BODY EXTERIOR, DOORS, ROOF & VEHICLE SECURITY

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PRECAUTION PRECAUTIONS

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

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes dual stage front air bag modules. The SRS system may only deploy one front air bag, depending on the severity of a collision and whether the front passenger seat is occupied. Information necessary to service the system safely is included in the SR and SB section of this Service Manual.

WARNING:

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

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

WARNING:

- When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

Precaution for Work

INFOID:000000008317648

WARNING:

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

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with a new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After installation is complete, be sure to check that each part works properly.
- Follow the steps below to clean components.
- Water soluble dirt: Dip a soft cloth into lukewarm water, and wring the water out of the cloth to wipe the dirty area.
- Then rub with a soft and dry cloth.
- Oily dirt: Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%), and wipe the dirty area.

Then dip a cloth into fresh water, and wring the water out of the cloth to wipe the detergent off. Then rub with a soft and 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 >	
PREPARATI	ON

PREPARATION

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Special Service Tool The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here. Tool number Description (Kent-Moore No.) Tool name Locating the noise _ (J-39570) Chassis ear SIIA0993E Repairing the cause of noise _ (J-43980) NISSAN Squeak and Rattle Kit

	SIIA0994E		I
(J-43241) Remote Keyless Entry Tester	LE1946A	Used to test keyfobs	DLK
			Μ

- Ν
- Ο

PREPARATION

< PREPARATION > Tool number Description (Kent-Moore No.) Tool name • Activate and display TPMS transmitter ____ (J-50190) IDs Signal Tech II · Display tire pressure reported by the **TPMS** transmitter · Read TPMS DTCs Register TPMS transmitter IDs ٠ Check Intelligent Key relative signal ٠ strength Confirm vehicle Intelligent Key antenna ALEIA0131ZZ signal strength Removing trim components (J-46534) Trim tool set AWJIA0483ZZ

Commercial Service Tool

(Kent-Moore No.) Tool name		Description	
(J-39565) Engine ear	SIIA0995E	Locating the noise	

< SYSTEM DESCRIPTION > SYSTEM DESCRIPTION А **COMPONENT PARTS** POWER DOOR LOCK SYSTEM В POWER DOOR LOCK SYSTEM : Component Parts Location INFOID:000000007913643 С 1 D 2 C Е ล OBE 0 F OF Πſ G (5 ٥ 62 Н 0 A Q Ø¢ J 6 DLK \bigcirc \bigcirc L $\overline{7}$ (8) 6 \bigcirc 0 (9) 6 Μ Ν (10) Ο (11)12

Revision: March 2012

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< SYSTEM DESCRIPTION >

1.	BCM (shown with combination meter removed)	2.	Front door switch LH	3.	Rear door switch LH
4.	Front door switch RH	5.	Rear door switch RH	6.	Fuel lid door lock actuator (view with luggage side lower finisher LH re- moved)
7.	Front door lock assembly LH	8.	Front door lock actuator RH	9.	Rear door lock actuator RH (LH sim- ilar)
10.	Back door lock assembly	11.	Main power window and door lock/ unlock switch	12.	Power window and door lock/unlock switch RH

POWER DOOR LOCK SYSTEM : Component Description

INFOID:000000007913644

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

< SYSTEM DESCRIPTION >

INTELLIGENT KEY SYSTEM : Component Parts Location

INFOID:000000008249319

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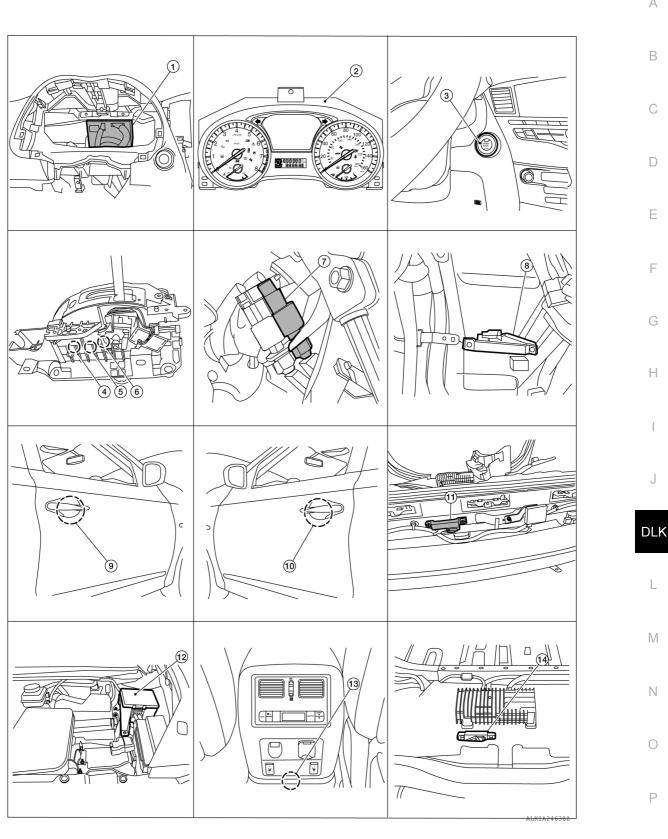
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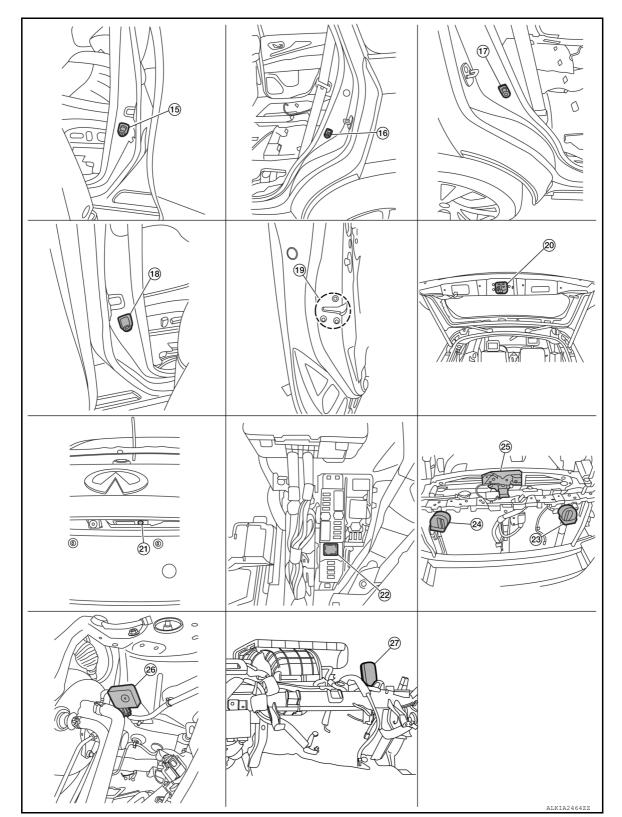


- BCM (view with combination meter 2. 1. removed)
- CVT shift selector (P (Park) position 5. 4. switch)
- Combination meter
- CVT shift selector (Shift lock solenoid)
- 3. Push button ignition switch
- 6. CVT shift selector (P (Park) position switch Intelligent Key)

DLK-13

< SYSTEM DESCRIPTION >

- 7. Brake switch
- 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)
- 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)
- Front outside handle RH (RH request switch and outside key antenna passenger side)
- 12. IPDM E/R



< SYSTEM DESCRIPTION >

- 15. Front door switch LH
- 18. Front door switch RH
- 21. Back door opener switch
- 24. Horn (high)

- 16. Rear door switch LH
- 19. Front door lock assembly LH
- 22. Horn relay
- 25. Hood switch

23. Horn (low)

20. Back door lock assembly

17. Rear door switch RH

26. Intelligent Key warning buzzer

27. Remote keyless entry receiver (view with dash pad removed)

INTELLIGENT KEY SYSTEM : Component Description

INFOID:000000008266421

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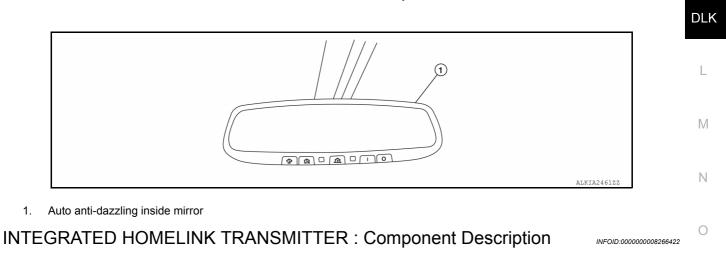
Item	Function
BCM	Controls the Intelligent Key system.
Back door opener switch	Inputs back door open/close condition to BCM.
Door lock actuator	Output lock/unlock signal from BCM and locks/unlocks each door.
Stop lamp switch	Inputs the brake pedal position condition to BCM.
Push button ignition switch	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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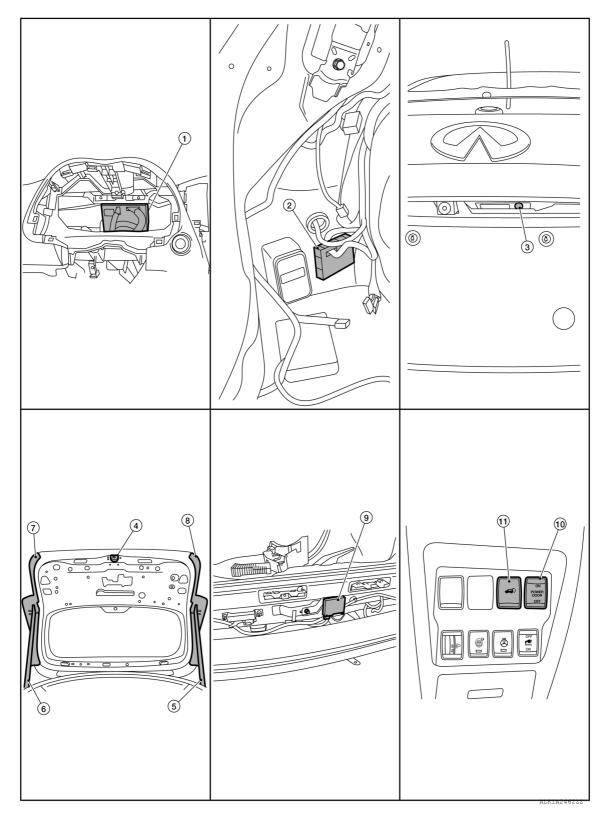
Item	Function	F
Homelink universal transceiver	A maximum of 3 radio signals can be stored and transmitted to operate the garage door, etc.	

AUTOMATIC BACK DOOR SYSTEM

< SYSTEM DESCRIPTION >

AUTOMATIC BACK DOOR SYSTEM : Component Parts Location

INFOID:000000007913645



- 1. BCM (view with combination meter 2. 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 RH

6. Spindle LH

< SYSTEM DESCRIPTION >

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

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

10. Automatic back door main switch

11. Automatic back door switch

AUTOMATIC BACK DOOR SYSTEM : Component Description

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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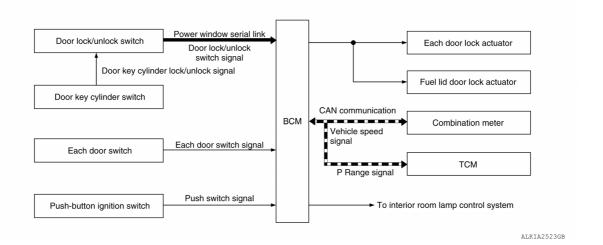
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SYSTEM (POWER DOOR LOCK SYSTEM)

< SYSTEM DESCRIPTION >

SYSTEM (POWER DOOR LOCK SYSTEM)

System Diagram



System Description

INFOID:000000007913648

INFOID:000000007913647

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-14, "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-7</u>, "System <u>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-7, "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). (Park). BCM outputs the lock signal to all door lock actuators when it detects that the ignition switch is in the ON posi-

tion, all doors are closed and the shift signal received from the TCM via CAN communication 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.

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

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (UNLOCK OPERATION)

The automatic door lock/unlock function is the function that unlocks all doors linked with the 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 the P to 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 TCM via CAN communication is shifted from any position other than the P to P position.

Setting change of Automatic Door Lock/Unlock Function

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

(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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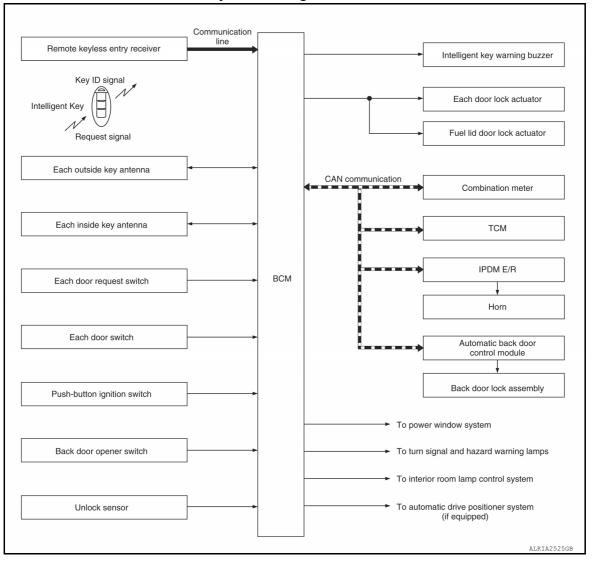
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< SYSTEM DESCRIPTION >

SYSTEM (INTELLIGENT KEY SYSTEM) INTELLIGENT KEY SYSTEM

INTELLIGENT KEY SYSTEM : System Diagram

INFOID:000000007913649



INTELLIGENT KEY SYSTEM : System Description

INFOID:000000007913650

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

The driver should always carry the Intelligent Key.

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

Function	Description	Refer
Door lock	Lock/unlock can be performed by pressing the request switch.	DLK-21
Back door opener	The back door can be opened by carrying the Intelligent Key and pressing the back door opener switch.	DLK-24
Remote keyless entry	Lock/unlock can be performed by pressing the remote controller button of the In- telligent Key.	DLK-25

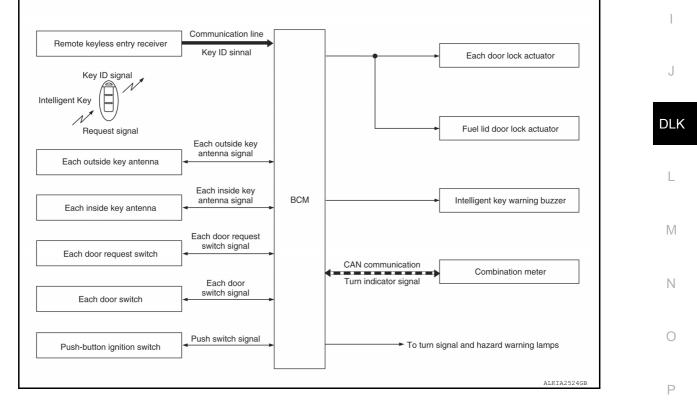
DLK-20

< SYSTEM DESCRIPTION >

Function	Description	Refer	-	
Key reminder	The key reminder buzzer sounds a warning if the door is locked w inside the vehicle.	<u>DLK-28</u>	- A	
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-31</u>	B	
Warning	If an action that does not meet the operating condition of the Intel tem is taken, the buzzer sounds to inform the driver.	DLK-32	C	
Engine start	The engine can be turned on while carrying the Intelligent Key.	SEC-9	-	
Interior room lamp control	Interior room lamp is controlled according to door lock/unlock sta	<u>INL-7</u>		
Power window	Power window can be operated by Intelligent Key button operation	PWC-7	- L	
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.	Automatic drive posi- tioner	<u>ADP-11</u>	E
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-15</u>	F
	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-20</u>	G

DOOR LOCK FUNCTION

DOOR LOCK FUNCTION : System Diagram



DOOR LOCK FUNCTION : System Description

INFOID:000000007913652

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

OPERATION DESCRIPTION

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< SYSTEM 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

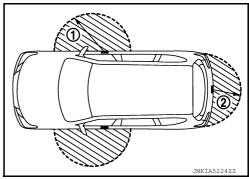
If the following conditions are satisfied, door lock/unlock operation is performed if the door request switch is operated.

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 <u>BCS-19, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>.

HAZARD AND BUZZER REMINDER FUNCTION

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

Revision: March 2012

DLK-22

< SYSTEM DESCRIPTION >

Operating Function Of Hazard And buzzer Reminder

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

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 <u>BCS-19</u>, "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.	F	
		\sim	

How To Change Auto Door Lock Operation Mode

Auto door lock operation mode can be changed using CONSULT. Refer to <u>BCS-19, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>.

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 waming lamp	Intelligent Key warning buzzer	Push-button ignition switch
Door lock/unlock function	×	×	×	×	х	×	×	×		×			
Hazard reminder function									×	×	×	х	
Selective unlock function	×			×	×	×	×	×		×			
Auto door lock function	×				×	×				×			×

BACK DOOR OPEN FUNCTION

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< SYSTEM DESCRIPTION >

BACK DOOR OPEN FUNCTION : System Diagram

Remote keyless entry receiver	Communication line Key ID signal			
Key ID signal			CAN communication Vehicle speed signal	Combination meter
Request signal Outside key antenna (rear bumper)	Outside key antenna (rear bumper) signal	BCM		Automatic back door control module
Each inside key antenna	Each inside key antenna signal		Back door open └ request signal	
Back door opener switch	Back door opener switch signal		Г	
	Back door		L	Back door lock assembly
Automatic back door switch	switch signal			

BACK DOOR OPEN FUNCTION : System Description

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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-36</u>, <u>"System Description"</u>.

OPERATION CONDITION

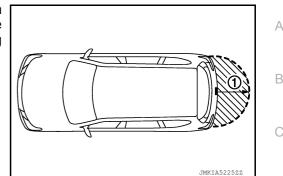
If the following conditions are not satisfied, back door open operation is not performed even if the back door opener switch is operated.

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

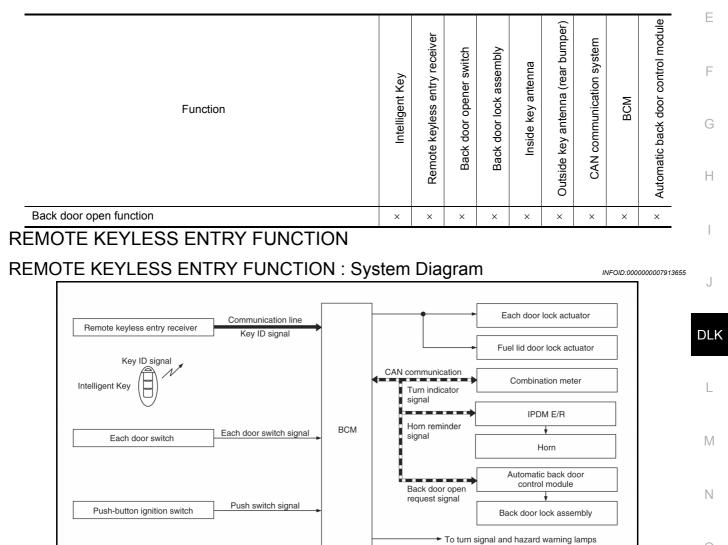
< SYSTEM DESCRIPTION >

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.



LIST OF OPERATION RELATED PARTS

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



REMOTE KEYLESS ENTRY FUNCTION : System Description

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

OPERATION

Remote keyless entry system controls operation of the following items.

- Door lock/unlock function
- Selective unlock function

Revision: March 2012

DLK-25

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< SYSTEM DESCRIPTION >

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

OPERATION AREA

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

REMOTE ENGINE START FUNCTION

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

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

DOOR LOCK/UNLOCK FUNCTION

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

OPERATION CONDITION

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

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

SELECTIVE UNLOCK FUNCTION

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

How to change selective unlock operation mode.

Selective unlock operation mode can be changed using CONSULT.

Refer to BCS-14, "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 O Door is locked Push switch is p 	N (door is open) ressed		
l ow to change auto door uto door lock mode can be lefer to <u>BCS-19, "INTELLIC</u>	changed using CON SENT KEY : CONSU	NSULT. LT Function (BCM -	INTELLIGENT KEY	<u>)"</u> .
AZARD AND HORN RE When doors are locked or un the hazard and horn remind	nlocked by Intelligen	t Key, BCM blinks ha		
perating Function of Hazard	and Horn Reminder			
	C m	ode	S me	ode
Intelligent Key operation	Lock	Unlock	Lock	Unlock
Hazard warning lamp blinks	Twice	Once	Twice	_
Horn sound	Once	_	_	_
Door is open (only lock op				
Door is open (only lock op ow to Change Hazard and With CONSULT lazard and horn reminder of Refer to <u>BCS-19, "INTELLIO</u>	Horn Reminder Mod	be changed using CC		<u>)"</u> .
low to Change Hazard and With CONSULT lazard and horn reminder o	Horn Reminder Mod operation mode can b <u>SENT KEY : CONSU</u> signals are sent from	be changed using CC <u>LT Function (BCM -</u> the Intelligent Key fo	INTELLIGENT KEY	nds at the same time,
With CONSULT Azard and horn reminder of Refer to <u>BCS-19, "INTELLIO</u> Without CONSULT Vhen LOCK and UNLOCK so the hazard and horn remind	Horn Reminder Mod operation mode can b <u>BENT KEY : CONSU</u> signals are sent from er mode is changed	be changed using CC LT Function (BCM - the Intelligent Key fo and hazard warning	INTELLIGENT KEY	nds at the same time,
With CONSULT Azard and horn reminder of Refer to BCS-19, "INTELLIO Without CONSULT When LOCK and UNLOCK she hazard and horn remind billowing items: C mode	Horn Reminder Mod operation mode can b SENT KEY : CONSU signals are sent from er mode is changed Haza hirp mode)	be changed using CC <u>LT Function (BCM -</u> the Intelligent Key fo	INTELLIGENT KEY	nds at the same time, orn sounds as per the

AUTOMATIC BACK DOOR OPEN/CLOSE FUNCTION

Μ When back door button of Intelligent Key is pressed for 0.4 second or more, back door open automatically for detailed description, refer to DLK-36, "System Description".

LIST OF OPERATION RELATED PARTS

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

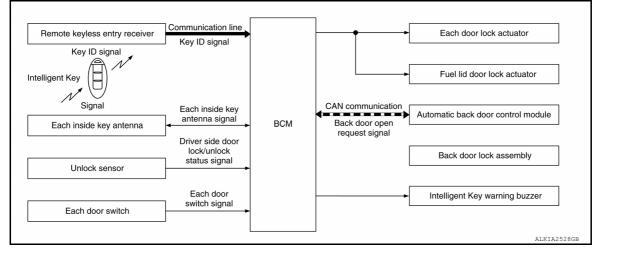
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< SYSTEM DESCRIPTION >

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

KEY REMINDER FUNCTION

KEY REMINDER FUNCTION : System Diagram



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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< SYSTEM DESCRIPTION >

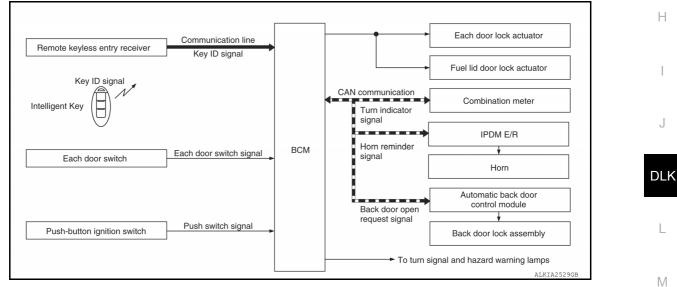
Key remainder func- tion	Operation condition	Operation
Door is open or closed	 Right after all doors are closed under the following conditions: Intelligent Key is inside the vehicle. Any door is open. All doors (except back door) are locked by door lock and unlock switch or door lock knob. 	 All doors (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



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.

REMOTE ENGINE START FUNCTION

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< SYSTEM DESCRIPTION >

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

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

• Ignition switch position is ON.

Door is open (only lock operation)

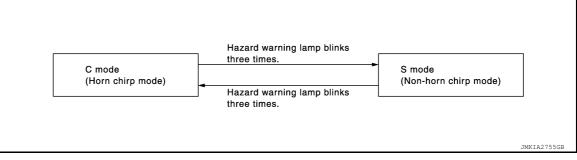
How to Change Hazard and Horn Reminder Mode

With CONSULT

Hazard and horn reminder operation mode can be changed using CONSULT. Refer to BCS-19, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Without CONSULT

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



LIST OF OPERATION RELATED PARTS

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

< SYSTEM DESCRIPTION >

Function	Intelligent Key	Door switch	Door lock actuator	Fuel lid lock actuator	Push-button ignition switch	CAN communication system	BCM	IPDM E/R	Horn	Combination meter	Hazard warning lamp	Automatic back door control module	Back door lock assembly	
Door lock/unlock function	×	×	×	×			×							
Selective unlock function	×	×	×	×			×							
Auto door lock function	×	×	×	×	×		×							
Hazard and horn reminder function						×	×	×	×	×	×			-
Automatic back door open/close function Remote engine start function	×					×	×					×	×	
LCOME LIGHT FUNCTION	ON				×						1	1		•
		Diag	gran	า							INF	OID:0000	00000791	365
Remote keyless entry receiver Key		Diag	gran	ו							INF	DID:0000	00000791	365
Remote keyless entry receiver Key ID signal Intelligent Key Signal Each	N : System [nication line ID signal		gran	1		,	► To i	nterio	room	lamp			00000791	365
Remote keyless entry receiver Key ID signal Intelligent Key Signal Each inside key antenna Each outside key antenna	N : System I nication line ID signal inside key ma signal butside key ma signal			N com	munic	ation	[nterio					00000791	365
Remote keyless entry receiver Key ID signal Intelligent Key Signal Each inside key antenna Each outside key antenna Pus Push-button ignition switch Each	N : System I nication line ID signal inside key ma signal butside key		CA	N com		ation	[nterio	r room TC				00000791	365

WELCOME LIGHT FUNCTION : System Description

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.

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< SYSTEM DESCRIPTION >

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.

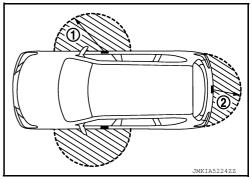
OPERATION CONDITION

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

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



WELCOME LIGHT FUNCTION SETTING

Welcome light function operation mode can be changed using CONSULT

(P) With CONSULT

Refer to BCS-19, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Without CONSULT

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

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

WARNING FUNCTION

WARNING FUNCTION : System Description

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.

Revision: March 2012

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< SYSTEM DESCRIPTION >

Warning/Inform	nation functions	Operation procedure						
Intelligent Key system ma	alfunction	When a malfunction is detected on BCM, "KEY" warning lamp illuminates.						
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) position Engine 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 changes 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	For external For internal For external For external Door is open to close Door is open Door is open Push-button ignition witch operation Ignition switch is ON po- sition Ignition switch is except ON position	 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 						
		 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	iformation • Engine is stopped Ignition switch is except • Ignition switch: Except ON position • Shift position: P (Park) position*							
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 DESCRIPTION >

		Information display	Warning chime				
Warning/Info	ormation functions	warning lamp	(combination meter)	Combination meter buzzer	Intelligent Key warning buzze		
Intelligent Key	system malfunction	Indicate	—	_	_		
OFF position	For internal	_	_	Activate	_		
warning	For external	_	_	—	Activate		
	For internal			Activate	—		
P position warning	For external	_	Shift to Park	_	Active		
			ALKIA2515GB				
ACC warning		_	Push ignition to OFF	Activate	_		
	Door is open to close			Activate	Activate		
Take away	Door is open				—		
warning	Push-button igni- tion switch opera- tion	_	No Key Detected	Activate	_		
Door lock op- eration warn-	Request switch operation		_	_	Activate		
ing	Intelligent Key	—	—	_	Activate		
Key ID warning	9	_	Key ID Incorrect	_	_		
Engine start in	formation	_	Push brake and start button to drive	_	_		

< SYSTEM DESCRIPTION >

	Marring //nformation display					
Warning/Information functions	warning lamp	(combination display	Combination meter buzzer	Intelligent Key warning buzzer	A	
Intelligent Key low battery warning	_	Key low battery	_	_	B	
		ALKIA2520GB			D	
Key ID verification information	_	(11) ((1)	_	_	E	
		ALKIA2521ZZ			F	

LIST OF OPERATION RELATED PARTS

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

Warnir	ng function	Intelligent Key	Ignition switch	Door switch	Door request switch	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	Combination meter buzzer	CAN communication system	BCM	Information display	"KEY" warning lamp	H I J
Intelligent Key system malfu	Inction									×	×		×	
	For internal			×					×	×	×			DLK
OFF position warning	For external			×				×			×			
P (Park) position warning			×						×	×	×	×	×	L
ACC warning			×						×	×	×	×		
	Door is open or close	×		×		×		×	×	×	×	×	×	
Take away warning	Door is open	×		×		×				×	×	×	×	M
	Push-button ignition switch operation	×	×			×			×	×	×	×	×	
Door lock operation warning]	×		×	×	×	×	×			×			Ν
Key ID warning			×			×				×	×	×	×	
	Ignition switch is ON position	×	×			×				х	×	×		0
Engine start information	Ignition switch is except ON position	×	×			×				×	×	×		0
Intelligent Key low battery w	varning	×				×				х	×	×	×	Р
Key ID verification informati	on	×				×				×	×	×		

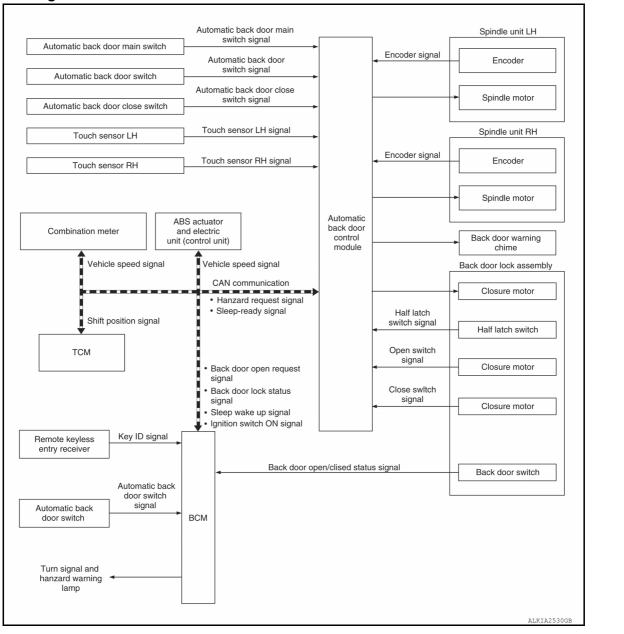
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SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

< SYSTEM DESCRIPTION >

SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

System Diagram



System Description

INFOID:000000008266449

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

AUTOMATIC BACK DOOR OPEN/CLOSE FUNCTION

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

AUTOMATIC OPEN/CLOSE TEMPORARY STOP FUNCTION

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< SYSTEM 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 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

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< SYSTEM DESCRIPTION >

	Pattern	Time	Description
A	ON 200ms OFF JMKIA1862ZZ	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 JMKIA6517ZZ	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)] 				

< 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 direct	lose temporary stop function after 2 reverse operations re- ction	

AUTOMATIC BACK DOOR OPEN/CLOSE OPERATION CONDITION

	Automatic back door switch			Intellig	ent Key	Automat- ic back door close switch	Back door opener switch	
Operating direction	Fully closed \rightarrow Open Fully open \rightarrow Closed		Fully closed \rightarrow Open	Fully open \rightarrow Closed	Fully open \rightarrow Closed	Fully closed \rightarrow Open		
Main switch	-	_	_	_	_	ON	ON	
Ignition position	ON/ACC/ LOCK	OFF	_		_		ON/ACC/ LOCK	OFF
Shift selector lever	P position	—	—	—	_	_	P position	
Vehicle speed	•		L	0 k	m/h			
Back door lock condition	-	_	_	_	_	—	Unl	ock*
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	he operation is continued				
Operation condition release during the opera- tion start announcement condition	Automatic back door fur	tomatic back door function 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 C) 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)]					
Operation time (More than approx. 180 sec.)	Inhibit automatic back d	oor operation				

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< SYSTEM DESCRIPTION >

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

TIME CHART FOR AUTOMATIC BACK DOOR SYSTEM

Fully Closed to Fully Open Operation

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

Component	Parts	Status	1) (B) (4) (!	5
		ON						
	Half latch switch	OFF						
	Open switch	ON						
	Open switch	OFF					L	
Back door lock	Close switch	ON						
assembly		OFF					i L	
	Back door closure motor	ON						
	(open)	OFF			_			
	Back door closure motor (close)	ON						
		OFF					J	
	Spindle motor (open)	ON						
Spindle unit		OFF						
	Spindle motor (close)	ON						
		OFF						
_	Automatic back door buzzer			חח			Г	
		OFF						
_	Hazard	ON						
		OFF		·	·			
								JMKIA6521GB

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

< SYSTEM DESCRIPTION >

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

- 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.

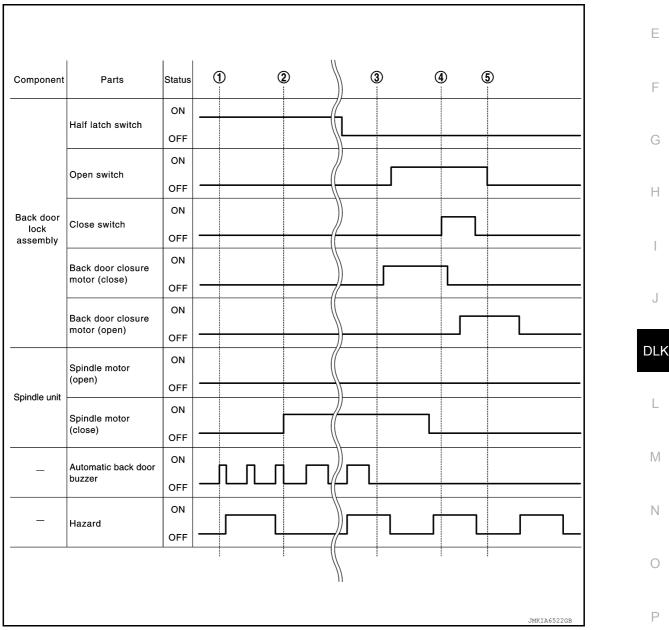
NOTE:

4.

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.

SYSTEM (INTEGRATED HOMELINK TRANSMITTER)

< SYSTEM DESCRIPTION >

SYSTEM (INTEGRATED HOMELINK TRANSMITTER)

System Description

INFOID:000000007913664

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

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DIAGNOSIS SYSTEM (BCM) COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000008368181

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

DOOR LOCK

DATA MONITOR

DIAGNOSIS SYSTEM (BCM)

DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)

SELF DIAGNOSTIC RESULT

< SYSTEM DESCRIPTION >

Refer to BCS-49, "DTC Index".

DATA MONITOR

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

ACTIVE TEST

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

WORK SUPPORT

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

* : Initial setting

INTELLIGENT KEY

SELF DIAGNOSTIC RESULT Refer to <u>BCS-49, "DTC Index"</u>.

INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)

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< SYSTEM DESCRIPTION >

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.
SHIFTLOCK SOLENOID POWER SUP- PLY [On/Off]	×	Indicates condition of power supply to shiftlock solenoid.
BRAKE SW 1 [On/Off]	×	Indicates condition of brake switch.
BRAKE SW 2 [On/Off]		Indicates condition of brake switch.
DETE/CANCL SW [On/Off]	×	Indicates condition of P (park) position.
SFT PN/N SW [On/Off]	×	Indicates condition of P (park) or N (neutral) position.
UNLK SEN -DR [On/Off]	×	Indicates condition of door unlock sensor.
PUSH SW -IPDM [On/Off]		Indicates condition of push-button ignition switch received from IPDM E/R on CAN communication line.
IGN RLY1 -F/B [On/Off]		Indicates condition of ignition relay 1 received from IPDM E/R on CAN 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.
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 AUTHENTICATION CANCEL TIMER [under a stop]		Indicates condition of Intelligent Key ID authentication.
ACC BATTERY SAVER [under a stop]		Indicates condition of battery saver.
CRNK PRBT TMR [On/Off]		Indicates condition of crank prohibit timer.
AUT CRNK TMR [On/Off]		Indicates condition of automatic engine crank timer from Intelligent Key.
CRNK PRBT TME [sec]		Indicates condition of engine crank prohibit time.
AUTO CRNK TME [sec]		Indicates condition of automatic engine crank time from Intelligent Key.
CRANKING TME [sec]		Indicates condition of engine cranking time from Intelligent Key.
DETE SW PWR [On/Off]		Indicates condition of detent switch voltage.
ACC RLY -REQ [On/Off]		Indicates condition of accessory relay control request.

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< SYSTEM DESCRIPTION >

Monitor Item [Unit]	Main	Description	
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.	
KEYFOB ABD [On/Off]		Indicates condition of Intelligent Key ABD.	

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].	
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].	
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 PW 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 SOLENOID TEST This test is able to check shift lock solenoid operation [On/Off].		

WORK SUPPORT

			0
Support Item	Setting	Description	
IGN/ACC Battery Saver	On*	Battery saver function ON.	
IGIN/ACC Ballery Saver	Off	Battery saver function OFF.	P
REMOTE ENGINE STARTER	On*	Remote engine start function ON.	
REMOTE ENGINE STARTER	Off	Remote engine start function OFF.	

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< SYSTEM DESCRIPTION >

Support Item	Setting		Description	
	Buzzer		Buzzer reminder function by door lock/unlock request switch ON.	
ANSWERBACK SOUND BY HANDS FREE LOCK UNLOCK FOR NAM	Horn chirp (only lock)		Horn chirp reminder function by door lock request switch ON.	
FREE LOCK UNLOCK FOR NAM	Off*		No reminder function by door lock/unlock request switch.	
	Invalid		This mode is not used.	
ANSWERBACK SOUND BY KEYLESS	On		Buzzer or horn chirp reminder when doors are locked/unlocked with Intelligent Key.	
LOCK UNLOCK	Off*		No buzzer or horn chirp reminder when doors are locked/unlocked with Intelligent Key.	
WELCOME LIGHT OP SET	On*		Door handle lamp function from request switch ON.	
WELCOME LIGHT OF SET	Off		Door handle lamp function from request switch OFF.	
	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.	
RETRACTABLE MIRROR SET	On		Retractable mirror set ON.	
RETRACIABLE MIRROR SET	Off*		Retractable mirror set OFF.	
	On*		Door lock/unlock function from Intelligent Key ON.	
LOCK/UNLOCK BY I-KEY	Off		Door lock/unlock function from Intelligent Key OFF.	
ENGINE START BY I-KEY	On*		Engine start function from Intelligent Key ON.	
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.	
RUNNGLASS HATCH OPEN	Off		Buzzer reminder function by back door request switch OFF.	
INTELLIGENT KEY LINK SET	On		Intelligent Key link set ON.	
INTELLIGENT KET LINK SET	Off*		Intelligent Key link set OFF.	
		70 msec		
SHORT CRANKING OUTPUT	Start	100 msec	Starter motor operation duration times.	
SHORT CRAIKING OUTFUT		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	1	

*: Initial Setting

TRUNK

TRUNK : CONSULT Function (BCM - TRUNK)

INFOID:00000008368184

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.

< SYSTEM DESCRIPTION >

Monitor Item [Unit]	Description	
TR/BD OPEN SW [On/Off]	Indicates condition of back door opener switch.	A
RKE-TR/BD [On/Off]	Indicates condition of back door open signal from Intelligent Key.	
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DIAGNOSIS SYSTEM (AUTOMATIC BACK DOOR CONTROL UNIT)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (AUTOMATIC BACK DOOR CONTROL UNIT)

CONSULT Function

INFOID:000000007913669

APPLICATION ITEMS

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

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

SELF DIAGNOSTIC RESULTS Refer to <u>DLK-56, "DTC Index"</u>.

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	
OPEN SW	[ON/OFF]	Indicates condition of open switch	
CLOSE SW	[ON/OFF]	Indicates condition of close switch	
HALF LATCH SW	[ON/OFF]	Indicates condition of half latch switch	
TOUCH SEN RH	[ON/OFF/OPEN]	Indicates condition of touch sensor RH	
TOUCH SEN LH	[ON/OFF/OPEN]	Indicates condition of touch sensor LH	
P RANGE IND	[ON/OFF]	Indicates condition of P range signal from combination meter	
RKE REQ	[OFF/MOVE/ REV]	Indicates condition of remote keyless entry signal from BCM	
IGN SW	[ON/OFF]	Indicates condition of IGN power supply	
SPINDLE LH ENCODER A	[LO/HI]	Indicates condition of encoder signal from encoder A	
SPINDLE LH ENCODER B	[LO/HI]	Indicates condition of encoder signal from encoder B	
UNLOCK SEN BD	[LOCK/ UNLOCK]	NOTE: This item is displayed, but cannot be monitored	
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	
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	

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DIAGNOSIS SYSTEM (AUTOMATIC BACK DOOR CONTROL UNIT)

< SYSTEM DESCRIPTION >

Monitor Item		Unit	Description	٨
SPINDLE RH ENCODE	٦A	[LO/HI]	Indicates condition of encoder signal from encoder A	A
SPINDLE RH ENCODE	RB	[LO/HI]	Indicates condition of encoder signal from encoder B	

WORK SUPPORT

Work item	Description	Refer to
RESET AUTO BACK DOOR STA-	This item is for calibration of automatic back door position informa-	DLK-110, "Work Proce-
TUS	tion.	dure"

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< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION AUTOMATIC BACK DOOR CONTROL UNIT

Reference Value

INFOID:00000008282639

VALUES ON THE DIAGNOSIS TOOL

CONSULT MONITOR ITEM

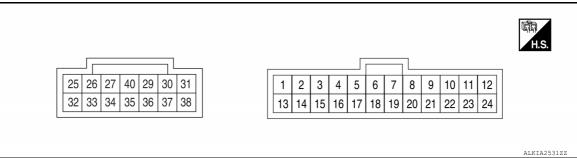
Monitor Item	Conditio	n	Value/Status
SPINDLE SENSOR LH	Back door: Moving		0 – 65535
SPINDLE LH SPEED	Back door: Moving		0 – 6553.5
SPINDLE MOTOR LH DUTY	Back door: Moving		0 – 255
VHCL SPEED MTR	While driving		Equivalent to speedometer reading
VHCL SPEED ABS	While driving		Equivalent to speedometer reading
MAIN SW	Automatic back door main switch	OFF	OFF
	Automatic back door main switch	ON	ON
AUTO BD SW	Automatic back door switch	Release	OFF
	Automatic back door switch	Press	ON
BK DOOR CL SW	Automatic back door close switch	Release	OFF
BR DOOR OF SW	Automatic back door close switch	Press	ON
BACK DOOR LOCK STATUS	Back door lock	Lock	OFF
BACK DOOK LOOK STATUS	Back door lock	Unlock	ON
	Deals deer	Half latch/fully closed	OFF
OPEN SW	Back door	Open	ON
CLOSE SW	Back door	Open/half latch	OFF
CLOSE SVV		Fully closed	ON
	Deals dear	Half latch/fully closed	OFF
HALF LATCH SW	Back door	Open	ON
	Touch concer DU	Other than bellow	OFF
TOUCH SEN RH	Touch sensor RH	Detect obstruction	ON
	Touch concert LL	Other than bellow	OFF
TOUCH SEN LH	Touch sensor LH	Detect obstruction	ON
	Selector lover	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
		Other than ON position	OFF
IGN SW	Ignition switch	ON position	ON
		Not operate	No change HI or LO
SPINDLE LH ENCODER A	Automatic back door	Operate	Change HI or LO
		Not operate	No change HI or LO
SPINDLE LH ENCODER B	Automatic back door	Operate	Change HI or LO
UNLOCK SEN BD	NOTE: The item is indicated, but not monit	ored	OFF

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< ECU DIAGNOSIS INFORMATION >

Monitor Item	Conditio	n	Value/Status	
DESTINATION			OTHER	1
AUTO BCK DR POS INITIAL	Calibration of automatic back door	Not complete	YET	
AUTO BOK DR POS INITIAL	position information	Complete	DONE	
AUTO BCK DR POS LEARN	Additional service when removing	Not complete	YET	
AUTO BOK DR POS LEARN	battery negative terminal	ery negative terminal Complete		
SPINDLE SENSOR RH	Back door: Moving		0 – 65535	(
SPINDLE RH SPEED	Back door: Moving		0 - 6553.5	
SPINDLE MOTOR RH DUTY	Back door: Moving		0 – 255	ſ
	Automotio book door	Not operate	No change HI or LO	
SPINDLE RH ENCODER A	Automatic back door	Operate	Change HI or LO	
	Automotic hook door	Not operate	No change HI or LO	[
SPINDLE RH ENCODER B	Automatic back door	Operate	Change HI or LO	

TERMINAL LAYOUT



PHYSICAL VALUES

	inal No. e color)	Description		Con	dition	Voltage
(+)	(-)	Signal name	Input/ Output	Con		(Approx.)
1	13 (SB)	Touch sensor RH sig- nal	Input	Touch sensor RH	Detect obstruc- tion	1.8 – 5 V
(BR)	(36)	nai			Other than above	2.72 – 7.27 V
2	13 (SB)	Touch sensor LH sig- nal	Input	Touch sensor LH	Detect obstruc- tion	1.8 – 2.72 V
(LG)	(36)	nai			Other than above	5.0 – 7.27 V
2					Open	0 V
3 (L)	Ground	Half latch switch signal	Input	Back door	Fully closed/half latch	Battery voltage
5	Oraciad		la a st	De els de en	Fully closed	0 V
(LG)	Ground	Close switch signal	Input	Back door	Open/half latch	Battery voltage
6 (V)	Ground	Encoder LH A signal	Input	Back door	Moving (auto or manual)	(V) 15 10 5 0 20ms JMKIA186422 NOTE: Waveform width changes accord- ing to back door open/close speed
					When stopped	0 V or Battery voltage

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< ECU DIAGNOSIS INFORMATION >

	inal No. e color)	Description		Con	dition	Voltage
(+)	(-)	Signal name	Input/ Output	Con	dition	(Approx.)
7 (Y)	Ground	Encoder LH B signal	Input	Back door	Moving (auto or manual)	(V) 15 10 5 0 20ms JMKIA186422 MOTE: Waveform width changes accord- ing to back door open/close speed
					When stopped	0 V or 12 V
8 (BR)	Ground	Encoder RH A signal	Input	Back door	Moving (auto or manual)	(V) 15 10 5 0 20ms JMKIA186422 MOTE: Waveform width changes accord- ing to back door open/close speed
_					When stopped	0 V or 12 V
9 (L)	Ground	Encoder RH B signal	Input	Back door	Moving (auto or manual)	(V) 15 10 5 0 20ms JMKIA1864ZZ MOTE: Waveform width changes accord- ing to back door open/close speed
					When stopped	0 V or 12 V
10 (LG)	Ground	Automatic back door main switch	Input	Automatic back door main switch	ON OFF	Battery voltage
/					Open	0 V
11 (BR)	Ground	Open switch signal	Input	Back door	Half latch/fully closed	Battery voltage
12 (W)	Ground	CAN - L	Input/ Output	-	—	_
13 (SB)	Ground	Touch sensor ground	Input		_	0.01 – 0 V
18 (—)	Ground	Ground (noise shield)	_	-	_	0.01 – 0 V
19 (SB)	Ground	Encoder LH power supply	Output	-	_	Battery voltage
20 (Y)	Ground	Encoder RH power supply	Output	-		Battery voltage
21 (LG)	Ground	Encoder ground		-	_	0 V

< ECU DIAGNOSIS INFORMATION >

	iinal No. e color)	Description		Con	dition	Voltage
(+)	(-)	Signal name	Input/ Output	Con		(Approx.)
22	Ground	Automatic back door	Input	Automatic back	Pressed	Battery voltage
(SB)	Ground	switch	mput	door switch	Released	0 V
23	Ground	Automatic back door	Input	Automatic back	Pressed	Battery voltage
(Y)	Cround	close switch	mput	door close switch	Released	0 V
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
29 (B)	Ground	Spindle motor RH (open)	Output	Back door	Auto open opera- tion	Battery voltage
31	Cround	Back door closure mo-	Output	Back door	Open operation	Battery voltage
(B)	Ground	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		Back door warning		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)	Giounu	tor (close)	Sulput	Dack UUUI	Other than above	0 V
40 (—)	Ground	Ground (noise shield)	_	-	_	0.01 – 0 V

Fail Safe

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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.
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 after automatic back door operation is inhibited.

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Display contents of CONSULT	Fail-safe	Cancellation
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

DTC Index

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NOTE:

Details of time display

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

CONSULT display	Fail-safe	Reference page
U1000: CAN COMM	x	DLK-111, "DTC Logic"
U1010: CONTROL UNIT(CAN)	x	DLK-112, "DTC Logic"
B2401: IGN OPEN	x	DLK-113, "DTC Logic"
B2409: HALF LATCH SW	x	DLK-114, "DTC Logic"
B2416: TOUCH SEN R OPEN	x	DLK-117, "DTC Logic"
B2417: TOUCH SEN L OPEN	x	DLK-120, "DTC Logic"
B2419: OPEN SW	x	DLK-123, "DTC Logic"
B2420: CLOSE SW	x	DLK-126, "DTC Logic"
B2422: BACK DOOR STATE	x	DLK-129, "DTC Logic"
B2423: ABD MTR TIME OUT	x	DLK-132, "DTC Logic"
B2426: SPINDLE SENSOR LH	x	DLK-134, "DTC Logic"
B2427: SPINDLE SENSOR RH	x	DLK-137, "DTC Logic"
B2428: AUTO BACK DR CNT UNIT	x	DLK-140, "DTC Logic"
B242A: CLSR CONDITION	x	DLK-141, "DTC Logic"

BCM

List of ECU Reference

INFOID:000000008368185

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ECU	Reference	
	BCS-27, "Reference Value"	
DOM	BCS-47, "Fail Safe"	
BCM	BCS-47. "DTC Inspection Priority Chart"	
	BCS-49, "DTC Index"	

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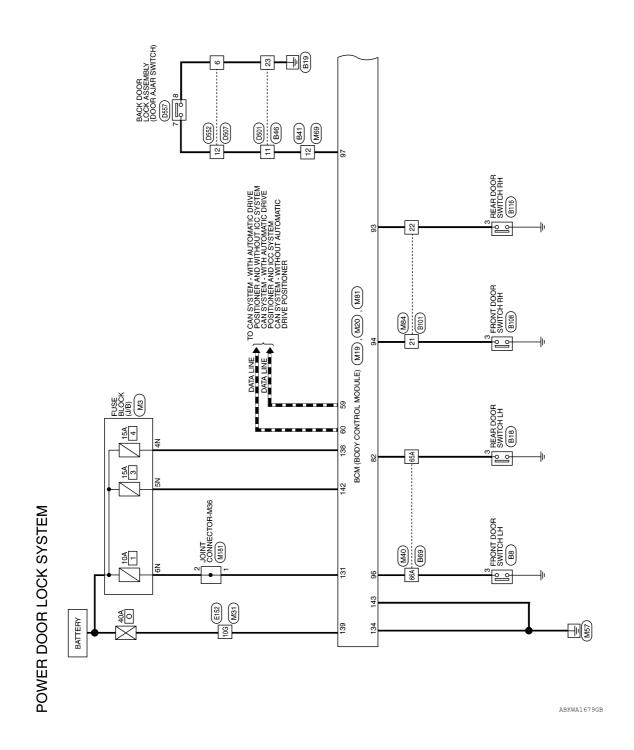
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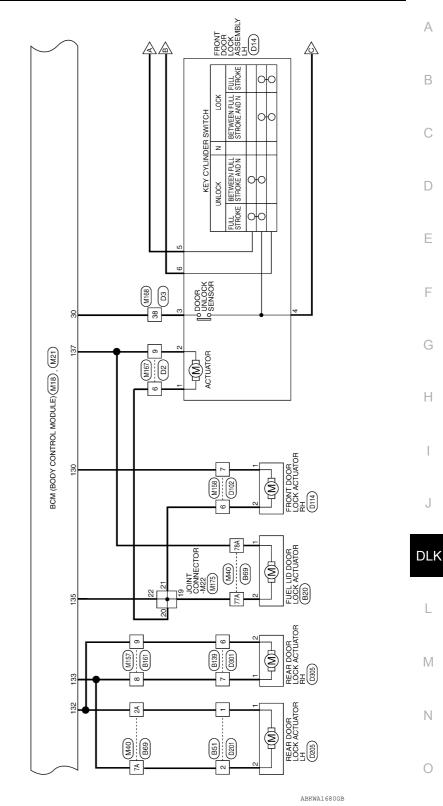
WIRING DIAGRAM POWER DOOR LOCK SYSTEM

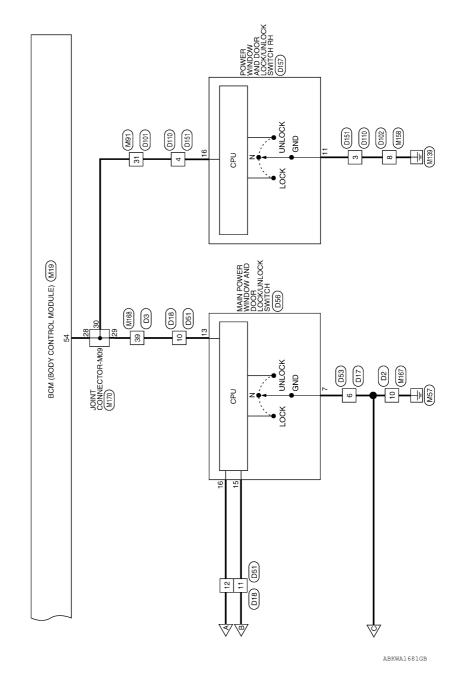
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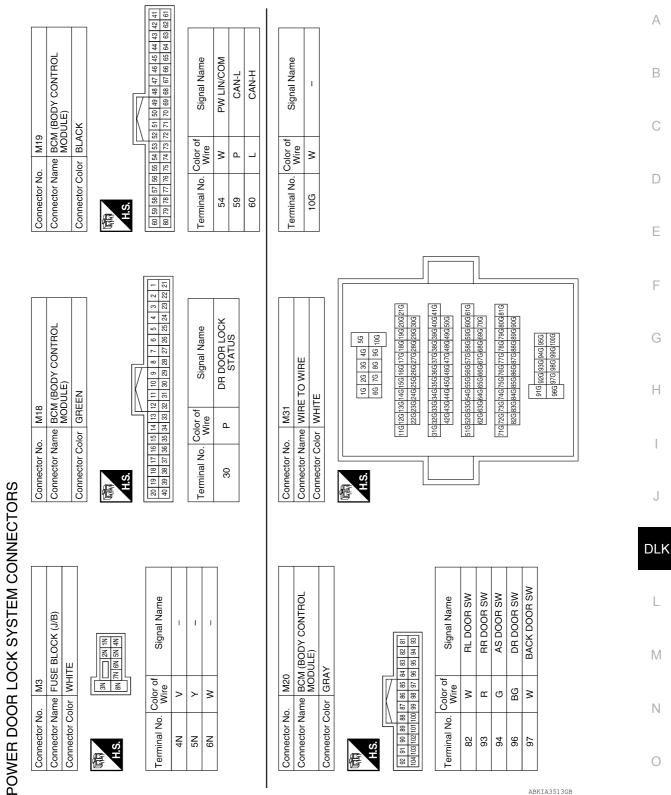


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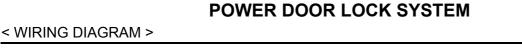


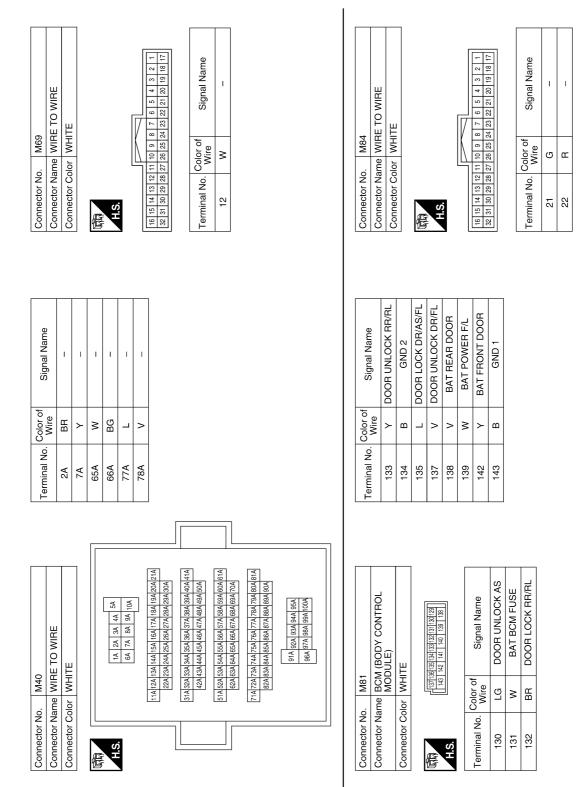


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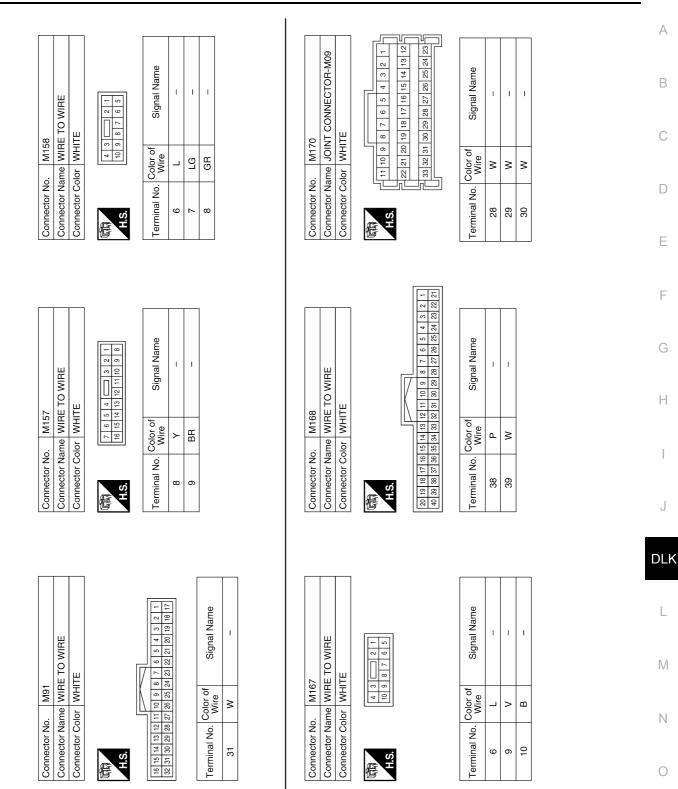


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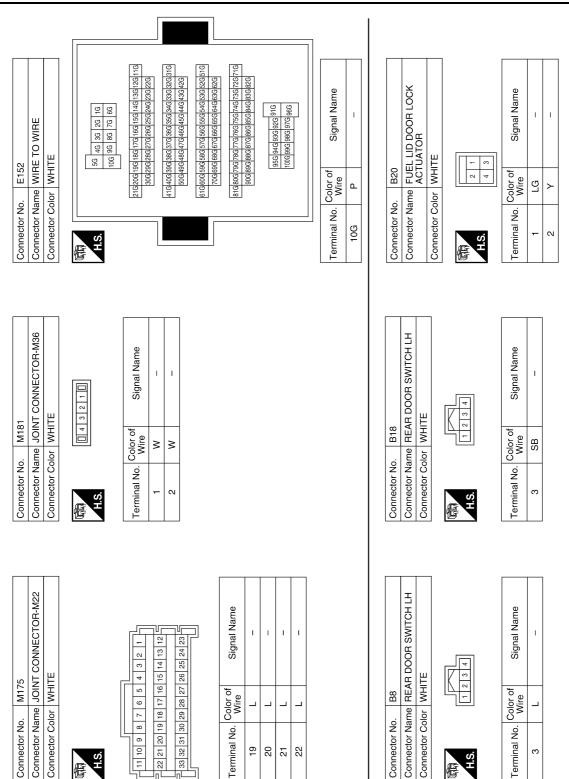


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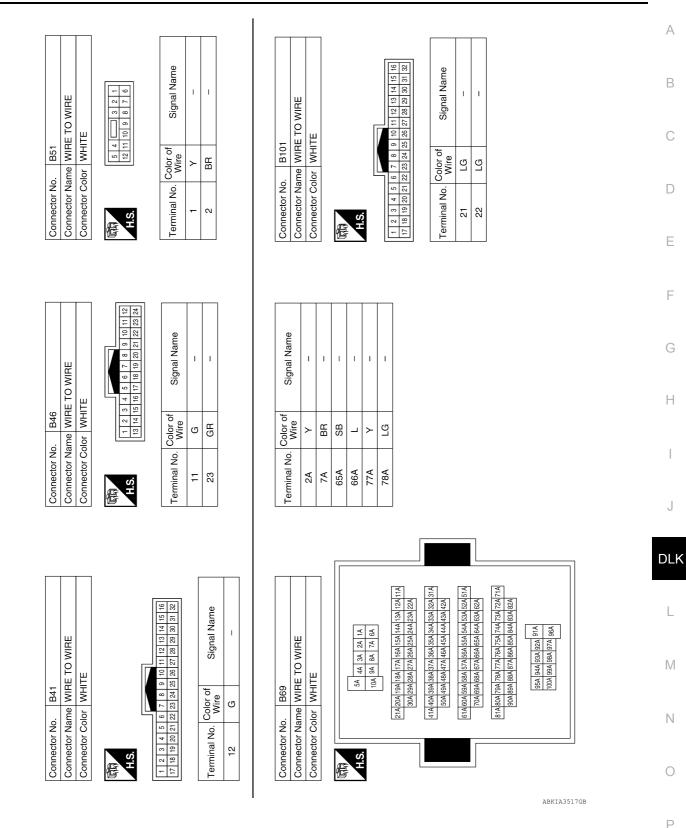
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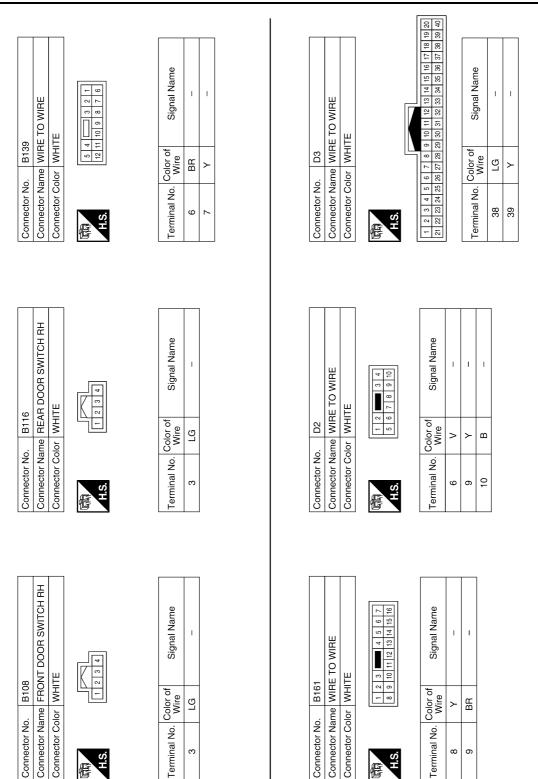


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Terminal No.

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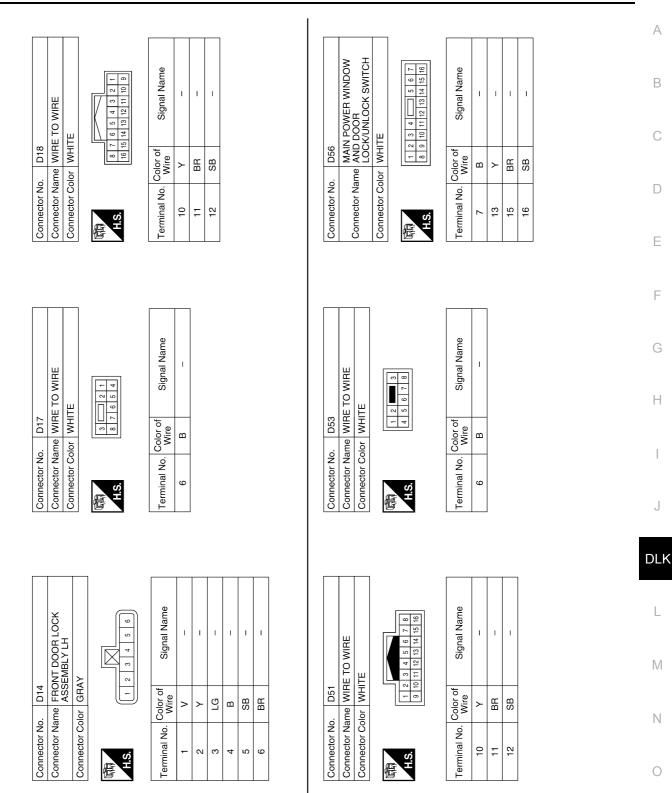
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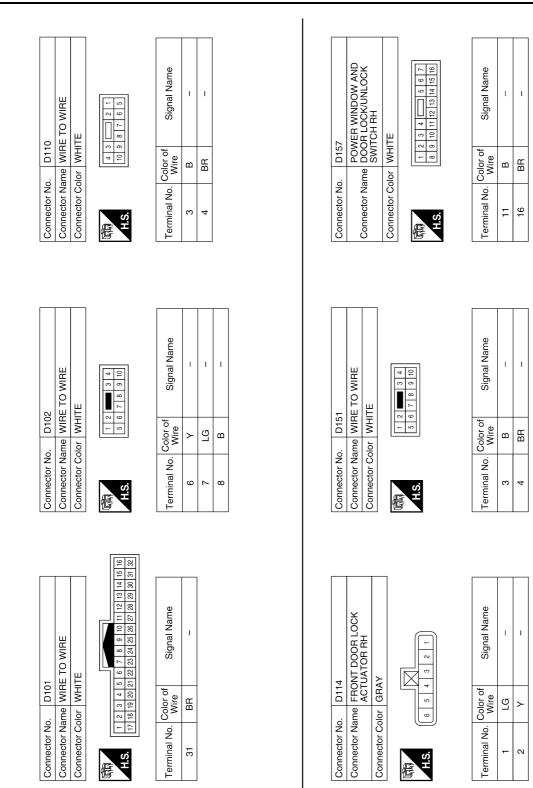
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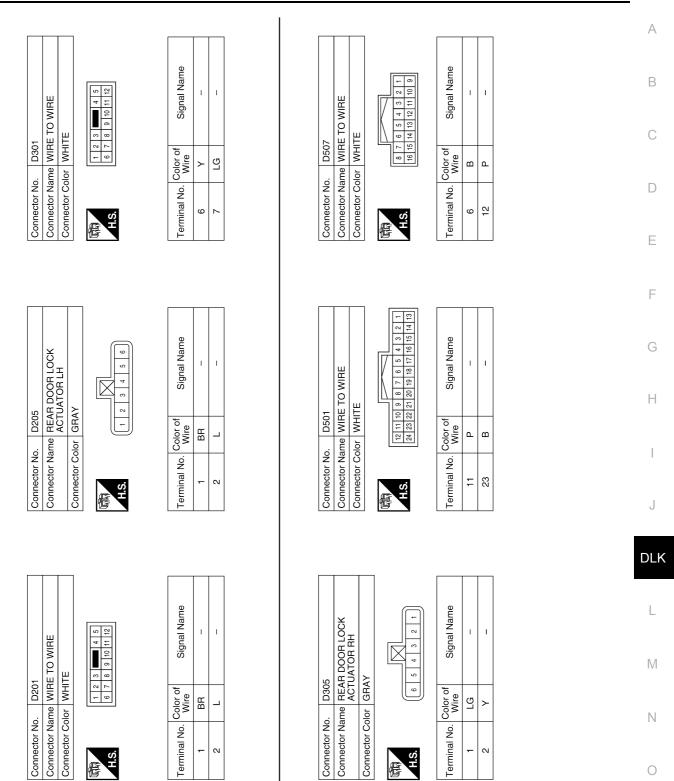
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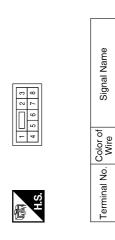


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Signal Name

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Connector No.	D552	52							
Connector Name WIRE TO WIRE	≥	2	ΙĔ.	6	1	띭			
Connector Color WHITE	Ž	Ę	ш						
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S H	-	2	з	4	5	9	7	8	
	9		10 11 12 13 14 15 16	12	13	14	15	16	

Connector No. D557 Connector Name BACK DOOR LOCK ASSEMBLY

Connector Color WHITE

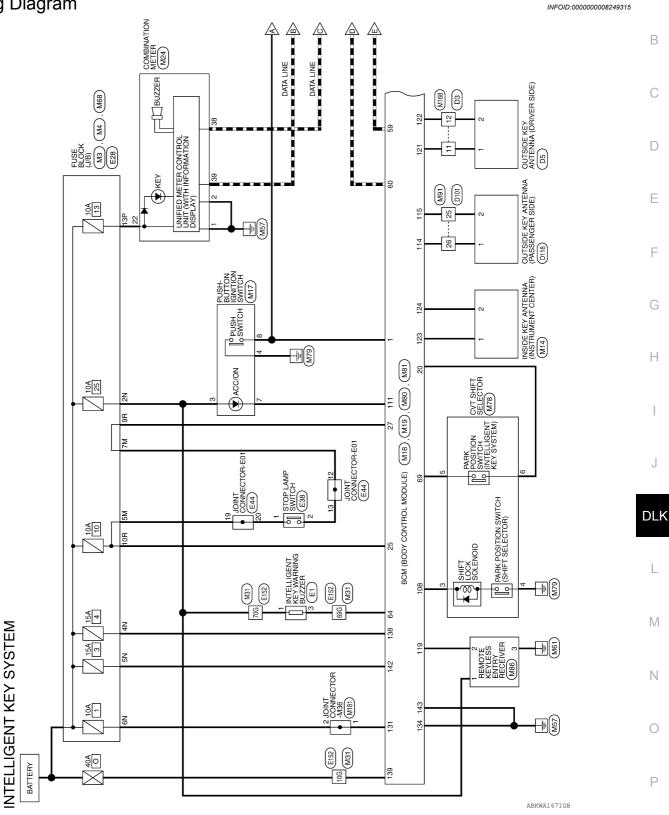
Signal Name	I	I
Color of Wire	В	σ
Terminal No.	9	12

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INTELLIGENT KEY SYSTEM

Wiring Diagram



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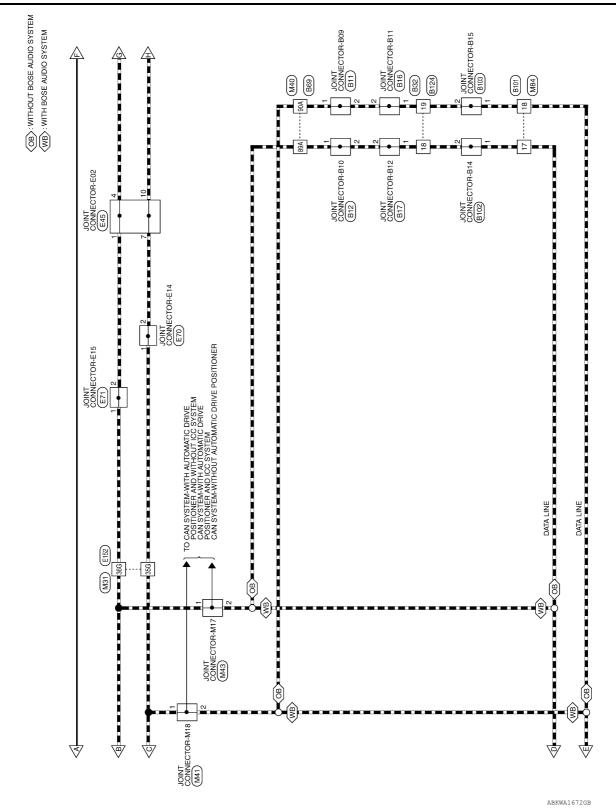
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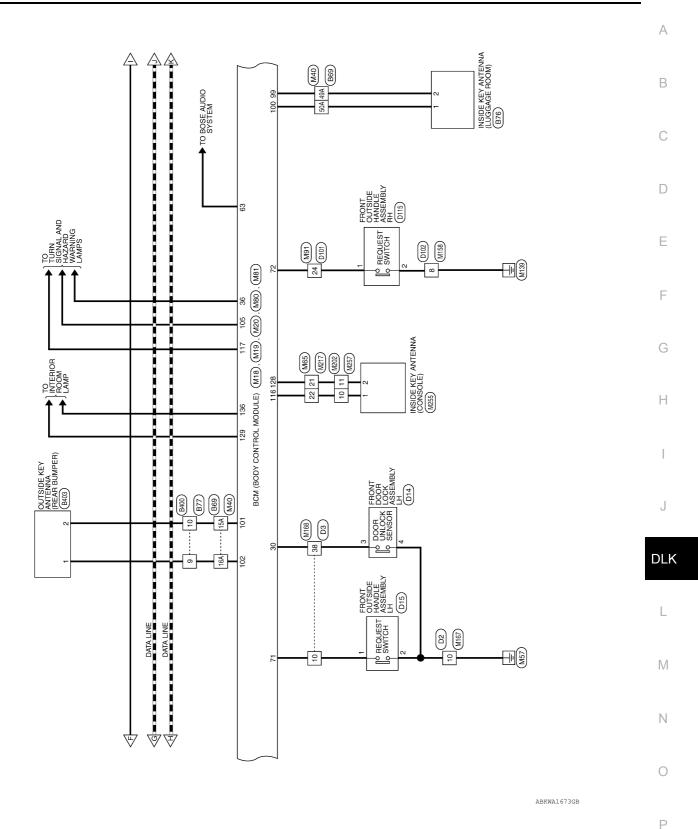
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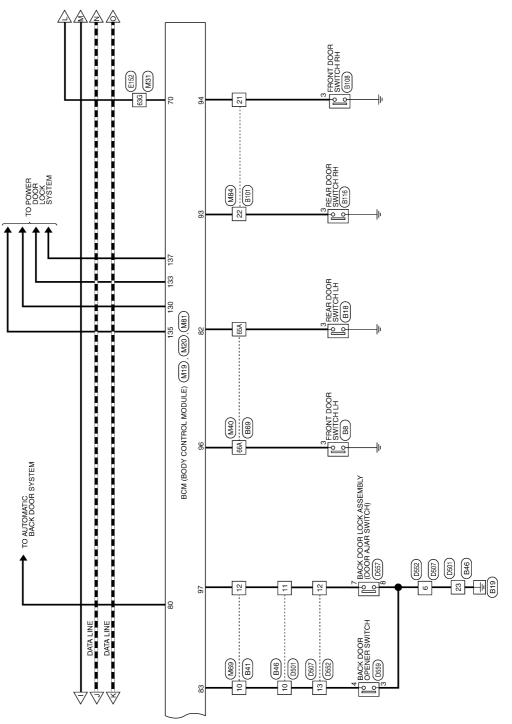
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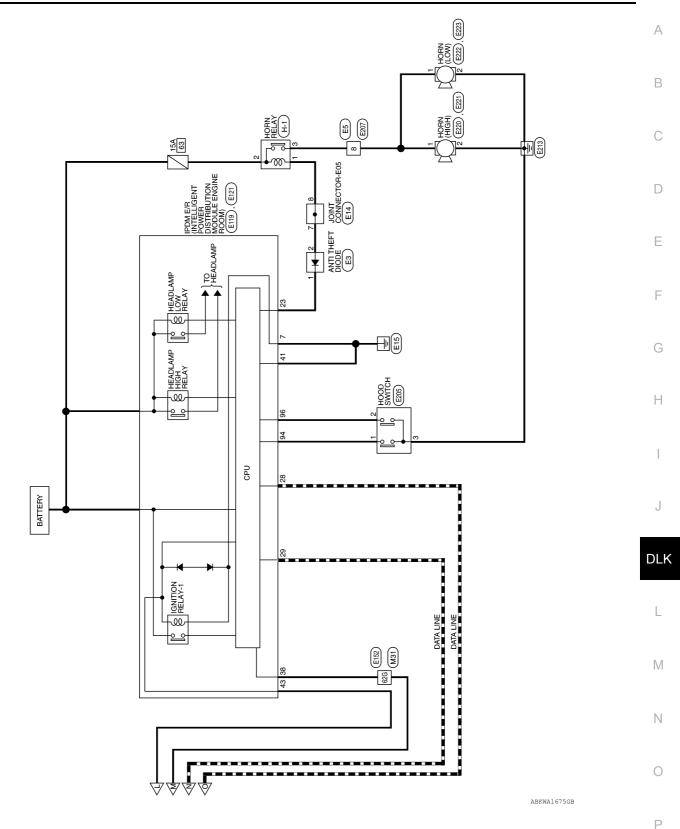


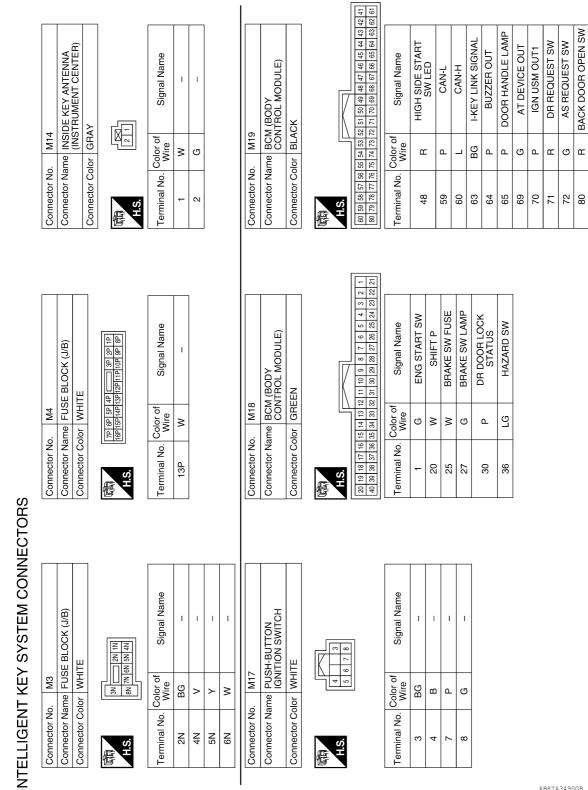


Revision: March 2012



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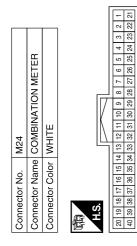


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INTELLIGENT KEY SYSTEM

Revision: March 2012

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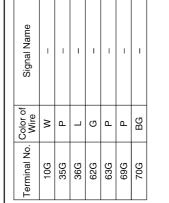


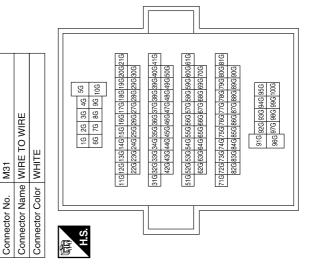
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	Signal Name	GND 1	GND 2	BAT	CAN-L	CAN-H
	Color of Wire	В	В	Μ	Р	_
	Terminal No. Color of Wire	1	2	22	38	39

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	٩	M	н	σ	
Terminal No. Color of Wire	26	66	100	101	102	

Connector No.	·No.	M20	0								
Connector Name BCM (BODY CONTROL N	' Name	80	ΣZ	ЩĔ	22	≻ ₹	BCM (BODY CONTROL MODULE)		ω		
Connector Color GRAY	Color	Б Н	Ă								
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ů N	92 91 90	98 06	88	87	86	85	85 84 83 82	8	윊	81	
0. L	104 103 1	103 102 101 100 99 98 97 96 95 94	100	66	98	97	3 96	5		8	
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Signal Name	RL DOOR SW	BACK DOOR REQUEST SW	RR DOOR SW	AS DOOR SW	DR DOOR SW	
Color of Wire	Μ	BG	н	ŋ	BG	
Terminal No.	82	83	63	94	96	





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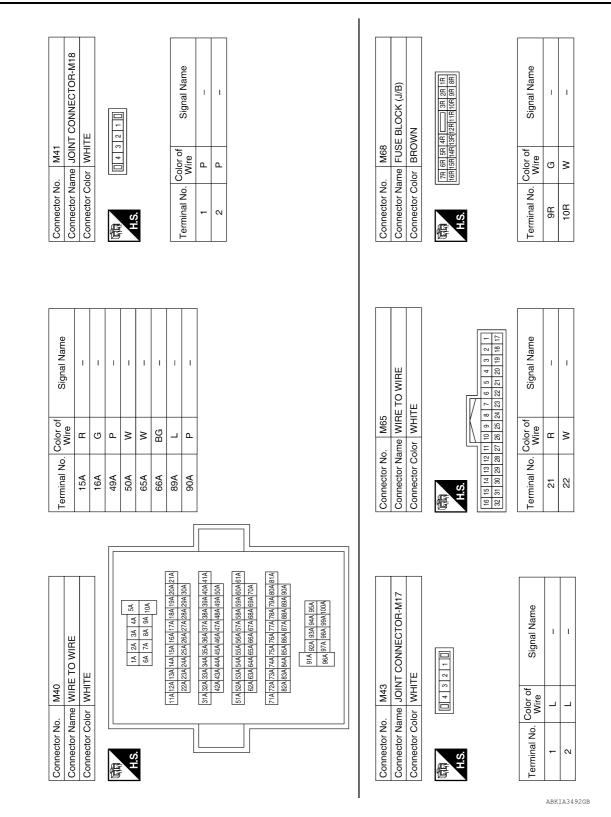
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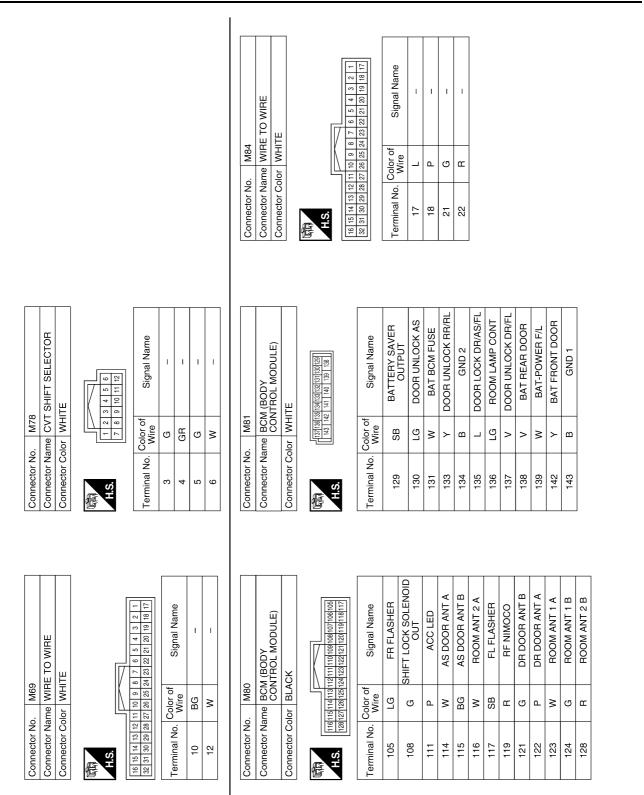
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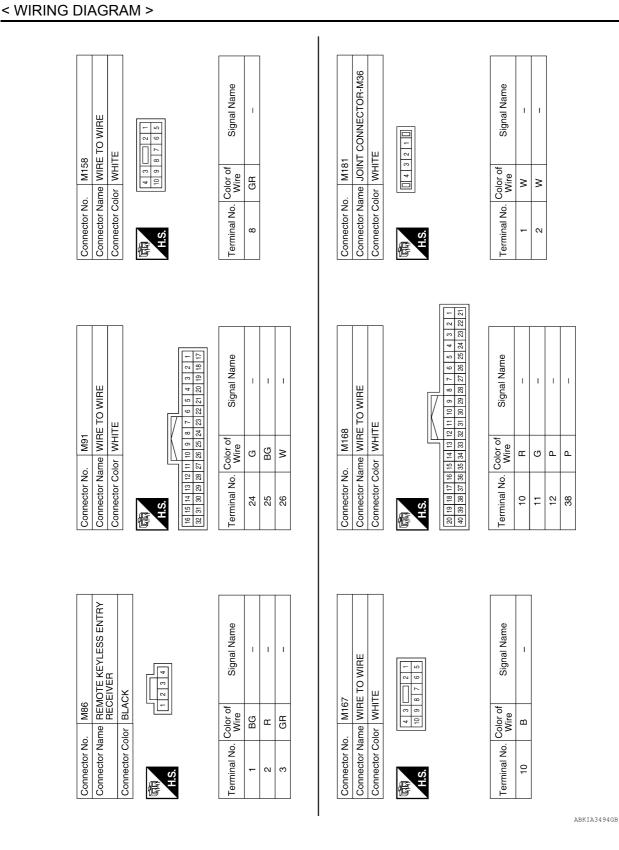
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Revision: March 2012

Connector No. M202 Connector Name WIRE TO WIRE Connector Name WIRE TO WIRE Connector Color WHITE Terminal No. Color of Terminal No. Color of Terminal No. Color of Terminal No. Color of Signal Name Terminal No. Connector Name WIRE TO WIRE Connector No. M257 Connector No. M257 Connector No. M257 Connector No. M3257 Connector No. M3267 Connector No. M3267 Connector No. M3267 Connector Name WIRE TO WIRE Connector Name Wire M327 M328 M329 M3

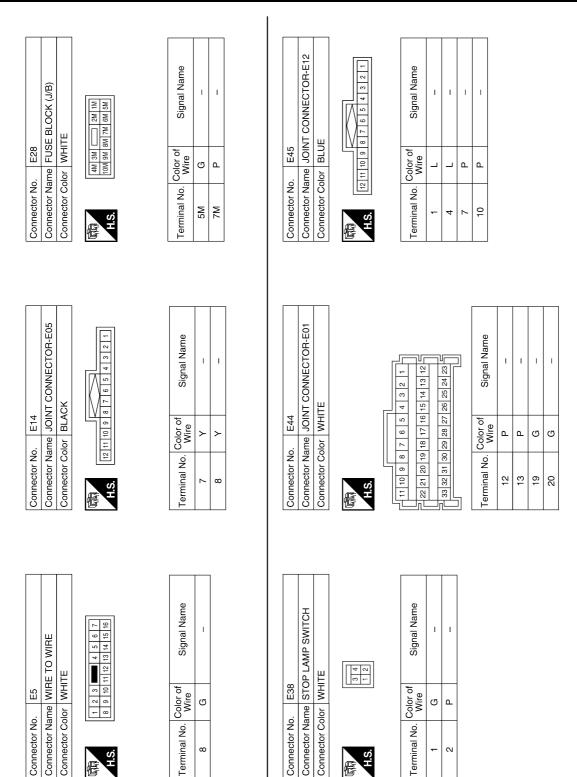
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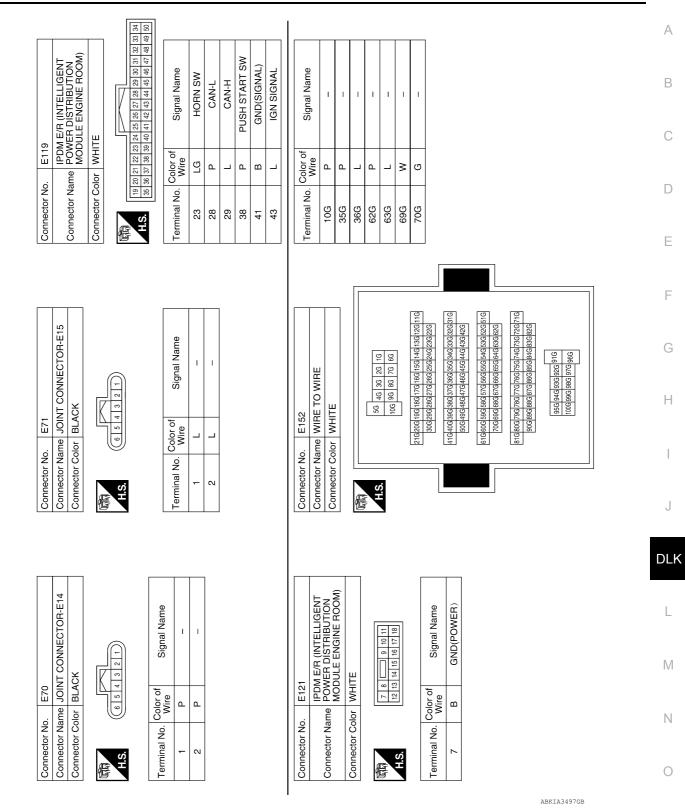
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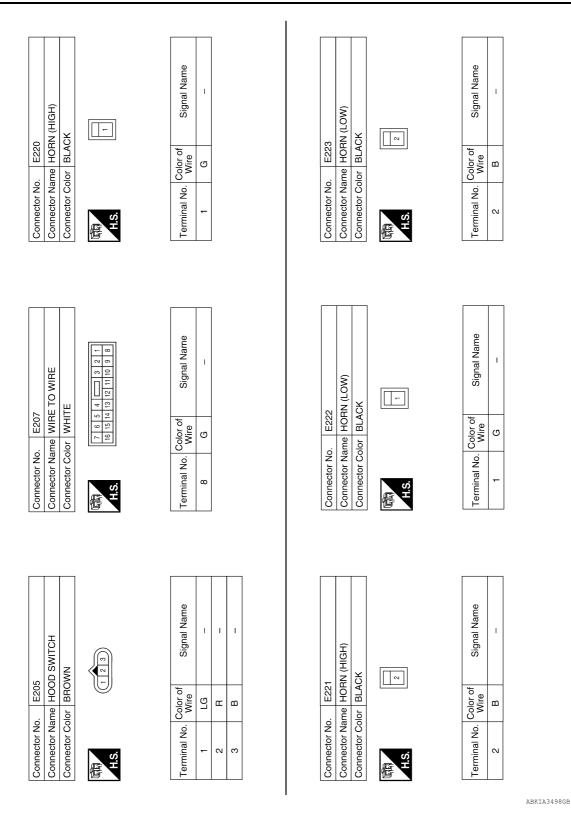
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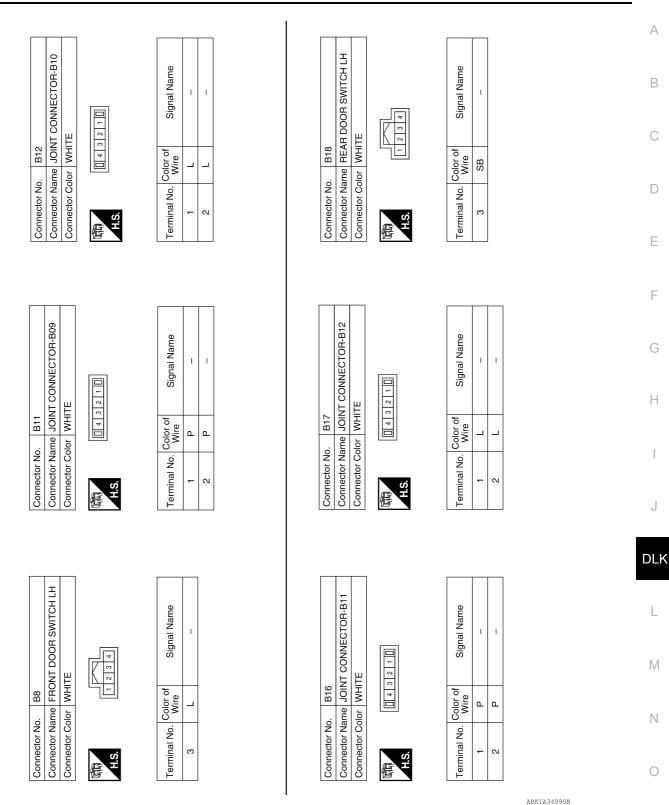
INTELLIGENT KEY SYSTEM

Revision: March 2012

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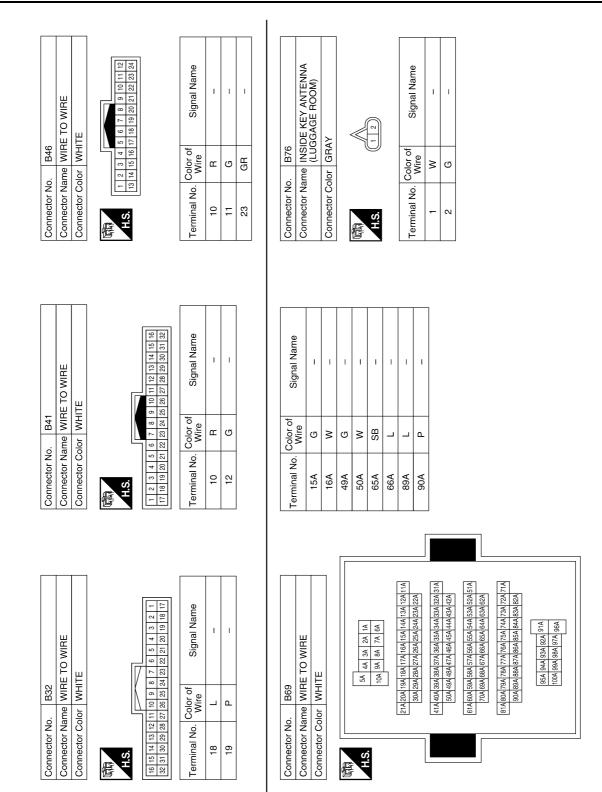
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Revision: March 2012

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Connector Name JOINT CONNECTOR-B14 Connector Name REAR DOOR SWITCH RH Signal Name Signal Name T T I 2 3 4 Connector Color WHITE Connector Color WHITE B102 B116 Color of Wire Color of Wire ŋ _ _ Connector No. Connector No. Terminal No. Terminal No. -N ო H.S. H.S. 俉 悟 Connector Name FRONT DOOR SWITCH RH 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 30 31 34 15 16 Signal Name Signal Name Т Т Т 1 I Connector Name WIRE TO WIRE 4 1 2 3 Connector Color WHITE Connector Color WHITE B101 B108 Color of Wire Color of Wire Q ŋ ŋ ٩ _ Connector No. Connector No. Terminal No. Terminal No. 18 17 2 22 ო H.S.H H.S. E E Connector Name JOINT CONNECTOR-B15 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 30 31 32 32 32 Signal Name Signal Name I L T I Connector Name WIRE TO WIRE Connector Color WHITE Connector Color WHITE B103 Color of Wire B77 Color of Wire ≥ ٩ ۵ G Connector No. Connector No. Terminal No. Terminal No. 10 ი -N ALS. H.S. 佢 E

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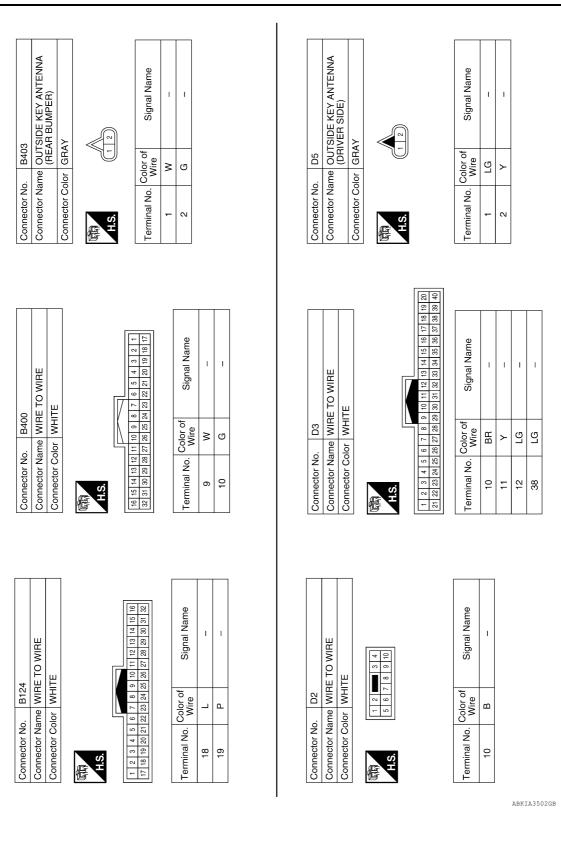
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А Connector Name OUTSIDE KEY ANTENNA (PASSENGER SIDE) 0 11 12 13 14 15 16 5 27 28 29 30 31 32 Signal Name Signal Name В Т T. I T. T Connector Name WIRE TO WIRE 10 26 С Connector Color WHITE GRAY D118 1 2 3 4 5 6 7 8 9 17 18 19 20 21 22 23 24 25 Color of Wire Color of Wire ŋ ŋ ŋ ≻ ≻ Connector Color Connector No. D Terminal No. Terminal No. 24 25 26 -N H.S. H.S. 惛 E Е Connector Name FRONT OUTSIDE HANDLE ASSEMBLY RH Connector Name FRONT OUTSIDE HANDLE ASSEMBLY LH Signal Name Signal Name G I I. Т Т 0 4 0 5 3 1 Н WHITE WHITE D115 Color of Wire Color of Wire ŋ ВВ В ш Connector Color Connector Color Connector No. Terminal No. Terminal No. N N --ALS. H.S. E E DLK Signal Name Signal Name L Connector Name FRONT DOOR LOCK ASSEMBLY LH Т T I ¢ Connector Name WIRE TO WIRE 7 8 9 10 4 Μ Connector Color WHITE 3 Connector Color GRAY D102 Color of Wire 5 6 Color of Wire 2 ŋ ш ш Ν Connector No. Terminal No. Terminal No. С 4 ω H.S. AHS. E E

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Connector No.

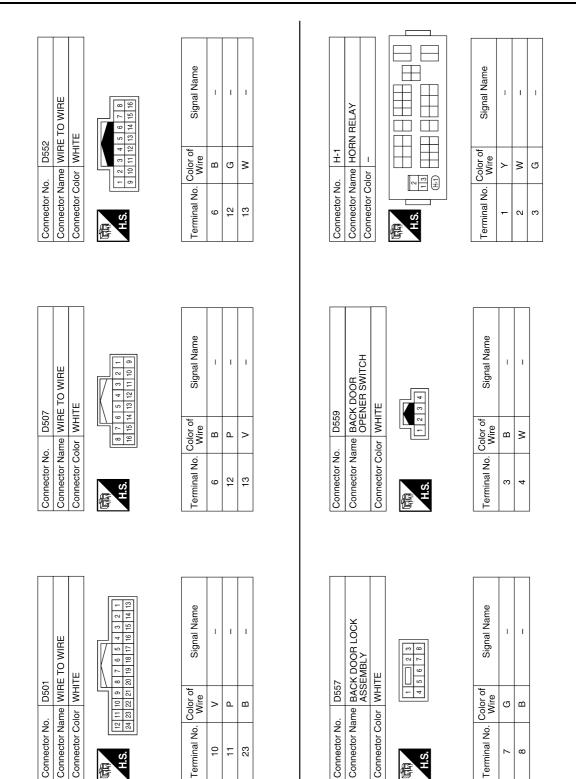
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Connector No.

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Connector No.

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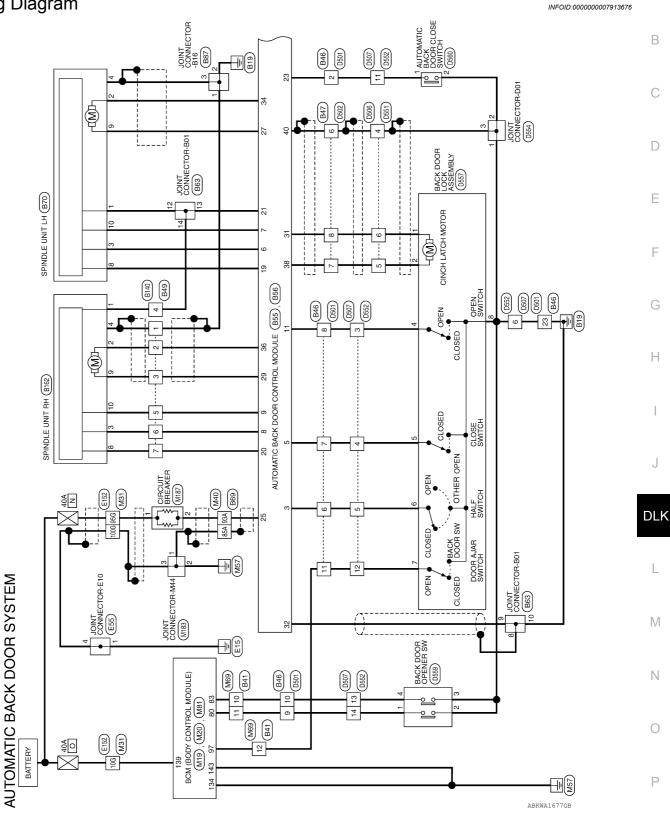


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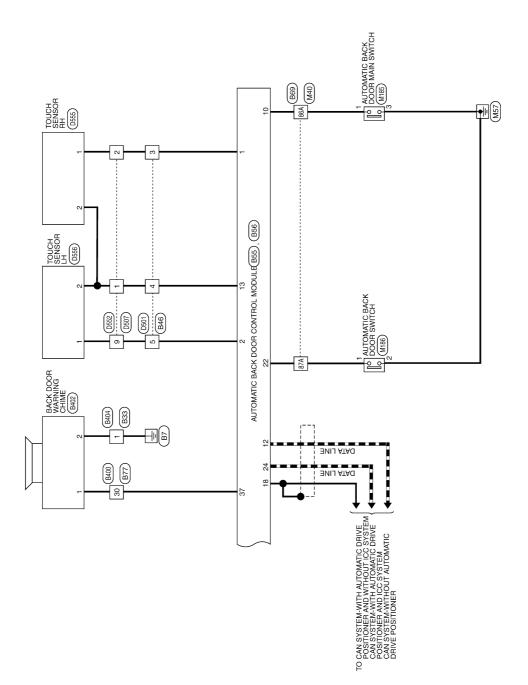
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AUTOMATIC BACK DOOR SYSTEM

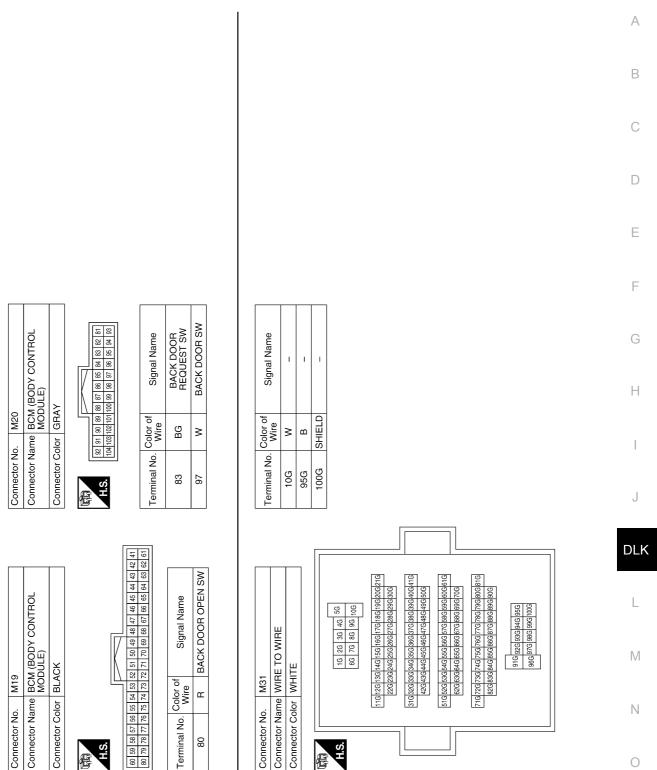
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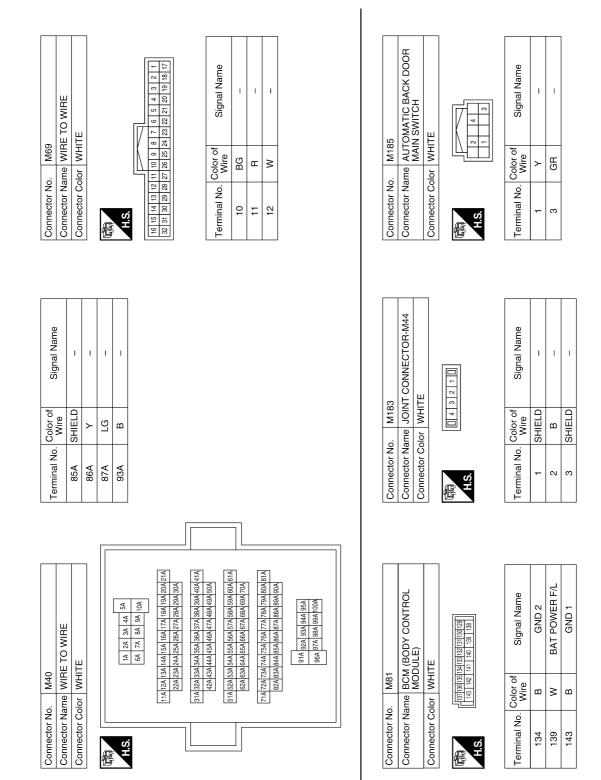
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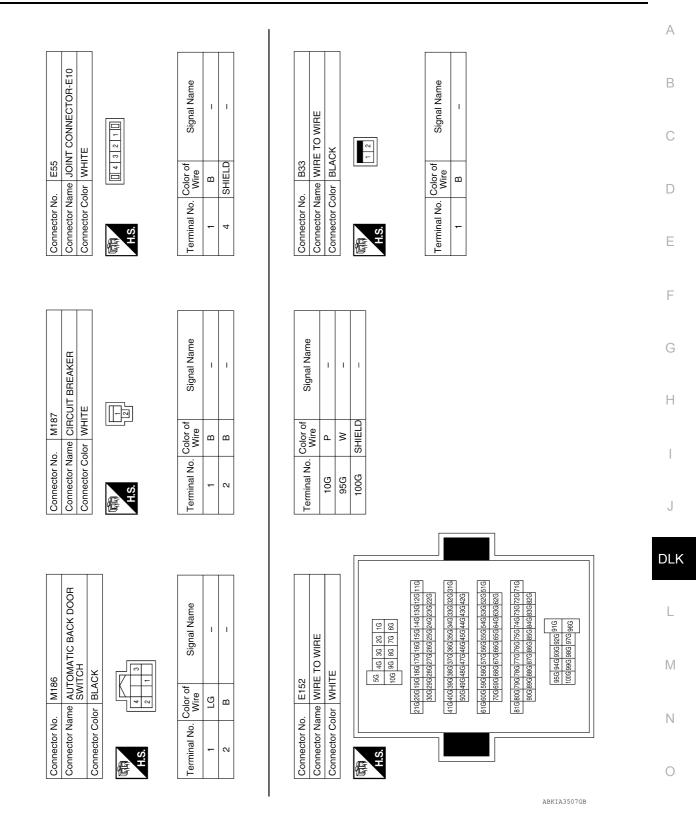
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Signal Name	-	-	I	-	1	I
Color of Wire	ГG	BR	Ν	В	G	GR
Terminal No. Color of Wire	7	8	б	10	11	23

Connector Name WIRE TO WIRE	Nai	l e	>	≝	Ш	IΥ	\leq	€	ш				
Connector Color WHITE	Col	P	>	F	Ë								
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		11	11	11	1	1	11	11		1	11	1	

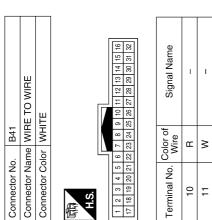
Connector No. B46

Signal Name	I	1	1	I	I
Color of Wire	۲	BR	SB	ГG	Г
Terminal No. Color of Wire	2	e	4	5	6

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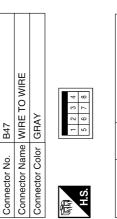


Signal Name	I	I	I	I
Color of Wire	ГG	Γ	BR	Y
Terminal No. Color of Wire	7	5	9	7

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ш	>	>	~	16 15 14 13 12 11 10	
Connector No.	Connector Name WIRE TO WIRE	Connector Color WHITE			ю.п

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Signal Name	I	I	I
Color of Wire	SHIELD	M	в
Terminal No. Color of Wire	-	2	3



Signal Name	I	I	I	
Color of Wire	SHIELD	Μ	В	
Terminal No. Color of Wire	9	7	8	

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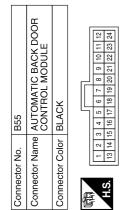
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	GND HALL	DRIVER SW	INSIDE CLOSE SW	CAN-H									B63 .IOINT CONNECTOR-B01	TF	1		8 7 6 5 4 3 2 1	9 18 17 16 15 14 13 12		0 29 28 27 26 25 24 23]	Signal Name		I	I
-	ГG	SB	٢	В									e				11 10 9 8	22 21 20 19 18		33 32 31 30 29 28		0		SHIELD	ď
20	21	22	23	24									Connector No.	Connector Color		۲ E	 v]	Terminal No		8	σ
																									-
	A SIGN RH	B SIGN RH	MAIN SW	OPEN SW	CAN-L	TOUCH SENS GND	I	I	1	I	CAN SHIELD		Signal Name	I	LATCH MTR OPEN	GND	I	LH MTR CLOSE	I	RH MTR CLOSE	BUZZER	LATCH MTR CLOSE	I	NOISE SHIELD LATCH	
-	BR	Г	ГG	BR	Μ	SB	-	I	1	I	SHIELD		Color of Wire	I	ш	B	I	Μ	-	Μ	ГG	Μ	I	SHIELD	
	8	6	10	11	12	13	14	15	16	17	18		ninal No.	30	31	32	33	34	35	36	37	38	39	40	

Signal Name	POWER LH	POWER RH	GND HALL	DRIVER SW	INSIDE CLOSE SW	CAN-H
Color of Wire	SB	≻	ГG	SB	≻	в
Terminal No.	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	I	I	I	CAN SHIELD	
Color of Wire	>	≻	BR	_	ГG	BR	×	SB	-	I	I	I	SHIELD	
Terminal No. Color of Wire	9	7	8	6	10	11	12	13	14	15	16	17	18	

Signal Name	Ι	LATCH MTR OPEN	GND	I	LH MTR CLOSE	Ι	RH MTR CLOSE	BUZZER	LATCH MTR CLOS	I	NOISE SHIELD LATO	
Color of Wire	Ι	ш	в	Ι	N	-	8	ГG	M	I	SHIELD	
Terminal No.	30	31	32	33	34	35	36	37	38	39	40	



	5 6 7 8 9 10 11	13 14 15 16 17 18 19 20 21 22 23		Signal Nam	
		16 1		_ و	
	2 3 4	15		Color of Wire	
	~	14		0-	
	-	13		ġ	
		H.S.	-	Terminal No.	

Signal Name	TOUCH SENS RH	TOUCH SENS LH	HALF-LATCH-SW	I	CLOSE SW	
Color of Wire	BR	ГG	L	Ι	ГG	
erminal No.	۰	2	e	4	5	

B56	Connector Name AUTOMATIC BACK DOOR CONTROL MODULE	RAY		27 40 29 31	01 00 00 00 00 00 00
8	A D	5		25	33
Connector No.	Connector Nam	Connector Color GRAY	le l		Ъ. Г.

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Signal Name	+B	I	LH MTR OPEN	I	RH MTR OPEN
Color of Wire	В	-	в	I	ш
Terminal No. Color of Wire	25	26	27	28	29

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AUTOMATIC BACK DOOR SYSTEM

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	Connector Name SPINDLE UNIT LH	XO			۳ ا	5	6	P		Signal Name
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Connector No.	Connector Na	Connector Color BLACK		E	S H	b.			_	Terminal No. Color of Wire
Terminal No. Color of Signal Name		85A SHIELD –	86A LG –	87A SB –	93A B -					
L L]				
		1	٦				[4	'	বি	বি

Connector No. B69 Connector Name WIRE TO WIRE Connector Color WHITE	SA AA BA ZA LA 10A 9A BA 7A 6A 10A 9A BA 7A 6A 10A 9A BA 7A 6A 21A 20A 19A 18A 7A 6A 30A 28A 17A 16A 16A 17A 16A 16A 16A 16A 16A 16A 16A 17A 17A

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

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

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			Г	16	32	
				8 9 10 11 12 13 14 15 16	18 19 20 21 22 23 24 25 26 27 28 29 30 31 32	
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			1	13	29	
				12	28	
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Connector Color WHITE	16 🗎		1	-	17	
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Connector Name WIRE TO WIRE B77

Connector No.

Signal Name	I	
Color of Wire	ГG	
Terminal No.	30	

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2 3 ••• 4 5 6 7 9 10 11 12 13 14 15 16	Signal Name	I	I	I	I
1 2 3 8 9 10	Color of Wire	SHIELD	M	ш	_
品.S.H	Terminal No. Color of Wire	-	2	e	4

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Signal Name	I	I	I	
Color of Wire	SHIELD	ЧÐ	SHIELD	

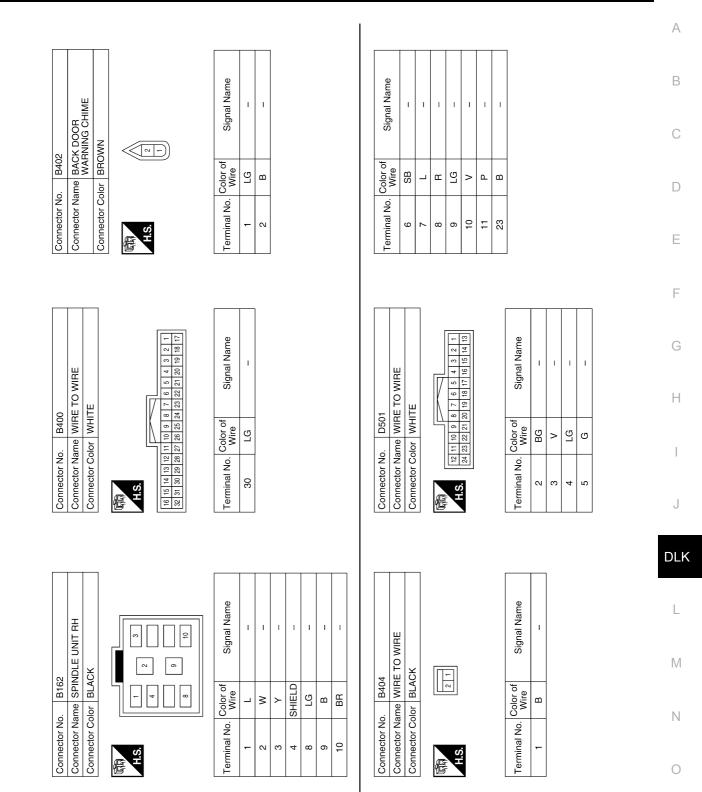
Terminal No. ŝ ო

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Color of Wire	SHIELD	ГG	SB	c
Terminal No.	85A	86A	87A	

AUTOMATIC BACK DOOR SYSTEM

< WIRING DIAGRAM >



ABKIA3511GB

< WIRING DIAGRAM >

AUTOMATIC BACK DOOR SYSTEM



Signal Name	I	I	I	I	I	I	I	I	I	I	I
Color of Wire	ГG	>	В	Γ	SB	В	g	BG	Ь	>	ГG
Terminal No. Color of Wire	-	2	3	4	5	9	6	11	12	13	14

Signal Name	I	I	I	I	I	I	I	1
Color of Wire	_	SB	В	G	н	G	Ν	U
Terminal No. Color of Wire	4	5	9	6	11	12	13	14



Signal Name	I	I	I	
Color of Wire	SHIELD	BR/B	R/G	
Terminal No. Color of Wire	4	5	9	

-Т

	WIRE			Signal Name
D502	e WIRE TO	r GRAY	8 7 6 5 1	tolor of Wire
Connector No.	Connector Name WIRE TO WIRE	Connector Color GRAY	国 H.S.	Terminal No. Color of Wire

Color of Wire	SHIELD	BR/B	5/H
Terminal No.	4	5	9
	1		

Т I

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SHIELD BR/B R/G

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5	RE TO WIRE		2 3 4 5 6 7 8 10 11 12 13 14 15 16	Signal Name
D55	ne WIF	n []	1 2 3 9 10 11	Color of Wire
Connector No. D552	Connector Name WIRE TO WIRE	Connector Color WHITE	मन्त्र H.S.	Terminal No. Color of Wire
		_		
51	RE TO WIRE		2 3	Signal Name
. D551	me WIRE TO WIRE	lor WHILE	1 2 3 4 5 6	
Connector No. D551	Connector Name WIRE TO WIRE	Connector Color WHITE	ЧЯЧЯ H.S.	Terminal No. Color of Signal Name

Signal Name	I	I	I
Color of Wire	SHIELD	W	В
Terminal No.	4	5	9
	Terminal No. Color of Signal Name		

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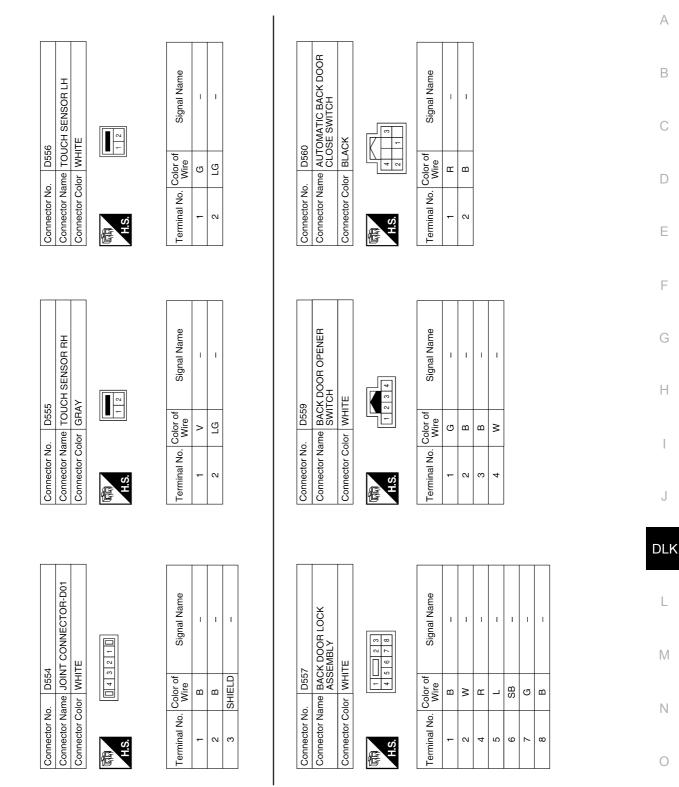
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ABKIA3512GB

AUTOMATIC BACK DOOR SYSTEM

< WIRING DIAGRAM >



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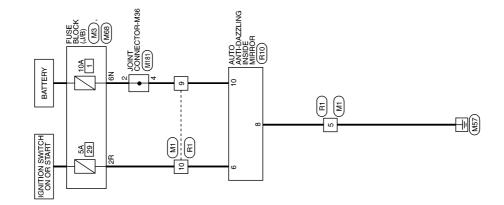
HOMELINK UNIVERSAL TRANSCEIVER

< WIRING DIAGRAM >

HOMELINK UNIVERSAL TRANSCEIVER

Wiring Diagram

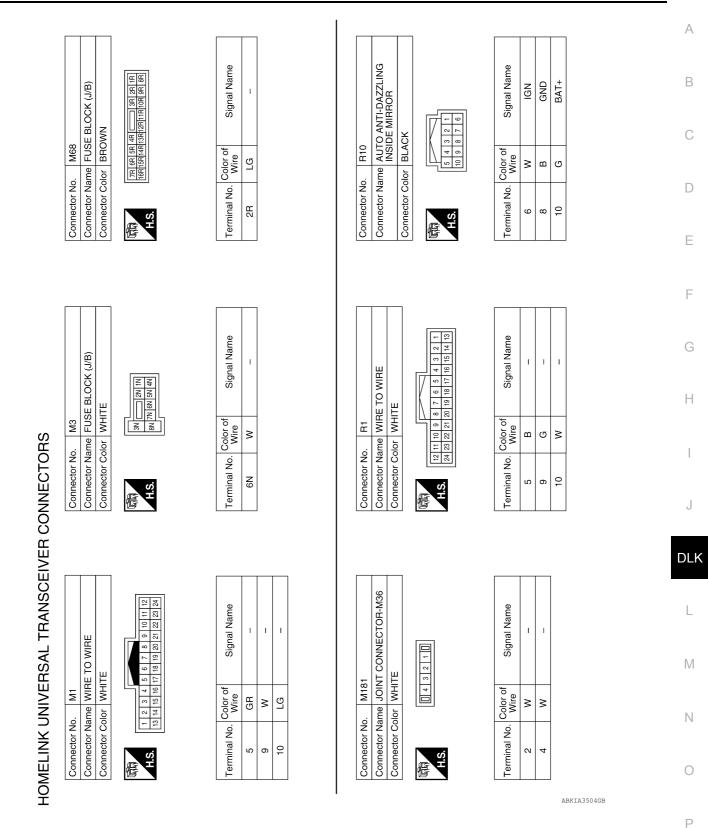
INFOID:000000007913677



HOMELINK UNIVERSAL TRANSCEIVER

ABKWA1676GB

HOMELINK UNIVERSAL TRANSCEIVER



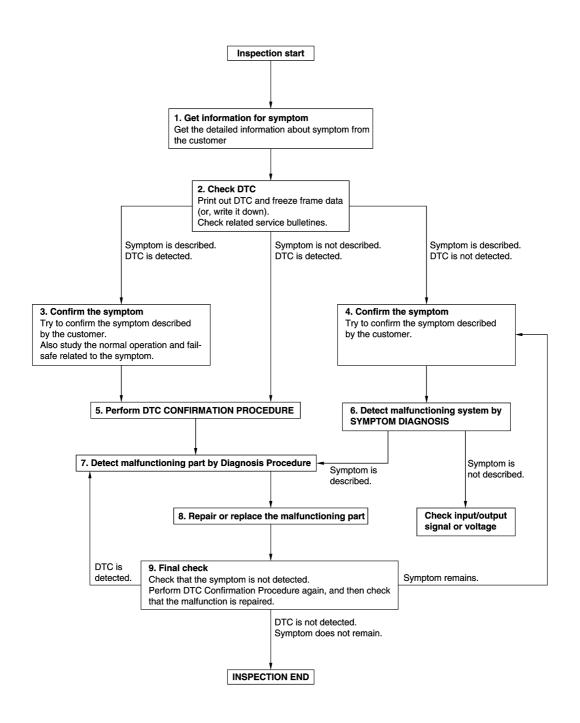
< BASIC INSPECTION >

BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000007913678

OVERALL SEQUENCE



DETAILED FLOW

Revision: March 2012

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

I.GET INFORMATION FOR SYMPTOM	А
1. Get detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurs).	A
2. Check operation condition of the function that is malfunctioning.	В
>> GO TO 2.	
2.CHECK DTC	С
1. Check DTC.	
 2. Perform the following procedure if DTC is detected. Record DTC and freeze frame data. (Print them out using CONSULT.) Erase DTC. 	D
- Study the relationship between the cause detected by DTC and the symptom described by the customer.	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	
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.	G
>> GO TO 5.	Η
4.CONFIRM THE SYMPTOM	I
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	
	DLk
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-47, "DTC Inspection Priority Chart"</u> (BCM) and determine	
trouble diagnosis order.	L
 NOTE: Freeze frame data is useful if the DTC is not detected. Perform Component Function Check if DTC CONFIRMATION PROCEDURE is not included on Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check. 	M
If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC CONFIR-	Ν
Is DTC detected?	
YES >> GO TO 7. NO >> Check according to <u>GI-53, "Intermittent Incident"</u> .	0
6. DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS	
Detect malfunctioning system according to SYMPTOM DIAGNOSIS based on the confirmed symptom in step 4, and determine the trouble diagnosis order based on possible causes and symptom.	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- 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 GI-53, "Intermittent Incident".

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 9.

9.FINAL CHECK

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

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

Is DTC detected and does symptom remain?

- YES-1 >> DTC is detected: GO TO 7.
- YES-2 >> Symptom remains: GO TO 4.
- NO >> Before returning the vehicle to the customer, always erase DTC.

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

< BASIC INSPECTION >

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMI-NAL

Description	В
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 	С
Work Procedure	D
1.INITIALIZATION	E
1. Fully close the back door manually. (When back door is already fully closed, this operation is not neces- sary).	
 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
	I
	J
	DL
	L
	M
	Ν
	0
	Ρ

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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

INFOID:000000008368177

INFOID:000000008368176

Refer to the CONSULT operation manual for the initialization procedure.

ADDITIONAL SERVICE WHEN REPLACING AUTOMATIC BACK DOOR CON-TROL UNIT

< BASIC INSPECTION >

ADDITIONAL SERVICE WHEN REPLACING AUTOMATIC BACK DOOR CONTROL UNIT

Description	В
When replacing control module or removing connector terminal, it is necessary to perform initial setting to operate automatic back door system normally. NOTE:	С
 The following specified operations are not performed under the non-initialized condition. Automatic back door open/close function Anti-pinch function 	
Work Procedure	D
1.INITIALIZATION	E
 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.	Н
	I
	J
	DLI
	L
	M
	Ν
	0
	Ρ

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CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

< BASIC INSPECTION >

CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

Description

INFOID:000000008368153

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

Work Procedure

INFOID:000000008368154

1.STEP 1

- 1. Select "AUTOMATIC BACK DOOR CONTROL MODULE" using CONSULT.
- 2. Select "RESET AUTO BACK DOOR STATUS" of "WORK SUPPORT" mode.
- 3. Touch "NEXT" and "CLEAR" to erase automatic back door position information.

>> GO TO 2.

2.STEP 2

Fully close the back door manually.

>> 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 2. **5.** STEP 5

Fully close the back door.

>> Inspection End.

DTC/CIRCUIT DIAGNOSIS U1000 CAN COMM CIRCUIT

Description

INFOID:000000007913685

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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 2 communication lines (CAN H-line, CAN L-line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only. CAN Communication Signal Chart. Refer to LAN-39, "CAN COMMUNICATION SYSTEM : CAN Communication Signal Chart".

DTC Logic

INFOID:000000007913686

INFOID:000000007913687

DTC DETECTION LOGIC

DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	
U1000	CAN COMM	When automatic back door control module cannot communicate CAN communication signal continuously for 2 seconds or more.	CAN communication system	0

Diagnosis Procedure

1.PERFORM SELF DIAGNOSTIC

1. Turn ignition switch ON and wait for 2 seconds or more.

2. Check "Self Diagnostic Result".

Is "CAN COMM CIRCUIT" displayed?

YES >> Refer to LAN-22, "Trouble Diagnosis Flow Chart".

NO >> Refer to <u>GI-53</u>, "Intermittent Incident".

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U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

U1010 CONTROL UNIT (CAN)

DTC Logic

INFOID:000000007913688

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
U1010	CONTROL UNIT	Automatic back door control module detected in-	Automatic back door control mod-
	(CAN)	ternal CAN communication circuit malfunction	ule

Diagnosis Procedure

INFOID:000000007913689

1.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

When DTC [U1010] is detected, replace automatic back door control module.

>> Replace automatic back door control module. Refer to DLK-308, "Removal and Installation".

B2401 IGNITION POWER SUPPLY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

B2401 IGNITION POWER SUPPLY CIRCUIT

DTC Logic

INFOID:000000008266453

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DTC	CONSULT disp description	lay DTC detecting co	ndition	Possible cause
B2401	IGN OPEN	Automatic back door control m ignition switch ON signal via C with BCM.		 BCM Automatic back door control module CAN communication system
	IRMATION PR	OCEDURE		
1.PERFOR	M DTC CONFIF	RMATION PROCEDURE		
3. Check S <u>Is DTC deter</u> YES >> NO >>	cted? Refer to <u>DLK-11</u> Inspection End.		ACK DOOR CON	TROL MODULE using CONSULT
Jiagnosis	Procedure			INFOID:000000082664
1. CHECK E	BCM OUTPUT S	GNAL		
2. Select I	•	CONSULT. n DATA MONITOR mode. operates normally according to	the following co	nditions.
Mon	itor item	Condition		Status
IGN RLY1-RE	Q	Ignition switch		On
		OF		Off

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-308</u>, "Removal and Installation".

NO >> Replace BCM. Refer to <u>BCS-77. "Removal and Installation"</u>.

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< DTC/CIRCUIT DIAGNOSIS >

B2409 HALF LATCH SWITCH

DTC Logic

INFOID:00000008266455

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-114</u>, "Diagnosis Procedure".

NO >> Inspection End.

Diagnosis Procedure

INFOID:000000008266456

Regarding Wiring Diagram information, refer to DLK-91, "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	Condit	lion	Status
HALF LATCH SW	Back door	Fully closed/Half latch	OFF
	Back door	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 >

- Turn ignition switch OFF. 1.
- 2.

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

. Check voltage between k	ack door lock ass	sembly har	ness connecto	or and ground.	
(+)					
Back door lock	assembly		(-)		Voltage (Approx.)
Connector	Terminal				, , ,
D557	6		Ground		16 – 8 V
s the inspection result norma	<u>al?</u>				
YES >> GO TO 6. NO >> GO TO 5.					
CHECK HALF LATCH SW					
 Disconnect automatic ba Check continuity betwee assembly harness conne 	n automatic back			arness connecto	r and back door loc
Automatic back door co	ntrol module		Back door lock	assembly	Continuity
Connector	Terminal	Co	onnector	Terminal	Continuity
B55	3		D557	6	Yes
	door control module				Continuity
Connector	Termina	al	Gi	round	
B55 the inspection result norma	3				No
CHECK HALF LATCH SW			ess connector	and ground.	
Back door lock	assembly				
Connector	Terminal		Ground		Continuity
D557	8				Yes
s the inspection result norma YES >> GO TO 7. NO >> Repair or replace CHECK HALF LATCH SW	e back door lock a	ssembly gr	round circuit.	,	
Refer to <u>DLK-115, "Compone</u>	nt Inspection".				
s the inspection result norma	<u>ll?</u>				
YES >> GO TO 8. NO >> Replace back do	or lock assembly	Pafar to D	I K-206 "DOC		wal and Installation"
CHECK INTERMITTENT			LIX-230, DUC	IN LOOK . REIII	
Refer to GI-53, "Intermittent I	<u>ncident"</u> .				
>> Inspection End.					
Component Inspection					INFOID:00000008266
					IN CID.00000008200

Revision: March 2012

COMPONENT INSPECTION

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< DTC/CIRCUIT DIAGNOSIS >

1. CHECK SWITCH

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

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to DLK-296, "DOOR LOCK : Removal and Installation".

B2416 TOUCH SENSOR RH

< DTC/CIRCUIT DIAGNOSIS >

B2416 TOUCH SENSOR RH

А

DTC	CONSULT display description	DTC detecting condition	Possi	ble cause
B2416	TOUCH SEN R OPEN	Automatic back door control module detects a mal- function of touch sensor RH during automatic oper- ation of back door.	sor • Touch sensor • Harness or co	
	IRMATION PRO	CEDURE ATION PROCEDURE		
Turn igni Check S DTC detec	•	sult mode of AUTOMATIC BACK DOOR CON	TROL MODUL	E using CONSU
′ES >> F		"Diagnosis Procedure".		
egarding W		ormation, refer to <u>DLK-91, "Wiring Diagram"</u> .		INFOID:00000000826
CHECK IN CHECK IN Check that to Defer to DLK the inspec YES >> 0	Viring Diagram info	TOUCH SENSOR RH installed normally. ENSOR : Removal and Installation".	o "	INFOID:00000000826
CHECK IN CHECK IN Check that to Refer to DLK the inspec YES >> 0 NO >> F	Viring Diagram info	TOUCH SENSOR RH installed normally. ENSOR : Removal and Installation". C TOUCH SENSOR : Removal and Installatio	<u>n"</u> .	INFOID:00000000826
CHECK IN CHECK IN Check that to Refer to DLK Sthe inspect YES >> 0 NO >> F CHECK T Select A Select T	Viring Diagram info NSTALLATION OF Duch sensor RH is 2-297, "TOUCH SE tion result normal GO TO 2. Refer to <u>DLK-297,</u> OUCH SENSOR UTOMATIC BACK OUCH SEN RH in	TOUCH SENSOR RH installed normally. ENSOR : Removal and Installation". C TOUCH SENSOR : Removal and Installatio	LT.	INFOID:00000000826
CHECK IN CHECK IN Check that to efer to DLK the inspec YES >> (NO >> F CHECK T Select A Select A Check th	Viring Diagram info NSTALLATION OF Duch sensor RH is 2-297, "TOUCH SE tion result normal GO TO 2. Refer to <u>DLK-297,</u> OUCH SENSOR UTOMATIC BACK OUCH SEN RH in	TOUCH SENSOR RH installed normally. <u>ENSOR : Removal and Installation"</u> . <u>2</u> <u>"TOUCH SENSOR : Removal and Installation"</u> . MONITOR ITEM COOR CONTROL MODULE using CONSU DATA MONITOR mode.	LT.	Status
CHECK IN CHECK IN Check that to efer to DLK the inspec YES >> (NO >> F CHECK T Select A Select A Check th	Viring Diagram info	TOUCH SENSOR RH installed normally. <u>NSOR : Removal and Installation"</u> . <u>TOUCH SENSOR : Removal and Installation</u> MONITOR ITEM TOOOR CONTROL MODULE using CONSU DATA MONITOR mode. erates normally according to the following consu	LT.	
egarding W .CHECK II heck that to efer to DLK the inspec YES >> 0 NO >> F .CHECK T . Select A . Select T . Check th . Check th . TOUCH SE . the inspec	Viring Diagram info NSTALLATION OF Duch sensor RH is 2-297, "TOUCH SE tion result normal" GO TO 2. Refer to <u>DLK-297,</u> OUCH SENSOR UTOMATIC BACK OUCH SEN RH in that the function op onitor item	TOUCH SENSOR RH installed normally. <u>INSOR : Removal and Installation</u> ". <u>TOUCH SENSOR : Removal and Installation</u> <u>TOUCH SENSOR : Removal and Installation</u> <u>Condition</u> <u>Condition</u> <u>Condition</u> <u>Touch sensor RH</u> <u>Other than below</u> <u>Detect obstruction</u>	LT.	Status OFF
Regarding W .CHECK II Check that to Refer to DLK Sefer to DLK Sefer to DLK Sefect To NO >> F .CHECK T . Select To . Select To . Select To . Check th TOUCH SE Sefect Sefect Sefec	Viring Diagram info NSTALLATION OF Duch sensor RH is 2-297, "TOUCH SE tion result normal" GO TO 2. Refer to <u>DLK-297,</u> OUCH SENSOR UTOMATIC BACK OUCH SEN RH in the function op	TOUCH SENSOR RH installed normally. <u>INSOR : Removal and Installation</u> ". <u>TOUCH SENSOR : Removal and Installation</u> <u>TOUCH SENSOR : Removal and Installation</u> <u>Condition</u> <u>Condition</u> <u>Condition</u> <u>Touch sensor RH</u> <u>Other than below</u> <u>Detect obstruction</u>	LT.	Status OFF

ness connector.

B2416 TOUCH SENSOR RH

< DTC/CIRCUIT DIAGNOSIS >

(+)	(–) Automatic back door control mod-		0		Valtaga	
Touch s	ensor RH		lle	Condition		Voltage (Approx.)	
Connector	Terminal	Connector	Terminal				
D555	1	B55	13	Touch sensor Detect obstruc- tion		1.8 – 5 V	
0000	1	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.

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

Automatic back do	or control module	Touch se	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 d	por 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 <u>DLK-308, "Removal and Installation"</u>.

NO >> Repair or replace harness.

5. CHECK TOUCH SENSOR RH GROND 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 do	Automatic back door control module Touch sensor RH		Touch sensor RH		
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 door 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 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.

B2416 TOUCH SENSOR RH

< DTC/CIRCUIT DIAGNOSIS >

	(+)			Valtara
Automa	atic back door cont	trol module	()	Voltage (Approx.)
Connector		Terminal		V FF - 7
B55		13	Ground	0.01 – 0 V
Is the inspection resul	<u>t normal?</u>			
YES >> GO TO 7.	(
		door control module.	Refer to <u>DLK-308, "Re</u>	moval and Installation".
7.CHECK TOUCH SI				
Refer to DLK-119, "Co		ection".		
Is the inspection result	t normal?			
YES >> GO TO 8. NO >> Replace to	ouch sensor DI	H Refer to DI K-207		emoval and Installation".
8.CHECK INTERMIT			TUGGH SLINGUK . K	
Refer to GI-53, "Intern	nittent Incident"			
>> Inspectior	n End			
•				
Component Inspe	CUON			INFOID:00000008266460
1. CHECK TOUCH SI	ENSOR RH			
1. Turn ignition switc	h OFF.			
2. Disconnect touch	sensor RH con			
3. Check resistance	between touch	sensor RH terminals.		
Touch ser	Isor RH			Resistance
Termi	nal	Co	ndition	(Approx.)
		T	Detect obstruction	380 – 420 kΩ
1	2	Touch sensor RH	Other then above	0.05 1.05 kg

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace touch sensor RH. Refer to <u>DLK-297, "TOUCH SENSOR : Removal and Installation"</u>.

Other than above

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 $0.95 - 1.05 \text{ k}\Omega$

B2417 TOUCH SENSOR LH

< DTC/CIRCUIT DIAGNOSIS >

B2417 TOUCH SENSOR LH

DTC Logic

INFOID:00000008266461

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.	 Improper installation of touch sensor Touch sensor LH Harness or connectors Automatic back door control module

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

Turn ignition switch ON. 1.

2. Check Self-Diagnostic Result mode of AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.

Is DTC detected?

YES >> Refer to DLK-120, "Diagnosis Procedure".

NO >> Inspection End.

Diagnosis Procedure

INFOID:00000008266462

Regarding Wiring Diagram information, refer to DLK-91, "Wiring Diagram".

1. CHECK INSTALLATION OF TOUCH SENSOR LH

Check that touch sensor LH is installed normally.

Refer to DLK-297, "TOUCH SENSOR : Removal and Installation".

Is the inspection result normal?

- YES >> GO TO 2.
- NO >> Refer to DLK-297, "TOUCH SENSOR : Removal and Installation".

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.

3. CHECK TOUCH SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.

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

B2417 TOUCH SENSOR LH

< DTC/CIRCUIT DIAGNOSIS >

Touch s	(+) sensor LH	Automatic back	–) door control mod- ile	Co	ndition	Voltage (Approx.)		
Connector	Terminal	Connector	Terminal			(Αρριολ.)		
D556	1	B55	13	Touch sensor	Detect obstruc- tion	1.8 – 5 V		
D350	I	600	13	LH	Other than above	2.72 – 7.27 V		
-	on result norm	<u>nal?</u>						
	O TO 5. O TO 4.							
		R LH CIRCUIT						
		ack door contro		touch sensor L F	d connector			
					less connector a	and touch sense		
harness co	onnector.							
Autom	atic back door c	ontrol module		Touch sensor LH	1			
Conne	ector	Terminal	Conne	ctor	Terminal	Continuity		
B55	5	2	D55	6	1	Yes		
Check cor	tinuity betwe	en automatic ba	ack door contro	ol module harne	ess connector an	d ground.		
	Automatic back	door control module	e			0		
			Terminal		Ground		Ground	
Co	onnector	Term	ninal	Ground		Continuity		
e inspectio S >> Re	B55 on result norm	nal? atic back door c	2		308. "Removal a	No		
he inspection ES >> Re D >> Re CHECK TO Disconnect	B55 on result norm eplace autom epair or replace UCH SENSC et automatic b ntinuity betwe	atic back door c ce harness. OR LH GROND ack door contro	2 control module CIRCUIT ol module and t	. Refer to <u>DLK-:</u> touch sensor LH		No nd Installation".		
he inspection ES >> Re O >> Re CHECK TO Disconneor Check cor harness co	B55 on result norm eplace autom epair or replace UCH SENSC et automatic b ntinuity betwe	atic back door o ce harness. DR LH GROND ack door contro een automatic b	2 control module CIRCUIT ol module and t	. Refer to <u>DLK-:</u> touch sensor LH	l connector. ness connector a	No nd Installation".		
he inspection ES >> Re O >> Re CHECK TO Disconneor Check cor harness co	B55 on result norm eplace autom epair or replace UCH SENSC ot automatic b trinuity betwe connector.	atic back door of ce harness. OR LH GROND tack door contro ten automatic b ontrol module Terminal	2 control module CIRCUIT ol module and t	. Refer to <u>DLK-</u> touch sensor LH rol module harr Touch sensor LH	l connector. ness connector a	No nd Installation".		
ne inspection ES >> Re D >> Re CHECK TO Disconnec Check cor harness co Autom Connec B55	B55 eplace autom eplace autom epair or replace UCH SENSC to automatic b ntinuity betwee onnector.	atic back door of ce harness. DR LH GROND pack door contro pack door contro pen automatic b control module Terminal 13	2 control module CIRCUIT ol module and t ack door contr Conne D55	. Refer to <u>DLK-</u> touch sensor LH rol module harr Touch sensor LH ctor	H connector. ness connector a I Terminal 2	No nd Installation". and touch sense Continuity Yes		
he inspection ES >> Re O >> Re CHECK TO Disconneo Check cor harness co Autom Conneo B55	B55 eplace autom eplace autom epair or replace UCH SENSC to automatic b ntinuity betwee onnector.	atic back door of ce harness. DR LH GROND pack door contro pack door contro pen automatic b control module Terminal 13	2 control module CIRCUIT ol module and t ack door contr Conne D55	. Refer to <u>DLK-</u> touch sensor LH rol module harr Touch sensor LH ctor	H connector. ness connector a	No nd Installation". and touch sense Continuity Yes		
he inspection ES >> Re O >> Re CHECK TO Disconneo Check cor harness co Autom Conneo B55	B55 on result norm eplace autom epair or replace UCH SENSC UCH SENSC at automatic b onnector. atic back door co ector	atic back door of ce harness. DR LH GROND pack door contro pack door contro pen automatic b control module Terminal 13	2 control module CIRCUIT ol module and f ack door contro D55 ack door contro	. Refer to <u>DLK-</u> touch sensor LH rol module harr Touch sensor LH ctor	H connector. ness connector a I Terminal 2	No nd Installation". and touch sense Continuity Yes id ground.		
he inspection ES >> Re O >> Re CHECK TO Disconnec Check cor harness co Autom Connec 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	atic back door of ce harness. OR LH GROND tack door contro ten automatic b ten automatic b 13 en automatic ba	2 control module CIRCUIT ol module and t ack door contro D55 ack door contro e	. Refer to <u>DLK-</u> touch sensor LH rol module harr Touch sensor LH ctor	H connector. ness connector a I Terminal 2	No nd Installation". and touch sense Continuity Yes		
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 ot automatic b trinuity betwe onnector. atic back door co atic back door co	atic back door of ce harness. OR LH GROND back door contro een automatic b ontrol module Terminal 13 en automatic ba door control module	2 control module CIRCUIT ol module and f ack door contro D55 ack door contro e ninal	. Refer to <u>DLK-</u> touch sensor LH rol module harr Touch sensor LH ctor 6 bl module harne	H connector. ness connector a I Terminal 2	No nd Installation". and touch sense Continuity Yes id ground.		
he inspection ES >> Re O >> Re CHECK TO Disconneous Check cor harness co Autom Conne B55 Check cor Conne Conn	B55 on result norm eplace autom eplace autom eplar or replace UCH SENSC attributy between onnector. attributy between attributy between attributy between Automatic back onnector B55 on result norm O TO 6.	atic back door of ce harness. DR LH GROND ack door control ack door control cen automatic back 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 Terminal	2 control module CIRCUIT ol module and f ack door contro D55 ack door contro e ninal	. Refer to <u>DLK-</u> touch sensor LH rol module harr Touch sensor LH ctor 6 bl module harne	H connector. ness connector a I Terminal 2	No nd Installation". and touch sense Continuity Yes Id ground. Continuity		
he inspection ES >> Re O >> Re CHECK TO Disconnec Check cor harness co Autom Connec B55 Check cor Check cor Check cor Check cor Check cor Check cor	B55 Dn result norm eplace autom eplace autom eplace autom eplace autom eplace autom eplace autom eplace autom eplace UCH SENSC Et automatic b htinuity betwe Automatic back onnector B55 Dn result norm D TO 6. epair or replace Et automatic back	atic back door of ce harness. DR LH GROND ack door control ack door control cen automatic back 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 Terminal	2 control module CIRCUIT ol module and t ack door contro back door contro e ninal 3	. Refer to <u>DLK-</u> touch sensor LH rol module harr Touch sensor LH ctor 6 bl module harne	H connector. ness connector a I Terminal 2	No nd Installation". and touch sense Continuity Yes Id ground. Continuity		

B2417 TOUCH SENSOR LH

< DTC/CIRCUIT DIAGNOSIS >

((+)		
Automatic back d	loor control module	(-)	Voltage (Approx.)
Connector	Terminal		(/ () () () () () () () () () () () () ()
B55	13	Ground	0.01 – 0 V
Is the inspection result normalYES>> GO TO 7.NO>> Replace automation7.CHECK TOUCH SENSOR	c back door control module.	Refer to <u>DLK-308, "Re</u>	moval and Installation".
Refer to <u>DLK-119</u> , "Component <u>Is the inspection result normal</u> " YES >> GO TO 8. NO >> Replace touch ser 8 .CHECK INTERMITTENT IN	? nsor LH. Refer to <u>DLK-297.</u>	"TOUCH SENSOR : Re	emoval and Installation"
Refer to <u>GI-53, "Intermittent In</u> >> Inspection End.	<u>cident"</u> .		
Component Inspection			INFOID:00000008266463
1.CHECK TOUCH SENSOR	LH		
 Turn ignition switch OFF. Disconnect touch sensor I Check resistance between 	LH connector. In touch sensor LH terminals		

	Touch sensor LH Terminal		Condition		Resistance
					(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.
>> Replace touch sensor LH. Refer to <u>DLK-297, "TOUCH SENSOR : Removal and Installation"</u>. NO

B2419 OPEN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

B2419 OPEN SWITCH

DTC Logic

INFOID:000000008266464

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DTC DETECTION LOGIC В CONSULT display DTC Possible cause DTC detecting condition 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 E DTC CONFIRMATION PROCEDURE 1.PERFORM DTC CONFIRMATION PROCEDURE F 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-123, "Diagnosis Procedure". >> Inspection End. NO Н **Diagnosis** Procedure INFOID-00000008266465 Regarding Wiring Diagram information, refer to <u>DLK-91, "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. 2. CHECK BACK DOOR OPEN/CLOSE OPERATION Manually check open and close operation of back door. Is the inspection result normal? Μ YES >> 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. 2. Select OPEN SW in DATA MONITOR mode. Check that the function operates normally according to the following conditions. 3. Monitor item Condition Status Fully closed/Half latch OFF **OPEN SW** Back door ON Open 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.

(+)			Voltage (Approx.)
Back door loo	Back door lock assembly		
Connector	Terminal		(FF -)
D557	4	Ground	16 – 8 V

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 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 d	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 of	loor control module		Continuity
Connector	Terminal	Ground	Continuity
B55	11		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-308, "Removal and Installation"</u>.

NO >> Repair or replace harness.

Ó.CHECK OPEN SWITCH GROUND CIRCUIT

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

Back door lock	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-115</u>, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace back door lock assembly. Refer to <u>DLK-296, "DOOR LOCK : Removal and Installation"</u>.

8. CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

>> Inspection End.

Component Inspection

COMPONENT INSPECTION

Revision: March 2012

INFOID:000000008266466

< DTC/CIRCUIT DIAGNOSIS >

1.CHECK SWITCH

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

Back door loc	k assembly		Condition	Continuity	
Termi	nal	-	Condition	Continuity	(
			Open	Yes	
4			Fully closed/Half latch	No	
5		Back door lock	Fully close	Yes	[
5	8	BACK UUUI IUCK	Open/Half latch	No	
6	- O		Open	Yes	
6			Fully closed/Half latch	No	0
7	-	Back door	On	Yes	
1		switch	Off	No	ŀ

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to <u>DLK-296, "DOOR LOCK : Removal and Installation"</u>. G

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< DTC/CIRCUIT DIAGNOSIS >

B2420 CLOSE SWITCH

DTC Logic

INFOID:000000008266467

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.	

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, "Diagnosis Procedure"</u>.

NO >> Inspection End.

Diagnosis Procedure

INFOID:000000008266468

Regarding Wiring Diagram information, refer to <u>DLK-91, "Wiring Diagram"</u>.

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.

- Select CLOSE SW in DATA MONITOR mode.
- 3. Check that the function operates normally according to the following conditions.

Monitor item	Condit	ion	Status
CLOSE SW	Back door	Open/Half latch	OFF
	Back dool	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 >

(+)			
Back door lo	ock assembly	()		Voltage (Approx.)
Connector	Terminal			(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
D557	5	Ground		16 – 8 V
the inspection result nor (ES >> GO TO 6. NO >> GO TO 5. CHECK CLOSE SWITC				
Disconnect automatic	back door control module een automatic back doo		rness connector	and back door I
Automatic back door	r control module	Back door lock a	assembly	Orationity
Connector	Terminal	Connector	Terminal	Continuity
B55	5	D557	5	Yes
D.C.C.	5			No
B55 the inspection result nor				
the inspection result nor (ES >> Replace autor NO >> Repair or repla .CHECK CLOSE SWITC	natic back door control m ace harness. CH GROUND CIRCUIT			nd Installation".
the inspection result nor (ES >> Replace autor NO >> Repair or repla .CHECK CLOSE SWITC	natic back door control mace harness.			nd Installation".
the inspection result nor YES >> Replace autor NO >> Repair or repla .CHECK CLOSE SWITC heck continuity between	natic back door control m ace harness. CH GROUND CIRCUIT		nd ground.	
the inspection result nor YES >> Replace autor NO >> Repair or repla .CHECK CLOSE SWITC heck continuity between	natic back door control m ace harness. CH GROUND CIRCUIT back door lock assembly		nd ground.	nd Installation".
the inspection result nor YES >> Replace autor NO >> Repair or repla .CHECK CLOSE SWITC heck continuity between Back door	natic back door control m ace harness. CH GROUND CIRCUIT back door lock assembly	harness connector a	nd ground.	

8. CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

>> Inspection End.

Component Inspection

COMPONENT INSPECTION

INFOID:000000008266469

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< DTC/CIRCUIT DIAGNOSIS >

1.CHECK SWITCH

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

Back door lock	c assembly		Condition	Continuity
Termin	nal		Condition	Continuity
4			Open	Yes
4			Fully closed/Half latch	No
5		Back door lock	Fully close	Yes
5	8	BACK GOOL IOCK	Open/Half latch	No
6	Ö		Open	Yes
0			Fully closed/Half latch	No
7		Back door	On	Yes
ľ		switch	Off	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to DLK-296, "DOOR LOCK : Removal and Installation".

B2422 BACK DOOR STATE

< DTC/CIRCUIT DIAGNOSIS >

B2422 BACK DOOR STATE

DTC Logic

INFOID:000000008266470

DTC	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
	IRMATION PROC		
1.PERFOR	M DTC CONFIRMA	TION PROCEDURE	
2. Operate	-	or. ult" mode of "AUTOMATIC BACK DOOR (CONTROL MODULE" using CO
YES >> NO >>	Inspection End.	<u>Diagnosis Procedure"</u> .	
YES >> NO >>		<u>Diagnosis Procedure"</u> .	INFOID:0000000826
YES >> NO >> Diagnosis Regarding V	Inspection End. Procedure Viring Diagram inform	<u>Diagnosis Procedure"</u> . nation, refer to <u>SEC-27. "Wiring Diagram"</u> . FIC BACK DOOR POSITION INFORMATIO	
YES >> NO >> Diagnosis Regarding V 1.CALIBRA	Inspection End. Procedure Viring Diagram inform ATION OF AUTOMAT	nation, refer to <u>SEC-27, "Wiring Diagram"</u> . FIC BACK DOOR POSITION INFORMATION of automatic back door position information	DN
YES >> NO >> Diagnosis Regarding V 1.CALIBRA	Inspection End. Procedure Viring Diagram inform ATION OF AUTOMAT initialization setting DLK-109, "Work Pro	nation, refer to <u>SEC-27, "Wiring Diagram"</u> . FIC BACK DOOR POSITION INFORMATION of automatic back door position information	DN n.
YES >> NO >> Diagnosis Regarding V 1.CALIBRA 1. Perform Refer to 2. Erase D	Inspection End. Procedure Viring Diagram inform ATION OF AUTOMAT initialization setting DLK-109, "Work Pro TC, and then repeat	nation, refer to <u>SEC-27, "Wiring Diagram"</u> . FIC BACK DOOR POSITION INFORMATIC of automatic back door position information	DN n.
YES >> NO >> Diagnosis Regarding V 1.CALIBRA 1. Perform Refer to 2. Erase D s DTC dete YES >>	Inspection End. Procedure Viring Diagram inform ATION OF AUTOMAT initialization setting DLK-109, "Work Pro TC, and then repeat cted? GO TO 2.	nation, refer to <u>SEC-27, "Wiring Diagram"</u> . FIC BACK DOOR POSITION INFORMATIC of automatic back door position information	DN n.
YES >> NO >> Diagnosis Regarding V 1.CALIBRA 1. Perform Refer to 2. Erase D s DTC dete YES >> NO >>	Inspection End. Procedure Viring Diagram inform ATION OF AUTOMAT initialization setting DLK-109, "Work Pro- TC, and then repeat cted? GO TO 2. Inspection End.	nation, refer to <u>SEC-27, "Wiring Diagram"</u> . FIC BACK DOOR POSITION INFORMATIC of automatic back door position information <u>ocedure"</u> . "PERFORM DTC CONFIRMATION PROC	DN n.
YES >> NO >> Diagnosis Regarding V 1.CALIBRA 1. Perform Refer to 2. Erase D 5 DTC dete YES >> NO >> 2.CHECK I 1. Check t Refer to 2. Check b	Inspection End. Procedure Viring Diagram inform ATION OF AUTOMAT initialization setting DLK-109, "Work Pro- TC, and then repeat cted? GO TO 2. Inspection End. NSTALLATION OF E hat back door assem DLK-284, "BACK D	nation, refer to <u>SEC-27, "Wiring Diagram"</u> . FIC BACK DOOR POSITION INFORMATIC of automatic back door position information	DN n. CEDURE".
YES >> NO >> Diagnosis Regarding V 1.CALIBRA 1. Perform Refer to 2. Erase D S DTC dete YES >> NO >> 2.CHECK I 1. Check t Refer to 2. Check t pinched s the inspec	Inspection End. Procedure Viring Diagram inform ATION OF AUTOMAT initialization setting DLK-109, "Work Pro- TC, and then repeat cted? GO TO 2. Inspection End. NSTALLATION OF E hat back door assem DLK-284, "BACK D back door assembly foreign materials. ction result normal?	nation, refer to <u>SEC-27. "Wiring Diagram"</u> . FIC BACK DOOR POSITION INFORMATION of automatic back door position information <u>bcedure"</u> . "PERFORM DTC CONFIRMATION PROC BACK DOOR ASSEMBLY ably is installed normally. <u>OOR ASSEMBLY : Adjustment"</u> .	DN n. CEDURE".
YES >> NO >> Diagnosis Regarding V .CALIBRA . Perform Refer to . Erase D s DTC dete YES >> NO >> 2.CHECK I . Check t Refer to . Check t ginched s the inspec YES >>	Inspection End. Procedure Viring Diagram inform ATION OF AUTOMAT initialization setting <u>DLK-109. "Work Pro</u> TC, and then repeat <u>cted?</u> GO TO 2. Inspection End. NSTALLATION OF E hat back door assem <u>DLK-284. "BACK D</u> pack door assembly foreign materials. <u>ction result normal?</u> GO TO 3.	nation, refer to <u>SEC-27. "Wiring Diagram"</u> . FIC BACK DOOR POSITION INFORMATION of automatic back door position information <u>bcedure"</u> . "PERFORM DTC CONFIRMATION PROC BACK DOOR ASSEMBLY ably is installed normally. <u>OOR ASSEMBLY : Adjustment"</u> .	DN n. CEDURE".
YES >> NO >> Diagnosis Regarding V .CALIBRA . CALIBRA . Perform Refer to 2. Erase D S DTC dete YES >> NO >> 2.CHECK I Refer to 2. Check t Refer to 2. Check to 2. Chec	Inspection End. Procedure Viring Diagram inform ATION OF AUTOMAT initialization setting <u>DLK-109. "Work Pro</u> TC, and then repeat <u>cted?</u> GO TO 2. Inspection End. NSTALLATION OF E hat back door assem <u>DLK-284. "BACK D</u> pack door assembly foreign materials. <u>ction result normal?</u> GO TO 3.	nation, refer to <u>SEC-27. "Wiring Diagram"</u> . FIC BACK DOOR POSITION INFORMATION of automatic back door position information <u>bcedure"</u> . "PERFORM DTC CONFIRMATION PROC BACK DOOR ASSEMBLY The installed normally. <u>OOR ASSEMBLY : Adjustment"</u> . mechanism deformation, looseness, rattle	DN n. CEDURE".

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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-308, "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.)
Conr	nector	Terminal		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
LH	B70	8	Ground	16.75 – 6 V
RH	B162	0	Gibalia	10.75 - 0 V

Is the inspection result normal?

YES	>> GO TO 6.
-----	-------------

NO >> GO TO 5.

5.CHECK ENCODER CIRCUIT

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

Automatic back of	loor control module		Spindle unit		Continuity
Connector	Terminal	Con	nector	Terminal	Continuity
B55	19	LH	B70	Q	Yes
600	20	RH	B162	Ö	165

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

Automatic back	door control module		Continuity
Connector	Terminal	Ground	Continuity
B55	19	Ground	No
600	20		INU

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-308</u>, "<u>Removal and Installation</u>". NO >> Repair or replace harness.

6.CHECK ENCODER CIRCUIT 2

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

B2422 BACK DOOR STATE

< DTC/CIRCUIT DIAGNOSIS >

Connector	Terminal				(Continuity
	Terrinia	Co	nnector	Terminal	Continuity
	6	LH	B70	3	
DEE	7	LN	B70	10	
B55	8		D100	3	Yes
	9	- RH	B162	10	
Check continuit		atic back door contro			ground
Autor	natic back door contr	ol module			Continuity
Connecto	r	Terminal			Continuity
		6	Ground		
DEE		7	Giouna		No
B55		8	-		No
		9	-		
ES >> GO TO O >> Repair o CHECK ENCOD Connect automa	7. or replace harnes ER CIRCUIT 3 atic back door co	s. ntrol module and spir atic back door contro		onnector and	l ground.
NO >> Repair of CHECK ENCOD Connect automa Check continuit	7. or replace harnes ER CIRCUIT 3 atic back door co	ntrol module and spi atic back door contro		onnector and	Voltage
YES >> GO TO NO >> Repair of CHECK ENCOD Connect automa Check continuit	7. or replace harnes ER CIRCUIT 3 atic back door co y between autom	ntrol module and spi atic back door contro		onnector and	
YES >> GO TO NO >> Repair of CHECK ENCOD Connect automa Check continuit	7. or replace harnes ER CIRCUIT 3 atic back door co y between autom	ntrol module and spin atic back door contro	ol module harness co	onnector and	Voltage

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B2423 AUTOMATIC BACK DOOR MOTOR OPERATION TIME

< DTC/CIRCUIT DIAGNOSIS >

B2423 AUTOMATIC BACK DOOR MOTOR OPERATION TIME

DTC Logic

INFOID:00000008266474

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-132</u>, "Diagnosis Procedure".
- NO >> Inspection End.

Diagnosis Procedure

INFOID:000000008266475

Regarding Wiring Diagram information, refer to DLK-91, "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 de	Automatic back door control module		Spindle unit		
Connector	Terminal	Con	Connector Terminal		
	27	LH	B70	9	
B56	34		670	2	Yes
850	29	DU	B162	9	Tes
	36	RH	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 d	oor control module		Continuity	F
Connector	Terminal		Continuity	
	27	Ground		-
B56	29	Giouna	No	E
000	34		INO	
	36			C

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-308, "Removal and Installation"</u>.

NO >> Repair or replace harness.

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B2426 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

B2426 ENCODER

DTC Logic

INFOID:00000008266476

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-134</u>, "Diagnosis Procedure".
- NO >> Inspection End.

Diagnosis Procedure

INFOID:000000008266477

Regarding Wiring Diagram information, refer to DLK-91, "Wiring Diagram".

1.CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

- Perform initialization setting of automatic back door position information. Refer to <u>DLK-109</u>, "Work Procedure".
- 2. Erase DTC, and then repeat "PERFORM DTC CONFIRMATION PROCEDURE".

Is DTC detected?

YES >> GO TO 2.

NO >> Inspection End.

- 2.check installation of back door assembly
- Check that back door assembly is installed normally. Refer to <u>DLK-284, "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 i	tem	Con	dition	S	Status
SPINDLE LH ENCO	DER A		Moving (auto or manu- al)	н	⇔LO
			When stopped	HI	l or LO
SPINDLE LH ENCO		ack door	Moving (auto or manu- al)	н	⇔LO
			When stopped	Н	l or LO
CHECK ENCODE Turn ignition swi Disconnect spin	automatic back ER POWER SU tch OFF. dle unit LH conr	PPLY	ule. Refer to <u>DLK-308</u>	3, "Removal and	<u>d Installation"</u> .
(+ Spindle				Volt	tage
Connector	Terminal		()		prox.)
B70	8	Cr	ound	16 75	5 – 6 V
the inspection res	-	Gi		10.70	
CHECK ENCODE	ER CIRCUIT matic back door y between auto	r control module co matic back door c	onnector. ontrol module harne	ss connector a	Ind spindle unit
CHECK ENCODE Disconnect auto Check continuit harness connec	ER CIRCUIT matic back door y between auto	matic back door c			
CHECK ENCODE Disconnect auto Check continuity harness connec	ER CIRCUIT matic back door y between auto tor. ack door control mo	matic back door c	ontrol module harne		and spindle unit
CHECK ENCODE Disconnect auto Check continuity harness connec Automatic b Connector B55	ER CIRCUIT matic back door y between auto tor. ack door control mo Term 1	matic back door c dule ninal 9	Ontrol module harne Spindle unit LH Connector B70	Terminal 8	- Continuity Yes
CHECK ENCODE Disconnect auto Check continuity harness connect Automatic b Connector B55 Check continuity	ER CIRCUIT matic back door y between auto tor. ack door control mo Term 1 y between auton natic back door cont	matic back door c dule ninal 9 natic back door cor	Ontrol module harne Spindle unit LH Connector	Terminal 8 connector and	- Continuity Yes
CHECK ENCODE Disconnect auto Check continuity harness connect Automatic b Connector B55 Check continuity Autom Connecto B55	ER CIRCUIT matic back door y between auto tor. ack door control mo Term y between auton natic back door cont	matic back door c dule ninal 9 natic back door cor	Spindle unit LH Connector B70 htrol module harness	Terminal 8 connector and	Continuity Yes ground.
CHECK ENCODE Disconnect auto Check continuity harness connect Automatic b Connector B55 Check continuity Auton Connecto B55 the inspection res (ES >> Replace IO >> Repair of CHECK ENCODE Disconnect auto	ER CIRCUIT matic back door y between auto tor. ack door control mo Term y between auton natic back door cont natic back door cont natic back door cont r ult normal? automatic back or replace harne ER CIRCUIT 2 matic back door y between auto	matic back door c dule ninal 9 natic back door cor trol module Terminal 19 t door control module ss. r control module co	Spindle unit LH Connector B70 ntrol module harness Ground	Terminal 8 connector and 8 .	Continuity Yes ground. Continuity No d Installation".
CHECK ENCODE Disconnect auto Check continuity harness connect Automatic b Connector B55 Check continuity Auton Connecto B55 the inspection res (ES >> Replace IO >> Repair of CHECK ENCODE Disconnect auto Check continuity harness connect	ER CIRCUIT matic back door y between auto tor. ack door control mo Term y between auton natic back door cont natic back door cont natic back door cont r ult normal? automatic back or replace harne ER CIRCUIT 2 matic back door y between auto	matic back door c dule ninal 9 natic back door cor trol module Terminal 19 t door control module ss. r control module co matic back door c	Spindle unit LH Connector B70 Introl module harness Ground Jule. Refer to DLK-308	Terminal 8 connector and 8 connector and 8 ss connector a	Continuity Yes ground. Continuity No d Installation". and spindle unit
CHECK ENCODE Disconnect auto Check continuity harness connect Automatic b Connector B55 Check continuity Auton Connecto B55 the inspection res (ES >> Replace IO >> Repair of CHECK ENCODE Disconnect auto Check continuity harness connect	ER CIRCUIT matic back door y between auto tor. ack door control mo Term y between auton natic back door control natic back door control natic back door control c ult normal? automatic back for replace harne ER CIRCUIT 2 matic back door y between auto tor. ack door control mo	matic back door c dule ninal 9 natic back door cor trol module Terminal 19 t door control module ss. r control module co matic back door c	Spindle unit LH Connector B70 Introl module harness Ground Ule. Refer to DLK-308	Terminal 8 connector and 8 connector and 8 ss connector a	Continuity Yes ground. Continuity No d Installation".

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

B2426 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

Automatic back d	oor control module		Continuity
Connector	Terminal	Ground	Continuity
B55	6	Giodila	No
	7		NO

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 of	loor 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-308</u>, "Removal and Installation".

8. CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-308</u>, "Removal and Installation".

NO >> Repair or replace the malfunctioning parts.

B2427 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

B2427 ENCODER

DTC Logic

INFOID:000000008266478

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
C CONF	IRMATION PROC	EDURE	
PERFOR	M DTC CONFIRMA	TION PROCEDURE	
	ition switch ON. automatic back doc	r	
Check "		". ult" mode of "AUTOMATIC BACK DOOR (CONTROL MODULE" using CON-
SULT. DTC dete	cted?		
		Diagnosis Procedure".	
0 >>	Inspection End.		
0 >>			INFOID:00000008266479
o >> agnosis	Inspection End. Procedure		INFOID:00000008266479
o >> agnosis	Inspection End. Procedure	nation, refer to <u>DLK-91, "Wiring Diagram"</u> .	INFOID:00000008266479
O >> agnosis	Inspection End. Procedure Viring Diagram inforr	nation, refer to <u>DLK-91, "Wiring Diagram"</u> .	
O >> agnosis garding V CALIBRA	Inspection End. Procedure Viring Diagram inforr TION OF AUTOMA		DN
agnosis garding V CALIBRA Perform Refer to	Inspection End. Procedure Viring Diagram inforr TION OF AUTOMA initialization setting DLK-109, "Work Pro-	nation, refer to <u>DLK-91, "Wiring Diagram"</u> . FIC BACK DOOR POSITION INFORMATIC of automatic back door position information <u>pcedure"</u> .	DN 1.
agnosis garding V CALIBRA Perform Refer to	Inspection End. Procedure Viring Diagram inforr TION OF AUTOMA initialization setting <u>DLK-109, "Work Pro</u> TC, and then repeat	nation, refer to <u>DLK-91, "Wiring Diagram"</u> . FIC BACK DOOR POSITION INFORMATIC of automatic back door position information	DN 1.
agnosis garding V CALIBRA Perform Refer to Erase D DTC deter ES >>	Inspection End. Procedure Viring Diagram inforr TION OF AUTOMA initialization setting <u>DLK-109, "Work Pro</u> TC, and then repeat <u>cted?</u> GO TO 2.	nation, refer to <u>DLK-91, "Wiring Diagram"</u> . FIC BACK DOOR POSITION INFORMATIC of automatic back door position information <u>pcedure"</u> .	DN 1.
agnosis agrding V CALIBRA Perform Refer to Erase D DTC deter ES >> O >>	Inspection End. Procedure Viring Diagram inforr TION OF AUTOMA initialization setting <u>DLK-109, "Work Pro</u> TC, and then repeat <u>cted?</u> GO TO 2. Inspection End.	nation, refer to <u>DLK-91, "Wiring Diagram"</u> . FIC BACK DOOR POSITION INFORMATIC of automatic back door position information <u>bcedure</u> ". "PERFORM DTC CONFIRMATION PROC	DN 1.
agnosis agnosis garding V CALIBRA Perform Refer to Erase D DTC deter ES >> O >> CHECK I Check ti	Inspection End. Procedure Viring Diagram inforr TION OF AUTOMA initialization setting <u>DLK-109, "Work Pre</u> TC, and then repeat <u>cted?</u> GO TO 2. Inspection End. NSTALLATION OF E hat back door asser	nation, refer to <u>DLK-91, "Wiring Diagram"</u> . FIC BACK DOOR POSITION INFORMATIC of automatic back door position information <u>bcedure"</u> . "PERFORM DTC CONFIRMATION PROC BACK DOOR ASSEMBLY	DN 1.
agnosis agnosis garding V CALIBRA Perform Refer to Erase D DTC deter ES >> O >> CHECK I Check th Refer to Check b	Inspection End. Procedure Viring Diagram inforr TION OF AUTOMA ^T initialization setting <u>DLK-109, "Work Pre</u> TC, and then repeat <u>cted?</u> GO TO 2. Inspection End. NSTALLATION OF E hat back door assem <u>DLK-284, "BACK D</u>	nation, refer to <u>DLK-91, "Wiring Diagram"</u> . FIC BACK DOOR POSITION INFORMATIC of automatic back door position information <u>pcedure</u> ". "PERFORM DTC CONFIRMATION PROC	DN n. EDURE".
agnosis agrong V calibra calib	Inspection End. Procedure Viring Diagram inforr TION OF AUTOMA initialization setting <u>DLK-109, "Work Pre</u> TC, and then repeat <u>cted?</u> GO TO 2. Inspection End. NSTALLATION OF E hat back door assem <u>DLK-284, "BACK D</u> back door assembly foreign materials. <u>ction result normal?</u>	nation, refer to <u>DLK-91, "Wiring Diagram"</u> . FIC BACK DOOR POSITION INFORMATIC of automatic back door position information <u>bcedure"</u> . "PERFORM DTC CONFIRMATION PROC BACK DOOR ASSEMBLY ably is installed normally. <u>OOR ASSEMBLY : Adjustment"</u> .	DN n. EDURE".
agnosis agnosis garding V CALIBRA Perform Refer to Erase D DTC deter ES >> CHECK I Check th Refer to Check th Refer to Check th Refer to Check th Refer to Check th Refer to Check th Spinched	Inspection End. Procedure Viring Diagram inforr TION OF AUTOMAT initialization setting <u>DLK-109. "Work Pre</u> TC, and then repeat <u>cted?</u> GO TO 2. Inspection End. NSTALLATION OF E hat back door assem <u>DLK-284. "BACK D</u> back door assembly foreign materials. <u>ction result normal?</u> GO TO 3.	nation, refer to <u>DLK-91, "Wiring Diagram"</u> . FIC BACK DOOR POSITION INFORMATIC of automatic back door position information <u>bcedure"</u> . "PERFORM DTC CONFIRMATION PROC BACK DOOR ASSEMBLY ably is installed normally. <u>OOR ASSEMBLY : Adjustment"</u> .	DN n. EDURE".

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

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

DLK-137

B2427 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

Monitor item	Condition		Status
SPINDLE RH ENCODER A		Moving (auto or manu- al)	HI ⇔ LO
	- Back door	When stopped	HI or LO
SPINDLE RH ENCODER B		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-308, "Removal and Installation"</u>.

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.

(+ Spindle	,	()	Voltage (Approx.)
Connector	Terminal		
B162	8	Ground	16.75 – 6 V

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5.CHECK ENCODER CIRCUIT

1. Disconnect automatic back door control module connector.

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

Automatic back de	oor control module	Spindle ur	nit 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 do	por control module	Continuity	
Connector	Terminal	Ground	
B55	20		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-308, "Removal and Installation"</u>. NO >> Repair or replace harness.

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 ur	nit RH	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B55	8		3	Yes
B00	9	B162	10	165

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

B2427 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

Automatic back	door control module		Continuity
Connector	Terminal	Ground	Continuity
B55	8	Ground	No
600	9		NO
ne inspection result norm	al?		
S >> GO TO 7.			
>> Repair or replace			
CHECK ENCODER CIRC	CUIT 3		
	door control module spindle		
Check continuity betwee	n automatic back door contro	ol module harness connector a	and ground.
Automatic back	door control module		Voltago
Connector	Terminal	Ground	Voltage (Approx.)
		Ground	
B55	21		0 V
B55	21		0 V
ne inspection result norm			0 V
ne inspection result norm	al?	. Refer to DLK-308, "Removal	
ne inspection result norm ES >> GO TO 8. D >> Replace automa	al? tic back door control module	. Refer to <u>DLK-308, "Removal</u>	
ne inspection result norm ES >> GO TO 8. D >> Replace automa CHECK INTERMITTENT	al? tic back door control module INCIDENT	. Refer to <u>DLK-308, "Removal</u>	
ne inspection result norm ES >> GO TO 8. D >> Replace automa CHECK INTERMITTENT er to <u>GI-53. "Intermittent</u>	al? tic back door control module INCIDENT Incident".	. Refer to <u>DLK-308, "Removal</u>	
ne inspection result norm ES >> GO TO 8. D >> Replace automa CHECK INTERMITTENT er to <u>GI-53. "Intermittent</u> ne inspection result norm	tic back door control module INCIDENT Incident". al?		and Installation'
ne inspection result norm S >> GO TO 8. D >> Replace automa CHECK INTERMITTENT er to <u>GI-53. "Intermittent</u> ne inspection result norm S >> Replace automa	al? tic back door control module INCIDENT Incident". al? tic back door control module	. Refer to <u>DLK-308, "Removal</u> . Refer to <u>DLK-308, "Removal</u>	and Installation'
ne inspection result norm S >> GO TO 8. D >> Replace automa CHECK INTERMITTENT er to <u>GI-53. "Intermittent</u> ne inspection result norm S >> Replace automa	tic back door control module INCIDENT Incident". al?		and Installation'
ne inspection result norm S >> GO TO 8. D >> Replace automa CHECK INTERMITTENT er to <u>GI-53. "Intermittent</u> ne inspection result norm S >> Replace automa	al? tic back door control module INCIDENT Incident". al? tic back door control module		and Installation'
ne inspection result norm S >> GO TO 8. D >> Replace automa CHECK INTERMITTENT er to <u>GI-53. "Intermittent</u> ne inspection result norm S >> Replace automa	al? tic back door control module INCIDENT Incident". al? tic back door control module		and Installation
ne inspection result norm S >> GO TO 8. D >> Replace automa CHECK INTERMITTENT er to <u>GI-53. "Intermittent</u> ne inspection result norm S >> Replace automa	al? tic back door control module INCIDENT Incident". al? tic back door control module		and Installation'
ne inspection result norm S >> GO TO 8. D >> Replace automa CHECK INTERMITTENT er to <u>GI-53. "Intermittent</u> ne inspection result norm S >> Replace automa	al? tic back door control module INCIDENT Incident". al? tic back door control module		and Installation'

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B2428 AUTOMATIC BACK DOOR CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

B2428 AUTOMATIC BACK DOOR CONTROL UNIT

DTC Logic

INFOID:00000008266480

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:000000008266481

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-308, "Removal and Installation".

B242A CLOSURE CONDITION

< DTC/CIRCUIT DIAGNOSIS >

B242A CLOSURE CONDITION

DTC Logic

INFOID:000000008266482

DTC DETECTION LOGIC

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DTC	CONSULT display description	DTC detecting condition	Possible cause
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
TC CONFI	IRMATION PROC	EDURE	
.PERFORM	M DTC CONFIRMA	TION PROCEDURE	
Operate	tion switch ON. back door auto clos elf-Diagnostic Resu	sure operation. It mode of AUTOMATIC BACK DOOR CON	TROL MODULE using CONSULT.
		<u>Diagnosis Procedure".</u>	
Jiagnosis	Procedure		INFOID:00000008266483
iagnosis	Procedure		INFOID:00000008266483
-		nation, refer to <u>DLK-91, "Wiring Diagram"</u> .	INFOID:00000008266483
egarding W	′iring Diagram inforr	nation, refer to <u>DLK-91, "Wiring Diagram"</u> . ERIALS IN BACK DOOR LOCK ASSEMBL	
egarding W	′iring Diagram inforr OR FOREIGN MAT		
Regarding W CHECK F Check for en s the inspect	'iring Diagram inforr OR FOREIGN MAT try of foreign materi tion result normal?	ERIALS IN BACK DOOR LOCK ASSEMBL	
Regarding W CHECK F Check for en the inspect YES >> 0	'iring Diagram inforr OR FOREIGN MAT try of foreign materi	ERIALS IN BACK DOOR LOCK ASSEMBL als in back door lock assembly.	
Regarding W CHECK F Check for ent the inspect YES >> C NO >> F	'iring Diagram inforr OR FOREIGN MAT try of foreign materi tion result normal? GO TO 2. Remove foreign materian materian for the second sec	ERIALS IN BACK DOOR LOCK ASSEMBL als in back door lock assembly.	
Regarding W CHECK F Check for en Sthe inspect YES >> 0 NO >> F CHECK B	'iring Diagram inforr OR FOREIGN MAT try of foreign materi tion result normal? GO TO 2. Remove foreign mat ACK DOOR OPEN.	ERIALS IN BACK DOOR LOCK ASSEMBL als in back door lock assembly. terials.	
Regarding W .CHECK F check for en- s the inspect YES >> (NO >> F .CHECK B fanually che s the inspect	'iring Diagram inforr OR FOREIGN MAT try of foreign materi tion result normal? GO TO 2. Remove foreign mat ACK DOOR OPEN eck open and close tion result normal?	ERIALS IN BACK DOOR LOCK ASSEMBL als in back door lock assembly. terials. /CLOSE OPERATION	
Regarding W .CHECK F Check for ent the inspect YES >> (NO >> F .CHECK B Anually che the inspect YES >> ('iring Diagram inforr OR FOREIGN MAT try of foreign materi tion result normal? GO TO 2. Remove foreign mat ACK DOOR OPEN ack open and close tion result normal? GO TO 3.	ERIALS IN BACK DOOR LOCK ASSEMBL als in back door lock assembly. terials. /CLOSE OPERATION operation of back door.	
Regarding W CHECK F Check for en- S the inspect YES >> 0 NO >> F CHECK B Annually che S the inspect YES >> 0 NO >> F	Firing Diagram inform OR FOREIGN MAT try of foreign materi tion result normal? GO TO 2. Remove foreign materi ACK DOOR OPEN ack open and close tion result normal? GO TO 3. Repair or replace the	ERIALS IN BACK DOOR LOCK ASSEMBL als in back door lock assembly. terials. /CLOSE OPERATION	
Regarding W CHECK F Check for en- Sthe inspect YES >> (NO >> F CHECK B Manually check Sthe inspect YES >> (NO >> F CHECK M Select Al Select Al Select H	Viring Diagram inform OR FOREIGN MAT try of foreign materi tion result normal? GO TO 2. Remove foreign materi ACK DOOR OPEN eck open and close tion result normal? GO TO 3. Repair or replace the IONITOR ITEM UTOMATIC BACK I ALF LATCH SW, O	ERIALS IN BACK DOOR LOCK ASSEMBL als in back door lock assembly. terials. /CLOSE OPERATION operation of back door.	Y

B242A CLOSURE CONDITION

< DTC/CIRCUIT DIAGNOSIS >

Monitor item	Condition		Status
		Fully closed/Half latch	OFF
HALF LATCH SW		Open	ON
	Back door	Fully closed/Half latch	OFF
OPEN SW	Dack UOUI	Open	ON
CLOSE SW		Open/Half latch	OFF
CLOSE 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 lo	,	()	Voltage (Approx.)
Connector	Terminal		(/ ())
	4		
D557	5	Ground	16 – 8 V
	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 of	loor 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	oor 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-308</u>, "<u>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 a	assembly		Continuity	
Connector	Terminal	Ground	Continuity	
D557	8	-	Yes	
Is the inspection result normal?	?			
YES >> GO TO 7.				
NO >> Repair or replace I	back door lock assen	nbly ground circuit.		
7.CHECK SWITCH				
Refer to DLK-115, "Component	t Inspection".			
Is the inspection result normal?	<u>?</u>			
YES >> GO TO 8.				
	-	er to <u>DLK-296, "DOOR LOC</u>	K : Removal and Installation".	
8. CHECK INTERMITTENT IN	ICIDENT			
Refer to GI-53, "Intermittent Inc	cident".			
>> Inspection End.				
Component Inspection			INFOID:00000008266484	
COMPONENT INSPECTION	N			
1 .CHECK SWITCH				
1. Turn ignition switch OFF.				
2. Disconnect back door lock	assembly connector	-		
	assembly connector	•		

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to <u>DLK-296, "DOOR LOCK : Removal and Installation"</u>.

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B261B REMOTE ENGINE START

< DTC/CIRCUIT DIAGNOSIS >

B261B REMOTE ENGINE START

DTC Logic

INFOID:000000008297262

DTC DETECTION LOGIC

NOTE:

- If DTC B261B is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to <u>DLK-111, "DTC Logic"</u>.
- If DTC B261B is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to <u>DLK-112, "DTC Logic"</u>.

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B261B	BCM	The BCM has requested ignition OFF but ECM keeps the engine running for more than 10 seconds after the OFF request was made.	• ECM

Diagnosis Procedure

INFOID:000000008297263

1. CHECK ECM IGNITION, POWER AND GROUND CIRCUITS

Check ECM ignition power and ground circuits. Refer to EC-186, "Diagnosis Procedure".

Is the inspection result normal?

- YES >> Replace ECM. Refer to <u>EC-493</u>, "Removal and Installation". 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-77, "Removal and Installation"</u>.
- NO >> Inspection End..

B2621 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

B2621 INSIDE ANTENNA

DTC Logic

INFOID:000000007913720

DTC DETECTION LOGIC

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DTC	CONSULT display description	DTC detecting condition	Possible cause
B2621	INSIDE ANTENNA	An excessive high or low voltage from inside anten- na (instrument center) is sent to BCM.	 Inside key antenna (instrument center) Harness or connector [Inside key antenna (instrument center) circuit is open or shorted]
TC CONFII	RMATION PROC	EDURE	
.PERFORM	I DTC CONFIRMA	TION PROCEDURE	
Select "IN Perform i KEY".	ISIDE ANT DIAGN inside key antenn	of "BCM" using CONSULT. OSIS" in "WORK SUPPORT" mode. a ("INSIDE ANT DIAGNOSIS") on "WOR	K SUPPORT" of "INTELLIGENT
	CM for DTC. antenna DTC detec	sted?	
/ES >> R	efer to <u>DLK-145, "I</u>	<u>Diagnosis Procedure"</u> . (instrument center) is OK.	
iagnosis I	Procedure		INFOID:00000000791372
		nation, refer to <u>DLK-71, "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.

	+) CM	()	Condition	Signal (Reference value)	L
Connector	Terminal			(
M80	123, 124	Ground	When Intelligent Key is in the an- tenna detection area	(V) 10 50 1 s JMKIA3839GB	1 1 0
			When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 10 15 10 5 10 15 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 10 10 10 10 10 10 10 10 10 10 10 10	F

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-77, "Removal and Installation"</u>.

< 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.

E	CM	Inside key antenna	(instrument center)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M80	123	M14	1	Yes
WOO	124	10114	2	165

3. Check continuity between BCM harness connector and ground.

В	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 0 5 0 15 15 15 15 15 15 15 15 15 15
WOU	120, 124	Ground	When Intelligent Key is not in the antenna detection area	(V) 15 0 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 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-77, "Removal and Installation"</u>.

B2622 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

B2622 INSIDE ANTENNA

DTC Logic

INFOID:000000007913722

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DTC	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 CON	FIRMATION PROC	EDURE	
.PERFO	RM DTC CONFIRMA	TION PROCEDURE	
_			
Select Perforr Check	NSIDE ANT DIAGNO n inside key antenna BCM for DTC.	of BCM using CONSULT. OSIS in WORK SUPPORT mode. (INSIDE ANT DIAGNOSIS) on WORK SUF	PORT of INTELLIGENT KEY.
. Select . Perforr . Check <u>: inside ke</u> YES >>	NSIDE ANT DIAGNO n inside key antenna BCM for DTC. y antenna DTC deteo	OSIS in WORK SUPPORT mode. (INSIDE ANT DIAGNOSIS) on WORK SUF <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.

(+ BC		()	Condition	Signal
Connector	Terminal			(Reference value)
M80	116 129	Ground	When Intelligent Key is in the an- tenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB
M80	116, 128	Ground	When Intelligent Key is not in the	(V) 15 10 5 11 5 10
			antenna detection area	0 1 s JMKIA5951GB

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-77, "Removal and Installation"</u>. NO >> GO TO 2. .1

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 ant	enna (console)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M80	116	M255	1	Yes
MOO	128	101235	2	165

3. Check continuity between BCM harness connector and ground.

В	СМ		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.

$3. {\sf CHECK} \text{ INSIDE KEY ANTENNA INPUT SIGNAL 2}$

- 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.

	+) CM	()	Condition	Signal (Reference value)
Connector	Terminal			
M80	116, 128	Ground	When Intelligent Key is in the an- tenna detection area	(V) 15 0 1 s JMKIA3839GB
Mee	110, 120	Ground	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 11 1 5 0 11 1 5 0 11 5 0 11 5 0 15 10 5 0 15 10 5 0 15 10 10 10 10 10 10 10 10 10 10 10 10 10

Is the inspection result normal?

YES >> Replace inside key antenna (console). Refer to <u>DLK-303. "CONSOLE : Removal and Installation"</u>.

NO >> Replace BCM. Refer to <u>BCS-77, "Removal and Installation"</u>.

B2623 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

B2623 INSIDE ANTENNA

DTC Logic

INFOID:000000007913724

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DTC	CONSULT display description	DTC detecting condition	Possible cause
B2622	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]
TC CONF	IRMATION PROC	EDURE	
.PERFOR	M DTC CONFIRMA	TION PROCEDURE	
. Select II . Perform . Check E	NSIDE ANT DIAGNO inside key antenna 3CM for DTC.	of BCM using CONSULT. OSIS in WORK SUPPORT mode. (INSIDE ANT DIAGNOSIS) on WORK SUP	PORT of INTELLIGENT KEY.
. Select II . Perform . Check E <u>s inside key</u> YES >>	NSIDE ANT DIAGNO inside key antenna 3CM for DTC. <u>antenna DTC detec</u> Refer to <u>DLK-149. "</u>	OSIS in WORK SUPPORT mode. (INSIDE ANT DIAGNOSIS) on WORK SUP	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	()	Condition	(Reference value)
M20	100, 99	Ground	When Intelligent Key is in the an- tenna detection area	(V) 15 0 0 1 s JMKIA38396B
W20	100, 99	Ground	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 •••••••••••••••••••••••••••••
				JMKIA5951GB

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-77, "Removal and Installation"</u>. NO >> GO TO 2. .1

B2623 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

2. CHECK INSIDE KEY ANTENNA CIRCUIT

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

E	BCM		Inside key antenna (luggage room)	
Connector	Terminal	Connector	Terminal	Continuity
M20	100	B76	1	Yes
IM20	99	670	2	165

3. Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector	Terminal	- Ground	Continuity
M20	100		No
WZU	99		NU .

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

- 1. Replace inside key antenna (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 50 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5
M20	100, 00		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 11 15 15 15 15 15 15 15 15 15

Is the inspection result normal?

YES >> Replace inside key antenna (luggage room). Refer to <u>DLK-303, "LUGGAGE ROOM : Removal</u> and Installation".

NO >> Replace BCM. Refer to <u>BCS-77, "Removal and Installation"</u>.

B26FD SHIFT LOCK SOLENOID

< DTC/CIRCUIT DIAGNOSIS >

B26FD SHIFT LOCK SOLENOID

DTC	CONSULT display description	DTC detectin	ng condition	Po	ssible cause
B26FD	SHIFT LOCK SOLE- NOID	BCM shift lock solenoid c shift lock solenoid output			
CONF	IRMATION PROC	EDURE			
ERFOR	M DTC CONFIRMA	TION PROCEDURE			
Turn ign Check ":	ition switch ON. Self Diagnostic Resi	Ilt" mode of "BCM" usi	ng CONSULT		
TC dete	-				
S >>	Refer to <u>DLK-151, "I</u>	Diagnosis Procedure".			
>>	Shift lock solenoid is	OK.			
	Shift lock solehold is Procedure	UK.			INFOID:0000000082
		OK.			INFOID:000000082
gnosis	Procedure	nation, refer to <u>DLK-71</u>	I. "Wiring Diagram	<u>.</u>	INFCID:0000000082
gnosis	Procedure		I, "Wiring Diagram	<u>"</u> -	INFOID:000000082
gnosis arding V	Procedure			<u>"</u> -	INFOID:000000082
gnosis arding V CHECK	Procedure	nation, refer to <u>DLK-71</u>		<u>"</u> -	INFCID:000000082
gnosis arding V CHECK Turn ign Disconn	Frocedure	nation, refer to <u>DLK-71</u> STOP LAMP SWITCH)		INFOID:0000000082
gnosis arding V CHECK Turn ign Disconn	Frocedure	nation, refer to <u>DLK-71</u> STOP LAMP SWITCH)		INFOID:000000082
gnosis arding V CHECK Turn ign Disconn	Frocedure	nation, refer to <u>DLK-71</u> STOP LAMP SWITCH)	nd ground.	INFCID:0000000082
gnosis arding V CHECK Turn ign Disconn	Frocedure	nation, refer to <u>DLK-71</u> STOP LAMP SWITCH connector. lamp switch connecto)		INFOID:000000082

2.CHECK STOP LAMP SWITCH

Check stop lamp switch. Refer to TM-151, "Component Inspection (Stop Lamp Switch)".

Is the inspection result normal?

YES >> GO TO 3.

>> Replace stop lamp switch. Refer to <u>BR-20, "Exploded View"</u>. NO

3. CHECK GROUND CIRCUIT (BCM)

1. Check continuity between BCM connector M81 terminals 134,143 and ground.

B	CM		Continuity
Connector	Terminal (+)	Ground	Continuity
M81	134		Yes
M81	143		Yes

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B26FD SHIFT LOCK SOLENOID

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace damaged parts.

4. CHECK HARNESS BETWEEN BCM AND STOP LAMP SWITCH FOR OPEN

Check continuity between BCM connector M18 terminal 27 and stop lamp switch connector E38 terminal 2.

B	СМ	stop lamp switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M18	27	E38	2	Yes

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace damaged parts.

5.CHECK HARNESS BETWEEN BCM AND STOP LAMP SWITCH FOR SHORT CIRCUIT

Check continuity between BCM connector M18 terminal 27 and ground.

B	СМ		Continuity
Connector	Terminal	Ground	Continuity
M18	27		No

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace damaged parts.

6.CHECK HARNESS BETWEEN BCM AND CVT SHIFT SELECTOR FOR OPEN

- 1. Disconnect CVT shift selector connector.
- 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 7.

NO >> Repair or replace damaged parts.

7. CHECK HARNESS BETWEEN BCM AND CVT SHIFT SELECTOR FOR SHORT CIRCUIT

Check continuity between BCM connector M80 terminal 108 and ground.

B	CM		Continuity
Connector	Terminal	Ground	
M80	108		No

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace damaged parts.

8.CHECK GROUND CIRCUIT (CVT SHIFT SELECTOR)

Check continuity between CVT shift selector connector M78 terminal 4 and ground.

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

	B26FD SHIFT LOCK SOLENOID	
< DTC	/CIRCUIT DIAGNOSIS >	
Is the i	nspection result normal?	
YES NO	>> Replace shift lock solenoid. Refer to <u>TM-171, "Exploded View"</u> . >> Repair or replace damaged parts.	A
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< DTC/CIRCUIT DIAGNOSIS >

B26FE HOOD SWITCH

DTC Logic

INFOID:00000008282675

DTC DETECTION LOGIC

NOTE:

- If DTC B26FE is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-65, "DTC Logic".
- If DTC B26FE is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-66, "DTC Logic".

DTC	CONSULT display description	DTC detecting condition	Possible cause
B26FE	HOOD SWITCH	BCM detects that the hood switch input is malfunc- tioning.	 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 <u>DLK-154</u>, "Diagnosis Procedure".
- NO >> Hood switch is OK.

Diagnosis Procedure

INFOID:00000008282668

Regarding Wiring Diagram information, refer to DLK-71. "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	Connector Terminal			
E218	94	Ground	Battery voltage	
E210	96	Gibuliu	Dallery Vollage	

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	IPDM E/R		Hood switch		
Connector	Terminal	Connector	Terminal	Continuity	
E218	94	E205	1	Yes	
LZIO	96	205	2	165	

B26FE HOOD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

3. Check continuity between IPDM E/R harness connector and ground. А IPDM E/R Continuity Connector Terminal Ground В 94 E218 No 96 Is the inspection result normal? YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation". NO >> Repair or replace harness. 3.CHECK HOOD SWITCH GROUND CIRCUIT D Check continuity between hood switch harness connector and ground. E Hood switch Continuity Connector Terminal Ground 3 E205 Yes F Is the inspection result normal? YES >> GO TO 4. >> Repair or replace harness. NO G 4.CHECK HOOD SWITCH Refer to DLK-155, "Component Inspection" . Н Is the inspection result normal? YES >> GO TO 5. NO >> Replace hood switch. Refer to <u>DLK-287, "HOOD LOCK CONTROL CABLE : Removal and Instal-</u> lation". 5. CHECK BCM CONFIGURATION Refer to BCS-63, "CONFIGURATION (BCM) : Configuration List". >> Inspection End. DLK Component Inspection INFOID:00000008282669 1. CHECK HOOD SWITCH 1. Turn ignition switch OFF. 2. Disconnect hood switch connector. 3. Check continuity between hood switch terminals. Μ Hood switch Condition Continuity Terminal Ν 1 3 Hood switch Press No 1 3 Yes Hood switch Release 2 3 Press Hood switch No 2 3 Release Yes Hood switch Is the inspection result normal? Ρ YES >> Inspection End.

NO >> Replace hood switch. Refer to <u>DLK-287, "HOOD LOCK CONTROL CABLE : Removal and Instal-</u><u>lation"</u>.

B26FF REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

B26FF REMOTE KEYLESS ENTRY RECEIVER

DTC Logic

INFOID:000000008487430

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-156, "Diagnosis Procedure"</u>.

NO >> Inspection End.

Diagnosis Procedure

INFOID:000000008487434

Regarding Wiring Diagram information, refer to DLK-71, "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 ••• 0.2\$ OCC3881D	
MOU	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-77, "Removal and Installation"</u>.

NO >> GO TO 3.

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.

B26FF REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

Connector Terminal Connector Terminal M80 119 M86 2 Ye Check continuity between BCM harness connector and ground. (-) Continuity (+) BCM (-) Continuity Connector Terminal (-) Continuity Connector Terminal (-) Continuity Connector Terminal (-) Continuity M80 119 Ground No e.inspection result normal? S >> GO TO 3. > >> >>> Repair or replace harness. : : Voltage (Approx) Check REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY ck voltage between remote keyless entry receiver harness connector and ground. . (+)		M	Remote keyle	ess entry receiver	Continuity
Check continuity between BCM harness connector and ground. (+) Continuity BCM (-) Connector Terminal M80 119 Ground No ne inspection result normal? S >> GO TO 3. No D> >> Repair or replace harness. CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY Continuity Connector Terminal (-) Voltage (Approx) M86 1 Ground Battery voltage M86 1 Ground Battery voltage M86 1 Ground Dattery voltage D-2 >> Repair or replace harness between BCM and 10A fuse No. 25. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT Sck continuity between remote keyless entry receiver harness connector and ground. Continui Remote keyless entry receiver Ground Continui Rem	Connector	Terminal	Connector	Terminal	Continuity
(+) BCM (-) Continuity M80 119 Ground No he inspection result normal? S >> GO TO 3. No D >> Repair or replace harness. CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY Connector and ground. (+) (-) Voltage (Approx) Connector Terminal (-) Voltage (Approx) M86 1 Ground Battery voltage he inspection result normal? ES >> GO TO 4. S D-1 >> Check 10A fuse No. 25 [located in fuse block J/B]. S >> D-2 >> Repair or replace harness between BCM and 10A fuse No. 25. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT reck continuity between remote keyless entry receiver harness connector and ground. Continuit Remote keyless entry receiver Ground Continuit Remote keyless entry receiver Ground Continuit M86 3 <td>M80</td> <td>119</td> <td>M86</td> <td>2</td> <td>Yes</td>	M80	119	M86	2	Yes
BCM (-) Continuity Connector Terminal No M80 119 Ground No ne inspection result normal? SS >> GO TO 3. No D >> Repair or replace harness. CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY Voltage eck voltage between remote keyless entry receiver harness connector and ground. (+) Voltage (Approx) Connector Terminal (-) Voltage (Approx) Connector Terminal (-) Voltage (Approx) Connector Terminal (-) Voltage (Approx) Connector Terminal Ground Battery voltage M86 1 Ground Battery voltage No 1 Ground Battery voltage No 25 [Oncold fuels No. 25 [Deck 10A fuse No. 25 [Deck CREMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT So Continuity between remote keyless entry receiver Ground Continuit Connector Terminal Ground Yes M86 3 Yes	Check continuity be	tween BCM harness	connector and grou	und.	
Connector Terminal M80 119 Ground No ne inspection result normal? S S GO TO 3. No D >> Repair or replace harness. CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY eck voltage between remote keyless entry receiver harness connector and ground. (+) Voltage (Approx) (+) (-) Voltage (Approx) Connector Terminal (-) Voltage (Approx) M86 1 Ground Battery voltage me inspection result normal? S >> GO TO 4. S 0-1 >> Check 10A fuse No. 25 [located in fuse block J/B]. S >> Check 10A fuse No. 25 [located in fuse block J/B]. 0-2 >> Repair or replace harness between BCM and 10A fuse No. 25. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT eck continuity between remote keyless entry receiver harness connector and ground. Continui M86 3 Yes te inspection result normal? Ground Continui S >> Replace remote keyless entry receiver. Ground Continui		(+)			
M80 119 Ground No he inspection result normal? S >> Go TO 3. >> Repair or replace harness. D >> Repair or replace harness. CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY eck voltage between remote keyless entry receiver harness connector and ground. (+) (-) Voltage (Approx) Connector Terminal (-) Voltage (Approx) M86 1 Ground Battery voltage he inspection result normal? ES >> GO TO 4. S 0-1 >> Check 10A fuse No. 25 [located in fuse block J/B]. S S 0-2 >> Repair or replace harness between BCM and 10A fuse No. 25. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT eck continuity between remote keyless entry receiver harness connector and ground. Continui Remote keyless entry receiver Continui M86 3 Yes he inspection result normal? S S >> Replace remote keyless entry receiver. Refer to DLK-306, "Removal and Installation"		BCM	(-)		Continuity
he inspection result normal? ES >> GO TO 3. D >> Repair or replace harness. CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY eck voltage between remote keyless entry receiver harness connector and ground. (+) (-) Remote keyless entry receiver (-) N86 1 Ground Battery voltage he inspection result normal? ES ES >> GO TO 4. D-1 >> Check 10A fuse No. 25 [located in fuse block J/B]. D-2 >> Repair or replace harness between BCM and 10A fuse No. 25. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT eck continuity between remote keyless entry receiver harness connector and ground. Remote keyless entry receiver Ground M86 3 Remote keyless entry receiver. Ground Remote keyless entry receiver. Ground Remote keyless entry receiver. Yes N86 3 Yes Yes N86 3	Connector	Terminal			
S >> GO TO 3. O >> Repair or replace harness. CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY eck voltage between remote keyless entry receiver harness connector and ground. (+) Remote keyless entry receiver (-) Voltage (Approx) Connector Terminal M86 1 Ground Battery voltage he inspection result normal? SS >> GO TO 4. O-1 >> Check 10A fuse No. 25 [located in fuse block J/B]. O-2 >> Repair or replace harness between BCM and 10A fuse No. 25. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT eck continuity between remote keyless entry receiver harness connector and ground. Remote keyless entry receiver Ground M86 3 Yes me inspection result normal? S SS >> Replace remote keyless entry receiver. Refer to DLK-306, "Removal and Installation"	M80	119	Groun	d	No
Remote keyless entry receiver (-) Voltage (Approx) Connector Terminal (-) Voltage (Approx) M86 1 Ground Battery voltage me inspection result normal? ES >> GO TO 4. Solution D-1 >> Check 10A fuse No. 25 [located in fuse block J/B]. D-2 >> Repair or replace harness between BCM and 10A fuse No. 25. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT Eck continuity between remote keyless entry receiver harness connector and ground. Remote keyless entry receiver Ground Continui M86 3 Yes me inspection result normal? Es >> Replace remote keyless entry receiver.	IO >> Repair or re CHECK REMOTE KE	EYLESS ENTRY RE			d.
Remote keyless entry receiver (-) Voltage (Approx) Connector Terminal (-) Voltage (Approx) M86 1 Ground Battery voltage me inspection result normal? ES >> GO TO 4. Solution D-1 >> Check 10A fuse No. 25 [located in fuse block J/B]. D-2 >> Repair or replace harness between BCM and 10A fuse No. 25. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT Eck continuity between remote keyless entry receiver harness connector and ground. Remote keyless entry receiver Ground Continui M86 3 Yes me inspection result normal? Es >> Replace remote keyless entry receiver.		(+)			
Connector Terminal M86 1 Ground Battery voltage ne inspection result normal? ES >> GO TO 4. Description Description D-1 >> Check 10A fuse No. 25 [located in fuse block J/B]. Description Description Description D-2 >> Repair or replace harness between BCM and 10A fuse No. 25. Description Description Description CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT Example the entry receiver harness connector and ground. Continuity between remote keyless entry receiver harness connector and ground. Remote keyless entry receiver Ground Continuity for the entry of the entry o	Remote key		(-)		
ne inspection result normal? ES >> GO TO 4. D-1 >> Check 10A fuse No. 25 [located in fuse block J/B]. D-2 >> Repair or replace harness between BCM and 10A fuse No. 25. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT eck continuity between remote keyless entry receiver harness connector and ground. Remote keyless entry receiver Connector Terminal M86 3 re inspection result normal? ES >> Replace remote keyless entry receiver. Refer to DLK-306. "Removal and Installation"	Connector	Terminal			(Αρριοχ)
S >> GO TO 4. D-1 >> Check 10A fuse No. 25 [located in fuse block J/B]. D-2 >> Repair or replace harness between BCM and 10A fuse No. 25. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT eck continuity between remote keyless entry receiver harness connector and ground. Remote keyless entry receiver Connector Terminal M86 3 re inspection result normal? S >> Replace remote keyless entry receiver. Refer to DLK-306, "Removal and Installation"	M86	1	Groun	d	Battery voltage
Connector Terminal Ground Continuit M86 3 Yes me inspection result normal? Yes ES >> Replace remote keyless entry receiver. Refer to DLK-306, "Removal and Installation"	O-1 >> Check 10A O-2 >> Repair or re	fuse No. 25 [located place harness betwe	een BCM and 10Å fu		
Connector Terminal Ground M86 3 Yes ne inspection result normal? S ES >> Replace remote keyless entry receiver. Refer to DLK-306, "Removal and Installation"	IO-1 >> Check 10A IO-2 >> Repair or re CHECK REMOTE KE	fuse No. 25 [located place harness betwe EYLESS ENTRY RE	een BCM and 10Å fu CEIVER GROUND	CIRCUIT	und.
ne inspection result normal? ES >> Replace remote keyless entry receiver. Refer to <u>DLK-306, "Removal and Installation"</u>	IO-1 >> Check 10A IO-2 >> Repair or re CHECK REMOTE KE leck continuity betwee	fuse No. 25 [located place harness betwe EYLESS ENTRY RE en remote keyless er	een BCM and 10Å fu CEIVER GROUND	CIRCUIT	
ES >> Replace remote keyless entry receiver. Refer to <u>DLK-306</u> , "Removal and Installation"	IO-1 >> Check 10A IO-2 >> Repair or re CHECK REMOTE KE leck continuity betwee Remote k	fuse No. 25 [located place harness betwe EYLESS ENTRY RE en remote keyless er	een BCM and 10Å fu CEIVER GROUND htry receiver harness	CIRCUIT s connector and gro	und. Continuity
	O-1 >> Check 10A O-2 >> Repair or re CHECK REMOTE KE eck continuity betwee Remote k Connector M86	fuse No. 25 [located place harness betwee EYLESS ENTRY RE en remote keyless en reviewer Termina 3	een BCM and 10Å fu CEIVER GROUND htry receiver harness	CIRCUIT s connector and gro	Continuity

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:000000008267087

Regarding Wiring Diagram information, refer to DLK-71. "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.

	+)		
Connector	Automatic back door control module Connector Terminal		Voltage
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 d	oor control module		Continuity	
Connector	Terminal	Ground	Continuity	
B56	32	Giouna	Yes	
000	40		Tes	

Does continuity exist?

YES >> Inspection End.

NO >> Repair or replace harness.

BCM

BCM : Diagnosis Procedure

INFOID:000000008368314

Regarding Wiring Diagram information, refer to BCS-52, "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 nam	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 blow	vn?			
YES >> Replace the blow NO >> GO TO 2	vn fuse or fusible link after	repairing the affected cir	cuit.	
CHECK POWER SUPPL	Y CIRCUIT			
Disconnect BCM connec Check voltage between B	tor M81. 3CM connector M81 termi	nals 131, 139 and groun	d.	
BCM	1	Ground	Voltage	
Connector	Terminal	Ground	(Approx.)	
M81	131		Battery voltage	
M81 139			Dattery voltage	
the inspection result norma	al?			
YES >> GO TO 3	. .			
	e harness or connectors.			
. CHECK GROUND CIRCU				
heck continuity between BC	CM connector M81 termina	als 134, 143 and ground.		
BCM	Λ			
DON	Terminal	Ground	Continuity	
Connector				
Connector	134			
Connector M81		_	Yes	
	134 143	_	Yes	

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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 <u>DLK-160, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007913727

Regarding Wiring Diagram information, refer to DLK-71, "Wiring Diagram".

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM		()	Condition		Signal	
Connector	Terminal		Condition		(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 5 5 5 5 5 5 5 5 5 5 5 5 5	
	,	oround	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 5 5 5 5 5 5 5 5 5 5 5 5 5	

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-77, "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.

BCM		Outside key anteni	Continuity	
Connector	Connector Terminal		Connector Terminal	Continuity
 M80	114	D118	1	Yes
IVIOU	115	0110	2	165

3. Check continuity between BCM harness connector and ground.

INFOID:000000008487446

OUTSIDE KEY ANTENNA (PASSENGER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

	BCM			Continuity	
Connector		Terminal	Ground	Continuity	
M80		114	No		
		115			
Replace outside k Connect BCM cor	eplace harn KEY ANTEN ey antenna (nector and c	NA INPUT SIGNAL passenger side). (Ne utside key antenna	2 ew antenna or other (passenger side) cor d ground using oscill	nnector.	
(+)					
BCM	()	Condition		Signal (Reference value)	
Connector Termina				,	
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 0 0 0 0 0 0 0 0 0 0 0 0 0	
wild 114, 115 Ground erated	erated with ignition switch OFF	When Intelligent Key is not in the antenna detection area (The distance between In- telligent Key and an-	(V) 15 10 5 0		

NO >> Replace BCM. Refer to <u>BCS-77, "Removal and Installation"</u>.

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OUTSIDE KEY ANTENNA (DRIVER SIDE)

< 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-162, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007913729

Regarding Wiring Diagram information, refer to DLK-71, "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.

(+	+)				2.
BC	CM	(–)	Condition		Signal (Reference value)
Connector	Terminal				<pre></pre>
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 5 5 5 5 5 5 5 5 5 5 5 5 5
Moo	121, 122	Clound	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

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-77, "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.

E	BCM		Outside key antenna (driver side)		
Connector	Terminal	Connector	Terminal	Continuity	
M80	122	- D5	1	Yes	
IVIOU	121		2	Tes	

3. Check continuity between BCM harness connector and ground.

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INFOID:000000008487450

OUTSIDE KEY ANTENNA (DRIVER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

B	BCM		Continuity	A
Connector	Terminal	Ground	Continuity	
	122	Giouna	Net eviated	_
M80	121	-	Not existed	В
s the inspection result norm	al?			

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

- 1. Replace outside key antenna (driver side). (New antenna or other antenna)
- 2. Connect BCM connector and outside key antenna (driver side) connector.

3. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM			Condition		Signal	
BC	CM	(-)	Con	dition	(Reference value)	
Connector	Terminal					
			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 5 5 5 5 5 5 5 5 5 5 5 5 5	
M80	121, 122	Ground	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 → ← 500 ms	

Is the inspection result normal?

YES >> Replace outside key antenna (driver side). Refer to <u>DLK-304, "DRIVER SIDE : Removal and</u> <u>Installation"</u>.

NO >> Replace BCM. Refer to <u>BCS-77, "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-164, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007913731

Regarding Wiring Diagram information, refer to DLK-71, "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.

BC	+) CM	(-)	Condition		Signal (Reference value)
Connector	Terminal		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 0 500 ms JJKIA59556B
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 50 500 ms JMKIA5954GB

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-77, "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.

E	BCM		Outside key antenna (rear bumper)		
Connector	Terminal	Connector	Terminal	Continuity	
M20	102	B403	1	Yes	
IVI20	101	D405	2	165	

3. Check continuity between BCM harness connector and ground.

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INFOID:000000008487451

OUTSIDE KEY ANTENNA (REAR BUMPER)

< DTC/CIRCUIT DIAGNOSIS >

		BCM				
Co	onnector		Terminal	Ground	Continuity	
	M20		102	Ground	No	
	MZU		101		INO	
the inspect	ion result no	ormal?				
	GO TO 3.					
	Repair or rep					
CHECK O	UTSIDE KE	Y ANTENN	IA INPUT SIGNAL	2		
				antenna or other ant	enna)	
			antenna (rear bump	er) connector. I ground using oscille	anora	
Oneon Si	grial betwee			ground damy oscin	5500pc.	
(+)		Condition			
B	СМ	(-)			Signal (Reference value)	
Connector	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 0 0 0 0 0 0 0 0 0 0 0 0 0	
M20 101, 102 Grou		erated with ignition switch OFF	When Intelligent Key is not in the antenna detection area (The	(V) 15 10 5		

Is the inspection result normal?

YES >> Replace outside key antenna (rear bumper). Refer to <u>DLK-304, "REAR BUMPER : Removal and</u> <u>Installation"</u>.

NO >> Replace BCM. Refer to <u>BCS-77, "Removal and Installation"</u>.

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< DTC/CIRCUIT DIAGNOSIS >

DOOR SWITCH

Component Function Check

INFOID:000000007913733

1.CHECK FUNCTION

- 1. Select DOOR LOCK of BCM using CONSULT.
- 2. Select DOOR SW-DR, DOOR SW-AS, DOOR SW-RL, DOOR SW-RR, in DATA MONITOR mode.
- 3. Check that the function operates normally according to the following conditions.

Monitor item		Condition	Status
	Driver side door	Open	On
DOOR SW-DR	Driver side door	Closed	Off
DOOR SW-AS	Dessente side dess	Open	On
	Passenger side door	Closed	Off
DOOR SW-RL	Deer deer LU	Open	On
	Rear door LH	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-166, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007913734

Regarding Wiring Diagram information, refer to <u>DLK-71, "Wiring Diagram"</u>.

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)		
Conne	ector	Terminal			
Driver side	B8				
Passenger side	B108				(V) 15
Rear LH	B18				
Rear RH	B116	3	Ground	0 → → 10ms → → 10ms PKIB4960J 7.0 - 8.0 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				0	
Con	nector	Terminal	Connecto	r Termina	Continuity	
Driver side	B8			96		
Passenger side	B108	2	N400	94		
Rear LH	B18	3	M20	82	Yes	
Rear RH	B116			93		
Check continui	ty between door sw	itch harness co	onnector and g	round.		
	Door switch				Continuity	
	Connector	Te	rminal		Continuity	
Driver side	B8			Ground		
Passenger side	B108		3	Ground	No	
Rear LH	B18		U I		NO	
Rear RH	B116					
the inspection real ES >> GO TO O >> Replac		or switch. Refe	er to <u>DLK-301.</u>	"Removal and Ir	atallation"	
CHECK INTERN	ITTENT INCIDEN					
CHECK INTERN	AITTENT INCIDENT ermittent Incident". ion End.					
CHECK INTERN fer to <u>GI-53, "Inte</u> >> Inspect	AITTENT INCIDENT ermittent Incident". ion End. pection				INFOID:000000007	
CHECK INTERN fer to <u>GI-53, "Inte</u> >> Inspect omponent Ins CHECK DOOR S Turn ignition sw Disconnect ma	AITTENT INCIDENT <u>ermittent Incident"</u> . ion End. pection SWITCH	r vitch connector.				
CHECK INTERN fer to <u>GI-53, "Inte</u> >> Inspect omponent Ins CHECK DOOR S Turn ignition sw Disconnect ma	AITTENT INCIDENT <u>ermittent Incident"</u> . ion End. pection SWITCH vitch OFF. Ifunctioning door sw	r vitch connector.			INFCID:00000007	
CHECK INTERN fer to <u>GI-53, "Inte</u> >> Inspect omponent Ins CHECK DOOR S Turn ignition sw Disconnect ma	AITTENT INCIDENT ermittent Incident". ion End. pection SWITCH vitch OFF. Ifunctioning door sw ty between door sw	r vitch connector.				
CHECK INTERN fer to <u>GI-53, "Inte</u> >> Inspect omponent Ins CHECK DOOR S Turn ignition sw Disconnect ma	AITTENT INCIDENT ermittent Incident". ion End. pection SWITCH vitch OFF. Ifunctioning door sw ty between door sw Door switch	r vitch connector. itch terminals.	Cond		INFCID:00000007	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace malfunction door switch. Refer to <u>DLK-301, "Removal and Installation"</u>.

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< DTC/CIRCUIT DIAGNOSIS >

BACK DOOR SWITCH

Component Function Check

INFOID:000000007913736

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	Status	
DOOR SW-BK	Driver side door	Open	On
DOOK SW-BK		Closed	Off

Is the inspection result normal?

- YES >> Door switch is OK.
- NO >> Refer to <u>DLK-168, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007913737

Regarding Wiring Diagram information, refer to DLK-91, "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		(Reference value)	
D557	7	Ground	(V) 15 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	

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.

BACK DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Back doo	r lock assembly			
Connector	Terminal		Ground	Continuity
D557	7			No
s the inspection result nor YES >> Replace BCM. NO >> Repair or repla 3.CHECK BACK DOOR S	Refer to <u>BCS-77, "Re</u> ace harness.		allation".	
Check continuity between	back door lock assem	bly harness cor	nnector and groun	d.
Back doo	lock assembly			Continuity
Connector	Terminal		Ground	Continuity
D557	8			Yes
4 .CHECK BACK DOOR S Refer to <u>DLK-169, "Comp</u> o				
Is the inspection result nor YES >> GO TO 5. NO >> Replace back 5.CHECK INTERMITTEN Refer to GI-53. "Intermitter >> Inspection End Component Inspection	<u>mal?</u> door lock assembly. F T INCIDENT <u>at Incident"</u> . d. D N	Refer to <u>DLK-29</u>	6, "DOOR LOCK :	: Removal and Installation".
s the inspection result nor YES >> GO TO 5. NO >> Replace back 5.CHECK INTERMITTEN Refer to GI-53, "Intermitter >> Inspection End Component Inspection 1.CHECK BACK DOOR S 1. Turn ignition switch Of 2. Disconnect back door	mal? door lock assembly. F T INCIDENT <u>It Incident"</u> . d. D N SWITCH F. lock assembly connect	ctor.		
s the inspection result nor YES >> GO TO 5. NO >> Replace back 5.CHECK INTERMITTEN Refer to GI-53. "Intermitter >> Inspection End Component Inspection 1.CHECK BACK DOOR S 1. Turn ignition switch OF 2. Disconnect back door 3. Check continuity betwo	mal? door lock assembly. F T INCIDENT <u>at Incident"</u> . d. DN SWITCH FF. lock assembly connect een back door lock as assembly	ctor. sembly termina		
Is the inspection result nor YES >> GO TO 5. NO >> Replace back 5.CHECK INTERMITTEN Refer to GI-53. "Intermitter >> Inspection End Component Inspection 1.CHECK BACK DOOR S 1. Turn ignition switch OF 2. Disconnect back door 3. Check continuity betwo	mal? door lock assembly. F T INCIDENT <u>at Incident"</u> . d. DN SWITCH FF. lock assembly connect een back door lock as assembly	ctor. sembly termina	IS.	INFOID:000000079137
s the inspection result nor YES >> GO TO 5. NO >> Replace back 5.CHECK INTERMITTEN Refer to GI-53. "Intermitter >> Inspection End Component Inspection 1.CHECK BACK DOOR S 1. Turn ignition switch OF 2. Disconnect back door 3. Check continuity betwo	mal? door lock assembly. F T INCIDENT <u>Incident"</u> . d. DN SWITCH F. lock assembly connected een back door lock as assembly al	ctor. sembly termina	ls.	INFOID:000000079137:

< DTC/CIRCUIT DIAGNOSIS >

DOOR LOCK AND UNLOCK SWITCH DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:000000007913739

1.CHECK FUNCTION

- 1. Select DOOR LOCK of BCM using CONSULT.
- 2. Select CDL LOCK SW, CDL UNLOCK SW in DATA MONITOR mode.
- 3. Check that the function operates normally according to the following conditions.

Monitor item	Con	Status	
CDL LOCK SW		Lock	ON
	Door lock and unlock switch	Unlock	
CDL UNLOCK SW	Door lock and unlock switch	Lock	OFF
CDL UNLOCK SW		Unlock	ON

Is the inspection result normal?

- YES >> Door lock and unlock switch is OK.
- NO >> Refer to <u>DLK-170</u>, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

1.CHECK POWER WINDOW SWITCH

- 1. Turn ignition switch ON.
- 2. Check power window operation.

Does power window operate?

YES >> Replace power window main switch. Refer to <u>PWC-77</u>, "Removal and Installation".

NO >> Refer to <u>PWC-64, "Diagnosis Procedure"</u>.

PASSENGER SIDE

PASSENGER SIDE : Component Function Check

1.CHECK FUNCTION

- 1. Select DOOR LOCK of BCM using CONSULT.
- 2. Select CDL LOCK SW, CDL UNLOCK SW in DATA MONITOR mode.
- 3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
CDL LOCK SW		Lock	ON
CDL LOCK SW	Door lock and unlock switch	Unlock	OFF
CDL UNLOCK SW	- Door lock and unlock switch	Lock	OFF
CDE UNLOCK 3W		Unlock	ON

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.

NO >> Refer to <u>PWC-38</u>, "FRONT POWER WINDOW SWITCH (PASSENGER SIDE) : Diagnosis Proce-<u>dure"</u>.

PASSENGER SIDE : Diagnosis Procedure

1.CHECK POWER WINDOW SWITCH

1. Turn ignition switch ON.

2. Check power window operation.

Does power window operate?

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INFOID:000000007913741

INFOID:000000007913740

DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

YES	>> Replace front power window switch (passenger side). Refer to PWC-78, "Removal and Installa-
	tion".

NO >> Refer to <u>PWC-64</u>, "Diagnosis Procedure".

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< DTC/CIRCUIT DIAGNOSIS >

DOOR LOCK ACTUATOR DRIVER SIDE

DRIVER SIDE : Component Function Check

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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-172</u>, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

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Regarding Wiring Diagram information, refer to DLK-58, "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.

	+) k assembly LH	(-)	Condition		Voltage (Approx.)
Connector	Terminal				(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
D14	1	Ground	Door lock and unlock switch	Lock	12 V
	2	Ground	Door lock and unlock switch	Unlock	12 V

Is the inspection result normal?

YES >> Replace front door lock assembly LH. Refer to <u>DLK-289, "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	Connector Terminal		Continuity	
M81	135	D14	1	Yes	
	137	014	2	165	

3. Check continuity between BCM harness connector and ground.

E	BCM		Continuity	
Connector	Terminal	Ground	Continuity	
M81	135	Ground	No	
IVIO I	137		NO	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

1. Connect BCM connector.

2. Check voltage between BCM harness connector and ground.

(+	+)					
BCM		(–) Condition			Voltage (Approx.)	
Connector	Terminal	-			(, , , , , , , , , , , , , , , , , , ,	
M81	135	Ground	Door lock and unlock switch	Lock	12 V	
WIG I	137	Ground	Door lock and unlock switch	Unlock	12 V	
PASSENGÉ	R SIDE		7, "Removal and Installat	<u>ion</u> .		
PASSENGER	SIDE : C	omponent	Function Check		INFOID:00000000791374	
1.CHECK FUN	CTION					
		CM using CO				
		CTIVE TEST UNLK to chec	mode. ck that it works normally.			
Is the inspection						
	r lock actuato					
NO >> Refe	er to <u>DLK-173</u>	<u>8, "PASSENG</u>	ER SIDE : Diagnosis Pro	<u>cedure"</u> .		
PASSENGEF	R SIDE : D	iagnosis P	rocedure		INFOID:00000000791374	

Regarding Wiring Diagram information, refer to <u>DLK-58</u>, "Wiring Diagram".

1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+)			Condition		Voltage (Approx.)	L
Front door loo	Front door lock actuator RH					_
Connector	Terminal				(
D114	1	Ground	Door lock and unlock switch	Unlock	12 V	\mathbb{M}
D114	D114 2		Door lock and unlock switch	Lock	12 V	

Is the inspection result normal?

YES >> Replace front door lock actuator RH. Refer to <u>DLK-289, "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 lock actuator RH		
Connector	Terminal	Connector	Terminal	Continuity	
M81	130	D114	1	Yes	
	135	DI14	2	Tes	

3. Check continuity between BCM harness connector and ground.

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DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

E	BCM		Continuity
Connector	Terminal	Ground	Continuity
M81	130	Ground	No
IVIO I	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		Condition	
Connector	Terminal				Voltage (Approx.)
M81	130	Ground	Door lock and unlock switch	Unlock	12 V
IVIO I	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-77, "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-174, "REAR LH : Diagnosis Procedure"</u>.

REAR LH : Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>DLK-58, "Wiring Diagram"</u>.

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.

	+) ck actuator LH	(-) Condition Voltage		Condition	
Connector	Terminal	()	Condition		(Approx.)
D205	1	Ground	Door lock and unlock switch	Lock	12 V
6205	2	Ground	Unlock		12 V

Is the inspection result normal?

YES >> Replace rear door lock actuator LH. Refer to <u>DLK-296, "DOOR LOCK : Removal and Installation"</u>. NO >> GO TO 2.

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< DTC/CIRCUIT DIAGNOSIS >

		ors and fuel lid door ess connector and re		ector. tor LH harness connector.
B	СМ	Rear doo	or lock actuator LH	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M81	133	D205	2	Yes
M81	132	D205	1	165
Check continuity be	etween BCM harne	ess connector and g	round.	
	BCM			
Connector	Terr	minal		Continuity
M81	1	33	Ground	Na
M81	1	32	No	
	nector.	s connector and grou	ind.	
(+)				Voltage
BCM	(-)	Co	ndition	(Approx.)
	ninal			
	33 Ground 32	Door lock and unlock		12 V
s the inspection result			Lock	
YES >> Check for i	nternal short of ea CM. Refer to <u>BCS-</u> onent Functio	ch door lock actuato 77, "Removal and Ir n Check		INFQID:00000007913749
 Select "DOOR LOC Select DOOR LOC Touch ALL LOCK c the inspection result 	K in ACTIVE TES	T mode.	mally.	
YES >> Door lock a	actuator is OK.	I : Diagnosis Proced	ure".	
REAR RH · Diagn	osis Procedure	e		INFOID:000000007913750

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

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DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

(1	+)		Condition		Veltere	
Rear door loo	ck actuator RH	(—)			Condition (Approx.)	Voltage (Approx.)
Connector	Terminal				, , , ,	
D305	1	Ground	Door lock and unlock switch	Unlock	12 V	
D303	2	Ground	Door lock and unlock switch	Lock	12 V	

Is the inspection result normal?

YES >> Replace rear door lock actuator RH. Refer to <u>DLK-293, "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.

В	СМ	Rear door lock actuator RH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M81	133	D305	1	Yes
M81	132	5000	2	103

3. Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector	Terminal	Ground	Continuity
M81	133	Ground	No
M81	132		INU

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				(Approx.)
M81	133	Ground	Door lock and unlock switch	Unlock	12 V
M81	132	Gibunu		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-77, "Removal and Installation"</u>.

ATOR ck using CONSULT. E TEST mode. K to check that it works ator is OK. agnosis Procedure".		am".	INFOID:000000007913751
using CONSULT. E TEST mode. K to check that it works ator is OK. agnosis Procedure". ation, refer to <u>DLK-58, '</u>		am".	
E TEST mode. K to check that it works ator is OK. agnosis Procedure". ation, refer to <u>DLK-58, '</u>		am".	INFOID:00000007913752
E TEST mode. K to check that it works ator is OK. agnosis Procedure". ation, refer to <u>DLK-58, '</u>		am".	INFOID:00000007913752
ation, refer to <u>DLK-58, 1</u>	"Wiring Diagra	am".	INFOID:000000007913752
	"Wiring Diagra	am".	
	"Wiring Diagra	<u>am"</u> .	
K ACTUATOR INPUT	SIGNAL		
ctuator connector. I door lock actuator ha	arness connec	tor and ground.	
(-)	Condition		Voltage (Approx.)
	dla ala	Unlock	
round switch		Lock	12 V
		moval and Insta	<u>llation"</u> .
	11		
	and fuel lid doo	or lock actuator	harness connector.
	uel lid door lock a	ctuator	
		Terminal	Continuity
85 B20)	2	Yes
37		1	103
✓ harness connector a	and ground.		
			Continuity
Terminal	Groun	d	Continuity
135			No
137			
	I door lock actuator had (-) round Door lock and switch Dock actuator. Refer to K ACTUATOR CIRCU actuators connector. M harness connector a 135 137	I door lock actuator harness connect (-) Condition round Door lock and unlock switch Dock actuator. Refer to DLK-298, "Re K ACTUATOR CIRCUIT actuators connector. M harness connector and fuel lid door lock a inal Connector 15 B20 7 B20 M harness connector and ground. Terminal Groun 135 137	I door lock actuator harness connector and ground. (-) Condition round Door lock and unlock switch Unlock Lock Dook actuator. Refer to DLK-298, "Removal and Insta K ACTUATOR CIRCUIT actuators connector. M harness connector and fuel lid door lock actuator Image: second

3.CHECK BCM 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
	137	Giouna	DOOL OCK AND UNIOCK SWITCH	Unlock	12 V

Is the inspection result normal?

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

NO >> Replace BCM. Refer to <u>BCS-77, "Removal and Installation"</u>.

UNLOCK SENSOR

< DTC/CIRCUIT DIAGNOSIS >

UNLOCK SENSOR

Component Function Check

1.CHECK FUNCTION

- 1. Select INTELLIGENT KEY of BCM using CONSULT.
- 2. Select UNLK SEN-DR in DATA MONITORmode.

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

Monitor item	Condition		Status	
UNLK SEN -DR	Driver side door	Lock	OFF	D
		Unlock	ON	
Is the inspection result norr	nal?			

YES >> Unlock sensor is OK.

NO >> Refer to <u>DLK-179</u>, "Diagnosis Procedure".

Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-58, "Wiring Diagram".

1.CHECK UNLOCK SENSOR INPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect front door lock assembly LH connector.
- 3. Check signal between front door lock assembly LH harness connector and ground with oscilloscope.

(+) Front door lock assembly LH			Signal (Reference value)	
		(-)		
Connector	Terminal			
D14	3	Ground	(V) 15 10 5 0 + 10ms	Γ
inspection result po			PKIB4960J	_

Is the inspection result normal?

YES >> GO TO 3.

2.CHECK UNLOCK SENSOR CIRCUIT

1. Disconnect BCM connector.

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

BCM		Front door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M18	30	D14	3	Yes

3. Check continuity between BCM harness connector and ground.

BC	CM		Continuity
Connector Terminal		Ground	Continuity
M18	30		No

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UNLOCK SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-77, "Removal and Installation"</u>.

NO >> Repair or replace harness.

3. CHECK UNLOCK SENSOR GROUND CIRCUIT

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

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

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK UNLOCK SENSOR

Refer to DLK-180, "Component Inspection".

Is the inspection result normal?

- YES >> GO TO 5.
- NO >> Replace front door lock assembly LH. Refer to <u>DLK-289, "DOOR LOCK : Removal and Installa-</u> <u>tion"</u>.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:000000007913755

1. CHECK UNLOCK SENSOR

1. Turn ignition switch OFF.

- 2. Disconnect front door lock assembly LH connector.
- 3. Check continuity between front door lock assembly LH terminals.

Front door lock assembly LH		Condition		Continuity	
Terminal					
3	4	Driver side door	Unlock	Yes	
			Lock	No	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace front door lock assembly LH. Refer to <u>DLK-289, "DOOR LOCK : Removal and Installa-</u> tion".

< DTC/CIRCUIT DIAGNOSIS >

DOOR KEY CYLINDER SWITCH

А Component Function Check INFOID:000000007913756 В 1.CHECK FUNCTION 1. Select DOOR LOCK of BCM using CONSULT. 2. Select KEY CYL LK-SW, KEY CYL UN-SW in DATA MONITOR mode. 3. Check that the function operates normally according to the following conditions. Monitor item Condition Status ON Lock **KEY CYL LK-SW** Neutral / Unlock OFF Driver side door key cylinder E ON Unlock **KEY CYL UN-SW** Neutral / Lock OFF Is the inspection result normal? E >> Door key cylinder switch is OK. YES >> Refer to DLK-181, "Diagnosis Procedure". NO **Diagnosis** Procedure INFOID 000000007913757 Н Regarding Wiring Diagram information, refer to DLK-58, "Wiring Diagram". 1.CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL 1. Turn ignition switch OFF. 2. Disconnect front door lock assembly LH connector. Check voltage between front door lock assembly LH harness connector and ground. 3. (+) Voltage DLK Front door lock assembly LH (-) (Approx.) Connector Terminal 5 D14 Ground 5 V L 6 Is the inspection result normal? YES >> GO TO 3. Μ NO >> GO TO 2. 2.CHECK DOOR KEY CYLINDER SWITCH SIGNAL CIRCUIT Ν 1. Disconnect power window main switch connector. Check continuity between main power window and door lock/unlock switch harness connector and front 2. door lock assembly LH harness connector. Main power window and door lock/unlock switch Front door lock assembly LH Continuity Connector Terminal Connector Terminal 15 6 D402 D14 Yes 16 5 Check continuity between power window main switch harness connector and ground. 3.

DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Main power window and door lock/unlock switch			Continuity
Connector	Terminal	Ground	Continuity
D402	15	Ground	No
D402	16		INO

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to <u>PWC-77, "Removal and Instal-</u> lation".

NO >> Repair or replace harness.

$3. {\sf CHECK \ DOOR \ KEY \ CYLINDER \ SWITCH \ GROUND \ CIRCUIT}$

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-182, "Component Inspection".

Is the inspection result normal?

- YES >> GO TO 5.
- NO >> Replace front door lock assembly LH. Refer to <u>DLK-289, "DOOR LOCK : Removal and Installa-</u> tion".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:000000007913758

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			Unlock	Yes
5	5 4	Driver eide deer key eulinder	Neutral / Lock	No
6	4	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-289, "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		D
Is the inspection result normal?		
YES >> Remote keyless entry receive NO >> Refer to <u>DLK-183, "Diagnosis</u>		E
Diagnosis Procedure	INFOID	0:000000007913760
		F
Regarding Wiring Diagram information, re	fer to <u>DLK-71, "Wiring Diagram"</u> .	

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
Connector	Terminal			(Reference value)
M80	119	Ground	Standby state	(V) 6 4 2 0 0 0 0.25 0
MOU	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-77, "Removal and Installation"</u>.

NO >> GO TO 3.

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.

B	СМ	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.

(+) BCM		(-)	Continuity
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 keyles	s entry receiver	(-)	Voltage Approx.
Connector	Terminal		FF -
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 BCM and 10A fuse No. 25.

4. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

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

Remote keyless entry receiver			Continuity
Connector	Terminal	Ground	Continuity
M86	3		Yes

Is the inspection result normal?

YES >> Replace remote keyless entry receiver. Refer to <u>DLK-306</u>, "Removal and Installation".

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	D
REQ SW -DR	Driver side door request switch	Released	OFF	
REQ SW -AS		Pressed	ON	_
KEQ SW -AS	Passenger side door request switch	Released	OFF	

Is the inspection result normal?

YES >> Front door request switch is OK.

NO >> Refer to <u>DLK-185, "Diagnosis Procedure"</u>.

Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-58, "Wiring Diagram".

1. CHECK DOOR REQUEST SWITCH INPUT SIGNAL

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

(+)					0
Front door request switch		()	Voltage (Approx.)		
Con	nector	Terminal		(, , , , , , , , , , , , , , , , , , ,	DLK
Driver side	D15	1	Ground	12 V	
Passenger side	D115		Ground	12 V	I

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK DOOR REQUEST SWITCH CIRCUIT

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

Front door request switch			BCM		Continuity	0
Con	nector	Terminal	Connector	Terminal	Continuity	
Driver side	D15	1	M19	71	Yes	
Passenger side	D115		119	72	Tes	Р

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

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DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Front door request switch				Continuity
Connector Terminal		Ground	Continuity	
Driver side	D15	1	Gibunu	No
Passenger side	D115	1		NO

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-77, "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				Continuitu	
Connector		Terminal	Ground	Continuity	
Driver side	D15	2	Ground	Yes	
Passenger side	D115	2		tes	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK DOOR REQUEST SWITCH

Refer to DLK-186, "Component Inspection".

Is the inspection result normal?

- YES >> GO TO 5.
- NO >> Replace malfunctioning front outside handle assembly. Refer to <u>DLK-302</u>, "<u>DRIVER SIDE</u> : <u>Removal and Installation</u>" or <u>DLK-302</u>, "<u>PASSENGER SIDE</u> : <u>Removal and Installation</u>".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:000000007913763

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 re	Front door request switch		Condition	
Terminal				
1	2	Door request switch	Pressed	Yes
I	2	Door request switch	Released	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace malfunctioning front door request switch. Refer to <u>DLK-290, "OUTSIDE HANDLE :</u> <u>Removal and Installation"</u>.

BACK DOOR REQUEST SWITCH А **Component Function Check** INFOID:000000007913764 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. Monitor item Condition Status On Pressed **REQ SW-BD/TR** Back door request switch Released Off Is the inspection result normal? E YES >> Back door request switch is OK. NO >> Refer to DLK-187, "Diagnosis Procedure". Diagnosis Procedure INFOID:000000007913765 F Regarding Wiring Diagram information, refer to DLK-91, "Wiring Diagram". G CHECK BACK DOOR REQUEST SWITCH INPUT SIGNAL Н 1. Turn ignition switch OFF. 2. Disconnect back door opener switch connector. 3. Check voltage between back door opener switch harness connector and ground. (+) Voltage Back door opener switch (-) (Approx.) Connector Terminal D559 4 12 V Ground DLK Is the inspection result normal? YES >> GO TO 3. NO >> GO TO 2. L 2.CHECK BACK DOOR REQUEST SWITCH CIRCUIT 1. Disconnect BCM connector. 2. Check continuity between BCM harness connector and back door opener switch harness connector. Μ 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 M20 83 No Is the inspection result normal? >> Replace BCM. Refer to BCS-77, "Removal and Installation". YES NO >> Repair or replace harness. ${f 3}.$ check back door request switch ground circuit

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

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BACK DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Back door o	pener switch		Continuity	
Connector	Terminal	Ground	Continuity	
D559	3		Yes	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

CHECK BACK DOOR REQUEST SWITCH

Refer to DLK-188, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace back door opener switch. Refer to <u>DLK-302</u>, "BACK DOOR : Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-53, "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	r switch assembly	Condition	Continuity	
Terr	Terminal		Condition	
2	Δ	Pack door request switch	Pressed	Yes
3	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-302</u>, "<u>BACK DOOR</u> : <u>Removal and</u> <u>Installation</u>".

< DTC/CIRCUIT DIAGNOSIS > BACK DOOR OPENER SWITCH А **Component Function Check** INFOID:000000007913767 1.CHECK FUNCTION В 1. Select TRUNK of BCM using CONSULT. Select TR/BD OPEN SW in DATA MONITOR mode. 2. 3. Check that the function operates normally according to the following conditions. Monitor item Condition Status Pressed ON TR/BD OPEN SW Back door opener switch OFF Released Is the inspection result normal? E YES >> Back door opener switch is OK. NO >> Refer to DLK-189, "Diagnosis Procedure". **Diagnosis** Procedure INFOID:000000007913768 F Regarding Wiring Diagram information, refer to DLK-91, "Wiring Diagram". G 1.CHECK BACK DOOR OPEN INPUT SIGNAL Н 1. Turn ignition switch OFF. Disconnect back door opener switch connector. 2. 3. Check signal between back door opener switch harness connector and ground. (+) Signal Back door opener switch (-) (Reference value) Connector Terminal DLK D559 1 Ground L 10 ms JPMIA0012GE Μ Is the inspection result normal? YES >> GO TO 3. NO >> GO TO 2. **2.**CHECK BACK DOOR OPENER SWITCH CIRCUIT Ν 1. Disconnect BCM connector. 2. Check continuity between BCM harness connector and back door opener switch harness connector.

B	BCM		Back door opener switch	
Connector	Terminal	Connector	Terminal	Continuity
M19	80	D559	1	Yes

3. Check continuity between BCM harness connector and ground.

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M19	80		No

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BACK DOOR OPENER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-77, "Removal and Installation"</u>.

NO >> Repair or replace harness.

3. CHECK BACK DOOR OPENER SWITCH GROUND CIRCUIT

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

Back door opener switch			Continuity			
Connector	Terminal	Ground	Continuity			
D559	2	-	Yes			
Is the inspection result normal	?					
YES >> GO TO 4. NO >> Repair or replace harness.						
4.CHECK BACK DOOR OPE	NER SWITCH					
Refer to DLK-190, "Componer	t Inspection".					
Is the inspection result normal	<u>?</u>					

YES >> GO TO 5.

NO >> Replace back door opener switch. Refer to <u>DLK-312</u>, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:000000007913769

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door opener switch. Refer to <u>DLK-312, "Removal and Installation"</u>.

< DTC/CIRCUIT DIAGNOS	_		WARNI	NG BUZZER	
INTELLIGENT KEY		BUZZE	ER		
Component Function	Check				INFOID:000000007913770
	Check				INFOLD.00000001913170
1.CHECK FUNCTION					
 Select "INTELLIGENT K Select "OUTSIDE BUZZ 					
3. Touch "On" or "Off" to ch		s normally.			
<u>Is the inspection result norm</u> YES >> Intelligent Key v		SOK.			
NO >> Refer to <u>DLK-19</u>					
Diagnosis Procedure					INFOID:000000007913771
Regarding Wiring Diagram i	nformation, refer	to <u>DLK-71</u>	, "Wiring E	Diagram".	
1.CHECK FUSE					
 Turn ignition switch OFF Check 10 A fuse [No. 10] 		block (.I/B	:)]		
is the inspection result norm			,)].		
YES >> GO TO 2. NO >> Replace the blo	up fues after rer	airing the	offootod ai	rouit if a fuca ic bla	
2.CHECK INTELLIGENT K	•	-			WV11.
1. Disconnect Intelligent K					
2. Check voltage between				ss connector and g	ground.
(+)				
Intelligent Key	warning buzzer			(-)	Voltage (Approx.)
Connector	Termina	al			Detter
E1 Is the inspection result norm	1		(bround	Battery voltage
YES >> GO TO 3.					
NO >> Repair or replace					
3.CHECK INTELLIGENT K		BUZZER CI	IRCUIT		
 Disconnect BCM conne Check continuity betwee 		connector	and Intelli	gent Key warning I	ouzzer harness connector.
BCM		Ini	telligent Key	warning buzzer	
Connector	Terminal			Terminal	Continuity
M19	64	E		3	Yes
3. Check continuity betwee	en BCM harness	connector	and grour	nd.	
	СМ				
Connector	Termina	al		Ground	Continuity
M19	64				No
s the inspection result norm	al?	+			
YES >> GO TO 4. NO >> Repair or replace	o harness				
4. CHECK INTELLIGENT K					

INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

Refer to DLK-192, "Component Inspection".

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-77, "Removal and Installation".

NO >> Replace Intelligent Key warning buzzer. Refer to <u>DLK-305</u>, "Removal and Installation".

Component Inspection

INFOID:000000007913772

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		
Terr	Operation	
(+)	(-)	
1	3	Buzzer sounds

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace Intelligent Key warning buzzer. Refer to <u>DLK-305, "Removal and Installation"</u>.

< DTC/CIRCUIT DIAGNOSIS >	
INTELLIGENT KEY	
Component Function Check	INFOID:00000007913773
User Guide for additional information. • Check Intelligent Key relative signal • Confirm vehicle Intelligent Key anter 1 .CHECK FUNCTION 1. Select "INTELLIGENT KEY" of "B 2. Select "RKE OPE COUN1" in "DA	nna signal strength. BCM" using CONSULT.
Monitor item	Condition
RKE OPE COUN1	Check that the numerical value is changing while operating on the Intelligent Key.
Is the inspection result normal?	
YES >> Intelligent Key is OK. NO >> Refer to <u>DLK-193</u> , "Diagn	osis Procedure"
	<u>osis i rocedure</u> .
Diagnosis Procedure	INFOID:000000007913774

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.

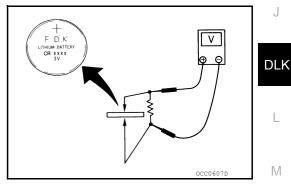
- Check Intelligent Key relative signal strength.
- · Confirm vehicle Intelligent Key antenna signal strength.
- 1.CHECK INTELLIGENT KEY BATTERY

Check by connecting a resistance (approximately 300Ω) so that the current value becomes about 10 mA. Refer to <u>DLK-307</u>, "<u>Removal and 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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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-194</u>, "Diagnosis Procedure".

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-93, "Removal and Installation".

NO >> Replace BCM. Refer to <u>BCS-77, "Removal and Installation"</u>.

INEOID:000000008272199

INFOID:00000008272198

< DTC/CIRCUIT DIAGNOSIS >	
KEY WARNING LAMP	٨
Component Function Check	А
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. 	С
Is the inspection result normal? YES >> Key warning lamp is OK. NO >> Refer to <u>DLK-195. "Diagnosis Procedure"</u> .	D
Diagnosis Procedure	
1.CHECK KEY WARNING LAMP	Ε
Refer to MWI-17, "CONSULT Function (METER/M&A)". Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	F
2. CHECK INTERMITTENT INCIDENT	G
Refer to GI-53. "Intermittent Incident".	
>> Inspection End.	Н
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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-196</u>, "Diagnosis Procedure".

Diagnosis Procedure

1.CHECK HAZARD SWITCH CIRCUIT

Refer to EXL-144, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

>> Inspection End.

INFOID:000000007913781

AUTOMATIC BACK DOOR CLOSE SWITCH

AUTOMATIC BACK DOOR CLOSE SWITCH

А **Component Function Check** INFOID:00000008272201 1. CHECK FUNCTION В 1. Select "AUTOMATIC BACK DOOR CONTROL MODULE" using CONSULT. Select "BK DOOR CL SW" in "DATA MONITOR" mode. 2. 3. Check that the function operates normally according to the following conditions. Monitor item Condition Status ON Pressed **BK DOOR CL SW** Automatic back door close switch OFF Released Is the inspection result normal? E YES >> Automatic back door close switch is OK. NO >> Refer to DLK-197, "Diagnosis Procedure". Diagnosis Procedure INFOID:000000008272202 F Regarding Wiring Diagram information, refer to <u>DLK-91</u>, "Wiring Diagram". G 1.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH INPUT SIGNAL Н 1. Turn ignition switch OFF. 2. Disconnect automatic back door close switch connector. 3. Check voltage between automatic back door close switch harness connector and ground. (+) Voltage Automatic back door close switch (-) (Approx.) Connector Terminal D560 1 16 V Ground Is the inspection result normal? >> GO TO 3. YES NO >> GO TO 2. L 2 . CHECK AUTOMATIC BACK DOOR CLOSE SWITCH CIRCUIT 1. Disconnect automatic back door control module connector. 2. Check continuity between automatic back door control module harness connector and automatic back Μ door close switch harness connector. Automatic back door control module Automatic back door close switch Continuity Ν Connector Connector Terminal Terminal B55 23 D560 1 Yes Check continuity between automatic back door control module harness connector and ground. 3. Automatic back door control module Continuity Connector Terminal Ground P B55 23 No Is the inspection result normal?

>> Replace automatic back door control module. Refer to DLK-308, "Removal and Installation". YES NO >> Repair or replace harness.

3.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH GROUND CIRCUIT

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AUTOMATIC BACK DOOR CLOSE SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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

Automatic back door	close switch		Continuity
Connector	Terminal	Ground	Continuity
D560	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-198, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace automatic back door close switch. Refer to <u>DLK-311, "Removal and Installation"</u>.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-53, "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	door close switch	Con	lition	Continuity
Terr	ninal	Cond		Continuity
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-311, "Removal and Installation"</u>.

AUTOMATIC BACK DOOR MAIN SWITCH

< DTC/CIRCUIT DIAGNO			H			
Component Function						A
	Oncon					INFOID.00000006272204
1.CHECK FUNCTION					Ŧ	B
 Select AUTOMATIC BA Select MAIN SW in DA 			E using C	ONSU	LI.	
3. Check that the function			the follov	ving cor	nditions.	С
Monitor item		Conditior	1			Status
			ON			ON D
MAIN SW	Automatic back do	or main switch	OFF			OFF
Is the inspection result norr	nal?					
YES >> Automatic back NO >> Refer to DLK-1						E
Diagnosis Procedure						INFOID:00000008272205
Diagnoolo i roocaare						INFOID.00000008272205
Regarding Wiring Diagram	information, refer	to <u>DLK-91, "W</u>	iring Diag	<u>gram"</u> .		G
4						
1. CHECK AUTOMATIC B	ACK DOOR MAIN	I SWITCH INP	UT SIGN	AL		Н
1. Turn ignition switch OF		11.1				
 Disconnect automatic t Check voltage betweer 				s conn	ector and aro	und
					cotor and gro	
	(+)					Voltago
Automatic back	door main switch		(-)			Voltage Approx.) J
Connector	Termin	al				
M185	1		Ground			16 – 8 V DL
Is the inspection result norr	nal?					
YES >> GO TO 3. NO >> GO TO 2.						
2. CHECK AUTOMATIC B	ACK DOOR MAIN	I SWITCH CIR	CUIT			L
1. Disconnect automatic t						
2. Check continuity betwe	een automatic ba			harnes	ss connector	and automatic back
door main switch harne	ess connector.					
Automatic back door	control module	Auton	natic back d	loor main	switch	
Connector	Terminal	Conne	ctor		Terminal	Continuity N
B55	10	M18	5		1	Yes
3. Check continuity betwee	en automatic bac	k door control	module c	onnecto	or and ground	i . O
Automatic	back door control mo	odule				Continuity
Connector		Terminal		Gro	ound	Continuity P
B55		10				No
Is the inspection result norr	nal?					
YES >> Replace autom		ntrol module. F	Refer to D	<u>LK-308</u>	, "Removal a	nd Installation".
NO >> Repair or repla			יירי סיאוור	דיייסס		
3.CHECK AUTOMATIC B		SWITCH GRO		RCOIL		

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-200, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace automatic back door main switch. Refer to <u>DLK-310, "Removal and Installation"</u>.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-53, "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	Condi	tion	Continuity
Ter	minal	Cond		Continuity
1	3	Automatic back door	ON	Yes
I	5	main switch	OFF	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace automatic back door main switch. Refer to <u>DLK-310. "Removal and Installation"</u>.

AUTOMATIC BACK DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS AUTOMATIC BACK I		ГСН			
Component Function (Check				A
1. CHECK FUNCTION					E
 Select AUTOMATIC BAC Select AUTO BD SW in D Check that the function operation of the second seco	ATA MONITOR r	node.	-		C
Monitor item		Condit	ion		Status
AUTO BD SW	Automatic bac	k door switch	Pressed		ON
			Released		OFF
Is the inspection result normalYES>> Automatic back dNO>> Refer to DLK-201	oor switch is OK.	cedure".			E
Diagnosis Procedure					INFOID:00000008272208
U					
Regarding Wiring Diagram inf	ormation refer to		ing Diagram"		
Regarding winnig Diagram in		<u>DLK-91, WII</u>	<u>ing Diagrann</u> .		(-
1. CHECK AUTOMATIC BAC					
	R DOOR SWITC		NAL		-
 Turn ignition switch OFF. Disconnect automatic bac 	k door switch co	nnector.			
3. Check voltage between a			ess connecto	r and ground.	1
(+)					
Automatic back	door switch		()		Voltage
Connector	Terminal				(Approx.)
M186	1		Ground		16 V
Is the inspection result normal	?	L			DL
YES >> GO TO 3.					
NO $>>$ GO TO 2.					L
2.CHECK AUTOMATIC BAC					
 Disconnect automatic bac Check continuity between 			-	ess connecto	r and automatic back
door switch harness conn					
Automatia baak daar aa	atrol modulo	Auto	motio book door	owitch	
Automatic back door co			matic back door	Terminal	Continuity
Connector B55	Terminal 22	Connect M186		1	Yes
3. Check continuity between			odule harnes	-	
5. Check continuity between				S CONNECTOR A	
Automatic back do	or control module				Continuity
Connector	Terminal		Ground		F
B55	22				No
Is the inspection result normal	?				
YES >> Replace automati		rol module. Re	efer to <u>DLK-30</u>	8. "Removal	and Installation".
NO >> Repair or replace					
3.CHECK AUTOMATIC BAC	K DOOK SWITC				

AUTOMATIC BACK DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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

Automatic back d	oor 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-202, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace automatic back door switch. Refer to <u>DLK-312, "Removal and Installation"</u>.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-53, "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	Conditic		Continuity
Terr	ninal	Conduic	<i>/</i> //	Continuity
1	2	Automatic back door switch	Pressed	Yes
I	2	Automatic back door switch	Released	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace automatic back door switch. Refer to <u>DLK-312. "Removal and Installation"</u>.

HALF LATCH SWITCH

omponent Function (JNECK			INFOID:000000007913792
.CHECK FUNCTION				
 Select AUTOMATIC BAG Select HALF LATCH SW Check that the function of 	/ in DATA MONITOR mo	de.		
Monitor item		Condition		Status
HALF LATCH SW	Back door	Fully closed/H	lalf latch	OFF
		Open		ON
		<u>-</u> .		
Diagnosis Procedure				INFOID:000000007913793
1. Turn ignition switch OFF				
	ck assembly connector. back door lock assembly	harness connecto	or and ground.	
3. Check voltage between	back door lock assembly		or and ground.	Voltage
3. Check voltage between (-) Back door lock	back door lock assembly	harness connecto	or and ground.	Voltage (Approx.)
3. Check voltage between (-) Back door lock Connector D557	back door lock assembly assembly Terminal 6			-
3. Check voltage between (-) Back door lock Connector D557 s the inspection result normation YES >> GO TO 3. NO >> GO TO 3. NO >> GO TO 2. 2.CHECK HALF LATCH SV 1. Disconnect automatic back	A assembly Terminal 6 al? VITCH CIRCUIT ack door control module of	(–) Ground	E	(Approx.)
3. Check voltage between (-) Back door lock Connector D557 Is the inspection result normation YES >> GO TO 3. NO >> GO TO 2. 2.CHECK HALF LATCH SV 1. Disconnect automatic back	A assembly Terminal 6 al? VITCH CIRCUIT ack door control module of an automatic back door c	(–) Ground	ness connector.	(Approx.) attery voltage
3. Check voltage between (-) Back door lock Connector D557 Is the inspection result normatic VES >> GO TO 3. NO >> GO TO 2. 2.CHECK HALF LATCH SV 1. Disconnect automatic back 2. Check continuity between	A assembly Terminal 6 al? VITCH CIRCUIT ack door control module of an automatic back door c	(–) Ground connector. ontrol module harr	ness connector.	(Approx.)
3. Check voltage between (-) Back door lock Connector D557 Is the inspection result norms YES >> GO TO 3. NO >> GO TO 3. NO >> GO TO 2. 2.CHECK HALF LATCH SV 1. Disconnect automatic back Connector Automatic back door co Connector B55	back door lock assembly assembly Terminal 6 al? VITCH CIRCUIT ack door control module of an automatic back door control module Terminal 3	(–) Ground connector. ontrol module harr Back door lock Connector D557	ness connector.	(Approx.) attery voltage Continuity Yes
3. Check voltage between (-) Back door lock Connector D557 s the inspection result normation YES YES S GO TO 3. NO Pack door lock Back door lock Connector D557 S the inspection result normatic YES YES GO TO 3. NO Pack HALF LATCH SV 1. Disconnect automatic back door compared Automatic back door compared B55	back door lock assembly assembly Terminal 6 al? VITCH CIRCUIT ack door control module of an automatic back door control module Terminal 3	(–) Ground connector. ontrol module harr Back door lock Connector D557	ness connector.	(Approx.) attery voltage Continuity Yes
3. Check voltage between (-) Back door lock Connector D557 s the inspection result norms YES YES S GO TO 3. NO Pack door lock 2. CHECK HALF LATCH SV 1. Disconnect automatic back door continuity between	back door lock assembly Terminal 6 al? VITCH CIRCUIT ack door control module of an automatic back door control module Terminal 3 en automatic back door control module	(-) Ground connector. ontrol module harr Back door lock Connector D557 ontrol module harr	ness connector.	(Approx.) attery voltage Continuity Yes
3. Check voltage between (-) Back door lock Connector D557 Is the inspection result norm YES >> GO TO 3. NO >> GO TO 2. 2.CHECK HALF LATCH SV 1. Disconnect automatic back Connector Automatic back door ca Connector B55 3. Check continuity betwee Automatic back door ca Connector B55 Check continuity betwee Check continuity check continuity betwee Check continuity check continuity check continuity check continuity	A assembly Terminal 6 al? VITCH CIRCUIT Ack door control module of an automatic back door control module Terminal 3 en automatic back door control module Terminal 3 en automatic back door control module Terminal	(–) Ground connector. ontrol module harr Back door lock Connector D557	ness connector.	(Approx.) attery voltage Continuity Yes d ground. Continuity
3. Check voltage between (-) Back door lock Connector D557 Is the inspection result norms YES YES S GO TO 3. NO Pack door lock 2. CHECK HALF LATCH SV 1. Disconnect automatic back door continuity between	back door lock assembly Terminal 6 al? VITCH CIRCUIT ack door control module cen automatic back door control module Terminal 3 en automatic back door co door control module Terminal 3 an automatic back door co door control module 3 an automatic back door co door control module 3 an automatic back door co door control module 3 an automatic back door co door control module 3 an automatic back door co door control module 3 an automatic back door co door control module 3 an automatic back door co door control module 3 an automatic back door co and control module 3 an automatic back door co an automatic back d	(-) Ground connector. ontrol module harr Back door lock Connector D557 ontrol module harr	ness connector.	(Approx.) attery voltage Continuity Yes d ground.

< DTC/CIRCUIT DIAGNOSIS >

HALF LATCH SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Back door lock	assembly		Continuity			
Connector	Terminal	Ground				
D557	3		Yes			
the inspection result normal?						

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK HALF LATCH SWITCH

Refer to DLK-204, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace back door lock assembly. Refer to <u>DLK-296, "DOOR LOCK : Removal and Installation"</u>.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

>> Inspection End.

Component Inspection

COMPONENT INSPECTION

1.CHECK HALF LATCH SWITCH

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

Back door loc Termi	Condition		Continuity	
	8	Back door	Open	Yes
6			Fully closed/Half latch	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to <u>DLK-296, "DOOR LOCK : Removal and Installation"</u>.

< DTC/CIRCUIT	DIAGNOSIS >
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TOUCH SENSOR

RH

RH: Component Function Check

1.CHECK FUNCTION

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

Monitor item		Condition		D
TOUCH SEN RH	Touch sensor RH	Other than below	OFF	-
TOUCH SEN RH		Detect obstruction	ON	
Is the inspection result norm	al?			
YES >> Touch sensor R NO >> Refer to <u>DLK-20</u>	H is OK. <u>15, "RH : Diagnosis Pro</u>	ocedure".		F

RH : Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-91, "Wiring Diagram".

1. CHECK TOUCH SENSOR INPUT SIGNAL

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

-	(+)	(—)	Condition		I mod- Condition Voltage (Approx.)			J
-	Touch se	ensor RH		door control mod- Ile						
-	Connector	Terminal	Connector	Terminal				DLK		
-	D555	1	B55	13	Touch sensor	Detect obstruc- tion	1.8 – 5 V			
_	D355	Ι	600	15	RH	Other than above	2.72 – 7.27 V	L		

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK TOUCH SENSOR RH CIRCUIT

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

Automatic back do	or control module	Touch se	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	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-308</u>, "Removal and Installation".

NO >> Repair or replace harness.

3. CHECK TOUCH SENSOR RH GROND CIRCUIT

1. Disconnect automatic back door control module and touch sensor RH connector.

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

Automatic back do	or control module	Touch se	Continuity	
Connector	Terminal	erminal Connector Terminal		
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.

Automatic back of	(+) loor 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.

CHECK TOUCH SENSOR RH

Refer to DLK-206, "RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace touch sensor RH. Refer to <u>DLK-297, "TOUCH SENSOR : Removal and Installation"</u>.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-53, "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 sensor RH			Condition		Resistance		
		Terminal					(Approx.)	
	1		2 Т	Touch sensor RH		380 – 420 kΩ		
					Other than al	pove	0.95 – 1.05 kΩ	
		n result norm	<u>al?</u>					
YES		pection End.						
NO .H	>> Re	place touch s	ensor RH. Re	eter to <u>DLK-29</u>	7, TOUCH SENS	SOR : Remova	al and Installation".	
.11								
.H : C	Compo	nent Fund	tion Chec	:k			INFOID:00000008272213	
-		NCTION						
. Se 2. Se	elect AU			ONTROL MOD NITOR mode.	ULE using CONS	SULT.		
					to the following	conditions.		
					, to the renering			
	Moni	tor item		C	ondition		Status	
TOI	TOUCH SEN LH Touch sensor LH		Other than below		OFF			
100		Detect obstruction ON						
s the i	nspectio	n result norm	al?					
YES	-	uch sensor LH			_			
NO	>> Re	fer to <u>DLK-20</u>	<u>7, "LH : Diag</u>	nosis Procedu	<u>re"</u> .			
.H : C	Diagno	sis Proced	ure				INFOID:00000008272214	
Dogoro	hina \//iri	na Dioarom ir	formation re	for to DLK 01				
tegart	ang win	ng Diagram i	normation, re	er to <u>DLK-91.</u>	"Wiring Diagram			
4								
I.CHE	ECK TO	UCH SENSO	R INPUT SIG	NAL				
		on switch OFF						
		-	touch sensor	LH harness co	onnector and auto	omatic back do	oor control module har-	
ne	ss conne							
	(+)		(-)				
	Touch sensor LH Automatic			k door control mod	d-	dition	Voltage	
				ule	Condition (Approx.)			
Сс	onnector	Terminal	Connector	Terminal				
						Detect obstruc	- 1.8 – 5 V	
	D556	1	B55	13	Touch sensor	tion		
					LH	Other than		

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 d	oor control module	Touch sens	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 de	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-308</u>, "<u>Removal and Installation</u>".

NO >> Repair or replace harness.

3.CHECK TOUCH SENSOR LH GROND CIRCUIT

- 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.

Automatic back c	(+) Automatic back door 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-209, "LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace touch sensor LH. Refer to <u>DLK-297, "TOUCH SENSOR : Removal and Installation"</u>.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-53. "Intermittent Incident".

>> Inspection End.

< DTC/CIRCUIT DIAGNOSIS >

LH : Component Inspection

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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 se	ensor LH	C	ondition	Resistance	С
	Terr	ninal			(Approx.)	
_	1	2	Touch sensor LH	Detect obstruction	380 – 420 kΩ	
	I	2		Other than above	0.95 – 1.05 kΩ	D

Is the inspection result normal?

YES >> Inspection End.

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< DTC/CIRCUIT DIAGNOSIS >

SPINDLE MOTOR RH

RH : Diagnosis Procedure

INFOID:000000008272216

Regarding Wiring Diagram information, refer to DLK-91. "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.

	+) • unit RH	(-)	Con	dition	Voltage (Approx.)
Connector	Terminal				
B162	9	Ground	Back door	Auto open opera- tion	16.75 – 8.5 V
5102	2	Ground	Back door	Auto close opera- tion	

Is the inspection result normal?

YES >> Replace spindle unit RH. Refer to <u>DLK-286, "SPINDLE UNIT : Removal and Installation"</u>. NO >> GO TO 2.

2. CHECK SPINDLE MOTOR CIRCUIT

1. Disconnect automatic back door control module connector.

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

Automatic back c	loor control module	Spindle unit RH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B56	29	B162	9	N/a a
800	36	<u>Б102</u>	2	Yes

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

Automatic back de	oor control module		Continuity
Connector	Terminal	Ground	Continuity
B56	29	Ground	Na
ВЗО	36		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-308</u>, "<u>Removal and Installation</u>". NO >> Repair or replace harness.

LH

LH : Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-91, "Wiring Diagram".

1. CHECK SPINDLE MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.

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SPINDLE MOTOR

< DTC/CIRCUIT DIAGNOSIS >

2. Disconnect spindle unit LH connector.

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

	r+) e unit LH	(-)	C	Condition		В
Connector	Terminal				(Approx.)	
070	9	Ground	Back door	Auto open opera- tion		С
B70	2	Ground	Back 0001	Auto close opera- tion	16.75 – 8.5 V	
inspection re	cult normal?	1	1	1		Γ

Is the inspection result normal?

YES	>> Replace spindle unit LH. Refer to <u>DLK-286, "SPINDLE UNIT : Removal and Installation"</u> .
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 F harness connector.

Continuity	Spindle unit LH		Automatic back door control module	
Continuity	Terminal	Connector	Terminal	Connector
Yes	9	B70	27	B56
105	2	0/0	34	000

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

Automatic back d	Automatic back door control module		Continuity	I
Connector	Terminal	Cround	Continuity	
DEC	27	Ground	No	
B56	34		No	J

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-308, "Removal and Installation". NO >> Repair or replace harness.

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BACK DOOR CLOSURE MOTOR

Diagnosis Procedure

INFOID:00000008272218

Regarding Wiring Diagram information, refer to DLK-91, "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 lock assembly		(-)	Condition		Voltage (Approx.)
Connector	Terminal				()
D557	1	Ground	Ground Back door opener		16 – 7.8 V
0557	2	Giouna	switch	Released	0 V

Is the inspection result normal?

YES >> Replace back door lock assembly. Refer to <u>DLK-296, "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	0007	2	165

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-308, "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:00000008272219 B Regarding Wiring Diagram information, refer to <u>DLK-91, "Wiring Diagram"</u>. 1. CHECK BACK DOOR WARNING CHIME POWER SUPPLY CIRCUIT 1. Turn ignition switch OFF. Disconnect back door warning chime connector. 2. 3. Check voltage between back door warning chime harness connector and ground. (+) E Voltage Back door warning chime (-) (Approx.) Terminal Connector E B402 1 Ground Battery voltage Is the inspection result normal? YES >> GO TO 3. G 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 B402 37 1 Yes 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 DLK-308, "Removal and Installation". NO >> Repair or replace harness. Μ ${f 3}.$ CHECK BACK DOOR WARNING CHIME GROUND CIRCUIT Check continuity between back door warning chime harness connector and ground. Ν Back door warning chime Continuity Terminal Connector Ground B402 2 Yes Is the inspection result normal? YFS >> GO TO 4. >> Repair or replace harness. NO 4.CHECK BACK DOOR WARNING CHIME Refer to DLK-214, "Component Inspection". Is the inspection result normal? YES >> GO TO 5.

NO >> Replace back door warning chime. Refer to DLK-309, "Removal and Installation".

AUTOMATIC BACK DOOR WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

5. CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:000000008272220

1.CHECK BACK DOOR WARNING CHIME

1. Turn ignition switch OFF.

2. Disconnect back door warning chime connector.

3. Check battery power supply directly to back door warning chime terminals and check the operation.

	back door warning chime	
Operation	al	Termina
	(-)	(+)
Chime sounds	2	1

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door warning chime. Refer to <u>DLK-309, "Removal and Installation"</u>.

GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS > GROUND CIRCUIT

Diagnosis Procedure

INFOID:000000007913805

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Regarding Wiring Diagram information, refer to <u>DLK-91, "Wiring Diagram"</u>.

1. CHECK GROUND CIRCUIT

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

	Automatic back door control module			Continuity	E
	Connector	Terminal	Ground	Continuity	
	DEC	32	Ground	Vee	-
_	B56	40		Yes	F

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-308</u>, "<u>Removal and Installation</u>".

NO >> Repair or replace harness.

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< DTC/CIRCUIT DIAGNOSIS >

HOOD SWITCH

Component Function Check

INFOID:000000008282672

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-216</u>, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:000000008282673

Regarding Wiring Diagram information, refer to DLK-71, "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		(, , , , , , , , , , , , , , , , , , ,	
E218	94	Ground	12	
LZ 10	96	Giðunu	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.

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

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

IPDM E/R			Continuity
Connector	Terminal	Ground	Continuity
E218	94	Ground	No
2210	96		INU

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.

Ho	od switch			Continuity	
Connector	Terminal	l	Ground	Continuity	
E205	3			Yes	
the inspection result no	ormal?				
YES >> GO TO 4.					
NO >> Repair or rep					
CHECK HOOD SWIT					
efer to <u>DLK-217, "Comp</u>					
<u>s the inspection result no</u> YES >> GO TO 5.	ormal?				
	d switch. Refer to	DLK-287. "HOOD	LOCK CONTROL	CABLE : Removal and Insta	
lation".					
CHECK INTERMITTE	NT INCIDENT				
efer to GI-53, "Intermitte	ent Incident".				
>> Inspection E	nd.				
>> Inspection E				INFOID:000000082824	
·	ion			INFOID:000000082820	
CHECK HOOD SWIT	ion СН			INFOID:000000082820	
CHECK HOOD SWITE Turn ignition switch C Disconnect hood swi	ion CH DFF. tch connector.			INFCID:000000082820	
CHECK HOOD SWIT	ion CH DFF. tch connector.	terminals.		INFOID:00000008282	
CHECK HOOD SWITE	iON CH DFF. tch connector. ween hood switch	terminals.	Condition		
CHECK HOOD SWITC CHECK HOOD SWITC Turn ignition switch (Disconnect hood swi Check continuity bet	ion CH DFF. tch connector. ween hood switch	terminals.	Condition	INFOID:000000082824	
CHECK HOOD SWITC CHECK HOOD SWITC Turn ignition switch (Disconnect hood swi Check continuity betw Hood sw Termin	ion CH DFF. tch connector. ween hood switch vitch	terminals.	Condition		
CHECK HOOD SWITC . CHECK HOOD SWITC . Turn ignition switch C . Disconnect hood swi . Check continuity betw Hood sw	ion CH DFF. tch connector. ween hood switch	_	I	Continuity	
CHECK HOOD SWITC CHECK HOOD SWITC Turn ignition switch (Disconnect hood swi Check continuity betw Hood sw Termin	ion CH DFF. tch connector. ween hood switch vitch	terminals. 	Press	Continuity No	

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< 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-218</u>, "Diagnosis Procedure".

3.CHECK TRANSMITTER

Check transmitter with Tool*.

*:For details, refer to Technical Service Bulletin.

Is the inspection result normal?

- YES >> Receiver or hand-held transmitter malfunction, not vehicle related.
- NO >> Replace auto anti-dazzling inside mirror (homelink[®] universal transceiver). Refer to <u>MIR-27.</u> <u>"Removal and Installation"</u>.

Diagnosis Procedure

INFOID:000000008317659

INFOID:00000008317660

Regarding Wiring Diagram information, refer to DLK-102. "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.)
R10	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 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
the inspection result normal?			
YES >> GO TO 3.			
NO >> Repair harness.			
CHECK INTERMITTENT INCIDENT			
efer to GI-53, "Intermittent Incident".			
>> Inspection End.			

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SYMPTOM DIAGNOSIS INTELLIGENT KEY SYSTEM SYMPTOMS

Symptom Table

CAUTION:

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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-221</u>. Drivers side door inoperative. Refer to <u>DLK-221</u>. Passenger side door inoperative. Refer to <u>DLK-222</u>. Rear LH door inoperative. Refer to <u>DLK-222</u>. Rear RH door inoperative. Refer to <u>DLK-222</u>.
Door does not lock/unlock with door key cylinder operation.	Refer to <u>DLK-224</u> .
Door does not lock/unlock with door request switch.	 All door request switches. Refer to <u>DLK-225</u>. Drivers side door request switch. Refer to <u>DLK-226</u>. Passenger side door request switch. Refer to <u>DLK-226</u>. Back door request switch. Refer to <u>DLK-226</u>.
Door does not lock/unlock with Intelligent Key.	Refer to DLK-228.
Fuel lid lock actuator does not operate.	Refer to <u>DLK-229</u> .
Ignition position warning function does not operate.	Refer to DLK-230.
Selective unlock function does not operate.	Refer to DLK-231.
Auto door lock operation does not operate.	Refer to DLK-232.
Vehicle speed sensing auto lock operation does not operate.	Refer to DLK-233.
GN OFF interlock door unlock function does not operate.	Refer to DLK-234.
P (Park) range interlock door lock/unlock function does not operate.	Refer to <u>DLK-235</u> .
Hazard and horn reminder does not operate.	Refer to <u>DLK-236</u> .
Hazard and buzzer reminder does not operate.	Refer to DLK-237.
Welcome light function does not operate.	Refer to DLK-239.
OFF position warning does not operate.	Refer to <u>DLK-241</u> .
ACC warning does not operate.	Refer to <u>DLK-242</u> .
Take away warning does not operate.	Refer to DLK-243.
Key ID warning does not operate.	Refer to <u>DLK-245</u> .
Intelligent Key low battery warning does not operate.	Refer to DLK-246.
Door lock operation warning does not operate.	Refer to <u>DLK-247</u> .
Automatic back door operation does not operate.	 All switches. Refer to <u>DLK-248</u>. Automatic back door switch. Refer to <u>DLK-249</u>. Automatic back door close switch. Refer to <u>DLK-249</u>. Intelligent Key. Refer to <u>DLK-250</u>. Back door opener switch. Refer to <u>DLK-250</u>. Open/closure function. Refer to <u>DLK-251</u>. Open function. Refer to <u>DLK-252</u>. Closure function. Refer to <u>DLK-253</u>.
Automatic back door warning does not operate.	Refer to <u>DLK-254</u> .
Automatic back door functions do not cancel.	Refer to DLK-256.
Automatic back door anti-pinch functions do not operate.	Refer to <u>DLK-257</u> .
Integrated homelink transmitter does not operate.	Refer to DLK-258.
Squeak and rattle trouble diagnosis.	Refer to DLK-261.

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

< SYMPTOM DIAGNOSIS > DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK Δ SWITCH ALL DOOR В ALL DOOR : Description INFOID:000000007913808 All doors do not lock/unlock using door lock and unlock switch. ALL DOOR : Diagnosis Procedure INFOID-000000007913809 1. CHECK DOOR LOCK AND UNLOCK SWITCH D Check door lock and unlock switch. Driver side: Refer to <u>DLK-170, "DRIVER SIDE : Component Function Check"</u>. • Passenger side: Refer to DLK-170, "PASSENGER SIDE : Component Function Check". E Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. E 2. CHECK DOOR LOCK ACTUATOR Check front door lock assembly (driver side). G Refer to DLK-172, "DRIVER SIDE : Component Function Check". Is the inspection result normal? YES >> GO TO 3. Н NO >> Repair or replace the malfunctioning parts. **3.**REPLACE BCM · Replace BCM. Refer to BCS-77, "Removal and Installation". · Confirm the operation after replacement. Is the result normal? YES >> Inspection End. >> Check intermittent incident. Refer to GI-53, "Intermittent Incident". NO DRIVER SIDE DLK DRIVER SIDE : Description INFOID:000000007913810 Driver side door does not lock/unlock using door lock and unlock switch. **DRIVER SIDE : Diagnosis Procedure** INFOID:000000007913811 **1**.CHECK DOOR LOCK ACTUATOR Μ Check front door lock assembly (driver side). Refer to DLK-172, "DRIVER SIDE : Component Function Check". Is the inspection result normal? Ν YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.REPLACE BCM Replace BCM. Refer to BCS-77, "Removal and Installation". · Confirm the operation after replacement. Ρ Is the result normal? YES >> Inspection End. NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident". PASSENGER SIDE

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

< SYMPTOM DIAGNOSIS >	
PASSENGER SIDE : Description	INFOID:000000007913812
Passenger side door does not lock/unlock using door lock and unlock switch.	
PASSENGER SIDE : Diagnosis Procedure	INFOID:000000007913813
1. CHECK DOOR LOCK ACTUATOR	
Check front door lock assembly (passenger side). Refer to <u>DLK-173, "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-77, "Removal and Installation"</u> . Confirm the exercise ofter replacement.	
 Confirm the operation after replacement. <u>Is the result normal?</u> 	
YES >> Inspection End.	
NO >> Check intermittent incident. Refer to <u>GI-53, "Intermittent Incident"</u> . REAR LH	
REAR LH : Description	INFOID:000000007913814
Rear LH side door does not lock/unlock using door lock and unlock switch.	
REAR LH : Diagnosis Procedure	INFOID:000000007913815
1.CHECK DOOR LOCK ACTUATOR	
Check rear door lock assembly LH. Refer to <u>DLK-174, "REAR LH : 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-77, "Removal and Installation"</u> .	
 Confirm the operation after replacement. Is the result normal? 	
YES >> Inspection End.	
NO >> Check intermittent incident. Refer to <u>GI-53, "Intermittent Incident"</u> .	
REAR RH	
REAR RH : Description	INFOID:000000007913816
Rear RH side door does not lock/unlock using door lock and unlock switch.	
REAR RH : Diagnosis Procedure	INFOID:000000007913817
1. CHECK DOOR LOCK ACTUATOR	
Check rear door lock assembly RH. Refer to <u>DLK-175, "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 <u>BCS-77, "Removal and Installation"</u> .	

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

< SYM	PTOM DIAGNOSIS >	
Confi	rm the operation after replacement.	
Is the re	esult normal?	А
YES	>> Inspection End.	
NO	>> Check intermittent incident. Refer to GI-53, "Intermittent Incident".	
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DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERATION < SYMPTOM DIAGNOSIS >

DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERA-TION

Diagnosis Procedure

INFOID:000000007913818

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-221, "ALL DOOR : Diagnosis Procedure"</u>.

2. CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.

Refer to DLK-181, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.REPLACE BCM

• Replace BCM. Refer to BCS-77, "Removal and Installation".

• Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to <u>GI-53, "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	A
ALL DOOR REQUEST SWITCHES : Description	913819 B
All doors do not lock/unlock using all door request switches.	
ALL DOOR REQUEST SWITCHES : Diagnosis Procedure	913820
1.CHECK REMOTE KEYLESS ENTRY FUNCTION	
Check remote keyless entry function.	D
<u>Does door lock/unlock with Intelligent Key button?</u> YES >> GO TO 2.	
NO >> Refer to <u>DLK-183, "Component Function Check"</u> .	E
2. CHECK "LOCK/UNLOCK BY I-KEY" SETTING IN "WORK SUPPORT"	_
 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-19</u>, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)". 	F
Is the inspection result normal?	G
YES >> GO TO 3. NO >> Set "ON" in "LOCK/UNLOCK BY I-KEY".	
3. CHECK DOOR SWITCH	Н
Check door switch. Refer to DLK-166, "Component Function Check".	
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.	
 Instrument center: Refer to <u>DLK-145, "DTC Logic"</u>. Console: Refer to <u>DLK-147, "DTC Logic"</u>. 	DLK
Luggage room: Refer to <u>DLK-149, "DTC Logic"</u> .	
<u>Is the inspection result normal?</u> YES >> GO TO 5.	L
NO >> Repair or replace the malfunctioning parts.	
5. CHECK OUTSIDE KEY ANTENNA	Μ
Check outside key antenna.	
 Driver side: Refer to <u>DLK-162</u>, "<u>Component Function Check</u>". Passenger side: Refer to <u>DLK-160</u>, "<u>Component Function Check</u>". Back door: Refer to <u>DLK-164</u>, "<u>Component Function Check</u>". 	Ν
Is the inspection result normal?	
YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts.	0
NO >> Repair or replace the malfunctioning parts. 6.CHECK BACK DOOR SWITCH	
Check back door switch.	— P
Refer to <u>DLK-168, "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 SWIT < SYMPTOM DIAGNOSIS >	ГСН
Replace BCM. Refer to <u>BCS-77, "Removal and Installation"</u> . Confirm the operation after replacement.	
Is the result normal?	
YES >> Inspection End.	
NO >> Check intermittent incident. Refer to <u>GI-53, "Intermittent Incident"</u> . DRIVER SIDE DOOR REQUEST SWITCH	
DRIVER SIDE DOOR REQUEST SWITCH : Description	INFOID:000000007913821
All doors do not lock/unlock using driver side door request switch.	
DRIVER SIDE DOOR REQUEST SWITCH : Diagnosis Procedure	INFOID:000000007913822
1.CHECK DOOR REQUEST SWITCH	
Check front door request switch (driver side). Refer to DLK-185, "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-77, "Removal and Installation"</u>. Confirm the operation after replacement. 	
Is the result normal?	
YES >> Inspection End.	
NO >> Check intermittent incident. Refer to <u>GI-53, "Intermittent Incident"</u> .	
PASSENGER SIDE DOOR REQUEST SWITCH	
PASSENGER SIDE DOOR REQUEST SWITCH : Description	INFOID:000000007913823
All doors do not lock/unlock using passenger side door request switch.	
PASSENGER SIDE DOOR REQUEST SWITCH : Diagnosis Procedure	INFOID:000000007913824
1.CHECK DOOR REQUEST SWITCH	
Check front door request switch (passenger side).	
Refer to <u>DLK-185, "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-77, "Removal and Installation"</u> .	
Confirm the operation after replacement. Is the result normal?	
YES >> Inspection End.	
NO >> Check intermittent incident. Refer to <u>GI-53, "Intermittent Incident"</u> .	
BACK DOOR REQUEST SWITCH	
BACK DOOR REQUEST SWITCH : Description	INFOID:000000007913825
All doors do not lock/unlock using back door request switch.	
BACK DOOR REQUEST SWITCH : Diagnosis Procedure	INFOID:000000007913826
1.CHECK BACK DOOR REQUEST SWITCH	
Check back door request switch.	

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

< SYMPTOM DIAGNOSIS >	
Refer to DLK-187, "Component Function Check".	
Is the inspection result normal?	A
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts.	В
2.REPLACE BCM	
 Replace BCM. Refer to <u>BCS-77, "Removal and Installation"</u>. Confirm the operation after replacement. 	С
Is the result normal?	C
YES >> Inspection End.	
NO >> Check intermittent incident. Refer to <u>GI-53, "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:000000007913827

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-221, "ALL DOOR : Diagnosis Procedure"</u>.

2. CHECK REMOTE KEYLESS ENTRY RECEIVER

Check remote keyless entry receiver.

Refer to DLK-183, "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 <u>DLK-193, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.REPLACE BCM

• Replace BCM. Refer to BCS-77, "Removal and Installation".

Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

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

FUEL LID LOCK ACTUATOR DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >	
FUEL LID LOCK ACTUATOR DOES NOT OPERATE	A
Diagnosis Procedure	
1. CHECK POWER DOOR LOCK OPERATION	В
Check power door lock operation.	
Does door lock/unlock with door lock and unlock switch?	C
YES >> GO TO 2.	C
NO >> Refer to DLK-221, "ALL DOOR : Diagnosis Procedure".	
2.CHECK FUEL LID LOCK ACTUATOR	D
Check fuel lid lock actuator.	
Refer to <u>DLK-177, "Component Function Check"</u> .	_
<u>Is the inspection result normal?</u> YES >> GO TO 3.	E
NO >> Repair or replace the malfunctioning parts.	
3. REPLACE BCM	F
Replace BCM. Refer to <u>BCS-77, "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-53, "Intermittent Incident"</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:000000007913829

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-221, "ALL DOOR : Diagnosis Procedure"</u>.

2.CHECK DOOR SWITCH

Check door switch Refer to <u>DLK-166</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-168. "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-77, "Removal and Installation".

Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

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

SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >	
SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE	
Diagnosis Procedure	А ,
1. CHECK "DOOR LOCK–UNLOCK SET" SETTING IN "WORK SUPPORT"	В
 Select "DOOR LOCK" of "BCM" using CONSULT. Select "DOOR LOCK-UNLOCK SET" in "WORK SUPPORT" mode. Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT". Refer to <u>BCS-14, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>. 	С
Is the inspection result normal? YES >> GO TO 2. NO >> Set "On" in "DOOR LOCK-UNLOCK SET".	D
 2.REPLACE BCM Replace BCM. Refer to <u>BCS-77. "Removal and Installation"</u>. Confirm the exercise offer replacement. 	- E
Confirm the operation after replacement. <u>Is the result normal?</u> YES >> Inspection End. NO >> Check intermittent incident. Befor to CL 52. "Intermittent incident"	F
NO >> Check intermittent incident. Refer to <u>GI-53, "Intermittent Incident"</u> .	G

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AUTO DOOR LOCK OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

AUTO DOOR LOCK OPERATION DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000007913831

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-19</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 BCS-77, "Removal and Installation".

· Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

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

VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPER-ATE

Diagnosis Procedure	INFOID:000000007913832	В
1. CHECK "AUTOMATIC LOCK/UNLOCK SELECT" SETTING IN "WORK SUPPORT"		D
 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". 		С
Refer to <u>BCS-14</u> , "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)". <u>Is the inspection result normal?</u>		D
YES >> GO TO 2. NO >> Set "Lock Only" or "Lock/Unlock" in "WORK SUPPORT". 2. CHECK "AUTOMATIC DOOR LOCK SELECT" SETTING IN "WORK SUPPORT"		E
 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-14</u>, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)". 		F
Is the inspection result normal? YES >> GO TO 3.		G
NO >> Set "VH SPD" in "AUTOMATIC DOOR LOCK SELECT". 3. REPLACE BCM		Н
 Replace BCM. Refer to <u>BCS-77, "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-53, "Intermittent Incident"</u> .		J

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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:000000007913833

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

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 2. Select "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT" mode.
- 3. Check "AUTOMATIC LOCK/UNLOCK SELECT" setting in "WORK SUPPORT".

Refer to BCS-14, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 2.

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

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

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 2. Select "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT" mode.
- 3. Check "AUTOMATIC DOOR UNLOCK SELECT" setting in "WORK SUPPORT".

Refer to <u>BCS-14, "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-77, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

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

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:000000007913834	В
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-14, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>. 		С
Is the inspection result normal?		D
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"	SELECT".	E
 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-14, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>. 		F
Is the inspection result normal?		G
YES >> GO TO 3. NO >> Set "P RANGE" in "AUTOMATIC DOOR LOCK SELECT". 3. CHECK "AUTOMATIC DOOR UNLOCK SELECT" SETTING IN "WORK SUPPORT"		Н
 Select "DOOR LOCK" of "BCM" using CONSULT. Select "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT" mode. Check "AUTOMATIC DOOR UNLOCK SELECT" setting in "WORK SUPPORT". Refer to BCS-14, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)". 		I
Is the inspection result normal? YES >> GO TO 4. NO >> Set "MODE 2" or "MODE 4" in "AUTOMATIC DOOR UNLOCK SELECT".		J
4.REPLACE BCM		DLK
 Replace BCM. Refer to <u>BCS-77, "Removal and Installation"</u>. Confirm the operation after replacement. <u>Is the result normal?</u> 	I	DLK
YES >> Inspection End. NO >> Check intermittent incident. Refer to <u>GI-53. "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:000000007913835

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 <u>BCS-19, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>.

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-19, "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 <u>DLK-196, "Component Function Check"</u>.

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-138, "Component Function Check".

Is the inspection result normal?

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

5.REPLACE BCM

- Replace BCM. Refer to BCS-77, "Removal and Installation".
- Confirm the operation after replacement.

- YES >> Inspection End.
- NO >> Check intermittent incident. Refer to GI-53. "Intermittent Incident".

HAZARD AND BUZZER REMINDER DOES NOT OPERATE < SYMPTOM DIAGNOSIS >	
HAZARD AND BUZZER REMINDER DOES NOT OPERATE	A
Diagnosis Procedure	
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-19, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>. 	С
Is the inspection result normal?	5
YES >> GO TO 2. NO >> Set the "Lock Only", "Unlock Only" or "Lock/Unlock" in "HAZARD ANSWER BACK".	D
2. CHECK "ANS BACK I-KEY LOCK" SETTING IN "WORK SUPPORT"	— E
 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-19, "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
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-19, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>. 	Н
Is the inspection result normal?	I
YES >> GO TO 4. NO >> Set the "On" in "ANS BACK I-KEY UNLOCK".	
4.CHECK HAZARD FUNCTION	J
Check hazard function. Refer to DLK-196, "Component Function Check".	DLK
Is the inspection result normal?	
YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts.	I
5. CHECK INTELLIGENT KEY WARNING BUZZER	L
Check Intelligent Key warning buzzer.	
Refer to DLK-191, "Component Function Check".	Μ
<u>Is the inspection result normal?</u> YES >> GO TO 6.	
NO >> Repair or replace the malfunctioning parts.	Ν
6.REPLACE BCM	
 Replace BCM. Refer to <u>BCS-77, "Removal and Installation"</u>. Confirm the operation after replacement. 	0
Is the result normal?	
YES >> Inspection End. NO >> Check intermittent incident. Refer to <u>GI-53, "Intermittent Incident"</u> .	Ρ

KEY REMINDER FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

KEY REMINDER FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000007913837

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

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "ANTI KEY LOCK IN FUNCTI" in "WORK SUPPORT" mode.
- 3. Check "ANTI KEY LOCK IN FUNCTI" setting in "WORK SUPPORT".

Refer to BCS-19, "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-145, "DTC Logic"</u>.
- Console: Refer to <u>DLK-147, "DTC Logic"</u>.
- Luggage room: Refer to <u>DLK-149, "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 <u>DLK-179</u>, "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-77, "Removal and Installation".

Confirm the operation after replacement.

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

WELCOME LIGHT FUNCTION DOES NOT OPERATE < SYMPTOM DIAGNOSIS > WELCOME LIGHT FUNCTION DOES NOT OPERATE А **Diagnosis** Procedure INFOID:000000007913838 1. CHECK "WELCOME LIGHT OP SET" SETTING IN "WORK SUPPORT" 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT. 2. Select "WELCOME LIGHT OP SET" in "WORK SUPPORT" mode. Check "WELCOME LIGHT OP SET" setting in "WORK SUPPORT". 3 Refer to BCS-19, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)". Is the inspection result normal? YES >> GO TO 2. D NO >> Set "On" and "WELCOME LIGHT SELECT" in "WORK SUPPORT". 2.CHECK "WELCOME LIGHT SELECT" SETTING IN "WORK SUPPORT" E 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT. Select "WELCOME LIGHT SELECT" in "WORK SUPPORT" mode. 2. Check "WELCOME LIGHT SELECT" setting in "WORK SUPPORT". 3. Refer to BCS-19, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)". F Is the inspection result normal? YES >> GO TO 3. NO G >> Set "WELCOME LIGHT SELECT" setting in "WORK SUPPORT". **3.**CHECK INSIDE KEY ANTENNA Check inside key antenna. Н Instrument center: Refer to DLK-145, "DTC Logic". Console: Refer to <u>DLK-147, "DTC Logic"</u>. Luggage room: Refer to <u>DLK-149</u>, "<u>DTC Logic</u>". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. **4.**CHECK OUTSIDE KEY ANTENNA Check outside key antenna. Driver side: Refer to DLK-162, "Component Function Check", DLK • Passenger side: Refer to DLK-160, "Component Function Check". • Back door: Refer to DLK-164, "Component Function Check". Is the inspection result normal? L YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts. **5.**CHECK REMOTE KEYLESS ENTRY FUNCTION Μ Check remote keyless entry function Does door lock/unlock with Intelligent Key button? Ν YES >> GO TO 6. >> Refer to DLK-228, "Diagnosis Procedure". NO **O.**CHECK INTERIOR ROOM LAMP CONTROL SYSTEM Check interior room lamp control system. Refer to INL-7, "INTERIOR ROOM LAMP CONTROL SYSTEM : System Description". Does the room lamp and puddle lamp turn ON? Ρ YES >> GO TO 7. >> Refer to INL-59, "Symptom Table". NO **1**.REPLACE BCM · Replace BCM. Refer to BCS-77, "Removal and Installation". Confirm the operation after replacement.

WELCOME LIGHT FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

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

OFF POSITION WARNING DOES NOT OPERATE

OFF POSITION WARNING DOES NOT OPERA	iE
< SYMPTOM DIAGNOSIS >	
OFF POSITION WARNING DOES NOT OPERATE	
Diagnosis Procedure	INFOID:000000007913839
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.	
NO >> Perform trouble diagnosis relevant to DTC indicated. 2.CHECK DTC WITH COMBINATION METER	
Check that DTC is not detected with combination meter.	
<u>Is the inspection result normal?</u> 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-166, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 4.	
NO >> Repair or replace the malfunctioning parts.	
4.CHECK COMBINATION METER BUZZER	
Check combination meter buzzer.	
Refer to <u>DLK-194, "Component Function Check"</u> . Is the inspection result normal?	
YES $>>$ GO TO 5.	
NO >> Repair or replace the malfunctioning parts.	
5.CHECK INTELLIGENT KEY WARNING BUZZER	
Check Intelligent Key warning buzzer. Refer to <u>DLK-191, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 6.	-
NO >> Repair or replace the malfunctioning parts.	
6.REPLACE BCM	
 Replace BCM. Refer to <u>BCS-77, "Removal and Installation"</u>. Confirm the operation after replacement. 	
Is the result normal?	
YES >> Inspection End.	
NO >> Check intermittent incident. Refer to <u>GI-53, "Intermittent Incident"</u> .	

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ACC WARNING DOES NOT OPERATE

< 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-32</u>, <u>"WARNING FUNCTION : System</u> <u>Description"</u>.

Diagnosis Procedure

INFOID:000000007913843

INFOID:000000007913842

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 <u>DLK-194</u>, "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-77, "Removal and Installation".

• Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

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

TAKE AWAY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

TAKE AWAY WARNING DOES NOT OPERATE	٥
Description	A
Take away warning function does not operate for vehicle with information display models.	В
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-32</u> , <u>"WARNING FUNCTION : System</u> <u>Description"</u> .	С
Diagnosis Procedure	
1.снеск отс with всм	D
Check that DTC is not detected with BCM.	
Is the inspection result normal?	Е
YES >> GO TO 2.	
NO >> Perform trouble diagnosis relevant to DTC indicated.	F
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	Н
Check inside key antenna.	
Instrument center: Refer to <u>DLK-145, "DTC Logic"</u> .	
Console: Refer to <u>DLK-147, "DTC Logic"</u> .	
Luggage room: Refer to <u>DLK-149, "DTC Logic"</u> . <u>Is the inspection result normal?</u>	
YES >> GO TO 4.	.1
NO >> Repair or replace the malfunctioning parts.	0
4.CHECK DOOR SWITCH	
Check front door switch (driver side).	DLK
Refer to DLK-166, "Component Function Check".	
Is the inspection result normal?	L
YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts.	
5. CHECK COMBINATION METER BUZZER	
Check combination meter buzzer.	M
Refer to DLK-194, "Component Function Check".	
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-191, "Component Function Check".	
Is the inspection result normal?	Ρ
YES >> GO TO 7.	
NO >> Repair or replace the malfunctioning parts.	
7.REPLACE BCM	
Replace BCM, Refer to BCS-77, "Removal and Installation".	

• 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-53, "Intermittent Incident"</u>.

KEY ID WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

KEY ID WARNING DOES NOT OPERATE

Description	INFOID:000000007913846
Key ID warning function does not operate for vehicle with information display models.	В
Warning functions operating condition is extremely complicated. During operating confirmati list above twice in order to ensure proper operation. Refer to <u>DLK-32</u> , <u>"WARNING FUNDescription"</u> .	ons, reconfirm the <u>NCTION:System</u> C
Diagnosis Procedure	INFOID:000000007913847
1.снеск отс with всм	D
Check that DTC is not detected with BCM.	
Is the inspection result normal?	E
YES >> GO TO 2.	
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.	0
NO >> Perform trouble diagnosis relevant to DTC indicated.	
3.CHECK INTELLIGENT KEY	Н
Check Intelligent Key. Refer to DLK-193, "Component Function Check".	
Is the inspection result normal?	1
YES >> GO TO 4.	
NO >> Repair or replace the malfunctioning parts.	
4. CHECK INSIDE KEY ANTENNA	J
Check inside key antenna.	
Instrument center: Refer to <u>DLK-145, "DTC Logic"</u> .	DL
Console: Refer to <u>DLK-147, "DTC Logic"</u> .	
Luggage room: Refer to <u>DLK-149, "DTC Logic"</u> .	
<u>Is the inspection result normal?</u> YES >> GO TO 5.	L
NO >> Repair or replace the malfunctioning parts.	
5. REPLACE BCM	
Replace BCM. Refer to <u>BCS-77, "Removal and Installation"</u> .	M
Confirm the operation after replacement.	
Is the result normal?	Ν
YES >> Inspection End.	
NO >> Check intermittent incident. Refer to <u>GI-53, "Intermittent Incident"</u> .	
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INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

Description

INFOID:000000007913848

Intelligent Key low battery warning does not operate for vehicle with information display models. NOTE:

Warning functions operating condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-32, "WARNING FUNCTION : System Description".

Diagnosis Procedure

INFOID-000000007913849

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"

- Select "INTELLIGENT KEY" of "BCM". 1.
- 2. Select "LO- BATT OF KEY FOB WARN" in "WORK SUPPORT" mode.
- Check "LO- BATT OF KEY FOB WARN" setting in "WORK SUPPORT". 3

Refer to BCS-19, "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-193, "Component Function Check".

Is the inspection result normal?

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

5.CHECK INSIDE KEY ANTENNA

Check inside key antenna.

- Instrument center: Refer to DLK-145, "DTC Logic".
- Console: Refer to <u>DLK-147</u>, "<u>DTC Logic</u>".
 Luggage room: Refer to <u>DLK-149</u>, "<u>DTC Logic</u>".

Is the inspection result normal?

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

O.REPLACE BCM

- · Replace BCM. Refer to BCS-77, "Removal and Installation".
- · Confirm the operation after replacement.

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

DOOR LOCK OPERATION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

DOOR LOCK OPERATION WARNING DOES NOT OPERATE

Diagnosis Procedure	INFOID:000000007913850	A
1. CHECK DOOR LOCK FUNCTION		В
Check door lock function.		
Does door lock/unlock using door request switch?		
YES >> GO TO 2. NO >> Refer to <u>DLK-225, "ALL DOOR REQUEST SWITCHES : Diagnosis Procedure"</u> .		С
2. CHECK INTELLIGENT KEY WARNING BUZZER		D
Check Intelligent Key warning buzzer. Refer to DLK-191, "Component Function Check".		
Is the inspection result normal?		Е
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.		
3. REPLACE BCM		F
 Replace BCM. Refer to <u>BCS-77, "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-53, "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-36</u>, "System Description".

ALL SWITCHES : 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 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-251, "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-113, "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-140, "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-122, "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-119, "Component Inspection"</u>.

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 <u>DLK-308. "Removal and Installation"</u>.

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

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AUTOMATIC BACK DOOR OPERATION DOES NOT OPERATE < SYMPTOM DIAGNOSIS > NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident". AUTOMATIC BACK DOOR SWITCH А AUTOMATIC BACK DOOR SWITCH : Description INFOID:000000007913853 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-36. "System Description". AUTOMATIC BACK DOOR SWITCH : Diagnosis Procedure INFOID:000000007913854 D CHECK AUTOMATIC BACK DOOR SWITCH Check automatic back door switch. Refer to DLK-201, "Component Function Check". E Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. F 2.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE 1. Replace automatic back door control module. Refer to DLK-308, "Removal and Installation". G Confirm the operation after replacement. 2. Is the result normal? YES >> Inspection End. Н >> Check intermittent incident. Refer to GI-53, "Intermittent Incident". NO AUTOMATIC BACK DOOR CLOSE SWITCH AUTOMATIC BACK DOOR CLOSE SWITCH : Description INFOID:000000007913855 Automatic back door open/close function does not operate using automatic back door close switch. NOTE: J 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-36, "System Description". AUTOMATIC BACK DOOR CLOSE SWITCH : Diagnosis Procedure INFOID:000000007913856 DLK **1**.CONFIRM THE OPERATION 1. Turn ON automatic back door main switch. L 2. Confirm the operation. Is the result normal? YES >> Automatic back door system is normal. Μ NO >> GO TO 2. 2. CHECK AUTOMATIC BACK DOOR CLOSE SWITCH Ν Check automatic back door close switch. Refer to DLK-197, "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. **3.**CHECK AUTOMATIC BACK DOOR MAIN SWITCH P Check automatic back door main switch. Refer to DLK-199, "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 <u>DLK-308, "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-53, "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-36</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-228, "Diagnosis Procedure"</u>.

4.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-308, "Removal and Installation".

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to <u>GI-53, "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-36</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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2. CHECK AUTOMATIC BACK DOOR MAIN SWITCH	Δ
Check automatic back door main switch. Refer to <u>DLK-199, "Component Function Check"</u> .	\cap
Is the inspection result normal?	
YES >> GO TO 3.	В
NO >> Repair or replace the malfunctioning parts.	
3. CHECK BACK DOOR OPENER SWITCH	С
Check back door opener switch.	
Refer to DLK-189, "Component Function Check".	D
Is the inspection result normal?	D
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	
4. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE	Ε
 Replace automatic back door control module. Refer to <u>DLK-308</u>, "<u>Removal and Installation</u>". Confirm the operation after replacement. 	_
Is the result normal?	F
YES >> Inspection End.	
NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".	G
OPEN/CLOSURE FUNCTION	
OPEN/CLOSURE FUNCTION : Description	Н
Back door auto closure function does not operate when back door opening and closing operations are per- formed.	
, ·	
1.CONFIRM THE OPERATION	J
 Turn ON automatic back door main switch. Confirm the operation. 	
YES >> Automatic back door system is normal.	DLK
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?	B. 4
YES >> GO TO 3.	Μ
NO >> Perform trouble diagnosis relevant to DTC indicated.	
3. CHECK AUTOMATIC BACK DOOR MAIN SWITCH	Ν
Check automatic back door main switch. Refer to <u>DLK-199, "Component Function Check"</u> .	
Is the inspection result normal?	0
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	
4. CHECK BACK DOOR OPENER SWITCH	Ρ
Check back door opener switch.	
Refer to <u>DLK-189, "Component Function Check"</u> .	
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-212</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-308, "Removal and Installation".

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to <u>GI-53. "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-199, "Component Function Check"</u>.

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-189, "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-308. "Removal and Installation".

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

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

CLOSURE FUNCTION

CLOSURE FUNCTION : Description

INFOID:000000007913865

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

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INFOID:000000007913863

AUTOMATIC BACK DOOR OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >	
CLOSURE FUNCTION : Diagnosis Procedure	3866
1. CHECK HALF LATCH SWITCH	A
Check half latch switch. Refer to <u>DLK-203, "Component Function Check"</u> .	В
Is the inspection result normal?	
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	С
2. CHECK BACK DOOR CLOSURE MOTOR	
Check back door closure motor. Refer to <u>DLK-212, "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	
 Replace automatic back door control module. Refer to <u>DLK-308</u>, "<u>Removal and Installation</u>". Confirm the operation after replacement. 	— F
Is the result normal?	G
 YES >> Inspection End. NO >> Check intermittent incident. Refer to <u>GI-53, "Intermittent Incident"</u>. 	
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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?

>> GO TO 2. YES

NO >> Perform trouble diagnosis relevant to DTC indicated.

2. CHECK BACK DOOR WARNING CHIME

Check back door warning chime.

Refer to DLK-213, "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-308, "Removal and Installation".

Confirm the operation after replacement. 2.

Is the result normal?

YES >> Inspection End.

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

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.

3.CHECK GROUND CIRCUIT

Check automatic back door control module ground circuit. Refer to DLK-215, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts

4.CHECK HAZARD AND HORN REMINDER FUNCTION

INFOID-000000007913869

INFOID:000000007913870

INFOID:00000000791386

INFOID-000000007913867

AUTOMATIC BACK DOOR WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >	
Check hazard and horn reminder function.	
Is the inspection result normal?	А
YES >> GO TO 5.	
NO >> Refer to <u>DLK-236. "Diagnosis Procedure"</u> .	В
5.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE	
 Replace automatic back door control module. Refer to <u>DLK-308, "Removal and Installation"</u>. Confirm the operation after replacement. 	С
Is the result normal?	
 YES >> Inspection End. NO >> Check intermittent incident. Refer to <u>GI-53, "Intermittent Incident"</u>. 	
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AUTOMATIC BACK DOOR FUNCTIONS DO NOT CANCEL

< SYMPTOM DIAGNOSIS >

AUTOMATIC BACK DOOR FUNCTIONS DO NOT CANCEL

Diagnosis Procedure

INFOID:000000007913871

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-199, "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-308, "Removal and Installation"</u>.

2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

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

AUTOMATIC BACK DOOR ANTI-PINCH FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >	
AUTOMATIC BACK DOOR ANTI-PINCH FUNCTION DOES NOT OPERAT	Ē
Diagnosis Procedure	3872
1. CHECK POWER SUPPLY AND GROUND CIRCUIT	В
Check automatic back door control module power supply and ground circuit. Refer to DLK-113, "Diagnosis Procedure".	
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 DLK-207, "LH : Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3. CHECK TOUCH SENSOR RH	E F
Check touch sensor RH. Refer to <u>DLK-205, "RH : Component Function Check"</u> . <u>Is the inspection result normal?</u>	G
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. 4. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE	Н
 Replace automatic back door control module. Refer to <u>DLK-308</u>, "<u>Removal and Installation</u>". Confirm the operation after replacement. Is the result normal? 	
YES >> Inspection End. NO >> Check intermittent incident. Refer to <u>GI-53, "Intermittent Incident"</u> .	J

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INTEGRATED HOMELINK TRANSMITTER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

INTEGRATED HOMELINK TRANSMITTER DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000007913873

1. CHECK INTEGRATED HOMELINK[®] TRANSMITTER

Check integrated homelink[®] transmitter. Refer to DLK-218, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.REPLACE AUTO ANTI-DAZZLING INSIDE MIRROR

Replace auto anti-dazzling inside mirror. Refer to <u>MIR-27. "Removal and Installation"</u>.

Is the result normal?

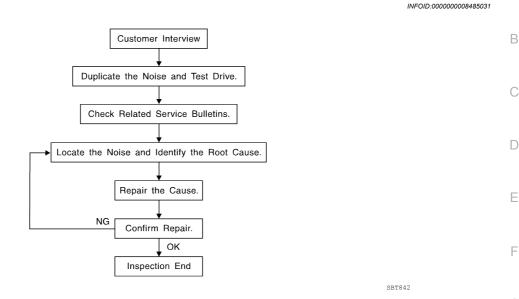
YES >> Inspection End.

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

< SYMPTOM DIAGNOSIS >

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow



CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any customer's comments; refer to <u>DLK-263</u>, "<u>Diagnostic Worksheet</u>". 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)
 Squeak characteristics include the light contact/fast movement/brought on by road conditions/hard surfaces
 = higher pitch noise/softer surfaces = lower pitch noises/edge to surface = chirping.
- Creak—(Like walking on an old wooden floor) Creak characteristics include firm contact/slow movement/twisting with a rotational movement/pitch dependent on materials/often brought on by activity.
- Rattle—(Like shaking a baby rattle) Rattle characteristics include the fast repeated contact/vibration or similar movement/loose parts/missing clip or fastener/incorrect clearance.
- Knock —(Like a knock on a door) Knock characteristics include hollow sounding/sometimes repeating/often brought on by driver action.
 Tick—(Like a clock second hand)
- Tick —(Like a clock second hand)
 Tick characteristics include gentle contacting of light materials/loose components/can be caused by driver action or road conditions.
- Thump—(Heavy, muffled knock noise)

Thump characteristics include softer knock/dead sound often brought on by activity.

- Buzz—(Like a bumble bee) Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending upon the person. A noise that you may judge P 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.

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< SYMPTOM DIAGNOSIS >

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

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

CHECK RELATED SERVICE BULLETINS

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

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

LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

- 1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis Ear: J-39570, Engine Ear: J-39565 and mechanic's stethoscope).
- 2. Narrow down the noise to a more specific area and identify the cause of the noise by:
 - removing the components in the area that you suspect the noise is coming from. Do not use too much force when removing clips and fasteners, otherwise clips and fasteners can be broken or lost during the repair, resulting in the creation of new noise.
 - tapping or pushing/pulling the component that you suspect is causing the noise.
 Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
 - feeling for a vibration with your hand by touching the component(s) that you suspect is (are) causing the noise.
 - placing a piece of paper between components that you suspect are causing the noise.
 - looking for loose components and contact marks. Refer to <u>DLK-261. "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-43980) 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. Always check with the Parts Department for the latest parts information.

The following materials are contained in the NISSAN Squeak and Rattle Kit (J-43980). Each item can be ordered separately as needed.

URETHANE PADS [1.5 mm (0.059 in) thick]

Insulates connectors, harness, etc.

76268-9E005: 100×135 mm (3.94×5.31 in)/76884-71L01: 60×85 mm (2.36×3.35 in)/76884-71L02: 15×25 mm (0.59×0.98 in)

INSULATOR (Foam blocks)

Insulates components from contact. Can be used to fill space behind a panel.

73982-9E000: 45 mm (1.77 in) thick, 50×50 mm (1.97×1.97 in)/73982-50Y00: 10 mm (0.39 in) thick, 50×50 mm (1.97×1.97 in)

INSULATOR (Light foam block)

80845-71L00: 30 mm (1.18 in) thick, 30×50 mm (1.18×1.97 in)

FELT CLOTH TAPE

Used to insulate where movement does not occur. Ideal for instrument panel applications.

68370-4B000: 15×25 mm (0.59×0.98 in) pad/68239-13E00: 5 mm (0.20 in) wide tape roll. The following materials not found in the kit can also be used to repair squeaks and rattles.

UHMW (TEFLON) TAPE

Insulates where slight movement is present. Ideal for instrument panel applications. SILICONE GREASE

<	SYMPTOM DIAGNOSIS >	
N S	sed instead of UHMW tape that will be visible or not fit. ote: Will only last a few months. ILICONE SPRAY	A
	se when grease cannot be applied.	
	UCT TAPE se to eliminate movement.	В
	ONFIRM THE REPAIR	
С	onfirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same onditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.	С
G	eneric Squeak and Rattle Troubleshooting	
R	efer to Table of Contents for specific component removal and installation information.	D
	ISTRUMENT PANEL	
	ost incidents are caused by contact and movement between:	Е
1.		
2.	·	
3.		F
4.		
5.	Instrument panel pins.	G
6.	Wiring harnesses behind the combination meter.	G
7.	A/C defroster duct and duct joint.	
pı in	nese incidents can usually be located by tapping or moving the components to duplicate the noise or by ressing on the components while driving to stop the noise. Most of these incidents can be repaired by apply- g felt cloth tape or silicone spray (in hard to reach areas). Urethane pads can be used to insulate wiring har-	Η
	ess. AUTION:	
D	o not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will ot be able to recheck the repair.	
С	ENTER CONSOLE	J
С	omponents to pay attention to include:	
1.	Shift selector assembly cover to finisher.	DLK
2.	A/C control unit and cluster lid C.	DEN
3.	Wiring harnesses behind audio and A/C control unit.	
T	ne instrument panel repair and isolation procedures also apply to the center console.	L
D	OORS	
P	ay attention to the:	
1.		Μ
2.		
3.	S	Ν
4.		
m	apping or moving the components or pressing on them while driving to duplicate the conditions can isolate any of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks from e NISSAN Squeak and Rattle Kit (J-43980) to repair the noise.	0
	RUNK	
	runk noises are often caused by a loose jack or loose items put into the trunk by the owner. addition look for:	Ρ
1.	· · · · · · · · · · · · · · · · · · ·	
2.		
3.		
- 1	A lease license plate or bracket	

4. A loose license plate or bracket.

< SYMPTOM DIAGNOSIS >

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

SUNROOF/HEADLINING

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

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

Again, pressing on the components to stop the noise while duplicating the conditions can isolate most of these incidents. Repairs usually consist of insulating with felt cloth tape.

OVERHEAD CONSOLE (FRONT AND REAR)

Overhead console noises are often caused by the console panel clips not being engaged correctly. Most of these incidents are repaired by pushing up on the console at the clip locations until the clips engage. In addition look for:

- 1. Loose harness or harness connectors.
- 2. Front console map/reading lamp lens loose.
- 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

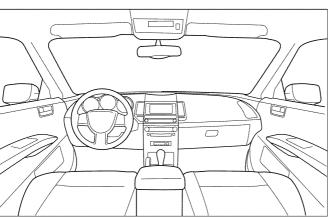
Dear Customer:

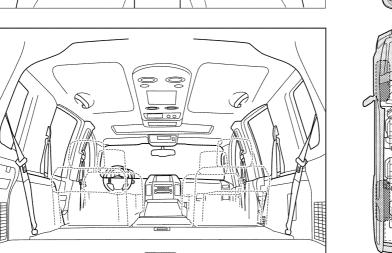
We are concerned about your satisfaction with your vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your vehicle right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may be asked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





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:

VHEN 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:
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	s	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)
	Anytime 1 st time in the morning Only when it is cold outside Only when it is hot outside WHEN DRIVING: Through driveways Over rough roads Over speed bumps Only about mph On acceleration Coming to a stop On turns: left, right or either (circle) With passengers or cargo Other:	1 st time in the morning Image: Constraint of the morning Only when it is cold outside Image: Constraint of the morning Only when it is hot outside Image: Constraint of the morning WHEN DRIVING: IV. When it is hot outside Image: Constraint of the morning WHEN DRIVING: IV. Through driveways Image: Constraint of the morning Over rough roads Image: Constraint of the morning Over speed bumps Image: Constraint of the morning Only about mph Image: Constraint of the morning On acceleration Image: Constraint of the morning Coming to a stop Image: Constraint of the morning On turns: left, right or either (circle) Image: Constraint of the morning With passengers or cargo Other:

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

	YES	NO	Initials of person performing
Vehicle test driven with customer - Noise verified on test drive - Noise source located and repaired - Follow up test drive performed to confirm repai	□ □ r □		
VIN:C	ustomer Name		
	ate:		

This form must be attached to Work Order

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

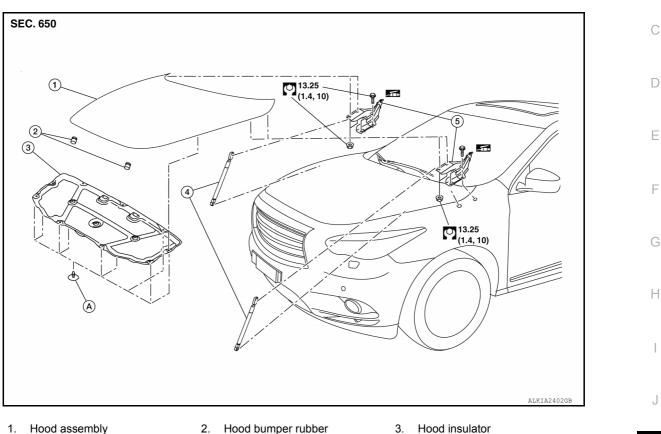
Exploded View

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- 4. Hood stay (LH/RH)
- 5. Hood hinge (LH/RH)
- 3. Hood insulator
- A. Clip

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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.
- Μ 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.

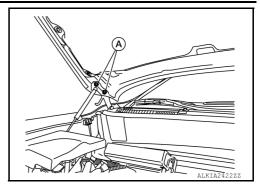
WARNING:

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.



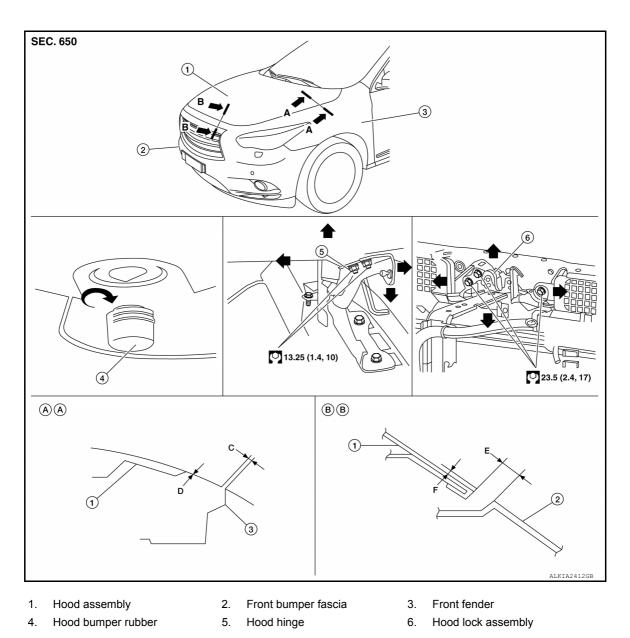
INSTALLATION

Installation is in the reverse order of removal.

- 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-266, "HOOD</u> <u>ASSEMBLY : Adjustment"</u>.

HOOD ASSEMBLY : Adjustment

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Revision: March 2012

DLK-266

HOOD

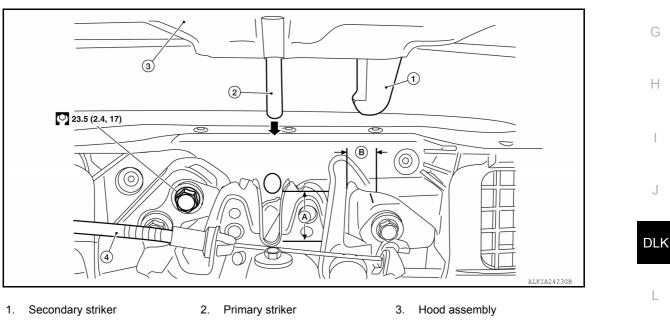
< REMOVAL AND INSTALLATION >

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	В
Hood – Front fender	A – A	С	Clearance	$3.5\pm1.0\;(0.14\pm0.04)$	≤ 1.5 (0.06)	
	A-A	D	Surface height	1.0 ± 1.5 (0.04 ± 0.06)	_	0
Hood – Front bumper fascia	B – B	E	Clearance	4.1 ± 2.0 (0.16 ± 0.08)	< 2.0 (0.08)	C
Hood – Front bumper lascia	0 - D	F	Surface height	1.0 ± 1.5 (0.04 ± 0.06)	< 2.0 (0.08)	

HEIGHT ADJUSTMENT

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



20 mm (0.79 in) 4. Secondary latch control cable Α.

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Unit: mm (in)

- 5. After adjustment, tighten hood hinge nuts and bolts to the specified torque. CAUTION:
 - · Check hood hinge rotating part for poor lubrication. If necessary, apply a suitable multi-purpose grease.

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6.8 mm (0.27 in)

• After adjusting, apply touch-up paint (body color) onto the head of hood hinge bolts and nuts.

CLEARANCE ADJUSTMENT

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

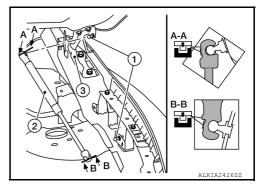
HOOD HINGE

< REMOVAL AND INSTALLATION >

HOOD HINGE : Removal and Installation

REMOVAL

- 1. Remove hood assembly. Refer to DLK-265, "HOOD ASSEMBLY : Removal and Installation".
- 2. Remove hood stay (2) from hood hinge (3) and ball studs (1).



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-266, "HOOD ASSEM-BLY : Adjustment"</u>.

HOOD STAY

HOOD STAY : Removal and Installation

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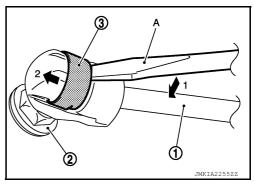
REMOVAL

1. Support the hood assembly using a suitable tool.

WARNING:

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

 Remove the metal clip (3) located on the connection between the hood stay (1) and the stud ball (2) (hood side) by using a suitable tool (A) to release the clip to the side and then toward the front.



- 3. Disengage the stud ball from the hood stay (hood side).
- 4. Disengage the stud ball from the hood stay (body side), then remove the hood stay.

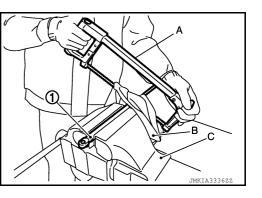
INSTALLATION

Installation is in the reverse order of removal.

< REMOVAL AND INSTALLATION >

HOOD STAY : Disposal

- 1. Fix hood stay (1) using a vise (C).
- 2. Using a hacksaw (A) slowly make two holes in the hood stay (1), in numerical order as shown in the figure. CAUTION:
 - When cutting a hole on hood stay (1), always cover hacksaw (A) with a shop cloth (B) to avoid scattering metal fragments or oil.
 - Wear eye protection (safety glasses).
 - Wear gloves.



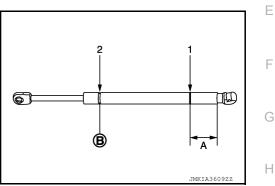
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- A: 20 mm (0.79 in)
- **B:** Cut at the groove.

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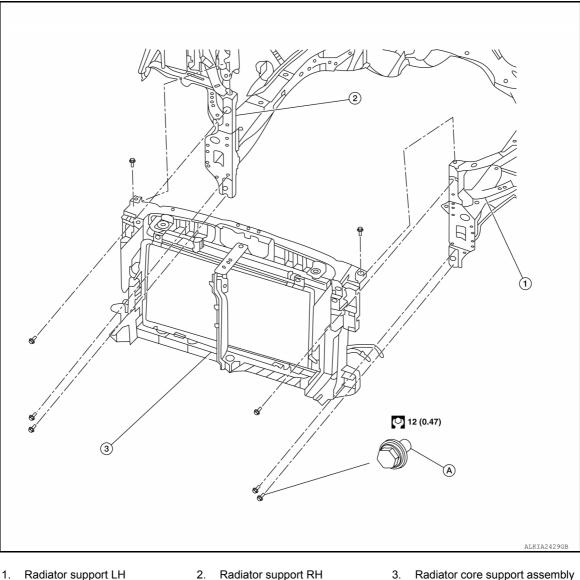
RADIATOR CORE SUPPORT

< REMOVAL AND INSTALLATION >

RADIATOR CORE SUPPORT

Exploded View

INFOID:000000007913883



A. Bolt

Removal and Installation

INFOID:000000007913884

REMOVAL

CAUTION:

When removing radiator core support upper, be careful not to damage the painted surface.

- 1. Remove front bumper assembly. Refer to EXT-17, "Removal and Installation".
- 2. Release clips and then remove radiator upper seal.
- 3. Remove the battery. Refer to PG-92, "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-287, "HOOD LOCK CONTROL CABLE : Removal and Instal-</u><u>lation"</u>.

DLK-270

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".	А
10. Remove bolts, and then radiator core support assembly.	
INSTALLATION	D
Installation is in the reverse order of removal.	В
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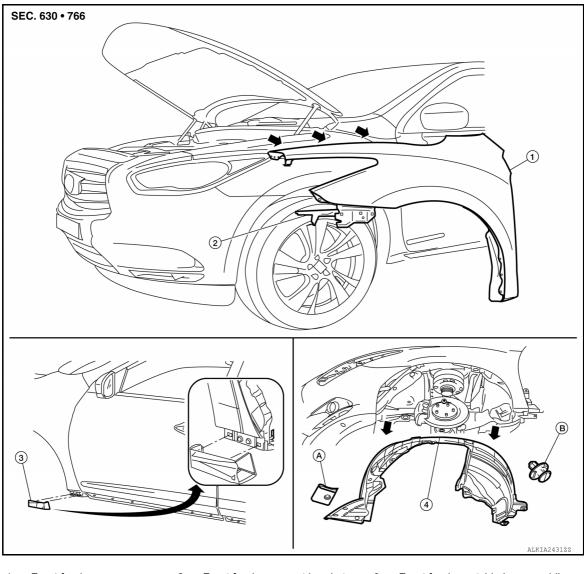
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< REMOVAL AND INSTALLATION >

FRONT FENDER

Exploded View

INFOID:000000007913885



- 1. Front fender
 - Front fender protector
- Front fender support bracket
 J-nut
- Front fender outside lower molding
 Clip

FRONT FENDER

4.

FRONT FENDER : Removal and Installation

INFOID:000000007913886

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-27, "FENDER PROTECTOR : Removal and Installation".
- 2. Remove front combination lamp. Refer to EXL-160. "Removal and Installation".
- 3. Release the clips and pawls using a suitable tool and remove hoodledge finisher.
- 4. Remove front fender outside lower molding. Refer to EXT-36. "Removal and Installation".
- 5. Remove front fender bolts and front fender. CAUTION:

FRONT FENDER

< REMOVAL AND INSTALLATION >

Use care when removing the front fender. The front fender baffle foam adheres the front fender to the body side outer. Carefully release the baffle foam or damage to the front fender may occur.	А
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.	В
 After installation, adjust the following components as necessary: Hood assembly: Refer to <u>DLK-266, "HOOD ASSEMBLY : Adjustment"</u>. Front door: Refer to <u>DLK-275, "DOOR ASSEMBLY : Adjustment"</u>. 	С
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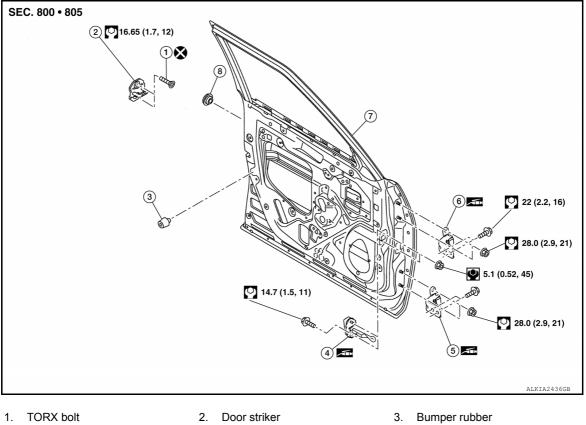
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< REMOVAL AND INSTALLATION >

FRONT DOOR

Exploded View

INFOID:000000007913889



4. Door check link

7. Front door panel

5. Front door hinge (lower)

8. Grommet

- Front door hinge (upper) 6.

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

INFOID:000000007913890

CAUTION:

Use two people when removing or installing the front door due to its heavy weight.

• When removing and installing front door assembly, support front door with a suitable tool.

REMOVAL

- 1. Remove front door finisher. Refer to INT-15, "Removal and Installation".
- Disconnect the harness connectors from the front door.
- Remove front door harness grommet, then harness from the front door.
- 4. Remove front door check link bolt from the body.
- Remove front door hinge nuts (door side) and front door assembly. 5.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Apply anticorrosive agent onto the surface.
- After installation, check front door open/close, lock/unlock operation.
- After installation, perform the front door adjustment procedure. Refer to DLK-275, "DOOR ASSEM-**BLY : Adjustment".**

DLK-274

FRONT DOOR

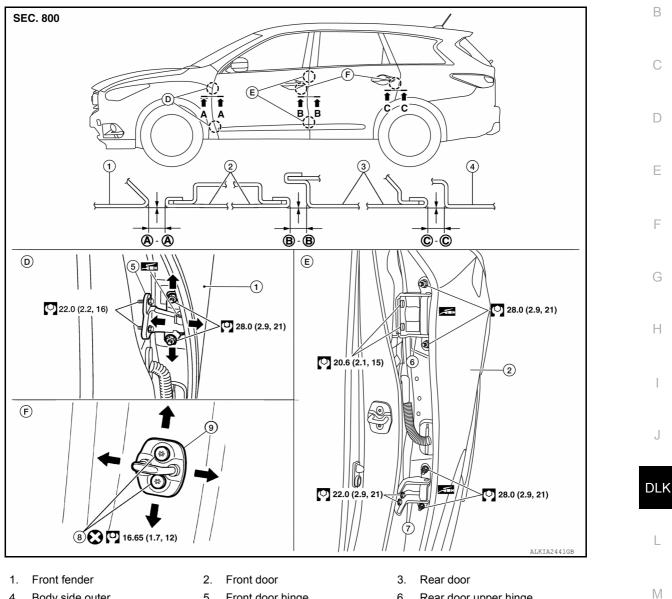
< REMOVAL AND INSTALLATION >

DOOR ASSEMBLY : Adjustment

INFOID:000000007913891

А

Adjustment



7.

Body side outer 4.

Rear door lower hinge

- 5. Front door hinge 8. TORX bolts
- Rear door upper hinge 6.
- 9. Striker

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

			Unit: mm (in)	\sim
Portion	Section	Gap measurement	Standard	0
Front fender – Front door	A – A	4.1 ± 1.0 (± 0.04)	± 1.0 (± 0.04)	
Front door – Rear door	B – B	4.1 ± 1.0 (± 0.04)	± 1.0 (± 0.04)	Ρ
Rear door – Body side outer panel	C – C	3.7 ± 1.0 (± 0.04)	± 1.0 (± 0.04)	

- Remove front fender. Refer to DLK-272, "FRONT FENDER : Removal and Installation". 1.
- Loosen front door hinge nuts on door side. 2.
- 3. Adjust the surface height of front door according to the specifications provided.
- Temporarily tighten front door hinge nuts on door side. 4.

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DLK-275

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FRONT DOOR

< REMOVAL AND INSTALLATION >

- 5. Loosen front door hinge bolts on body side.
- 6. Raise front door at rear end to adjust clearance of the front door according to the specifications provided.
- 7. After adjustment tighten bolts and nuts to the specified torque.
 - CAUTION:
 Check door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.
 - After adjusting, apply touch-up paint (body color) to the head of front door hinge bolts and nuts.
- 8. Install front fender. Refer to refer to <u>DLK-272</u>, "FRONT FENDER : Removal and Installation".

DOOR STRIKER ADJUSTMENT

Adjust front door striker so that it becomes parallel with front door lock insertion direction. DOOR STRIKER

DOOR STRIKER : Removal and Installation

REMOVAL

Remove TORX bolts and then remove front door striker.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- When installing striker do not reuse TORX bolts.
- · After installation, check front door open/close, lock/unlock operation.
- After installation, perform the front door adjustment procedure. Refer to <u>DLK-275, "DOOR ASSEM-BLY : Adjustment"</u>.

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:000000007913893

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REMOVAL

CAUTION:

- Use two people when removing and installing the front door due to its heavy weight.
- When removing and installing front door assembly, support door using a suitable tool.
- 1. Remove front fender. Refer to DLK-272, "FRONT FENDER : Removal and Installation".
- 2. Remove front door assembly. Refer to DLK-274, "DOOR ASSEMBLY : Removal and Installation".
- 3. Remove front door hinge bolts (body side) and front door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Apply anticorrosive agent onto the hinge mating surface.
- After installation, check front door open/close, 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-275, "DOOR ASSEM-BLY : Adjustment"</u>.

DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

REMOVAL

- 1. Fully close the front door window.
- 2. Remove front door finisher. Refer to <u>INT-15, "Removal and Installation"</u>.
- 3. Remove front door speaker bolts.
- 4. Disconnect harness connector from front door speaker and remove.
- 5. Remove front door speaker bolts.
- 6. Remove door check link bolt from body.

DLK-276

INFOID:000000007913894

FRONT DOOR

< R	REMOVAL AND INSTALLATION >	
7. 8.		А
Ins	STALLATION stallation is in the reverse order of removal. NUTION:	В
• C	After installation, check front door open/close, lock/unlock operation. Check door check link rotating point for poor lubrication. If necessary, apply a suitable multi-pur- pose grease.	С
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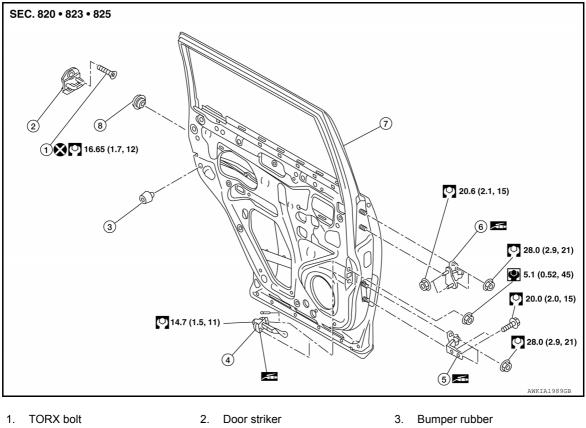
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< REMOVAL AND INSTALLATION >

REAR DOOR

Exploded View

INFOID:000000007913895



4. Door check link

7. Rear door panel

5. Rear door hinge (lower)

8. Grommet

6. Rear door hinge (upper)

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

INFOID:000000007913896

CAUTION:

Use two people when removing or installing the rear door due to its heavy weight.

When removing and installing rear door assembly, support rear door using a suitable tool.

REMOVAL

- 1. Remove rear door finisher. Refer to <u>DLK-278</u>, "DOOR ASSEMBLY : Removal and Installation".
- Disconnect the harness connectors from rear door.
- 3. Remove harness grommet from rear door and then pull out rear door harness from the rear door.
- 4. Remove rear door check link bolt from body.
- Remove rear door hinge nuts (door side) and rear door assembly. 5.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Apply anticorrosive agent onto the surface.
- After installation, check rear door open/close, lock/unlock operation.
- After installation, perform the rear door adjustment procedure. Refer to DLK-279, "DOOR ASSEMBLY ٠ : Adjustment".

REAR DOOR

< REMOVAL AND INSTALLATION >

DOOR ASSEMBLY : Adjustment

А

SEC. 800 В F E t 11 Ť Ť C Ē в D (4) Е Ô-Ô Ø A **B**-**B** F D **E** 5 📻 61 1 22.0 (2.2, 16) 🖸 28.0 (2.9, 21) 28.0 (2.9, 21) 6 Н 20.6 (2.1, 15) (2) F (9) Б 22.0 (2.9, 21) 28.0 (2.9, 21) DLK 8 16.65 (1.7, 12) ALKTA2441GF L 1. Front fender 2. Front door 3. Rear door 4. Body side outer 5. Front door hinge 6. Rear door upper hinge 7. Rear door lower hinge 8. TORX bolts 9. Striker Μ

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	Gap measurement	Standard	
Front fender – Front door	A – A	4.1 ± 1.0 (± 0.04)	± 1.0 (± 0.04)	0
Front door – Rear door	B – B	4.1 ± 1.0 (± 0.04)	± 1.0 (± 0.04)	
Rear door – Body side outer panel	C – C	3.7 ± 1.0 (± 0.04)	± 1.0 (± 0.04)	P

- 1. Remove center pillar lower finisher. Refer to <u>INT-19, "CENTER PILLAR LOWER FINISHER : Removal</u> and Installation".
- 2. Loosen rear door hinge nuts on rear door side.
- 3. Adjust the surface height of rear door according to specifications provided.
- 4. Temporarily tighten rear door hinge nuts on rear door side.

DLK-279

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REAR DOOR

< REMOVAL AND INSTALLATION >

- 5. Loosen rear door hinge nuts and bolts on body side.
- 6. Raise rear door at rear end to adjust clearance of rear door according to the specifications provided.
- 7. After adjustment tighten bolts and nuts to the specified torque.
 - CAUTION:
 Check rear door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.
 - After adjusting, apply touch-up paint (body color) to the head of rear door hinge bolts and nuts.
- 8. Install center pillar lower finisher. Refer to <u>INT-19</u>, "CENTER PILLAR LOWER FINISHER : Removal and <u>Installation</u>".

DOOR STRIKER ADJUSTMENT

Adjust rear door striker so that it becomes parallel with rear door lock insertion direction. DOOR STRIKER

DOOR STRIKER : Removal and Installation

INFOID:000000007913898

REMOVAL

Remove TORX bolts, and then remove rear door striker.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- When installing rear door striker do not reuse TORX bolts.
- After installation, check rear door open/close, lock/unlock operation.
- After installation, perform the rear door adjustment procedure. Refer to <u>DLK-279, "DOOR ASSEMBLY</u>
 <u>Adjustment"</u>.

DOOR HINGE

DOOR HINGE : Removal and Installation

CAUTION:

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

REMOVAL

- 1. Remove rear door assembly. Refer to DLK-278, "DOOR ASSEMBLY : Removal and Installation".
- 2. Remove center pillar lower finisher. Refer to <u>INT-19</u>, "CENTER PILLAR LOWER FINISHER : Removal <u>and Installation"</u>.
- 3. Remove rear door hinge bolts and nuts (body side) and rear door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Apply anticorrosive agent onto the hinge mating surface.
- After installation, check rear door open/close, lock/unlock operation.
- After installation, perform the rear door adjustment procedure. Refer to <u>DLK-279, "DOOR ASSEMBLY</u> : <u>Adjustment"</u>.

DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

REMOVAL

- 1. Fully close the rear door window.
- 2. Remove rear door finisher. Refer to INT-16, "Removal and Installation".
- 3. Remove rear door speaker bolts.
- 4. Disconnect harness connector and remove rear door speaker.
- 5. Remove rear door check link bolt from the body.
- 6. Remove rear door check link nuts on rear door panel.

DLK-280

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REAR DOOR

< REMOVAL AND INSTALLATION >

7. Remove rear door check link through the hole in rear door panel.	
INSTALLATION	А
Installation is in the reverse order of removal. CAUTION:	
 After installation, check rear door open/close, lock/unlock operation. Check rear door check link rotating point for poor lubrication. If necessary, apply a suitable multi- 	В
purpose grease.	0
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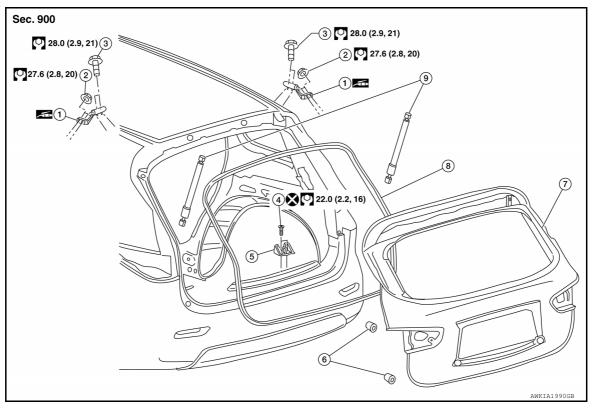
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< REMOVAL AND INSTALLATION >

BACK DOOR

Exploded View

INFOID:000000007913901



- 1. Back door hinge
- 4. TORX bolt

- Back door hinge nut
 Back door striker
- Back door striker
 Back door weatherstrip
- Back door hinge bolt
 Back door bumper rubber
- 9. Spindle unit

BACK DOOR ASSEMBLY

7. Back door assembly

BACK DOOR ASSEMBLY : Removal and Installation

CAUTION:

- Use two people when removing or installing the back door due to its heavy weight.
- Use shop cloths to protect surrounding components from damage during removal and installation of back door.

REMOVAL

1. Support the back door assembly using a suitable tool.

WARNING:

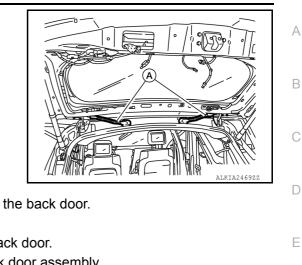
Bodily injury may occur if back door assembly is not supported properly when removing the back door spindle unit.

- 2. Remove back door spindle units (LH/RH). Refer to DLK-286, "SPINDLE UNIT : Removal and Installation".
- 3. Remove roof side moldings (LH/RH). Refer to EXT-30, "Removal and Installation".

INFOID:000000007913902

< REMOVAL AND INSTALLATION >

4. Disconnect harness connectors (A) from back door.



- 5. Remove back door harness grommet, then pull harness from the back door.
- 6. Disconnect washer tube.
- 7. Remove washer tube grommet, then washer tube from the back door.
- 8. Remove back door hinge nuts on back door and remove back door assembly.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Apply anticorrosive agent onto the surface.
- 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-284, "BACK</u> <u>DOOR ASSEMBLY : Adjustment"</u>.

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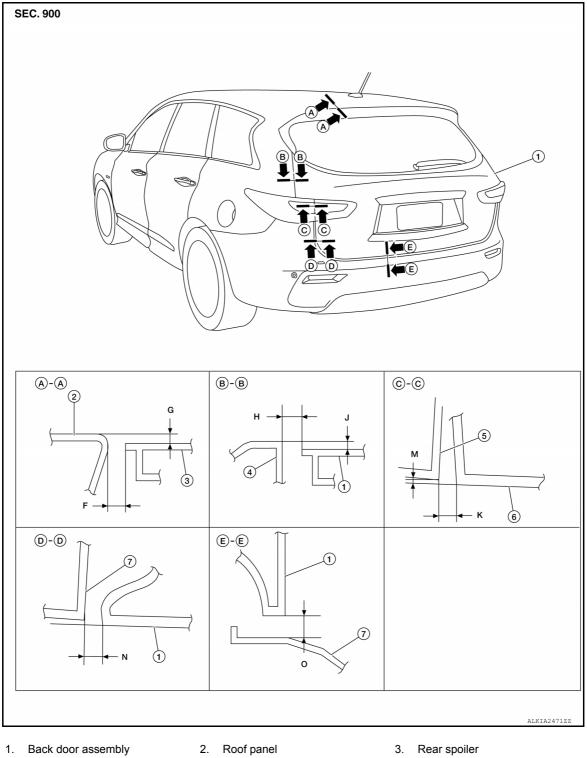
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Revision: March 2012

< REMOVAL AND INSTALLATION >

BACK DOOR ASSEMBLY : Adjustment

INFOID:000000007913903



- 4. Body side outer

- 5. Rear combination lamp
- 6. Back-up lamp

7. Rear bumper fascia

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

< REMOVAL AND INSTALLATION >

	Section	Item	Measurement	Standard	Difference (LH/RH, MAX)
Roof panel – Rear spoiler	A – A	F	Clearance	$7.0 \pm 1.5 \; (0.28 \pm 0.06)$	_
		G	Surface height	1.5 ± 1.5 (0.06 ± 0.06)	
Body side outer – Back door as- sembly	B – B	Н	Clearance	$5.0\pm2.0\;(0.20\pm0.08)$	≤2.0 (0.08)
	0-0	J	Surface height	0.8 ± 2.0 (0.03 ± 0.08)	≤2.0 (0.08)
Rear combination lamp – Back- ip lamp	к- с–с	К	Clearance	$5.0\pm2.0~(0.20\pm0.08)$	≤2.3 (0.08)
		М	Surface height	0.0 ± 2.1 (0.0 ± 0.08)	≤2.5 (0.10)
Rear bumper fascia – Back door assembly	D – D	Ν	Clearance	$7.0\pm2.0\;(0.28\pm0.08)$	_
Rear bumper fascia – Back door assembly	E–E	0	Clearance	$5.0\pm2.0\;(0.20\pm0.08)$	≤2.0 (0.08)
				tallation".	
pose grease. After adjusting, apply to	that it beco back doo rotating buch-up pa	omes pa r open point fe	arallel with back door /close, lock/unlock or poor lubrication	r lock insertion direction.	-
Adjust back door striker so to CAUTION: After installation, check Check back door hinge pose grease. After adjusting, apply to BACK DOOR STRIK	that it beco back doo rotating uch-up pa ER	omes pa r open point fo aint (bo	arallel with back door /close, lock/unlock or poor lubrication ody color) to the hea	r lock insertion direction. operation. . If necessary, apply a su	-
Adjust back door striker so to CAUTION: After installation, check Check back door hinge pose grease. After adjusting, apply to	that it beco back doo rotating uch-up pa ER	omes pa r open point fo aint (bo	arallel with back door /close, lock/unlock or poor lubrication ody color) to the hea	r lock insertion direction. operation. . If necessary, apply a su	-
Adjust back door striker so f CAUTION: After installation, check Check back door hinge pose grease. After adjusting, apply to BACK DOOR STRIKE BACK DOOR STRIKE	that it beco back doo rotating buch-up pa ER ER : Rer	omes pa r open point fo aint (bo noval Refer to	arallel with back door /close, lock/unlock or poor lubrication ody color) to the hea and Installation	r lock insertion direction. operation. . If necessary, apply a su	s and nuts.
Adjust back door striker so f CAUTION: After installation, check Check back door hinge pose grease. After adjusting, apply to BACK DOOR STRIKE BACK DOOR STRIKE REMOVAL 1. Remove back door kick <u>tion"</u> .	that it beco back doo rotating wuch-up pa ER ER : Rer Sing plate. I	omes pa r open point fo aint (bo noval Refer to k door s	arallel with back door /close, lock/unlock or poor lubrication ody color) to the hea and Installation o <u>INT-35. "BACK DOO</u> striker.	r lock insertion direction. operation. . If necessary, apply a su ad of rear door hinge bolt	s and nuts.

BACK DOOR HINGE : Removal and Installation

CAUTION:

• Use two people when removing or installing the back door due to its heavy weight.

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< REMOVAL AND INSTALLATION >

Use protective tape or shop cloths to protect surrounding components from damage during removal and installation of back door.

REMOVAL

- 1. Remove back door assembly. Refer to DLK-282, "BACK DOOR ASSEMBLY : Removal and Installation".
- 2. Remove back door hinge nuts (body side) and then remove back door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Apply anticorrosive agent onto the surface.
- After installation, perform the back door assembly adjustment procedure. Refer to <u>DLK-284, "BACK</u> <u>DOOR ASSEMBLY : Adjustment"</u>.

SPINDLE UNIT

SPINDLE UNIT : Removal and Installation

INFOID:000000007913923

REMOVAL

- 1. Support back door using a suitable tool.
 - WARNING:

Bodily injury may occur if the back door is not supported properly when removing the back door spindle unit.

- 2. Remove rear pillar finisher. Refer to INT-28, "REAR PILLAR FINISHER : Removal and Installation".
- 3. Remove back pillar finisher. Refer to INT-30, "BACK PILLAR FINISHER : Removal and Installation".
- 4. Remove luggage side upper finisher. Refer to <u>INT-30, "LUGGAGE SIDE UPPER FINISHER : Removal</u> <u>and Installation"</u>.
- 5. Position aside headliner and disconnect the harness connector from spindle unit.
- 6. Remove the metal clip located on the connection between spindle unit and the stud ball (body side) by using a suitable tool to release the clip to the side and then toward front.
- 7. Disengage the stud ball from the spindle unit (back door side) then remove spindle unit.

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 WEATHER-STRIP

BACK DOOR WEATHER-STRIP : Removal and Installation

INFOID:000000007913908

REMOVAL

- 1. Support back door using a suitable tool.
- 2. Carefully remove back door weather-strip from opening door joint.

INSTALLATION

- 1. Beginning with upper section, align weather-strip mark with vehicle center position mark and install weather strip to the vehicle.
- 2. For the lower section, align weather-strip seam with center of back door striker.

NOTE:

Pull weather-strip gently to ensure that there are no loose sections.

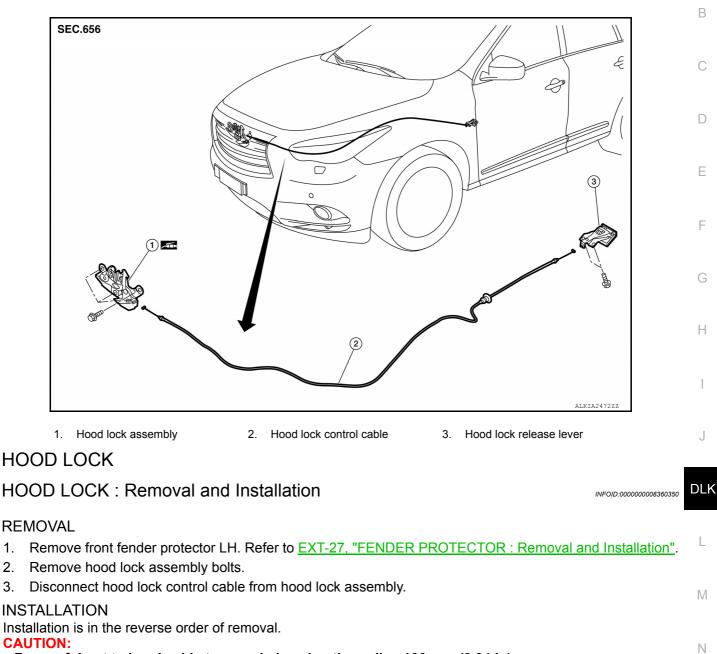
< REMOVAL AND INSTALLATION >

HOOD LOCK

Exploded View

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- Be careful not to bend cable too much, keeping the radius 100 mm (3.94 in) or more.
- Check that hood lock control cable is properly engaged with hood lock assembly.
- After installation, perform hood assembly adjustment procedure. Refer to <u>DLK-266, "HOOD ASSEM-BLY : Adjustment"</u>.
 After adjusting perform hood look inspection. Befer to DLK 288, "Inspection".
- After adjusting, perform hood lock inspection. Refer to <u>DLK-288, "Inspection"</u>.
 HOOD LOCK CONTROL CABLE

HOOD LOCK CONTROL CABLE : Removal and Installation

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REMOVAL

- 1. Disconnect hood lock control cable from hood lock assembly. Refer to <u>DLK-287, "HOOD LOCK : Removal</u> <u>and Installation"</u>.
- 2. Release all hood lock control cable clips.

HOOD LOCK

< REMOVAL AND INSTALLATION >

- 3. Remove hood lock release lever bolts, and then remove hood lock release lever.
- 4. Disconnect hood lock control cable from hood lock release lever.
- Remove grommet on the lower dash, and carefully pull the hood lock control cable into the passenger compartment.
 CAUTION:

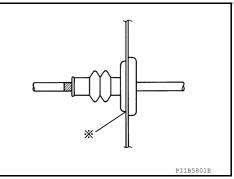
While pulling, be careful not to damage (peel) the outside of hood lock control cable.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Be careful not to bend cable too much, keep the radius 100 mm (3.94 in) or more.
- Check that cable is not offset from the positioning grommet, and apply the sealant to the grommet (at * mark) properly.



- Check that hood lock control cable is properly engaged with hood lock assembly.
- After installation, perform hood assembly adjustment procedure. Refer to <u>DLK-266, "HOOD ASSEM-BLY : Adjustment"</u>.
- After adjusting, perform hood lock inspection. Refer to <u>DLK-288, "Inspection"</u>.

Inspection

INFOID:000000007913911

NOTE:

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

- 1. Check that secondary latch is properly engaged with secondary striker with hoods own weight.
- 2. While operating hood lock release lever, carefully check that the front end of hood assembly is raised by approximately 20.0 mm (0.79 in). Also check that hood lock release lever returns to the original position.
- 3. Check that hood lock release lever operates at 49 N (5.0 kg-m, 11.0 ft-lb) or below.
- 4. Install so that static closing force of hood is 315-490 N (32.1-50.0 kg-m, 70.8-110.2 ft-lb). 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.

FRONT DOOR LOCK

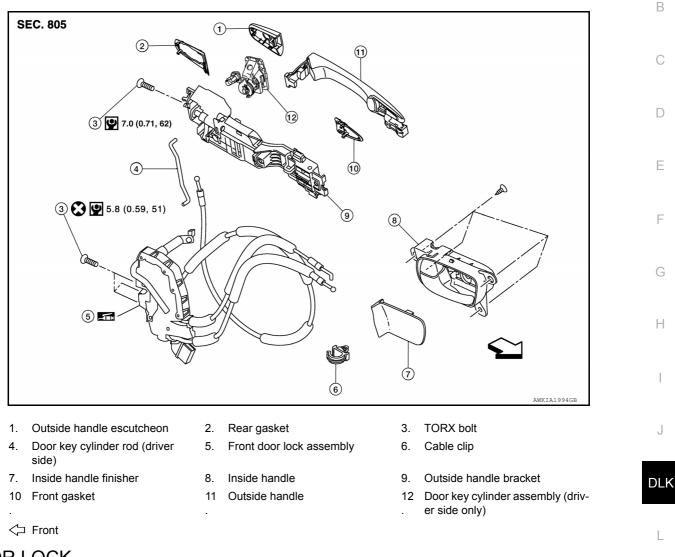
Exploded View

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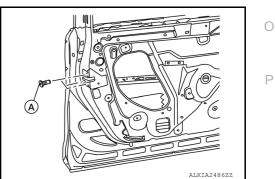


DOOR LOCK

DOOR LOCK : Removal and Installation

REMOVAL

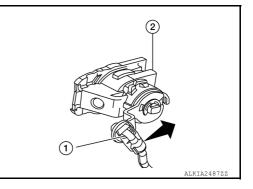
- 1. Remove outside handle and outside handle bracket. Refer to <u>DLK-290, "OUTSIDE HANDLE : Removal</u> ^N <u>and Installation"</u>.
- 2. Remove door lock assembly TORX bolts (A).



FRONT DOOR LOCK

< REMOVAL AND INSTALLATION >

- 3. Disconnect the harness connector from the front door lock actuator and then remove front door lock assembly.
- 4. Remove door key cylinder rod (1) from door lock assembly (2) for LH front door only.



INSTALLATION

Installation is in the reverse order of removal.

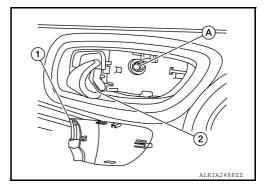
- CAUTION:
- Do not reuse door lock assembly TORX bolts. Always replace bolts with new ones when removed.
- Check door lock cables are properly engaged to inside handle and outside handle bracket.
- When installing door key cylinder rod on the LH front door, be sure to rotate door key cylinder rod holder until a click is felt.
- After installation, check door open/close, 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

REMOVAL

- 1. Remove front door finisher. Refer to INT-15, "Removal and Installation".
- 2. Remove inside handle finisher (1).
- 3. Remove inside handle screws (A) and the inside handle (2).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Check door lock cables are properly engaged to inside handle.
- After installation, check door open/close, lock/unlock operation.

OUTSIDE HANDLE

OUTSIDE HANDLE : Removal and Installation

REMOVAL

- 1. Fully close front door glass.
- 2. Remove front door finisher. Refer to INT-15, "Removal and Installation".
- 3. Remove front door sealing screen.

NOTE:

Cut the butyl tape so that some parts of the butyl tape remain on the sealing screen, if the sealing screen is reused.

Revision: March 2012

DLK-290

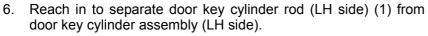
2013 Infiniti JX

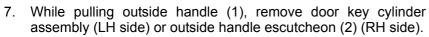
INFOID:000000007913915

FRONT DOOR LOCK

< REMOVAL AND INSTALLATION >

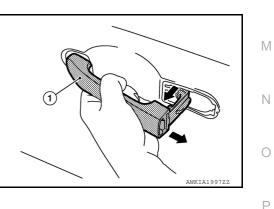
- 4. Disconnect the harness connectors from the door antenna and door request switch and then remove harness clamp on outside handle bracket.
- 5. Remove door side grommet (1), and loosen TORX bolt from grommet hole (2).

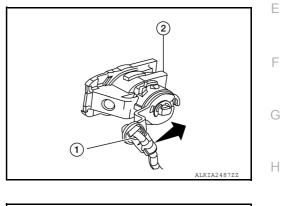


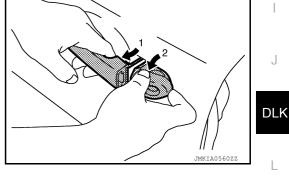


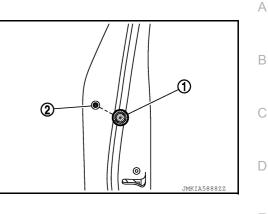
8. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.

9. Remove front gasket and rear gasket.





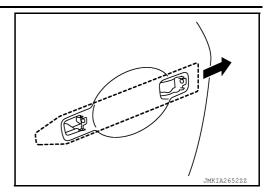




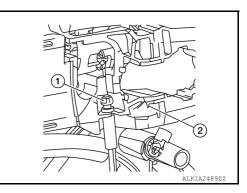
FRONT DOOR LOCK

< REMOVAL AND INSTALLATION >

10. Slide outside handle bracket toward rear of vehicle to remove.



11. Disconnect outside handle cable (1) from outside handle bracket (2).



INSTALLATION

Installation is in the reverse order of removal.

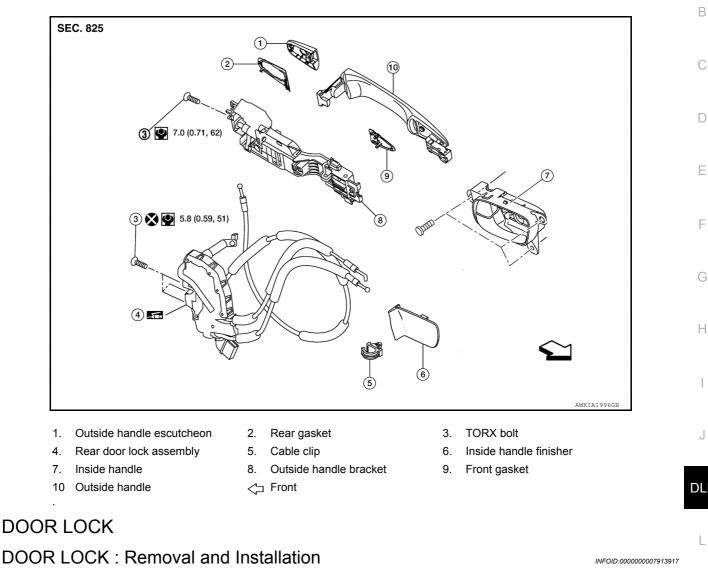
- CAUTION:
- When installing door key cylinder rod on the LH front door, be sure to rotate door key cylinder rod holder until a click is felt.
- Check door lock cable is properly engaged to outside handle bracket.
- After installation, check door open/close, lock/unlock operation.

REAR DOOR LOCK

Exploded View

INFOID:000000007913916

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REMOVAL

- 1. Remove outside handle and outside handle bracket.
- 2. Remove door lock assembly TORX bolts.
- 3. Disconnect the harness connector from the rear door lock then remove rear door lock assembly.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

 Check door lock cables are properly engaged to inside handle and outside handle. • After installation, check door open/close, lock/unlock operation. **INSIDE HANDLE**

INSIDE HANDLE : Removal and Installation

REMOVAL

1. Remove rear door finisher. Refer to INT-16, "Removal and Installation".

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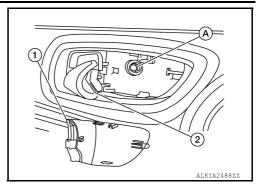
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REAR DOOR LOCK

< REMOVAL AND INSTALLATION >

- 2. Remove inside handle finisher (1). Refer to <u>INT-33</u>, "Exploded <u>View"</u>.
- 3. Remove inside handle screw (A) and inside handle (2).



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

Check door lock cables are properly engaged to inside handle.
After installation, check door open/close, lock/unlock operation. OUTSIDE HANDLE

OUTSIDE HANDLE : Removal and Installation

INFOID:000000007913919

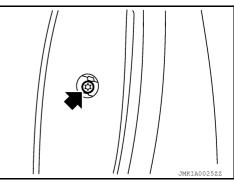
REMOVAL

- 1. Fully close rear door glass.
- 2. Remove rear door finisher. Refer to INT-16, "Removal and Installation".
- 3. Remove rear door sealing screen.

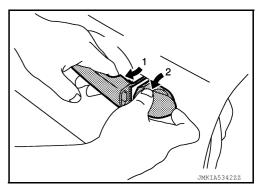
NOTE:

Cut the butyl tape so that some parts of the butyl tape remain on the sealing screen, if the sealing screen is reused.

4. Remove door side grommet, and loosen TORX bolt from grommet hole.



5. While pulling outside handle (1), remove outside handle escutcheon (2).



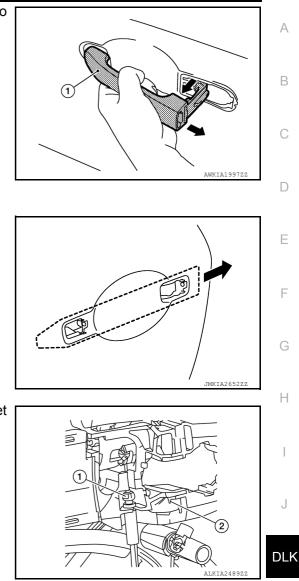
REAR DOOR LOCK

< REMOVAL AND INSTALLATION >

7. Remove front gasket and rear gasket.

(2).

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



9. Disconnect outside handle cable (1) from outside handle bracket

8. Slide outside handle bracket toward rear of vehicle to remove.

INSTALLATION Installation in the reverse order of removal. CAUTION: • Check door lock cable is properly engaged to outside handle bracket. • After installation, check door open/close, lock/unlock operation.

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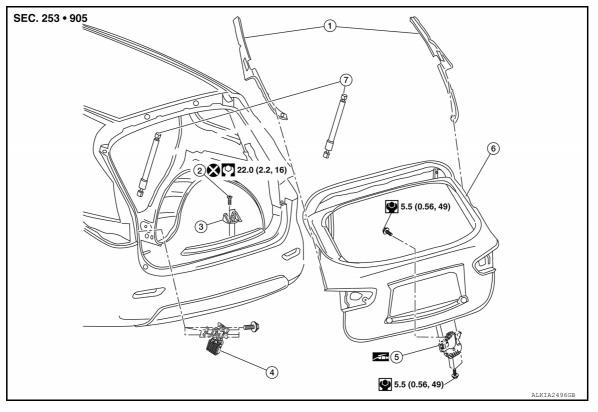
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BACK DOOR LOCK

Exploded View

INFOID:000000007913920



- 1. Back door touch sensor
- 2. TORX bolt

5. Back door lock assembly

- 4. Automatic back door control module
- 7. Spindle unit

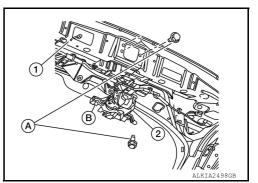
DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:000000007913921

REMOVAL

- 1. Remove back door lower finisher. Refer to INT-34, "BACK DOOR FINISHER : Removal and Installation".
- 2. Disconnect harness connector (B) from the back door lock assembly (2).
- Remove back door lock bolts (A) and back door lock assembly (2) from back door assembly (1).



3. Back door striker

6. Back door assembly

INSTALLATION Installation is in the reverse order of removal. CAUTION: After installation, check back door open/close, lock/unlock operation. TOUCH SENSOR

Revision: March 2012



BACK DOOR LOCK

< REMOVAL AND INSTALLATION > TOUCH SENSOR : Removal and Installation	INFGID:000000007913922	
CAUTION: Use care not to bend touch sensor.		А
REMOVAL		В
 Remove back door side finishers (LH/RH). Refer to <u>INT-34, "B</u> and Installation". 	ACK DOOR SIDE FINISHER : Removal	
2. Disconnect the harness from the touch sensor.		С
3. Release clips and remove TORX screws that retain touch senso		
4. Remove touch sensor harness from the back door assembly, the	en remove touch sensor.	D
INSTALLATION Installation is in the reverse order of removal. CAUTION:		_
After installation, check back door open/close, lock/unlock open EMERGENCY LEVER	ation.	E
EMERGENCY LEVER : Unlock procedures	INFOID:00000007913924	F
UNLOCK PROCEDURES NOTE:		G
If back door lock assembly cannot be unlocked due to a malfunction or battery discharge, perform the follow- ing procedures to unlock back door assembly.		
1. Remove the emergency handle mask, using a suitable tool to re	lease.	Н
From inside the vehicle, rotate emergency lever in the direction shown to unlock.		
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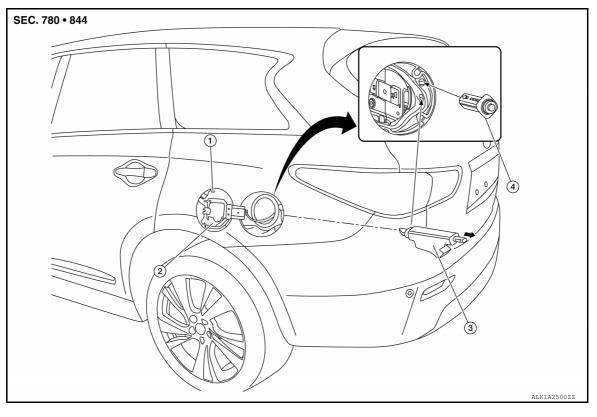
FUEL FILLER LID OPENER

< REMOVAL AND INSTALLATION >

FUEL FILLER LID OPENER

Exploded View

INFOID:000000007913925



- 1. Fuel lid bumper rubber
- 2. Fuel filler lid assembly
- 3. Fuel filler lid lock actuator

4. Fuel filler lid lock assembly

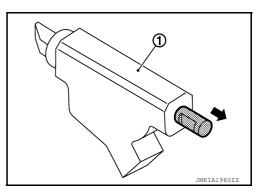
Removal and Installation

INFOID:000000007913926

REMOVAL

NOTE:

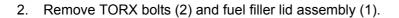
When fuel filler lid lock actuator (1) is not functioning correctly, pull the rod from inside the vehicle to open fuel filler lid assembly.



FUEL FILLER LID OPENER

< REMOVAL AND INSTALLATION >

1. Remove fuel cap pin (1).



- 3. Remove luggage side lower finisher LH. Refer to <u>INT-29</u>, "LUGGAGE SIDE LOWER FINISHER : H <u>Removal and Installation"</u>.
- 4. Rotate lock nut counterclockwise and then remove lock nut.
- 5. Remove fuel filler lid lock actuator by releasing the pawl.
- 6. Disconnect harness connector from fuel filler lid lock actuator.
- 7. Remove fuel filler lock assembly by releasing the pawls.

INSTALLATION

Installation is in the reverse order of removal.

- CAUTION:
- After installation, check fuel filler lid assembly open/close, lock/unlock operation.
- After installation, apply touch-up paint (body color) to the head of fuel filler lid bolts.

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KEY CYLINDER

< REMOVAL AND INSTALLATION >

KEY CYLINDER GLOVE BOX LID KEY CYLINDER

GLOVE BOX LID KEY CYLINDER : Removal and Installation

INFOID:000000007913927

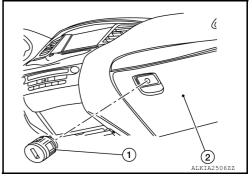
REMOVAL

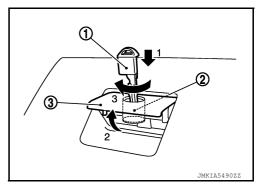
1. Remove glove box assembly (2) to access glove box lid key cylinder (1). Refer to <u>IP-24, "Removal and Installation"</u>.

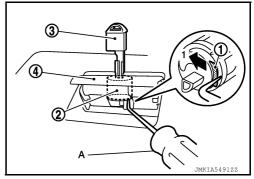
- 2. Insert key (1) into glove box lid lock cylinder (2).
- 3. Pull upward on glove box lid release handle (3).
- 4. Rotate key (1) and turn glove box lid key cylinder (2) to the lock position.

5. Press tumbler stopper (1) into glove box lid lock cylinder (2) using a suitable tool (A), and then remove key (3) and glove box lid lock cylinder together from glove box lid release handle (4). **NOTE:**

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







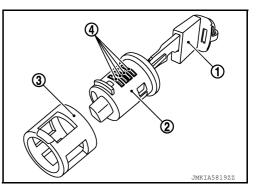
6. Remove sleeve (3) from glove box lid release handle and then install sleeve to glove box lid lock cylinder.

NOTE:

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

CAUTION:

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



INSTALLATION

Installation is in the reverse order of removal.

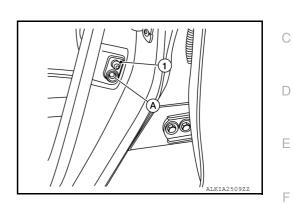
After installation, check glove box assembly open/close, lock/unlock operation.

DOOR SWITCH

Removal and Installation

REMOVAL

- 1. Remove the door switch bolt (A).
- 2. Disconnect harness from 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

INFOID:000000007913931

REMOVAL

The driver side door request switch and driver side outside handle are serviced as an assembly. Refer to <u>DLK-290, "OUTSIDE HANDLE : Removal and Installation"</u>.

INSTALLATION Installation is in the reverse order of removal. PASSENGER SIDE

PASSENGER SIDE : Removal and Installation

REMOVAL

The passenger side door request switch and passenger side outside handle are serviced as an assembly. Refer to <u>DLK-290, "OUTSIDE HANDLE : Removal and Installation"</u>.

INSTALLATION Installation is in the reverse order of removal. BACK DOOR

BACK DOOR : Removal and Installation

REMOVAL Remove the back door outer finisher upper. Refer to <u>EXT-41. "Removal and Installation"</u>.

INSTALLATION Installation is in the reverse order of removal. INFOID:000000007913933

INSIDE KEY ANTENNA	
< REMOVAL AND INSTALLATION >	
INSIDE KEY ANTENNA INSTRUMENT CENTER	A
INSTRUMENT CENTER : Removal and Installation	В
 REMOVAL Remove cluster lid C upper. Refer to <u>IP-21, "Removal and Installation - Cluster Lid C Upper"</u>. Remove the inside key antenna (instrument center) screw, and then remove inside key antenna (instrument center). 	С
INSTALLATION Installation is in the reverse order of removal. CONSOLE	D
CONSOLE : Removal and Installation	
 REMOVAL Remove the center console rear finisher. Refer to <u>IP-18, "Removal and Installation"</u>. Remove the inside key antenna (console) screws and inside key antenna (console). 	F
INSTALLATION Installation is in the reverse order of removal. LUGGAGE ROOM	Н
LUGGAGE ROOM : Removal and Installation	I
 REMOVAL Remove the second row seatback. Refer to <u>SE-85, "Removal and Installation"</u>. Remove the inside key antenna (luggage room) clip, and then remove inside key antenna (luggage room). INSTALLATION 	J
Installation is in the reverse order of removal.	DLK

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OUTSIDE KEY ANTENNA DRIVER SIDE

DRIVER SIDE : Removal and Installation

REMOVAL

The driver side outside key antenna and driver side outside handle are serviced as an assembly. Refer to <u>DLK-290, "OUTSIDE HANDLE : Removal and Installation"</u>.

INSTALLATION Installation is in the reverse order of removal. PASSENGER SIDE

PASSENGER SIDE : Removal and Installation

REMOVAL The passenger side outside key antenna and passenger side outside handle are serviced as an assembly. Refer to <u>DLK-290</u>, "OUTSIDE HANDLE : Removal and Installation".

INSTALLATION Installation is in the reverse order of removal. REAR BUMPER

REAR BUMPER : Removal and Installation

REMOVAL Remove rear bumper fascia. Refer to <u>EXT-20, "Removal and Installation"</u>.

INSTALLATION Installation is in the reverse order of removal. INFOID:000000007913937

INFOID:000000007913938

INTELLIGENT KEY WARNING BUZZER

< REMOVAL AND INSTALLATION >

INTELLIGENT KEY WARNING BUZZER

		Δ
Removal and Installation	INFOID:000000007913940	~
REMOVAL NOTE:		В
 The Intelligent Key warning buzzer is located in the left front area of the engine compartment. Remove the Intelligent Key warning buzzer clips. Disconnect the harness connector from the Intelligent Key warning buzzer and remove. 		С
INSTALLATION Installation is in the reverse order of removal.		D

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REMOTE KEYLESS ENTRY RECEIVER

Removal and Installation

INFOID:000000007913941

REMOVAL

- 1. Remove the glove box assembly. Refer to IP-24, "Removal and Installation".
- 2. Remove the remote keyless entry receiver bolt.
- 3. Disconnect the harness connector from remote keyless entry receiver and remove.

INSTALLATION

Installation is in the reverse order of removal.

INTELLIGENT KEY BATTERY

< REMOVAL AND INSTALLATION >

INTELLIGENT KEY BATTERY

Removal and Installation

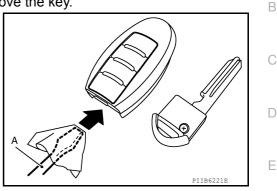
- 1. Release the lock knob on the back of the Intelligent Key and remove the key.
- 2. Insert a suitable tool (A) wrapped with a cloth into the slit of the corner and twist it to separate the upper part from the lower part. CAUTION:
 - Do not touch the circuit board or battery terminal.
 - The key fob is water-resistant. However, if it does get wet, immediately wipe it dry.

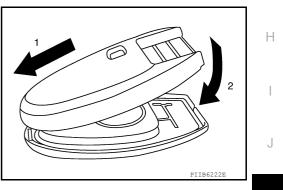


Battery replacement

:Coin-type lithium battery (CR2025)

- 4. Align the tips of the upper and lower parts, and then push them together until unit is securely closed. CAUTION:
 - When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.
 - After replacing the battery, check that all Intelligent Key functions work normally.





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AUTOMATIC BACK DOOR CONTROL MODULE

< REMOVAL AND INSTALLATION >

AUTOMATIC BACK DOOR CONTROL MODULE

Removal and Installation

INFOID:000000008297270

REMOVAL

- 1. Remove the luggage side lower finisher LH. Refer to <u>INT-29</u>, "LUGGAGE SIDE LOWER FINISHER : <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.

INSTALLATION

Installation is in the reverse order of removal.

BACK DOOR WARNING CHIME

< REMOVAL AND INSTALLATION >

BACK DOOR WARNING CHIME		Λ
Removal and Installation	INFOID:000000007913945	A
REMOVAL		В
1. Remove the rear bumper fascia. Refer to <u>EXT-20, "Removal and Installation"</u> .		
 Remove the back door warning chime nut. Disconnect the harness connector from the back door warning chime and remove. 		С
INSTALLATION		
Installation is in the reverse order of removal.		D

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AUTOMATIC BACK DOOR MAIN SWITCH

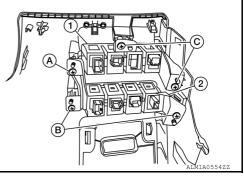
< REMOVAL AND INSTALLATION >

AUTOMATIC BACK DOOR MAIN SWITCH

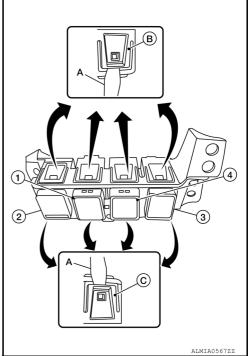
Removal and Installation

REMOVAL

- 1. Remove the instrument lower panel LH. Refer to IP-23, "Removal and Installation".
- Remove five screws (A,B,C) that retain the upper (1) and lower
 (2) switch carriers.



- 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) Blank
 - (2) VDC switch
 - (4) Automatic back door switch



INSTALLATION

Installation is in the reverse order of removal.

AUTOMATIC BACK DOOR CLOSE SWITCH

< REMOVAL AND INSTALLATION >

AUTOMATIC BACK DOOR CLOSE SWITCH

А **Removal and Installation** INFOID:000000007913947 REMOVAL В 1. Open back door assembly. 2. Release the three pawls (one of the top and two on the bottom) using a suitable tool and remove the auto-С matic back door close switch as an assembly. 3. Remove the automatic back door close switch screws, then remove automatic back door close switch from the finisher. D INSTALLATION Installation is in the reverse order of removal. Е

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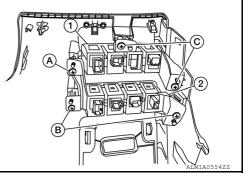
AUTOMATIC BACK DOOR SWITCH

Removal and Installation

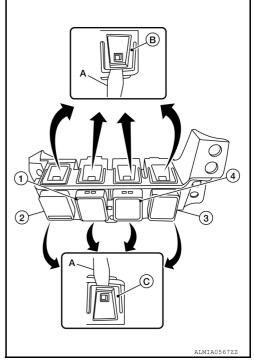
INFOID:000000007913948

REMOVAL

- 1. Remove the instrument lower panel LH. Refer to IP-23, "Removal and Installation".
- Remove five 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 switch (4) from the upper switch carrier.
 - (1) Blank
 - (2) VDC switch
 - (3) Automatic back door main switch



INSTALLATION

Installation is in the reverse order of removal.