

SECTION **DLK** DOOR & LOCK

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PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:0000000011151654

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

WARNING:

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

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

WARNING:

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

Precaution for Servicing Doors and Locks

INFOID:0000000011151655

WARNING:

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

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

PREPARATION

< PREPARATION >

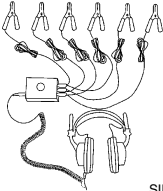
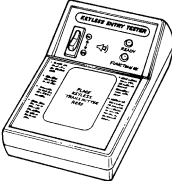
PREPARATION

PREPARATION

Special Service Tool

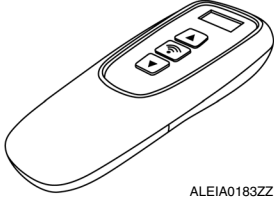
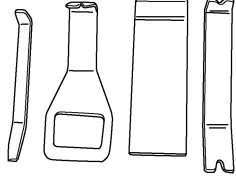
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The actual shape of the tools may differ from those illustrated here.

Tool number (TechMate No.) Tool name	Description
— (J-39570) Chassis Ear  SIIA0993E	Locating the noise
— (J-50397) NISSAN Squeak and Rattle Kit  ALJIA1232ZZ	Repairing the cause of noise
— (J-43241) Remote Keyless Entry Tester 	Used to test keyfobs
— (J-50190) Signal Tech II  ALEIA0131ZZ	• Activate and display TPMS transmitter IDs • Display tire pressure reported by the TPMS transmitter • Read TPMS DTCs • Register TPMS transmitter IDs • Test remote keyless entry keyfob relative signal strength • Check Intelligent Key relative signal strength • Confirm vehicle Intelligent Key antenna signal strength • Compatible with future sensors • Equipped with a display

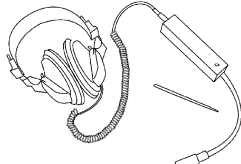
PREPARATION

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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 Tool

INFOID:0000000011151657

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

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COMPONENT PARTS

< SYSTEM DESCRIPTION >

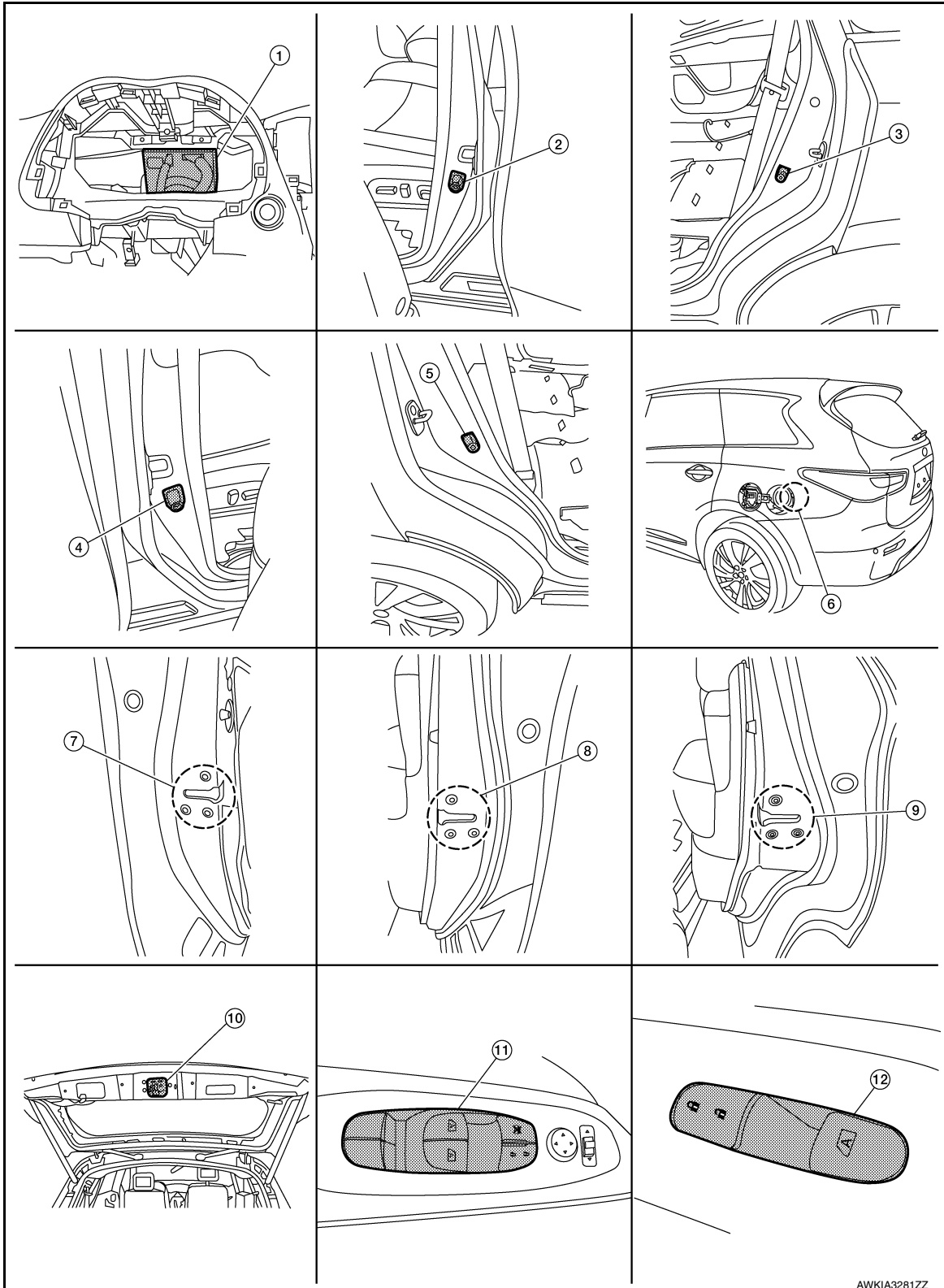
SYSTEM DESCRIPTION

COMPONENT PARTS

POWER DOOR LOCK SYSTEM

POWER DOOR LOCK SYSTEM : Component Parts Location

INFOID:0000000011151658



AWKIA3281ZZ

COMPONENT PARTS

< SYSTEM DESCRIPTION >

1. BCM (view with combination meter removed)	2. Front door switch LH	3. Rear door switch LH
4. Front door switch RH	5. Rear door switch RH	6. Fuel lid door lock actuator
7. Front door lock assembly LH	8. Front door lock actuator RH	9. Rear door lock actuator RH (LH similar)
10. Back door lock assembly	11. Main power window and door lock/unlock switch	12. Power window and door lock/unlock switch RH

POWER DOOR LOCK SYSTEM : Component Description

INFOID:0000000011151659

Item	Function
BCM	Controls the door lock system
Door switch	Inputs door open/close condition to BCM
Door lock and unlock switch	• Detects if door lock and unlock switch is press/release • Integrated in the main power window and door lock/unlock switch and power window and door lock/unlock switch (RH)
Door lock actuator	Output lock/unlock signal from BCM and locks/unlocks each door
Fuel lid door lock actuator	Output lock/unlock signal from BCM and locks/unlocks fuel filler lid

INTELLIGENT KEY SYSTEM

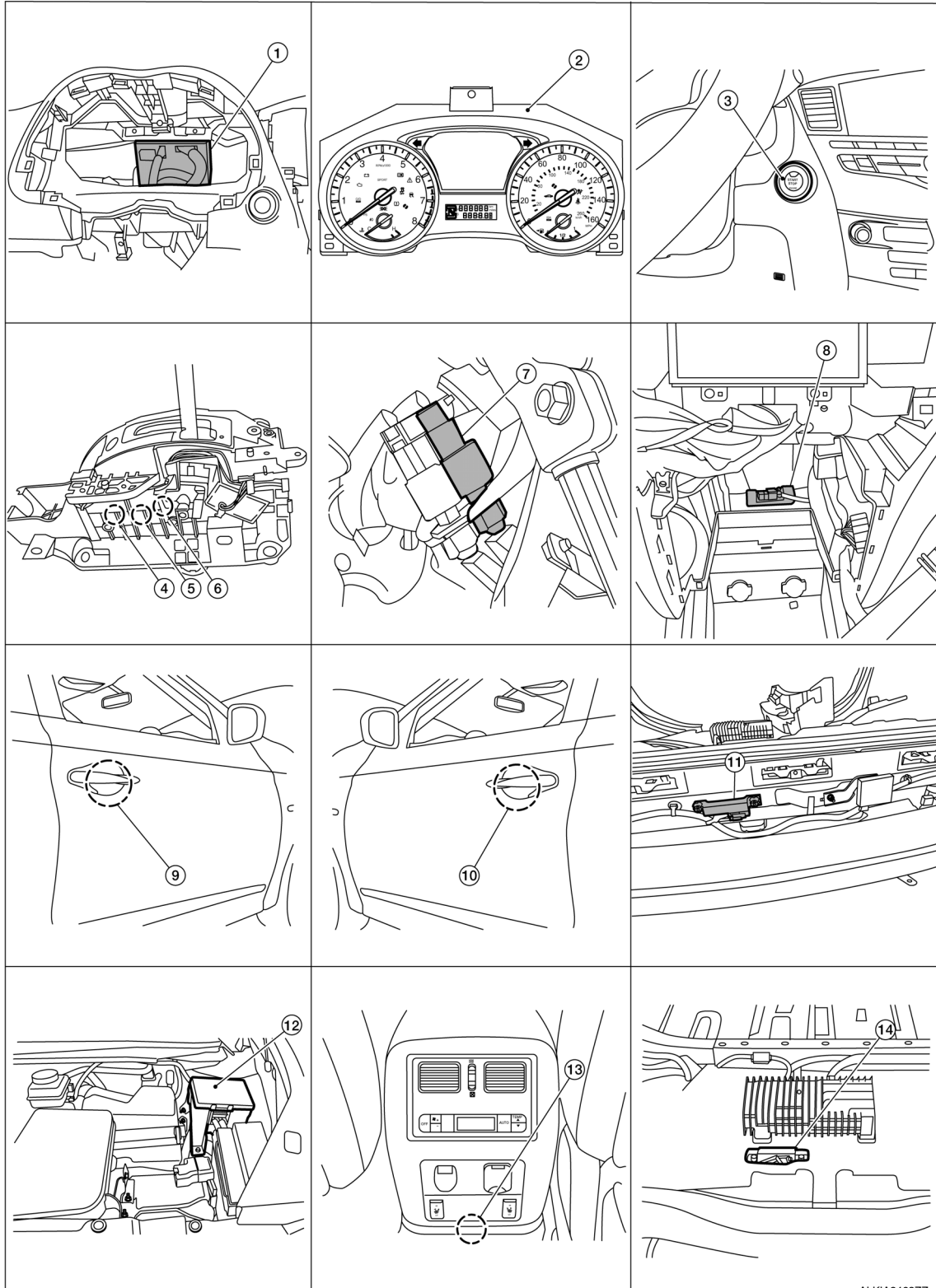
DLK

COMPONENT PARTS

< SYSTEM DESCRIPTION >

INTELLIGENT KEY SYSTEM : Component Parts Location

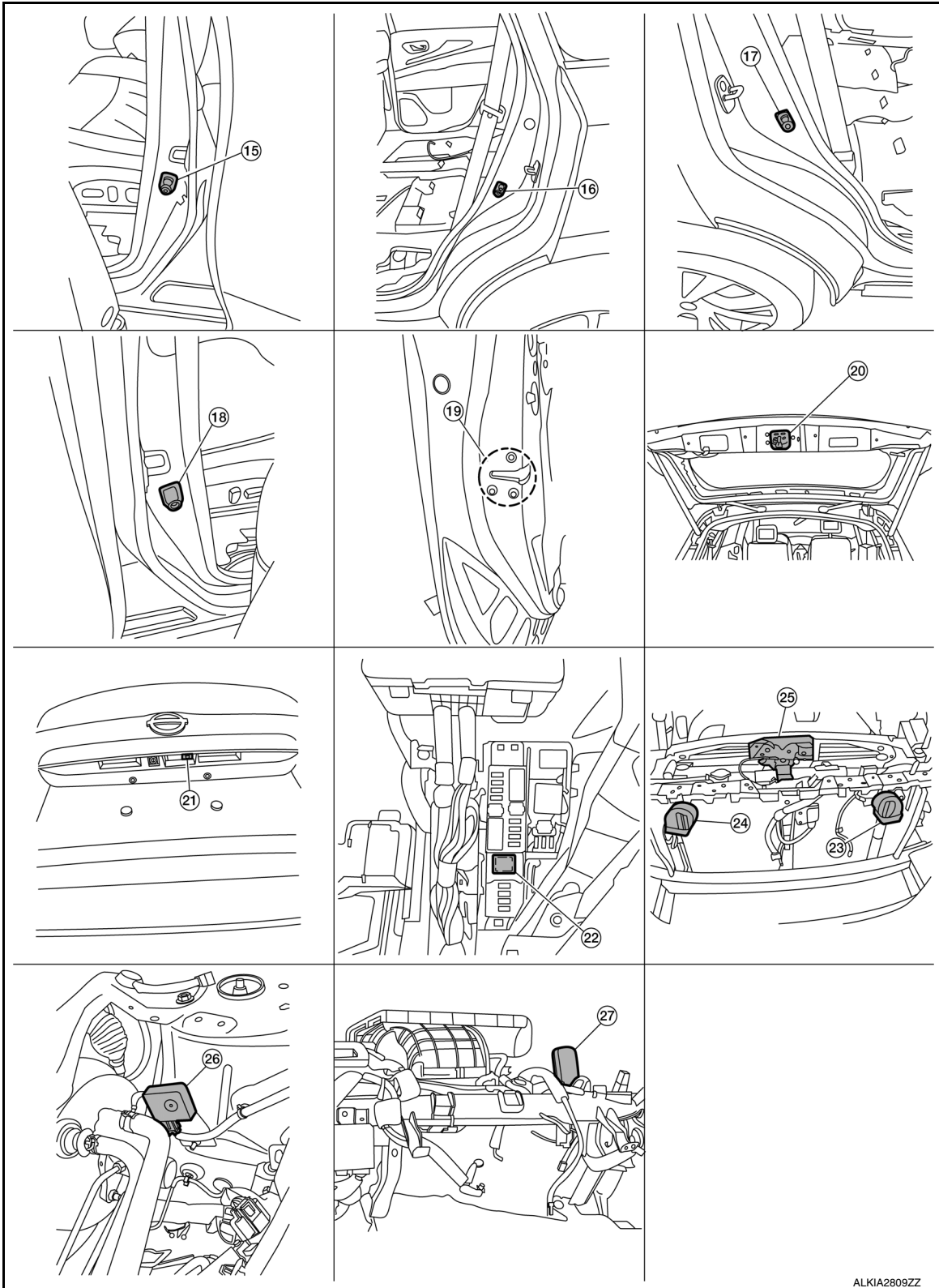
INFOID:0000000011151660



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COMPONENT PARTS

< SYSTEM DESCRIPTION >



1. BCM (view with combination meter removed)	2. Combination meter	3. Push-button ignition switch
4. CVT shift selector (P (Park) position switch) (view with center console removed)	5. CVT shift selector (Shift lock solenoid) (view with center console removed)	6. CVT shift selector (P (Park) position switch) (view with center console removed)

COMPONENT PARTS

< SYSTEM DESCRIPTION >

7. Stop lamp switch	8. Inside key antenna (instrument center)	9. Front outside handle RH (RH request switch and outside key antenna passenger side)
10. Front outside handle LH (LH request switch and outside key antenna drivers side)	11. Outside key antenna (rear bumper) (view with rear bumper cover removed)	12. IPDM E/R
13. Inside key antenna (console)	14. Inside key antenna (luggage room) (view with rear carpet removed)	15. Front door switch LH
16. Rear door switch LH	17. Rear door switch RH	18. Front door switch RH
19. Front door lock assembly LH	20. Back door lock assembly	21. Back door opener switch
22. Horn relay	23. Horn (low)	24. Horn (high)
25. Hood switch	26. Intelligent Key warning buzzer	27. Remote keyless entry receiver (view with instrument panel removed)

INTELLIGENT KEY SYSTEM : Component Description

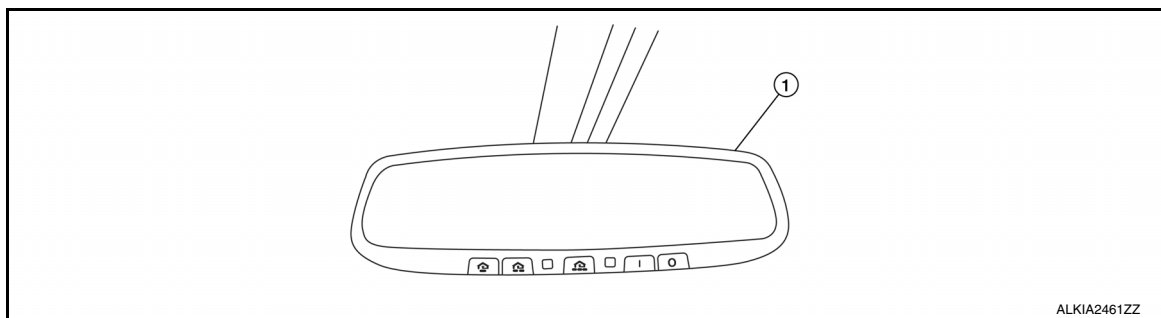
INFOID:0000000011151661

Item	Function
BCM	Controls the Intelligent Key system.
Back door opener switch	Inputs back door open/close condition to BCM.
Door lock actuator	Output lock/unlock signal from BCM and locks/unlocks each door.
Stop lamp switch	Inputs the brake pedal position condition to BCM.
Push-button ignition switch	Inputs the push-button ignition switch ON/OFF condition to BCM.
Hood switch	Inputs hood open/close condition to BCM.
Door switch	Inputs door open/close condition to BCM.
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM.
Request switch	Inputs lock/unlock operation to BCM.
Intelligent Key	Transmits button operation to remote keyless entry receiver.
Outside key antenna	Detects if Intelligent Key is outside the vehicle.
Inside key antenna	Detects if Intelligent Key is inside the vehicle.
Combination meter	Display, buzzer (combination meter) and KEY warning lamp are installed to combination meter.
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound.

INTEGRATED HOMELINK TRANSMITTER

INTEGRATED HOMELINK TRANSMITTER : Component Parts Location

INFOID:0000000011151662



ALKIA2461ZZ

1. Auto anti-dazzling inside mirror

COMPONENT PARTS

< SYSTEM DESCRIPTION >

INTEGRATED HOMELINK TRANSMITTER : Component Description

INFOID:0000000011151663

Item	Function
Homelink universal transceiver	A maximum of 3 radio signals can be stored and transmitted to operate the garage door, etc.

AUTOMATIC BACK DOOR SYSTEM

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

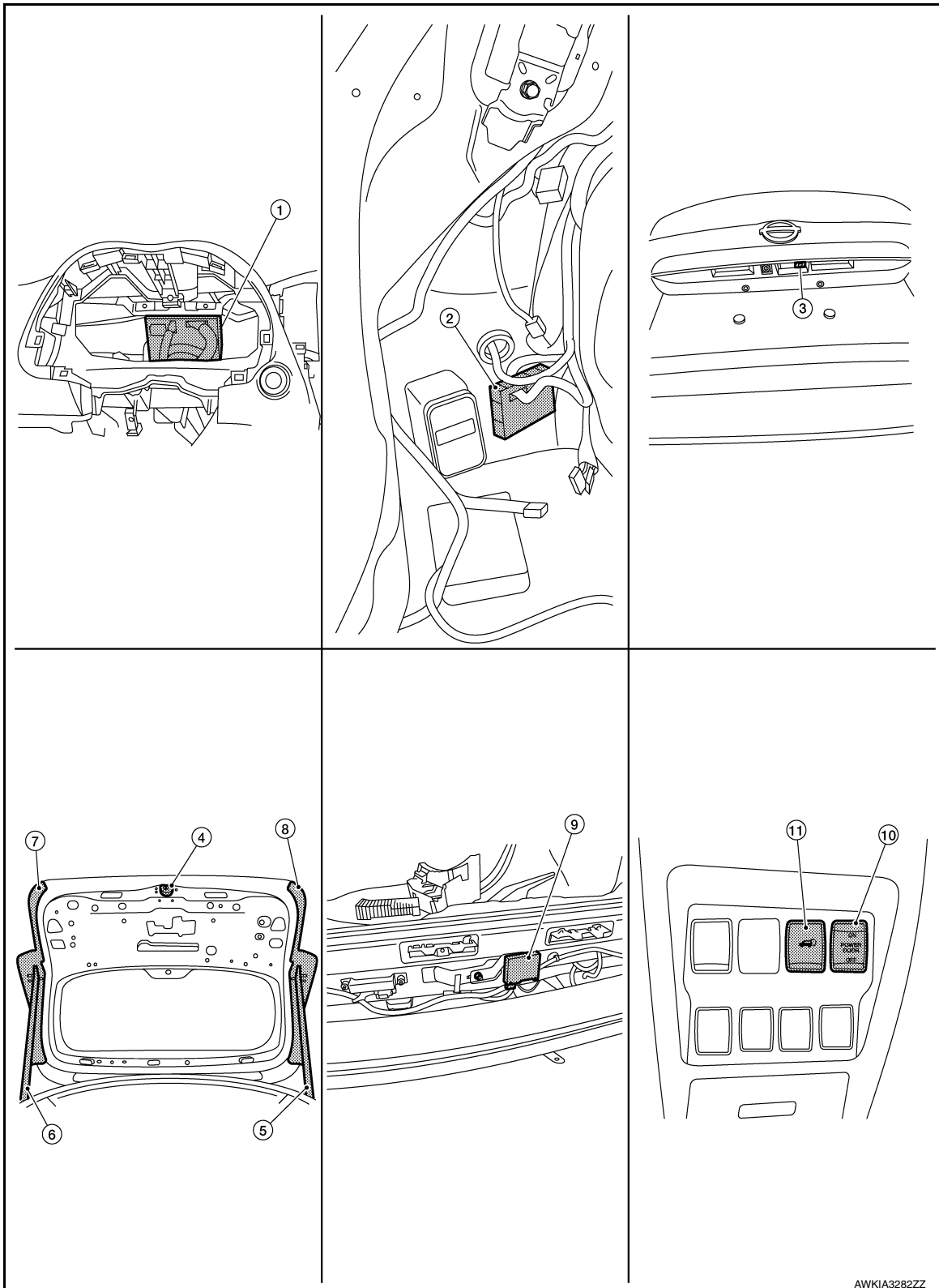
P

COMPONENT PARTS

< SYSTEM DESCRIPTION >

AUTOMATIC BACK DOOR SYSTEM : Component Parts Location

INFOID:0000000011151664



AWKIA3282ZZ

1. BCM (view with combination meter removed)	2. Automatic back door control module (view with luggage side lower finisher removed)	3. Back door opener switch
4. Back door lock assembly	5. Spindle Unit RH	6. Spindle Unit LH

COMPONENT PARTS

< SYSTEM DESCRIPTION >

7. Touch sensor LH	8. Touch sensor RH	9. Back door warning chime (view with rear bumper cover removed)
10. Automatic back door main switch	11. Automatic back door switch	

AUTOMATIC BACK DOOR SYSTEM : Component Description

INFOID:0000000011151665

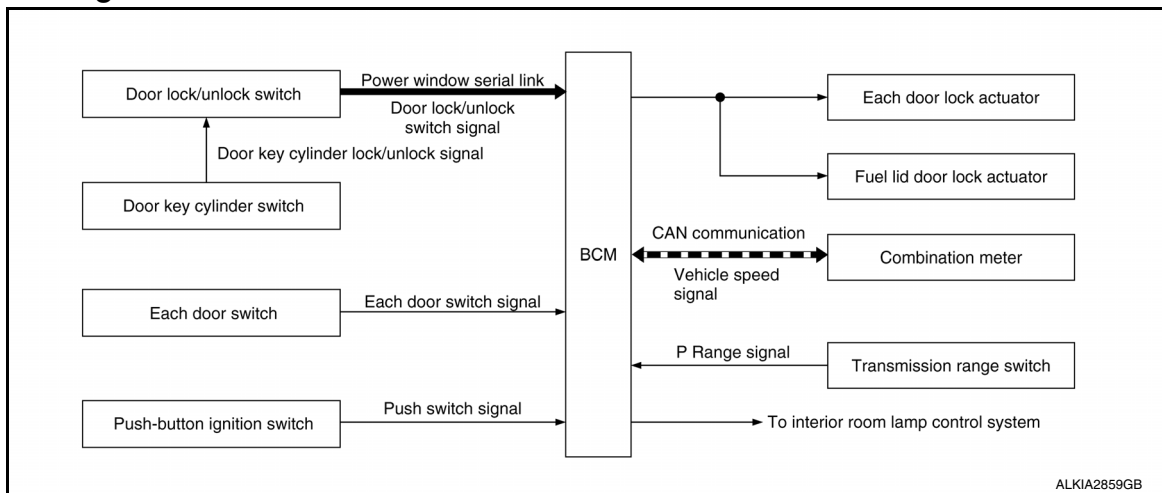
Item	Function
Automatic back door control module	Controls the automatic back door system.
BCM	Transmits and receives signals to the automatic back door control module.
Combination meter	Transmits vehicle speed signal to CAN communication line.
Automatic back door warning chime	Warns the user of the automatic back door condition and inappropriate operations with the chime sounds.
Touch sensor LH/RH	During back door close operation, the touch sensor detects any trapped foreign material.
Back door opener switch	Detects if back door opener switch is press/release.
Back door request switch	Detects if back door request switch is press/release.
Automatic back door switch	Detects if automatic back door switch is press/release.
Automatic back door main switch	Detects if automatic back door main switch is press/release.
Automatic back door close switch	Detects if automatic back door close switch is press/release.
Back door lock assembly	Back door closure motor, half latch switch, open switch, close switch and back door switch are installed: • Closure motor: Inputs open/close signal from automatic back door control module and activates the back door auto closure operation. • Half latch switch: Starts the closure motor close operation. • Open switch: Stops the closure motor open operation. • Close switch: Stops the closure motor close operation. • Back door switch: Inputs back door open/ close condition to BCM.
Spindle unit	Encoder and spindle motor are installed: • Encoder: Automatic back door control module receives the pulse signals from encoders A and B that occurred due to synchronization with the back door operation. The automatic back door control module calculates the back door position, operation direction, and operation speed according to the received pulse signals. • Spindle motor: Inputs open/close signal from automatic back door control module and activates the automatic back door open/close operation.

SYSTEM (POWER DOOR LOCK SYSTEM)

< SYSTEM DESCRIPTION >

SYSTEM (POWER DOOR LOCK SYSTEM)

System Diagram



System Description

INFOID:0000000011151667

DOOR LOCK FUNCTION

Door Lock and Unlock Switch

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

Door Key Cylinder Switch

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

Selective unlock operation mode can be changed using CONSULT.

Refer to [BCS-15. "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)".](#)

DOOR KEY CYLINDER SWITCH POWER WINDOW FUNCTION

Driver side door key cylinder LOCK/UNLOCK operation can activate power window. Refer to [PWC-10. "System Description".](#)

IGNITION POSITION WARNING FUNCTION

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

INTERIOR ROOM LAMP CONTROL FUNCTION

Interior room lamp is controlled according to door lock/unlock state, refer to [INL-6. "INTERIOR ROOM LAMP CONTROL SYSTEM : System Description".](#)

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (LOCK OPERATION)

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

Vehicle Speed Sensing Auto Door Lock

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

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

SYSTEM (POWER DOOR LOCK SYSTEM)

< SYSTEM DESCRIPTION >

P Range Interlock Door Lock

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

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

Setting change of Automatic Door Lock/Unlock Function

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

With CONSULT

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

Without CONSULT

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

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

OFF → ON : 2 blinks

ON → OFF : 1 blink

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (UNLOCK OPERATION)

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

IGN OFF Interlock Door Unlock

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

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

P Range Interlock Door Unlock

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

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

Setting change of Automatic Door Lock/Unlock Function

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

With CONSULT

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

Without CONSULT

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

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

OFF → ON : 2 blinks

ON → OFF : 1 blink

SYSTEM (INTELLIGENT KEY SYSTEM)

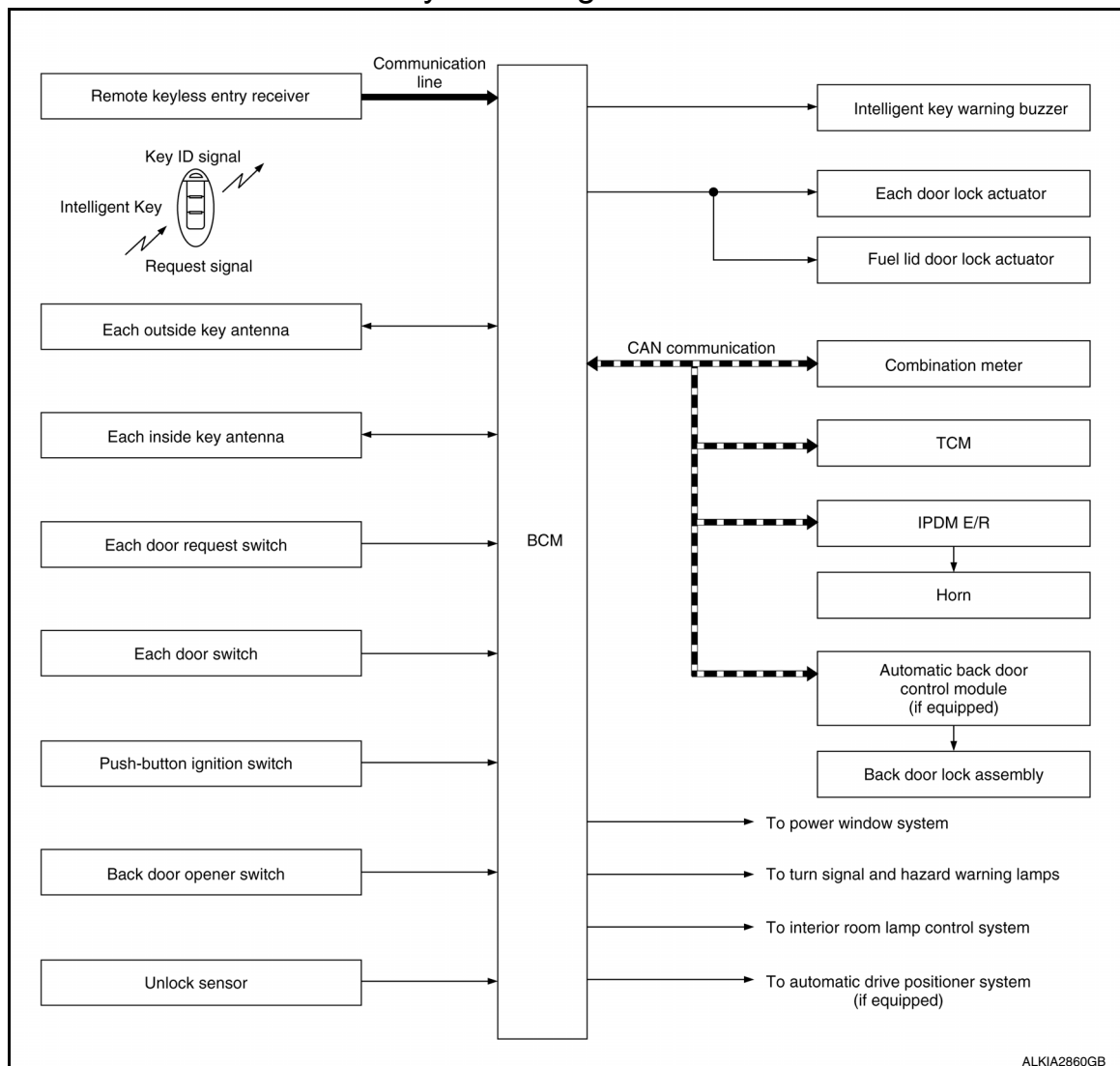
< SYSTEM DESCRIPTION >

SYSTEM (INTELLIGENT KEY SYSTEM)

INTELLIGENT KEY SYSTEM

INTELLIGENT KEY SYSTEM : System Diagram

INFOID:0000000011151668



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INTELLIGENT KEY SYSTEM : System Description

INFOID:0000000011151669

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

CAUTION:

The driver should always carry the Intelligent Key.

- The settings for each function can be changed with CONSULT.
- If an Intelligent Key is lost, a new Intelligent Key can be registered. A maximum of 4 Intelligent Keys can be registered.
- It is possible to perform a diagnosis on the system and register an Intelligent Key with CONSULT.
- 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
Back door opener	The back door can be opened by carrying the Intelligent Key and pressing the back door opener switch.	DLK-26

SYSTEM (INTELLIGENT KEY SYSTEM)

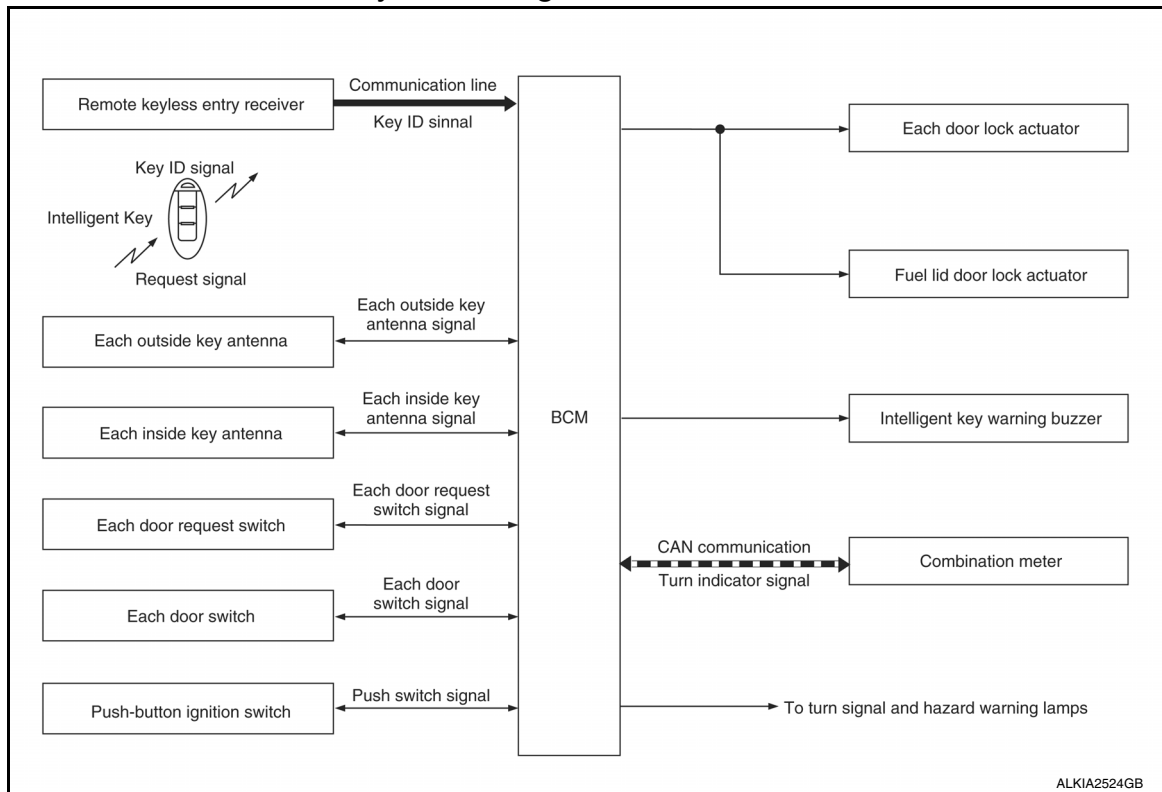
< SYSTEM DESCRIPTION >

Function	Description	Refer
Remote keyless entry	Lock/unlock can be performed by pressing the remote controller button of the Intelligent Key.	DLK-27
Key reminder	The key reminder buzzer sounds a warning if the door is locked with the key left inside the vehicle.	DLK-30
Welcome light	When the Intelligent Key is carried, and vehicle doors are approached, the BCM illuminates interior room lamps and operates heart beat operation of the push-button ignition switch.	DLK-34
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-35
Engine start	The engine can be turned on while carrying the Intelligent Key.	SEC-9
Interior room lamp control	Interior room lamp is controlled according to door lock/unlock state.	INL-6
Power window	Power window can be operated by Intelligent Key button operation.	PWC-10
Panic alarm	When Intelligent Key panic alarm button is pressed, horn sounds.	SEC-14
Intelligent Key interlock	Setting of auto driving position can be automatically set, according to key ID of Intelligent Key to the position that is registered in advance.	Automatic drive positioner ADP-12
	Setting of air conditioning system can be set according to key ID of Intelligent Key to the setting value that is set before turning ignition switch OFF.	Air conditioning system HAC-18
	Setting of multi AV system can be set according to key ID of Intelligent Key to the setting value that is set before turning ignition switch OFF.	Multi AV system AV-14

DOOR LOCK FUNCTION

DOOR LOCK FUNCTION : System Diagram

INFOID:0000000011151670



DOOR LOCK FUNCTION : System Description

INFOID:0000000011151671

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

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

OPERATION DESCRIPTION

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

OPERATION CONDITION

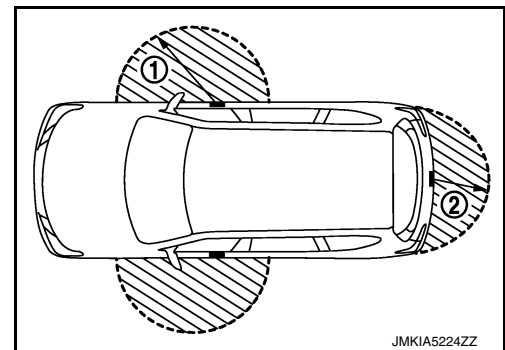
If the following conditions are satisfied, door lock/unlock operation is performed if the door request switch is operated.

Each door request switch operation	Operation condition
Lock	• All doors are closed. • Panic alarm is not activated. • P (Park) position warning is not activated. • Intelligent Key is outside the vehicle. • Intelligent Key is within outside key antenna detection area*.
Unlock	• Panic alarm is not activated. • Intelligent Key is outside the vehicle. • Intelligent Key is within outside key antenna detection area*.

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

OUTSIDE KEY ANTENNA DETECTION AREA

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



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SELECTIVE UNLOCK FUNCTION

Lock Operation

When a LOCK signal is sent from door request switch (driver side, passenger side, back door), all doors and fuel filler lid are locked.

Unlock Operation

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

How To Change Selective Unlock Operation Mode

Selective unlock operation mode can be changed using CONSULT.

Refer to [BCS-21. "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

HAZARD AND BUZZER REMINDER FUNCTION

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

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

Operating Function Of Hazard And buzzer Reminder

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

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

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

How To Change Hazard And Buzzer Reminder Mode

Hazard and buzzer reminder mode can be changed using CONSULT.

Refer to [BCS-21, "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)".](#)

AUTO DOOR LOCK FUNCTION

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

Operating condition	• Door switch is ON (door is open). • Door is locked. • Push switch is pressed.

How To Change Auto Door Lock Operation Mode

Auto door lock operation mode can be changed using CONSULT.

Refer to [BCS-21, "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)".](#)

LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

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

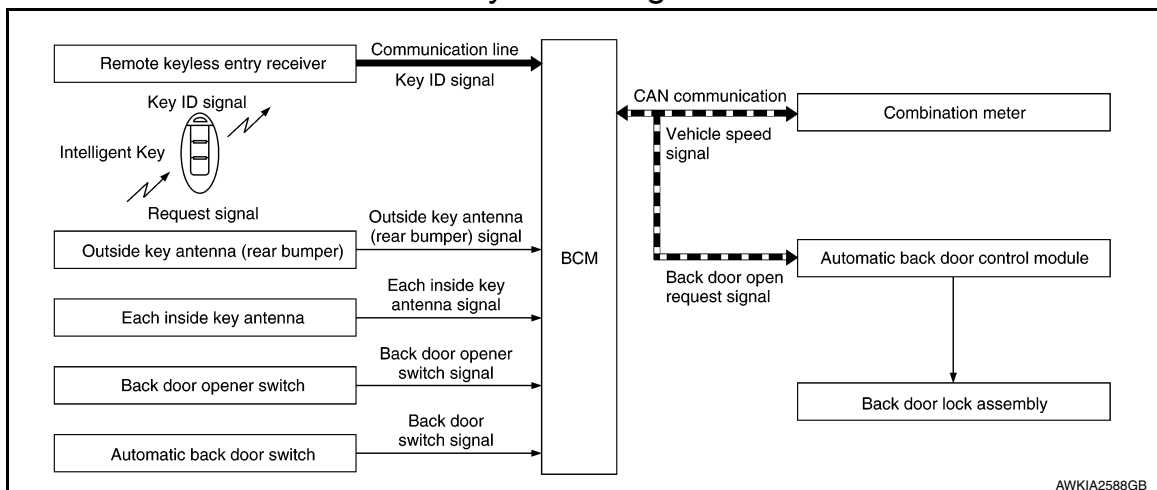
BACK DOOR OPEN FUNCTION

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

BACK DOOR OPEN FUNCTION : System Diagram

INFOID:000000011151672



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BACK DOOR OPEN FUNCTION : System Description

INFOID:000000011151673

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

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

BACK DOOR OPEN

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

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

The operation of then back door open is the same as the automatic back door system, refer to [DLK-39, "System Description"](#).

OPERATION CONDITION

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

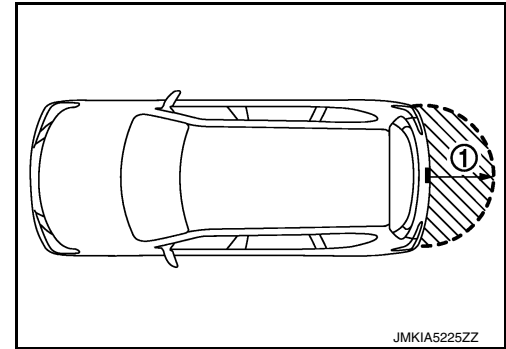
Back door opener switch operation	Operation condition
Back door open	• Vehicle speed is less than 5 km/h (3 MPH). • Intelligent Key is within outside key antenna (rear bumper) detection area. • Back door is closed. • Panic alarm is not activated.

OUTSIDE KEY ANTENNA DETECTION AREA

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

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



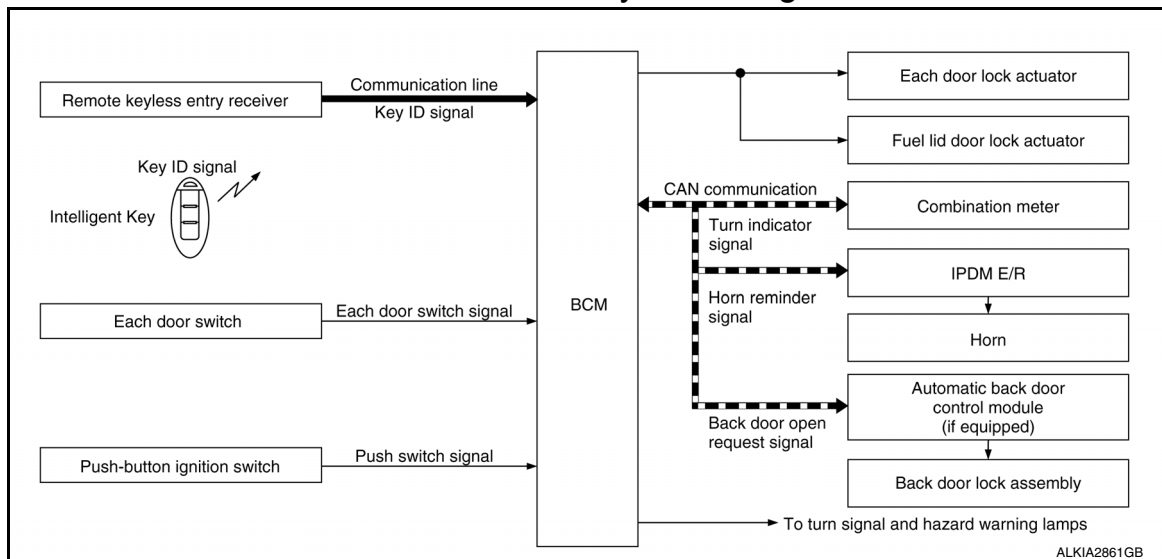
LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

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

REMOTE KEYLESS ENTRY FUNCTION

REMOTE KEYLESS ENTRY FUNCTION : System Diagram



REMOTE KEYLESS ENTRY FUNCTION : System Description

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

OPERATION

Remote keyless entry system controls operation of the following items.

- Door lock/unlock function
- Selective unlock function

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

- Auto door lock function
- Hazard and horn reminder function
- Automatic back door open/close function
- Remote engine start

OPERATION AREA

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

REMOTE ENGINE START FUNCTION

- When the lock button and then the remote engine start button of the Intelligent Key are pressed within 5 seconds of each other, a start signal is transmitted from Intelligent Key to BCM via remote keyless entry receiver.
- When the BCM receives the remote engine start signal, it locks all doors and the fuel lid, flashes the hazard lamps and chirps the horn and the engine will then start.
- To exit the remote engine start mode from inside the vehicle, depress the brake pedal and press the push-button ignition switch at the same time.
- To cancel the remote engine start mode away from the vehicle, press the remote engine start button on the Intelligent Key.
- Once the vehicle has been started using the remote engine start feature it will remain running for 10 minutes. Extended run time can be added to the initial 10 minute running time by pressing the lock button and remote engine start button within 5 seconds of each other. This will add an additional 10 minutes of running time. Extended time can only be added once, for a total run time of up to 20 minutes.

Remote engine start cancel operation	• Anti-theft alarm - unauthorized entry • Maximum time for engine to run by remote start has been exceeded. • Hazard lamps are turned on. • Push-button start button is pressed without the Intelligent Key in the vehicle. • Push-button start button is pressed without depressing the brake pedal. • The hood is opened while the remote engine start is engaged.

DOOR LOCK/UNLOCK FUNCTION

- When door lock/unlock button of the Intelligent Key is pressed, lock signal or unlock signal transmitted from Intelligent Key to BCM via remote keyless entry receiver.
- When BCM receives the door lock/unlock signal, it operates all door lock actuators and fuel lid lock actuator, blinks the hazard lamp (lock: 2 time, unlock: 1 times) and horn chirp signal to IPDM E/R at the same time as a reminder.
- IPDM E/R honks horn (lock: 1 time) as a reminder.

OPERATION CONDITION

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

Remote controller operation	Operation condition
Lock	• Panic alarm is not activated. • P (Park) position warning is not activated.
Unlock	Panic alarm is not activated.

SELECTIVE UNLOCK FUNCTION

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

How to change selective unlock operation mode.

Selective unlock operation mode can be changed using CONSULT.

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

AUTO DOOR LOCK FUNCTION

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

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

Operating condition

- Door switch is ON (door is open)
- Door is locked
- Push switch is pressed

How to change auto door lock operation mode.

Auto door lock mode can be changed using CONSULT.

Refer to [BCS-21, "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

HAZARD AND HORN REMINDER FUNCTION

When doors are locked or unlocked by Intelligent Key, BCM blinks hazard warning lamps as a reminder. The hazard and horn reminder has a horn chirp mode (C mode) and a non-horn chirp mode (S mode).

Operating Function of Hazard and Horn Reminder

	C mode		S mode	
	Lock	Unlock	Lock	Unlock
Intelligent Key operation	Lock	Unlock	Lock	Unlock
Hazard warning lamp blinks	Twice	Once	Twice	—
Horn sound	Once	—	—	—

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

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

How to Change Hazard and Horn Reminder Mode

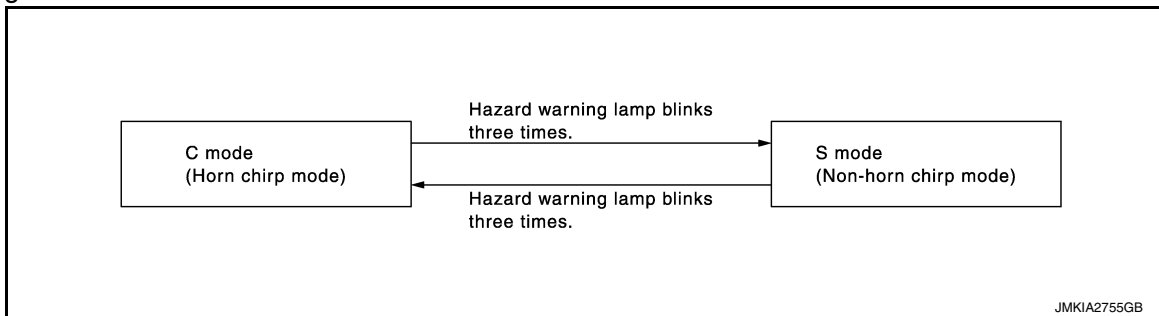
With CONSULT

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

Refer to [BCS-21, "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

Without CONSULT

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



AUTOMATIC BACK DOOR OPEN/CLOSE FUNCTION

When back door button of Intelligent Key is pressed for 0.4 second or more, back door open automatically for detailed description, refer to [DLK-39, "System Description"](#).

LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

SYSTEM (INTELLIGENT KEY SYSTEM)

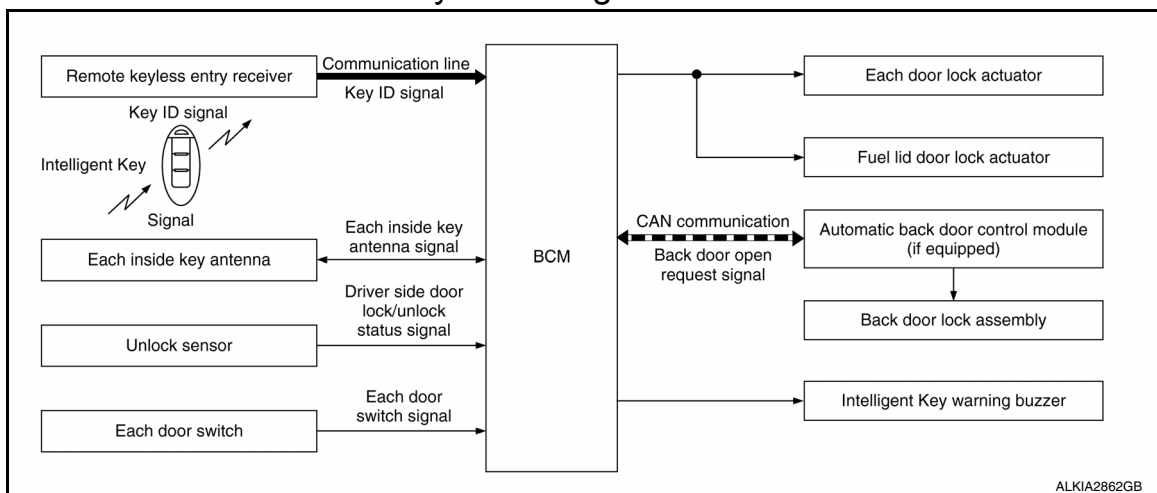
< SYSTEM DESCRIPTION >

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

KEY REMINDER FUNCTION

KEY REMINDER FUNCTION : System Diagram

INFOID:0000000011151676



KEY REMINDER FUNCTION : System Description

INFOID:0000000011151677

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

Key remainder function	Operation condition	Operation
Driver door closed*	Right after driver side door is closed under the following conditions: • Door lock operation is performed. • Driver side door is open. • Driver side door is in lock state.	All doors (except back door) and fuel filler lid unlock.

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

Key remainder function	Operation condition	Operation
Door is open or closed	Right after all doors are closed under the following conditions: - Intelligent Key is inside the vehicle. - Any door is open. - All doors (except back door) are locked by door lock and unlock switch or door lock knob.	- All doors (except back door) and fuel filler lid unlock. - Honk Intelligent Key warning buzzer.
Back door is closed	Right after back door is closed under the following conditions: - Intelligent Key is inside vehicle. - All doors (except for back door) are closed. - All doors (except for back door) are locked.	- All doors (except for back door) and fuel filler lid unlock. - Back door can open with back door opener switch. - Honk Intelligent Key warning buzzer.

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

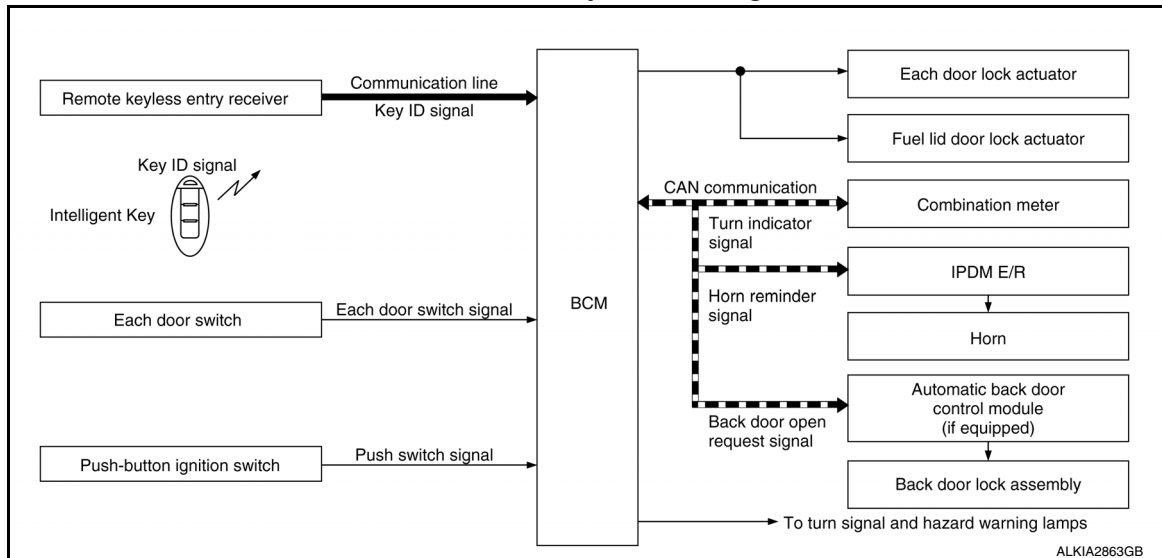
CAUTION:

- The above function operates when the Intelligent Key is inside the vehicle. However, there may be times when the Intelligent Key cannot be detected. 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.

REMOTE ENGINE START FUNCTION

REMOTE ENGINE START FUNCTION : System Diagram

INFOID:0000000011151678



REMOTE ENGINE START FUNCTION : System Description

INFOID:0000000011151679

OPERATION

Remote keyless entry system controls operation of the following items.

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

OPERATION AREA

The remote engine start operating range is approximately 60 m (197 ft) from the vehicle, but not inside the vehicle.

REMOTE ENGINE START FUNCTION

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

- The remote engine start function is activated when the lock button of the Intelligent Key is pressed and released, then within 5 seconds, the remote engine start button is pressed and held for at least 2 seconds. At this time, a start signal is transmitted from the Intelligent Key to the BCM via the remote keyless entry receiver.
- When the BCM receives the lock signal, it locks all doors and the fuel lid, flashes the hazard lamps and chirps the horn (the horn will chirp only if the answer back horn feature is activated).
- When the BCM receives a successful remote engine start signal, the turn signals will flash once and the parking/tail lamps will come on.
- To enter normal engine run mode from inside the vehicle, depress and hold the brake pedal, then press the push-button ignition switch.
- To cancel the remote engine start mode away from the vehicle, press the remote engine start button on the Intelligent Key.
- Once the vehicle has been started using the remote engine start feature it will remain running for 10 minutes. Extended run time can be added to the initial 10 minute running time by first pressing and releasing the lock button, then, within 5 seconds, pressing and holding the remote engine start button for at least 2 seconds. The turn signals will flash once and an additional 10 minutes of running time will be added. The additional 10 minutes starts when the extended run time is activated. Extended time can only be added once, for a maximum run time of up to 20 minutes.

Additional remote engine start cancel operation	• Anti-theft alarm is activated - unauthorized entry • Maximum time for engine to run by remote start has been exceeded. • Hazard lamps are turned on. • Push-button ignition switch is pressed without the Intelligent Key in the vehicle. • Push-button ignition switch is pressed without depressing the brake pedal first. • The hood is opened while the remote engine start is engaged. • The vehicle has been moved out of park before "brake and push" action is completed.
Limitations/Restrictions	• Remote engine start must be set to ON within Vehicle Settings of the combination meter. • Engine must be stopped (0 RPM) before engine can be remotely started. - Must wait for 6 seconds or more after IGN RUN → OFF. • Remote engine start can only be activated up to 2 times. - Remote engine start extended time counts as 1 remote engine start activation. - Cycling IGN via push-button ignition switch resets this counter. • User has 5 seconds to press and hold remote engine start button after lock button is pressed. • Remote engine start must be pressed and held for 2 seconds or more after lock button is pressed. • Maximum remote start time is 20 minutes (this includes remote engine start extended time). • Operation area is approximately 60 m (197 ft) from the vehicle, but not inside of the vehicle. • The push-button ignition switch must not be in the ACC or ON positions. • The vehicle must be in Park. • Hazard flashers must not be on. • There must not be any registered Intelligent Keys inside the vehicle. • Brakes must not be pressed when attempting to activate remote engine start. - Improper remote engine start operation can occur when stop lamp switch is misadjusted or inoperative. • The doors must be closed. • The back door must be closed. • The hood must be closed. • No current DTCs in the BCM can be present.

HAZARD AND HORN REMINDER FUNCTION

When remote engine start is initiated by Intelligent Key, BCM blinks hazard warning lamps as a reminder. The hazard and horn reminder has a horn chirp mode (C mode) and a non-horn chirp mode (S mode).

Operating Function of Hazard and Horn Reminder

	C mode		S mode	
	Lock	Unlock	Lock	Unlock
Intelligent Key operation	Lock	Unlock	Lock	Unlock
Hazard warning lamp blinks	Twice	Once	Twice	—
Horn sound	Once	—	—	—

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

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

How to Change Hazard and Horn Reminder Mode

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

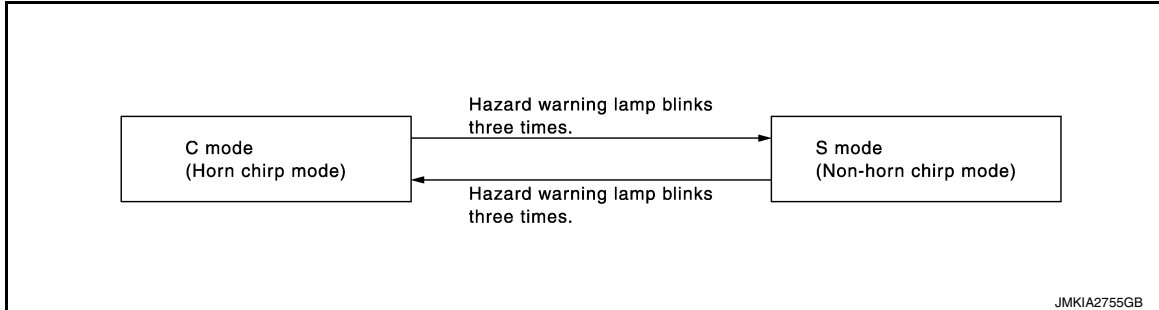
With CONSULT

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

Refer to [BCS-21, "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

Without CONSULT

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



LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

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

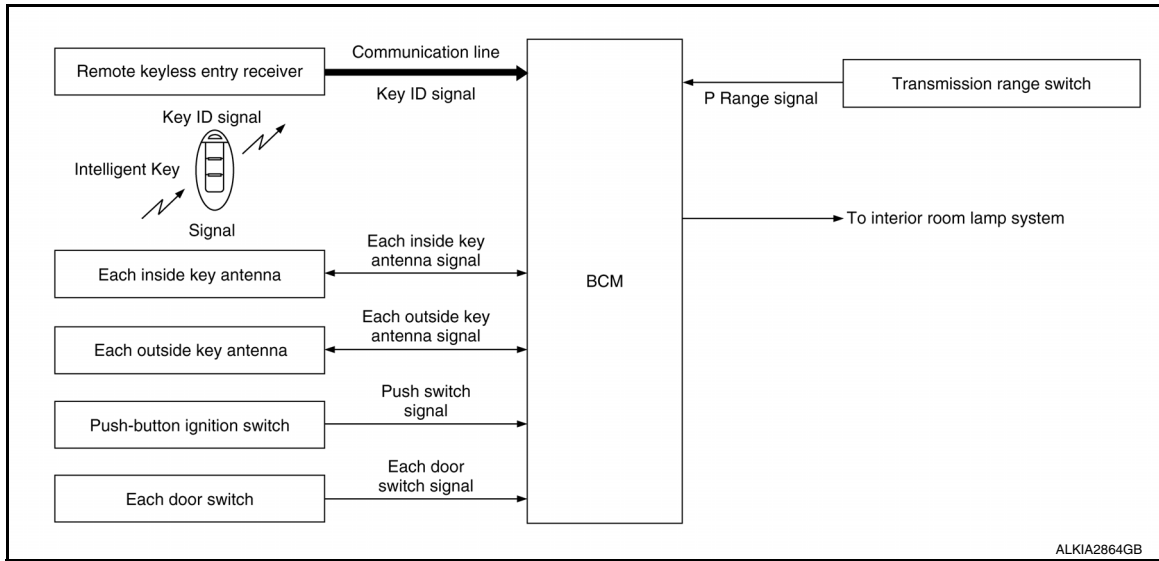
WELCOME LIGHT FUNCTION

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

WELCOME LIGHT FUNCTION : System Diagram

INFOID:0000000011151680



WELCOME LIGHT FUNCTION : System Description

INFOID:0000000011151681

The welcome light function operates as per the following. When the Intelligent Key is within the outside key antenna detection area, the BCM turns on interior room lamp* and operates heart beat operation of the push-button ignition switch.

*: Settings for map lamp, foot lamp, personal lamp, and puddle lamp are available.

OPERATION DESCRIPTION

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

TIMER FUNCTION

BCM can operate welcome light function using the timer function for 9 days after key switch is turned OFF.

The timer function resets when the engine is started*. Operating period of timer function may differ depending on battery size.

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

OPERATION CONDITION

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

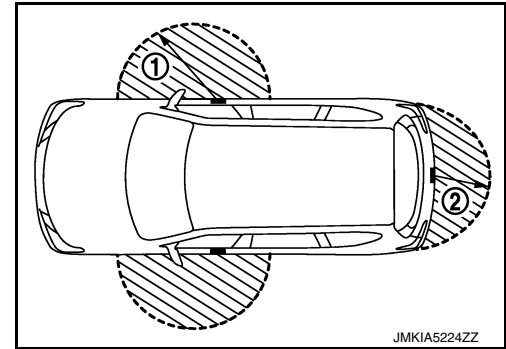
Function	Operation condition
Welcome light function	• All door are closed. • All doors are locked. • Ignition switch: OFF position. • Shift position: P (Park) position. • Intelligent Key is outside the vehicle. • Timer function is activated.

OUTSIDE KEY ANTENNA DETECTION AREA

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

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



WELCOME LIGHT FUNCTION SETTING

Welcome light function operation mode can be changed using CONSULT

Ⓟ With CONSULT

Refer to [BCS-21, "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

ⓧ Without CONSULT

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

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

WARNING FUNCTION

WARNING FUNCTION : System Description

INFOID:0000000011151682

OPERATION DESCRIPTION

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

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

OPERATION CONDITION

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

Warning/Information functions	Operation procedure
Intelligent Key system malfunction	When a malfunction is detected on BCM, "KEY" warning lamp illuminates.

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

Warning/Information functions		Operation procedure
OFF position warning	For internal	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 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)
	For external	OFF position warning (For internal) is in active mode, driver side door is closed. NOTE: OFF position (For external) active only when each of the sequence occurs as below: P position warning → ACC warning → OFF position warning (For internal) → OFF position warning (For internal)
P position warning	For internal	• Shift position: Except P (Park) position • Engine is running to stopped (ignition switch is ON to OFF)
	For external	Warning is activated when driver door is closed from the open position while the P (Park) position warning (for inside vehicle) is ON.
ACC warning		• When P (Park) position warning is in active mode, shift position changes P (Park) position • Ignition switch: ACC position
Take away warning	Door is open to close	• Ignition switch: Except Lock position • Door switch: ON to OFF (Door is open to close) • Intelligent Key cannot be detected inside the vehicle
	Door is open	• Ignition switch: Except Lock position • Door switch: ON (Door is open) • Key ID verification every 5 seconds when registered Intelligent Key cannot be detected inside the vehicle
	Push-button ignition switch operation	• Ignition switch: Except Lock position • Press push-button ignition switch • Intelligent Key cannot be detected inside the vehicle
Door lock operation warning		When door lock operation is requested while door lock operating condition of door request switch or Intelligent Key are not satisfied
Engine start information	Ignition switch is ON position	• Ignition switch: ON position • Shift position: P (Park) position* • Engine is stopped
	Ignition switch is except ON position	• Ignition switch: Except ON position • Shift position: P (Park) position* • Intelligent Key is inserted in key slot or Intelligent Key can be detected inside the vehicle
Intelligent Key low battery warning		When Intelligent Key is low battery, BCM is detected after ignition switch is turned ON
Key ID warning		When registered Intelligent Key cannot be detected inside the vehicle after ignition switch is turned ON
Key ID verification information		• When registered Intelligent Key cannot be detected inside the vehicle • Intelligent Key battery is discharged • When NATS antenna amp cannot be detected NATS ID

WARNING METHOD

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

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

Warning/Information functions		“KEY” warning lamp	Information display (combination meter)	Warning chime	
				Combination meter buzzer	Intelligent Key warning buzzer
Intelligent Key system malfunction		Indicate	—	—	—
OFF position warning	For internal	—	—	Activate	—
	For external	—	—	—	Activate
P position warning	For internal	—	 Shift to Park ALKIA2515GB	Activate	—
	For external			—	Active
ACC warning		—	 Push ignition to OFF ALKIA2516GB	Activate	—
Take away warning	Door is open to close	—	 No Key Detected ALKIA2517GB	Activate	Activate
	Door is open			—	—
	Push-button igni- tion switch opera- tion			Activate	—
Door lock op- eration warn- ing	Request switch operation	—	—	—	Activate
	Intelligent Key	—	—	—	Activate
Key ID warning		—	 Key ID Incorrect ALKIA2518GB	—	—
Engine start information		—	 Push brake and start button to drive ALKIA2519GB	—	—

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SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

Warning/Information functions	“KEY” warning lamp	Information display (combination meter)	Warning chime	
			Combination meter buzzer	Intelligent Key warning buzzer
Intelligent Key low battery warning	—	 Key low battery ALK1A2520GB	—	—
Key ID verification information	—	 ALK1A2521ZZ	—	—

LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

Warning function		Intelligent Key	Ignition switch	Door switch	Door request switch	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	Combination meter buzzer	CAN communication system	BCM	Information display	“KEY” warning lamp
Intelligent Key system malfunction										×	×		×
OFF position warning	For internal			×					×	×	×		
	For external			×				×			×		
P (Park) position warning			×						×	×	×	×	×
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	Ignition switch is ON position	×	×			×				×	×	×	
	Ignition switch is except ON position	×	×			×				×	×	×	
Intelligent Key low battery warning		×				×				×	×	×	×
Key ID verification information		×				×				×	×	×	

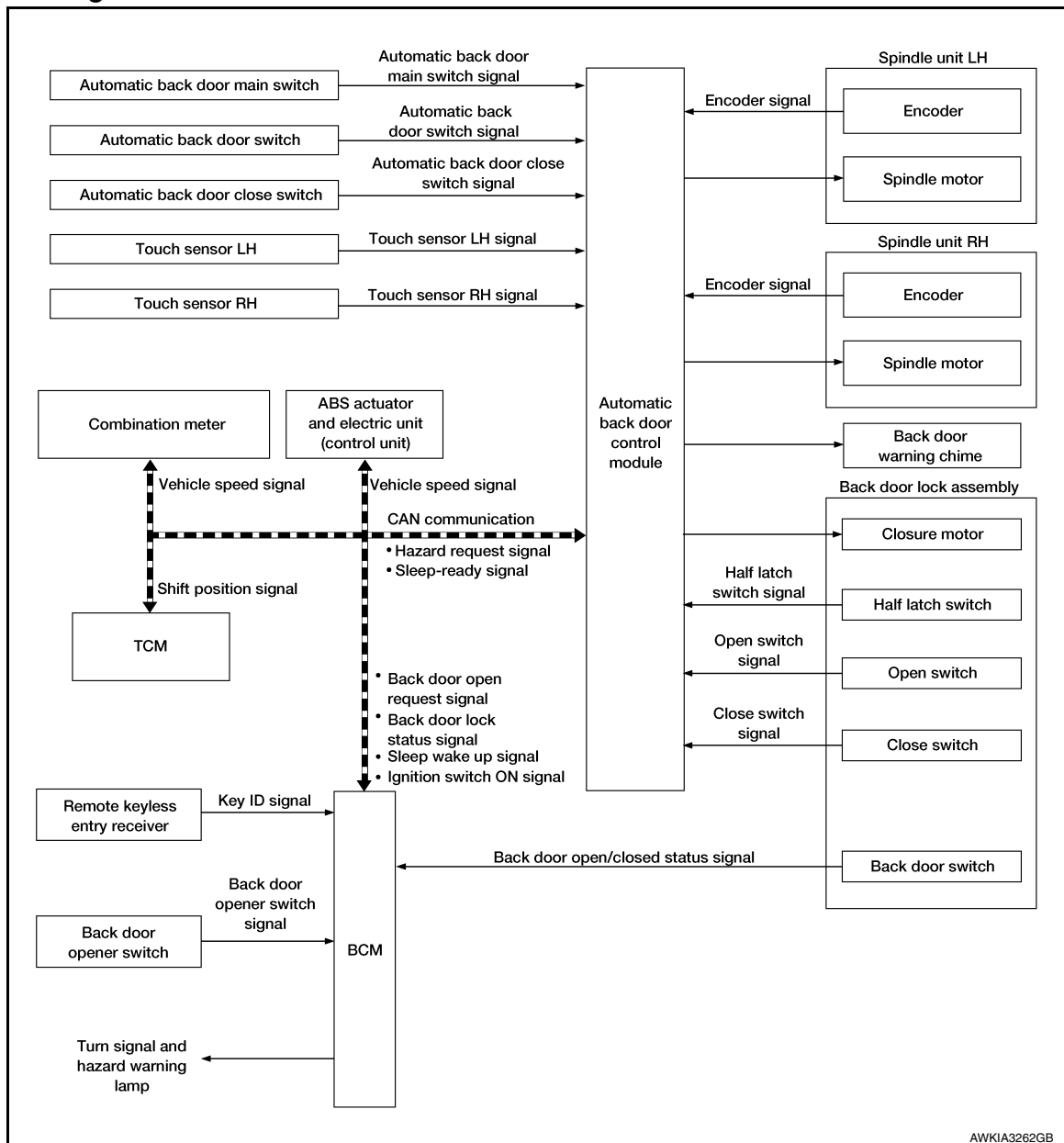
SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

< SYSTEM DESCRIPTION >

SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

System Diagram

INFOID:0000000011151683



System Description

INFOID:0000000011151684

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

AUTOMATIC BACK DOOR OPEN/CLOSE FUNCTION

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

AUTOMATIC OPEN/CLOSE TEMPORARY STOP FUNCTION

SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

< SYSTEM DESCRIPTION >

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

Back Door Opener Switch Operation

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

Automatic Back Door Main Switch Operation

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

BACK DOOR OPEN POSITION SETTING FUNCTION

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

Setting Procedure

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

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

Cancellation Procedure

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

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

BACK DOOR AUTO CLOSURE FUNCTION

Open Function

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

Closure Function

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

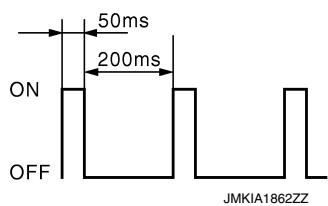
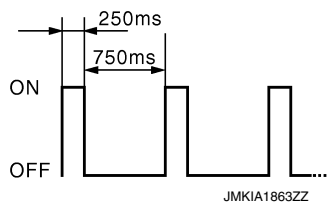
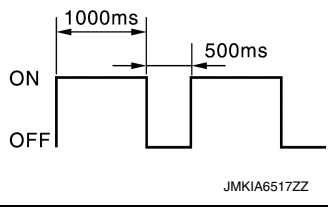
WARNING FUNCTION

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

Chime Operation Condition

SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

< SYSTEM DESCRIPTION >

Pattern	Time	Description
A 	0.75 sec.	Operation start announcement
		Anti-pinch operation start announcement
B Pi---	2.0 sec.	- Closure function operates when automatic back door main switch is in OFF position - During the closure operation, when touch sensor detects any trapped foreign material, the back door stops halfway
C Pi-----.....	Back door fully closed or vehicle is stopped	The conditions are not satisfied in the fully open position or during the operation, and then the operation continues
D 	During open/close operation	During operation announcement
E 	2.5 sec.	- Calibration of automatic back door position information is complete - Back door open position setting procedure is complete

ANTI-PINCH FUNCTION

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

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

Operation Condition

Detection method	Encoder pulse	Touch sensor
Applicable operation	Open/close operation	Close operation
Operation when any trapped foreign material is detected	Stop the vehicle	- Buzzer sounds (pattern A) and the back door stops in the fully-open position after reverse operation - During closure (close) operation (at main switch OFF): Closure [open (neutral position return)] operation
	Running the vehicle	- The back door reverses a certain amount, and then it reverses automatically to perform the auto close operation - During closure (close) operation (at main switch ON): Closure (open) operation
Non-reverse area	- Just after starting the motor operation - Full range of closure operation - Driving	- Back door open operation - Closure [open (return the latch to the neutral position)]

SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

< SYSTEM DESCRIPTION >

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

AUTOMATIC BACK DOOR OPEN/CLOSE OPERATION CONDITION

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

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

CONTROL IF NOT WITHIN THE OPERATION CONDITIONS DURING THE OPERATION

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

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

SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

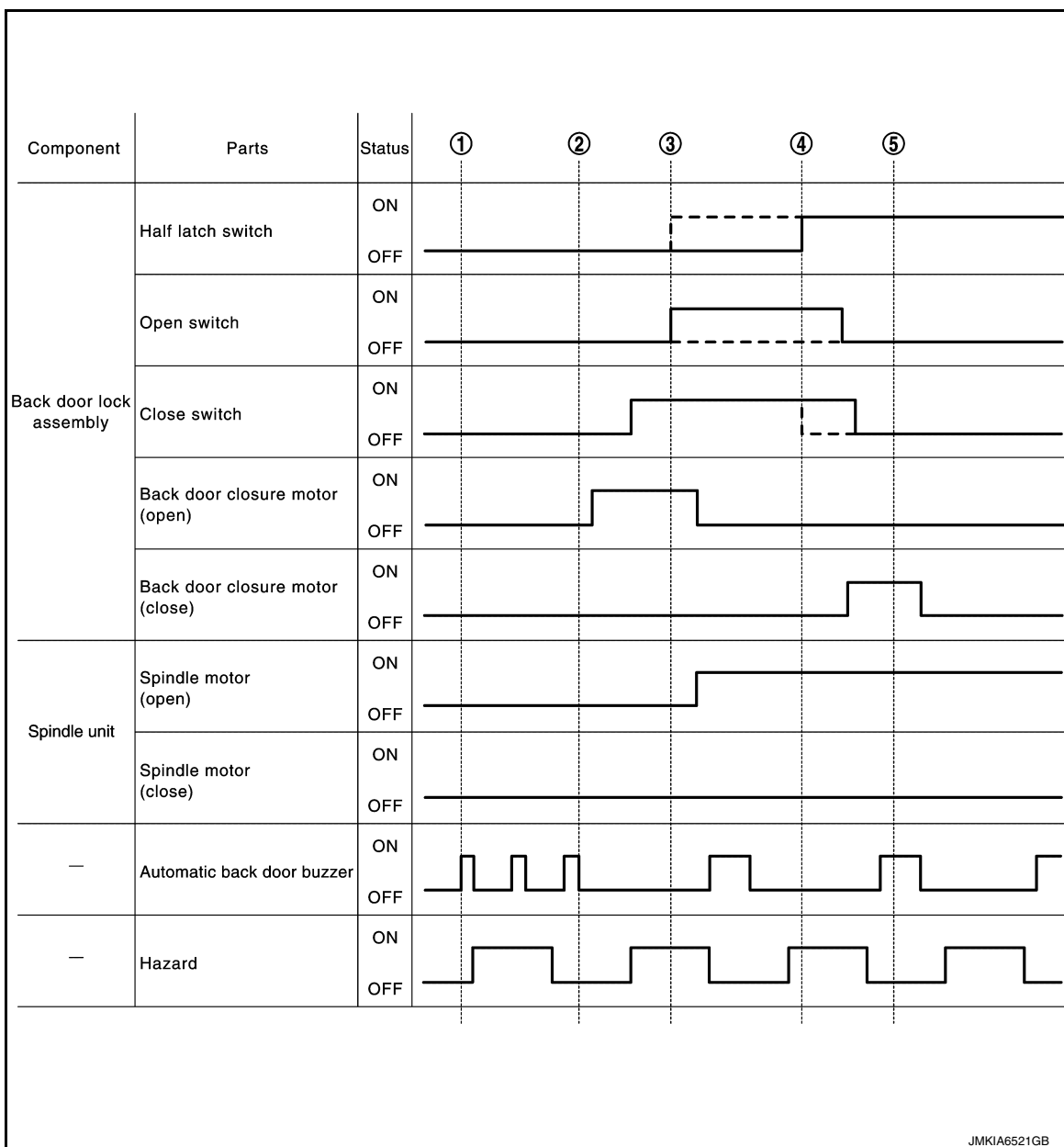
< SYSTEM DESCRIPTION >

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

TIME CHART FOR AUTOMATIC BACK DOOR SYSTEM

Fully Closed to Fully Open Operation

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



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

SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

< SYSTEM DESCRIPTION >

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

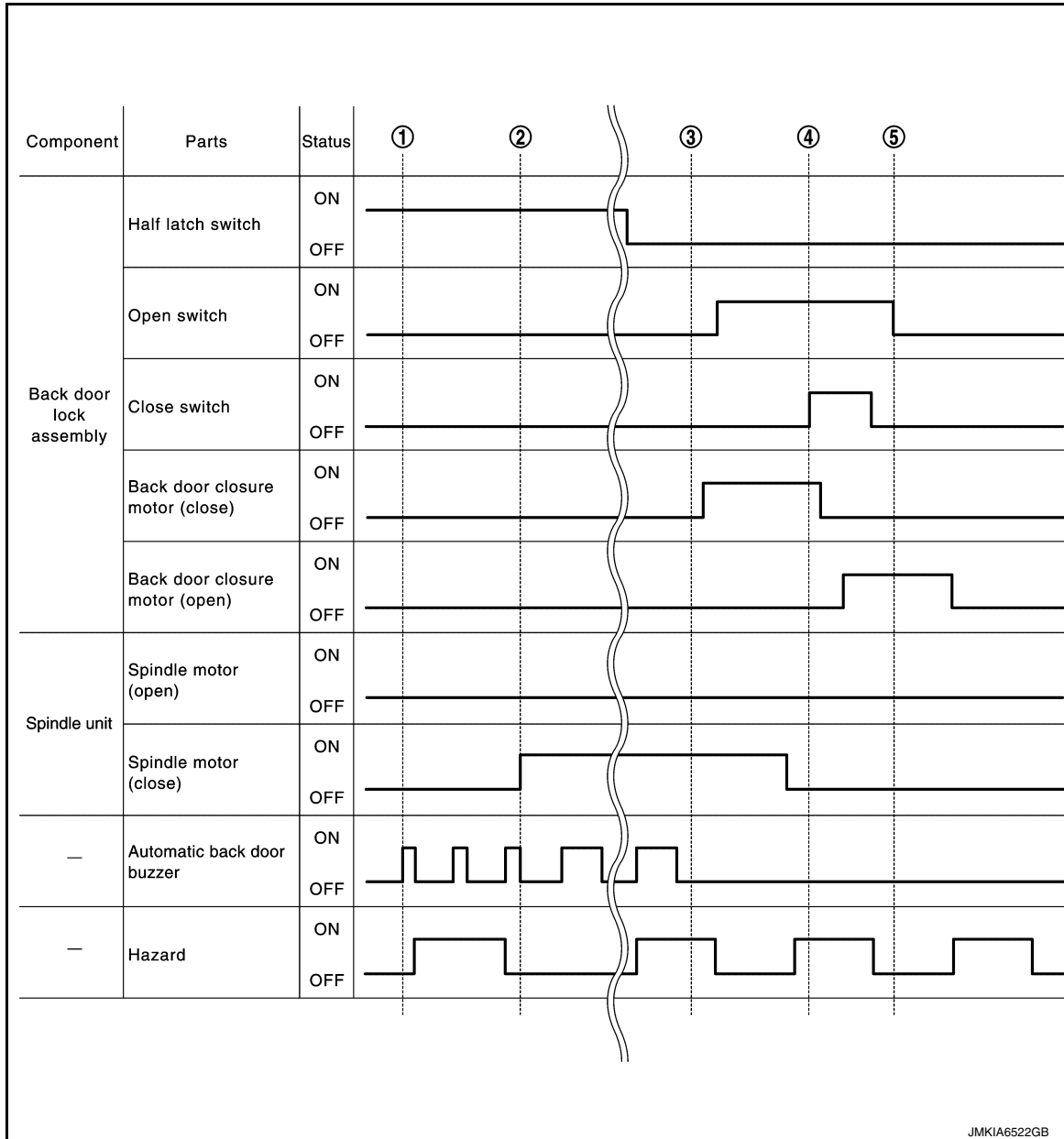
4. The back door closure motor performs the close operation after turning the half latch switch to ON.
5. Stop the back door closure motor close operation and return the latch to the neutral position after turning the close switch to OFF.

NOTE:

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

Fully Open to Fully Closed Operation

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



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

SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

< SYSTEM DESCRIPTION >

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

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DLK

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SYSTEM (INTEGRATED HOMELINK TRANSMITTER)

< SYSTEM DESCRIPTION >

SYSTEM (INTEGRATED HOMELINK TRANSMITTER)

System Description

INFOID:0000000011151685

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

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000011581017

CAUTION:

After disconnecting the CONSULT vehicle interface (VI) from the data link connector, the ignition must be cycled OFF → ON (for at least 5 seconds) → OFF. If this step is not performed, the BCM may not go to "sleep mode", potentially causing a discharged battery and no-start condition.

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		×	×	×	×		
Rear window defogger	REAR DEFOGGER			×	×	×		
Warning chime	BUZZER			×	×			
Interior room lamp timer	INT LAMP			×	×	×		
Exterior lamp	HEADLAMP			×	×	×		
Wiper and washer	WIPER			×	×	×		
Turn signal and hazard warning lamps	FLASHER			×	×			
Air conditioner	AIR CONDITIONER			×				
Intelligent Key system	INTELLIGENT KEY		×	×	×	×		
Combination switch	COMB SW			×				
BCM	BCM	×	×			×	×	×
Immobilizer	IMMU		×	×	×			
Interior room lamp battery saver	BATTERY SAVER			×	×			
Back door open	TRUNK			×				
Vehicle security system	THEFT ALM			×	×	×		
RAP system	RETAINED PWR			×				

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

System	Sub System	Direct Diagnostic Mode						
		Ecu Identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN Diag Support Mntr
Signal buffer system	SIGNAL BUFFER			×				
TPMS	AIR PRESSURE MONITOR		×	×	×	×		

DOOR LOCK

DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)

INFOID:000000011581018

CAUTION:

After disconnecting the CONSULT vehicle interface (VI) from the data link connector, the ignition must be cycled OFF → ON (for at least 5 seconds) → OFF. If this step is not performed, the BCM may not go to "sleep mode", potentially causing a discharged battery and no-start condition.

SELF DIAGNOSTIC RESULT

Refer to [BCS-52, "DTC Index"](#).

DATA MONITOR

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

ACTIVE TEST

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

WORK SUPPORT

Support Item	Setting	Description
DOOR LOCK-UNLOCK SET	On*	Automatic door locks function ON.
	Off	Automatic door locks function OFF.
AUTO UNLOCK TYPE	MODE2	Driver door only unlocks automatically.
	MODE1*	All doors unlock automatically.

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

Support Item	Setting	Description
AUTO LOCK FUNCTION	MODE3	This mode is not used.
	MODE2	Doors lock automatically when shifted out of P (park).
	MODE1*	Doors lock automatically when vehicle speed reaches 24 km/h (15 mph).
	Off	—
AUTO UNLOCK FUNCTION	MODE3	This mode is not used.
	MODE2	Doors unlock automatically when shifted into P (park).
	MODE1*	Doors unlock automatically when ignition is switched from ON to OFF.
	Off	—

* : Initial setting

INTELLIGENT KEY

INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)

INFOID:0000000011581019

CAUTION:

After disconnecting the CONSULT vehicle interface (VI) from the data link connector, the ignition must be cycled OFF → ON (for at least 5 seconds) → OFF. If this step is not performed, the BCM may not go to "sleep mode", potentially causing a discharged battery and no-start condition.

SELF DIAGNOSTIC RESULT

Refer to [BCS-52. "DTC Index"](#).

DATA MONITOR

Monitor Item [Unit]	Main	Description
REQ SW -DR [On/Off]	×	Indicates condition of door request switch LH.
REQ SW -AS [On/Off]	×	Indicates condition of door request switch RH.
REQ SW -BD/TR [On/Off]	×	Indicates condition of back door request switch.
PUSH SW [On/Off]		Indicates condition of push-button ignition switch.
SHFTLCK SLNID PWR SPLY [On/Off]	×	Indicates condition of power supply to shiftlock solenoid.
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.

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

Monitor Item [Unit]	Main	Description
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.
DOOR STAT-RR [LOCK/READY/UNLK]	×	Indicates condition of rear right side door status.
DOOR STAT-RL [LOCK/READY/UNLK]	×	Indicates condition of rear left side door status.
BK DOOR STATE [LOCK/READY/UNLK]	×	Indicates condition of back door status.
ID OK FLAG [Set/Reset]		Indicates condition of Intelligent Key ID.
PRMT ENG STRT [Set/Reset]		Indicates condition of engine start possibility.
PRMT RKE STRT [Set/Reset]		Indicates condition of engine start possibility from Intelligent Key.
I-KEY OK FLAG [Key ON/Key OFF]	×	Indicates condition of Intelligent Key OK flag.
PRBT ENG STRT [Set/Reset]		Indicates condition of engine start prohibit.
ID AUTHENT CANCEL TIMER [STOP]		Indicates condition of Intelligent Key ID authentication.
ACC BATTERY SAVER [STOP]		Indicates condition of battery saver.
CRNK PRBT TMR [On/Off]		Indicates condition of crank prohibit timer.
AUT CRNK TMR [On/Off]		Indicates condition of automatic engine crank timer from Intelligent Key.
CRNK PRBT TME [sec]		Indicates condition of engine crank prohibit time.
AUT CRNK TME [sec]		Indicates condition of automatic engine crank time from Intelligent Key.
CRANKING TME [sec]		Indicates condition of engine cranking time from Intelligent Key.
DETE SW PWR [On/Off]		Indicates condition of detent switch voltage.
IGN RLY3 -REQ [On/Off]		Indicates condition of front blower motor relay control request.
ACC RLY -REQ [On/Off]		Indicates condition of accessory relay control request.
RKE OPE COUN1 [0-19]	×	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing.
RKE OPE COUN2 [0-19]	×	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing.
RKE-LOCK [On/Off]		Indicates condition of lock signal from Intelligent Key.
RKE-UNLOCK [On/Off]		Indicates condition of unlock signal from Intelligent Key.
RKE-TR/BD [On/Off]		Indicates condition of back door open signal from Intelligent Key.
RKE-PANIC [On/Off]		Indicates condition of panic signal from Intelligent Key.
RKE-MODE CHG [On/Off]		Indicates condition of mode change signal from Intelligent Key.
RKE PBD [On/Off]		Indicates condition of power back door signal from Intelligent Key.

ACTIVE TEST

Test Item	Description
INTELLIGENT KEY LINK (CAN)	This test is able to check Intelligent Key identification number [Off/ID No1/ID N02/ID No3/ID No4/ID No5].
INT LAMP	This test is able to check interior room lamp operation [On/Off].
FLASHER	This test is able to check hazard lamp operation [LH/RH/Off].
HORN	This test is able to check horn operation [On].
BATTERY SAVER	This test is able to check battery saver operation [On/Off].
TRUNK/BACK DOOR	This test is able to check back door actuator operation [Open].
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation [On/Off].
INSIDE BUZZER	This test is able to check combination meter warning chime operation [Take Out/Knob/Key/Off].
INDICATOR	This test is able to check combination meter warning lamp operation [KEY ON/KEY IND/Off].

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

Test Item	Description
IGN CONT2	This test is able to check ignition relay-2 control operation [On/Off].
ENGINE SW ILLUMI	This test is able to check push-button ignition switch START indicator operation [On/Off].
PUSH SWITCH INDICATOR	This test is able to check push-button ignition switch indicator operation [On/Off].
ACC CONT	This test is able to check accessory relay control operation [On/Off].
IGN CONT1	This test is able to check ignition relay-1 control operation [On/Off].
ST CONT LOW	This test is able to check starter control relay operation [On/Off].
IGNITION RELAY	This test is able to check ignition relay operation [On/Off].
REVERSE LAMP TEST	This test is able to check reverse lamp illumination operation [On/Off].
DOOR HANDLE LAMP TEST	This test is able to check door handle lamp illumination operation [On/Off].
TRUNK/LUGGAGE LAMP TEST	This test is able to check cargo lamp illumination operation [On/Off].
KEYFOB P/W TEST	This test is able to check power window operation using the Intelligent Key [P/W up/down OFF/Send P/W down ON/Send P/W up ON].
SHIFTLOCK SORENOID TEST	This test is able to check shift lock solenoid operation [On/Off].

WORK SUPPORT

Support Item	Setting	Description
IGN/ACC BATTERY SAVER	On*	Battery saver function ON.
	Off	Battery saver function OFF.
REMOTE ENGINE STARTER	On*	Remote engine start function ON.
	Off	Remote engine start function OFF.
ANSWER BACK I-KEY LOCK UNLOCK	BUZZER	Buzzer reminder function by door lock/unlock request switch ON.
	HORN	Horn chirp reminder function by door lock request switch ON.
	Off*	No reminder function by door lock/unlock request switch.
	INVALID	This mode is not used.
ANSWERBACK KEYLESS LOCK UNLOCK	On	Buzzer or horn chirp reminder when doors are locked/unlocked with Intelligent Key.
	Off*	No buzzer or horn chirp reminder when doors are locked/unlocked with Intelligent Key.
WELCOME LIGHT OP SET	On*	Door handle lamp function from request switch ON.
	Off	Door handle lamp function from request switch OFF.
ANSWER BACK	On*	Horn chirp reminder when doors are locked with Intelligent Key.
	Off	No horn chirp reminder when doors are locked with Intelligent Key.
RETRACTABLE MIRROR SET	On	Retractable mirror set ON.
	Off*	Retractable mirror set OFF.
CONFIRM KEY FOB ID	—	Intelligent Key ID code registration can be checked.
LOCK/UNLOCK BY I-KEY	On*	Door lock/unlock function from Intelligent Key ON.
	Off	Door lock/unlock function from Intelligent Key OFF.
ENGINE START BY I-KEY	On*	Engine start function from Intelligent Key ON.
	Off	Engine start function from Intelligent Key OFF.
TRUNK/GLASS HATCH OPEN	On*	Buzzer reminder function by back door request switch ON.
	Off	Buzzer reminder function by back door request switch OFF.
INTELLIGENT KEY LINK SET	On	Intelligent Key link set ON.
	Off*	Intelligent Key link set OFF.

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

Support Item	Setting		Description
SHORT CRANKING OUTPUT	Start	70 msec	Starter motor operation duration times.
		100 msec	
		200 msec	
	End		—
INSIDE ANT DIAGNOSIS	—		This function allows inside key antenna self-diagnosis.
AUTO LOCK SET	MODE7	5 min	Auto door lock time can be set in this mode.
	MODE6	4 min	
	MODE5	3 min	
	MODE4	2 min	
	MODE3*	1 min	
	MODE2	30 sec	
	MODE1	Off	

*: Initial Setting

TRUNK

TRUNK : CONSULT Function (BCM - TRUNK)

INFOID:000000011581020

CAUTION:

After disconnecting the CONSULT vehicle interface (VI) from the data link connector, the ignition must be cycled OFF → ON (for at least 5 seconds) → OFF. If this step is not performed, the BCM may not go to "sleep mode", potentially causing a discharged battery and no-start condition.

DATA MONITOR

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

DIAGNOSIS SYSTEM (AUTOMATIC BACK DOOR CONTROL UNIT)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (AUTOMATIC BACK DOOR CONTROL UNIT)

CONSULT Function

INFOID:00000000111151690

CAUTION:

After disconnecting the CONSULT vehicle interface (VI) from the data link connector, the ignition must be cycled OFF → ON (for at least 5 seconds) → OFF. If this step is not performed, the BCM may not go to "sleep mode", potentially causing a discharged battery and no-start condition.

APPLICATION ITEMS

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

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

SELF DIAGNOSTIC RESULTS

Refer to [DLK-59, "DTC Index"](#).

DATA MONITOR

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

DIAGNOSIS SYSTEM (AUTOMATIC BACK DOOR CONTROL UNIT)

< SYSTEM DESCRIPTION >

Monitor Item	Unit	Description
AUTO BCK DR POS LEARN	[YET/DONE]	Indicates condition of additional service when removing battery negative cable
SPINDLE SENSOR RH	[Pulse]	Displays the condition of the RH encoder
SPINDLE RH SPEED	[mm/s]	Displays the RH spindle operation speed
SPINDLE MOTOR RH DUTY	[%]	Displays the condition of the spindle motor RH duty
SPINDLE RH ENCODER A	[LO/HI]	Indicates condition of encoder signal from encoder A
SPINDLE RH ENCODER B	[LO/HI]	Indicates condition of encoder signal from encoder B
TRANSMISSION TYPE	[AT/CVT]	Indicates type of transmission the vehicle is equipped with

WORK SUPPORT

Work item	Description	Refer to
RESET AUTO BACK DOOR STATUS	This item is for calibration of automatic back door position information.	DLK-116, "Work Procedure"

AUTOMATIC BACK DOOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

AUTOMATIC BACK DOOR CONTROL UNIT

Reference Value

INFOID:0000000011151691

VALUES ON THE DIAGNOSIS TOOL

CONSULT MONITOR ITEM

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

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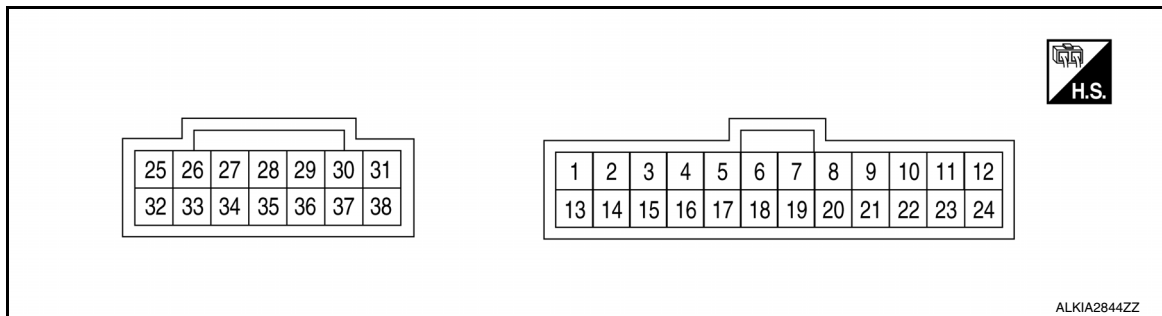
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AUTOMATIC BACK DOOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

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

TERMINAL LAYOUT

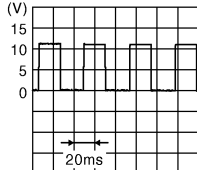
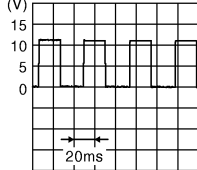
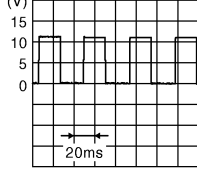
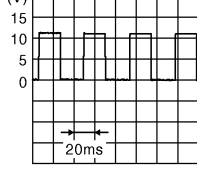


PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Voltage (Approx.)
(+)	(–)	Signal name	Input/ Output			
1 (BR)	13 (SB)	Touch sensor RH signal	Input	Touch sensor RH	Detect obstruction	1.8 – 5 V
					Other than above	2.72 – 7.27 V
2 (LG)	13 (SB)	Touch sensor LH signal	Input	Touch sensor LH	Detect obstruction	1.8 – 5 V
					Other than above	2.72 – 7.27 V
3 (L)	Ground	Half latch switch signal	Input	Back door	Half latch	0 V
					Fully closed/open	Battery voltage
4* (GR)	Ground	Ground	—	—	—	0 V
5 (LG)	Ground	Close switch signal	Input	Back door	Fully closed	0 V
					Open/half latch	Battery voltage

AUTOMATIC BACK DOOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Voltage (Approx.)
(+)	(-)	Signal name	Input/ Output			
6 (V)	Ground	Encoder LH A signal	Input	Back door	Moving (auto or manual)	 NOTE: Waveform width changes according to back door open/close speed
					When stopped	0 V or Battery voltage
7 (Y)	Ground	Encoder LH B signal	Input	Back door	Moving (auto or manual)	 NOTE: Waveform width changes according to back door open/close speed
					When stopped	0 V or 12 V
8 (BR)	Ground	Encoder RH A signal	Input	Back door	Moving (auto or manual)	 NOTE: Waveform width changes according to back door open/close speed
					When stopped	0 V or 12 V
9 (L)	Ground	Encoder RH B signal	Input	Back door	Moving (auto or manual)	 NOTE: Waveform width changes according to back door open/close speed
					When stopped	0 V or 12 V
10 (LG)	Ground	Automatic back door main switch	Input	Automatic back door main switch	ON	0 V
					OFF	Battery voltage
11 (BR)	Ground	Open switch signal	Input	Back door	Open	0 V
					Half latch/fully closed	Battery voltage
12 (W)	Ground	CAN - L	Input/ Output	—	—	—

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AUTOMATIC BACK DOOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

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

*: Except For Mexico

Fail Safe

INFOID:0000000011151692

Display contents of CONSULT	Fail-safe	Cancellation
U1000 CAN COMM	Inhibit automatic back door operation	Return to normal status.
U1010 CONTROL UNIT (CAN)	Inhibit automatic back door operation	Return to normal status.
B2401 IGN OPEN	Inhibit automatic back door operation	Automatic back door control module detects ignition switch ON signal via CAN communication.

AUTOMATIC BACK DOOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

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

DTC Inspection Priority Chart

INFOID:0000000011151693

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

Priority	DTC
1	- B2428 AUTO BK DR CNT UNIT - U1000 CAN COMM - U1010 CONTROL UNIT (CAN) - B2401 IGN OPEN
2	- B2409 HALF LATCH SW - B2416 TOUCH SEN R OPEN - B2417 TOUCH SEN L OPEN - B2419 OPEN SW - B2420 CLOSE SW - B2422 BACK DOOR STATE - B2423 ABD MTR TIME OUT - B2426 SPINDLE SENSOR LH - B2427 SPINDLE SENSOR RH - B242A CLSR CONDITION

DLK

DTC Index

INFOID:0000000011151694

NOTE:

Details of time display

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

CONSULT display	Fail-safe	Reference page
U1000: CAN COMM	×	DLK-117, "DTC Logic"
U1010: CONTROL UNIT(CAN)	×	DLK-118, "DTC Logic"
B2401: IGN OPEN	×	DLK-119, "DTC Logic"
B2409: HALF LATCH SW	×	DLK-120, "DTC Logic"
B2416: TOUCH SEN R OPEN	×	DLK-123, "DTC Logic"
B2417: TOUCH SEN L OPEN	×	DLK-126, "DTC Logic"

AUTOMATIC BACK DOOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Reference page
B2419: OPEN SW	×	DLK-129, "DTC Logic"
B2420: CLOSE SW	×	DLK-132, "DTC Logic"
B2422: BACK DOOR STATE	×	DLK-135, "DTC Logic"
B2423: ABD MTR TIME OUT	×	DLK-138, "DTC Logic"
B2426: SPINDLE SENSOR LH	×	DLK-140, "DTC Logic"
B2427: SPINDLE SENSOR RH	×	DLK-143, "DTC Logic"
B2428: AUTO BACK DR CNT UNIT	×	DLK-146, "DTC Logic"
B242A: CLSR CONDITION	×	DLK-147, "DTC Logic"

BCM

< ECU DIAGNOSIS INFORMATION >

BCM

List of ECU Reference

INFOID:0000000011151695

ECU	Reference
BCM	BCS-30. "Reference Value"
	BCS-50. "Fail Safe"
	BCS-50. "DTC Inspection Priority Chart"
	BCS-52. "DTC Index"

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DLK

POWER DOOR LOCK SYSTEM

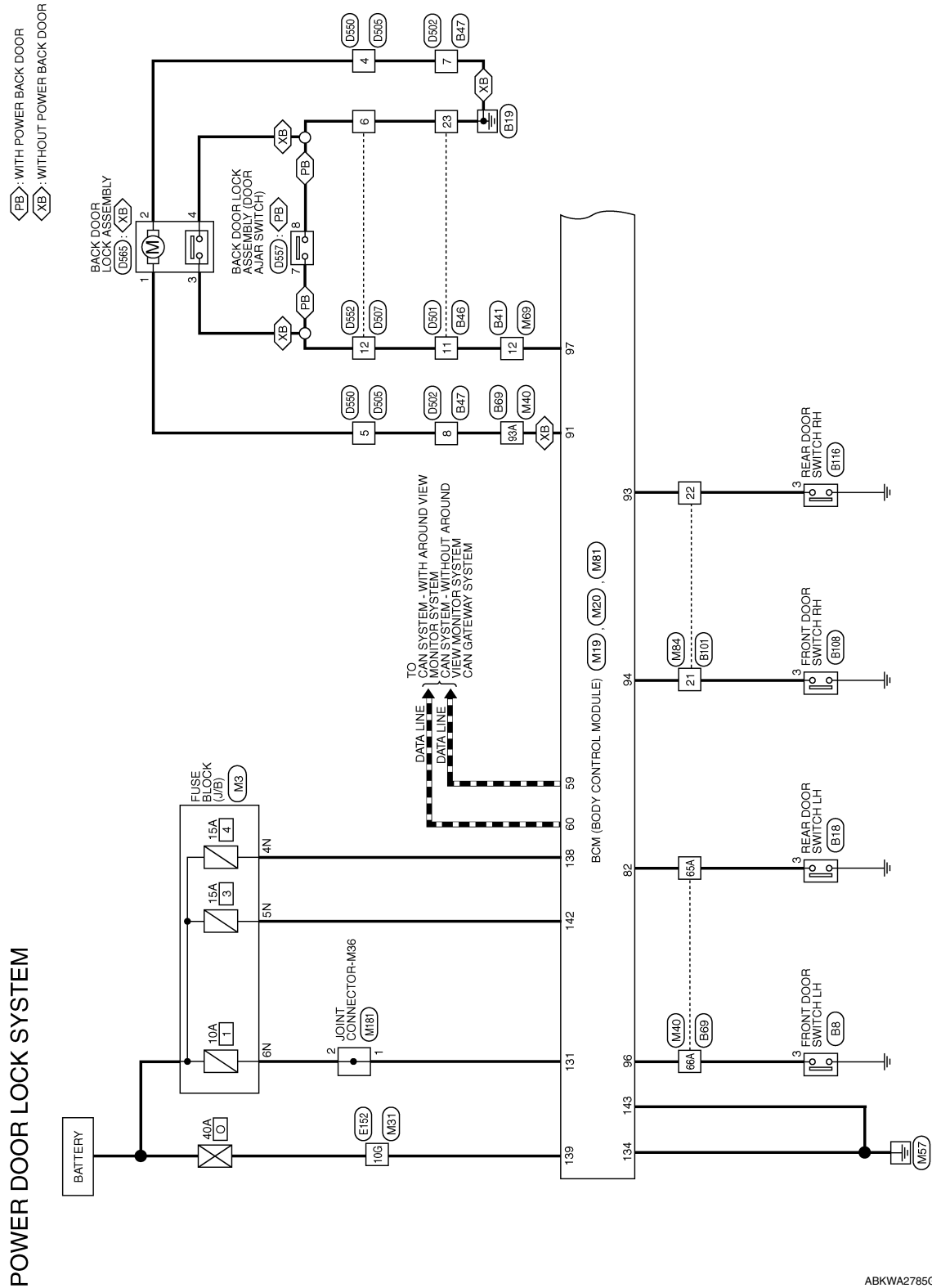
< WIRING DIAGRAM >

WIRING DIAGRAM

POWER DOOR LOCK SYSTEM

Wiring Diagram

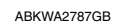
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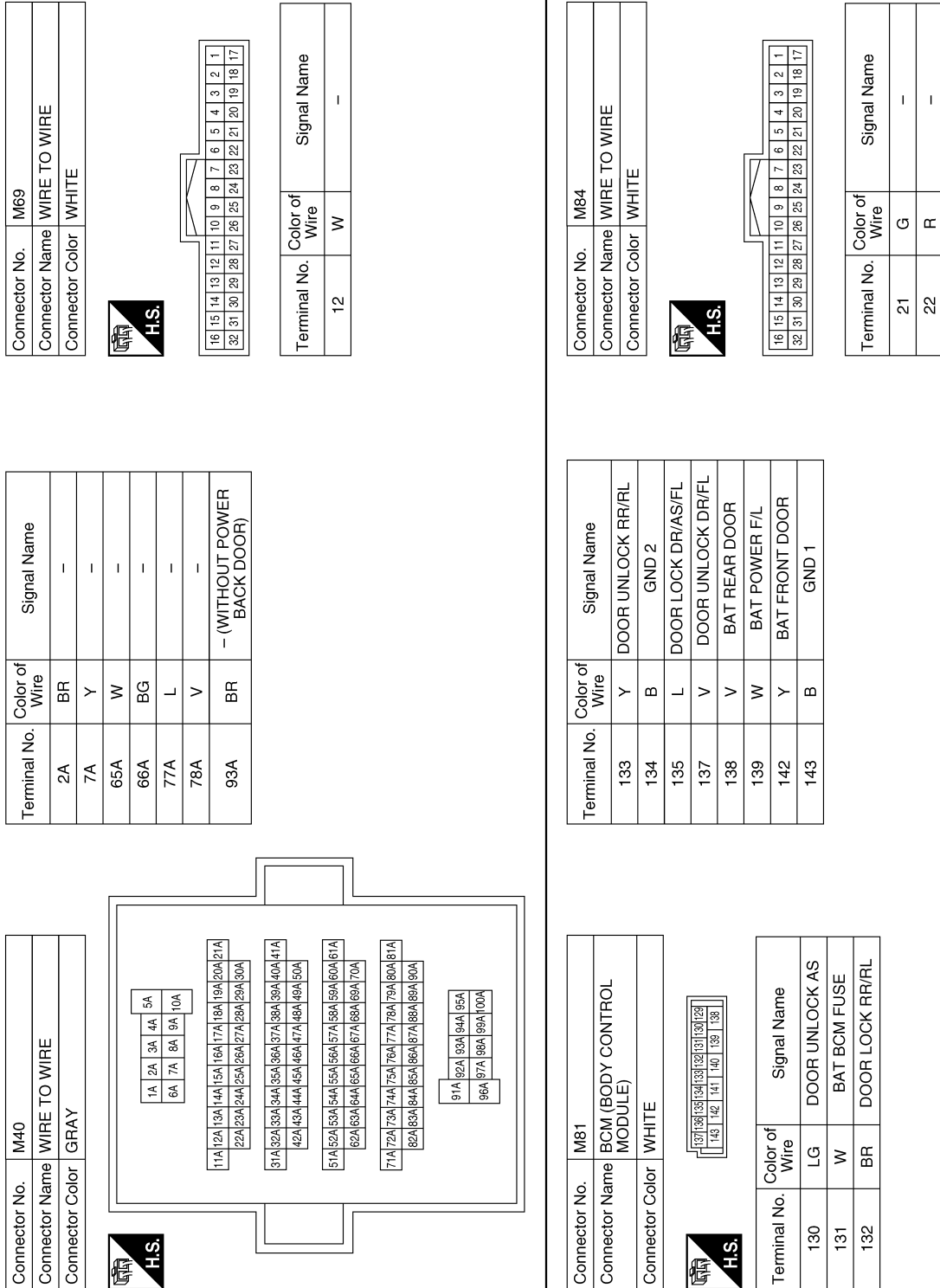


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POWER DOOR LOCK SYSTEM

< WIRING DIAGRAM >

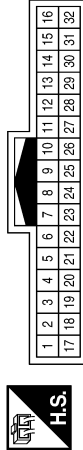


ABKIA6365GB

POWER DOOR LOCK SYSTEM

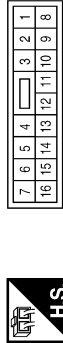
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Connector No.	M91
Connector Name	WIRE TO WIRE
Connector Color	WHITE



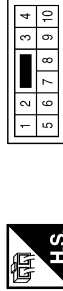
Terminal No.	Color of Wire	Signal Name
27	BR	-
28	Y	-
31	W	-

Connector No.	M157
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
8	Y	-
9	BR	-

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



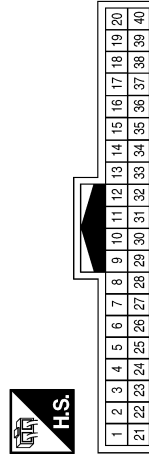
Terminal No.	Color of Wire	Signal Name
6	L	-
7	LG	-
8	B	-

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



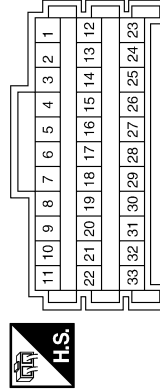
Terminal No.	Color of Wire	Signal Name
3	B	-
4	L	-
5	V	-

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



Terminal No.	Color of Wire	Signal Name
1	BR	-
2	Y	-
3	BR	-
21	SB	-
38	P	-
39	W	-

Connector No.	M170
Connector Name	JOINT CONNECTOR-M09
Connector Color	WHITE



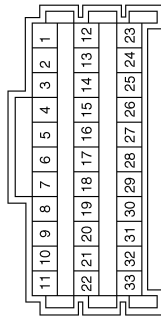
Terminal No.	Color of Wire	Signal Name
28	W	-
29	W	-
30	W	-

ABKIA4720GB

POWER DOOR LOCK SYSTEM

< WIRING DIAGRAM >

Connector No.	M175
Connector Name	JOINT CONNECTOR-M22
Connector Color	WHITE



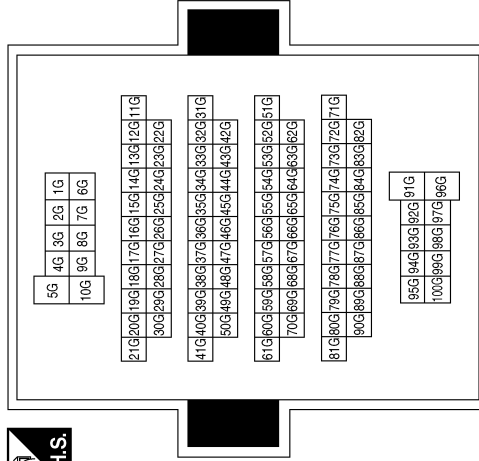
Terminal No.	Color of Wire	Signal Name
19	L	-
20	L	-
21	L	-
22	L	-

Connector No.	M181
Connector Name	JOINT CONNECTOR-M36
Connector Color	WHITE



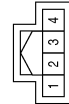
Terminal No.	Color of Wire	Signal Name
1	W	-
2	W	-

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



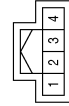
Terminal No.	Color of Wire	Signal Name
10G	P	-

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



Terminal No.	Color of Wire	Signal Name
3	L	-

Connector No.	B18
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	SB	-

Connector No.	B20
Connector Name	FUEL LID DOOR LOCK ACTUATOR
Connector Color	WHITE



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

ABKIA6366GB

POWER DOOR LOCK SYSTEM

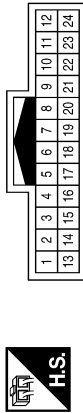
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Connector No.	B47
Connector Name	WIRE TO WIRE
Connector Color	GRAY



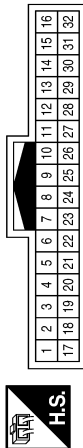
Terminal No.	Color of Wire	Signal Name
7	B	– (WITHOUT POWER BACK DOOR)
8	BR	– (WITHOUT POWER BACK DOOR)

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



Terminal No.	Color of Wire	Signal Name
11	G	–
23	GR	–

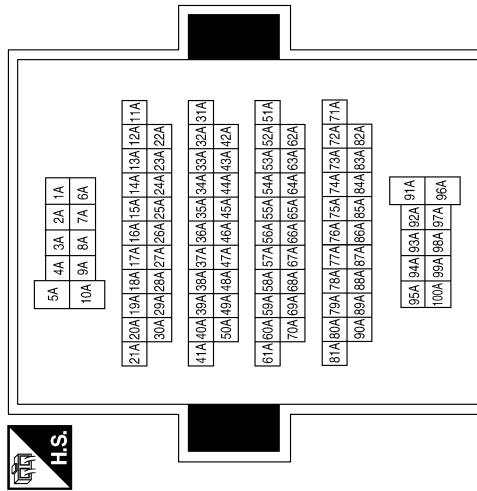
Connector No.	B41
Connector Name	WIRE TO WIRE
Connector Color	WHITE



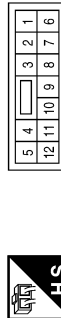
Terminal No.	Color of Wire	Signal Name
12	G	–

Terminal No.	Color of Wire	Signal Name
2A	Y	–
7A	BR	–
65A	SB	–
66A	L	–
77A	Y	–
78A	LG	–
93A	BR	– (WITHOUT POWER BACK DOOR)

Connector No.	B69
Connector Name	WIRE TO WIRE
Connector Color	GRAY



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



Terminal No.	Color of Wire	Signal Name
1	Y	–
2	BR	–

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POWER DOOR LOCK SYSTEM

< WIRING DIAGRAM >

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



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

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

Connector No.	B108
Connector Name	FRONT DOOR SWITCH RH
Connector Color	WHITE



1	2	3	4

Terminal No.	Color of Wire	Signal Name
3	LG	-

Connector No.	B116
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE



1	2	3	4

Terminal No.	Color of Wire	Signal Name
3	LG	-

Connector No.	B139
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

Connector No.	B161
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.	D2
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

Terminal No.	Color of Wire	Signal Name
6	BR	-
7	Y	-

Terminal No.	Color of Wire	Signal Name
8	Y	-
9	BR	-

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

ABKIA4723GB

POWER DOOR LOCK SYSTEM

< WIRING DIAGRAM >

Connector No.	D23
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH (WITH LEFT FRONT ONLY AUTO DOWN)
Connector Color	WHITE



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

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



1	2	3	4	5	6

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



20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21

Terminal No.	Color of Wire	Signal Name
1	B	GND
3	Y	LOCK CDL
15	BR	UNLOCK CDL

Terminal No.	Color of Wire	Signal Name
1	V	-
2	Y	-
3	LG	-
4	B	-
5	SB	-
6	BR	-

Terminal No.	Color of Wire	Signal Name
1	BR	-
2	Y	-
3	BR	-
21	SB	-
38	LG	-
39	Y	-

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



4	3			2	1
10	9	8	7	6	5

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



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

Connector No.	D25
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH (WITH LEFT AND RIGHT FRONT AUTO UP/DOWN)
Connector Color	WHITE



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

Terminal No.	Color of Wire	Signal Name
6	Y	-
7	LG	-
8	B	-

Terminal No.	Color of Wire	Signal Name
27	BR	-
28	Y	-
31	Y	-

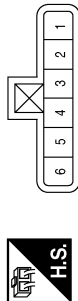
Terminal No.	Color of Wire	Signal Name
1	B	GND
3	BR	KEY CYL LOCK
11	Y	COM
15	SB	UNLOCK CDL

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POWER DOOR LOCK SYSTEM

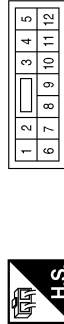
< WIRING DIAGRAM >

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



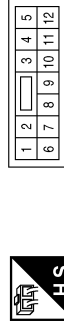
Terminal No.	Color of Wire	Signal Name
1	LG	-
2	Y	-

Connector No.	D125
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH (WITH LEFT FRONT ONLY AUTO DOWN)
Connector Color	WHITE



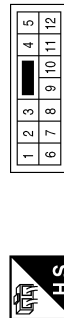
Terminal No.	Color of Wire	Signal Name
1	Y	-
2	BR	-
3	B	-

Connector No.	D129
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH (WITH LEFT AND RIGHT FRONT AUTO UP/DOWN)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	Y	COM
7	B	GND

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



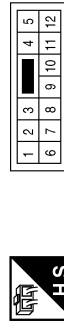
Terminal No.	Color of Wire	Signal Name
1	BR	-
2	L	-

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



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

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



Terminal No.	Color of Wire	Signal Name
6	Y	-
7	LG	-

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POWER DOOR LOCK SYSTEM

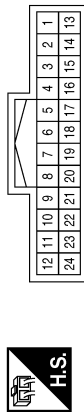
< WIRING DIAGRAM >

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



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

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



Terminal No.	Color of Wire	Signal Name
11	P	-(WITH POWER BACK DOOR)
11	LG	-(WITHOUT POWER BACK DOOR)
23	B	-

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



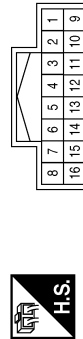
Terminal No.	Color of Wire	Signal Name
7	B	-(WITHOUT POWER BACK DOOR)
8	BR	-(WITHOUT POWER BACK DOOR)

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



Terminal No.	Color of Wire	Signal Name
4	B	-(WITHOUT POWER BACK DOOR)
5	BR	-(WITHOUT POWER BACK DOOR)

Connector No.	D507
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6	B	-
12	P	-(WITH POWER BACK DOOR)
12	LG	-(WITHOUT POWER BACK DOOR)

Connector No.	D550
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
4	B	-(WITHOUT POWER BACK DOOR)
5	BR	-(WITHOUT POWER BACK DOOR)

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POWER DOOR LOCK SYSTEM

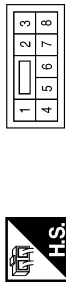
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Connector No.	D565
Connector Name	BACK DOOR LOCK ASSEMBLY (WITHOUT POWER BACK DOOR)
Connector Color	WHITE



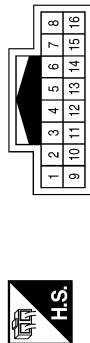
Terminal No.	Color of Wire	Signal Name
1	BR	-
2	B	-
3	G	-
4	B	-

Connector No.	D557
Connector Name	BACK DOOR LOCK ASSEMBLY (WITH POWER BACK DOOR)
Connector Color	WHITE



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

Connector No.	D552
Connector Name	WIRE TO WIRE
Connector Color	WHITE



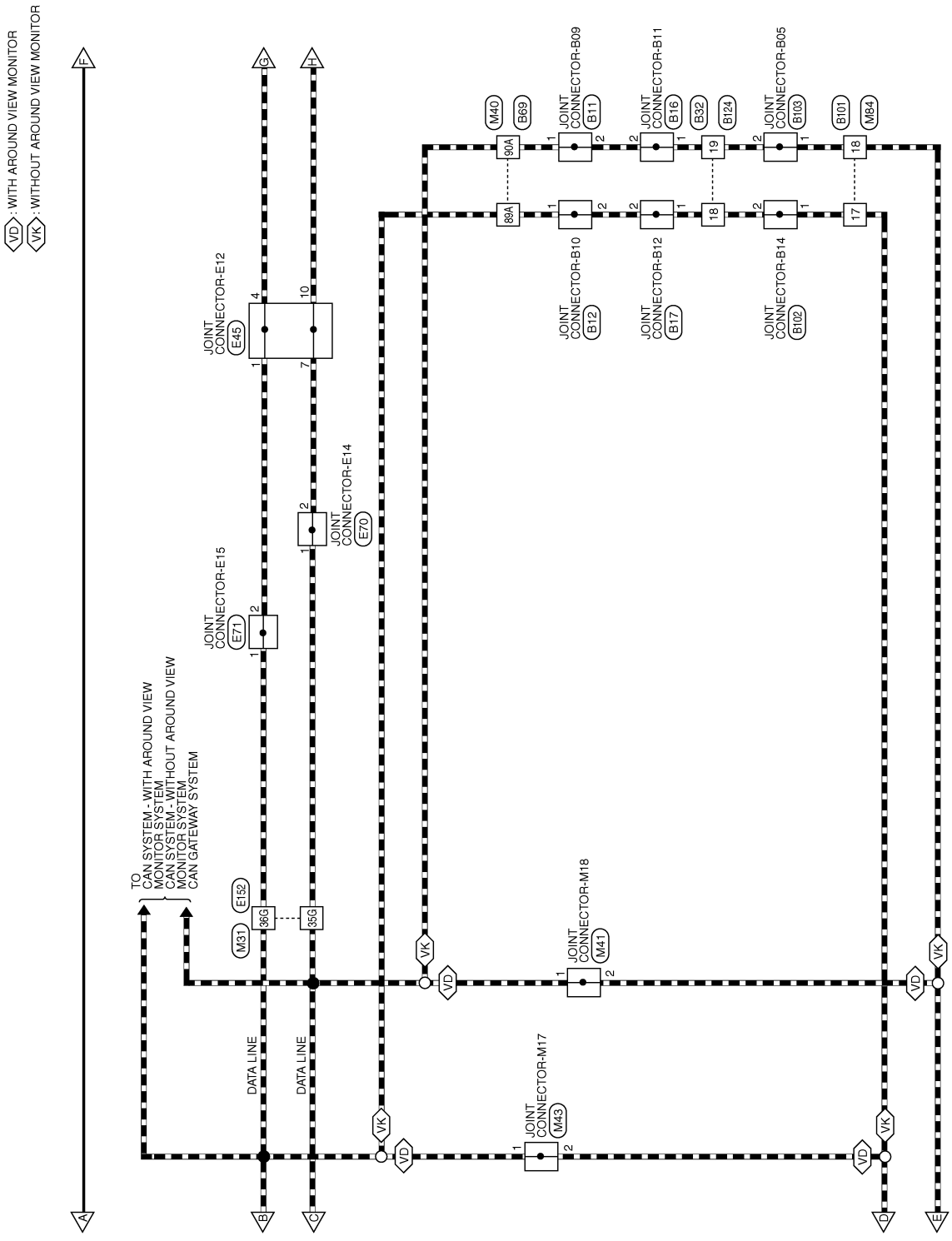
Terminal No.	Color of Wire	Signal Name
6	B	-
12	G	-

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2015 Pathfinder

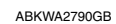
INTELLIGENT KEY SYSTEM

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ABKWA2789GB

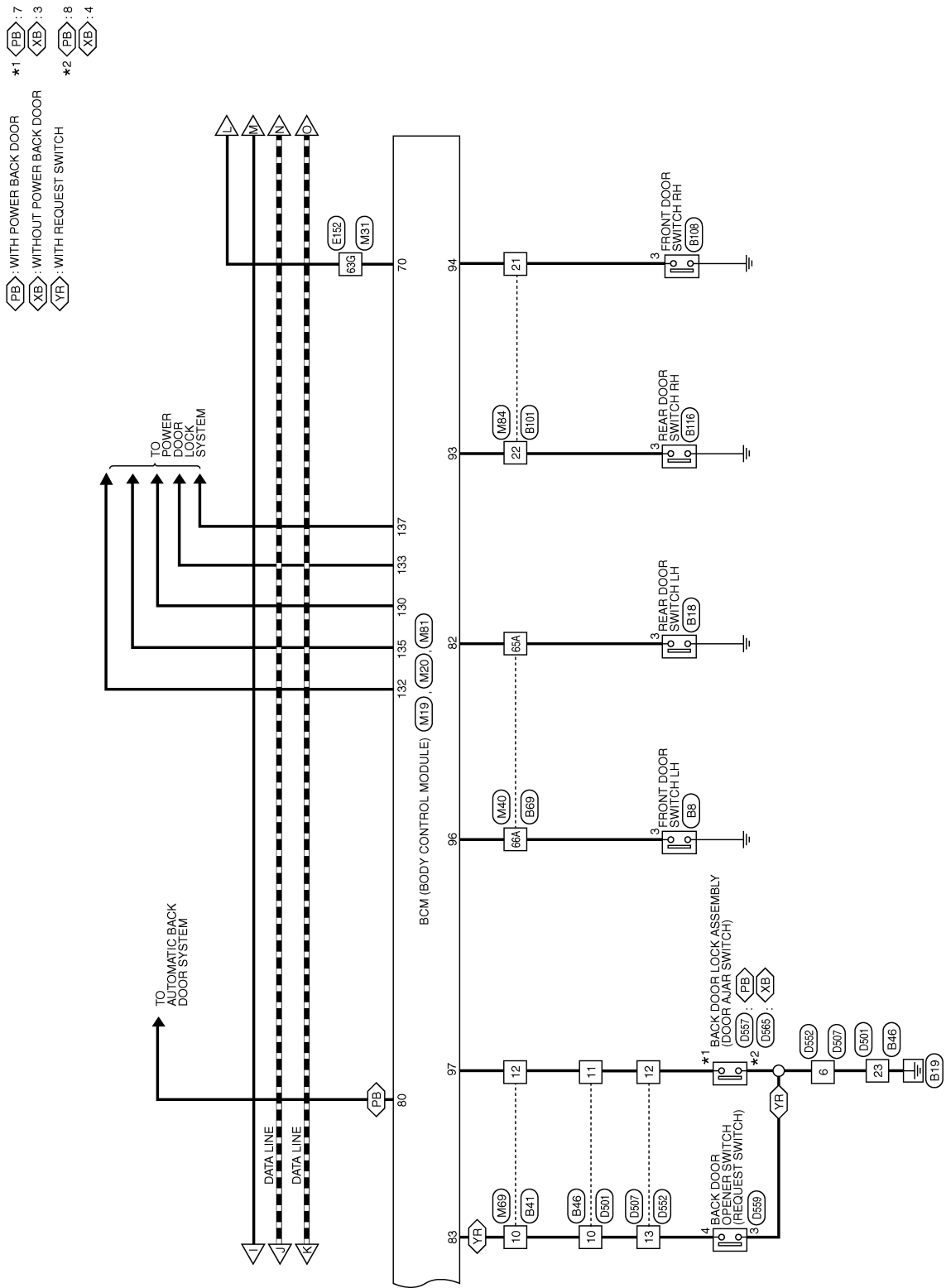
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INTELLIGENT KEY SYSTEM

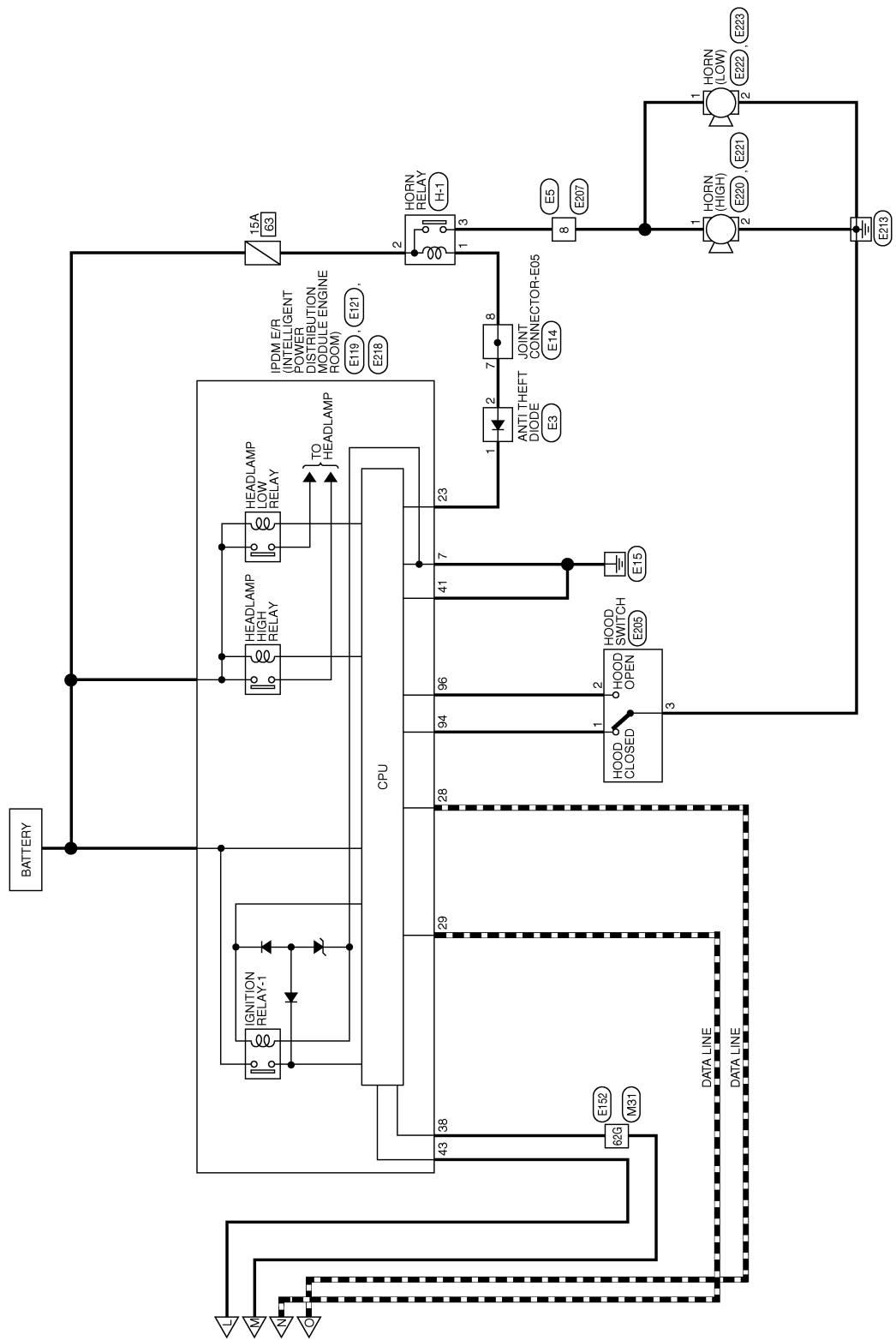
< WIRING DIAGRAM >



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INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >



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DLK

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INTELLIGENT KEY SYSTEM CONNECTORS

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Connector No.	M4
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

Connector No.	M14
Connector Name	INSIDE KEY ANTENNA (INSTRUMENT CENTER)
Connector Color	GRAY

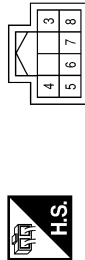


Terminal No.	Color of Wire	Signal Name
2N	BG	-
4N	V	-
5N	Y	-
6N	W	-

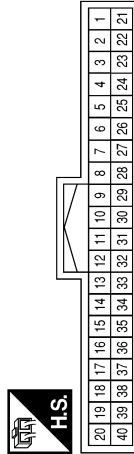
Terminal No.	Color of Wire	Signal Name
13P	W	-

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

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



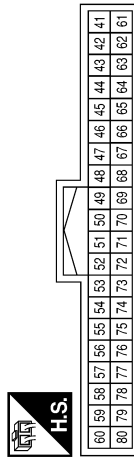
Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN



Terminal No.	Color of Wire	Signal Name
3	BG	-
4	B	-
7	P	-
8	G	-

Terminal No.	Color of Wire	Signal Name
1	G	ENG START SW
20	W	SHIFT P
25	W	BRAKE SW FUSE
27	G	BRAKE SW LAMP
30	P	DR DOOR LOCK STATUS
36	W	HAZARD SW

Terminal No.	Color of Wire	Signal Name
59	P	CAN-L
60	L	CAN-H
63	BG	I-KEY LINK SIGNAL
64	P	BUZZER OUT
69	G	AT DEVICE OUT
70	P	IGN USM OUT1
71	R	DR REQUEST SW
72	G	AS REQUEST SW
80	R	BACK DOOR OPEN SW



INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE



20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21

Terminal No.	Color of Wire	Signal Name
1	B	GND1
2	B	GND2
22	W	BAT
38	P	CAN-L
39	L	CAN-H

Terminal No.	Color of Wire	Signal Name
97	W	BACK DOOR SW
99	P	ROOM ANT 3 B
100	W	ROOM ANT 3 A
101	R	REAR BUMPER ANT B
102	G	REAR BUMPER ANT A

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

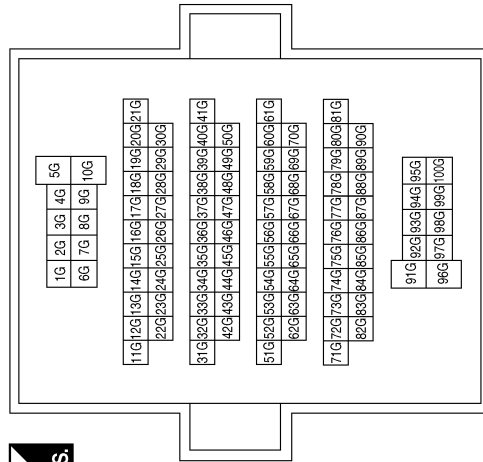


92	91	90	89	88	87	86	85	84	83	82	81
104	103	102	101	100	99	98	97	96	95	94	93

Terminal No.	Color of Wire	Signal Name
82	W	RL DOOR SW
83	BG	BACK DOOR REQUEST SW
93	R	RR DOOR SW
94	G	AS DOOR SW
96	BG	DR DOOR SW

Terminal No.	Color of Wire	Signal Name
10G	W	-
35G	P	-
36G	L	-
62G	G	-
63G	P	-
69G	P	-
70G	BG	-

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

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INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

Connector No.	M41
Connector Name	JOINT CONNECTOR-M18
Connector Color	WHITE

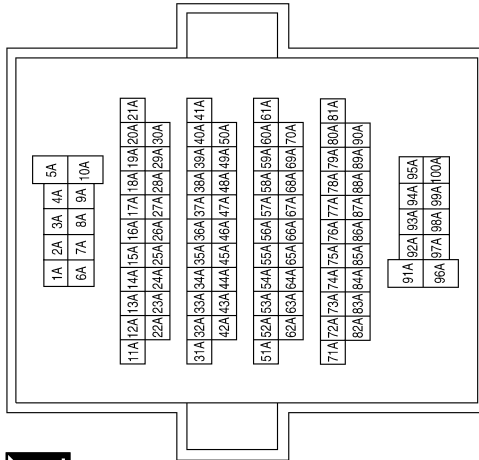


4	3	2	1

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

Terminal No.	Color of Wire	Signal Name
15A	R	-
16A	G	-
49A	P	-
50A	W	-
65A	W	-
66A	BG	-
89A	L	-
90A	P	-

Connector No.	M40
Connector Name	WIRE TO WIRE
Connector Color	GRAY



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



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

Connector No.	M56
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

Connector No.	M43
Connector Name	JOINT CONNECTOR-M17
Connector Color	WHITE



4	3	2	1

Terminal No.	Color of Wire	Signal Name
9R	G	-
10R	W	-

Terminal No.	Color of Wire	Signal Name
17	R	-
18	W	-

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

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INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

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



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

Terminal No.	Color of Wire	Signal Name
10	BG	-
12	W	-

Connector No.	M78
Connector Name	CVT SHIFT SELECTOR
Connector Color	WHITE



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

Terminal No.	Color of Wire	Signal Name
3	GR	-
4	B	-
5	G	-
6	W	-

Connector No.	M80
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



116	115	114	113	112	111	110	109	108	107	106	105
128	127	126	125	124	123	122	121	120	119	118	117

Terminal No.	Color of Wire	Signal Name
105	LG	FR FLASHER
108	GR	SHIFT LOCK SOLENOID OUT
111	P	ACC LED
114	W	AS DOOR ANT A
115	BG	AS DOOR ANT B
116	W	ROOM ANT 2 A
117	SB	FL FLASHER
119	R	RF NIMOCO
121	G	DR DOOR ANT B
122	P	DR DOOR ANT A
123	W	ROOM ANT 1 A
124	G	ROOM ANT 1 B
128	R	ROOM ANT 2 B

Connector No.	M81
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



137	136	135	134	133	132	131	130	129
143	142	141	140	139	138			

Terminal No.	Color of Wire	Signal Name
129	SB	BATTERY SAVER OUT
130	LG	DOOR UNLOCK AS
131	W	BAT BCM FUSE
132	BR	DOOR LOCK RR/RL
133	Y	DOOR UNLOCK RR/RL
134	B	GND 2
135	L	DOOR LOCK DR/AS/FL
136	LG	ROOM LAMP CONT
137	V	DOOR UNLOCK DR/FL
138	V	BAT REAR DOOR
139	W	BAT POWER F/L
142	Y	BAT FRONT DOOR
143	B	GND 1

Connector No.	M84
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

Terminal No.	Color of Wire	Signal Name
17	L	-
18	P	-
21	G	-
22	R	-

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INTELLIGENT KEY SYSTEM

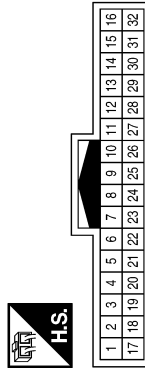
< WIRING DIAGRAM >

Connector No.	M86
Connector Name	REMOTE KEYLESS ENTRY RECEIVER
Connector Color	BLACK



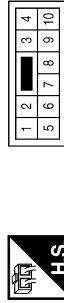
Terminal No.	Color of Wire	Signal Name
1	BG	—
2	R	—
3	GR	—

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



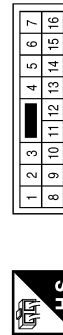
Terminal No.	Color of Wire	Signal Name
24	G	—
25	BG	—
26	W	—

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



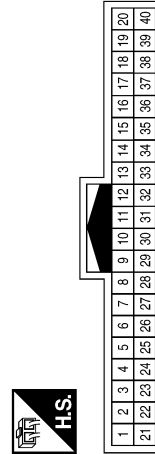
Terminal No.	Color of Wire	Signal Name
8	B	—

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



Terminal No.	Color of Wire	Signal Name
3	B	—

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



Terminal No.	Color of Wire	Signal Name
10	R	—
11	G	—
12	P	—
38	P	—

Connector No.	M181
Connector Name	JOINT CONNECTOR-M36
Connector Color	WHITE



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

ABKIA4710GB

INTELLIGENT KEY SYSTEM

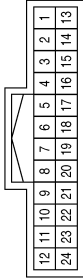
< WIRING DIAGRAM >

Connector No.	M255
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Color	GRAY



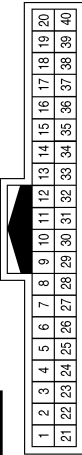
Terminal No.	Color of Wire	Signal Name
1	W	-
2	B	-

Connector No.	M214
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
17	B	-
18	W	-

Connector No.	M202
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

Connector No.	E3
Connector Name	ANTI THEFT DIODE
Connector Color	BLACK



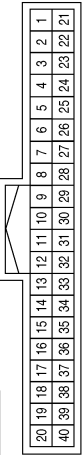
Terminal No.	Color of Wire	Signal Name
1	LG	-
2	Y	-

Connector No.	E1
Connector Name	INTELLIGENT KEY WARNING BUZZER
Connector Color	BROWN



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

Connector No.	M257
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

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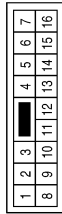
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P

DLK

INTELLIGENT KEY SYSTEM

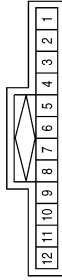
< WIRING DIAGRAM >

Connector No.	E5
Connector Name	WIRE TO WIRE
Connector Color	WHITE



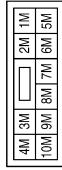
Terminal No.	Color of Wire	Signal Name
8	G	—

Connector No.	E14
Connector Name	JOINT CONNECTOR-E05
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
7	Y	—
8	Y	—

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



Terminal No.	Color of Wire	Signal Name
5M	Y	—
7M	R	—

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



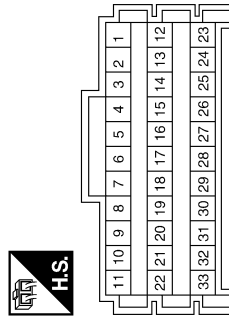
Terminal No.	Color of Wire	Signal Name
1	Y	—
2	W	—

Connector No.	E39
Connector Name	STOP LAMP RELAY
Connector Color	BLUE



Terminal No.	Color of Wire	Signal Name
1	W	—
2	B	—
3	Y	—
5	R	—

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



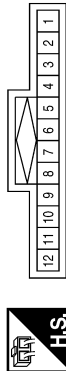
Terminal No.	Color of Wire	Signal Name
12	Y	—
13	Y	—
14	Y	—

ABKIA4712GB

INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

Connector No.	E45
Connector Name	JOINT CONNECTOR-E12
Connector Color	BLUE



Terminal No.	Color of Wire	Signal Name
1	L	-
4	L	-
7	P	-
10	P	-

Connector No.	E70
Connector Name	JOINT CONNECTOR-E14
Connector Color	BLACK



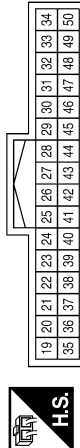
Terminal No.	Color of Wire	Signal Name
1	P	-
2	P	-

Connector No.	E71
Connector Name	JOINT CONNECTOR-E15
Connector Color	BLACK



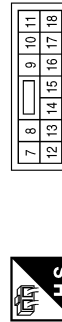
Terminal No.	Color of Wire	Signal Name
1	L	-
2	L	-

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



Terminal No.	Color of Wire	Signal Name
23	LG	HORN SW
28	P	CAN-L
29	L	CAN-H
38	P	PUSH START SW
41	B	GND (SIGNAL)
43	L	IGN SIGNAL

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



Terminal No.	Color of Wire	Signal Name
7	B	GND (POWER)

ABKIA4713GB

< WIRING DIAGRAM >

82	83	84	85	86	87	88	89
90	91	92	93	94	95	96	97

5G	4G	3G	2G	1G
10G	9G	8G	7G	6G

21G	20G	19G	18G	17G	16G	15G	14G	13G	12G	11G
30G	29G	28G	27G	26G	25G	24G	23G	22G		

41G	40G	39G	38G	37G	36G	35G	34G	33G	32G	31G
50G	49G	48G	47G	46G	45G	44G	43G	42G		

61G	60G	59G	58G	57G	56G	55G	54G	53G	52G	51G
70G	69G	68G	67G	66G	65G	64G	63G	62G		

81G	80G	79G	78G	77G	76G	75G	74G	73G	72G	71G
90G	89G	88G	87G	86G	85G	84G	83G	82G		

95G	94G	93G	92G	91G
100G	99G	98G	97G	96G

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

ABKIA4714GB

INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

Connector No.	E223
Connector Name	HORN (LOW)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
2	B	-

Connector No.	E222
Connector Name	HORN (LOW)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	G	-

Connector No.	E221
Connector Name	HORN (HIGH)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
2	B	-

Connector No.	B12
Connector Name	JOINT CONNECTOR-B10
Connector Color	WHITE



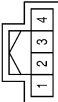
Terminal No.	Color of Wire	Signal Name
1	L	-
2	L	-

Connector No.	B11
Connector Name	JOINT CONNECTOR-B09
Connector Color	WHITE



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

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



Terminal No.	Color of Wire	Signal Name
3	L	-

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INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

Connector No.	B16
Connector Name	JOINT CONNECTOR-B11
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	P	—
2	P	—

Connector No.	B17
Connector Name	JOINT CONNECTOR-B12
Connector Color	WHITE



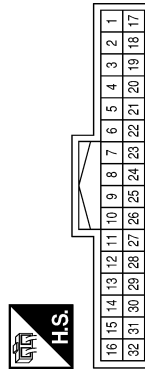
Terminal No.	Color of Wire	Signal Name
1	L	—
2	L	—

Connector No.	B18
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE



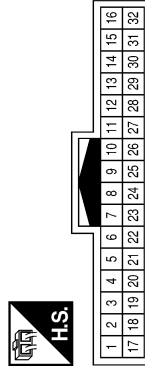
Terminal No.	Color of Wire	Signal Name
3	SB	—

Connector No.	B32
Connector Name	WIRE TO WIRE
Connector Color	WHITE



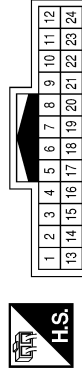
Terminal No.	Color of Wire	Signal Name
18	L	—
19	P	—

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



Terminal No.	Color of Wire	Signal Name
10	R	—
12	G	—

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



Terminal No.	Color of Wire	Signal Name
10	R	—
11	G	—
23	GR	—

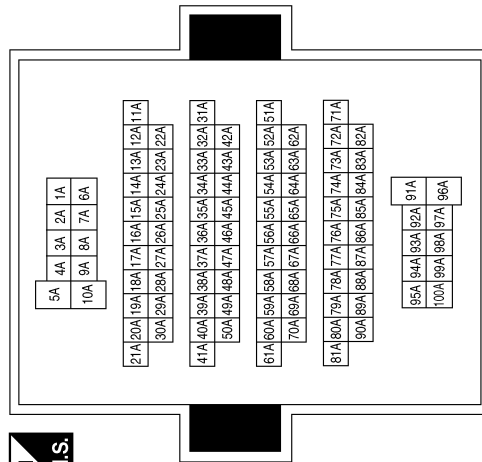
Connector No.	B76
Connector Name	INSIDE KEY ANTENNA (LUGGAGE ROOM)
Connector Color	GRAY



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

Terminal No.	Color of Wire	Signal Name
15A	G	-
16A	W	-
49A	G	-
50A	W	-
65A	SB	-
66A	L	-
89A	L	-
90A	P	-

Connector No.	B69
Connector Name	WIRE TO WIRE
Connector Color	GRAY

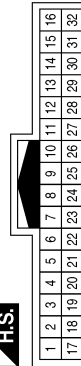


Connector No.	B102
Connector Name	JOINT CONNECTOR-B14
Connector Color	WHITE



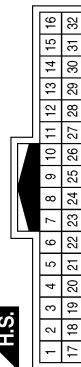
Terminal No.	Color of Wire	Signal Name
1	L	-
2	L	-

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



Terminal No.	Color of Wire	Signal Name
17	L	-
18	P	-
21	LG	-
22	LG	-

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
9	W	-
10	G	-

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INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

Connector No.	B103
Connector Name	JOINT CONNECTOR-B05
Connector Color	WHITE



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

Connector No.	B108
Connector Name	FRONT DOOR SWITCH RH
Connector Color	WHITE



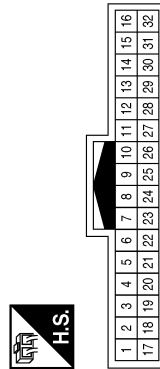
Terminal No.	Color of Wire	Signal Name
3	LG	-

Connector No.	B116
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE



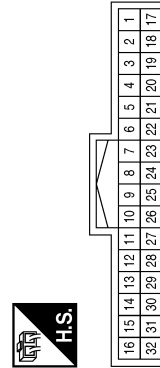
Terminal No.	Color of Wire	Signal Name
3	LG	-

Connector No.	B124
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
18	L	-
19	P	-

Connector No.	B400
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
9	W	-
10	G	-

Connector No.	B403
Connector Name	OUTSIDE KEY ANTENNA (REAR BUMPER)
Connector Color	GRAY



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

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INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

Connector No.	D2
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	B	—

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



20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21

Terminal No.	Color of Wire	Signal Name
10	BR	—
11	Y	—
12	LG	—
38	LG	—

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
3	LG	—
4	B	—

Connector No.	D15
Connector Name	FRONT OUTSIDE HANDLE ASSEMBLY LH
Connector Color	BLACK



1	2	3	4

Terminal No.	Color of Wire	Signal Name
1	LG	—
2	Y	—
3	BR	—
4	B	—

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



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

Terminal No.	Color of Wire	Signal Name
24	LG	—
25	Y	—
26	LG	—

Connector No.	D102
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
8	B	—

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DLK

INTELLIGENT KEY SYSTEM

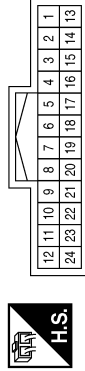
< WIRING DIAGRAM >

Connector No.	D115
Connector Name	FRONT OUTSIDE HANDLE ASSEMBLY RH
Connector Color	BLACK



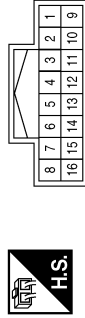
Terminal No.	Color of Wire	Signal Name
1	LG	–
2	Y	–
3	LG	–
4	B	–

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



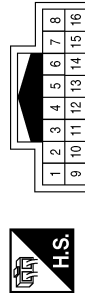
Terminal No.	Color of Wire	Signal Name
10	V	–
11	P	– (WITH POWER BACK DOOR)
11	LG	– (WITHOUT POWER BACK DOOR)
23	B	–

Connector No.	D507
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6	B	–
12	P	– (WITH POWER BACK DOOR)
12	LG	– (WITHOUT POWER BACK DOOR)
13	V	–

Connector No.	D552
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6	B	–
12	G	–
13	W	–

Connector No.	D557
Connector Name	BACK DOOR LOCK ASSEMBLY (WITH POWER BACK DOOR)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
7	G	–
8	B	–

Connector No.	D559
Connector Name	BACK DOOR OPENER SWITCH
Connector Color	WHITE

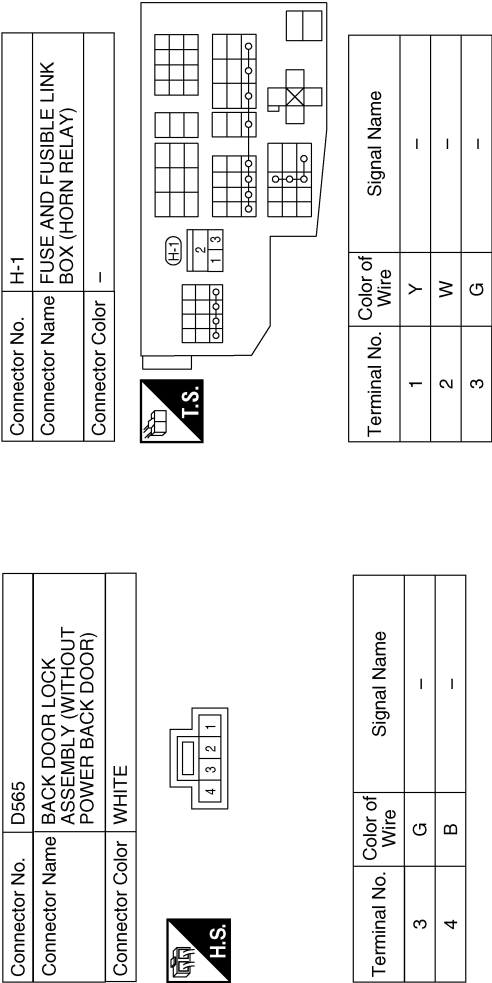


Terminal No.	Color of Wire	Signal Name
3	B	–
4	W	–

ABKIA6375GB

INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >



DLK

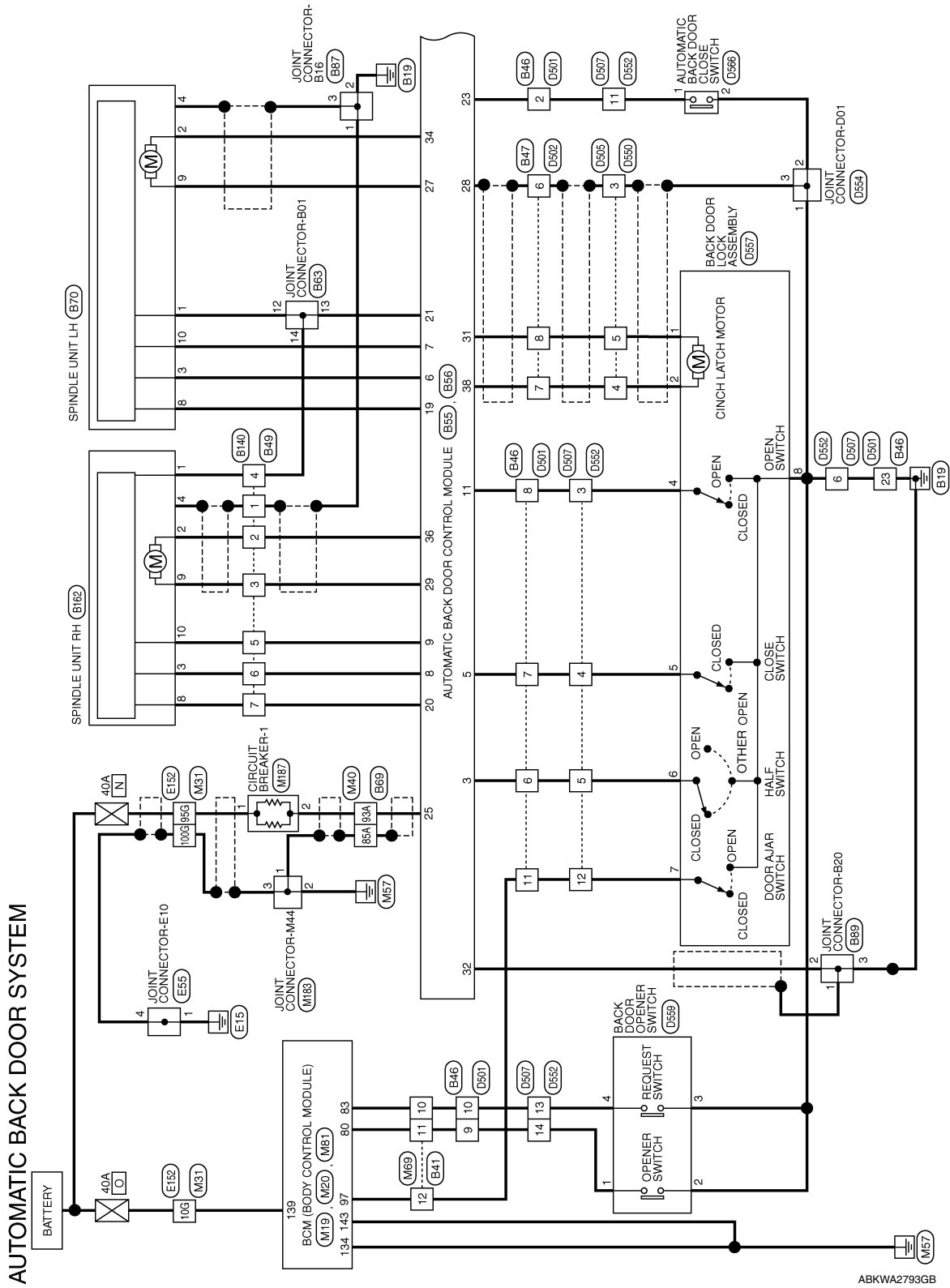
AUTOMATIC BACK DOOR SYSTEM

< WIRING DIAGRAM >

AUTOMATIC BACK DOOR SYSTEM

Wiring Diagram

INFOID:0000000011151698

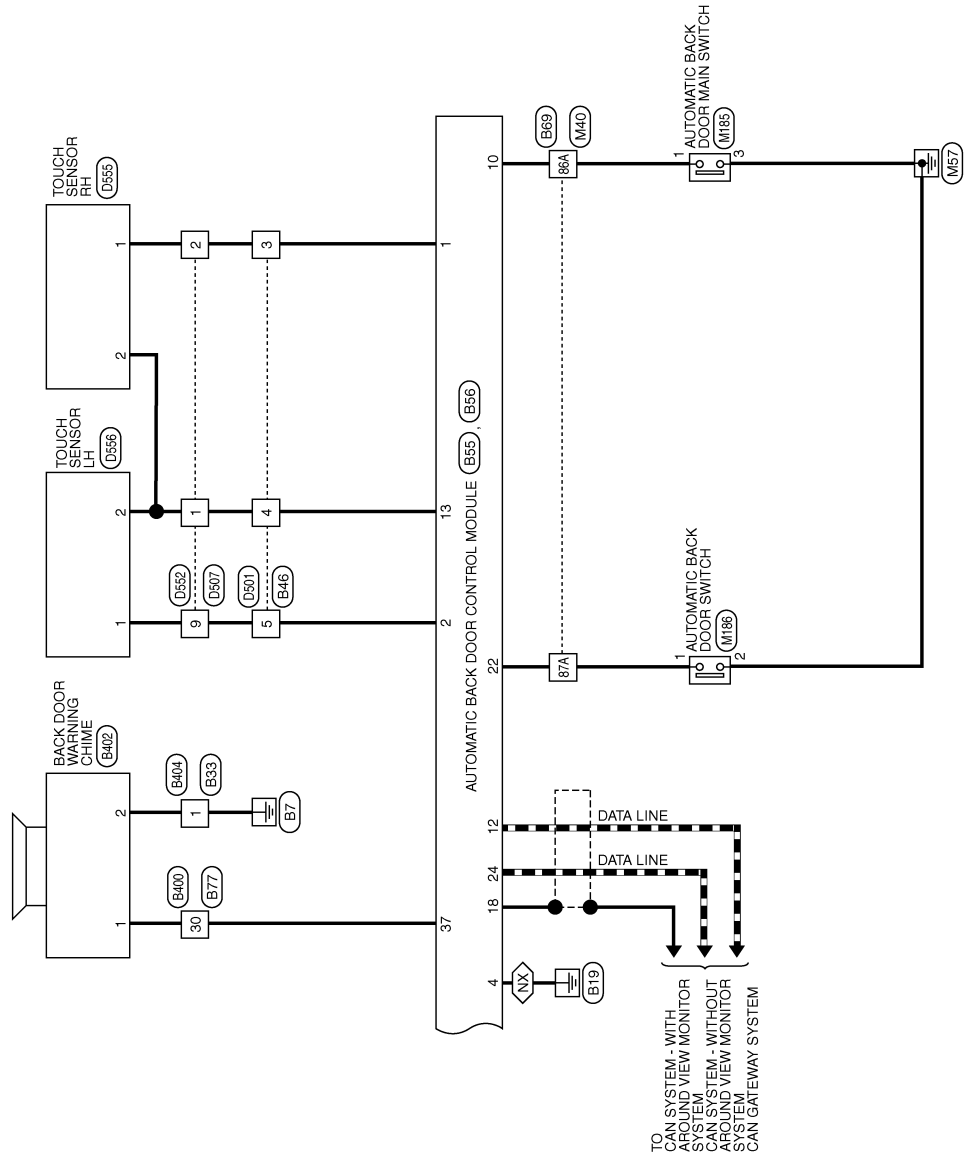


ABKWA2793GB

AUTOMATIC BACK DOOR SYSTEM

< WIRING DIAGRAM >

(NX) : EXCEPT FOR MEXICO



ABKWA2794GB

DLK

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AUTOMATIC BACK DOOR SYSTEM

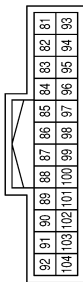
< WIRING DIAGRAM >

AUTOMATIC BACK DOOR SYSTEM CONNECTORS

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



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

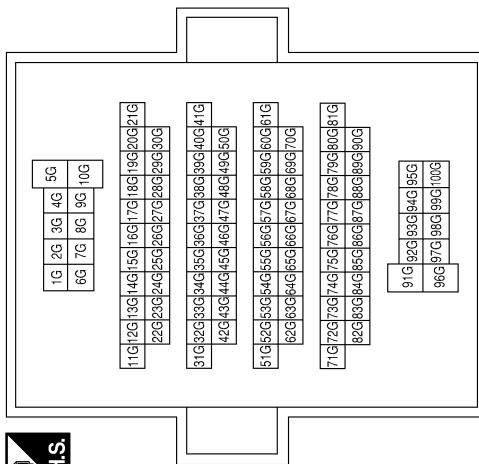


Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
83	BG	BACK DOOR REQUEST SW
97	W	BACK DOOR SW

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



AAKIA0894GB

AUTOMATIC BACK DOOR SYSTEM

< WIRING DIAGRAM >

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

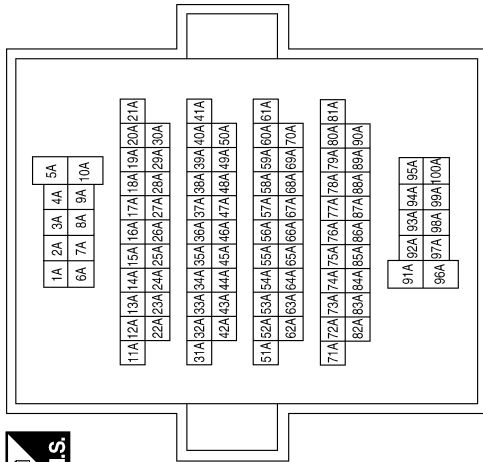


16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17

Terminal No.	Color of Wire	Signal Name
10	BG	-
11	R	-
12	W	-

Terminal No.	Color of Wire	Signal Name
85A	SHIELD	-
86A	Y	-
87A	LG	-
93A	B	- (WITH POWER BACK DOOR)

Connector No.	M40
Connector Name	WIRE TO WIRE
Connector Color	GRAY



Connector No.	M185
Connector Name	AUTOMATIC BACK DOOR MAIN SWITCH
Connector Color	WHITE



2	4	3
1		

Terminal No.	Color of Wire	Signal Name
1	Y	-
3	GR	-

Connector No.	M183
Connector Name	JOINT CONNECTOR-M44
Connector Color	WHITE

4	3	2	1



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

Connector No.	M81
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



137	136	135	134	133	132	131	130	129
143	142	141	140	139	138			

Terminal No.	Color of Wire	Signal Name
134	B	GND 2
139	W	BAT POWER F/L
143	B	GND 1

ABKIA4702GB

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

DLK

AUTOMATIC BACK DOOR SYSTEM

< WIRING DIAGRAM >

Connector No.	E55
Connector Name	JOINT CONNECTOR-E10
Connector Color	WHITE



4	3	2	1

Connector No.	M187
Connector Name	CIRCUIT BREAKER-1
Connector Color	WHITE



1	2

Connector No.	M186
Connector Name	AUTOMATIC BACK DOOR SWITCH
Connector Color	GREEN



4	3
2	1

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

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

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

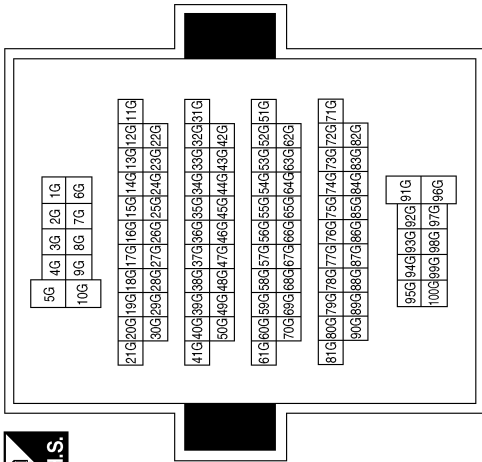
Connector No.	B33
Connector Name	WIRE TO WIRE
Connector Color	BLACK



1	2

Terminal No.	Color of Wire	Signal Name
10G	P	-
95G	W	-
100G	SHIELD	-

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



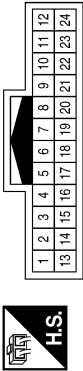
ABKIA6378GB

AUTOMATIC BACK DOOR SYSTEM

< WIRING DIAGRAM >

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

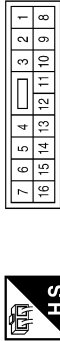
Connector No.	B46
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	Y	-
3	BR	-
4	SB	-
5	LG	-
6	L	-

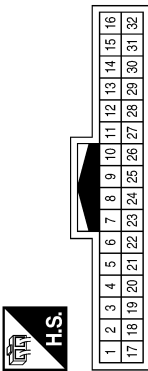
Terminal No.	Color of Wire	Signal Name
4	LG	-
5	L	-
6	BR	-
7	Y	-

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



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

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



Terminal No.	Color of Wire	Signal Name
10	R	-
11	W	-
12	G	-

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



Terminal No.	Color of Wire	Signal Name
6	SHIELD	-
7	W	- (WITH POWER BACK DOOR)
8	B	- (WITH POWER BACK DOOR)

ABKIA4703GB

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AUTOMATIC BACK DOOR SYSTEM

< WIRING DIAGRAM >

Terminal No.	Color of Wire	Signal Name
19	SB	POWER LH
20	Y	POWER RH
21	LG	GND
22	SB	DRIVER SW
23	Y	INSIDE CLOSE SW
24	B	CAN-H

Terminal No.	Color of Wire	Signal Name
6	V	A SIGN LH
7	Y	B SIGN LH
8	BR	A SIGN RH
9	L	B SIGN RH
10	LG	MAIN SW
11	BR	OPEN SW
12	W	CAN-L
13	SB	TOUCH SENS GND
14	-	-
15	-	-
16	-	-
17	-	-
18	SHIELD	CAN SHIELD

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

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



Terminal No.	Color of Wire	Signal Name
1	BR	TOUCH SENS RH
2	LG	TOUCH SENS LH
3	L	HALF-LATCH-SW
4	GR	LOGIC
5	LG	CLOSE SW

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

11	10	9	8	7	6	5	4	3	2	1
22	21	20	19	18	17	16	15	14	13	12
33	32	31	30	29	28	27	26	25	24	23



Terminal No.	Color of Wire	Signal Name
12	LG	-
13	LG	-
14	LG	-

Terminal No.	Color of Wire	Signal Name
30	-	-
31	B	LATCH MTR OPEN
32	B	GND (POWER 1)
33	-	-
34	W	LH MTR CLOSE
35	-	-
36	W	RH MTR CLOSE
37	LG	BUZZER
38	W	LATCH MTR CLOSE

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

25	26	27	28	29	30	31
32	33	34	35	36	37	38



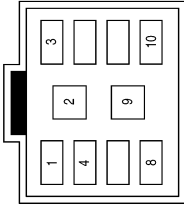
Terminal No.	Color of Wire	Signal Name
25	B	+B
26	-	-
27	B	LH MTR OPEN
28	SHIELD	NOISE SHIELD LATCH
29	B	RH MTR OPEN

ABKIA4704GB

AUTOMATIC BACK DOOR SYSTEM

< WIRING DIAGRAM >

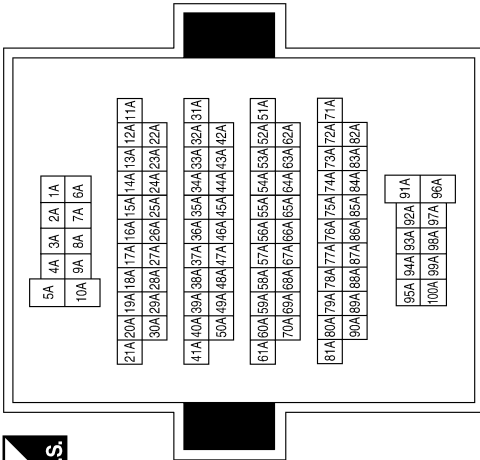
Connector No.	B70
Connector Name	SPINDLE UNIT LH
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	LG	-
2	W	-
3	V	-
4	SHIELD	-
8	SB	-
9	B	-
10	Y	-

Terminal No.	Color of Wire	Signal Name
85A	SHIELD	-
86A	LG	-
87A	SB	-
93A	B	-(WITH POWER BACK DOOR)

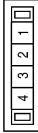
Connector No.	B69
Connector Name	WIRE TO WIRE
Connector Color	GRAY



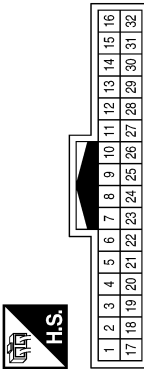
Connector No.	B89
Connector Name	JOINT CONNECTOR-B20
Connector Color	WHITE



Connector No.	B87
Connector Name	JOINT CONNECTOR-B16
Connector Color	WHITE



Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

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

Terminal No.	Color of Wire	Signal Name
30	LG	-

ABKIA4705GB

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

DLK

AUTOMATIC BACK DOOR SYSTEM

< WIRING DIAGRAM >

Connector No.	B140
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.	B162
Connector Name	SPINDLE UNIT RH
Connector Color	BLACK

1	2	3
4	9	10
8		



Connector No.	B400
Connector Name	WIRE TO WIRE
Connector Color	WHITE



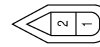
16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17

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

Terminal No.	Color of Wire	Signal Name
1	L	-
2	W	-
3	Y	-
4	SHIELD	-
8	LG	-
9	B	-
10	BR	-

Terminal No.	Color of Wire	Signal Name
30	LG	-

Connector No.	B402
Connector Name	BACK DOOR WARNING CHIME
Connector Color	BROWN



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

Connector No.	B404
Connector Name	WIRE TO WIRE
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	B	-

AAKIA0900GB

AUTOMATIC BACK DOOR SYSTEM

< WIRING DIAGRAM >

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



2	1
6	5
4	3

Terminal No.	Color of Wire	Signal Name
3	SHIELD	-
4	BR/B	-(WITH POWER BACK DOOR)
5	R/G	-(WITH POWER BACK DOOR)

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



4	3	2	1
8	7	6	5

Terminal No.	Color of Wire	Signal Name
6	SHIELD	-
7	BR/B	-(WITH POWER BACK DOOR)
8	R/G	-(WITH POWER BACK DOOR)

Connector No.	D501
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
2	BG	-
3	V	-
4	LG	-
5	G	-
6	SB	-
7	L	-
8	R	-
9	LG	-
10	V	-
11	P	-(WITH POWER BACK DOOR)
23	B	-

Connector No.	D550
Connector Name	WIRE TO WIRE
Connector Color	WHITE



1	2
3	4
5	6

Terminal No.	Color of Wire	Signal Name
3	SHIELD	-
4	W	-(WITH POWER BACK DOOR)
5	B	-(WITH POWER BACK DOOR)

Terminal No.	Color of Wire	Signal Name
5	SB	-
6	B	-
9	G	-
11	BG	-
12	P	-(WITH POWER BACK DOOR)
13	V	-
14	LG	-

Connector No.	D507
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

Terminal No.	Color of Wire	Signal Name
1	LG	-
2	V	-
3	R	-
4	L	-

ABKIA4706GB

AUTOMATIC BACK DOOR SYSTEM

< WIRING DIAGRAM >

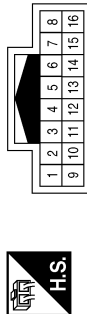
Connector No.	D554
Connector Name	JOINT CONNECTOR-D01
Connector Color	WHITE



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

Terminal No.	Color of Wire	Signal Name
4	L	-
5	SB	-
6	B	-
9	G	-
11	R	-
12	G	-
13	W	-
14	G	-

Connector No.	D552
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

Connector No.	D557
Connector Name	BACK DOOR LOCK ASSEMBLY (WITH POWER BACK DOOR)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	B	-
2	W	-
4	R	-
5	L	-
6	SB	-
7	G	-
8	B	-

Connector No.	D556
Connector Name	TOUCH SENSOR LH
Connector Color	WHITE



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

Connector No.	D555
Connector Name	TOUCH SENSOR RH
Connector Color	GRAY



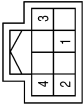
Terminal No.	Color of Wire	Signal Name
1	V	-
2	LG	-

ABKIA6377GB

AUTOMATIC BACK DOOR SYSTEM

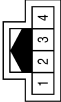
< WIRING DIAGRAM >

Connector No.	D566
Connector Name	AUTOMATIC BACK DOOR CLOSE SWITCH
Connector Color	GREEN



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

Connector No.	D559
Connector Name	BACK DOOR OPENER SWITCH
Connector Color	WHITE



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

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DLK

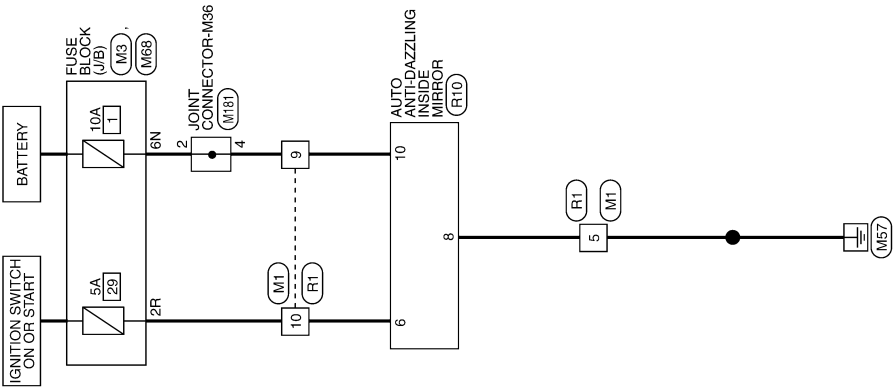
HOMELINK UNIVERSAL TRANSCEIVER

< WIRING DIAGRAM >

HOMELINK UNIVERSAL TRANSCEIVER

Wiring Diagram

INFOID:0000000011151699

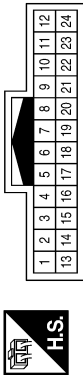


HOMELINK UNIVERSAL TRANSCEIVER

AAKWA0498GB

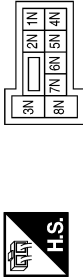
HOMELINK UNIVERSAL TRANSCEIVER CONNECTORS

Connector No.	M1
Connector Name	WIRE TO WIRE
Connector Color	WHITE



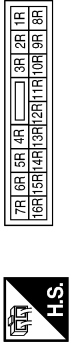
Terminal No.	Color of Wire	Signal Name
5	B	—
9	W	—
10	LG	—

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6N	W	—

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



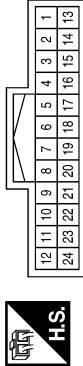
Terminal No.	Color of Wire	Signal Name
2R	LG	—

Connector No.	M181
Connector Name	JOINT CONNECTOR-M36
Connector Color	WHITE



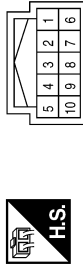
Terminal No.	Color of Wire	Signal Name
2	W	—
4	W	—

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
5	B	—
9	G	—
10	W	—

Connector No.	R10
Connector Name	AUTO ANTI-DAZZLING INSIDE MIRROR
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
6	W	—
8	B	—
10	G	—

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

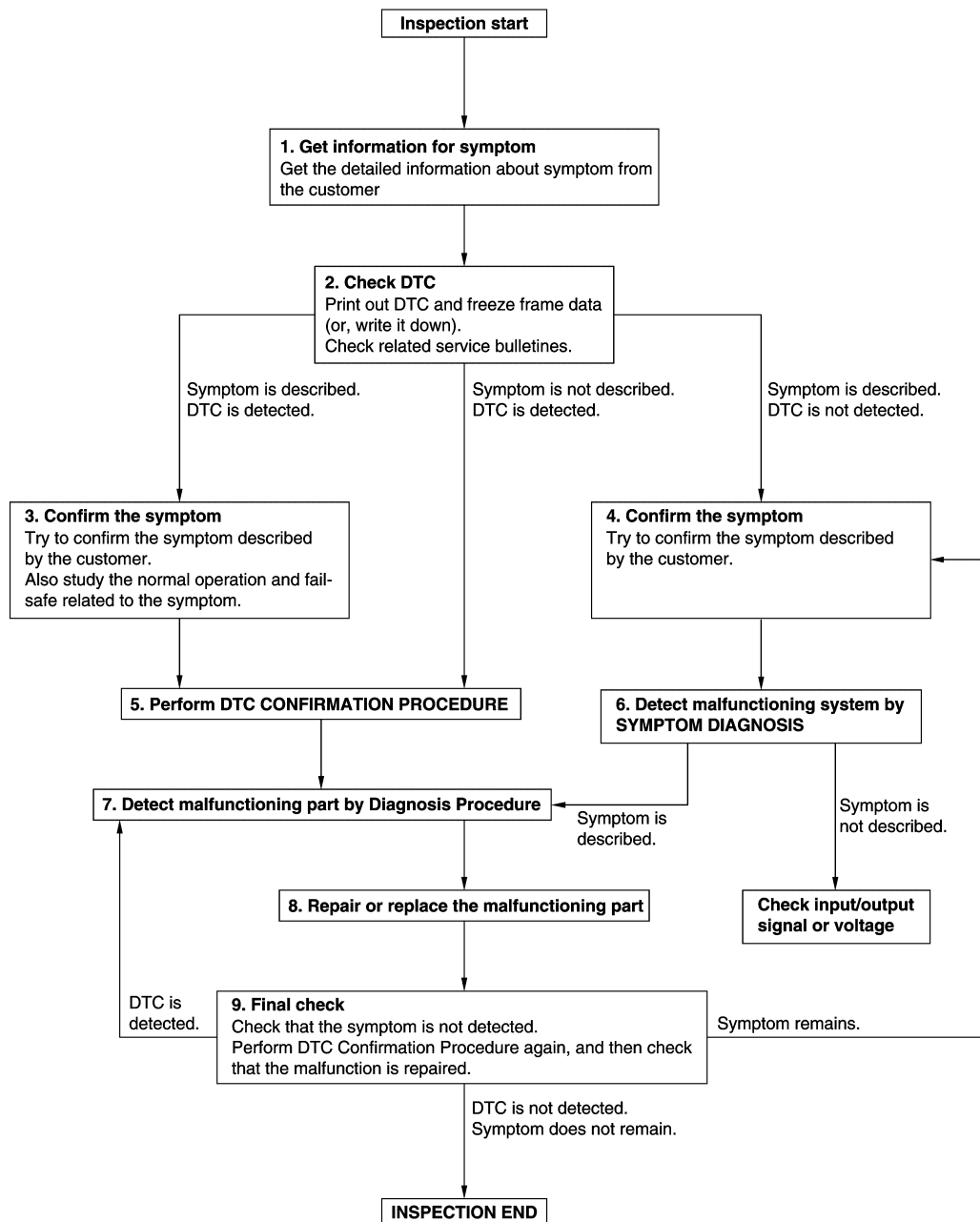
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000011151700

OVERALL SEQUENCE



JMKIA8652GB

DETAILED FLOW

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2.CHECK DTC

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

Are any symptoms described and any DTC detected?

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

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

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

3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

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

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

>> GO TO 5.

4.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

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

>> GO TO 6.

5.PERFORM DTC CONFIRMATION PROCEDURE

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

If two or more DTCs are detected, refer to [BCS-50. "DTC Inspection Priority Chart"](#) (BCM) and determine trouble diagnosis order.

NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC CONFIRMATION PROCEDURE is not included on Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check.

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

Is DTC detected?

YES >> GO TO 7.

NO >> Check according to [GI-47. "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 >

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.

NO >> Check according to [GI-47, "Intermittent Incident"](#).

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 9.

9. FINAL CHECK

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

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

Is DTC detected and does symptom remain?

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

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

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

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

< BASIC INSPECTION >

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

Description

INFOID:0000000011151701

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

NOTE:

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

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

Work Procedure

INFOID:0000000011151702

1. INITIALIZATION

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

NOTE:

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

>> Inspection End.

DLK

ADDITIONAL SERVICE WHEN REPLACING BCM

< BASIC INSPECTION >

ADDITIONAL SERVICE WHEN REPLACING BCM

Description

INFOID:0000000011151703

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

Work Procedure

INFOID:0000000011151704

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

ADDITIONAL SERVICE WHEN REPLACING AUTOMATIC BACK DOOR CONTROL UNIT

< BASIC INSPECTION >

ADDITIONAL SERVICE WHEN REPLACING AUTOMATIC BACK DOOR CONTROL UNIT

Description

INFOID:0000000011151705

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

NOTE:

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

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

Work Procedure

INFOID:0000000011151706

1. INITIALIZATION

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

NOTE:

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

>> Inspection End.

DLK

CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

< BASIC INSPECTION >

CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

Description

INFOID:0000000011151707

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

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

NOTE:

If the back door reverses and closes while opening with an automatic/power open operation, it is an indication that re-calibration is needed.

Work Procedure

INFOID:0000000011151708

1.STEP 1

Fully close the back door manually.

>> GO TO 2.

2.STEP 2

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

>> GO TO 3.

3.STEP 3

Operate back door opener switch and perform automatic open operation.

NOTE:

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

>> GO TO 4.

4.STEP 4

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

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

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

5.STEP 5

Fully close the back door.

>> Inspection End.

U1000 CAN COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000011151709

Refer to [LAN-12, "CAN COMMUNICATION SYSTEM : System Description"](#).

DTC Logic

INFOID:0000000011151710

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:0000000011151711

1. PERFORM SELF DIAGNOSTIC

1. Turn ignition switch ON and wait for 2 second or more.
2. Check "SELF- DIAG RESULTS".

Is "CAN COMM CIRCUIT" displayed?

- YES >> Perform CAN Diagnosis as described in DIAGNOSIS section of CONSULT Operation Manual.
NO >> Refer to [GI-47, "Intermittent Incident"](#).

DLK

U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

U1010 CONTROL UNIT (CAN)

Description

INFOID:0000000011151712

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with two communication lines (CAN-H and CAN-L) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.

CAN Communication Signal Chart. Refer to [LAN-38, "CAN COMMUNICATION SYSTEM : CAN Communication Signal Chart"](#).

DTC Logic

INFOID:0000000011151713

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC Detection Condition	Possible cause
U1010	CONTROL UNIT(CAN)	Automatic back door control unit detected internal CAN communication circuit malfunction.	Automatic back door control module

Diagnosis Procedure

INFOID:0000000011151714

1. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

When DTC "U1010: CONTROL UNIT(CAN)" is detected, replace automatic back door control module.

>> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

B2401 IGNITION POWER SUPPLY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

B2401 IGNITION POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000011151715

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2401	IGN OPEN	Automatic back door control module cannot detect ignition switch ON signal via CAN communication with BCM.	• BCM • Automatic back door control module • CAN communication system

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check Self Diagnostic Result mode of AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.

Is DTC detected?

- YES >> Refer to [DLK-119, "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000011151716

1.CHECK BCM OUTPUT SIGNAL

1. Select IPDM E/R using CONSULT.
2. Select IGN RLY1-REQ in DATA MONITOR mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
IGN RLY1-REQ	Ignition switch	ON	On
		OFF	Off

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).
NO >> Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

B2409 HALF LATCH SWITCH

< DTC/CIRCUIT DIAGNOSIS >

B2409 HALF LATCH SWITCH

DTC Logic

INFOID:0000000011151717

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2409	HALF LATCH SW	Automatic back door control module detects a malfunction of half latch switch during automatic operation of back door.	• Entry of foreign materials to back door lock assembly • Back door mechanism • Automatic back door control module • Half latch switch • Harness or connectors

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check Self Diagnostic Result mode of AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.

Is DTC detected?

- YES >> Refer to [DLK-120, "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000011151718

Regarding Wiring Diagram information, refer to [DLK-96, "Wiring Diagram"](#).

1.CHECK FOR FOREIGN MATERIALS IN BACK DOOR LOCK ASSEMBLY

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

Is the inspection result normal?

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

2.CHECK BACK DOOR OPEN/CLOSE OPERATION

Manually check open and close operation of back door.

Is the inspection result normal?

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

3.CHECK HALF LATCH SWITCH MONITOR ITEM

1. Select AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.
2. Select HALF LATCH SW in DATA MONITOR mode.
3. Check that the function operates normally according to the following conditions.

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

Is the inspection result normal?

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

4.CHECK HALF LATCH SWITCH INPUT SIGNAL

B2409 HALF LATCH SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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

(+)		(-)	Voltage (Approx.)
Back door lock assembly			
Connector	Terminal		
D557	6	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5.CHECK HALF LATCH SWITCH CIRCUIT

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

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B55	3	D557	6	Yes

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

NO >> Repair or replace harness.

6.CHECK HALF LATCH SWITCH GROUND CIRCUIT

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D557	8		Yes

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace back door lock assembly ground circuit.

7.CHECK HALF LATCH SWITCH

Refer to [DLK-121, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace back door lock assembly. Refer to [DLK-310, "DOOR LOCK : Removal and Installation"](#).

8.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000011151719

COMPONENT INSPECTION

B2409 HALF LATCH SWITCH

< DTC/CIRCUIT DIAGNOSIS >

1.CHECK SWITCH

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

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to [DLK-310, "DOOR LOCK : Removal and Installation"](#).

B2416 TOUCH SENSOR RH

< DTC/CIRCUIT DIAGNOSIS >

B2416 TOUCH SENSOR RH

DTC Logic

INFOID:0000000011151720

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2416	TOUCH SEN R OPEN	Automatic back door control module detects a malfunction of touch sensor RH during automatic operation of back door.	- Improper installation of touch sensor - Touch sensor RH - Harness or connectors - Automatic back door control module

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON.
- Check Self-Diagnostic Result mode of AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.

Is DTC detected?

- YES >> Refer to [DLK-123, "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000011151721

Regarding Wiring Diagram information, refer to [DLK-96, "Wiring Diagram"](#).

1.CHECK INSTALLATION OF TOUCH SENSOR RH

Check that touch sensor RH is installed normally.

Refer to [DLK-311, "TOUCH SENSOR : Removal and Installation"](#).

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Refer to [DLK-311, "TOUCH SENSOR : Removal and Installation"](#).

2.CHECK TOUCH SENSOR MONITOR ITEM

- Select AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.
- Select TOUCH SEN RH in DATA MONITOR mode.
- Check that the function operates normally according to the following conditions.

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

Is the inspection result normal?

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

3.CHECK TOUCH SENSOR INPUT SIGNAL

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

B2416 TOUCH SENSOR RH

< DTC/CIRCUIT DIAGNOSIS >

(+)		(−)		Condition		Voltage (Approx.)
Touch sensor RH		Automatic back door control module				
Connector	Terminal	Connector	Terminal			
D555	1	B55	13	Touch sensor RH	Detect obstruction	1.8 – 5 V
					Other than above	2.72 – 7.27 V

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4. CHECK TOUCH SENSOR RH CIRCUIT

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

Automatic back door control module		Touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B55	1	D555	1	Yes

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

NO >> Repair or replace harness.

5. CHECK TOUCH SENSOR RH GROUND CIRCUIT 1

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

Automatic back door control module		Touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B55	13	D555	2	Yes

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

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

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6. CHECK TOUCH SENSOR RH GROUND CIRCUIT 2

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

B2416 TOUCH SENSOR RH

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

YES >> GO TO 7.

NO >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

7.CHECK TOUCH SENSOR RH

Refer to [DLK-125, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace touch sensor RH. Refer to [DLK-311, "TOUCH SENSOR : Removal and Installation"](#).

8.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000011151722

1.CHECK TOUCH SENSOR RH

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

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace touch sensor RH. Refer to [DLK-311, "TOUCH SENSOR : Removal and Installation"](#).

B2417 TOUCH SENSOR LH

< DTC/CIRCUIT DIAGNOSIS >

B2417 TOUCH SENSOR LH

DTC Logic

INFOID:0000000011151723

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2417	TOUCH SEN L OPEN	Automatic back door control module detects a malfunction of touch sensor LH during automatic operation of back door.	- Improper installation of touch sensor - Touch sensor LH - Harness or connectors - Automatic back door control module

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON.
- Check Self-Diagnostic Result mode of AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.

Is DTC detected?

- YES >> Refer to [DLK-126. "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000011151724

Regarding Wiring Diagram information, refer to [DLK-96. "Wiring Diagram"](#).

1.CHECK INSTALLATION OF TOUCH SENSOR LH

Check that touch sensor LH is installed normally.

Refer to [DLK-311. "TOUCH SENSOR : Removal and Installation"](#).

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Refer to [DLK-311. "TOUCH SENSOR : Removal and Installation"](#).

2.CHECK TOUCH SENSOR MONITOR ITEM

- Select AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.
- Select TOUCH SEN LH in DATA MONITOR mode.
- Check that the function operates normally according to the following conditions.

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

Is the inspection result normal?

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

3.CHECK TOUCH SENSOR INPUT SIGNAL

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

B2417 TOUCH SENSOR LH

< DTC/CIRCUIT DIAGNOSIS >

(+)		(−)		Condition		Voltage (Approx.)
Touch sensor LH		Automatic back door control module				
Connector	Terminal	Connector	Terminal			
D556	1	B55	13	Touch sensor LH	Detect obstruction	1.8 – 5 V
					Other than above	2.72 – 7.27 V

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK TOUCH SENSOR LH CIRCUIT

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

Automatic back door control module		Touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B55	2	D556	1	Yes

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

NO >> Repair or replace harness.

5.CHECK TOUCH SENSOR LH GROUND CIRCUIT 1

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

Automatic back door control module		Touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B55	13	D556	2	Yes

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

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

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6.CHECK TOUCH SENSOR LH GROUND CIRCUIT 2

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

B2417 TOUCH SENSOR LH

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

YES >> GO TO 7.

NO >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

7. CHECK TOUCH SENSOR LH

Refer to [DLK-128, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace touch sensor LH. Refer to [DLK-311, "TOUCH SENSOR : Removal and Installation"](#)

8. CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000011151725

1. CHECK TOUCH SENSOR LH

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

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace touch sensor LH. Refer to [DLK-311, "TOUCH SENSOR : Removal and Installation"](#).

B2419 OPEN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

B2419 OPEN SWITCH

DTC Logic

INFOID:0000000011151726

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2419	OPEN SW	Automatic back door control module detects a malfunction of open switch during automatic operation of back door.	• Entry of foreign materials to back door lock assembly • Back door mechanism • Automatic back door control module • Open switch • Harness or connectors

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check Self-Diagnostic Result mode of AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.

Is DTC detected?

- YES >> Refer to [DLK-129, "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000011151727

Regarding Wiring Diagram information, refer to [DLK-96, "Wiring Diagram"](#).

1.CHECK FOR FOREIGN MATERIALS IN BACK DOOR LOCK ASSEMBLY

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

Is the inspection result normal?

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

2.CHECK BACK DOOR OPEN/CLOSE OPERATION

Manually check open and close operation of back door.

Is the inspection result normal?

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

3.CHECK OPEN SWITCH SIGNAL

1. Select AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.
2. Select OPEN SW in DATA MONITOR mode.
3. Check that the function operates normally according to the following conditions.

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

Is the inspection result normal?

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

4.CHECK OPEN SWITCH INPUT SIGNAL

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

B2419 OPEN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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

(+)		(-)	Voltage (Approx.)
Back door lock assembly			
Connector	Terminal		
D557	4	Ground	Battery voltage

Is the inspection result normal?

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

5.CHECK OPEN SWITCH CIRCUIT

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

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B55	11	D557	4	Yes

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

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

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).
NO >> Repair or replace harness.

6.CHECK OPEN SWITCH GROUND CIRCUIT

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D557	8		Yes

Is the inspection result normal?

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

7.CHECK OPEN SWITCH

Refer to [DLK-130, "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 8.
NO >> Replace back door lock assembly. Refer to [DLK-310, "DOOR LOCK : Removal and Installation"](#).

8.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000011151728

COMPONENT INSPECTION

B2419 OPEN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

1.CHECK SWITCH

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

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to [DLK-310, "DOOR LOCK : Removal and Installation"](#).

DLK

B2420 CLOSE SWITCH

< DTC/CIRCUIT DIAGNOSIS >

B2420 CLOSE SWITCH

DTC Logic

INFOID:0000000011151729

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2420	CLOSE SW	Automatic back door control module detects a malfunction of close switch during automatic operation of back door.	• Entry of foreign materials to back door lock assembly • Back door mechanism • Automatic back door control module • Close switch • Harness or connectors

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check Self-Diagnostic Result mode of AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.

Is DTC detected?

- YES >> Refer to [DLK-132, "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000011151730

Regarding Wiring Diagram information, refer to [DLK-96, "Wiring Diagram"](#).

1.CHECK FOR FOREIGN MATERIALS IN BACK DOOR LOCK ASSEMBLY

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

Is the inspection result normal?

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

2.CHECK BACK DOOR OPEN/CLOSE OPERATION

Manually check open and close operation of back door.

Is the inspection result normal?

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

3.CHECK CLOSE SWITCH SIGNAL

1. Select AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.
2. Select CLOSE SW in DATA MONITOR mode.
3. Check that the function operates normally according to the following conditions.

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

Is the inspection result normal?

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

4.CHECK CLOSE SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.

B2420 CLOSE SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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

(+)		(-)	Voltage (Approx.)
Back door lock assembly			
Connector	Terminal		
D557	5	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5.CHECK CLOSE SWITCH CIRCUIT

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

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B55	5	D557	5	Yes

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

NO >> Repair or replace harness.

6.CHECK CLOSE SWITCH GROUND CIRCUIT

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D557	8		Yes

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness.

7.CHECK CLOSE SWITCH

Refer to [DLK-133, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace back door lock assembly. Refer to [DLK-310, "DOOR LOCK : Removal and Installation"](#).

8.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

COMPONENT INSPECTION

B2420 CLOSE SWITCH

< DTC/CIRCUIT DIAGNOSIS >

1.CHECK SWITCH

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

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to [DLK-310, "DOOR LOCK : Removal and Installation"](#).

B2422 BACK DOOR STATE

< DTC/CIRCUIT DIAGNOSIS >

B2422 BACK DOOR STATE

DTC Logic

INFOID:0000000011151732

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2422	BACK DOOR STATE	When the automatic back door control module detects back door position malfunction according to the pulse signal.	• Improper installation of back door assembly • [CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION]: not complete • Back door mechanism • Encoder • Automatic back door control module • Harness or connectors

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

- YES >> Refer to [DLK-135. "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000011151733

Regarding Wiring Diagram information, refer to [DLK-96. "Wiring Diagram"](#).

1.CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

1. Perform initialization setting of automatic back door position information.
Refer to [DLK-115. "Work Procedure"](#).
2. Erase DTC, and then repeat "PERFORM DTC CONFIRMATION PROCEDURE".

Is DTC detected?

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

2.CHECK INSTALLATION OF BACK DOOR ASSEMBLY

1. Check that back door assembly is installed normally.
Refer to [DLK-296. "BACK DOOR ASSEMBLY : Adjustment"](#).
2. Check back door assembly mechanism deformation, looseness, rattle, interference with other parts and pinched foreign materials.

Is the inspection result normal?

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

3.CHECK ENCODER SIGNAL

1. Select "AUTOMATIC BACK DOOR CONTROL MODULE" using CONSULT.
2. Select "SPINDLE SENSOR LH" and "SPINDLE SENSOR RH" in "DATA MONITOR" mode.
3. Check that the function operates normally according to the following conditions.

B2422 BACK DOOR STATE

< DTC/CIRCUIT DIAGNOSIS >

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

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

YES >> GO TO 4.

NO >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

4.CHECK ENCODER POWER SUPPLY

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

(+)		(-)	Voltage (Approx.)
Spindle unit			
Connector	Terminal		
LH	B70	Ground	Battery voltage
RH	B162		

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5.CHECK ENCODER CIRCUIT 1

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

Automatic back door control module		Spindle unit		Continuity
Connector	Terminal	Connector	Terminal	
B55	19	LH	B70	Yes
	20	RH	B162	

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

NO >> Repair or replace harness.

6.CHECK ENCODER CIRCUIT 2

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

B2422 BACK DOOR STATE

< DTC/CIRCUIT DIAGNOSIS >

Automatic back door control module		Spindle unit		Continuity
Connector	Terminal	Connector	Terminal	
B55	6	LH	B70	3
	7			10
	8	RH	B162	3
	9			10

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

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

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness.

7.CHECK ENCODER CIRCUIT 3

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

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

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

8.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning parts.

B2423 AUTOMATIC BACK DOOR MOTOR OPERATION TIME

< DTC/CIRCUIT DIAGNOSIS >

B2423 AUTOMATIC BACK DOOR MOTOR OPERATION TIME

DTC Logic

INFOID:0000000011151734

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2423	ABD MTR TIME OUT	When the automatic back door control module and spindle motor operate in the same direction for 180 seconds or more continuously.	• Spindle motor • Automatic back door control module • Harness or connector

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check "Self-Diagnostic Result" mode of "AUTOMATIC BACK DOOR CONTROL MODULE" using CONSULT.

Is DTC detected?

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

Diagnosis Procedure

INFOID:0000000011151735

Regarding Wiring Diagram information, refer to [DLK-96, "Wiring Diagram"](#).

1.ERASE DTC

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

Is DTC detected?

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

2.CHECK SPINDLE MOTOR CIRCUIT

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

Automatic back door control module		Spindle unit			Continuity
Connector	Terminal	Connector		Terminal	
B56	27	LH	B70	9	Yes
	34			2	
	29	RH	B162	9	
	36			2	

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

B2423 AUTOMATIC BACK DOOR MOTOR OPERATION TIME

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).
NO >> Repair or replace harness.

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DLK

B2426 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

B2426 ENCODER

DTC Logic

INFOID:0000000011151736

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2426	SPINDLE SENSOR LH	When the automatic back door control module can not receive the pulse signal from the encoder just after starting the open/close operation.	• Improper installation of back door assembly • [CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION]: not complete • Back door mechanism • Automatic back door control module • Encoder • Harness or connectors

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check "Self-Diagnostic Result" mode of "AUTOMATIC BACK DOOR CONTROL MODULE" using CONSULT.

Is DTC detected?

- YES >> Refer to [DLK-140, "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000011151737

Regarding Wiring Diagram information, refer to [DLK-96, "Wiring Diagram"](#).

1.CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

1. Perform initialization setting of automatic back door position information.
Refer to [DLK-115, "Work Procedure"](#).
2. Erase DTC, and then repeat "PERFORM DTC CONFIRMATION PROCEDURE".

Is DTC detected?

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

2.CHECK INSTALLATION OF BACK DOOR ASSEMBLY

1. Check that back door assembly is installed normally.
Refer to [DLK-296, "BACK DOOR ASSEMBLY : Adjustment"](#).
2. Check back door assembly mechanism deformation, looseness, rattle, interference with other parts, and pinched foreign materials.

Is the inspection result normal?

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

3.CHECK ENCODER SIGNAL

1. Select "AUTOMATIC BACK DOOR CONTROL MODULE" using CONSULT.
2. Select "SPINDLE LH ENCODER A" and "SPINDLE LH ENCODER B" in "DATA MONITOR" mode.
3. Check that the function operates normally according to the following conditions.

B2426 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

4.CHECK ENCODER POWER SUPPLY

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

(+)		(-)	Voltage (Approx.)
Spindle unit LH			
Connector	Terminal		
B70	8	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5.CHECK ENCODER CIRCUIT 1

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

Automatic back door control module		Spindle unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B55	19	B70	8	Yes

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

NO >> Repair or replace harness.

6.CHECK ENCODER CIRCUIT 2

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

Automatic back door control module		Spindle unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B55	6	B70	3	Yes
	7		10	

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

B2426 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness.

7. CHECK ENCODER CIRCUIT 3

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

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

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

8. CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning parts.

B2427 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

B2427 ENCODER

DTC Logic

INFOID:0000000011151738

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2427	SPINDLE SENSOR RH	When the automatic back door control module can not receive the pulse signal from the encoder just after starting the open/close operation.	• Improper installation of back door assembly • [CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION]: not complete • Back door mechanism • Automatic back door control module • Encoder • Harness or connectors

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check "Self-Diagnostic Result" mode of "AUTOMATIC BACK DOOR CONTROL MODULE" using CONSULT.

Is DTC detected?

- YES >> Refer to [DLK-143. "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000011151739

Regarding Wiring Diagram information, refer to [DLK-96. "Wiring Diagram"](#).

1.CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

1. Perform initialization setting of automatic back door position information.
Refer to [DLK-115. "Work Procedure"](#).
2. Erase DTC, and then repeat "PERFORM DTC CONFIRMATION PROCEDURE".

Is DTC detected?

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

2.CHECK INSTALLATION OF BACK DOOR ASSEMBLY

1. Check that back door assembly is installed normally.
Refer to [DLK-296. "BACK DOOR ASSEMBLY : Adjustment"](#).
2. Check back door assembly mechanism deformation, looseness, rattle, interference with other parts, and pinched foreign materials.

Is the inspection result normal?

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

3.CHECK ENCODER SIGNAL

1. Select "AUTOMATIC BACK DOOR CONTROL MODULE" using CONSULT.
2. Select "SPINDLE RH ENCODER A" and "SPINDLE RH ENCODER B" in "DATA MONITOR" mode.
3. Check that the function operates normally according to the following conditions.

B2427 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

4. CHECK ENCODER POWER SUPPLY

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

(+)		(-)	Voltage (Approx.)
Spindle unit RH			
Connector	Terminal		
B162	8	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5. CHECK ENCODER CIRCUIT 1

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

Automatic back door control module		Spindle unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B55	20	B162	8	Yes

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

NO >> Repair or replace harness.

6. CHECK ENCODER CIRCUIT 2

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

Automatic back door control module		Spindle unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B55	8	B162	3	Yes
	9		10	

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

B2427 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness.

7. CHECK ENCODER CIRCUIT 3

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

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

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

8. CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning parts.

DLK

B2428 AUTOMATIC BACK DOOR CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

B2428 AUTOMATIC BACK DOOR CONTROL UNIT

DTC Logic

INFOID:0000000011151740

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:0000000011151741

1. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

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

>> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

B242A CLOSURE CONDITION

< DTC/CIRCUIT DIAGNOSIS >

B242A CLOSURE CONDITION

DTC Logic

INFOID:0000000011151742

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B242A	CLSR CONDITION	Automatic back door control module detects malfunctions of open switch, close switch and half latch switch when auto closure of back door operates.	• Entry of foreign materials to back door lock assembly • Back door mechanism • Automatic back door control module • Open switch • Close switch • Half latch switch • Harness or connectors

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate back door auto closure operation.
3. Check Self-Diagnostic Result mode of AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.

Is DTC detected?

- YES >> Refer to [DLK-147, "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000011151743

Regarding Wiring Diagram information, refer to [DLK-96, "Wiring Diagram"](#).

1.CHECK FOR FOREIGN MATERIALS IN BACK DOOR LOCK ASSEMBLY

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

Is the inspection result normal?

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

2.CHECK BACK DOOR OPEN/CLOSE OPERATION

Manually check open and close operation of back door.

Is the inspection result normal?

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

3.CHECK MONITOR ITEM

1. Select AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.
2. Select HALF LATCH SW, OPEN SW and CLOSE SW in DATA MONITOR mode.
3. Check that the function operates normally according to the following conditions.

B242A CLOSURE CONDITION

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

YES >> GO TO 8.

NO >> GO TO 4.

4.CHECK SWITCH INPUT SIGNAL

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

(+)		(-)	Voltage (Approx.)
Back door lock assembly			
Connector	Terminal		
D557	4	Ground	Battery voltage
	5		
	6		

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5.CHECK SWITCH CIRCUIT

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

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B55	3	D557	6	Yes
	5		5	
	11		4	

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

NO >> Repair or replace harness.

6.CHECK SWITCH GROUND CIRCUIT

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

B242A CLOSURE CONDITION

< DTC/CIRCUIT DIAGNOSIS >

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D557	8		Yes

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace back door lock assembly ground circuit.

7.CHECK SWITCH

Refer to [DLK-149. "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace back door lock assembly. Refer to [DLK-310. "DOOR LOCK : Removal and Installation"](#).

8.CHECK INTERMITTENT INCIDENT

Refer to [GI-47. "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000011151744

COMPONENT INSPECTION

1.CHECK SWITCH

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

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to [DLK-310. "DOOR LOCK : Removal and Installation"](#).

B261B REMOTE ENGINE START

< DTC/CIRCUIT DIAGNOSIS >

B261B REMOTE ENGINE START

DTC Logic

INFOID:0000000011151745

DTC DETECTION LOGIC

NOTE:

- If DTC B261B is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [DLK-117, "DTC Logic"](#).
- If DTC B261B is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [DLK-118, "DTC Logic"](#).

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B261B	BCM	The BCM has requested ignition OFF but ECM keeps the engine running for more than 10 seconds after the OFF request was made.	• ECM

Diagnosis Procedure

INFOID:0000000011151746

1. CHECK ECM IGNITION, POWER AND GROUND CIRCUITS

Check ECM ignition power and ground circuits. Refer to [EC-190, "Diagnosis Procedure"](#) (USA and Canada) or [EC-684, "Diagnosis Procedure"](#) (Mexico).

Is the inspection result normal?

- YES >> Replace ECM. Refer to [EC-526, "Removal and Installation"](#) (USA and Canada) or [EC-916, "Removal and Installation"](#) (Mexico). GO TO 2.
- NO >> Repair or replace harness or connectors.

2. INSPECTION

1. Turn ignition switch ON.
2. Select "Self-diagnostic result" mode with CONSULT.
3. Touch "ERASE".
4. Perform vehicle remote start operation.

Does DTC B261B return?

- YES >> Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).
- NO >> Inspection End..

B2621 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

B2621 INSIDE ANTENNA

DTC Logic

INFOID:0000000011151747

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is inside key antenna DTC detected?

- YES >> Refer to [DLK-151. "Diagnosis Procedure"](#).
NO >> Inside key antenna (instrument center) is OK.

Diagnosis Procedure

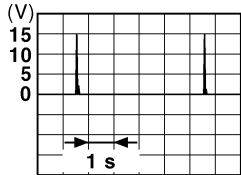
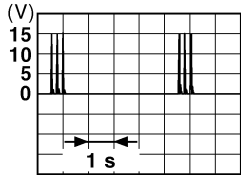
INFOID:0000000011151748

Regarding Wiring Diagram information, refer to [DLK-75. "Wiring Diagram"](#).

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

DLK

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M80	123, 124	Ground	When Intelligent Key is in the antenna detection area	
			When Intelligent Key is not in the antenna detection area	

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-80. "Removal and Installation"](#).

B2621 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

NO >> GO TO 2.

2. CHECK INSIDE KEY ANTENNA CIRCUIT

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

BCM		Inside key antenna (instrument center)		Continuity
Connector	Terminal	Connector	Terminal	
M80	123	M14	1	Yes
	124		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M80	123		No
	124		

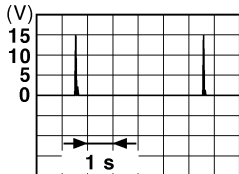
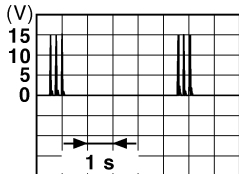
Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M80	123, 124	Ground	When Intelligent Key is in the antenna detection area	
			When Intelligent Key is not in the antenna detection area	

Is the inspection result normal?

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

NO >> Replace BCM. Refer to [BCS-80. "Removal and Installation"](#).

B2622 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

B2622 INSIDE ANTENNA

DTC Logic

INFOID:0000000011151749

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2622	INSIDE ANTENNA	An excessive high or low voltage from inside antenna (console) is sent to BCM.	- Inside key antenna (console) - Harness or connector [Inside key antenna (console) circuit is open or shorted]

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is inside key antenna DTC detected?

YES >> Refer to [DLK-153, "Diagnosis Procedure"](#).

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

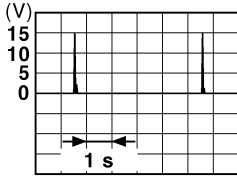
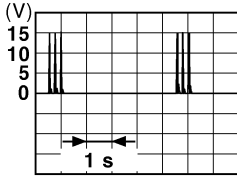
Diagnosis Procedure

INFOID:0000000011151750

Regarding Wiring Diagram information, refer to [DLK-75, "Wiring Diagram"](#).

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M80	116, 128	Ground	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
			When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

NO >> GO TO 2.

B2622 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

2. CHECK INSIDE KEY ANTENNA CIRCUIT

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

BCM		Inside key antenna (console)		Continuity
Connector	Terminal	Connector	Terminal	
M80	116	M255	1	Yes
	128		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M80	116		No
	128		

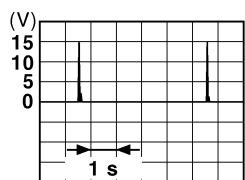
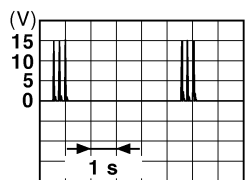
Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M80	116, 128	Ground	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
			When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

Is the inspection result normal?

YES >> Replace inside key antenna (console). Refer to [DLK-317, "CONSOLE : Removal and Installation"](#).

NO >> Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

B2623 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

B2623 INSIDE ANTENNA

DTC Logic

INFOID:0000000011151751

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is inside key antenna DTC detected?

YES >> Refer to [DLK-155, "Diagnosis Procedure"](#).

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

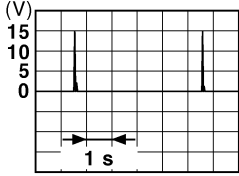
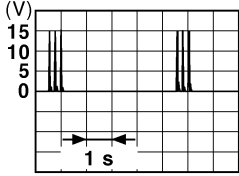
Diagnosis Procedure

INFOID:0000000011151752

Regarding Wiring Diagram information, refer to [DLK-75, "Wiring Diagram"](#).

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M20	100, 99	Ground	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
			When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

NO >> GO TO 2.

B2623 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

2. CHECK INSIDE KEY ANTENNA CIRCUIT

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

BCM		Inside key antenna (luggage room)		Continuity
Connector	Terminal	Connector	Terminal	
M20	100	B76	1	Yes
	99		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	100		No
	99		

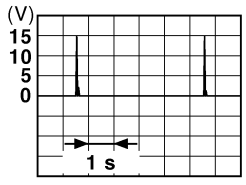
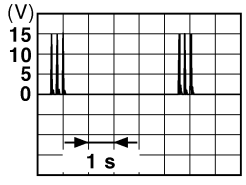
Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M20	100, 99	Ground	When Intelligent Key is in the antenna detection area	 JMK1A0062GB
			When Intelligent Key is not in the antenna detection area	 JMK1A0063GB

Is the inspection result normal?

YES >> Replace inside key antenna (luggage room). Refer to [DLK-317, "LUGGAGE ROOM : Removal and Installation"](#).

NO >> Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

B26FD SHIFT LOCK SOLENOID

< DTC/CIRCUIT DIAGNOSIS >

B26FD SHIFT LOCK SOLENOID

DTC Logic

INFOID:0000000011151753

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B26FD	SHIFT LOCK SOLENOID	BCM shift lock solenoid output control is OFF but shift lock solenoid output feedback is ON and these conditions are continuous for 1 second.	- Shift lock solenoid - Harness or connector - Shift lock solenoid circuit is open or shorted

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

- YES >> Refer to [DLK-157, "Diagnosis Procedure"](#).
NO >> Shift lock solenoid is OK.

Diagnosis Procedure

INFOID:0000000011151754

Regarding Wiring Diagram information, refer to [DLK-75, "Wiring Diagram"](#).

1. CHECK POWER SOURCE (STOP LAMP SWITCH)

- Turn ignition switch OFF.
- Disconnect stop lamp switch connector.
- Check voltage between stop lamp switch connector E38 terminal 1 and ground.

Stop lamp switch		Ground	Voltage
Connector	Terminal		
E38	1		Battery voltage

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Check the following:
 - Harness for short or open between fuse block (J/B) and stop lamp switch
 - 10A fuse (No. 10, located in fuse block [J/B])

2.CHECK STOP LAMP SWITCH

Check stop lamp switch. Refer to [TM-182, "Component Inspection \(Stop Lamp Switch\)"](#) (RE0F10E) or [TM-397, "Component Inspection \(Stop Lamp Switch\)"](#) (RE0F10J).

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Replace stop lamp switch. Refer to [BR-20, "Exploded View"](#).

3.CHECK GROUND CIRCUIT (STOP LAMP RELAY)

- Remove the stop lamp relay.
- Check continuity between stop lamp relay connector E39 terminal 2 and ground.

B26FD SHIFT LOCK SOLENOID

< DTC/CIRCUIT DIAGNOSIS >

Stop lamp relay		Ground	Continuity
Connector	Terminal (+)		
E39	2		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace damaged parts.

4.CHECK HARNESS BETWEEN STOP LAMP RELAY AND BCM

1. Disconnect BCM connector M18. Check continuity between stop lamp relay connector E39 terminal 5 and BCM connector M18 terminal 27.

BCM		stop lamp relay		Continuity
Connector	Terminal	Connector	Terminal	
M18	27	E39	5	Yes

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace damaged parts.

5.CHECK HARNESS BETWEEN STOP LAMP SWITCH AND STOP LAMP RELAY

Check continuity between stop lamp relay connector E39 terminal 2 and stop lamp switch connector E38 terminal 1.

Stop lamp switch		Stop lamp relay		Continuity
Connector	Terminal	Connector	Terminal	
E38	2	E39	1	Yes

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace damaged parts.

6.CHECK POWER SOURCE (STOP LAMP RELAY)

Check voltage between stop lamp relay connector E39 terminal 3 and ground.

Stop lamp relay		Ground	Continuity
Connector	Terminal (+)		
E39	3		Battery voltage

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace damaged parts.

7.CHECK HARNESS BETWEEN BCM AND CVT SHIFT SELECTOR FOR OPEN

1. Disconnect CVT shift selector connector and BCM connector M80.
2. Check continuity between BCM connector M80 terminal 108 and CVT shift selector connector M78 terminal 3.

BCM		CVT shift selector		Continuity
Connector	Terminal	Connector	Terminal	
M80	108	M78	3	Yes

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace damaged parts.

B26FD SHIFT LOCK SOLENOID

< DTC/CIRCUIT DIAGNOSIS >

8.CHECK HARNESS BETWEEN BCM AND CVT SHIFT SELECTOR FOR SHORT CIRCUIT

Check continuity between BCM connector M80 terminal 108 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M80	108		No

Is the inspection result normal?

YES >> GO TO 9.

NO >> Repair or replace damaged parts.

9.CHECK GROUND CIRCUIT (CVT SHIFT SELECTOR)

Check continuity between CVT shift selector connector M78 terminal 4 and ground.

CVT shift selector		Ground	Continuity
Connector	Terminal		
M78	4		Yes

Is the inspection result normal?

YES >> Replace CVT shift selector. Refer to [TM-192, "Removal and Installation"](#) (RE0F10E) or [TM-407, "Removal and Installation"](#) (RE0F10J).

NO >> Repair or replace damaged parts.

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DLK

B26FE HOOD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

B26FE HOOD SWITCH

DTC Logic

INFOID:0000000011151755

DTC DETECTION LOGIC

NOTE:

- If DTC B26FE is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [DLK-117, "DTC Logic"](#).
- If DTC B26FE is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [DLK-118, "DTC Logic"](#).

DTC	CONSULT display description	DTC detecting condition	Possible cause
B26FE	HOOD SWITCH	BCM detects that the hood switch input is malfunctioning for 3 seconds.	• Hood switch • Harness or connector [hood switch circuit is open or shorted]

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

- YES >> Refer to [DLK-160, "Diagnosis Procedure"](#).
NO >> Hood switch is OK.

Diagnosis Procedure

INFOID:0000000011151756

Regarding Wiring Diagram information, refer to [DLK-75, "Wiring Diagram"](#).

1.CHECK HOOD SWITCH SIGNAL CIRCUITS

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

(+)		(-)	Voltage (V) (Approx.)
Hood switch			
Connector	Terminal		
E205	1	Ground	Battery voltage
	2		

Is the inspection result normal?

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

2.CHECK HOOD SWITCH SIGNAL CIRCUITS

1. Disconnect IPDM E/R connector.
2. Check continuity between IPDM E/R harness connector and hood switch harness connector.

IPDM E/R		Hood switch		Continuity
Connector	Terminal	Connector	Terminal	
E218	94	E205	1	Yes
	96		2	

B26FE HOOD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

3. Check continuity between IPDM E/R harness connector and ground.

IPDM E/R		Ground	Continuity
Connector	Terminal		
E218	94		No
	96		

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to [PCS-32, "Removal and Installation"](#).

NO >> Repair or replace harness.

3.CHECK HOOD SWITCH GROUND CIRCUIT

Check continuity between hood switch harness connector and ground.

Hood switch		Ground	Continuity
Connector	Terminal		
E205	3		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK HOOD SWITCH

Refer to [DLK-161, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace hood switch. Refer to [DLK-301, "HOOD LOCK RELEASE CABLE : Removal and Installation"](#).

5.CHECK BCM CONFIGURATION

Refer to [BCS-66, "CONFIGURATION \(BCM\) : Configuration List"](#).

>> Inspection End.

Component Inspection

INFOID:0000000011151757

DLK

1.CHECK HOOD SWITCH

1. Turn ignition switch OFF.
2. Disconnect hood switch connector.
3. Check continuity between hood switch terminals.

Hood switch		Condition		Continuity
Terminal				
1	3	Hood switch	Press	Yes
1	3	Hood switch	Release	No
2	3	Hood switch	Press	No
2	3	Hood switch	Release	Yes

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace hood switch. Refer to [DLK-301, "HOOD LOCK RELEASE CABLE : Removal and Installation"](#).

B26FF REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

B26FF REMOTE KEYLESS ENTRY RECEIVER

DTC Logic

INFOID:0000000011151758

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B26FF	INTELLIGENT TUNER COMMUNICATION FAIL	Inactive communication between BCM and remote keyless entry receiver.	• Harness or connector • Remote keyless entry receiver • BCM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

- YES >> Refer to [DLK-162. "Diagnosis Procedure"](#).
NO >> Inspection End.

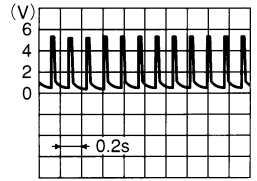
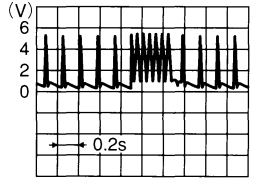
Diagnosis Procedure

INFOID:0000000011151759

Regarding Wiring Diagram information, refer to [DLK-75. "Wiring Diagram"](#).

1.CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT SIGNAL

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M80	119	Ground	Standby state	 OCC3881D
			Press the Intelligent Key lock or unlock button	 OCC3880D

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-80. "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.

B26FF REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M80	119	M86	2	Yes

3. Check continuity between BCM harness connector and ground.

(+)		(-)	Continuity
BCM			
Connector	Terminal		
M80	119	Ground	No

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

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

(+)		(-)	Voltage (Approx)
Remote keyless entry receiver			
Connector	Terminal		
M86	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.

NO-1 >> Check 10A fuse No. 25 [located in fuse block J/B].

NO-2 >> Repair or replace harness between remote keyless entry receiver and 10A fuse No. 25.

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		
M86	3		Yes

Is the inspection result normal?

YES >> Replace remote keyless entry receiver. Refer to [DLK-321. "Removal and Installation"](#).

NO >> Repair or replace harness.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT

AUTOMATIC BACK DOOR CONTROL UNIT

AUTOMATIC BACK DOOR CONTROL UNIT : Diagnosis Procedure

INFOID:0000000011151760

Regarding Wiring Diagram information, refer to [DLK-96, "Wiring Diagram"](#).

1. CHECK FUSIBLE LINK

Check that the following fusible link is not open.

Fusible link No.	Signal name
N (40A)	Battery power supply

Is the fusible link open?

YES >> Replace the open fusible link after repairing the affected circuit.

NO >> GO TO 2.

2. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door control module connector.
3. Check voltage between automatic back door control module harness connector and ground.

(+)		(-)	Voltage
Automatic back door control module			
Connector	Terminal		
B56	25	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK GROUND CIRCUIT

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

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	32		Yes
	28		
B55	4 (Except For Mexico)		

Does continuity exist?

YES >> Inspection End.

NO >> Repair or replace harness.

BCM

BCM : Diagnosis Procedure

INFOID:0000000011583886

Regarding Wiring Diagram information, refer to [BCS-55, "Wiring Diagram"](#).

1. CHECK FUSE AND FUSIBLE LINK

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

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Terminal No.	Signal name	Fuse and fusible link No.
139	Fusible link battery power	O (40A)
131	BCM battery fuse	1 (10A)

Is the fuse or fusible link 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 M81.

2. Check voltage between BCM connector M81 terminals 131, 139 and ground.

BCM		Ground	Voltage (Approx.)
Connector	Terminal		
M81	131	—	Battery voltage
	139		

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness or connectors.

3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M81 terminals 134, 143 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M81	134	—	Yes
	143		

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness or connectors.

DLK

OUTSIDE KEY ANTENNA (PASSENGER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

OUTSIDE KEY ANTENNA (PASSENGER SIDE)

Component Function Check

INFOID:0000000011151762

1.CHECK OUTSIDE KEY ANTENNA (PASSENGER SIDE)

1. Place the Intelligent Key into the detection area of the outside key antenna (passenger side).
2. Press the door request switch (passenger side).

Does the door unlock?

- YES >> Inspection End.
NO >> Refer to [DLK-166, "Diagnosis Procedure"](#).

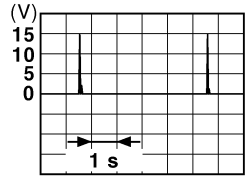
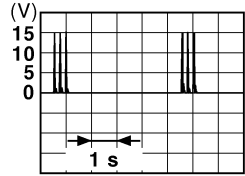
Diagnosis Procedure

INFOID:0000000011151763

Regarding Wiring Diagram information, refer to [DLK-75, "Wiring Diagram"](#).

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M80	114, 115	Ground	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA0062GB
			When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA0063GB

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).
NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

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

BCM		Outside key antenna (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M80	114	D115	1	Yes
	115		2	

3. Check continuity between BCM harness connector and ground.

OUTSIDE KEY ANTENNA (PASSENGER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

BCM		Ground	Continuity
Connector	Terminal		
M80	114		No
	115		

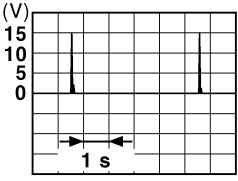
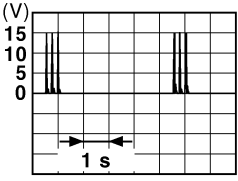
Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M80	114, 115	Ground	When the driver door request switch is operated with ignition switch OFF	
			When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	

Is the inspection result normal?

YES >> Replace outside key antenna (passenger side). Refer to [DLK-318, "PASSENGER SIDE : Removal and Installation"](#).

NO >> Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

OUTSIDE KEY ANTENNA (DRIVER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

OUTSIDE KEY ANTENNA (DRIVER SIDE)

Component Function Check

INFOID:0000000011151764

1.CHECK OUTSIDE KEY ANTENNA (DRIVER SIDE)

1. Place the Intelligent Key into the detection area of the outside key antenna (driver side).
2. Press the door request switch (driver side).

Does the door unlock?

- YES >> Inspection End.
NO >> Refer to [DLK-168, "Diagnosis Procedure"](#).

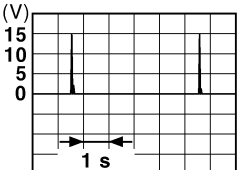
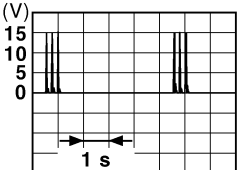
Diagnosis Procedure

INFOID:0000000011151765

Regarding Wiring Diagram information, refer to [DLK-75, "Wiring Diagram"](#).

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M80	121, 122	Ground	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	
			When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).
NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

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

BCM		Outside key antenna (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M80	122	D15	1	Yes
	121		2	

3. Check continuity between BCM harness connector and ground.

OUTSIDE KEY ANTENNA (DRIVER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

BCM		Ground	Continuity
Connector	Terminal		
M80	122		Not existed
	121		

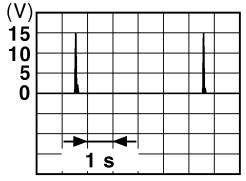
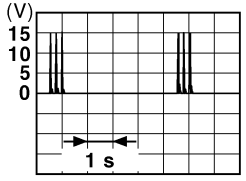
Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M80	121, 122	Ground	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA0062GB
			When the driver door request switch is operated with ignition switch OFF	 JMKIA0063GB

Is the inspection result normal?

YES >> Replace outside key antenna (driver side). Refer to [DLK-318, "DRIVER SIDE : Removal and Installation"](#).

NO >> Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

OUTSIDE KEY ANTENNA (REAR BUMPER)

< DTC/CIRCUIT DIAGNOSIS >

OUTSIDE KEY ANTENNA (REAR BUMPER)

Component Function Check

INFOID:0000000011151766

1.CHECK OUTSIDE KEY ANTENNA (REAR BUMPER)

1. Place the Intelligent Key into the detection area of the outside key antenna (rear bumper).
2. Press the door request switch (back door).

Does the door unlock?

- YES >> Inspection End.
NO >> Refer to [DLK-170, "Diagnosis Procedure"](#).

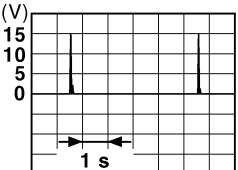
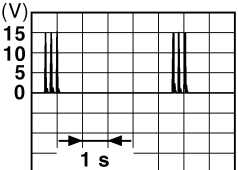
Diagnosis Procedure

INFOID:0000000011151767

Regarding Wiring Diagram information, refer to [DLK-75, "Wiring Diagram"](#).

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M20	101, 102	Ground	When the driver door request switch is operated with ignition switch OFF	 JMKIA0062GB
			When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA0063GB

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).
NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

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

BCM		Outside key antenna (rear bumper)		Continuity
Connector	Terminal	Connector	Terminal	
M20	102	B403	1	Yes
	101		2	

3. Check continuity between BCM harness connector and ground.

OUTSIDE KEY ANTENNA (REAR BUMPER)

< DTC/CIRCUIT DIAGNOSIS >

BCM		Ground	Continuity
Connector	Terminal		
M20	102		No
	101		

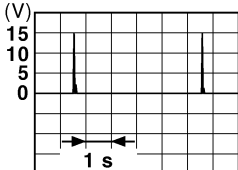
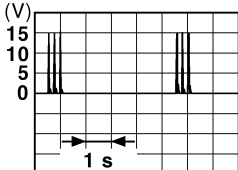
Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			
M20	101, 102	Ground	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA0062GB
			When the driver door request switch is operated with ignition switch OFF	 JMKIA0063GB

Is the inspection result normal?

YES >> Replace outside key antenna (rear bumper). Refer to [DLK-318, "REAR BUMPER : Removal and Installation"](#).

NO >> Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

DOOR SWITCH

Component Function Check

INFOID:0000000011151768

1.CHECK FUNCTION

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

Monitor item	Condition		Status
DOOR SW-DR	Driver side door	Open	On
		Closed	Off
DOOR SW-AS	Passenger side door	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-172, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011151769

Regarding Wiring Diagram information, refer to [DLK-75, "Wiring Diagram"](#).

1.CHECK DOOR SWITCH INPUT SIGNAL

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

(+)		Terminal	(-)	Signal (Reference value)
Door switch				
Connector				
Driver side	B8	3	Ground	</

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 >

Door switch		BCM		Continuity
Connector	Terminal	Connector	Terminal	
Driver side	B8	M20	96	Yes
Passenger side	B108		94	
Rear LH	B18		82	
Rear RH	B116		93	

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

Door switch		Ground	Continuity
Connector	Terminal		
Driver side	B8	3	No
Passenger side	B108		
Rear LH	B18		
Rear RH	B116		

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

NO >> Repair or replace harness.

3.CHECK DOOR SWITCH

Refer to [DLK-173, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace malfunctioning door switch. Refer to [DLK-315, "Removal and Installation"](#).

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000011151770

DLK

1.CHECK DOOR SWITCH

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

Door switch		Condition		Continuity
Terminal				
3	Ground contact is part of the switch.	Door switch	Pressed	No
			Released	Yes

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace malfunction door switch. Refer to [DLK-315, "Removal and Installation"](#).

BACK DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

BACK DOOR SWITCH

Component Function Check

INFOID:0000000011151771

1.CHECK FUNCTION

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

Monitor item	Condition		Status
DOOR SW-BK	Driver side door	Open	On
		Closed	Off

Is the inspection result normal?

YES >> Door switch is OK.

NO >> Refer to [DLK-174, "Diagnosis Procedure \(With Power Back Door\)"](#).

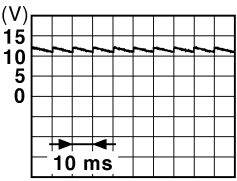
Diagnosis Procedure (With Power Back Door)

INFOID:0000000011151772

Regarding Wiring Diagram information, refer to [DLK-96, "Wiring Diagram"](#).

1.CHECK BACK DOOR SWITCH INPUT SIGNAL

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

(+)		(-)	Signal (Reference value)
Connector	Terminal		
D557	7	Ground	 JPMIA0011GB 11.8 V

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK BACK DOOR SWITCH CIRCUIT

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

Back door lock assembly		BCM		Continuity
Connector	Terminal	Connector	Terminal	
D557	7	M20	97	Yes

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

BACK DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D557	7		No

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

NO >> Repair or replace harness.

3.CHECK BACK DOOR SWITCH GROUND CIRCUIT

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D557	8		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK BACK DOOR SWITCH

Refer to [DLK-176, "Component Inspection \(With Power Back Door\)"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace back door lock assembly. Refer to [DLK-310, "DOOR LOCK : Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

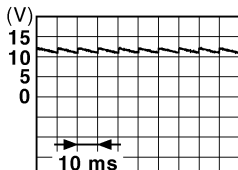
Diagnosis Procedure (Without Power Back Door)

INFOID:0000000011151773

Regarding Wiring Diagram information, refer to [DLK-75, "Wiring Diagram"](#).

1.CHECK BACK DOOR SWITCH INPUT SIGNAL

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

(+) (V)		(-)	Signal (Reference value)
Back door lock assembly			
Connector	Terminal		
D565	3	Ground	 JPMIA0011GB 11.8 V

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

BACK DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

2. CHECK BACK DOOR SWITCH CIRCUIT

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

Back door lock assembly		BCM		Continuity
Connector	Terminal	Connector	Terminal	
D565	3	M20	97	Yes

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D565	3		No

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

NO >> Repair or replace harness.

3. CHECK BACK DOOR SWITCH GROUND CIRCUIT

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D565	4		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK BACK DOOR SWITCH

Refer to [DLK-177, "Component Inspection \(Without Power Back Door\)"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace back door lock assembly. Refer to [DLK-310, "DOOR LOCK : Removal and Installation"](#).

5. CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection (With Power Back Door)

INFOID:0000000011151774

1. CHECK BACK DOOR SWITCH

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

Back door lock assembly		Condition		Continuity
Terminal				
7	8	Back door switch	Pressed	Yes
			Released	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to [DLK-310, "DOOR LOCK : Removal and Installation"](#).

BACK DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Component Inspection (Without Power Back Door)

INFOID:0000000011151775

1.CHECK BACK DOOR SWITCH

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

Back door lock assembly		Condition		Continuity
Terminal				
3	4	Back door switch	Pressed	Yes
			Released	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to [DLK-310, "DOOR LOCK : Removal and Installation"](#).

DLK

DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

DOOR LOCK AND UNLOCK SWITCH DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000011151776

Transmits door lock/unlock operation to BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000011151777

1.CHECK FUNCTION

④With CONSULT

Check CDL LOCK SW, CDL UNLOCK SW in Data Monitor mode with CONSULT.

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 >> With LH and RH anti-pinch, refer to [DLK-178, "DRIVER SIDE : Diagnosis Procedure \(With LH and RH Auto Up/Down\)"](#).

NO >> With LH anti-pinch only, refer to [DLK-179, "DRIVER SIDE : Diagnosis Procedure \(With LH Auto Down Only\)"](#).

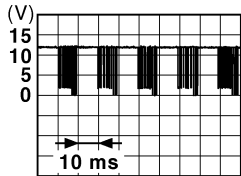
DRIVER SIDE : Diagnosis Procedure (With LH and RH Auto Up/Down)

INFOID:0000000011151778

Regarding Wiring Diagram information, refer to [DLK-62, "Wiring Diagram"](#).

1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Read voltage signal between BCM connector and ground with oscilloscope when door lock and unlock switch (driver side) is turned "LOCK" or "UNLOCK".
2. Check that signals which are shown in the figure below can be detected during 10 second just after door lock and unlock switch (driver side) is turned "LOCK" or "UNLOCK".

Terminal		Condition	Signal (Reference value)
(+)	(-)		
BCM connector	Terminal		
M19	54	Door is closed	

JPMIA0013GB

Is the inspection result normal?

YES >> GO TO 4

NO >> GO TO 2

2.CHECK POWER WINDOW SWITCH GROUND

1. Turn ignition switch OFF.

DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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
D25	1	Ground	Yes

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness.

3.CHECK POWER WINDOW SERIAL LINK CIRCUIT

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
M19	54	D25	11	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminals		Continuity
M19	54	Ground	No

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

DRIVER SIDE : Diagnosis Procedure (With LH Auto Down Only)

INFOID:0000000011151779

Regarding Wiring Diagram information, refer to [DLK-62, "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
D23	Neutral → Unlock	15	Ground	Battery voltage → 0
	Neutral → Lock	3		

Is the inspection result normal?

YES >> GO TO 5

NO >> GO TO 2

2.CHECK POWER WINDOW SWITCH GROUND

DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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
D23	1	Ground	Yes

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness.

3.CHECK POWER WINDOW SWITCH

Check continuity between main power window and door lock/unlock switch terminals.

Main power window and door lock/unlock switch state	Terminals	Continuity
Unlock	1 - 15	Yes
Lock	1 - 3	
Neutral/Unlock	1 - 3	No
Neutral/Lock	1 - 15	

Is the inspection result normal?

YES >> GO TO 4

NO >> Replace main power window and door lock/unlock switch. Refer to [PWC-62, "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	34	D23	15	Yes
	19		3	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M18	34	Ground	No
	19		

Is the inspection result normal?

YES >> GO TO 5

NO >> Repair or replace harness.

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

PASSENGER SIDE

PASSENGER SIDE : Description

Transmits door lock/unlock operation to BCM.

INFOID:0000000011151780

DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

PASSENGER SIDE : Component Function Check

INFOID:0000000011151781

1.CHECK FUNCTION

With CONSULT

Check CDL LOCK SW, CDL UNLOCK SW in Data Monitor mode with CONSULT.

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 >> With LH and RH anti-pinch, refer to [DLK-181, "PASSENGER SIDE : Diagnosis Procedure \(With LH and RH Auto Up/Down\)"](#).

NO >> With LH anti-pinch only, refer to [DLK-182, "PASSENGER SIDE : Diagnosis Procedure \(With LH Auto Down Only\)"](#).

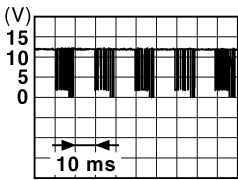
PASSENGER SIDE : Diagnosis Procedure (With LH and RH Auto Up/Down)

INFOID:0000000011151782

Regarding Wiring Diagram information, refer to [DLK-62, "Wiring Diagram"](#).

1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Read voltage signal between BCM connector and ground with oscilloscope when power window and door lock/unlock switch RH is changed to "LOCK" or "UNLOCK".
2. Check that signals which are shown in the figure below can be detected during 10 second just after ower window and door lock/unlock switch RH is changed "LOCK" or "UNLOCK".

Terminal		Condition	Signal (Reference value)
(+)	(-)		
BCM connector	Terminal		
M19	54	Ground	Door is closed  JPMA0013GB

Is the inspection result normal?

YES >> GO TO 4

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.

DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Power window and door lock/ unlock switch RH connector	Terminal		Continuity
D129	7	Ground	Yes

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness.

3.CHECK POWER WINDOW SERIAL LINK CIRCUIT

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

BCM connector	Terminal	Power window and door lock/unlock switch RH con- nector	Terminal	Continuity
M19	54	D129	3	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminals		Continuity
M19	54	Ground	No

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-47. "Intermittent Incident"](#).

>> Inspection End.

PASSENGER SIDE : Diagnosis Procedure (With LH Auto Down Only)

INFOID:0000000011151783

Regarding Wiring Diagram information, refer to [DLK-62. "Wiring Diagram"](#).

1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage at the power window and door lock/unlock switch RH connector when the switch (passenger side) is changed to "LOCK" or "UNLOCK".

Connector	Power window and door lock/unlock switch RH state	Terminal		Voltage
D125	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.

DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Power window and door lock/ unlock switch RH connector	Terminal		Continuity
D125	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.

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.

BCM connector	Terminal	Power window and door lock/unlock switch RH connector	Terminal	Continuity
M18	19	D125	1	Yes
	34		2	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M18	19	Ground	No
	34		

Is the inspection result normal?

YES >> GO TO 5

NO >> Repair or replace harness.

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

DOOR LOCK ACTUATOR DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:0000000011151784

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to [DLK-184, "DRIVER SIDE : Diagnosis Procedure"](#).

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000011151785

Regarding Wiring Diagram information, refer to [DLK-62, "Wiring Diagram"](#).

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+) Front door lock assembly LH		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
D14	1	Ground	Door lock and unlock switch	Lock	12 V
	2			Unlock	

Is the inspection result normal?

YES >> Replace front door lock assembly LH. Refer to [DLK-303, "DOOR LOCK : Removal and Installation"](#).

NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM, all door lock actuators and fuel lid door lock actuator 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	
M81	135	D14	1	Yes
	137		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M81	135		No
	137		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

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

(+) BCM		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
M81	135	Ground	Door lock and unlock switch	Lock	12 V
	137			Unlock	

Is the inspection result normal?

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

NO >> Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

PASSENGER SIDE

PASSENGER SIDE : Component Function Check

INFOID:0000000011151786

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to [DLK-185, "PASSENGER SIDE : Diagnosis Procedure"](#).

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000011151787

Regarding Wiring Diagram information, refer to [DLK-62, "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.

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(+) Front door lock actuator RH		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
D114	1	Ground	Door lock and unlock switch	Unlock	12 V
	2			Lock	

Is the inspection result normal?

YES >> Replace front door lock actuator RH. Refer to [DLK-303, "DOOR LOCK : Removal and Installation"](#).

NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM, all door lock actuators and fuel lid door lock actuator connector.
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	
M81	130	D114	1	Yes
	135		2	

3. Check continuity between BCM harness connector and ground.

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

BCM		Ground	Continuity
Connector	Terminal		
M81	130		No
	135		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

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

(+) BCM		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
M81	130	Ground	Door lock and unlock switch	Unlock	12 V
	135			Lock	

Is the inspection result normal?

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

NO >> Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

REAR LH

REAR LH : Component Function Check

INFOID:0000000011151788

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to [DLK-186, "REAR LH : Diagnosis Procedure"](#).

REAR LH : Diagnosis Procedure

INFOID:0000000011151789

Regarding Wiring Diagram information, refer to [DLK-62, "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.

(+) Rear door lock actuator LH		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
D205	1	Ground	Door lock and unlock switch	Lock	12 V
	2			Unlock	

Is the inspection result normal?

YES >> Replace rear door lock actuator LH. Refer to [DLK-310, "DOOR LOCK : Removal and Installation"](#).

NO >> GO TO 2.

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM, all door lock actuators and fuel lid door lock actuator connector.
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	
M81	133	D205	2	Yes
M81	132		1	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M81	133		No
M81	132		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

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

(+) BCM		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
M81	133	Ground	Door lock and unlock switch	Unlock	12 V
M81	132			Lock	

Is the inspection result normal?

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

NO >> Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

REAR RH

REAR RH : Component Function Check

INFOID:0000000011151790

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to [DLK-187, "REAR RH : Diagnosis Procedure"](#).

REAR RH : Diagnosis Procedure

INFOID:0000000011151791

Regarding Wiring Diagram information, refer to [DLK-62, "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.

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DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

(+) Rear door lock actuator RH		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
D305	1	Ground	Door lock and unlock switch	Unlock	12 V
	2			Lock	

Is the inspection result normal?

YES >> Replace rear door lock actuator RH. Refer to [DLK-307. "DOOR LOCK : Removal and Installation"](#).

NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM, all door lock actuators and fuel lid lock actuator connector.
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	
M81	133	D305	1	Yes
M81	132		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M81	133		No
M81	132		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

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

(+) BCM		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
M81	133	Ground	Door lock and unlock switch	Unlock	12 V
M81	132			Lock	

Is the inspection result normal?

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

NO >> Replace BCM. Refer to [BCS-80. "Removal and Installation"](#).

FUEL LID LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

FUEL LID LOCK ACTUATOR

Component Function Check

INFOID:0000000011151792

1.CHECK FUNCTION

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

Is the inspection result normal?

- YES >> Fuel lid door lock actuator is OK.
NO >> Refer to [DLK-189. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011151793

Regarding Wiring Diagram information, refer to [DLK-62. "Wiring Diagram"](#).

1.CHECK FUEL LID DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+) (Fuel lid door lock actuator)		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
B20	1	Ground	Door lock and unlock switch	Unlock	12 V
	2			Lock	

Is the inspection result normal?

- YES >> Replace fuel lid door lock actuator. Refer to [DLK-312. "Removal and Installation"](#).
NO >> GO TO 2.

2.CHECK FUEL LID DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM, all door lock actuators connector.
2. Check continuity between BCM harness connector and fuel lid door lock actuator harness connector.

BCM		Fuel lid door lock actuator		Continuity
Connector	Terminal	Connector	Terminal	
M81	135	B20	2	Yes
	137		1	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M81	135		No
	137		

Is the inspection result normal?

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

3.CHECK BCM OUTPUT SIGNAL

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

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FUEL LID LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

(+) BCM		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
M81	135	Ground	Door lock and unlock switch	Lock	12 V
	137			Unlock	

Is the inspection result normal?

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

NO >> Replace BCM. Refer to [BCS-80. "Removal and Installation"](#).

UNLOCK SENSOR

< DTC/CIRCUIT DIAGNOSIS >

UNLOCK SENSOR

Component Function Check

INFOID:0000000011151794

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-191, "Diagnosis Procedure"](#).

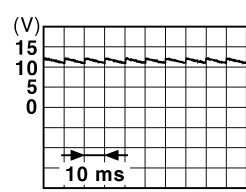
Diagnosis Procedure

INFOID:0000000011151795

Regarding Wiring Diagram information, refer to [DLK-62, "Wiring Diagram"](#).

1.CHECK UNLOCK SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly LH connector.
3. Check signal between front door lock assembly LH harness connector and ground with oscilloscope.

(+)		(-)	Signal (Reference value)
Front door lock assembly LH			
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	
M18	30	D14	3	Yes

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M18	30		No

UNLOCK SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-80, "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-192, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace front door lock assembly LH. Refer to [DLK-303, "DOOR LOCK : Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000011151796

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-303, "DOOR LOCK : Removal and Installation"](#).

DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

DOOR KEY CYLINDER SWITCH

Component Function Check

INFOID:0000000011151797

1.CHECK FUNCTION

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

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

Is the inspection result normal?

- YES >> Door key cylinder switch is OK.
NO >> Refer to [DLK-193. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011151798

Regarding Wiring Diagram information, refer to [DLK-62. "Wiring Diagram"](#).

1.CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

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

(+)		(-)	Voltage (Approx.)
Front door lock assembly LH			
Connector	Terminal		
D14	5	Ground	5 V
	6		

Is the inspection result normal?

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

2.CHECK DOOR KEY CYLINDER SWITCH SIGNAL CIRCUIT

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

Main power window and door lock/unlock switch		Front door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
D25	3	D14	6	Yes
	15		5	

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

DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Main power window and door lock/unlock switch		Ground	Continuity
Connector	Terminal		No
D25	3		
	15		

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to [PWC-62, "Removal and Installation"](#).

NO >> Repair or replace harness.

3.CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

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

Front door lock assembly LH		Ground	Continuity
Connector	Terminal		Yes
D14	4		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK DOOR KEY CYLINDER SWITCH

Refer to [DLK-194, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace front door lock assembly LH. Refer to [DLK-303, "DOOR LOCK : Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000011151799

1.CHECK DOOR KEY CYLINDER SWITCH

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

Front door lock assembly LH		Condition		Continuity
Terminal				
5	4	Driver side door key cylinder	Unlock	Yes
			Neutral / Lock	No
6			Lock	Yes
			Neutral / Unlock	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace front door lock assembly LH. Refer to [DLK-303, "DOOR LOCK : Removal and Installation"](#).

REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

REMOTE KEYLESS ENTRY RECEIVER

Component Function Check

INFOID:0000000011151800

1.CHECK FUNCTION

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

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

Is the inspection result normal?

- YES >> Remote keyless entry receiver is OK.
NO >> Refer to [DLK-195. "Diagnosis Procedure"](#).

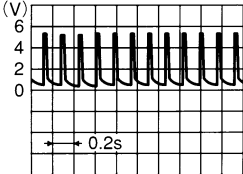
Diagnosis Procedure

INFOID:0000000011151801

Regarding Wiring Diagram information, refer to [DLK-75. "Wiring Diagram"](#).

1.CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT SIGNAL

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

(+)		(-)	Condition	Signal (Reference value)
BCM				
Connector	Terminal			
M80	119	Ground	Standby state	 OCC3881D
			Press the Intelligent Key lock or unlock button	 OCC3880D

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-80. "Removal and Installation"](#).
NO >> GO TO 2.

2.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 1

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	
M80	119	M86	2	Yes

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REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

3. Check continuity between BCM harness connector and ground.

(+)		(-)	Continuity
BCM			
Connector	Terminal		
M80	119	Ground	No

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

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

(+)		(-)	Voltage Approx.
Remote keyless entry receiver			
Connector	Terminal		
M86	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.

NO-1 >> Check 10A fuse No. 25 [located in fuse block J/B].

NO-2 >> Repair or replace harness between remote keyless entry receiver and 10A fuse No. 25.

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		
M86	3		Yes

Is the inspection result normal?

YES >> Replace remote keyless entry receiver. Refer to [DLK-321, "Removal and Installation"](#).

NO >> Repair or replace harness.

DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

DOOR REQUEST SWITCH

Component Function Check

INFOID:0000000011151802

1.CHECK FUNCTION

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

Monitor item	Condition		Status
REQ SW -DR	Driver side door request switch	Pressed	ON
		Released	OFF
REQ SW -AS	Passenger side door request switch	Pressed	ON
		Released	OFF

Is the inspection result normal?

YES >> Front door request switch is OK.

NO >> Refer to [DLK-197, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011151803

Regarding Wiring Diagram information, refer to [DLK-75, "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.

(+) Front door request switch		Terminal	(−)	Voltage (Approx.)
Connector				
Driver side	D15	3	Ground	12 V
Passenger side	D115			

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	
Driver side	D15	M19	71	Yes
Passenger side	D115		72	

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

DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Front door request switch			Ground	Continuity
Connector		Terminal		No
Driver side	D15	3		
Passenger side	D115			

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-80, "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		Yes
Driver side	D15	4		
Passenger side	D115			

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK DOOR REQUEST SWITCH

Refer to [DLK-198, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace malfunctioning front outside handle assembly. Refer to [DLK-316, "DRIVER SIDE : Removal and Installation"](#) or [DLK-316, "PASSENGER SIDE : Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000011151804

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-304, "OUTSIDE HANDLE : Removal and Installation"](#).

BACK DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

BACK DOOR REQUEST SWITCH

Component Function Check

INFOID:0000000011151805

1.CHECK FUNCTION

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

Monitor item	Condition		Status
REQ SW-BD/TR	Back door request switch	Pressed	On
		Released	Off

Is the inspection result normal?

YES >> Back door request switch is OK.

NO >> Refer to [DLK-199, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011151806

Regarding Wiring Diagram information, refer to [DLK-96, "Wiring Diagram"](#).

1.CHECK BACK DOOR REQUEST SWITCH INPUT SIGNAL

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

(+)		(-)	Voltage (Approx.)
Back door opener switch			
Connector	Terminal		
D559	4	Ground	12 V

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK BACK DOOR REQUEST SWITCH CIRCUIT

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

BCM		Back door opener switch		Continuity
Connector	Terminal	Connector	Terminal	
M20	83	D559	4	Yes

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	83		No

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

NO >> Repair or replace harness.

3.CHECK BACK DOOR REQUEST SWITCH GROUND CIRCUIT

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

BACK DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Back door opener switch		Ground	Continuity
Connector	Terminal		
D559	3		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK BACK DOOR REQUEST SWITCH

Refer to [DLK-200, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace back door opener switch. Refer to [DLK-316, "BACK DOOR : Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000011151807

1.CHECK BACK DOOR REQUEST SWITCH

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

Back door opener switch assembly		Condition		Continuity
Terminal				
3	4	Back door request switch	Pressed	Yes
			Released	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door opener switch assembly. Refer to [DLK-316, "BACK DOOR : Removal and Installation"](#).

BACK DOOR OPENER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

BACK DOOR OPENER SWITCH

Component Function Check

INFOID:0000000011151808

1.CHECK FUNCTION

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

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

Is the inspection result normal?

- YES >> Back door opener switch is OK.
NO >> Refer to [DLK-201, "Diagnosis Procedure"](#).

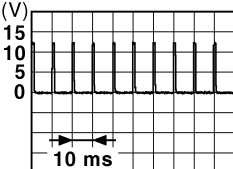
Diagnosis Procedure

INFOID:0000000011151809

Regarding Wiring Diagram information, refer to [DLK-96, "Wiring Diagram"](#).

1.CHECK BACK DOOR OPEN INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door opener switch connector.
3. Check signal between back door opener switch harness connector and ground.

(+)		(-)	Signal (Reference value)
Back door opener switch			
Connector	Terminal		
D559	1	Ground	

JPMIA0012GB

Is the inspection result normal?

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

2.CHECK BACK DOOR OPENER SWITCH CIRCUIT

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

BCM		Back door opener switch		Continuity
Connector	Terminal	Connector	Terminal	
M19	80	D559	1	Yes

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M19	80		No

BACK DOOR OPENER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

NO >> Repair or replace harness.

3.CHECK BACK DOOR OPENER SWITCH GROUND CIRCUIT

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

Back door opener switch		Ground	Continuity
Connector	Terminal		
D559	2		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK BACK DOOR OPENER SWITCH

Refer to [DLK-202, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace back door opener switch. Refer to [DLK-316, "BACK DOOR : Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000011151810

1.CHECK BACK DOOR OPENER SWITCH

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

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door opener switch. Refer to [DLK-316, "BACK DOOR : Removal and Installation"](#).

INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

INTELLIGENT KEY WARNING BUZZER

Component Function Check

INFOID:0000000011151811

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-203. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011151812

Regarding Wiring Diagram information, refer to [DLK-75. "Wiring Diagram"](#).

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10 A fuse [No. 25, 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		
E1	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	
M19	64	E1	3	Yes

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M19	64		No

Is the inspection result normal?

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

4.CHECK INTELLIGENT KEY WARNING BUZZER

INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

Refer to [DLK-204. "Component Inspection"](#).

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-80. "Removal and Installation"](#).

NO >> Replace Intelligent Key warning buzzer. Refer to [DLK-319. "Removal and Installation"](#).

Component Inspection

INFOID:0000000011151813

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-319. "Removal and Installation"](#).

INTELLIGENT KEY

< DTC/CIRCUIT DIAGNOSIS >

INTELLIGENT KEY

Component Function Check

INFOID:0000000011151814

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" mode.
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-205, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011151815

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

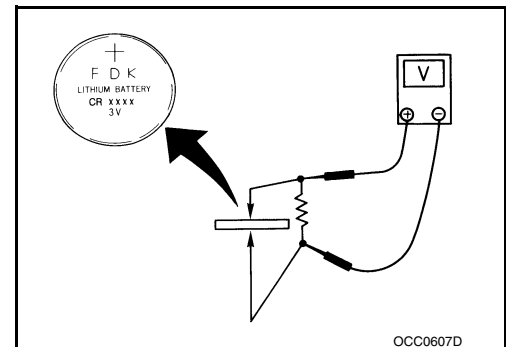
Check by connecting a resistance (approximately 300Ω) so that the current value becomes about 10 mA. Refer to [DLK-322, "Removal and Installation"](#).

Standard : Approx. 2.5 - 3.0V

Is the measurement value within the specification?

YES >> Replace Intelligent Key.

NO >> Replace Intelligent Key battery.



METER BUZZER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

METER BUZZER CIRCUIT

Description

INFOID:0000000011151816

- The buzzer for the warning chime system is installed in the combination meter.
- The combination meter sounds the buzzer based on the signals transmitted from various units.

Component Function Check

INFOID:0000000011151817

1. CHECK OPERATION OF METER BUZZER

1. Select BUZZER of BCM on CONSULT.
2. Perform LIGHT WARN ALM or SEAT BELT WARN TEST of ACTIVE TEST.

Does meter buzzer activate?

- YES >> Inspection End.
NO >> Refer to [DLK-206, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011151818

1. CHECK COMBINATION METER INPUT SIGNAL

Select the Data Monitor for the "METER/M&A and check the BUZZER monitor value.

BUZZER

- Under the condition of buzzer input : On
Except above : Off

Is the inspection result normal?

- YES >> Replace combination meter. Refer to [MWI-85, "Removal and Installation"](#).
NO >> Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

KEY WARNING LAMP

< DTC/CIRCUIT DIAGNOSIS >

KEY WARNING LAMP

Component Function Check

INFOID:0000000011151819

1.CHECK FUNCTION

1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
2. Select "INDICATOR" in "ACTIVE TEST" mode.
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-207. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011151820

1.CHECK KEY WARNING LAMP

Refer to [MWI-18. "CONSULT Function \(METER/M&A\)"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK INTERMITTENT INCIDENT

Refer to [GI-47. "Intermittent Incident"](#).

>> Inspection End.

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HAZARD FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

HAZARD FUNCTION

Component Function Check

INFOID:0000000011151821

1.CHECK FUNCTION

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

Is the inspection result normal?

- YES >> Hazard warning lamp circuit is OK.
NO >> Refer to [DLK-208, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011151822

1.CHECK HAZARD SWITCH CIRCUIT

Refer to [EXL-131, "Component Function Check"](#).

Is the inspection result normal?

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

2.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

AUTOMATIC BACK DOOR CLOSE SWITCH

< DTC/CIRCUIT DIAGNOSIS >

AUTOMATIC BACK DOOR CLOSE SWITCH

Component Function Check

INFOID:0000000011151823

1.CHECK FUNCTION

1. Select "AUTOMATIC BACK DOOR CONTROL MODULE" using CONSULT.
2. Select "BK DOOR CL SW" in "DATA MONITOR" mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
BK DOOR CL SW	Automatic back door close switch	Pressed	ON
		Released	OFF

Is the inspection result normal?

- YES >> Automatic back door close switch is OK.
NO >> Refer to [DLK-209, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011151824

Regarding Wiring Diagram information, refer to [DLK-96, "Wiring Diagram"](#).

1.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH INPUT SIGNAL

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

(+)		(-)	Voltage (Approx.)
Automatic back door close switch			
Connector	Terminal		
D566	1	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and automatic back door close switch harness connector.

Automatic back door control module		Automatic back door close switch		Continuity
Connector	Terminal	Connector	Terminal	
B55	23	D566	1	Yes

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

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	23		No

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).
NO >> Repair or replace harness.

3.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH GROUND CIRCUIT

AUTOMATIC BACK DOOR CLOSE SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Check continuity between automatic back door close switch harness connector and ground.

Automatic back door close switch		Ground	Continuity
Connector	Terminal		
D566	2		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH

Refer to [DLK-210, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace automatic back door close switch. Refer to [DLK-326, "Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000011151825

1.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH

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

Automatic back door close switch		Condition		Continuity
Terminal				
1	2	Automatic back door close switch	Pressed	Yes
			Released	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace automatic back door close switch. Refer to [DLK-326, "Removal and Installation"](#).

AUTOMATIC BACK DOOR MAIN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

AUTOMATIC BACK DOOR MAIN SWITCH

Component Function Check

INFOID:0000000011151826

1.CHECK FUNCTION

1. Select AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.
2. Select MAIN SW in DATA MONITOR mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
MAIN SW	Automatic back door main switch	ON	ON
		OFF	OFF

Is the inspection result normal?

- YES >> Automatic back door main switch is OK.
NO >> Refer to [DLK-211, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011151827

Regarding Wiring Diagram information, refer to [DLK-96, "Wiring Diagram"](#).

1.CHECK AUTOMATIC BACK DOOR MAIN SWITCH INPUT SIGNAL

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

(+)		(-)	Voltage (Approx.)
Automatic back door main switch			
Connector	Terminal		
M185	1	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK AUTOMATIC BACK DOOR MAIN SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and automatic back door main switch harness connector.

Automatic back door control module		Automatic back door main switch		Continuity
Connector	Terminal	Connector	Terminal	
B55	10	M185	1	Yes

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

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	10		No

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).
NO >> Repair or replace harness.

3.CHECK AUTOMATIC BACK DOOR MAIN SWITCH GROUND CIRCUIT

AUTOMATIC BACK DOOR MAIN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Check continuity between automatic back door main switch connector and ground.

Automatic back door main switch		Ground	Continuity
Connector	Terminal		
M185	3		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Refer to [DLK-212. "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace automatic back door main switch. Refer to [DLK-324. "Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-47. "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000011151828

1.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

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

Automatic back door main switch		Condition		Continuity
Terminal				
1	3	Automatic back door main switch	ON	Yes
			OFF	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace automatic back door main switch. Refer to [DLK-324. "Removal and Installation"](#).

AUTOMATIC BACK DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

AUTOMATIC BACK DOOR SWITCH

Component Function Check

INFOID:0000000011151829

1.CHECK FUNCTION

1. Select AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.
2. Select AUTO BD SW in DATA MONITOR mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
AUTO BD SW	Automatic back door switch	Pressed	ON
		Released	OFF

Is the inspection result normal?

- YES >> Automatic back door switch is OK.
NO >> Refer to [DLK-213, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011151830

Regarding Wiring Diagram information, refer to [DLK-96, "Wiring Diagram"](#).

1.CHECK AUTOMATIC BACK DOOR SWITCH INPUT SIGNAL

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

(+)		(-)	Voltage (Approx.)
Automatic back door switch			
Connector	Terminal		
M186	1	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK AUTOMATIC BACK DOOR SWITCH CIRCUIT

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

Automatic back door control module		Automatic back door switch		Continuity
Connector	Terminal	Connector	Terminal	
B55	22	M186	1	Yes

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

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	22		No

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).
NO >> Repair or replace harness.

3.CHECK AUTOMATIC BACK DOOR SWITCH GROUND CIRCUIT

AUTOMATIC BACK DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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

Automatic back door switch		Ground	Continuity
Connector	Terminal		
M186	2		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK AUTOMATIC BACK DOOR SWITCH

Refer to [DLK-214. "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace automatic back door switch. Refer to [DLK-325. "Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-47. "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000011151831

1.CHECK AUTOMATIC BACK DOOR SWITCH

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

Automatic back door switch		Condition		Continuity
Terminal				
1	2	Automatic back door switch	Pressed	Yes
			Released	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace automatic back door switch. Refer to [DLK-325. "Removal and Installation"](#).

HALF LATCH SWITCH

< DTC/CIRCUIT DIAGNOSIS >

HALF LATCH SWITCH

Component Function Check

INFOID:0000000011151832

1.CHECK FUNCTION

1. Select AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.
2. Select HALF LATCH SW in DATA MONITOR mode.
3. Check that the function operates normally according to the following conditions.

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

Is the inspection result normal?

YES >> Half latch switch is OK.

NO >> Refer to [DLK-215, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011151833

Regarding Wiring Diagram information, refer to [DLK-96, "Wiring Diagram"](#).

1.CHECK HALF LATCH SWITCH INPUT SIGNAL

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

(-)		(-)	Voltage (Approx.)
Back door lock assembly			
Connector	Terminal		
D557	6	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK HALF LATCH SWITCH CIRCUIT

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

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B55	3	D557	6	Yes

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

NO >> Repair or replace harness.

3.CHECK HALF LATCH SWITCH GROUND CIRCUIT

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

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HALF LATCH SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D557	8		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK HALF LATCH SWITCH

Refer to [DLK-216, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace back door lock assembly. Refer to [DLK-310, "DOOR LOCK : Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000011151834

COMPONENT INSPECTION

1.CHECK HALF LATCH SWITCH

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

Back door lock assembly		Condition		Continuity
Terminal				
6	8	Back door	Half latch	Yes
			Fully closed/Open	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to [DLK-310, "DOOR LOCK : Removal and Installation"](#).

TOUCH SENSOR

< DTC/CIRCUIT DIAGNOSIS >

TOUCH SENSOR

RH

RH : Component Function Check

INFOID:0000000011151835

1.CHECK FUNCTION

1. Select AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.
2. Select TOUCH SEN RH in DATA MONITOR mode.
3. Check that the function operates normally according to the following conditions.

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

Is the inspection result normal?

YES >> Touch sensor RH is OK.

NO >> Refer to [DLK-217, "RH : Diagnosis Procedure"](#).

RH : Diagnosis Procedure

INFOID:0000000011151836

Regarding Wiring Diagram information, refer to [DLK-96, "Wiring Diagram"](#).

1.CHECK TOUCH SENSOR INPUT SIGNAL

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

(+)		(-)		Condition		Voltage (Approx.)
Touch sensor RH		Automatic back door control module				
Connector	Terminal	Connector	Terminal			
D555	1	B55	13	Touch sensor RH	Detect obstruction	1.8 – 5 V
					Other than above	2.72 – 7.27 V

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK TOUCH SENSOR RH CIRCUIT

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

Automatic back door control module		Touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B55	1	D555	1	Yes

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

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

TOUCH SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).
NO >> Repair or replace harness.

3.CHECK TOUCH SENSOR RH GROND CIRCUIT 1

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

Automatic back door control module		Touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B55	13	D555	2	Yes

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

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

Is the inspection result normal?

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

4.CHECK TOUCH SENSOR RH GROND CIRCUIT 2

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

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

Is the inspection result normal?

- YES >> GO TO 5.
NO >> Repair or replace harness.

5.CHECK TOUCH SENSOR RH

Refer to [DLK-218, "RH : Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 6.
NO >> Replace touch sensor RH. Refer to [DLK-311, "TOUCH SENSOR : Removal and Installation"](#).

6.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

RH : Component Inspection

INFOID:0000000011151837

1.CHECK TOUCH SENSOR RH

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

TOUCH SENSOR

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace touch sensor RH. Refer to [DLK-311, "TOUCH SENSOR : Removal and Installation"](#).

LH

LH : Component Function Check

INFOID:0000000011151838

1.CHECK FUNCTION

1. Select AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.
2. Select TOUCH SEN LH in DATA MONITOR mode.
3. Check that the function operates normally according to the following conditions.

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

Is the inspection result normal?

YES >> Touch sensor LH is OK.

NO >> Refer to [DLK-219, "LH : Diagnosis Procedure"](#).

LH : Diagnosis Procedure

INFOID:0000000011151839

Regarding Wiring Diagram information, refer to [DLK-96, "Wiring Diagram"](#).

1.CHECK TOUCH SENSOR INPUT SIGNAL

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

(+) Touch sensor LH		Automatic back door control module		Condition		Voltage (Approx.)
Connector	Terminal	Connector	Terminal			
D556	1	B55	13	Touch sensor LH	Detect obstruction	1.8 – 5 V
					Other than above	2.72 – 7.27 V

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK TOUCH SENSOR LH CIRCUIT

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

TOUCH SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic back door control module		Touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B55	2	D556	1	Yes

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

NO >> Repair or replace harness.

3.CHECK TOUCH SENSOR LH GROND CIRCUIT 1

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

Automatic back door control module		Touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B55	13	D556	2	Yes

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

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

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK TOUCH SENSOR LH GROND CIRCUIT 2

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

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

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5.CHECK TOUCH SENSOR LH

Refer to [DLK-221, "LH : Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace touch sensor LH. Refer to [DLK-311, "TOUCH SENSOR : Removal and Installation"](#).

6.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

TOUCH SENSOR

< DTC/CIRCUIT DIAGNOSIS >

LH : Component Inspection

INFOID:0000000011151840

1.CHECK TOUCH SENSOR LH

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

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace touch sensor LH. Refer to [DLK-311, "TOUCH SENSOR : Removal and Installation"](#).

DLK

SPINDLE MOTOR

< DTC/CIRCUIT DIAGNOSIS >

SPINDLE MOTOR

RH

RH : Diagnosis Procedure

INFOID:0000000011151841

Regarding Wiring Diagram information, refer to [DLK-96, "Wiring Diagram"](#).

1. CHECK SPINDLE MOTOR INPUT SIGNAL

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

(+) Spindle unit RH		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
B162	9	Ground	Back door	Auto open operation	Battery voltage
	2			Auto close operation	

Is the inspection result normal?

- YES >> Replace spindle unit RH. Refer to [DLK-298, "SPINDLE UNIT : Removal and Installation"](#).
NO >> GO TO 2.

2. CHECK SPINDLE MOTOR CIRCUIT

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

Automatic back door control module		Spindle unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B56	29	B162	9	Yes
	36		2	

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

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

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).
NO >> Repair or replace harness.

LH

LH : Diagnosis Procedure

INFOID:0000000011151842

Regarding Wiring Diagram information, refer to [DLK-96, "Wiring Diagram"](#).

1. CHECK SPINDLE MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.

SPINDLE MOTOR

< DTC/CIRCUIT DIAGNOSIS >

2. Disconnect spindle unit LH connector.
3. Check voltage between spindle unit LH harness connector and ground.

(+)		(-)	Condition		Voltage (Approx.)
Spindle unit LH					
Connector	Terminal				
B70	9	Ground	Back door	Auto open operation	Battery voltage
	2			Auto close operation	

Is the inspection result normal?

- YES >> Replace spindle unit LH. Refer to [DLK-298, "SPINDLE UNIT : Removal and Installation"](#).
 NO >> GO TO 2.

2.CHECK SPINDLE MOTOR CIRCUIT

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

Automatic back door control module		Spindle unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B56	27	B70	9	Yes
	34		2	

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

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

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).
 NO >> Repair or replace harness.

BACK DOOR CLOSURE MOTOR

< DTC/CIRCUIT DIAGNOSIS >

BACK DOOR CLOSURE MOTOR

Diagnosis Procedure

INFOID:0000000011151843

Regarding Wiring Diagram information, refer to [DLK-96, "Wiring Diagram"](#).

1. CHECK BACK DOOR CLOSURE MOTOR INPUT SIGNAL

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

(+)		(-)	Condition		Voltage (Approx.)
Back door lock assembly					
Connector	Terminal				
D557	1	Ground	Back door opener switch	Pressed	Battery voltage
	2			Released	0 V

Is the inspection result normal?

- YES >> Replace back door lock assembly. Refer to [DLK-310, "DOOR LOCK : Removal and Installation"](#).
NO >> GO TO 2.

2. CHECK BACK DOOR CLOSURE MOTOR CIRCUIT

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

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B56	31	D557	1	Yes
	38		2	

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

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	31		No
	38		

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).
NO >> Repair or replace harness.

AUTOMATIC BACK DOOR WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

AUTOMATIC BACK DOOR WARNING BUZZER

Diagnosis Procedure

INFOID:0000000011151844

Regarding Wiring Diagram information, refer to [DLK-96. "Wiring Diagram"](#).

1. CHECK BACK DOOR WARNING CHIME POWER SUPPLY CIRCUIT

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

(+)		(-)	Voltage (Approx.)
Back door warning chime			
Connector	Terminal		
B402	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK BACK DOOR WARNING CHIME OUTPUT SIGNAL CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door warning chime harness connector.

Automatic back door control module		Back door warning chime		Continuity
Connector	Terminal	Connector	Terminal	
B56	37	B402	1	Yes

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

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	37		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to [DLK-323. "Removal and Installation"](#).

NO >> Repair or replace harness.

3. CHECK BACK DOOR WARNING CHIME GROUND CIRCUIT

Check continuity between back door warning chime harness connector and ground.

Back door warning chime		Ground	Continuity
Connector	Terminal		
B402	2		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK BACK DOOR WARNING CHIME

Refer to [DLK-226. "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace back door warning chime. Refer to [DLK-320. "Removal and Installation"](#).

AUTOMATIC BACK DOOR WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000011151845

1.CHECK BACK DOOR WARNING CHIME

1. Turn ignition switch OFF.
2. Disconnect back door warning chime connector.
3. Check battery power supply directly to back door warning chime terminals and check the operation.

back door warning chime		Operation
Terminal		
(+)	(-)	
1	2	Chime sounds

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door warning chime. Refer to [DLK-320, "Removal and Installation"](#).

GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000011151846

Regarding Wiring Diagram information, refer to [DLK-96, "Wiring Diagram"](#).

1. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door control module connector.
3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	32		Yes
	28		
B55	4 (Except For Mexico)		

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).
NO >> Repair or replace harness.

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HOOD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

HOOD SWITCH

Component Function Check

INFOID:0000000011151847

1.CHECK FUNCTION

1. Select HOOD SW in Data Monitor mode of IPDM E/R using CONSULT.
2. Check HOOD SW indication under the following condition.

Monitor item	Condition		Indication
HOOD SW	Hood	Open	ON
		Close	OFF

Is the indication normal?

YES >> Hood switch is OK.

NO >> Go to [DLK-228, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000011151848

Regarding Wiring Diagram information, refer to [DLK-75, "Wiring Diagram"](#).

1.CHECK HOOD SWITCH SIGNAL CIRCUITS

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

(+)		(-)	Voltage (V) (Approx.)
Hood switch			
Connector	Terminal		
E205	1	Ground	12
	2		

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK HOOD SWITCH SIGNAL CIRCUITS

1. Disconnect IPDM E/R connector.
2. Check continuity between IPDM E/R harness connector and hood switch harness connector.

IPDM E/R		Hood switch		Continuity
Connector	Terminal	Connector	Terminal	
E218	94	E205	1	Yes
	96		2	

3. Check continuity between IPDM E/R harness connector and ground.

IPDM E/R		Ground	Continuity
Connector	Terminal		
E218	94		No
	96		

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to [PCS-32, "Removal and Installation"](#).

NO >> Repair or replace harness.

HOOD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

3.CHECK HOOD SWITCH GROUND CIRCUIT

Check continuity between hood switch harness connector and ground.

Hood switch		Ground	Continuity
Connector	Terminal		
E205	3		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK HOOD SWITCH

Refer to [DLK-229, "Component Inspection"](#) .

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace hood switch. Refer to [DLK-301, "HOOD LOCK RELEASE CABLE : Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000011151849

1.CHECK HOOD SWITCH

1. Turn ignition switch OFF.
2. Disconnect hood switch connector.
3. Check continuity between hood switch terminals.

Hood switch		Condition		Continuity
Terminal				
1	3	Hood switch	Press	Yes
			Release	No
2	3		Press	No
			Release	Yes

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace hood switch. Refer to [DLK-301, "HOOD LOCK RELEASE CABLE : Removal and Installation"](#).

INTEGRATED HOMELINK TRANSMITTER

< DTC/CIRCUIT DIAGNOSIS >

INTEGRATED HOMELINK TRANSMITTER

Component Function Check

INFOID:0000000011151850

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> GO TO 2.

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

2.CHECK ILLUMINATE

1. Turn ignition switch OFF.

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Refer to [DLK-230. "Diagnosis Procedure"](#).

3.CHECK TRANSMITTER

Check transmitter with Tool*.

*:For details, refer to Technical Service Bulletin.

Is the inspection result normal?

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

NO >> Replace auto anti-dazzling inside mirror (homelink® universal transceiver). Refer to [MIR-16. "Removal and Installation"](#).

Diagnosis Procedure

INFOID:0000000011151851

Regarding Wiring Diagram information, refer to [DLK-108. "Wiring Diagram"](#).

1.CHECK POWER SUPPLY

1. Turn ignition switch OFF.

2. Disconnect auto anti-dazzling inside mirror (homelink® universal transceiver) connector.

3. Check voltage between auto anti-dazzling inside mirror (homelink® universal transceiver) harness connector and ground.

Auto anti-dazzling inside mirror (Homelink® universal transceiver) connector	Terminal		Condition	Voltage (V) (Approx.)
R10	10	Ground	Ignition switch position: OFF	Battery voltage
	6		Ignition switch position: ON	

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check the following items.

- 5A fuse [No. 29 located in the fuse block (J/B)]
- 10A fuse [No. 1 located in the fuse block (J/B)]
- Harness for open or short between fuse and auto anti-dazzling inside mirror (homelink® universal transceiver).

2.CHECK GROUND CIRCUIT

Check continuity between auto anti-dazzling inside mirror (homelink® universal transceiver) harness connector and ground.

INTEGRATED HOMELINK TRANSMITTER

< DTC/CIRCUIT DIAGNOSIS >

Auto anti-dazzling inside mirror (Homelink® universal transceiver) connector	Terminal	Ground	Continuity
R10	8		Yes

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness.

3.CHECK INTERMITTENT INCIDENT

Refer to [GI-47, "Intermittent Incident"](#).

>> Inspection End.

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INTELLIGENT KEY SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

INTELLIGENT KEY SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000011151852

CAUTION:

Perform the self-diagnosis with CONSULT before the symptom diagnosis. Perform the trouble diagnosis if any DTC is detected.

Symptom	Inspection item
Door does not lock/unlock with door lock and unlock switch.	• All doors inoperative. Refer to DLK-233. • Drivers side door inoperative. Refer to DLK-233. • Passenger side door inoperative. Refer to DLK-234. • Rear LH door inoperative. Refer to DLK-234. • Rear RH door inoperative. Refer to DLK-234.
Door does not lock/unlock with door key cylinder operation.	Refer to DLK-236 .
Door does not lock/unlock with door request switch.	• All door request switches. Refer to DLK-237. • Drivers side door request switch. Refer to DLK-238. • Passenger side door request switch. Refer to DLK-238. • Back door request switch. Refer to DLK-238.
Door does not lock/unlock with Intelligent Key.	Refer to DLK-240 .
Fuel lid lock actuator does not operate.	Refer to DLK-241 .
Ignition position warning function does not operate.	Refer to DLK-242 .
Selective unlock function does not operate.	Refer to DLK-243 .
Auto door lock operation does not operate.	Refer to DLK-244 .
Vehicle speed sensing auto lock operation does not operate.	Refer to DLK-245 .
IGN OFF interlock door unlock function does not operate.	Refer to DLK-246 .
P (Park) range interlock door lock/unlock function does not operate.	Refer to DLK-247 .
Hazard and horn reminder does not operate.	Refer to DLK-248 .
Hazard and buzzer reminder does not operate.	Refer to DLK-249 .
Welcome light function does not operate.	Refer to DLK-251 .
OFF position warning does not operate.	Refer to DLK-253 .
ACC warning does not operate.	Refer to DLK-254 .
Take away warning does not operate.	Refer to DLK-255 .
Key ID warning does not operate.	Refer to DLK-257 .
Intelligent Key low battery warning does not operate.	Refer to DLK-258 .
Door lock operation warning does not operate.	Refer to DLK-259 .
Automatic back door operation does not operate.	• All switches. Refer to DLK-260. • Automatic back door switch. Refer to DLK-261. • Automatic back door close switch. Refer to DLK-261. • Intelligent Key. Refer to DLK-262. • Back door opener switch. Refer to DLK-262. • Open/closure function. Refer to DLK-263. • Open function. Refer to DLK-264. • Closure function. Refer to DLK-265.
Automatic back door warning does not operate.	Refer to DLK-266 .
Automatic back door functions do not cancel.	Refer to DLK-268 .
Automatic back door anti-pinch functions do not operate.	Refer to DLK-269 .
Integrated homelink transmitter does not operate.	Refer to DLK-270 .
Squeak and rattle trouble diagnosis.	Refer to DLK-271 .

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

< SYMPTOM DIAGNOSIS >

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

ALL DOOR

ALL DOOR : Description

INFOID:0000000011151853

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

ALL DOOR : Diagnosis Procedure

INFOID:0000000011151854

1.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch.

- Driver side: Refer to [DLK-178, "DRIVER SIDE : Component Function Check"](#).
- Passenger side: Refer to [DLK-181, "PASSENGER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (driver side).

Refer to [DLK-184, "DRIVER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.REPLACE BCM

- Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000011151855

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

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000011151856

1.CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (driver side).

Refer to [DLK-184, "DRIVER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.REPLACE BCM

- Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

PASSENGER SIDE

DLK

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

< SYMPTOM DIAGNOSIS >

PASSENGER SIDE : Description

INFOID:0000000011151857

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

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000011151858

1.CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (passenger side).

Refer to [DLK-185, "PASSENGER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.REPLACE BCM

- Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

REAR LH

REAR LH : Description

INFOID:0000000011151859

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

REAR LH : Diagnosis Procedure

INFOID:0000000011151860

1.CHECK DOOR LOCK ACTUATOR

Check rear door lock assembly LH.

Refer to [DLK-186, "REAR LH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.REPLACE BCM

- Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

REAR RH

REAR RH : Description

INFOID:0000000011151861

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

REAR RH : Diagnosis Procedure

INFOID:0000000011151862

1.CHECK DOOR LOCK ACTUATOR

Check rear door lock assembly RH.

Refer to [DLK-187, "REAR RH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.REPLACE BCM

- Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

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

< SYMPTOM DIAGNOSIS >

- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

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DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERATION

< SYMPTOM DIAGNOSIS >

DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERATION

Diagnosis Procedure

INFOID:0000000011151863

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-233, "ALL DOOR : Diagnosis Procedure"](#).

2.CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.

Refer to [DLK-193, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.REPLACE BCM

• Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

• Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

< SYMPTOM DIAGNOSIS >

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

ALL DOOR REQUEST SWITCHES : Description

INFOID:0000000011151864

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

ALL DOOR REQUEST SWITCHES : Diagnosis Procedure

INFOID:0000000011151865

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-195, "Component Function Check"](#).

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" mode.

3. Check "LOCK/UNLOCK BY I-KEY" setting in "WORK SUPPORT".

Refer to [BCS-21, "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-172, "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-151, "DTC Logic"](#).

• Console: Refer to [DLK-153, "DTC Logic"](#).

• Luggage room: Refer to [DLK-155, "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.

• Driver side: Refer to [DLK-168, "Component Function Check"](#).

• Passenger side: Refer to [DLK-166, "Component Function Check"](#).

• Back door: Refer to [DLK-170, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6.CHECK BACK DOOR SWITCH

Check back door switch.

Refer to [DLK-174, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

7.REPLACE BCM

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

< SYMPTOM DIAGNOSIS >

- Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

DRIVER SIDE DOOR REQUEST SWITCH

DRIVER SIDE DOOR REQUEST SWITCH : Description

INFOID:0000000011151866

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

DRIVER SIDE DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:0000000011151867

1.CHECK DOOR REQUEST SWITCH

Check front door request switch (driver side).

Refer to [DLK-197, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.REPLACE BCM

- Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

PASSENGER SIDE DOOR REQUEST SWITCH

PASSENGER SIDE DOOR REQUEST SWITCH : Description

INFOID:0000000011151868

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

PASSENGER SIDE DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:0000000011151869

1.CHECK DOOR REQUEST SWITCH

Check front door request switch (passenger side).

Refer to [DLK-197, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.REPLACE BCM

- Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

BACK DOOR REQUEST SWITCH

BACK DOOR REQUEST SWITCH : Description

INFOID:0000000011151870

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

BACK DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:0000000011151871

1.CHECK BACK DOOR REQUEST SWITCH

Check back door request switch.

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

< SYMPTOM DIAGNOSIS >

Refer to [DLK-199, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.REPLACE BCM

• Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

• Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

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DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

< SYMPTOM DIAGNOSIS >

DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

Diagnosis Procedure

INFOID:0000000011151872

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-233, "ALL DOOR : Diagnosis Procedure"](#).

2.CHECK REMOTE KEYLESS ENTRY RECEIVER

Check remote keyless entry receiver.

Refer to [DLK-195, "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-205, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.REPLACE BCM

- Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

FUEL LID LOCK ACTUATOR DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

FUEL LID LOCK ACTUATOR DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000011151873

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-233, "ALL DOOR : Diagnosis Procedure"](#).

2.CHECK FUEL LID LOCK ACTUATOR

Check fuel lid lock actuator.

Refer to [DLK-189, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.REPLACE BCM

• Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

• Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

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IGNITION POSITION WARNING FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

IGNITION POSITION WARNING FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000011151874

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-233, "ALL DOOR : Diagnosis Procedure"](#).

2.CHECK DOOR SWITCH

Check door switch

Refer to [DLK-172, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK BACK DOOR SWITCH

Check door switch

Refer to [DLK-174, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.REPLACE BCM

- Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000011151875

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

1. Select "DOOR LOCK" of "BCM" using CONSULT.
2. Select "DOOR LOCK-UNLOCK SET" in "WORK SUPPORT" mode.
3. Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT".
Refer to [BCS-15, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Set "On" in "DOOR LOCK-UNLOCK SET".

2.REPLACE BCM

- Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

- YES >> Inspection End.
NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

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AUTO DOOR LOCK OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

AUTO DOOR LOCK OPERATION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000011151876

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

1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
2. Select "AUTO LOCK SET" in "WORK SUPPORT" mode.
3. Check "AUTO LOCK SET" setting in "WORK SUPPORT".

Refer to [BCS-21, "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

Is the inspection result normal?

YES >> GO TO 2.

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

2. REPLACE BCM

- Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000011151877

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

1. Select "DOOR LOCK" of "BCM" using CONSULT.
2. Select "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT" mode.
3. Check "AUTOMATIC LOCK/UNLOCK SELECT" setting in "WORK SUPPORT".
Refer to [BCS-15, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "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" mode.
3. Check "AUTOMATIC DOOR LOCK SELECT" setting in "WORK SUPPORT".
Refer to [BCS-15, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

Is the inspection result normal?

YES >> GO TO 3.

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

3.REPLACE BCM

- Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

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IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000011151878

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

1. Select "DOOR LOCK" of "BCM" using CONSULT.
2. Select "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT" mode.
3. Check "AUTOMATIC LOCK/UNLOCK SELECT" setting in "WORK SUPPORT".
Refer to [BCS-15, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "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" mode.
3. Check "AUTOMATIC DOOR UNLOCK SELECT" setting in "WORK SUPPORT".
Refer to [BCS-15, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

Is the inspection result normal?

YES >> GO TO 3.

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

3. REPLACE BCM

- Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

P RANGE INTERLOCK DOOR LOCK/UNLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

P RANGE INTERLOCK DOOR LOCK/UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000011151879

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

1. Select "DOOR LOCK" of "BCM" using CONSULT.
2. Select "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT" mode.
3. Check "AUTOMATIC LOCK/UNLOCK SELECT" setting in "WORK SUPPORT".
Refer to [BCS-15, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

Is the inspection result normal?

YES >> GO TO 2.

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

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

1. Select "DOOR LOCK" of "BCM" using CONSULT.
2. Select "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT" mode.
3. Check "AUTOMATIC DOOR LOCK SELECT" setting in "WORK SUPPORT".
Refer to [BCS-15, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

Is the inspection result normal?

YES >> GO TO 3.

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

3.CHECK "AUTOMATIC DOOR UNLOCK SELECT" SETTING IN "WORK SUPPORT"

1. Select "DOOR LOCK" of "BCM" using CONSULT.
2. Select "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT" mode.
3. Check "AUTOMATIC DOOR UNLOCK SELECT" setting in "WORK SUPPORT".
Refer to [BCS-15, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

Is the inspection result normal?

YES >> GO TO 4.

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

4.REPLACE BCM

- Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

HAZARD AND HORN REMINDER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

HAZARD AND HORN REMINDER DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000011151880

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" mode.
3. Check the "HAZARD ANSWER BACK" setting in "WORK SUPPORT".
Refer to [BCS-21, "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 "HORN WITH KEYLESS LOCK" SETTING IN "WORK SUPPORT"

1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
2. Select "HORN WITH KEYLESS LOCK" in "WORK SUPPORT" mode.
3. Check the "HORN WITH KEYLESS LOCK" in "WORK SUPPORT".
Refer to [BCS-21, "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Set the "On" in "HORN WITH KEYLESS LOCK".

3. CHECK HAZARD FUNCTION

Check hazard function.

Refer to [DLK-208, "Component Function Check"](#).

Is the inspection result normal?

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

4. CHECK HORN FUNCTION

Check horn function.

Refer to [SEC-142, "Component Function Check"](#).

Is the inspection result normal?

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

5. REPLACE BCM

- Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

- YES >> Inspection End.
NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

HAZARD AND BUZZER REMINDER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

HAZARD AND BUZZER REMINDER DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000011151881

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" mode.
3. Check the "HAZARD ANSWER BACK" setting in "WORK SUPPORT".
Refer to [BCS-21, "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" mode.
3. Check the "ANS BACK I-KEY LOCK" setting in "WORK SUPPORT".
Refer to [BCS-21, "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" mode.
3. Check the "ANS BACK I-KEY UNLOCK" setting in "WORK SUPPORT".
Refer to [BCS-21, "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-208, "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-203, "Component Function Check"](#).

Is the inspection result normal?

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

6.REPLACE BCM

- Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

- YES >> Inspection End.
NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

KEY REMINDER FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

KEY REMINDER FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000011151882

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

1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
2. Select "ANTI KEY LOCK IN FUNCTI" in "WORK SUPPORT" mode.
3. Check "ANTI KEY LOCK IN FUNCTI" setting in "WORK SUPPORT".
Refer to [BCS-21, "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

Is the inspection result normal?

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

2. CHECK INSIDE KEY ANTENNA

Check inside key antenna.

- Instrument center: Refer to [DLK-151, "DTC Logic"](#).
- Console: Refer to [DLK-153, "DTC Logic"](#).
- Luggage room: Refer to [DLK-155, "DTC Logic"](#).

Is the inspection result normal?

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

3. CHECK UNLOCK SENSOR

Check unlock sensor.

Refer to [DLK-191, "Component Function Check"](#).

Is the inspection result normal?

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

4. REPLACE BCM

- Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

- YES >> Inspection End.
NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

WELCOME LIGHT FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

WELCOME LIGHT FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000011151883

1.CHECK "WELCOME LIGHT OP SET" SETTING IN "WORK SUPPORT"

1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
2. Select "WELCOME LIGHT OP SET" in "WORK SUPPORT" mode.
3. Check "WELCOME LIGHT OP SET" setting in "WORK SUPPORT".
Refer to [BCS-21, "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)".](#)

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Set "On" and "WELCOME LIGHT SELECT" in "WORK SUPPORT".

2.CHECK "WELCOME LIGHT SELECT" SETTING IN "WORK SUPPORT"

1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
2. Select "WELCOME LIGHT SELECT" in "WORK SUPPORT" mode.
3. Check "WELCOME LIGHT SELECT" setting in "WORK SUPPORT".
Refer to [BCS-21, "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)".](#)

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Set "WELCOME LIGHT SELECT" setting in "WORK SUPPORT".

3.CHECK INSIDE KEY ANTENNA

Check inside key antenna.

- Instrument center: Refer to [DLK-151, "DTC Logic".](#)
- Console: Refer to [DLK-153, "DTC Logic".](#)
- Luggage room: Refer to [DLK-155, "DTC Logic".](#)

Is the inspection result normal?

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

4.CHECK OUTSIDE KEY ANTENNA

Check outside key antenna.

- Driver side: Refer to [DLK-168, "Component Function Check".](#)
- Passenger side: Refer to [DLK-166, "Component Function Check".](#)
- Back door: Refer to [DLK-170, "Component Function Check".](#)

Is the inspection result normal?

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

5.CHECK REMOTE KEYLESS ENTRY FUNCTION

Check remote keyless entry function

Does door lock/unlock with Intelligent Key button?

- YES >> GO TO 6.
NO >> Refer to [DLK-240, "Diagnosis Procedure".](#)

6.CHECK INTERIOR ROOM LAMP CONTROL SYSTEM

Check interior room lamp control system. Refer to [INL-6, "INTERIOR ROOM LAMP CONTROL SYSTEM : System Description".](#)

Does the room lamp and puddle lamp turn ON?

- YES >> GO TO 7.
NO >> Refer to [INL-58, "Symptom Table".](#)

7.REPLACE BCM

- Replace BCM. Refer to [BCS-80, "Removal and Installation".](#)
- Confirm the operation after replacement.

Is the result normal?

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WELCOME LIGHT FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

OFF POSITION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

OFF POSITION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000011151884

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 (driver side).

Refer to [DLK-172, "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-206, "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-203, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6.REPLACE BCM

• Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

• Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

ACC WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

ACC WARNING DOES NOT OPERATE

Description

INFOID:0000000011151885

ACC warning function does not operate for vehicle with information display models

NOTE:

Warning functions operating condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to [DLK-35. "WARNING FUNCTION : System Description"](#).

Diagnosis Procedure

INFOID:0000000011151886

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-206. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.REPLACE BCM

- Replace BCM. Refer to [BCS-80. "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47. "Intermittent Incident"](#).

TAKE AWAY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

TAKE AWAY WARNING DOES NOT OPERATE

Description

INFOID:0000000011151887

Take away warning function does not operate for vehicle with information display models.

NOTE:

Warning functions operating condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to [DLK-35, "WARNING FUNCTION : System Description"](#).

Diagnosis Procedure

INFOID:0000000011151888

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-151, "DTC Logic"](#).
- Console: Refer to [DLK-153, "DTC Logic"](#).
- Luggage room: Refer to [DLK-155, "DTC Logic"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK DOOR SWITCH

Check front door switch (driver side).

Refer to [DLK-172, "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-206, "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-203, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

7.REPLACE BCM

- Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).
- Confirm the operation after replacement.

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TAKE AWAY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

KEY ID WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

KEY ID WARNING DOES NOT OPERATE

Description

INFOID:0000000011151889

Key ID warning function does not operate for vehicle with information display models.

NOTE:

Warning functions operating condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to [DLK-35, "WARNING FUNCTION : System Description"](#).

Diagnosis Procedure

INFOID:0000000011151890

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-205, "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-151, "DTC Logic"](#).
- Console: Refer to [DLK-153, "DTC Logic"](#).
- Luggage room: Refer to [DLK-155, "DTC Logic"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5.REPLACE BCM

- Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

Description

INFOID:0000000011151891

Intelligent Key low battery warning does not operate for vehicle with information display models.

NOTE:

Warning functions operating condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to [DLK-35, "WARNING FUNCTION : System Description"](#).

Diagnosis Procedure

INFOID:0000000011151892

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" mode.

3. Check "LO- BATT OF KEY FOB WARN" setting in "WORK SUPPORT".

Refer to [BCS-21, "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-205, "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-151, "DTC Logic"](#).

• Console: Refer to [DLK-153, "DTC Logic"](#).

• Luggage room: Refer to [DLK-155, "DTC Logic"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6. REPLACE BCM

• Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

• Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

DOOR LOCK OPERATION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

DOOR LOCK OPERATION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:00000000111151893

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-237, "ALL DOOR REQUEST SWITCHES : Diagnosis Procedure"](#).

2.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.

Refer to [DLK-203, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.REPLACE BCM

• Replace BCM. Refer to [BCS-80, "Removal and Installation"](#).

• Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

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AUTOMATIC BACK DOOR OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

AUTOMATIC BACK DOOR OPERATION DOES NOT OPERATE

ALL SWITCHES

ALL SWITCHES : Description

INFOID:0000000011151894

Automatic back door open/close function does not operate using all switches.

NOTE:

Automatic back door open/close operation condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to [DLK-39, "System Description"](#).

ALL SWITCHES : Diagnosis Procedure

INFOID:0000000011151895

1.CHECK DTC WITH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK BACK DOOR AUTO CLOSURE FUNCTION

Check back door auto closure function.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Refer to [DLK-263, "OPEN/CLOSURE FUNCTION : Diagnosis Procedure"](#).

3.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check automatic back door control module power supply and ground circuit.

Refer to [DLK-164, "AUTOMATIC BACK DOOR CONTROL UNIT : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK GROUND CIRCUIT

Check automatic back door control module ground circuit.

Refer to [DLK-227, "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5.CHECK TOUCH SENSOR LH

Check touch sensor LH.

Refer to [DLK-128, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6.CHECK TOUCH SENSOR RH

Check touch sensor RH.

Refer to [DLK-125, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

7.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

AUTOMATIC BACK DOOR OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

NO >> Check intermittent incident. Refer to [GI-47. "Intermittent Incident"](#).

AUTOMATIC BACK DOOR SWITCH

AUTOMATIC BACK DOOR SWITCH : Description

INFOID:0000000011151896

Automatic back door open/close function does not operate using automatic back door switch.

NOTE:

Automatic back door open/close operation condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to [DLK-39. "System Description"](#).

AUTOMATIC BACK DOOR SWITCH : Diagnosis Procedure

INFOID:0000000011151897

1.CHECK AUTOMATIC BACK DOOR SWITCH

Check automatic back door switch.

Refer to [DLK-213. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to [DLK-323. "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47. "Intermittent Incident"](#).

AUTOMATIC BACK DOOR CLOSE SWITCH

AUTOMATIC BACK DOOR CLOSE SWITCH : Description

INFOID:0000000011151898

Automatic back door open/close function does not operate using automatic back door close switch.

NOTE:

Automatic back door open/close operation condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to [DLK-39. "System Description"](#).

AUTOMATIC BACK DOOR CLOSE SWITCH : Diagnosis Procedure

INFOID:0000000011151899

1.CONFIRM THE OPERATION

1. Turn ON automatic back door main switch.

2. Confirm the operation.

Is the result normal?

YES >> Automatic back door system is normal.

NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH

Check automatic back door close switch.

Refer to [DLK-209. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Check automatic back door main switch.

Refer to [DLK-211. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

AUTOMATIC BACK DOOR OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

1. Replace automatic back door control module. Refer to [DLK-323. "Removal and Installation"](#).
2. Confirm the operation after replacement.

Is the result normal?

- YES >> Inspection End.
NO >> Check intermittent incident. Refer to [GI-47. "Intermittent Incident"](#).

INTELLIGENT KEY

INTELLIGENT KEY : Description

INFOID:0000000011151900

Automatic back door open/close function does not operate using Intelligent Key.

NOTE:

Automatic back door open/close operation condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to [DLK-39. "System Description"](#).

INTELLIGENT KEY : Diagnosis Procedure

INFOID:0000000011151901

1.CHECK DTC WITH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK DTC WITH BCM

Check that DTC is not detected with BCM

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Perform trouble diagnosis relevant to DTC indicated.

3.CHECK REMOTE KEYLESS ENTRY FUNCTION

Check remote keyless entry function.

Does door lock/unlock with Intelligent Key button?

- YES >> GO TO 4.
NO >> Refer to [DLK-240. "Diagnosis Procedure"](#).

4.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to [DLK-323. "Removal and Installation"](#).
2. Confirm the operation after replacement.

Is the result normal?

- YES >> Inspection End.
NO >> Check intermittent incident. Refer to [GI-47. "Intermittent Incident"](#).

BACK DOOR OPENER SWITCH

BACK DOOR OPENER SWITCH : Description

INFOID:0000000011151902

Automatic back door open/close function does not operate using back door opener switch.

NOTE:

Automatic back door open/close operation condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to [DLK-39. "System Description"](#).

BACK DOOR OPENER SWITCH : Diagnosis Procedure

INFOID:0000000011151903

1.CONFIRM THE OPERATION

1. Turn ON automatic back door main switch.
2. Confirm the operation.

Is the result normal?

- YES >> Automatic back door system is normal.
NO >> GO TO 2.

AUTOMATIC BACK DOOR OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

2.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Check automatic back door main switch.

Refer to [DLK-211, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.

Refer to [DLK-201, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

OPEN/CLOSURE FUNCTION

OPEN/CLOSURE FUNCTION : Description

INFOID:0000000011151904

Back door auto closure function does not operate when back door opening and closing operations are performed.

OPEN/CLOSURE FUNCTION : Diagnosis Procedure

INFOID:0000000011151905

1.CONFIRM THE OPERATION

1. Turn ON automatic back door main switch.

2. Confirm the operation.

Is the result normal?

YES >> Automatic back door system is normal.

NO >> GO TO 2.

2.CHECK DTC WITH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Perform trouble diagnosis relevant to DTC indicated.

3.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Check automatic back door main switch.

Refer to [DLK-211, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.

Refer to [DLK-201, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

AUTOMATIC BACK DOOR OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

5.CHECK BACK DOOR CLOSURE MOTOR

Check back door closure motor.

Refer to [DLK-224, "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

OPEN FUNCTION

OPEN FUNCTION : Description

INFOID:0000000011151906

Back door auto closure function does not operate when back door opening operations are performed.

OPEN FUNCTION : Diagnosis Procedure

INFOID:0000000011151907

1.CONFIRM THE OPERATION

1. Turn ON automatic back door main switch.

2. Confirm the operation.

Is the result normal?

YES >> Automatic back door system is normal.

NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Check automatic back door main switch.

Refer to [DLK-211, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.

Refer to [DLK-201, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

CLOSURE FUNCTION

CLOSURE FUNCTION : Description

INFOID:0000000011151908

Back door auto closure function does not operate when back door closing operations are performed.

AUTOMATIC BACK DOOR OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

CLOSURE FUNCTION : Diagnosis Procedure

INFOID:0000000011151909

1.CHECK HALF LATCH SWITCH

Check half latch switch.

Refer to [DLK-215, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK BACK DOOR CLOSURE MOTOR

Check back door closure motor.

Refer to [DLK-224, "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

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AUTOMATIC BACK DOOR WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

AUTOMATIC BACK DOOR WARNING DOES NOT OPERATE BUZZER

BUZZER : Description

INFOID:0000000011151910

Automatic back door warning chime does not operate when automatic back door warning function are performed.

BUZZER : Diagnosis Procedure

INFOID:0000000011151911

1.CHECK DTC WITH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK BACK DOOR WARNING CHIME

Check back door warning chime.

Refer to [DLK-225, "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

HAZARD WARNING LAMP

HAZARD WARNING LAMP : Description

INFOID:0000000011151912

Hazard warning lamp does not operate when automatic back door warning function are performed.

HAZARD WARNING LAMP : Diagnosis Procedure

INFOID:0000000011151913

1.CHECK DTC WITH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Perform trouble diagnosis relevant to DTC indicated.

3.CHECK GROUND CIRCUIT

Check automatic back door control module ground circuit.

Refer to [DLK-227, "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts

4.CHECK HAZARD AND HORN REMINDER FUNCTION

AUTOMATIC BACK DOOR WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

Check hazard and horn reminder function.

Is the inspection result normal?

YES >> GO TO 5.

NO >> Refer to [DLK-248, "Diagnosis Procedure"](#).

5.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

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AUTOMATIC BACK DOOR FUNCTIONS DO NOT CANCEL

< SYMPTOM DIAGNOSIS >

AUTOMATIC BACK DOOR FUNCTIONS DO NOT CANCEL

Diagnosis Procedure

INFOID:0000000011151914

1.CHECK THE OPERATION

Check automatic back door main switch function.

NOTE:

When the main switch is OFF, the automatic back door operation is not available by back door opener switch and automatic back door close switch.

Is the inspection result normal?

- YES >> Automatic back door system is normal.
- NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Check automatic back door main switch.

Refer to [DLK-211, "Component Function Check"](#).

Is the inspection result normal?

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

3.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).
2. Confirm the operation after replacement.

Is the result normal?

- YES >> Inspection End.
- NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

AUTOMATIC BACK DOOR ANTI-PINCH FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

AUTOMATIC BACK DOOR ANTI-PINCH FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000011151915

1.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check automatic back door control module power supply and ground circuit.

Refer to [DLK-164, "AUTOMATIC BACK DOOR CONTROL UNIT : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK TOUCH SENSOR LH

Check touch sensor LH.

Refer to [DLK-219, "LH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK TOUCH SENSOR RH

Check touch sensor RH.

Refer to [DLK-217, "RH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to [DLK-323, "Removal and Installation"](#).

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

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DLK

INTEGRATED HOMELINK TRANSMITTER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

INTEGRATED HOMELINK TRANSMITTER DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000011151916

1. CHECK INTEGRATED HOMELINK® TRANSMITTER

Check integrated homelink® transmitter.

Refer to [DLK-230, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. REPLACE AUTO ANTI-DAZZLING INSIDE MIRROR

Replace auto anti-dazzling inside mirror.

Refer to [MIR-16, "Removal and Installation"](#).

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

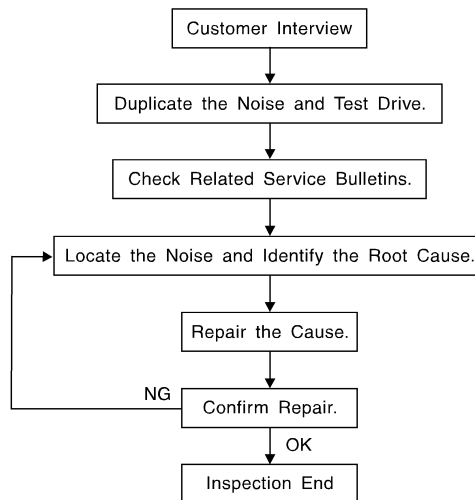
SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000011151917



SBT842

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-275, "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 >

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-272, "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:0000000011151918

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 >

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 >

3. Loose screws at console attachment points.

SEATS

When isolating seat noise it's important to note the position the seat is in and the load placed on the seat when the noise is present. These conditions should be duplicated when verifying and isolating the cause of the noise.

Cause of seat noise include:

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

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

UNDERHOOD

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

Causes of transmitted underhood noise include:

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

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

SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

Diagnostic Worksheet

INFOID:0000000011151919

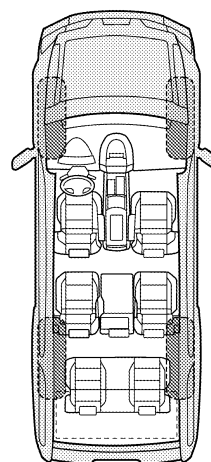
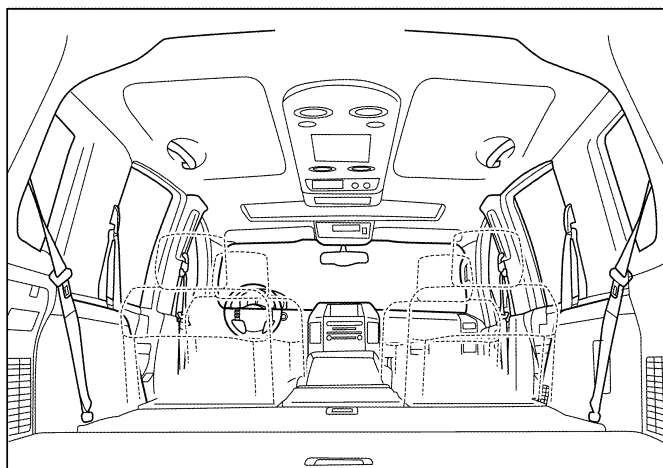
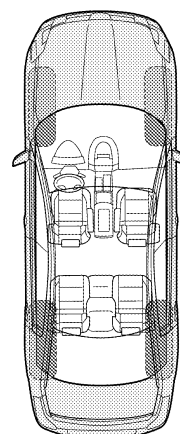
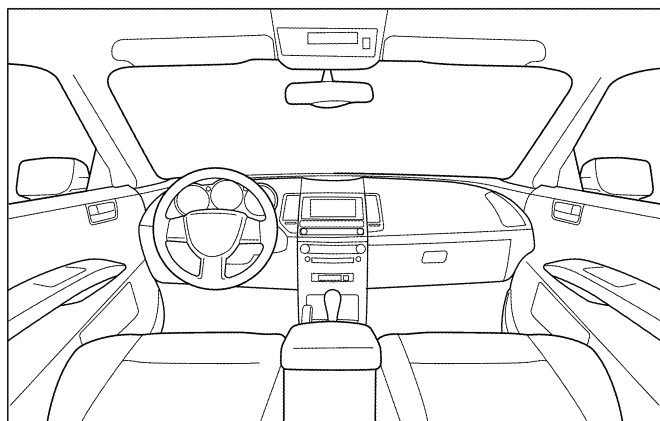
Dear Customer:

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 >

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

HOOD

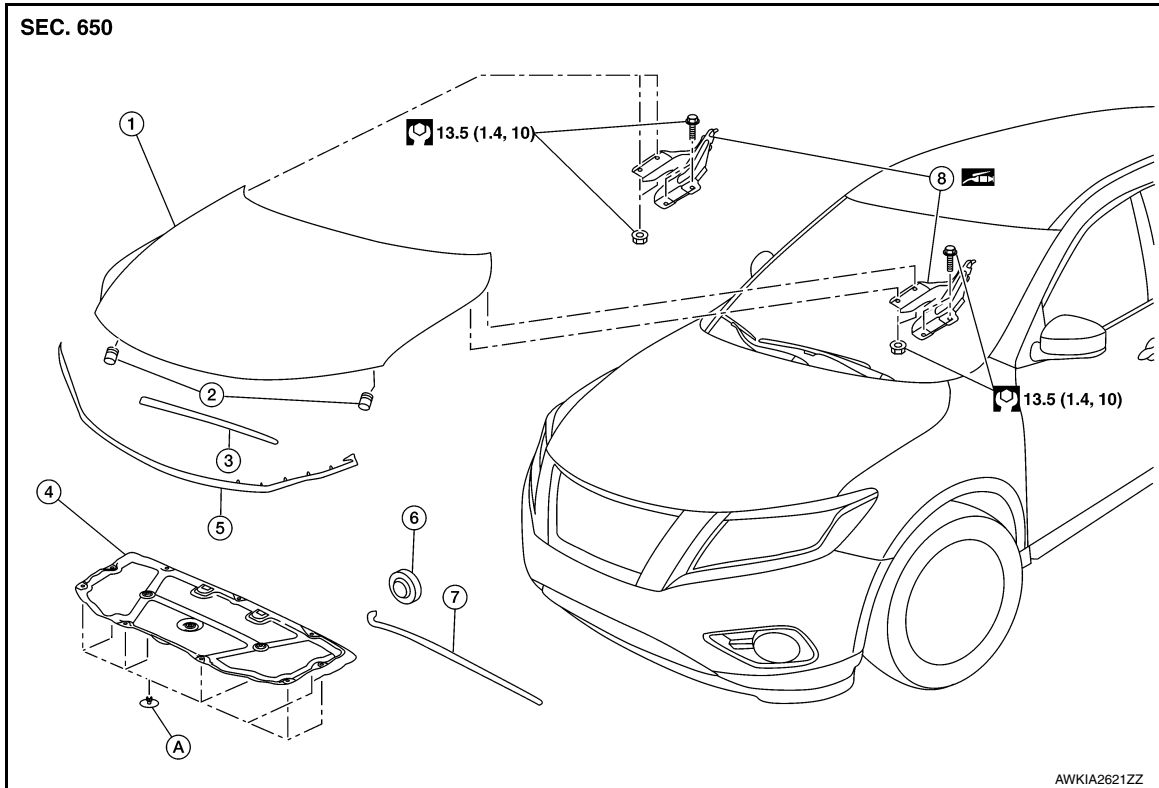
< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

HOOD

Exploded View

INFOID:0000000011151920



1. Hood assembly	2. Hood bumper rubber	3. Hood seal
4. Hood insulator	5. Hood front seal (body side)	6. Hood support rod grommet
7. Hood support rod	8. Hood hinge (LH/RH)	A. Clip

HOOD ASSEMBLY

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000011151921

CAUTION:

- Use two people when removing or installing hood assembly due to its heavy weight.
- Use protective tape or shop cloths to protect surrounding components from damage during removal and installation of hood assembly.

REMOVAL

1. Support the hood assembly using a suitable tool.

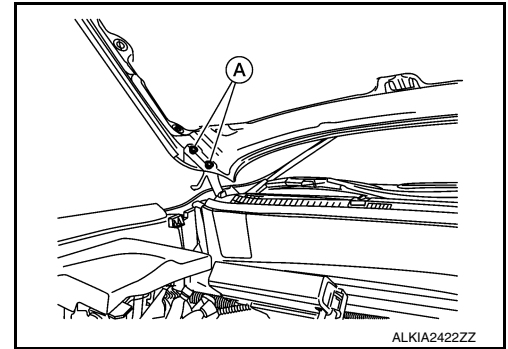
WARNING:

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

HOOD

< REMOVAL AND INSTALLATION >

- Remove hood hinge to hood nuts (A) and then remove the hood assembly.



ALKIA2422ZZ

INSTALLATION

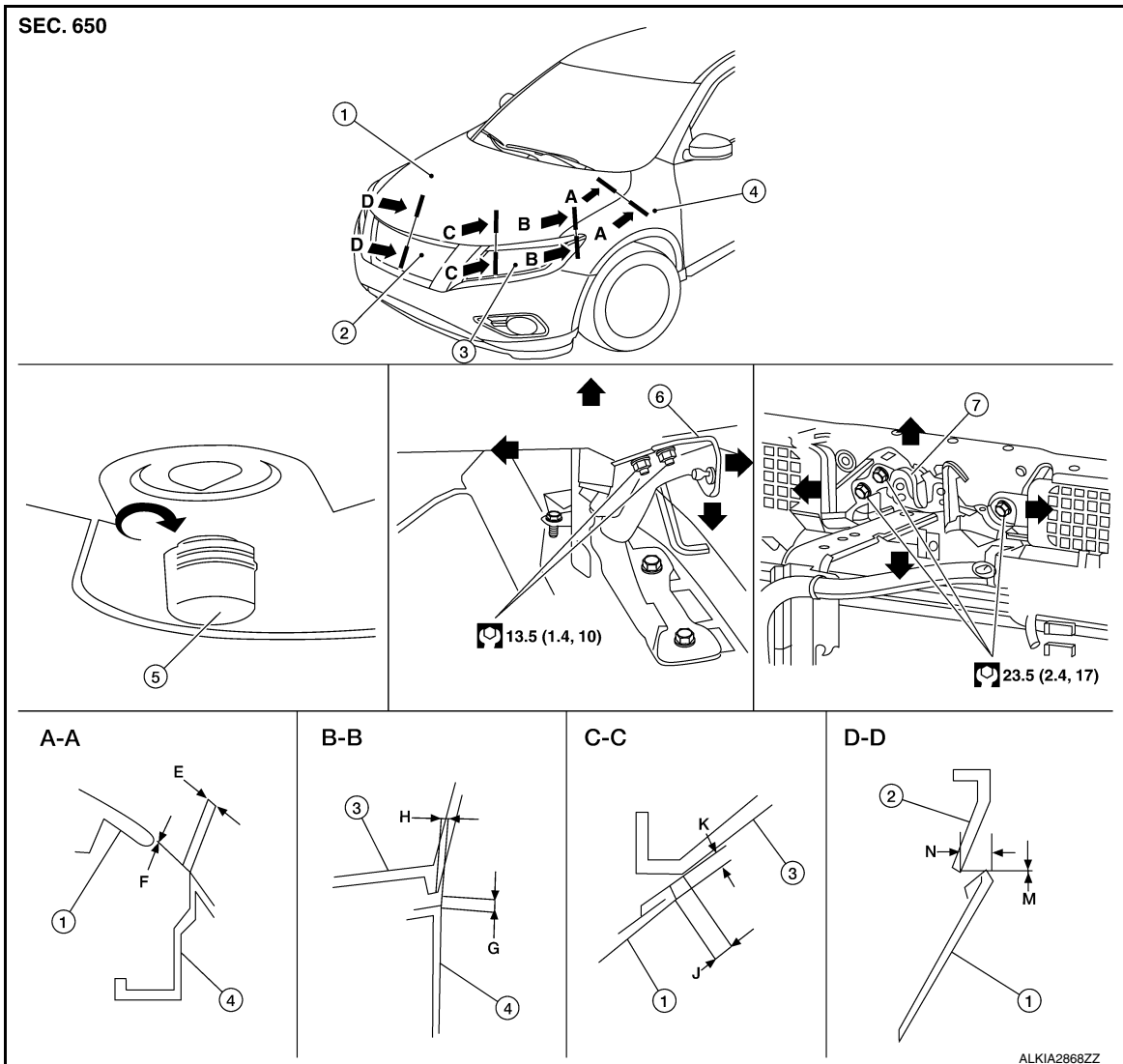
Installation is in the reverse order of removal.

CAUTION:

- Before installing the hood hinge, apply anticorrosive agent onto the surface of the vehicle.
- After installation, perform the hood assembly adjustment procedure. Refer to [DLK-278, "HOOD ASSEMBLY : Adjustment"](#).

HOOD ASSEMBLY : Adjustment

INFOID:000000011151922



ALKIA2868ZZ

1. Hood assembly

2. Front grille

3. Front combination lamp

HOOD

< REMOVAL AND INSTALLATION >

4. Front fender	5. Hood bumper rubber	6. Hood hinge
7. Hood lock assembly		

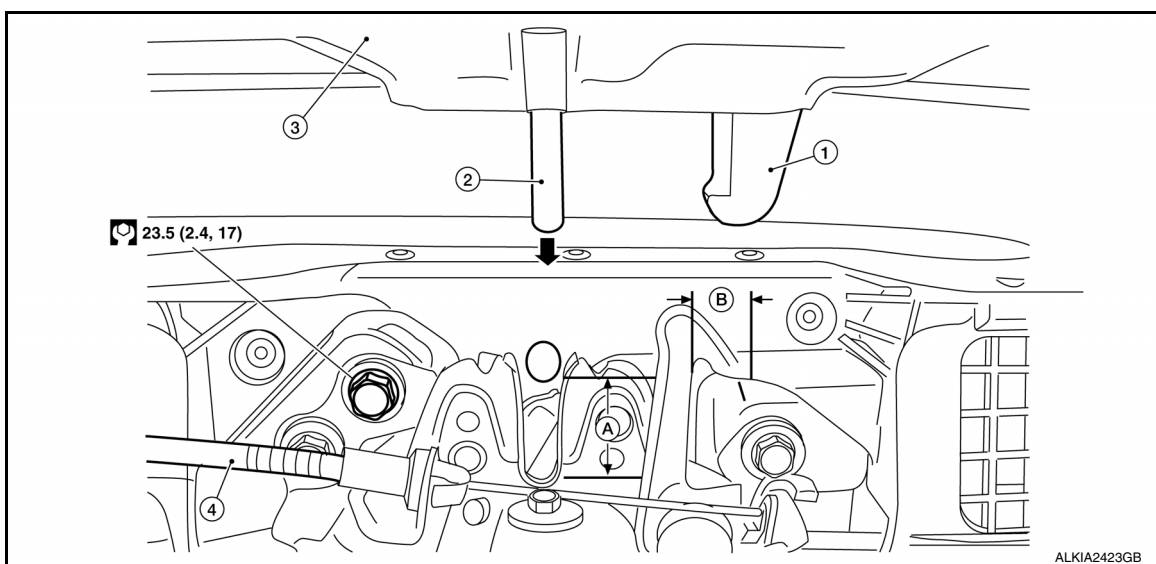
Check the clearance and the surface height between hood and each part by visual inspection and tactile feel. If the clearance and the surface height are out of specification, adjust them according to the adjustment procedures.

Unit: mm (in)

Portion	Section	Item	Measurement	Standard	Parallelism
Hood assembly – Front fender	A – A	E	Clearance	3.5 ± 1.0 (0.14 $\pm$ 0.04)	≤ 1.5 (0.06)
		F	Surface height	0.0 ± 1.5 (0.0 $\pm$ 0.06)	—
Front fender — Front combination lamp	B – B	G	Clearance	1.5 ± 1.3 (0.06 $\pm$ 0.05)	< 1.5 (0.06)
		H	Surface height	0.0 ± 0.5 (0.00 $\pm$ 0.00)	< 0.0 (0.00)
Hood assembly — Front combination lamp	C – C	J	Clearance	5.0 ± 2.0 (0.20 $\pm$ 0.08)	< 2.0 (0.08)
		K	Surface height	0.0 ± 0.0 (0.0 $\pm$ 0.00)	< 0.0 (0.00)
Front bumper upper grille - Hood assembly	D – D	M	Clearance	5.0 ± 2.0 (0.20 $\pm$ 0.08)	< 2.0 (0.08)
		N	Surface height	0.0 ± 0.0 (0.0 $\pm$ 0.00)	< 0.0 (0.00)

HEIGHT ADJUSTMENT

- Loosen the hood lock assembly bolts.
- Adjust the surface height of hood assembly to front grille and front fender according to the specified values by rotating hood bumper rubber.
- Temporarily tighten hood lock assembly bolts.
- Adjust (A) and (B) as shown to the following value with hood's own weight by dropping it from approximately 200 mm (7.87 in) height or by pressing hood lightly [approximately 29 N (3.0 kg, 6.5 lb)].



1. Secondary striker	2. Primary striker	3. Hood assembly
4. Secondary latch control cable	A. 20 mm (0.79 in)	B. 6.8 mm (0.27 in)

- After adjustment, tighten hood hinge nuts and bolts to the specified torque.

CAUTION:

- Check hood hinge rotating part for poor lubrication. If necessary, apply a suitable multi-purpose grease.
- After adjusting, apply touch-up paint (body color) to the head of hood hinge bolts and nuts.

CLEARANCE ADJUSTMENT

- Loosen hood hinge nuts and bolts.
- Loosen the hood lock assembly bolts.

HOOD

< REMOVAL AND INSTALLATION >

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

HOOD HINGE

HOOD HINGE : Removal and Installation

INFOID:0000000011151923

REMOVAL

1. Remove hood assembly. Refer to [DLK-277, "HOOD ASSEMBLY : Removal and Installation"](#).
2. Remove front fender. Refer to [DLK-283, "FRONT FENDER : Removal and Installation"](#).
3. Remove hood hinge bolts, and then remove hood hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Before installing the hood hinge, apply anticorrosive agent onto the surface of the vehicle.
- After installation, perform hood assembly adjustment procedure. Refer to [DLK-278, "HOOD ASSEMBLY : Adjustment"](#).

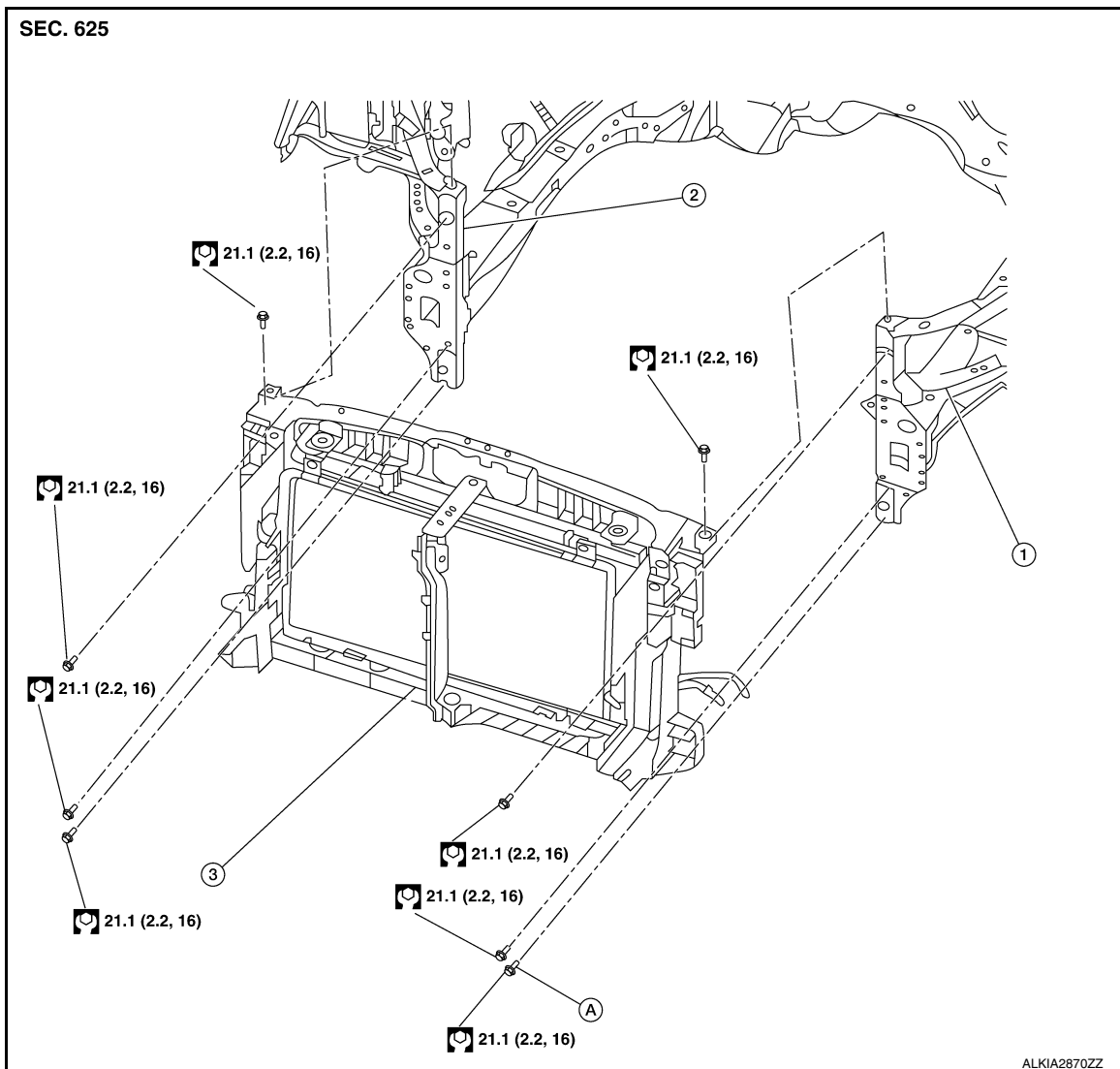
RADIATOR CORE SUPPORT

< REMOVAL AND INSTALLATION >

RADIATOR CORE SUPPORT

Exploded View

INFOID:0000000011151924



Removal and Installation

INFOID:0000000011151925

CAUTION:

When removing radiator core support upper, be careful not to damage the painted surface.

REMOVAL

1. Remove front bumper fascia. Refer to [EXT-17, "Removal and Installation"](#).
2. Release clips and then remove radiator upper seal.
3. Remove the battery. Refer to [PG-95, "Removal and Installation"](#).
4. Disconnect harness connector from refrigerant pressure sensor.
5. Remove upper air intake.
6. Disconnect all harness clips from radiator core support assembly.
7. Remove hood lock assembly. Refer to [DLK-301, "HOOD LOCK RELEASE CABLE : Removal and Installation"](#).

RADIATOR CORE SUPPORT

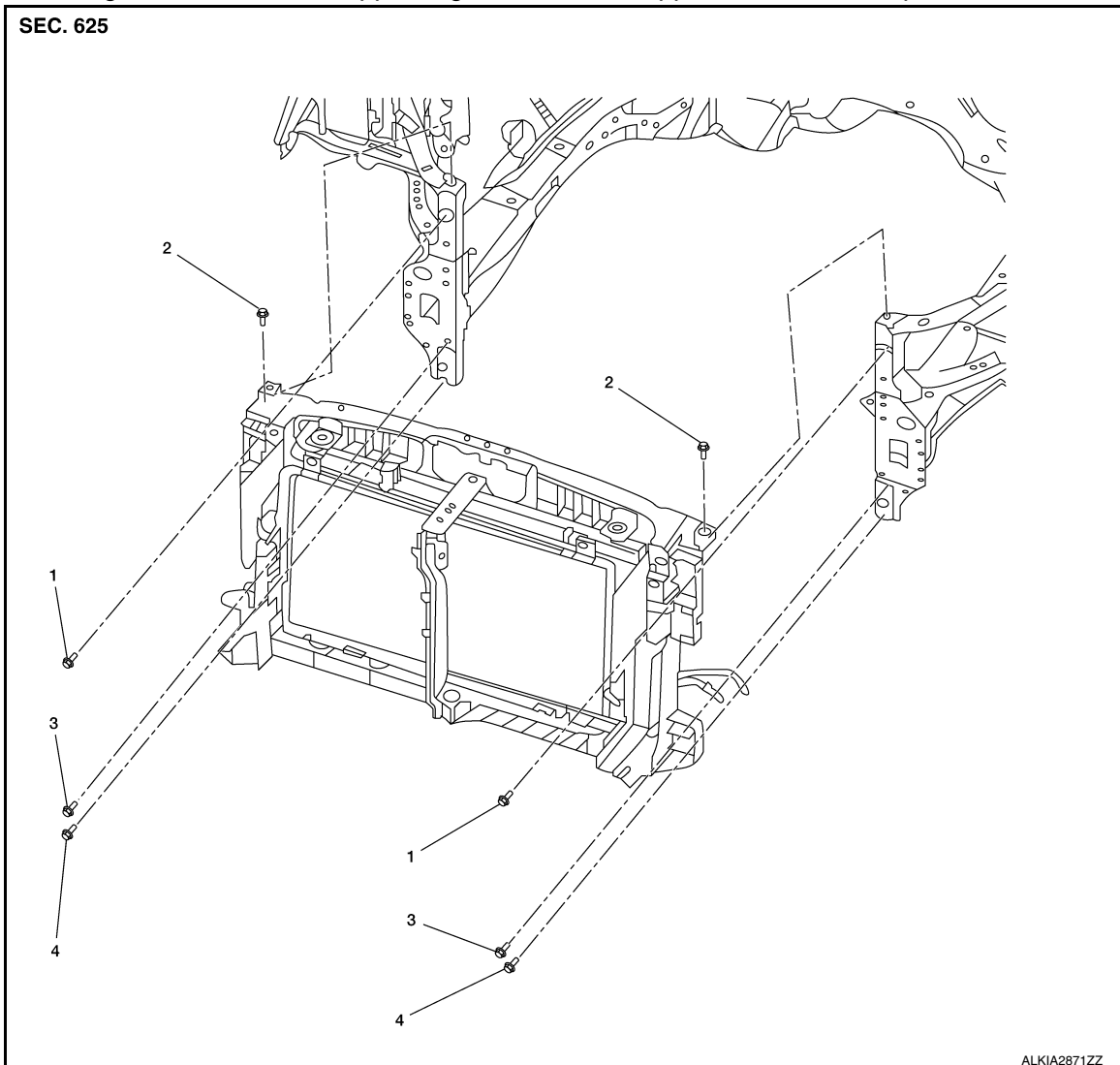
< REMOVAL AND INSTALLATION >

8. Release clips of air guide seal and remove.
9. Remove radiator bolts. Refer to [CO-15, "Removal and Installation"](#).
10. Remove bolts, and radiator core support assembly.

INSTALLATION

Installation is in the reverse order of removal.

- When installing the radiator core support, tighten the core support bolts in the sequence shown.



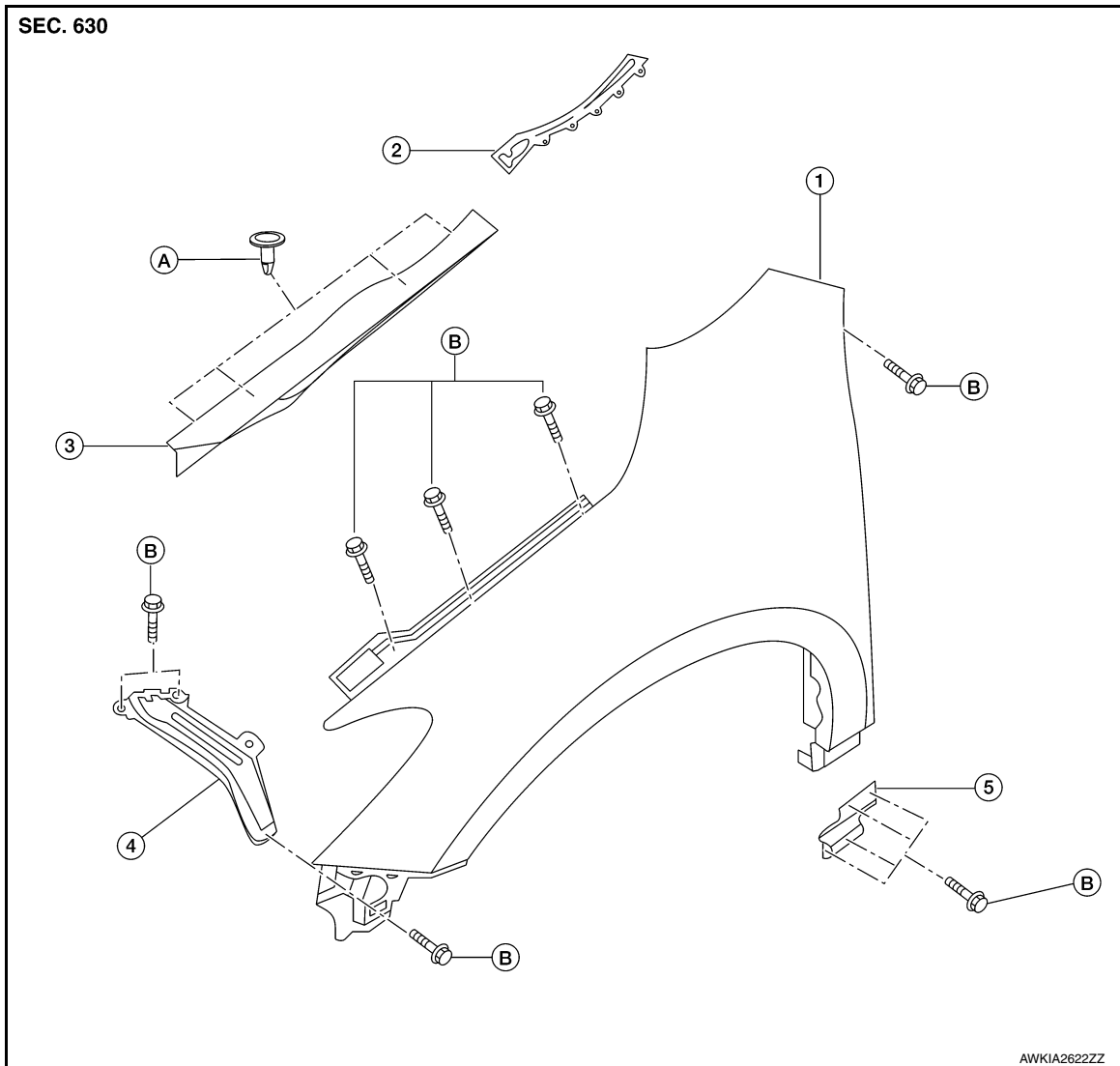
FRONT FENDER

< REMOVAL AND INSTALLATION >

FRONT FENDER

Exploded View

INFOID:0000000011151926



1. Front fender	2. Front fender upper seal	3. Front fender hoodledge finisher
4. Front fender bracket	5. Front fender lower bracket	A. Clip
B. Bolt		

FRONT FENDER

FRONT FENDER : Removal and Installation

INFOID:0000000011151927

CAUTION:

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

REMOVAL

1. Remove front fender protector. Refer to [EXT-28, "FENDER PROTECTOR : Removal and Installation"](#).
2. Remove front combination lamp. Refer to [EXL-145, "Removal and Installation"](#).
3. Remove front fender outside lower molding. Refer to [EXT-38, "Removal and Installation"](#).
4. Remove front fender bolts and front fender.

CAUTION:

FRONT FENDER

< REMOVAL AND INSTALLATION >

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

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- After installation apply touch up paint (body color) to the head of front fender bolts.
- After installation, adjust the following components as necessary:
 - Hood assembly: Refer to [DLK-278, "HOOD ASSEMBLY : Adjustment"](#).
 - Front door: Refer to [DLK-286, "DOOR ASSEMBLY : Adjustment"](#).

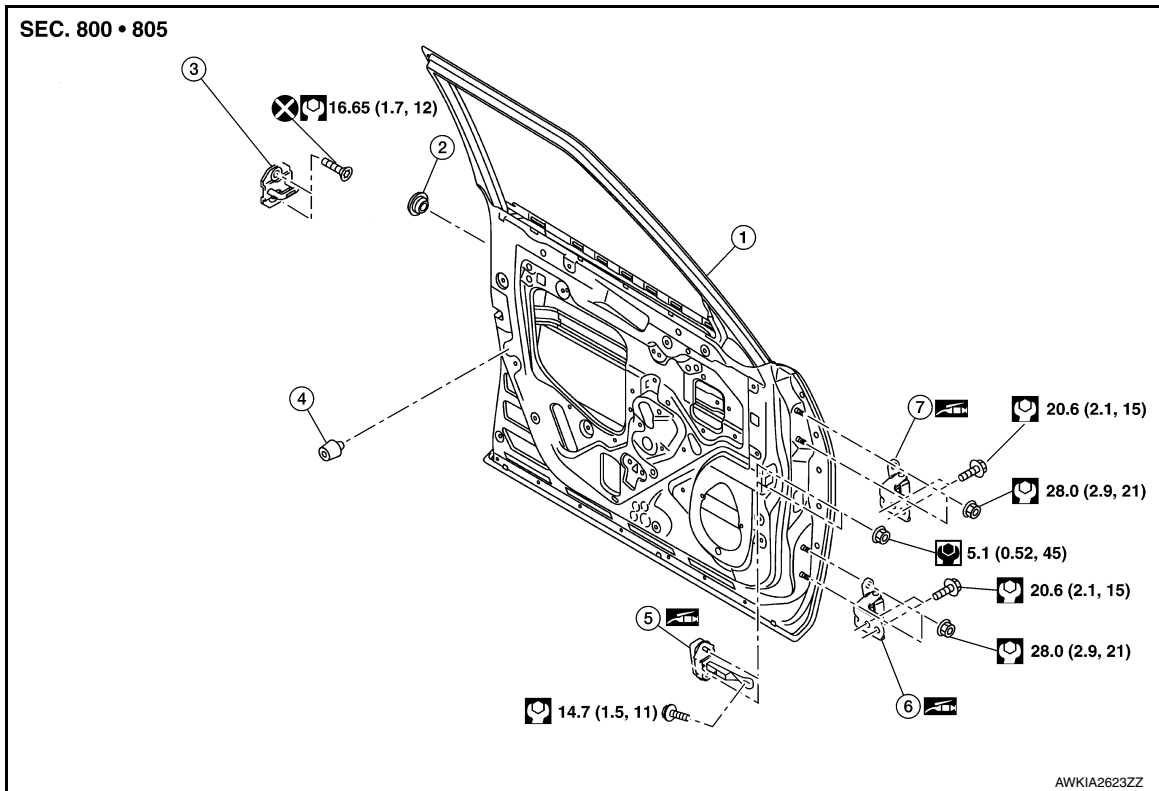
FRONT DOOR

< REMOVAL AND INSTALLATION >

FRONT DOOR

Exploded View

INFOID:0000000011151928



1. Front door panel	2. Grommet	3. Front door striker
4. Bumper rubber	5. Door check link	6. Front door lower hinge
7. Front door upper hinge		

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000011151929

CAUTION:

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

REMOVAL

1. Disconnect the battery negative and positive terminals and wait at least three minutes. Refer to [PG-95, "Removal and Installation"](#).
2. Remove front door finisher. Refer to [INT-15, "Removal and Installation"](#).
3. Disconnect the harness connectors from the front door.
4. Remove front door harness grommet, then harness from the front door.
5. Remove front door check link bolt (body side).
6. Remove front door hinge nuts (door side) and front door assembly.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Apply anticorrosive agent where necessary.
- After installation, check front door open/close and lock/unlock operation.
- After installation, perform the front door adjustment procedure. Refer to [DLK-286, "DOOR ASSEMBLY : Adjustment"](#).

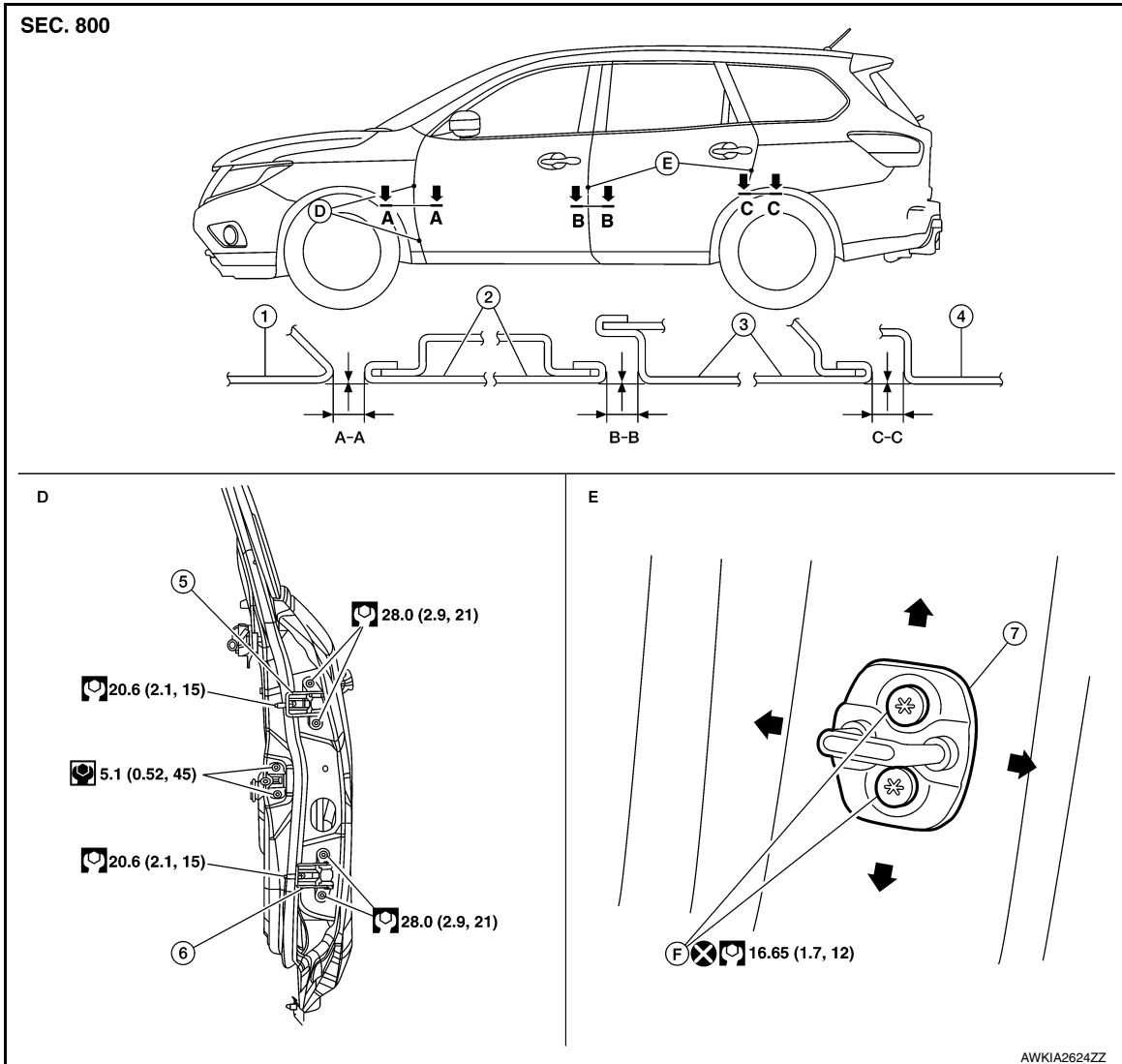
FRONT DOOR

< REMOVAL AND INSTALLATION >

DOOR ASSEMBLY : Adjustment

INFOID:000000011151930

Adjustment



1. Front fender	2. Front door	3. Rear door
4. Body side outer	5. Front door upper hinge	6. Front door lower hinge
7. Door striker	F. Front door striker bolts	

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

Unit: mm (in)

Portion	Section	Measurement	Standard
Front fender - Front door	A - A	Clearance	4.0 ± 1.0 (0.16 $\pm$ 0.04)
		Surface height	± 1.0 ($\pm$ 0.04)
Front door - Rear door	B - B	Clearance	4.3 ± 1.0 (0.17 $\pm$ 0.04)
		Surface height	± 1.0 ($\pm$ 0.04)
Rear door - Body side outer	C - C	Clearance	3.7 ± 1.0 (0.15 $\pm$ 0.04)
		Surface height	± 1.0 ($\pm$ 0.04)

1. Remove front fender. Refer to [DLK-283, "FRONT FENDER : Removal and Installation"](#).

FRONT DOOR

< REMOVAL AND INSTALLATION >

2. Loosen front door hinge nuts (door side).
3. Adjust the surface height of front door according to the specifications provided.
4. Temporarily tighten front door hinge nuts (door side).
5. Loosen front door hinge bolts (body side).
6. Raise front door at rear end to adjust clearance of the front door according to the specifications provided.
7. After adjustment tighten bolts and nuts to the specified torque.

CAUTION:

- Check door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.
- After adjusting, apply touch-up paint (body color) to the head of front door hinge bolts and nuts.

8. Install front fender. Refer to refer to [DLK-283, "FRONT FENDER : Removal and Installation"](#).

DOOR STRIKER

DOOR STRIKER : Removal and Installation

INFOID:0000000011151931

REMOVAL

Remove bolts and front door striker.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

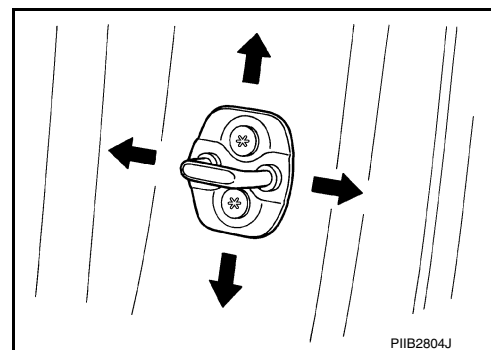
- Do not reuse front door striker bolts.
- After installation, check front door open/close operation. If necessary, adjust the front door striker. Refer to [DLK-287, "DOOR STRIKER : Adjustment"](#).

DOOR STRIKER : Adjustment

INFOID:0000000011151932

DOOR STRIKER ADJUSTMENT

1. Loosen door striker bolts
2. Adjust door striker so that it becomes parallel with front door lock insertion direction.



3. Tighten door striker bolts to specification. Refer to [DLK-285, "Exploded View"](#).

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:0000000011151933

REMOVAL

CAUTION:

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

1. Remove front fender. Refer to [DLK-283, "FRONT FENDER : Removal and Installation"](#).
2. Remove front door assembly. Refer to [DLK-285, "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:

FRONT DOOR

< REMOVAL AND INSTALLATION >

- Apply anticorrosive agent to the hinge mating surface.
- After installation, check front door open/close and lock/unlock operation.
- Check door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.
- After installation, perform the front door adjustment procedure. Refer to [DLK-286, "DOOR ASSEMBLY : Adjustment"](#).

DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:0000000011151934

REMOVAL

1. Fully close the front door window.
2. Remove front door speaker. Refer to [AV-47, "Removal and Installation"](#) (BASE AUDIO), [AV-190, "Removal and Installation"](#) (MID AUDIO), or [AV-433, "Removal and Installation"](#) (PREMIUM AUDIO).
3. Remove door check link bolt from body.
4. Remove door check link nuts on door assembly.
5. Remove door check link through the hole in door assembly.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- After installation, check front door open/close and lock/unlock operation.
- Check door check link rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.

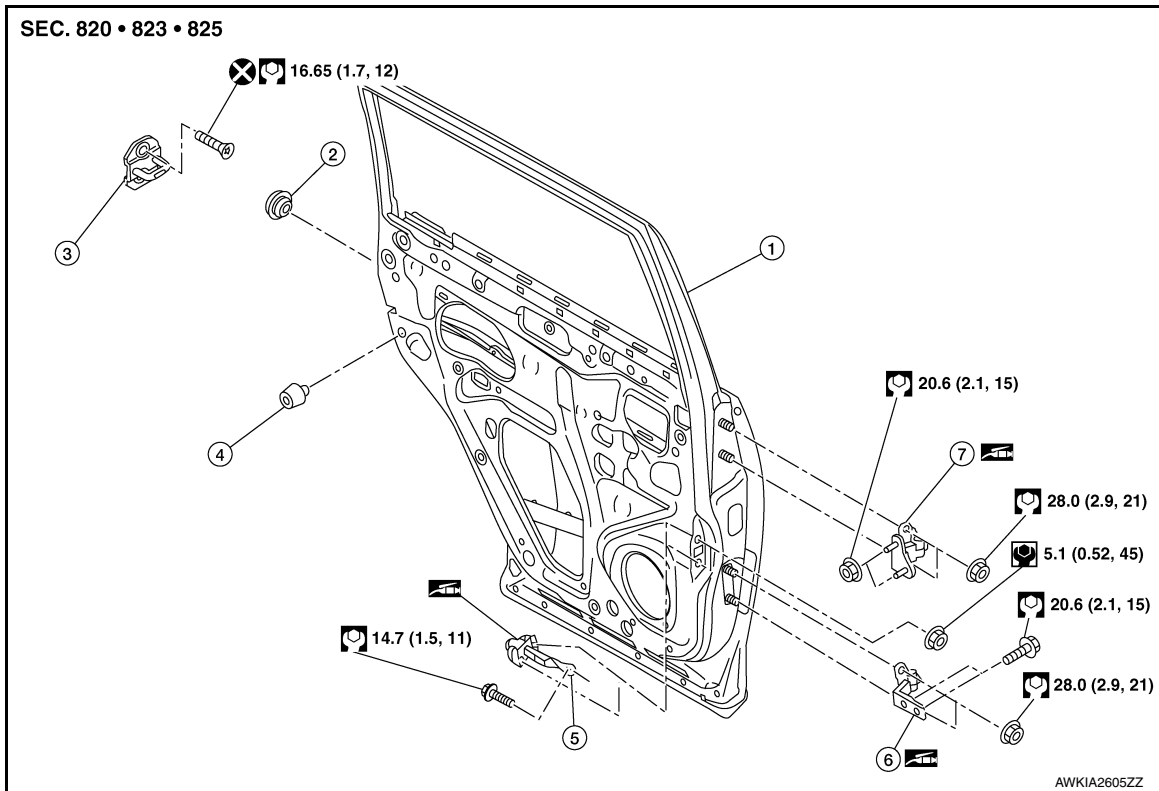
REAR DOOR

< REMOVAL AND INSTALLATION >

REAR DOOR

Exploded View

INFOID:0000000011151935



1. Rear door panel	2. Grommet	3. Door striker
4. Bumper rubber	5. Door check link	6. Rear door lower hinge
7. Rear door upper hinge		

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000011151936

CAUTION:

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

REMOVAL

1. Remove rear door finisher. Refer to [DLK-289, "DOOR ASSEMBLY : Removal and Installation"](#).
2. Disconnect the harness connectors from rear door.
3. Remove harness grommet from rear door, then pull out rear door harness from the rear door.
4. Remove rear door check link bolt (body side).
5. Remove rear door hinge nuts (door side) and rear door assembly.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

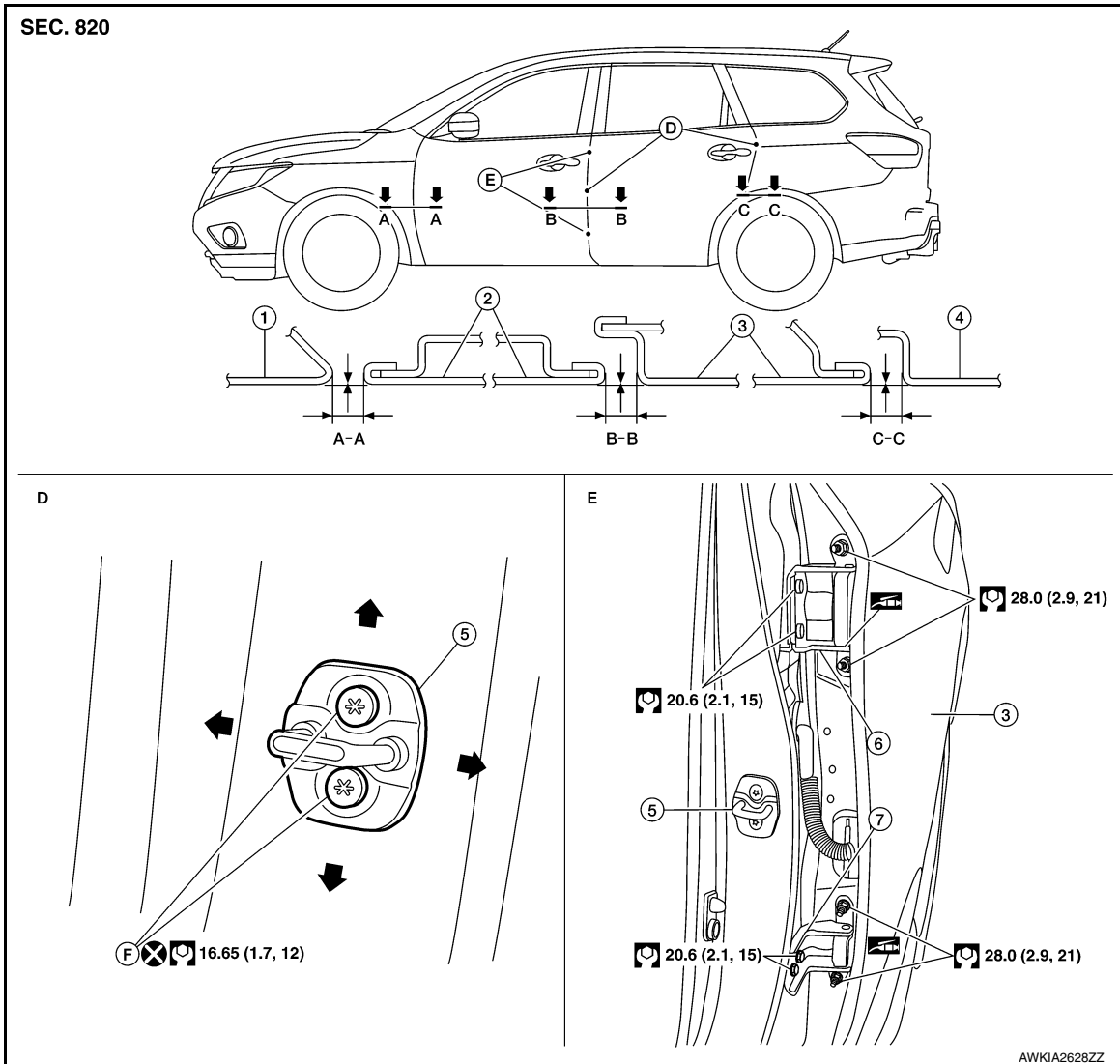
- Apply anticorrosive agent where necessary.
- After installation, check rear door open/close and lock/unlock operation.
- After installation, perform the rear door adjustment procedure. Refer to [DLK-290, "DOOR ASSEMBLY : Adjustment"](#).

REAR DOOR

< REMOVAL AND INSTALLATION >

DOOR ASSEMBLY : Adjustment

INFOID:0000000011151937



1. Front fender	2. Front door	3. Rear door
4. Body side outer	5. Door striker	6. Rear door upper hinge
7. Rear door lower hinge	F. Door striker bolts	

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

Unit: mm (in)

Portion	Section	Measurement	Standard
Front fender - Front door	A - A	Clearance	4.0 ± 1.0 (0.16 $\pm$ 0.04)
		Surface height	± 1.0 ($\pm$ 0.04)
Front door - Rear door	B - B	Clearance	4.3 ± 1.0 (0.17 $\pm$ 0.04)
		Surface height	± 1.0 ($\pm$ 0.04)
Rear door - Body side outer	C - C	Clearance	4.0 ± 1.0 (0.16 $\pm$ 0.04)
		Surface height	± 1.0 ($\pm$ 0.04)

1. Remove center pillar lower finisher. Refer to [INT-21, "CENTER PILLAR LOWER FINISHER : Removal and Installation"](#).

REAR DOOR

< REMOVAL AND INSTALLATION >

2. Loosen rear door hinge nuts (door side).
3. Adjust the surface height of rear door according to specifications provided.
4. Temporarily tighten rear door hinge nuts (door side).
5. Loosen rear door hinge nuts and bolts (body side).
6. Raise rear door at rear end to adjust clearance of rear door according to the specifications provided.
7. After adjustment tighten bolts and nuts to the specified torque.
CAUTION:
 - Check rear door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.
 - After adjusting, apply touch-up paint (body color) to the head of rear door hinge bolts and nuts.
8. Install center pillar lower finisher. Refer to [INT-21, "CENTER PILLAR LOWER FINISHER : Removal and Installation"](#).

DOOR STRIKER

DOOR STRIKER : Removal and Installation

INFOID:0000000011151938

REMOVAL

Remove bolts and rear door striker.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

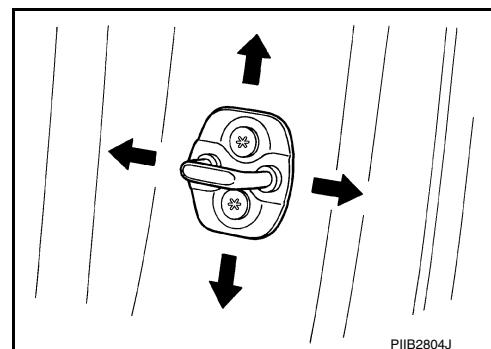
- Do not reuse rear door striker bolts.
- After installation, check rear door open/close operation. If necessary, adjust the door striker. Refer to [DLK-291, "DOOR STRIKER : Adjustment"](#).

DOOR STRIKER : Adjustment

INFOID:0000000011151939

DOOR STRIKER ADJUSTMENT

1. Loosen door striker bolts
2. Adjust door striker so that it becomes parallel with front door lock insertion direction.



3. Tighten door striker bolts to specification. Refer to [DLK-289, "Exploded View"](#).

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:0000000011151940

REMOVAL

CAUTION:

- Use two people when removing and installing the front door due to its heavy weight.
 - When removing and installing front door assembly, support door using a suitable tool.
1. Remove rear door assembly. Refer to [DLK-289, "DOOR ASSEMBLY : Removal and Installation"](#).
 2. Remove center pillar lower finisher. Refer to [INT-21, "CENTER PILLAR LOWER FINISHER : Removal and Installation"](#).
 3. Remove rear door hinge bolts and nuts and rear door hinge.

INSTALLATION

REAR DOOR

< REMOVAL AND INSTALLATION >

Installation is in the reverse order of removal.

CAUTION:

- Apply anticorrosive agent onto the hinge mating surface.
- After installation, check rear door open/close and lock/unlock operation.
- After installation, perform the rear door adjustment procedure. Refer to [DLK-290, "DOOR ASSEMBLY : Adjustment"](#).

DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:0000000011151941

REMOVAL

1. Fully close the rear door window.
2. Remove rear door speaker. Refer to [AV-49, "Removal and Installation"](#) (BASE AUDIO), [AV-192, "Removal and Installation"](#) (MID AUDIO), or [AV-437, "Removal and Installation"](#) (PREMIUM AUDIO).
3. Remove rear door check link bolt (body side).
4. Remove rear door check link nuts (door side).
5. Remove rear door check link through the hole in rear door panel.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- After installation, check rear door open/close and lock/unlock operation.
- Check rear door check link rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.

BACK DOOR

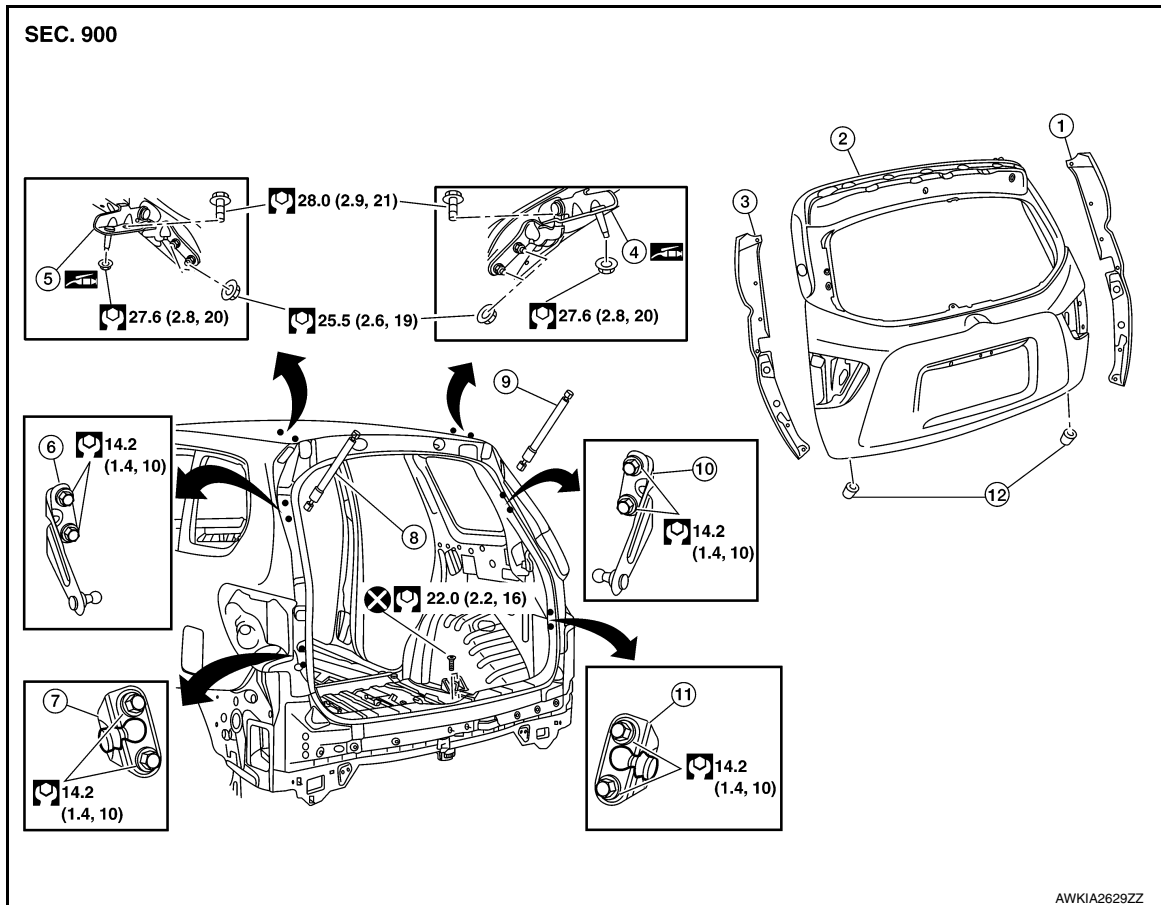
< REMOVAL AND INSTALLATION >

BACK DOOR

Exploded View

INFOID:0000000111151942

WITH POWER BACK DOOR

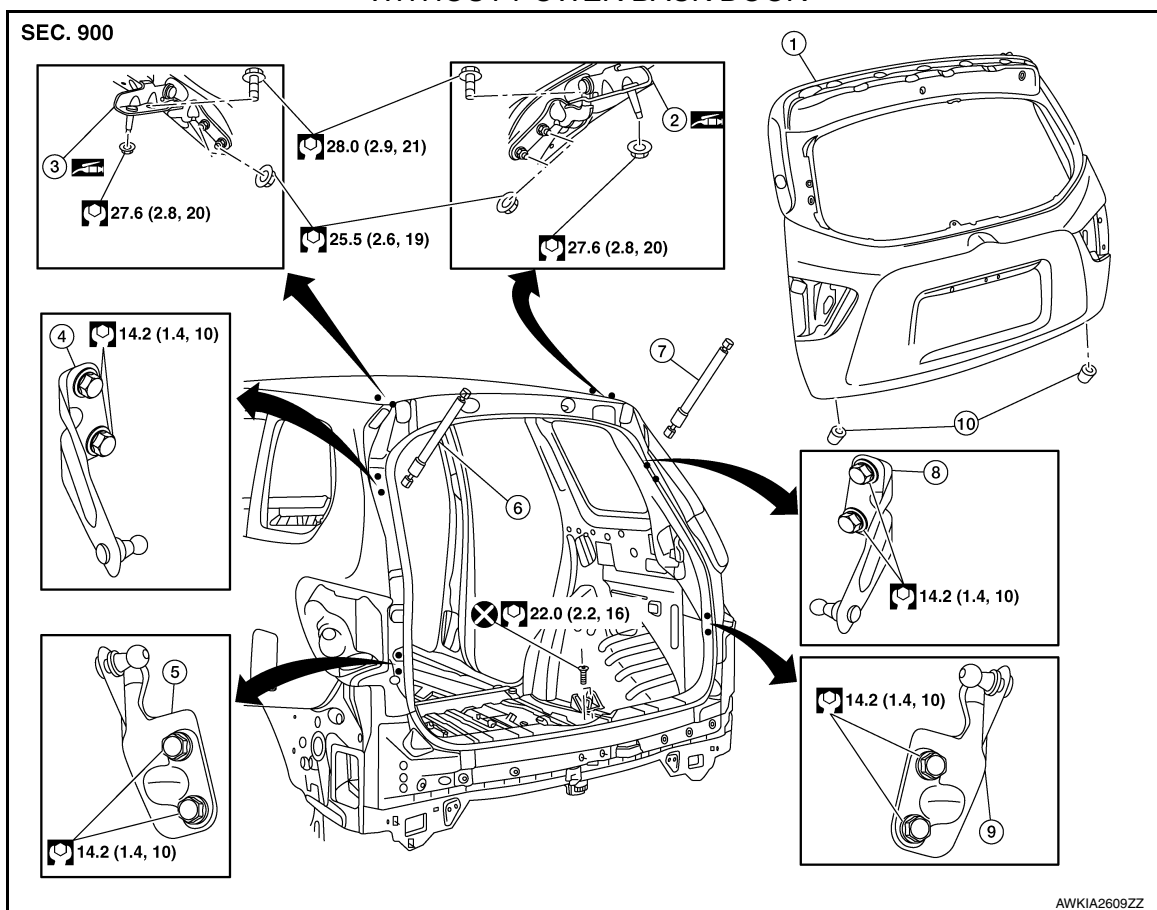


1. Back door touch sensor (RH)	2. Back door panel	3. Back door touch sensor (LH)
4. Back door hinge (RH)	5. Back door hinge (LH)	6. Spindle unit upper hinge (LH)
7. Spindle unit lower hinge (LH)	8. Spindle unit (LH)	9. Spindle unit (RH)
10. Spindle unit upper hinge (RH)	11. Spindle unit lower hinge (RH)	12. Bumper rubber

BACK DOOR

< REMOVAL AND INSTALLATION >

WITHOUT POWER BACK DOOR



1. Back door panel	2. Back door hinge (RH)	3. Back door hinge (LH)
4. Back door stay upper hinge (LH)	5. Back door stay lower hinge (LH)	6. Back door stay (LH)
7. Back door stay (RH)	8. Back door stay upper hinge (RH)	9. Back door stay lower hinge (RH)
10. Bumper rubber		

BACK DOOR ASSEMBLY

BACK DOOR ASSEMBLY : Removal and Installation

INFOID:000000011151943

CAUTION:

- Use two people when removing or installing the back door due to its heavy weight.
- Use shop cloths to protect surrounding components from damage during removal and installation of back door.

REMOVAL

1. Support the back door assembly using a suitable tool.

WARNING:

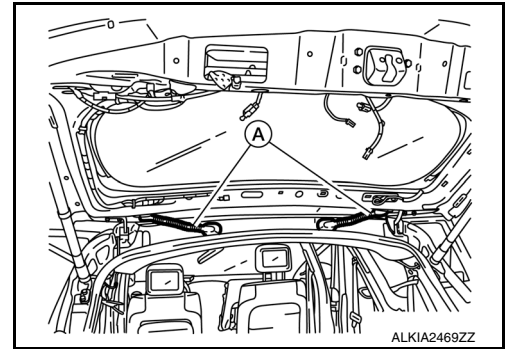
Bodily injury may occur if back door assembly is not supported properly when removing the back door spindle unit.

2. Remove spindle units (LH/RH) (WITH POWER BACK DOOR). Refer to [DLK-298, "SPINDLE UNIT : Removal and Installation"](#).
3. Remove back door stays (LH/RH) (WITHOUT POWER BACK DOOR). Refer to [DLK-298, "BACK DOOR STAY : Removal and Installation"](#).
4. Remove roof side moldings (LH/RH). Refer to [EXT-31, "Removal and Installation"](#).

BACK DOOR

< REMOVAL AND INSTALLATION >

5. Disconnect harness connectors (A) from back door.



6. Remove back door harness grommet, then pull harness from the back door.
7. Disconnect washer tube.
8. Remove washer tube grommet and washer tube from the back door.
9. Remove back door hinge nuts (door side) and back door assembly.

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-296, "BACK DOOR ASSEMBLY : Adjustment"](#).

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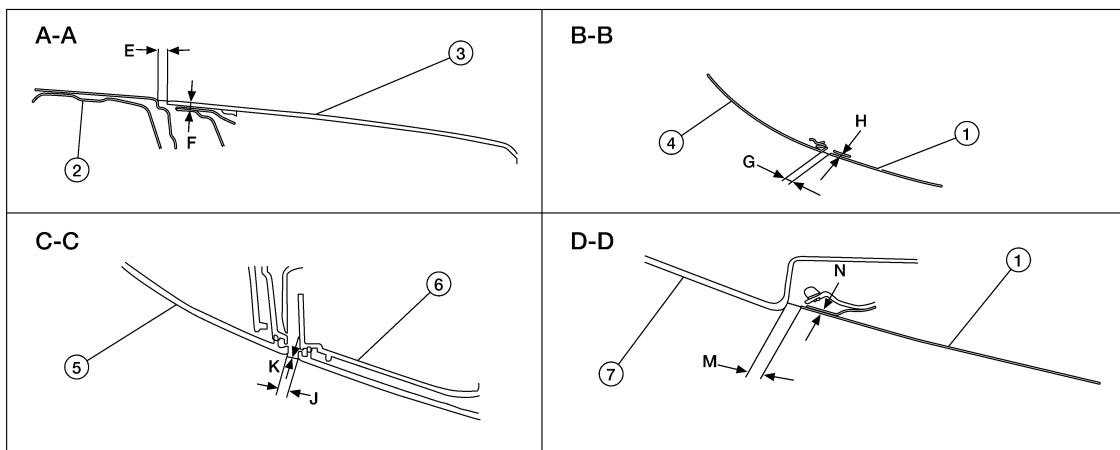
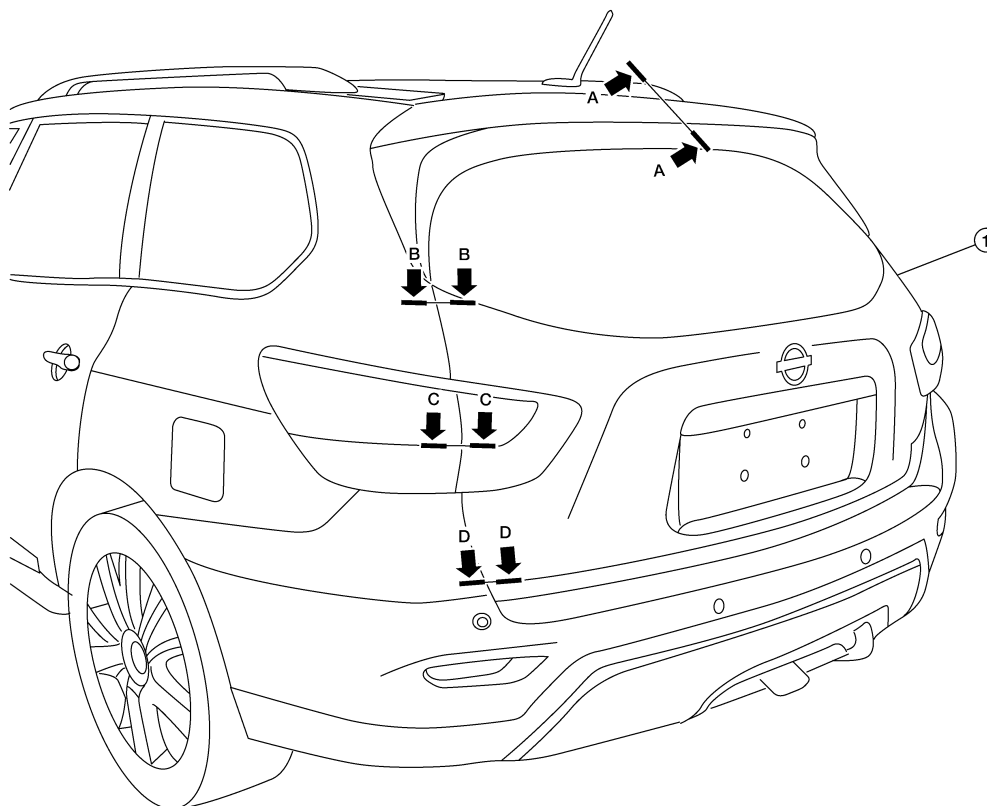
BACK DOOR

< REMOVAL AND INSTALLATION >

BACK DOOR ASSEMBLY : Adjustment

INFOID:000000011151944

SEC. 900



ALKIA2968ZZ

1. Back door assembly	2. Roof panel	3. Rear spoiler
4. Body side outer	5. Rear combination lamp	6. Back-up lamp
7. Rear bumper fascia		

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

BACK DOOR

< REMOVAL AND INSTALLATION >

Unit: mm (in)

Portion	Section	Item	Measurement	Standard	Difference (LH/RH, MAX)
Roof panel – Rear spoiler	A – A	E	Clearance	7.0 ± 1.5 (0.28 $\pm$ 0.06)	—
		F	Surface height	1.5 ± 1.5 (0.06 $\pm$ 0.06)	—
Body side outer – Back door assembly	B – B	G	Clearance	5.0 ± 2.0 (0.20 $\pm$ 0.08)	≤ 2.0 (0.08)
		H	Surface height	0.8 ± 2.0 (0.03 $\pm$ 0.08)	≤ 2.0 (0.08)
Rear combination lamp – Back-up lamp	C – C	J	Clearance	5.0 ± 2.0 (0.20 $\pm$ 0.08)	≤ 2.3 (0.09)
		K	Surface height	0.0 ± 2.1 (0.0 $\pm$ 0.08)	≤ 2.5 (0.10)
Rear bumper fascia – Back door assembly	D – D	M	Clearance	7.0 ± 2.0 (0.28 $\pm$ 0.08)	—
		N	Surface height	5.0 ± 2.0 (0.20 $\pm$ 0.08)	≤ 2.0 (0.08)

- Loosen back door hinge nuts (door side).
- Lift up back door approximately 100 – 150 mm (3.94 – 5.91 in) height then close it lightly and check that it is engaged firmly with back door closed.
- Check the clearance and surface height according to the specifications provided.
- Tighten back door hinge nuts to specified torque.

CAUTION:

 - After installation, check back door open/close, lock/unlock operation.
 - Check back door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.
 - After adjusting, apply touch-up paint (body color) to the head of rear door hinge bolts and nuts.
- Install roof side molding (LH / RH). Refer to. [EXT-31. "Removal and Installation"](#).

BACK DOOR STRIKER

BACK DOOR STRIKER : Removal and Installation

INFOID:0000000011151945

REMOVAL

- Remove back door kicking plate. Refer to [INT-36. "BACK DOOR KICKING PLATE : Removal and Installation"](#).
- Remove bolts and back door striker.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

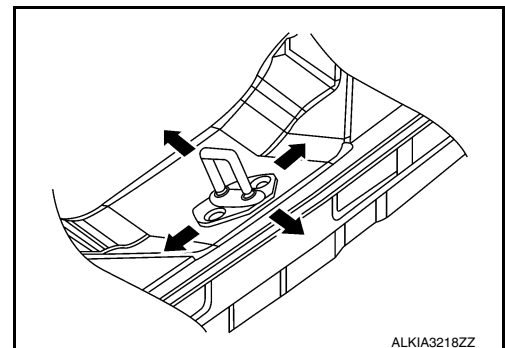
- Do not reuse back door striker bolts.
- After installation, check back door open/close operation. If necessary, adjust the door striker. Refer to [DLK-297. "BACK DOOR STRIKER : Adjustment"](#).

BACK DOOR STRIKER : Adjustment

INFOID:0000000011151946

DOOR STRIKER ADJUSTMENT

- Loosen door striker bolts
- Adjust door striker so that it becomes parallel with front door lock insertion direction.



ALKIA3218ZZ

- Tighten door striker bolts to specification. Refer to [DLK-293. "Exploded View"](#).

BACK DOOR

< REMOVAL AND INSTALLATION >

BACK DOOR HINGE

BACK DOOR HINGE : Removal and Installation

INFOID:0000000011151947

REMOVAL

CAUTION:

- Use two people when removing and installing the front door due to its heavy weight.
 - When removing and installing front door assembly, support door using a suitable tool.
1. Remove back door assembly. Refer to [DLK-294. "BACK DOOR ASSEMBLY : Removal and Installation"](#).
 2. Remove back door hinge bolts (body side) and 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-296. "BACK DOOR ASSEMBLY : Adjustment"](#).

SPINDLE UNIT

SPINDLE UNIT : Removal and Installation

INFOID:0000000011151948

REMOVAL

1. Support back door using a suitable tool.

WARNING:

Bodily injury may occur if the back door is not supported properly when removing the back door spindle unit.

2. Partially remove headlining (rear edge).
3. Disconnect the harness connector from the spindle unit.
4. Release spindle unit from stud balls and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- When reusing stud ball, always apply locking sealant before installing stud ball to back door.
- After installation, check back door open/close, lock/unlock operation.

BACK DOOR STAY

BACK DOOR STAY : Removal and Installation

INFOID:0000000011151949

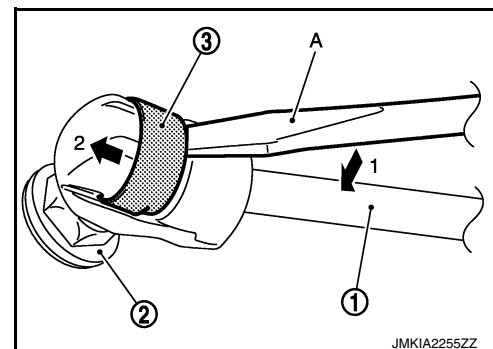
REMOVAL

1. Support the back door using a suitable tool.

WARNING:

Body injury may occur if no supporting rod is holding the back door open when removing the back door stay.

2. Release the metal clip (3) located on the connection between the back door stay (1) and the stud ball (2) (back door side) using a suitable tool (A).
3. Remove the back door stay (back door side).



4. In the same way, remove the back door stay from the body side.

BACK DOOR

< REMOVAL AND INSTALLATION >

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

After installation, check the back door open/close operation.

BACK DOOR WEATHER-STRIP

BACK DOOR WEATHER-STRIP : Removal and Installation

INFOID:0000000011151950

REMOVAL

Carefully remove back door weather-strip from opening door joint.

INSTALLATION

1. Beginning with upper section, align weather-strip mark with vehicle center position mark and install weather strip to the vehicle.
2. For the lower section, align weather-strip seam with center of back door striker.

NOTE:

Pull weather-strip gently to ensure that there are no loose sections.

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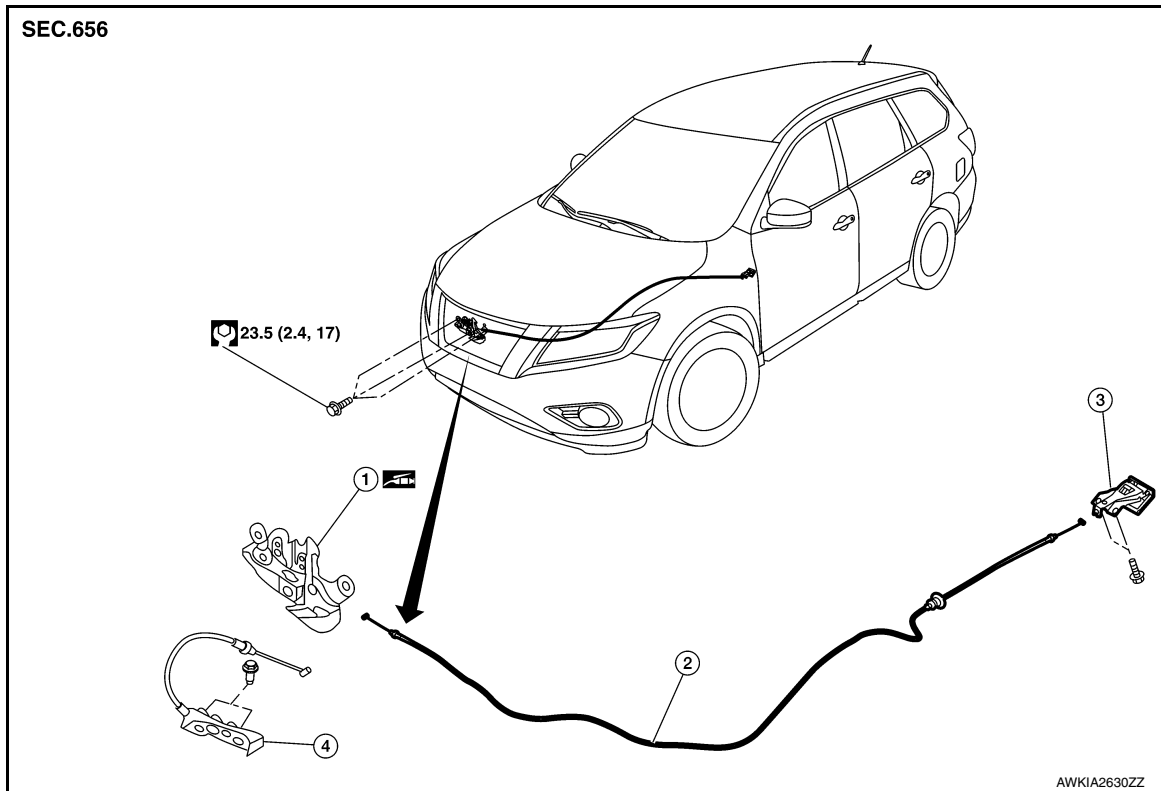
HOOD LOCK

< REMOVAL AND INSTALLATION >

HOOD LOCK

Exploded View

INFOID:0000000011151951



1. Hood lock assembly
4. Secondary latch

2. Hood lock release cable

3. Hood lock release handle

HOOD LOCK

HOOD LOCK : Removal and Installation

INFOID:0000000011151952

REMOVAL

1. Remove front air duct. Refer to [EM-24, "Exploded View"](#).
2. Remove front fender protector (LH). Refer to [EXT-28, "FENDER PROTECTOR : Removal and Installation"](#).
3. Disconnect the harness connector from the primary latch switch.
4. Remove hood lock assembly bolts.
5. Disconnect hood lock release cable and secondary latch cable from hood lock assembly and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Be careful not to bend cable too much, keeping the radius 100 mm (3.94 in) or more.
- Check that hood lock release cable and secondary latch cable are properly engaged with hood lock assembly.
- After installation, perform hood assembly adjustment procedure. Refer to [DLK-278, "HOOD ASSEMBLY : Adjustment"](#).
- After adjusting, perform hood lock inspection. Refer to [DLK-300, "HOOD LOCK : Inspection"](#).

HOOD LOCK : Inspection

INFOID:0000000011151953

NOTE:

HOOD LOCK

< REMOVAL AND INSTALLATION >

If the hood lock cable is bent or deformed, replace it.

1. Check that secondary latch is properly engaged with secondary striker with hoods own weight.
2. While operating hood lock release handle, carefully check that the front end of hood assembly is raised by approximately 20.0 mm (0.79 in). Also check that hood lock release handle returns to the original position.
3. Check that hood lock release handle operates at 49 N (5.0 kg-m, 11.0 ft-lb) or below.
4. Install so that static closing force of hood is 315-490 N (32.1-50.0 kg-m, 70.8-110.2 ft-lb).

NOTE:

- Do not exert vertical force on right side and left side of hood lock.
- Do not press simultaneously on both sides.

5. Check the hood lock lubrication condition. If necessary, apply a suitable multi-purpose grease to hood lock assembly.

SECONDARY LATCH

SECONDARY LATCH : Removal and Installation

INFOID:0000000011151954

REMOVAL

1. Remove radiator core support upper cover. Refer to [EXT-16, "Exploded View"](#).
2. Disconnect secondary latch cable from hood lock assembly.
3. Remove bolts and secondary latch.

INSTALLATION

Installation is in the reverse order of removal.

HOOD LOCK RELEASE CABLE

HOOD LOCK RELEASE CABLE : Removal and Installation

INFOID:0000000011151955

REMOVAL

1. Remove fender protector (LH). Refer to [EXT-28, "FENDER PROTECTOR : Removal and Installation"](#).
2. Remove front under cover. Refer to [EXT-30, "Removal and Installation"](#).
3. Remove front air duct. Refer to [EM-24, "Exploded View"](#).
4. Remove radiator core support upper cover. Refer to [EXT-17, "Removal and Installation"](#).
5. Disconnect hood lock release cable from hood lock release handle and hood lock assembly.
6. Release all hood lock release cable clips.
7. Remove grommet on the lower dash, and carefully pull the hood lock release cable into the passenger compartment.

CAUTION:

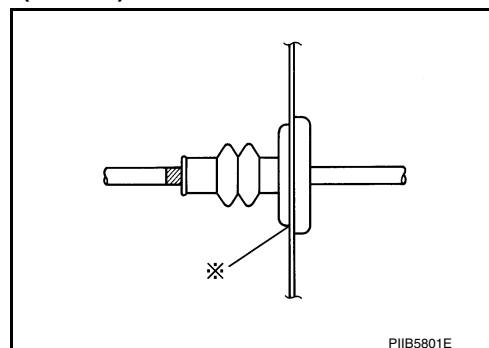
While pulling, be careful not to damage (peel) the outside of hood lock release cable.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Be careful not to bend cable too much, keep the radius 100 mm (3.94 in) or more.**
- **Check that cable is not offset from the positioning grommet, and apply the sealant to the grommet (at * mark) properly.**



- **Check that hood lock release cable is properly engaged with hood lock assembly.**

HOOD LOCK

< REMOVAL AND INSTALLATION >

- After installation, perform hood assembly adjustment procedure. Refer to [DLK-278, "HOOD ASSEMBLY : Adjustment"](#).
- After adjusting, perform hood lock inspection. Refer to [DLK-300, "HOOD LOCK : Inspection"](#).

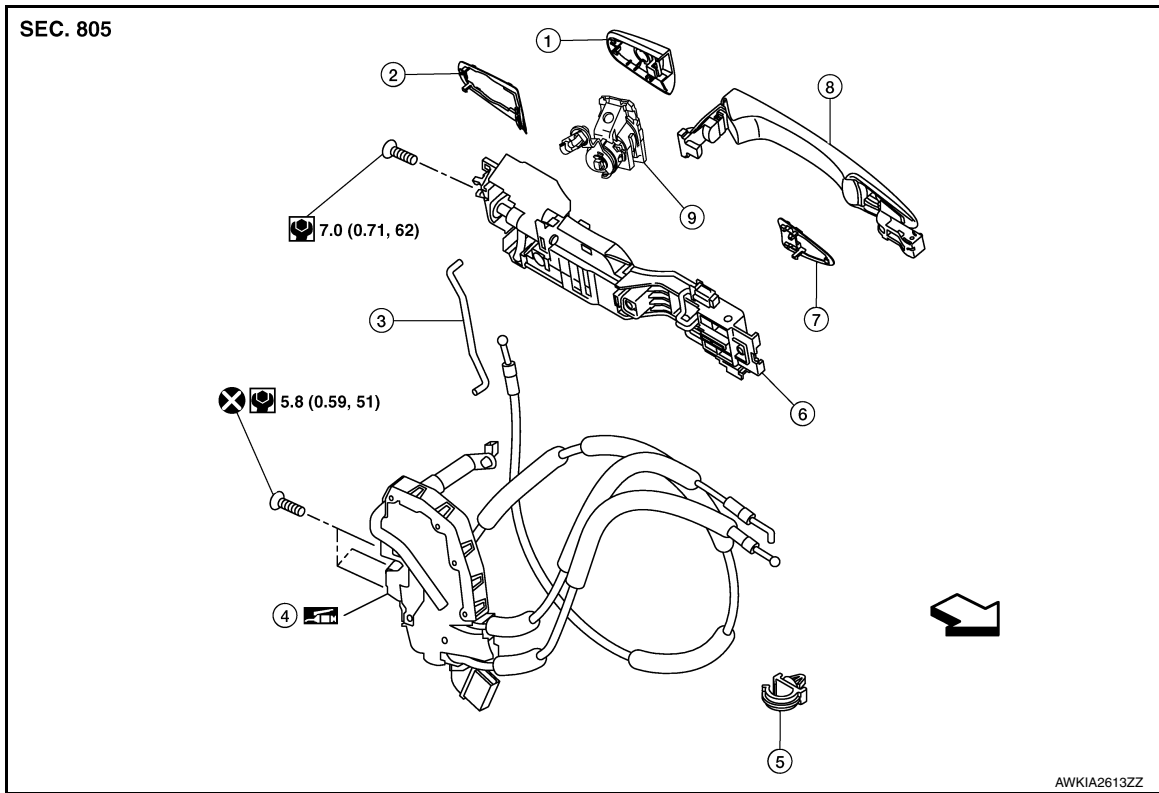
FRONT DOOR LOCK

< REMOVAL AND INSTALLATION >

FRONT DOOR LOCK

Exploded View

INFOID:0000000011151956



1. Outside handle escutcheon	2. Rear gasket	3. Door key cylinder rod (LH only)
4. Front door lock	5. Cable clip	6. Outside handle bracket
7. Front gasket	8. Outside handle	9. Door key cylinder (LH only)

↩ Front

DLK

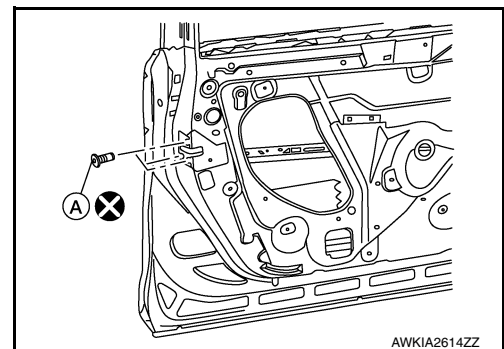
DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:0000000011151957

REMOVAL

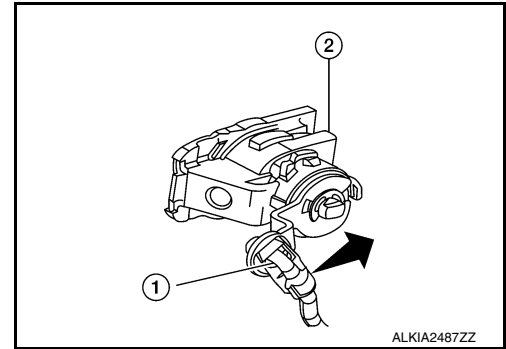
1. Remove front door finisher. Refer to [INT-15. "Removal and Installation"](#).
2. Remove vapor barrier.
3. Remove front door lock bolts (A).



FRONT DOOR LOCK

< REMOVAL AND INSTALLATION >

4. Disconnect door key cylinder rod (LH only) (1) from front door lock (LH only) (2).



5. Disconnect door lock cables.
6. Disconnect the harness connector from the front door lock and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Do not reuse front door lock bolts.
- After installation, check door lock cables are properly engaged to inside handle and outside handle bracket.
- When installing door key cylinder rod (LH only), be sure to rotate door key cylinder rod holder until a click is felt.
- After installation, check door open/close and lock/unlock operation.
- Check door lock assembly for poor lubrication. If necessary apply a suitable multi-purpose grease.

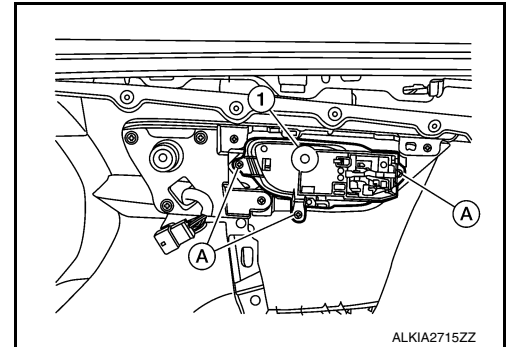
INSIDE HANDLE

INSIDE HANDLE : Removal and Installation

INFOID:0000000011151958

REMOVAL

1. Remove front door finisher. Refer to [INT-15, "Removal and Installation"](#).
2. Remove inside handle screws (A) and the inside handle (1).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- After installation, check door lock cables are properly engaged to inside handle.
- After installation, check door open/close and lock/unlock operation.

OUTSIDE HANDLE

OUTSIDE HANDLE : Removal and Installation

INFOID:0000000011151959

REMOVAL

1. Fully close front door glass.
2. Remove front door finisher. Refer to [INT-15, "Removal and Installation"](#).
3. Remove vapor barrier.

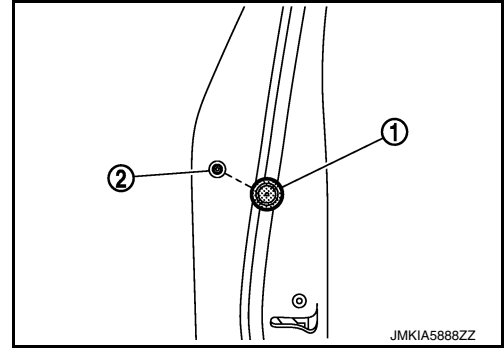
NOTE:

FRONT DOOR LOCK

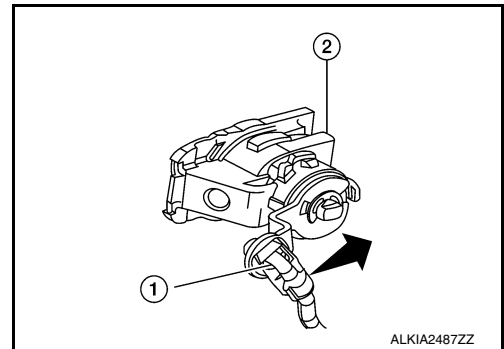
< REMOVAL AND INSTALLATION >

Cut the butyl tape so that some parts of the butyl tape remain on the vapor barrier, if the vapor barrier is reused.

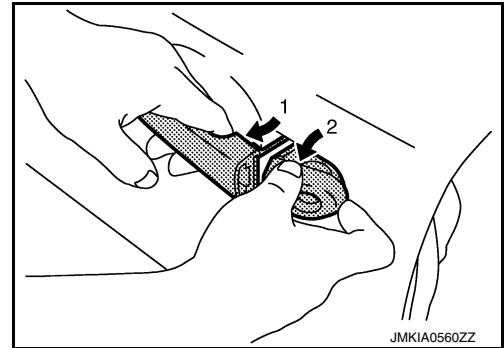
4. Disconnect the harness connectors from the Intelligent Key antenna and door request switch and then remove harness clamp on outside handle bracket.
5. Remove door side grommet (1), and remove bolt from grommet hole (2).



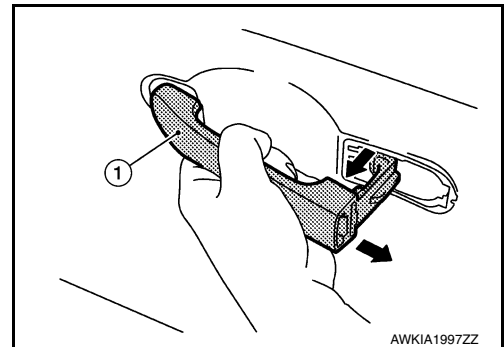
6. Separate door key cylinder rod (LH only) (1) from door key cylinder assembly (LH only) (2).



7. While pulling outside handle (1), remove door key cylinder assembly (LH side) (2) or outside handle escutcheon (RH side) (2).



8. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.

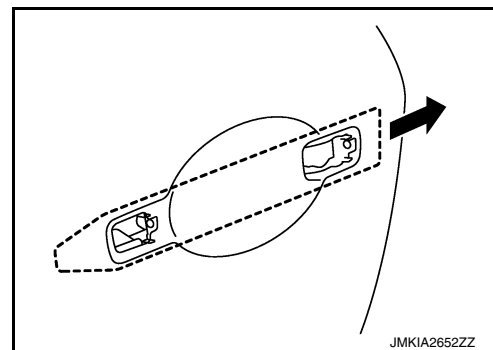


9. Remove front gasket and rear gasket.

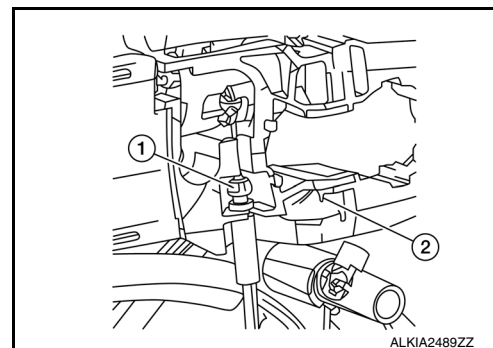
FRONT DOOR LOCK

< REMOVAL AND INSTALLATION >

10. Slide outside handle bracket toward rear of vehicle to remove.



11. Disconnect outside handle cable (1) from outside handle bracket (2) as shown.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- When installing door key cylinder rod (LH only), be sure to rotate door key cylinder rod holder until a click is felt.
- After installation, check door lock cable is properly engaged to outside handle bracket.
- After installation, check door open/close and lock/unlock operation.

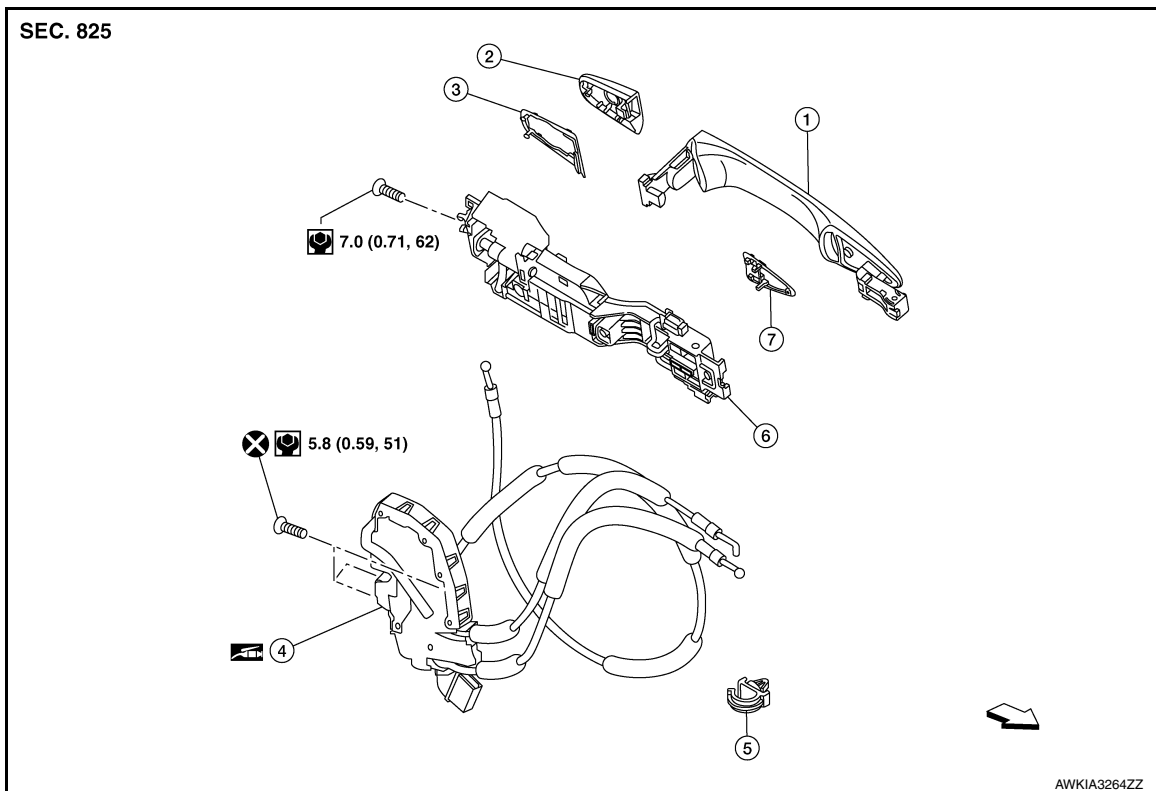
REAR DOOR LOCK

< REMOVAL AND INSTALLATION >

REAR DOOR LOCK

Exploded View

INFOID:0000000011151960



1. Outside handle	2. Outside handle escutcheon	3. Rear gasket
4. Rear door lock	5. Cable clip	6. Outside handle bracket
7. Front gasket	↔ Front	

DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:0000000011151961

REMOVAL

1. Remove rear door finisher. Refer to [INT-17, "Removal and Installation"](#).
2. Remove vapor barrier.
3. Remove rear door lock bolts.
4. Disconnect the door lock cables.
5. Disconnect the harness connector from the rear door lock and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Do not reuse rear door lock bolts.
- After installation, check door lock cables are properly engaged to inside handle and outside handle.
- After installation, check door open/close and lock/unlock operation.

INSIDE HANDLE

INSIDE HANDLE : Removal and Installation

INFOID:0000000011151962

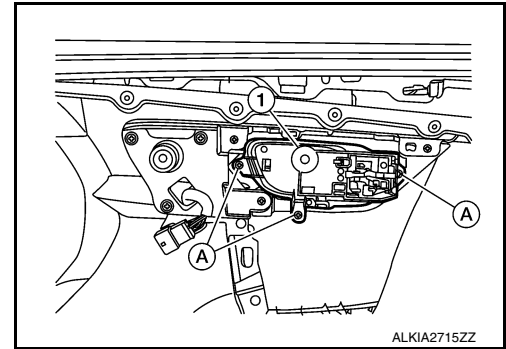
REMOVAL

1. Remove rear door finisher. Refer to [INT-17, "Removal and Installation"](#).

REAR DOOR LOCK

< REMOVAL AND INSTALLATION >

2. Remove inside handle screw (A) and inside handle (1).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- After installation, check door lock cables are properly engaged to inside handle.
- After installation, check door open/close and lock/unlock operation.

OUTSIDE HANDLE

OUTSIDE HANDLE : Removal and Installation

INFOID:0000000011151963

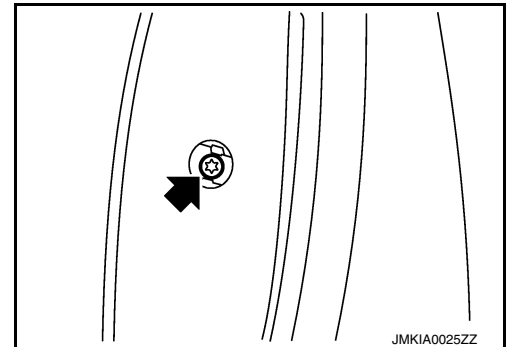
REMOVAL

1. Fully close rear door glass.
2. Remove rear door finisher. Refer to [INT-17. "Removal and Installation"](#).
3. Remove rear door vapor barrier.

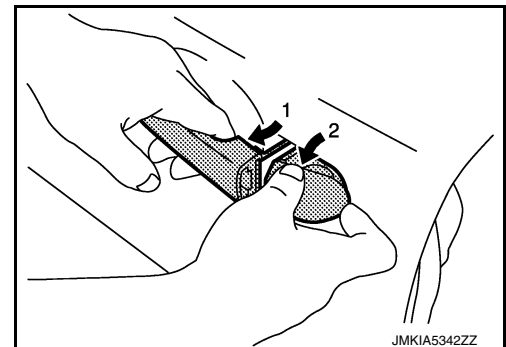
NOTE:

Cut the butyl tape so that some parts of the butyl tape remain on the vapor barrier, if the vapor barrier is reused.

4. Remove door side grommet and bolt from grommet hole.



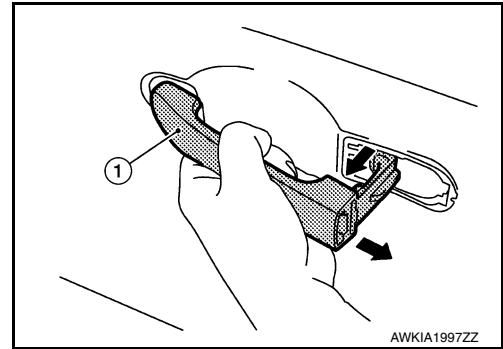
5. While pulling outside handle (1), remove outside handle escutcheon (2).



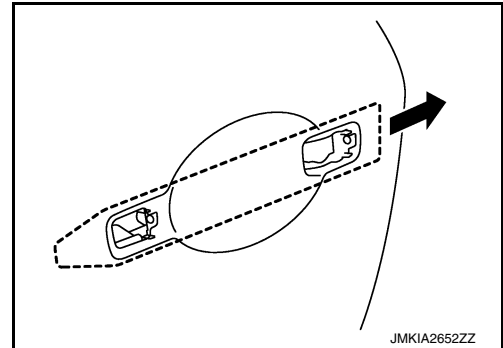
REAR DOOR LOCK

< REMOVAL AND INSTALLATION >

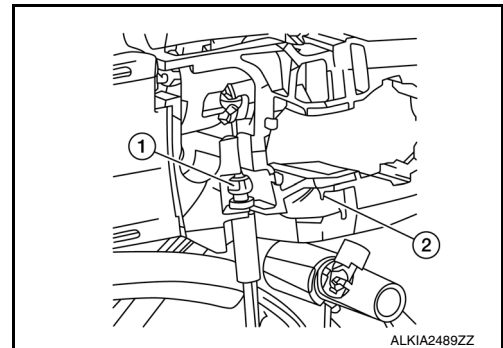
6. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



7. Remove front gasket and rear gasket.
8. Slide outside handle bracket toward rear of vehicle to remove.



9. Disconnect outside handle cable (1) from outside handle bracket (2) as shown.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- After installation, check door lock cable is properly engaged to outside handle bracket.
- After installation, check door open/close and lock/unlock operation.

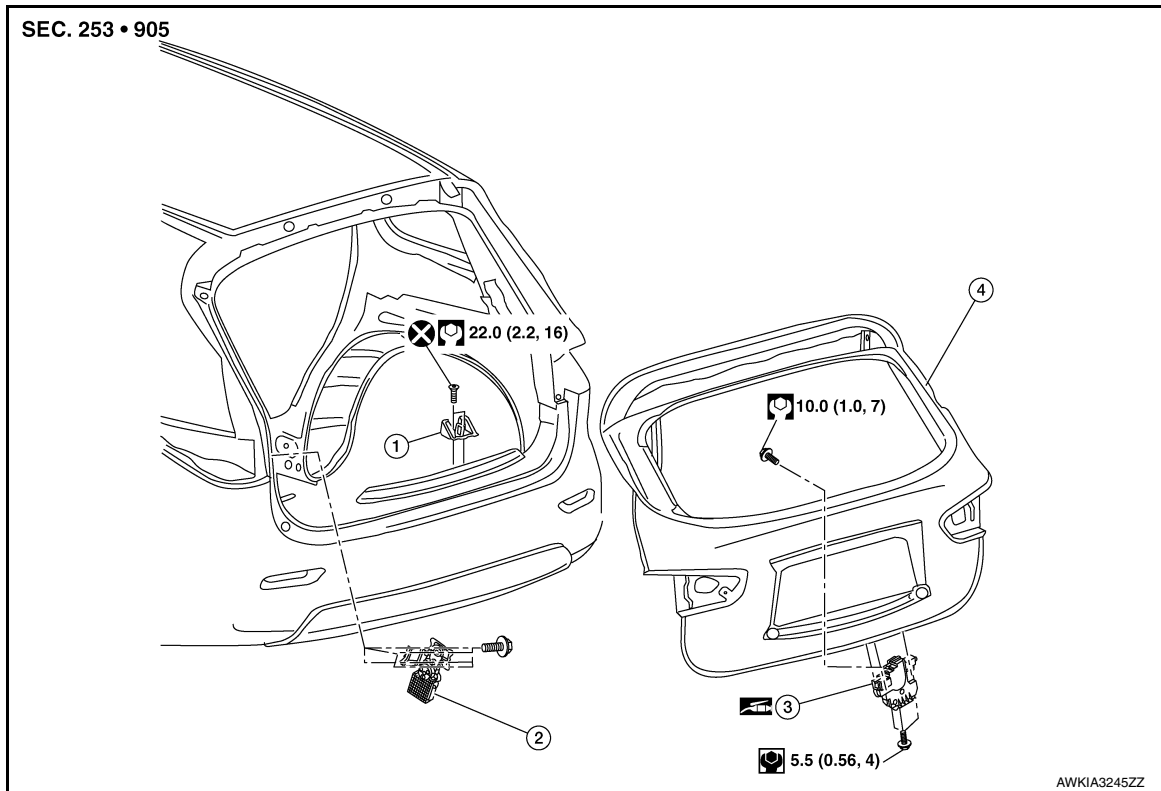
BACK DOOR LOCK

< REMOVAL AND INSTALLATION >

BACK DOOR LOCK

Exploded View

INFOID:0000000011151964



1. Door striker
2. Automatic back door control module (if equipped)
3. Back door lock
4. Back door panel

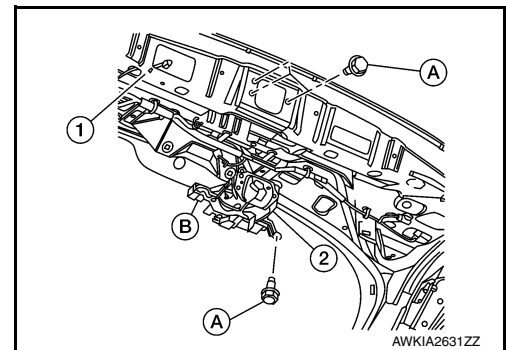
DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:0000000011151965

REMOVAL

1. Remove back door lower finisher. Refer to [INT-35, "BACK DOOR LOWER FINISHER : Removal and Installation"](#).
2. Disconnect harness connector (B) from the back door lock (2).
3. Remove back door lock bolts (A) and back door lock (2) from back door assembly (1).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

After installation, check back door open/close and lock/unlock operation.

TOUCH SENSOR

BACK DOOR LOCK

< REMOVAL AND INSTALLATION >

TOUCH SENSOR : Removal and Installation

INFOID:0000000011151966

CAUTION:

Use care not to bend touch sensor.

REMOVAL

1. Remove back door side finishers. Refer to [INT-35, "BACK DOOR SIDE FINISHER : Removal and Installation"](#).
2. Disconnect the harness connectors from the touch sensor.
3. Release clips and remove screws that retain touch sensor.
4. Remove touch sensor harness from the back door assembly, then remove touch sensor.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

After installation, check back door open/close and lock/unlock operation.

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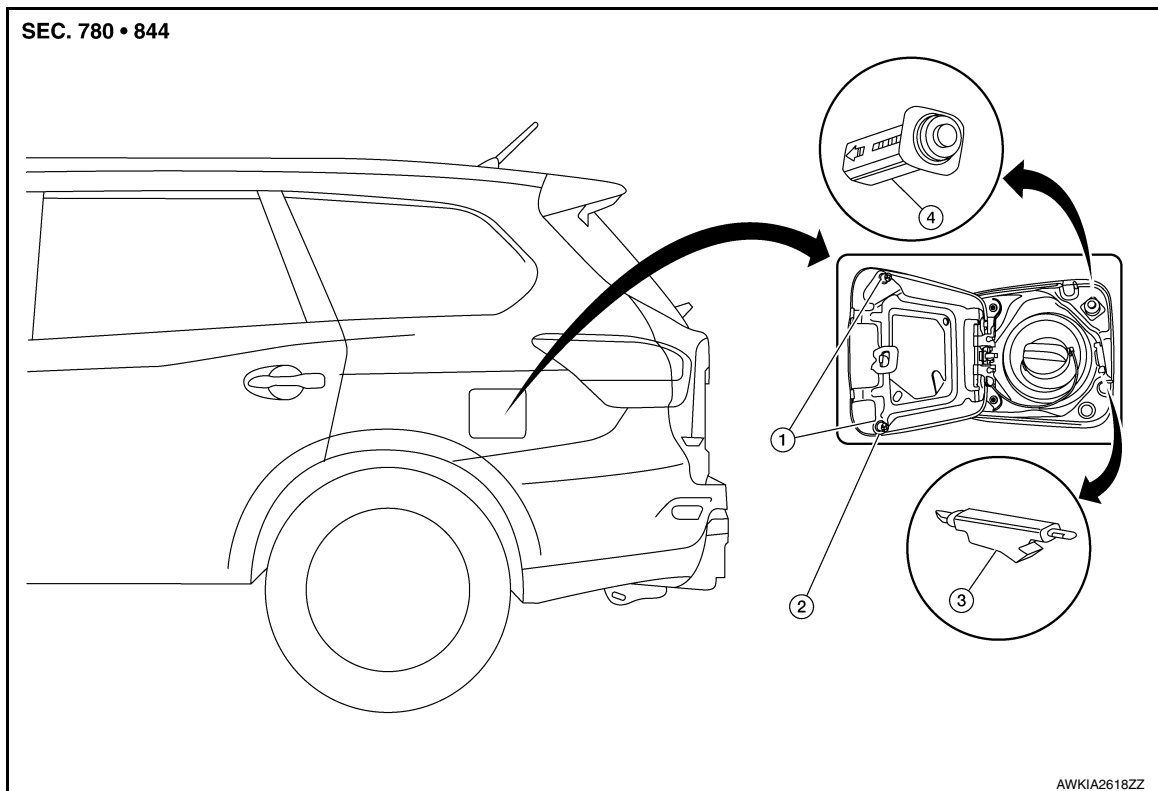
FUEL FILLER LID OPENER

< REMOVAL AND INSTALLATION >

FUEL FILLER LID OPENER

Exploded View

INFOID:0000000011151968



1. Fuel filler lid bumper rubber

2. Fuel filler lid

3. Fuel filler lid lock actuator

4. Fuel filler lid lock

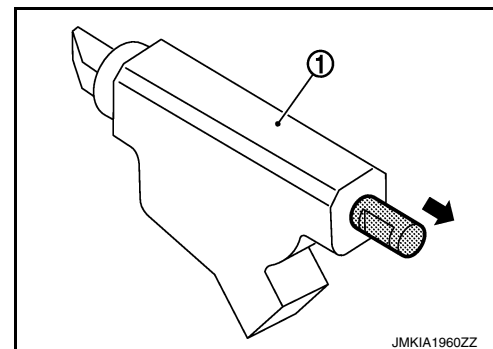
Removal and Installation

INFOID:0000000011151969

REMOVAL

NOTE:

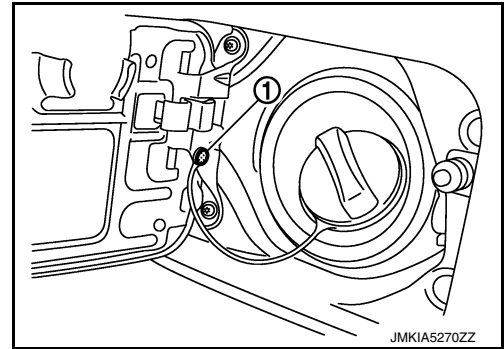
When fuel filler lid lock actuator (1) is not functioning correctly, pull the rod from inside the vehicle to open fuel filler lid.



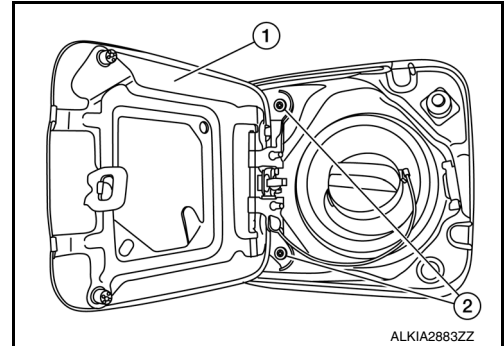
FUEL FILLER LID OPENER

< REMOVAL AND INSTALLATION >

1. Remove fuel cap pin (1).



2. Remove bolts (2) and fuel filler lid (1).



3. Remove luggage side lower finisher (LH). Refer to [INT-31, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation"](#).
4. Rotate lock nut counterclockwise and remove.
5. Remove fuel filler lid lock actuator by releasing the pawl.
6. Disconnect harness connector from fuel filler lid lock actuator.
7. Remove fuel filler lid lock by releasing the pawls.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- After installation, check fuel filler lid open/close, lock/unlock operation.
- After installation, apply touch-up paint (body color) to the head of fuel filler lid bolts.

KEY CYLINDER

< REMOVAL AND INSTALLATION >

KEY CYLINDER

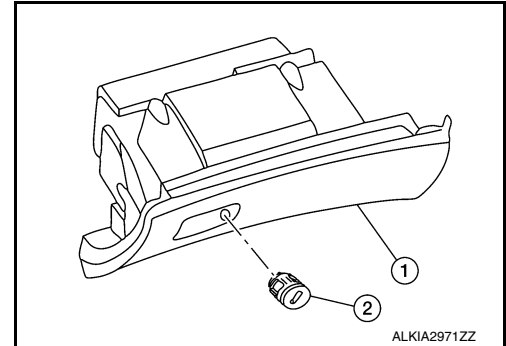
GLOVE BOX LID KEY CYLINDER

GLOVE BOX LID KEY CYLINDER : Removal and Installation

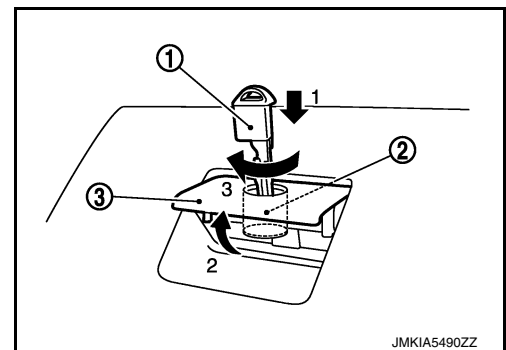
INFOID:0000000011151970

REMOVAL

1. Remove glove box assembly (1) to access glove box lid key cylinder (2). Refer to [JP-26. "Removal and Installation"](#).



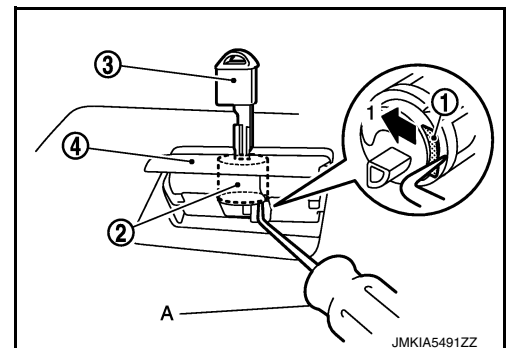
2. Insert key (1) into glove box lid lock cylinder (2).
3. Pull upward on glove box lid release handle (3).
4. Rotate key (1) and turn glove box lid key cylinder (2) to the lock position.



5. Press tumbler stopper (1) into glove box lid lock cylinder (2) using a suitable tool (A), and then remove key (3) and glove box lid lock cylinder together from glove box lid release handle (4).

NOTE:

When removing glove box lid lock cylinder (2) note the position of cylinder to glove box lid release handle (4).



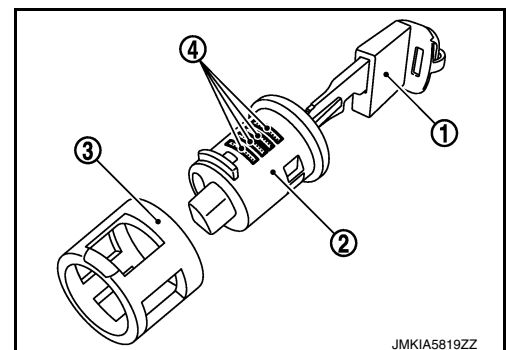
6. Remove sleeve (3) from glove box lid release handle and then install sleeve to glove box lid lock cylinder.

NOTE:

When removing sleeve note the position of sleeve to glove box lid release handle.

CAUTION:

Do not pull out key (1) from glove box lid lock cylinder (2) while sleeve (3) is removed. Otherwise, tumblers (4) may be lost from glove box lid lock cylinder.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

After installation, check glove box assembly open/close, lock/unlock operation.

DOOR SWITCH

< REMOVAL AND INSTALLATION >

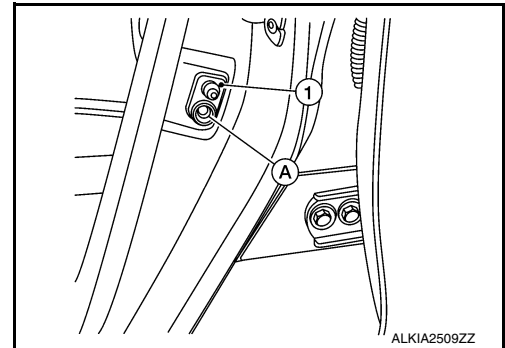
DOOR SWITCH

Removal and Installation

INFOID:0000000011151971

REMOVAL

1. Remove the door switch bolt (A).
2. Disconnect the harness connector from the door switch (1) and remove.



INSTALLATION

Installation is in the reverse order of removal.

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DLK

DOOR REQUEST SWITCH

< REMOVAL AND INSTALLATION >

DOOR REQUEST SWITCH

DRIVER SIDE

DRIVER SIDE : Removal and Installation

INFOID:0000000011151972

The driver side door request switch and driver side outside handle are serviced as an assembly. Refer to [DLK-304. "OUTSIDE HANDLE : Removal and Installation"](#).

PASSENGER SIDE

PASSENGER SIDE : Removal and Installation

INFOID:0000000011151973

The passenger side door request switch and passenger side outside handle are serviced as an assembly. Refer to [DLK-304. "OUTSIDE HANDLE : Removal and Installation"](#).

BACK DOOR

BACK DOOR : Removal and Installation

INFOID:0000000011151974

REMOVAL

1. Remove the back door outer finisher. Refer to [EXT-43. "Removal and Installation"](#).
2. Disconnect the harness connector from the back door request switch.
3. Remove the back door request switch.

INSTALLATION

Installation is in the reverse order of removal.

INSIDE KEY ANTENNA

< REMOVAL AND INSTALLATION >

INSIDE KEY ANTENNA INSTRUMENT CENTER

INSTRUMENT CENTER : Removal and Installation

INFOID:0000000011151975

REMOVAL

1. Remove cluster lid C upper. Refer to [JP-22, "CLUSTER LID C : Removal and Installation"](#).
2. Remove the inside key antenna (instrument center) screw, and then remove inside key antenna (instrument center).

INSTALLATION

Installation is in the reverse order of removal.

CONSOLE

CONSOLE : Removal and Installation

INFOID:0000000011151976

REMOVAL

1. Remove rear center ventilator duct. Refer to [VTL-12, "REAR CENTER VENTILATOR DUCT : Removal and Installation"](#).
2. Remove the inside key antenna (console) screws and inside key antenna (console).

INSTALLATION

Installation is in the reverse order of removal.

LUGGAGE ROOM

LUGGAGE ROOM : Removal and Installation

INFOID:0000000011151977

REMOVAL

1. Remove the second row seatback. Refer to [SE-99, "Removal and Installation"](#).
2. Remove the inside key antenna (luggage room) clip, and then remove inside key antenna (luggage room).

INSTALLATION

Installation is in the reverse order of removal.

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DLK

OUTSIDE KEY ANTENNA

< REMOVAL AND INSTALLATION >

OUTSIDE KEY ANTENNA

DRIVER SIDE

DRIVER SIDE : Removal and Installation

INFOID:0000000011151978

The driver side outside key antenna and driver side outside handle are serviced as an assembly. Refer to [DLK-304, "OUTSIDE HANDLE : Removal and Installation"](#).

PASSENGER SIDE

PASSENGER SIDE : Removal and Installation

INFOID:0000000011151979

The passenger side outside key antenna and passenger side outside handle are serviced as an assembly. Refer to [DLK-304, "OUTSIDE HANDLE : Removal and Installation"](#).

REAR BUMPER

REAR BUMPER : Removal and Installation

INFOID:0000000011151980

REMOVAL

1. Remove rear bumper fascia. Refer to [EXT-20, "Removal and Installation"](#).
2. Disconnect the harness connector from the rear bumper outside key antenna and remove.

INSTALLATION

Installation is in the reverse order of removal.

INTELLIGENT KEY WARNING BUZZER

< REMOVAL AND INSTALLATION >

INTELLIGENT KEY WARNING BUZZER

Removal and Installation

INFOID:0000000011151981

REMOVAL

NOTE:

The Intelligent Key warning buzzer is located in the left front area of the engine compartment.

1. Remove Intelligent Key warning buzzer clips.
2. Disconnect the harness connector from the Intelligent Key warning buzzer and remove.

INSTALLATION

Installation is in the reverse order of removal.

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BACK DOOR WARNING CHIME

< REMOVAL AND INSTALLATION >

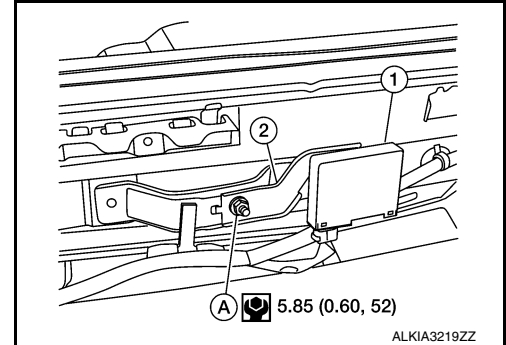
BACK DOOR WARNING CHIME

Removal and Installation

INFOID:0000000011151982

REMOVAL

1. Remove the rear bumper fascia. Refer to [EXT-20. "Removal and Installation"](#).
2. Remove the back door warning chime bracket nut (A) and remove back door warning chime (1).
3. Remove back door warning chime (1) from bracket (2) (if necessary).



INSTALLATION

Installation is in the reverse order of removal.

REMOTE KEYLESS ENTRY RECEIVER

< REMOVAL AND INSTALLATION >

REMOTE KEYLESS ENTRY RECEIVER

Removal and Installation

INFOID:0000000011151983

REMOVAL

1. Remove the glove box assembly. Refer to [IP-26. "Removal and Installation"](#).
2. Remove the remote keyless entry receiver bolt.
3. Disconnect the harness connector from remote keyless entry receiver and remove.

INSTALLATION

Installation is in the reverse order of removal.

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INTELLIGENT KEY BATTERY

< REMOVAL AND INSTALLATION >

INTELLIGENT KEY BATTERY

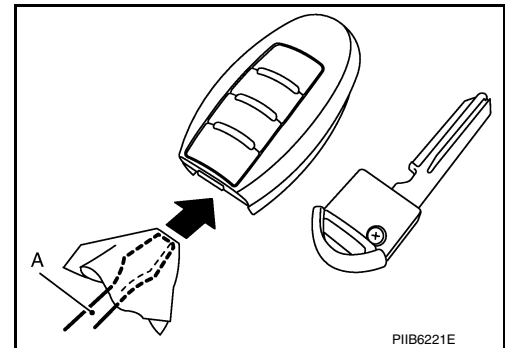
Removal and Installation

INFOID:0000000011151984

1. Release the lock knob on the back of the Intelligent Key and remove the key.
2. Insert a suitable tool (A) wrapped with a cloth into the slit of the corner and twist it to separate the upper part from the lower part.

CAUTION:

- Do not insert a tool into the notches of the Intelligent Key to pry it open, as this may damage the circuit board.
- Do not use excessive force when opening the intelligent key, as this may result in damage to the internal components.
- Do not touch the circuit board or battery terminal.
- The key fob is water-resistant. However, if it does get wet, immediately wipe it dry.



3. Replace the battery with a new one.

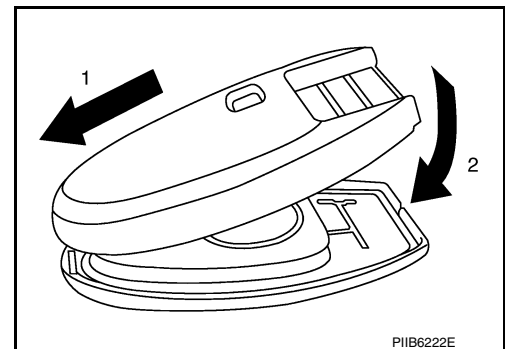
Battery replacement

:Coin-type lithium battery (CR2025)

4. Align the tips of the upper and lower parts, and then push them together until unit is securely closed.

CAUTION:

- When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.
- After replacing the battery, check that all Intelligent Key functions work normally.



AUTOMATIC BACK DOOR CONTROL MODULE

< REMOVAL AND INSTALLATION >

AUTOMATIC BACK DOOR CONTROL MODULE

Removal and Installation

INFOID:0000000011151985

REMOVAL

1. Remove the luggage side lower finisher (LH). Refer to [INT-31. "LUGGAGE SIDE LOWER FINISHER : Removal and Installation"](#).
2. Remove the automatic back door control module bolts.
3. Disconnect the harness connector from the automatic back door control module and remove.

INSTALLATION

Installation is in the reverse order of removal.

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AUTOMATIC BACK DOOR MAIN SWITCH

< REMOVAL AND INSTALLATION >

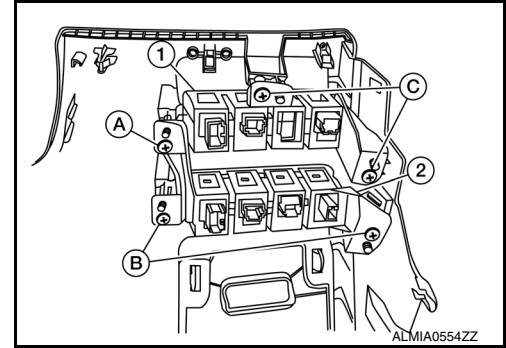
AUTOMATIC BACK DOOR MAIN SWITCH

Removal and Installation

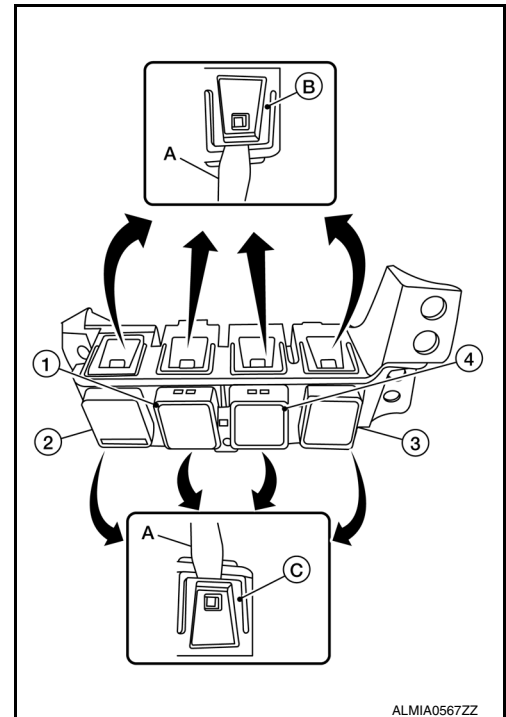
INFOID:0000000011151986

REMOVAL

1. Remove the instrument lower panel LH. Refer to [IP-25. "Removal and Installation"](#).
2. Remove the screws (A,B,C) that retain the upper (1) and lower (2) switch carriers.



3. Release upper (B) and lower (C) tab using a suitable tool (A), then remove the automatic back door main switch (3) from the upper switch carrier.
(1): Heated steering wheel switch (if equipped)
(2): Traction control switch
(3): Automatic back door main switch (if equipped)
(4): Automatic back door switch (if equipped)



INSTALLATION

Installation is in the reverse order of removal.

AUTOMATIC BACK DOOR SWITCH

< REMOVAL AND INSTALLATION >

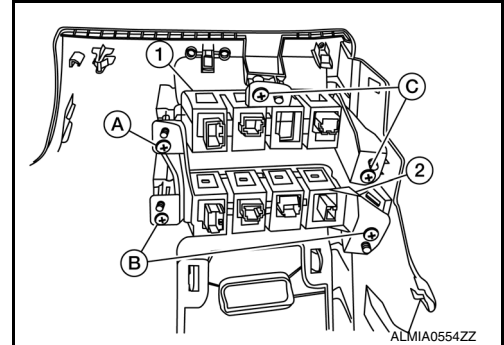
AUTOMATIC BACK DOOR SWITCH

Removal and Installation

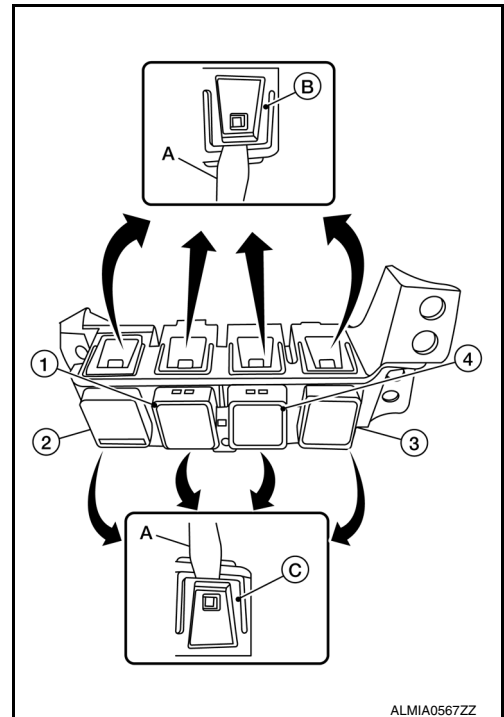
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REMOVAL

1. Remove the instrument lower panel LH. Refer to [IP-25. "Removal and Installation"](#).
2. Remove the screws (A,B,C) that retain the upper (1) and lower (2) switch carriers.



3. Release upper (B) and lower (C) tab using a suitable tool (A), then remove the automatic back door opener switch (4) from the upper switch carrier.
(1): Heated steering wheel switch (if equipped)
(2): Traction control switch
(3): Automatic back door main switch (if equipped)
(4): Automatic back door switch (if equipped)



INSTALLATION

Installation is in the reverse order of removal.

AUTOMATIC BACK DOOR CLOSE SWITCH

< REMOVAL AND INSTALLATION >

AUTOMATIC BACK DOOR CLOSE SWITCH

Removal and Installation

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REMOVAL

1. Open back door assembly.
2. Release the automatic back door close switch pawls using a suitable tool.
3. Remove the automatic back door close switch screws.
4. Disconnect the harness connector from the automatic back door close switch and remove.

INSTALLATION

Installation is in the reverse order of removal.