltage
	2			Unlock	

Is the inspection result normal?

YES >> Replace rear door lock actuator LH. Refer to [DLK-172, "Exploded View"](#).

NO >> GO TO 2.

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM		Rear door lock actuator LH		Continuity
Connector	Terminal	Connector	Terminal	
M99	65	D205	1	Yes
	55		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M99	65		No
	55		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

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

(+) BCM		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
M99	65	Ground	Door lock and unlock switch	Lock	Battery voltage
	55			Unlock	

Is the inspection result normal?

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

NO >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

REAR RH

REAR RH : Component Function Check

INFOID:0000000012430018

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-82, "REAR RH : Diagnosis Procedure"](#).

REAR RH : Diagnosis Procedure

INFOID:0000000012430019

Regarding Wiring Diagram information, refer to [DLK-36, "Wiring Diagram"](#).

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

(+) Rear door lock actuator RH		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
D305	2	Ground	Door lock and unlock switch	Lock	Battery voltage
	1			Unlock	

Is the inspection result normal?

YES >> Replace rear door lock actuator RH. Refer to [DLK-172, "Exploded View"](#).

NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM		Rear door lock actuator RH		Continuity
Connector	Terminal	Connector	Terminal	
M99	65	D305	2	Yes
	55		1	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M99	65		No
	55		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.
2. Check voltage between rear door lock actuator RH harness connector and ground.

(+) BCM		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
M99	65	Ground	Door lock and unlock switch	Lock	Battery voltage
	55			Unlock	

Is the inspection result normal?

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

NO >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

BACK DOOR

BACK DOOR : Description

INFOID:0000000012430020

Locks/unlocks the door with the signal from BCM.

BACK DOOR : Component Function Check

INFOID:0000000012430021

1.CHECK FUNCTION

1. Perform "DOOR LOCK" in "Active Test" using CONSULT.
2. Touch "ALL LOCK" or "ALL UNLK" to check that it works normally.

Is the inspection result normal?

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

- YES >> Back door lock actuator is OK.
NO >> Refer to [DLK-84, "BACK DOOR : Diagnosis Procedure"](#).

BACK DOOR : Diagnosis Procedure

INFOID:000000012430022

Regarding Wiring Diagram information, refer to [DLK-36, "Wiring Diagram"](#).

1. CHECK BACK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+) Back door lock actuator		(-)	Condition		Voltage (V) (Approx.)
Connector	Terminal				
D505	1	Ground	Door lock and unlock switch	Unlock	Battery voltage
	2			Lock	

Is the inspection result normal?

- YES >> Replace back door lock actuator. Refer to [DLK-176, "BACK DOOR LOCK : Removal and Installation"](#).
NO-1 >> GO TO 2 (lock signal).
NO-2 >> GO TO 3 (unlock signal).

2. CHECK BACK DOOR LOCK ACTUATOR LOCK CIRCUIT

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

BCM		Back door lock actuator		Continuity
Connector	Terminal	Connector	Terminal	
M99	65	D505	2	Yes

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M99	65		No

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).
NO >> Repair or replace harness.

3. CHECK BACK DOOR LOCK ACTUATOR UNLOCK CIRCUIT

1. Disconnect back door lock actuator relay connector.
2. Check continuity between back door lock actuator relay harness connector and back door lock actuator harness connector.

Back door lock actuator relay		Back door lock actuator		Continuity
Connector	Terminal	Connector	Terminal	
M41	3	D505	1	Yes

3. Check continuity between BCM harness connector and ground.

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Back door lock actuator relay		Ground	Continuity
Connector	Terminal		
M41	3		No

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-42, "Intermittent Incident"](#)

>> Inspection End.

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BACK DOOR LOCK ACTUATOR RELAY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

BACK DOOR LOCK ACTUATOR RELAY

Description

INFOID:0000000012430023

Controls back door lock actuator lock/unlock operation.

Component Function Check

INFOID:0000000012430024

1.CHECK FUNCTION

1. Perform "DOOR LOCK" in "Active Test" using CONSULT.
2. Touch "ALL LOCK" or "ALL UNLK" to check that it works normally.

Is the inspection result normal?

- YES >> Back door lock actuator relay is OK.
NO >> Refer to [DLK-86, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012430025

Regarding Wiring Diagram information, refer to [DLK-36, "Wiring Diagram"](#).

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10 A fuse, No. 8, located in fuse block (J/B).

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

2.CHECK BACK DOOR LOCK ACTUATOR RELAY POWER CIRCUIT

1. Remove back door lock actuator relay.
2. Check voltage between back door lock actuator relay harness connector and ground.

(+)		(-)	Voltage (V) (Approx.)
Back door lock actuator relay			
Connector	Terminal		
M41	1	Ground	Battery voltage
	5		

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Repair or replace harness.

3.CHECK BACK DOOR LOCK ACTUATOR RELAY CIRCUIT 1

1. Install the back door lock actuator relay.
2. Check voltage between BCM harness connector and ground.

(+)		(-)	Condition		Voltage (V) (Approx.)
BCM					
Connector	Terminal				
M100	50	Ground	Door lock and un- lock switch	LOCK	Battery voltage
				UNLOCK	0

Is the inspection result normal?

- YES >> GO TO 6.
NO-1 (when voltage is fixed at 12V)>>Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).
NO-2 (when voltage is fixed at 0V)>>GO TO 4.

BACK DOOR LOCK ACTUATOR RELAY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

4.CHECK BACK DOOR LOCK ACTUATOR RELAY CIRCUIT 1

1. Disconnect BCM connector.
2. Check voltage between BCM harness connector and ground.

(+)		(-)	Voltage (V) (Approx.)
BCM			
Connector	Terminal		
M100	50	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

NO >> GO TO 5.

5.CHECK BACK DOOR LOCK ACTUATOR RELAY CIRCUIT 2

1. Remove back door lock actuator relay.
2. Check continuity between BCM harness connector and back door lock actuator relay harness connector.

Back door lock actuator relay		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M41	2	M100	50	Yes

3. Check continuity between BCM harness connector and ground.

Back door lock actuator relay		Ground	Continuity
Connector	Terminal		
M41	2		No

Is the inspection result normal?

YES >> Replace back door lock actuator relay.

NO >> Repair or replace harness.

6.CHECK BACK DOOR LOCK ACTUATOR RELAY GROUND CIRCUIT

Check continuity between back door lock actuator relay harness connector and ground.

Back door lock actuator relay		Ground	Continuity
Connector	Terminal		
M41	4		Yes

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness.

7.CHECK BACK DOOR LOCK ACTUATOR RELAY

Check back door lock actuator relay. Refer to [DLK-87, "Component Inspection"](#)

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace back door lock actuator relay.

8.CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-42, "Intermittent Incident"](#)

>> Inspection End.

Component Inspection

INFOID:0000000012430026

1.CHECK BACK DOOR LOCK ACTUATOR RELAY

BACK DOOR LOCK ACTUATOR RELAY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

1. Turn ignition switch OFF.
2. Remove back door lock actuator relay.
3. Check continuity between back door lock actuator relay terminals.

Back door lock actuator relay		Condition	Continuity
Terminal			
3	4	12 V direct current supply between terminals 1 and 2	No
		No current supply	Yes
	5	12 V direct current supply between terminals 1 and 2	Yes
		No current supply	No

Is the inspection result normal?

- YES >> Inspection End.
NO >> Replace back door lock actuator relay.

DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DOOR LOCK AND UNLOCK SWITCH

Component Function Check

INFOID:0000000012430027

1.CHECK FUNCTION

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

Monitor item	Condition		Status
CDL LOCK SW	Main power window and door lock/unlock switch	LOCK	ON
		UNLOCK	OFF
CDL UNLOCK SW		LOCK	OFF
		UNLOCK	ON

Is the inspection result normal?

- YES >> Main power window and door lock/unlock switch is OK.
NO >> Refer to [DLK-89, "Diagnosis Procedure"](#).

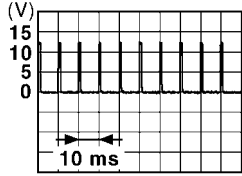
Diagnosis Procedure

INFOID:0000000012430028

Regarding Wiring Diagram information, refer to [DLK-36, "Wiring Diagram"](#).

1.CHECK DOOR LOCK AND UNLOCK SWITCH INPUT SIGNAL

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

(+)		(-)	Signal (Reference value)
Connector	Terminal		
D7	6	Ground	
D8	18		

Is the inspection result normal?

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

2.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

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

DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

BCM		Main power window and door lock/unlock switch		Continuity
Connector	Terminal	Connector	Terminal	
M97	12	D8	18	Yes
	13	D7	6	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M97	12		No
	13		

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

NO >> Repair or replace harness.

3.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

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

Main power window and door lock/unlock switch		Ground	Continuity
Connector	Terminal		
D8	17		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK DOOR LOCK AND UNLOCK SWITCH

Refer to [DLK-90, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace main power window and door lock/unlock switch. Refer to [PWC-55, "Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000012430029

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

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 terminals.

Main power window and door lock/unlock switch		Condition		Continuity
Terminal				
6	17	Main power window and door lock/ unlock switch	LOCK	No
			UNLOCK	Yes
18			LOCK	Yes
			UNLOCK	No

Is the inspection result normal?

YES >> Inspection End

DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

NO >> Replace main power window and door lock/unlock switch. Refer to [PWC-55, "Removal and Installation"](#).

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UNLOCK SENSOR

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

UNLOCK SENSOR

Component Function Check

INFOID:0000000012542550

1.CHECK FUNCTION

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

Monitor item	Condition		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-92, "Diagnosis Procedure"](#).

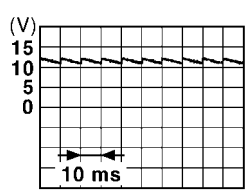
Diagnosis Procedure

INFOID:0000000012542551

Regarding Wiring Diagram information, refer to [DLK-36, "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.

(+) Front door lock assembly LH		(-)	Signal (Reference value)
Connector	Terminal		
D14	3	Ground	 JPMIA0011GB

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	
M97	31	D14	3	Yes

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M97	31		No

UNLOCK SENSOR

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-74, "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		
D14	4		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK UNLOCK SENSOR

Refer to [DLK-93, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace front door lock assembly LH. Refer to [DLK-168, "DOOR LOCK : Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000012542552

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-168, "DOOR LOCK : Removal and Installation"](#).

DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DOOR REQUEST SWITCH

Component Function Check

INFOID:0000000012430030

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	Door request switch LH	Pressed	ON
		Released	OFF
REQ SW -AS	Door request switch RH	Pressed	ON
		Released	OFF

Is the inspection result normal?

- YES >> Front door request switch is OK.
NO >> Refer to [DLK-94, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012430031

Regarding Wiring Diagram information, refer to [DLK-46, "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				
Left side	D17	3	Ground	Battery voltage
Right side	D113			

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		BCM		Continuity
Connector	Terminal	Connector	Terminal	
Left side	D17	M98	75	Yes
Right side	D113		100	

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

DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Front door request switch			Ground	Continuity
Connector		Terminal		
Left side	D17	3		No
Right side	D113			

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-74, "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			Ground	Continuity
Connector		Terminal		
Left side	D17	4		Yes
Right side	D113			

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK DOOR REQUEST SWITCH

Refer to [DLK-95, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace malfunctioning front door request switch.

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000012430032

DLK

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-185, "DRIVER SIDE : Removal and Installation"](#) (driver side) or [DLK-185, "PASSENGER SIDE : Removal and Installation"](#) (passenger side).

BACK DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

BACK DOOR REQUEST SWITCH

Description

INFOID:0000000012430033

Transmits lock/unlock operation to BCM.

Component Function Check

INFOID:0000000012430034

1.CHECK FUNCTION

Check "REQSW-BD/TR" in "Data Monitor" using CONSULT.

Monitor item	Condition		Status
REQSW-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-96, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012430035

Regarding Wiring Diagram information, refer to [DLK-46, "Wiring Diagram"](#).

1.CHECK BACK DOOR REQUEST SWITCH INPUT SIGNAL

- Turn ignition switch OFF.
- Disconnect back door request switch connector.
- Check voltage between back door request switch harness connector and ground.

(+)		(-)	Voltage (V) (Approx.)
Back door request switch			
Connector	Terminal		
D506	1	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK BACK DOOR REQUEST SWITCH CIRCUIT

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

BCM		Back door request switch		Continuity
Connector	Terminal	Connector	Terminal	
M100	51	D506	1	Yes

- Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M100	51	Ground	No

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).
NO >> Repair harness or connector.

3.CHECK BACK DOOR REQUEST SWITCH GROUND CIRCUIT

BACK DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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

Back door request switch		Ground	Continuity
Connector	Terminal		
D506	2		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK BACK DOOR REQUEST SWITCH

Refer to [DLK-97, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace back door request switch. Refer to [DLK-176, "OUTSIDE HANDLE : Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000012430036

1.CHECK BACK DOOR REQUEST SWITCH

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

Back door request switch		Condition		Continuity
Terminal				
1	2	Back door request switch	Pressed	Yes
			Released	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door request switch. Refer to [DLK-176, "OUTSIDE HANDLE : Removal and Installation"](#).

DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DOOR SWITCH

Component Function Check

INFOID:000000012430037

1.CHECK FUNCTION

1. Select "DOOR LOCK" of "BCM" using CONSULT.
2. Select "DOOR SW-DR", "DOOR SW-AS", "DOOR SW-RL" and "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-98, "Diagnosis Procedure"](#).

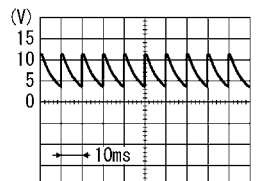
Diagnosis Procedure

INFOID:000000012430038

Regarding Wiring Diagram information, refer to [DLK-36, "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.

(+)			(-)	Signal (Reference value)
Door switch				
Connector		Terminal		
Front door switch LH	B8	3	Ground	 PKIB4960J 7.0 - 8.0 V
Front door switch RH	B16	3		
Rear door switch LH	B6	3		
Rear door switch RH	B17	3		

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 door switch LH	B8	3	M100	Yes
Front door switch RH	B16			
Rear door switch LH	B6			
Rear door switch RH	B17			

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

Door switch			Continuity
Connector	Terminal		
Front door switch LH	B8	3	No
Front door switch RH	B16		
Rear door switch LH	B6		
Rear door switch RH	B17		

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

NO >> Repair or replace harness.

3.CHECK DOOR SWITCH

Refer to [DLK-99, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace malfunctioning door switch.

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000012430039

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

Is the inspection result normal?

DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

YES >> Inspection End.
NO >> Replace malfunction door switch.

HAZARD FUNCTION

Component Function Check

INFOID:0000000012430040

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-101. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012430041

1.CHECK HAZARD SWITCH CIRCUIT

Refer to [EXL-85. "Component Function Check"](#).

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK INTERMITTENT INCIDENT

Refer to [GI-42. "Intermittent Incident"](#).

>> Inspection End.

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DLK

INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY WARNING BUZZER

Component Function Check

INFOID:0000000012542553

1.CHECK FUNCTION

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

Is the inspection result normal?

- YES >> Intelligent Key warning buzzer is OK.
NO >> Refer to [DLK-102, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012542554

Regarding Wiring Diagram information, refer to [DLK-46, "Wiring Diagram"](#).

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10 A fuse [No. 8, located in fuse block (J/B)].

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

2.CHECK INTELLIGENT KEY WARNING BUZZER POWER SUPPLY CIRCUIT

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

(+)		(-)	Voltage (Approx.)
Intelligent Key warning buzzer			
Connector	Terminal		
E70	1	Ground	Battery voltage

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Repair or replace harness.

3.CHECK INTELLIGENT KEY WARNING BUZZER CIRCUIT

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

BCM		Intelligent Key warning buzzer		Continuity
Connector	Terminal	Connector	Terminal	
M98	93	E70	3	Yes

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M98	93		No

Is the inspection result normal?

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

4.CHECK INTELLIGENT KEY WARNING BUZZER

INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Refer to [DLK-103, "Component Inspection"](#).

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

NO >> Replace Intelligent Key warning buzzer. Refer to [DLK-186, "Removal and Installation"](#).

Component Inspection

INFOID:0000000012542555

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		
(+)	(-)	
1	3	Buzzer sounds

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace Intelligent Key warning buzzer. Refer to [DLK-186, "Removal and Installation"](#).

INTELLIGENT KEY

Component Function Check

INFOID:000000012430042

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-104, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012430043

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.

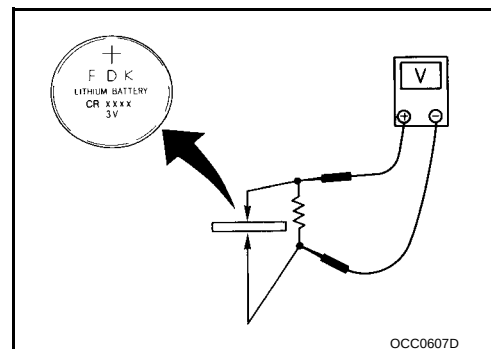
1.CHECK INTELLIGENT KEY BATTERY

Check by connecting a resistance (approximately 300Ω) so that the current value becomes about 10 mA. Refer to [DLK-188, "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.



KEY WARNING LAMP

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

KEY WARNING LAMP

Component Function Check

INFOID:0000000012430044

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-105. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012430045

1.CHECK KEY WARNING LAMP

Refer to [DLK-27. "WARNING FUNCTION : System Description"](#).

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK INTERMITTENT INCIDENT

Refer to [GI-42. "Intermittent Incident"](#).

>> Inspection End.

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DLK

REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

REMOTE KEYLESS ENTRY RECEIVER

Component Function Check

INFOID:0000000012430046

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	Checks whether value changes when operating Intelligent Key.

Is the inspection result normal?

YES >> Remote keyless entry receiver is OK.

NO for USA >>Refer to [DLK-106, "Diagnosis Procedure \(For USA\)".](#)

NO for Canada>>Refer to [DLK-107, "Diagnosis Procedure \(For Canada\)".](#)

Diagnosis Procedure (For USA)

INFOID:0000000012430047

Regarding Wiring Diagram information, refer to [DLK-46, "Wiring Diagram".](#)

1.CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT SIGNAL

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

(+)		(-)	Condition	Signal (Reference value)
BCM				
Connector	Terminal			
M97	38	Ground	Push-button ignition OFF or ACC	0 – 0.5 V
			Push-button ignition ON	Battery voltage

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-74, "Removal and Installation".](#)

NO >> GO TO 2.

2.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT

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

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M97	38	M94	2	Yes

3. Check continuity between BCM harness connector and ground.

(+)		(-)	Continuity
BCM			
Connector	Terminal		
M97	38	Ground	No

Is the inspection result normal?

YES >> GO TO 3.

REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

NO >> Repair or replace harness.

3.CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

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

(+) Remote keyless entry receiver		(-)	Voltage Approx.
Connector	Terminal		
M94	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.

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

NO-2 >> Repair or replace harness between remote keyless entry receiver and 10A fuse No. 10.

4.CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

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

Remote keyless entry receiver		Ground	Continuity
Connector	Terminal		
M94	4		Yes

Is the inspection result normal?

YES >> Replace remote keyless entry receiver. Refer to [DLK-187, "Removal and Installation"](#).

NO >> Repair or replace harness.

Diagnosis Procedure (For Canada)

INFOID:0000000012430048

Regarding Wiring Diagram information, refer to [DLK-46, "Wiring Diagram"](#).

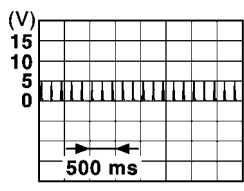
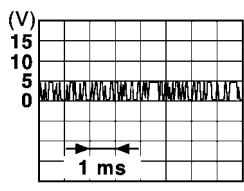
1.CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Check signal between remote keyless entry receiver connector and ground with oscilloscope.

REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Terminals			Condition	Signal (Reference value)
(+) Remote keyless entry receiver connector		(-) Terminal		
Terminal				
M90	2	Ground	Waiting (All doors closed.)	 500 ms JMKIA3838GB
			When signal is received. (All doors closed.)	 1 ms JMKIA3841GB

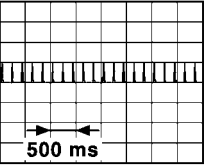
Is the inspection result normal?

YES >> GO TO 7.

NO >> GO TO 2.

2.CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

1. Disconnect remote keyless entry receiver connector.
2. Check signal between remote keyless entry receiver connector and ground with oscilloscope.

Terminals			Signal (Reference value)
(+) Remote keyless entry receiver connector		(-)	
Terminal			
M90	4	Ground	(V) 15 10 5 0  JMKIA3838GB

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 3.

3.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 1

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

BCM connector	Terminal	Remote keyless entry receiver connector	Terminal	Continuity
M97	19	M90	4	Yes

3. Check continuity between BCM connector and ground.

REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

BCM connector	Terminal	Ground	Continuity
M97	19		No

Is the inspection result normal?

YES >> Reconnect BCM, GO TO 4.

NO >> Repair or replace harness between BCM and remote keyless entry receiver.

4.CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

Check continuity between remote keyless entry receiver connector and ground.

Remote keyless entry receiver connector	Terminal	Ground	Continuity
M90	1		Yes

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 2

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

BCM connector	Terminal	Remote keyless entry receiver connector	Terminal	Continuity
M97	18	M90	1	Yes

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness between BCM and remote keyless entry receiver.

6.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 3

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

BCM connector	Terminal	Remote keyless entry receiver connector	Terminal	Continuity
M97	20	M90	2	Yes

2. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M97	20		No

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness between BCM and remote keyless entry.

7.CHECK REMOTE KEYLESS ENTRY RECEIVER RSSI SIGNAL CIRCUIT

1. Disconnect BCM connector.

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

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M97	22	M90	3	Yes

3. Check continuity between BCM harness connector and ground.

REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

BCM		Ground	Continuity
Connector	Terminal		
M97	22		No

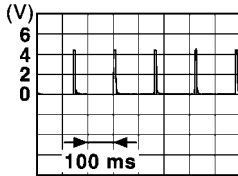
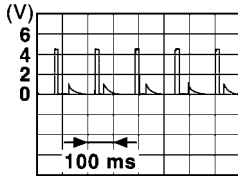
Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness between BCM and remote keyless entry.

8.CHECK REMOTE KEYLESS ENTRY RECEIVER RSSI SIGNAL

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

(+) Remote keyless entry receiver		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M90	3	Ground	During waiting	 JMKIA5952GB
			When pressing and holding either button on Intelligent Key.	 JMKIA5953GB

Is the inspection result normal?

YES >> GO TO 9.

NO >> Replace remote keyless entry receiver. Refer to [DLK-187, "Removal and Installation"](#).

9.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> Inspection End.

SHIFT P WARNING LAMP

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

SHIFT P WARNING LAMP

Component Function Check

INFOID:0000000012430049

1.CHECK FUNCTION

1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
2. Select "LCD" in "Active Test".
3. Touch "SET P" to check that it works normally.

Is the inspection result normal?

- YES >> Shift P warning lamp is OK.
NO >> Refer to [DLK-111, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012430050

1.CHECK SHIFT P WARNING LAMP

Refer to [TM-220, "Component Parts Function Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> Inspection End.

SYMPTOM DIAGNOSIS

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

ALL DOOR

ALL DOOR : Description

INFOID:0000000012430051

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

ALL DOOR : Diagnosis Procedure

INFOID:0000000012430052

1.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch.

Refer to [DLK-89, "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-79, "DRIVER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.REPLACE BCM

1. Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000012430053

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

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000012430054

1.CHECK DOOR LOCK ACTUATOR

Check front door lock assembly LH.

Refer to [DLK-79, "DRIVER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.REPLACE BCM

1. Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

PASSENGER SIDE

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

< SYMPTOM DIAGNOSIS >

PASSENGER SIDE : Description

INFOID:0000000012430055

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

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000012430056

1.CHECK DOOR LOCK ACTUATOR

Check front door lock actuator RH.

Refer to [DLK-80, "PASSENGER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.REPLACE BCM

1. Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

REAR LH

REAR LH : Description

INFOID:0000000012430057

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

REAR LH : Diagnosis Procedure

INFOID:0000000012430058

1.CHECK DOOR LOCK ACTUATOR

Check rear door lock actuator LH.

Refer to [DLK-81, "REAR LH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.REPLACE BCM

1. Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

REAR RH

REAR RH : Description

INFOID:0000000012430059

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

REAR RH : Diagnosis Procedure

INFOID:0000000012430060

1.CHECK DOOR LOCK ACTUATOR

Check rear door lock actuator RH.

Refer to [DLK-82, "REAR RH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.REPLACE BCM

1. Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH
< SYMPTOM DIAGNOSIS > [WITH INTELLIGENT KEY SYSTEM]

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

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

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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

Diagnosis Procedure

INFOID:0000000012430061

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-112, "ALL DOOR : Diagnosis Procedure"](#).

2.CHECK UNLOCK SENSOR

Check unlock sensor.

Refer to [DLK-92, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.REPLACE BCM

1. Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

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DLK

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:0000000012430062

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

ALL DOOR REQUEST SWITCHES : Diagnosis Procedure

INFOID:0000000012430063

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-22, "INTELLIGENT KEY SYSTEM : System Description"](#).

2.CHECK LOCK/UNLOCK BY I-KEY SETTING IN WORK SUPPORT

1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.

2. Select "LOCK/UNLOCK BY I-KEY" in "Work support".

3. Check "LOCK/UNLOCK BY I-KEY" setting in "Work support".

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

Is the inspection result normal?

YES >> GO TO 3.

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

3.CHECK DOOR SWITCH

Check door switch.

Refer to [DLK-98, "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-65, "DTC Logic"](#).

• Console: Refer to [DLK-67, "DTC Logic"](#).

• Trunk room: Refer to [DLK-69, "DTC Logic"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5.CHECK OUTSIDE KEY ANTENNA

Check outside key antenna.

• LH side: Refer to [DLK-73, "DTC Logic"](#).

• RH side: Refer to [DLK-71, "DTC Logic"](#).

• Rear bumper: Refer to [DLK-75, "DTC Logic"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6.REPLACE BCM

1. Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

DRIVER SIDE DOOR REQUEST SWITCH

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DRIVER SIDE DOOR REQUEST SWITCH : Description

INFOID:0000000012430064

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

DRIVER SIDE DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:0000000012430065

1.CHECK DOOR REQUEST SWITCH LH

Check door request switch LH.

Refer to [DLK-94. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK OUTSIDE KEY ANTENNA

Check outside key antenna LH.

Refer to [DLK-73. "DTC Logic"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.REPLACE BCM

1. Replace BCM. Refer to [BCS-74. "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-42. "Intermittent Incident"](#).

PASSENGER SIDE DOOR REQUEST SWITCH

PASSENGER SIDE DOOR REQUEST SWITCH : Description

INFOID:0000000012430066

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

PASSENGER SIDE DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:0000000012430067

1.CHECK DOOR REQUEST SWITCH RH

Check door request switch RH.

Refer to [DLK-94. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK OUTSIDE KEY ANTENNA

Check outside key antenna RH.

Refer to [DLK-71. "DTC Logic"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.REPLACE BCM

1. Replace BCM. Refer to [BCS-74. "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End

NO >> Check intermittent incident. Refer to [GI-42. "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:000000012430068

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-112, "ALL DOOR : Diagnosis Procedure"](#).

2.CHECK REMOTE KEYLESS ENTRY RECEIVER

Check remote keyless entry receiver.

Refer to [DLK-106, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK INTELLIGENT KEY

Check Intelligent Key.

Refer to [DLK-104, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK DOOR SWITCH

Check door switch.

Refer to [DLK-98, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5.REPLACE BCM

1. Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End

NO >> Check intermittent incident. Refer to [GI-42, "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:000000012430069

1.CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

Does door lock/unlock with driver side door lock knob and door key cylinder?

YES >> GO TO 2.

NO >> Refer to [DLK-115, "Diagnosis Procedure"](#).

2.CHECK DOOR SWITCH

Check door switch.

Refer to [DLK-98, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.REPLACE BCM

1. Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

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DLK

AUTO DOOR LOCK OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

AUTO DOOR LOCK OPERATION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012430070

1. CHECK AUTO LOCK SET SETTING IN WORK SUPPORT

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

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

Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "MODE 2", "MODE 3", "MODE 4", "MODE 5", "MODE 6" or "MODE 7" in "AUTO LOCK SET".

2. REPLACE BCM

1. Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE
< SYMPTOM DIAGNOSIS > **[WITH INTELLIGENT KEY SYSTEM]**

VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012430071

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

1. Select "DOOR LOCK" of "BCM" using CONSULT.
2. Select "AUTOMATIC LOCK/UNLOCK SELECT" in "Work support".
3. Check "AUTOMATIC LOCK/UNLOCK SELECT" setting in "Work support".
Refer to [BCS-18, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Set "Lock Only" or "Lock/Unlock" in "Work support".

2.CHECK AUTOMATIC DOOR LOCK SELECT SETTING IN WORK SUPPORT

1. Select "DOOR LOCK" of "BCM" using CONSULT.
2. Select "AUTOMATIC DOOR LOCK SELECT" in "Work support".
3. Check "AUTOMATIC DOOR LOCK SELECT" setting in "Work support".
Refer to [BCS-18, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Set "VH SPD" in "AUTOMATIC DOOR LOCK SELECT".

3.REPLACE BCM

1. Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).
2. Confirm the operation after replacement.

Is the result normal?

- YES >> Inspection End.
NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

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DLK

IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012430072

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

1. Select "DOOR LOCK" of "BCM" using CONSULT.
2. Select "AUTOMATIC LOCK/UNLOCK SELECT" in "Work support".
3. Check "AUTOMATIC LOCK/UNLOCK SELECT" setting in "Work support".
Refer to [BCS-18, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

Is the inspection result normal?

YES >> GO TO 2.

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

2. CHECK AUTOMATIC DOOR UNLOCK SELECT SETTING IN WORK SUPPORT

1. Select "DOOR LOCK" of "BCM" using CONSULT.
2. Select "AUTOMATIC DOOR UNLOCK SELECT" in "Work support".
3. Check "AUTOMATIC DOOR UNLOCK SELECT" setting in "Work support".
Refer to [BCS-18, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Set "MODE 1" or "MODE 3" in "AUTOMATIC DOOR UNLOCK SELECT".

3. REPLACE BCM

1. Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

HAZARD AND BUZZER REMINDER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

HAZARD AND BUZZER REMINDER DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000012430073

1. CHECK HAZARD ANSWER BACK SETTING IN WORK SUPPORT

1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
2. Select "HAZARD ANSWER BACK" in "Work support".
3. Check the "HAZARD ANSWER BACK" setting in "Work support".
Refer to [BCS-22, "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Set the "Lock Only", "Unlock Only" or "Lock/Unlock" in "HAZARD ANSWER BACK".

2. CHECK ANS BACK I-KEY LOCK SETTING IN WORK SUPPORT

1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
2. Select "ANS BACK I-KEY LOCK" in "Work support".
3. Check the "ANS BACK I-KEY LOCK" setting in "Work support".
Refer to [BCS-22, "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Set the "Horn Chirp" or "Buzzer" in "ANS BACK I-KEY LOCK".

3. CHECK ANS BACK I-KEY UNLOCK SETTING IN WORK SUPPORT

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

4. CHECK HAZARD FUNCTION

Check hazard function.

Refer to [DLK-101, "Component Function Check"](#).

Is the inspection result normal?

- YES >> GO TO 5.
NO >> Repair or replace the malfunctioning parts.

5. CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.

Refer to [DLK-102, "Component Function Check"](#).

Is the inspection result normal?

- YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.

6. REPLACE BCM

1. Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).
2. Confirm the operation after replacement.

Is the result normal?

- YES >> Inspection End.
NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

KEY REMINDER FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

KEY REMINDER FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012430074

1.CHECK ANTI KEY LOCK IN FUNCTI SETTING IN WORK SUPPORT

1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
2. Select "ANTI KEY LOCK IN FUNCTI" in "Work support".
3. Check "ANTI KEY LOCK IN FUNCTI" setting in "Work support".
Refer to [BCS-22, "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Set "On" in "ANTI KEY LOCK IN FUNCTI".

2.CHECK DOOR SWITCH

Check door switch.

Refer to [DLK-98, "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-65, "DTC Logic"](#).
- Console: Refer to [DLK-67, "DTC Logic"](#).
- Trunk room: Refer to [DLK-69, "DTC Logic"](#).

Is the inspection result normal?

- YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.CHECK UNLOCK SENSOR

Check unlock sensor.

Refer to [DLK-92, "Component Function Check"](#).

Is the inspection result normal?

- YES >> GO TO 5.
NO >> Repair or replace the malfunctioning parts.

5.REPLACE BCM

1. Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).
2. Confirm the operation after replacement.

Is the result normal?

- YES >> Inspection End.
NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

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OFF POSITION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

OFF POSITION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012430075

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-98, "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-78, "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-102, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6.REPLACE BCM

1. Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

P POSITION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

P POSITION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000012430076

1.CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK DTC WITH COMBINATION METER

Check that DTC is not detected with combination meter.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Perform trouble diagnosis relevant to DTC indicated.

3.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.

Refer to [DLK-102, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK COMBINATION METER BUZZER

Check combination meter buzzer.

Refer to [DLK-78, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5.CHECK DOOR SWITCH

Check front door switch LH.

Refer to [DLK-98, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6.CHECK KEY WARNING LAMP

Check key warning lamp.

Refer to [DLK-105, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

7.CHECK SHIFT P WARNING LAMP

Check shift P warning lamp.

Refer to [DLK-111, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace the malfunctioning parts.

8.REPLACE BCM

1. Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

P POSITION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

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ACC WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

ACC WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012430077

1.CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK DTC WITH COMBINATION METER

Check that DTC is not detected with combination meter.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Perform trouble diagnosis relevant to DTC indicated.

3.CHECK COMBINATION METER BUZZER

Check combination meter buzzer.

Refer to [DLK-78, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.REPLACE BCM

1. Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

TAKE AWAY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

TAKE AWAY WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000012430078

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-65, "DTC Logic"](#).
- Console: Refer to [DLK-67, "DTC Logic"](#).
- Trunk room: Refer to [DLK-69, "DTC Logic"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK DOOR SWITCH

Check door switch.

Refer to [DLK-98, "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-78, "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-102, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

7.CHECK KEY WARNING LAMP

Check key warning lamp.

Refer to [DLK-105, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace the malfunctioning parts.

8.REPLACE BCM

1. Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).
2. Confirm the operation after replacement.

TAKE AWAY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

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INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012430079

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-104, "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-65, "DTC Logic".](#)

• Console: Refer to [DLK-67, "DTC Logic".](#)

• Trunk room: Refer to [DLK-69, "DTC Logic".](#)

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6.CHECK KEY WARNING LAMP

Check key warning lamp.

Refer to [DLK-105, "Component Function Check".](#)

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

7.REPLACE BCM

1. Replace BCM. Refer to [BCS-74, "Removal and Installation".](#)

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident".](#)

DOOR LOCK OPERATION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DOOR LOCK OPERATION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012430080

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-116, "ALL DOOR REQUEST SWITCHES : Diagnosis Procedure"](#).

2.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.

Refer to [DLK-102, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.REPLACE BCM

1. Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

KEY ID WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

KEY ID WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012430081

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-104, "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-65, "DTC Logic"](#).
- Console: Refer to [DLK-67, "DTC Logic"](#).
- Trunk room: Refer to [DLK-69, "DTC Logic"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5.CHECK KEY WARNING LAMP

Check key warning lamp.

Refer to [DLK-105, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6.REPLACE BCM

1. Replace BCM. Refer to [BCS-74, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

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SQUEAK AND RATTLE TROUBLE DIAGNOSES

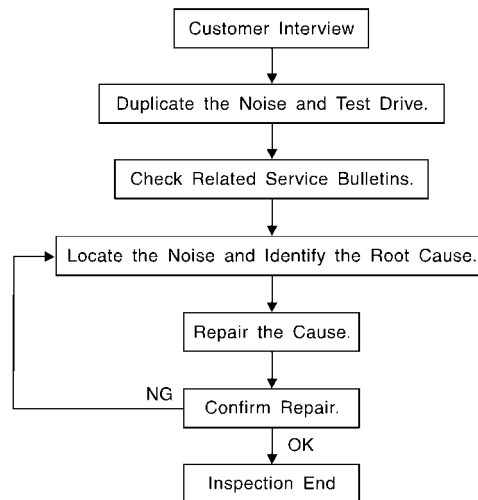
< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:000000012430082



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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-138, "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 >

[WITH INTELLIGENT KEY SYSTEM]

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

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

CHECK RELATED SERVICE BULLETINS

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

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

LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis Ear: J-39570, Engine Ear: J-39565 and mechanic's stethoscope).
2. Narrow down the noise to a more specific area and identify the cause of the noise by:
 - removing the components in the area that you suspect the noise is coming from.
Do not use too much force when removing clips and fasteners, otherwise clips and fasteners can be broken or lost during the repair, resulting in the creation of new noise.
 - tapping or pushing/pulling the component that you suspect is causing the noise.
Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
 - feeling for a vibration with your hand by touching the component(s) that you suspect is (are) causing the noise.
 - placing a piece of paper between components that you suspect are causing the noise.
 - looking for loose components and contact marks.Refer to [DLK-135, "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:0000000012430083

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 >

[WITH 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

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

INFOID:000000012430084

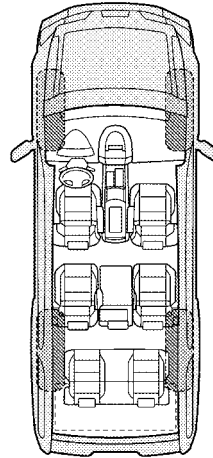
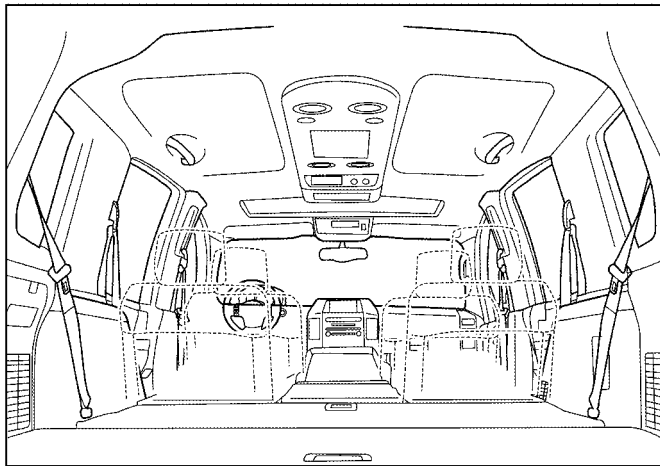
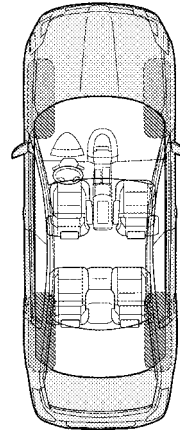
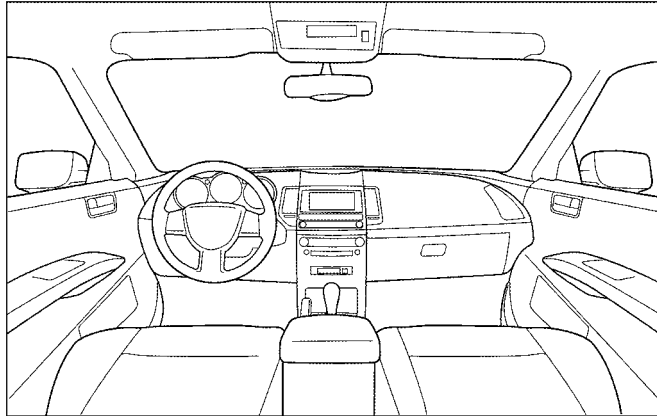
Dear Customer:

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)

- | | |
|---|--|
| ☐ Anytime | ☐ After sitting out in the rain |
| ☐ 1st time in the morning | ☐ When it is raining or wet |
| ☐ Only when it is cold outside | ☐ Dry or dusty conditions |
| ☐ Only when it is hot outside | ☐ Other: |

III. WHEN DRIVING:

- ☐ 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	☐	☐	_____
- Noise verified on test drive	☐	☐	_____
- Noise source located and repaired	☐	☐	_____
- Follow up test drive performed to confirm repair	☐	☐	_____

VIN: _____ Customer Name _____
W.O.# _____ Date: _____

This form must be attached to Work Order

LAIA0071E

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HOOD

< REMOVAL AND INSTALLATION >

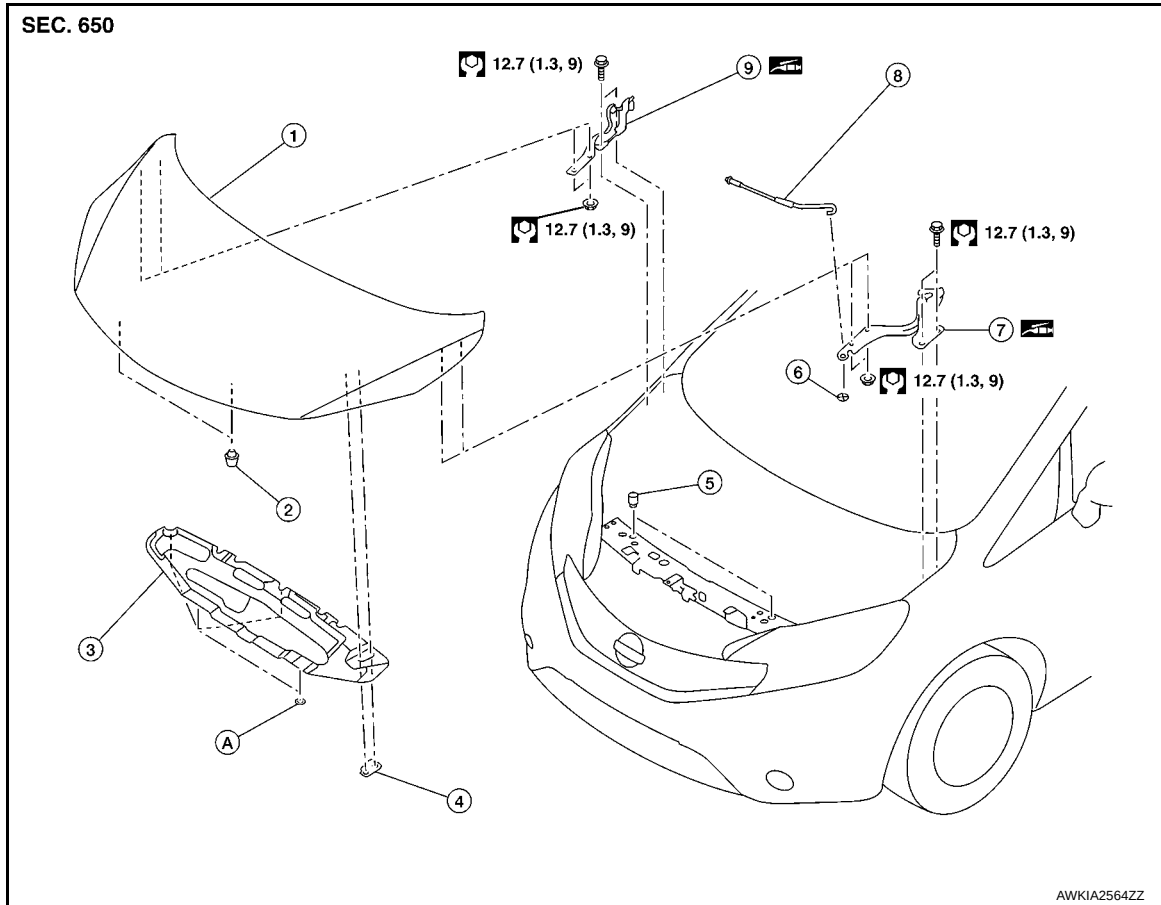
[WITH INTELLIGENT KEY SYSTEM]

REMOVAL AND INSTALLATION

HOOD

Exploded View

INFOID:000000012430085



- | | | |
|------------------------|------------------------------|---------------------|
| 1. Hood | 2. Bumper rubber (hood side) | 3. Hood insulator |
| 4. Hood rod clamp | 5. Bumper rubber (body side) | 6. Hood rod grommet |
| 7. Hood hinge (LH) | 8. Hood support rod | 9. Hood hinge (RH) |
| A. Hood insulator clip | | |

HOOD ASSEMBLY

HOOD ASSEMBLY : Removal and Installation

INFOID:000000012430086

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 hood assembly using a suitable tool.

WARNING:

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

2. Remove hood hinge nuts and hood assembly.
3. Remove clips and hood insulator (if necessary).

INSTALLATION

HOOD

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

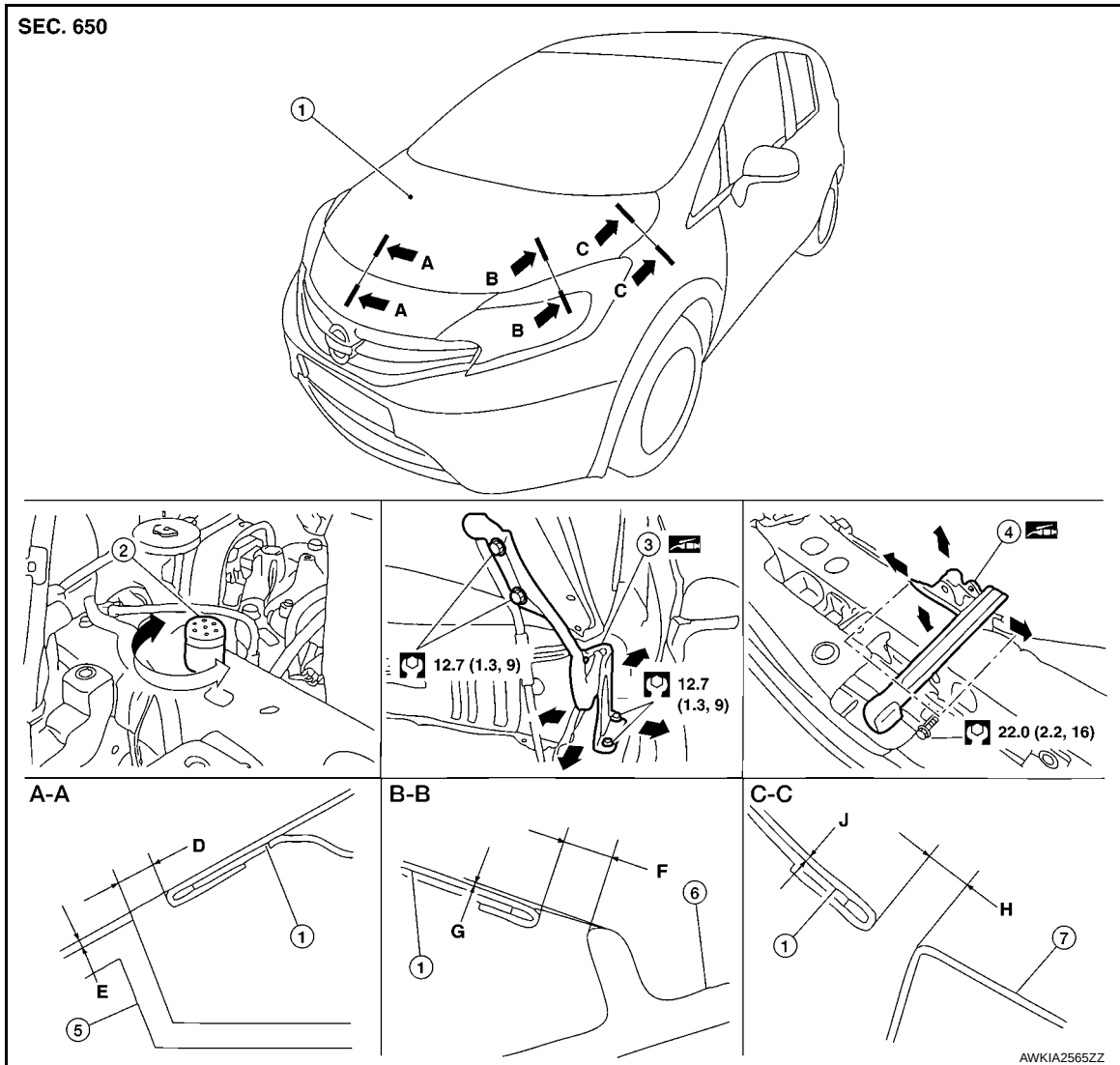
Installation is in the reverse order of removal.

CAUTION:

- Before installing hood assembly, apply anticorrosive agent to the surface of hood hinge.
- After installation, perform the hood assembly adjustment procedure. Refer to [DLK-141, "HOOD ASSEMBLY : Adjustment"](#).
- After installation, apply touch-up paint (body color) to the head of hood hinge nuts.

HOOD ASSEMBLY : Adjustment

INFOID:0000000012430087



- | | | |
|------------------|------------------------------|---------------------------|
| 1. Hood assembly | 2. Bumper rubber (body side) | 3. Hood hinge (LH) |
| 4. Hood lock | 5. Front grille finisher | 6. Front combination lamp |
| 7. Front fender | | |

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 procedure.

Unit: mm (in)

Section	Item	Measurement	Standard	Parallelism	Equality
A - A	D	Clearance	4.4 ± 2.0 (0.17 ± 0.08)	2.0 (0.08)	—
	E	Surface height	-0.5 +2.0, -1.5 (0.02 +0.08, -0.06)	2.0 (0.08)	—
B - B	F	Clearance	4.0 ± 2.0 (0.16 ± 0.08)	2.0 (0.08)	3.0 (0.12)
	G	Surface height	—	—	—

HOOD

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

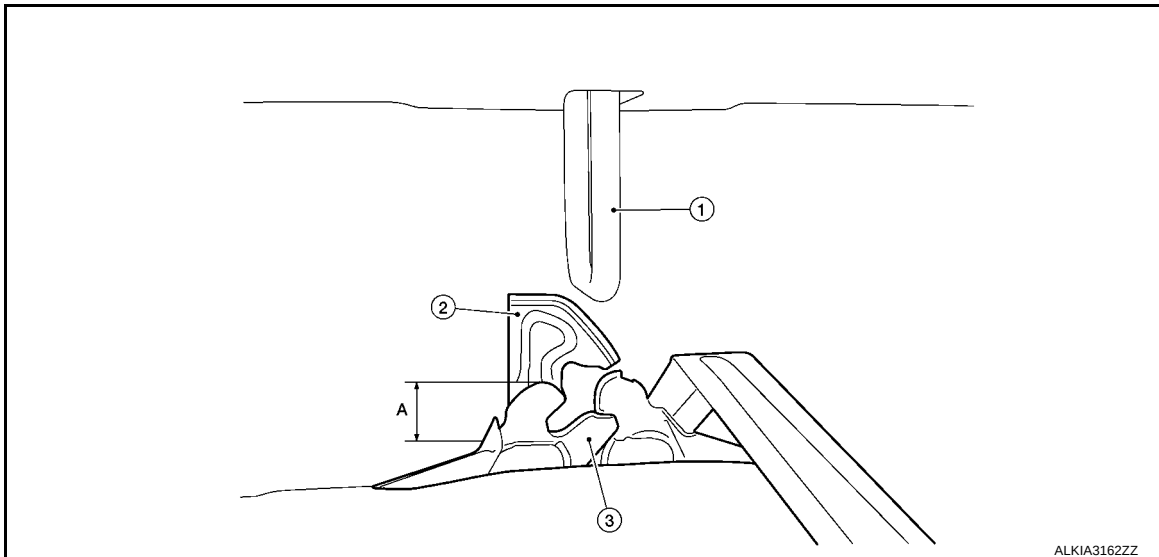
Section	Item	Measurement	Standard	Parallelism	Equality
C – C	H	Clearance	3.5 ± 1.0 (0.14 ± 0.04)	1.5 (0.06)	1.5 (0.06)
	J	Surface height	0.0 ± 1.5 (0.0 ± 0.06)	1.5 (0.06)	1.5 (0.06)

CLEARANCE ADJUSTMENT

1. Loosen hood hinge nuts and bolts.
2. Loosen hood lock assembly bolts.
3. Adjust the hood lock assembly so the clearance measurements are within the specifications provided.
4. Tighten hood hinge nuts and bolts to specified torque.
5. Tighten hood lock assembly bolts to specified torque.

HEIGHT ADJUSTMENT

1. Loosen hood lock assembly bolts.
2. Adjust the surface height of hood assembly to front upper grille, front fender and front combination lamp to the specified values by rotating hood bumper rubber.
3. Temporarily tighten hood lock assembly bolts.
4. Adjust (A) 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. Hood striker
 2. Secondary latch
 3. Primary latch
- A. 20.0 mm (0.79 in)

5. After adjustment, tighten hood lock assembly bolts to specified torque.

HOOD HINGE

HOOD HINGE : Removal and Installation

INFOID:0000000012430088

REMOVAL

1. Remove hood assembly. Refer to [DLK-140, "HOOD ASSEMBLY : Removal and Installation"](#).
2. Remove front fender. Refer to [DLK-147, "Removal and Installation"](#).
3. Remove cowl top side cover. Refer to [EXT-36, "Exploded View"](#).
4. Remove hood hinge bolts and hood hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

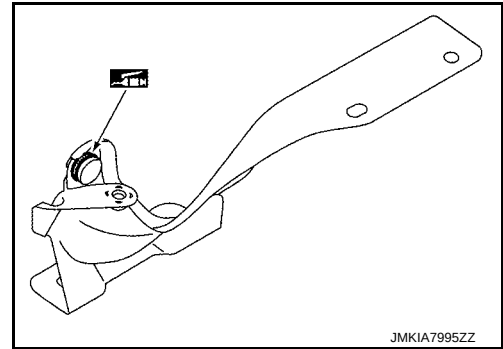
- Before installing the hood hinge, apply anticorrosive agent onto the surface of the vehicle.

HOOD

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

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



HOOD SUPPORT ROD

HOOD SUPPORT ROD : Removal and Installation

INFOID:0000000012430089

REMOVAL

1. Support hood assembly using a suitable tool.

WARNING:

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

2. Rotate and remove hood support rod from grommet.
3. Release tab and remove grommet from hood hinge (if necessary).

INSTALLATION

Installation is in the reverse order of removal.

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RADIATOR CORE SUPPORT

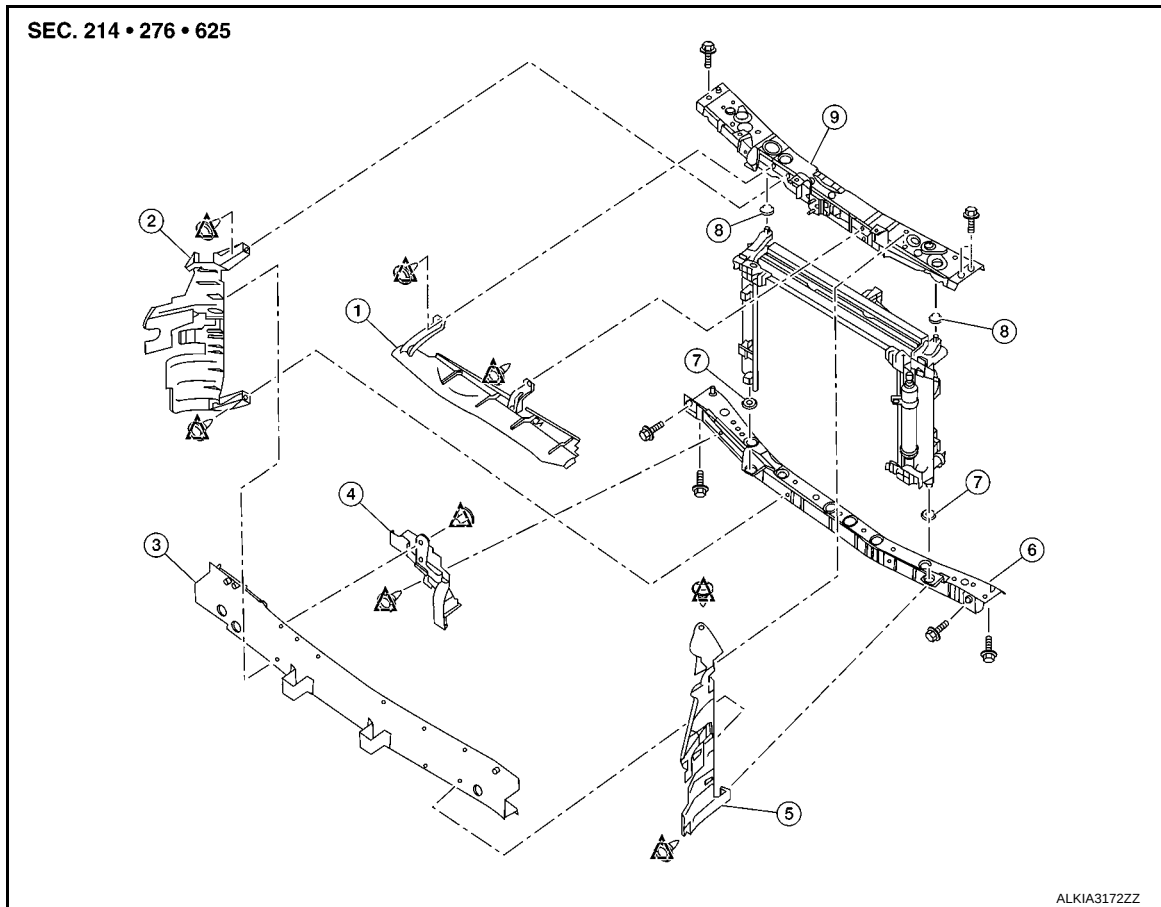
< REMOVAL AND INSTALLATION >

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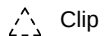
RADIATOR CORE SUPPORT

Exploded View

INFOID:000000012430090



- | | | |
|--------------------|-------------------|--------------------------------|
| 1. Upper air guide | 2. Air guide (RH) | 3. Front bumper reinforcement |
| 4. Lower air guide | 5. Air guide (LH) | 6. Radiator core lower support |
| 7. Lower grommet | 8. Upper grommet | 9. Radiator core upper support |



Clip

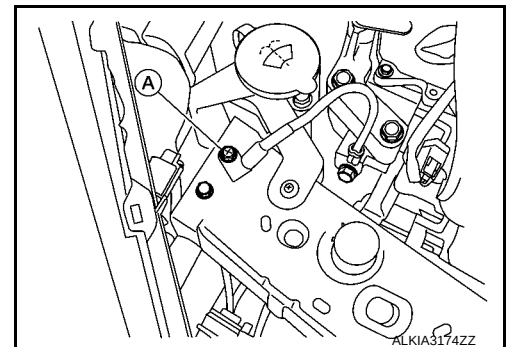
RADIATOR CORE SUPPORT UPPER

RADIATOR CORE SUPPORT UPPER : Removal and Installation

INFOID:000000012430091

REMOVAL

1. Remove front grille. Refer to [EXT-32, "Removal and Installation"](#).
2. Remove ground harness bolt (A).

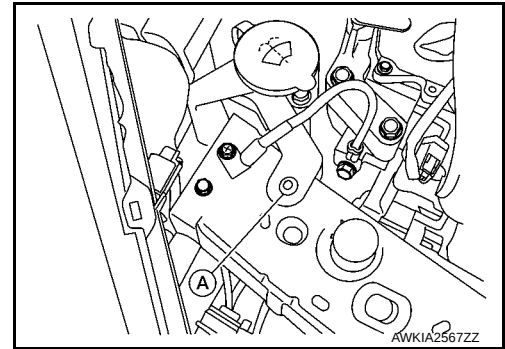


RADIATOR CORE SUPPORT

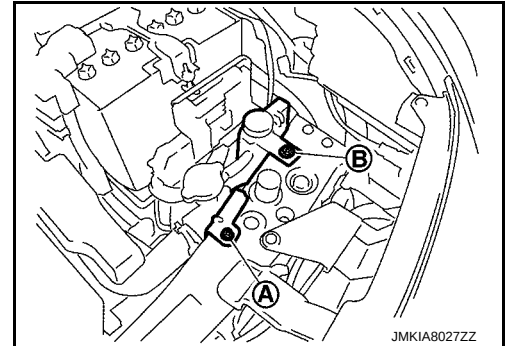
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

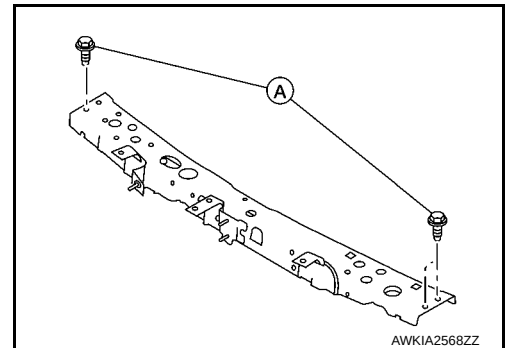
3. Remove washer tube inlet clip (A).



4. Remove radiator cap adapter bracket bolt (A) and radiator reservoir tank bolt (B).



5. Remove horn. Refer to [HRN-6, "Removal and Installation"](#).
6. Remove crash zone sensor. Refer to [SR-24, "Removal and Installation"](#).
7. Remove hood lock assembly. Refer to [DLK-165, "HOOD LOCK : Removal and Installation"](#).
8. Release hood lock release cable clips from radiator core support upper using a suitable tool.
9. Remove upper air guide. Refer to [DLK-144, "Exploded View"](#).
10. Remove air guide (LH/RH). Refer to [DLK-144, "Exploded View"](#).
11. Release all harness connector clips from radiator core support upper using a suitable tool.
12. Remove bolts (A) and radiator core support upper.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

After installation, perform hood assembly adjustment procedure. Refer to [DLK-141, "HOOD ASSEMBLY : Adjustment"](#).

RADIATOR CORE SUPPORT LOWER

RADIATOR CORE SUPPORT LOWER : Removal and Installation

INFOID:0000000012430092

REMOVAL

1. Remove radiator core support upper. Refer to [DLK-144, "RADIATOR CORE SUPPORT UPPER : Removal and Installation"](#).
2. Reposition the radiator and condenser.

RADIATOR CORE SUPPORT

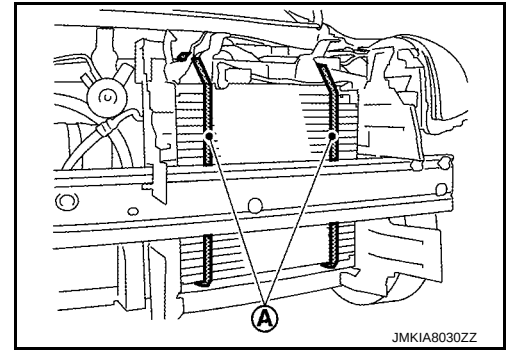
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

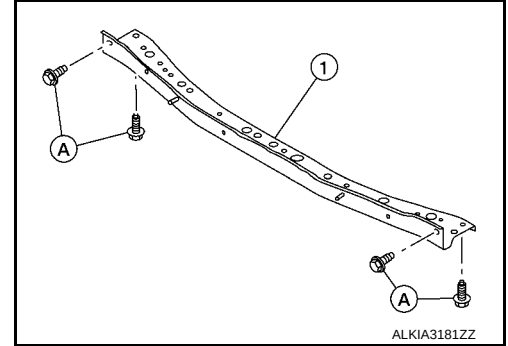
3. Using a suitable tool (A), suspend radiator and condenser to prevent them from falling.

CAUTION:

Use care to avoid damaging radiator and condenser.



4. Remove bolts (A) and radiator core support lower (1).



INSTALLATION

Installation is in the reverse order of removal.

FRONT FENDER

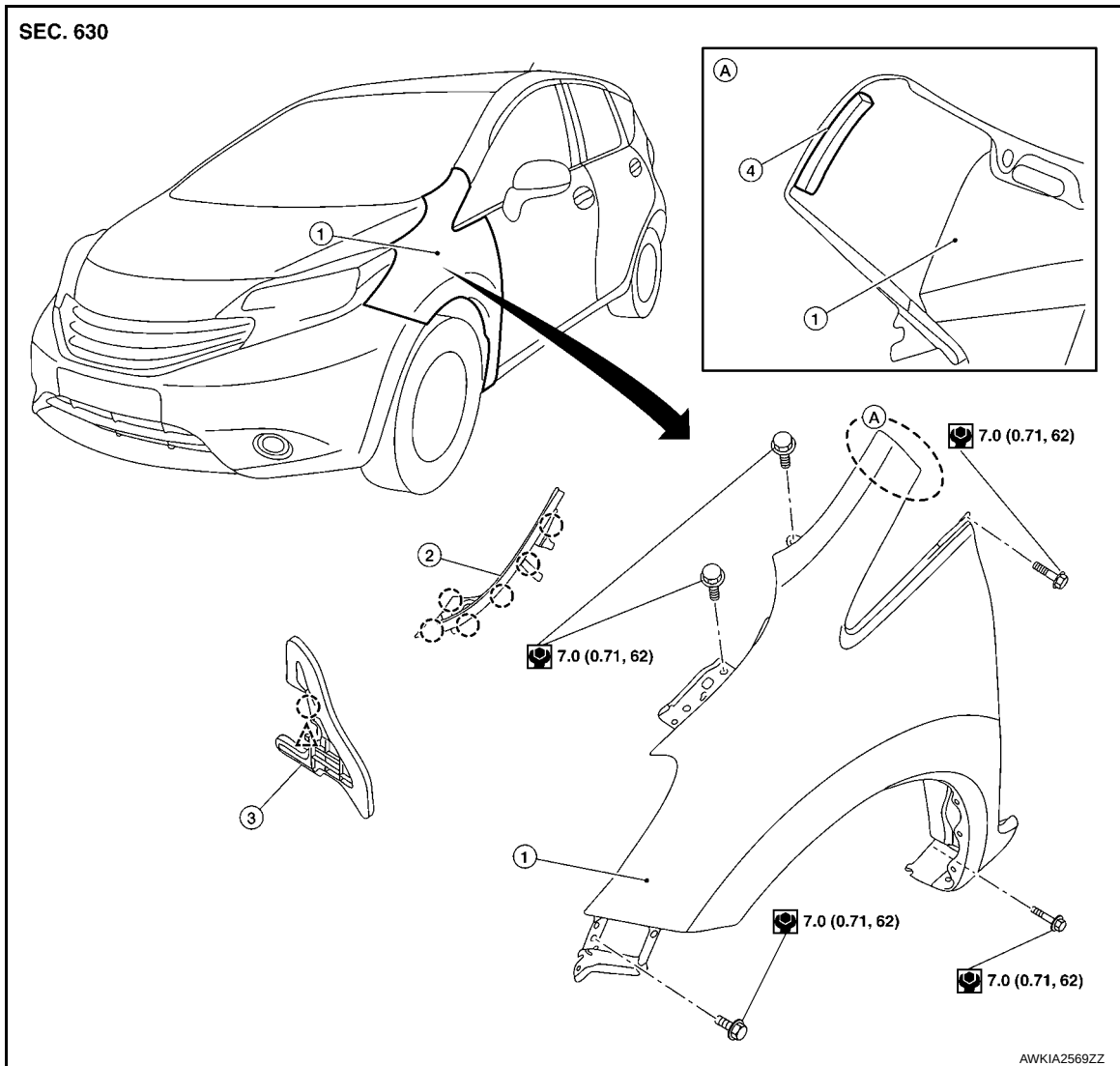
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

FRONT FENDER

Exploded View

INFOID:000000012430093



- | | | |
|---------------------------|------------------------|---------------------------|
| 1. Front fender | 2. Cowl top side cover | 3. Front fender insulator |
| 4. Front fender stiffener | ○ Pawl | △ Clip |

Removal and Installation

INFOID:000000012430094

CAUTION:

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

REMOVAL

1. Remove the front combination lamp. Refer to [EXL-102, "Removal and Installation"](#).
2. Remove cowl top side cover. Refer to [DLK-147, "Exploded View"](#).
3. Remove front fender bolts.

FRONT FENDER

< REMOVAL AND INSTALLATION >

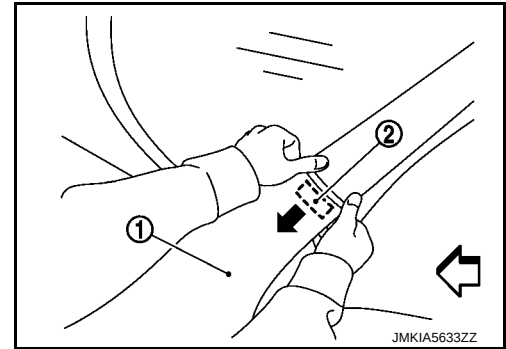
[WITH INTELLIGENT KEY SYSTEM]

4. Remove front fender stiffener (2) by carefully pulling upper portion of front fender (1) away from body.

⇐: Front

CAUTION:

Use care when removing the front fender. The front fender stiffener foam adheres the front fender to the body. Carefully release the stiffener foam or damage to front fender may occur.



5. Remove front fender.

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-141, "HOOD ASSEMBLY : Adjustment"](#).
 - Front door assembly: Refer to [DLK-150, "DOOR ASSEMBLY : Adjustment"](#).

FRONT DOOR

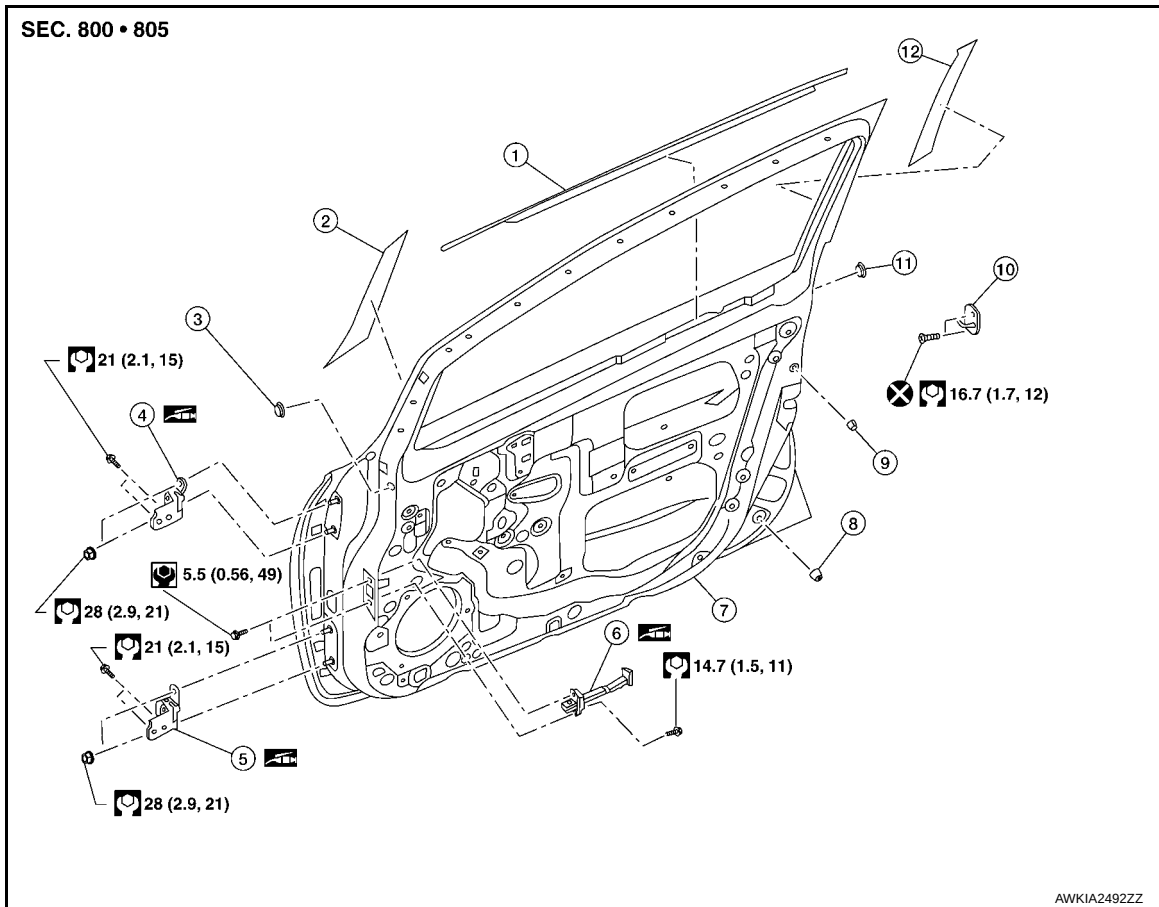
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

FRONT DOOR

Exploded View

INFOID:0000000012430095



- | | | |
|---------------------|-------------------------|-------------------------------|
| 1. Inside seal | 2. Door sash front tape | 3. Grommet (driver side only) |
| 4. Door upper hinge | 5. Door lower hinge | 6. Door check link |
| 7. Front door panel | 8. Lower grommet | 9. Upper grommet |
| 10. Door striker | 11. Body panel plug | 12. Door sash rear tape |

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000012430096

CAUTION:

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

REMOVAL

1. Disconnect the battery positive and negative terminals and wait at least three minutes. Refer to [PG-70, "Removal and Installation \(Battery\)"](#).
2. Remove dash side finisher. Refer to [INT-24, "DASH SIDE FINISHER : Removal and Installation"](#).
3. Disconnect the harness connectors from the front door.
4. Remove door check link bolt (body side).
5. Remove door hinge nuts (door side) and front door assembly.

INSTALLATION

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FRONT DOOR

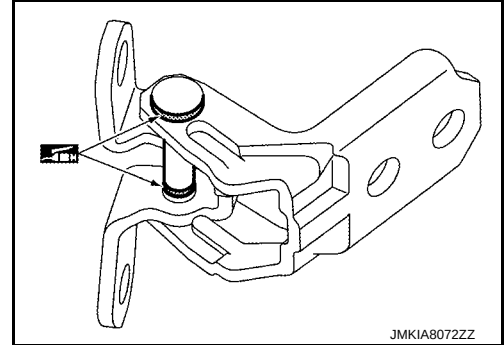
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

Installation is in the reverse order of removal.

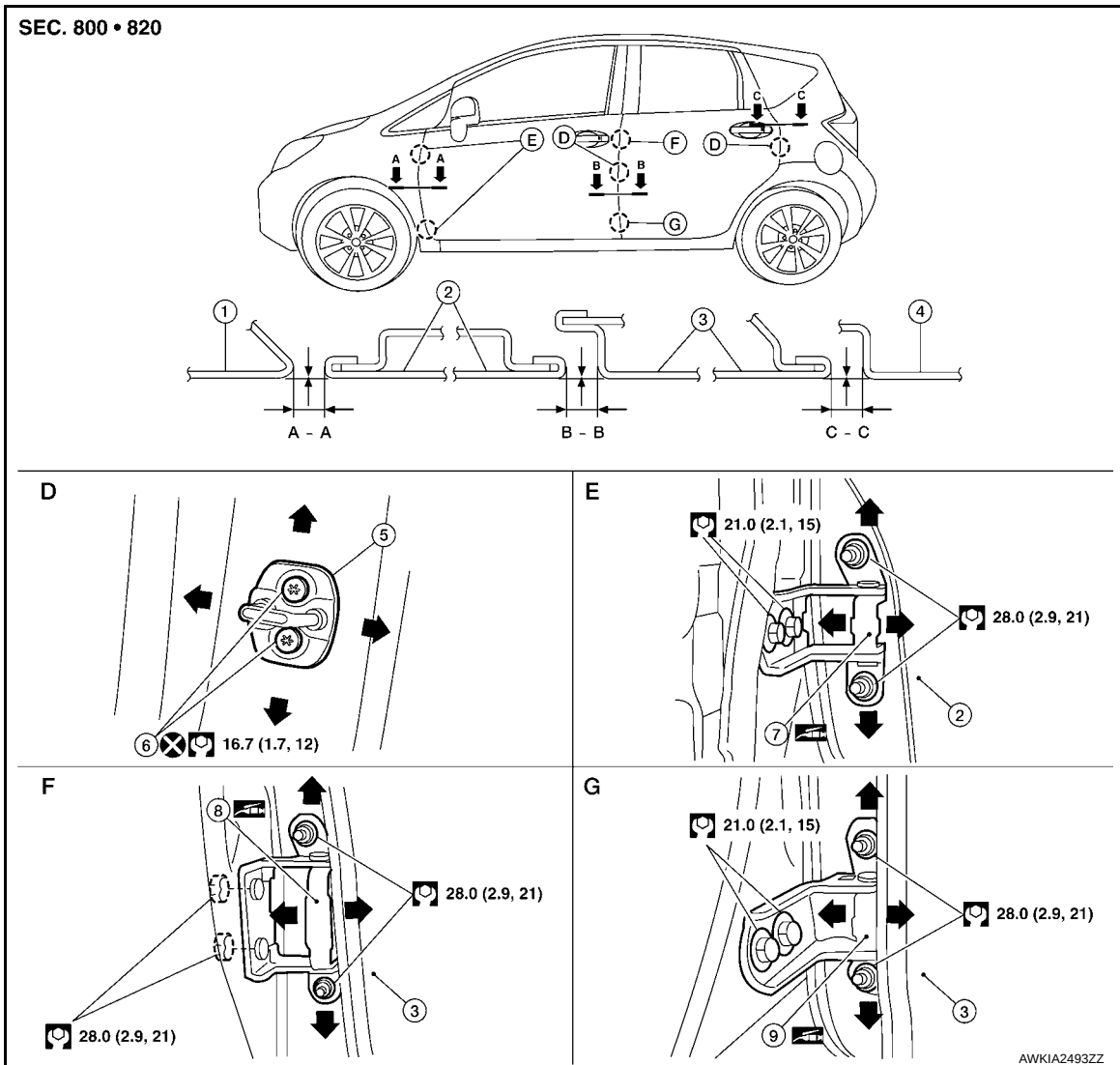
CAUTION:

- After installation, perform the front door adjustment procedure. Refer to [DLK-150, "DOOR ASSEMBLY : Adjustment"](#).
- Perform camera image calibration (if equipped with around view camera). Refer to [AV-179, "CALIBRATING CAMERA IMAGE \(AROUND VIEW MONITOR\) : Description"](#).
- Apply anticorrosive agent to the door hinge mating surface.
- Check door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.



DOOR ASSEMBLY : Adjustment

INFOID:0000000012430097



FRONT DOOR

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

- | | | |
|---------------------|--------------------------|--------------------------|
| 4. Body side outer | 5. Door striker | 6. Striker bolt |
| 7. Front door hinge | 8. Rear door upper hinge | 9. Rear door lower hinge |

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

Unit: mm (in)

Section	Measurement	Standard
A – A	Clearance	4.6 ± 1.0 (0.18 ± 0.04)
	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
B – B	Clearance	4.6 ± 2.0 (0.18 ± 0.08)
	Surface height	0.0 ± 1.5 (0.0 ± 0.06)
C – C	Clearance	4.6 ± 1.0 (0.18 ± 0.04)
	Surface height	0.0 ± 1.0 (0.0 ± 0.04)

1. Remove front fender. Refer to [DLK-147, "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 or lower the 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.
8. Install front fender. Refer to refer to [DLK-147, "Removal and Installation"](#).

DOOR STRIKER

DOOR STRIKER : Removal and Installation

INFOID:0000000012430098

DLK

REMOVAL

Remove bolts and door striker.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Do not reuse door striker bolts.
- Tighten bolts to specification. Refer to [DLK-149, "Exploded View"](#).
- After installation, check front door open/close operation. If necessary, perform the door striker adjustment procedure. Refer to [DLK-151, "DOOR STRIKER : Adjustment"](#).

DOOR STRIKER : Adjustment

INFOID:0000000012430099

DOOR STRIKER ADJUSTMENT

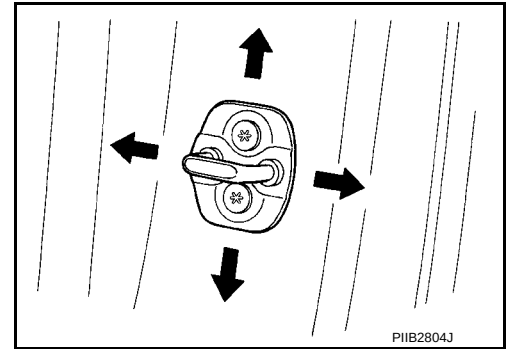
1. Loosen door striker bolts

FRONT DOOR

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

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-149, "Exploded View"](#).

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:000000012430100

REMOVAL

CAUTION:

- Use two people when removing or installing front door due to its heavy weight
- When removing and installing front door assembly, support the door using a suitable tool.
- Use shops cloths to protect surrounding components from damage during removal and installation of front door assembly.

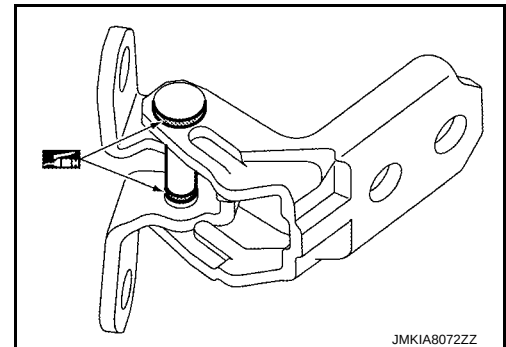
1. Remove front fender. Refer to [DLK-147, "Removal and Installation"](#).
2. Remove front door assembly. Refer to [DLK-149, "DOOR ASSEMBLY : Removal and Installation"](#).
3. Remove front door hinge bolts (body side) and front door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Apply anticorrosive agent to the hinge mating surface.
- After installation, perform the front door adjustment procedure. Refer to [DLK-150, "DOOR ASSEMBLY : Adjustment"](#).
- Check door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.



DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:000000012430101

REMOVAL

1. Remove front door speaker. Refer to [AV-54, "Removal and Installation"](#) (BASE AUDIO), [AV-114, "Removal and Installation"](#) (DISPLAY AUDIO) or [AV-243, "Removal and Installation"](#) (NAVIGATION).
2. Remove door check link bolt (body side).
3. Remove door check link bolts (door side) and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

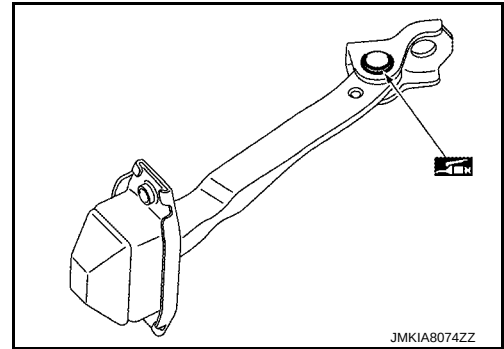
- After installation, check rear door open/close, lock/unlock operation.

FRONT DOOR

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

- Check door check link rotating point for poor lubrication. If necessary, apply a multi-purpose grease.



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

DLK

REAR DOOR

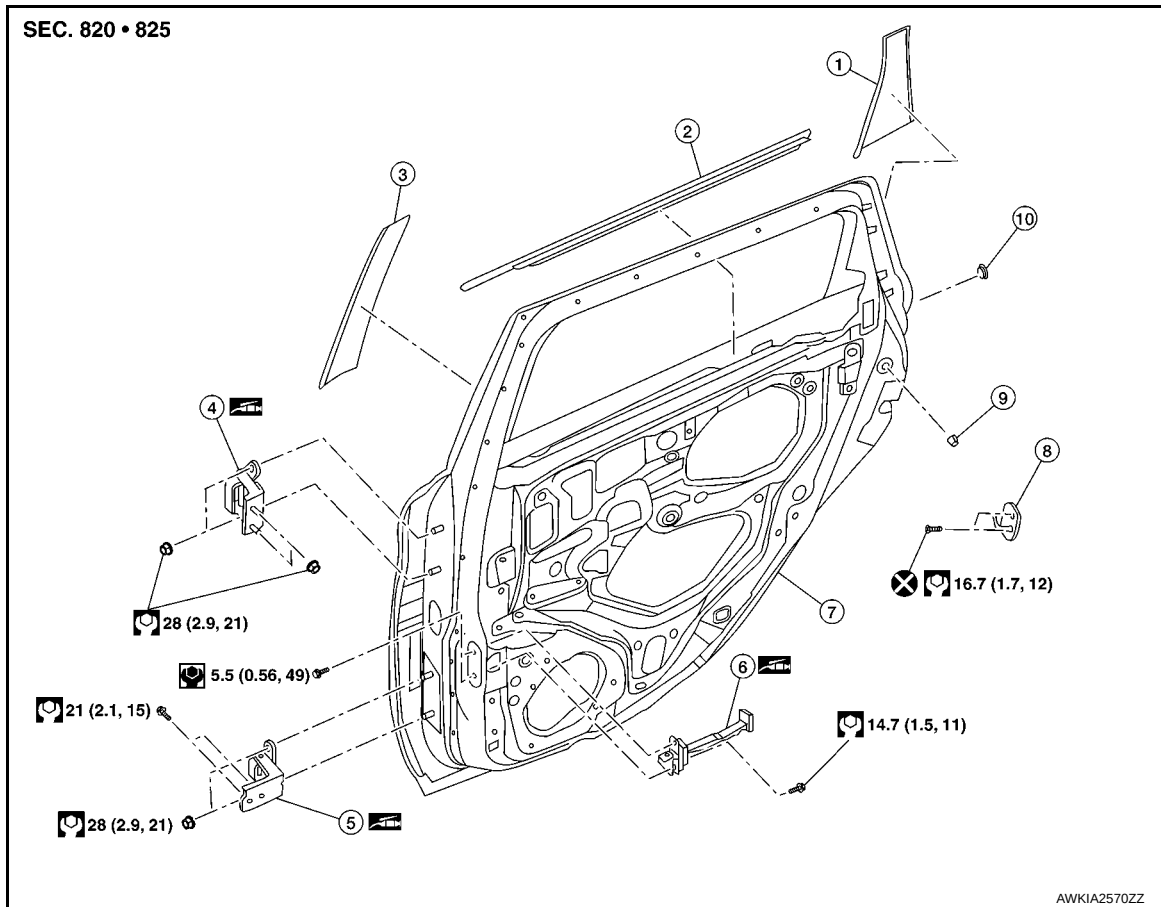
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

REAR DOOR

Exploded View

INFOID:0000000012430102



- | | | |
|------------------------|---------------------|-------------------------|
| 1. Door sash rear tape | 2. Inside seal | 3. Door sash front tape |
| 4. Door upper hinge | 5. Door lower hinge | 6. Door check link |
| 7. Rear door panel | 8. Door striker | 9. Grommet |
| 10. Body panel plug | | |

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

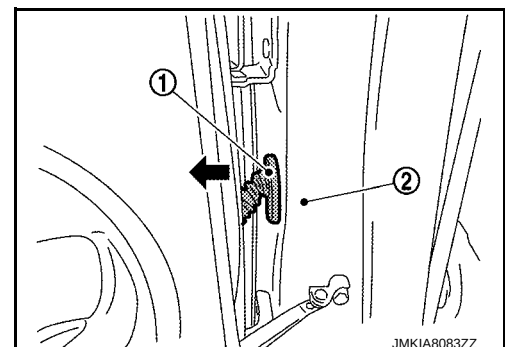
INFOID:0000000012430103

CAUTION:

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

REMOVAL

1. Remove rear door harness grommet (1) from body side outer (2), then pull out rear door harness.

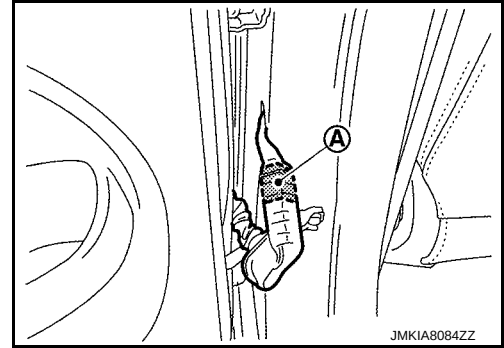


REAR DOOR

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

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



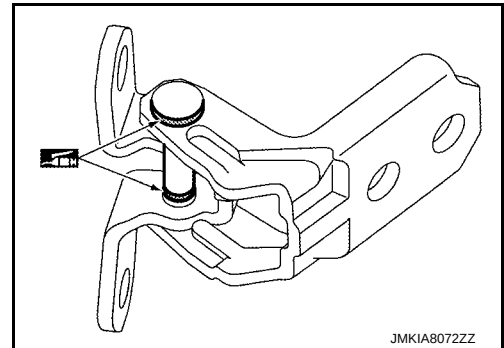
3. Remove door check link bolt (body side).
4. Remove door hinge nuts (door side) and rear door assembly.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Apply anticorrosive agent to the hinge mating surface.
- After installation, perform the rear door adjustment procedure. Refer to [DLK-156, "DOOR ASSEMBLY : Adjustment"](#).
- After adjusting, apply touch-up paint (body color) to the head of door hinge nuts.
- Check door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.



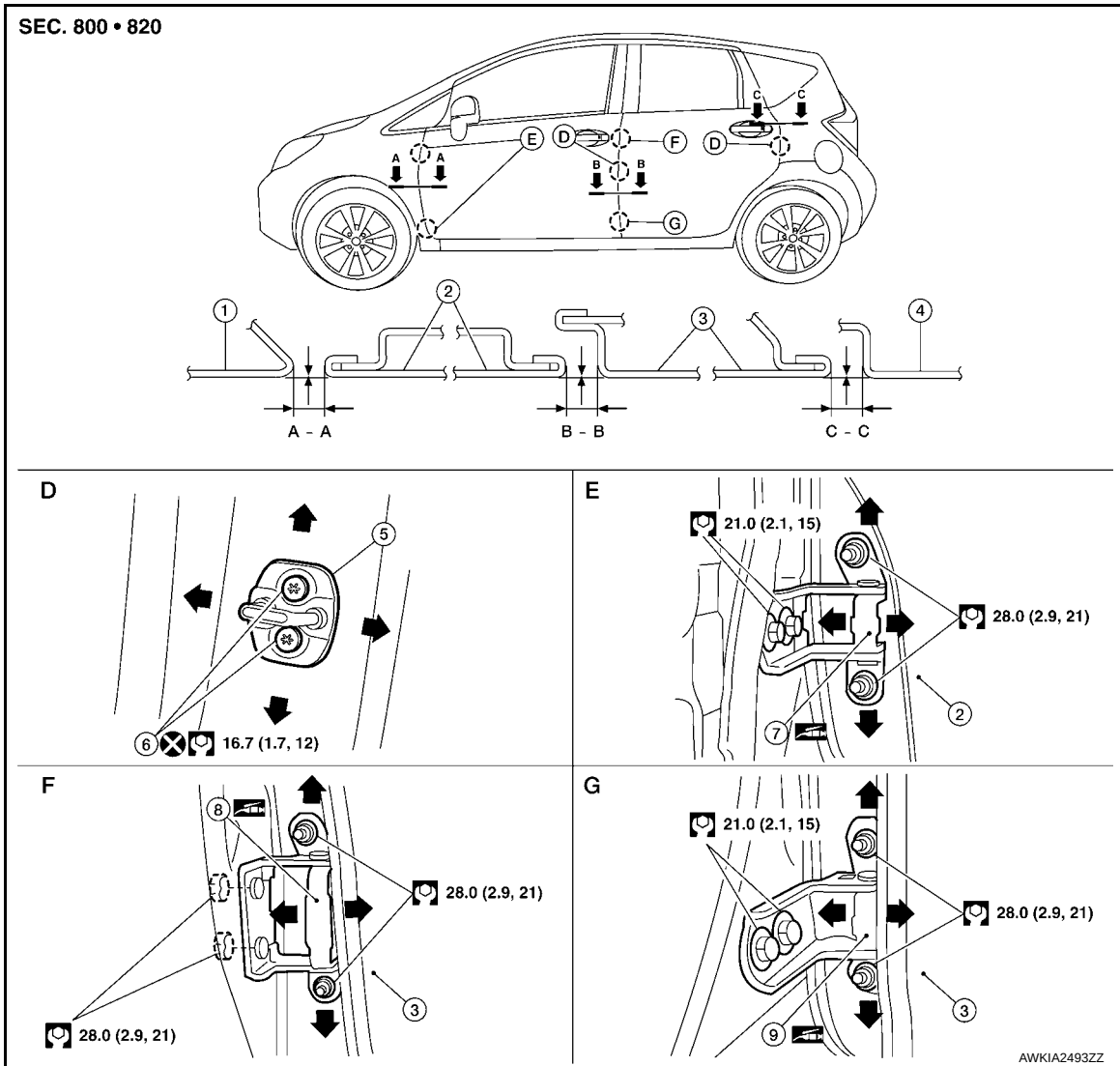
REAR DOOR

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

DOOR ASSEMBLY : Adjustment

INFOID:000000012430104



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

Unit: mm (in)

Section	Measurement	Standard
A - A	Clearance	4.6 ± 1.0 (0.18 ± 0.04)
	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
B - B	Clearance	4.6 ± 2.0 (0.18 ± 0.08)
	Surface height	0.0 ± 1.5 (0.0 ± 0.06)
C - C	Clearance	4.6 ± 1.0 (0.18 ± 0.04)
	Surface height	0.0 ± 1.0 (0.0 ± 0.04)

1. Remove center pillar lower finisher. Refer to [INT-25, "CENTER PILLAR LOWER FINISHER : Removal and Installation"](#).

REAR DOOR

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

2. Loosen door hinge nuts (door side).
3. Adjust the surface height of rear door according to the specifications provided.
4. Temporarily tighten door hinge nuts (door side).
5. Loosen door hinge nuts and bolts (body side).
6. Raise rear door at rear end to adjust clearance of rear door according to the specifications provided.
7. After adjustment tighten bolts and nuts to the specified torque.
CAUTION:
 - Apply touch-up paint (body color) to the head of hinge bolts and nuts.
 - Check door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.
8. Install center pillar lower finisher. Refer to [INT-25, "CENTER PILLAR LOWER FINISHER : Removal and Installation"](#).

DOOR STRIKER

DOOR STRIKER : Removal and Installation

INFOID:0000000012430105

REMOVAL

Remove bolts and rear door striker.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

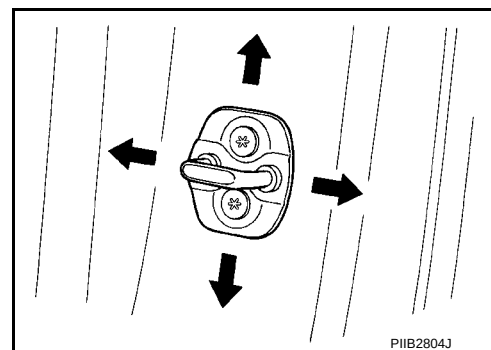
- Do not reuse door striker bolts.
- Tighten door striker bolts to specification. Refer to [DLK-154, "Exploded View"](#).
- After installation, check front door open/close operation. If necessary, adjust the door striker. Refer to [DLK-157, "DOOR STRIKER : Adjustment"](#).

DOOR STRIKER : Adjustment

INFOID:0000000012430106

DOOR STRIKER ADJUSTMENT

1. Loosen door striker bolts.
2. Adjust door striker so that it becomes parallel with rear door lock insertion direction.



3. Tighten door striker bolts to specification. Refer to [DLK-154, "Exploded View"](#).

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:0000000012430107

REMOVAL

CAUTION:

- Use two people when removing or installing front door due to its heavy weight
 - When removing and installing front door assembly, support the door using a suitable tool.
 - Use shops cloths to protect surrounding components from damage during removal and installation of front door assembly.
1. Remove rear door assembly. Refer to [DLK-154, "DOOR ASSEMBLY : Removal and Installation"](#).
 2. Remove center pillar lower finisher. Refer to [INT-25, "CENTER PILLAR LOWER FINISHER : Removal and Installation"](#).

REAR DOOR

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

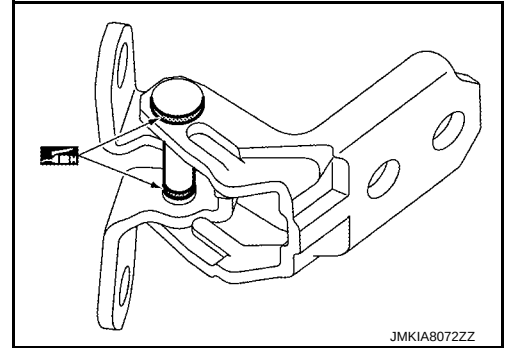
3. Remove rear door hinge bolts and nuts (body side) and rear door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Apply anticorrosive agent to the door hinge mating surface.
- After installation, perform the rear door adjustment procedure. Refer to [DLK-156, "DOOR ASSEMBLY : Adjustment"](#).
- After adjusting, apply touch-up paint (body color) to the head of door hinge bolts and nuts.
- Check door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.



DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:0000000012430108

REMOVAL

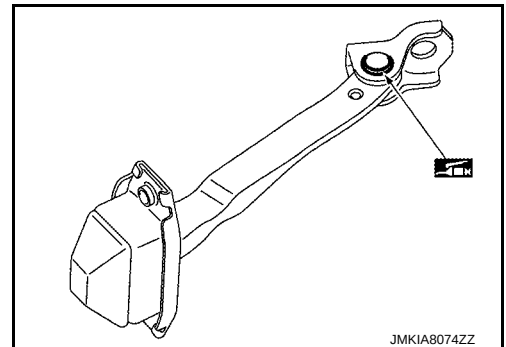
1. Remove rear door speaker. Refer to [AV-55, "Removal and Installation"](#) (BASE AUDIO), [AV-115, "Removal and Installation"](#) (DISPLAY AUDIO) or [AV-244, "Removal and Installation"](#) (NAVIGATION).
2. Remove door check link bolt (body side).
3. Remove door check link bolts (door side) and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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



BACK DOOR

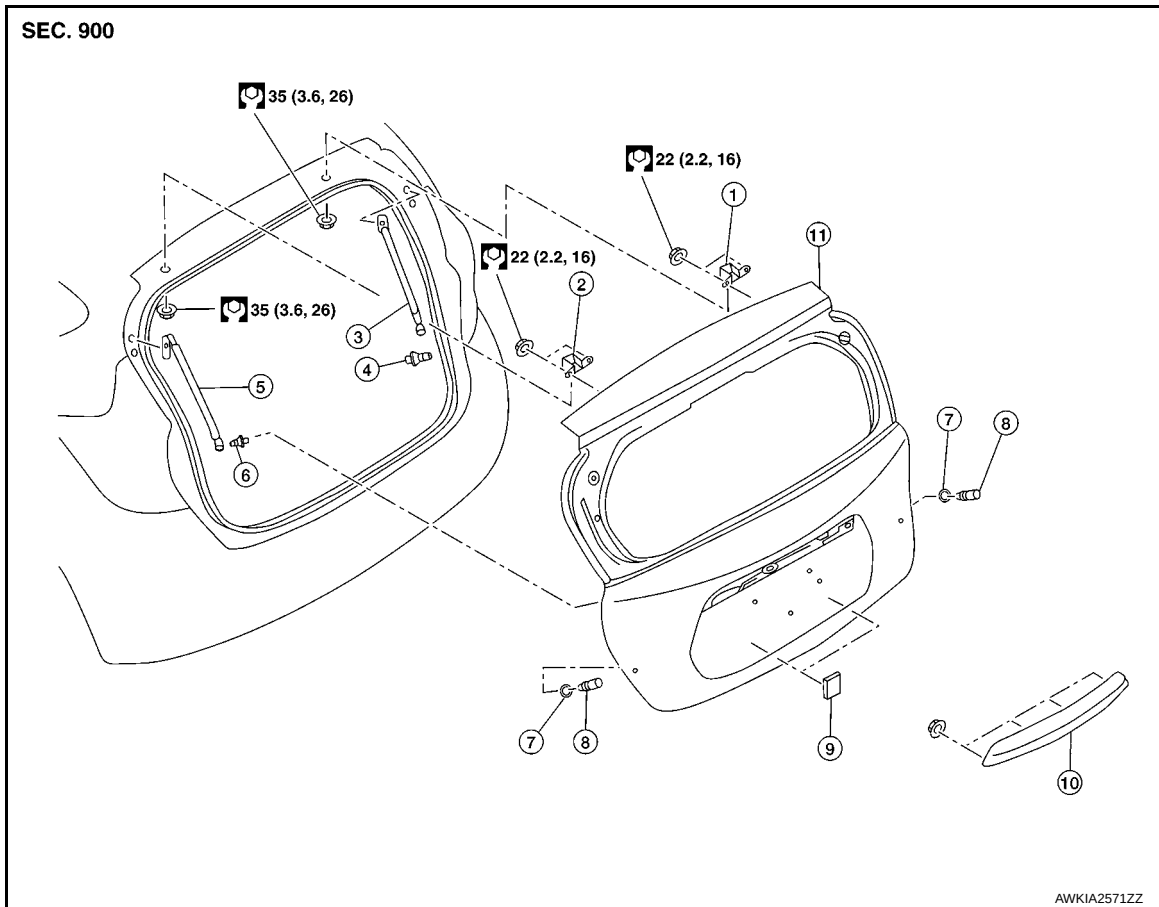
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

BACK DOOR

Exploded View

INFOID:0000000012430109



- | | | |
|----------------------------------|-------------------------|----------------------------------|
| 1. Back door hinge (RH) | 2. Back door hinge (LH) | 3. Back door stay (RH) |
| 4. Back door stay stud ball (RH) | 5. Back door stay (LH) | 6. Back door stay stud ball (LH) |
| 7. Bumper rubber seal | 8. Bumper rubber | 9. Spacer |
| 10. Back door outer finisher | 11. Back door assembly | |

BACK DOOR ASSEMBLY

BACK DOOR ASSEMBLY : Removal and Installation

INFOID:0000000012430110

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

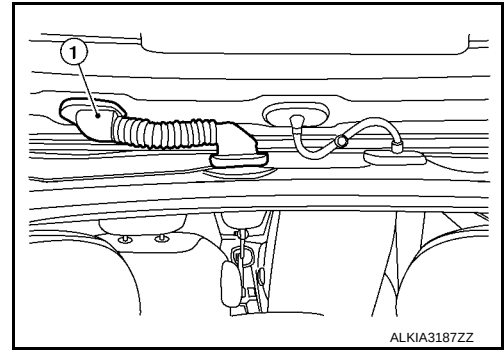
1. Remove back door inner finisher. Refer to [INT-36, "BACK DOOR INNER FINISHER : Removal and Installation"](#).
2. Remove back door stay (LH/RH). Refer to [DLK-163, "BACK DOOR STAY : Removal and Installation"](#).

BACK DOOR

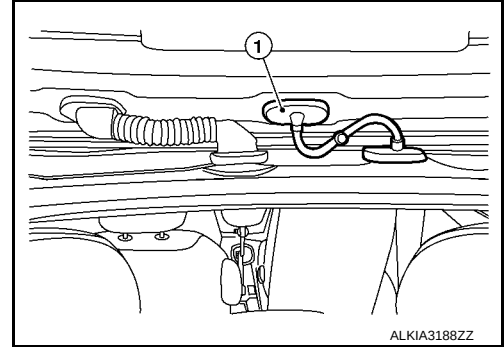
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

3. Remove back door harness grommet (1), then pull harness from the back door.



4. Disconnect washer tube from rear wiper.
5. Remove washer tube grommet (1), then pull washer tube from the back door.



6. 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.

7. Remove back door hinge nuts (door side) and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- 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-161, "BACK DOOR ASSEMBLY : Adjustment"](#).
- Perform camera image calibration (if equipped with around view camera). Refer to [AV-179, "CALIBRATING CAMERA IMAGE \(AROUND VIEW MONITOR\) : Description"](#).

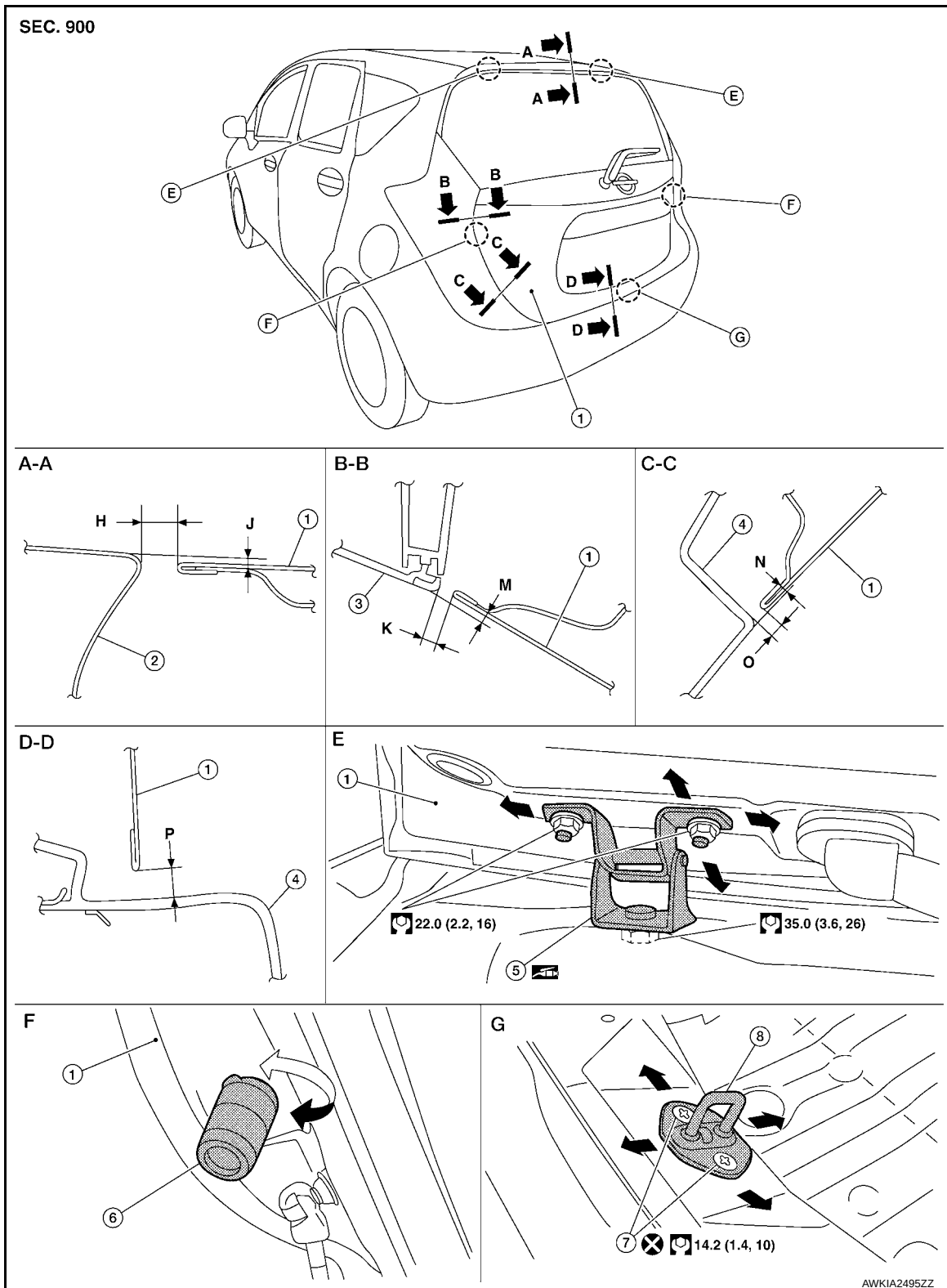
BACK DOOR

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

BACK DOOR ASSEMBLY : Adjustment

INFOID:0000000012430111



1. Back door panel
4. Rear bumper fascia
7. Bolt

2. Roof panel
5. Back door hinge
8. Back door striker

3. Rear combination lamp
6. Bumper rubber

BACK DOOR

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

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.

Unit: mm (in)

Portion	Section	Item	Measurement	Standard
Back door panel – Roof panel	A – A	H	Clearance	6.0 ± 1.0 (0.24 ± 0.04)
		I	Surface height	$0.0 +0.5, -1.5$ ($0.00 +0.02, -0.06$)
Rear combination lamp – Back door panel	B – B	J	Clearance	5.0 ± 2.0 (0.20 ± 0.08)
		K	Surface height	-2.0 ± 2.0 (-0.08 ± 0.08)
Rear bumper fascia – Back-door panel	C – C	L	Clearance	5.0 ± 2.0 (0.20 ± 0.08)
		M	Surface height	$0.0 +0.5, -2.0$ ($0.0 +0.02, -0.08$)
	D – D	M	Clearance	7.0 ± 2.0 (0.28 ± 0.08)

1. Loosen back door hinge nuts (door side).
2. 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.
3. Check the clearance and surface height and adjust back door as necessary.
4. 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.

BACK DOOR STRIKER

BACK DOOR STRIKER : Removal and Installation

INFOID:0000000012430112

REMOVAL

1. Remove back door kicking plate using a suitable tool.
2. Remove bolts and back door striker.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

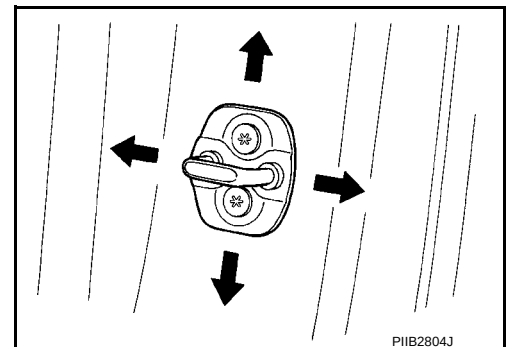
- Do not reuse back door striker bolts.
- After installation, check back door open/close, lock/unlock operation.
- After installation, perform the back door assembly adjustment procedure. Refer to [DLK-161, "BACK DOOR ASSEMBLY : Adjustment"](#).

BACK DOOR STRIKER : Adjustment

INFOID:0000000012430113

DOOR STRIKER ADJUSTMENT

1. Loosen door striker bolts.
2. Adjust door striker so that it becomes parallel with back door lock insertion direction.



3. Tighten door striker bolts to specification. Refer to [DLK-159, "Exploded View"](#).

BACK DOOR

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

BACK DOOR HINGE

BACK DOOR HINGE : Removal and Installation

INFOID:0000000012430114

REMOVAL

1. Remove back door assembly. Refer to [DLK-159, "BACK DOOR ASSEMBLY : Removal and Installation"](#).
2. Partially remove back door weatherstrip. Refer to [DLK-164, "BACK DOOR WEATHER-STRIP : Removal and Installation"](#).
3. Remove back door hinge nuts and bolts (body side) and then remove back door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Apply anticorrosive agent onto the surface between hinge and body side.
- After installation, perform the back door assembly adjustment procedure. Refer to [DLK-161, "BACK DOOR ASSEMBLY : Adjustment"](#).

BACK DOOR STAY

BACK DOOR STAY : Removal and Installation

INFOID:0000000012430115

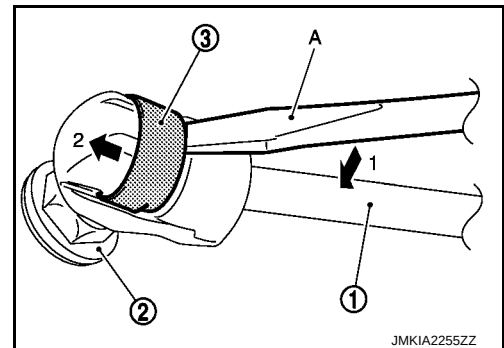
REMOVAL

1. Support the back door with a suitable tool too prevent it from falling.

WARNING:

Body injury may occur if no supporting rod is holding the back door open when removing the back door stay.

2. Remove the metal clip (3) located on the connection between the back door stay (1) and the stud ball (2) (back door side) by using a flat blade screwdriver (A).
3. Remove the back door stay (back door side).



4. In the same way, remove the back door stay from the body side.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Check the back door open/close operation after installation.

BACK DOOR STAY : Disposal

INFOID:0000000012430116

BACK DOOR STAY DISPOSAL

WARNING:

When performing disposal procedure, wear protective gloves and glasses.

BACK DOOR

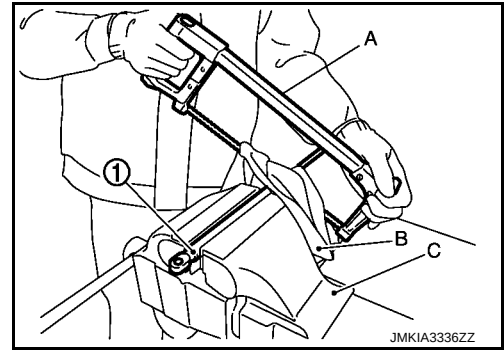
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

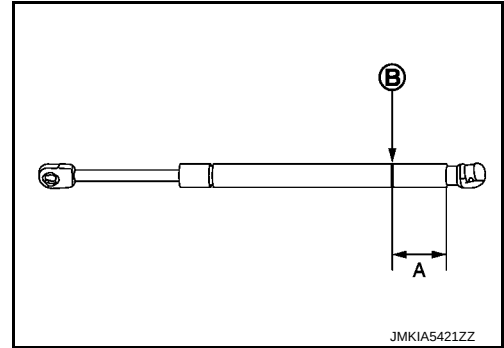
1. Secure back door stay (1) using a vice (C).

CAUTION:

When cutting back door stay, always cover suitable tool (A) using a shop cloth (B) to avoid scattering metal fragments or oil.



2. Slowly cut a hole in back door stay and drain the gas using a hacksaw at position (B) as shown.
A: 20 mm (0.79 in)



BACK DOOR WEATHER-STRIP

BACK DOOR WEATHER-STRIP : Removal and Installation

INFOID:0000000012430117

REMOVAL

1. Support back door using a suitable tool.
2. 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 make sure that there are no loose sections.

HOOD LOCK

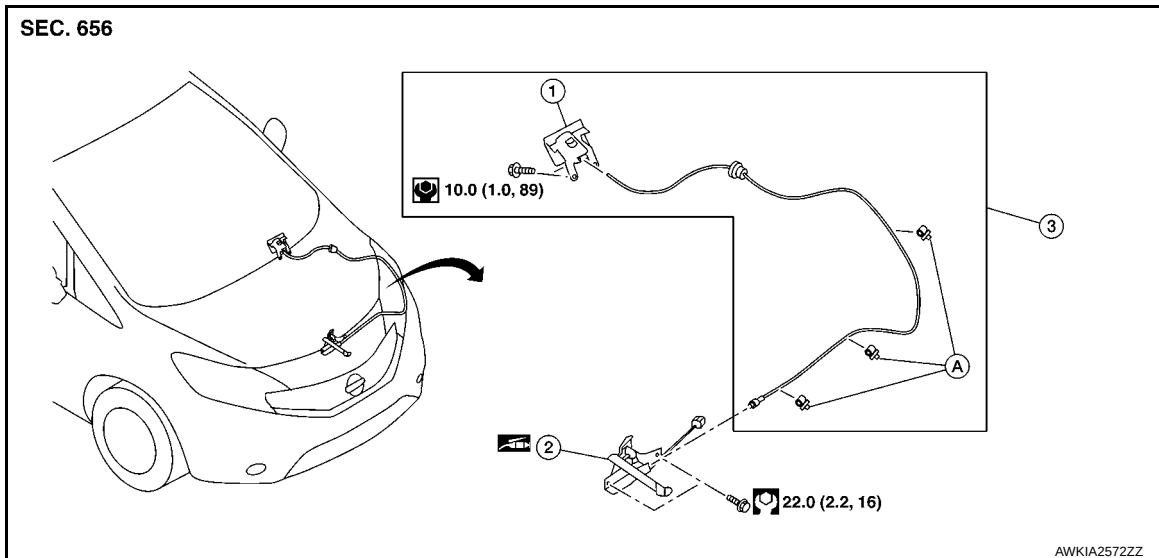
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

HOOD LOCK

Exploded View

INFOID:0000000012430118



1. Hood lock/fuel filler lid release handle 2. Hood lock assembly 3. Hood lock release cable assembly
A. Clip

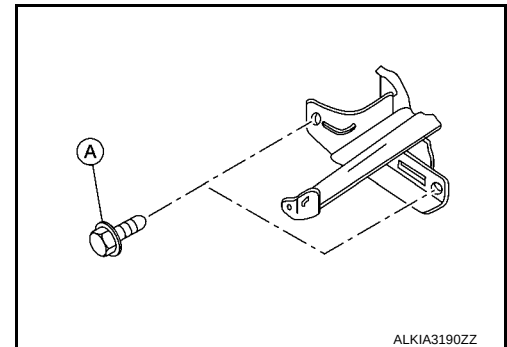
HOOD LOCK

HOOD LOCK : Removal and Installation

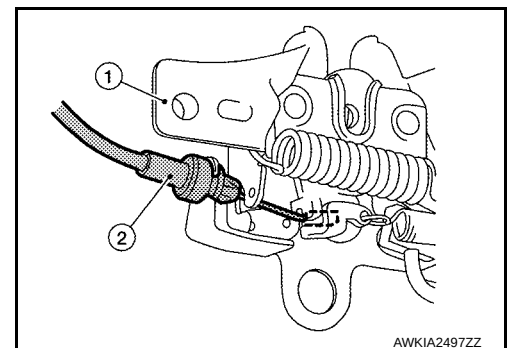
INFOID:0000000012430119

REMOVAL

1. Remove hood lock bolts (A).



2. Disconnect hood lock release cable (2) from hood lock (1) and remove.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

HOOD LOCK

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

- After installation, perform hood assembly adjustment procedure. Refer to [DLK-141, "HOOD ASSEMBLY : Adjustment"](#).
- After adjustment, perform hood lock control inspection. Refer to [DLK-166, "HOOD LOCK : Inspection"](#).

HOOD LOCK : Inspection

INFOID:0000000012430120

HOOD LOCK INSPECTION

NOTE:

If hood lock cable is bent or deformed, replace it. Refer to [DLK-165, "HOOD LOCK : Removal and Installation"](#).

1. Check that secondary latch is properly engage with secondary striker with hoods own weight.
2. While operating hood lock release lever, 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 lever returns to original position.
3. Check that hood lock release lever operates at 49 N (5.0 kg-m, 11.0 ft-lb) or below.
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).
5. Check hood lock assembly lubrication condition. If necessary, apply a suitable multi-purpose grease.

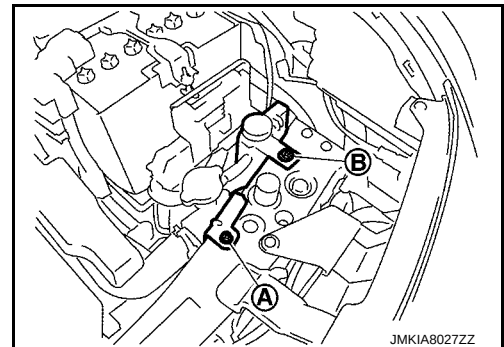
HOOD LOCK RELEASE CABLE

HOOD LOCK RELEASE CABLE : Removal and Installation

INFOID:0000000012430121

REMOVAL

1. Disconnect hood lock release cable from hood lock. Refer to [DLK-165, "Exploded View"](#).
2. Remove radiator cap adapter bracket bolt (A) and radiator reservoir tank bolt (B).



3. Remove fender protector (LH). Refer to [EXT-38, "Removal and Installation"](#).
4. Release hood lock control cable clips using a suitable tool.
5. Remove hood lock/fuel filler door release handle. Refer to [DLK-167, "HOOD LOCK RELEASE HANDLE : Removal and Installation"](#).
6. Remove dash side finisher (LH). Refer to [INT-24, "DASH SIDE FINISHER : Removal and Installation"](#).
7. Remove grommet on the lower dash and pull the hood lock release cable into the passenger compartment.

CAUTION:

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

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

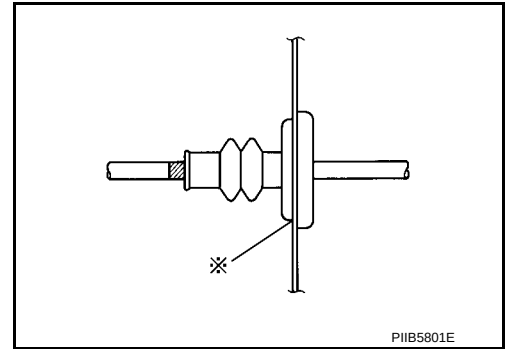
- Be careful not to bend cable too much, keep the radius 100 mm (3.94 in) or more.
- Check that hood lock release cable is properly engaged with hood lock.

HOOD LOCK

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

- Check that cable is not offset from the positioning grommet, and apply the sealant to the grommet (at * mark).



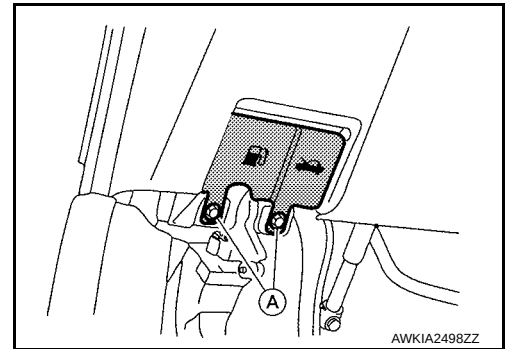
HOOD LOCK RELEASE HANDLE

HOOD LOCK RELEASE HANDLE : Removal and Installation

INFOID:0000000012430122

REMOVAL

1. Remove hood lock/fuel filler door release handle bolts (A).



2. Disconnect hood lock release cable from hood lock/fuel filler door release handle and remove.

INSTALLATION

Installation is in the reverse order of removal.

DLK

FRONT DOOR LOCK

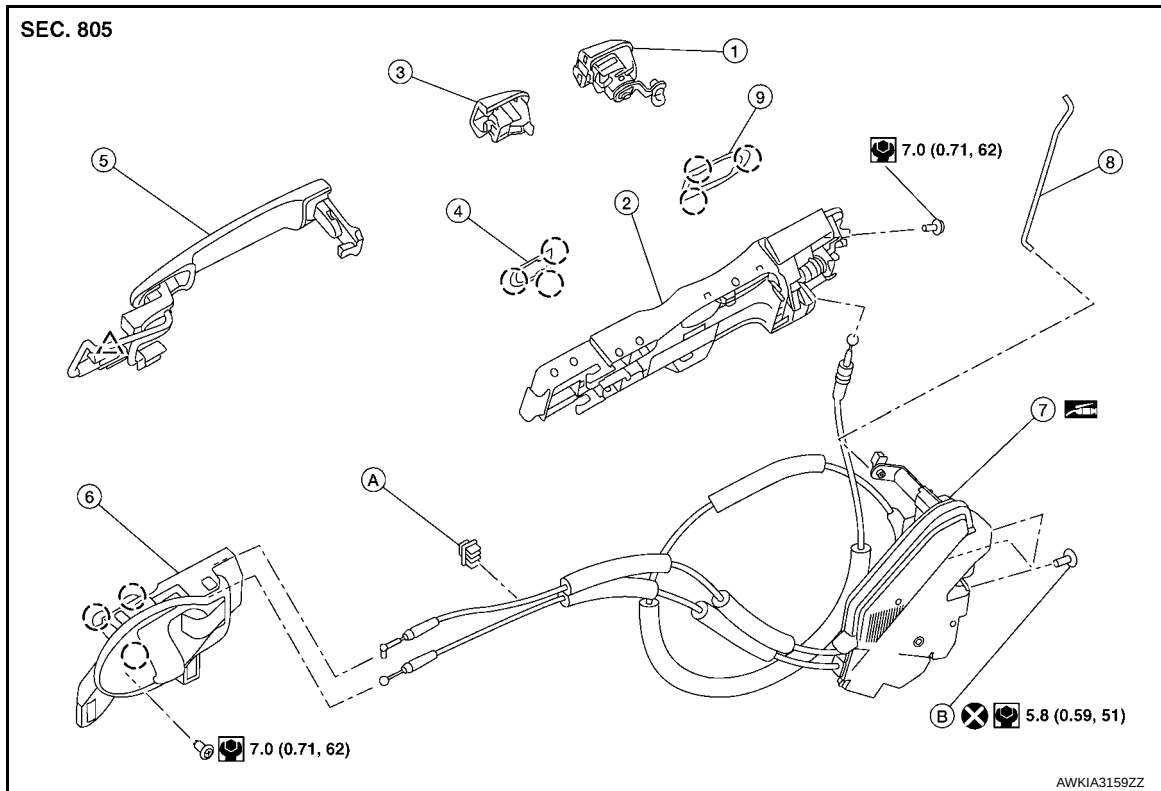
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

FRONT DOOR LOCK

Exploded View

INFOID:0000000012430123



- | | | |
|-------------------------------|-----------------------------------|---|
| 1. Key cylinder (driver side) | 2. Outside handle bracket | 3. Outside handle escutcheon (passenger side) |
| 4. Front gasket | 5. Outside handle | 6. Inside handle |
| 7. Door lock | 8. Key cylinder rod (driver side) | 9. Rear gasket |
| A. Clip | B. Bolt | ○ Pawl |

DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:0000000012430124

REMOVAL

1. Remove inside handle. Refer to [DLK-169, "INSIDE HANDLE : Removal and Installation"](#).
2. Remove outside handle. Refer to [DLK-170, "OUTSIDE HANDLE : Removal and Installation"](#).
3. Disconnect the harness connector from the door lock actuator.
4. Remove front door glass rear run. Refer to [GW-21, "Exploded View"](#).
5. Remove bolts and door lock.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

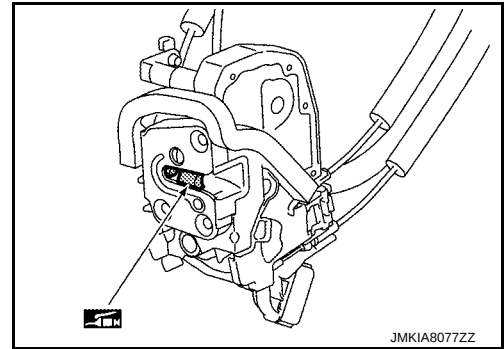
- Do not reuse door lock bolts.
- After installation, check door open/close, lock/unlock operation.
- Check door lock cables are properly engaged to inside handle and outside handle bracket.
- When installing key cylinder on front door, be sure to rotate key cylinder rod holder until a click is felt.

FRONT DOOR LOCK

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

- Check door lock for poor lubrication. Apply a suitable multi-purpose grease to door lock if necessary.



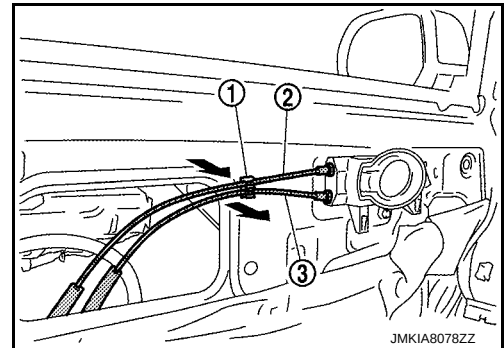
INSIDE HANDLE

INSIDE HANDLE : Removal and Installation

INFOID:0000000012430125

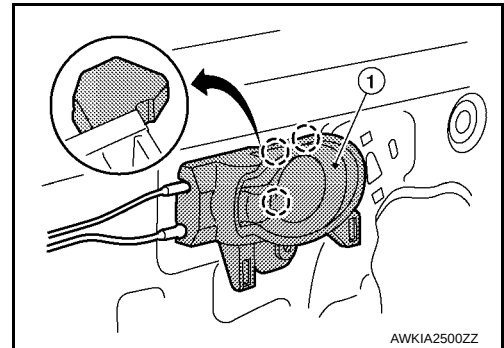
REMOVAL

1. Remove front door finisher. Refer to [INT-15, "Removal and Installation"](#).
2. Partially remove vapor barrier. Refer to [GW-21, "Exploded View"](#).
3. Release lock knob (2) and inside handle cable (3) from clip (1) using a suitable tool.

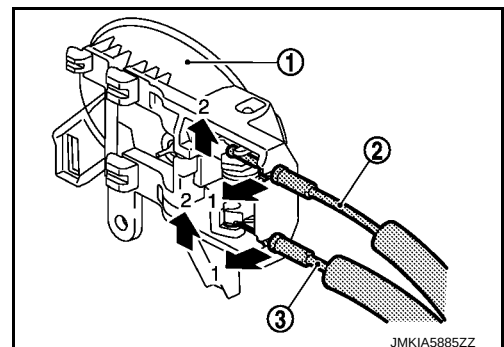


4. Remove inside handle bolt.
5. Release inside handle (1) from door panel using a suitable tool and remove.

○: Pawl



6. Release inside handle cable (3) and lock cable (2) from inside handle (1) and remove.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

FRONT DOOR LOCK

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

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

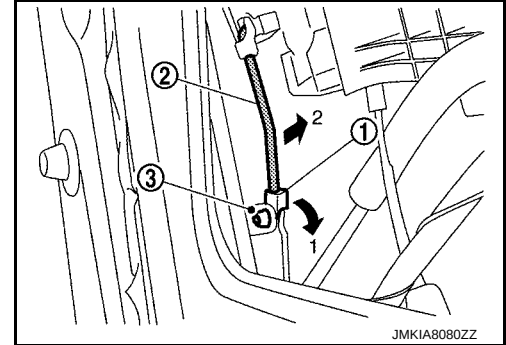
OUTSIDE HANDLE

OUTSIDE HANDLE : Removal and Installation

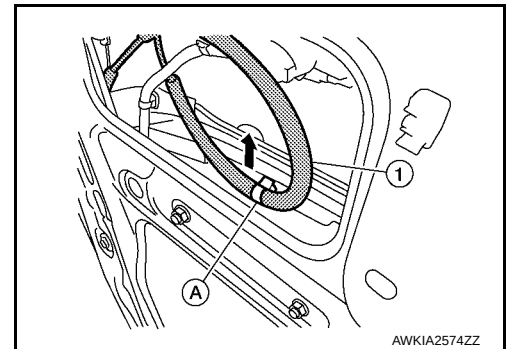
INFOID:0000000012430126

REMOVAL

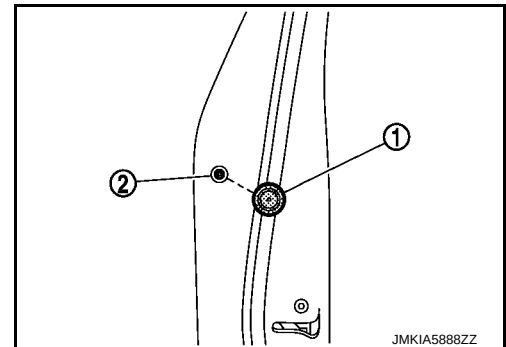
1. Remove front door finisher. Refer to [INT-15, "Removal and Installation"](#).
2. Partially remove vapor barrier. Refer to [GW-21, "Exploded View"](#).
3. Open rod holder (1) by pulling downward and separate key rod (3) from door lock assembly (2) (driver side only).



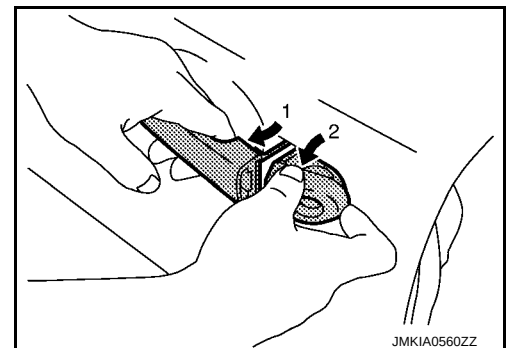
4. Release outside handle cable (1) from cable clip (A).



5. Remove door grommet (1) and bolt from grommet hole (2).



6. While pulling outside handle, remove outside handle escutcheon.

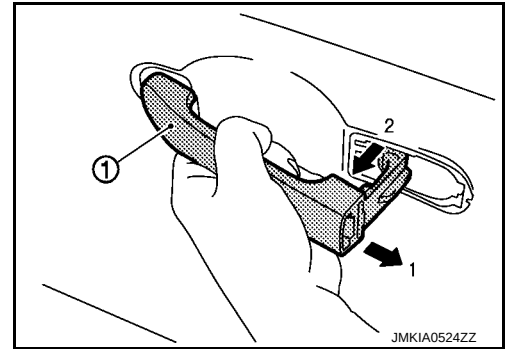


FRONT DOOR LOCK

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

7. While pulling outside handle (1), slide toward rear of vehicle.

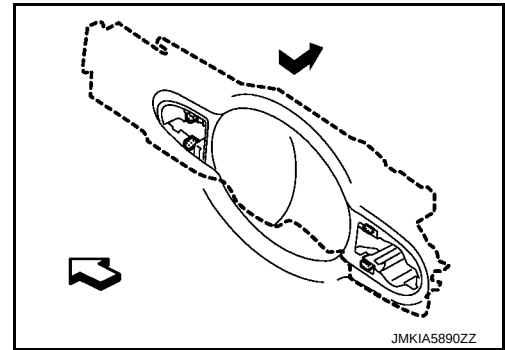


8. Disconnect the harness connectors from the outside handle and remove.

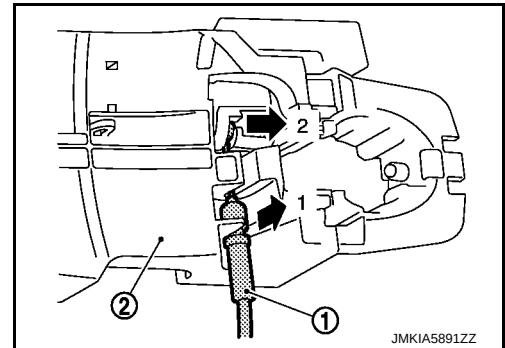
9. Remove front gasket and rear gasket.

10. Slide outside handle bracket toward rear of vehicle to remove.

⇐: Front



11. Disconnect outside handle cable (1) from outside handle bracket (2) as shown.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Check that door lock cables are properly engaged with outside handle bracket.
- After installation, check door open/close, and lock/unlock operation.

REAR DOOR LOCK

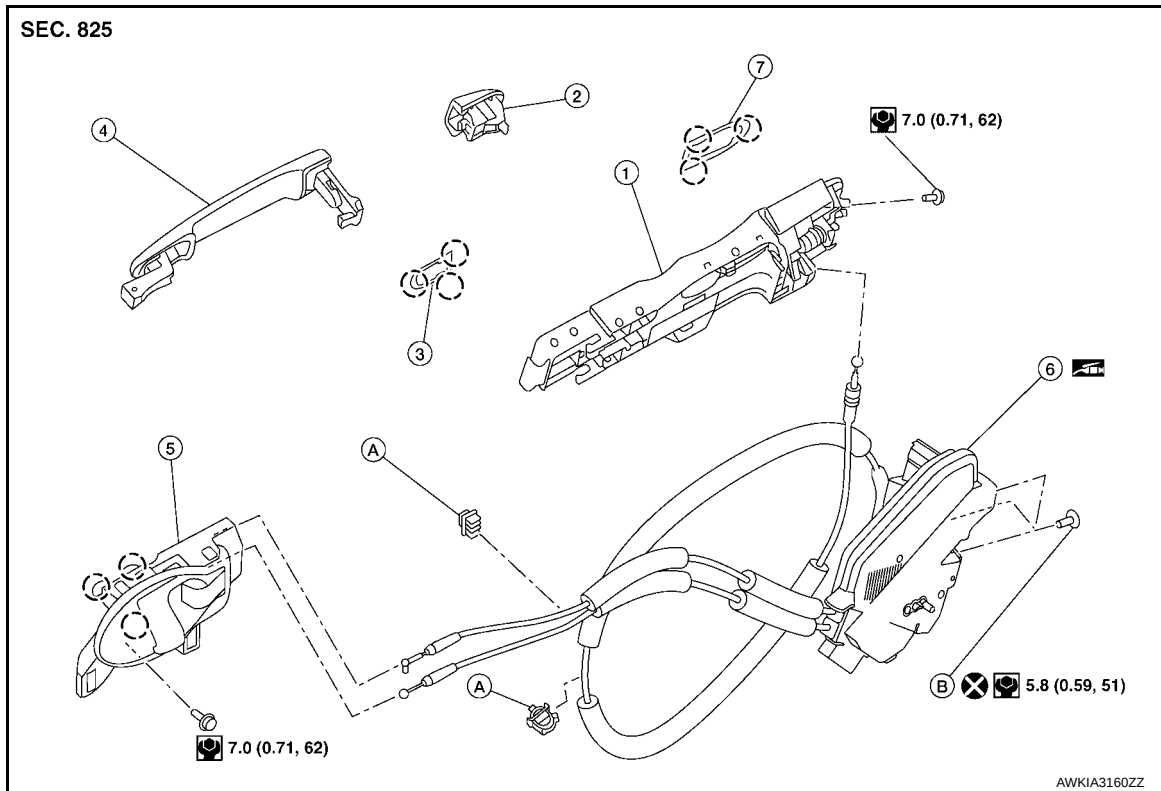
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

REAR DOOR LOCK

Exploded View

INFOID:0000000012430127



- | | | |
|---------------------------|------------------------------|-----------------|
| 1. Outside handle bracket | 2. Outside handle escutcheon | 3. Front gasket |
| 4. Outside handle | 5. Inside handle | 6. Door lock |
| 7. Door lock | A. Clip | B. Bolt |

○ Pawl

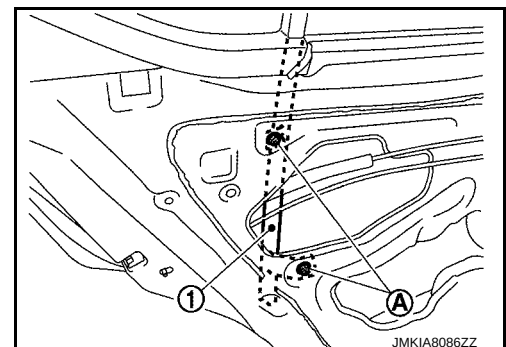
DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:0000000012430128

REMOVAL

1. Remove inside handle. Refer to [DLK-173, "INSIDE HANDLE : Removal and Installation"](#).
2. Remove outside handle. Refer to [DLK-174, "OUTSIDE HANDLE : Removal and Installation"](#).
3. Remove bolts (A) from rear door glass rear run (1).



4. Disconnect the harness connector from door lock actuator.
5. Remove bolts and door lock.

REAR DOOR LOCK

< REMOVAL AND INSTALLATION >

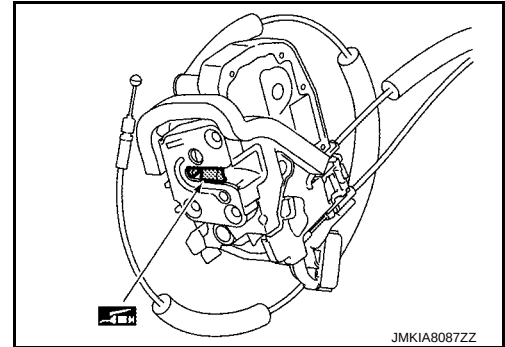
[WITH INTELLIGENT KEY SYSTEM]

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Do not reuse door lock assembly bolts.
- After installation, check door open/close, lock/unlock operation.
- Check door lock cable is properly engaged with inside handle and outside handle bracket.
- Check door lock assembly for poor lubrication. If necessary, apply a suitable multi-purpose grease.



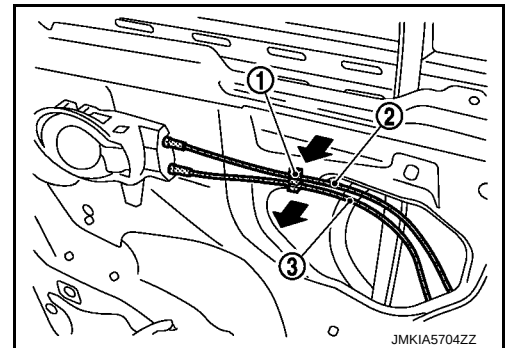
INSIDE HANDLE

INSIDE HANDLE : Removal and Installation

INFOID:000000012430129

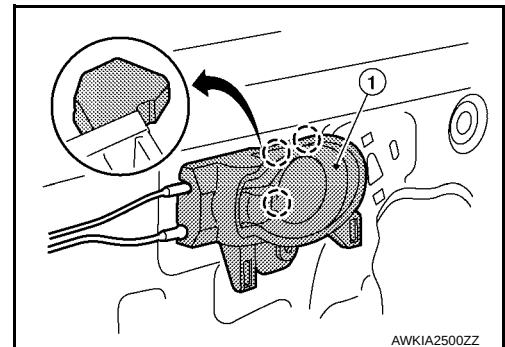
REMOVAL

1. Remove rear door finisher. Refer to [INT-18, "Removal and Installation"](#).
2. Remove upper portion of vapor barrier. Refer to [GW-25, "Exploded View"](#).
3. Release lock knob (2) and inside handle cable (3) from clip (1) using a suitable tool.



4. Remove inside handle bolt.
5. Release inside handle (1) from door panel using a suitable tool and remove.

(○): Pawl

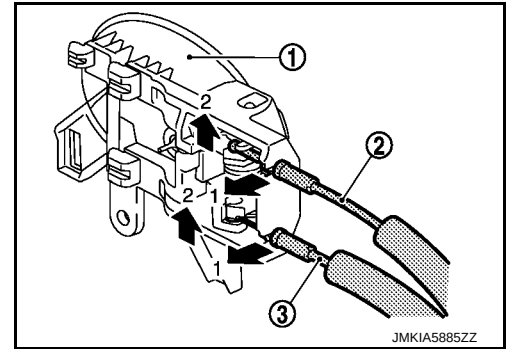


REAR DOOR LOCK

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

6. Release inside handle cable (3) and lock cable (2) from inside handle (1) and remove.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

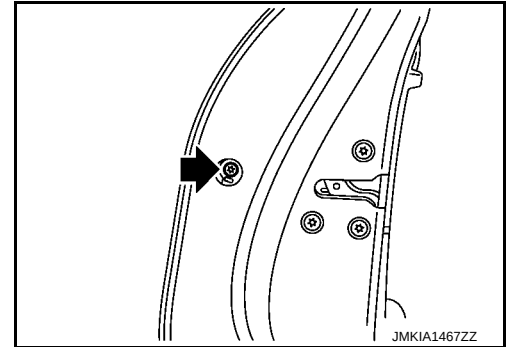
OUTSIDE HANDLE

OUTSIDE HANDLE : Removal and Installation

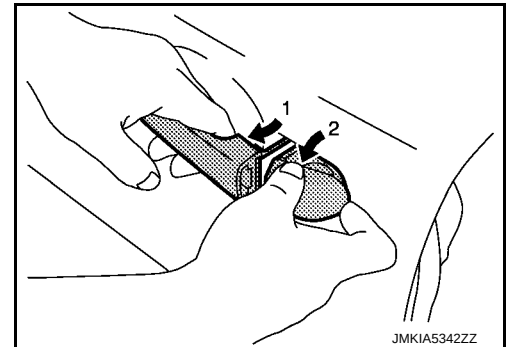
INFOID:0000000012430130

REMOVAL

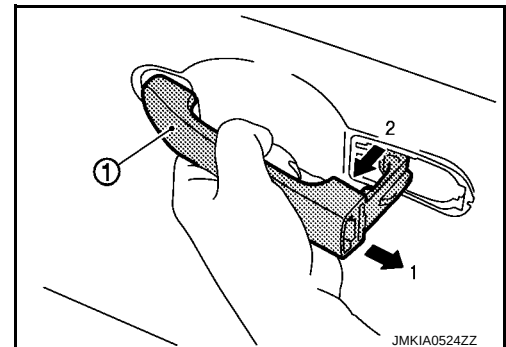
1. Remove inside handle. Refer to [DLK-173, "INSIDE HANDLE : Removal and Installation"](#)
2. Remove door grommet and bolt from grommet hole.



3. While pulling outside handle, remove outside handle escutcheon.



4. While pulling outside handle (1), slide towards rear of vehicle to remove.

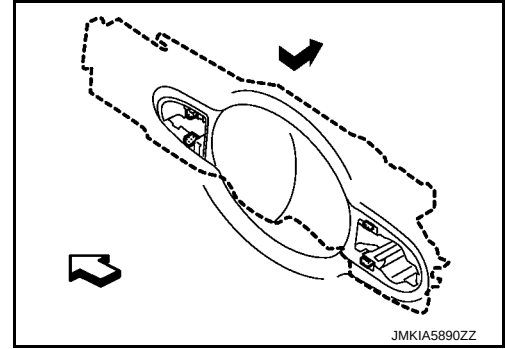


REAR DOOR LOCK

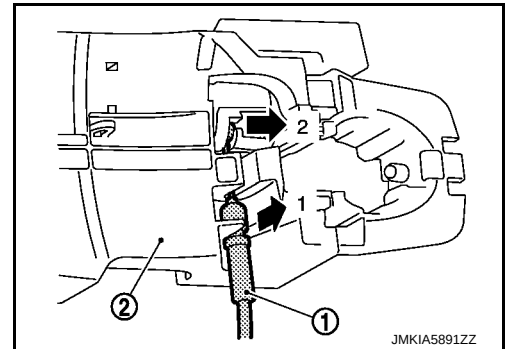
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

5. Remove front gasket and rear gasket.
6. Slide outside handle bracket toward rear of vehicle to remove.
⇐: Front



7. Disconnect outside handle cable (1) from outside handle bracket (2) as shown.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

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BACK DOOR LOCK

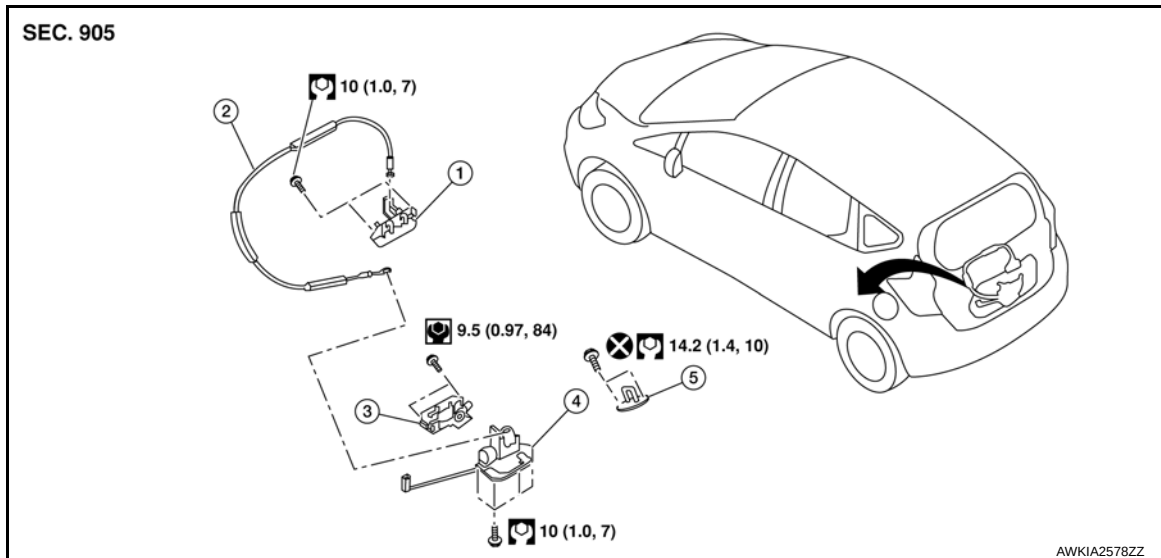
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

BACK DOOR LOCK

Exploded View

INFOID:0000000012430131



1. Outside handle
2. Back door lock cable
3. Back door lock actuator
4. Back door lock
5. Door striker

BACK DOOR LOCK

BACK DOOR LOCK : Removal and Installation

INFOID:0000000012430132

REMOVAL

1. Remove back door inner finisher. Refer to [INT-36, "BACK DOOR INNER FINISHER : Removal and Installation"](#).
2. Remove back door outer finisher. Refer to [EXT-48, "Removal and Installation"](#).
3. Disconnect lock rod from key cylinder (if equipped).
4. Disconnect the harness connectors from the back door lock.
5. Disconnect door lock cable from handle.
6. Remove back door lock bolts and back door lock.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Tighten back door bolts to specification.**
- **After installation, check back door open/close and lock/unlock operation.**

OUTSIDE HANDLE

OUTSIDE HANDLE : Removal and Installation

INFOID:0000000012430133

REMOVAL

1. Remove back door outer finisher. Refer to [EXT-48, "Removal and Installation"](#).
2. Release the back door lock cable from the outside handle.
3. Remove outside handle bolts and outside handle.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Tighten outside handle bolts to specification. Refer to [DLK-176, "Exploded View"](#).

BACK DOOR LOCK

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

- After installation, check back door open/close and lock/unlock operation.

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[WITH INTELLIGENT KEY SYSTEM]

FUEL FILLER LID OPENER

INFOID:0000000012430134



- Pawl

FUEL FILLER LID : Removal and Installation

INFOID:0000000012430135

1. Remove fuel cap pin (1).

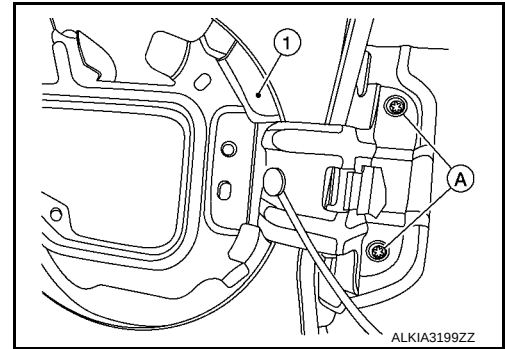


FUEL FILLER LID OPENER

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

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



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

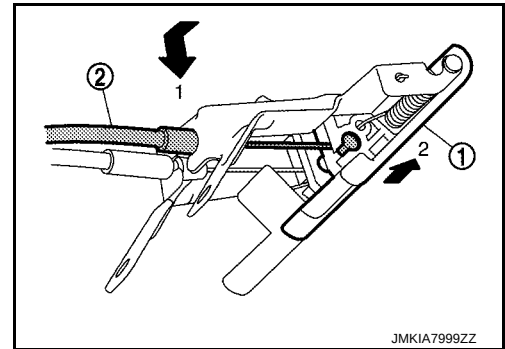
FUEL FILLER OPENER CABLE

FUEL FILLER OPENER CABLE : Removal and Installation

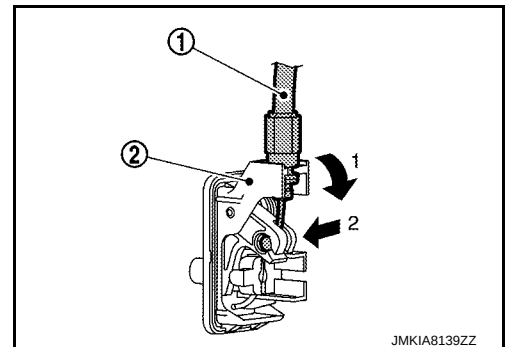
INFOID:0000000012430136

REMOVAL

1. Remove hood lock/fuel filler lid lock release handle. Refer to [DLK-167, "HOOD LOCK RELEASE HANDLE : Removal and Installation"](#).
2. Disconnect fuel filler lid opener cable (2) from hood lock/fuel filler lid lock release handle (1).



3. Remove dash side finisher (LH). Refer to [INT-24, "DASH SIDE FINISHER : Removal and Installation"](#).
4. Remove center pillar lower finisher (LH). Refer to [INT-25, "CENTER PILLAR LOWER FINISHER : Removal and Installation"](#).
5. Remove luggage side lower finisher (LH). Refer to [INT-34, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation"](#).
6. Disconnect fuel filler lid opener cable (1) by pulling downward and then sliding cable end to the side to remove from fuel filler lid lock assembly (2).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

FUEL FILLER LID LOCK

FUEL FILLER LID OPENER

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

FUEL FILLER LID LOCK : Removal and Installation

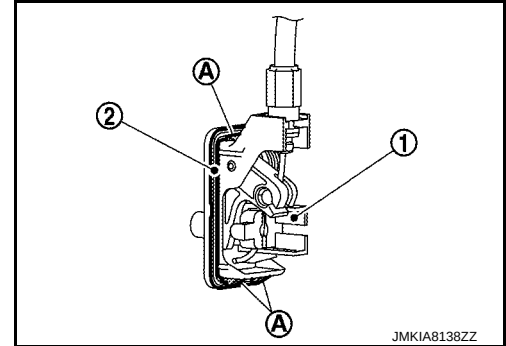
INFOID:000000012430137

REMOVAL

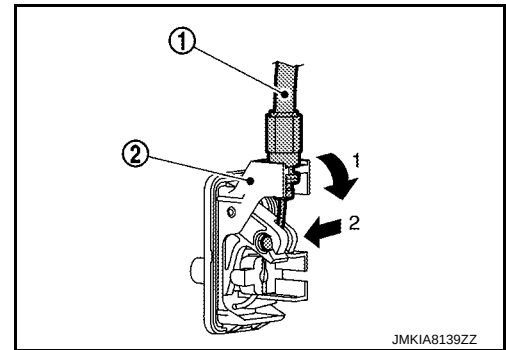
1. Fully open fuel filler lid.
2. Remove luggage side lower finisher (LH). Refer to [INT-34, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation"](#).
3. Disconnect the harness connector from the fuel filler lid lock assembly.
4. Release pawls (A) and remove fuel filler lid lock assembly (1).

CAUTION:

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



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



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

DOOR SWITCH

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

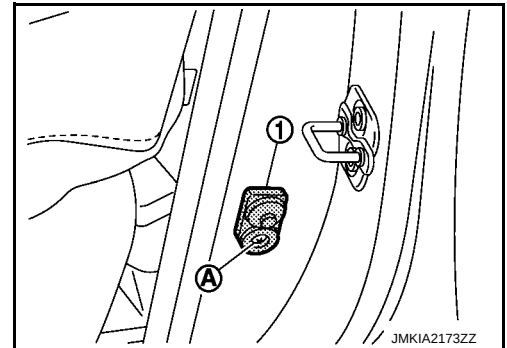
DOOR SWITCH

Removal and Installation

INFOID:0000000012430138

REMOVAL

1. Remove the door switch bolt (A).
2. Disconnect the harness connector and remove door switch (1).



INSTALLATION

Installation is in the reverse order of removal.

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INSIDE KEY ANTENNA

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

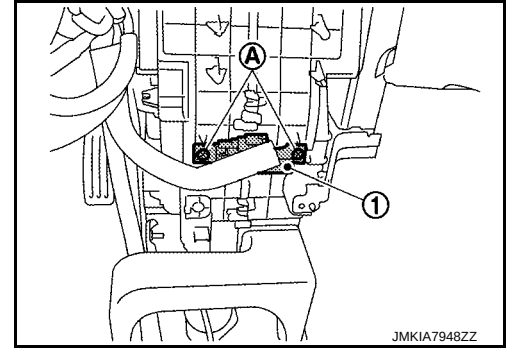
INSIDE KEY ANTENNA INSTRUMENT CENTER

INSTRUMENT CENTER : Removal and Installation

INFOID:0000000012430139

REMOVAL

1. Remove center console lower. Refer to [JP-20, "Removal and Installation"](#).
2. Disconnect the harness connector from the inside key antenna (instrument center).
3. Remove screws (A) and the inside key antenna (instrument center) (1).



INSTALLATION

Installation is in the reverse order of removal.

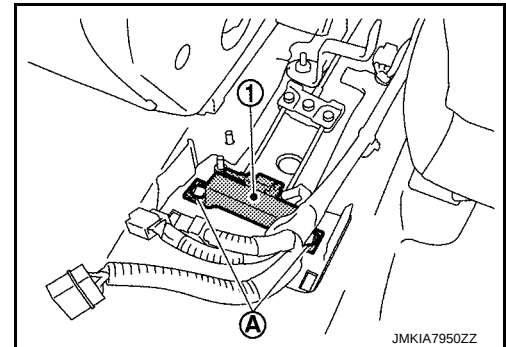
CONSOLE

CONSOLE : Removal and Installation

INFOID:0000000012430140

REMOVAL

1. Remove center console assembly. Refer to [JP-18, "Removal and Installation"](#).
2. Disconnect the harness connector from the inside key antenna (console).
3. Release clips (A) and remove inside key antenna (console) (1).



INSTALLATION

Installation is in the reverse order of removal.

LUGGAGE ROOM

LUGGAGE ROOM : Removal and Installation

INFOID:0000000012430141

REMOVAL

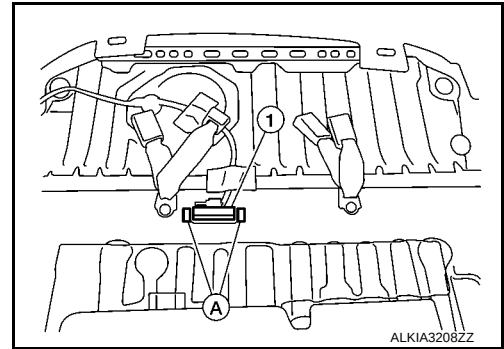
1. Remove rear seat cushion. Refer to [SE-26, "SEAT CUSHION : Removal and Installation"](#).
2. Disconnect the harness connector from the inside key antenna (luggage room).

INSIDE KEY ANTENNA

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

3. Release clips (A) and remove inside key antenna (luggage room) (1).



INSTALLATION

Installation is in the reverse order of removal.

OUTSIDE KEY ANTENNA

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

OUTSIDE KEY ANTENNA

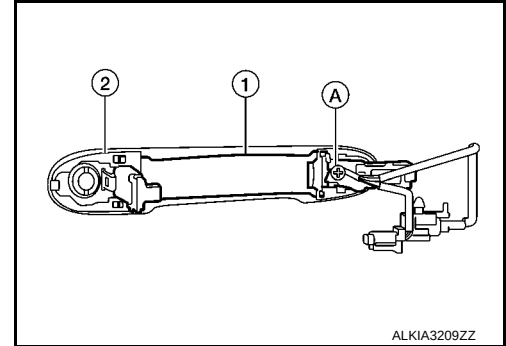
OUTSIDE HANDLE

OUTSIDE HANDLE : Removal and Installation

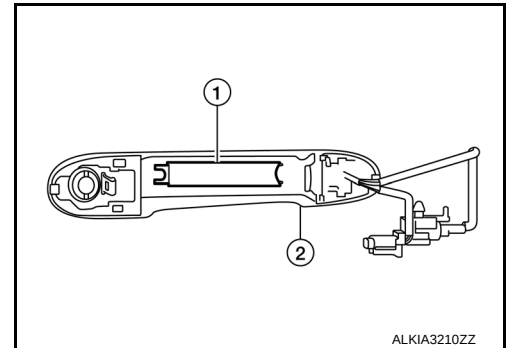
INFOID:0000000012430142

REMOVAL

1. Remove outside handle. Refer to [DLK-170, "OUTSIDE HANDLE : Removal and Installation"](#).
2. Remove screw (A) and outside handle finisher (1) from outside handle (2).



3. Remove outside key antenna (outside handle) (1) from outside handle (2).



INSTALLATION

Installation is in the reverse order of removal.

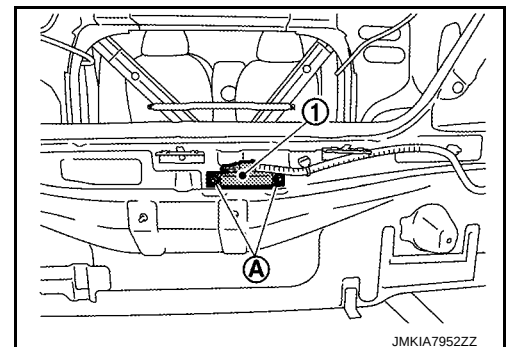
REAR BUMPER

REAR BUMPER : Removal and Installation

INFOID:0000000012430143

REMOVAL

1. Remove the rear bumper fascia. Refer to [EXT-29, "Removal and Installation"](#).
2. Disconnect the harness connector from the outside key antenna (rear bumper)
3. Release clips (A) and remove outside key antenna (rear bumper) (1).



INSTALLATION

Installation is in the reverse order of removal.

DOOR REQUEST SWITCH

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

DOOR REQUEST SWITCH

DRIVER SIDE

DRIVER SIDE : Removal and Installation

INFOID:0000000012430144

The door request switch (driver side) is serviced as an assembly with the outside handle. Refer to [DLK-170, "OUTSIDE HANDLE : Removal and Installation"](#).

PASSENGER SIDE

PASSENGER SIDE : Removal and Installation

INFOID:0000000012430145

The door request switch (passenger side) is serviced as an assembly with the outside handle. Refer to [DLK-170, "OUTSIDE HANDLE : Removal and Installation"](#).

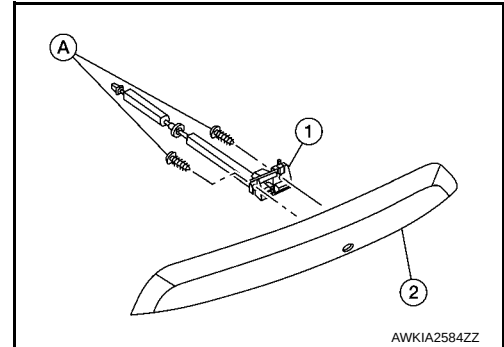
BACK DOOR

BACK DOOR : Removal and Installation

INFOID:0000000012430146

REMOVAL

1. Remove back door outer finisher. Refer to [EXT-48, "Removal and Installation"](#).
2. Remove screws (A) and back door request switch (1) from back door outer finisher (2).



INSTALLATION

Installation is in the reverse order of removal.

DLK

INTELLIGENT KEY WARNING BUZZER

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

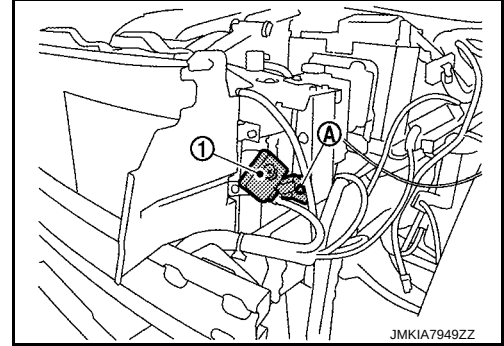
INTELLIGENT KEY WARNING BUZZER

Removal and Installation

INFOID:0000000012430147

REMOVAL

1. Remove front combination lamp (LH). Refer to [EXL-102. "Removal and Installation"](#)
2. Remove bolt (A) and Intelligent Key warning buzzer (1).



INSTALLATION

Installation is in the reverse order of removal.

REMOTE KEYLESS ENTRY RECEIVER

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

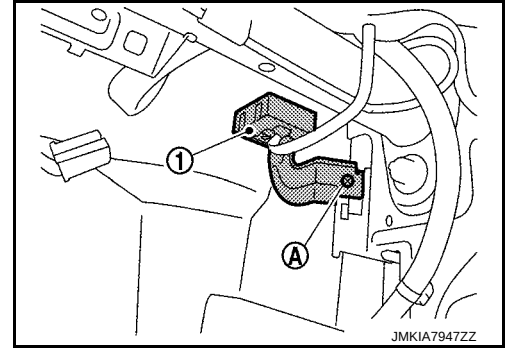
REMOTE KEYLESS ENTRY RECEIVER

Removal and Installation

INFOID:0000000012430148

REMOVAL

1. Remove glove box assembly. Refer to [IP-25. "Removal and Installation"](#).
2. Remove remote keyless entry receiver bolt (A).
3. Disconnect the harness connector and remove remote keyless entry receiver (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

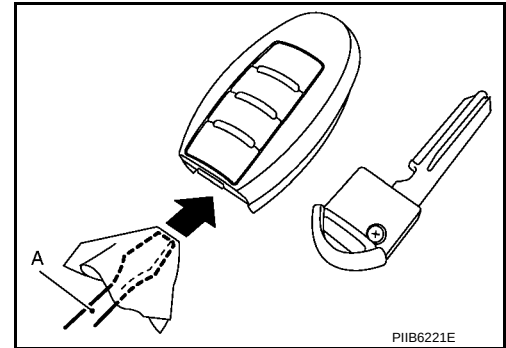
Removal and Installation

INFOID:000000012430149

1. Release the lock knob at the back of the Intelligent Key and remove the mechanical key.
2. Insert a suitable tool (A) wrapped with a cloth into the slit of the corner and rotate it to separate the upper part from the lower part.

CAUTION:

- Do not touch the circuit board or battery terminal.
- The key fob is water-resistant. However, if it does get wet, immediately wipe it dry.



3. Replace the battery with new one.

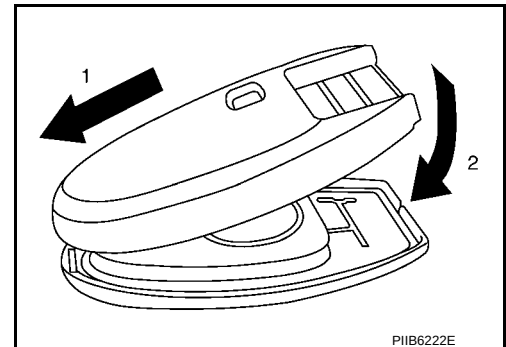
Battery replacement

:Coin-type lithium battery (CR2025)

4. Align the tips of the upper and lower parts, and then push them together until it is securely closed.

CAUTION:

- When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.
- After replacing the battery, check that all Intelligent Key functions work normally.



PRECAUTION

PRECAUTIONS

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

INFOID:0000000012430150

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

WARNING:

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

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

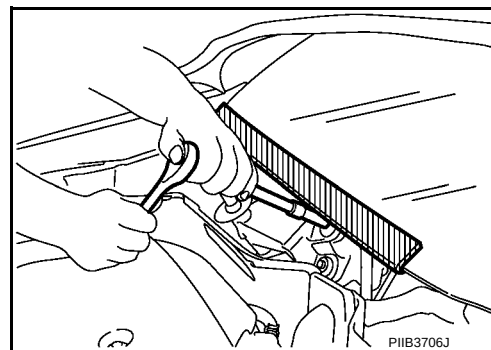
WARNING:

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

Procedure without Cowl Top Cover

INFOID:0000000012430151

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



Precaution for Servicing Doors and Locks

INFOID:0000000012430152

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.

PRECAUTIONS

< PRECAUTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

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

Precaution for Work

INFOID:000000012918341

- 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

< PREPARATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

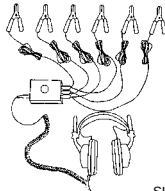
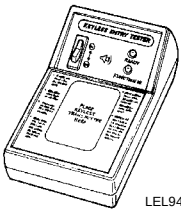
PREPARATION

PREPARATION

Special Service Tools

INFOID:0000000012430153

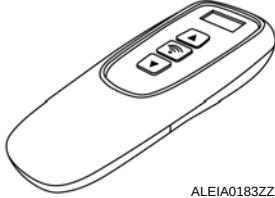
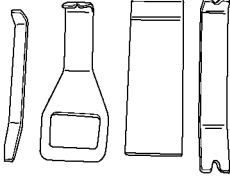
The actual shape of the tools may differ from those illustrated here.

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		• Activate and display TPMS transmitter IDs • Display tire pressure reported by the TPMS transmitter • Read TPMS DTCs • Register TPMS transmitter IDs • Test remote keyless entry keyfob relative signal strength • Compatible with future sensors • Equipped with a display • Check Intelligent Key relative signal strength • Confirm vehicle Intelligent Key antenna signal strength

PREPARATION

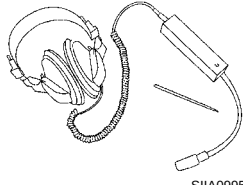
< PREPARATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

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

Commercial Service Tools

INFOID:0000000012430154

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

cardiagn.com

COMPONENT PARTS

< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

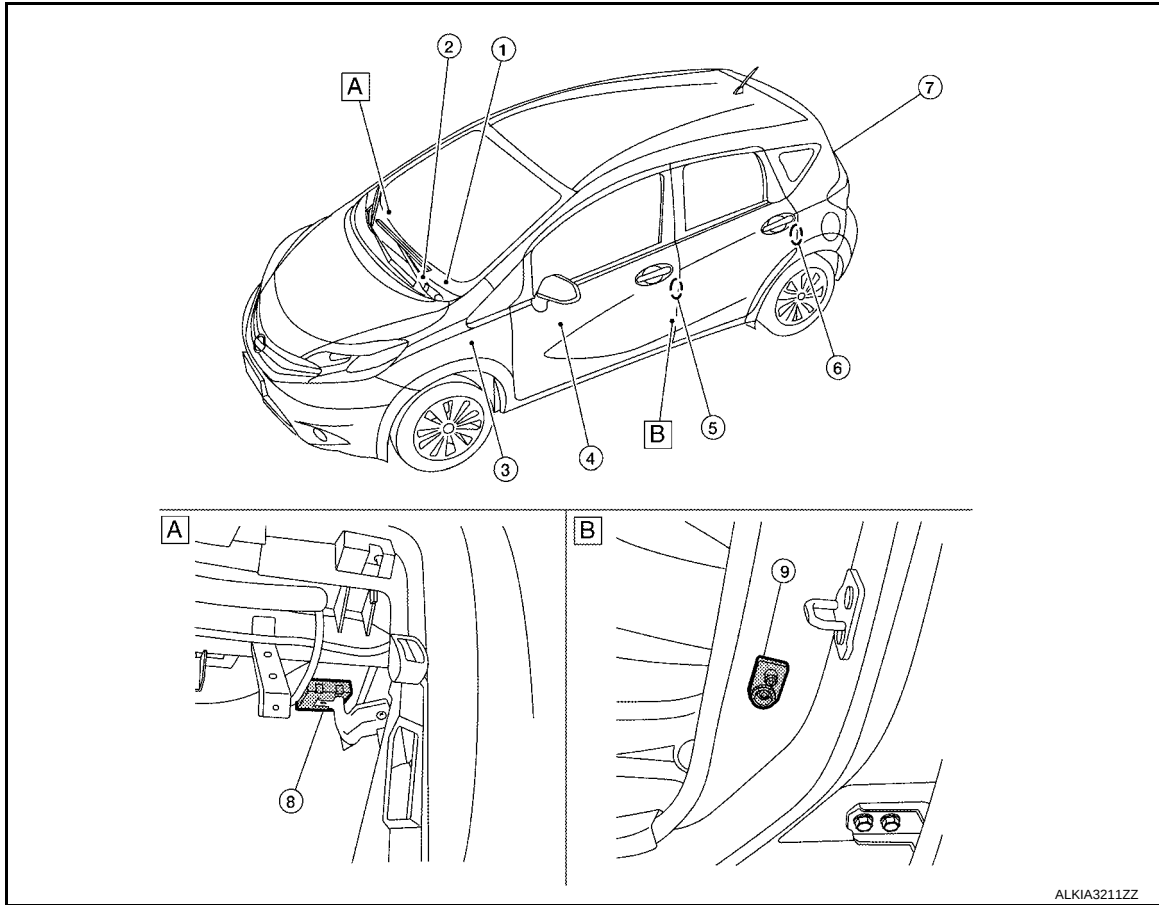
SYSTEM DESCRIPTION

COMPONENT PARTS

REMOTE KEYLESS ENTRY SYSTEM

REMOTE KEYLESS ENTRY SYSTEM : Component Parts Location

INFOID:0000000012430155



A. View with glove box door removed B. View of LH door switch (RH similar)

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-9, "METER SYSTEM : Combination Meter" (Type A) or MWI-59, "METER SYSTEM : Combination Meter" (Type B).
2.	Ignition switch	Ignition switch transmits ON/OFF signal to BCM. BCM maintains the ignition switch position status.

COMPONENT PARTS

< SYSTEM DESCRIPTION >

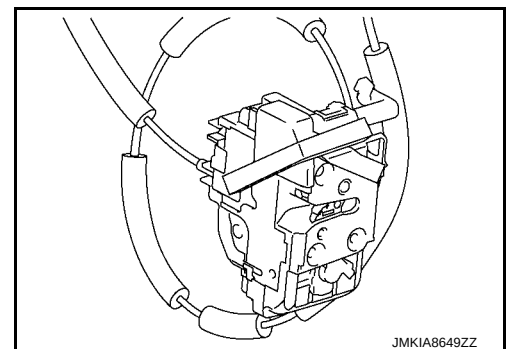
[WITHOUT INTELLIGENT KEY SYSTEM]

No.	Component	Function
3.	BCM	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-77, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
4.	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" .
5.	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-194, "REMOTE KEYLESS ENTRY SYSTEM : Front Door Lock Assembly (Driver Side)" .
6.	Rear door lock actuator LH	Rear door lock actuator locks/unlocks the rear door latch assembly.
7.	Back door lock actuator	Back door lock actuator locks/unlocks the back door latch assembly. Refer to DLK-195, "REMOTE KEYLESS ENTRY SYSTEM : Back Door Lock Assembly" .
8.	Remote keyless entry receiver	Remote keyless entry receiver receives button operation signal and key ID signal of Intelligent Key, and then transmits them to the BCM. Refer to DLK-195, "REMOTE KEYLESS ENTRY SYSTEM : Remote Keyless Entry Receiver" .
9.	Door switch	Door switch detects door open/close condition and then transmits ON/OFF signal to BCM. Refer to DLK-195, "REMOTE KEYLESS ENTRY SYSTEM : Door Switch" .

REMOTE KEYLESS ENTRY SYSTEM : Front Door Lock Assembly (Driver Side)

INFOID:0000000012430156

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



COMPONENT PARTS

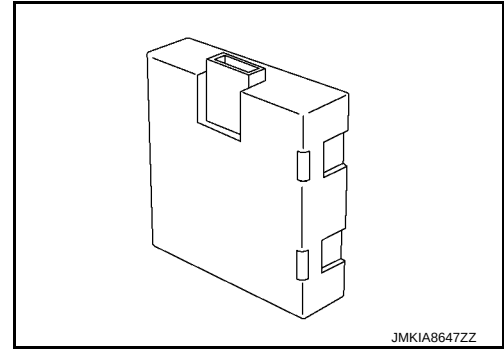
< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

REMOTE KEYLESS ENTRY SYSTEM : Remote Keyless Entry Receiver

INFOID:0000000012430157

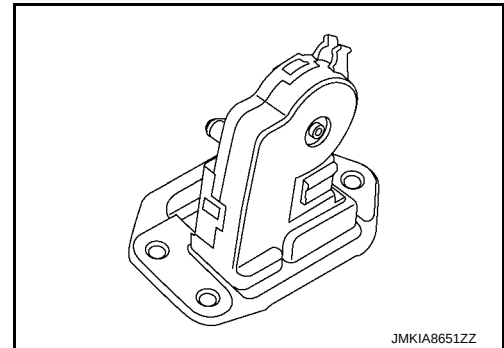
- Remote keyless entry receiver receives button operation signal and key ID signal of Intelligent Key, and then transmits them to BCM.
- Remote keyless entry receiver is installed in the rear of glove box lid.



REMOTE KEYLESS ENTRY SYSTEM : Back Door Lock Assembly

INFOID:0000000012430158

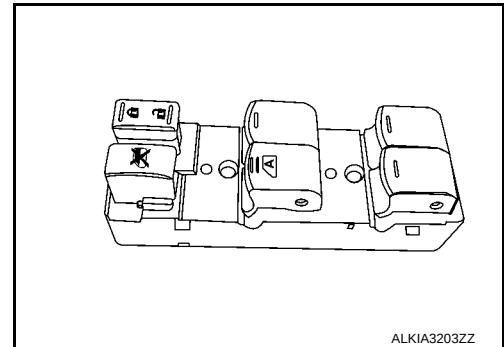
- Back door lock assembly integrates door lock actuator and back door latch.
- Door lock actuator locks/unlocks the back door according to the door lock/unlock signal from BCM.



REMOTE KEYLESS ENTRY SYSTEM : Door Lock and Unlock Switch

INFOID:0000000012430159

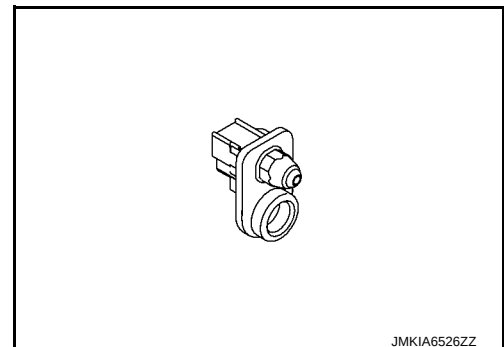
- Door lock and unlock switch transmits door lock/unlock signal operation to BCM.
- Door lock and unlock switch is integrated in the main power window and door lock/unlock switch and power window and door lock/unlock switch RH.



REMOTE KEYLESS ENTRY SYSTEM : Door Switch

INFOID:0000000012430160

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



SYSTEM

< SYSTEM DESCRIPTION >

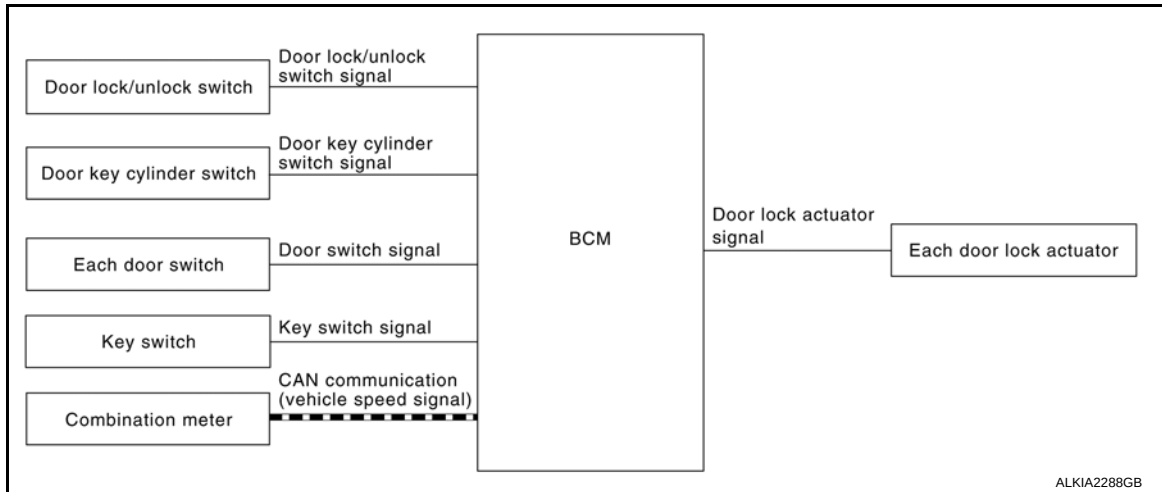
[WITHOUT INTELLIGENT KEY SYSTEM]

SYSTEM

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION : System Diagram

INFOID:0000000012430161



AUTOMATIC DOOR LOCK/UNLOCK FUNCTION : System Description

INFOID:0000000012430162

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

DOOR LOCK FUNCTION

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

Door Key Cylinder

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

Selective unlock operation mode can be changed using "DOOR LOCK-UNLOCK SET" mode in "Work support". Refer to [BCS-90, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

AUTOMATIC DOOR LOCKS (LOCK OPERATION)

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

Vehicle Speed Sensing Auto Door Lock*¹

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

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

SYSTEM

< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

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

Setting change of Automatic Door Locks (LOCK) Function

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

With CONSULT

The ON/OFF switching of the automatic door locks (LOCK) function and the type selection of the automatic door locks (LOCK) function can be performed at the "Work support". Refer to [BCS-90, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

Without CONSULT

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

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

OFF → ON : 2 blinks

ON → OFF : 1 blink

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

AUTOMATIC DOOR LOCKS (UNLOCK OPERATION)

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

IGN OFF Interlock Door Unlock^{*1}

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

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

Setting change of Automatic Door Locks (UNLOCK) Function

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

With CONSULT

The ON/OFF switching of the automatic door locks (UNLOCK) function and the type selection of the automatic door locks (UNLOCK) function can be performed at the "Work support". Refer to [BCS-90, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

Without CONSULT

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

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

OFF → ON : 2 blinks

ON → OFF : 1 blink

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

^{*1}: This function is set to ON before delivery.

POWER DOOR LOCK SYSTEM

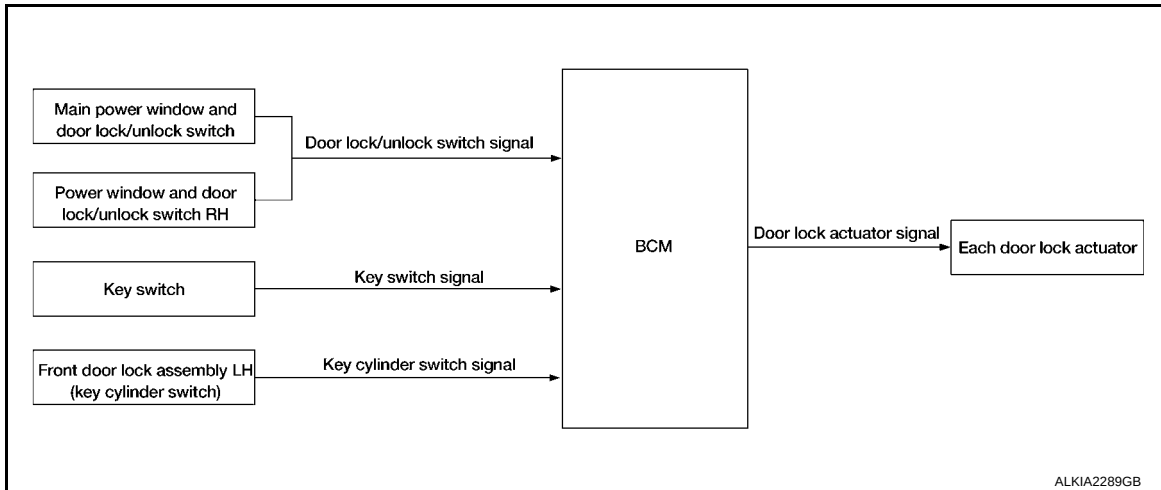
SYSTEM

< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

POWER DOOR LOCK SYSTEM : System Diagram

INFOID:000000012430163



POWER DOOR LOCK SYSTEM : System Description

INFOID:000000012430164

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-90, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

REMOTE KEYLESS ENTRY SYSTEM

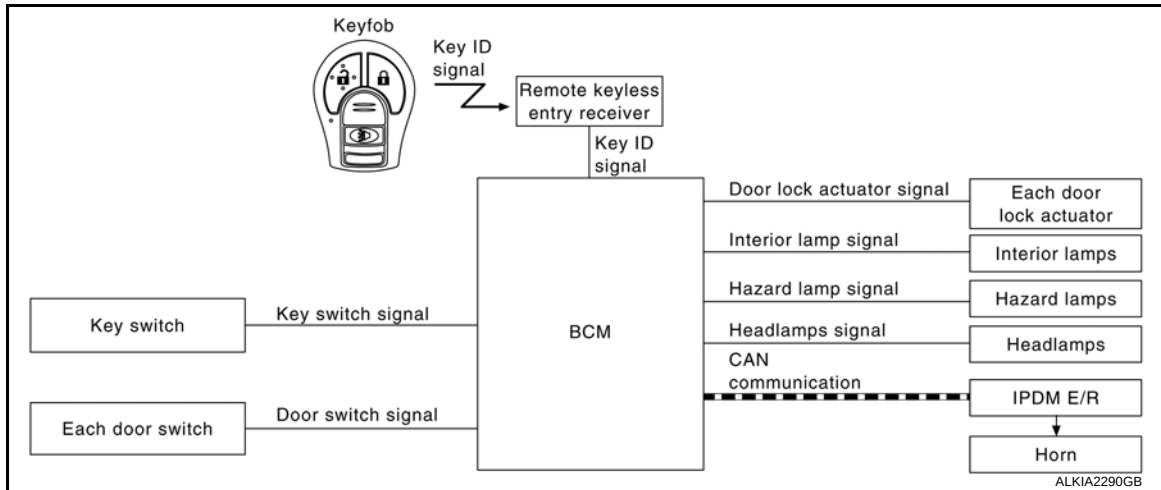
SYSTEM

< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

REMOTE KEYLESS ENTRY SYSTEM : System Diagram

INFOID:000000012430165



REMOTE KEYLESS ENTRY SYSTEM : System Description

INFOID:000000012430166

The remote keyless entry system can be locked and unlocked by pressing door lock and unlock button of keyfob.

DOOR LOCK AND UNLOCK OPERATION

- When door lock and unlock button of keyfob is pressed, door lock and unlock signal transmits from keyfob to BCM via remote keyless entry receiver.
- When BCM receives the door lock and unlock signal, it operates door lock actuator, flashes the hazard lamp (lock: 2 times, unlock: 1 time) and horn chirp signal to IPDM E/R at the same time as a reminder.
- IPDM E/R honks horn (lock: 1 time) as a reminder.

OPERATION CONDITION

Remote controller operation	Operation condition
Lock/unlock	Key switch is OFF. Mechanical key is removed from the ignition cylinder.

OPERATION AREA

To ensure that the keyfob works effectively, use within 10 m (33ft) range of the vehicle, however the operable range may differ according to surroundings.

SELECTIVE UNLOCK OPERATION

When door lock is unlocked, pressing LOCK button on keyfob once will lock all doors. When door lock is locked, pressing UNLOCK button on keyfob will unlock driver side door. Pressing UNLOCK button on keyfob second time within 5 seconds from the first time will unlock all doors.

HAZARD AND HORN REMINDER

When the doors are locked or unlocked by keyfob, power is supplied to sound horn and flash hazard warning lamps as a reminder

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

How to Change Hazard and Horn Reminder Modes

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	
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-92, "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-92, "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-92, "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)

< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000012542558

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	- 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			
Warning chime	BUZZER			x	x			
Interior room lamp timer	INT LAMP			x	x	x		
Remote keyless entry system	MULTI REMOTE ENT			x	x	x		
Exterior lamp	HEAD LAMP			x	x	x		
Wiper and washer	WIPER			x	x	x		
Turn signal and hazard warning lamps	FLASHER			x	x			
Air conditioner	AIR CONDITIONER			x				
Combination switch	COMB SW			x				
BCM	BCM	x	x			x	x	x
Immobilizer	IMMU		x		x	x		
Interior room lamp battery saver	BATTERY SAVER			x	x	x		
Vehicle security system	THEFT ALM			x		x		
RAP system	RETAINED PWR			x		x		
Signal buffer system	SIGNAL BUFFER			x				
TPMS	AIR PRESSURE MONITOR		x	x	x	x		
Panic alarm system	PANIC ALARM				x			

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

DOOR LOCK

DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)

INFOID:000000012542560

DATA MONITOR

Monitor Item [Unit]	Description
IGN ON SW [On/Off]	Indicates condition of ignition switch ON position.
KEY ON SW [On/Off]	Indicates condition of key switch.
CDL LOCK SW [On/Off]	Indicates condition of lock signal from door lock and unlock switch.
CDL UNLOCK SW [On/Off]	Indicates condition of unlock signal from door lock and unlock switch.
DOOR SW-DR [On/Off]	Indicates condition of front door switch LH.
DOOR SW-AS [On/Off]	Indicates condition of front door switch RH.
DOOR SW-RR [On/Off]	Indicates condition of rear door switch RH.
DOOR SW-RL [On/Off]	Indicates condition of rear door switch LH.
DOOR SW-BK [On/Off]	Indicates condition of back door switch.
ACC ON SW [On/Off]	Indicates condition of ignition switch ACC position.
KEYLESS LOCK [On/Off]	Indicates condition of lock signal from keyfob.
KEYLESS UNLOCK [On/Off]	Indicates condition of unlock signal from keyfob.
KEY CYL LK-SW [On/Off]	Indicates condition of lock signal from door key cylinder switch.
KEY CYL UN-SW [On/Off]	Indicates condition of unlock signal from door key cylinder switch.
VEHICLE SPEED [km/h/mph]	Indicates vehicle speed signal received from combination meter on CAN communication line.

ACTIVE TEST

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

WORK SUPPORT

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

* : Initial setting

MULTI REMOTE ENT

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

MULTI REMOTE ENT : CONSULT Function (BCM - MULTI REMOTE ENT)

INFOID:0000000012542561

DATA MONITOR

Monitor Item [Unit]	Description
IGN ON SW [On/Off]	Indicates condition of ignition switch ON position.
KEY ON SW [On/Off]	Indicates condition of key switch.
ACC ON SW [On/Off]	Indicates condition of ignition switch ACC position.
KEYLESS LOCK [On/Off]	Indicates condition of lock signal from keyfob.
KEYLESS UNLOCK [On/Off]	Indicates condition of unlock signal from keyfob.
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.
KEYLESS PANIC [On/Off]	Indicates condition of panic signal from keyfob.

ACTIVE TEST

Test Item	Description
HORN	This test is able to check the door lock tone.
INT LAMP	This test is able to check interior room lamp operation [On/Off].
FLASHER	This test is able to check hazard reminder operation [Off/LH/RH].

WORK SUPPORT

Support Item	Setting		Description
REMO CONT ID REGIST	—		Keyfob ID code can be registered.
REMO CONT ID ERASUR	—		Keyfob ID code can be erased.
REMO CONT ID CONFIR	—		Keyfob ID code registration is displayed.
HORN CHIRP SET	Off		Horn chirp function can be changed in this mode.
	On*		
HAZARD LAMP SET	MODE4*	Lock and Unlock	Hazard warning lamp function can be changed in this mode.
	MODE3	Lock Only	
	MODE2	Unlock Only	
	MODE1	OFF	
PANIC ALRM SET	MODE3	1.5 sec	Panic alarm operation can be changed in this mode.
	MODE2	OFF	
	MODE1*	0.5 sec	

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

Support Item	Setting		Description
AUTO LOCK SET	MODE7	5 min	Auto locking function can be changed in this mode.
	MODE6	4 min	
	MODE5	3 min	
	MODE4	2 min	
	MODE3*	1 min	
	MODE2	30 sec	
	MODE1	OFF	

*: Initial setting

ECU DIAGNOSIS INFORMATION

BCM, IPDM E/R

List of ECU Reference

INFOID:0000000012430170

ECU	Reference
BCM	BCS-101, "Reference Value"
	BCS-117, "Wiring Diagram"
	BCS-115, "Fail-safe"
	BCS-115, "DTC Inspection Priority Chart"
	BCS-115, "DTC Index"
IPDM E/R	PCS-13, "Reference Value"
	PCS-21, "Wiring Diagram"
	PCS-19, "Fail-safe"
	PCS-20, "DTC Index"

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DLK

POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

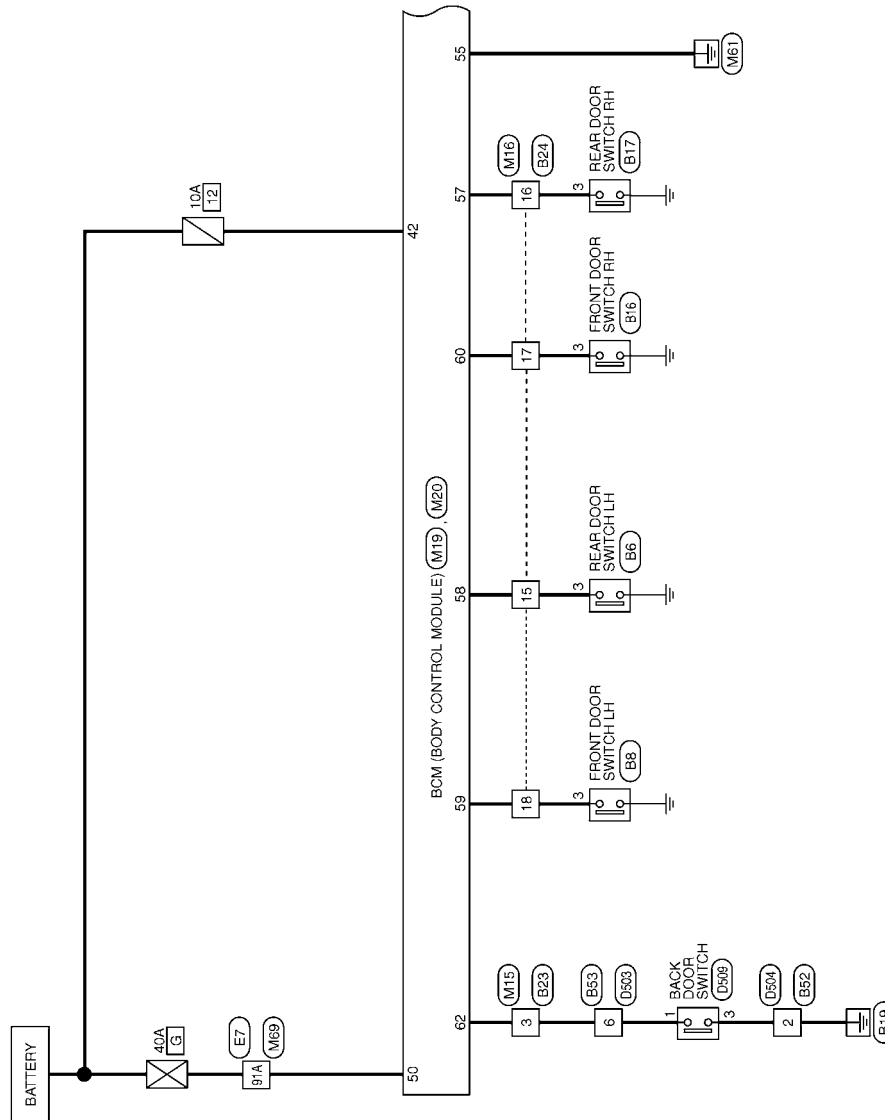
WIRING DIAGRAM

POWER DOOR LOCK SYSTEM

Wiring Diagram

INFOID:000000012430171

POWER DOOR LOCK SYSTEM - WITHOUT INTELLIGENT KEY SYSTEM

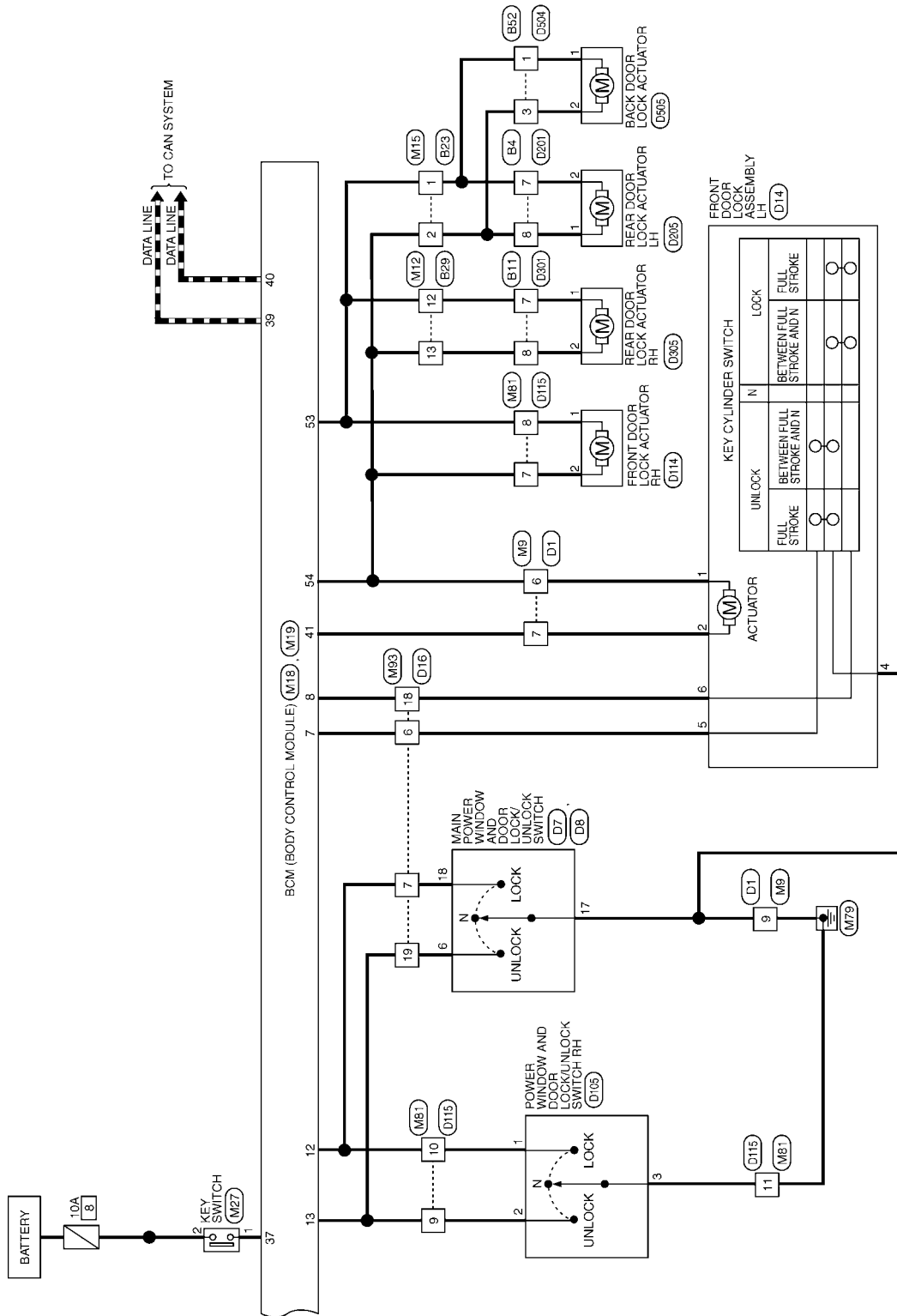


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POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >



ABKWA3092GB

POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

POWER DOOR LOCK SYSTEM CONNECTORS - WITHOUT INTELLIGENT KEY SYSTEM

Connector No.	M9
Connector Name	WIRE TO WIRE
Connector Color	WHITE

1	2	3	4	5		
6	7	8	9	10	11	12



Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Color	WHITE

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



Connector No.	M15
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
6	SB	-
7	G	-
9	B	-

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

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

Connector No.	M16
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
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Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM)
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	33	34	35	36	37	38	39	40
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----



Terminal No.	Color of Wire	Signal Name
7	W	KEY CYLINDER UNLOCK SW
8	GR	KEY CYLINDER LOCK SW
12	GR	CENTRAL DOOR LOCK SW
13	BR	CENTRAL DOOR UNLOCK SW
37	Y	KEY SW
39	L	CAN-H
40	P	CAN-L

Terminal No.	Color of Wire	Signal Name
15	W	-
16	BR	-
17	BG	-
18	SB	-

ABKIA7081GB

POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

Terminal No.	Color of Wire	Signal Name
58	W	DOOR SW (RL)
59	SB	DOOR SW (DR)
60	BG	DOOR SW (AS)
62	P	TRUNK/BACK DOOR OPEN OUTPUT

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM)
Connector Color	BLACK

56	57	58	59	60	61	62	63	64
65	66	67	68	69	70			



Terminal No.	Color of Wire	Signal Name
57	BR	DOOR SW (RR)

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM)
Connector Color	WHITE

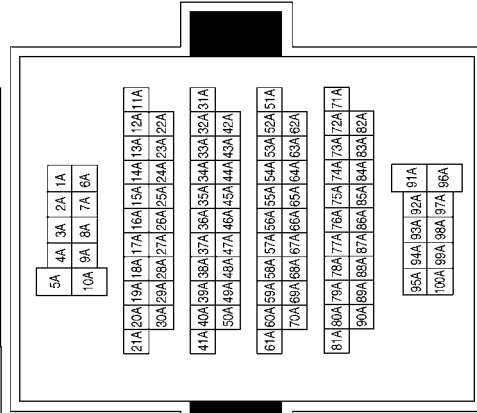
41	42	43	44	45	46	47	48	49
50	51	52	53	54	55			



Terminal No.	Color of Wire	Signal Name
41	G	DOOR UNLOCK OUTPUT (DR)
42	Y	BATTERY (FUSE)
50	G	BATTERY (F/L)
53	G	DOOR UNLOCK OUTPUT (AS, RR, RL)
54	SB	DOOR LOCK OUTPUT
55	B	GND

Terminal No.	Color of Wire	Signal Name
91A	G	-

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



Connector No.	M27
Connector Name	KEY SWITCH
Connector Color	BROWN

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

ABKIA7082GB

POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

Connector No.	M81
Connector Name	WIRE TO WIRE
Connector Color	WHITE

1	2	3	4	5
6	7	8	9	10
11	12			



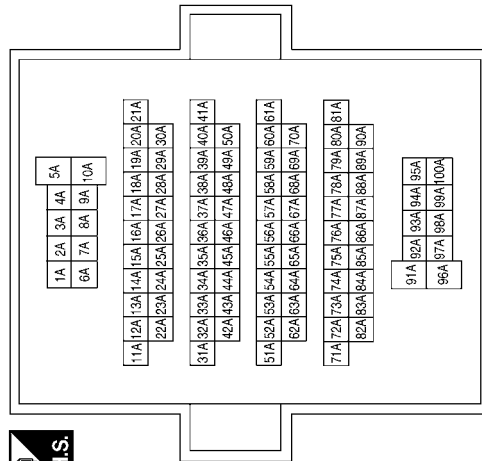
Terminal No.	Color of Wire	Signal Name
7	SB	-
8	G	-
9	BR	-
10	GR	-
11	B	-



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
6	W	-
7	GR	-
18	GR	-
19	BR	-

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Color	WHITE



4	3	2	1
10	9	8	7
6	5		

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

POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

Connector No.	B11
Connector Name	WIRE TO WIRE
Connector Color	WHITE

4	3	2	1
10	9	8	7
6	5		



Terminal No.	Color of Wire	Signal Name
7	G	-
8	SB	-

Connector No.	B8
Connector Name	FRONT DOOR SWITCH LH
Connector Color	WHITE

1	2	3	4
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Terminal No.	Color of Wire	Signal Name
3	LG	-

Connector No.	B6
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE

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

Connector No.	B23
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
1	G	-
2	SB	-
3	P	-

Connector No.	B17
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE

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

Connector No.	B16
Connector Name	FRONT DOOR SWITCH RH
Connector Color	WHITE

1	2	3	4
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Terminal No.	Color of Wire	Signal Name
3	L	-

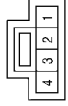
ABKIA7084GB

POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

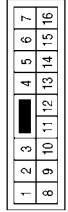
< WIRING DIAGRAM >

Connector No.	B52
Connector Name	WIRE TO WIRE
Connector Color	WHITE



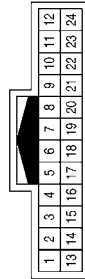
Terminal No.	Color of Wire	Signal Name
1	G	-
2	B	-
3	W	-

Connector No.	B29
Connector Name	WIRE TO WIRE
Connector Color	WHITE



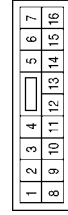
Terminal No.	Color of Wire	Signal Name
12	G	-
13	SB	-

Connector No.	B24
Connector Name	WIRE TO WIRE
Connector Color	WHITE



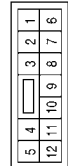
Terminal No.	Color of Wire	Signal Name
15	V	-
16	R	-
17	L	-
18	LG	-

Connector No.	D7
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Color	WHITE



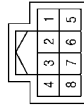
Terminal No.	Color of Wire	Signal Name
6	L	UNLOCK SWITCH

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6	LG	-
7	R	-
9	B	-

Connector No.	B53
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6	P	-

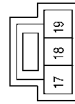
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POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

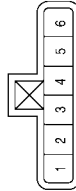
< WIRING DIAGRAM >

Connector No.	D8
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Color	WHITE



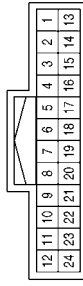
Terminal No.	Color of Wire	Signal Name
17	B	GND
18	GR	LOCK SW

Connector No.	D14
Connector Name	FRONT DOOR LOCK ACTUATOR ASSEMBLY LH
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
1	LG	-
2	R	-
4	B	-
5	W	-
6	GR	-

Connector No.	D16
Connector Name	WIRE TO WIRE
Connector Color	WHITE



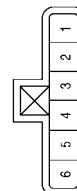
Terminal No.	Color of Wire	Signal Name
6	W	-
7	GR	-
18	GR	-
19	L	-

Connector No.	D105
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH
Connector Color	WHITE



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

Connector No.	D114
Connector Name	FRONT DOOR LOCK ACTUATOR RH
Connector Color	GRAY



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

Connector No.	D115
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
7	LG	-
8	R	-
9	BR	-
10	GR	-
11	B	-

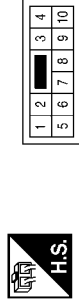
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POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< WIRING DIAGRAM >

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



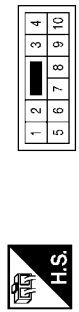
Terminal No.	Color of Wire	Signal Name
7	G	-
8	SB	-

Connector No.	D205
Connector Name	REAR DOOR LOCK ACTUATOR LH
Connector Color	GRAY



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

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



Terminal No.	Color of Wire	Signal Name
7	G	-
8	SB	-

Connector No.	D504
Connector Name	WIRE TO WIRE
Connector Color	WHITE



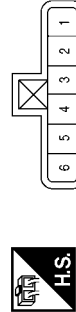
Terminal No.	Color of Wire	Signal Name
1	G	-
2	B	-
3	SB	-

Connector No.	D503
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6	P	-

Connector No.	D305
Connector Name	REAR DOOR LOCK ACTUATOR RH
Connector Color	GRAY



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

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POWER DOOR LOCK SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

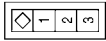
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Connector No.	D505
Connector Name	BACK DOOR LOCK ACTUATOR
Connector Color	WHITE

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

Connector No.	D509
Connector Name	BACK DOOR SWITCH
Connector Color	WHITE

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

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REMOTE KEYLESS ENTRY SYSTEM

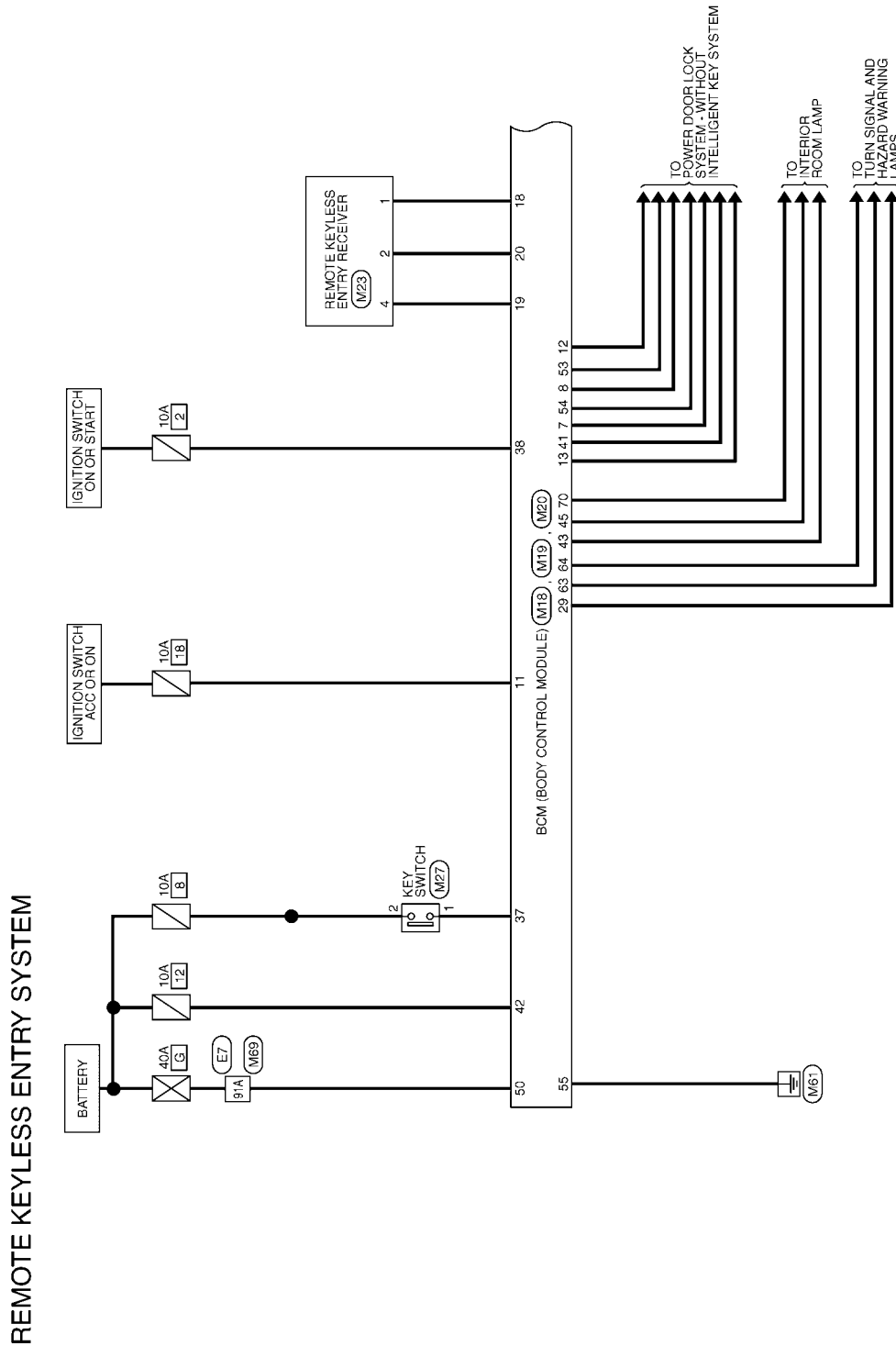
< WIRING DIAGRAM >

[WITHOUT INTELLIGENT KEY SYSTEM]

REMOTE KEYLESS ENTRY SYSTEM

Wiring Diagram

INFOID:0000000012430172

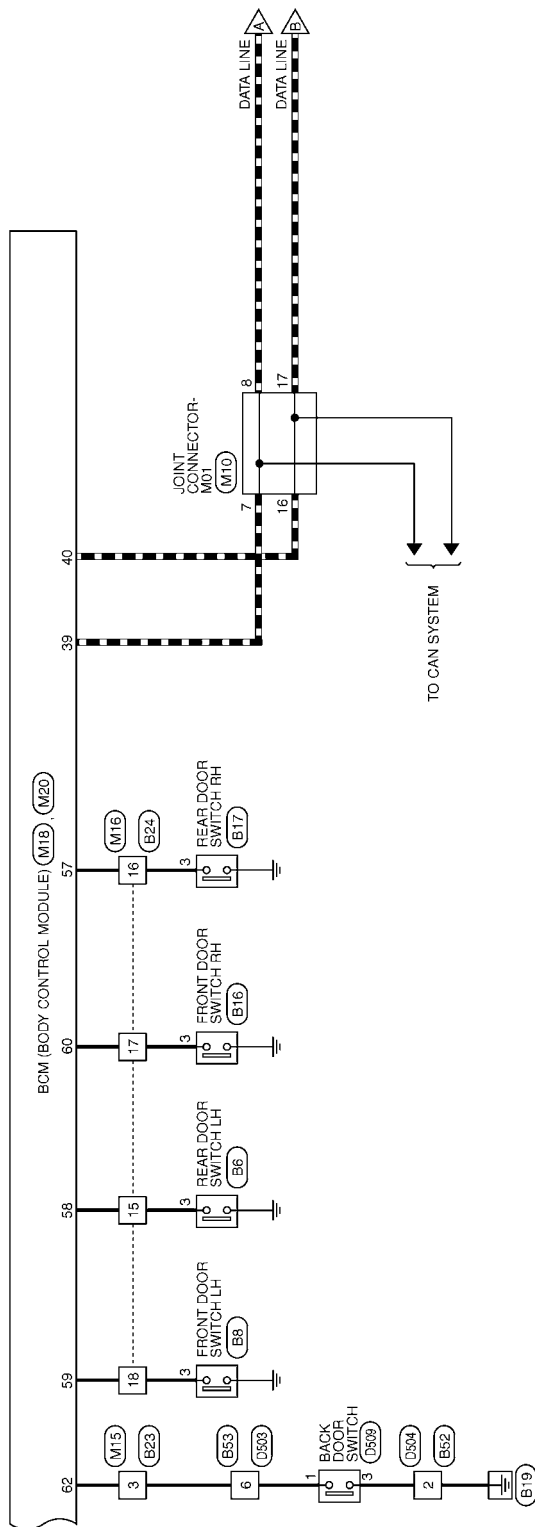


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REMOTE KEYLESS ENTRY SYSTEM

< WIRING DIAGRAM >

[WITHOUT INTELLIGENT KEY SYSTEM]



ABKWA2967GB

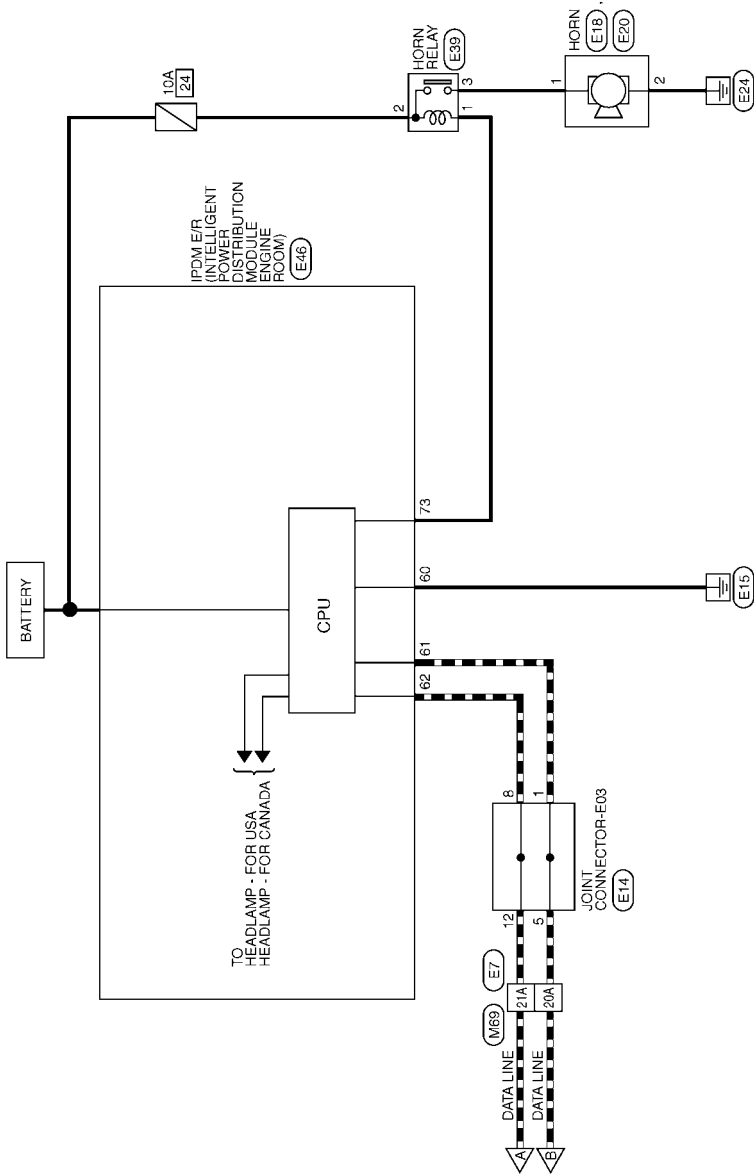
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REMOTE KEYLESS ENTRY SYSTEM

< WIRING DIAGRAM >

[WITHOUT INTELLIGENT KEY SYSTEM]



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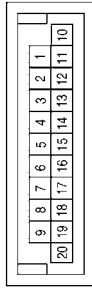
REMOTE KEYLESS ENTRY SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

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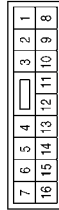
REMOTE KEYLESS ENTRY SYSTEM CONNECTORS

Connector No.	M10
Connector Name	JOINT CONNECTOR-M01
Connector Color	BLUE



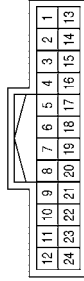
Terminal No.	Color of Wire	Signal Name
7	L	-
8	L	-
16	P	-
17	P	-

Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Color	WHITE



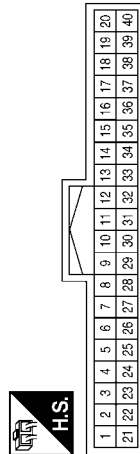
Terminal No.	Color of Wire	Signal Name
3	P	-

Connector No.	M16
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
15	W	-
16	BR	-
17	BG	-
18	SB	-

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
7	W	KEY CYLINDER UNLOCK SW
8	GR	KEY CYLINDER LOCK SW
11	L	ACC SW

Terminal No.	Color of Wire	Signal Name
12	GR	CENTRAL DOOR LOCK SW
13	BR	CENTRAL DOOR UNLOCK SW
18	V	KEYLESS & AUTO LIGHT SENSOR GND
19	LG	KEYLESS TUNER POWER SUPPLY
20	G	KEYLESS TUNER SIGNAL
29	BG	HAZARD SW
37	Y	KEY SW
38	O	IGN SW
39	L	CAN-H
40	P	CAN-L

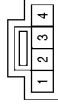
ABKIA7089GB

REMOTE KEYLESS ENTRY SYSTEM

< WIRING DIAGRAM >

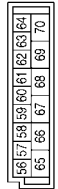
[WITHOUT INTELLIGENT KEY SYSTEM]

Connector No.	M23
Connector Name	REMOTE KEYLESS ENTRY RECEIVER (WITHOUT INTELLIGENT KEY SYSTEM)
Connector Color	WHITE



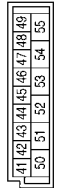
Terminal No.	Color of Wire	Signal Name
1	V	—
2	G	—
4	LG	—

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
57	BR	DOOR SW (RR)
58	W	DOOR SW (RL)
59	SB	DOOR SW (DR)
60	BG	DOOR SW (AS)
62	P	DOOR SW BACK
63	W	FLASHER OUTPUT (RIGHT)
64	V	FLASHER OUTPUT (LEFT)
70	L	LUGGAGE LAMP OUTPUT

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
41	G	DOOR UNLOCK OUTPUT (DR)
42	Y	BATTERY (FUSE)
43	W	BATTERY SAVER OUTPUT
45	R	ROOM LAMP OUTPUT
50	G	BATTERY (F/L)
53	G	DOOR UNLOCK OUTPUT (AS, RR, RL)
54	SB	DOOR LOCK OUTPUT
55	B	GND

Connector No.	M27
Connector Name	KEY SWITCH
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
1	Y	—
2	LG	—

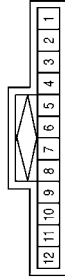
ABKIA7090GB

REMOTE KEYLESS ENTRY SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

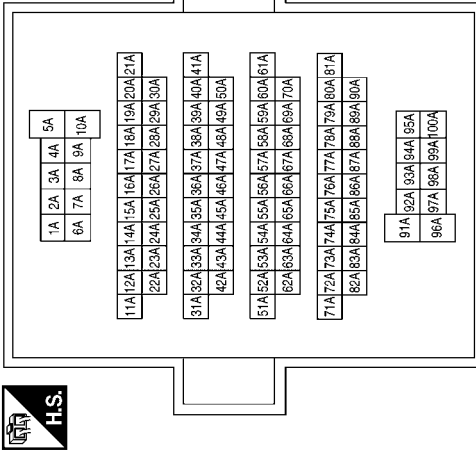
< WIRING DIAGRAM >

Connector No.	E14
Connector Name	JOINT CONNECTOR-E03
Connector Color	BLUE



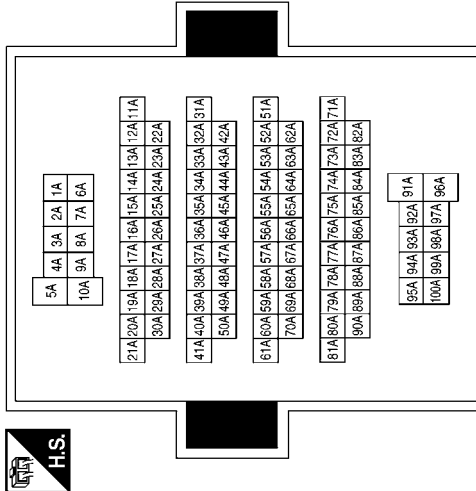
Terminal No.	Color of Wire	Signal Name
1	P	-
5	P	-
8	L	-
12	L	-

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
20A	P	-
21A	L	-
91A	Y	-

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



Terminal No.	Color of Wire	Signal Name
20A	P	-
21A	L	-
91A	G	-

Connector No.	E20
Connector Name	HORN
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
2	B	-

Connector No.	E18
Connector Name	HORN
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	G	-

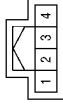
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REMOTE KEYLESS ENTRY SYSTEM

< WIRING DIAGRAM >

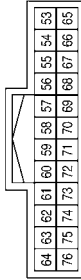
[WITHOUT INTELLIGENT KEY SYSTEM]

Connector No.	B6
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	V	—

Connector No.	E46
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



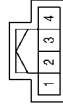
Terminal No.	Color of Wire	Signal Name
60	B	S-GND
61	P	CAN-L
62	L	CAN-H
73	SB	HORN RLY

Connector No.	E39
Connector Name	HORN RELAY
Connector Color	WHITE



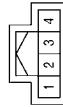
Terminal No.	Color of Wire	Signal Name
1	SB	—
2	L	—
3	G	—

Connector No.	B17
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE



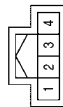
Terminal No.	Color of Wire	Signal Name
3	R	—

Connector No.	B16
Connector Name	FRONT DOOR SWITCH RH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	L	—

Connector No.	B8
Connector Name	FRONT DOOR SWITCH LH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	LG	—

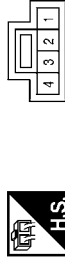
ABKIA7091GB

REMOTE KEYLESS ENTRY SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

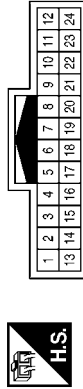
< WIRING DIAGRAM >

Connector No.	B52
Connector Name	WIRE TO WIRE
Connector Color	WHITE



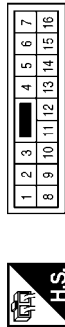
Terminal No.	2
Color of Wire	B
Signal Name	-

Connector No.	B24
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	15
Color of Wire	V
Signal Name	-
Terminal No.	16
Color of Wire	R
Signal Name	-
Terminal No.	17
Color of Wire	L
Signal Name	-
Terminal No.	18
Color of Wire	LG
Signal Name	-

Connector No.	B23
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	3
Color of Wire	P
Signal Name	-

Connector No.	D504
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	2
Color of Wire	B
Signal Name	-

Connector No.	D503
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	6
Color of Wire	P
Signal Name	-

Connector No.	B53
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	6
Color of Wire	P
Signal Name	-

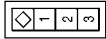
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REMOTE KEYLESS ENTRY SYSTEM

< WIRING DIAGRAM >

[WITHOUT INTELLIGENT KEY SYSTEM]

Connector No.	D509
Connector Name	BACK DOOR SWITCH
Connector Color	WHITE

	
---	---

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

AAKIA1338GB

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

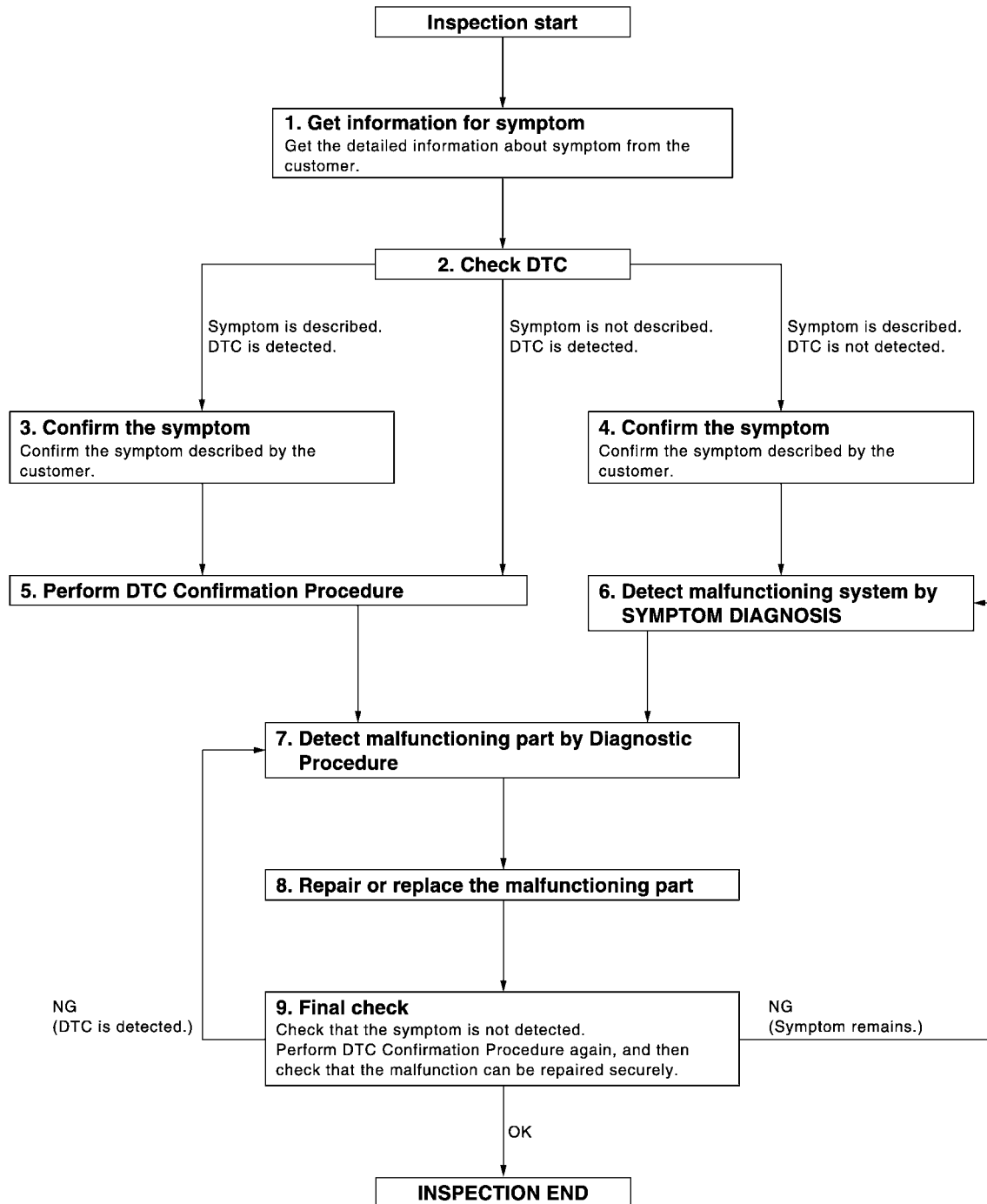
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000012430173

OVERALL SEQUENCE



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JMKIA2270GB

DETAILED FLOW

Revision: August 2015

DLK-225

2016 Versa Note

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-115, "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-42, "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.

NOTE:

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.

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DLK

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000012430174

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

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:0000000012430175

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

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM

Description

INFOID:0000000012430176

Refer to [LAN-7, "CAN COMMUNICATION SYSTEM : System Description"](#).

DTC Logic

INFOID:0000000012430177

DTC DETECTION LOGIC

NOTE:

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

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

Diagnosis Procedure

INFOID:0000000012430178

1. PERFORM SELF DIAGNOSTIC RESULT

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

Is "CAN COMM CIRCUIT" displayed?

- YES >> Perform CAN Diagnosis as described in DIAGNOSIS section of CONSULT Operation Manual.
- NO >> Refer to [GI-42, "Intermittent Incident"](#).

DLK

U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

U1010 CONTROL UNIT (CAN)

DTC Logic

INFOID:0000000012430179

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:0000000012430180

1.REPLACE BCM

When DTC "U1010" is detected, replace BCM.

>> Replace BCM. Refer to [BCS-137. "Removal and Installation"](#).

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:0000000012542562

Regarding Wiring Diagram information, refer to [BCS-117. "Wiring Diagram"](#).

1.CHECK FUSES AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuses and fusible link No.
37	Battery power supply	8 (10A)
42		12 (10A)
50		G (40A)
11	Ignition switch ACC or ON	18 (10A)
38	Ignition switch ON or START	2 (10A)

Is the fuse blown?

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

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

BCM		Ground	Ignition switch position		
Connector	Terminal		OFF	ACC	ON
M18	11	—	0 V	Battery voltage	Battery voltage
	37		Battery voltage		
	38		0 V		
M19	42		Battery voltage	Battery voltage	
	50				

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M19	55	—	Yes

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair harness or connector.

DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

DOOR SWITCH

Description

INFOID:0000000012430182

Detects door open/close condition.

Component Function Check

INFOID:0000000012430183

1.CHECK FUNCTION

With CONSULT

Check door switches "DOOR SW-DR", "DOOR SW-AS", "DOOR SW-RL", "DOOR SW-RR" in "Data Monitor".

Monitor item	Condition
DOOR SW-DR	CLOSE → OPEN: OFF → ON
DOOR SW-AS	
DOOR SW-RL	
DOOR SW-RR	

Is the inspection result normal?

YES >> Door switch is OK.

NO >> Refer to [DLK-232, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012430184

Regarding Wiring Diagram information, refer to [DLK-206, "Wiring Diagram"](#).

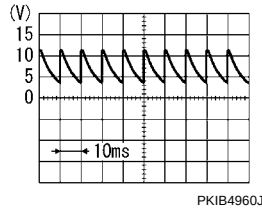
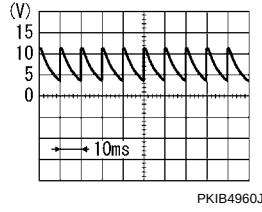
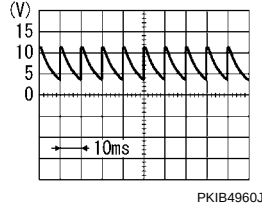
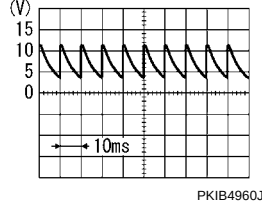
1.CHECK DOOR SWITCH INPUT SIGNAL

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

DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Terminals			Door condition		Voltage (V) (Approx.)
(+)		(-)			
BCM connector	Terminal				
M20	60	Ground	Front RH	OPEN	0
				CLOSE	
	57		Rear RH	OPEN	0
				CLOSE	
	59		Front LH	OPEN	0
				CLOSE	
	58		Rear LH	OPEN	0
				CLOSE	

Is the inspection result normal?

- YES >> GO TO 4.
NO >> GO TO 2.

2.CHECK DOOR SWITCH CIRCUIT

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

BCM connector	Terminal	Door switch connector	Terminal	Continuity
M20	60	B16 (Front RH)	3	Yes
	57	B17 (Rear RH)		
	59	B8 (Front LH)		
	58	B6 (Rear LH)		

DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M20	60	Ground	No
	57		
	59		
	58		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness between BCM and door switch.

3.CHECK DOOR SWITCH

Refer to [DLK-234, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace malfunctioning door switch.

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000012430185

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.

DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

DOOR LOCK AND UNLOCK SWITCH

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000012430186

Transmits door lock/unlock operation to BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000012430187

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-235, "DRIVER SIDE : Diagnosis Procedure"](#).

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000012430188

Regarding Wiring Diagram information, refer to [DLK-206, "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.)
D7	Neutral → Unlock	6	Ground	Battery voltage → 0
D8	Neutral → Lock	18		

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
D8	17	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 >

[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
Lock	17 - 18	Yes
Unlock	6 - 17	
Neutral/Lock	6 - 17	No
Neutral/Unlock	17 - 18	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace main power window and door lock/unlock switch. Refer to [PWC-55, "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	12	D8	18	Yes
	13	D7	6	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M18	12	Ground	No
	13		

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> Inspection End.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000012430189

Transmits door lock/unlock operation to BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000012430190

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

DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.

NO >> Refer to [DLK-237, "PASSENGER SIDE : Diagnosis Procedure"](#).

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000012430191

Regarding Wiring Diagram information, refer to [DLK-206, "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 turned to "LOCK" or "UNLOCK".

Connector	Power window and door lock/unlock switch RH state	Terminal		Voltage (Approx.)
D105	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
D105	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-56, "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 >

[WITHOUT INTELLIGENT KEY SYSTEM]

BCM connector	Terminal	Power window and door lock/unlock switch RH connector	Terminal	Continuity
M18	12	D105	1	Yes
	13		2	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M18	12	Ground	No
	13		

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> Inspection End.

KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

KEY CYLINDER SWITCH

Description

INFOID:0000000012430192

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:0000000012430193

1.CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

Check "KEY CYL UN-SW", "KEY CYL UN-SW" in "Data Monitor" of "POWER DOOR LOCK SYSTEM" with CONSULT. Refer to [BCS-90. "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

Monitor item	Condition
KEY CYL LK-SW	Lock : ON
	Neutral / Unlock : OFF
KEY CYL UN-SW	Unlock : ON
	Neutral / Lock : OFF

Is the inspection result normal?

YES >> Key cylinder switch is OK.

NO >> Refer to [DLK-239. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012430194

Regarding Wiring Diagram information, refer to [DLK-206. "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		
M18	8	Lock	0
		Neutral / Unlock	7.0 - 8.0
	7	Unlock	0
		Neutral / Lock	7.0 - 8.0

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 cylinder switch LH connector.
3. Check continuity between front door lock key cylinder switch LH connector and ground.

Front door lock key cylinder switch LH connector	Terminal	Ground	Continuity
D14	4		Yes

Is the inspection result normal?

YES >> GO TO 3.

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KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

NO >> Repair or replace harness.

3.CHECK DOOR KEY CYLINDER SIGNAL CIRCUIT

1. Disconnect BCM connector M18.
2. Check continuity between front door lock key cylinder switch LH connector and BCM connector M18.

Front door lock key cylinder switch LH connector	Terminal	BCM connector	Terminal	Continuity
D14	6	M18	8	Yes
	5		7	

3. Check continuity between front door lock key cylinder switch LH connector and ground.

Front door lock key cylinder switch LH connector	Terminal	Ground	Continuity
D14	6		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-240, "Component Inspection"](#).

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> Replace front door lock key cylinder switch LH. Refer to [DLK-295, "DOOR LOCK : Removal and Installation"](#).

Component Inspection

INFOID:000000012430195

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 key cylinder switch LH. Refer to [DLK-295, "DOOR LOCK : Removal and Installation"](#).

KEY SWITCH (BCM INPUT)

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

KEY SWITCH (BCM INPUT)

Diagnosis Procedure

INFOID:0000000012430196

Regarding Wiring Diagram information, refer to [DLK-206. "Wiring Diagram"](#).

1. CHECK KEY SWITCH INPUT SIGNAL

 With CONSULT

Check key switch "KEY ON SW" in "Data Monitor". Refer to [BCS-90. "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

- When key is inserted to ignition key cylinder:

KEY ON SW : ON

- When key is removed from ignition key cylinder:

KEY ON SW : OFF

 Without CONSULT

Check voltage between BCM connector M18 terminal 37 and ground.

Connector	Terminal		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M18	37	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
1 - 2	Key is inserted.	Yes
	Key is removed.	No

Is the inspection result normal?

- YES >> Repair or replace harness or fuse.
NO >> Replace key switch.

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

DOOR LOCK ACTUATOR DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000012430197

Locks/unlocks the door with the signal from BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000012430198

1.CHECK FUNCTION

1. Perform "DOOR LOCK" in "Active Test" using CONSULT.
2. Touch "ALL LOCK" or "ALL UNLOCK" to check that it works normally.

Is the inspection result normal?

- YES >> Door lock actuator is OK.
NO >> Refer to [DLK-242, "DRIVER SIDE : Diagnosis Procedure"](#).

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000012430199

Regarding Wiring Diagram information, refer to [DLK-206, "Wiring Diagram"](#).

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+) Front door lock actuator LH		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
D14	1	Ground	Door lock and unlock switch	Lock	Battery voltage
	2			Unlock	

Is the inspection result normal?

- YES >> Replace front door lock actuator LH. Refer to [DLK-295, "DOOR LOCK : Removal and Installation"](#).
NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM		Front door lock actuator LH		Continuity
Connector	Terminal	Connector	Terminal	
M19	54	D14	1	Yes
	41		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M19	54		No
	41		

Is the inspection result normal?

DOOR LOCK ACTUATOR

[WITHOUT INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

- YES >> GO TO 3.
NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.
2. Check voltage between front door lock actuator LH harness connector and ground.

(+) BCM		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
M19	54	Ground	Door lock and unlock switch	Lock	Battery voltage
	41			Unlock	

Is the inspection result normal?

- YES >> Check for internal short of each door lock actuator.
NO >> Replace BCM. Refer to [BCS-137, "Removal and Installation"](#).

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000012430200

Locks/unlocks the door with the signal from BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000012430201

1.CHECK FUNCTION

1. Perform "DOOR LOCK""Active Test" using CONSULT.
2. Touch "ALL LOCK" or "ALL UNLOCK" to check that it works normally.

Is the inspection result normal?

- YES >> Door lock actuator is OK.
NO >> Refer to [DLK-243, "PASSENGER SIDE : Diagnosis Procedure"](#).

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000012430202

Regarding Wiring Diagram information, refer to [DLK-206, "Wiring Diagram"](#).

DLK

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.

(+) Front door lock actuator RH		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
D114	2	Ground	Door lock and unlock switch	Lock	Battery voltage
	1			Unlock	

Is the inspection result normal?

- YES >> Replace front door lock actuator RH. Refer to [DLK-295, "DOOR LOCK : Removal and Installation"](#).
NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

BCM		Front door lock actuator RH		Continuity
Connector	Terminal	Connector	Terminal	
M19	54	D114	2	Yes
	53		1	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M19	54		No
	53		

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 front door lock actuator RH harness connector and ground.

(+) BCM		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
M19	54	Ground	Door lock and unlock switch	Lock	Battery voltage
	53			Unlock	

Is the inspection result normal?

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

NO >> Replace BCM. Refer to [BCS-137, "Removal and Installation"](#).

REAR LH

REAR LH : Description

INFOID:0000000012430203

Locks/unlocks the door with the signal from BCM.

REAR LH : Component Function Check

INFOID:0000000012430204

1.CHECK FUNCTION

1. Perform "DOOR LOCK" in "Active Test" using CONSULT.
2. Touch "ALL LOCK" or "ALL UNLOCK" to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to [DLK-244, "REAR LH : Diagnosis Procedure"](#).

REAR LH : Diagnosis Procedure

INFOID:0000000012430205

Regarding Wiring Diagram information, refer to [DLK-206, "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.

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

(+)		(-)	Condition		Voltage (Approx.)
Rear door lock actuator LH					
Connector	Terminal				
D205	1	Ground	Door lock and unlock switch	Lock	Battery voltage
	2			Unlock	

Is the inspection result normal?

YES >> Replace rear door lock actuator LH. Refer to [DLK-299, "DOOR LOCK : Removal and Installation"](#).

NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM		Rear door lock actuator LH		Continuity
Connector	Terminal	Connector	Terminal	
M19	54	D205	1	Yes
	53		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M19	54		No
	53		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

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

(+)		(-)	Condition		Voltage (Approx.)
BCM					
Connector	Terminal				
M19	54	Ground	Door lock and unlock switch	Lock	Battery voltage
	53			Unlock	

Is the inspection result normal?

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

NO >> Replace BCM. Refer to [BCS-137, "Removal and Installation"](#).

REAR RH

REAR RH : Description

INFOID:0000000012430206

Locks/unlocks the door with the signal from BCM.

REAR RH : Component Function Check

INFOID:0000000012430207

1.CHECK FUNCTION

1. Perform "DOOR LOCK" in "Active Test" using CONSULT.
2. Touch "ALL LOCK" or "ALL UNLOCK" to check that it works normally.

Is the inspection result normal?

DOOR LOCK ACTUATOR

[WITHOUT INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

- YES >> Door lock actuator is OK.
NO >> Refer to [DLK-246, "REAR RH : Diagnosis Procedure"](#).

REAR RH : Diagnosis Procedure

INFOID:000000012430208

Regarding Wiring Diagram information, refer to [DLK-206, "Wiring Diagram"](#).

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+) Rear door lock actuator RH		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
D305	2	Ground	Door lock and unlock switch	Lock	Battery voltage
	1			Unlock	

Is the inspection result normal?

- YES >> Replace rear door lock actuator RH. Refer to [DLK-299, "DOOR LOCK : Removal and Installation"](#).
NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM		Rear door lock actuator RH		Continuity
Connector	Terminal	Connector	Terminal	
M19	54	D305	2	Yes
	53		1	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M19	54		No
	53		

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.
2. Check voltage between rear door lock actuator RH harness connector and ground.

(+) BCM		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
M19	54	Ground	Door lock and unlock switch	Lock	Battery voltage
	53			Unlock	

Is the inspection result normal?

- YES >> Check for internal short of each door lock actuator.
NO >> Replace BCM. Refer to [BCS-137, "Removal and Installation"](#).

REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

REMOTE KEYLESS ENTRY RECEIVER

Description

INFOID:0000000012430209

Receives keyfob operation and transmits to BCM.

Component Function Check

INFOID:0000000012430210

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 >> Remote keyless entry receiver is OK.

NO >> Refer to [DLK-247, "Diagnosis Procedure"](#).

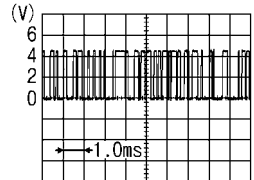
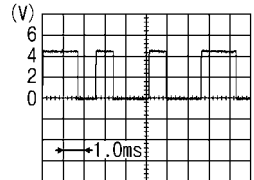
Diagnosis Procedure

INFOID:0000000012430211

Regarding Wiring Diagram information, refer to [DLK-216, "Wiring Diagram"](#).

1.CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Check signal between remote keyless entry receiver connector and ground with oscilloscope.

Terminals		Condition	Signal (Reference value)
(+)	(-)		
Remote keyless entry receiver connector	Terminal		
M23	2	Ground	
		Waiting (All doors closed)	 PIIB7728J
M23	2	Ground	
		When signal is received (All doors closed)	 PIIB7729J

Is the inspection result normal?

YES >> GO TO 7.

NO >> GO TO 2.

REMOTE KEYLESS ENTRY RECEIVER

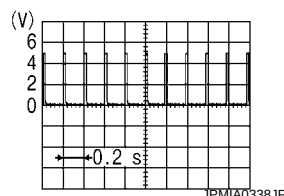
< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

2. CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

1. Disconnect remote keyless entry receiver connector.
2. Check signal between remote keyless entry receiver connector and ground with oscilloscope.

Terminals		Signal (Reference value)
(+)	(-)	
Remote keyless entry receiver connector	Terminal	
M23	4	Ground



Is the inspection result normal?

- YES >> GO TO 4.
NO >> GO TO 3.

3. CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 1

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

BCM connector	Terminal	Remote keyless entry receiver connector	Terminal	Continuity
M18	19	M23	4	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M18	19		No

Is the inspection result normal?

- YES >> Reconnect BCM, GO TO 4.
NO >> Repair or replace harness between BCM and remote keyless entry receiver.

4. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

Check continuity between remote keyless entry receiver connector and ground.

Remote keyless entry receiver connector	Terminal	Ground	Continuity
M23	1		Yes

Is the inspection result normal?

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

5. CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 2

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

BCM connector	Terminal	Remote keyless entry receiver connector	Terminal	Continuity
M18	18	M23	1	Yes

Is the inspection result normal?

- YES >> GO TO 7.

REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

NO >> Repair or replace harness between BCM and remote keyless entry receiver.

6.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 3

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

BCM connector	Terminal	Remote keyless entry receiver connector	Terminal	Continuity
M18	20	M23	2	Yes

2. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M18	20		No

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness between BCM and remote keyless entry.

7.CHECK INTERMITTENT INCIDENT

Refer to [GI-42. "Intermittent Incident"](#).

>> Inspection End.

KEYFOB BATTERY AND FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

KEYFOB BATTERY AND FUNCTION

Description

INFOID:0000000012430212

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:0000000012430213

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-250, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012430214

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.

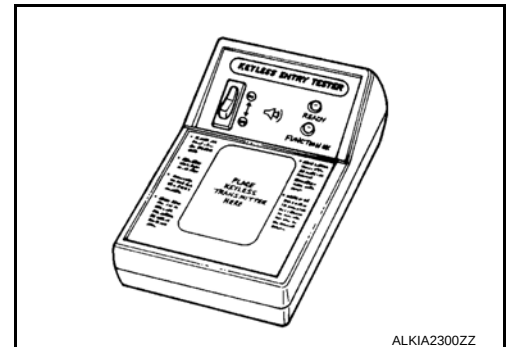
1. CHECK KEYFOB FUNCTION

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 COMPONENTS

KEYFOB BATTERY AND FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

1. Remove the screw (A).
2. Insert a small screwdriver into the slit of the corner (B) and twist it to separate the upper part from the power part. Use a cloth to protect the casing.

CAUTION:

- Do not touch the circuit board or battery terminal.
- The keyfob is water-resistant. However, if it does get wet, immediately wipe it dry.

3. Remove the keyfob battery.

CAUTION:

- Keep dirt, grease, and other foreign materials off the electrode contact area.

4. Visually inspect keyfob internal components.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace malfunctioning parts.

3. CHECK KEYFOB BATTERY

Check by connecting a resistance (approximately 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. Check remote keyless entry receiver. Refer to [DLK-247](#).

["Component Function Check"](#).

NO >> GO TO 4.

4. REPLACE KEYFOB BATTERY

1. Replace the keyfob battery with a new one.

CAUTION:

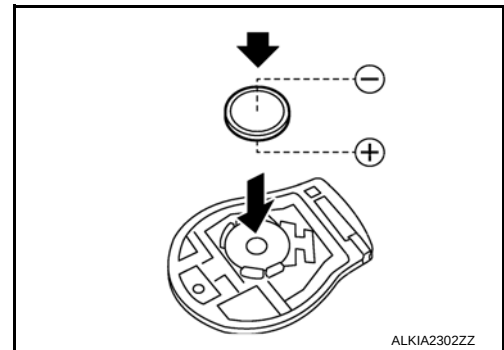
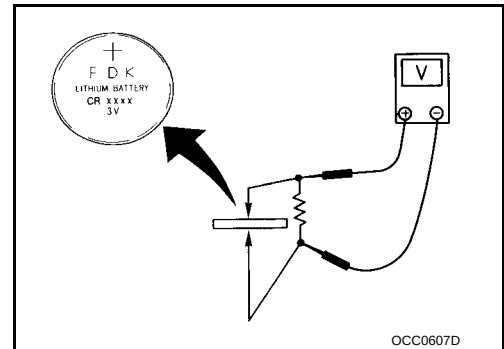
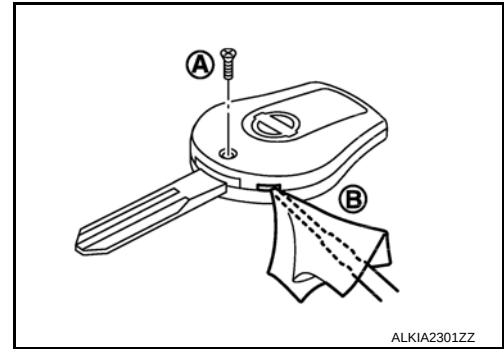
- When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.
- Make sure that the + side faces the bottom of the case.

2. Align the tips of the upper and lower parts, and then push them together until it is securely closed.
3. After replacing the battery, check that all keyfob functions work properly.

Is the inspection result normal?

YES >> Keyfob is OK.

NO >> Check remote keyless entry receiver. Refer to [DLK-247](#).
["Component Function Check"](#).



HORN FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

HORN FUNCTION

Description

INFOID:0000000012430215

Perform answer-back for each operation with horn.

Component Function Check

INFOID:0000000012430216

1.CHECK FUNCTION

1. Select "HORN" in "Active Test" using CONSULT.
2. Check the horn operation.

Test item		Description	
HORN	ON	Horn relay	ON (for 20 ms)

Is the operation normal?

- YES >> Inspection End.
NO >> Refer to [DLK-252, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012430217

Regarding Wiring Diagram information, refer to [DLK-216, "Wiring Diagram"](#).

1.CHECK HORN FUNCTION

Check horn function with horn switch.

Does the horn sound?

- YES >> GO TO 2.
NO >> Refer to [HRN-3, "Wiring Diagram"](#).

2.CHECK HORN RELAY POWER SUPPLY

1. Turn ignition switch ON.
2. Perform "Active Test""HORN" using CONSULT.
3. Using an oscilloscope or analog voltmeter to check voltage between IPDM E/R connector and ground.

IPDM E/R		Ground	Test item		Voltage (V) (Approx.)
Connector	Terminal				
E46	73	Ground	HORN	ON	Battery voltage → 0 → Battery voltage
				Other than above	Battery voltage

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Replace IPDM E/R. Refer to [PCS-30, "Removal and Installation"](#).

3.CHECK HORN RELAY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect IPDM E/R and horn relay connector.
3. Check continuity between IPDM E/R harness connector and horn relay harness connector.

IPDM E/R		Horn relay		Continuity
Connector	Terminal	Connector	Terminal	
E46	73	E39	1	Yes

4. Check continuity between IPDM E/R harness connector and ground.

HORN FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

IPDM E/R		Ground	Continuity
Connector	Terminal		
E46	73	Ground	No

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to [PCS-30, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning part.

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WARNING CHIME FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

WARNING CHIME FUNCTION

Description

INFOID:0000000012430218

Performs operation method guide and warning with buzzer.

Component Function Check

INFOID:0000000012430219

1.CHECK FUNCTION

With CONSULT

1. Check the operation of "BUZZER" in "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-254, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012430220

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-54, "Removal and Installation"](#) (Type A) or [MWI-115, "Removal and Installation"](#) (Type B).

2.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> Inspection End.

HAZARD FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

HAZARD FUNCTION

Description

INFOID:0000000012430221

Perform answer-back for each operation with number of blinks.

Component Function Check

INFOID:0000000012430222

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-255, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012430223

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-108, "Removal and Installation"](#).

2.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> Inspection End.

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DLK

KEYFOB ID SET UP WITH CONSULT

ID Code Entry Procedure

INFOID:0000000012430224

KEYFOB ID SET UP WITH CONSULT

NOTE:

- If a keyfob is lost, the ID code of the lost keyfob must be erased to prevent unauthorized use. A specific ID code can be erased with CONSULT. However, when the ID code of a lost keyfob is not known, all controller ID codes should be erased. After all ID codes are erased, the ID codes of all remaining and/or new keyfobs must be re-registered.
- When registering an additional keyfob, the existing ID codes in memory may or may not be erased. If five ID codes are stored in memory when an additional code is registered, only the oldest code is erased. If less than five codes are stored in memory when an additional code is registered, the new ID code is added and no ID codes are erased.
- Entry of a maximum of five ID codes is allowed. When more than five codes are entered, the oldest ID code will be erased.
- Even if the same ID code that is already in memory is input, the same ID code can be entered. The code is counted as an additional code.

1. Turn ignition switch ON.
2. Select "BCM".
3. Select "MULTI REMOTE ENT".
4. Select "Work support".
5. You can register, erase or confirm a keyfob ID code. To register a new code, select the following option and follow CONSULT instructions:

- REMO CONT ID REGIST
Use this mode to register a keyfob ID code.

NOTE:

Register the ID code when keyfob or BCM is replaced, or when additional keyfob is required.

- REMO CONT ID ERASUR
Use this mode to erase a keyfob ID code.
- REMO CONT ID CONFIR
Use this mode to confirm if a keyfob ID code is registered or not.

KEYFOB ID SET UP WITHOUT CONSULT

< DTC/CIRCUIT DIAGNOSIS >

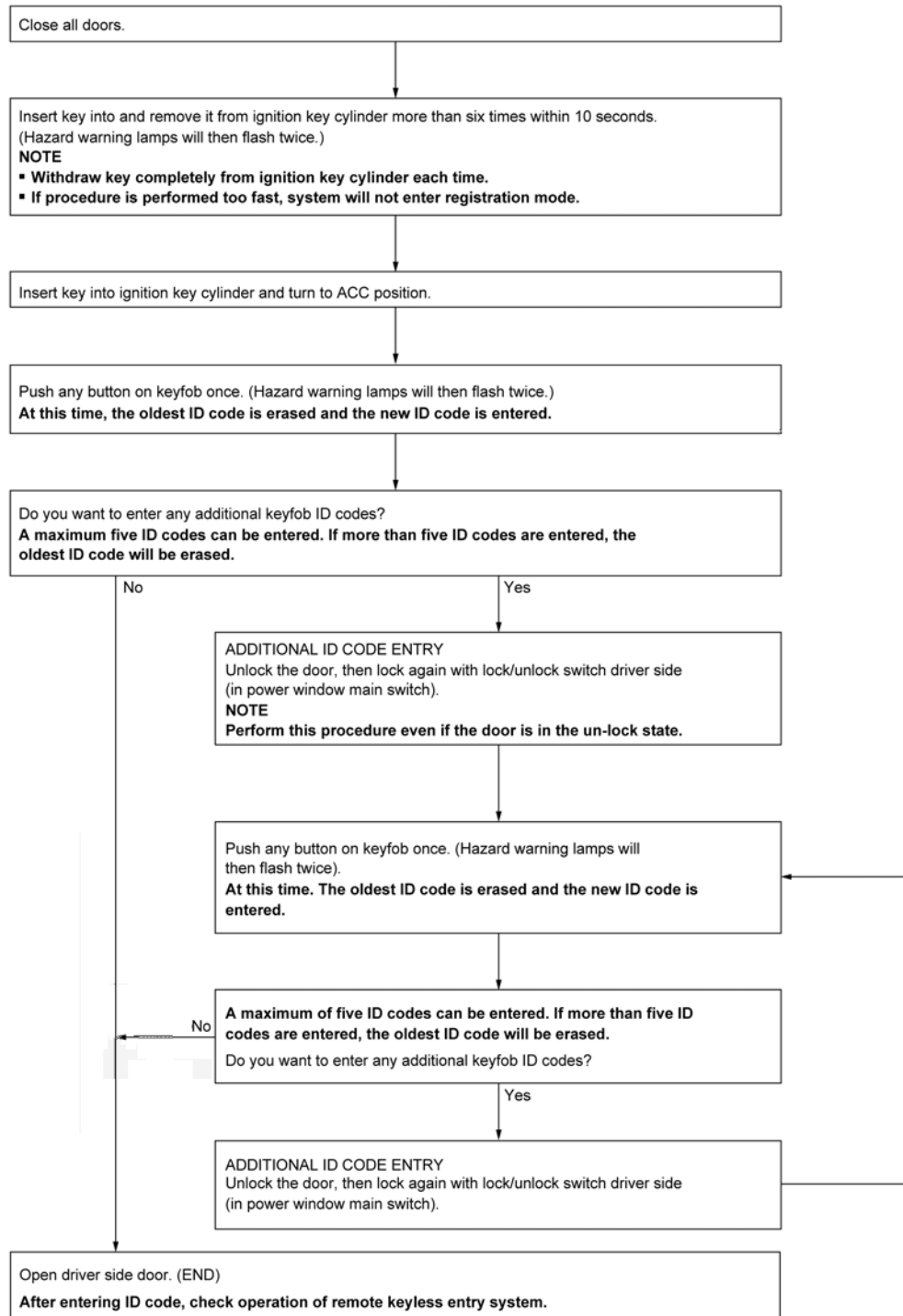
[WITHOUT INTELLIGENT KEY SYSTEM]

KEYFOB ID SET UP WITHOUT CONSULT

ID Code Entry Procedure

INFOID:000000012430225

KEYFOB ID SET UP WITHOUT CONSULT



NOTE:

- If a keyfob is lost, the ID code of the lost keyfob must be erased to prevent unauthorized use. A specific ID code can be erased with CONSULT. However, when the ID code of a lost keyfob is not known, all controller

KEYFOB ID SET UP WITHOUT CONSULT

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

ID codes should be erased. After all ID codes are erased, the ID codes of all remaining and/or new keyfobs must be re-registered.

To erase all ID codes in memory, register one ID code (keyfob) five times. After all ID codes are erased, the ID codes of all remaining and/or new keyfobs must be re-registered.

- When registering an additional keyfob, the existing ID codes in memory may or may not be erased. If five ID codes are stored in memory, when an additional code is registered, only the oldest code is erased. If less than five ID codes are stored in memory, when an additional ID code is registered, the new ID code is added and no ID codes are erased.
- If you need to activate more than two additional new keyfobs, repeat the procedure "Additional ID code entry" for each new keyfob [DLK-256. "ID Code Entry Procedure"](#) (with CONSULT), [DLK-257. "ID Code Entry Procedure"](#) (without CONSULT).
- A maximum amount of five ID codes is allowed. When more than five ID codes are entered, the oldest ID code will be erased.
- Even if same ID code that is already in the memory is input, the same ID code can be entered. The code is counted as an additional code.

POWER DOOR LOCK SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

SYMPTOM DIAGNOSIS

POWER DOOR LOCK SYSTEM SYMPTOMS

Symptom Table

INFOID:000000012430226

DOOR LOCK/UNLOCK FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to [DLK-225, "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-232
	2.	Check key switch.	DLK-241
	3.	Check Intermittent Incident.	GI-42
Power door lock does not operate with door lock and unlock switch on main power window and door lock/unlock switch or power window and door lock/unlock switch RH.	1.	Check BCM power supply and ground circuit.	BCS-129
	2.	Check main power window and door lock and unlock switch.	DLK-235
	3.	Check power window and door lock and unlock switch RH.	DLK-236
	4.	Check Intermittent Incident.	GI-42
Specific door lock actuator does not operate.	1.	Front LH	DLK-242
		Front RH	DLK-243
		Rear LH	DLK-244
		Rear RH	DLK-245
	2.	Check Intermittent Incident.	GI-42
Power door locks do not operate with front door lock key cylinder switch LH.	1.	Check key cylinder switch.	DLK-239
	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-196
	2.	Check combination meter vehicle speed signal.	MWI-40 (Type A) MWI-95 (Type B)
	3.	Check intermittent incident.	GI-42
Ignition OFF interlock auto door UNLOCK function does not operate.	1.	Ensure automatic door lock/unlock function (unlock operation) is enabled.	DLK-196
	2.	Check BCM for DTCs.	BCS-115
	3.	Check intermittent incident.	GI-42

REMOTE KEYLESS ENTRY SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

REMOTE KEYLESS ENTRY SYSTEM SYMPTOMS

Symptom Table

INFOID:000000012430227

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)] or Signal Tech II Tool [- (J-50190)]). NOTE: If the result of keyfob function check is OK, keyfob is not malfunctioning.	DLK-250
	2. Check BCM and remote keyless entry receiver.	DLK-247
The new ID of keyfob cannot be entered.	1. Keyfob battery and function check (use Remote Keyless Entry Tester [- (J-43241)] or Signal Tech II Tool [- (J-50190)]). NOTE: If the result of keyfob function check is OK, keyfob is not malfunctioning.	DLK-250
	2. Door switch check.	DLK-232
	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)] or Signal Tech II Tool [- (J-50190)]). NOTE: If the result of keyfob function check is OK, keyfob is not malfunctioning.	DLK-250
	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-199
	2. Door switch check	DLK-232
	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-199
	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-199
	2. Check horn function with horn switch	—
	3. IPDM E/R operation check	PCS-10
	4. Replace BCM.	BCS-137
Room lamp illumination does not operate properly.	1. Room lamp operation check	INL-7
	2. Door switch check	DLK-232
	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)] or Signal Tech II Tool [- (J-50190)]). NOTE: If the result of keyfob function check is OK, keyfob is not malfunctioning.	DLK-250
	2. Replace BCM.	BCS-137

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-196
	2. Replace BCM.	BCS-137

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SQUEAK AND RATTLE TROUBLE DIAGNOSES

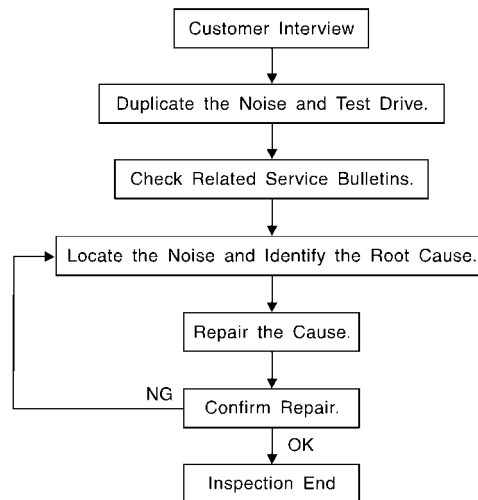
< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:000000012430228



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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-266, "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-263, "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:0000000012430229

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

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 >

[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.

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SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Diagnostic Worksheet

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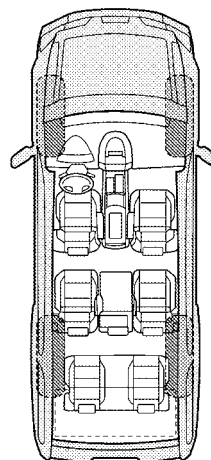
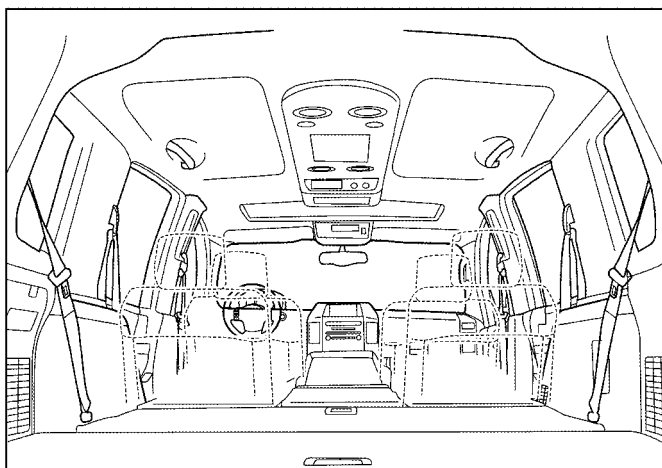
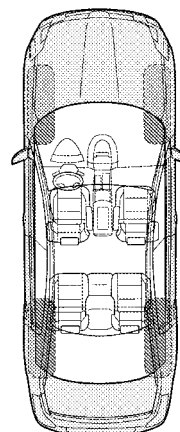
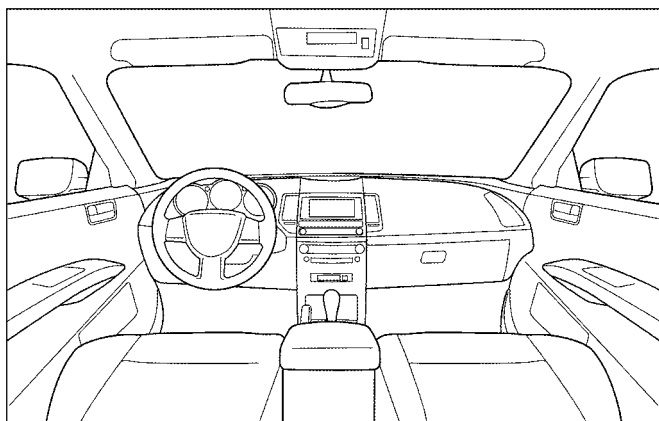
Dear Customer:

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 >

[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)

- | | |
|---|--|
| ☐ Anytime | ☐ After sitting out in the rain |
| ☐ 1st time in the morning | ☐ When it is raining or wet |
| ☐ Only when it is cold outside | ☐ Dry or dusty conditions |
| ☐ Only when it is hot outside | ☐ Other: |

III. WHEN DRIVING:

- ☐ 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	☐	☐	_____
- Noise verified on test drive	☐	☐	_____
- Noise source located and repaired	☐	☐	_____
- Follow up test drive performed to confirm repair	☐	☐	_____

VIN: _____ Customer Name _____
W.O.# _____ Date: _____

This form must be attached to Work Order

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HOOD

< REMOVAL AND INSTALLATION >

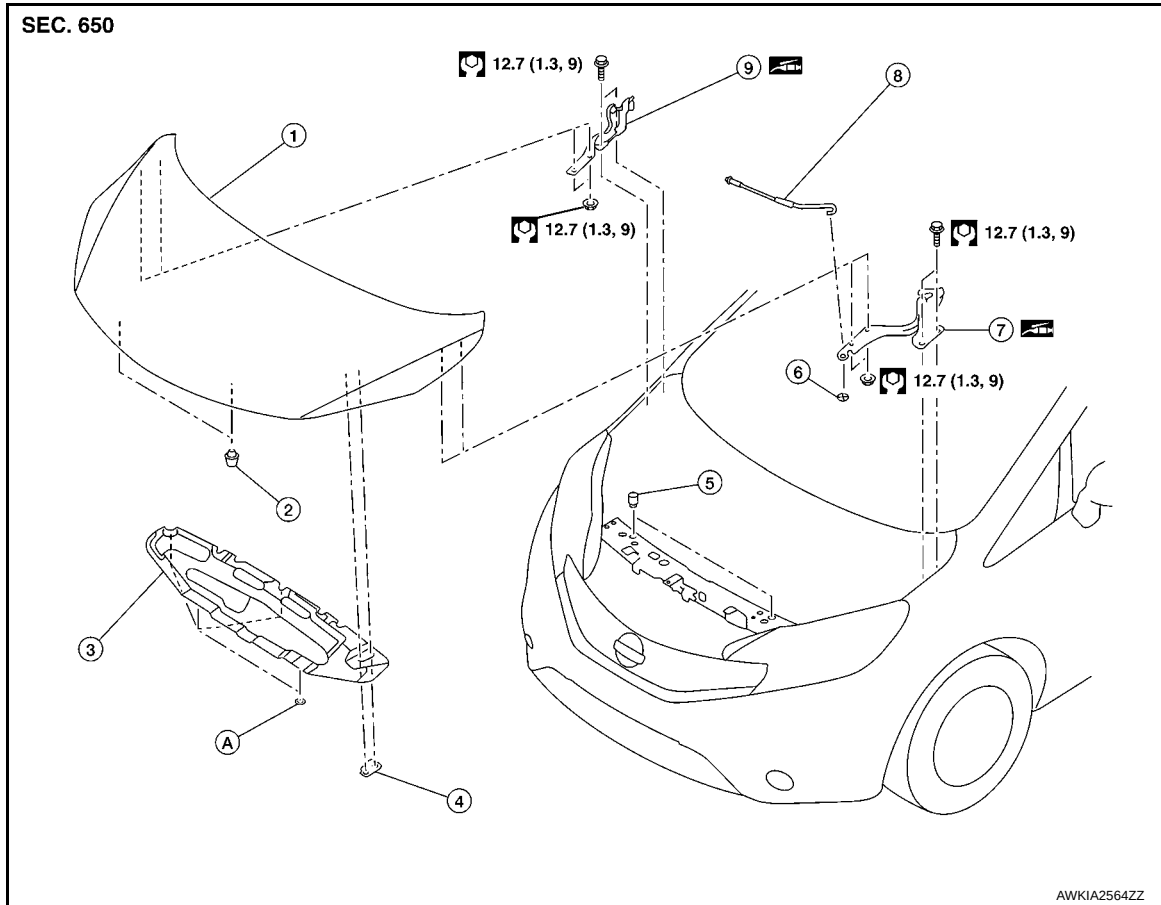
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REMOVAL AND INSTALLATION

HOOD

Exploded View

INFOID:000000012430231



- | | | |
|------------------------|------------------------------|---------------------|
| 1. Hood | 2. Bumper rubber (hood side) | 3. Hood insulator |
| 4. Hood rod clamp | 5. Bumper rubber (body side) | 6. Hood rod grommet |
| 7. Hood hinge (LH) | 8. Hood support rod | 9. Hood hinge (RH) |
| A. Hood insulator clip | | |

HOOD ASSEMBLY

HOOD ASSEMBLY : Removal and Installation

INFOID:000000012430232

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 hood assembly using a suitable tool.

WARNING:

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

2. Remove hood hinge nuts and hood assembly.
3. Remove clips and hood insulator (if necessary).

INSTALLATION

HOOD

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

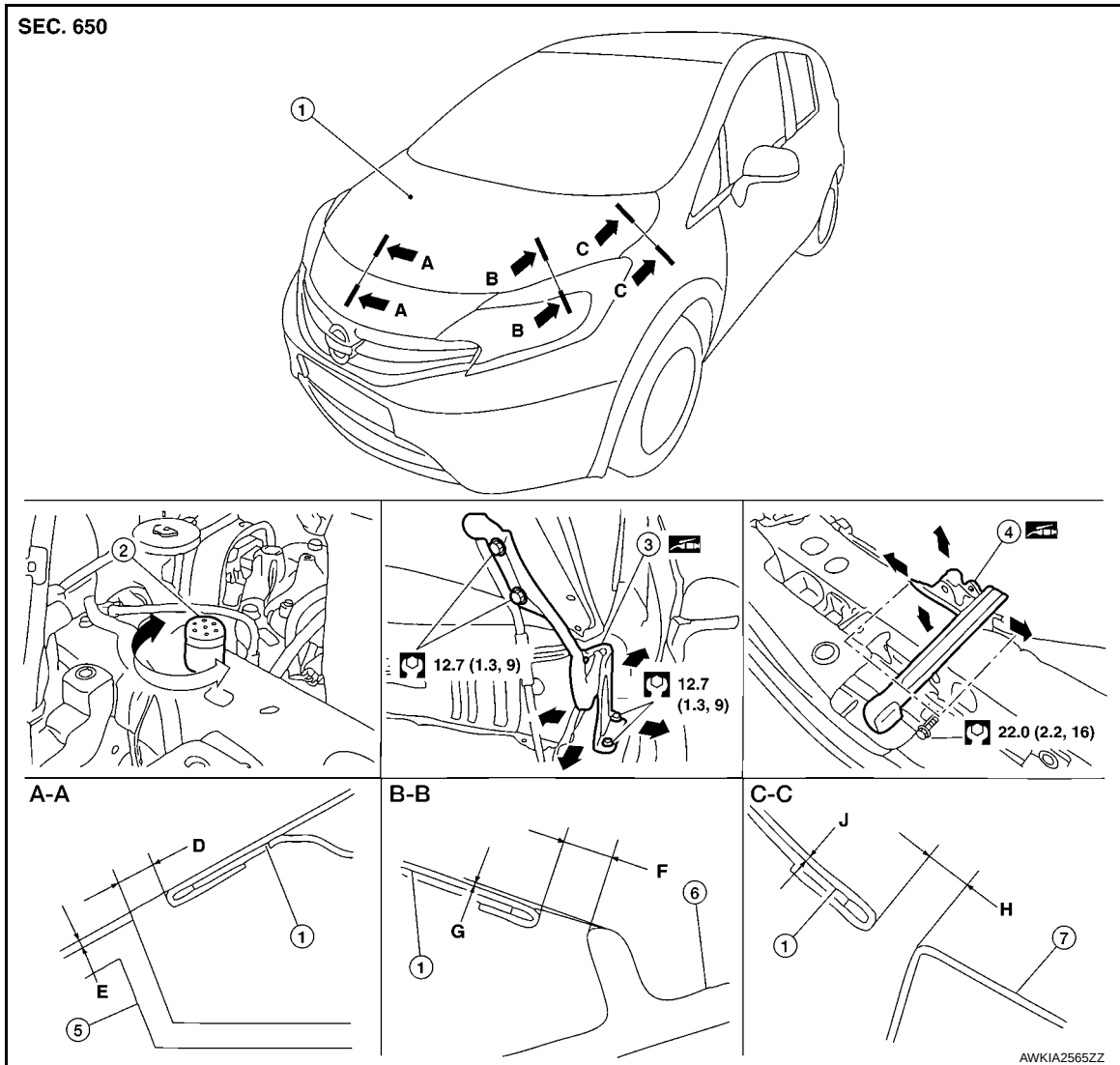
Installation is in the reverse order of removal.

CAUTION:

- Before installing hood assembly, apply anticorrosive agent to the surface of hood hinge.
- After installation, perform the hood assembly adjustment procedure. Refer to [DLK-269, "HOOD ASSEMBLY : Adjustment"](#).
- After installation, apply touch-up paint (body color) to the head of hood hinge nuts.

HOOD ASSEMBLY : Adjustment

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- | | | |
|------------------|------------------------------|---------------------------|
| 1. Hood assembly | 2. Bumper rubber (body side) | 3. Hood hinge (LH) |
| 4. Hood lock | 5. Front grille finisher | 6. Front combination lamp |
| 7. Front fender | | |

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 procedure.

Unit: mm (in)

Section	Item	Measurement	Standard	Parallelism	Equality
A - A	D	Clearance	4.4 ± 2.0 (0.17 ± 0.08)	2.0 (0.08)	—
	E	Surface height	-0.5 +2.0, -1.5 (0.02 +0.08, -0.06)	2.0 (0.08)	—
B - B	F	Clearance	4.0 ± 2.0 (0.16 ± 0.08)	2.0 (0.08)	3.0 (0.12)
	G	Surface height	—	—	—

HOOD

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

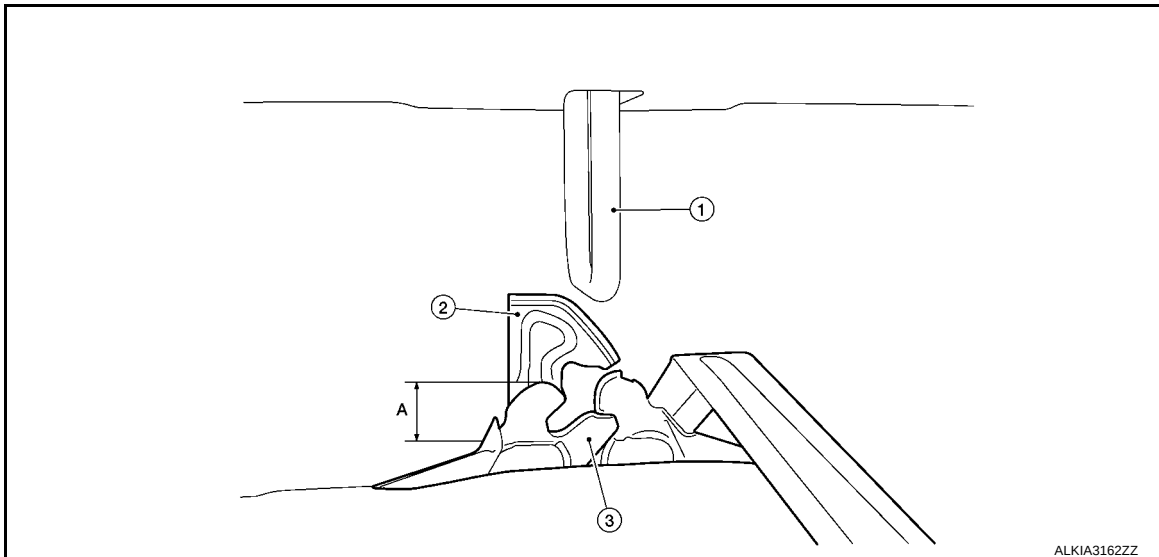
Section	Item	Measurement	Standard	Parallelism	Equality
C – C	H	Clearance	3.5 ± 1.0 (0.14 ± 0.04)	1.5 (0.06)	1.5 (0.06)
	J	Surface height	0.0 ± 1.5 (0.0 ± 0.06)	1.5 (0.06)	1.5 (0.06)

CLEARANCE ADJUSTMENT

1. Loosen hood hinge nuts and bolts.
2. Loosen hood lock assembly bolts.
3. Adjust the hood lock assembly so the clearance measurements are within the specifications provided.
4. Tighten hood hinge nuts and bolts to specified torque.
5. Tighten hood lock assembly bolts to specified torque.

HEIGHT ADJUSTMENT

1. Loosen hood lock assembly bolts.
2. Adjust the surface height of hood assembly to front upper grille, front fender and front combination lamp to the specified values by rotating hood bumper rubber.
3. Temporarily tighten hood lock assembly bolts.
4. Adjust (A) 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. Hood striker
 2. Secondary latch
 3. Primary latch
- A. 20.0 mm (0.79 in)

5. After adjustment, tighten hood lock assembly bolts to specified torque.

HOOD HINGE

HOOD HINGE : Removal and Installation

INFOID:0000000012430234

REMOVAL

1. Remove hood assembly. Refer to [DLK-268, "HOOD ASSEMBLY : Removal and Installation"](#).
2. Remove front fender. Refer to [DLK-275, "Removal and Installation"](#).
3. Remove cowl top side cover. Refer to [EXT-36, "Exploded View"](#).
4. Remove hood hinge bolts and hood hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

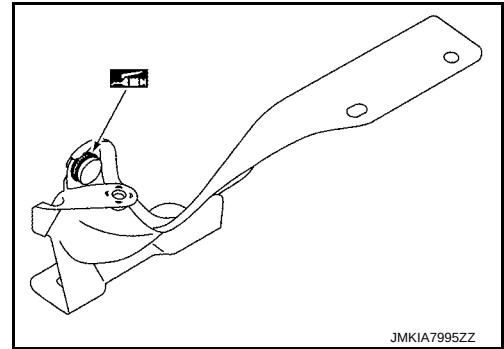
- Before installing the hood hinge, apply anticorrosive agent onto the surface of the vehicle.

HOOD

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

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



HOOD SUPPORT ROD

HOOD SUPPORT ROD : Removal and Installation

INFOID:0000000012430235

REMOVAL

1. Support hood assembly using a suitable tool.

WARNING:

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

2. Rotate and remove hood support rod from grommet.
3. Release tab and remove grommet from hood hinge (if necessary).

INSTALLATION

Installation is in the reverse order of removal.

A
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DLK

RADIATOR CORE SUPPORT

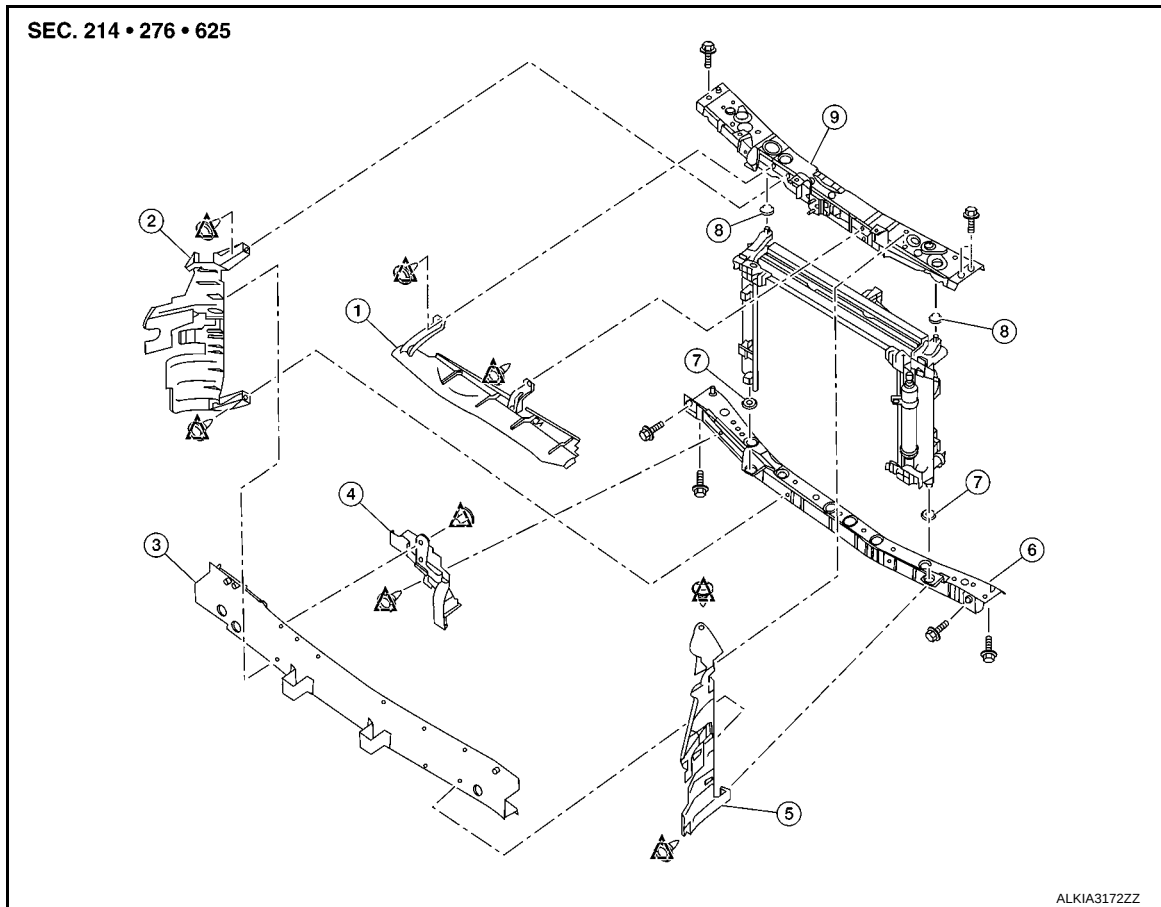
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

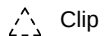
RADIATOR CORE SUPPORT

Exploded View

INFOID:000000012430236



- | | | |
|--------------------|-------------------|--------------------------------|
| 1. Upper air guide | 2. Air guide (RH) | 3. Front bumper reinforcement |
| 4. Lower air guide | 5. Air guide (LH) | 6. Radiator core lower support |
| 7. Lower grommet | 8. Upper grommet | 9. Radiator core upper support |



Clip

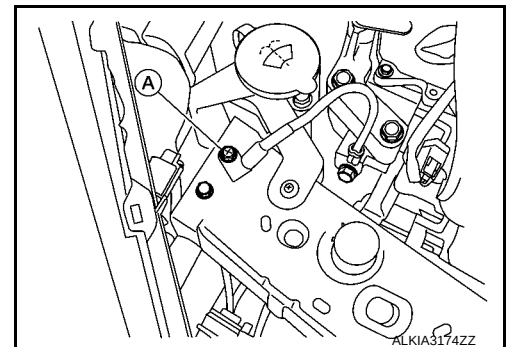
RADIATOR CORE SUPPORT UPPER

RADIATOR CORE SUPPORT UPPER : Removal and Installation

INFOID:000000012430237

REMOVAL

1. Remove front grille. Refer to [EXT-32, "Removal and Installation"](#).
2. Remove ground harness bolt (A).

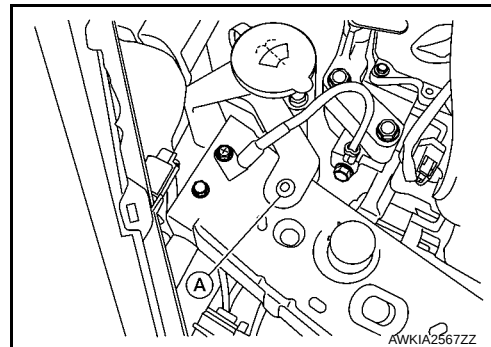


RADIATOR CORE SUPPORT

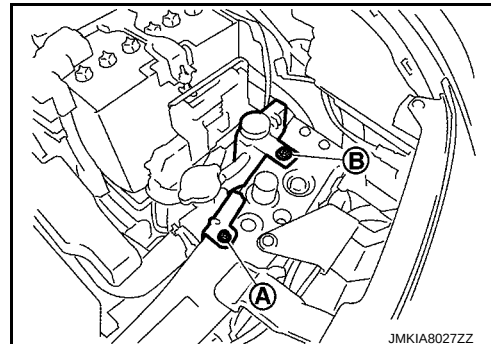
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

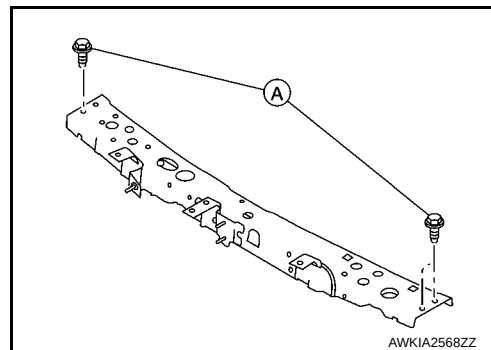
3. Remove washer tube inlet clip (A).



4. Remove radiator cap adapter bracket bolt (A) and radiator reservoir tank bolt (B).



5. Remove horn. Refer to [HRN-6, "Removal and Installation"](#).
6. Remove crash zone sensor. Refer to [SR-24, "Removal and Installation"](#).
7. Remove hood lock assembly. Refer to [DLK-292, "HOOD LOCK : Removal and Installation"](#).
8. Release hood lock release cable clips from radiator core support upper using a suitable tool.
9. Remove upper air guide. Refer to [DLK-272, "Exploded View"](#).
10. Remove air guide (LH/RH). Refer to [DLK-272, "Exploded View"](#).
11. Release all harness connector clips from radiator core support upper using a suitable tool.
12. Remove bolts (A) and radiator core support upper.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

After installation, perform hood assembly adjustment procedure. Refer to [DLK-269, "HOOD ASSEMBLY : Adjustment"](#).

RADIATOR CORE SUPPORT LOWER

RADIATOR CORE SUPPORT LOWER : Removal and Installation

INFOID:0000000012430238

REMOVAL

1. Remove radiator core support upper. Refer to [DLK-272, "RADIATOR CORE SUPPORT UPPER : Removal and Installation"](#).
2. Reposition the radiator and condenser.

RADIATOR CORE SUPPORT

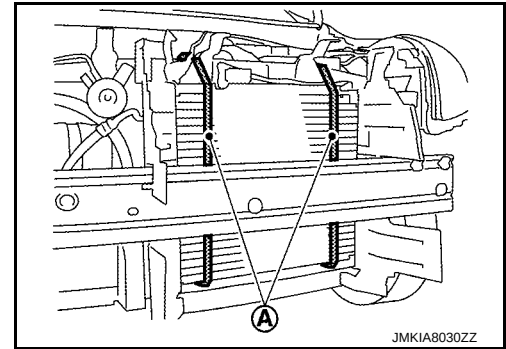
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

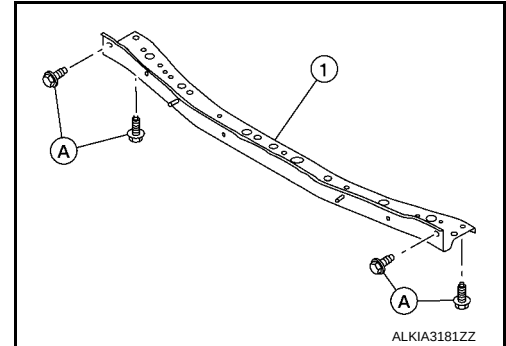
3. Using a suitable tool (A), suspend radiator and condenser to prevent them from falling.

CAUTION:

Use care to avoid damaging radiator and condenser.



4. Remove bolts (A) and radiator core support lower (1).



INSTALLATION

Installation is in the reverse order of removal.

FRONT FENDER

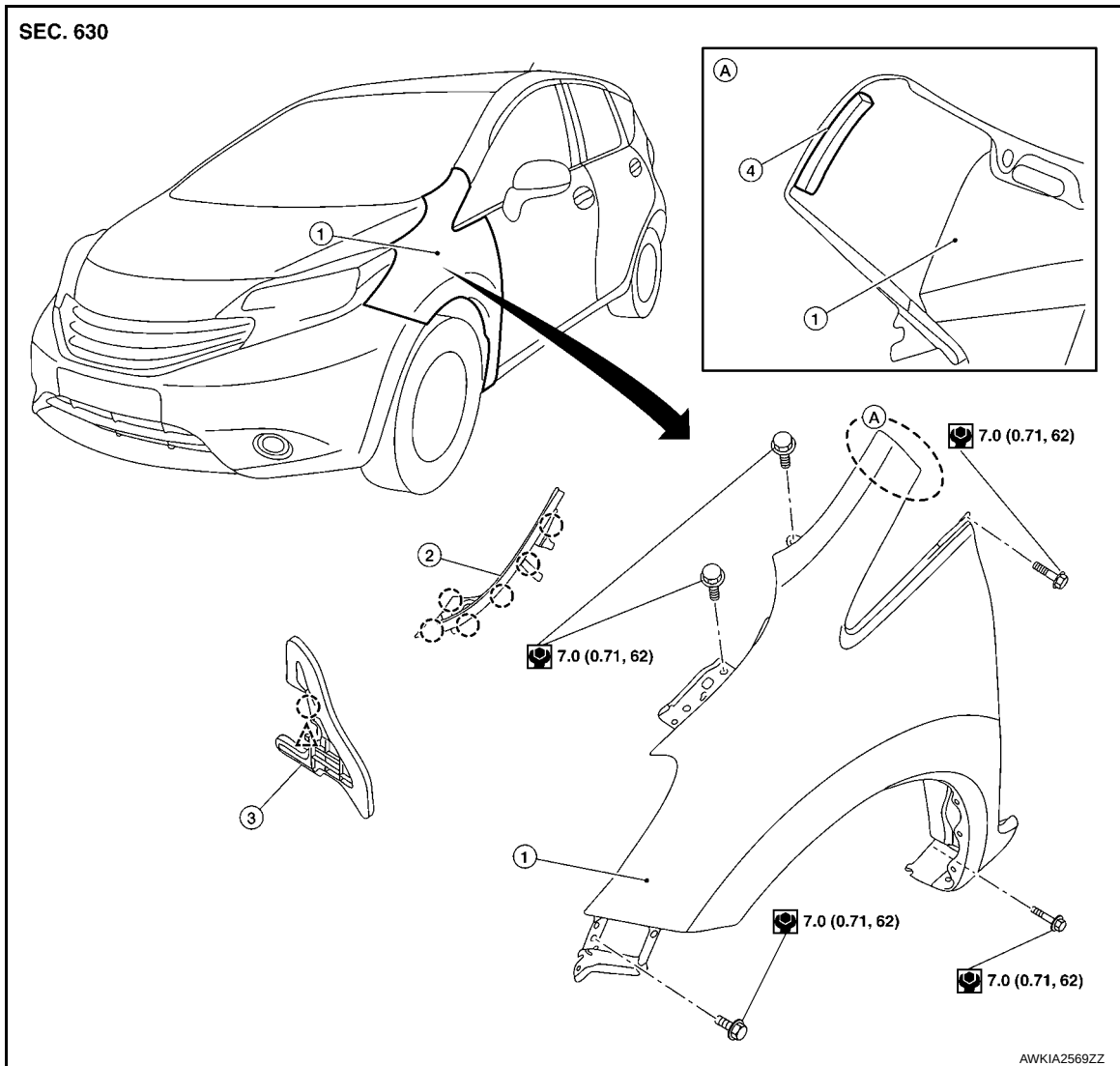
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

FRONT FENDER

Exploded View

INFOID:000000012430239



- | | | |
|---------------------------|------------------------|---------------------------|
| 1. Front fender | 2. Cowl top side cover | 3. Front fender insulator |
| 4. Front fender stiffener | ○ Pawl | △ Clip |

Removal and Installation

INFOID:000000012430240

CAUTION:

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

REMOVAL

1. Remove the front combination lamp. Refer to [EXL-102, "Removal and Installation"](#).
2. Remove cowl top side cover. Refer to [DLK-275, "Exploded View"](#).
3. Remove front fender bolts.

FRONT FENDER

< REMOVAL AND INSTALLATION >

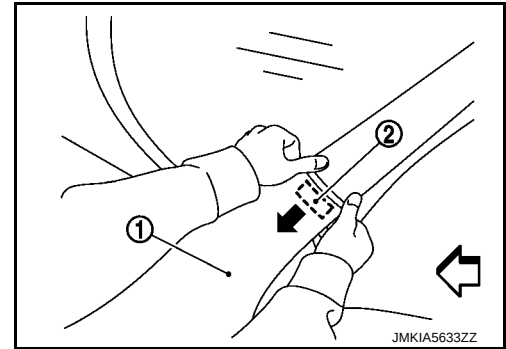
[WITHOUT INTELLIGENT KEY SYSTEM]

4. Remove front fender stiffener (2) by carefully pulling upper portion of front fender (1) away from body.

⇐: Front

CAUTION:

Use care when removing the front fender. The front fender stiffener foam adheres the front fender to the body. Carefully release the stiffener foam or damage to front fender may occur.



5. Remove front fender.

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-269, "HOOD ASSEMBLY : Adjustment"](#).
 - Front door assembly: Refer to [DLK-278, "DOOR ASSEMBLY : Adjustment"](#).

FRONT DOOR

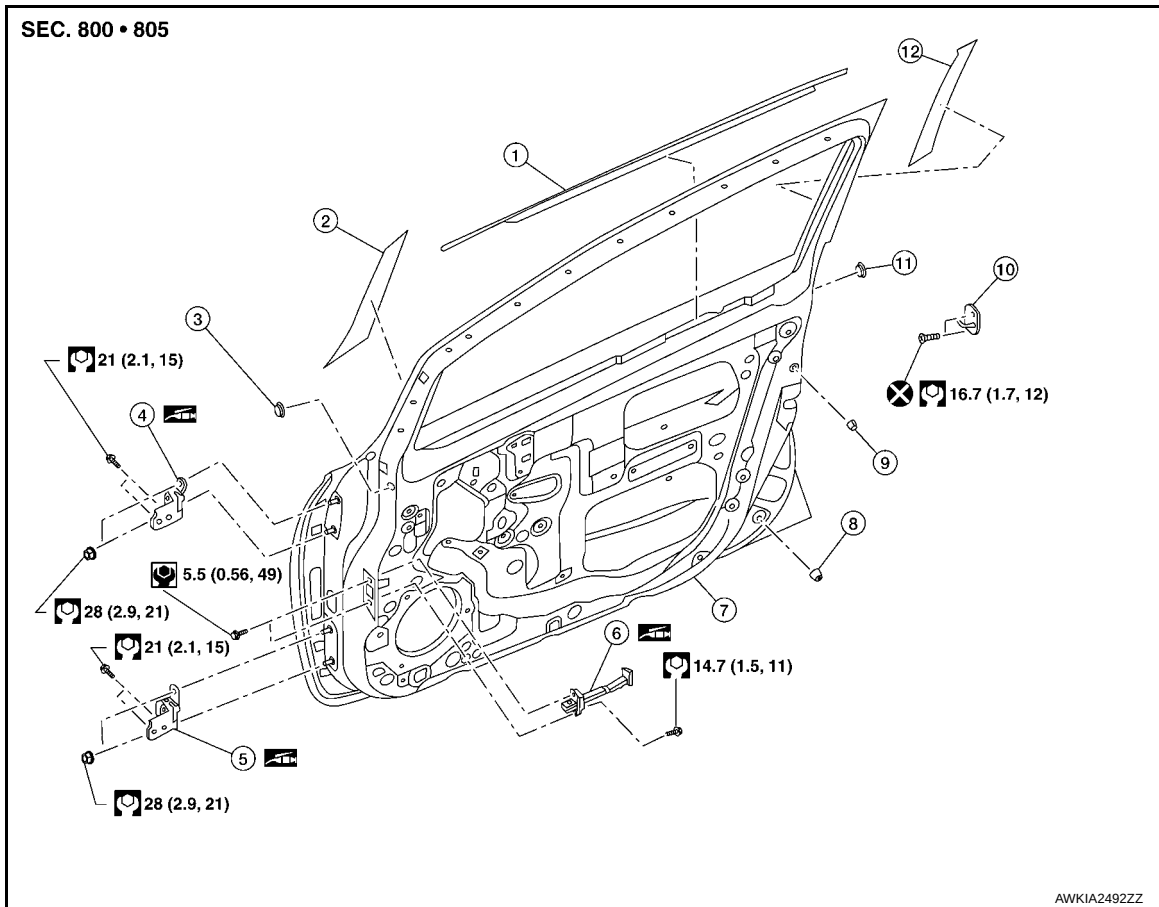
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

FRONT DOOR

Exploded View

INFOID:0000000012430241



- | | | |
|---------------------|-------------------------|-------------------------------|
| 1. Inside seal | 2. Door sash front tape | 3. Grommet (driver side only) |
| 4. Door upper hinge | 5. Door lower hinge | 6. Door check link |
| 7. Front door panel | 8. Lower grommet | 9. Upper grommet |
| 10. Door striker | 11. Body panel plug | 12. Door sash rear tape |

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000012430242

CAUTION:

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

REMOVAL

1. Disconnect the battery positive and negative terminals and wait at least three minutes. Refer to [PG-70, "Removal and Installation \(Battery\)"](#).
2. Remove dash side finisher. Refer to [INT-24, "DASH SIDE FINISHER : Removal and Installation"](#).
3. Disconnect the harness connectors from the front door.
4. Remove door check link bolt (body side).
5. Remove door hinge nuts (door side) and front door assembly.

INSTALLATION

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DLK

FRONT DOOR

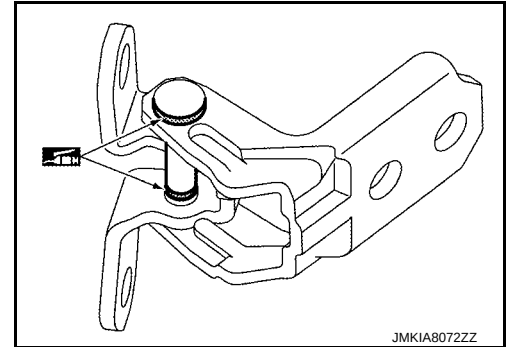
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

Installation is in the reverse order of removal.

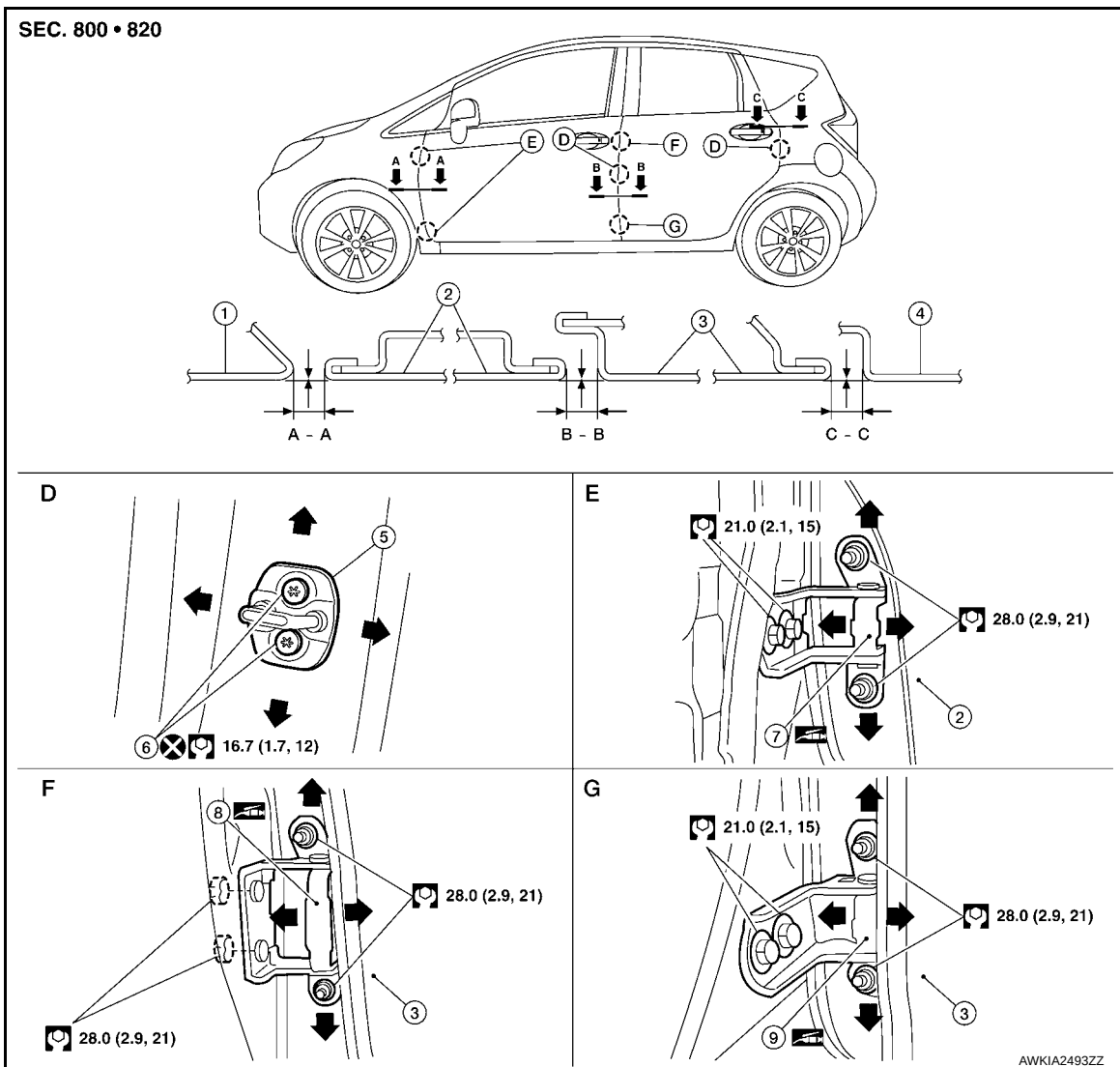
CAUTION:

- After installation, perform the front door adjustment procedure. Refer to [DLK-278, "DOOR ASSEMBLY : Adjustment"](#).
- Apply anticorrosive agent to the door hinge mating surface.
- Check door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.



DOOR ASSEMBLY : Adjustment

INFOID:000000012430243



FRONT DOOR

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

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

Unit: mm (in)

Section	Measurement	Standard
A – A	Clearance	4.6 ± 1.0 (0.18 ± 0.04)
	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
B – B	Clearance	4.6 ± 2.0 (0.18 ± 0.08)
	Surface height	0.0 ± 1.5 (0.0 ± 0.06)
C – C	Clearance	4.6 ± 1.0 (0.18 ± 0.04)
	Surface height	0.0 ± 1.0 (0.0 ± 0.04)

1. Remove front fender. Refer to [DLK-275, "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 or lower the 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.

8. Install front fender. Refer to refer to [DLK-275, "Removal and Installation"](#).

DOOR STRIKER

DOOR STRIKER : Removal and Installation

INFOID:0000000012430244

REMOVAL

Remove bolts and door striker.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

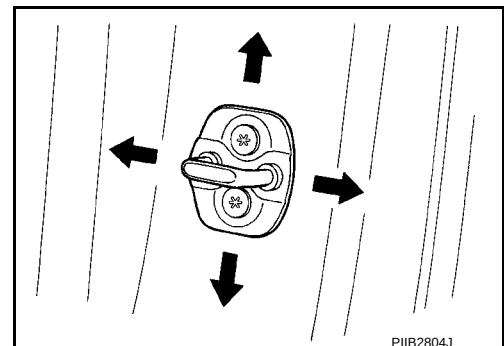
- Do not reuse door striker bolts.
- Tighten bolts to specification. Refer to [DLK-277, "Exploded View"](#).
- After installation, check front door open/close operation. If necessary, perform the door striker adjustment procedure. Refer to [DLK-279, "DOOR STRIKER : Adjustment"](#).

DOOR STRIKER : Adjustment

INFOID:0000000012430245

DOOR STRIKER ADJUSTMENT

1. Loosen door striker bolts
2. Adjust door striker so that it becomes parallel with front door lock insertion direction.



FRONT DOOR

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

3. Tighten door striker bolts to specification. Refer to [DLK-277, "Exploded View"](#).

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:0000000012430246

REMOVAL

CAUTION:

- Use two people when removing or installing front door due to its heavy weight
- When removing and installing front door assembly, support the door using a suitable tool.
- Use shops cloths to protect surrounding components from damage during removal and installation of front door assembly.

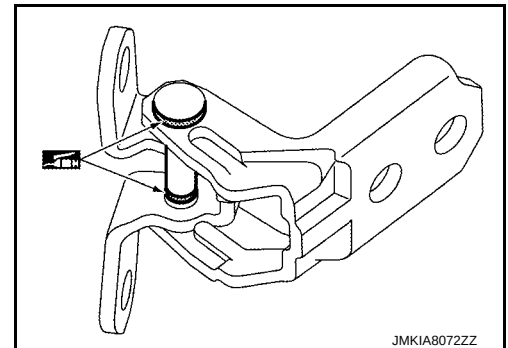
1. Remove front fender. Refer to [DLK-275, "Removal and Installation"](#).
2. Remove front door assembly. Refer to [DLK-277, "DOOR ASSEMBLY : Removal and Installation"](#).
3. Remove front door hinge bolts (body side) and front door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Apply anticorrosive agent to the hinge mating surface.
- After installation, perform the front door adjustment procedure. Refer to [DLK-278, "DOOR ASSEMBLY : Adjustment"](#).
- Check door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.



DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:0000000012430247

REMOVAL

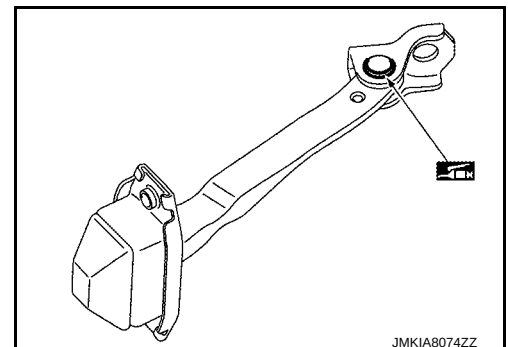
1. Remove front door speaker. Refer to [AV-54, "Removal and Installation"](#) (BASE AUDIO), [AV-114, "Removal and Installation"](#) (DISPLAY AUDIO) or [AV-243, "Removal and Installation"](#) (NAVIGATION).
2. Remove door check link bolt (body side).
3. Remove door check link bolts (door side) and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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



REAR DOOR

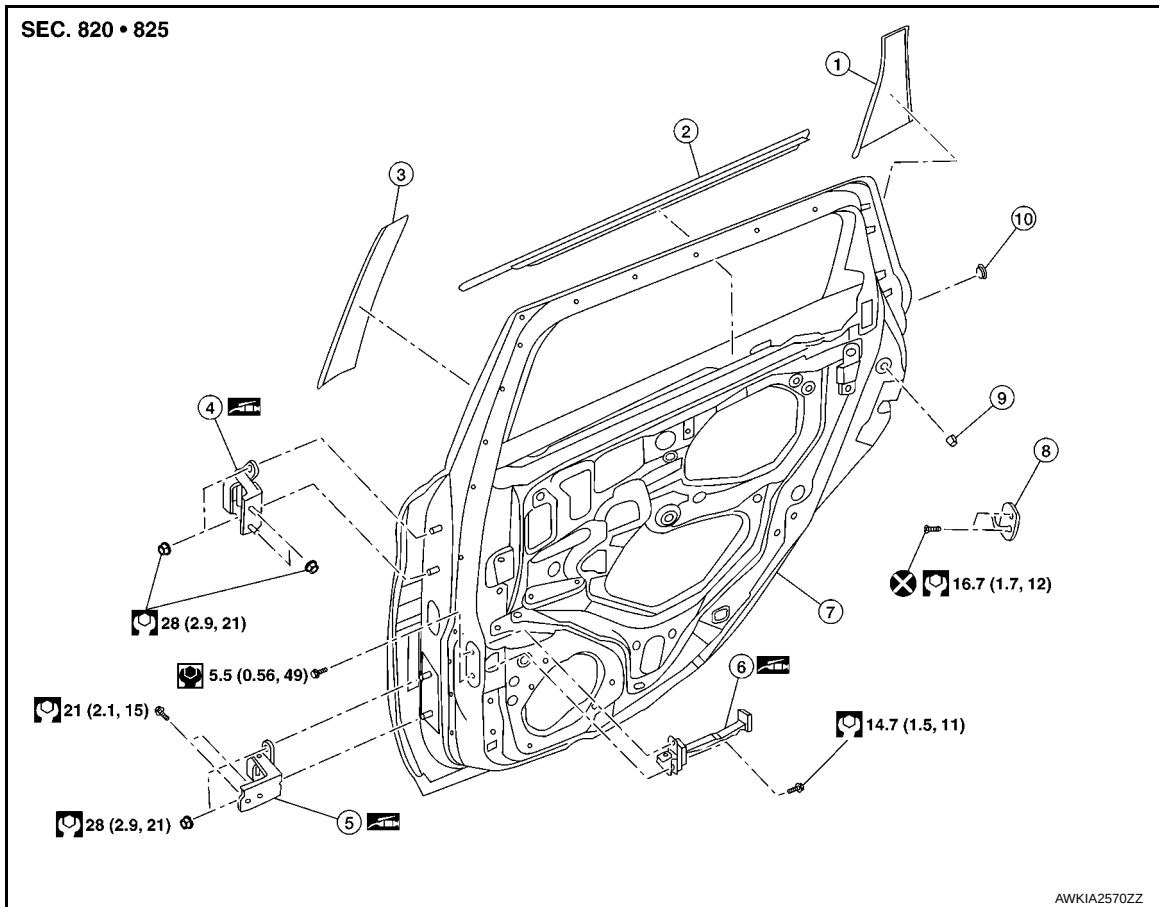
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

REAR DOOR

Exploded View

INFOID:0000000012430248



- | | | |
|------------------------|---------------------|-------------------------|
| 1. Door sash rear tape | 2. Inside seal | 3. Door sash front tape |
| 4. Door upper hinge | 5. Door lower hinge | 6. Door check link |
| 7. Rear door panel | 8. Door striker | 9. Grommet |
| 10. Body panel plug | | |

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

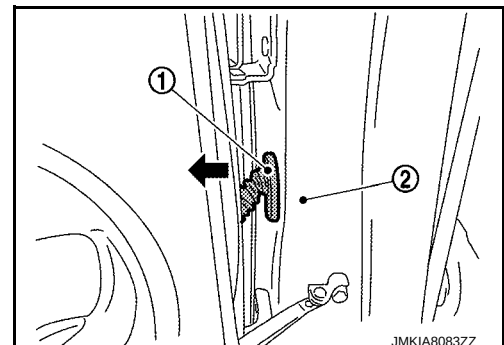
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CAUTION:

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

REMOVAL

1. Remove rear door harness grommet (1) from body side outer (2), then pull out rear door harness.

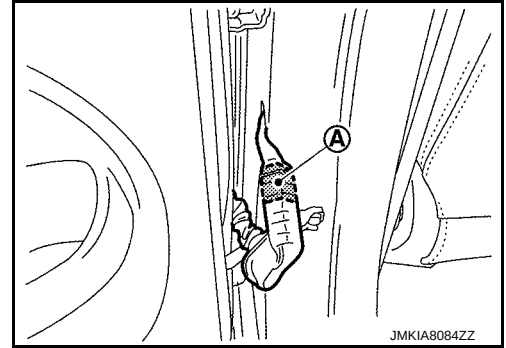


REAR DOOR

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

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



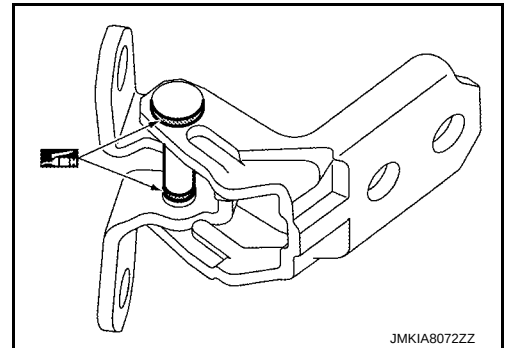
3. Remove door check link bolt (body side).
4. Remove door hinge nuts (door side) and rear door assembly.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Apply anticorrosive agent to the hinge mating surface.
- After installation, perform the rear door adjustment procedure. Refer to [DLK-283, "DOOR ASSEMBLY : Adjustment"](#).
- After adjusting, apply touch-up paint (body color) to the head of door hinge nuts.
- Check door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.



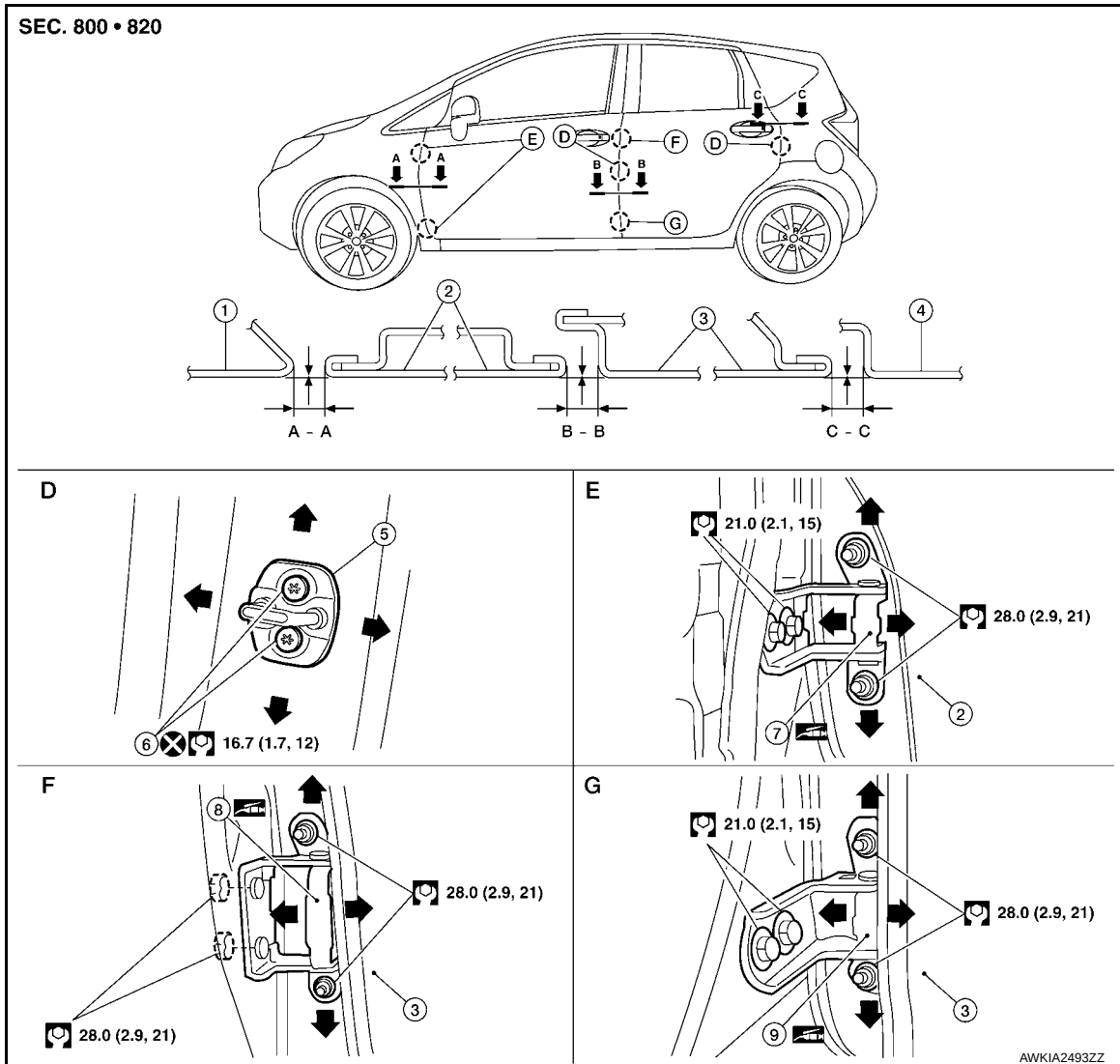
REAR DOOR

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

DOOR ASSEMBLY : Adjustment

INFOID:000000012430250



- | | | |
|---------------------|--------------------------|--------------------------|
| 1. Front fender | 2. Front door | 3. Rear door |
| 4. Body side outer | 5. Door striker | 6. Striker bolt |
| 7. Front door hinge | 8. Rear door upper hinge | 9. Rear door lower hinge |

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

Unit: mm (in)

Section	Measurement	Standard
A - A	Clearance	4.6 ± 1.0 (0.18 ± 0.04)
	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
B - B	Clearance	4.6 ± 2.0 (0.18 ± 0.08)
	Surface height	0.0 ± 1.5 (0.0 ± 0.06)
C - C	Clearance	4.6 ± 1.0 (0.18 ± 0.04)
	Surface height	0.0 ± 1.0 (0.0 ± 0.04)

1. Remove center pillar lower finisher. Refer to [INT-25, "CENTER PILLAR LOWER FINISHER : Removal and Installation"](#).

REAR DOOR

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

2. Loosen door hinge nuts (door side).
3. Adjust the surface height of rear door according to the specifications provided.
4. Temporarily tighten door hinge nuts (door side).
5. Loosen door hinge nuts and bolts (body side).
6. Raise rear door at rear end to adjust clearance of rear door according to the specifications provided.
7. After adjustment tighten bolts and nuts to the specified torque.

CAUTION:

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

8. Install center pillar lower finisher. Refer to [INT-25, "CENTER PILLAR LOWER FINISHER : Removal and Installation"](#).

DOOR STRIKER

DOOR STRIKER : Removal and Installation

INFOID:0000000012430251

REMOVAL

Remove bolts and rear door striker.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

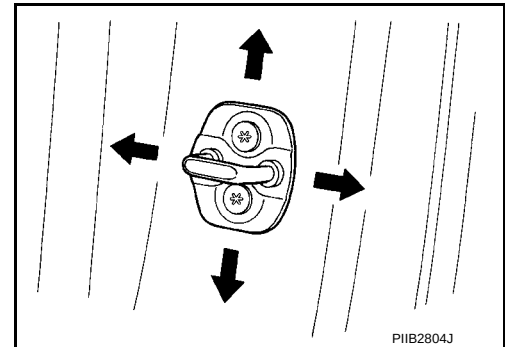
- Do not reuse door striker bolts.
- Tighten door striker bolts to specification. Refer to [DLK-281, "Exploded View"](#).
- After installation, check front door open/close operation. If necessary, adjust the door striker. Refer to [DLK-284, "DOOR STRIKER : Adjustment"](#).

DOOR STRIKER : Adjustment

INFOID:0000000012430252

DOOR STRIKER ADJUSTMENT

1. Loosen door striker bolts.
2. Adjust door striker so that it becomes parallel with rear door lock insertion direction.



3. Tighten door striker bolts to specification. Refer to [DLK-281, "Exploded View"](#).

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:0000000012430253

REMOVAL

CAUTION:

- Use two people when removing or installing front door due to its heavy weight
- When removing and installing front door assembly, support the door using a suitable tool.
- Use shops cloths to protect surrounding components from damage during removal and installation of front door assembly.

1. Remove rear door assembly. Refer to [DLK-281, "DOOR ASSEMBLY : Removal and Installation"](#).
2. Remove center pillar lower finisher. Refer to [INT-25, "CENTER PILLAR LOWER FINISHER : Removal and Installation"](#).

REAR DOOR

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

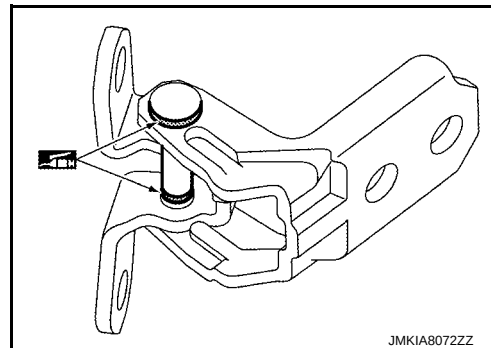
3. Remove rear door hinge bolts and nuts (body side) and rear door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Apply anticorrosive agent to the door hinge mating surface.
- After installation, perform the rear door adjustment procedure. Refer to [DLK-283, "DOOR ASSEMBLY : Adjustment"](#).
- After adjusting, apply touch-up paint (body color) to the head of door hinge bolts and nuts.
- Check door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.



DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:0000000012430254

REMOVAL

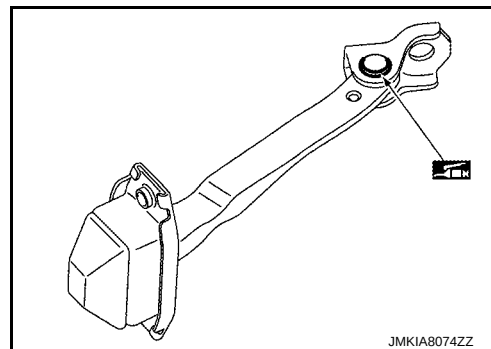
1. Remove rear door speaker. Refer to [AV-55, "Removal and Installation"](#) (BASE AUDIO), [AV-115, "Removal and Installation"](#) (DISPLAY AUDIO) or [AV-244, "Removal and Installation"](#) (NAVIGATION).
2. Remove door check link bolt (body side).
3. Remove door check link bolts (door side) and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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



BACK DOOR

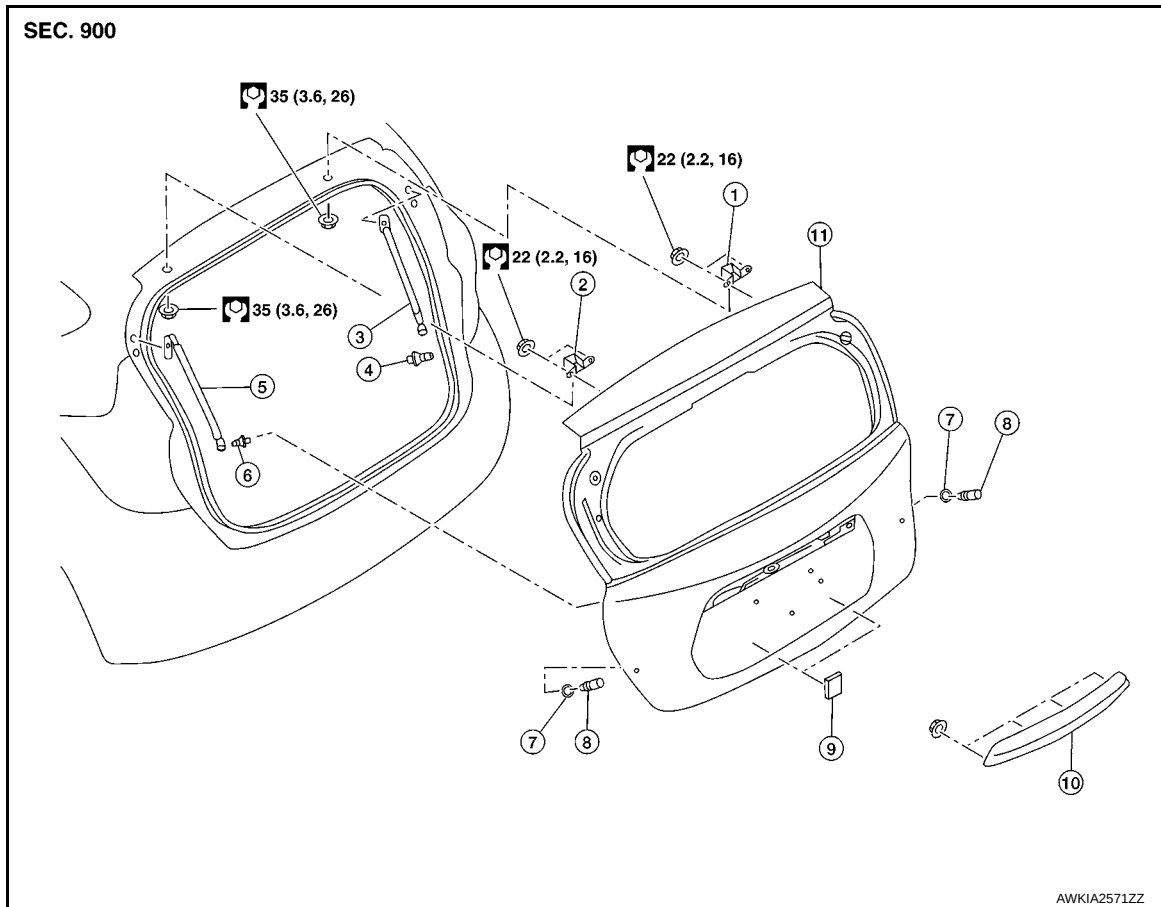
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

BACK DOOR

Exploded View

INFOID:000000012430255



- | | | |
|----------------------------------|-------------------------|----------------------------------|
| 1. Back door hinge (RH) | 2. Back door hinge (LH) | 3. Back door stay (RH) |
| 4. Back door stay stud ball (RH) | 5. Back door stay (LH) | 6. Back door stay stud ball (LH) |
| 7. Bumper rubber seal | 8. Bumper rubber | 9. Spacer |
| 10. Back door outer finisher | 11. Back door assembly | |

BACK DOOR ASSEMBLY

BACK DOOR ASSEMBLY : Removal and Installation

INFOID:000000012430256

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

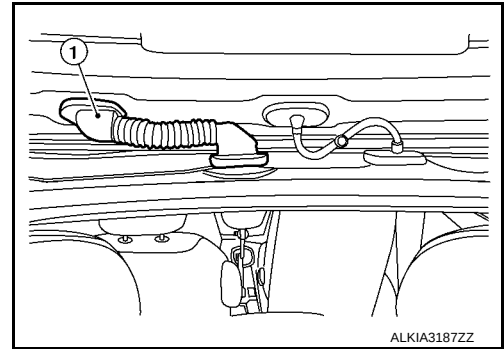
1. Remove back door inner finisher. Refer to [INT-36, "BACK DOOR INNER FINISHER : Removal and Installation"](#).
2. Remove back door stay (LH/RH). Refer to [DLK-163, "BACK DOOR STAY : Removal and Installation"](#).

BACK DOOR

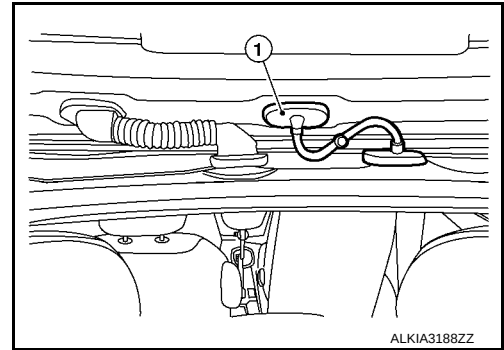
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

3. Remove back door harness grommet (1), then pull harness from the back door.



4. Disconnect washer tube from rear wiper.
5. Remove washer tube grommet (1), then pull washer tube from the back door.



6. 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.

7. Remove back door hinge nuts (door side) and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- 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-288, "BACK DOOR ASSEMBLY : Adjustment"](#).

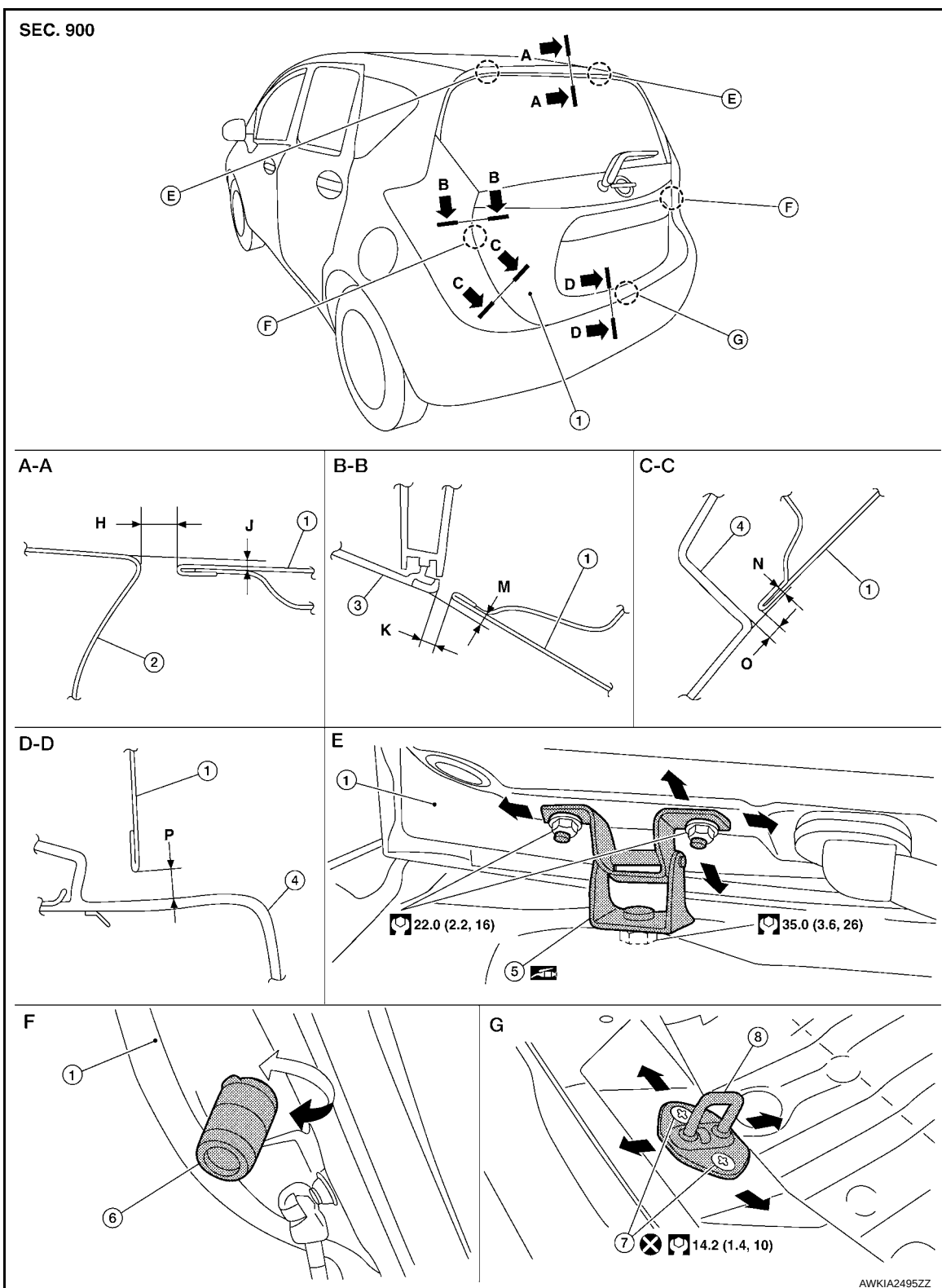
BACK DOOR

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

BACK DOOR ASSEMBLY : Adjustment

INFOID:000000012430257



1. Back door panel
4. Rear bumper fascia
7. Bolt

2. Roof panel
5. Back door hinge
8. Back door striker

3. Rear combination lamp
6. Bumper rubber

BACK DOOR

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

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.

Unit: mm (in)

Portion	Section	Item	Measurement	Standard
Back door panel – Roof panel	A – A	H	Clearance	6.0 ± 1.0 (0.24 ± 0.04)
		I	Surface height	$0.0 +0.5, -1.5$ ($0.00 +0.02, -0.06$)
Rear combination lamp – Back door panel	B – B	J	Clearance	5.0 ± 2.0 (0.20 ± 0.08)
		K	Surface height	-2.0 ± 2.0 (-0.08 ± 0.08)
Rear bumper fascia – Back-door panel	C – C	L	Clearance	5.0 ± 2.0 (0.20 ± 0.08)
		M	Surface height	$0.0 +0.5, -2.0$ ($0.0 +0.02, -0.08$)
	D – D	M	Clearance	7.0 ± 2.0 (0.28 ± 0.08)

1. Loosen back door hinge nuts (door side).
2. 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.
3. Check the clearance and surface height and adjust back door as necessary.
4. 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.

BACK DOOR STRIKER

BACK DOOR STRIKER : Removal and Installation

INFOID:0000000012430258

REMOVAL

1. Remove back door kicking plate using a suitable tool.
2. Remove bolts and back door striker.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

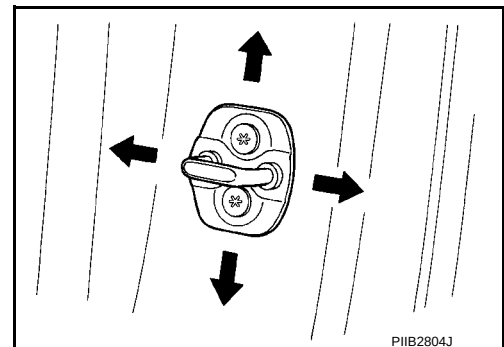
- Do not reuse back door striker bolts.
- After installation, check back door open/close, lock/unlock operation.
- After installation, perform the back door assembly adjustment procedure. Refer to [DLK-288, "BACK DOOR ASSEMBLY : Adjustment"](#).

BACK DOOR STRIKER : Adjustment

INFOID:0000000012430259

DOOR STRIKER ADJUSTMENT

1. Loosen door striker bolts.
2. Adjust door striker so that it becomes parallel with back door lock insertion direction.



3. Tighten door striker bolts to specification. Refer to [DLK-286, "Exploded View"](#).

BACK DOOR

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

BACK DOOR HINGE

BACK DOOR HINGE : Removal and Installation

INFOID:0000000012430260

REMOVAL

1. Remove back door assembly. Refer to [DLK-286, "BACK DOOR ASSEMBLY : Removal and Installation"](#).
2. Partially remove back door weatherstrip. Refer to [DLK-291, "BACK DOOR WEATHER-STRIP : Removal and Installation"](#).
3. Remove back door hinge nuts and bolts (body side) and then remove back door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Apply anticorrosive agent onto the surface between hinge and body side.
- After installation, perform the back door assembly adjustment procedure. Refer to [DLK-288, "BACK DOOR ASSEMBLY : Adjustment"](#).

BACK DOOR STAY

BACK DOOR STAY : Removal and Installation

INFOID:0000000012430261

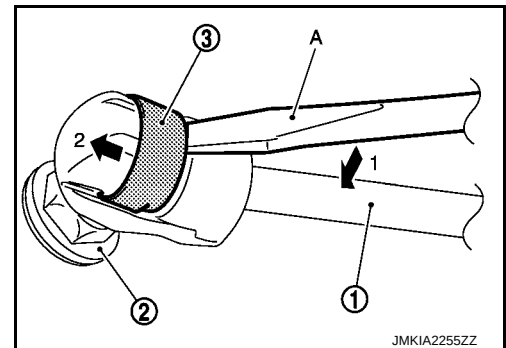
REMOVAL

1. Support the back door with a suitable tool too prevent it from falling.

WARNING:

Body injury may occur if no supporting rod is holding the back door open when removing the back door stay.

2. Remove the metal clip (3) located on the connection between the back door stay (1) and the stud ball (2) (back door side) by using a flat blade screwdriver (A).
3. Remove the back door stay (back door side).



4. In the same way, remove the back door stay from the body side.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Check the back door open/close operation after installation.

BACK DOOR STAY : Disposal

INFOID:0000000012430262

BACK DOOR STAY DISPOSAL

WARNING:

When performing disposal procedure, wear protective gloves and glasses.

BACK DOOR

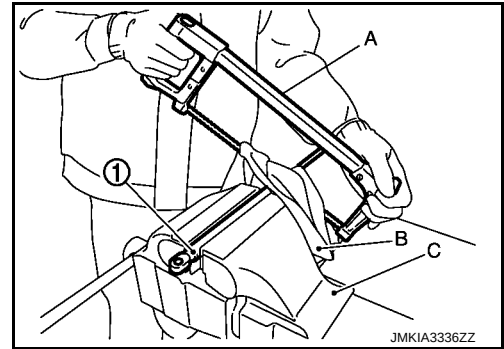
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

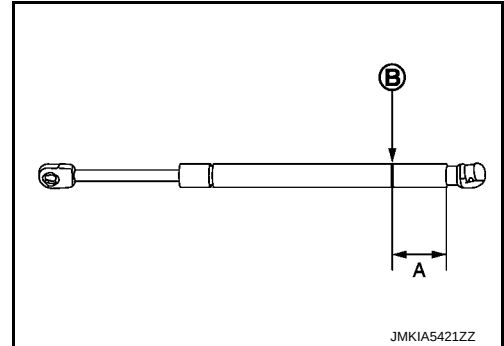
1. Secure back door stay (1) using a vice (C).

CAUTION:

When cutting back door stay, always cover suitable tool (A) using a shop cloth (B) to avoid scattering metal fragments or oil.



2. Slowly cut a hole in back door stay and drain the gas using a hacksaw at position (B) as shown.
A: 20 mm (0.79 in)



BACK DOOR WEATHER-STRIP

BACK DOOR WEATHER-STRIP : Removal and Installation

INFOID:0000000012430263

REMOVAL

1. Support back door using a suitable tool.
2. 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 make sure that there are no loose sections.

HOOD LOCK

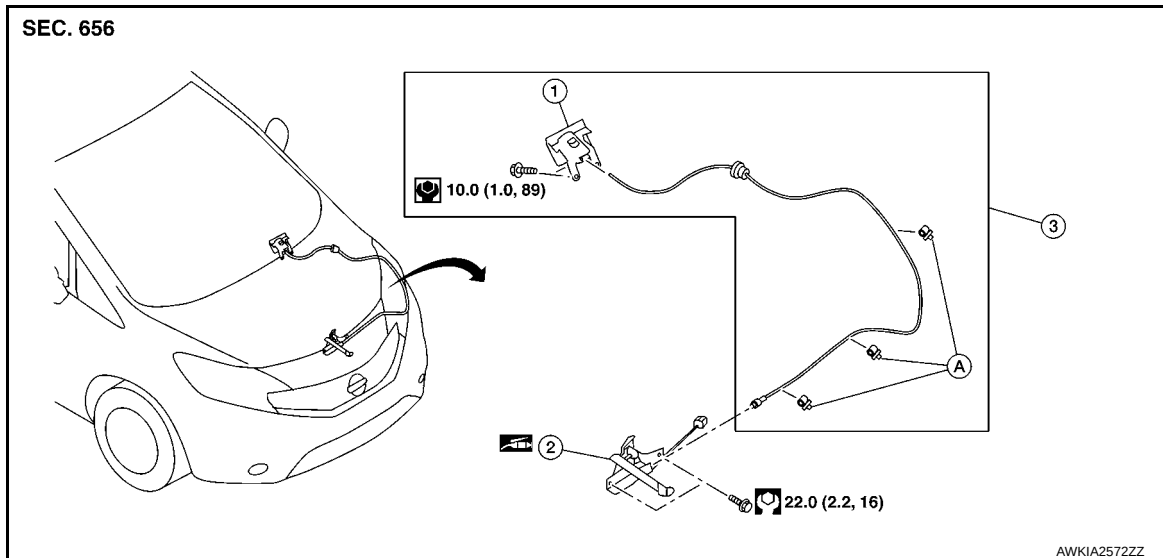
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

HOOD LOCK

Exploded View

INFOID:000000012430264



1. Hood lock/fuel filler lid release handle 2. Hood lock assembly 3. Hood lock release cable assembly
A. Clip

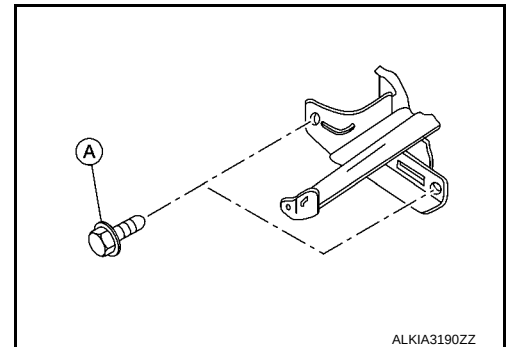
HOOD LOCK

HOOD LOCK : Removal and Installation

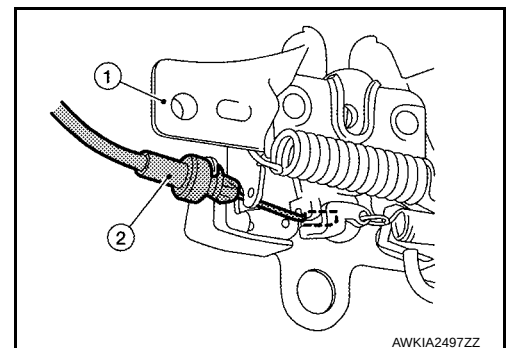
INFOID:000000012430265

REMOVAL

1. Remove hood lock bolts (A).



2. Disconnect hood lock release cable (2) from hood lock (1) and remove.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

HOOD LOCK

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

- After installation, perform hood assembly adjustment procedure. Refer to [DLK-269, "HOOD ASSEMBLY : Adjustment"](#).
- After adjustment, perform hood lock control inspection. Refer to [DLK-293, "HOOD LOCK : Inspection"](#).

HOOD LOCK : Inspection

INFOID:0000000012430266

HOOD LOCK INSPECTION

NOTE:

If hood lock cable is bent or deformed, replace it. Refer to [DLK-292, "HOOD LOCK : Removal and Installation"](#).

1. Check that secondary latch is properly engage with secondary striker with hoods own weight.
2. While operating hood lock release lever, 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 lever returns to original position.
3. Check that hood lock release lever operates at 49 N (5.0 kg-m, 11.0 ft-lb) or below.
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).
5. Check hood lock assembly lubrication condition. If necessary, apply a suitable multi-purpose grease.

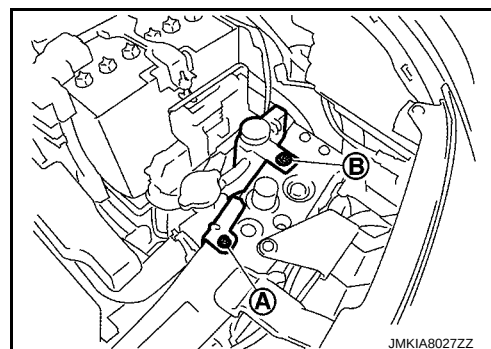
HOOD LOCK RELEASE CABLE

HOOD LOCK RELEASE CABLE : Removal and Installation

INFOID:0000000012430267

REMOVAL

1. Disconnect hood lock release cable from hood lock. Refer to [DLK-292, "Exploded View"](#).
2. Remove radiator cap adapter bracket bolt (A) and radiator reservoir tank bolt (B).



3. Remove fender protector (LH). Refer to [EXT-38, "Removal and Installation"](#).
4. Release hood lock control cable clips using a suitable tool.
5. Remove hood lock/fuel filler door release handle. Refer to [DLK-167, "HOOD LOCK RELEASE HANDLE : Removal and Installation"](#).
6. Remove dash side finisher (LH). Refer to [INT-24, "DASH SIDE FINISHER : Removal and Installation"](#).
7. Remove grommet on the lower dash and pull the hood lock release cable into the passenger compartment.

CAUTION:

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

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

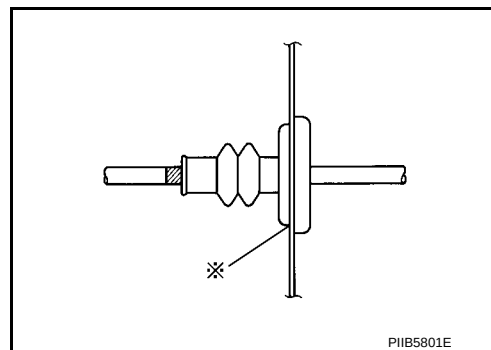
- Be careful not to bend cable too much, keep the radius 100 mm (3.94 in) or more.
- Check that hood lock release cable is properly engaged with hood lock.

HOOD LOCK

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

- Check that cable is not offset from the positioning grommet, and apply the sealant to the grommet (at * mark).



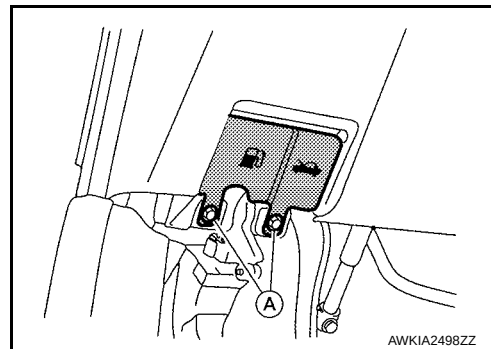
HOOD LOCK RELEASE HANDLE

HOOD LOCK RELEASE HANDLE : Removal and Installation

INFOID:0000000012430268

REMOVAL

1. Remove hood lock/fuel filler door release handle bolts (A).



2. Disconnect hood lock release cable from hood lock/fuel filler door release handle and remove.

INSTALLATION

Installation is in the reverse order of removal.

FRONT DOOR LOCK

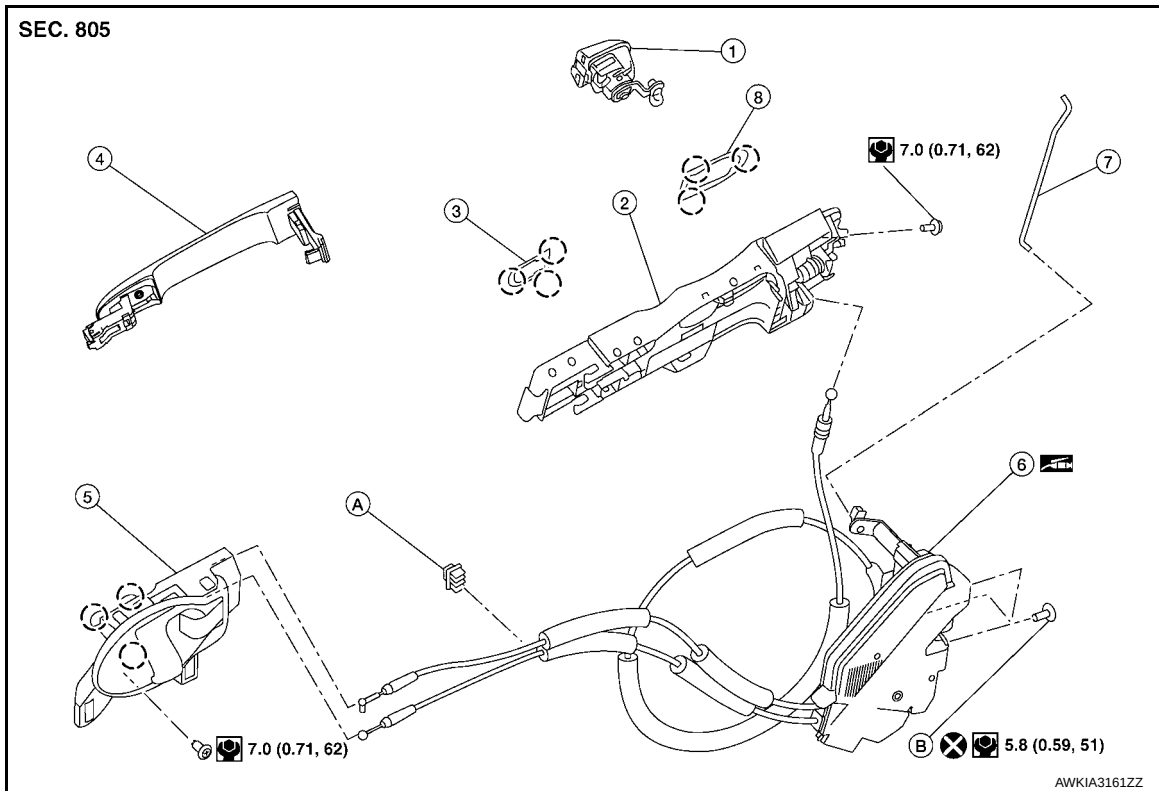
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

FRONT DOOR LOCK

Exploded View

INFOID:0000000012430269



- | | | |
|---------------------|---------------------------|-----------------|
| 1. Key cylinder | 2. Outside handle bracket | 3. Front gasket |
| 4. Outside handle | 5. Inside handle | 6. Door lock |
| 7. Key cylinder rod | 8. Rear gasket | A. Clip |
| B. Bolt | ○ Pawl | |

DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:0000000012430270

REMOVAL

1. Remove inside handle. Refer to [DLK-296, "INSIDE HANDLE : Removal and Installation"](#).
2. Remove outside handle. Refer to [DLK-297, "OUTSIDE HANDLE : Removal and Installation"](#).
3. Disconnect the harness connector from the door lock actuator (if equipped).
4. Remove front door glass rear run. Refer to [GW-21, "Exploded View"](#).
5. Remove bolts and door lock.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

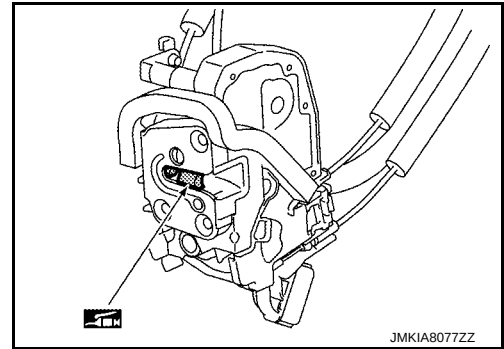
- Do not reuse door lock bolts.
- After installation, check door open/close, lock/unlock operation.
- Check door lock cables are properly engaged to inside handle and outside handle bracket.
- When installing key cylinder on front door, be sure to rotate key cylinder rod holder until a click is felt.

FRONT DOOR LOCK

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

- Check door lock for poor lubrication. Apply a suitable multi-purpose grease to door lock if necessary.



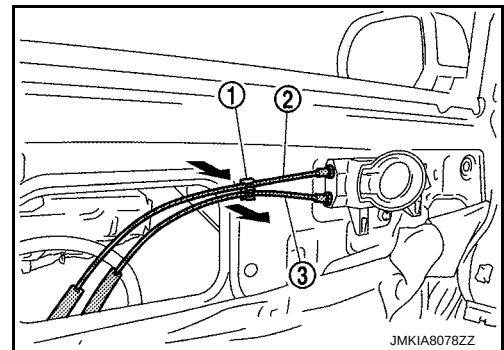
INSIDE HANDLE

INSIDE HANDLE : Removal and Installation

INFOID:000000012430271

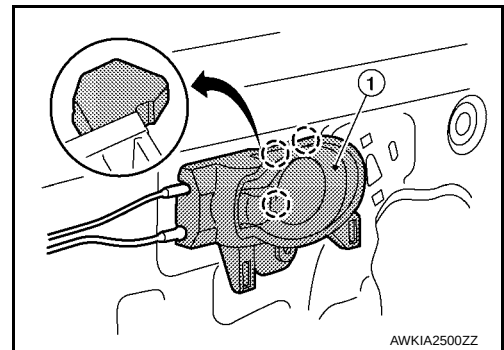
REMOVAL

1. Remove front door finisher. Refer to [INT-15, "Removal and Installation"](#).
2. Partially remove vapor barrier. Refer to [GW-21, "Exploded View"](#).
3. Release lock knob (2) and inside handle cable (3) from clip (1) using a suitable tool.

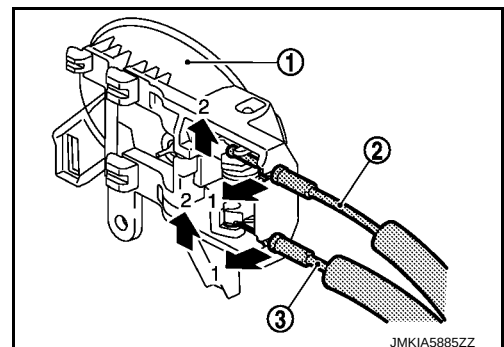


4. Remove inside handle bolt.
5. Release inside handle (1) from door panel using a suitable tool and remove.

⊖: Pawl



6. Release inside handle cable (3) and lock cable (2) from inside handle (1) and remove.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

FRONT DOOR LOCK

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

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

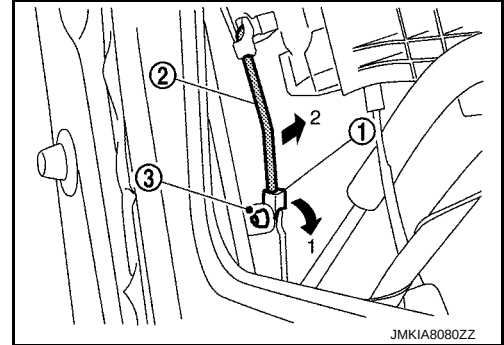
OUTSIDE HANDLE

OUTSIDE HANDLE : Removal and Installation

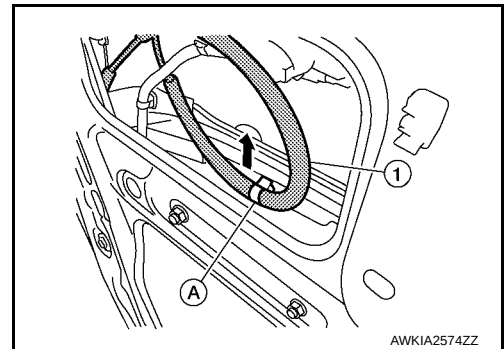
INFOID:000000012430272

REMOVAL

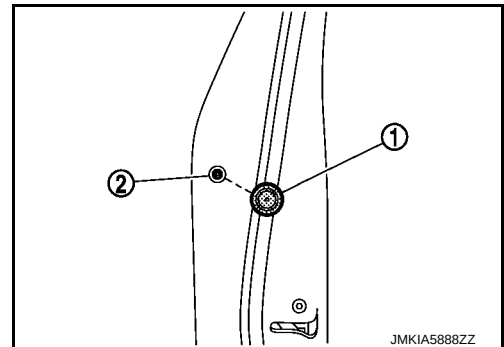
1. Remove front door finisher. Refer to [INT-15, "Removal and Installation"](#).
2. Partially remove vapor barrier. Refer to [GW-21, "Exploded View"](#).
3. Open rod holder (1) by pulling downward and separate key rod (3) from door lock assembly (2) (driver side only).



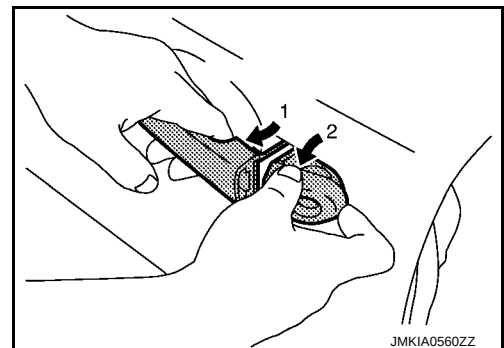
4. Release outside handle cable (1) from cable clip (A).



5. Remove door grommet (1) and bolt from grommet hole (2).



6. While pulling outside handle, remove outside handle escutcheon.

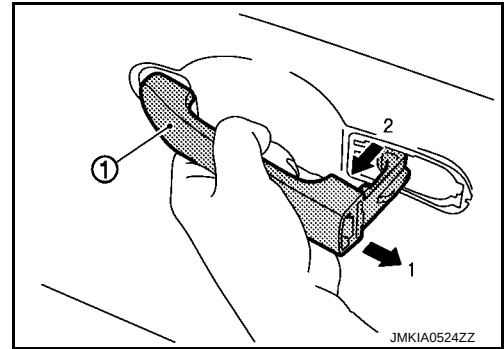


FRONT DOOR LOCK

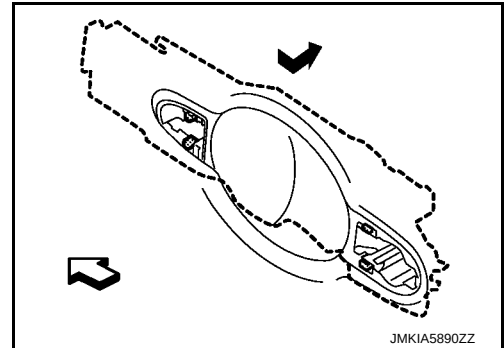
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

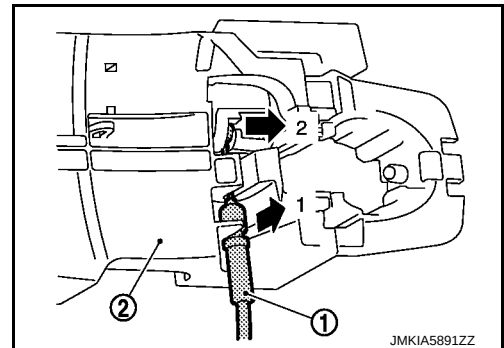
7. While pulling outside handle (1), slide toward rear of vehicle to remove.



8. Remove front gasket and rear gasket.
9. Slide outside handle bracket toward rear of vehicle to remove.
⇐: Front



10. Disconnect outside handle cable (1) from outside handle bracket (2) as shown.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Check that door lock cables are properly engaged with outside handle bracket.
- After installation, check door open/close, and lock/unlock operation.

REAR DOOR LOCK

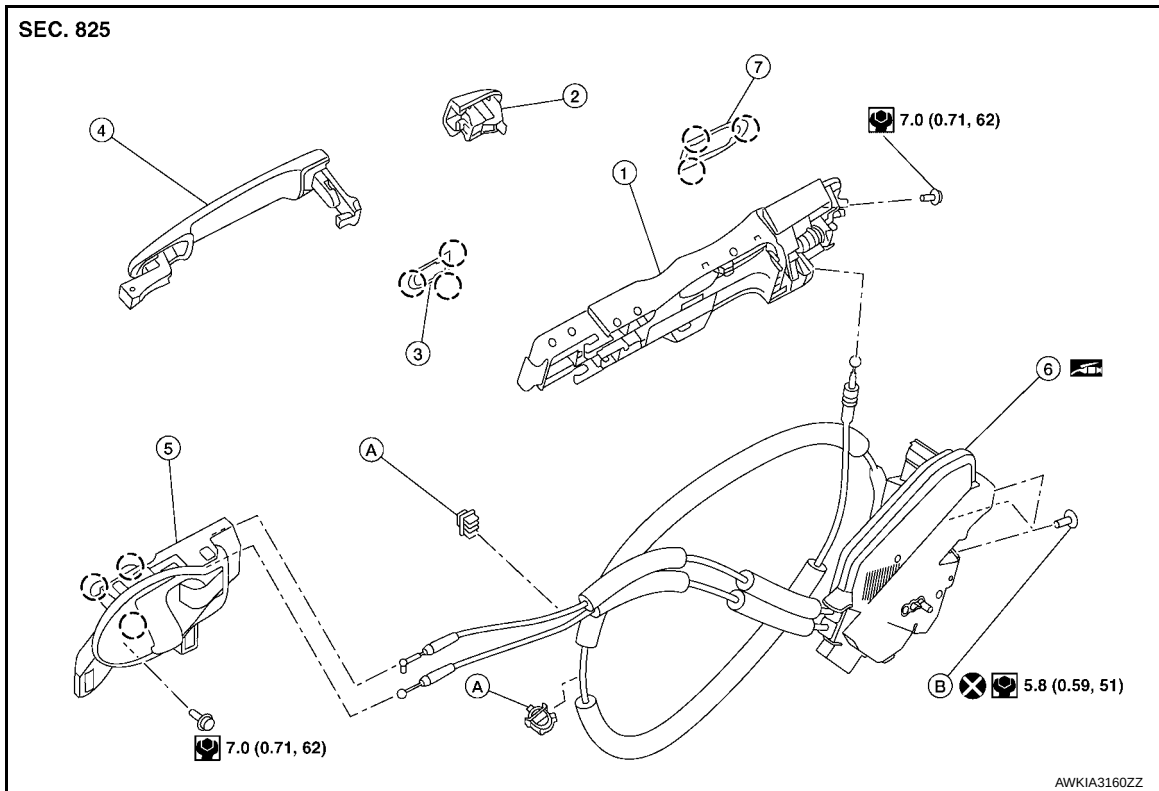
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

REAR DOOR LOCK

Exploded View

INFOID:000000012430273



- | | | |
|---------------------------|------------------------------|-----------------|
| 1. Outside handle bracket | 2. Outside handle escutcheon | 3. Front gasket |
| 4. Outside handle | 5. Inside handle | 6. Door lock |
| 7. Door lock | A. Clip | B. Bolt |

○ Pawl

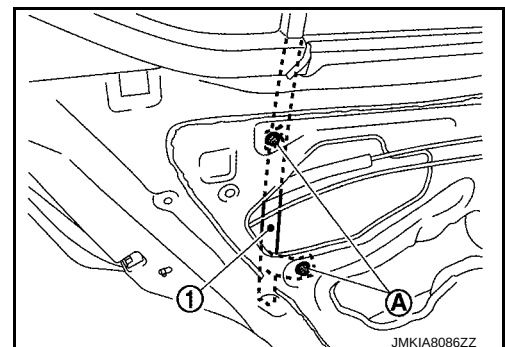
DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:000000012430274

REMOVAL

1. Remove inside handle. Refer to [DLK-300, "INSIDE HANDLE : Removal and Installation"](#).
2. Remove outside handle. Refer to [DLK-301, "OUTSIDE HANDLE : Removal and Installation"](#).
3. Remove bolts (A) from rear door glass rear run (1).



4. Disconnect the harness connector from door lock actuator (if equipped).
5. Remove bolts and door lock.

REAR DOOR LOCK

< REMOVAL AND INSTALLATION >

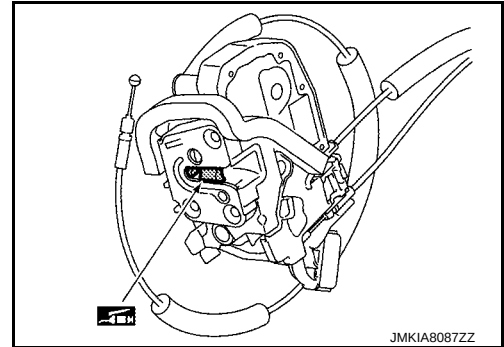
[WITHOUT INTELLIGENT KEY SYSTEM]

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Do not reuse door lock assembly bolts.
- After installation, check door open/close, lock/unlock operation.
- Check door lock cable is properly engaged with inside handle and outside handle bracket.
- Check door lock assembly for poor lubrication. If necessary, apply a suitable multi-purpose grease.



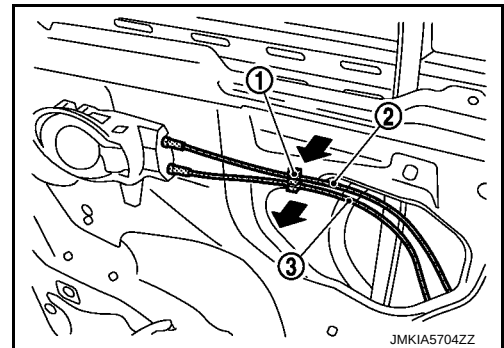
INSIDE HANDLE

INSIDE HANDLE : Removal and Installation

INFOID:0000000012430275

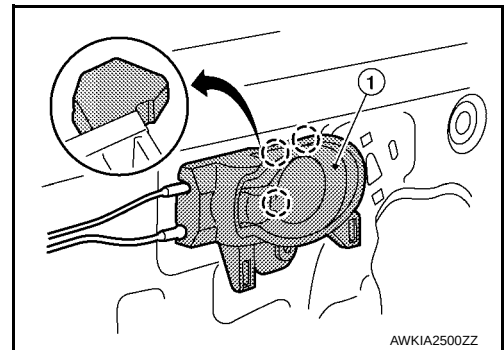
REMOVAL

1. Remove rear door finisher. Refer to [INT-18, "Removal and Installation"](#).
2. Remove upper portion of vapor barrier. Refer to [GW-25, "Exploded View"](#).
3. Release lock knob (2) and inside handle cable (3) from clip (1) using a suitable tool.



4. Remove inside handle bolt.
5. Release inside handle (1) from door panel using a suitable tool and remove.

(○): Pawl

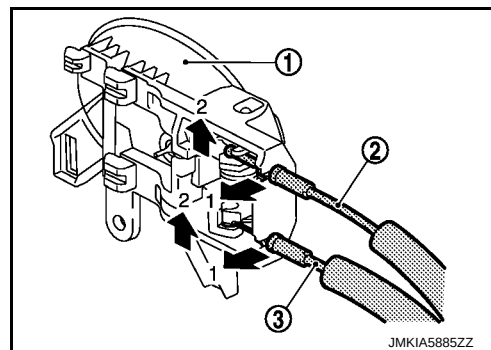


REAR DOOR LOCK

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

6. Release inside handle cable (3) and lock cable (2) from inside handle (1) and remove.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

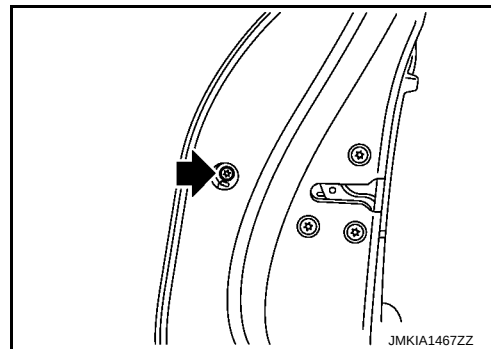
OUTSIDE HANDLE

OUTSIDE HANDLE : Removal and Installation

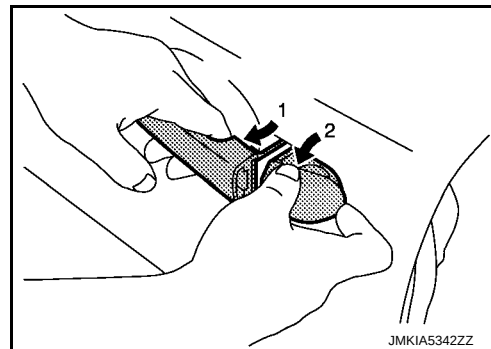
INFOID:000000012430276

REMOVAL

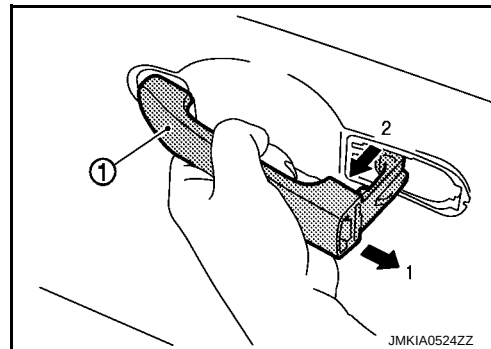
1. Remove inside handle. Refer to [DLK-300, "INSIDE HANDLE : Removal and Installation"](#)
2. Remove door grommet and bolt from grommet hole.



3. While pulling outside handle, remove outside handle escutcheon.



4. While pulling outside handle (1), slide towards rear of vehicle to remove.

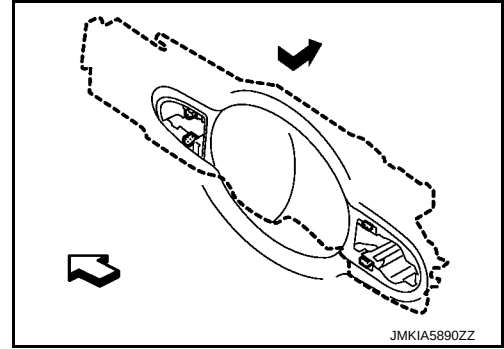


REAR DOOR LOCK

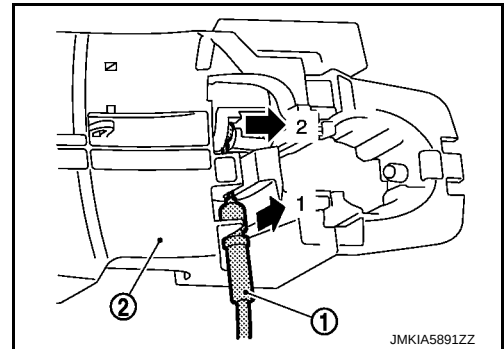
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

5. Remove front gasket and rear gasket.
6. Slide outside handle bracket toward rear of vehicle to remove.
⇐: Front



7. Disconnect outside handle cable (1) from outside handle bracket (2) as shown.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

BACK DOOR LOCK

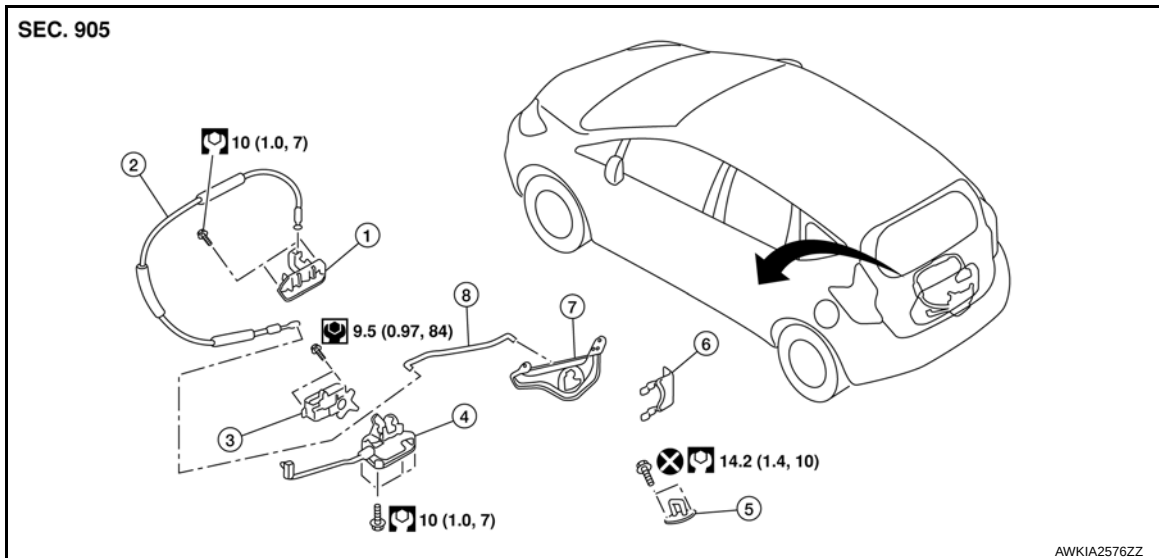
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

BACK DOOR LOCK

Exploded View

INFOID:0000000012430277



- | | | |
|---|-----------------------------------|--|
| 1. Outside handle | 2. Back door lock cable | 3. Back door lock actuator |
| 4. Back door lock | 5. Door striker | 6. Key cylinder rod clip (if equipped) |
| 7. Key cylinder rod bracket (if equipped) | 8. Key cylinder rod (if equipped) | |

BACK DOOR LOCK

BACK DOOR LOCK : Removal and Installation

INFOID:0000000012430278

REMOVAL

1. Remove back door inner finisher. Refer to [INT-36. "BACK DOOR INNER FINISHER : Removal and Installation"](#).
2. Remove back door outer finisher. Refer to [EXT-48. "Removal and Installation"](#).
3. Disconnect lock rod from key cylinder (if equipped).
4. Disconnect the harness connectors from the back door lock.
5. Disconnect door lock cable from handle.
6. Remove back door lock bolts and back door lock.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Tighten back door bolts to specification.
- After installation, check back door open/close and lock/unlock operation.

OUTSIDE HANDLE

OUTSIDE HANDLE : Removal and Installation

INFOID:0000000012430279

REMOVAL

1. Remove back door outer finisher. Refer to [EXT-48. "Removal and Installation"](#).
2. Release the back door lock cable from the outside handle.
3. Remove outside handle bolts and outside handle.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

BACK DOOR LOCK

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

- Tighten outside handle bolts to specification. Refer to [DLK-303, "Exploded View"](#).
- After installation, check back door open/close and lock/unlock operation.

FUEL FILLER LID OPENER

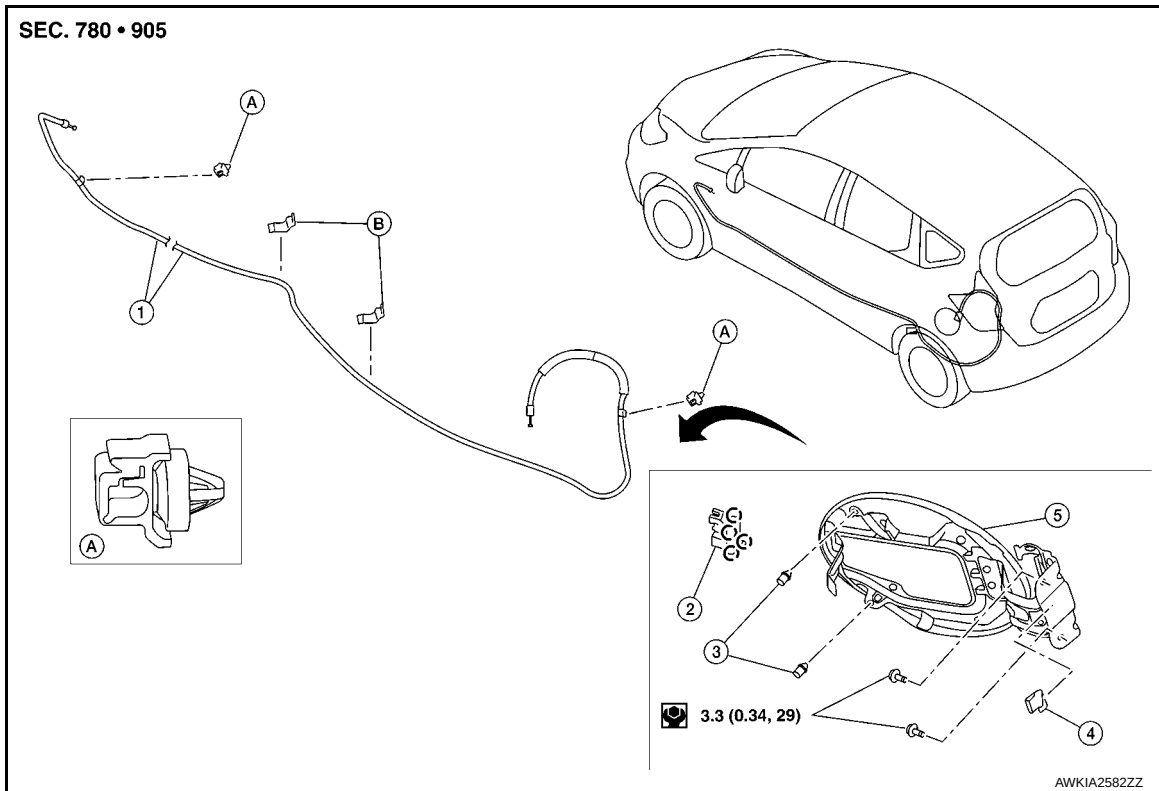
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

FUEL FILLER LID OPENER

Exploded View

INFOID:000000012430280



1. Fuel filler lid lock release cable

2. Fuel filler lid lock

3. Fuel filler lid bumper

4. Fuel filler lid spring

5. Fuel filler lid

A. Clip

B. Cable protector

⊖ Pawl

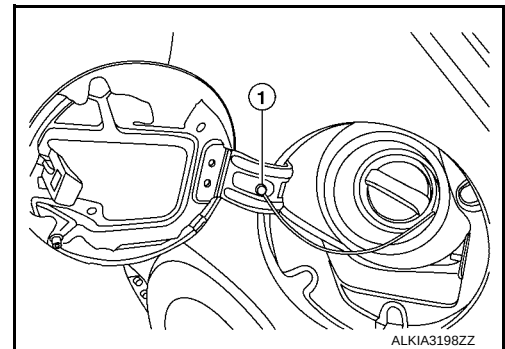
FUEL FILLER LID

FUEL FILLER LID : Removal and Installation

INFOID:000000012430281

REMOVAL

1. Remove fuel cap pin (1).

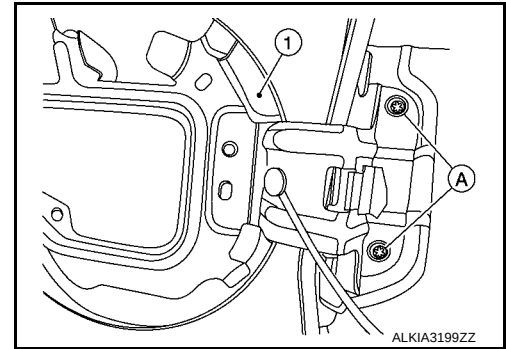


FUEL FILLER LID OPENER

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

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



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

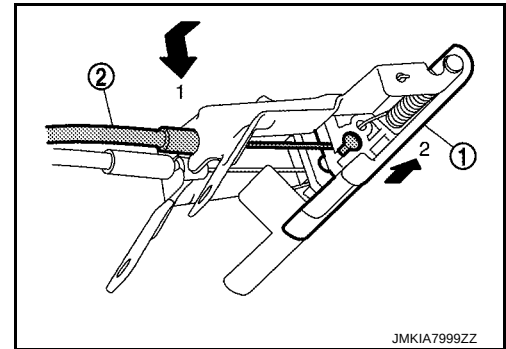
FUEL FILLER OPENER CABLE

FUEL FILLER OPENER CABLE : Removal and Installation

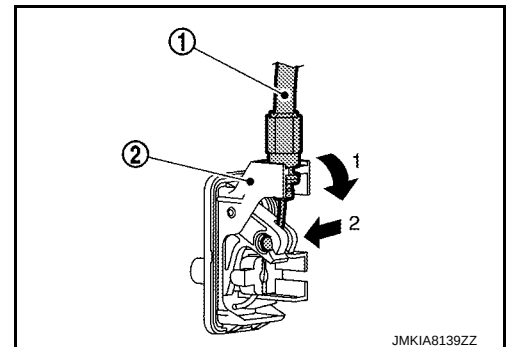
INFOID:0000000012430282

REMOVAL

1. Remove hood lock/fuel filler lid lock release handle. Refer to [DLK-167, "HOOD LOCK RELEASE HANDLE : Removal and Installation"](#).
2. Disconnect fuel filler lid opener cable (2) from hood lock/fuel filler lid lock release handle (1).



3. Remove dash side finisher (LH). Refer to [INT-24, "DASH SIDE FINISHER : Removal and Installation"](#).
4. Remove center pillar lower finisher (LH). Refer to [INT-25, "CENTER PILLAR LOWER FINISHER : Removal and Installation"](#).
5. Remove luggage side lower finisher (LH). Refer to [INT-34, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation"](#).
6. Disconnect fuel filler lid opener cable (1) by pulling downward and then sliding cable end to the side to remove from fuel filler lid lock assembly (2).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

FUEL FILLER LID LOCK

FUEL FILLER LID OPENER

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

FUEL FILLER LID LOCK : Removal and Installation

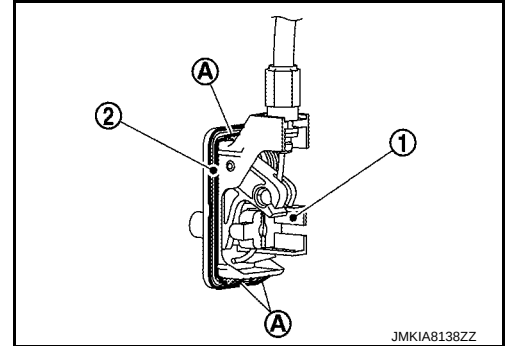
INFOID:000000012430283

REMOVAL

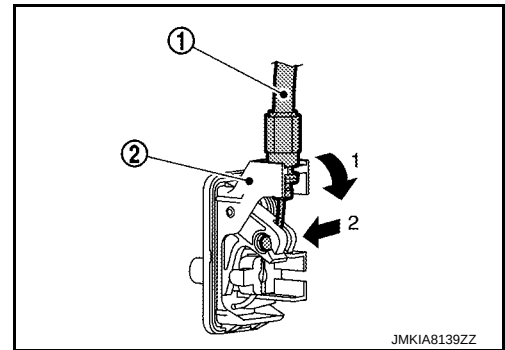
1. Fully open fuel filler lid.
2. Remove luggage side lower finisher (LH). Refer to [INT-34, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation"](#).
3. Disconnect the harness connector from the fuel filler lid lock assembly.
4. Release pawls (A) and remove fuel filler lid lock assembly (1).

CAUTION:

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



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



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

DLK

DOOR SWITCH

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

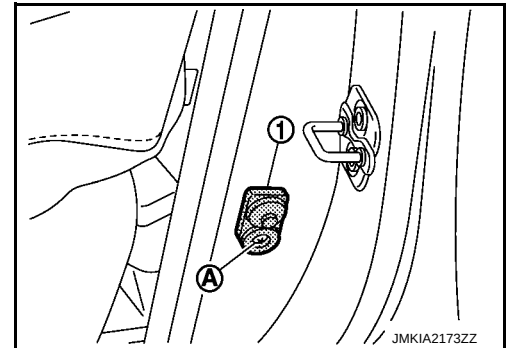
DOOR SWITCH

Removal and Installation

INFOID:0000000012430284

REMOVAL

1. Remove the door switch bolt (A).
2. Disconnect the harness connector and remove door switch (1).



INSTALLATION

Installation is in the reverse order of removal.

REMOTE KEYLESS ENTRY RECEIVER

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

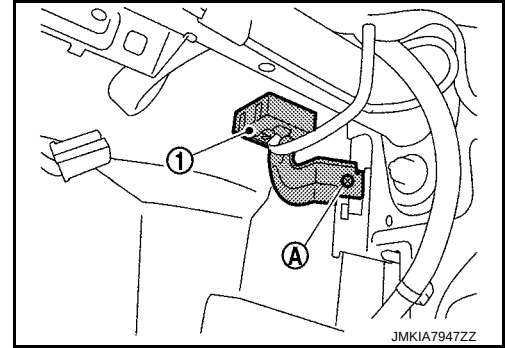
REMOTE KEYLESS ENTRY RECEIVER

Removal and Installation

INFOID:000000012430285

REMOVAL

1. Remove glove box assembly. Refer to [IP-25. "Removal and Installation"](#).
2. Remove remote keyless entry receiver bolt (A).
3. Disconnect the harness connector and remove remote keyless entry receiver (1)



INSTALLATION

Installation is in the reverse order of removal.

A
B
C
D
E
F
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I
J
L
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N
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P

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DLK

KEYFOB BATTERY

Removal and Installation

INFOID:000000012430286

REPLACEMENT

1. Remove screw from the rear of keyfob.
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 keyfob to malfunction
- The keyfob 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 (CR1620)

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 keyfob.
Refer to [DLK-247, "Component Function Check"](#).

STEERING LOCK UNIT

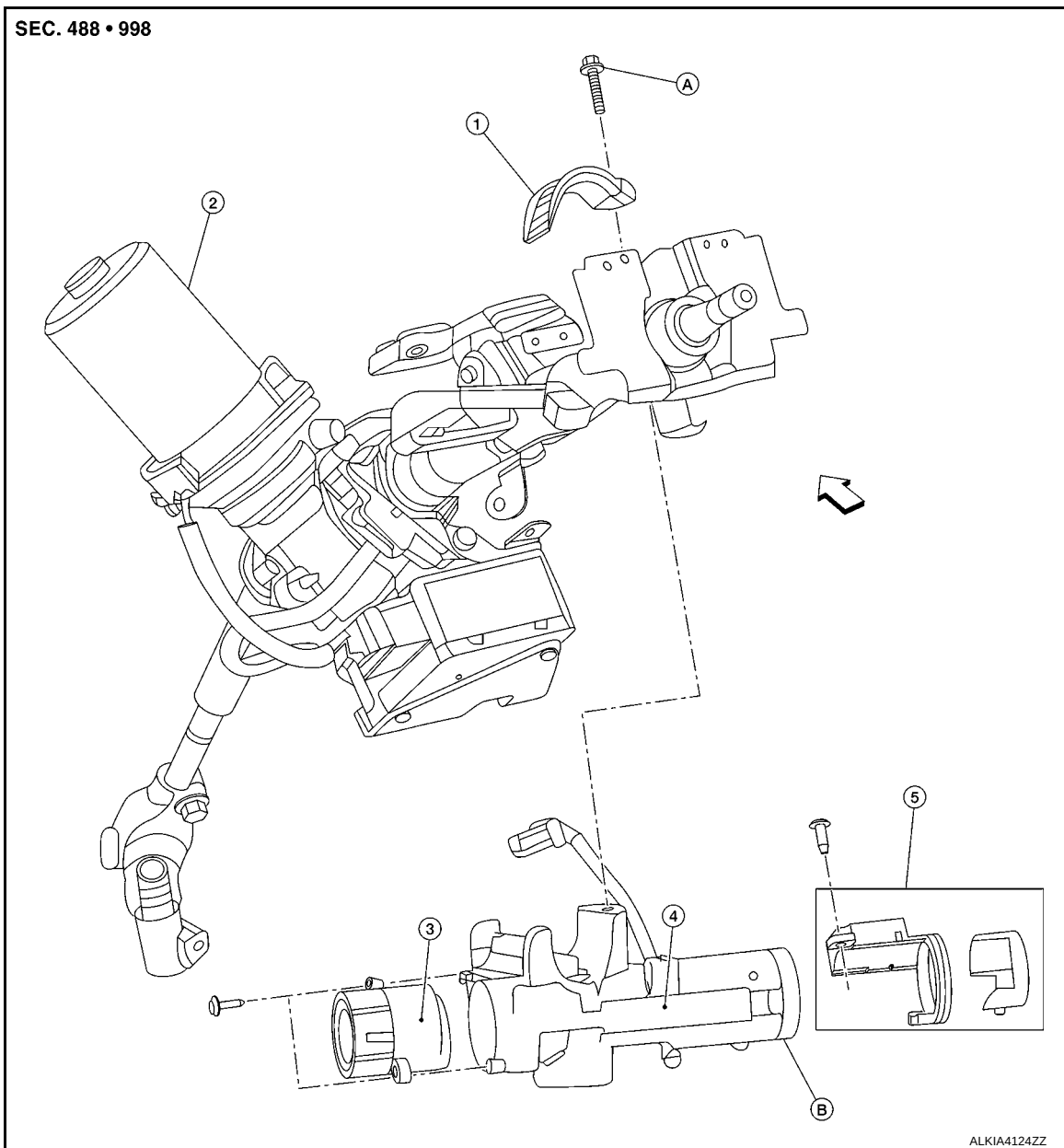
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

STEERING LOCK UNIT

Exploded View

INFOID:000000012828149



- | | | |
|--------------------------|----------------------|---|
| 1. Steering lock bracket | 2. Steering column | 3. Ignition switch |
| 4. Steering lock unit | 5. NATS antenna amp. | A. Tamper resistant self-shear type screw |
| B. Key cylinder | ↶ Front | |

NOTE:

Steering lock unit and key cylinder are serviced as an assembly. Ignition switch is available separately.

Removal and Installation - Steering lock unit

INFOID:000000012828150

REMOVAL

1. Disconnect battery cables. Refer to [PG-70, "Removal and Installation \(Battery\)"](#).
2. Remove combination switch. Refer to [BCS-138, "Removal and Installation"](#).
3. Remove cluster lid A. Refer to [IP-21, "Removal and Installation"](#).
4. Disconnect the harness connector from the spiral cable.
5. Disconnect the harness connector from the ignition switch.

STEERING LOCK UNIT

< REMOVAL AND INSTALLATION >

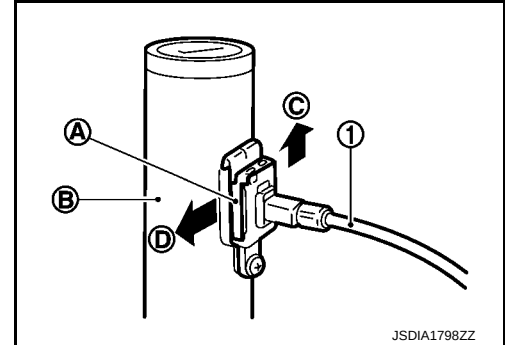
[WITHOUT INTELLIGENT KEY SYSTEM]

6. Disconnect the harness connector from the key switch.
7. For models with CVT but without intelligent key system, perform the following steps to separate key interlock cable from steering lock unit:
 - a. Lift lock plate (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.



8. Using suitable tool, remove tamper resistant self-shear type screw.
CAUTION:
Do not reuse screw. Replace with new tamper resistant self-shear type screw.
9. Remove steering lock bracket and steering lock unit.
10. Remove NATS antenna amp. (if necessary). Refer to [SEC-159, "Removal and Installation"](#).

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Do not reuse screw. Replace with new tamper resistant self-shear type screw.**
- **Tighten tamper resistant self-shear type screw until head breaks off.**
- Adjust the neutral position of the steering angle sensor. Refer to [BRC-55, "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Description"](#).
- For initialization and registration of mechanical keys, refer to CONSULT Immobilizer mode and follow the on-screen instructions.

Removal and Installation - Ignition switch

INFOID:0000000012828152

REMOVAL

1. Remove steering column cover. Refer to [IP-17, "Removal and Installation"](#).
2. Disconnect ignition switch harness connector.
3. Remove ignition switch screws and ignition switch.

INSTALLATION

Installation is in the reverse order of removal.

Adjust the neutral position of the steering angle sensor. Refer to [BRC-55, "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Description"](#).