BODY EXTERIOR, DOORS, ROOF & VEHICLE SECURITY

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PRECAUTIONS

< PRECAUTION >

PRECAUTION А PRECAUTIONS Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT В **PRF-TENSIONER**" INFOID:000000011151654 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. D 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. Ε 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 Igni-Н tion 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:000000011151655 WARNING: Radio waves could adversely affect electric medical equipment. Those who use a pacemaker should DLK 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. L 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 Μ 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. Ν 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: P 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

Special Service Tool

INFOID:000000011151656

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

Tool number (TechMate No.) Tool name		Description
 (J-39570) Chassis Ear	SILAO993E	Locating the noise
	ALJIA1232ZZ	Repairing the cause of noise
 (J-43241) Remote Keyless Entry Tester	Hill Constant of the second se	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

< PREPARATION >

Fool number TechMate No.) Fool name		Description
(V48105501 J-45295-A) Fransmitter Activation Tool		 Activate TPMS transmitter IDs Compatible with future sensors Equipped with a display (KV48105501 only)
	ALEIA0183ZZ	Removing trim components
J-46534) Frim Tool Set		
	AWJIA0483ZZ	
ommercial Service		INFOID:0000000111516
Ommercial Service (TechMate No.) Tool name		INFOID:0000000111516
(TechMate No.)	Tool	
(TechMate No.) Tool name (J-39565)		Description
(TechMate No.) Tool name (J-39565) Engine ear	Tool	Description Locating the noise

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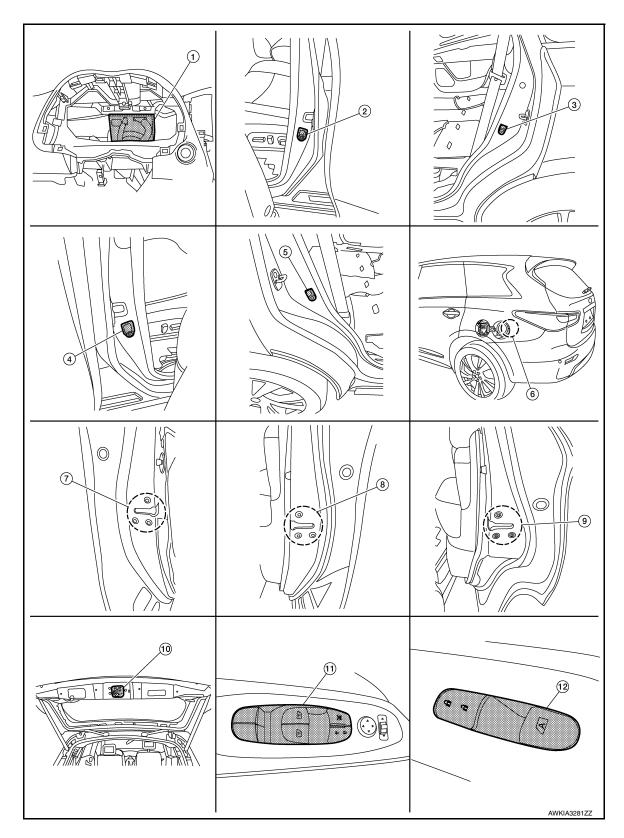
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< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION COMPONENT PARTS POWER DOOR LOCK SYSTEM

POWER DOOR LOCK SYSTEM : Component Parts Location

INFOID:000000011151658



< SYSTEM DESCRIPTION >

1.	BCM (view with combination meter removed)	2.	Front door switch LH	3.	Rear door switch LH	/	4
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 sim- ilar)	ŀ	3
10.	Back door lock assembly	11.	Main power window and door lock/ unlock switch	12.	Power window and door lock/unlock switch RH		
						(С.

POWER DOOR LOCK SYSTEM : Component Description

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

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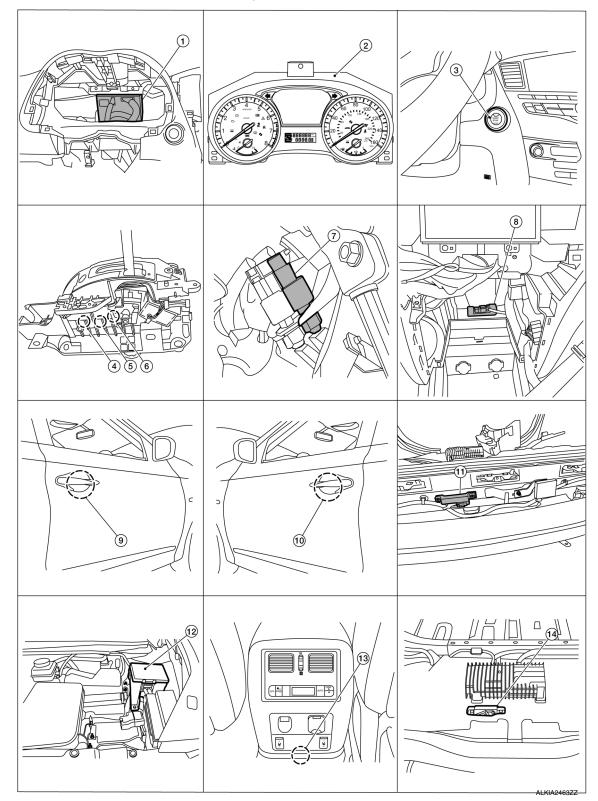
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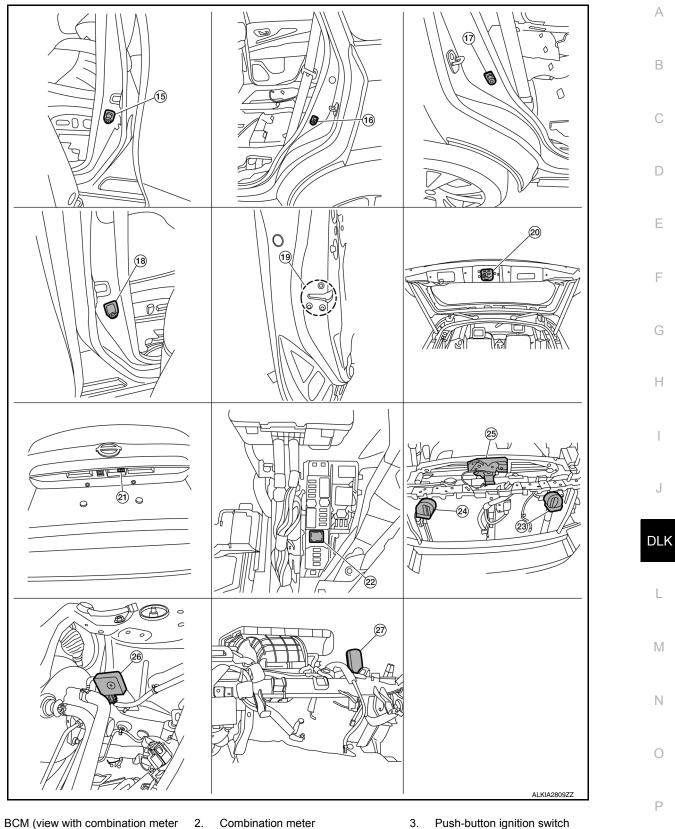
< SYSTEM DESCRIPTION >

INTELLIGENT KEY SYSTEM : Component Parts Location

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< SYSTEM DESCRIPTION >



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

< SYSTEM DESCRIPTION >

- Stop lamp switch 7.
- 10. Front outside handle LH (LH request 11. Outside key antenna (rear bumper) switch and outside key antenna drivers side)
- 13. Inside key antenna (console)
- 16. Rear door switch LH
- 19. Front door lock assembly LH
- 22. Horn relay
- 25. Hood switch

- 8. Inside key antenna (instrument cen- 9. ter)
 - (view with rear bumper cover removed)
- 14. Inside key antenna (luggage room) (view with rear carpet removed)
- 17. Rear door switch RH
- 20. Back door lock assembly
- 23. Horn (low)
- 26. Intelligent Key warning buzzer

- Front outside handle RH (RH request switch and outside key antenna passenger side)
- 12. IPDM E/R
- 15. Front door switch LH
- 18. Front door switch RH
- 21. Back door opener switch
- 24. Horn (high)
- 27. Remote keyless entry receiver (view with instrument panel removed)

INTELLIGENT KEY SYSTEM : Component Description

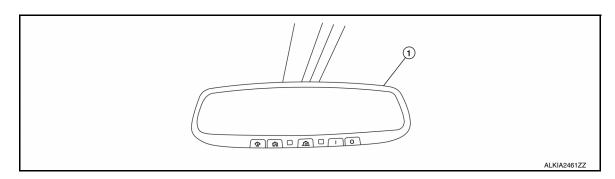
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Item	Function
BCM	Controls the Intelligent Key system.
Back door opener switch	Inputs back door open/close condition to BCM.
Door lock actuator	Output lock/unlock signal from BCM and locks/unlocks each door.
Stop lamp switch	Inputs the brake pedal 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

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1. Auto anti-dazzling inside mirror

< SYSTEM DESCRIPTION >

INTEGRATED HOMELINK TRANSMITTER : Component Description

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Item

Homelink universal transceiver

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

AUTOMATIC BACK DOOR SYSTEM

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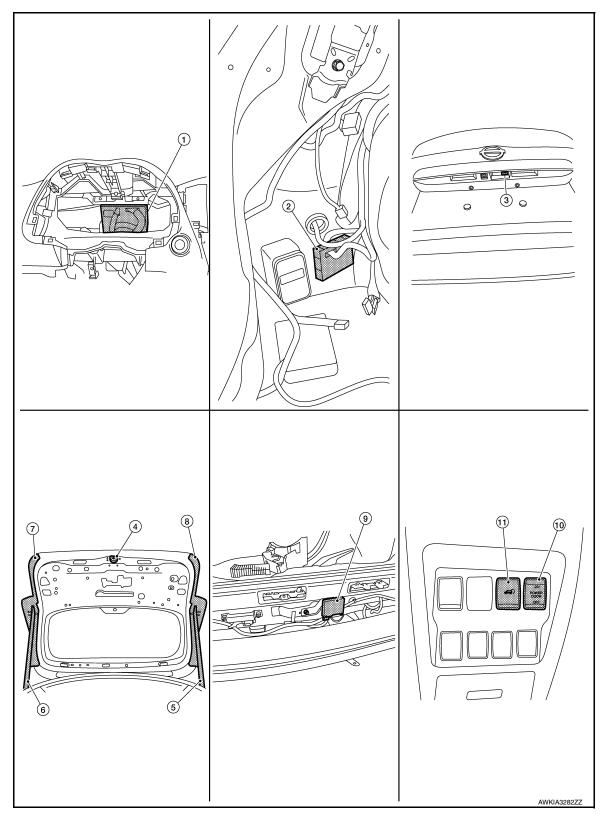
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< SYSTEM DESCRIPTION >

AUTOMATIC BACK DOOR SYSTEM : Component Parts Location

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- 1. BCM (view with combination meter removed)
- Automatic back door control module 3. (view with luggage side lower finisher removed)
- Back door opener switch

- 4. Back door lock assembly
- 5. Spindle Unit RH
- 6. Spindle Unit LH

DLK-18

< SYSTEM DESCRIPTION >

- Touch sensor LH 7.
- 8. Touch sensor RH

Back door warning chime (view with 9. rear bumper cover removed)

10. Automatic back door main switch

11. Automatic back door switch

AUTOMATIC BACK DOOR SYSTEM : Component Description

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Item	Function		
Automatic back door control mod- ule	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 close 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 op- eration speed according to the received pulse signals. Spindle motor: Inputs open/close signal from automatic back door control module and ac- tivates the automatic back door open/close operation. 		

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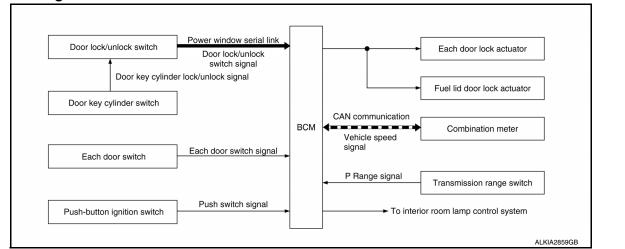
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SYSTEM (POWER DOOR LOCK SYSTEM)

< SYSTEM DESCRIPTION >

SYSTEM (POWER DOOR LOCK SYSTEM)

System Diagram



System Description

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INFOID:000000011151666

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 <u>PWC-10, "System Description"</u>.

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 <u>INL-6. "INTERIOR ROOM LAMP</u> <u>CONTROL SYSTEM : System Description"</u>.

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: $OFF \rightarrow ON$
- 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.

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

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (UNLOCK OPERATION)

The automatic door lock/unlock function is the function that unlocks all doors linked with the key position or H 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.

(B) 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: $OFF \rightarrow ON$
- 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.

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

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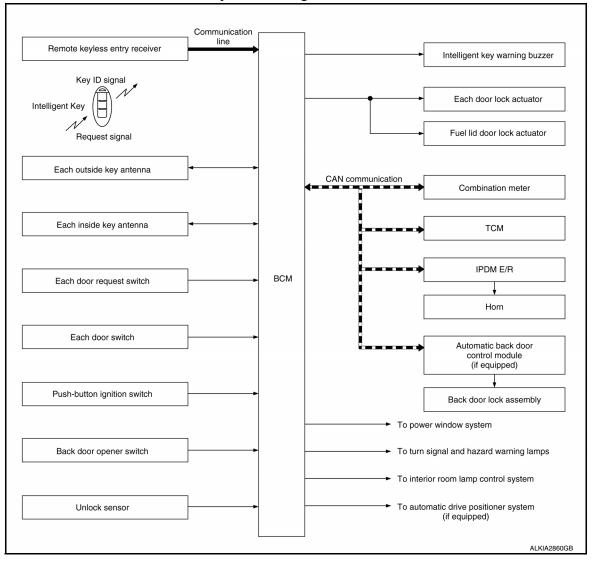
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< SYSTEM DESCRIPTION >

SYSTEM (INTELLIGENT KEY SYSTEM) INTELLIGENT KEY SYSTEM

INTELLIGENT KEY SYSTEM : System Diagram

INFOID:000000011151668



INTELLIGENT KEY SYSTEM : System Description

INFOID:000000011151669

 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.

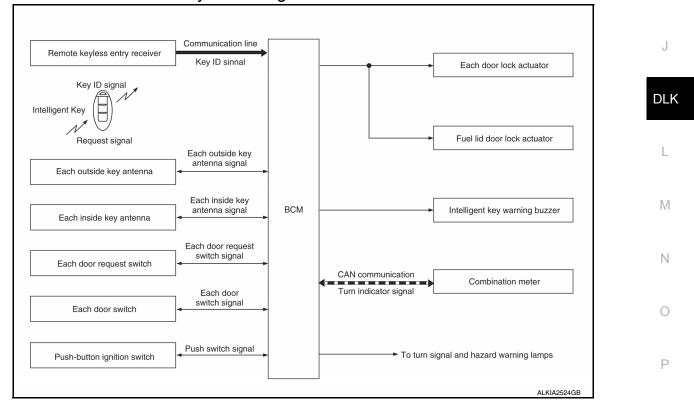
- The settings for each function can be changed with CONSULT.
- If an Intelligent Key is lost, a new Intelligent Key can be registered. A maximum of 4 Intelligent Keys can be registered.
- It is possible to perform a diagnosis on the system and register an Intelligent Key with CONSULT.
- For initialization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

Function	Description	Refer
Door lock	Lock/unlock can be performed by pressing the request switch.	<u>DLK-23</u>
Back door opener	The back door can be opened by carrying the Intelligent Key and pressing the back door opener switch.	<u>DLK-26</u>

< SYSTEM DESCRIPTION >

Function	Description		Refer	0
Remote keyless entry	Lock/unlock can be performed by pressing the remote controller b telligent Key.	outton of the In-	DLK-27	A
Key reminder	The key reminder buzzer sounds a warning if the door is locked w inside the vehicle.	ith the key left	DLK-30	В
Welcome light	When the Intelligent Key is carried, and vehicle doors are approad illuminates interior room lamps and operates heart beat operation button ignition switch.		<u>DLK-34</u>	С
Warning	If an action that does not meet the operating condition of the Intel tem is taken, the buzzer sounds to inform the driver.	ligent Key sys-	DLK-35	
Engine start	The engine can be turned on while carrying the Intelligent Key.		SEC-9	D
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.		<u>PWC-10</u>	Е
Panic alarm	When Intelligent Key panic alarm button is pressed, horn sounds	•	<u>SEC-14</u>	
	Setting of auto driving position can be automatically set, accord- ing to key ID of Intelligent Key to the position that is registered in advance.		<u>ADP-12</u>	F
Intelligent Key interlock	Setting of air conditioning system can be set according to key ID of Intelligent Key to the setting value that is set before turning ignition switch OFF.	Air condi- tioning sys- tem	<u>HAC-18</u>	G
	Setting of multi AV system can be set according to key ID of In- telligent Key to the setting value that is set before turning ignition switch OFF.	Multi AV sys- tem	<u>AV-14</u>	Н

DOOR LOCK FUNCTION DOOR LOCK FUNCTION : System Diagram



DOOR LOCK FUNCTION : System Description

INFOID:000000011151671

INFOID:000000011151670

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

< 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

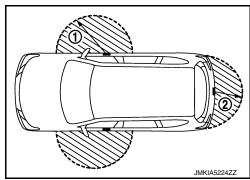
If the following conditions are satisfied, door lock/unlock operation is performed if the door request switch is operated.

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.



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

DLK-24

< 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	Operation Hazard warning lamp blinks Intelligent Key warning buzzer hone			
-	Unlock	Once	Once		
-	Lock	Twice	Twice	C	

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. 	
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How To Change Auto Door Lock Operation Mode

Auto door lock operation mode can be changed using CONSULT. Refer to BCS-21, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

LIST OF OPERATION RELATED PARTS

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

Function	Intelligent Key	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	×	×	х	×	х	×	×	х		×			
Hazard reminder function									×	×	×	×	
Selective unlock function	×			×	×	×	×	×		×			
Auto door lock function	×				×	×				×			×

BACK DOOR OPEN FUNCTION



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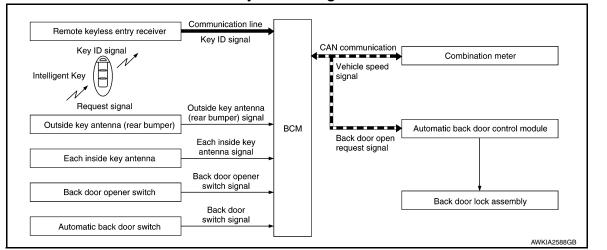
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< SYSTEM DESCRIPTION >

BACK DOOR OPEN FUNCTION : System Diagram



BACK DOOR OPEN FUNCTION : System Description

INFOID:000000011151673

INFOID:000000011151672

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 <u>DLK-39</u>, <u>"System Description"</u>.

OPERATION CONDITION

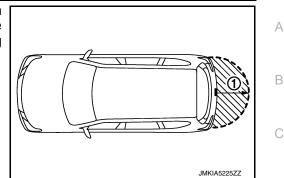
If the following conditions are not satisfied, back door open operation is not performed even if the back door opener switch is operated.

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 DESCRIPTION >

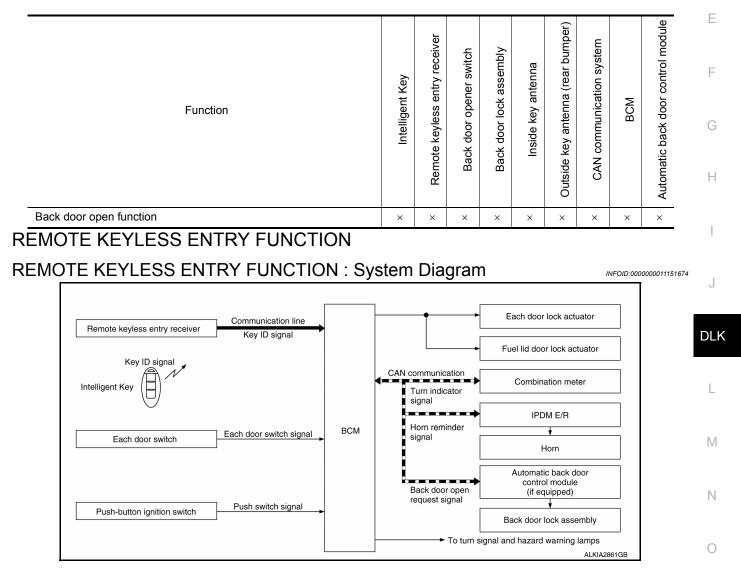
The outside key antenna detection area of back door open function is in the range of approximately 80 cm (31.50 in) surrounding the outside key antenna (rear bumper) (1). However, this operating range depends on the ambient conditions.



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LIST OF OPERATION RELATED PARTS

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



REMOTE KEYLESS ENTRY FUNCTION : System Description

INFOID:0000000011151675

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

Revision: September 2014

DLK-27

2015 Pathfinder

< 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 pushbutton 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 aditional 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 opera- tion	 Anti-theft alarm - unauthorized entry Maximum time for engine to run by remote start has been exceded. 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.
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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 DESCRIPTION >

Operating condition	 Door switch is ON (door is open) Door is locked Push switch is pressed 						
ow to change auto door uto door lock mode can be efer to <u>BCS-21, "INTELLIC</u>	changed using CO	NSULT.	INTELLIGENT KEY	<u>Y)"</u> .			
AZARD AND HORN RE /hen doors are locked or u he hazard and horn remine	nlocked by Intelliger der has a horn chirp	nt Key, BCM blinks ha mode (C mode) and					
perating Function of Hazaro				odo			
Intelligent Key exercise		node		lalask			
Intelligent Key operation	Lock	Unlock Once	Lock	Unlock			
Hazard warning lamp blinks Horn sound	Once		IWICE				
azard and horn reminder of efer to <u>BCS-21, "INTELLIO</u>	SENT KEY : CONSU	JLT Function (BCM -	INTELLIGENT KEY	onds at the same time			
Without CONSULT /hen LOCK and UNLOCK he hazard and horn remind illowing items:	er mode is changed	d and hazard warning	lamp blinks and h	orn sounds as per th			
/hen LOCK and UNLOCK he hazard and horn remind	На;	zard warning lamp blinks	lamp blinks and h	orn sounds as per th			
/hen LOCK and UNLOCK he hazard and horn remind illowing items:	Ha: thre nirp mode)		S mode (Non-horn chirp mod				

detailed description, refer to <u>DLK-39</u>, "System Description".

LIST OF OPERATION RELATED PARTS

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

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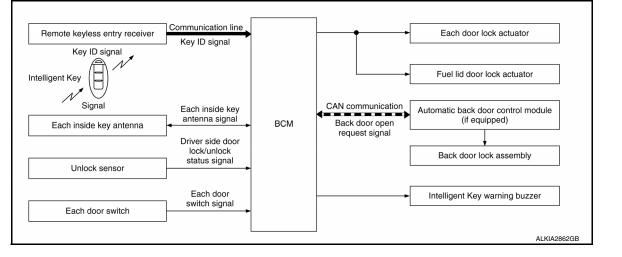
Ο

< SYSTEM DESCRIPTION >

Function Door lock/unlock function Selective unlock function		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



KEY REMINDER FUNCTION : System Description

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

Key remainder func- tion	Operation condition	Operation
Driver 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.

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INFOID:000000011151676

< SYSTEM DESCRIPTION >

Key remainder func- tion	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 un- lock. Honk Intelligent Key warn- ing 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 un- lock. Back door can open with back door opener switch. Honk Intelligent Key warn- ing 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

Н Each door lock actuato Communication line Remote keyless entry receiver Key ID signal Fuel lid door lock actuator Key ID signal CAN communication Combination meter Intelligent Key Turn indicator signal _ IPDM E/R Horn reminder BCM Each door switch signal Each door switch signal Horn DLK Automatic back door control module Back door open (if equipped) request signal Push switch signal Push-button ignition switch Back door lock assembly To turn signal and hazard warning lamps ALKIA2863GE M

REMOTE ENGINE START FUNCTION : System Description

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

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< 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 back door 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 m	node	S m	node
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

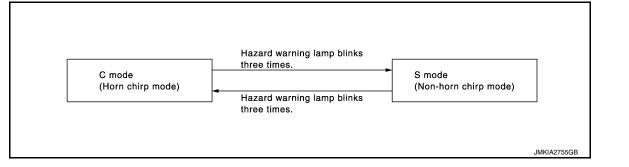
< SYSTEM DESCRIPTION >

With CONSULT

Hazard and horn reminder operation mode can be changed using CONSULT. Refer to <u>BCS-21, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>.

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 \times are the parts related to operation.

Function Door lock/unlock function		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

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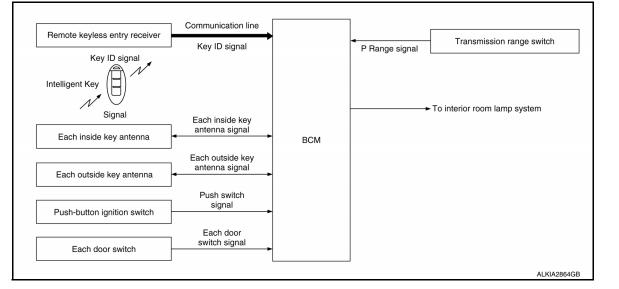
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< SYSTEM DESCRIPTION >

WELCOME LIGHT FUNCTION : System Diagram



WELCOME LIGHT FUNCTION : System Description

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INFOID:000000011151680

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

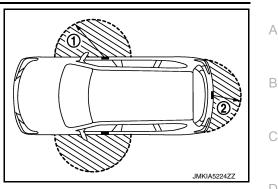
If the following condition are satisfied, welcome light function is operated.

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 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.



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Welcome light function operation mode can be changed using CONSULT With CONSULT Refer to BCS-21, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)". (R) Without CONSULT The welcome light function ON/OFF can be switched by performing the following operation.

Turn ignition switch: $OFF \rightarrow ON$ 1.

WELCOME LIGHT FUNCTION SETTING

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

WARNING FUNCTION

WARNING FUNCTION : System Description

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 malfunct	ion Y	When a malfunction is detected on BCM, "KEY" warning lamp illuminates.	Ν

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< SYSTEM DESCRIPTION >

Warning/Inform	nation 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 \rightarrow ACC warning \rightarrow OFF position warning (For internal) \rightarrow OFF position warning (For internal)				
P position warping	For internal	Shift position: Except P (Park) positionEngine is running to stopped (ignition switch is ON to OFF)				
P position warning	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 chang P (Park) position Ignition switch: ACC position 				
	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 				
Take away warning	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 warn	ing	When door lock operation is requested while door lock operating condition of door request switch or Intelligent Key are not satisfied				
	Ignition switch is ON po- sition	 Ignition switch: ON position Shift position: P (Park) position* Engine is stopped 				
Engine start information	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 batter	y warning	When Intelligent Key is low battery, BCM is detected after ignition switch is turned ON				
Key ID warning		When registered Intelligent Key cannot be detected inside the vehicle after ignition switch is turned ON				
Key ID verification inform	ation	 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 >

		"KEY"	Information diaplay	Warnii	ng chime	А
Warning/Info	ormation functions	warning Iamp	Information display (combination meter)	Combination meter buzzer	Intelligent Key warning buzzer	
Intelligent Key	system malfunction	Indicate		_		В
OFF position	For internal	_		Activate		
warning	For external	—	_	_	Activate	0
	For internal			Activate		С
P position warning	For external	_	Shift to Park	_	Active	D
ACC warning		_	Push ignition to OFF	Activate	_	F
	Door is open to close			Activate	Activate	Н
Take away	Door is open			_	_	
warning	Push-button igni- tion switch opera- tion	_	No Key Detected	Activate	_	l
Door lock op- eration warn-	Request switch operation			_	Activate	
ing	Intelligent Key		_	_	Activate	DL
Key ID warning)		Key ID Incorrect	_	_	L
Engine start in	formation		Push brake and start button to drive	_	_	N

SYSTEM (INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

	"KEY"	Information display	Warnii	ng chime
Warning/Information functions	warning Iamp	(combination meter)	Combination meter buzzer	Intelligent Key warning buzzer
Intelligent Key low battery warning	_	Key low battery	_	_
Key ID verification information		(1) (11 C) ALKIA2521ZZ		_

LIST OF OPERATION RELATED PARTS

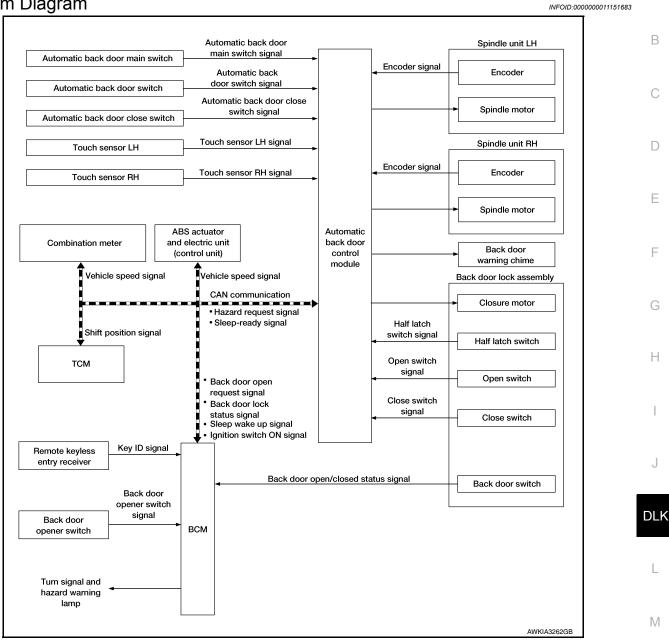
Parts marked with \times are the parts related to operation.

Warning function			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 malfu	Inction									×	×		×
OFF position warning	For internal			×					×	×	×		
or i position warning	For external			×				×			×		
P (Park) position warning			×						×	×	х	×	×
ACC warning			×						×	×	х	×	
	Door is open or close	×		×		×		×	×	×	×	×	×
Take away warning	Door is open	×		×		×				×	×	×	×
	Push-button ignition switch operation	×	×			×			×	×	×	×	×
Door lock operation warning]	×		×	×	×	×	×			×		
Key ID warning			×			×				×	×	×	×
	Ignition switch is ON position	×	×			×				×	х	×	
Engine start information	Ignition switch is except ON position	×	×			×				×	×	×	
Intelligent Key low battery w	varning	×				×				×	×	×	×
Key ID verification information	on	×				×				×	×	×	

< SYSTEM DESCRIPTION >

SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

System Diagram



System Description

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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

DLK-39

< 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 DESCRIPTION >

	Pattern	Time	Description
A	ON OFF	0.75 sec.	Operation start announcement Anti-pinch operation start announcement
В	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
С	Pi	Back door fully closed or vehi- cle is stopped	The conditions are not satisfied in the fully open position or during the operation, and then the operation continues
D	OFF	During open/close operation	During operation announcement
E	ON OFF	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	Stop the vehicle	Chime sounds (pattern A) and reverse operation	 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 				
any trapped for- eign material is de- tected	Running the ve- hicle	No reverse operation (chime sounds, pattern C)	 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 mo- tor operation Full range of closure oper- ation Driving 	 Back door open operation Closure [open (return the latch to the neutral position)] 				

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< SYSTEM DESCRIPTION >

Detection method	Encoder pulse	Touch sensor
Switch operation during reverse op- eration	Receive	
Number of allowable reverse opera- tions	Perform the automatic open/c gardless of the operation dire	lose temporary stop function after 2 reverse operations re- ction

AUTOMATIC BACK DOOR OPEN/CLOSE OPERATION CONDITION

	Automa	atic back doc	or switch	Intellig	ent Key	Automat- ic back door close switch	Back door opener switch			
Operating direction	Fully close	$d \rightarrow Open$	Fully open →Closed	Fully closed \rightarrow Open	Fully open \rightarrow Closed	Fully open \rightarrow Closed	Fully close	$d \rightarrow Open$		
Main switch	-	_	—	_			0	N		
Ignition position	ON/ACC/ LOCK	OFF	_			_	ON/ACC/ LOCK	OFF		
Shift selector lever	P position	—	_	_	_	_	P position	_		
Vehicle speed			1	0 k	m/h	L	· · · · · · · · · · · · · · · · · · ·			
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 continu	led						
Operation condition release during the opera- tion start announcement condition	Automatic back door fur	nction does not operate						
Vehicle speed	Open operation	Operation stop [Back door fully closed or chime sounds until the vehicle stops (pattern C)]						
(0 km/h \rightarrow More than 0 km/h)	Close operation	The operation is continued [chime sounds (pattern (until back door fully closed]						
	Open operation	The operation is continued (If the pinch is detected af- ter that, the system switches to the automatic open/ close temporary stop function)						
Touch sensor	Close operation	Automatic open/close temporary stop function						
(Normal \rightarrow Open)	Closure (close) opera- tion	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 d	loor operation						

< SYSTEM DESCRIPTION >

Item (Condition)		Back door condition	A
Back door opener switch	Closure (close) opera- tion	Closure (open) operation and back door open	
$(OFF \rightarrow ON)$	Closure [open (return the latch to the neutral position)]	Back door open	В
Malfunction detected	IGN circuit	Automatic open/close temporary stop function	С
	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.

Component	Parts	Status	0	D				(3		(₽	(D	
		ON													
	Half latch switch	OFF							-						
		ON													
	Open switch	OFF							L _			L			
ack door lock		ON											1		
assembly	Close switch	OFF													
	Back door closure motor	ON					_								
	(open)	OFF	—						L						
	Back door closure motor	ON										Г			
	(close)	OFF													
	Spindle motor	ON							Г						
Spindle unit	(open)	OFF													
	Spindle motor	ON													
	(close)	OFF													
_	Automatic back door buzzer	ON		Π	п	П							Г		Г
	Automatic back door buzzer	OFF								JL					
_		ON		F		٦		_		1	Г		٦	Г	 _
	Hazard	OFF				L									

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

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

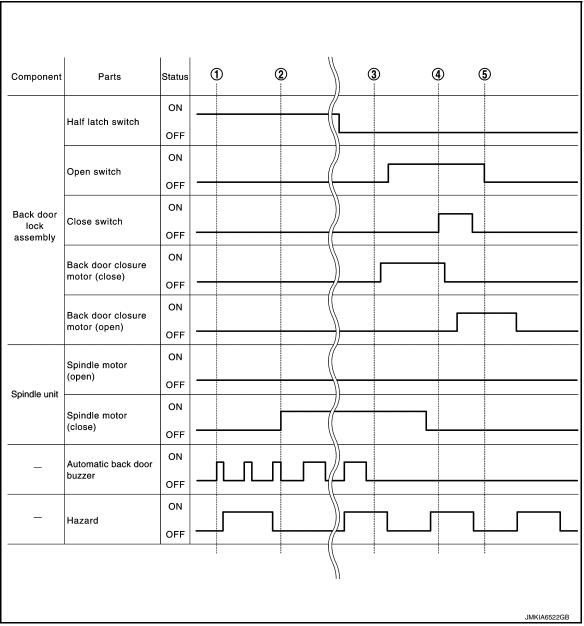
- 4. The back door closure motor performs the close operation after turning the half latch switch to ON.
- 5. Stop the back door closure motor close operation and return the latch to the neutral position after turning the close switch to OFF.

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.

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< 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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SYSTEM (INTEGRATED HOMELINK TRANSMITTER)

< SYSTEM DESCRIPTION >

SYSTEM (INTEGRATED HOMELINK TRANSMITTER)

System Description

INFOID:0000000011151685

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

< SYSTEM DESCRIPTION > DIAGNOSIS SYSTEM (BCM) COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000011581017

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CAUTION:

After disconnecting the CONSULT vehicle interface (VI) from the data link connector, the ignition must be cycled OFF \rightarrow ON (for at least 5 seconds) \rightarrow 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.

				Direct [Diagnosti	ic Mode			
System	Sub System	Ecu Identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN Diag Support Mntr	J DLK
Door lock	DOOR LOCK		×	×	×	×			
Rear window defogger	REAR DEFOGGER			×	×	×			-
Warning chime	BUZZER			×	×				M
Interior room lamp timer	INT LAMP			×	×	×			-
Exterior lamp	HEADLAMP			×	×	×			
Wiper and washer	WIPER			×	×	×			N
Turn signal and hazard warning lamps	FLASHER			×	×				_
Air conditioner	AIR CONDITIONER			×					0
Intelligent Key system	INTELLIGENT KEY		×	×	×	×			
Combination switch	COMB SW			×					_
BCM	BCM	×	×			×	×	×	Р
Immobilizer	IMMU		×	×	×				_
Interior room lamp battery saver	BATTERY SAVER			×	×				
Back door open	TRUNK			×					_
Vehicle security system	THEFT ALM			×	×	×			_
RAP system	RETAINED PWR			×					

< SYSTEM DESCRIPTION >

			Direct Diagnostic Mode					
System	Sub System	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 \rightarrow ON (for at least 5 seconds) \rightarrow 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 <u>BCS-52, "DTC Index"</u>.

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.
AUTO UNLOOK TIPE	MODE1*	All doors unlock automatically.

< SYSTEM DESCRIPTION >

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

* : Initial setting

INTELLIGENT KEY

INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)

CAUTION:

After disconnecting the CONSULT vehicle interface (VI) from the data link connector, the ignition must be cycled OFF \rightarrow ON (for at least 5 seconds) \rightarrow 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.	D
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 commu- nication 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 com- munication 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 communica- tion 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 commu- nication line.	

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INFOID:000000011581019

< 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 oper- ating on Intelligent Key, the numerical value start changing.
RKE OPE COUN2 [0-19]	×	When remote keyless entry receiver receives the signal transmitted while oper- ating 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].

Revision: September 2014

< 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	G
IGN/ACC BATTERY SAVER	On*	Battery saver function ON.	G
IGN/ACC BATTERY SAVER	Off	Battery saver function OFF.	
	On*	Remote engine start function ON.	Н
REMOTE ENGINE STARTER	Off	Remote engine start function OFF.	
	BUZZER	Buzzer reminder function by door lock/unlock request switch ON.	
ANSWER BACK I-KEY LOCK UNLOCK	HORN	Horn chirp reminder function by door lock request switch ON.	I
ANSWER BACK I-RET LOCK UNLOCK	Off*	No reminder function by door lock/unlock request switch.	
	INVALID	This mode is not used.	J
ANSWERBACK KEYLESS LOCK UN-	On	Buzzer or horn chirp reminder when doors are locked/unlocked with Intelligent Key.	
LOCK	Off*	No buzzer or horn chirp reminder when doors are locked/unlocked with Intelligent Key.	DLI
	On*	Door handle lamp function from request switch ON.	
WELCOME LIGHT OP SET	Off	Door handle lamp function from request switch OFF.	L
	On*	Horn chirp reminder when doors are locked with Intelligent Key.	
ANSWER BACK	Off	No horn chirp reminder when doors are locked with Intelligent Key.	М
RETRACTABLE MIRROR SET	On	Retractable mirror set ON.	IVI
RETRACTABLE MIRROR SET	Off*	Retractable mirror set OFF.	
CONFIRM KEY FOB ID	_	Intelligent Key ID code registration can be checked.	Ν
LOCK/UNLOCK BY I-KEY	On*	Door lock/unlock function from Intelligent Key ON.	
LOCK UNLOCK BY I-KET	Off	Door lock/unlock function from Intelligent Key OFF.	
ENGINE START BY I-KEY	On*	Engine start function from Intelligent Key ON.	0
ENGINE START BT I-RET	Off	Engine start function from Intelligent Key OFF.	
TRUNK/GLASS HATCH OPEN	On*	Buzzer reminder function by back door request switch ON.	Ρ
INUNIVIGLASS HAIGH UPEN	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.	

< SYSTEM DESCRIPTION >

Support Item	Setting		Description
SHORT CRANKING OUTPUT		70 msec	
	Start	100 msec	Starter motor operation duration times.
		200 msec	
	End		_
INSIDE ANT DIAGNOSIS	-	_	This function allows inside key antenna self-diagnosis.
	MODE7	5 min	
	MODE6	4 min	
	MODE5	3 min	
AUTO LOCK SET	MODE4	2 min	Auto door lock time can be set in this mode.
	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 \rightarrow ON (for at least 5 seconds) \rightarrow 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

CAUTION:

After disconnecting the CONSULT vehicle interface (VI) from the data link connector, the ignition must be cycled OFF \rightarrow ON (for at least 5 seconds) \rightarrow 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	F

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	[LOCKUNLKI]	Indicates condition of back door unlock sensor		
DESTINATION	[JPN/NAM]	Indicates specification of destination of the automatic back door system		
AUTO BCK DR POS INITIAL	[YET/DONE]	Indicates condition of calibration of automatic back door position informa- tion		

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INFOID:000000011151690

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 STA-	This item is for calibration of automatic back door position informa-	DLK-116, "Work Proce-
TUS	tion.	dure"

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION AUTOMATIC BACK DOOR CONTROL UNIT

Reference Value

VALUES ON THE DIAGNOSIS TOOL

CONSULT MONITOR ITEM

Monitor Item	Conditio	n	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
/HCL SPEED MTR	While driving		Equivalent to speedometer reading
/HCL SPEED ABS	While driving		Equivalent to speedometer reading
	Automatic back door main switch	OFF	OFF
MAIN SW	Automatic back door main switch	ON	ON
		Release	OFF
AUTO BD SW	Automatic back door switch	Press	ON
		Release	OFF
3K DOOR CL SW	Automatic back door close switch	Press	ON
	Deals dear leafs	Lock	OFF
BACK DOOR LOCK STATUS	Back door lock	Unlock	ON
	De directore	Not applied	OFF
PKB SW	Parking brake	Applied	ON
		Half latch/fully closed	OFF
OPEN SW	Back door	Applied	ON
		Open/half latch	OFF
CLOSE SW	Back door	Fully closed	ON
		Half latch/fully closed	OFF
IALF LATCH SW	Back door	Open	ON
	To the second DU	Other than below	OFF
FOUCH SEN RH	Touch sensor RH	Detect obstruction	ON
	T	Other than below	OFF
FOUCH SEN LH	Touch sensor LH	Detect obstruction	ON
	O ale aten lavaa	Other than P position	OFF
P RANGE IND	Selector lever	P position	ON
		Release	OFF
RKE REQ	Intelligent Key button (back door)	Press (more than 0.5 sec- ond)	MOVE
		Press (just after)	REV
	Ignition owitch	Other than ON position	OFF
GN SW	Ignition switch	ON position	ON
	Automatic back door	Not operate	No change HI or LO
SPINDLE LH ENCODER A	Automatic back door	Operate	Change HI or LO
	Automatic back door	Not operate	No change HI or LO
SPINDLE LH ENCODER B	Automatic back door	Operate	Change HI or LO

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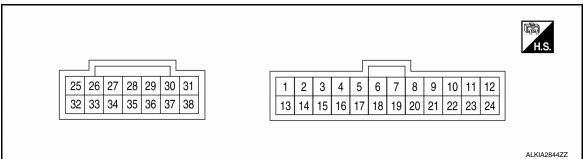
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< ECU DIAGNOSIS INFORMATION >

Monitor Item	Conditio	n	Value/Status	
UNLOCK SEN BD	Back door lock	Lock	LOCK	
UNLOCK SEN BD	Back door lock	Unlock	UNLK	
DESTINATION			OTHER	
AUTO BCK DR POS INITIAL	Calibration of automatic back door	Not complete	YET	
AUTO BUK DR POS INITIAL	position information	Complete	DONE	
AUTO BCK DR POS LEARN	Additional service when removing	Not complete	YET	
AUTO BOR DR POS LEARN	battery negative terminal	Complete	DONE	
SPINDLE SENSOR RH	Back door: Moving	Back door: Moving		
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	
SPINDLE RH ENCODER A		Operate	Change HI or LO	
SPINDLE RH ENCODER B	Automatic back door	Not operate	No change HI or LO	
SFINDLE KH ENCODER B		Operate	Change HI or LO	
TRANSMISSION TYPE	_		AT/CVT	

TERMINAL LAYOUT



PHYSICAL VALUES

	inal No. e color)	Description		Con	dition	Voltage	
(+)	(—)	Signal name	Input/ Output	Condition		(Approx.)	
1 (BR)	13 (SB)	Touch sensor RH sig- nal	Input	Touch sensor RH	Detect obstruc- tion	1.8 – 5 V	
(DR)	(36)	Tidi			Other than above	2.72 – 7.27 V	
2	13 (SP)	Touch sensor LH sig- nal	Input Touch sensor LH	Detect obstruc- tion	1.8 – 5 V		
(LG)	(SB)	Tidi			Other than above	2.72 – 7.27 V	
3	Cround	Half latab awitab aignal	loout	Pools door	Half latch	0 V	
(L)	Ground	Half latch switch signal	Input	Back door	Fully closed/open	Battery voltage	
4* (GR)	Ground	Ground	_	-	_	0 V	
5	Ground	Close switch signal	Input	Back door	Fully closed	0 V	
(LG)	Ground	CIOSE SWICH SIGNAL	Input	Dack GOOI	Open/half latch	Battery voltage	

< ECU DIAGNOSIS INFORMATION >

	inal No. e color)	Description		0	-111	Voltage	A
(+)	(-)	Signal name	Input/ Output	Con	dition	(Approx.)	
6 (V)	Ground	Encoder LH A signal	Input	Back door	Moving (auto or manual)	(V) 15 10 5 0 JMKIA1864ZZ NOTE: Waveform width changes accord-	B C D
					When stopped	ing to back door open/close speed 0 V or Battery voltage	E
7 (Y)	Ground	Encoder LH B signal	Input	Back door	Moving (auto or manual)	(V) 15 10 5 0 20ms JMKIA1864ZZ NOTE:	F
					When stopped	Waveform width changes accord- ing to back door open/close speed 0 V or 12 V	Η
8 (BR)	Ground	Encoder RH A signal	Input	Back door	Moving (auto or manual)	(V) 15 10 5 0 20ms JMKIA1864ZZ NOTE: Waveform width changes accord- ing to back door open/close speed	l J DLł
					When stopped	0 V or 12 V	
9 (L)	Ground	Encoder RH B signal	Input	Back door	Moving (auto or manual)	(V) 15 10 5 0 	M
						NOTE: Waveform width changes accord- ing to back door open/close speed	0
					When stopped	0 V or 12 V	0
10 (LG)	Ground	Automatic back door main switch	Input	Automatic back door main switch	ON OFF	0 V Battery voltage	
(==)					Open	0 V	Ρ
11 (BR)	Ground	Open switch signal	Input	Back door	Half latch/fully closed	Battery voltage	
12 (W)	Ground	CAN - L	Input/ Output	-	—	-	

< ECU DIAGNOSIS INFORMATION >

	inal No. e color)	Description		Con	dition	Voltage
(+)	(–)	Signal name	Input/ Output	Con		(Approx.)
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	Ground	Automatic back door	Input	Automatic back	Pressed	0 V
(SB)	Ground	switch	mput	door switch	Released	Battery voltage
23	Ground	Automatic back door	Input	Automatic back	Pressed	0 V
(Y)	Ground	close switch	input	door close switch	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 opera- tion	Battery voltage
28 (—)	Ground	Ground (noise shield)		-	_	0.01 – 0 V
29 (B)	Ground	Spindle motor RH (open)	Output	Back door	Auto open opera- tion	Battery voltage
31	Ground	Back door closure mo-	Output	Back door	Open operation	Battery voltage
(B)	Ciouna	tor (open)	Output	Back door	Other than above	0 V
32 (B)	Ground	Ground	_	-	_	0 V
34 (W)	Ground	Spindle motor LH (close)	Output	Back door	Auto close opera- tion	Battery voltage
36 (W)	Ground	Spindle motor RH (close)	Output	Back door	Auto close opera- tion	Battery voltage
37	37 Back door warning	<u> </u>	Automatic back	Sounding	0 V	
(LG)	Ground	chime	Output	door warning chime	Not sounding	Battery voltage
38	Ground	Back door closure mo-	Output	Back door	Close operation	Battery voltage
(W)	e. sund	tor (close)	- sthat		Other than above	0 V

*: Except For Mexico

Fail Safe

INFOID:000000011151692

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.

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	isplay contents of CONSULT Fail-safe	
B2409 HALF LATCH SW	Inhibit automatic back door operation	Automatic back door control module detects that half latch switch chang- es 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 af- ter 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

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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 	Γ

DTC Index

NOTE:

Details of time display

• 1 - 39: Displayed if any previous malfunction is present when current condition is normal. It increases $1 \rightarrow 2$ $\rightarrow 3...38 \rightarrow 39$ after returning to the normal condition whenever ignition switch OFF \rightarrow 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 \rightarrow 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"	F
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"	

< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Reference page
B2419: OPEN SW	×	DLK-129, "DTC Logic"
B2420: CLOSE SW	x	DLK-132, "DTC Logic"
B2422: BACK DOOR STATE	x	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	x	DLK-143, "DTC Logic"
B2428: AUTO BACK DR CNT UNIT	x	DLK-146, "DTC Logic"
B242A: CLSR CONDITION	×	DLK-147, "DTC Logic"

List of ECU Reference	

BCM

< ECU DIAGNOSIS INFORMATION >

INFOID:000000011151695

		B
ECU	Reference	
	BCS-30, "Reference Value"	
ВСМ	BCS-50, "Fail Safe"	С
BCIVI	BCS-50, "DTC Inspection Priority Chart"	
	BCS-52, "DTC Index"	
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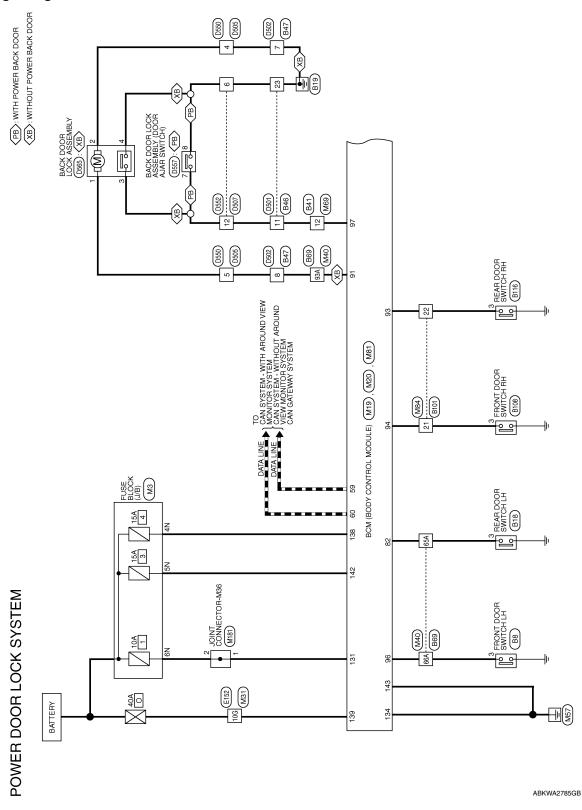
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< WIRING DIAGRAM >

WIRING DIAGRAM POWER DOOR LOCK SYSTEM

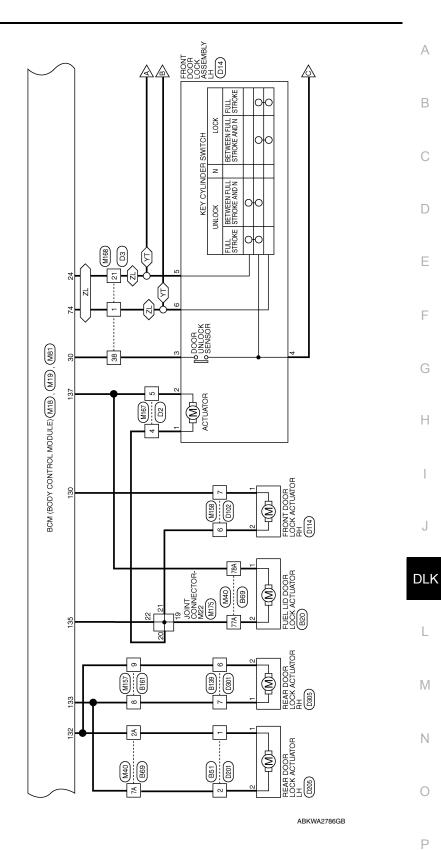
Wiring Diagram

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POWER DOOR LOCK SYSTEM

< WIRING DIAGRAM >



 $\langle \underline{vT} \rangle$: with left and right front auto up/down $\langle \underline{zL} \rangle$: with left front only auto down

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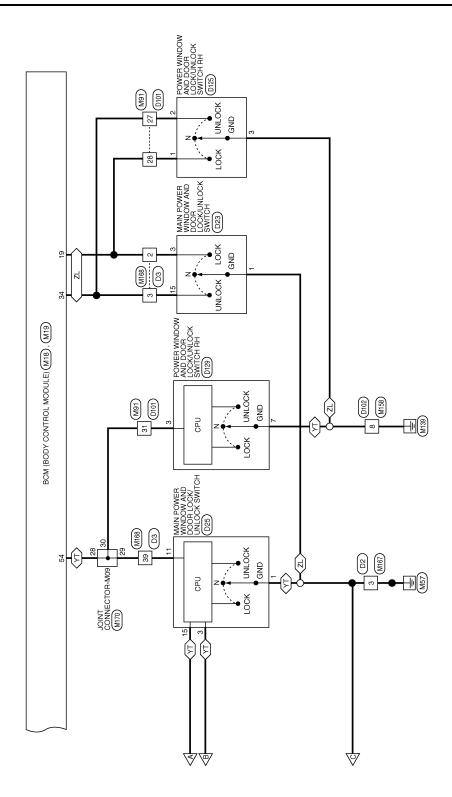
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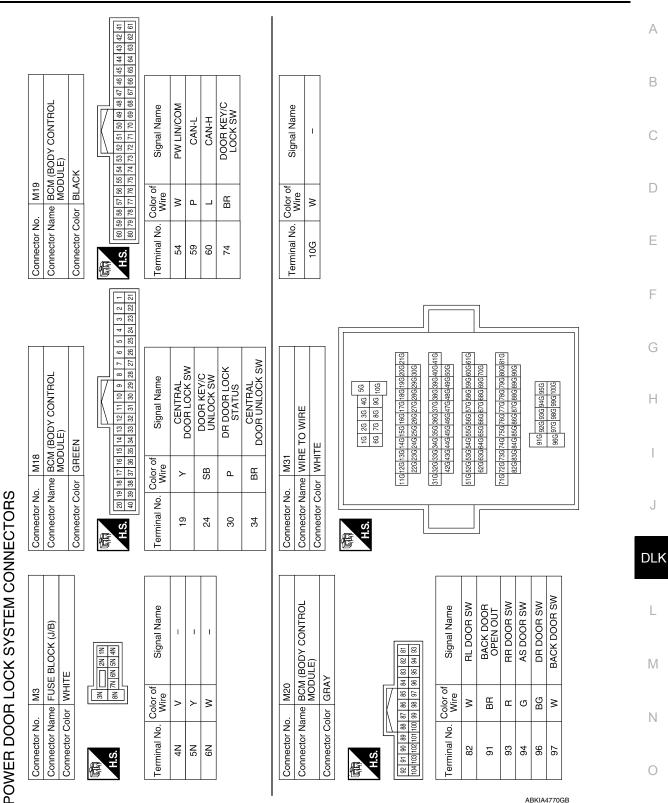
POWER DOOR LOCK SYSTEM

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 $\overline{\langle \tau T \rangle}$: with left and right front auto up/down $\overline{\langle z L \rangle}$: with left front only auto down



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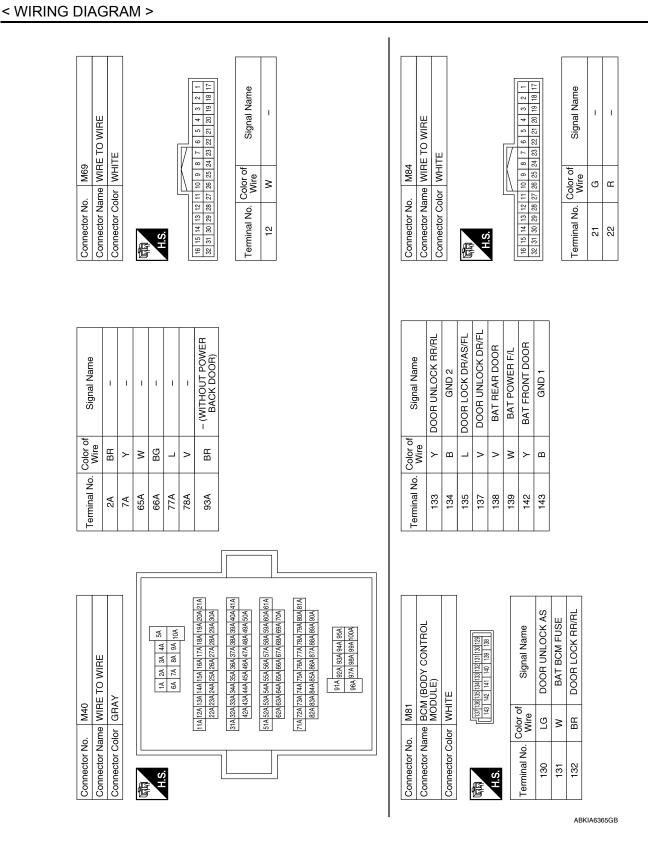
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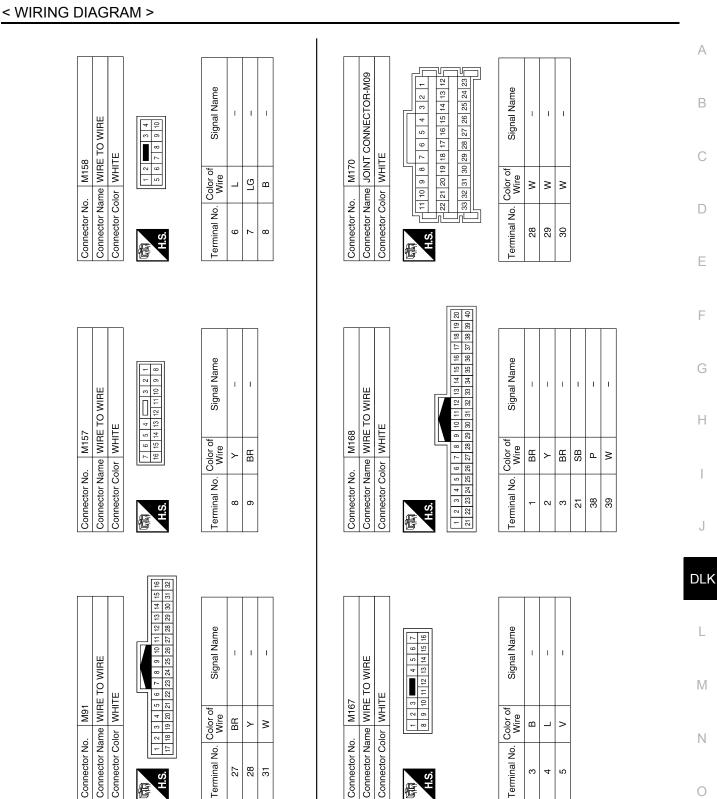
POWER DOOR LOCK SYSTEM

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Revision: September 2014



POWER DOOR LOCK SYSTEM



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POWER DOOR LOCK SYSTEM

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POWER DOOR LOCK SYSTEM

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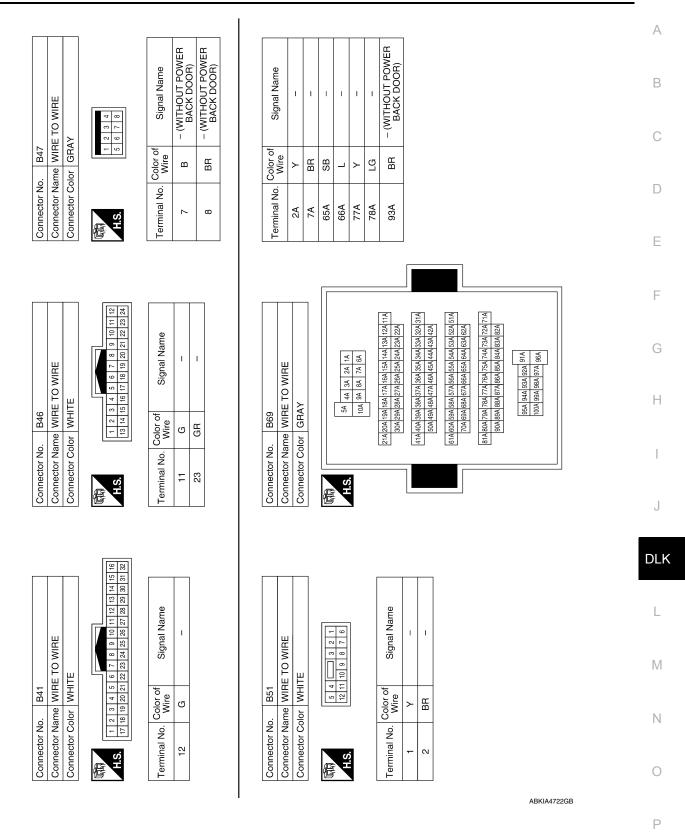
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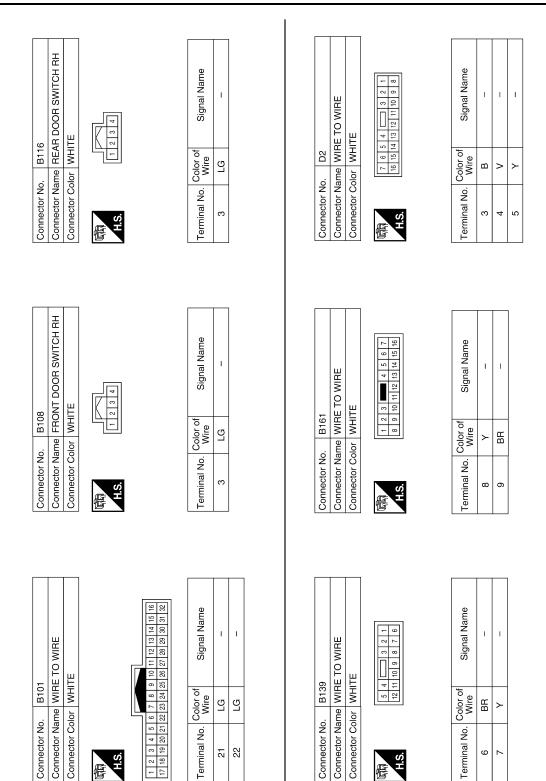
POWER DOOR LOCK SYSTEM

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Revision: September 2014

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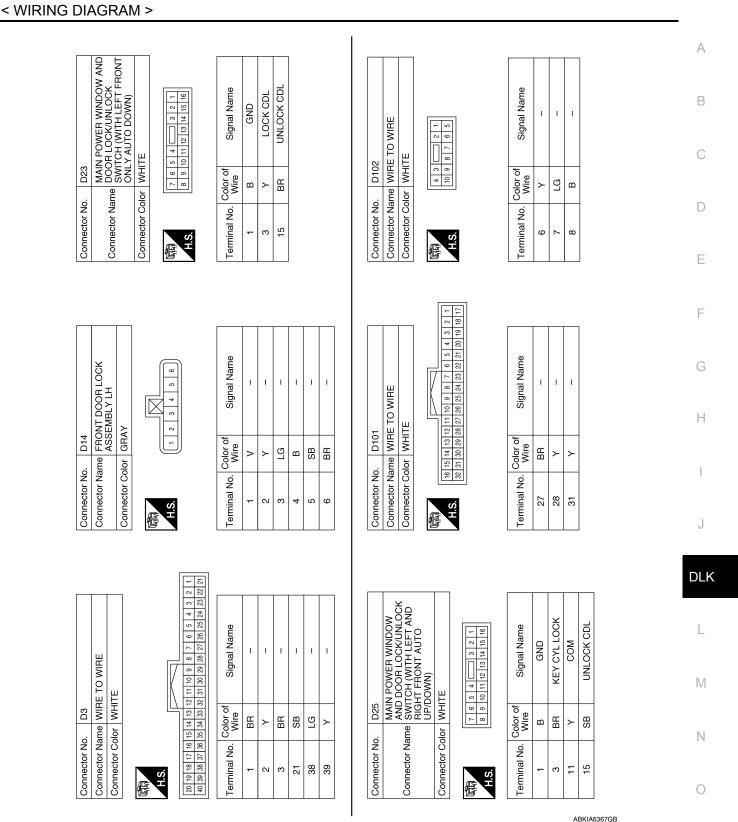


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POWER DOOR LOCK SYSTEM

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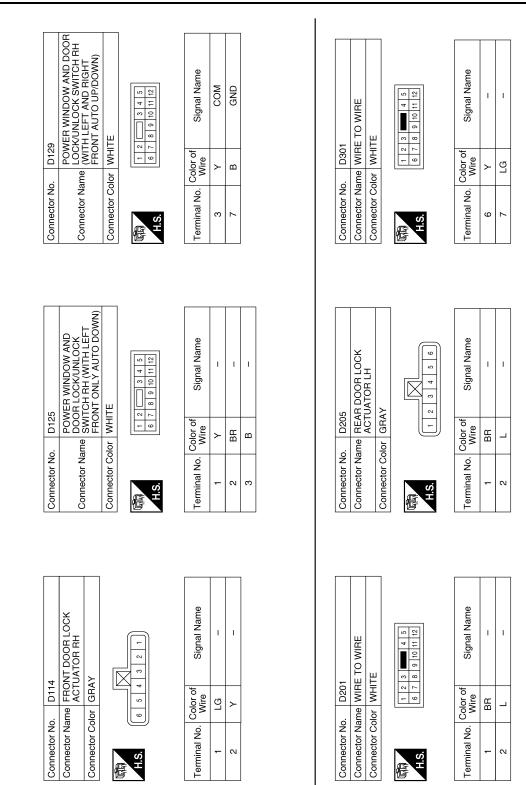
POWER DOOR LOCK SYSTEM

2015 Pathfinder

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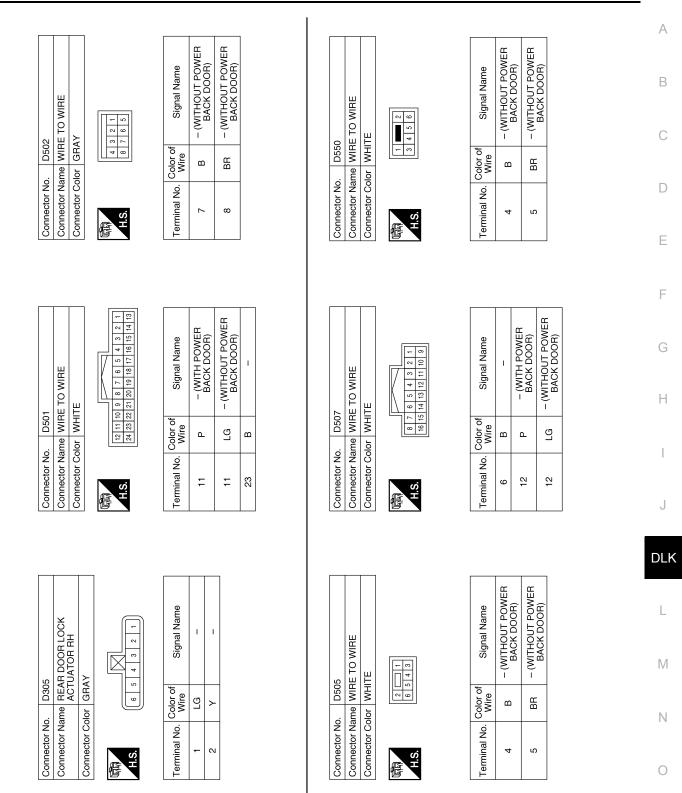
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POWER DOOR LOCK SYSTEM

< WIRING DIAGRAM >



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Signal Name	I	I	I	I
Color of Wire	BR	в	G	В
Terminal No. Color of Wire	Ļ	2	8	4

Connector No.	D557
Connector Name	Connector Name ASSEMBLY (WITH POWER BACK DOOR)
Connector Color WHITE	WHITE
际可 H.S.	1 2 3 4 5 6 7 8

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Signal Name	I	Ι
Color of Wire	IJ	в
Terminal No.	2	8



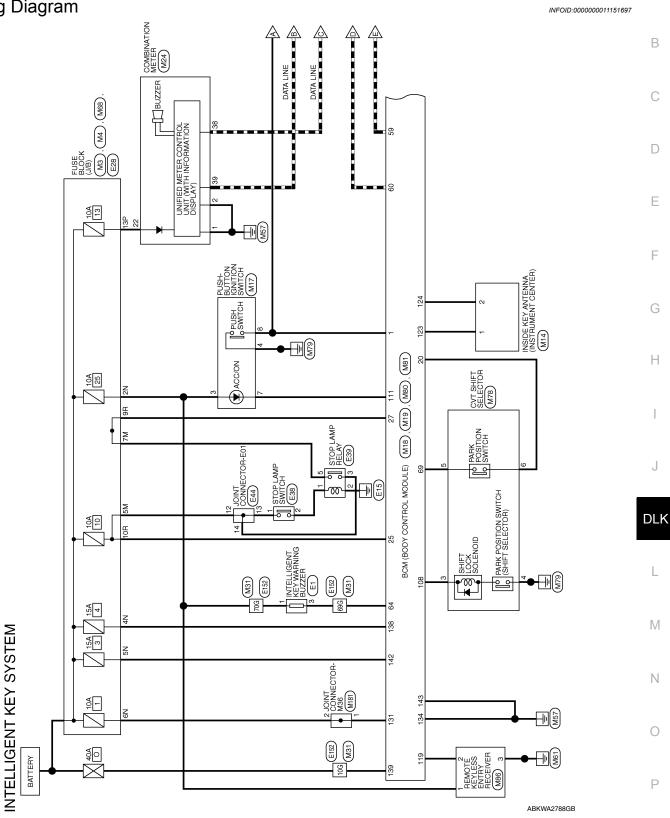
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Signal Name	I	I
Color of Wire	В	Ġ
Terminal No.	9	6

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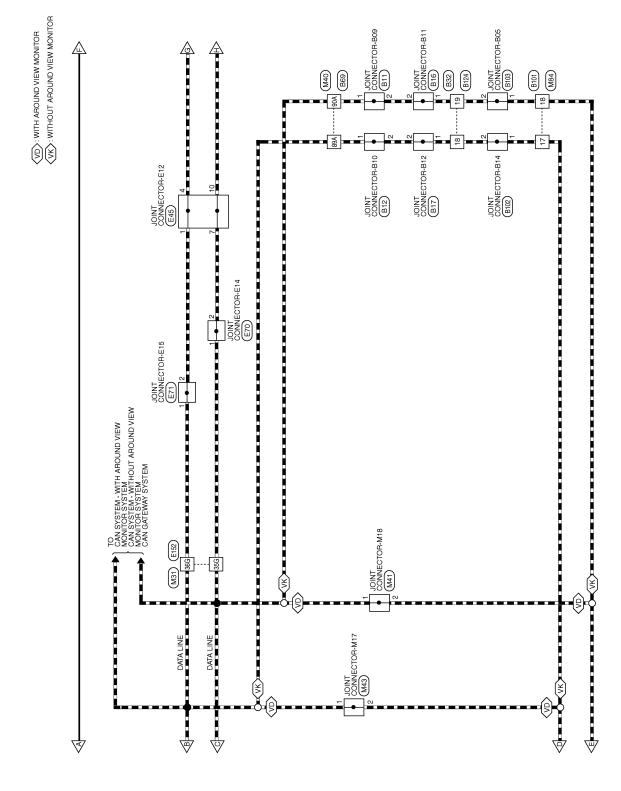


Wiring Diagram



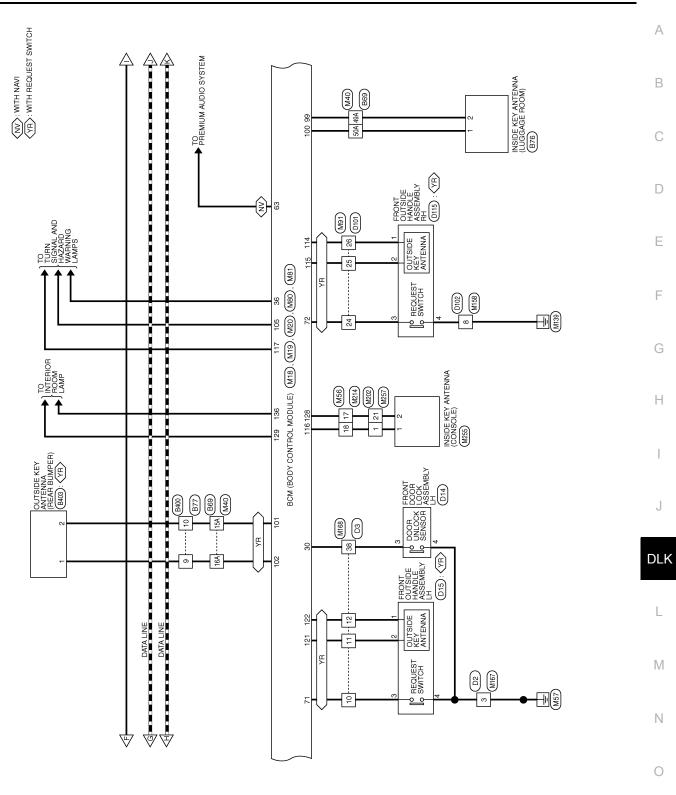
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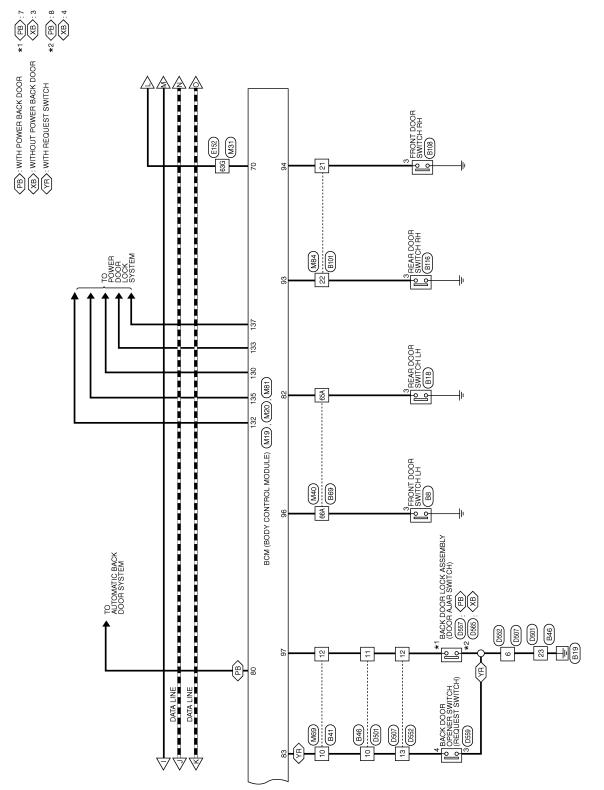
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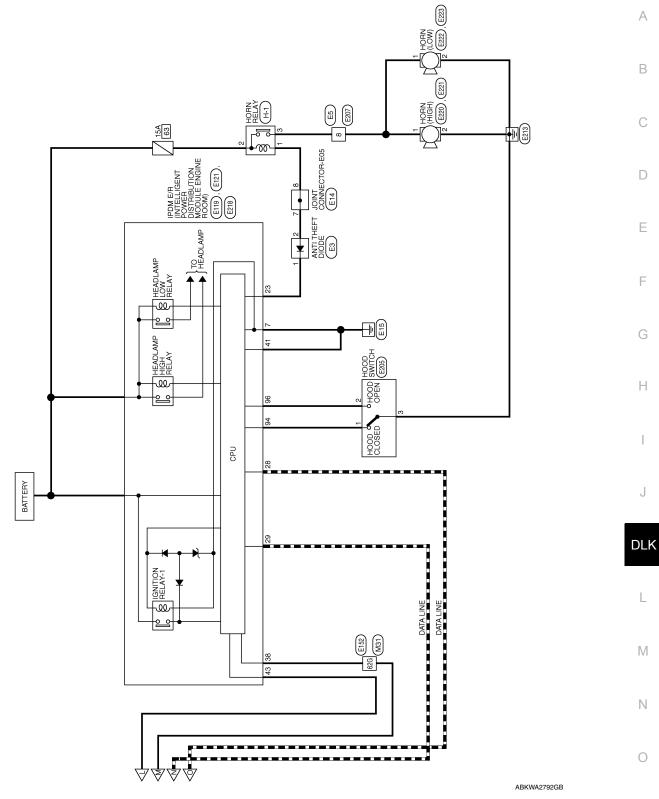
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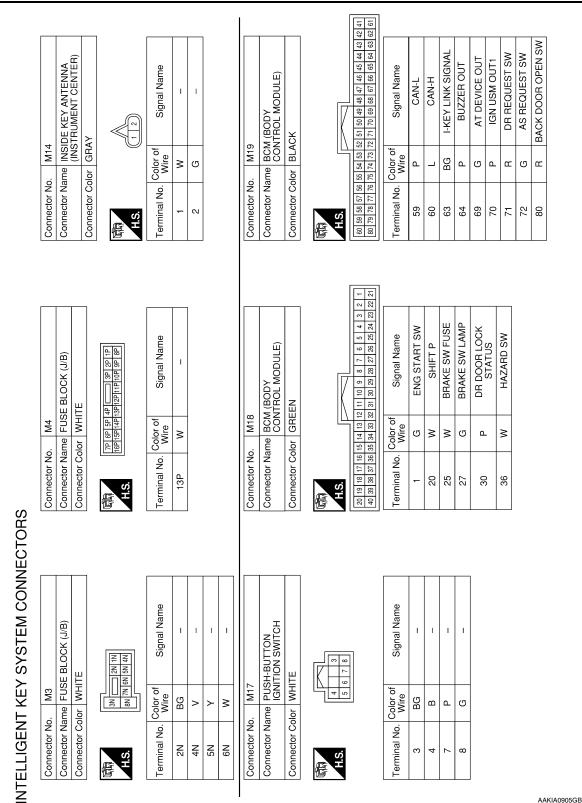
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Revision: September 2014

2015 Pathfinder

< WIRING DIAGRAM >

Signal Name

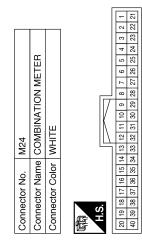
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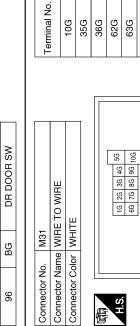
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Signal Name	GND1	GND2	BAT	CAN-L	CAN-H
Color of Wire	в	В	Μ	٩	Γ
Terminal No. Color of Wire	-	2	22	38	68

Signal Name	BACK DOOR SW	ROOM ANT 3 B	ROOM ANT 3 A	REAR BUMPER ANT B	REAR BUMPER ANT A
Color of Wire	Μ	Ч	W	В	G
Terminal No. Color of Wire	26	66	100	101	102

Γ	8	S]	Θ	≥	sm	≥	≥
	82	92		am	S	0 N N	s S	S S
	8	95		z	Ы	ЫN	Ö	Ъ
	84	96		nal	0	ΧÖ	2	2
/	85	97		Signal Name	RL DOOR SW	BACK DOOR REQUEST SW	RR DOOR SW	AS DOOR SW
	86	86			Œ	шщ	Ē	∣∢
	87	66						
	88	100		-				
٦	8	101		i e		15		
	6	102		Color of Wire	≥	BG	Ē	Q
	5	104 103 102 101 100						
	8	104		ю.				
		0'L	-	Terminal No.	82	83	93	94



Connector Color WHITE	16 26 36 46 56 66 70 80 90 105 116 26 36 46 56 116 26 36 46 56 116 26 36 46 56 250 250 250 250 250 216 220 250 250 250 250 216 220 250 250 250 250 250 216 250 25
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Connector Name BCM (BODY CONTROL MODULE)

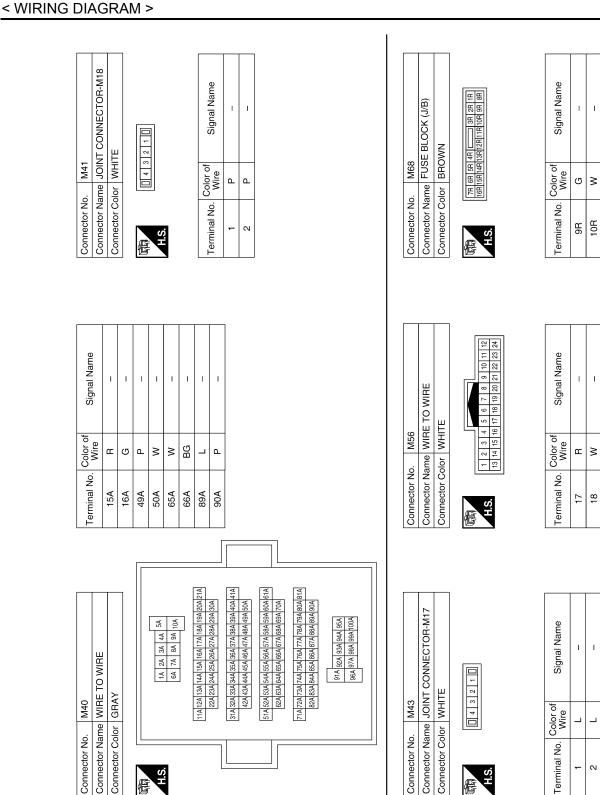
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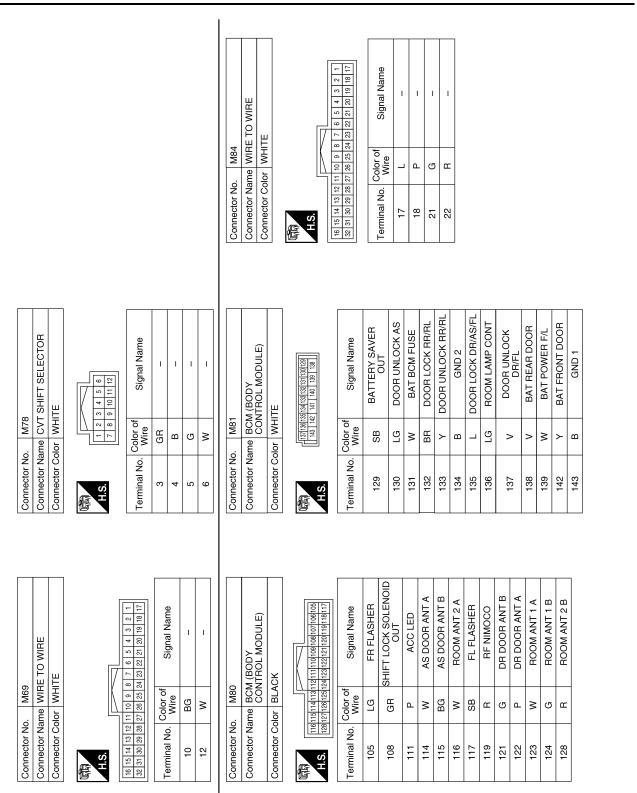
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Terminal No. -N

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< WIRING DIAGRAM >



INTELLIGENT KEY SYSTEM

ABKIA6370GB

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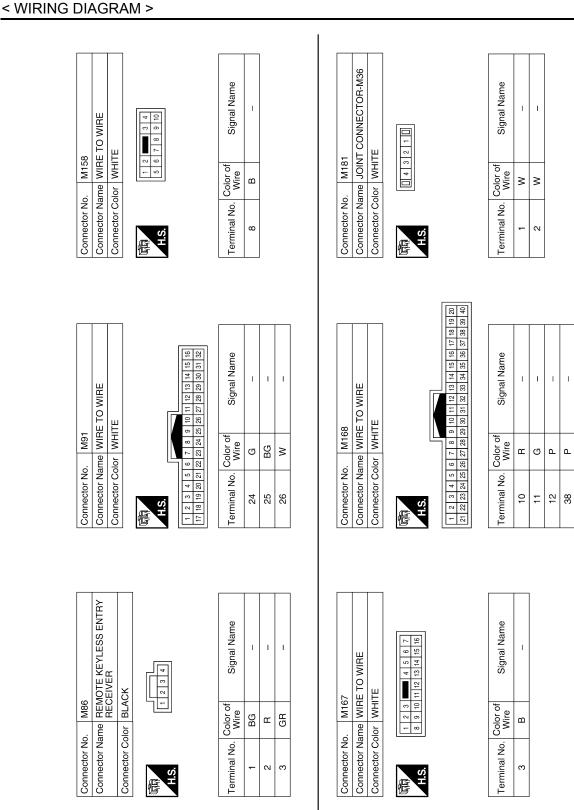
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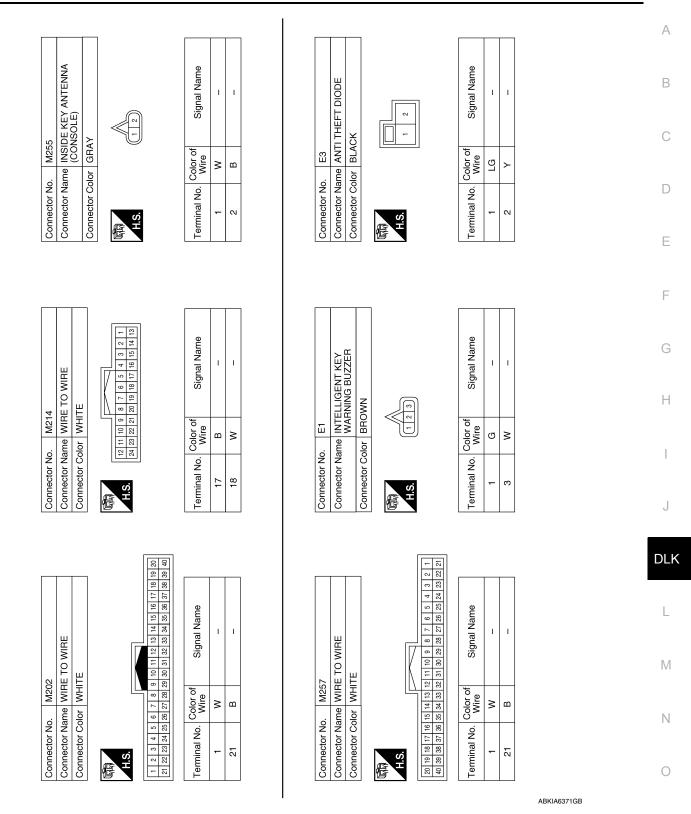
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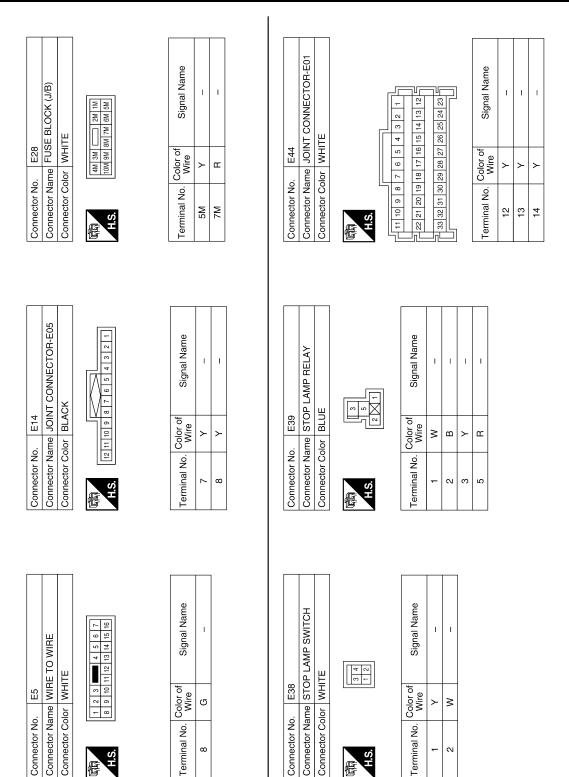
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Revision: September 2014

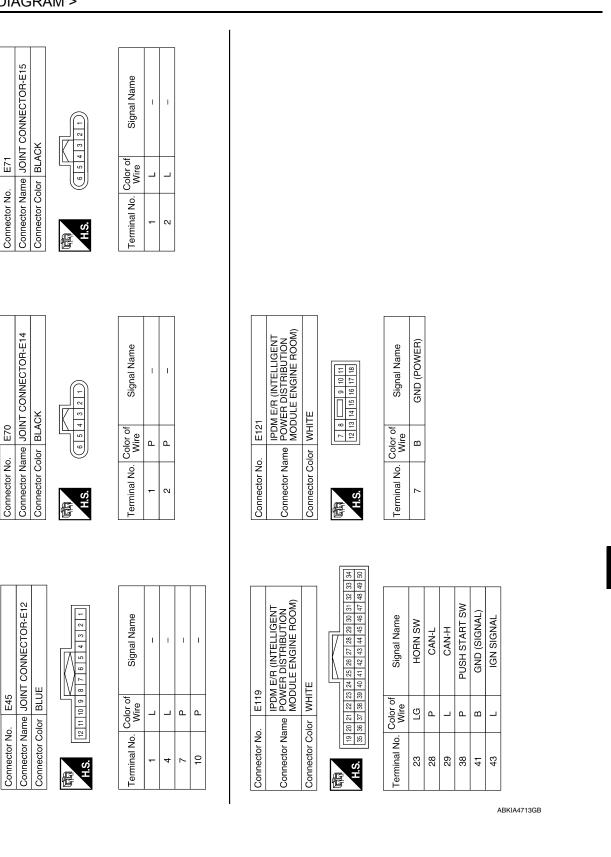


< WIRING DIAGRAM >

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ABKIA4712GB



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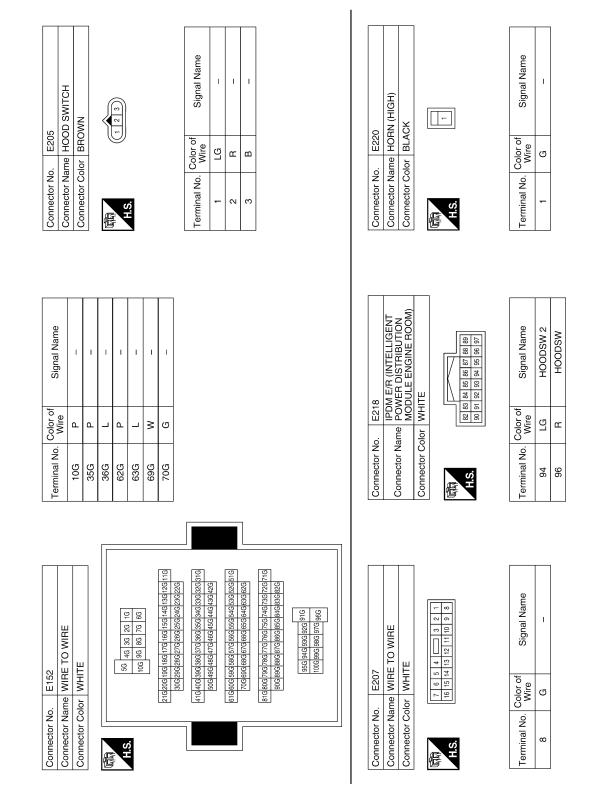
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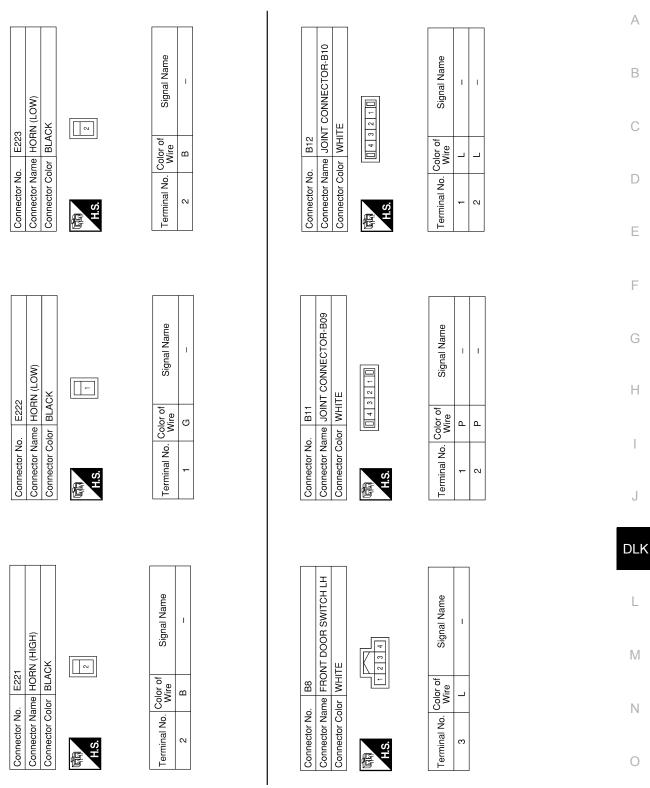






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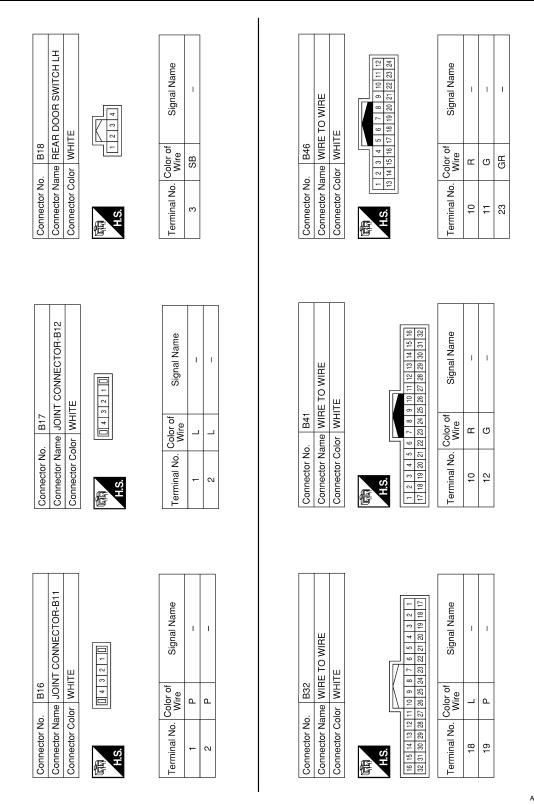
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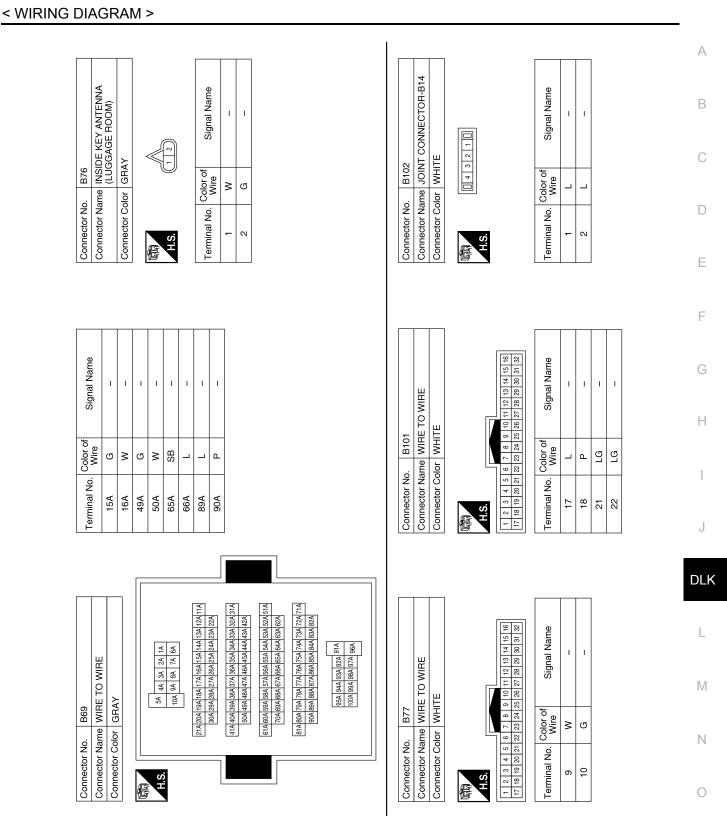
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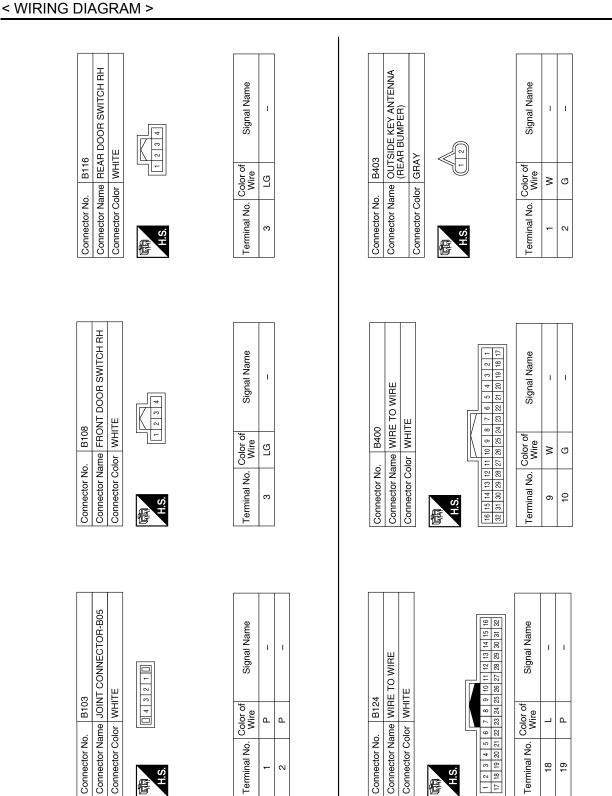
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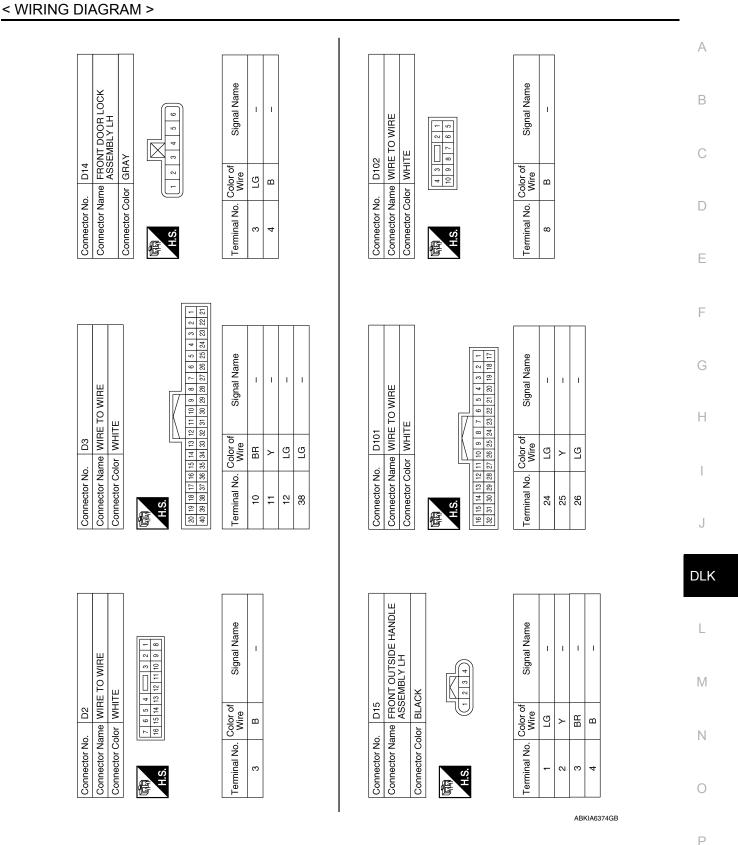
ABKIA6372GB



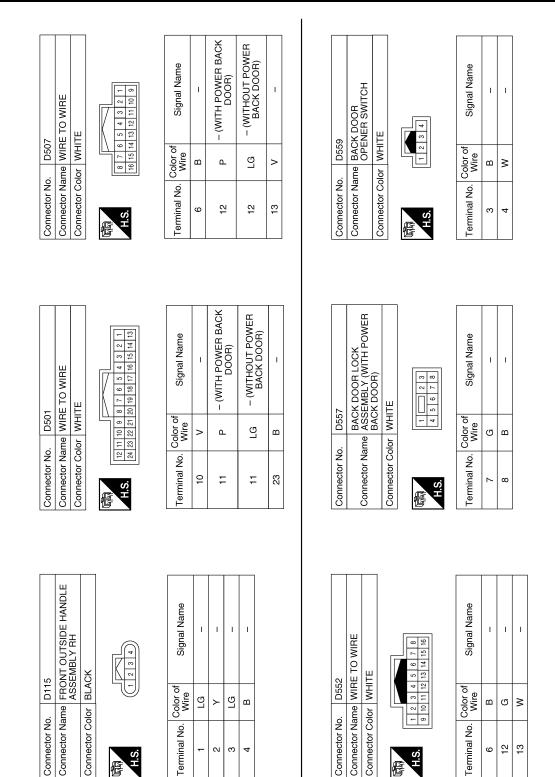
Revision: September 2014

2015 Pathfinder

ABKIA6373GB



< WIRING DIAGRAM >



ABKIA6375GB

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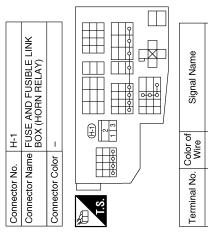
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Signal Name	I	I	I	
Color of Wire	≻	Μ	G	
Terminal No.	-	2	3	

Connector No.	D565
Connector Name	Connector Name BACK DOOR LOCK ASSEMBLY (WITHOUT POWER BACK DOOR)
Connector Color WHITE	WHITE
(引) H.S.H	4

Signal Name	L	Η	
Color of Wire	G	В	
Terminal No.	3	4	

ABKIA6376GB

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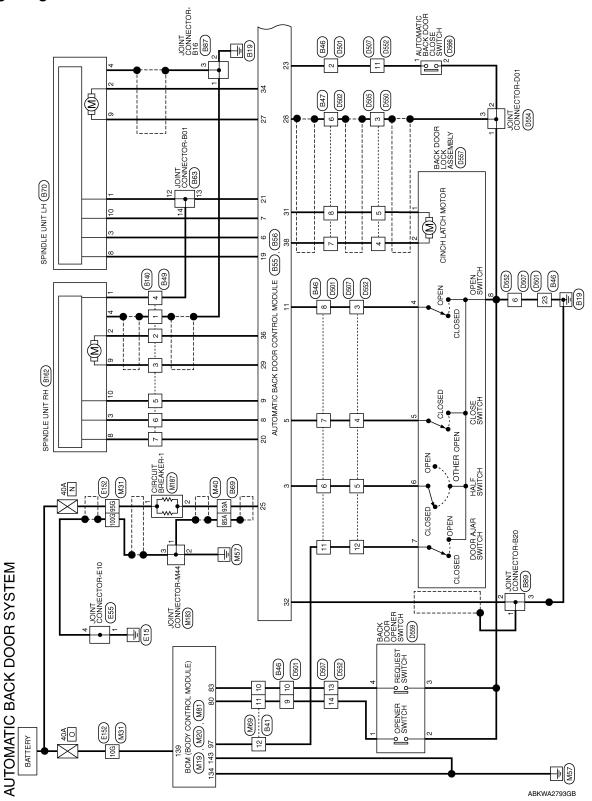
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< WIRING DIAGRAM >

AUTOMATIC BACK DOOR SYSTEM

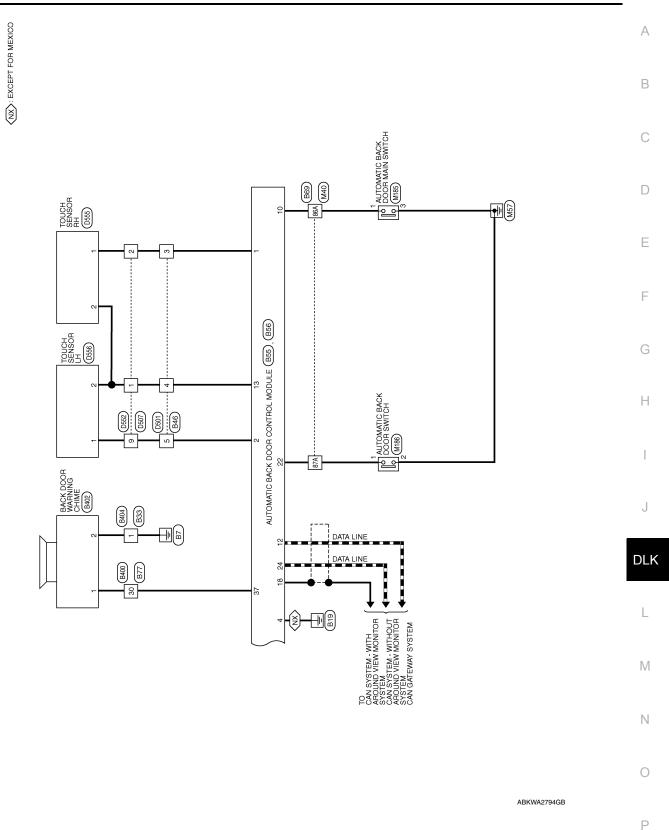
Wiring Diagram

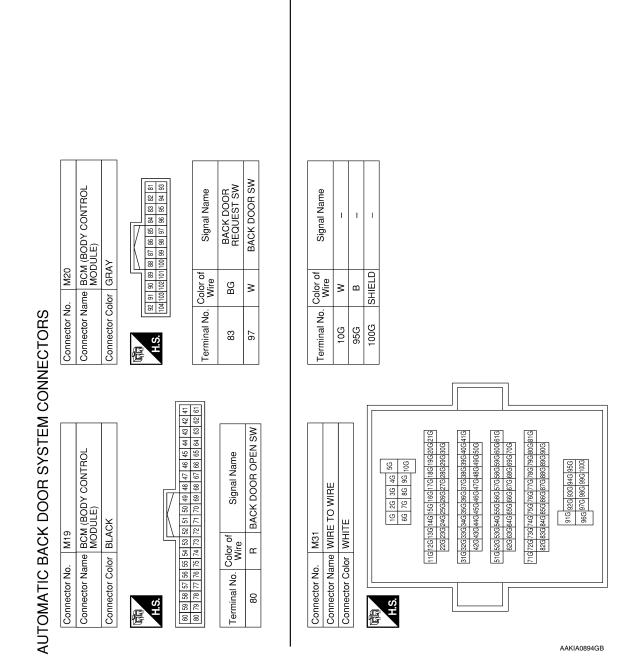
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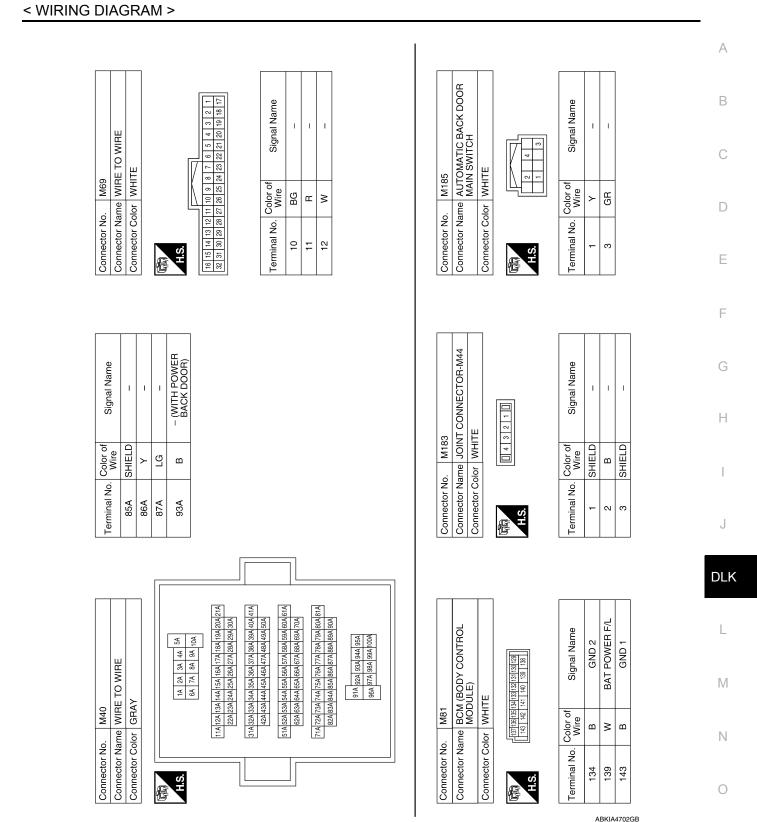
AUTOMATIC BACK DOOR SYSTEM

< WIRING DIAGRAM >



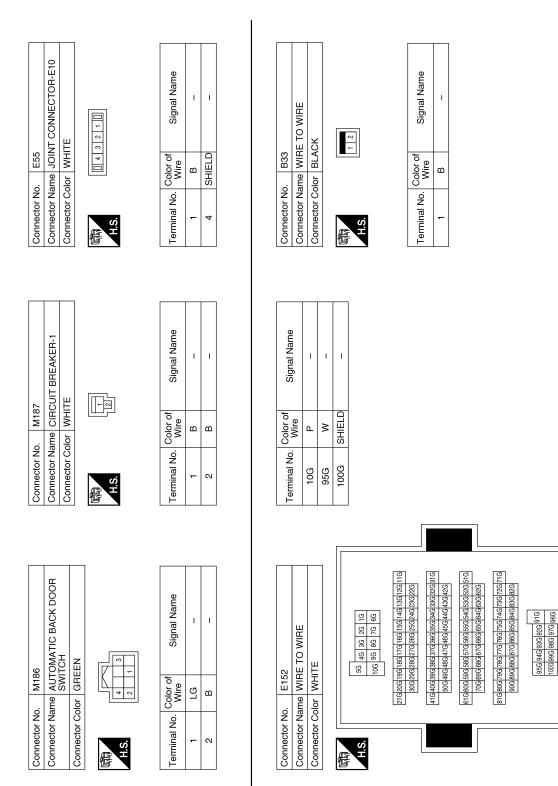


AUTOMATIC BACK DOOR SYSTEM



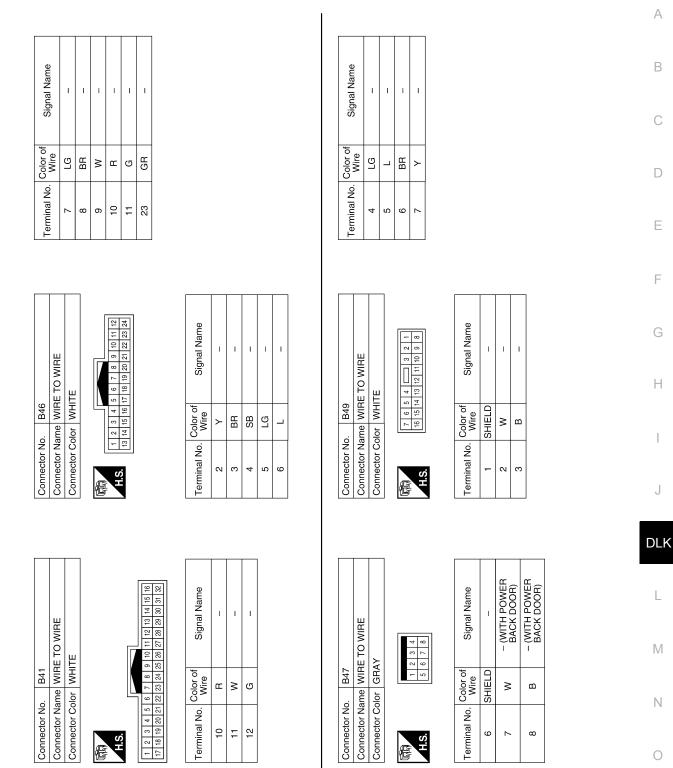
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AUTOMATIC BACK DOOR SYSTEM < WIRING DIAGRAM >



ABKIA6378GB

	AUTOMATIC BACK DOOR SYSTEM
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< WIRING DIAGRAM

AUTOMATIC BACK DOOR SYSTEM

< WIRING DIAGRAM >

Signal Name

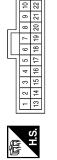
Color of Wire SB

Terminal No.

	JOINT CONNECTOR-B01	TE		7 6 5 4 3 2 1	18 17 16 15 14 13 12	30 29 28 27 26 25 24 23]	Signal Name	I	I	I
. B63		lor WHITE		11 10 9 8	21 20 19	33 32 31 30		Color of Wire	ГG	ГG	ГG
Connector No.	Connector Name	Connector Color	ľ	H.S.	8]	Terminal No.	12	13	14

	Signal Name	I	LATCH MTR OPEN	GND (POWER 1)	I	LH MTR CLOSE	I	RH MTR CLOSE	BUZZER	LATCH MTR CLOSE
	Color of Wire	I	В	В	I	M	I	N	ГG	Μ
	Terminal No.	30	31	32	33	34	35	36	37	38

Connector No.	B55
Connector Name	Connector Name AUTOMATIC BACK DOOR CONTROL MODULE
Connector Color BLACK	BLACK
4	



12

Signal Name	TOUCH SENS RH	TOUCH SENS LH	HALF-LATCH-SW	LOGIC	CLOSE SW	
Color of Wire	ВВ	ГG	L	GR	ГG	
Terminal No. Color of Wire	-	2	з	4	5	

Connector Name AUTOMATIC BACK DOOR CONTROL MODULE Connector Color GRAY	Connector No.	B56
Connector Color GRAY	Connector Name	AUTOMATIC BACK DOOR CONTROL MODULE
(項項 H.S. H.S.	Connector Color	GRAY
H.S. 22 23 34 35 56 37 38	4	
	日 H.S.	25 26 27 28 29 30 31 32 33 34 35 36 37 38

Signal Name	+Β	I	LH MTR OPEN	SHIELD NOISE SHIELD LATCH	RH MTR OPEN	
Color of Wire	в	I	В	SHIELD	В	
Terminal No. Color of Wire	25	26	27	28	29	

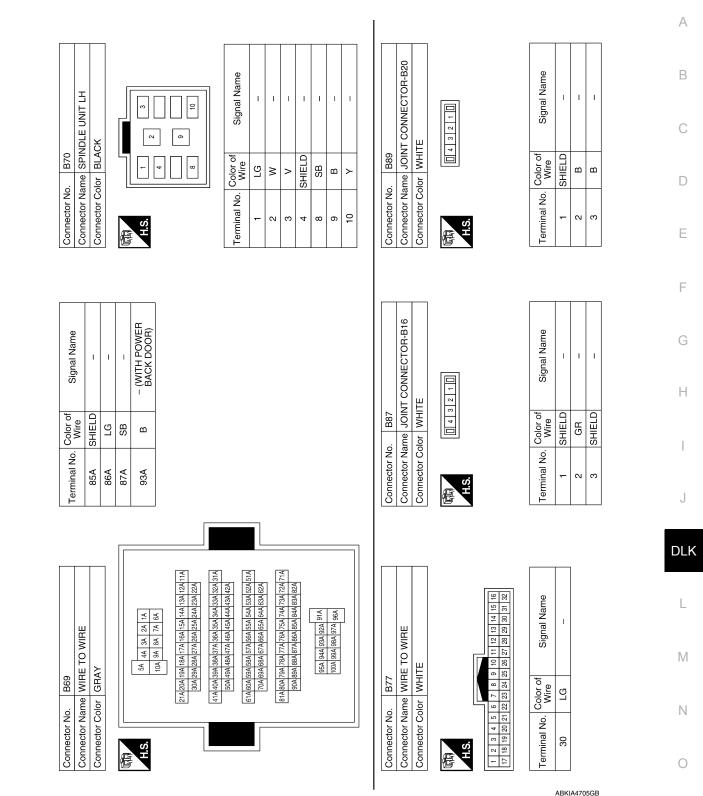
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т			-			-
	POWER LH	POWER RH	GND	DRIVER SW	INSIDE CLOSE SW	CAN-H
	SB	Y	ГG	SB	≻	в
	19	20	21	22	23	24

Signal Name	A SIGN LH	B SIGN LH	A SIGN RH	B SIGN RH	MAIN SW	OPEN SW	CAN-L	TOUCH SENS GND	I	Ι	I	I	CAN SHIELD	
Color of Wire	>	≻	BR	_	ГG	BR	3	SB	I	-	I	I	SHIELD	
Terminal No.	9	7	8	6	10	1	12	13	14	15	16	17	18	

< WIRING DIAGRAM >

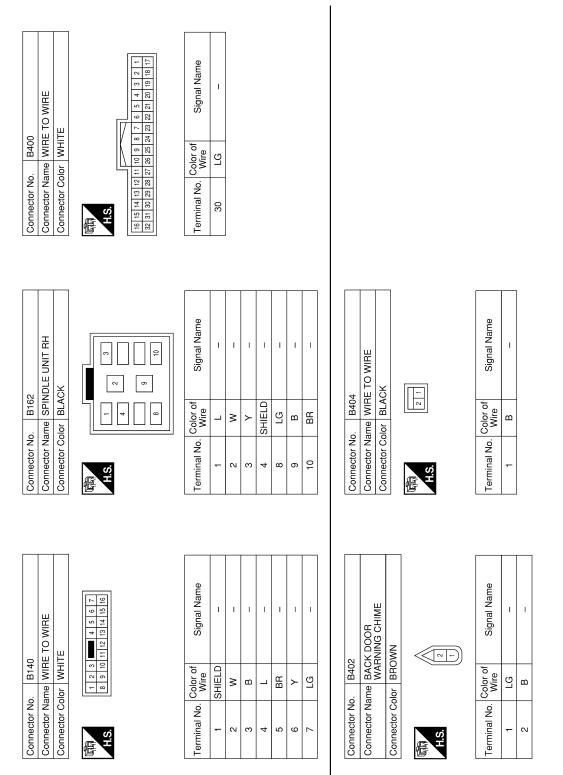
AUTOMATIC BACK DOOR SYSTEM



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AUTOMATIC BACK DOOR SYSTEM

< WIRING DIAGRAM >



AAKIA0900GB

Signal Name - (WITH POWER - (WITH POWER BACK DOOR) - (WITH POWER BACK DOOR) - (WITH POWER - (WITH POWER	– (WITH POWER BACK DOOR)
Terminal No. Color of Wire 3 SHIELD 3 SHIELD 4 BR/B 5 R/G 5 R/G 5 R/G 5 R/G 6 WIRE 7 D550 7 D550 7 MIRE 7 Wire 8 MIE 9 Wire 13 SHIELD 3 SHIELD	۵ س
Signal Name (WITH POWER - (WITH POWER BACK DOOR) - (WITH POWER BACK DOOR) - (WITH POWER	
Terminal No. Color of Wire 6 SHIELD 7 BR/B 8 R/G 8 R/G 1 B 5 SB 6 B 11 BG 12 P 13 V 14 LG	
nal Name I	1 1
al No. Color of Sig Wire BG V V Color of Sig BG Color of Sig BG Color of Sig B B B B B B B C Color of Sig B B B B C C C C O C O C O C O C O C O C	е 4 Г –
	Terminal No. Color of Wire Sgnal Name Terminal No. Color of Wire Sgnal Name BG -

AUTOMATIC BACK DOOR SYSTEM

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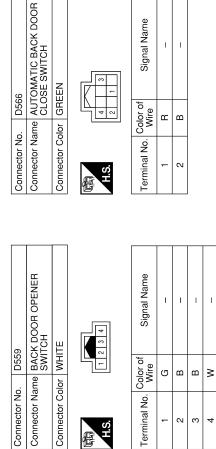
Connector Name WIRE TO WIRE Connector Color WHITE	Terminal No.		Signal Name	Connector No.	D554	
Connector Color WHITE		Wire		Connector Name	me JOIN	JOINT CONNECTOR-D01
	4		I	Connector Color	or WHITE	j.
	5	SB	I			I
	9	В	1			
	6	σ	1		· ·	
9 10 11 12 13 14 15	=	œ	1	211		
	12	J	1			
	13	M	1		-	
Terminal No. Color of Signal Name Wire	14	IJ	1	Terminal No.	Color of Wire	Signal Name
1 LG -				-	8	1
2 V -				0	в	1
3 В				e	SHIELD	I
Connector No. D555	Connector No.	D556		Connector No.	D557	
l e	Connector Name		TOUCH SENSOR LH			C DOOR LOCK
Connector Color GRAY	Connector Color	or WHITE		Connector Name		ASSEMBLY (WITH POWER BACK DOOR)
				Connector Color	-	ш
HH H.S.	H.S.	-				23
				H.S.	4	- 9
Color of		Color of			Color of	
lerminal No. Wire Signal Name	l erminal No.	Wire	signal Name	l erminal No.	Wire	signal Name
	-	თ	I	-	в	I
2 LG –	2	ГG	I	2	×	I
				4	В	I
				5	_	I
				9	SB	I
				7	ŋ	I
				8	В	T

AUTOMATIC BACK DOOR SYSTEM

Revision: September 2014

< WIRING DIAGRAM >

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Terminal No.

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Connector No.

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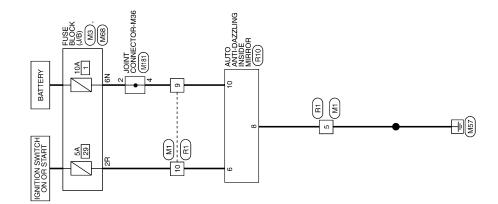
HOMELINK UNIVERSAL TRANSCEIVER

< WIRING DIAGRAM >

HOMELINK UNIVERSAL TRANSCEIVER

Wiring Diagram

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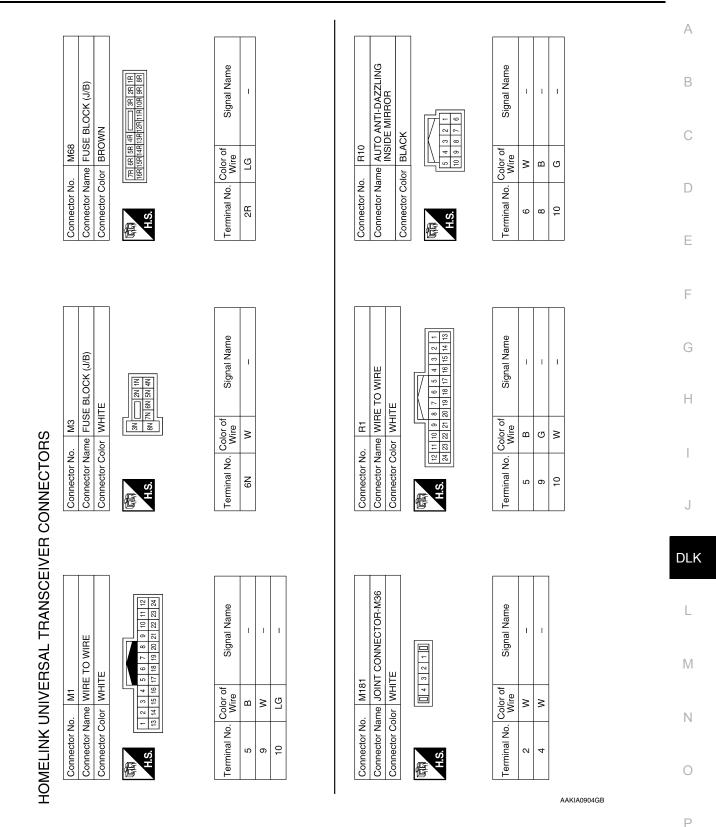


HOMELINK UNIVERSAL TRANSCEIVER

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HOMELINK UNIVERSAL TRANSCEIVER

< WIRING DIAGRAM >



Revision: September 2014

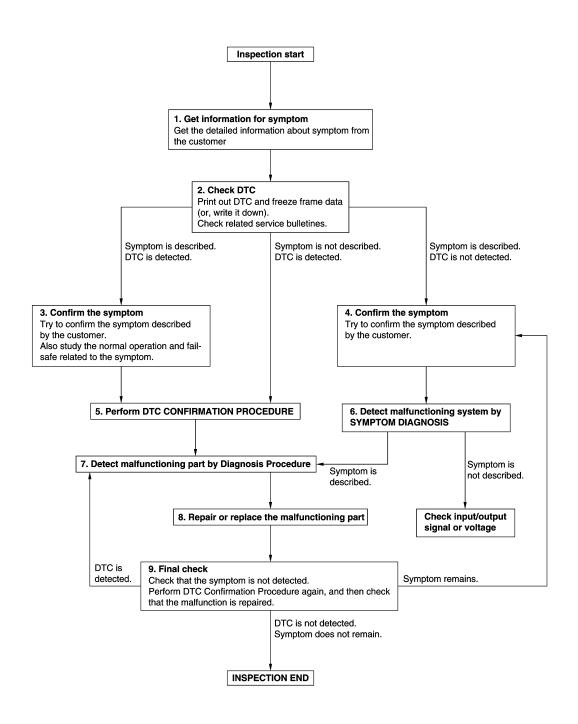
< BASIC INSPECTION >

BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000011151700

OVERALL SEQUENCE



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DETAILED FLOW

Revision: September 2014

< BASIC INSPECTION >

1.GET INFORMATION FOR SYMPTOM	٨
1. Get detailed information from the customer about the symptom (the condition and the environment when	A
the incident/malfunction occurs).Check operation condition of the function that is malfunctioning.	В
>> GO TO 2.	
2.снеск отс	С
1. Check DTC.	
 Perform the following procedure if DTC is detected. Record DTC and freeze frame data. (Print them out using CONSULT.) 	D
- Erase DTC.	
 Study the relationship between the cause detected by DTC and the symptom described by the customer. Check related service bulletins for information. 	Е
Are any symptoms described and any DTC detected?	
Symptom is described, DTC is detected.>>GO TO 3.	
Symptom is described, DTC is not detected.>>GO TO 4. Symptom is not described, DTC is detected.>>GO TO 5.	F
3. CONFIRM THE SYMPTOM	
Try to confirm the symptom described by the customer.	G
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.	Н
>> 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.	I
>> GO TO 6.	J
5.PERFORM DTC CONFIRMATION PROCEDURE	
	DL
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 <u>BCS-50, "DTC Inspection Priority Chart"</u> (BCM) and determine trouble diagnosis order.	1
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	M
this check. If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC CONFIR-	
MATION PROCEDURE.	Ν
Is DTC detected?	
YES >> GO TO 7. NO >> Check according to <u>GI-47, "Intermittent Incident"</u> .	0
6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS	0
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.	Ρ
Is the symptom described?	
YES >> GO TO 7. NO >> Monitor input data from related sensors or check voltage of related module terminals using CON-	
NO >> Monitor input data from related sensors or check voltage of related module terminals using CON- SULT.	

1.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 <u>GI-47, "Intermittent Incident"</u>.

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

- 1. Repair or replace the malfunctioning part.
- Reconnect parts or connectors disconnected during Diagnosis Procedure again after repair and replacement.
- 3. Check 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 TERMI-NAL

Description	701 B
When the battery is disconnected from the negative terminal, it is necessary to perform initial setting to oper ate 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 	D
Work Procedure	_
1.INITIALIZATION	E
1. Fully close the back door manually. (When back door is already fully closed, this operation is not neces sary).	3-
 Perform automatic back door open/close operation of back door. Check for noise or malfunctioning during operation. Check that hazard lamp blinks and that warning buzzer operates. 	F
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.	or ^G
>> Inspection End.	Н
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ADDITIONAL SERVICE WHEN REPLACING BCM

< BASIC INSPECTION >

ADDITIONAL SERVICE WHEN REPLACING BCM

Description

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

Work Procedure

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

INFOID:0000000011151703

INFOID:000000011151704

ADDITIONAL SERVICE WHEN REPLACING AUTOMATIC BACK DOOR CONTROL UNIT

< BASIC INSPECTION >

ADDITIONAL SERVICE WHEN REPLACING AUTOMATIC BACK DOOR CONTROL UNIT

Description INFOID:000000011151705	В
When replacing control module or removing connector terminal, it is necessary to perform initial setting to operate automatic back door system normally.	D
 NOTE: The following specified operations are not performed under the non-initialized condition. Automatic back door open/close function Anti-pinch function 	С
Work Procedure	D
1.INITIALIZATION	Е
1. Fully close the back door manually. (When back door is already fully closed, this operation is not necessary.)	
 Perform automatic back door open/close operation of back door. Check for noise or malfunctioning during operation. Check that hazard lamp blinks and that warning buzzer operates. 	F
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.	G
>> Inspection End.	Η
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CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

< BASIC INSPECTION >

CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

Description

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INFOID:0000000011151708

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

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.

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS U1000 CAN COMM CIRCUIT

Description

Refer to LAN-12, "CAN COMMUNICATION SYSTEM : System Description".

DTC Logic

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

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".

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INFOID:000000011151711

INFOID:000000011151709

INFOID:000000011151710

< 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 <u>LAN-38</u>, "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 in- ternal CAN communication circuit malfunc- tion.	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:000000011151715

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DTC	CONSULT display description	DTC detecting	condition	Possible cause
B2401	IGN OPEN	Automatic back door contro ignition switch ON signal via with BCM.		 BCM Automatic back door control module CAN communication system
TC CONFI	RMATION PROC	EDURE		
1.PERFORM	I DTC CONFIRM	TION PROCEDURE		
2. Operate a 3. Check Se <u>ls DTC detect</u> YES >> R	ted?		BACK DOOR CON	TROL MODULE using CONSULT
Diagnosis	Procedure			INFOID:0000000111517
1.снеск в	CM OUTPUT SIGI	NAL		
2. Select IG		NSULT. ATA MONITOR mode. trates normally according	to the following co	nditions.
Monite	or item	Condi	lion	Status

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-323</u>, "Removal and Installation".

OFF

NO >> Replace BCM. Refer to <u>BCS-80. "Removal and Installation"</u>.

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< 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 mal- function of half latch switch during automatic oper- ation of back door.	 Entry of foreign materials to back door lock assembly Back door mechanism Automatic back door control mod- ule 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 <u>DLK-120, "Diagnosis Procedure"</u>.

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	Condi	Status	
HALF LATCH SW	Back door	Fully closed/Half latch	OFF
HALL LATCH SW	Dack 0001	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.

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

	(+)			
Back doo	r lock assembly	(-)		Voltage (Approx.)
Connector	Terminal			(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
D557	6	Ground	I	Battery voltage
	I SWITCH CIRCUIT c back door control mod tween automatic back	dule connector. door control module harr	ness connecto	r and back door lock
Automatic back de	por control module	Back door lock as	sembly	
Connector	Terminal	Connector	Terminal	Continuity
B55	3	D557	6	Yes
B55 e inspection result n	ormal?			No
e inspection result n S >> Replace aut >> Repair or re	ormal? omatic back door contro	I module. Refer to <u>DLK-3</u>	23, "Removal a	
e inspection result n S >> Replace aut >> Repair or re HECK HALF LATCH	ormal? omatic back door contro blace harness. I SWITCH GROUND CI			
e inspection result n S >> Replace aut >> Repair or re HECK HALF LATCH ck continuity betwee	ormal? omatic back door contro blace harness. I SWITCH GROUND CI	RCUIT		and Installation".
e inspection result n S >> Replace aut >> Repair or re HECK HALF LATCH ck continuity betwee	ormal? omatic back door contro blace harness. I SWITCH GROUND Cl n back door lock assem	RCUIT		
e inspection result n S >> Replace aut >> Repair or rep HECK HALF LATCH ck continuity betwee Back dow Connector D557	ormal? omatic back door contro blace harness. I SWITCH GROUND CI n back door lock assem or lock assembly Terminal 8	RCUIT bly harness connector an		and Installation".
e inspection result n S >> Replace aut >> Repair or rep HECK HALF LATCH ck continuity betwee Back dow Connector D557 e inspection result n S >> GO TO 7. >> Repair or rep HECK HALF LATCH er to DLK-121, "Com e inspection result n S >> GO TO 8.	ormal? omatic back door contro- place harness. I SWITCH GROUND CI n back door lock assem or lock assembly Terminal 8 ormal? place back door lock assen I SWITCH ponent Inspection". ormal?	RCUIT bly harness connector an Ground	d ground.	Continuity Yes
e inspection result n S >> Replace aut >> Repair or replace HECK HALF LATCH ck continuity between Back down Connector D557 e inspection result n S >> GO TO 7. >> Repair or replace HECK HALF LATCH er to <u>DLK-121, "Comments</u> s >> GO TO 8. >> Replace back	ormal? omatic back door contro- place harness. I SWITCH GROUND CI n back door lock assem or lock assembly Terminal 8 ormal? place back door lock assen I SWITCH ponent Inspection". ormal? k door lock assembly. F	RCUIT bly harness connector an Ground	d ground.	Continuity Yes
e inspection result n S >> Replace aut >> Repair or rep HECK HALF LATCH ck continuity betwee Back dow Connector D557 e inspection result n S >> GO TO 7. >> Repair or rep HECK HALF LATCH er to <u>DLK-121, "Com</u> e inspection result n S >> GO TO 8. >> Replace bac HECK INTERMITTE er to <u>GI-47, "Intermitt</u> >> Inspection E	ormal? omatic back door contro- place harness. I SWITCH GROUND CI n back door lock assem or lock assembly Terminal 8 ormal? olace back door lock asse I SWITCH ponent Inspection". ormal? k door lock assembly. F ENT INCIDENT ent Incident". nd.	RCUIT bly harness connector an Ground	d ground.	Continuity Yes
e inspection result n S >> Replace aut >> Repair or rep HECK HALF LATCH ck continuity betwee Back dou Connector D557 e inspection result n S >> GO TO 7. >> Repair or rep HECK HALF LATCH r to <u>DLK-121, "Com</u> e inspection result n S >> GO TO 8. >> Replace bac HECK INTERMITTE r to <u>GI-47, "Intermitter</u>	ormal? omatic back door contro- place harness. I SWITCH GROUND CI n back door lock assem or lock assembly Terminal 8 ormal? olace back door lock asse I SWITCH ponent Inspection". ormal? k door lock assembly. F ENT INCIDENT ent Incident". nd.	RCUIT bly harness connector an Ground	d ground.	Continuity Yes

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< DTC/CIRCUIT DIAGNOSIS >

1. СНЕСК SWITCH

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

Back door lock	Back door lock assembly		Condition	
Termi	nal	Condition		Continuity
4			Open	Yes
4		Back door lock	Fully closed/Half latch	No
5			Fully close	Yes
5	8		Open/Half latch	No
6	o		Half latch	Yes
0			Fully closed/Open	No
7		Back door	On	Yes
I		switch	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

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DTC DETECTION LOGIC В CONSULT display DTC DTC detecting condition Possible cause description · Improper installation of touch sensor Automatic back door control module detects a mal-Touch sensor RH TOUCH SEN R B2416 function of touch sensor RH during automatic oper-D OPEN Harness or connectors ation of back door. Automatic back door control module Е DTC CONFIRMATION PROCEDURE 1.PERFORM DTC CONFIRMATION PROCEDURE F 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-123, "Diagnosis Procedure". NO >> Inspection End. Diagnosis Procedure INFOID:000000011151721 Н Regarding Wiring Diagram information, refer to <u>DLK-96, "Wiring Diagram"</u>. 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? DLK YES >> GO TO 2. NO >> Refer to DLK-311, "TOUCH SENSOR : Removal and Installation". 2.CHECK TOUCH SENSOR MONITOR ITEM L Select AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT. 1. 2. Select TOUCH SEN RH in DATA MONITOR mode. 3 Check that the function operates normally according to the following conditions. M Monitor item Condition Status OFF Other than below Ν TOUCH SEN RH Touch sensor RH Detect obstruction ON Is the inspection result normal? YES >> GO TO 8. NO >> GO TO 3. $\mathbf{3}$.check touch sensor input signal Ρ 1. Turn ignition switch OFF. Check voltage between touch sensor RH harness connector and automatic back door control module har-2.

Check voltage between touch sensor RH harness connector and automatic back door control module harness connector.

B2416 TOUCH SENSOR RH

< DTC/CIRCUIT DIAGNOSIS >

(+)	(–) Automatic back door control mod- ule		Condition			
Touch se	ensor RH					Voltage (Approx.)	
Connector	Terminal	Connector	Terminal				
D555	1	B55	13	Touch sensor tion		1.8 – 5 V	
0000	I	600	15	RH	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.

 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		Continuity	
B55	1	D555	1	Yes	

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

Automatic back do	or control module		Continuity
Connector	Terminal	Ground	Continuity
B55	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.

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

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

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

Automatic back doo	or control module		Continuity
Connector	Terminal	Ground	Continuity
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 >

	(+)			
Automa	atic back door contro	ol module	()	Voltage (Approx.)
Connector		Terminal		
B55		13	Ground	0.01 – 0 V
s the inspection result	t normal?			
YES >> GO TO 7.				
		loor control module. I	Refer to <u>DLK-323, "Re</u>	emoval and Installation".
CHECK TOUCH SE				
Refer to <u>DLK-125, "Co</u>		<u>ction"</u> .		
s the inspection result	t normal?			
YES >> GO TO 8. NO >> Replace to	auch sensor RH	Refer to DI K-311 "		emoval and Installation".
^				cmovar and motaliation.
		T		
B. CHECK INTERMIT		Т		
3. CHECK INTERMIT Refer to <u>GI-47, "Interm</u>		T		
Refer to <u>GI-47, "Interm</u>	nittent Incident".	IT		
Refer to <u>GI-47, "Interm</u> >> Inspection	n <u>ittent Incident"</u> . n End.	IT		
Refer to <u>GI-47, "Interm</u>	n <u>ittent Incident"</u> . n End.	ΙΤ		INFOID:000000011151722
Refer to <u>GI-47, "Interm</u> >> Inspection	n <u>ittent Incident"</u> . 1 End. 2 Ection	IT		INFQID:000000011151722
Refer to <u>GI-47, "Interm</u> >> Inspection Component Inspe 1.CHECK TOUCH SE	nittent Incident". n End. ection ENSOR RH	Т		INFOID:000000011151722
Refer to <u>GI-47, "Interm</u> >> Inspection Component Inspe 1.CHECK TOUCH SE 1. Turn ignition switc 2. Disconnect touch	nittent Incident". n End. ection ENSOR RH h OFF.			INFQID:000000011151722
Refer to <u>GI-47, "Interm</u> >> Inspection Component Inspe 1.CHECK TOUCH SE 1. Turn ignition switc 2. Disconnect touch	nittent Incident". End. ENSOR RH h OFF. sensor RH conn			INFOID:000000011151722
Refer to <u>GI-47, "Interm</u> >> Inspection Component Inspe 1.CHECK TOUCH SE 1. Turn ignition switc 2. Disconnect touch s 3. Check resistance I	nittent Incident". n End. ection ENSOR RH h OFF. sensor RH conn between touch s	nector.		
Refer to <u>GI-47, "Interm</u> >> Inspection Component Inspe 1.CHECK TOUCH SE 1. Turn ignition switc 2. Disconnect touch	nittent Incident". End. ENSOR RH h OFF. sensor RH conn between touch s	nector. sensor RH terminals.	ndition	INFOID:00000001115172
Refer to <u>GI-47, "Interm</u> >> Inspection Component Inspe 1.CHECK TOUCH SE 1. Turn ignition switc 2. Disconnect touch s 3. Check resistance I Touch sen	nittent Incident". End. ENSOR RH h OFF. sensor RH conn between touch s	nector. sensor RH terminals.	ndition Detect obstruction	Resistance

YES >> Inspection End.

NO >> Replace touch sensor RH. Refer to DLK-311. "TOUCH SENSOR : Removal and Installation". L

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B2417 TOUCH SENSOR LH

< DTC/CIRCUIT DIAGNOSIS >

B2417 TOUCH SENSOR LH

DTC Logic

INFOID:000000011151723

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2417	TOUCH SEN L OPEN	Automatic back door control module detects a mal- function of touch sensor LH during automatic oper- ation of back door.	IOUCH SENSOR I H

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 <u>DLK-126</u>, "Diagnosis Procedure".
- NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000011151724

Regarding Wiring Diagram information, refer to <u>DLK-96, "Wiring Diagram"</u>.

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 <u>DLK-311, "TOUCH SENSOR : Removal and Installation"</u>.

2. CHECK TOUCH SENSOR MONITOR ITEM

- 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 >> GO TO 8.

NO >> GO TO 3.

 $\mathbf{3}$.check touch sensor input signal

1. 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 >

Touch s	(+) sensor LH	Automatic back	-) door control mod-	Сог	ndition	Voltage (Approx.)	
Connector	Terminal	Connector	ile Terminal	_		(Αμριόχ.)	
		DEE	10	Touch sensor	Detect obstruc- tion	1.8 – 5 V	
D556	1	B55	13	LH	Other than above	2.72 – 7.27 V	
	on result norn	nal?					
	O TO 5. O TO 4.						
		R LH CIRCUIT					
				touch sensor LH	- connector		
						and touch sense	
harness co	onnector.						
Autom	atic back door c	ontrol module		Touch sensor LH			
Conne		Terminal	Conne		Terminal	Continuity	
B55	5	2	D55		1	Yes	
Check cor	tinuity betwe	en automatic ba	ack door contro	ol module harne	ss connector an	nd ground.	
	Automotic heal		-				
	Automatic back	door control modul	e			Continuity	
	nnootor	Torn	ainal	Ground		Continuity	
	nnector		ninal	Ground		-	
ne inspectio ES >> Re	B55 on result norn eplace autom	nal? atic back door o	2		323. "Removal a	No	
ne inspection ES >> Re D >> Re CHECK TO Disconnect Check cor harness co	B55 on result norn eplace autom epair or replac UCH SENSC tautomatic b ntinuity betwe onnector.	atic back door of ce harness. OR LH GROUNI ack door contro en automatic b	2 control module D CIRCUIT 1 ol module and	. Refer to <u>DLK-3</u> touch sensor LH rol module harn	l connector. less connector a	No	
ne inspection ES >> Re D >> Re CHECK TO Disconneor Check cor harness co Autom	B55 on result norm eplace autom epair or replace UCH SENSC ot automatic b ntinuity betwe onnector.	atic back door of ce harness. PR LH GROUNI ack door contro en automatic b	2 control module D CIRCUIT 1 ol module and ack door cont	. Refer to <u>DLK-</u> touch sensor LF rol module harn Touch sensor LH	l connector. ess connector a	No Ind Installation".	
ne inspection ES >> Re D >> Re CHECK TO Disconnect Check cor harness co	B55 on result norn eplace autom epair or replace UCH SENSC to automatic b ntinuity betwee onnector. atic back door co ector	atic back door of ce harness. OR LH GROUNI ack door contro en automatic b	2 control module D CIRCUIT 1 ol module and	. Refer to <u>DLK-</u> touch sensor LH rol module harn Touch sensor LH	l connector. less connector a	No Ind Installation". and touch senso Continuity	
ne inspection ES >> Re D >> Re CHECK TO Disconnec Check cor harness co Autom Connec B55	B55 on result norm eplace autom epair or replace UCH SENSC ot automatic b ntinuity betwee onnector.	atic back door of ce harness. OR LH GROUNI ack door contro en automatic b ontrol module Terminal 13	2 control module D CIRCUIT 1 ol module and ack door cont Conne	. Refer to DLK-3 touch sensor LH rol module harn Touch sensor LH ctor	I connector. less connector a Terminal 2	No and Installation". and touch senso Continuity Yes	
ne inspection ES >> Re D >> Re CHECK TO Disconnec Check cor harness co Autom Conne B55 Check cor	B55 on result norn eplace autom epair or replace UCH SENSC UCH SENSC at automatic b onnector. atic back door c ector	atic back door of ce harness. OR LH GROUNI ack door contro en automatic b ontrol module Terminal 13 en automatic ba	2 control module D CIRCUIT 1 ol module and ack door contro D55 ack door contro	. Refer to DLK-3 touch sensor LH rol module harn Touch sensor LH ctor	l connector. less connector a	No and Installation". and touch senso Continuity Yes	
ne inspection ES >> Re D >> Re CHECK TO Disconnec Check cor harness co Autom Conne B55 Check cor	B55 on result norn eplace autom epair or replace UCH SENSC UCH SENSC at automatic b onnector. atic back door c ector	atic back door of ce harness. OR LH GROUNI ack door contro en automatic b ontrol module Terminal 13	2 control module D CIRCUIT 1 ol module and ack door contro D55 ack door contro	. Refer to DLK-3	I connector. less connector a Terminal 2	No Ind Installation". and touch senso Continuity Yes Ind ground.	
ne inspection ES >> Re D >> Re CHECK TO Disconnec Check cor harness co Autom Conne B55 Check cor	B55 on result norm eplace autom epair or replace UCH SENSC UCH SENSC at automatic b onnector. atic back door co ector of tinuity betwe Automatic back onnector	atic back door of ce harness. PR LH GROUNI ack door control en automatic b ontrol module Terminal 13 en automatic ba door control modul Term	2 control module D CIRCUIT 1 ol module and ack door contro D55 ack door contro e ninal	. Refer to DLK-3 touch sensor LH rol module harn Touch sensor LH ctor	I connector. less connector a Terminal 2	No Ind Installation". and touch sense Continuity Yes Ind ground. Continuity	
ne inspection S >> Re D >> Re CHECK TO Disconnec Check cor harness co Autom Connec B55 Check cor Cc	B55 on result norm eplace autom epair or replace UCH SENSC of automatic b trinuity betwe onnector. atic back door c ector atinuity betwe Automatic back onnector B55	atic back door of ce harness. PR LH GROUNI ack door control en automatic b ontrol module Terminal 13 en automatic ba door control modul Term 1	2 control module D CIRCUIT 1 ol module and ack door contro D55 ack door contro e	. Refer to DLK-3	I connector. less connector a Terminal 2	No Ind Installation". and touch senso Continuity Yes Ind ground.	
ne inspection ES >> Re D >> Re CHECK TO Disconnec Check cor harness co Autom Conne B55 Check cor Conne	B55 on result norm eplace autom epair or replace UCH SENSC UCH SENSC at automatic b trinuity betwe onnector. atic back door c ector atinuity betwe Automatic back onnector B55 on result norm	atic back door of ce harness. PR LH GROUNI ack door control en automatic b ontrol module Terminal 13 en automatic ba door control modul Term 1	2 control module D CIRCUIT 1 ol module and ack door contro D55 ack door contro e ninal	. Refer to DLK-3	I connector. less connector a Terminal 2	No Ind Installation". and touch sense Continuity Yes Ind ground. Continuity	
ne inspection ES >> Re D >> Re CHECK TO Disconnec Check cor harness co Autom Conne B55 Check cor Conne	B55 on result norn eplace autom eplare autom eplare autom eplare replace UCH SENSC UCH SENSC atic back door c ector atic back door c ector atic back door c ector bitinuity betwe Automatic back onnector B55 on result norn O TO 6.	atic back door of ce harness. PR LH GROUNI ack door control en automatic b ontrol module Terminal 13 en automatic back door control modul Terminal 13 en automatic back door control modul 13 en automatic back door control modul 13 en automatic back door control modul	2 control module D CIRCUIT 1 ol module and ack door contro D55 ack door contro e ninal	. Refer to DLK-3	I connector. less connector a Terminal 2	No Ind Installation". and touch sense Continuity Yes Ind ground. Continuity	
ne inspection ES >> Re D >> Re CHECK TO Disconnec Check cor harness co Autom Conne B55 Check cor Check cor Conne ES >> G0 D >> Re	B55 on result norm eplace autom eplar or replace UCH SENSC ot automatic b trinuity betwee onnector. atic back door cr ector atic back door cr ector atic back door cr ector b ntinuity betwee Automatic back onnector B55 on result norm O TO 6. epair or replace	atic back door of ce harness. PR LH GROUNI ack door control en automatic b ontrol module Terminal 13 en automatic back door control module Terminal 13 en automatic back door control module Terminal 13 en automatic back door control module 13 en automatic back door control module 13 en automatic back door control module 13 en automatic back door control module	2 control module D CIRCUIT 1 ol module and ack door contro D55 ack door contro e ninal 3	. Refer to DLK-3	I connector. less connector a Terminal 2	No Ind Installation". and touch sense Continuity Yes Ind ground. Continuity	

B2417 TOUCH SENSOR LH

< DTC/CIRCUIT DIAGNOSIS >

(-	(+)		
Automatic back door control module		()	Voltage (Approx.)
Connector	Terminal		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
B55	13	Ground	0.01 – 0 V
Is the inspection result normal? YES >> GO TO 7. NO >> Replace automatic 7.CHECK TOUCH SENSOR	back door control module	. Refer to <u>DLK-323, "Ren</u>	noval and Installation".
Refer to <u>DLK-128, "Componen</u> Is the inspection result normal?	t Inspection".		
YES >> GO TO 8. NO >> Replace touch sen	sor LH. Refer to <u>DLK-311.</u>	"TOUCH SENSOR : Rer	moval and Installation"
8. CHECK INTERMITTENT IN	CIDENT		
Refer to GI-47, "Intermittent Inc	<u>cident"</u> .		
>> Inspection End.			
Component Inspection			INFOID:0000000111517
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	Touch sensor LH		Condition	
Te	rminal	Condition		(Approx.)
1	2	Touch sensor LH	Detect obstruction	380 – 420 kΩ
I	2		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

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DTC DETECTION LOGIC В CONSULT display DTC DTC detecting condition Possible cause description · Entry of foreign materials to back door lock assembly Automatic back door control module detects a mal- Back door mechanism D B2419 **OPEN SW** function of open switch during automatic operation Automatic back door control modof back door. ule Open switch · Harness or connectors Ε 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". >> Inspection End. NO Н **Diagnosis** Procedure INFOID 000000011151727 Regarding Wiring Diagram information, refer to <u>DLK-96, "Wiring Diagram"</u>. 1. CHECK FOR FOREIGN MATERIALS IN BACK DOOR LOCK ASSEMBLY Check for entry of foreign materials in back door lock assembly. DLK Is the inspection result normal? YES >> GO TO 2. NO >> Remove foreign materials. $\mathbf{2}$.CHECK BACK DOOR OPEN/CLOSE OPERATION Manually check open and close operation of back door. Is the inspection result normal? M YFS >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3.CHECK OPEN SWITCH SIGNAL Ν Select AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT. 1. Select OPEN SW in DATA MONITOR mode. 2. Check that the function operates normally according to the following conditions. 3. Monitor item Condition Status Ρ Fully closed/Half latch OFF OPEN SW Back door Open ON

Is the inspection result normal?

YES >> GO TO 8.

NO >> GO TO 4.

4.CHECK OPEN SWITCH INPUT SIGNAL

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.

(+)		
Back door loo	Back door lock assembly		Voltage (Approx.)
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 of	Automatic back door control module		Back door lock assembly	
Connector	Terminal	Connector	Terminal	Continuity
B55	11	D557	4	Yes

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

Automatic back d	oor control module		Continuity
Connector	Connector Terminal		Continuity
B55	11		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-323, "Removal and Installation"</u>.

NO >> Repair or replace harness.

O.CHECK OPEN SWITCH GROUND CIRCUIT

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

Back door lock	assembly	Continuity	
Connector	Terminal	Ground	Continuity
D557	8		Yes

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness.

7. CHECK OPEN SWITCH

Refer to <u>DLK-130</u>, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace back door lock assembly. Refer to <u>DLK-310, "DOOR LOCK : Removal and Installation"</u>.

8. CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

Component Inspection

COMPONENT INSPECTION

Revision: September 2014

INFOID:0000000011151728

B2419 OPEN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

1. CHECK SWITCH

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

Back door loc	k assembly		Condition	Continuity		
Termi	nal	-	Condition	Continuity	С	
			Open	Yes		
4			Fully closed/Half latch	No	-	
5	Back door lock		Fully close	Fully close	Yes	D
5		Open/Half latch	No	-		
	ŏ		Half latch	Yes	E	
6			Fully closed/Open	No		
7		Back door	On	Yes	-	
1		switch	Off	No	F	

Is the inspection result normal?

YES >> Inspection End.

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

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< DTC/CIRCUIT DIAGNOSIS >

B2420 CLOSE SWITCH

DTC Logic

INFOID:000000011151729

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2420	CLOSE SW	Automatic back door control module detects a mal- function 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 mod- ule Close switch Harness or connectors

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.

 Check Self-Diagnostic Result mode of AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT. Is DTC detected?

YES >> Refer to <u>DLK-132</u>, "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
	Dack door	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. Check voltage between back door lock assembly harness connector and ground. 3.

				Valtara
Back door lock	assembly	(-)		Voltage (Approx.)
Connector	Terminal			· · · · · ·
D557	5	Ground	E	Battery voltage
the inspection result normation (ES >> GO TO 6. NO >> GO TO 5. .CHECK CLOSE SWITCH Disconnect automatic bac Check continuity between assembly harness connect	CIRCUIT ack door control module en automatic back doo		ness connector	and back door lock
Automatic back door co	ontrol module	Back door lock as	ssembly	
Connector	Terminal	Connector	Terminal	Continuity
B55	5	D557	5	Yes
B55 the inspection result norm (ES >> Replace automa NO >> Repair or replace	tic back door control m	odule. Refer to <u>DLK-3</u>	23, "Removal a	No and Installation".
		harness connector ar	nd ground.	
CHECK CLOSE SWITCH	ick door lock assembly	harness connector ar	nd ground.	
heck continuity between ba	ick door lock assembly	harness connector ar	nd ground.	Continuity
heck continuity between ba	ick door lock assembly	_	nd ground.	Continuity Yes
heck continuity between ba Back door loc Connector	k assembly Terminal 8 al? e harness.	_	nd ground.	
heck continuity between ba Back door loc Connector D557 the inspection result norma YES >> GO TO 7. NO >> Repair or replace	k assembly k assembly Terminal 8 al? e harness. ent Inspection".	_	nd ground.	
heck continuity between ba Back door loc Connector D557 the inspection result normation YES >> GO TO 7. NO >> Repair or replace CHECK CLOSE SWITCH efer to DLK-133, "Component the inspection result normation YES >> GO TO 8. NO >> Replace back do	ick door lock assembly k assembly Terminal 8 al? e harness. ent Inspection". al? bor lock assembly. Refe	Ground		Yes
heck continuity between ba Back door loc Connector D557 the inspection result normation YES >> GO TO 7. NO >> Repair or replace CHECK CLOSE SWITCH efer to DLK-133. "Component the inspection result normation YES >> GO TO 8. NO >> Replace back do CHECK INTERMITTENT	ick door lock assembly k assembly Terminal 8 al? e harness. ent Inspection". al? bor lock assembly. Refe	Ground		Yes
heck continuity between ba Back door loc Connector D557 the inspection result normation YES >> GO TO 7. NO >> Repair or replace CHECK CLOSE SWITCH efer to DLK-133, "Component the inspection result normation YES >> GO TO 8. NO >> Replace back do	ick door lock assembly k assembly Terminal 8 al? e harness. ent Inspection". al? bor lock assembly. Refe	Ground		Yes
heck continuity between ba Back door loc Connector D557 the inspection result normation YES >> GO TO 7. NO >> Repair or replace CHECK CLOSE SWITCH efer to DLK-133. "Component the inspection result normation YES >> GO TO 8. NO >> Replace back do CHECK INTERMITTENT	ick door lock assembly k assembly Terminal 8 al? e harness. ent Inspection". al? bor lock assembly. Refe	Ground		Yes
heck continuity between ba Back door loc Connector D557 the inspection result normation YES >> GO TO 7. NO >> Repair or replace CHECK CLOSE SWITCH efer to DLK-133. "Component the inspection result normation YES >> GO TO 8. NO >> Replace back do CHECK INTERMITTENT efer to GI-47, "Intermittent	ick door lock assembly Iterminal 8 al? e harness. ent Inspection". al? bor lock assembly. Reference INCIDENT Incident".	Ground		Yes
heck continuity between ba Back door loc Connector D557 the inspection result normation YES >> GO TO 7. NO >> Repair or replact CHECK CLOSE SWITCH efer to DLK-133. "Component the inspection result normation YES >> GO TO 8. NO >> Replace back do CHECK INTERMITTENT efer to GI-47, "Intermittent >> Inspection End.	ick door lock assembly k assembly Image: k assembly	Ground		Yes

А

B2420 CLOSE SWITCH

< DTC/CIRCUIT DIAGNOSIS >

1. CHECK SWITCH

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

Back door lock	Back door lock assembly Terminal		Condition	Continuity
Termir			Condition	Continuity
4	4		Open	Yes
4			Fully closed/Half latch	No
5		Back door lock	Fully close	Yes
5	0	Back door lock	Open/Half latch	No
6	0	8	Half latch	Yes
0			Fully closed/Open	No
7		Back door	On	Yes
I		switch	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:000000011151732

DTC DETECTION LOGIC

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	CONSULT display description	DTC detecting condition	Possible cause
B2422	BACK DOOR STATE	When the automatic back door control module de- tects back door position malfunction according to the pulse signal.	 Improper installation of back door assembly [CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFOR- MATION]: not complete Back door mechanism Encoder Automatic back door control mod- ule Harness or connectors
	RMATION PROC		
1.PERFORM	M DTC CONFIRMA	TION PROCEDURE	
3. Check "S SULT. Is DTC detec YES >> F	ted?	r. ult" mode of "AUTOMATIC BACK DOOR C <u>Diagnosis Procedure"</u> .	CONTROL MODULE" using CON-
	Procedure		INFOID:000000011151733
5 5	0 0	nation, refer to <u>DLK-96, "Wiring Diagram"</u> .	
1. Perform	initialization setting	TIC BACK DOOR POSITION INFORMATIC of automatic back door position information	
 Perform Refer to Erase DT 	initialization setting <u>DLK-115, "Work Pro</u> ГC, and then repeat	of automatic back door position information	
 Perform i Refer to Erase DT Is DTC detec 	initialization setting <u>DLK-115, "Work Pro</u> ГC, and then repeat	of automatic back door position information ocedure".	
1. Perform Refer to 2. Erase DT <u>Is DTC detec</u> YES >> C NO >> In	initialization setting DLK-115, "Work Pro IC, and then repeat ted? GO TO 2. nspection End.	of automatic back door position information <u>ocedure"</u> . "PERFORM DTC CONFIRMATION PROC	
1. Perform Refer to 2. Erase D <u>Is DTC detec</u> YES >> C NO >> In 2. CHECK IN	initialization setting <u>DLK-115. "Work Pro</u> IC, and then repeat <u>ted?</u> GO TO 2. nspection End.	of automatic back door position information ocedure". "PERFORM DTC CONFIRMATION PROC BACK DOOR ASSEMBLY	
1. Perform Refer to 2. Erase DT <u>Is DTC detec</u> YES >> C NO >> In 2. CHECK IN 1. Check th Refer to 2. Check ba	initialization setting DLK-115, "Work Pro IC, and then repeat ted? GO TO 2. nspection End. NSTALLATION OF E at back door assem DLK-296, "BACK D	of automatic back door position information <u>ocedure"</u> . "PERFORM DTC CONFIRMATION PROC	EDURE".
 Perform Refer to Refer to Erase DT Erase DT Erase DT MC detec YES >> C NO >> In CHECK IN Check th Refer to Check base Check bas	initialization setting <u>DLK-115. "Work Pro</u> FC, and then repeat <u>sted?</u> GO TO 2. Inspection End. INSTALLATION OF E at back door assem <u>DLK-296. "BACK Dr</u> ack door assembly foreign materials. tion result normal?	of automatic back door position information <u>cedure"</u> . "PERFORM DTC CONFIRMATION PROC BACK DOOR ASSEMBLY bly is installed normally. <u>DOR ASSEMBLY : Adjustment"</u> .	EDURE".
 Perform Refer to Refer to Erase DT Erase DT BTC detectory YES >> 0 NO >> In CHECK IN Check th Refer to Check th Refer to Check base Check base	initialization setting DLK-115. "Work Pro IC, and then repeat ted? GO TO 2. Inspection End. INSTALLATION OF E at back door assem DLK-296. "BACK Dr ack door assembly foreign materials. tion result normal? GO TO 3.	of automatic back door position information <u>ccedure"</u> . "PERFORM DTC CONFIRMATION PROC BACK DOOR ASSEMBLY bly is installed normally. <u>OOR ASSEMBLY : Adjustment"</u> . mechanism deformation, looseness, rattle,	EDURE".
1. Perform Refer to 2. Erase D Is DTC detec YES >> 0 NO >> In 2. CHECK IN 1. Check th Refer to 2. Check ba pinched f Is the inspect YES >> 0 NO >> F	initialization setting DLK-115. "Work Pro IC, and then repeat ted? GO TO 2. Inspection End. INSTALLATION OF E at back door assem DLK-296. "BACK Dr ack door assembly foreign materials. tion result normal? GO TO 3.	of automatic back door position information <u>cedure"</u> . "PERFORM DTC CONFIRMATION PROC BACK DOOR ASSEMBLY bly is installed normally. <u>DOR ASSEMBLY : Adjustment"</u> .	EDURE".

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.

	(+)		()	
	Spindle unit			Voltage (Approx.)
Cor	nector	Terminal		(, , , , , , , , , , , , , , , , , , ,
LH	B70	- 8	Quest	h Potton woltago
RH	B162	- O	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.

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

Automatic back d	oor control module	Spindle unit Connector Terminal		Continuity	
Connector	Terminal			Terminal	Continuity
B55	19	LH	B70	Q	Yes
600	20	RH	B162	o	les

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

Automatic back d	oor control module		Continuity
Connector	Terminal	Ground	Continuity
B55	19	Ground	No
000	20	*	INU

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-323, "Removal and Installation"</u>.

NO >> Repair or replace harness.

6.CHECK ENCODER CIRCUIT 2

1. Disconnect automatic back door control module connector.

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

B2422 BACK DOOR STATE

< DTC/CIRCUIT DIAGNOSIS >

Automatic back d	Automatic back door control module		Spindle unit			А	
Connector	Terminal	Con	nector	Terminal	Continuity		
	6	LH	B70	3			
B55	7			10	Yes	В	
800	8		8 RH B16	B162	3	165	
	9	ΝП	B102	10	-	С	
B. Check continuity	/ between automat	ic back door control	module harness of	connector and gro	bund.		

Automatic back do	oor control module		Oantinuitu	
Connector	Terminal		Continuity	
	6	Ground		
B55	7	Ground	No	
800	8		No	
	9			

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			Voltage	•
 Connector	Terminal	Ground	(Approx.)	.1
B55 21			0 V	0

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace automatic back door control module. Refer to <u>DLK-323, "Removal and Installation"</u>.

8. CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-323, "Removal and Installation"</u>.

NO >> Repair or replace the malfunctioning parts.

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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 de- scription	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.
- Check "Self-Diagnostic Result" mode of "AUTOMATIC BACK DOOR CONTROL MODULE" using CON-SULT.

Is DTC detected?

- YES >> Refer to <u>DLK-138</u>, "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 d	Automatic back door control module		Spindle unit		
Connector	Terminal	Connector		Terminal	Continuity
	27	LH	B70	9	
B56	34	LH	670	2	Yes
630	29	RH	B162	9	Tes
	36	КП	D 102	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		Continuity	/-
Terminal		Continuity	
27	Ground		-
29	Ground	No	E
34		INO	
36	1		(
	Terminal 27 29 34	Terminal 27 29 34 Ground	Terminal Continuity 27 Ground 29 No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-323, "Removal and Installation"</u>.

NO >> Repair or replace harness.

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< 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 INFOR- MATION]: not complete Back door mechanism Automatic back door control mod- ule Encoder Harness or connectors

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

- YES >> Refer to <u>DLK-140, "Diagnosis Procedure"</u>.
- 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

- Perform initialization setting of automatic back door position information. Refer to <u>DLK-115, "Work Procedure"</u>.
- 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

- Check that back door assembly is installed normally. Refer to <u>DLK-296, "BACK DOOR ASSEMBLY : Adjustment"</u>.
- 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 it	em	Ĺ	Condition	•	Status
SPINDLE LH EN	ICODER A		Moving (auto or manu- al)	н	I⇔LO
		Back door	When stopped	Н	ll or LO
SPINDLE LH EN	SPINDLE LH ENCODER B		Moving (auto or manu- al)	н	I⇔LO
			When stopped	Н	ll or LO
CHECK ENCODE Turn ignition swi Disconnect spine	automatic ba ER POWER S tch OFF. dle unit LH co	UPPLY	odule. Refer to <u>DLK-32</u>		nd Installation".
	-	e unit LH namess	connector and ground		
(+				Vo	Itage
Spindle			(-)		prox.)
Connector	Terminal		Cround	D - 11	welter
B70 he inspection rest	8		Ground	Battery	y voltage
D >> GO TO S CHECK ENCODE Disconnect auto	R CIRCUIT 1 matic back do	or control module omatic back dool	connector. r control module harne	ess connector a	and spindle ur
O >> GO TO CHECK ENCODE Disconnect auto Check continuity harness connect	R CIRCUIT 1 matic back do	omatic back door			
D >> GO TO S CHECK ENCODE Disconnect auto Check continuity harness connect	ER CIRCUIT 1 matic back do / between aut for.	omatic back door	r control module harne		and spindle ur
O >> GO TO S CHECK ENCODE Disconnect auto Check continuity harness connect Automatic ba Connector B55	ER CIRCUIT 1 matic back do between aut cor. ack door control r Te	omatic back door	r control module harne Spindle unit LH	1 Terminal 8	- Continuity Yes
O >> GO TO S CHECK ENCODE Disconnect auto Check continuity harness connect Automatic ba Connector B55 Check continuity	ER CIRCUIT 1 matic back do between aut or. ack door control r r between auto between auto atic back door co	omatic back door	Spindle unit LF Connector B70	Terminal 8 s connector and	- Continuity Yes
O >> GO TO & CHECK ENCODE Disconnect auto Check continuity harness connect Automatic ba Connector B55 Check continuity Autom Connector B55	ER CIRCUIT 1 matic back do between aut or. ack door control r r between auto to between auto to back door co	omatic back door	r control module harne Spindle unit LF Connector B70 control module harness	Terminal 8 s connector and	Continuity Yes d ground.
O >> GO TO S CHECK ENCODE Disconnect auto Check continuity harness connect Automatic ba Connector B55 Check continuity Autom Connector B55 the inspection resu ES >> Replace O >> Repair o CHECK ENCODE Disconnect auto	R CIRCUIT 1 matic back do between aut or. ack door control r ack door control r to	omatic back door nodule rminal 19 omatic back door of ntrol module Terminal 19 ck door control module or control module	Spindle unit LF Connector B70 Control module harness Ground Dodule. Refer to DLK-323	Terminal 8 s connector and d 3, "Removal ar	Continuity Yes d ground. Continuity No d Installation
O >> GO TO S CHECK ENCODE Disconnect auto Check continuity harness connect Automatic ba Connector B55 Check continuity Autom Connector B55 he inspection resu ES >> Replace O >> Repair o CHECK ENCODE Disconnect auto Check continuity harness connect	ER CIRCUIT 1 matic back do / between aut for. ack door control r ack door contr ack door control r ack door control r ack	omatic back door	Connector Connector B70 Ground Ground Connector. Connector.	Terminal 8 s connector and 3, "Removal ar ess connector a	Continuity Yes d ground. Continuity No d Installation
O >> GO TO S CHECK ENCODE Disconnect auto Check continuity harness connect Automatic ba Connector B55 Check continuity Autom Connector B55 the inspection resu ES >> Replace O >> Repair o CHECK ENCODE Disconnect auto Check continuity harness connect	R CIRCUIT 1 matic back do between aut or. ack door control r between auto atic back door control r automatic ba r replace harr R CIRCUIT 2 matic back do between aut cor. ack door control r between aut cor.	omatic back door	Spindle unit LF Connector B70 Control module harness Ground Odule. Refer to DLK-323 Connector. Con	Terminal 8 s connector and 3, "Removal ar ess connector a	Continuity Yes d ground. Continuity No d Installation
O >> GO TO S CHECK ENCODE Disconnect auto Check continuity harness connect Automatic ba Connector B55 Check continuity Autom Connector B55 the inspection resu ES >> Replace O >> Repair o CHECK ENCODE Disconnect auto Check continuity harness connect	R CIRCUIT 1 matic back do between aut or. ack door control r between auto atic back door control r automatic ba r replace harr R CIRCUIT 2 matic back do between aut cor. ack door control r between aut cor.	omatic back door	Connector Connector B70 Ground Ground Connector. Connector.	Terminal 8 s connector and 3, "Removal ar ess connector a	Continuity Yes d ground. Continuity No d Installation". and spindle ur

B2426 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

Automatic back of	Automatic back door control module		Continuity
Connector	Terminal	Ground	Continuity
B55	6	Ground	No
000	7	1	UNI

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 de	oor control module		Voltage
Connector	Terminal	Ground	(Approx.)
B55	21		0 V

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace automatic back door control module. Refer to <u>DLK-323, "Removal and Installation"</u>.

8. CHECK INTERMITTENT INCIDENT

Refer to <u>GI-47, "Intermittent Incident"</u>.

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-323, "Removal and Installation"</u>.

NO >> Repair or replace the malfunctioning parts.

B2427 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

B2427 ENCODER

DTC Logic

INFOID:000000011151738

DTC DETECTION LOGIC

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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 INFOR- MATION]: not complete Back door mechanism Automatic back door control mod- ule Encoder Harness or connectors
	IRMATION PROC		
		TION PROCEDURE	
	ition switch ON. automatic back doc	r.	
		ult" mode of "AUTOMATIC BACK DOOR C	CONTROL MODULE" using CON-
s DTC detec	cted?		
	Refer to <u>DLK-143, "I</u> Inspection End.	<u>Diagnosis Procedure".</u>	
	Procedure		INFOID:000000011151739
Regarding W	/iring Diagram inforr	nation, refer to <u>DLK-96, "Wiring Diagram"</u> .	
1.CALIBRA	TION OF AUTOMA	FIC BACK DOOR POSITION INFORMATIC	N
1. Perform Refer to	initialization setting DLK-115, "Work Pro	of automatic back door position information	
2. Erase D	TC, and then repeat	"PERFORM DTC CONFIRMATION PROC	EDURE".
S DTC detec YES >> (<u>cted?</u> GO TO 2.		
	Inspection End.		
		BACK DOOR ASSEMBLY	
		ibly is installed normally. OOR ASSEMBLY : Adjustment".	
2. Check b		mechanism deformation, looseness, rattle,	interference with other parts, and
	tion result normal?		
	GO TO 3. Repair or replace the	e malfunctioning parts.	
3. снеск е	NCODER SIGNAL		

Select "AUTOMATIC BACK DOOR CONTROL MODULE" using CONSULT. 1.

Select "SPINDLE RH ENCODER A" and "SPINDLE RH ENCODER B" in "DATA MONITOR" mode. 2.

Check that the function operates normally according to the following conditions. 3.

DLK-143

B2427 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

Monitor item	Condition		Status
SPINDLE RH ENCODER A	Desk deer	Moving (auto or manu- al)	HI ⇔ LO
		When stopped	HI or LO
SPINDLE RH ENCODER B	- Back door	Moving (auto or manu- al)	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 <u>DLK-323</u>, "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		(FF - 7	
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	Continuity
B55	20	B162	8	Yes

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

Automatic back door control module			Continuity
 Connector	Terminal	Ground	Continuity
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.

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

Automatic back d	oor control module	Spindle unit RH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B55	8	B162	3	Yes
855	9		10	

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

B2427 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

	oor control module		Continuity
Connector	Terminal	Ground	Continuity
B55	8	Ground	No
600	9		NO
he inspection result normal	<u>?</u>		
ES >> GO TO 7.	h		
O >> Repair or replace			
CHECK ENCODER CIRCU			
	door control module spindle		
Check continuity between	automatic back door contro	of module narness connecto	or and ground.
Automatic back d	oor control module		Voltage
Connector	Terminal	Ground	(Approx.)
5	04	1	
B55	21		0 V
the inspection result normal			0 V
the inspection result normal ES >> GO TO 8.	?		
he inspection result norma ES >> GO TO 8. O >> Replace automati	⊵ ? c back door control module.	Refer to <u>DLK-323, "Remov</u>	
the inspection result normal ES >> GO TO 8.	⊵ ? c back door control module.	Refer to <u>DLK-323, "Remov</u>	
the inspection result normal ES >> GO TO 8. O >> Replace automati CHECK INTERMITTENT II fer to <u>GI-47, "Intermittent Ir</u>	c back door control module. NCIDENT <u>icident"</u> .	Refer to <u>DLK-323, "Remov</u>	
the inspection result normal ES >> GO TO 8. O >> Replace automati CHECK INTERMITTENT II fer to <u>GI-47, "Intermittent Ir</u> the inspection result normal	<u>?</u> c back door control module. NCIDENT <u>ncident"</u> . I <u>?</u>		val and Installation"
the inspection result normal ES >> GO TO 8. O >> Replace automati CHECK INTERMITTENT II fer to <u>GI-47, "Intermittent Ir</u> the inspection result normal ES >> Replace automati	c back door control module. NCIDENT <u>icident"</u> . I <u>?</u> c back door control module.		val and Installation"
the inspection result normal ES >> GO TO 8. O >> Replace automati CHECK INTERMITTENT II fer to <u>GI-47, "Intermittent Ir</u> the inspection result normal ES >> Replace automati	<u>?</u> c back door control module. NCIDENT <u>ncident"</u> . I <u>?</u>		val and Installation"
he inspection result norma ES >> GO TO 8. O >> Replace automati CHECK INTERMITTENT II fer to <u>GI-47, "Intermittent Ir</u> he inspection result norma ES >> Replace automati	c back door control module. NCIDENT <u>icident"</u> . I <u>?</u> c back door control module.		val and Installation"
the inspection result normal ES >> GO TO 8. O >> Replace automati CHECK INTERMITTENT II fer to <u>GI-47, "Intermittent Ir</u> the inspection result normal ES >> Replace automati	c back door control module. NCIDENT <u>icident"</u> . I <u>?</u> c back door control module.		val and Installation"
the inspection result normal ES >> GO TO 8. O >> Replace automati CHECK INTERMITTENT II fer to <u>GI-47, "Intermittent Ir</u> the inspection result normal ES >> Replace automati	c back door control module. NCIDENT <u>icident"</u> . I <u>?</u> c back door control module.		val and Installation"
he inspection result norma ES >> GO TO 8. O >> Replace automati CHECK INTERMITTENT II fer to <u>GI-47, "Intermittent Ir</u> he inspection result norma ES >> Replace automati	c back door control module. NCIDENT <u>icident"</u> . I <u>?</u> c back door control module.		val and Installation"
he inspection result normal ES >> GO TO 8. O >> Replace automati CHECK INTERMITTENT II fer to <u>GI-47, "Intermittent Ir</u> he inspection result norma ES >> Replace automati	c back door control module. NCIDENT <u>icident"</u> . I <u>?</u> c back door control module.		val and Installation"

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B2428 AUTOMATIC BACK DOOR CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

B2428 AUTOMATIC BACK DOOR CONTROL UNIT

DTC Logic

INFOID:000000011151740

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:000000011151741

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:000000011151742

DTC DETECTION LOGIC

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DTC	CONSULT display description	DTC detecting condition	Possible cause	С
B242A	CLSR CONDITION	Automatic back door control module detects mal- functions 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 mod- ule Open switch Close switch Half latch switch Harness or connectors 	D
DTC CO	NFIRMATION PROC	EDURE		F
1.PERFC	ORM DTC CONFIRMA	TION PROCEDURE		
	gnition switch ON. ate back door auto clos	sure operation.		G
3. Checl	< Self-Diagnostic Resu	It mode of AUTOMATIC BACK DOOR CON	TROL MODULE using CONSULT.	
Is DTC de YES >	v> Refer to <u>DLK-147, "I</u>	Diagnosis Procedure".		Н
NO >	Inspection End.			
Diagnos	sis Procedure		INFOID:000000011151743	
Regarding	y Wiring Diagram inforr	nation, refer to <u>DLK-96, "Wiring Diagram"</u> .		J
1.снес	K FOR FOREIGN MAT	ERIALS IN BACK DOOR LOCK ASSEMBL	Y	DLK
	entry of foreign materi pection result normal?	als in back door lock assembly.		
YES >	•> GO TO 2.			L
•	Remove foreign mat K BACK DOOR OPEN			
		operation of back door.		M
-	ection result normal?			
	> GO TO 3. > Repair or replace the	e malfunctioning parts.		Ν
-	K MONITOR ITEM			
		DOOR CONTROL MODULE using CONSU PEN SW and CLOSE SW in DATA MONITO		0
		rates normally according to the following co		
				Ρ

B242A CLOSURE CONDITION

< DTC/CIRCUIT DIAGNOSIS >

Monitor item	Co	ndition	Status
HALF LATCH SW		Fully closed/Half latch	OFF
HALF LATCH SW		Open	ON
	Deals dear	Fully closed/Half latch	OFF
OPEN SW	Back door	Open	ON
CLOSE SW		Open/Half latch	OFF
CLUSE SW		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.

(+) Back door lock assembly		()	Voltage (Approx.)
Connector	Terminal		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	4		
D557	5	Ground	Battery voltage
	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 d	oor control module	Back door lock assembly		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
	3		6		
B55	5	D557	5	Yes	
	11		4		

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-323, "Removal and Installation"</u>. 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		Continuity
Connector	Terminal	Ground	Continuity
D557	8		Yes
Is the inspection result norma	<u> ?</u>		
YES >> GO TO 7.	hll ll	heles and a stars of the	
NO >> Repair or replace 7.CHECK SWITCH	back door lock assem	bly ground circuit.	
Refer to <u>DLK-149</u> , "Compone			
Is the inspection result norma	<u> ?</u>		
YES >> GO TO 8. NO >> Replace back doo	or lock assembly. Refe	r to DLK-310. "DOOR LOC	K : Removal and Installation".
8. CHECK INTERMITTENT I			
Refer to <u>GI-47</u> , "Intermittent Ir			
>> Inspection End.			
Component Inspection			INFOID:000000011151744
COMPONENT INSPECTIO	N		
1. CHECK SWITCH			
1. Turn ignition switch OFF.			
2. Disconnect back door loc		. h. h	
3. Check continuity between	Dack door lock assem	ibly terminals.	
Back door lock ass	embly		

Back door lock	Back door lock assembly		Condition	Continuity	
Termir	nal		Condition	Continuity	J
4			Open	Yes	_
4			Fully closed/Half latch	No	
E		Pook door look	Fully close	Yes	DLK
5	8	Back door lock	Open/Half latch	No	L
6	o		Half latch	Yes	
6			Fully closed/Open	No	
7		Back door	On	Yes	_
1		switch	Off	No	M

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to <u>DLK-310, "DOOR LOCK : Removal and Installation"</u>.

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B261B REMOTE ENGINE START

< DTC/CIRCUIT DIAGNOSIS >

B261B REMOTE ENGINE START

DTC Logic

INFOID:000000011151745

DTC DETECTION LOGIC

NOTE:

- If DTC B261B is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to <u>DLK-117. "DTC Logic"</u>.
- If DTC B261B is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to <u>DLK-118, "DTC Logic"</u>.

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B261B	ВСМ	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:000000011151746

1. CHECK ECM IGNITION, POWER AND GROUND CIRCUITS

Check ECM ignition power and ground circuits. Refer to <u>EC-190, "Diagnosis Procedure"</u> (USA and Canada) or <u>EC-684, "Diagnosis Procedure"</u> (Mexico).

Is the inspection result normal?

- YES >> Replace ECM. Refer to <u>EC-526</u>, "<u>Removal and Installation</u>" (USA and Canada) or <u>EC-916</u>, <u>"Removal and Installation"</u> (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 <u>BCS-80, "Removal and Installation"</u>.
- NO >> Inspection End..

B2621 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

B2621 INSIDE ANTENNA

DTC Logic

1.

INFOID:000000011151747

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DTC DETECTION LOGIC В CONSULT display DTC DTC detecting condition Possible cause description · Inside key antenna (instrument center) An excessive high or low voltage from inside anten-B2621 INSIDE ANTENNA Harness or connector na (instrument center) is sent to BCM. D [Inside key antenna (instrument center) circuit is open or shorted] DTC CONFIRMATION PROCEDURE Е 1.PERFORM DTC CONFIRMATION PROCEDURE Select "INTELLIGENT KEY" of "BCM" using CONSULT. Select "INSIDE ANT DIAGNOSIS" in "WORK SUPPORT" mode. F Perform inside key antenna ("INSIDE ANT DIAGNOSIS") on "WORK SUPPORT" of "INTELLIGENT

- 2. 3.
- KEY". 4. Check BCM for DTC.

Is inside key antenna DTC detected?

- YES >> Refer to <u>DLK-151, "Diagnosis Procedure"</u>.
- >> Inside key antenna (instrument center) is OK. NO

Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>DLK-75, "Wiring Diagram"</u>.

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	123, 124	Ground	When Intelligent Key is in the an- tenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
IVIOU	120, 124	Ground	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "Removal and Installation".

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< 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	Continuity		
Connector	Terminal	Connector	Terminal	Continuity	
M80	123	M14	1	Yes	
INIOU	124	- IVI 14	2	165	

3. Check continuity between BCM harness connector and ground.

BC	CM		Continuity
Connector	Terminal	Ground	Continuity
 M80	123	Ground	No
	124		NO

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.

	+) CM	()	Condition	Signal (Reference value)
Connector	Terminal			
M80	123, 124	Ground	When Intelligent Key is in the an- tenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
WBU	123, 124	Ground	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 15 10 5 0 15 15 15 15 15 15 15 15 15 15 15 15 15

Is the inspection result normal?

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

NO >> Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>.

B2622 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

B2622 INSIDE ANTENNA

DTC Logic

INFOID:0000000011151749

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	CONSULT display description	DTC detecting condition	Possible cause
B2622	INSIDE ANTENNA	An excessive high or low voltage from inside anten- na (console) is sent to BCM.	 Inside key antenna (console) Harness or connector [Inside key antenna (console) cir- cuit is open or shorted]
TC CONF	IRMATION PROC	EDURE	
.PERFOR	M DTC CONFIRMA	TION PROCEDURE	
Select II Perform Check B	NSIDE ANT DIAGNO inside key antenna CM for DTC.	of BCM using CONSULT. OSIS in WORK SUPPORT mode. (INSIDE ANT DIAGNOSIS) on WORK SUP cted?	PORT of INTELLIGENT KEY.
Select IN Perform Check B inside key /ES >>	NSIDE ANT DIAGNO inside key antenna CM for DTC. antenna DTC deteo	OSIS in WORK SUPPORT mode. (INSIDE ANT DIAGNOSIS) on WORK SUP <u>cted?</u> <u>Diagnosis Procedure"</u> .	PORT of INTELLIGENT KEY.

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
Connector	Terminal	(-)		(Reference value)
M80	116, 128	Ground	When Intelligent Key is in the an- tenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
MOO	110, 120	Ciouna	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0
				JMKIA0063GB

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>.

NO >> GO TO 2.

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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.

В	СМ	Inside key antenna (console)		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M80	116	M255	1	Yes	
MOO	128	WZ33	2	165	

3. Check continuity between BCM harness connector and ground.

B	CM		Continuity	
Connector	Terminal	Ground	Continuity	
 M80	116	Ground	No	
	128		NO	

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 an- tenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	
	110, 120	Cround	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	

Is the inspection result normal?

YES >> Replace inside key antenna (console). Refer to <u>DLK-317. "CONSOLE : Removal and Installation"</u>.

NO >> Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>.

B2623 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

B2623 INSIDE ANTENNA

DTC Logic

INFOID:0000000011151751

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	CONSULT display description	DTC detecting condition	Possible cause
B2623	INSIDE ANTENNA	An excessive high or low voltage from inside anten- na (luggage room) is sent to BCM.	 Inside key antenna (luggage room) Harness or connector [Inside key antenna (luggage room) circuit is open or shorted]
C CONF	IRMATION PROC	EDURE	
PERFOR	M DTC CONFIRMA	TION PROCEDURE	
Select IN Perform Check B	NSIDE ANT DIAGNO inside key antenna CM for DTC. antenna DTC deteo	of BCM using CONSULT. OSIS in WORK SUPPORT mode. (INSIDE ANT DIAGNOSIS) on WORK SUF <u>cted?</u> Diagnosis Procedure".	PORT of INTELLIGENT KEY.
ES >>		(luggage room) is OK.	

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

	+)		Condition	Signal
BC		(-) Condition (Reference value)		
Connector	Terminal			
M20	100 00	Ground	When Intelligent Key is in the an- tenna detection area	(V) 15 10 5 0 15 1 10 5 0 15 15 10 5 0 15 15 15 15 15 15 15 15 15 15
M20	100, 99	Ground	When Intelligent Key is not in the	(V) 15 10 5 0
			antenna detection area	0 1 s JMKIA0063GB

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>.

NO >> GO TO 2.

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B2623 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

2. CHECK INSIDE KEY ANTENNA CIRCUIT

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

E	BCM	Inside key antenna (luggage room)		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M20	100	B76	1	Yes	
IVIZU	99		2	165	

3. Check continuity between BCM harness connector and ground.

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M20	100	Ground	No
Wi20	99		NO

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 an- tenna detection area	(V) 15 10 5 0 15 1 15 10 5 0 15 15 10 15 15 15 15 15 15 15 15 15 15	
W20	100, 99	Ground	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 <i>I I I I I I I I I I</i>	

Is the inspection result normal?

YES >> Replace inside key antenna (luggage room). Refer to <u>DLK-317, "LUGGAGE ROOM : Removal</u> and Installation".

NO >> Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>.

B26FD SHIFT LOCK SOLENOID

< DTC/CIRCUIT DIAGNOSIS >

B26FD SHIFT LOCK SOLENOID

DTC Logic

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DTC	CONSULT display description	DTC de	etecting condition	Possible cause
B26FD	SHIFT LOCK SOLE- NOID		noid output control is OFF but tput feedback is ON and these nuous for 1 second.	 Shift lock solenoid Harness or connector Shift lock solenoid circuit is open or shorted
	RMATION PROC			
	M DTC CONFIRMA	TION PROCEDUR	RE	
	tion switch ON. Self Diagnostic Resu	Ilt" mode of "BCM'	" using CONSULT.	
DTC detec				
ES >> F O >> S	Refer to <u>DLK-157, "I</u> Shift lock solenoid is	<u>Diagnosis Procedu</u> OK	<u>ire"</u> .	
-	Procedure	0.0		
agriosis	Tioccoure			INFOID:00000001115175
		CARLES STREET STREET		
garding W	iring Diagram inform	nation, refer to <u>DL</u>	K-75, "Wiring Diagram".	
garding W	iring Diagram inforn	nation, refer to <u>DL</u>	K-75, "Wiring Diagram".	
CHECK F	Viring Diagram inform POWER SOURCE (tion switch OFF.			
CHECK F Turn igni Disconne	POWER SOURCE (tion switch OFF. ect stop lamp switch	STOP LAMP SWI	TCH)	ground
CHECK F Turn igni Disconne	POWER SOURCE (tion switch OFF. ect stop lamp switch	STOP LAMP SWI		ground.
CHECK F Turn igni Disconne Check vo	POWER SOURCE (tion switch OFF. ect stop lamp switch	STOP LAMP SWI	TCH) lector E38 terminal 1 and	ground.
CHECK F Turn igni Disconne Check vo	POWER SOURCE (tion switch OFF. ect stop lamp switch bltage between stop p lamp switch	STOP LAMP SWI	TCH)	ground.
CHECK F Turn igni Disconne Check vo Sto	POWER SOURCE (tion switch OFF. ect stop lamp switch bltage between stop p lamp switch	STOP LAMP SWI	TCH) lector E38 terminal 1 and	ground.
CHECK F Turn igni Disconne Check vo Sto Connector E38	POWER SOURCE (tion switch OFF. ect stop lamp switch bltage between stop p lamp switch Terminal	STOP LAMP SWI	TCH) lector E38 terminal 1 and Voltage	ground.
CHECK F Turn igni Disconne Check vo Sto Connector E38 the inspect ES >> (POWER SOURCE (tion switch OFF. ect stop lamp switch bltage between stop p lamp switch	STOP LAMP SWI	TCH) lector E38 terminal 1 and Voltage	ground.
CHECK F Turn igni Disconne Check vo Sto Connector E38 he inspect ES >> (O >>	POWER SOURCE (tion switch OFF. ect stop lamp switch bltage between stop p lamp switch	STOP LAMP SWI	TCH) ector E38 terminal 1 and Voltage Battery voltage	
CHECK F Turn igni Disconne Check vo Sto Connector E38 he inspect ES >> C O >>	POWER SOURCE (tion switch OFF. ect stop lamp switch plamp switch plamp switch 1 tion result normal? GO TO 2. Check the followin Harness for short of 10A fuse (No. 10, 10)	STOP LAMP SWI connector. lamp switch conn Ground g: or open between fu ocated in fuse blo	TCH) ector E38 terminal 1 and Voltage Battery voltage	
CHECK F Turn igni Disconne Check vo Sto Connector E38 he inspect ES >> C O >>	POWER SOURCE (tion switch OFF. ect stop lamp switch bltage between stop p lamp switch	STOP LAMP SWI connector. lamp switch conn Ground g: or open between fu ocated in fuse blo	TCH) ector E38 terminal 1 and Voltage Battery voltage	
CHECK F Turn igni Disconne Check vo Sto Connector E38 he inspect ES >> C O >> CHECK S eck stop I	POWER SOURCE (tion switch OFF. ect stop lamp switch plamp switch plamp switch 1 tion result normal? GO TO 2. Check the followin Harness for short of 10A fuse (No. 10, 10) TOP LAMP SWITC amp switch. Refer f	STOP LAMP SWI connector. lamp switch conn Ground g: or open between fu located in fuse blo H	TCH) ector E38 terminal 1 and Voltage Battery voltage use block (J/B) and stop f ck [J/B])	amp switch
CHECK F Turn igni Disconne Check vo Sto Connector E38 the inspect ES >> C O >> CHECK S eck stop Ia 7, "Compo	POWER SOURCE (tion switch OFF. ect stop lamp switch plamp switch plamp switch 1 tion result normal? GO TO 2. Check the followin Harness for short of 10A fuse (No. 10, I TOP LAMP SWITC	STOP LAMP SWI connector. lamp switch conn Ground g: or open between fu located in fuse blo H	TCH) ector E38 terminal 1 and Voltage Battery voltage use block (J/B) and stop f ck [J/B])	amp switch
CHECK F Turn igni Disconne Check vo Sto Connector E38 he inspect ES >> 0 CHECK S eck stop la 7, "Compo he inspect ES >> 0	POWER SOURCE (tion switch OFF. ect stop lamp switch plamp switch p lamp switch tion result normal? GO TO 2. Check the followin Harness for short of 10A fuse (No. 10, 10 TOP LAMP SWITC amp switch. Refer to nent Inspection (Stot tion result normal? GO TO 3.	STOP LAMP SWI connector. lamp switch conn Ground g: or open between fu located in fuse blo H co <u>TM-182, "Comp</u> op Lamp Switch)" (TCH) ector E38 terminal 1 and Voltage Battery voltage use block (J/B) and stop I ck [J/B])	
CHECK F Turn igni Disconne Check vo Sto Connector E38 he inspect ES >> 0 O >> CHECK S eck stop la 7. "Compo he inspect ES >> 0 O >> F	POWER SOURCE (tion switch OFF. ect stop lamp switch plamp switch p lamp switch tion result normal? GO TO 2. Check the followin Harness for short of 10A fuse (No. 10, 10 TOP LAMP SWITC amp switch. Refer to nent Inspection (Stot tion result normal? GO TO 3.	STOP LAMP SWI connector. lamp switch conn Ground g: or open between fr ocated in fuse blo H to <u>TM-182, "Comp</u> p Lamp Switch)" (witch. Refer to <u>BR</u>	TCH) ector E38 terminal 1 and Voltage Battery voltage use block (J/B) and stop I ck [J/B]) <u>conent Inspection (Stop I</u> (RE0F10J).	amp switch

B26FD SHIFT LOCK SOLENOID

< DTC/CIRCUIT DIAGNOSIS >

Stop lar	mp relay		Continuity
Connector	Terminal (+)	Ground	Continuity
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.

B	CM	stop lamp relay		Continuity
Connector	Terminal	Connector	Terminal	Continuity
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 lan	Stop lamp switch		Stop lamp relay		
Connector	Terminal	Connector	Terminal	Continuity	
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 lar	mp relay		Continuity
Connector	Connector Terminal (+)		Continuity
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.

 Check continuity between BCM connector M80 terminal 108 and CVT shift selector connector M78 terminal 3.

B	BCM		CVT shift selector	
Connector	Terminal	Connector Terminal		Continuity
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.

			1
BC	CM		Continuity
Connector	Terminal	Ground	Continuity
M80	108		No
Is the inspectio	n result norma	<u>l?</u>	
) TO 9.		
-		damaged part	
9.CHECK GR	OUND CIRCU	IT (CVT SHIFT	SELECTOR)
Check continui	ty between CV	T shift selector	connector M78

CVT shi	ft selector		Continuity
Connector	Terminal	Ground	Continuity
M78	4		Yes

Is the inspection result normal?

YES >> Replace CVT shift selector. Refer to <u>TM-192</u>, "<u>Removal and Installation</u>" (RE0F10E) or <u>TM-407</u>, G "<u>Removal and Installation</u>" (RE0F10J).

NO >> Repair or replace damaged parts.

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< DTC/CIRCUIT DIAGNOSIS >

B26FE HOOD SWITCH

DTC Logic

INFOID:000000011151755

DTC DETECTION LOGIC

NOTE:

- If DTC B26FE is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to <u>DLK-117, "DTC Logic"</u>.
- If DTC B26FE is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to <u>DLK-118, "DTC Logic"</u>.

DTC	CONSULT display description	DTC detecting condition	Possible cause
B26FE	HOOD SWITCH	BCM detects that the hood switch input is malfunc- tioning 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.

	+) switch	()	Voltage (V) (Approx.)	
Connector	Terminal			
E205	1 Ground		Batteny voltage	
E205	2	Ground	Battery voltage	

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.

IPD	M E/R	Hood s	switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
E218	94	E205	1	Yes
LZIO	96	L205	2	163

B26FE HOOD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

	IPDM E/R				
Connector	Connector Terminal			Continuity	
E218	94	Gr	ound	No	
E218	96			No	
the inspection result	normal?				
		CS-32, "Removal and I	nstallation".		
•	place harness.	0. U .T			
CHECK HOOD SWI					
heck continuity betwee	en hood switch harne	ess connector and gro	ound.		
	lood switch				
Connector	Terminal	Gro	ound	Continuity	
E205	3			Yes	
the inspection result					
YES >> GO TO 4.					
NO >> Repair or re	eplace harness.				
.CHECK HOOD SWI	гоц				
	ГСП				
efer to <u>DLK-161, "Con</u>					
	ponent Inspection"				
efer to <u>DLK-161, "Con</u> the inspection result in YES >> GO TO 5.	nponent Inspection" normal?				
efer to <u>DLK-161, "Con</u> the inspection result i YES >> GO TO 5. NO >> Replace ho	nponent Inspection" normal?	DLK-301, "HOOD LOC	CK RELEASE CAI	BLE : Removal and	
efer to <u>DLK-161, "Con</u> <u>the inspection result r</u> YES >> GO TO 5. NO >> Replace ho <u>lation"</u> .	nponent Inspection" normal? od switch. Refer to [CK RELEASE CA	3LE : Removal and	
efer to <u>DLK-161, "Con</u> the inspection result in YES >> GO TO 5. NO >> Replace ho <u>lation"</u> .	nponent Inspection" normal? od switch. Refer to [IGURATION	DLK-301, "HOOD LOC	CK RELEASE CAI	BLE : Removal and	
efer to <u>DLK-161, "Con</u> <u>the inspection result i</u> YES >> GO TO 5. NO >> Replace ho	nponent Inspection" normal? od switch. Refer to [IGURATION	DLK-301, "HOOD LOC	CK RELEASE CAI	BLE : Removal and	
efer to <u>DLK-161, "Con</u> <u>the inspection result i</u> YES >> GO TO 5. NO >> Replace ho <u>lation"</u> . CHECK BCM CONF efer to <u>BCS-66, "CON</u>	nponent Inspection" normal? od switch. Refer to <u>I</u> IGURATION FIGURATION (BCM	DLK-301, "HOOD LOC	CK RELEASE CAI	BLE : Removal and	
efer to <u>DLK-161, "Con</u> <u>the inspection result i</u> YES >> GO TO 5. NO >> Replace ho <u>lation"</u> . • CHECK BCM CONF efer to <u>BCS-66, "CON</u> >> Inspection I	nponent Inspection" normal? od switch. Refer to [IGURATION FIGURATION (BCM	DLK-301, "HOOD LOC	CK RELEASE CAI	BLE : Removal and	
efer to <u>DLK-161, "Con</u> <u>the inspection result i</u> YES >> GO TO 5. NO >> Replace ho <u>lation"</u> . .CHECK BCM CONF efer to <u>BCS-66, "CON</u> >> Inspection I	nponent Inspection" normal? od switch. Refer to [IGURATION FIGURATION (BCM	DLK-301, "HOOD LOC	CK RELEASE CAI	BLE : Removal and	
efer to <u>DLK-161, "Con</u> <u>the inspection result in</u> YES >> GO TO 5. NO >> Replace hon <u>lation"</u> . CHECK BCM CONF efer to <u>BCS-66, "CON</u> >> Inspection In component Inspection	nponent Inspection" normal? od switch. Refer to <u>I</u> IGURATION FIGURATION (BCM End.	DLK-301, "HOOD LOC	CK RELEASE CA		
efer to <u>DLK-161, "Con</u> <u>the inspection result in</u> YES >> GO TO 5. NO >> Replace hon <u>lation"</u> . CHECK BCM CONF efer to <u>BCS-66, "CON</u> >> Inspection In OMPONENT INSPEC .CHECK HOOD SWI	nponent Inspection" normal? od switch. Refer to <u>I</u> IGURATION FIGURATION (BCM End. End.	DLK-301, "HOOD LOC	CK RELEASE CAI		
efer to <u>DLK-161, "Con</u> <u>the inspection result in</u> YES >> GO TO 5. NO >> Replace hon <u>lation"</u> . CHECK BCM CONF efer to <u>BCS-66, "CON</u> >> Inspection In COMPONENT Inspection In CHECK HOOD SWI Turn ignition switch	nponent Inspection" normal? od switch. Refer to <u>I</u> IGURATION FIGURATION (BCM End. End. CH OFF.	DLK-301, "HOOD LOC	CK RELEASE CA		
efer to <u>DLK-161, "Con</u> <u>the inspection result in</u> YES >> GO TO 5. NO >> Replace hon <u>lation"</u> . CHECK BCM CONF efer to <u>BCS-66, "CON</u> >> Inspection In CHECK HOOD SWI Turn ignition switch Disconnect hood switch	nponent Inspection" normal? od switch. Refer to <u>I</u> IGURATION FIGURATION (BCM End. End. CH OFF.	DLK-301, "HOOD LOC	CK RELEASE CAI		
efer to <u>DLK-161, "Con</u> <u>the inspection result in</u> YES >> GO TO 5. NO >> Replace hon <u>lation"</u> . CHECK BCM CONF efer to <u>BCS-66, "CON</u> >> Inspection In COMPONENT INSPECT CHECK HOOD SWI Turn ignition switch Disconnect hood switch Check continuity be	nponent Inspection" normal? od switch. Refer to I IGURATION FIGURATION (BCM End. End. Stion TCH OFF. vitch connector. etween hood switch t	DLK-301, "HOOD LOC	CK RELEASE CAI		
efer to <u>DLK-161, "Con</u> <u>the inspection result in</u> YES >> GO TO 5. NO >> Replace hon <u>lation"</u> . CHECK BCM CONF efer to <u>BCS-66, "CON</u> >> Inspection In CHECK HOOD SWI CHECK HOOD SWI Turn ignition switch Disconnect hood switch Disconnec	aponent Inspection" normal? od switch. Refer to <u>I</u> IGURATION FIGURATION (BCM End. End. Ction TCH OFF. vitch connector. etween hood switch t	DLK-301, "HOOD LOC			
efer to <u>DLK-161, "Con</u> <u>the inspection result in</u> YES >> GO TO 5. NO >> Replace hon <u>lation"</u> . CHECK BCM CONF efer to <u>BCS-66, "CON</u> >> Inspection In COMPONENT INSPECT CHECK HOOD SWI Turn ignition switch Disconnect hood switch Check continuity be	aponent Inspection" normal? od switch. Refer to <u>I</u> IGURATION FIGURATION (BCM End. End. Ction TCH OFF. vitch connector. etween hood switch t	DLK-301, "HOOD LOO	lition	INFOID:00000	
efer to <u>DLK-161, "Con</u> <u>the inspection result in</u> YES >> GO TO 5. NO >> Replace hon <u>lation"</u> . CHECK BCM CONF efer to <u>BCS-66, "CON</u> >> Inspection In omponent Inspect .CHECK HOOD SWI Turn ignition switch Disconnect hood switch Disconnect hood switch Disconnect hood switch Check continuity be Hood Term 1	apponent Inspection" normal? od switch. Refer to I IGURATION FIGURATION (BCM FIGURATION (BCM End. ction TCH OFF. vitch connector. etween hood switch t switch ninal 3	DLK-301, "HOOD LOO) : Configuration List". terminals. Hood switch	lition	INFOID:00000	
efer to <u>DLK-161, "Con</u> <u>the inspection result in</u> YES >> GO TO 5. NO >> Replace ho <u>lation"</u> . CHECK BCM CONF efer to <u>BCS-66, "CON</u> >> Inspection In Omponent Inspec .CHECK HOOD SWI Turn ignition switch Disconnect hood switch Check continuity be	aponent Inspection" normal? od switch. Refer to I IGURATION FIGURATION (BCM End. End. End. Ction TCH OFF. vitch connector. witch connector. switch	DLK-301, "HOOD LOO) : Configuration List". terminals. - Cond Hood switch Hood switch	lition Press Release	INFOID:000000 Continuity Yes No	
efer to <u>DLK-161, "Con</u> <u>the inspection result in</u> YES >> GO TO 5. NO >> Replace ho <u>lation"</u> . CHECK BCM CONF efer to <u>BCS-66, "CON</u> >> Inspection In Omponent Inspect .CHECK HOOD SWI Turn ignition switch Disconnect hood switch Disconnect hood switch Disconnect hood switch Disconnect hood switch Check continuity be Hood Term 1 1	aponent Inspection" normal? od switch. Refer to I IGURATION FIGURATION (BCM End. End. End. Ction TCH OFF. vitch connector. witch connector. switch inal 3 3	DLK-301, "HOOD LOO) : Configuration List". terminals. Hood switch	lition	INFOID:00000	

B26FF REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

B26FF REMOTE KEYLESS ENTRY RECEIVER

DTC Logic

INFOID:000000011151758

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B26FF	INTELLIGENT TUNER COMMUNICATION FAIL	Inactive communication between BCM and re- mote 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 <u>DLK-162</u>, "Diagnosis Procedure".
- NO >> Inspection End.

Diagnosis Procedure

INFOID:000000011151759

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	(V) 6 4 2 0 • • 0.2s OCC3881D	
inco			Press the Intelligent Key lock or unlock button	(V) 6 4 2 0 • • 0.25	

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>.

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 >

ВС	M	Remote keyless	Remote keyless entry receiver	
Connector	Terminal	Connector	Terminal	- Continuity
M80	119	M86	2	Yes
Check continuity be	tween BCM harness	s connector and groun	d.	
	(+)			
	BCM	()		Continuity
Connector	Terminal			
M80	119	Ground		No
	place harness. EYLESS ENTRY RE	ECEIVER POWER SU		
	(+)			
Remote key	less entry receiver	(-)		Voltage
Connector	Terminal			(Approx)
M86	1	Ground		Battery voltage
	fuse No. 25 [located			
S >> GO TO 4 D-1 >> Check 10A D-2 >> Repair or re CHECK REMOTE K	fuse No. 25 [located place harness betwo EYLESS ENTRY RE	l in fuse block J/B]. een remote keyless er ECEIVER GROUND C ntry receiver harness o	ntry receiver and 10	0A fuse No. 25.
S >> GO TO 4. -1 >> Check 10A -2 >> Repair or re CHECK REMOTE KI ck continuity betwee	fuse No. 25 [located place harness betwo EYLESS ENTRY RE en remote keyless er	een remote keyless er CEIVER GROUND C	ntry receiver and 10	0A fuse No. 25. nd.
S >> GO TO 4. -1 >> Check 10A -2 >> Repair or re CHECK REMOTE KI ck continuity betwee	fuse No. 25 [located place harness betwo EYLESS ENTRY RE	een remote keyless er ECEIVER GROUND C ntry receiver harness o	ntry receiver and 10	0A fuse No. 25.
S >> GO TO 4 D-1 >> Check 10A D-2 >> Repair or re CHECK REMOTE KI ck continuity betwee	fuse No. 25 [located place harness betwo EYLESS ENTRY RE en remote keyless en keyless entry receiver	een remote keyless er ECEIVER GROUND C ntry receiver harness o	ntry receiver and 10 IRCUIT connector and grou	0A fuse No. 25. nd.
S >> GO TO 4. D-1 >> Check 10A D-2 >> Repair or re- CHECK REMOTE KI ck continuity betweet Remote I Connector M86 e inspection result r	fuse No. 25 [located eplace harness betwee EYLESS ENTRY RE en remote keyless er keyless entry receiver Termin 3 normal?	een remote keyless er ECEIVER GROUND C ntry receiver harness o	ntry receiver and 10 IRCUIT connector and grou	DA fuse No. 25. nd. Continuity Yes

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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:000000011151760

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.

(+)			
Automatic back	Automatic back door control module		Voltage
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		Continuity
Connector	Terminal		Continuity
DEC	32	Ground	
B56	28	-	Yes
B55	4 (Except For Mexico)		

Does continuity exist?

YES >> Inspection End.

NO >> Repair or replace harness.

BCM

BCM : Diagnosis Procedure

INFOID:000000011583886

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 nan	ne	Fuse and fusible link No.	
139	Fusible link batte	ry power	O (40A)	
131	BCM battery	fuse	1 (10A)	
the fuse or fusible link blo	own?			
	own fuse or fusible link after	r repairing the affected ci	rcuit.	
IO >> GO TO 2				
. CHECK POWER SUPP				
Disconnect BCM conne			4	
Check voltage between	BCM connector M81 termi	inals 131, 139 and groun	0.	
BC	CM		Voltage	
Connector	Terminal	Ground	(Approx.)	
	131		.	
M81	139		Battery voltage	
the inspection result norn	nal?			
'ES >> GO TO 3				
	ce harness or connectors.			
CHECK GROUND CIRC	CUIT			
eck continuity between E	CM connector M81 termina	als 134, 143 and ground.		
BC		Ground	Continuity	
Connector	Terminal			
M81	134		Yes	
	143			
the inspection result norn				
ES >> Inspection End				
IO >> Repair or replace	ce harness or connectors.			

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OUTSIDE KEY ANTENNA (PASSENGER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

OUTSIDE KEY ANTENNA (PASSENGER SIDE)

Component Function Check

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:000000011151763

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.

	+) CM Terminal	(–)	Condition		Signal (Reference value)
M80	114, 115	Ground	When the driver door request switch is op-	When Intelligent Key is in the antenna de- tection area (The dis- tance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 1 s JMKIA0062GB
WOO	114, 110	Clound	erated with ignition switch OFF	When Intelligent Key is not in the antenna detection area (The distance between In- telligent Key and an- tenna: Approx. 2 m)	(V) 15 10 5 0 1 s JMKIA0063GB

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-80. "Removal and Installation"</u>. NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and outside key antenna (passenger side) connector.

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

	ЗСМ	Outside key antenr	na (passenger side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M80	114	D115	1	Yes
WOU	115	- 6110	2	tes

3. Check continuity between BCM harness connector and ground.

OUTSIDE KEY ANTENNA (PASSENGER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

ВС	CM		Continuity	Α
Connector	Terminal	Ground	Continuity	
M80	114	Giouna	No	
MOO	115	-	INO	В

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.

(+ BC			Condition		(–) Condition	dition	Signal (Reference value)
Connector	Terminal						
N00		Quand	When the driver door request switch is op-	When Intelligent Key is in the antenna de- tection area (The dis- tance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 1 s JMKIA0062GB		
M80	114, 115	Ground	erated with ignition switch OFF	When Intelligent Key is not in the antenna detection area (The distance between In-	(V) 15 10 5 0		
				telligent Key and an- tenna: Approx. 2 m)	JMKIA0063GB		

Is the inspection result normal?

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YES >> Replace outside key antenna (passenger side). Refer to <u>DLK-318, "PASSENGER SIDE :</u> <u>Removal and Installation"</u>.

DLK-167

NO >> Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>.

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< DTC/CIRCUIT DIAGNOSIS >

OUTSIDE KEY ANTENNA (DRIVER SIDE)

Component Function Check

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 <u>DLK-168</u>, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:000000011151765

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.

	+) CM Terminal	()	Condition		Signal (Reference value)
 M80	121, 122	Ground	When the driver door request switch is oper-	When Intelligent Key is in the antenna de- tection area (The dis- tance between Intelligent Key and an- tenna: 80 cm or less)	(V) 15 10 5 0 1 s JMKIA0062GB
MOO	121, 122	Cround	ated with ignition switch OFF	When Intelligent Key is not in the antenna detection area (The distance between In- telligent Key and an- tenna: Approx. 2 m)	(V) 15 10 5 0 15 10 5 0 15 10 5 0 15 15 15 10 5 0 15 15 15 15 15 15 15 15 15 15

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>. 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.

I	ЗСМ	Outside key ante	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M80	122	D15	1	Yes
IVIOU	121	610	2	Tes

3. Check continuity between BCM harness connector and ground.

OUTSIDE KEY ANTENNA (DRIVER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

		BCM			Continuity	
С	onnector		Terminal	Oracurad	Continuity	
	1400		122	Ground		
	M80		121		Not existed	
ne inspec	tion result r	ormal?				
	GO TO 3.					
	Repair or re			•		
			NA INPUT SIGNAL			
				ntenna or other anter (driver side) connecte		
				d ground using oscille		
	+)		0		Signal	
	CM	()	Cond	dition	(Reference value)	
Connector	Terminal					
				When Intelligent Key is in the antenna de-	(V) 15 10	
M80	121, 122	Ground	When the driver door request switch is oper- ated with ignition	tection area (The dis- tance between Intelligent Key and an- tenna: 80 cm or less)	5 0 1 s JMKIA0062GB	

Is the inspection result normal?

YES >> Replace outside key antenna (driver side). Refer to <u>DLK-318, "DRIVER SIDE : Removal and</u> <u>Installation"</u>.

NO >> Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>.

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OUTSIDE KEY ANTENNA (REAR BUMPER)

< DTC/CIRCUIT DIAGNOSIS >

OUTSIDE KEY ANTENNA (REAR BUMPER)

Component Function Check

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 <u>DLK-170</u>, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:000000011151767

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		(–) Condition		Signal (Reference value)
Connector	Terminal				(Reference value)		
	Ground	When the driver door request switch is op-	When Intelligent Key is in the antenna de- tection area (The dis- tance between Intelligent Key and antenna: 80 cm or less)	(V) 15 0 5 0 1 s JMKIA0062GB			
M20	101, 102	Ground	erated with ignition switch OFF	When Intelligent Key is not in the antenna detection area (The distance between In- telligent Key and an- tenna: Approx. 2 m)	(V) 15 10 5 0 1 s JMKIA0063GB		

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>. 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.

	ВСМ	Outside key ante	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M20	102	B403	1	Yes
IVIZU	101	D403	2	res

3. Check continuity between BCM harness connector and ground.

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OUTSIDE KEY ANTENNA (REAR BUMPER)

< DTC/CIRCUIT DIAGNOSIS >

BCM		BCM		_	
Co	nnector		Terminal	Ground	Continuity
	M20		102		No
	WIZ0		101		NO
•	<u>on result no</u>	<u>prmal?</u>			
	O TO 3.				
	•	blace harne		0	
			IA INPUT SIGNAL		
			ear bumper). (New a antenna (rear bump	antenna or other ant er) connector	tenna)
				ground using oscill	oscope.
(+ BC		()	Con	dition	Signal
Connector	Terminal	(-)	Con		(Reference value)
Juniector	Terminal				
M20	101, 102	Ground	When the driver door request switch is op-	When Intelligent Key is in the antenna de- tection area (The dis- tance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 1 s JMKIA0062GB
IVIZU	101, 102	Ground	erated with ignition switch OFF	When Intelligent Key is not in the antenna detection area (The	(V) 15 10 5
				distance between In- telligent Key and an- tenna: Approx. 2 m)	
inspecti	on result no	ymal?		telligent Key and an-	

NO >> Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>.

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< DTC/CIRCUIT DIAGNOSIS >

DOOR SWITCH

Component Function Check

INFOID:000000011151768

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	Cond	lition	Status
DOOR SW-DR	Driver side door	Open	On
DOOR SW-DR		Closed	Off
	Dessenger side deer	Open	On
DOOR SW-AS	Passenger side door	Closed	Off
DOOR SW-RL	Rear door LH	Open	On
DOOR SW-RL		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 <u>DLK-172, "Diagnosis Procedure"</u>.

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.

(+) Door switch					
			()	Signal (Reference value)	
Connector		Terminal			
Driver side	B8				
Passenger side	B108	3		(V) 15	
Rear LH	B18				10
Rear RH	B116		Ground	0 10 ms JPMIA0011GB 11.8 V	

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			Continuity	
Con	nector	Terminal	Connector	Terminal	Continuity
Driver side	B8			96	
Passenger side	B108	3	M20	94	Yes
Rear LH	B18	3		82	fes
Rear RH	B116			93	
Check continui	ty between door switch	harness cor	nnector and gro	ound.	
	Door switch				Continuity
	Connector	Ter	minal	_	
Driver side	B8			Ground	
Passenger side	B108		3	Croand	No
Rear LH	B18		č		110
Rear RH	B116				
CHECK INTERN	4. e malfunctioning door : /ITTENT INCIDENT ermittent Incident".	switch. Refer	r to <u>DLK-315, "F</u>	Removal and Insta	allation".
>> Inspect mponent Ins	tion End. pection				INFOID:000000
CHECK DOOR	SWITCH				
	vitch OFF. Ifunctioning door switcl ty between door switch				
	Door switch		Conditio		Continuity
	T		Conditio	ЛI	CONTINUITY
	Terminal				
3	Ground contact is part of	the _	or switch	Pressed	No

Is the inspection result normal?

YES >> Inspection End.

>> Replace malfunction door switch. Refer to DLK-315, "Removal and Installation". NO

switch.

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Released

Yes

Component Function Check

INFOID:000000011151771

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	Con	dition	Status
DOOR SW-BK	Driver side door	Open	On
DOOR SW-BR		Closed	Off

Is the inspection result normal?

YES >> Door switch is OK.

NO >> Refer to <u>DLK-174</u>, "Diagnosis Procedure (With Power Back Door)".

Diagnosis Procedure (With Power Back Door)

INFOID:000000011151772

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.

(+) Back door lock assembly		()	Signal (Reference value)	
Connector	Terminal			
D557	7	Ground	(V) 15 10 5 0 10 ms 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 lo	Back door lock assembly		BCM	
Connector	Terminal	Connector	Terminal	Continuity
D557	7	M20	97	Yes

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

< DTC/CIRCUIT DIAGNOSIS >

	Back door lock asser	nbly		Continuity
Connecto	or	Terminal	Ground	Continuity
D557		7		No
s the inspection re				
	ce BCM. Refer to ^r or replace harne	BCS-80, "Removal a	nd Installation".	
• '	•	GROUND CIRCUIT		
			ess connector and grou	nd
				nu.
	Back door lock asser	nbly		Continuity
Connecto	or	Terminal	Ground	
D557		8		Yes
Is the inspection re				
YES >> GO TO NO >> Repair) 4. [.] or replace harne	SS		
4.CHECK BACK	•			
		pection (With Power B	ack Door)"	
Is the inspection re			<u></u>	
YES >> GO TO				
-		-	LK-310, "DOOR LOCK	: Removal and Installation".
5. CHECK INTERI	MITTENT INCIDE	ENT		
Refer to <u>GI-47, "Int</u>	termittent Inciden	<u>t"</u> .		
>> Inspec	tion End.			
Diagnosis Proc	cedure (Withc	out Power Back D)oor)	INFOID:000000011151773
Regarding Wiring [Diagram informat	ion, refer to <u>DLK-75, '</u>	Wiring Diagram".	
		INPLIT SIGNAL		
 Turn ignition s¹ Disconnect ba 	ck door lock asse	embly connector.		
Check signal b	between back doo	or lock assembly harn	ess connector and grou	and using oscilloscope.
	(+)			
	ock assembly	()		Signal
Connector	Terminal		(Refe	erence value)
			(V)	
			15 10	
D565	3	Ground	5	
			<u>10 n</u>	JPMIA0011GB
				11.8 V
Is the inspection re	esult normal?			
YES >> GO TO				

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NO >> GO TO 2.

< 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 lo	Back door lock assembly		BCM		
Connector	Terminal	Connector Terminal		Continuity	
D565	3	M20	97	Yes	

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

Back door lo	ock assembly		Continuity
Connector	Terminal	Ground	Continuity
D565	3		No

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-80. "Removal and Installation"</u>.

NO >> Repair or replace harness.

$\mathbf{3}$.check back door switch ground circuit

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

Back door lo	ock assembly		Continuity
Connector	Terminal	Ground	Continuity
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 <u>DLK-310, "DOOR LOCK : Removal and Installation"</u>.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

Component Inspection (With Power Back Door)

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	Back door lock assembly		Condition	
	Terminal			
7	0	Back door switch	Pressed	Yes
1	o	DACK UUUI SWILCH	Released	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to <u>DLK-310, "DOOR LOCK : Removal and Installation"</u>.

< DTC/CIRCUIT DIAGNOSIS > Component Inspection (Without Power Back Door) INFOID:000000011151775 А 1. CHECK BACK DOOR SWITCH 1. Turn ignition switch OFF. В 2. Disconnect back door lock assembly connector. 3. Check continuity between back door lock assembly terminals. Back door lock assembly С Condition Continuity Terminal Yes Pressed 3 4 Back door switch D Released No Is the inspection result normal? YES >> Inspection End. Е NO >> Replace back door lock assembly. Refer to <u>DLK-310, "DOOR LOCK : Removal and Installation"</u>. F Н J DLK

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DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

DOOR LOCK AND UNLOCK SWITCH DRIVER SIDE

DRIVER SIDE : Description

Transmits door lock/unlock operation to BCM.

DRIVER SIDE : Component Function Check

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	
CDE LOCK SW	UNLOCK	: OFF	
CDL UNLOCK SW	LOCK	: OFF	
CDE UNEOCK SW	UNLOCK	: ON	

Is the inspection result normal?

- YES >> Door lock and unlock switch is OK.
- NO >> With LH and RH anti-pinch, refer to <u>DLK-178</u>, "<u>DRIVER SIDE</u> : <u>Diagnosis Procedure (With LH and</u> <u>RH Auto Up/Down)</u>".
- NO >> With LH anti-pinch only, refer to <u>DLK-179</u>, "<u>DRIVER SIDE</u> : <u>Diagnosis Procedure (With LH Auto</u> <u>Down Only)</u>".

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	Ground	Door is closed	(V) 15 0 0 0 10 ms JPMIA0013GB	

Is the inspection result normal?

YES	>> GO	ТΟ	4
	~ ~ ~		-

NO >> GO TO 2

2. CHECK POWER WINDOW SWITCH GROUND

1. Turn ignition switch OFF.

INFOID:0000000011151776

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.

lain power window	and door					
ck/unlock switch		Terr	minal	Co	ontinuity	
D25		1	Groun	ıd	Yes	
he inspection		<u>nal?</u>				
ES >> GO O >> Repa		ice harness				
CHECK POW				RCUIT		
Disconnect I						
Check contin			onnector	and main	power wir	and door lock/unlock switch connec
tor.						
		Main powe	r window			
BCM connector	Terminal	and door loo switch co		Terminal	Continuity	
M19	54	D2		11	Yes	
Check contin	nuity betwe	en BCM c	onnector	and grour	ıd.	
BCM connector		Termina		C	ontinuity	
M19	t	54	Ground		No	
	regult nor	mal?				
the inspection	result non					
ES >> GO	TO 4					
ES >> GO O >> Repa	TO 4 air or repla	ice harness				
ES >> GO O >> Rep CHECK INTE	TO 4 air or repla RMITTEN	ace harness T INCIDEN	IT			
ES >> GO IO >> Rep CHECK INTE	TO 4 air or repla RMITTEN	ace harness T INCIDEN	IT			
IO >> Rep CHECK INTE efer to <u>GI-47, "</u>	TO 4 air or repla RMITTEN Intermitten	ace harness T INCIDEN <u>It Incident"</u> .	IT			
ES >> GO IO >> Rep CHECK INTE efer to <u>GI-47, "</u> >> Insp	TO 4 air or repla RMITTEN Intermitten ection Enc	ace harness T INCIDEN <u>it Incident"</u> . I.	IT	- ()A/;+h-		
ES >> GO O >> Rep CHECK INTE fer to <u>GI-47, "</u> >> Insp	TO 4 air or repla RMITTEN Intermitten ection Enc	ace harness T INCIDEN <u>it Incident"</u> . I.	IT	e (With I	_H Auto	vn Only)
ES >> GO IO >> Rep CHECK INTE efer to <u>GI-47, "</u> >> Insp	TO 4 air or repla RMITTEN Intermitten ection Enc	ace harness T INCIDEN <u>it Incident"</u> . I.	IT	e (With I	_H Auto	vn Only)
YES >> GO NO >> Rep CHECK INTE efer to <u>GI-47, "</u>	TO 4 air or repla RMITTEN Intermitten ection Enc E : Diag	ace harness T INCIDEN <u>at Incident"</u> . I. nosis Pro	IT ocedure			
YES >> GO NO >> Repart CHECK INTE efer to <u>GI-47, "</u> >> Insp RIVER SID	TO 4 air or repla RMITTEN Intermitten ection Enc E : Diag	ace harness T INCIDEN <u>at Incident"</u> . I. nosis Pro	IT ocedure			
YES >> GO NO >> Repart CHECK INTE efer to <u>GI-47, "</u> >> Insp RIVER SID	TO 4 air or repla RMITTEN Intermitten ection Enc E : Diag	ace harness T INCIDEN I <u>t Incident"</u> . I. nosis Pro	OCEDURE	DLK-62, '	"Wiring Dia	

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".

Connecto	Main power window and door lock/unlock switch state	Terminal		Voltage
D23	Neutral \rightarrow Unlock	15	Ground	Battery voltage $\rightarrow 0$
D23	Neutral \rightarrow Lock	3	Ground	Ballery voltage $\rightarrow 0$
Is the ins	pection result normal?			
YES	>> GO TO 5			
NO	>> GO TO 2			

2. CHECK POWER WINDOW SWITCH GROUND

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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

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	Cround	110

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.

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2015 Pathfinder

NO >> Replace main power window and door lock/unlock switch. Refer to <u>PWC-62</u>, "<u>Removal and Instal-</u> lation".

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DOOR LOC	K AND UNLOCK SWI	ТСН	
DTC/CIRCUIT DIAGNOSIS >			
ASSENGER SIDE : Component I	Function Check	INFOID:000000011151781	
.CHECK FUNCTION			1
With CONSULT Check CDL LOCK SW, CDL UNLOCK SW in	Data Monitor mode with CO	NSULT.	
Monitor item	C	ondition	
CDL LOCK SW	LOCK	: ON	
CDE LOCK SW	UNLOCK	: OFF	
CDL UNLOCK SW	LOCK	: OFF	
ODE UNECCK SW	UNLOCK	: ON	
NO >> With LH anti-pinch only, refer to Auto Down Only)". ASSENGER SIDE : Diagnosis Pro			
Regarding Wiring Diagram information, refer	TPUT SIGNAL		
 Read voltage signal between BCM connellock/unlock switch RH is changed to "LC Check that signals which are shown in the window and door lock/unlock switch RH 	DCK" or "UNLOCK". ne figure below can be detect	ed during 10 second just after ower	

	Terminal				
(+	-)		Condition	Signal	
BCM connector	Terminal	(-)		(Reference value)	
M19	54	Ground	Door is closed	(V) 15 0 10 10 ms JPMIA0013GB	
YES >					
2.снесн	K POWEI			CH GROUND	

Turn ignition switch OFF.
 Disconnect power window and door lock/unlock switch RH connector.
 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	Termina	al	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	Ter	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:000000011151783

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	Term	ninal	Voltage
D125	Neutral \rightarrow Lock	1	Ground	Battery voltage $\rightarrow 0$
D125	$\text{Neutral} \rightarrow \text{Unlock}$	2	Ground	

Is the inspection result normal?

YES >> GO TO 5

NO >> GO TO 2

2. Check power window switch ground

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

^{1.} Turn ignition switch OFF.

^{2.} Disconnect power window and door lock/unlock switch RH connector.

DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

unde els euritede E	Ind door lock		Terminal	Co	ontinuity	
unlock switch R		3	Grou	ind	Yes	
the inspectio			0100		103	
YES >> GC) TO 3 pair or rep	blace harne				
neck continui	iy betweel	n power wi	ndow and	door lock/l		RH terminals.
Power window a	nd door lock	/unlock switcl	h RH state	Terminals	Continuity	
	Lock			1 - 3		
Unlock				2 - 3	Yes	
	Neutral/U	nlock		1 - 3	No	
	Neutral/L	ock		2 - 3	NO	
s the inspectio		ormal?				
YES >> GC NO >> Re		er window	and door	lock/unloc	switch RH	
1. CHECK PO						
I. Disconnect						
			connecto	r and powe	er window a	d door lock/unlock switch RH connector.
	-			•		
DOM as a star	Tamainal		ow and door		Quatinuitu	
BCM connector	Terminal		c switch RH	Terminal	Terminal Continuity	
	19		105	1		
M18 -	34	D	125	2	_ Yes	
		5014				
3. Check con	tinuity bet	ween BCM	connecto	r and grou	10.	
BCM connect	or	Term	inal	С	ontinuity	
		19				
M18		34	Ground		No	
s the inspectio		ormal?				
) TO 5 pair or rer	blace harne	SS.			
D.CHECK INT	• •					
Refer to <u>GI-47.</u>						
$\frac{0}{-47}$	mermitt		<u>.</u>			
	nection F	nd.				
>> Ins						
>> Ins						
>> Ins						
>> Ins						

< DTC/CIRCUIT DIAGNOSIS >

DOOR LOCK ACTUATOR DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:000000011151784

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 <u>DLK-184, "DRIVER SIDE : Diagnosis Procedure"</u>.

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	
D14	2	Ground	Door lock and unlock switch	Unlock	IZ V	

Is the inspection result normal?

YES >> Replace front door lock assembly LH. Refer to <u>DLK-303, "DOOR LOCK : Removal and Installa-</u> tion".

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.

E	BCM		front door lock assembly LH		
Connector	Terminal	al Connector Termin		Continuity	
M81 -	135	D14	1	Yes	
	137	014	2	165	

3. Check continuity between BCM harness connector and ground.

B	СМ		Continuity	
Connector	Connector Terminal		Continuity	
M81	135	Ground	No	
	137		INO	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

 ${f 3.}$ CHECK BCM OUTPUT SIGNAL

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

1. Connect BCM connector.

2. Check voltage between BCM harness connector and ground.

	0		C			
	(+) BCM		(–) Condition		Voltage	
Connector	Terminal	_	(Approx.)		(Αρριοχ.)	
 M81	135	Ground	Door lock and unlock switch	Lock	12 V	
WIGT	137	Unlock		12 V		
	R SIDE : C	component	Function Check		INFOID:00000001115178	
1.CHECK FUN	CTION					
	R LOCK in A	CTIVE TĚST				
	r lock actuato	or is OK.	ER SIDE : Diagnosis Pro	cedure".		
PASSENGE			-		INFOID:0000000111517	

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.

	+) :k actuator RH	(-) Condition Voltage		Condition		Condition Voltage (Approx.)		L
Connector	Terminal				(Αμριοκ.)			
D114	1	Ground	Door lock and unlock switch –	Unlock	12 V	M		
	2	Ground		Lock	- 12 V			

Is the inspection result normal?

YES >> Replace front door lock actuator RH. Refer to <u>DLK-303, "DOOR LOCK : Removal and Installa-</u> tion".

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.

E	BCM	Front door loo	ck actuator RH	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M81	130	D114	1	Yes
ΙΟΙ	135	0114	2	tes

3. Check continuity between BCM harness connector and ground.

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DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M81	130	Ground	No
	135		NO

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.

	+) CM	()	Condition		Voltage (Approx.)
Connector	Terminal				(
M81	130	Ground	Door lock and unlock switch	Unlock	12 V
	135	Ground	Door lock and unlock Switch	Lock	12 V

Is the inspection result normal?

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

NO >> Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>.

REAR LH

REAR LH : Component Function Check

1.CHECK FUNCTION

1. Select DOOR LOCK of BCM using CONSULT.

2. Select DOOR LOCK in ACTIVE TEST mode.

3. Touch ALL LOCK or ALL UNLK to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to <u>DLK-186</u>, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

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.

(·	+)				N/ 14
Rear door loo	ck actuator LH	(—)	Condition		Voltage (Approx.)
Connector	Terminal				(
D205	1	Ground	Door lock and unlock switch	Lock	12 V
D203	2	Ground	Door lock and unlock switch	Unlock	12 V

Is the inspection result normal?

YES >> Replace rear door lock actuator LH. Refer to <u>DLK-310, "DOOR LOCK : Removal and Installation"</u>. NO >> GO TO 2.

INFOID:0000000011151789

< DTC/CIRCUIT DIAGNOSIS >

Connector M81 M81 S. Check continuit	BCM Terminal 133		Rear door lock a		
M81 M81		Conn		actuator LH	Continuity
M81	133	Com	ector	Terminal	Continuity
_		D2	205	2	Yes
3. Check continuit	132		.05	1	165
	y between BCM har	ness connector	and ground.		
	BCM				
Connector	Te	erminal	0		Continuity
M81		133	Gro	bund	N-
M81		132			No
CHECK BCM OL . Connect BCM of . Check voltage b		ss connector ar	nd ground.		
(+)					
BCM	(-)		Condition		Voltage (Approx.)
Connector	Terminal				(
M81	133 Ground	Door lock and	d unlock switch	Unlock	12 V
M81	132			Lock	
NO >> Replace REAR RH	or internal short of e BCM. Refer to <u>BCS</u> nponent Functi	<u> 8-80, "Removal</u>		<u>ion"</u> .	INFOID.00000001115175
Select DOOR L	LOCK" of "BCM" usin OCK in ACTIVE TES K or ALL UNLK to c	ST mode.	rks normally.		
YES >> Door loo	ck actuator is OK. DLK-187, "REAR F	<u> RH : Diagnosis F</u>	Procedure".		
REAR RH : Dia	gnosis Procedu	re			INFOID:00000001115175
Regarding Wiring D	iagram information,	refer to <u>DLK-62</u>	. "Wiring Dia	<u>gram"</u> .	

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.

DLK-187

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

(+)				
Rear door loo	k actuator RH	(—)	Condition		Voltage (Approx.)
Connector	Terminal				
D305	1	Ground	Door lock and unlock switch	Unlock	12 V
500	2	Ground		Lock	

Is the inspection result normal?

YES >> Replace rear door lock actuator RH. Refer to <u>DLK-307, "DOOR LOCK : Removal and Installation"</u>. 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.

B	СМ	Rear door loo	k actuator RH	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M81	133	D305	1	Yes
M81	132		2	165

3. Check continuity between BCM harness connector and ground.

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M81	133	Ground	No
M81	132		NU

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.

(- BC	/	(-)	Condition		Voltage (Approx.)
Connector	Terminal				(
M81	133	Ground	Door lock and unlock switch	Unlock	12 V
M81	132	Giouna	DOUT TOCK AND UNIOCK SWITCH	Lock	12 V

Is the inspection result normal?

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

NO >> Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>.

< DTC/CIRCU				KACI	JAIOR		
		CTUATOR					-
Component	: Functior	Check				INFOID:00000001115179	A
1. снеск ги							D
		BCM using CON	ISULT.				B
2. Select DO	OR LOCK in	ACTIVE TEST m L UNLK to check	node.	rke norma	llvz		С
Is the inspection					iry.		C
		ck actuator is OK 89. "Diagnosis Pi					D
Diagnosis F			<u>.</u> .			INFOID:00000001115179	
							E
Regarding Wir	ing Diagram	information, refer	to <u>DLK-62</u>	2, "Wiring	<u>Diagram"</u> .		
				-			F
1.CHECK FU	EL LID DOC	R LOCK ACTUA	TOR INPU	T SIGNAL			_
	on switch OF t fuel lid doo	F. r lock actuator co	nnector				G
		n fuel lid door lock		narness co	onnector and gro	bund.	
(-	+)						Н
Fuel lid door		()		Cond	lition	Voltage (Approx.)	
Connector	Terminal 1		Door lock a		Unlock		
B20	2	Ground	switch		Lock	12 V	
Is the inspection			or Dofort) "Domoval and	Installation"	J
	D TO 2.	l door lock actuat		J <u>DLK-312</u>	<u>. Removal anu</u>	<u>Installation</u> .	
		R LOCK ACTUA					DLI
		oor lock actuators en BCM harness			id door lock actu	ator harness connector.	I
	BCM			Fuel lid doo	r lock actuator	• • •	
Conne	ctor	Terminal	Conr	nector	Terminal	Continuity	M
M81		135	B	20	2	Yes	
3. Check cor	ntinuitv betwe	137 en BCM harness	connector	and arou	1 nd.		Ν
	-	ВСМ		<u> </u>			
Cor	inector	Termina	al		_	Continuity	0
N	<i>J</i> /81	135			Ground	No	
		137					Р
Is the inspection YES >> G	on result nori O TO 3.	<u>nar?</u>					
NO >> Re	epair or repla						
3. СНЕСК ВС	M OUTPUT	SIGNAL					_

1. Connect BCM connector.

2. Check voltage between BCM harness connector and ground.

FUEL LID LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

	+) CM	(-)	Condition		Voltage (Approx.)
Connector	Terminal				(
M81	135	Ground	Door lock and unlock switch	Lock	12 V
IVIOT	137	Ground	DOOL OCK AND UNIOCK SWICH	Unlock	

Is the inspection result normal?

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

NO >> Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>.

UNLOCK SENSOR

ombonent Function	on Check			INFOID:00000001115179
-				INFOID.00000001115179
.CHECK FUNCTION Select INTELLIGEN				
Select INTELLIGEN Select UNLK SEN-D	R in DATA MONITC		owing conditions	
Monitor item		Condition		Status
		Lock		OFF
UNLK SEN -DR	Driver side door	Unlock		ON
the inspection result no	ormal?		L. L	
ES >> Unlock sense				
	<u>K-191, "Diagnosis Pr</u>	rocedure".		
iagnosis Procedur	re			INFOID:00000001115179
CHECK UNLOCK SE Turn ignition switch (Disconnect front doo Check signal betwee	OFF. or lock assembly LH	connector.		
· · · · · · · · · · · · · · · · · · ·			nnector and ground	I with oscilloscope.
			onnector and ground	I with oscilloscope.
Check signal betwee	-)		S	ignal
(+	-)		S	· · · · ·
(+ Front door lock	r) k assembly LH		S	ignal
(+ Front door lock Connector	c assembly LH Terminal	(-)	(Refere	Signal ence value)
(+ Front door lock Connector D14 the inspection result no 'ES >> GO TO 3.	c assembly LH Terminal	(-)	(Refere	Signal ence value)
(+ Front door lock Connector D14 the inspection result no ES >> GO TO 3. IO >> GO TO 2.	c assembly LH Terminal 3	(-)	(Refere	Signal ence value)
(+ Front door lock Connector D14 the inspection result no ES >> GO TO 3. O >> GO TO 2.	c assembly LH Terminal 3	(-)	(Refere	Signal ence value)
(+ Front door lock Connector D14 the inspection result no (ES >> GO TO 3. NO >> GO TO 2. .CHECK UNLOCK SE Disconnect BCM cor	c assembly LH Terminal 3 prmal? NSOR CIRCUIT nnector.	(-)	(V) 15 10 5 0 10 ms	Signal ence value)
(+ Front door lock Connector D14 the inspection result no (ES >> GO TO 3. NO >> GO TO 2. .CHECK UNLOCK SE Disconnect BCM cor	 c assembly LH Terminal 3 ormal? NSOR CIRCUIT nnector. ween BCM harness 	(-) Ground	(V) 15 10 5 0 10 ms 10 ms 10 ms 10 ms	Signal ence value)
(+ Front door lock Connector D14 the inspection result no (ES >> GO TO 3. NO >> GO TO 2. .CHECK UNLOCK SE Disconnect BCM cor Check continuity bet	 c assembly LH Terminal 3 ormal? NSOR CIRCUIT nnector. ween BCM harness 	(-) Ground	(V) 15 10 5 0 10 ms 10 ms 10 ms 10 ms	Signal ence value)

В	CM		Continuity	
Connector	Connector Terminal		Continuity	
M18	30		No	

UNLOCK SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>.

NO >> Repair or replace harness.

$\mathbf{3}$.check unlock sensor ground circuit

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

Front door loc	k assembly LH		Continuity
Connector	Terminal	Ground	Continuity
D14	4		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK UNLOCK SENSOR

Refer to <u>DLK-192, "Component Inspection"</u>.

Is the inspection result normal?

- YES >> GO TO 5.
- NO >> Replace front door lock assembly LH. Refer to <u>DLK-303, "DOOR LOCK : Removal and Installa-</u> tion".

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	
Ter	minal	Condition		Continuity	
3	1	Driver side door	Unlock	Yes	
5		Driver side door	Lock	No	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace front door lock assembly LH. Refer to <u>DLK-303, "DOOR LOCK : Removal and Installa-</u> tion".

DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

DOOR KEY CYLINDER SWITCH

Component Function Check

INFOID:000000011151797

INFOID 000000011151798

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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	Co	Condition		
KEY CYL LK-SW		Lock	ON	_
		Neutral / Unlock	OFF	
KEY CYL UN-SW	Driver side door key cylinder	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

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.

	(+)		Veltere	
Front door lo	Front door lock assembly LH		Voltage (Approx.)	DLK
Connector	Terminal		(+)	
 D14	5	Ground	5 V	I
D14	6	Giouria	5 V	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK DOOR KEY CYLINDER SWITCH SIGNAL CIRCUIT

- 1. Disconnect power window main switch connector.
- Check continuity between main power window and door lock/unlock switch harness connector and front door lock assembly LH harness connector.

					0
Main power window and	d door lock/unlock switch	Front door loc	k assembly LH	Continuity	-
Connector	Terminal	Connector	Terminal	Continuity	
D25	3	D14	6	Yes	- P
025	15		5	103	

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

DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Main power window and	d door lock/unlock switch		Continuity
Connector	Terminal	Ground	Continuity
D25	3	Ground	No
	15	-	NO

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to <u>PWC-62</u>, "<u>Removal and Instal-</u> lation".

NO >> Repair or replace harness.

$\mathbf{3}$.check door key cylinder switch ground circuit

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

Front door lock assembly LH			Continuity	
Connector	Terminal	Ground	Continuity	
D14	4		Yes	

Is the inspection result normal?

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

4.CHECK DOOR KEY CYLINDER SWITCH

Refer to DLK-194, "Component Inspection".

Is the inspection result normal?

- YES >> GO TO 5.
- NO >> Replace front door lock assembly LH. Refer to <u>DLK-303, "DOOR LOCK : Removal and Installa-</u> tion".

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
Term	inal			
5		Driver side door key cylinder	Unlock	Yes
5			Neutral / Lock	No
6		Driver side door key cylinder	Lock	Yes
0			Neutral / Unlock	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace front door lock assembly LH. Refer to <u>DLK-303, "DOOR LOCK : Removal and Installa-</u> tion".

REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

REMOTE KEYLESS ENTRY RECEIVER

Component Function Check

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 receive NO >> Refer to <u>DLK-195, "Diagnosis</u>		E	
Diagnosis Procedure	INFOID:0000000011151803		
		F	
Regarding Wiring Diagram information, re	fer 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.

	(+) Signal BCM (-) Condition (Reference value)		Signal	
Connector	Terminal			(Relefence value)
M80	119	Ground	Standby state	(V) 6 4 2 0 • • 0.2s OCC3881D
M80	119	Ground	Press the Intelligent Key lock or unlock button	(V) 6 4 2 0 • • • 0.2s

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>.

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		Continuity	
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.

(+) Remote keyless entry receiver			Voltage Approx.	
		(-)		
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 keyles	s entry receiver		Continuity	
Connector	Connector Terminal		Continuity	
M86	3		Yes	

Is the inspection result normal?

YES >> Replace remote keyless entry receiver. Refer to <u>DLK-321, "Removal and Installation"</u>.

NO >> Repair or replace harness.

< DTC/CIRCUIT DIAGNOSIS >

DOOR REQUEST SWITCH

Component Function Check 1.CHECK FUNCTION 1. Select INTELLIGENT KEY of BCM using CONSULT. 2. Select REQ SW-DR, REQ SW-AS in DATA MONITOR mode. 3. Check that the function operates normally according to the following conditions. Monitor item Condition Status Pressed ON **REQ SW -DR** Driver side door request switch OFF Released Pressed ON **REQ SW -AS** Passenger side door request switch Released OFF Is the inspection result normal? YES >> Front door request switch is OK. >> Refer to DLK-197, "Diagnosis Procedure". NO Diagnosis Procedure Regarding Wiring Diagram information, refer to <u>DLK-75, "Wiring Diagram"</u>. 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. (+) Voltage Front door request switch (-) (Approx.) Connector Terminal Driver side D15 3 Ground 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.
- Ν Check continuity between malfunctioning front door request switch harness connector and BCM harness 2. connector.

Front door request switch			BC	СМ	Continuity	0
Con	nector	Terminal	Connector	Terminal	Continuity	
Driver side	D15	3	M19	71	Yes	_
Passenger side	D115		10119	72	165	Р

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

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INFOID:000000011151803

12 V

DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Front door request switch				Continuity	
Connector		Terminal	Ground	Continuity	
Driver side	D15	3	Giouna	No	
Passenger side	D115			NO	

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>.

NO >> Repair or replace harness.

$\mathbf{3}$.check door request switch ground circuit

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

Front door request switch				Continuity	
Connector		Terminal	Oreverd	Continuity	
Driver side	D15	4	- Ground	Yes	
Passenger side	D115	- 4		Tes	

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 <u>DLK-316</u>, "<u>DRIVER SIDE</u> : <u>Removal and Installation</u>" or <u>DLK-316</u>, "<u>PASSENGER SIDE</u> : <u>Removal and Installation</u>".

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					
2	3 4		Pressed	Yes	
	4	Door request switch	Released	No	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace malfunctioning front door request switch. Refer to <u>DLK-304. "OUTSIDE HANDLE :</u> <u>Removal and Installation"</u>.

< DTC/CIRCUIT DIAGNOSIS > BACK DOOR REQUEST SWITCH А **Component Function Check** INFOID:000000011151805 1. CHECK FUNCTION В 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. Condition Status Monitor item On Pressed D **REQ SW-BD/TR** Back door request switch Off Released Is the inspection result normal? Е 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". CHECK BACK DOOR REQUEST SWITCH INPUT SIGNAL Н Turn ignition switch OFF. 1. 2. Disconnect back door opener switch connector. 3. Check voltage between back door opener switch harness connector and ground. (+) Voltage Back door opener switch (-)(Approx.) Connector Terminal D559 4 Ground 12 V DLK Is the inspection result normal? YES >> GO TO 3. NO >> GO TO 2. 2.check back door request switch circuit 1. Disconnect BCM connector. Check continuity between BCM harness connector and back door opener switch harness connector. 2. M BCM Back door opener switch Continuity Connector Terminal Connector Terminal Ν M20 83 D559 4 Yes Check continuity between BCM harness connector and ground. 3. BCM Continuity Terminal Ground Connector Ρ M20 83 No Is the inspection result normal? >> Replace BCM. Refer to BCS-80, "Removal and Installation". YES 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 >

Continuity
Continuity
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 <u>DLK-316</u>, "BACK DOOR : Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

Component Inspection

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 opene	Back door opener switch assembly Terminal		Condition	
Terr				
2	Δ	Pack door request switch	Pressed	Yes
3	4	Back door request switch	Released	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door opener switch assembly. Refer to <u>DLK-316, "BACK DOOR : Removal and</u> <u>Installation"</u>.

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	OR OPE	NER SWITC	Η			
Component	Function	h Check				INFOID:000000011151808
1.CHECK FUI	NCTION					
2. Select TR/	BD OPEN S	l using CONSULT. W in DATA MONI n operates normall	TOR mod		llowing conditio	ns.
Monitor	item		Conditi	on		Status
TR/BD OPEN	SW/ P	Back door opener switc		Pressed		ON
	5W L	Sack door opener switc		Released		OFF
NO >> Re	ck door ope fer to <u>DLK-2</u>	ner switch is OK. 201, "Diagnosis Pro	ocedure".			
Diagnosis P	roceaure					INFOID:000000011151809
1. CHECK BAG 1. Turn ignitic 2. Disconnect	CK DOOR C	information, refer DPEN INPUT SIGN FF. opener switch cor back door opener	IAL			nd.
	(+	-)				Signal
	Back door op			(-)		Signal (Reference value)
Conne	ector	Terminal				
D5	59	1		Ground		V) 15 0 5 0 10 ms JPMIA0012GB
D53				Ground		15 10 5 0 +>
Is the inspection YES >> GC				Ground		15 0 10 10 10 ms JPMIA0012GB
Is the inspectio YES >> GC NO >> GC	n result norr) TO 3.) TO 2.		CIRCUIT			15 0 10 10 10 ms JPMIA0012GB
Is the inspection YES >> GC NO >> GC 2.CHECK BAC 1. Disconnect	n result norr) TO 3.) TO 2. CK DOOR C t BCM conne	mal? DPENER SWITCH ector.			5	15 0 10 10 10 10 JPMIA0012GB
Is the inspection YES >> GC NO >> GC 2.CHECK BAC 1. Disconnect	n result norr) TO 3.) TO 2. CK DOOR C t BCM conne	mal? DPENER SWITCH ector.		r and back	5	itch harness connector.
Is the inspection YES >> GC NO >> GC 2.CHECK BAC 1. Disconnect	n result norr) TO 3.) TO 2. CK DOOR C t BCM conne tinuity betwee BCM	mal? DPENER SWITCH ector.	connecto	r and back	door opener sw	15 0 10 ms 10 ms JPMIA0012GB
$\frac{ s the inspection}{YES} >> GC \\ NO >> GC \\ 2.CHECK BAC \\ 1. Disconnect \\ 2. Check con \\ \hline Connect \\ M19 \\ \hline \end{tabular}$	n result norr) TO 3.) TO 2. CK DOOR C t BCM connection tinuity between BCM tor	mal? DPENER SWITCH ector. een BCM harness Terminal 80	Connector	r and back Back door o nector 559	door opener sw pener switch Terminal 1	itch harness connector.
$\frac{ s the inspection}{YES} >> GC \\ NO >> GC \\ 2.CHECK BAC \\ 1. Disconnect \\ 2. Check con \\ \hline Connect \\ M19 \\ \hline \end{tabular}$	n result norr) TO 3.) TO 2. CK DOOR C t BCM connection tinuity between BCM tor	mal? DPENER SWITCH ector. een BCM harness	Connector	r and back Back door o nector 559	door opener sw pener switch Terminal 1	Titch harness connector.
$\frac{ s \text{ the inspectio}}{YES} >> GC \\ NO >> GC \\ 2.CHECK BAC \\ 1. Disconnect \\ 2. Check con \\ \hline Connect \\ M19 \\ 3. Check con \\ \hline Connect \\ M19 \\ \hline Connect \\ \hline Connect \\ M19 \\ \hline Connect \\ \hline Co$	n result norr) TO 3.) TO 2. CK DOOR C t BCM conne tinuity between BCM tor	mal? DPENER SWITCH ector. een BCM harness Terminal 80	Connector	r and back Back door o nector 559 r and grour	door opener sw pener switch Terminal 1	Titch harness connector.

M19

< DTC/CIRCUIT DIAGNOSIS >

80

No

BACK DOOR OPENER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>.

NO >> Repair or replace harness.

$\mathbf{3}$.check back door opener switch ground circuit

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

Back door op	Back door opener switch		Continuity
Connector	Terminal	Ground	Continuity
D559	2		Yes
Is the inspection result norma	<u> ?</u>		
YES >> GO TO 4.			
NO >> Repair or replace	harness.		
4.CHECK BACK DOOR OP	ENER SWITCH		
Refer to DLK-202, "Compone	nt Inspection".		
Is the inspection result norma	<u> ?</u>		
YES >> GO TO 5.			
NO >> Replace back doo	or opener switch. Refer t	O DLK-316, "BACK DOOR :	Removal and Installation".
5. CHECK INTERMITTENT I	NCIDENT		
Refer to GI-47, "Intermittent In	ncident".		

>> 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	Pressed	Yes	
I	2	switch	Released	No	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door opener switch. Refer to <u>DLK-316, "BACK DOOR : Removal and Installation"</u>.

< DTC/CIRCUIT DIAGNOS	_	T KEY WARNI	NG BUZZER	
INTELLIGENT KEY		BUZZER		
Component Function	Check			INFCID:000000011151811
1.CHECK FUNCTION				
 Select "INTELLIGENT K Select "OUTSIDE BUZZ 	ER" in "ACTIVE	TEST" mode.		
3. Touch "On" or "Off" to ch		normally.		
Is the inspection result norm YES >> Intelligent Key v		OK.		
NO >> Refer to <u>DLK-20</u>				
Diagnosis Procedure				INFOID:000000011151812
Regarding Wiring Diagram i	nformation, refer	to <u>DLK-75, "Wiring</u>	<u>Diagram"</u> .	
1.CHECK FUSE				
 Turn ignition switch OFF Check 10 A fuse [No. 25] 	located in fuse	block (I/B)]		
Is the inspection result norm				
YES >> GO TO 2.				
NO >> Replace the blo 2.CHECK INTELLIGENT K	•	-		own.
1. Disconnect Intelligent K				
 Check voltage between 			ess connector and	ground.
(+)			
	warning buzzer		(-)	Voltage (Approx.)
Connector	Terminal			
E1	1		Ground	Battery voltage
Is the inspection result norm YES >> GO TO 3.	<u>al?</u>			
NO >> Repair or replace	e harness.			
0	EY WARNING B	UZZER CIRCUIT		
3. CHECK INTELLIGENT K				
1. Disconnect BCM conne	ctor.		in ont Kou working	
1. Disconnect BCM conne	ctor.		igent Key warning	buzzer harness connector.
1. Disconnect BCM conne	ctor.	connector and Intell	igent Key warning	
Disconnect BCM conner Check continuity between BCM Connector	ctor. en BCM harness Terminal	connector and Intell Intelligent Key Connector	v warning buzzer	Continuity
1. Disconnect BCM conne 2. Check continuity betweet BCM Connector M19	ctor. en BCM harness Terminal 64	connector and Intell Intelligent Key Connector E1	v warning buzzer Terminal 3	
Disconnect BCM conner Check continuity between BCM Connector	ctor. en BCM harness Terminal 64	connector and Intell Intelligent Key Connector E1	v warning buzzer Terminal 3	Continuity
1. Disconnect BCM conne 2. Check continuity betweet BCM Connector M19 3. Check continuity betweet	ctor. en BCM harness Terminal 64	connector and Intell Intelligent Key Connector E1	v warning buzzer Terminal 3	Continuity Yes
1. Disconnect BCM conne 2. Check continuity betweet BCM Connector M19 3. Check continuity betweet B Connector B Connector B Connector	ctor. en BCM harness Terminal 64 en BCM harness CM Termina	connector and Intell Intelligent Key Connector E1 connector and grou	v warning buzzer Terminal 3	Continuity Yes Continuity
1. Disconnect BCM conne 2. Check continuity betweet BCM Connector M19 3. Check continuity betweet B Connector M19 3. Check continuity betweet B Connector M19 M19	ctor. en BCM harness Terminal 64 en BCM harness CM Termina 64	connector and Intell Intelligent Key Connector E1 connector and grou	v warning buzzer Terminal 3 nd.	Continuity Yes
1. Disconnect BCM conne 2. Check continuity betweet BCM Connector M19 3. Check continuity betweet B Connector M19 3. Check continuity betweet B Connector M19 Is the inspection result norm	ctor. en BCM harness Terminal 64 en BCM harness CM Termina 64	connector and Intell Intelligent Key Connector E1 connector and grou	v warning buzzer Terminal 3 nd.	Continuity Yes Continuity
1. Disconnect BCM conne 2. Check continuity betweet BCM Connector M19 3. Check continuity betweet B Connector M19 3. Check continuity betweet B Connector M19 M19	ctor. en BCM harness Terminal 64 en BCM harness CM Termina 64 al? e harness.	connector and Intell Intelligent Key Connector E1 connector and grou	v warning buzzer Terminal 3 nd.	Continuity Yes Continuity

INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

Refer to DLK-204, "Component Inspection".

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>.

NO >> Replace Intelligent Key warning buzzer. Refer to <u>DLK-319</u>, "Removal and Installation".

Component Inspection

INFOID:000000011151813

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			
Teri	Terminal		
(+)	(-)		
1	3	Buzzer sounds	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace Intelligent Key warning buzzer. Refer to <u>DLK-319</u>, "Removal and Installation".

INTELLIGENT KEY	
Component Function Check	0000000011151814
 NOTE: The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Sign User Guide for additional information. Check Intelligent Key relative signal strength. Confirm vehicle Intelligent Key antenna signal strength. 1.CHECK FUNCTION 	al Tech II
 Select "INTELLIGENT KEY" of "BCM" using CONSULT. Select "RKE OPE COUN1" in "DATA MONITOR" mode. Check that the function operates normally according to the following conditions. 	

Monitor item	Condition	
RKE OPE COUN1	Check that the numerical value is changing while operating on the Intelligent Key.	
Is the inspection result normal?		F
YES >> Intelligent Key is OK.		

NO >> Refer to DLK-205, "Diagnosis Procedure".

Diagnosis Procedure

< DTC/CIRCUIT DIAGNOSIS >

NOTE:

The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II $_{\rm H}$ User Guide for additional information.

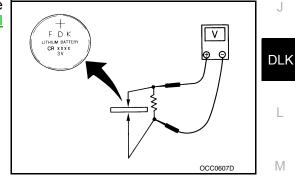
- Check Intelligent Key relative signal strength.
- Confirm vehicle Intelligent Key antenna signal strength.
- **1.**CHECK INTELLIGENT KEY BATTERY

Check by connecting a resistance (approximately 300Ω) so that the current value becomes about 10 mA. Refer to <u>DLK-322</u>, "<u>Removal</u> and <u>Installation</u>".

Standard : Approx. 2.5 - 3.0V

Is the measurement value within the specification?

- YES >> Replace Intelligent Key.
- NO >> Replace Intelligent Key battery.



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INFOID:000000011151815

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METER BUZZER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

METER BUZZER CIRCUIT

Description

• 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

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 <u>DLK-206, "Diagnosis Procedure"</u>.

Diagnosis Procedure

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 <u>BCS-80, "Removal and Installation"</u>.

INFOID:0000000011151816

INFOID:0000000011151817

< DTC/CIRCUIT DIAGNOSIS >	
KEY WARNING LAMP	А
Component Function Check	A
1.CHECK FUNCTION	В
 Select "INTELLIGENT KEY" of "BCM" using CONSULT. Select "INDICATOR" in "ACTIVE TEST" mode. Touch "KEY IND" or "KEY ON" to check that it works normally. Is the inspection result normal? 	С
YES >> Key warning lamp is OK. NO >> Refer to <u>DLK-207, "Diagnosis Procedure"</u> .	D
Diagnosis Procedure	
1.CHECK KEY WARNING LAMP	Е
Refer to MWI-18, "CONSULT Function (METER/M&A)".	
<u>Is the inspection result normal?</u> YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	F
2.CHECK INTERMITTENT INCIDENT	G
Refer to GI-47, "Intermittent Incident".	
>> Inspection End.	Η

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< DTC/CIRCUIT DIAGNOSIS >

HAZARD FUNCTION

Component Function Check

1.CHECK FUNCTION

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

Is the inspection result normal?

- YES >> Hazard warning lamp circuit is OK.
- NO >> Refer to <u>DLK-208</u>, "Diagnosis Procedure".

Diagnosis Procedure

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.

INFOID:000000011151821

AUTOMATIC BACK DOOR CLOSE SWITCH

COTC/CIRCUIT DIAGN			·L1	
			νΠ	
Component Functio	n Check			INFOID:000000011151823
.CHECK FUNCTION				
 Select "AUTOMATIC Select "BK DOOR CL Check that the function 	. SW" in "DATA MC	NITOR" mode.	-	s.
Monitor item		Condition		Status
BK DOOR CL SW	Automatic bac	ck door close switch	Pressed	ON
BR DOOR CL SW	Automatic bac	ck door close switch	Released	OFF
	ck door close switc -209. "Diagnosis Pi			INFOID:0000000011151824
CHECK AUTOMATIC	BACK DOOR CLO	SE SWITCH INPL		
. Check voltage betwee	en automatic back (+)	door close switch	harness connector a	
Automatic b	ack door close switch		()	Voltage (Approx.)
Connector	Termi	nal		
D566	1		Ground	Battery voltage
 <u>s the inspection result no</u> YES >> GO TO 3. NO >> GO TO 2. CHECK AUTOMATIC Disconnect automatic Check continuity bety door close switch har 	BACK DOOR CLO back door control ween automatic ba	module connecto	r.	nector and automatic back
Automatic back door	control module	Automatic	back door close switch	
Connector	Terminal	Connector	Terminal	Continuity
B55	23	D566	1	Yes
Check continuity betv	veen automatic bac	ck door control mo	odule harness conne	ctor and ground.
Automatic bac	k door control module			
Connector	Termina	ıl	Ground	Continuity
B55	23			No
s the inspection result no YES >> Replace auto NO >> Repair or rep CHECK AUTOMATIC	matic back door co lace harness.			noval and Installation".

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		Continuity	
Connector	Connector Terminal		Continuity	
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 <u>DLK-326</u>, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

Component Inspection

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	Automatic back door close switch Terminal		dition	Continuity
Terr			Condition	
1	2	Automatic back door	Pressed	Yes
I	2	close switch	Released	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace automatic back door close switch. Refer to <u>DLK-326, "Removal and Installation"</u>.

AUTOMATIC BACK DOOR MAIN SWITCH

< DTC/CIRCUIT DIAGNO	SIS >						
AUTOMATIC BACK	K DC			Н			
Component Function	Che	eck					INFOID:000000011151826
1.CHECK FUNCTION							
 Select AUTOMATIC B/ Select MAIN SW in DA Check that the function 	TA MC	NITOR mode	е.		0		
Monitor item			Condition	1			Status
MAIN SW	Auto	matic back door	main switch	ON			ON
	Auto	Halic Dack 0001	main switch	OFF	=		OFF
Is the inspection result norm YES >> Automatic back NO >> Refer to DLK-2	k door						
Diagnosis Procedure							INFOID:000000011151827
Regarding Wiring Diagram 1 .CHECK AUTOMATIC B 1. Turn ignition switch OF	ACK D			-	-		
 Disconnect automatic I Check voltage between 	back de n autor				ness conn	ector and gro	bund.
Automatic back	(+) door m	ain switch		(-	-)		Voltage
Connector		Terminal		,	/		(Approx.)
M185		1		Gro	und	Bat	ttery voltage
Is the inspection result norm YES >> GO TO 3. NO >> GO TO 2. 2.CHECK AUTOMATIC B 1. Disconnect automatic I 2. Check continuity betw door main switch harm	ACK D back de	oor control m utomatic back	odule connec	ctor.	dule harne	ss connector	and automatic back
			ſ				
Automatic back door					ack door mair		Continuity
Connector B55		erminal	Conne M18			Terminal 1	Yes
3. Check continuity betwe	en au	-	-	-	le connect		
Automatic Connector	back d	oor control modu	ıle Ferminal		Gr	ound	Continuity
B55			10		GI		No
Is the inspection result norm YES >> Replace autom NO >> Repair or repla 3.CHECK AUTOMATIC B	natic ba ce har	ness.	rol module. F				

AUTOMATIC BACK DOOR MAIN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Check continuity between automatic back door main switch connector and ground.

Automatic back do	oor main switch		Continuity	
Connector	Terminal	Ground	Continuity	
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 <u>DLK-324</u>, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

Component Inspection

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
 Terr	ninal	Condi		Continuity
 1	1 3 Automatic back door main switch		ON	Yes
I			OFF	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace automatic back door main switch. Refer to <u>DLK-324</u>, "Removal and Installation".

AUTOMATIC BACK DOOR SWITCH

<pre>< DTC/CIRCUIT DIAGNOSIS > AUTOMATIC BACK DO </pre>					
Component Function Ch	eck				A
1.CHECK FUNCTION					
1. Select AUTOMATIC BACK I			using CONSI	ШТ	B
2. Select AUTO BD SW in DAT	A MONITOR m	ode.			
3. Check that the function oper	ates normally a	ccording to th	e following c	onditions.	C
Monitor item		Conditio	n		Status
AUTO BD SW	Automatic back	door switch	Pressed		ON
			Released		OFF
Is the inspection result normal?YES>> Automatic back dooNO>> Refer to DLK-213. "		:dure".			E
Diagnosis Procedure	-				INFOID:000000011151830
Depending Wiring Diagram inform	nation refer to [na Diogram"		
Regarding Wiring Diagram inform	nation, reier to <u>i</u>	<u>JLK-90, VVIII</u>	<u>ig Diagram</u> .		G
1.CHECK AUTOMATIC BACK	DOOR SWITCH	I INPUT SIGN	AL		H
 Turn ignition switch OFF. Disconnect automatic back (door switch conr	nector.			
3. Check voltage between auto			ess connecto	r and ground.	
(+)					
Automatic back doc	or switch		()		Voltage Approx)
Connector	Terminal			(Approx.) J
M186	1	(Ground	Bat	ery voltage
Is the inspection result normal?					DL
YES >> GO TO 3. NO >> GO TO 2.					
2.CHECK AUTOMATIC BACK					L
			r		
 Disconnect automatic back of Check continuity between a 				ess connector	and automatic back \mathbb{N}
door switch harness connec					IV
Automatic back door contro	ol module	Auton	atic back door	switch	
Connector	Terminal	Connecto	r	Terminal	Continuity N
B55	22	M186		1	Yes
3. Check continuity between a	utomatic back de	oor control m	odule harnes	s connector a	nd ground. C
Automatic back door	control module				Continuit
Connector	Terminal		Ground		Continuity
B55	22				No
Is the inspection result normal?					
YES >> Replace automatic to NO >> Repair or replace ha		ol module. Re	er to <u>DLK-32</u>	3, "Removal a	and Installation".
3. СНЕСК АUTOMATIC BACK	DOOR SWITCH	I GROUND C	RCUIT		

AUTOMATIC BACK DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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

Automatic back door switch			Continuity	
Connector	Terminal	Ground	Continuity	
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 <u>DLK-325, "Removal and Installation"</u>.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

Component Inspection

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 ba	ck door switch	Condition		Continuity
Terr	minal	Conditio	ות	Continuity
1	2	Automatic back door switch	Pressed	Yes
I	1 2	Automatic Dack UOOF Switch	Released	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace automatic back door switch. Refer to <u>DLK-325, "Removal and Installation"</u>.

HALF LATCH SWITCH

DTC/CIRCUIT DIAGNO	SIS >			
IALF LATCH SWI	ТСН			
Component Function Check				
.CHECK FUNCTION				
	ACK DOOR CONTROL N		NSULT.	
	W in DATA MONITOR monogeneous on operates normally accord		a conditions	
	r operates normally accor		g conditions.	
Monitor item		Condition		Status
HALF LATCH SW	Back door Fully closed/Half latch		alf latch	OFF
		Open		ON
s the inspection result norr YES >> Half latch switch				
	215, "Diagnosis Procedur	<u>e"</u> .		
Diagnosis Procedure				INFOID:000000011151833
9				
Regarding Wiring Diagram	information, refer to <u>DLK</u>	<u>-96, "Wiring Diagrai</u>	<u>n"</u> .	
CHECK HALF LATCH S	WITCH INPUT SIGNAL			
. Turn ignition switch OF				
	lock assembly connector. n back door lock assembl		and around	
. Check voltage between		IY Harness connecto	and ground.	
(-	-)			Mallace
(- Back door lo		(-)		Voltage (Approx.)
· · · · · · · · · · · · · · · · · · ·		(-)		(Approx.)
Back door lo Connector D557	Terminal 6	(–) Ground		0
Back door lo Connector D557 s the inspection result norr	Terminal 6			(Approx.)
Back door lo Connector D557 S the inspection result norr YES >> GO TO 3.	Terminal 6			(Approx.)
Back door lo Connector D557 s the inspection result norr YES >> GO TO 3. NO >> GO TO 2.	Terminal 6 mal?			(Approx.)
Back door lo Connector D557 S the inspection result norr YES >> GO TO 3. NO >> GO TO 2. CHECK HALF LATCH S	Terminal 6 mal?	Ground		(Approx.)
Back door lo Connector D557 S the inspection result norr YES >> GO TO 3. NO >> GO TO 2. CHECK HALF LATCH S Disconnect automatic	Image: ck assembly Terminal 6 6 mal? 6 SWITCH CIRCUIT 6 back door control module	Ground	Ba	(Approx.)
Back door lo Connector D557 S the inspection result norr YES >> GO TO 3. NO >> GO TO 2. CHECK HALF LATCH S Disconnect automatic I Check continuity between	Terminal Terminal 6 mal? SWITCH CIRCUIT back door control module een automatic back door	Ground e connector. control module harn	Bai	(Approx.)
Back door lo Connector D557 S the inspection result norr YES >> GO TO 3. NO >> GO TO 2. CHECK HALF LATCH S Disconnect automatic I Check continuity betwee Automatic back door	Terminal 6 mal? SWITCH CIRCUIT back door control module control module	Ground e connector. control module harn Back door lock	Bai ess connector. assembly	(Approx.)
Back door lo Connector D557 S the inspection result norr YES >> GO TO 3. NO >> GO TO 2. CHECK HALF LATCH S Disconnect automatic I Check continuity betwee Automatic back door Connector	Terminal 6 mal? SWITCH CIRCUIT back door control module control module Terminal	Ground e connector. control module harn Back door lock Connector	ess connector. assembly Terminal	(Approx.) tery voltage
Back door lo Connector D557 s the inspection result norm YES >> GO TO 3. NO >> GO TO 2. CHECK HALF LATCH S CHECK HALF LATCH S Disconnect automatic I Check continuity between Automatic back door Connector B55	Terminal Terminal 6 mal? SWITCH CIRCUIT back door control module control module Terminal 3	Ground e connector. control module harn Back door lock Connector D557	eess connector. assembly Terminal 6	(Approx.) tery voltage Continuity Yes
Back door lo Connector D557 s the inspection result norm YES >> GO TO 3. NO >> GO TO 2. CHECK HALF LATCH S CHECK HALF LATCH S Disconnect automatic I Check continuity between Automatic back door Connector B55	Terminal 6 mal? SWITCH CIRCUIT back door control module control module Terminal	Ground e connector. control module harn Back door lock Connector D557	eess connector. assembly Terminal 6	(Approx.) tery voltage Continuity Yes
Back door lo Connector D557 s the inspection result norm YES >> GO TO 3. NO >> GO TO 2. 2.CHECK HALF LATCH S . Disconnect automatic I 2. Check continuity between Automatic back door Connector B55 3. Check continuity between	Terminal Terminal 6 mal? SWITCH CIRCUIT back door control module control module Terminal 3	Ground e connector. control module harn Back door lock Connector D557	eess connector. assembly Terminal 6	(Approx.) tery voltage Continuity Yes ground.
Back door lo Connector D557 s the inspection result norm YES >> GO TO 3. NO >> GO TO 2. 2.CHECK HALF LATCH S . Disconnect automatic I 2. Check continuity between Automatic back door Connector B55 3. Check continuity between	Terminal Terminal 6 mal? SWITCH CIRCUIT back door control module control module Terminal 3 een automatic back door	Ground e connector. control module harn Back door lock Connector D557	Bai bess connector. assembly Terminal 6 bess connector and	(Approx.) tery voltage Continuity Yes
Back door lo Connector D557 s the inspection result norm YES >> GO TO 3. NO >> GO TO 2. CHECK HALF LATCH S Disconnect automatic I Check continuity betwee Automatic back door Connector B55 S. Check continuity betwee Automatic back door Connector B55 Automatic back door	Terminal 6 mal? SWITCH CIRCUIT back door control module control module Terminal 3 cen automatic back door k door control module	Ground e connector. control module harn Back door lock Connector D557 control module harn	Bai bess connector. assembly Terminal 6 bess connector and	(Approx.) tery voltage Continuity Yes ground.
Back door lo Connector D557 s the inspection result norm YES >> GO TO 3. NO >> GO TO 2. 2.CHECK HALF LATCH S Disconnect automatic I Check continuity betwee Automatic back door Connector B55 3. Check continuity betwee Automatic back door Connector B55 3. Check continuity betwee	Terminal 6 mal? SWITCH CIRCUIT back door control module control module Terminal 3 cen automatic back door k door control module Terminal 3 cen automatic back door 3 a 3 a 3 a 3 a 3 a 3 a 3 a 3 a 3 a 3 a 3	Ground e connector. control module harn Back door lock Connector D557 control module harn	Bai bess connector. assembly Terminal 6 bess connector and	(Approx.) tery voltage Continuity Yes ground. Continuity
Back door lo Connector D557 s the inspection result norm YES >> GO TO 3. NO >> GO TO 2. 2.CHECK HALF LATCH S Disconnect automatic I Check continuity between Automatic back door Connector B55 3. Check continuity between Automatic back door Connector B55 3. Check continuity between Automatic back Somector B55 Sthe inspection result norm YES >> Replace autom	Terminal 6 mal? SWITCH CIRCUIT back door control module control module Terminal 3 cen automatic back door k door control module Terminal 3 cen automatic back door k door control module Terminal 3 mal? natic back door control module	Ground Connector. Control module harm Back door lock Connector D557 Control module harm Groun Groun	ess connector. assembly Terminal 6 tess connector and nd	(Approx.) tery voltage Continuity Yes ground. Continuity No
Back door lo Connector D557 s the inspection result norm YES >> GO TO 3. NO >> GO TO 2. 2.CHECK HALF LATCH S . Disconnect automatic I 2. CHECK continuity between Automatic back door Connector B55 3. Check continuity between Automatic back door Connector B55 3. Check continuity between Automatic back Connector B55 s. the inspection result norm	Image: second system Terminal 6 6 mal? 6 SWITCH CIRCUIT 5 back door control module 6 control module 7 control module 7 a 3 cen automatic back door 6 k door control module 7 a 3 amal? 3 matic back door control module 3 matic back door control module 3	Ground Connector. Control module harm Back door lock Connector D557 Control module harm Groun odule. Refer to DLK	ess connector. assembly Terminal 6 tess connector and nd	(Approx.) tery voltage Continuity Yes ground. Continuity No

HALF LATCH SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Back door lock assembly			Continuity	
Connector	Terminal	Ground	Continuity	
D557	8	-	Yes	
Is the inspection result normal?			·	
YES >> GO TO 4.				
NO >> Repair or replace h				
4. CHECK HALF LATCH SWIT	СН			
Refer to DLK-216. "Component	Inspection".			
Is the inspection result normal?				
YES >> GO TO 5.				
-	=	er to <u>DLK-310, "DOOR LOC</u>	K : Removal and Installation".	
5. CHECK INTERMITTENT IN	CIDENT			
Refer to GI-47, "Intermittent Inc	ident".			
>> Inspection End.				
Component Inspection			INFOID:000000011151834	
COMPONENT INSPECTION				
1. CHECK HALF LATCH SWIT	СН			
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 <u>DLK-310, "DOOR LOCK : Removal and Installation"</u>.

< DTC/CIRCUIT DIAGNOSIS >

TOUCH SENSOR	
--------------	--

RH

1.CHECK FUNCTION			
2. Select TOUCH SEN	RH in DATA MONITOR me	MODULE using CONSULT. ode. ording to the following conditions	i.
Monitor item		Condition	Status
TOUCH SEN RH	Touch sensor RH	Other than below	OFF
TOUCH SEN RH		Detect obstruction	ON
RH : Diagnosis Pro			INFOID:000000011151836
Regarding Wiring Diagra	m information, refer to <u>DLk</u>	K-96, "Wiring Diagram".	
1.CHECK TOUCH SEN	SOR INPUT SIGNAL		
. Turn ignition switch (2. Check voltage betweeness connector.		ess connector and automatic bac	ck door control module har-

	(+)	(•	(-)			J			
	Touch s	ensor RH		tomatic back door control mod- ule		Condition		Condition		
•	Connector	Terminal	Connector	Terminal	-			DLK		
	D555	1	B55	13	Touch sensor	Touch sensor Touch sensor				
	D333	I	600	15	RH	Other than above	2.72 – 7.27 V	L		
. '			10							

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.
- Check continuity between automatic back door control module harness connector and touch sensor RH harness connector.

Automatic back doo	or control module	Touch se	ensor RH	Continuity	-
Connector	Terminal	Connector	Terminal	Continuity	D
B55	1	D555	1	Yes	P

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

Automatic back do	or control module		Continuity
Connector	Terminal	Ground	Continuity
B55	1		No

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< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to <u>DLK-323</u>, "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 do	Automatic back door control module		ensor RH	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B55	13	D555	2	Yes

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

Automatic back do	or control module		Continuity
Connector	Terminal	Ground	Continuity
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.

((+)		N/ 1/
Automatic back d	oor control module	(—)	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 <u>DLK-311, "TOUCH SENSOR : Removal and Installation"</u>.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

RH : Component Inspection

1. CHECK TOUCH SENSOR RH

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

< DTC/CIRCUIT DIAGNOSIS >

Touch ser	isor RH	Condition		Resistance		
Termi	nal			(Approx.)		
1	2	Touch sensor RH				380 – 420 kΩ
I	2		Other than above	0.95 – 1.05 kΩ		
s the inspection result	t normal?					
YES >> Inspection NO >> Replace to .H		Refer to <u>DLK-311, '</u>	TOUCH SENSOR : F	Removal and Installation".		
H : Component	Function Ch	eck		INFOID:000000011151838		
CHECK FUNCTION	N					
	-	CONTROL MODUL	E using CONSULT.			
. Select AUTOMAT 2. Select TOUCH SE 3. Check that the fur	IC BACK DOOR EN LH in DATA M	IONITOR mode. ormally according to	E using CONSULT. the following condition			
. Select AUTOMAT 2. Select TOUCH SE	IC BACK DOOR EN LH in DATA M	IONITOR mode. ormally according to Conc	the following condition	Status		
. Select AUTOMAT 2. Select TOUCH SE 3. Check that the fur	IC BACK DOOR EN LH in DATA M	IONITOR mode. ormally according to Conc nsor LH	the following condition			
. Select AUTOMAT 2. Select TOUCH SE 3. Check that the fur Monitor item	IC BACK DOOR EN LH in DATA M nction operates n Touch ser	IONITOR mode. ormally according to Conc nsor LH	the following condition	Status OFF		
. Select AUTOMAT 2. Select TOUCH SE 3. Check that the fur Monitor item TOUCH SEN LH s the inspection result YES >> Touch ser	IC BACK DOOR EN LH in DATA M Inction operates n Touch ser t normal? Insor LH is OK.	IONITOR mode. ormally according to Conc nsor LH	the following condition ther than below etect obstruction	Status OFF		
. Select AUTOMAT 2. Select TOUCH SE 3. Check that the fur Monitor item TOUCH SEN LH s the inspection result YES >> Touch ser	IC BACK DOOR EN LH in DATA M Inction operates n Touch ser t normal? Insor LH is OK.	IONITOR mode. ormally according to Conc nsor LH	the following condition ther than below etect obstruction	Status OFF ON		
. Select AUTOMAT 2. Select TOUCH SE 3. Check that the fur Monitor item TOUCH SEN LH s the inspection result YES >> Touch ser NO >> Refer to D	IC BACK DOOR EN LH in DATA M Inction operates n Touch ser t normal? Insor LH is OK.	IONITOR mode. ormally according to Conc nsor LH	the following condition ther than below etect obstruction	Status OFF		
. Select AUTOMAT 2. Select TOUCH SE 3. Check that the fur Monitor item TOUCH SEN LH s the inspection result YES >> Touch ser NO >> Refer to D	IC BACK DOOR IN LH in DATA M Inction operates n Touch ser t normal? Insor LH is OK. DLK-219, "LH : Di Tocedure	IONITOR mode. ormally according to Conc nsor LH	the following condition ther than below etect obstruction	Status OFF ON		

1. CHECK TOUCH SENSOR INPUT SIGNAL

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

-	((1)	()				
-	(+) Touch sensor LH		Automatic back	–) door control mod- ile	Condition		Voltage (Approx.)	M
_	Connector	Terminal	Connector	Terminal				
_	D556	1	B55	13	Touch sensor	Detect obstruc- tion	1.8 – 5 V	Ν
	D550	1	600	15	LH	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.

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< DTC/CIRCUIT DIAGNOSIS >

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

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

Automatic back d	oor control module		Continuity
Connector	Terminal	Ground	Continuity
B55	2		No

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to <u>DLK-323, "Removal and Installation"</u>.
- 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.
- 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		Continuity	
B55	13	D556	2	Yes	

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

Automatic back do	or control module		Continuity
Connector	Terminal	Ground	Continuity
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.

(·	+)	Vallage	
Automatic back de	oor control module	()	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.

< DTC/CIRCUIT DIAGNOSIS >

LH : Component Inspection

INFOID:000000011151840

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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 s	ensor LH	C	ondition	Resistance	(
Terr	ninal	Condition		(Approx.)	
1	2	Touch sensor LH	Detect obstruction	380 – 420 kΩ	г
I	2		Other than above	0.95 – 1.05 kΩ	L

Is the inspection result normal?

YES >> Inspection End.

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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.

	+) e unit RH	(-)			Voltage (Approx.)
Connector	Terminal				(
B162	9	Cround	Back door	Auto open opera- tion	Battery voltage
D102	2	Ground	Dack UUUI	Auto close opera- tion	

Is the inspection result normal?

YES >> Replace spindle unit RH. Refer to <u>DLK-298</u>, "<u>SPINDLE UNIT</u> : <u>Removal and Installation</u>". >> 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	Continuity	
B56	29	B162	9	Yes	
630	36	B102	2	165	

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

Automatic bac	Automatic back door control module		Continuity
Connector	Terminal	Ground	Continuity
B56	29	Giouna	No
000	36		NO

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-323</u>, "<u>Removal and Installation</u>". NO >> Repair or replace harness.

LH

LH : Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-96, "Wiring Diagram".

1. CHECK SPINDLE MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.

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INFOID:000000011151842

SPINDLE MOTOR

< DTC/CIRCUIT DIAGNOSIS >

2. Disconnect spindle unit LH connector.

3. Check voltage between spindle unit LH harness connector and ground.

	+) unit LH	(-)		Condition		В
Connector	Terminal	-			(Approx.)	
B70	9	Ground	Back door	Auto open opera- tion	Pattan waltaga	С
670	2	Ground	Back UOOI	Auto close opera- tion	Battery voltage	
inspection res	sult normal?	1	1	1		D

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.

Au	omatic back d	oor control module	Spindle unit LH		Continuity	
Cor	nector	Terminal	Connector	Terminal	Continuity	G
	356	27	B70	9	Yes	
	550	34		2	165	Н

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

Automatic back door control module			Continuity	
Connector	Terminal	Ground	Continuity	
B56	27	Ground	No	
650	34		No	J

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-323, "Removal and Installation".

NO >> Repair or replace harness. DLK

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BACK DOOR CLOSURE MOTOR

Diagnosis Procedure

INFOID:000000011151843

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.

(+ Back door lo	/	(-)	Condition		Voltage (Approx.)
Connector	Terminal	*			X FF - 7
D557	1	Ground	Back door opener	Pressed	Battery voltage
D357	2	Ground	switch	Released	0 V

Is the inspection result normal?

YES >> Replace back door lock assembly. Refer to <u>DLK-310, "DOOR LOCK : Removal and Installation"</u>. 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 doo	or control module	Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B56	31	D557	1	Yes
630	38		2	165

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

Automatic back doo	r control module		Continuity
Connector	Terminal	Ground	Continuity
B56	31		No
650	38		NO

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-323, "Removal and Installation"</u>.

NO >> Repair or replace harness.

AUTOMATIC BACK DOOR WARNING BUZZER < DTC/CIRCUIT DIAGNOSIS > AUTOMATIC BACK DOOR WARNING BUZZER А **Diagnosis** Procedure INFOID:000000011151844 В Regarding Wiring Diagram information, refer to <u>DLK-96, "Wiring Diagram"</u>. 1. CHECK BACK DOOR WARNING CHIME POWER SUPPLY CIRCUIT 1. Turn ignition switch OFF. 2. Disconnect back door warning chime connector. D 3. Check voltage between back door warning chime harness connector and ground. (+) Ε Voltage Back door warning chime (-) (Approx.) 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. Н 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 Terminal Terminal Connector Connector B56 37 B402 1 Yes J Check continuity between automatic back door control module harness connector and ground. 3. DLK Automatic back door control module Continuity Connector Terminal Ground B56 37 No Is the inspection result normal? YES >> Replace automatic back door control module. Refer to <u>DLK-323, "Removal and Installation"</u>. NO >> Repair or replace harness. Μ $\mathbf{3}.$ CHECK BACK DOOR WARNING CHIME GROUND CIRCUIT Check continuity between back door warning chime harness connector and ground. Ν Back door warning chime Continuity Connector Terminal Ground B402 2 Yes Is the inspection result normal? YFS >> GO TO 4. Ρ >> Repair or replace harness. NO **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 <u>DLK-320, "Removal and Installation"</u>.

AUTOMATIC BACK DOOR WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

5. CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:000000011151845

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.

	or warning chime	
Operation	nal	Termin
	(-)	(+)
Chime sounds	2	1

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door warning chime. Refer to <u>DLK-320, "Removal and Installation"</u>.

GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

GROUND CIRCUIT

Diagnosis Procedure

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 de	oor control module		Continuity	E
Connector	Terminal		Continuity	
B56	32	Ground		
630	28		Yes	F
B55	4 (Except For Mexico)			

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-323, "Removal and Installation"</u>.

NO >> Repair or replace harness.

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INFOID:000000011151846

< DTC/CIRCUIT DIAGNOSIS >

HOOD SWITCH

Component Function Check

INFOID:000000011151847

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
	nood	Close	OFF

Is the indication normal?

YES >> Hood switch is OK.

NO >> Go to <u>DLK-228, "Diagnosis Procedure"</u>.

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.

(+) Hood switch		(-)	Voltage (V) (Approx.)
Connector	Terminal		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
E205	1	Ground	12
	2	Ground	١Z

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.

IPD	M E/R	Hood switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
E218	94	E205	1	Yes
EZIO	96	E205	2	165

3. Check continuity between IPDM E/R harness connector and ground.

IPDN	I E/R		Continuity
Connector	Terminal	Ground	Continuity
E218	94	Ground	No
EZIO	96		INO

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.

H	Hood switch			Operationsity
Connector	Terminal	(Ground	Continuity
E205	3			Yes
Is the inspection result	normal?			
YES >> GO TO 4.				
	eplace harness.			
4.CHECK HOOD SWI	ТСН			
Refer to <u>DLK-229, "Cor</u>	nponent Inspection"			
Is the inspection result	normal?			
YES >> GO TO 5.	ad awitch Data to !			E - Domoval and Instal
NO >> Replace ho lation".	bod switch. Refer to <u>I</u>	<u>JLK-301, "HOOD LC</u>	JCK RELEASE CABL	E : Removal and Instal-
5. CHECK INTERMITT				
Refer to <u>GI-47, "Intermi</u>	ttent inclaent.			
>> Inspection	End			
•				
Component Inspec				INFOID:000000011151849
1.check hood swi	ТСН			
1. Turn ignition switch	OFF.			
2. Disconnect hood sv				
Check continuity be	etween hood switch t	erminals.		
Hood	switch			
	ninal	Co	ndition	Continuity
			Press	Yes
1	3		Release	No
		Hood switch	Press	No
2	3		F1655	INU
—			Release	Yes

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace hood switch. Refer to <u>DLK-301, "HOOD LOCK RELEASE CABLE : Removal and Instal-</u><u>lation"</u>.

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INTEGRATED HOMELINK TRANSMITTER

< DTC/CIRCUIT DIAGNOSIS >

INTEGRATED HOMELINK TRANSMITTER

Component Function Check

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 <u>DLK-230, "Diagnosis Procedure"</u>.

3.CHECK TRANSMITTER

Check transmitter with Tool*.

*: For details, refer to Technical Service Bulletin.

Is the inspection result normal?

- YES >> Receiver or hand-held transmitter malfunction, not vehicle related.
- NO >> Replace auto anti-dazzling inside mirror (homelink[®] universal transceiver). Refer to <u>MIR-16.</u> <u>"Removal and Installation"</u>.

Diagnosis Procedure

INFOID:0000000011151851

INFOID:0000000011151850

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.
- Check voltage between auto anti-dazzling inside mirror (homelink[®] universal transceiver) harness connector and ground.

Auto anti-dazzling inside mirror (Homelink [®] universal transceiv- er) connector	Terminal		Condition	Voltage (V) (Approx.)
	10	Ground	Ignition switch position: OFF	Battery voltage
	6	Ground	Ignition switch position: ON	Dattery Voltage

Is the inspection result normal?

YES >> GO TO 2. NO >> Check the

>> 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
s the inspection result normal? YES >> GO TO 3. NO >> Repair harness. 3. CHECK INTERMITTENT INCIDENT		·	
Refer to <u>GI-47, "Intermittent Incident"</u> . >> Inspection End.			

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SYMPTOM DIAGNOSIS INTELLIGENT KEY SYSTEM SYMPTOMS

Symptom Table

INFOID:000000011151852

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 <u>DLK-233</u>. Drivers side door inoperative. Refer to <u>DLK-233</u>. Passenger side door inoperative. Refer to <u>DLK-234</u>. Rear LH door inoperative. Refer to <u>DLK-234</u>. Rear RH door inoperative. Refer to <u>DLK-234</u>.
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 <u>DLK-237</u>. Drivers side door request switch. Refer to <u>DLK-238</u>. Passenger side door request switch. Refer to <u>DLK-238</u>. Back door request switch. Refer to <u>DLK-238</u>.
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 <u>DLK-260</u>. Automatic back door switch. Refer to <u>DLK-261</u>. Automatic back door close switch. Refer to <u>DLK-261</u>. Intelligent Key. Refer to <u>DLK-262</u>. Back door opener switch. Refer to <u>DLK-262</u>. Open/closure function. Refer to <u>DLK-263</u>. Open function. Refer to <u>DLK-264</u>. Closure function. Refer to <u>DLK-265</u>.
Automatic back door warning does not operate.	Refer to <u>DLK-266</u> .
Automatic back door functions do not cancel.	Refer to <u>DLK-268</u> .
Automatic back door anti-pinch functions do not operate.	Refer to DLK-269.
Integrated homelink transmitter does not operate.	Refer to <u>DLK-270</u> .
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	A
ALL DOOR	
ALL DOOR : Description	в
All doors do not lock/unlock using door lock and unlock switch.	C
ALL DOOR : Diagnosis Procedure	4
1.CHECK DOOR LOCK AND UNLOCK SWITCH	D
 Check door lock and unlock switch. Driver side: Refer to <u>DLK-178, "DRIVER SIDE : Component Function Check"</u>. Passenger side: Refer to <u>DLK-181, "PASSENGER SIDE : Component Function Check"</u>. 	_
Is the inspection result normal?	E
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts. 2.CHECK DOOR LOCK ACTUATOR	F
Check front door lock assembly (driver side).	-
Refer to DLK-184, "DRIVER SIDE : Component Function Check".	G
Is the inspection result normal? YES >> GO TO 3.	
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	Н
3. REPLACE BCM	
 Replace BCM. Refer to <u>BCS-80. "Removal and Installation"</u>. Confirm the operation after replacement. 	
Is the result normal?	
YES >> Inspection End.	J
NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> . DRIVER SIDE	
DRIVER SIDE : Description	DLK
·	5
Driver side door does not lock/unlock using door lock and unlock switch.	L
DRIVER SIDE : Diagnosis Procedure	6
1.CHECK DOOR LOCK ACTUATOR	M
Check front door lock assembly (driver side). Refer to <u>DLK-184, "DRIVER SIDE : Component Function Check"</u> .	-
Is the inspection result normal?	Ν
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts. 2.REPLACE BCM	0
Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u> .	-
Confirm the operation after replacement.	Р
Is the result normal? YES >> Inspection End.	
NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> .	
PASSENGER SIDE	

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

< SYMPTOM DIAGNOSIS >	
PASSENGER SIDE : Description	INFOID:000000011151857
Passenger side door does not lock/unlock using door lock and unlock switch.	
PASSENGER SIDE : Diagnosis Procedure	INFOID:000000011151858
1. CHECK DOOR LOCK ACTUATOR	
Check front door lock assembly (passenger side). Refer to <u>DLK-185, "PASSENGER SIDE : Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts. 2.REPLACE BCM	
Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u> .	
Confirm the operation after replacement.	
<u>Is the result normal?</u> YES >> Inspection End.	
NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> .	
REAR LH	
REAR LH : Description	INFOID:000000011151859
Rear LH side door does not lock/unlock using door lock and unlock switch.	
REAR LH : Diagnosis Procedure	INFOID:000000011151860
1. CHECK DOOR LOCK ACTUATOR	
Check rear door lock assembly LH. Refer to <u>DLK-186, "REAR LH : Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	
NO >> Repair or replace the malfunctioning parts. 2.REPLACE BCM	
Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u> .	
 Confirm the operation after replacement. 	
<u>Is the result normal?</u> YES >> Inspection End.	
NO >> Check intermittent incident. Refer to <u>GI-47. "Intermittent Incident"</u> .	
REAR RH	
REAR RH : Description	INFOID:000000011151861
Rear RH side door does not lock/unlock using door lock and unlock switch.	
REAR RH : Diagnosis Procedure	INFOID:000000011151862
1. CHECK DOOR LOCK ACTUATOR	
Check rear door lock assembly RH. Refer to <u>DLK-187, "REAR RH : Component Function Check"</u> .	
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".	

Replace BCM. Refer to <u>BCS-80, "Removal and Installation".</u>

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

< SYMPTOM DIAGNOSIS >	
Confirm the operation after replacement.	
Is the result normal?	А
YES >> Inspection End. NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> .	
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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 OPERA-TION

Diagnosis Procedure

INFOID:000000011151863

1. CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

NO >> Refer to <u>DLK-233</u>, "ALL DOOR : Diagnosis Procedure".

2. CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.

Refer to <u>DLK-193</u>. "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 <u>BCS-80, "Removal and Installation".</u>

Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u>.

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH < SYMPTOM DIAGNOSIS >	
DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH ALL DOOR REQUEST SWITCHES	А
ALL DOOR REQUEST SWITCHES : Description	64 B
All doors do not lock/unlock using all door request switches.	D
ALL DOOR REQUEST SWITCHES : Diagnosis Procedure	65 C
1. CHECK REMOTE KEYLESS ENTRY FUNCTION	
Check remote keyless entry function. <u>Does door lock/unlock with Intelligent Key button?</u> YES >> GO TO 2.	D
NO >> Refer to <u>DLK-195, "Component Function Check"</u> . 2.CHECK "LOCK/UNLOCK BY I-KEY" SETTING IN "WORK SUPPORT"	E
 Select "INTELLIGENT KEY" of "BCM" using CONSULT. Select "LOCK/UNLOCK BY I-KEY" in "WORK SUPPORT" mode. Check "LOCK/UNLOCK BY I-KEY" setting in "WORK SUPPORT". Refer to <u>BCS-21, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>. 	F
Is the inspection result normal? YES >> GO TO 3. NO >> Set "ON" in "LOCK/UNLOCK BY I-KEY".	G
3. CHECK DOOR SWITCH	Н
Check door switch. Refer to <u>DLK-172, "Component Function Check"</u> .	
<u>Is the inspection result normal?</u> YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	I
4. CHECK INSIDE KEY ANTENNA	J
 Check inside key antenna. Instrument center: Refer to <u>DLK-151, "DTC Logic"</u>. Console: Refer to <u>DLK-153, "DTC Logic"</u>. Luggage room: Refer to <u>DLK-155, "DTC Logic"</u>. 	DLK
<u>Is the inspection result normal?</u> YES >> GO TO 5.	L
NO >> Repair or replace the malfunctioning parts.	
5.CHECK OUTSIDE KEY ANTENNA	M
 Check outside key antenna. Driver side: Refer to <u>DLK-168, "Component Function Check"</u>. Passenger side: Refer to <u>DLK-166, "Component Function Check"</u>. Back door: Refer to <u>DLK-170, "Component Function Check"</u>. 	Ν
Is the inspection result normal?	0
YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts.	0
6.CHECK BACK DOOR SWITCH	– P
Check back door switch. Refer to <u>DLK-174, "Component Function Check"</u> .	
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 <u>BCS-80, "Removal and Installation"</u>. Confirm the operation after replacement.
Is the result normal?
YES >> Inspection End.
NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> . DRIVER SIDE DOOR REQUEST SWITCH
DRIVER SIDE DOOR REQUEST SWITCH : Description
All doors do not lock/unlock using driver side door request switch.
DRIVER SIDE DOOR REQUEST SWITCH : Diagnosis Procedure
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 <u>BCS-80, "Removal and Installation"</u> .
Confirm the operation after replacement.
Is the result normal?
YES >> Inspection End. NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> .
PASSENGER SIDE DOOR REQUEST SWITCH
PASSENGER SIDE DOOR REQUEST SWITCH : Description
All doors do not lock/unlock using passenger side door request switch.
PASSENGER SIDE DOOR REQUEST SWITCH : Diagnosis Procedure
1. CHECK DOOR REQUEST SWITCH
Check front door request switch (passenger side).
Refer to <u>DLK-197, "Component Function Check"</u> . Is the inspection result normal?
YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.
2.REPLACE BCM
 Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>. Confirm the operation after replacement.
Is the result normal?
YES >> Inspection End. NO >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".
NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> . BACK DOOR REQUEST SWITCH
BACK DOOR REQUEST SWITCH : Description
· · · · · · · · · · · · · · · · · · ·
All doors do not lock/unlock using back door request switch.
All doors do not lock/unlock using back door request switch.
All doors do not lock/unlock using back door request switch. BACK DOOR REQUEST SWITCH : Diagnosis Procedure

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

< SYMPTOM DIAGNOSIS >	
Refer to DLK-199, "Component Function Check".	
Is the inspection result normal?	A
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	
2.REPLACE BCM	В
Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u> .	
Confirm the operation after replacement. <u>Is the result normal?</u>	С
YES >> Inspection End.	
NO >> Check intermittent incident. Refer to <u>GI-47. "Intermittent Incident"</u> .	D
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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:000000011151872

1. CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

NO >> Refer to <u>DLK-233</u>, "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 <u>GI-47, "Intermittent Incident"</u>.

FUEL LID LOCK ACTUATOR DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >	
FUEL LID LOCK ACTUATOR DOES NOT OPERATE	
TOLE LID LOOK ACTORION DOES NOT OF LIVE	А
Diagnosis Procedure	
1. CHECK POWER DOOR LOCK OPERATION	В
Check power door lock operation.	
Does door lock/unlock with door lock and unlock switch?	
YES >> GO TO 2. NO >> Refer to <u>DLK-233, "ALL DOOR : Diagnosis Procedure"</u> .	C
2. CHECK FUEL LID LOCK ACTUATOR	D
Check fuel lid lock actuator. Refer to <u>DLK-189, "Component Function Check"</u> .	
Is the inspection result normal?	Ε
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
3. REPLACE BCM	F
 Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>. Confirm the operation after replacement. 	0
Is the result normal?	G
YES >> Inspection End. NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> .	
NO Check intermittent incluent. Relef to <u>GI-47, Intermittent incluent</u> .	Н

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IGNITION POSITION WARNING FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

IGNITION POSITION WARNING FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000011151874

1. CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

NO >> Refer to <u>DLK-233</u>, "ALL DOOR : Diagnosis Procedure".

2. CHECK DOOR SWITCH

Check door switch Refer to <u>DLK-172</u>, "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 <u>GI-47, "Intermittent Incident"</u>.

SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE < SYMPTOM DIAGNOSIS > SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE А **Diagnosis** Procedure INFOID:000000011151875 1. CHECK "DOOR LOCK–UNLOCK SET" SETTING IN "WORK SUPPORT" В 1. Select "DOOR LOCK" of "BCM" using CONSULT. Select "DOOR LOCK-UNLOCK SET" in "WORK SUPPORT" mode. 2. Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT". 3. Refer to BCS-15, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)". Is the inspection result normal? YES >> GO TO 2. D NO >> Set "On" in "DOOR LOCK-UNLOCK SET". 2.REPLACE BCM Е · Replace BCM. Refer to BCS-80, "Removal and Installation". · Confirm the operation after replacement. Is the result normal? F YES >> Inspection End.

NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u>.

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AUTO DOOR LOCK OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

AUTO DOOR LOCK OPERATION DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000011151876

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 <u>BCS-21</u>, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.

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

• Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>.

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 OPER-ATE

Diagnosis Procedure INFOID:000000011151877 В 1. CHECK "AUTOMATIC LOCK/UNLOCK SELECT" SETTING IN "WORK SUPPORT" 1. Select "DOOR LOCK" of "BCM" using CONSULT. Select "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT" mode. 2. 3. Check "AUTOMATIC LOCK/UNLOCK SELECT" setting in "WORK SUPPORT". Refer to BCS-15, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)". D Is the inspection result normal? YES >> GO TO 2. NO >> Set "Lock Only" or "Lock/Unlock" in "WORK SUPPORT". Е 2.CHECK "AUTOMATIC DOOR LOCK SELECT" SETTING IN "WORK SUPPORT" Select "DOOR LOCK" of "BCM" using CONSULT. 1. Select "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT" mode. 2. Check "AUTOMATIC DOOR LOCK SELECT" setting in "WORK SUPPORT". 3. 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 Н Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>. 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.
- 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.
- Check "AUTOMATIC DOOR UNLOCK SELECT" setting in "WORK SUPPORT". Refer to <u>BCS-15, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.

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 <u>GI-47, "Intermittent Incident"</u>.

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

< SYMPTOM DIAGNOSIS >

P RANGE INTERLOCK DOOR LOCK/UNLOCK FUNCTION DOES NOT OP-ERATE

Diagnosis Procedure	INFOID:0000000011151879	3
1. CHECK "AUTOMATIC LOCK/UNLOCK SELECT" SETTING IN "WORK SUPPORT"		-
 Select "DOOR LOCK" of "BCM" using CONSULT. Select "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT" mode. Check "AUTOMATIC LOCK/UNLOCK SELECT" setting in "WORK SUPPORT". Refer to <u>BCS-15, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>. 	C	
Is the inspection result normal?	Γ)
YES >> GO TO 2. NO >> Set "Unlock Only", "Lock Only" or "Lock/Unlock" in "AUTOMATIC LOCK/UNLOCK S 2.CHECK "AUTOMATIC DOOR LOCK SELECT" SETTING IN "WORK SUPPORT"	BELECT".	
 Select "DOOR LOCK" of "BCM" using CONSULT. Select "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT" mode. Check "AUTOMATIC DOOR LOCK SELECT" setting in "WORK SUPPORT". Refer to <u>BCS-15, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>. 	F	
Is the inspection result normal?	(à
YES >> GO TO 3. NO >> Set "P RANGE" in "AUTOMATIC DOOR LOCK SELECT". 3. CHECK "AUTOMATIC DOOR UNLOCK SELECT" SETTING IN "WORK SUPPORT"	ŀ	-
 Select "DOOR LOCK" of "BCM" using CONSULT. Select "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT" mode. Check "AUTOMATIC DOOR UNLOCK SELECT" setting in "WORK SUPPORT". Refer to <u>BCS-15, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>. 		
Is the inspection result normal? YES >> GO TO 4. NO >> Set "MODE 2" or "MODE 4" in "AUTOMATIC DOOR UNLOCK SELECT".	J	J
4.REPLACE BCM	DI	к
 Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>. Confirm the operation after replacement. 		
Is the result normal?	I	
 YES >> Inspection End. NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u>. 	L	-
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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 <u>BCS-80, "Removal and Installation"</u>.
- 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	Α
Diagnosis Procedure	INFOID:000000011151881
1.CHECK "HAZARD ANSWER BACK" SETTING IN "WORK SUPPORT"	В
 Select "INTELLIGENT KEY" of "BCM" using CONSULT. Select "HAZARD ANSWER BACK" in "WORK SUPPORT" mode. Check the "HAZARD ANSWER BACK" setting in "WORK SUPPORT". Refer to <u>BCS-21, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>. 	С
Is the inspection result normal? YES >> GO TO 2.	D
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"	F
 Select "INTELLIGENT KEY" of "BCM" using CONSULT. Select "ANS BACK I-KEY LOCK" in "WORK SUPPORT" mode. Check the "ANS BACK I-KEY LOCK" setting in "WORK SUPPORT". Refer to <u>BCS-21, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>. 	F
Is the inspection result normal? YES >> GO TO 3.	
NO >> Set the "Horn Chirp" or "Buzzer" in "ANS BACK I-KEY LOCK".	G
${f 3.}$ CHECK "ANS BACK I-KEY UNLOCK" SETTING IN "WORK SUPPORT"	
 Select "INTELLIGENT KEY" of "BCM" using CONSULT. Select "ANS BACK I-KEY UNLOCK" in "WORK SUPPORT" mode. Check the "ANS BACK I-KEY UNLOCK" setting in "WORK SUPPORT". Refer to <u>BCS-21, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>. 	Н
Is the inspection result normal?	
YES >> GO TO 4. NO >> Set the "On" in "ANS BACK I-KEY UNLOCK".	I
4.CHECK HAZARD FUNCTION	0
Check hazard function. Refer to <u>DLK-208, "Component Function Check"</u> .	DLK
Is the inspection result normal?	
YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts.	L
5. CHECK INTELLIGENT KEY WARNING BUZZER	
Check Intelligent Key warning buzzer. Refer to <u>DLK-203, "Component Function Check"</u> .	M
Is the inspection result normal?	
YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts.	Ν
6.REPLACE BCM	
Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u> .	0
Confirm the operation after replacement.	
<u>Is the result normal?</u> YES >> Inspection End. NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> .	Р

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 <u>BCS-21</u>, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

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

2. CHECK INSIDE KEY ANTENNA

Check inside key antenna.

- Instrument center: Refer to <u>DLK-151, "DTC Logic"</u>.
- Console: Refer to <u>DLK-153</u>, "DTC Logic".
- Luggage room: Refer to <u>DLK-155, "DTC Logic"</u>.

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 <u>GI-47, "Intermittent Incident"</u>.

WELCOME LIGHT FUNCTION DOES NOT OPERATE < SYMPTOM DIAGNOSIS >	
WELCOME LIGHT FUNCTION DOES NOT OPERATE	
Diagnosis Procedure	A ID:000000011151883
1. CHECK "WELCOME LIGHT OP SET" SETTING IN "WORK SUPPORT"	В
 Select "INTELLIGENT KEY" of "BCM" using CONSULT. Select "WELCOME LIGHT OP SET" in "WORK SUPPORT" mode. Check "WELCOME LIGHT OP SET" setting in "WORK SUPPORT". Refer to <u>BCS-21, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>. 	С
Is the inspection result normal? YES >> GO TO 2. NO >> Set "On" and "WELCOME LIGHT SELECT" in "WORK SUPPORT".	D
2. CHECK "WELCOME LIGHT SELECT" SETTING IN "WORK SUPPORT"	-
 Select "INTELLIGENT KEY" of "BCM" using CONSULT. Select "WELCOME LIGHT SELECT" in "WORK SUPPORT" mode. Check "WELCOME LIGHT SELECT" setting in "WORK SUPPORT". Refer to <u>BCS-21, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>. 	F
Is the inspection result normal? YES >> GO TO 3. NO >> Set "WELCOME LIGHT SELECT" setting in "WORK SUPPORT".	G
3.CHECK INSIDE KEY ANTENNA	
 Check inside key antenna. Instrument center: Refer to <u>DLK-151, "DTC Logic"</u>. Console: Refer to <u>DLK-153, "DTC Logic"</u>. Luggage room: Refer to <u>DLK-155, "DTC Logic"</u>. 	H
Is the inspection result normal? YES >> GO TO 4.	I
NO >> Repair or replace the malfunctioning parts.	
4.CHECK OUTSIDE KEY ANTENNA	
 Check outside key antenna. Driver side: Refer to <u>DLK-168, "Component Function Check"</u>. Passenger side: Refer to <u>DLK-166, "Component Function Check"</u>. Back door: Refer to <u>DLK-170, "Component Function Check"</u>. 	DLK
<u>Is the inspection result normal?</u> YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts.	L
5. CHECK REMOTE KEYLESS ENTRY FUNCTION	Μ
Check remote keyless entry function Does door lock/unlock with Intelligent Key button?	N
YES >> GO TO 6. NO >> Refer to <u>DLK-240, "Diagnosis Procedure"</u> .	
6.CHECK INTERIOR ROOM LAMP CONTROL SYSTEM	0
Check interior room lamp control system. Refer to <u>INL-6, "INTERIOR ROOM LAMP CONTROL</u> System Description".	<u>SYSTEM :</u>
Does the room lamp and puddle lamp turn ON?	Р
YES >> GO TO 7. NO >> Refer to <u>INL-58. "Symptom Table"</u> . 7. REPLACE BCM	
Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u> .	
Confirm the operation after replacement.	
Is the result normal?	

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
1.снеск отс with всм
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
$\label{eq:combination meter buzzer.} \\ \mbox{Refer to } \underline{DLK-206, "Component Function Check"}. \\ \\ \mbox{Is the inspection result normal?} \\ \mbox{YES} >> GO TO 5. \\ \mbox{NO} >> \mbox{Repair or replace the malfunctioning parts.} \\ \\ \mbox{5.CHECK INTELLIGENT KEY WARNING BUZZER} \\ \\ \mbox{Check Intelligent Key warning buzzer.} \\ \mbox{Refer to } \underline{DLK-203, "Component Function Check".} \\ \\ \mbox{Is the inspection result normal?} \\ \\ \mbox{YES} >> GO TO 6. \\ \mbox{NO} >> \mbox{Repair or replace the malfunctioning parts.} \\ \\ \mbox{6.REPLACE BCM} \\ \hline \mbox{ equation of the operation after replacement.} \\ \\ \mbox{Is the result normal?} \\ \\ \mbox{YES} >> \mbox{Inspection End.} \\ \mbox{NO} >> \mbox{Check intermittent incident. Refer to } \underline{GI-47, "Intermittent Incident".} \\ \end{array}$

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< SYMPTOM DIAGNOSIS >

ACC WARNING DOES NOT OPERATE

Description

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 <u>DLK-35</u>, "WARNING FUNCTION : <u>System</u> <u>Description</u>".

Diagnosis Procedure

INFOID:000000011151886

INFOID:0000000011151885

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 <u>GI-47, "Intermittent Incident"</u>.

TAKE AWAY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >	
TAKE AWAY WARNING DOES NOT OPERATE	٨
Description	A
Take away warning function does not operate for vehicle with information display models.	В
NOTE: Warning functions operating condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to <u>DLK-35</u> , "WARNING FUNCTION : System <u>Description</u> ".	С
Diagnosis Procedure	
1.снеск отс with всм	D
Check that DTC is not detected with BCM. <u>Is the inspection result normal?</u> YES >> GO TO 2.	E
NO >> Perform trouble diagnosis relevant to DTC indicated. 2.CHECK DTC WITH COMBINATION METER	F
Check that DTC is not detected with combination meter. Is the inspection result normal?	G
YES >> GO TO 3. NO >> Perform trouble diagnosis relevant to DTC indicated.	
3. CHECK INSIDE KEY ANTENNA	Η
 Check inside key antenna. Instrument center: Refer to <u>DLK-151, "DTC Logic"</u>. Console: Refer to <u>DLK-153, "DTC Logic"</u>. Luggage room: Refer to <u>DLK-155, "DTC Logic"</u>. 	I
Is the inspection result normal?YES>> GO TO 4.NO>> Repair or replace the malfunctioning parts.	J
4. CHECK DOOR SWITCH	
Check front door switch (driver side). Refer to DLK-172, "Component Function Check".	DLK
<u>Is the inspection result normal?</u> YES >> GO TO 5.	L
NO >> Repair or replace the malfunctioning parts. 5.CHECK COMBINATION METER BUZZER	
Check combination meter buzzer. Refer to <u>DLK-206, "Component Function Check"</u> .	M
Is the inspection result normal?	Ν
YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts.	
6.CHECK INTELLIGENT KEY WARNING BUZZER	0
Check Intelligent Key warning buzzer.	
Refer to DLK-203, "Component Function Check".	Ρ
<u>Is the inspection result normal?</u> YES >> GO TO 7.	
NO >> Repair or replace the malfunctioning parts.	
/.REPLACE BCM	

Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>.
Confirm the operation after replacement.

TAKE AWAY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

Is the result normal?

- YES >> Inspection End.
- NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u>.

KEY ID WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS > KEY ID WARNING DOES NOT OPERATE

	А
Description	
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 <u>DLK-35</u> , "WARNING FUNCTION : System	В
Description".	С
Diagnosis Procedure	
1.снеск отс with всм	D
Check that DTC is not detected with BCM. <u>Is the inspection result normal?</u> YES >> GO TO 2.	Е
NO >> Perform trouble diagnosis relevant to DTC indicated. 2.CHECK DTC WITH COMBINATION METER	F
Check that DTC is not detected with combination meter. <u>Is the inspection result normal?</u> YES >> GO TO 3.	G
NO >> Perform trouble diagnosis relevant to DTC indicated. 3.CHECK INTELLIGENT KEY	Н
Check Intelligent Key. Refer to <u>DLK-205, "Component Function Check"</u> . Is the inspection result normal?	I
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. 4. CHECK INSIDE KEY ANTENNA	J
Check inside key antenna.	DLK
YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts.	L
5.REPLACE BCM	M
 Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>. Confirm the operation after replacement. 	
<u>Is the result normal?</u> YES >> Inspection End.	Ν
NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> .	0

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INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

Description

INFOID:000000011151891

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 <u>DLK-35</u>, "WARNING FUNCTION : <u>System</u> <u>Description</u>".

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 <u>DLK-151, "DTC Logic"</u>.
- Console: Refer to <u>DLK-153</u>, "DTC Logic".
- Luggage room: Refer to <u>DLK-155, "DTC Logic"</u>.

Is the inspection result normal?

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

6.REPLACE BCM

- Replace BCM. Refer to BCS-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:000000011151893	A
1. CHECK DOOR LOCK FUNCTION		В
Check door lock function.		
Does door lock/unlock using door request switch?		
YES >> GO TO 2.		С
NO >> Refer to <u>DLK-237</u> , "ALL DOOR REQUEST SWITCHES : Diagnosis Procedure".		
2.CHECK INTELLIGENT KEY WARNING BUZZER		D
Check Intelligent Key warning buzzer.		
Refer to DLK-203, "Component Function Check".		
Is the inspection result normal?		E
YES >> GO TO 3.		
NO >> Repair or replace the malfunctioning parts.		
3. REPLACE BCM		F
 Replace BCM. Refer to <u>BCS-80, "Removal and Installation"</u>. 		
 Confirm the operation after replacement. 		
Is the result normal?		G
YES >> Inspection End.		
NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> .		Н
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< SYMPTOM DIAGNOSIS >

AUTOMATIC BACK DOOR OPERATION DOES NOT OPERATE ALL SWITCHES

ALL SWITCHES : Description

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 <u>DLK-39</u>, "System Description".

ALL SWITCHES : Diagnosis Procedure

INFOID:000000011151895

INFOID 000000011151894

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 <u>DLK-263, "OPEN/CLOSURE FUNCTION : Diagnosis Procedure"</u>.

 $\mathbf{3}$.check power supply and ground circuit

Check automatic back door control module power supply and ground circuit. Refer to <u>DLK-164, "AUTOMATIC BACK DOOR CONTROL UNIT : Diagnosis Procedure"</u>.

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 <u>DLK-227, "Diagnosis Procedure"</u>.

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 <u>DLK-125</u>, "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. Revision: September 2014

AUTOMATIC BACK DOOR OPERATION DOES NOT OPERATE < SYMPTOM DIAGNOSIS > NO >> Check intermittent incident. Refer to GI-47, "Intermittent Incident". AUTOMATIC BACK DOOR SWITCH А AUTOMATIC BACK DOOR SWITCH : Description INFOID:000000011151896 В 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 D CHECK AUTOMATIC BACK DOOR SWITCH Check automatic back door switch. Refer to DLK-213, "Component Function Check". Е 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". Confirm the operation after replacement. 2. Is the result normal? YES >> Inspection End. Н 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 DLK **1**.CONFIRM THE OPERATION 1. Turn ON automatic back door main switch. L 2. Confirm the operation. Is the result normal? >> Automatic back door system is normal. YES M NO >> GO TO 2. 2.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH N 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. $\mathbf{3}$. CHECK AUTOMATIC BACK DOOR MAIN SWITCH P 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

< 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 <u>GI-47, "Intermittent Incident"</u>.

INTELLIGENT KEY

INTELLIGENT KEY : Description

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 <u>DLK-39</u>, "System Description".

INTELLIGENT KEY : Diagnosis Procedure

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 <u>DLK-240, "Diagnosis Procedure"</u>.

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 <u>GI-47, "Intermittent Incident"</u>.

BACK DOOR OPENER SWITCH

BACK DOOR OPENER SWITCH : Description

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 <u>DLK-39</u>, "System Description".

BACK DOOR OPENER SWITCH : Diagnosis Procedure

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.

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INFOID:0000000011151902

INFOID:000000011151903

INFOID:0000000011151901

INFOID:000000011151900

< SYMPTOM DIAGNOSIS >

2. CHECK AUTOMATIC BACK DOOR MAIN SWITCH	Δ
Check automatic back door main switch. Refer to <u>DLK-211, "Component Function Check"</u> .	\square
Is the inspection result normal?	В
YES >> GO TO 3.	D
NO >> Repair or replace the malfunctioning parts.	
3.CHECK BACK DOOR OPENER SWITCH	С
Check back door opener switch.	
Refer to DLK-201, "Component Function Check".	D
<u>Is the inspection result normal?</u> YES >> GO TO 4.	
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	
4. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE	Е
 Replace automatic back door control module. Refer to <u>DLK-323, "Removal and Installation"</u>. Confirm the operation after replacement. 	_
Is the result normal?	F
YES >> Inspection End.	
NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> .	G
OPEN/CLOSURE FUNCTION	
OPEN/CLOSURE FUNCTION : Description	
·	Η
Back door auto closure function does not operate when back door opening and closing operations are per- formed.	
OPEN/CLOSURE FUNCTION : Diagnosis Procedure	
1.CONFIRM THE OPERATION	
1. Turn ON automatic back door main switch.	J
2. Confirm the operation.	
Is the result normal?	DLK
YES >> Automatic back door system is normal. NO >> GO TO 2.	
2. CHECK DTC WITH AUTOMATIC BACK DOOR CONTROL MODULE	L
Check that DTC is not detected with automatic back door control module.	
Is the inspection result normal?	М
YES >> GO TO 3. NO >> Perform trouble diagnosis relevant to DTC indicated.	
e e	
3. CHECK AUTOMATIC BACK DOOR MAIN SWITCH	Ν
Check automatic back door main switch. Refer to <u>DLK-211, "Component Function Check"</u> .	
Is the inspection result normal?	0
YES >> GO TO 4.	U
NO >> Repair or replace the malfunctioning parts.	
4. CHECK BACK DOOR OPENER SWITCH	Ρ
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.

< SYMPTOM DIAGNOSIS >

5. CHECK BACK DOOR CLOSURE MOTOR

Check back door closure motor. Refer to <u>DLK-224</u>, "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 <u>GI-47. "Intermittent Incident"</u>.

OPEN FUNCTION

OPEN FUNCTION : Description

Back door auto closure function does not operate when back door opening operations are performed.

OPEN FUNCTION : Diagnosis Procedure

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 <u>DLK-211</u>, "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 <u>GI-47, "Intermittent Incident"</u>.

CLOSURE FUNCTION

CLOSURE FUNCTION : Description

Back door auto closure function does not operate when back door closing operations are performed.

INFOID:0000000011151908

INFOID:000000011151907

INFOID:000000011151906

< SYMPTOM DIAGNOSIS >	
CLOSURE FUNCTION : Diagnosis Procedure	
1.CHECK HALF LATCH SWITCH	A
Check half latch switch. Refer to <u>DLK-215, "Component Function Check"</u> .	В
Is the inspection result normal? YES >> GO TO 2.	С
NO >> Repair or replace the malfunctioning parts. 2.CHECK BACK DOOR CLOSURE MOTOR	
Check back door closure motor. Refer to <u>DLK-224, "Diagnosis Procedure"</u> .	D
Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	E
3.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE	F
 Replace automatic back door control module. Refer to <u>DLK-323, "Removal and Installation"</u>. Confirm the operation after replacement. 	
<u>Is the result normal?</u> YES >> Inspection End. NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> .	G
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AUTOMATIC BACK DOOR WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

AUTOMATIC BACK DOOR WARNING DOES NOT OPERATE BUZZER

BUZZER : Description

Automatic back door warning chime does not operate when automatic back door warning function are performed.

BUZZER : Diagnosis Procedure

1. CHECK DTC WITCH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

2. CHECK BACK DOOR WARNING CHIME

Check back door warning chime.

Refer to DLK-225, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

 ${\it 3.}$ REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-323, "Removal and Installation".

Confirm the operation after replacement. 2.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".

HAZARD WARNING LAMP

HAZARD WARNING LAMP : Description

Hazard warning lamp does not operate when automatic back door warning function are performed.

HAZARD WARNING LAMP : Diagnosis Procedure

1. CHECK DTC WITCH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis relevant to DTC indicated.

2.check dtc witch bcm

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Perform trouble diagnosis relevant to DTC indicated.

 $\mathbf{3}$.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

f 4 . CHECK HAZARD AND HORN REMINDER FUNCTION

INFOID:000000011151911

INFOID:000000011151910

INFOID 000000011151912

INFOID:000000011151913

AUTOMATIC BACK DOOR WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >	
Check hazard and horn reminder function.	
Is the inspection result normal?	A
YES >> GO TO 5. NO >> Refer to <u>DLK-248, "Diagnosis Procedure"</u> .	
5. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE	В
 Replace automatic back door control module. Refer to <u>DLK-323</u>, "<u>Removal and Installation</u>". 	
 Confirm the operation after replacement. 	C
Is the result normal?	С
YES >> Inspection End.	
NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> .	D
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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 <u>DLK-323, "Removal and Installation"</u>.

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u>.

AUTOMATIC BACK DOOR ANTI-PINCH FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >	
AUTOMATIC BACK DOOR ANTI-PINCH FUNCTION DOES NOT OPERATE	Λ
Diagnosis Procedure	A
1. CHECK POWER SUPPLY AND GROUND CIRCUIT	В
Check automatic back door control module power supply and ground circuit. Refer to <u>DLK-164, "AUTOMATIC BACK DOOR CONTROL UNIT : Diagnosis Procedure"</u> .	
Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CHECK TOUCH SENSOR LH	C
Check touch sensor LH. Refer to <u>DLK-219</u> , "LH : Component Function Check". <u>Is the inspection result normal?</u> YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3. CHECK TOUCH SENSOR RH	E
Check touch sensor RH. Refer to <u>DLK-217. "RH : Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. 4. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE	G
 Replace automatic back door control module. Refer to <u>DLK-323</u>, "<u>Removal and Installation</u>". Confirm the operation after replacement. <u>Is the result normal?</u> YES >> Inspection End. 	l J
NO >> Check intermittent incident. Refer to <u>GI-47, "Intermittent Incident"</u> .	

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INTEGRATED HOMELINK TRANSMITTER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

INTEGRATED HOMELINK TRANSMITTER DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000011151916

1. CHECK INTEGRATED HOMELINK[®] TRANSMITTER

Check integrated homelink[®] transmitter. Refer to <u>DLK-230, "Component Function Check"</u>.

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 <u>MIR-16. "Removal and Installation"</u>.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-47. "Intermittent Incident".

< SYMPTOM DIAGNOSIS >

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow





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Customer Interview Duplicate the Noise and Test Drive. Check Related Service Bulletins. Locate the Noise and Identify the Root Cause. Repair the Cause. NG Confirm Repair. ОК Inspection End 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 Н 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 J 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) DLK 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 depen-L dent 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 Μ 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.
- Ρ 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.

< SYMPTOM DIAGNOSIS >

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

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

CHECK RELATED SERVICE BULLETINS

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

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

LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

- 1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis Ear: J-39570, Engine Ear: J-39565 and mechanic's stethoscope).
- 2. Narrow down the noise to a more specific area and identify the cause of the noise by:
 - removing the components in the area that you suspect the noise is coming from.
 Do not use too much force when removing clips and fasteners, otherwise clips and fasteners can be broken or lost during the repair, resulting in the creation of new noise.
 - tapping or pushing/pulling the component that you suspect is causing the noise.
 Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
 - feeling for a vibration with your hand by touching the component(s) that you suspect is (are) causing the noise.
 - placing a piece of paper between components that you suspect are causing the noise.
 - looking for loose components and contact marks. Refer to <u>DLK-272, "Generic Squeak and Rattle Troubleshooting"</u>.

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:000000011151918

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

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

Revision: September 2014

< SYMPTOM DIAGNOSIS >

1.	Cluster lid A and the instrument panel	
2.	Acrylic lens and combination meter housing	А
3.	Instrument panel to front pillar finisher	
4.	Instrument panel to windshield	_
5.	Instrument panel pins	В
6.	Wiring harnesses behind the combination meter	
7.	A/C defroster duct and duct joint	C
pre	ese incidents can usually be located by tapping or moving the components to duplicate the noise or by ssing on the components while driving to stop the noise. Most of these incidents can be repaired by apply-felt cloth tape or silicone spray (in hard to reach areas). Urethane pads can be used to insulate wiring har-	С
nes CA		D
	be able to recheck the repair.	Е
CE	NTER CONSOLE	
Cor	mponents to pay attention to include:	_
1.	Shift selector assembly cover to finisher	F
2.	A/C control unit and cluster lid C	
3.	Wiring harnesses behind audio and A/C control unit	G
The	e instrument panel repair and isolation procedures also apply to the center console.	0
DO	ORS	
Pay	y attention to the:	Н
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	
ma	pping or moving the components or pressing on them while driving to duplicate the conditions can isolate ny of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks from NISSAN Squeak and Rattle Kit (J-50397) to repair the noise.	J
TR	UNK	
	nk noises are often caused by a loose jack or loose items put into the trunk by the owner. addition look for:	DLK
1.	Trunk lid bumpers out of adjustment	L
2.	Trunk lid striker out of adjustment	
3.	The trunk lid torsion bars knocking together	
4.	A loose license plate or bracket	M
	st of these incidents can be repaired by adjusting, securing or insulating the item(s) or component(s) caus- the noise.	
	NROOF/HEADLINING	Ν
Noi	ses 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	0
2.	Sun visor shaft shaking in the holder	0
3.	Front or rear windshield touching headlining and squeaking	
	ain, pressing on the components to stop the noise while duplicating the conditions can isolate most of these dents. Repairs usually consist of insulating with felt cloth tape.	Ρ
OV	ERHEAD CONSOLE (FRONT AND REAR)	
the	erhead console noises are often caused by the console panel clips not being engaged correctly. Most of se incidents are repaired by pushing up on the console at the clip locations until the clips engage. addition look for:	
1.	Loose harness or harness connectors.	
2.	Front console map/reading lamp lens loose.	

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< 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.

< SYMPTOM DIAGNOSIS >

Diagnostic Worksheet

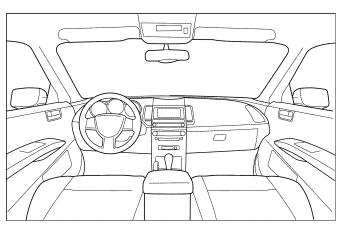
Dear Customer:

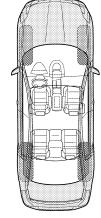
We are concerned about your satisfaction with your vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your vehicle right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may be asked 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.





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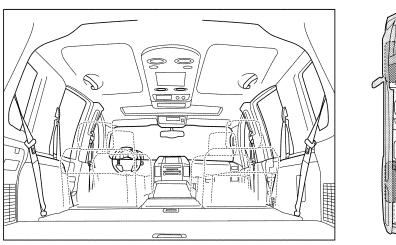
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Continue to page 2 of the worksheet and briefly describe the location of the noise or rattle. In addition, please indicate the conditions which are present when the noise occurs.

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< 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 1st time in the morning Only when it is cold outside Only when it is hot outside		After sitting out in the rain When it is raining or wet Dry or dusty conditions Other:
III.	WHEN DRIVING:	IV.	WHAT TYPE OF NOISE
	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 minute		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 persor performing
Vehicle test driven with customer - Noise verified on test drive - Noise source located and repaired - Follow up test drive performed to confirm rep	 air		
VIN:	Customer Name		
W.O.#	Date:		

This form must be attached to Work Order

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< REMOVAL AND INSTALLATION > **REMOVAL AND INSTALLATION** HOOD

Exploded View

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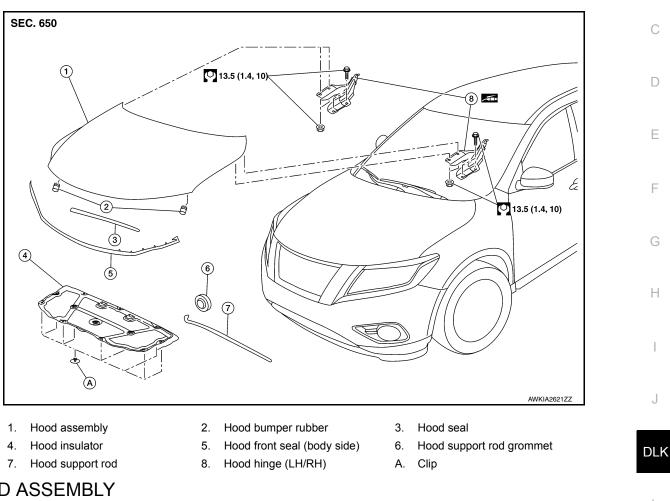
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HOOD ASSEMBLY

HOOD ASSEMBLY : Removal and Installation

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.

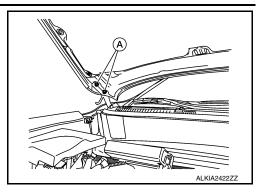
WARNING:

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

HOOD

< REMOVAL AND INSTALLATION >

2. Remove hood hinge to hood nuts (A) and then remove the hood assembly.

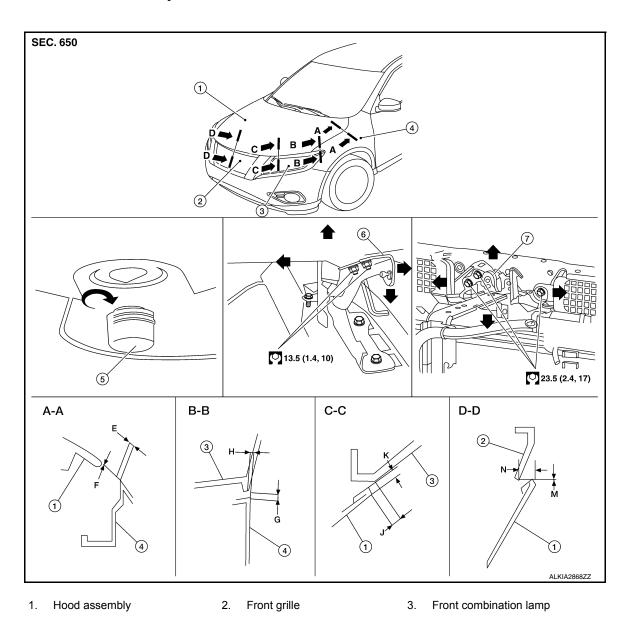


INSTALLATION Installation is in the reverse order of removal. CAUTION:

- Before installing the hood hinge, apply anticorrosive agent onto the surface of the vehicle.
- After installation, perform the hood assembly adjustment procedure. Refer to <u>DLK-278, "HOOD</u> <u>ASSEMBLY : Adjustment"</u>.

HOOD ASSEMBLY : Adjustment

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DLK-278

HOOD

< REMOVAL AND INSTALLATION >

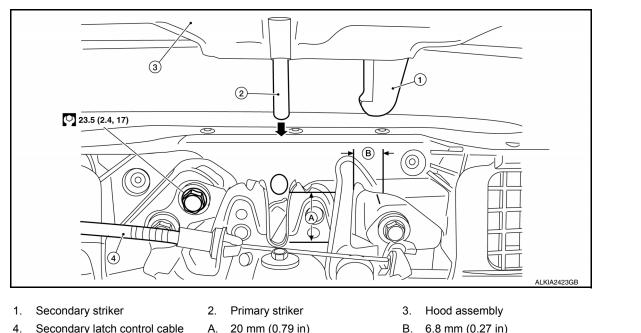
- 4. Front fender 5. Hood bumper rubber 6. Hood hinge
- 7. Hood lock assembly

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.

Portion	Section	Item	Measurement	Standard	Parallelism	C
Hood assembly – Front fend-	A – A	E	Clearance	$3.5 \pm 1.0 \; (0.14 \pm 0.04)$	≤ 1.5 (0.06)	0
er	A-A	F	Surface height	$0.0 \pm 1.5 \; (0.0 \pm 0.06)$	_	
Front fender — Front combi-	B – B	G	Clearance	$1.5 \pm 1.3 \; (0.06 \pm 0.05)$	< 1.5 (0.06)	D
nation lamp	Б – Б	Н	Surface height	$0.0\pm 0.5\;(0.00\pm 0.00)$	< 0.0 (0.00)	
Hood assembly — Front	C– C	J	Clearance	$5.0\pm2.0\;(0.20\pm0.08)$	< 2.0 (0.08)	F
combination lamp	0-0	K	Surface height	$0.0\pm 0.0\;(0.0\pm 0.00)$	< 0.0 (0.00)	
Front bumper upper grille -	D – D	М	Clearance	$5.0\pm2.0\;(0.20\pm0.08)$	< 2.0 (0.08)	
Hood assembly	0-0	Ν	Surface height	0.0 ± 0.0 (0.0 ± 0.00)	< 0.0 (0.00)	F

HEIGHT ADJUSTMENT

- 1. Loosen the hood lock assembly bolts.
- 2. Adjust the surface height of hood assembly to front grille and front fender according to the specified values by rotating hood bumper rubber.
- 3. Temporarily tighten hood lock assembly bolts.
- 4. Adjust (A) and (B) as shown to the following value with hood's own weight by dropping it from approximately 200 mm (7.87 in) height or by pressing hood lightly [approximately 29 N (3.0 kg, 6.5 lb)].



- 4. Secondary latch control cable A. 20 mm (0.79 in) B. 6.8
- 5. After adjustment, tighten hood hinge nuts and bolts to the specified torque.
 CAUTION:
 Check hood hinge rotating part for poor lubrication. If necessary apply a suitable matching is a suitable matching bolt of the specified torque.
 - Check hood hinge rotating part for poor lubrication. If necessary, apply a suitable multi-purpose grease.
 - After adjusting, apply touch-up paint (body color) to the head of hood hinge bolts and nuts.

CLEARANCE ADJUSTMENT

- 1. Loosen hood hinge nuts and bolts.
- 2. Loosen the hood lock assembly bolts.

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Unit: mm (in)

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

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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 <u>DLK-278</u>, <u>"HOOD ASSEM-BLY : Adjustment"</u>.

RADIATOR CORE SUPPORT

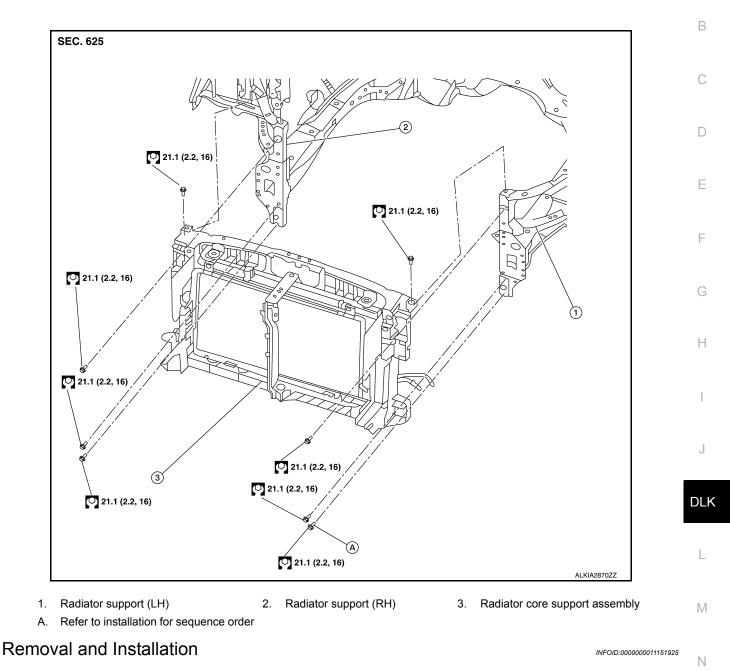
< REMOVAL AND INSTALLATION >

RADIATOR CORE SUPPORT

Exploded View

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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 <u>DLK-301, "HOOD LOCK RELEASE CABLE : Removal and Instal-</u><u>lation"</u>.

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RADIATOR CORE SUPPORT

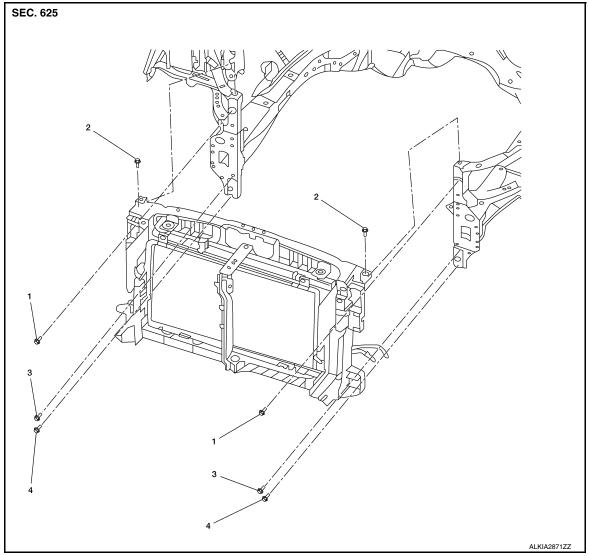
< REMOVAL AND INSTALLATION >

- 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.



< REMOVAL AND INSTALLATION >

FRONT FENDER

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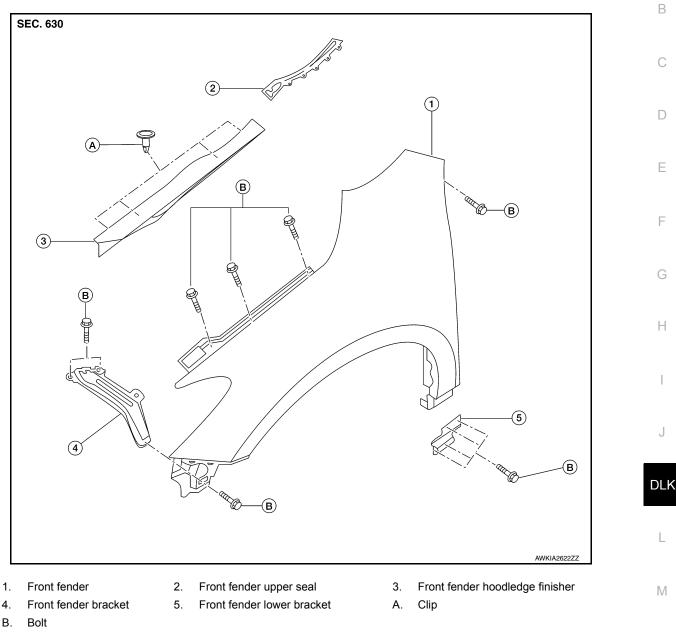
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FRONT FENDER

FRONT FENDER : Removal and Installation

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".
- Remove front fender outside lower molding. Refer to <u>EXT-38, "Removal and Installation"</u>.
- 4. Remove front fender bolts and front fender. **CAUTION:**

INFOID:000000011151927

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 <u>DLK-278, "HOOD ASSEMBLY : Adjustment"</u>.
- Front door: Refer to DLK-286, "DOOR ASSEMBLY : Adjustment".

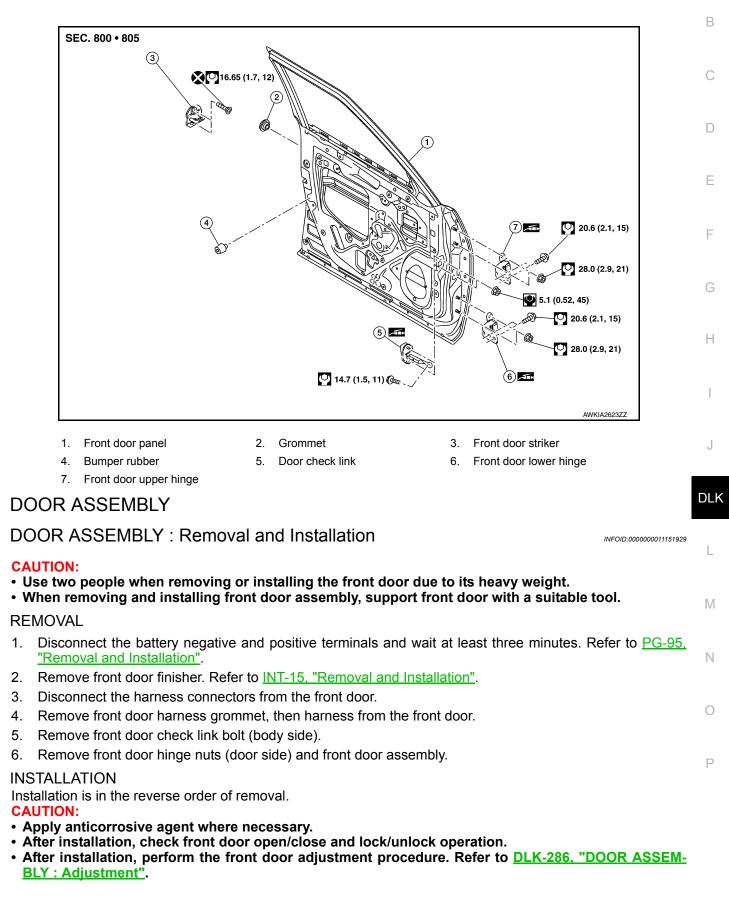
< REMOVAL AND INSTALLATION >

FRONT DOOR

Exploded View

INFOID:000000011151928

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DLK-285

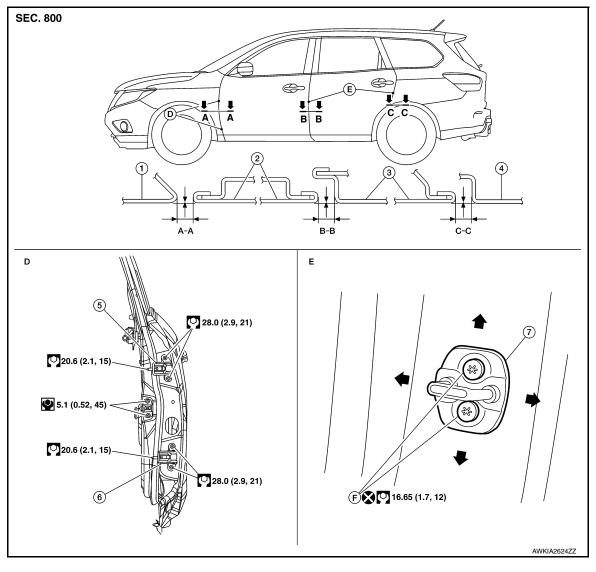
FRONT DOOR

< REMOVAL AND INSTALLATION >

DOOR ASSEMBLY : Adjustment

INFOID:000000011151930

Adjustment



Front fender 1.

- 2. Front door
- Body side outer 4.
- 7. Door striker

- 5.
 - Front door upper hinge
- F. Front door striker bolts
- 6. Front door lower hinge

3. Rear door

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

			Unit: mm (in)
Portion	Section	Measurement	Standard
Front fender - Front door	A – A	Clearance	4.0 ± 1.0 (0.16 ± 0.04)
		Surface height	± 1.0 (± 0.04)
Front door - Rear door	B – B	Clearance	4.3 ± 1.0 (0.17 ± 0.04)
		Surface height	± 1.0 (± 0.04)
Rear door - Body side outer	C – C	Clearance	3.7 ± 1.0 (0.15 ± 0.04)
		Surface height	± 1.0 (± 0.04)

Remove front fender. Refer to DLK-283, "FRONT FENDER : Removal and Installation". 1.

Revision: September 2014

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.

Install front fender. Refer to refer to DLK-283, "FRONT FENDER : Removal and Installation". D DOOR STRIKER

DOOR STRIKER : Removal and Installation

REMOVAL

Remove bolts and front door striker.

INSTALLATION

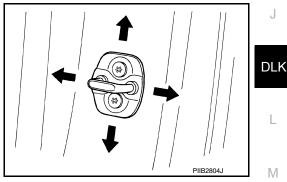
Installation is in the reverse order of removal. CAUTION:

- Do not reuse front door striker bolts.
- After installation, check front door open/close operation. If necessary, adjust the front door striker. Refer to <u>DLK-287</u>, "DOOR STRIKER : Adjustment".

DOOR STRIKER : Adjustment

DOOR STRIKER ADJUSTMENT

- 1. Loosen door striker bolts
- 2. Adjust door striker so that it becomes parallel with front door lock insertion direction.



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Tighten door striker bolts to specification. Refer to DLK-285, "Exploded View". DOOR HINGE Ν DOOR HINGE : Removal and Installation INFOID:000000011151933 REMOVAL CAUTION: Use two people when removing and installing the front door due to its heavy weight. Ρ When removing and installing front door assembly, support door using a suitable tool.

- 1. Remove front fender. Refer to <u>DLK-283, "FRONT FENDER : Removal and Installation"</u>.
- Remove front door assembly. Refer to <u>DLK-285, "DOOR ASSEMBLY : Removal and Installation"</u>.
- 3. Remove front door hinge bolts (body side) and front door hinge.

INSTALLATION

Installation is in the reverse order of removal. CAUTION:

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DLK-287

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 <u>DLK-286, "DOOR ASSEM-</u> <u>BLY : Adjustment"</u>.

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 <u>AV-47, "Removal and Installation"</u> (BASE AUDIO), <u>AV-190,</u> <u>"Removal and Installation"</u> (MID AUDIO), or <u>AV-433, "Removal and Installation"</u> (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:

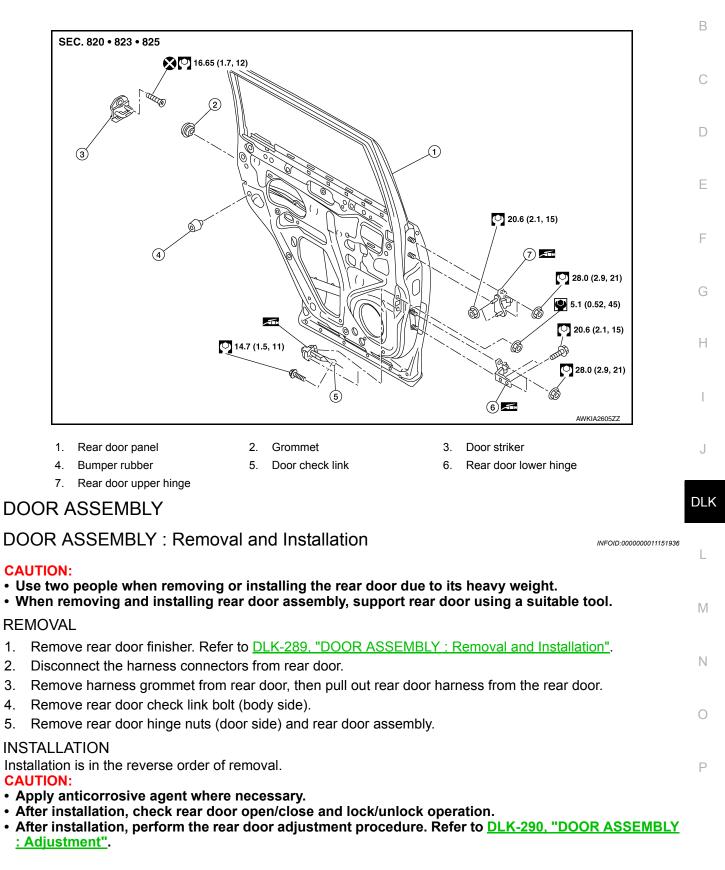
- After installation, check front door open/close and lock/unlock operation.
- Check door check link rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.

REAR DOOR

Exploded View

INFOID:0000000011151935

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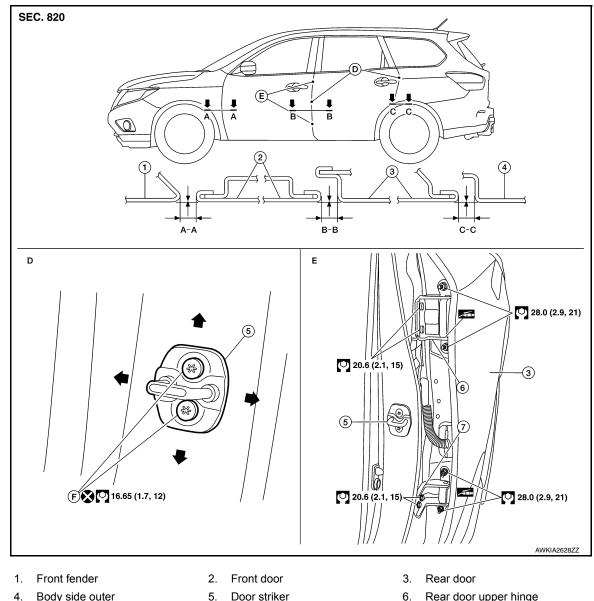


REAR DOOR

< REMOVAL AND INSTALLATION >

DOOR ASSEMBLY : Adjustment

INFOID:0000000011151937



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.

Portion	Section	Measurement	Standard
Front fender - Front door	A-A	Clearance	4.0 ± 1.0 (0.16 ± 0.04)
	A-A	Surface height	± 1.0 (± 0.04)
Front door - Rear door		Clearance	4.3 ± 1.0 (0.17 ± 0.04)
	B – B	Surface height	± 1.0 (± 0.04)
Deer deer Dedu side suter	C – C	Clearance	4.0 ± 1.0 (0.16 ± 0.04)
Rear door - Body side outer	0-0	Surface height	± 1.0 (± 0.04)

Remove center pillar lower finisher. Refer to INT-21, "CENTER PILLAR LOWER FINISHER : Removal 1. and Installation".

Unit: mm (in)

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.
- Install center pillar lower finisher. Refer to <u>INT-21, "CENTER PILLAR LOWER FINISHER : Removal and</u> <u>Installation"</u>.

DOOR STRIKER

DOOR STRIKER : Removal and Installation

REMOVAL

Remove bolts and rear door striker.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

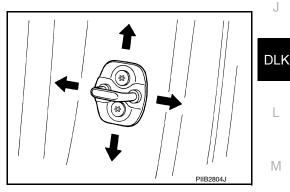
• Do not reuse rear door striker bolts.

• After installation, check rear door open/close operation. If necessary, adjust the door striker. Refer to H DLK-291, "DOOR STRIKER : Adjustment".

DOOR STRIKER : Adjustment

DOOR STRIKER ADJUSTMENT

- 1. Loosen door striker bolts
- 2. Adjust door striker so that it becomes parallel with front door lock insertion direction.



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3. Tighten door striker bolts to specification. Refer to <u>DLK-289, "Exploded View"</u> .	
DOOR HINGE	

DOOR HINGE : Removal and Installation

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 <u>DLK-289</u>, "DOOR ASSEMBLY : Removal and Installation".
- 2. Remove center pillar lower finisher. Refer to <u>INT-21, "CENTER PILLAR LOWER FINISHER : Removal</u> <u>and Installation"</u>.
- 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.

- 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 <u>DLK-290, "DOOR ASSEMBLY</u> : <u>Adjustment"</u>.

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 <u>AV-49</u>, "<u>Removal and Installation</u>" (BASE AUDIO), <u>AV-192</u>, "<u>Removal and Installation</u>" (MID AUDIO), or <u>AV-437</u>, "<u>Removal and Installation</u>" (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:

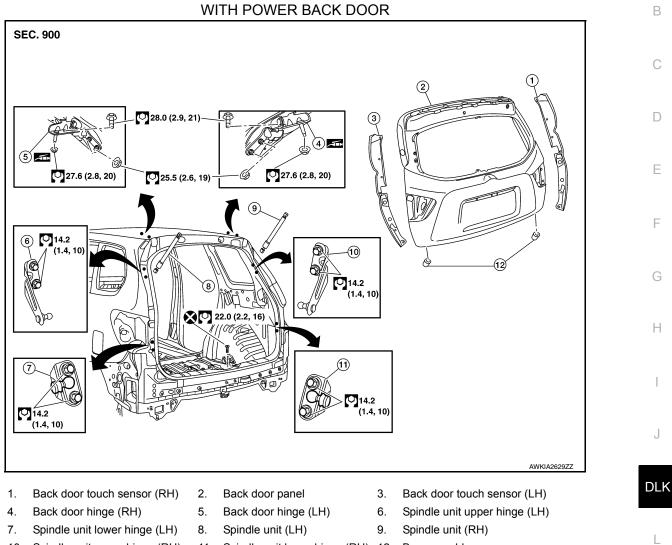
- After installation, check rear door open/close and lock/unlock operation.
- Check rear door check link rotating point for poor lubrication. If necessary, apply a suitable multipurpose grease.

< REMOVAL AND INSTALLATION > **BACK DOOR**

Exploded View

INFOID:000000011151942

А



- 10. Spindle unit upper hinge (RH)
- 11. Spindle unit lower hinge (RH) 12. Bumper rubber

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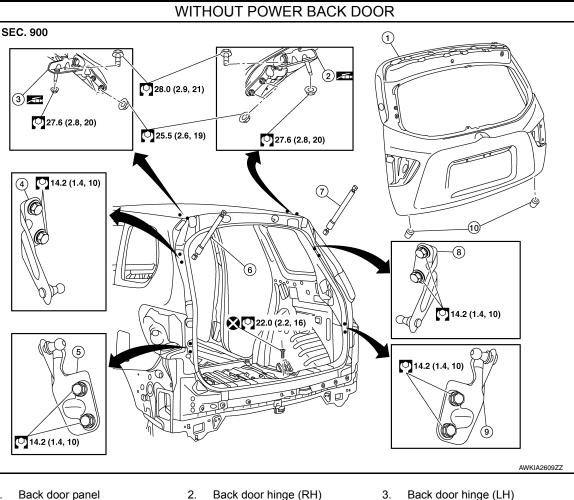
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BACK DOOR

< REMOVAL AND INSTALLATION >



- Back door panel 1.
- 4. Back door stay upper hinge (LH) 5.
- 7. Back door stay (RH)
- 10. Bumper rubber

- Back door stay lower hinge (LH) 6.
- Back door stay upper hinge (RH) 9.
- Back door hinge (LH)
- Back door stay (LH)
 - Back door stay lower hinge (RH)

BACK DOOR ASSEMBLY

BACK DOOR ASSEMBLY : Removal and Installation

8.

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.

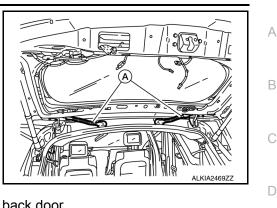
- 2. Remove spindle units (LH/RH) (WITH POWER BACK DOOR). Refer to <u>DLK-298, "SPINDLE UNIT</u>: Removal and Installation".
- 3. Remove back door stays (LH/RH) (WITHOUT POWER BACK DOOR). Refer to <u>DLK-298, "BACK DOOR</u> STAY : Removal and Installation".
- 4. Remove roof side moldings (LH/RH). Refer to EXT-31, "Removal and Installation".

DLK-294

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 <u>DLK-296, "BACK</u> <u>DOOR ASSEMBLY : Adjustment"</u>.

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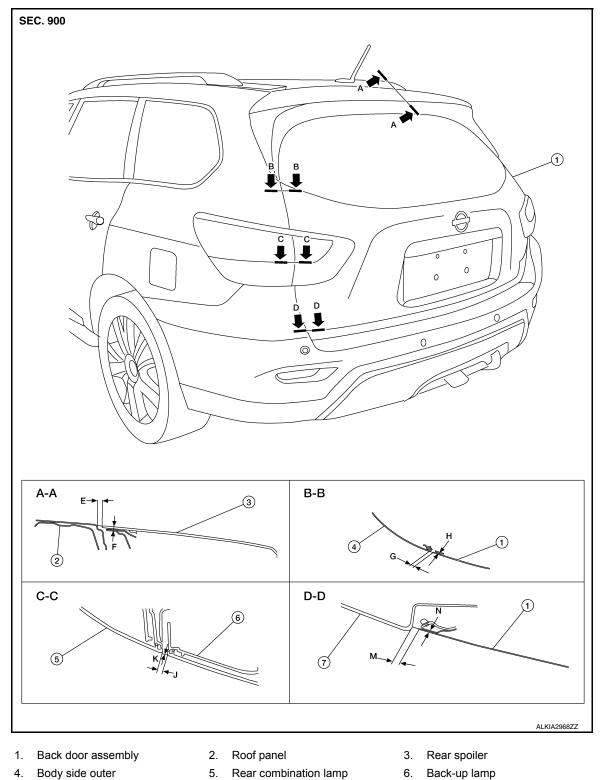
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BACK DOOR ASSEMBLY : Adjustment



BACK DOOR

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)	1
Deef namel Deer angiler	<u>م</u> م	E	Clearance	$7.0 \pm 1.5 \; (0.28 \pm 0.06)$	_	
Roof panel – Rear spoiler	A – A	F	Surface height	$1.5 \pm 1.5 \; (0.06 \pm 0.06)$	_	E
Body side outer – Back door assembly	B – B	G	Clearance	$5.0\pm2.0\;(0.20\pm0.08)$	≤2.0 (0.08)	
buy side buler - back door assembly	Б-Б	Н	Surface height	$0.8\pm2.0\;(0.03\pm0.08)$	≤2.0 (0.08)	(
Rear combination lamp – Back-up lamp	C – C	J	Clearance	$5.0\pm2.0\;(0.20\pm0.08)$	≤2.3 (0.09)	
Real combination lamp – back-up lamp	0-0	К	Surface height	$0.0\pm2.1\;(0.0\pm0.08)$	≤2.5 (0.10)	
Rear bumper fascia – Back door assembly	D – D	М	Clearance	$7.0\pm2.0\;(0.28\pm0.08)$	_	[
	0-0	Ν	Surface height	5.0 ± 2.0 (0.20 ± 0.08)	≤2.0 (0.08)	
1. Loosen back door hinge nuts (do	oor side).	•				F
 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-
- After adjusting, apply touch-up paint (body color) to the head of rear door hinge bolts and nuts.
- 5. Install roof side molding (LH / RH). Refer to. <u>EXT-31, "Removal and Installation"</u>.

BACK DOOR STRIKER

BACK DOOR STRIKER : Removal and Installation

REMOVAL

- Remove back door kicking plate. Refer to <u>INT-36, "BACK DOOR KICKING PLATE : Removal and Installa-</u> tion".
- 2. Remove bolts and back door striker.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

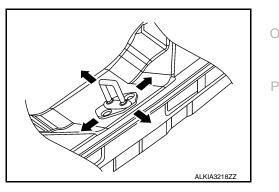
• Do not reuse back door striker bolts.

 After installation, check back door open/close operation. If necessary, adjust the door striker. Refer to <u>DLK-297, "BACK DOOR STRIKER : Adjustment"</u>.

BACK DOOR STRIKER : Adjustment

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-293. "Exploded View".

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INFOID:000000011151945

BACK DOOR HINGE

BACK DOOR HINGE : Removal and Installation

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.
- Remove back door assembly. Refer to DLK-294, "BACK DOOR ASSEMBLY : Removal and Installation". 1.
- 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:000000011151948

INFOID:000000011151947

REMOVAL

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.

- Partially remove headlining (rear edge).
- 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-000000011151949

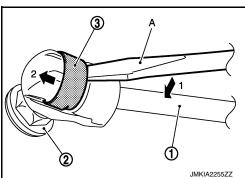
REMOVAL

Support the back door using a suitable tool.

WARNING:

Body injury may occur if no supporting rod is holding the back door open when removing the back door stay.

- 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).
- Remove the back door stay (back door side). 3.



In the same way, remove the back door stay from the body side. 4

BACK DOOR

< REMOVAL AND INSTALLATION >	
INSTALLATION Installation is in the reverse order of removal. CAUTION:	А
After installation, check the back door open/close operation. BACK DOOR WEATHER-STRIP	В
BACK DOOR WEATHER-STRIP : Removal and Installation	
REMOVAL Carefully remove back door weather-strip from opening door joint.	С
INSTALLATION	D
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.	Ε
NOTE: Pull weather-strip gently to ensure that there are no loose sections.	F
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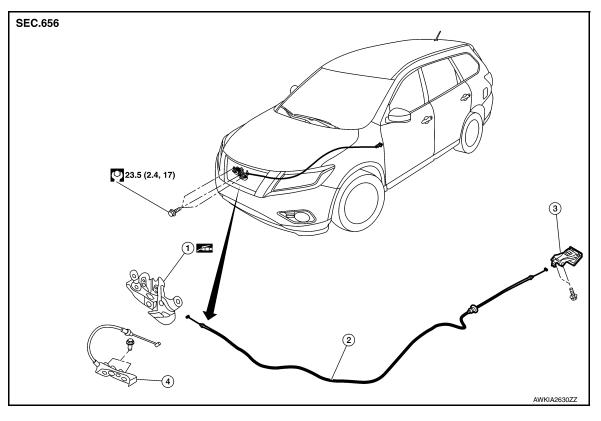
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HOOD LOCK

Exploded View

INFOID:000000011151951



- 1. Hood lock assembly
- 2. Hood lock release cable
- 3. Hood lock release handle

4. Secondary latch

HOOD LOCK

HOOD LOCK : Removal and Installation

INFOID:000000011151952

REMOVAL

- 1. Remove front air duct. Refer to EM-24, "Exploded View".
- 2. Remove front fender protector (LH). Refer to <u>EXT-28</u>, "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 <u>DLK-278</u>, <u>"HOOD ASSEM-BLY : Adjustment"</u>.
- After adjusting, perform hood lock inspection. Refer to <u>DLK-300, "HOOD LOCK : Inspection"</u>.

HOOD LOCK : Inspection

NOTE:

HOOD LOCK

< REMOVAL AND INSTALLATION >

If the hood lock cable is bent or deformed, replace it.

- А 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.
- Check that hood lock release handle operates at 49 N (5.0 kg-m, 11.0 ft-lb) or below. 3.
- 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:000000011151954
REMOVAL Remove radiator core support upper cover. Refer to <u>EXT-16, "Exploded View"</u>. Disconnect secondary latch cable from hood lock assembly. 	F
 Remove bolts and secondary latch. NSTALLATION Installation is in the reverse order of removal. HOOD LOCK RELEASE CABLE 	G
HOOD LOCK RELEASE CABLE : Removal and Installation	H
REMOVAL	I
 Remove fender protector (LH). Refer to <u>EXT-28, "FENDER PROTECTOR : Removal and</u> Remove front under cover. Refer to <u>EXT-30, "Removal and Installation"</u>. Remove front air duct. Refer to <u>EM-24, "Exploded View"</u>. 	Installation". J
 Remove radiator core support upper cover. Refer to <u>EXT-17, "Removal and Installation"</u>. Disconnect hood lock release cable from hood lock release handle and hood lock assemb 	ly. DL
 Release all hood lock release cable clips. Remove grommet on the lower dash, and carefully pull the hood lock release cable into compartment. CAUTION: While pulling, be careful not to damage (peel) the outside of hood lock release cable 	the passenger
NSTALLATION Installation is in the reverse order of removal.	M
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, 	Ν
and apply the sealant to the grommet (at * mark) properly.	0
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HOOD LOCK

< REMOVAL AND INSTALLATION >

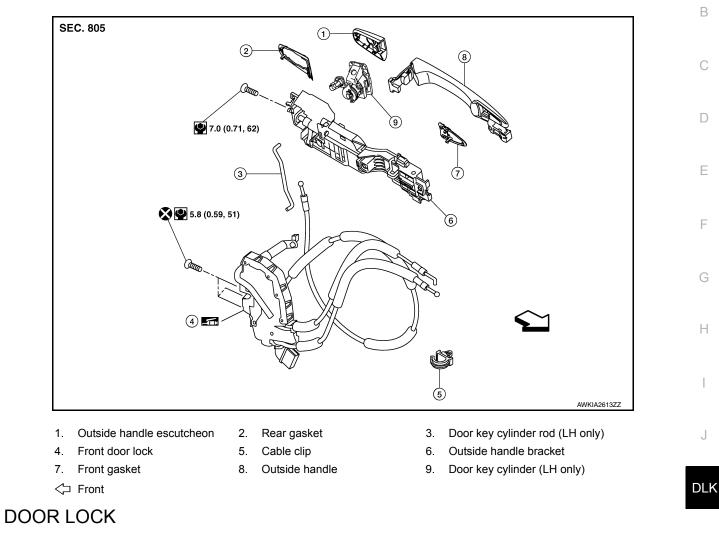
- After installation, perform hood assembly adjustment procedure. Refer to <u>DLK-278</u>, "HOOD ASSEM-<u>BLY : Adjustment"</u>.
- After adjusting, perform hood lock inspection. Refer to <u>DLK-300, "HOOD LOCK : Inspection"</u>.

FRONT DOOR LOCK

Exploded View

INFOID:000000011151956

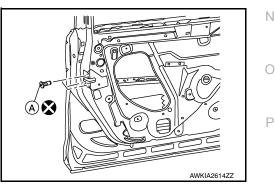
А



DOOR LOCK : Removal and Installation

REMOVAL

- 1. Remove front door finisher. Refer to INT-15. "Removal and Installation".
- 2. Remove vapor barrier.
- 3. Remove front door lock bolts (A).

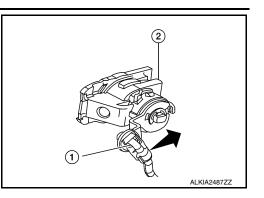


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FRONT DOOR LOCK

< REMOVAL AND INSTALLATION >

4. Disconnect door key cylinder rod (LH only) (1) from front door lock (LH only) (2).



- 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.

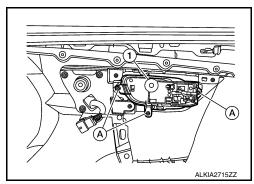
- **CAUTION:**
- Do not reuse front door lock bolts.
- After installation, check door lock cables are properly engaged to inside handle and outside handle bracket.
- When installing door key cylinder rod (LH only), be sure to rotate door key cylinder rod holder until a click is felt.
- After installation, 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:000000011151958

REMOVAL

- 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

REMOVAL

- Fully close front door glass.
- Remove front door finisher. Refer to INT-15, "Removal and Installation".
- 3. Remove vapor barrier. NOTE:

INFOID:000000011151959

DLK-304

FRONT DOOR LOCK

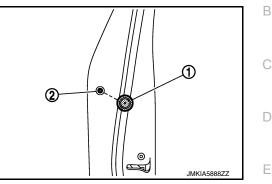
< REMOVAL AND INSTALLATION >

6.

8.

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).

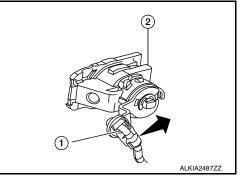


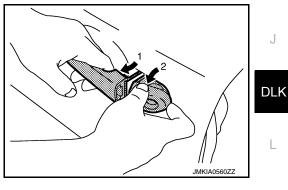
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Separate door key cylinder rod (LH only) (1) from door key cylinder assembly (LH only) (2).





M N O AWKIA1997ZZ

9. Remove front gasket and rear gasket.

remove outside handle.

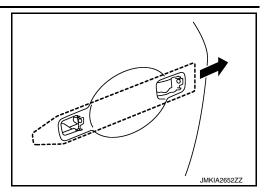
 While pulling outside handle (1), remove door key cylinder assembly (LH side) (2) or outside handle escutcheon (RH side) (2).

While pulling outside handle (1), slide toward rear of vehicle to

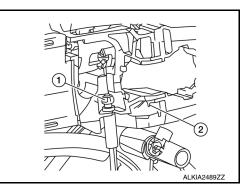
FRONT DOOR LOCK

< 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:

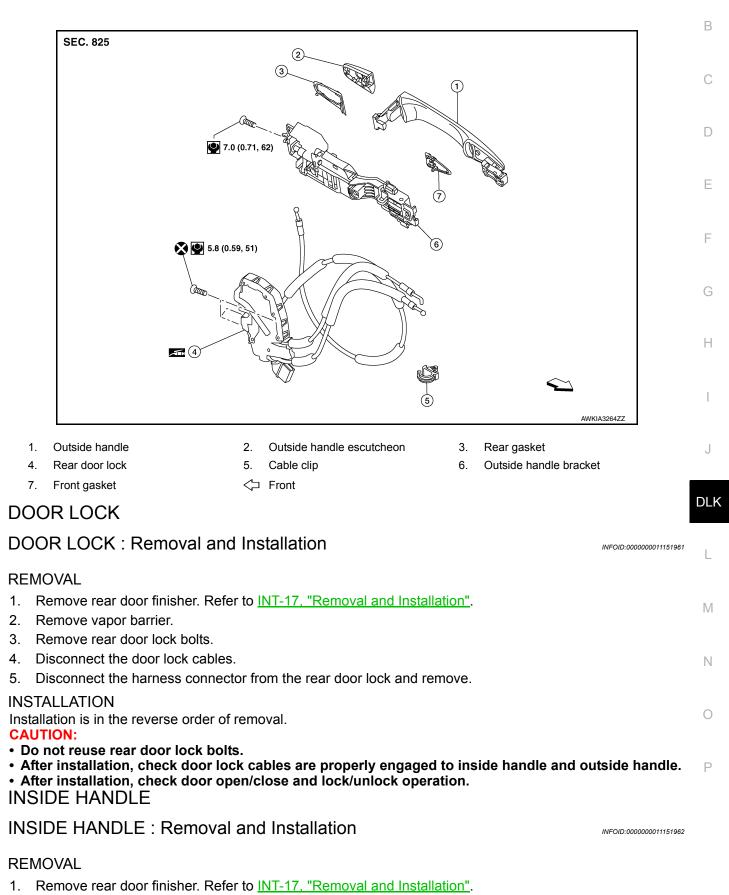
- When installing door key cylinder rod (LH only), be sure to rotate door key cylinder rod holder until a click is felt.
- After installation, check door lock cable is properly engaged to outside handle bracket.
- After installation, check door open/close and lock/unlock operation.

REAR DOOR LOCK

Exploded View

INFOID:0000000011151960

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Revision: September 2014

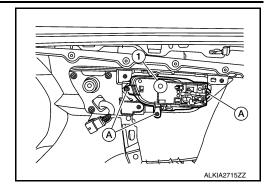
DLK-307

2015 Pathfinder

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.

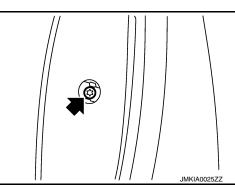
OUTSIDE HANDLE

OUTSIDE HANDLE : Removal and Installation

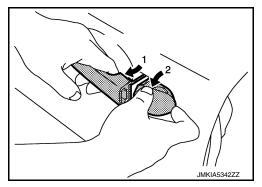
INFOID:000000011151963

REMOVAL

- 1. Fully close rear door glass.
- 2. Remove rear door finisher. Refer to INT-17, "Removal and Installation".
- 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

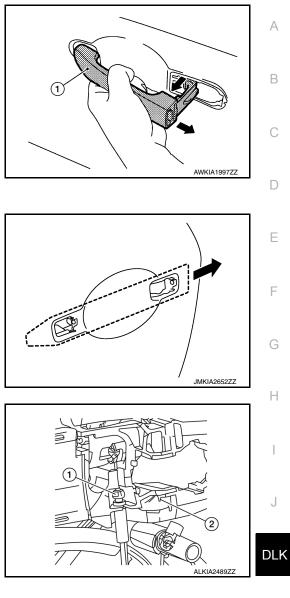
< REMOVAL AND INSTALLATION >

7. Remove front gasket and rear gasket.

8.

6. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.

Slide outside handle bracket toward rear of vehicle to remove.



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.

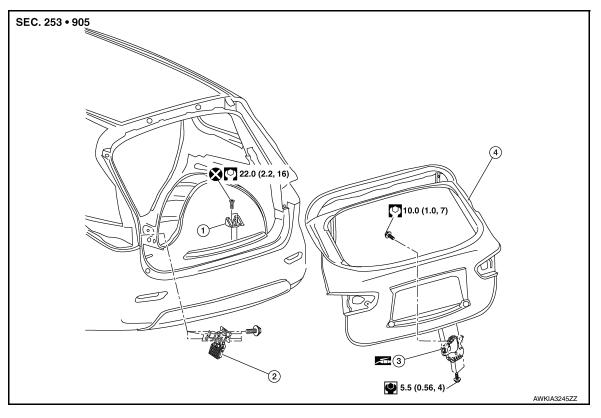
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BACK DOOR LOCK

Exploded View

INFOID:000000011151964



1. Door striker

2. Automatic back door control module 3. Back door lock (if equipped)

4. Back door panel

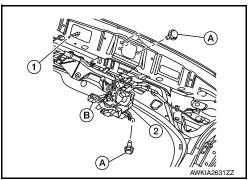
DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:000000011151965

REMOVAL

- 1. Remove back door lower finisher. Refer to <u>INT-35, "BACK DOOR LOWER FINISHER : Removal and</u> <u>Installation"</u>.
- 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

< R	REMOVAL AND INSTALLATION >	
TC	OUCH SENSOR : Removal and Installation	INFOID:000000011151966
	UTION: e care not to bend touch sensor.	A
RE	MOVAL	В
1.	Remove back door side finishers. Refer to <u>INT-35, "BACK DOOR SIDE FINISHER : Removation"</u> .	Il and Installa-
2.	Disconnect the harness connectors from the touch sensor.	С
3.	Release clips and remove screws that retain touch sensor.	
4.	Remove touch sensor harness from the back door assembly, then remove touch sensor.	D
INS	STALLATION	
	tallation is in the reverse order of removal.	
	UTION: er installation, check back door open/close and lock/unlock operation.	E
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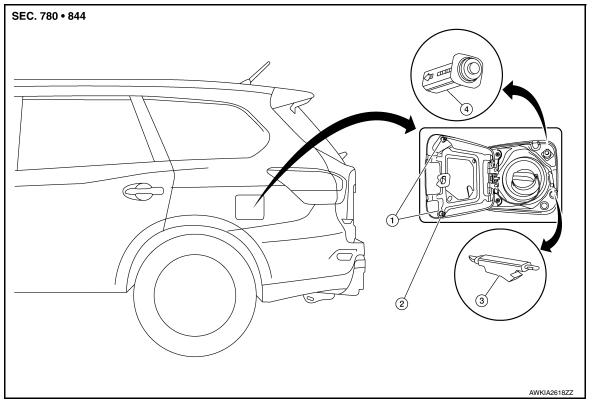
FUEL FILLER LID OPENER

< REMOVAL AND INSTALLATION >

FUEL FILLER LID OPENER

Exploded View

INFOID:000000011151968



1. Fuel filler lid bumper rubber 2. Fuel filler lid

3. Fuel filler lid lock actuator

4. Fuel filler lid lock

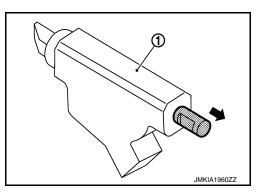
Removal and Installation

INFOID:0000000011151969

REMOVAL

NOTE:

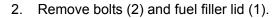
When fuel filler lid lock actuator (1) is not functioning correctly, pull the rod from inside the vehicle to open fuel filler lid.

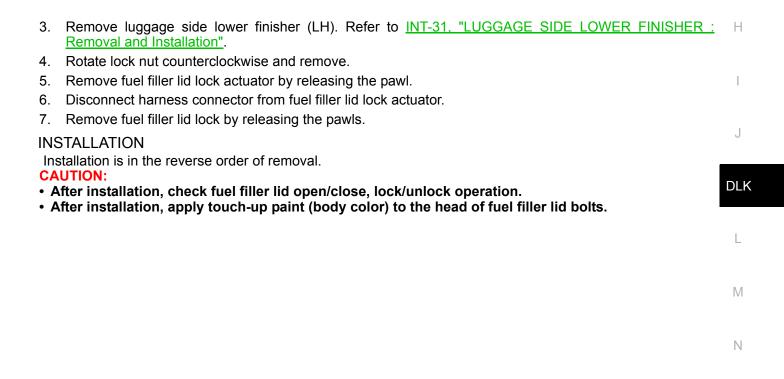


FUEL FILLER LID OPENER

< REMOVAL AND INSTALLATION >

1. Remove fuel cap pin (1).





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KEY CYLINDER

< REMOVAL AND INSTALLATION >

KEY CYLINDER GLOVE BOX LID KEY CYLINDER

2. Insert key (1) into glove box lid lock cylinder (2). 3. Pull upward on glove box lid release handle (3).

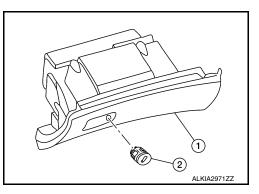
GLOVE BOX LID KEY CYLINDER : Removal and Installation

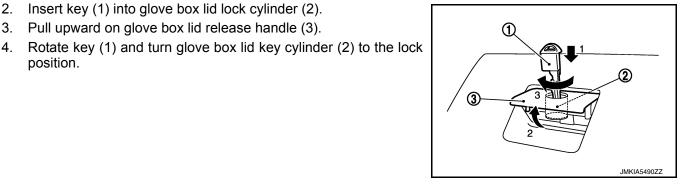
INFOID-000000011151970

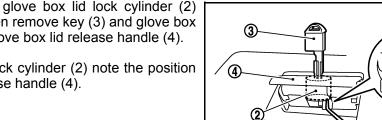
REMOVAL

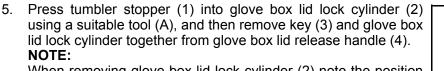
position.

Remove glove box assembly (1) to access glove box lid key cyl-1. inder (2). Refer to IP-26, "Removal and Installation".

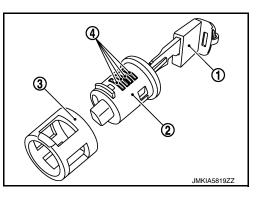








When removing glove box lid lock cylinder (2) note the position of cylinder to glove box lid release handle (4).



Remove sleeve (3) from glove box lid release handle and then 6. install sleeve to glove box lid lock cylinder.

NOTE:

When removing sleeve note the position of sleeve to glove box lid release handle.

CAUTION:

Do not pull out key (1) from glove box lid lock cylinder (2) while sleeve (3) is removed. Otherwise, tumblers (4) may be lost from glove box lid lock cylinder.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

After installation, check glove box assembly open/close, lock/unlock operation.

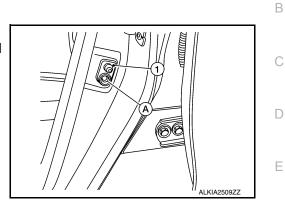
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DOOR SWITCH

Removal and Installation

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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DOOR REQUEST SWITCH

< REMOVAL AND INSTALLATION >

DOOR REQUEST SWITCH DRIVER SIDE

DRIVER SIDE : Removal and Installation

The driver side door request switch and driver side outside handle are serviced as an assembly. Refer to <u>DLK-304</u>, <u>"OUTSIDE HANDLE : Removal and Installation"</u>. PASSENGER SIDE

PASSENGER SIDE : Removal and Installation

The passenger side door request switch and passenger side outside handle are serviced as an assembly. Refer to <u>DLK-304, "OUTSIDE HANDLE : Removal and Installation"</u>. BACK DOOR

BACK DOOR : Removal and Installation

INFOID:000000011151974

INFOID:000000011151972

INFOID:000000011151973

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	А
INSTRUMENT CENTER : Removal and Installation	В
REMOVAL	
1. Remove cluster lid C upper. Refer to IP-22, "CLUSTER LID C : Removal and Installation".	С
2. Remove the inside key antenna (instrument center) screw, and then remove inside key antenna (instrument center).	C
INSTALLATION Installation is in the reverse order of removal.	D
CONSOLE	
CONSOLE : Removal and Installation	E
REMOVAL	F
1. Remove rear center ventilator duct. Refer to <u>VTL-12</u> , "REAR CENTER VENTILATOR DUCT : Removal <u>and Installation"</u> .	I
2. Remove the inside key antenna (console) screws and inside key antenna (console).	G
INSTALLATION	
Installation is in the reverse order of removal. LUGGAGE ROOM	Н
	11
LUGGAGE ROOM : Removal and Installation	
REMOVAL	
1. Remove the second row seatback. Refer to <u>SE-99. "Removal and Installation"</u> .	
2. Remove the inside key antenna (luggage room) clip, and then remove inside key antenna (luggage room).	J
INSTALLATION	
Installation is in the reverse order of removal.	DLK
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OUTSIDE KEY ANTENNA DRIVER SIDE

DRIVER SIDE : Removal and Installation

The driver side outside key antenna and driver side outside handle are serviced as an assembly. Refer to <u>DLK-304</u>, "<u>OUTSIDE HANDLE : Removal and Installation</u>". **PASSENGER SIDE**

PASSENGER SIDE : Removal and Installation

The passenger side outside key antenna and passenger side outside handle are serviced as an assembly. Refer to <u>DLK-304, "OUTSIDE HANDLE : Removal and Installation"</u>. **REAR BUMPER**

REAR BUMPER : Removal and Installation

INFOID:000000011151980

INFOID:000000011151978

INFOID:000000011151979

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

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REI NO	MOVAL TE:		В
The 1.	Intelligent Key warning buzzer is located in the left front area of the engine compartment. Remove Intelligent Key warning buzzer clips. Disconnect the harness connector from the Intelligent Key warning buzzer and remove.		С
-	TALLATION allation is in the reverse order of removal.		D

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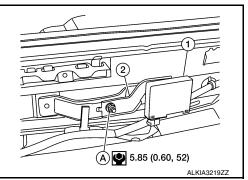
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BACK DOOR WARNING CHIME

Removal and Installation

REMOVAL

- 1. Remove the rear bumper fascia. Refer to <u>EXT-20, "Removal and Installation"</u>.
- 2. Remove the back door warning chime bracket nut (A) and
- remove back door warning chime (1).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 INSTA	ALLATION >	

REMOTE KEYLESS ENTRY RECEIVER

			Δ
Re	moval and Installation	INFOID:000000011151983	~
RE	MOVAL		В
	Remove the glove box assembly. Refer to <u>IP-26, "Removal and Installation"</u> .		
	Remove the remote keyless entry receiver bolt. Disconnect the harness connector from remote keyless entry receiver and remove.		С
	STALLATION allation is in the reverse order of removal.		D

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INTELLIGENT KEY BATTERY

< REMOVAL AND INSTALLATION >

INTELLIGENT KEY BATTERY

Removal and Installation

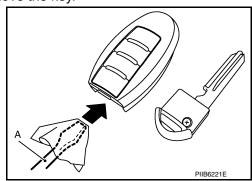
1. Release the lock knob on the back of the Intelligent Key and remove the key.

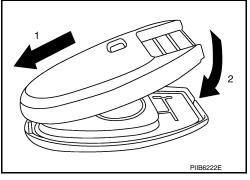
- Insert a suitable tool (A) wrapped with a cloth into the slit of the corner and twist it to separate the upper part from the lower part. CAUTION:
 - Do not insert a tool into the notches of the Intelligent Key to pry it open, as this may damage the circuit board.
 - Do not use excessive force when 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.
 - 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

< R	REMOVAL AND INSTALLATION >
Αl	JTOMATIC BACK DOOR CONTROL MODULE
Re	moval and Installation
RE	MOVAL
1.	Remove the luggage side lower finisher (LH). Refer to <u>INT-31, "LUGGAGE SIDE LOWER FINISHER :</u> <u>Removal and Installation"</u> .
2.	Remove the automatic back door control module bolts.
3.	Disconnect the harness connector from the automatic back door control module and remove.
INS	STALLATION

Installation is in the reverse order of removal.

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AUTOMATIC BACK DOOR MAIN SWITCH

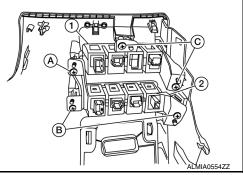
< REMOVAL AND INSTALLATION >

AUTOMATIC BACK DOOR MAIN SWITCH

Removal and Installation

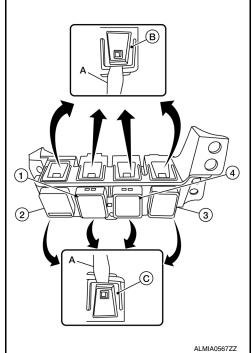
REMOVAL

- 1. Remove the instrument lower panel LH. Refer to IP-25, "Removal and Installation".
- Remove the screws (A,B,C) that retain the upper (1) and lower
 (2) switch carriers.



INFOID:000000011151986

- 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

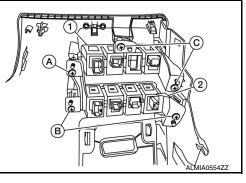
Installation is in the reverse order of removal.

AUTOMATIC BACK DOOR SWITCH

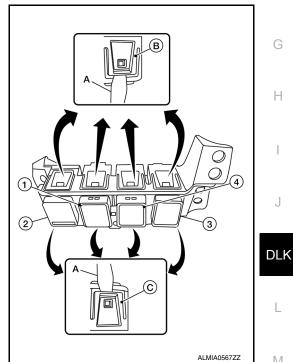
Removal and Installation

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.



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AUTOMATIC BACK DOOR CLOSE SWITCH

< REMOVAL AND INSTALLATION >

AUTOMATIC BACK DOOR CLOSE SWITCH

Removal and Installation

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.