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PRECAUTION

PRECAUTIONS

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRF-TFNSIONER"

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, it is recommended that all maintenance and repair be performed by an authorized NISSAN/INFINITI dealer.
- Improper repair, 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 Air Bag Diagnosis Sensor Unit or other Air Bag 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 or batteries, and wait at least three minutes before performing any service.

Precaution for Servicing Doors and Locks

WARNING:

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

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

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- Do not use organic solvent such as thinner, benzene, alcohol or gasoline.

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PRECAUTIONS

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- For genuine leather seats, use a genuine leather seat cleaner.

PREPARATION

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PREPARATION

Special Service Tool

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Tool number (TechMate No.) Tool name		Description
 (J-39570) Chassis Ear	SIIAO993E	Locating the noise
— (J-50397) INFINITI Squeak and Rattle Kit	Six Pilling & Young	Repairing the cause of noise

(J-43241) Remote Keyless Entry Tester

(J-50190)

Signal Tech II



ALJIA1232ZZ

Used to test keyfobs

· Activate and display TPMS transmitter · Display tire pressure reported by the

TPMS transmitter · Read TPMS DTCs

· Register TPMS transmitter IDs

· Test remote keyless entry keyfob relative signal strength

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· Check Intelligent Key relative signal strength · Confirm vehicle Intelligent Key anten-ALEIA0131ZZ na signal strength · Compatible with future sensors · Equipped with a display

PREPARATION

< PREPARATION >

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

Commercial Service Tool

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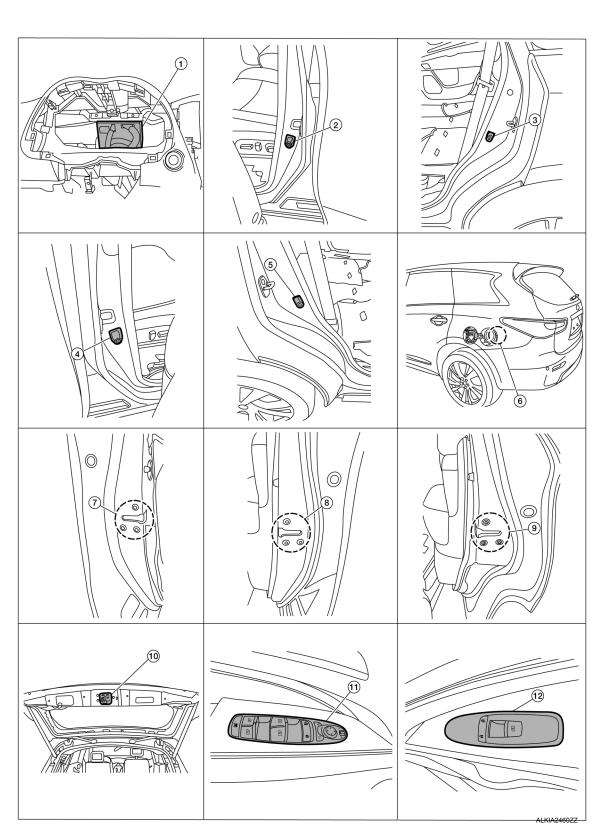
(TechMate No.) Tool name		Description
(J-39565) Engine Ear	SIIA0995E	Locating the noise
(—) Power Tool		Loosening nuts, screws and bolts
	PIIB1407E	

SYSTEM DESCRIPTION

COMPONENT PARTS
POWER DOOR LOCK SYSTEM

POWER DOOR LOCK SYSTEM : Component Parts Location

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COMPONENT PARTS

< SYSTEM DESCRIPTION >

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

POWER DOOR LOCK SYSTEM : Component Description

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

INTELLIGENT KEY SYSTEM

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INTELLIGENT KEY SYSTEM: Component Parts Location

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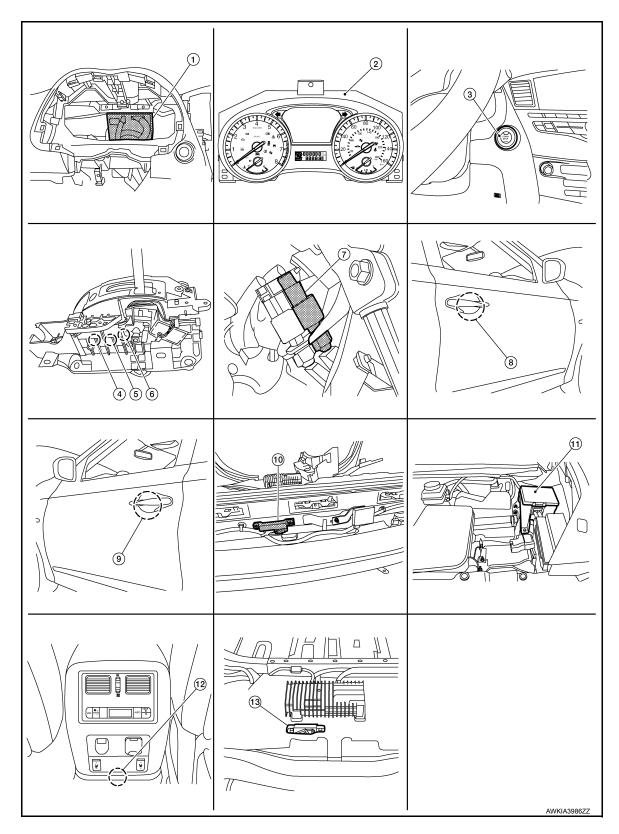
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- BCM (view with combination meter removed)
- 4. CVT shift selector [park position switch (shift selector)]
- 2. Combination meter
- CVT shift selector (shift lock solenoid)
- 3. Push-button ignition switch
- 6. CVT shift selector (park position switch)

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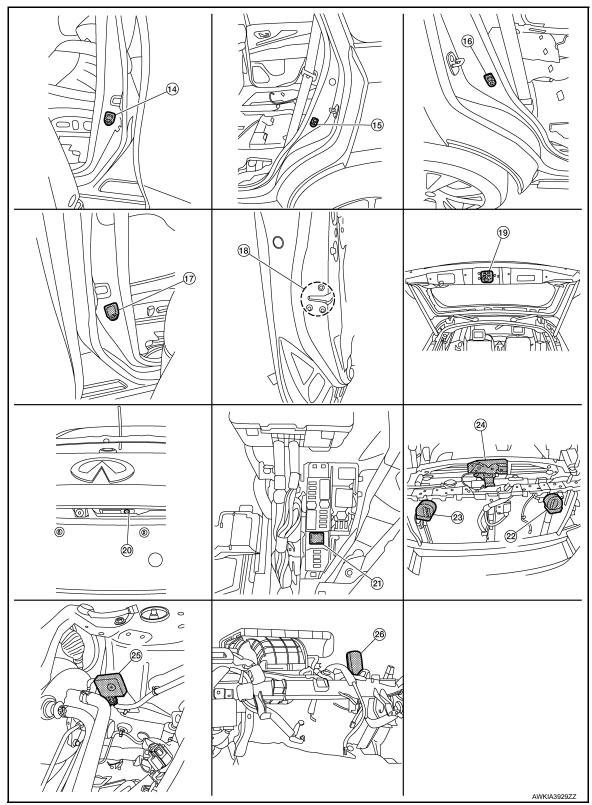
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COMPONENT PARTS

< SYSTEM DESCRIPTION >

- 7. Stop lamp switch
- Outside key antenna (rear bumper)
 (view with rear bumper cover removed)
- 13. Inside key antenna (luggage room) (view with rear carpet removed)
- 8. Front outside handle RH (RH request switch and outside key antenna passenger side)
- 11. IPDM E/R

- Front outside handle LH (LH request switch and outside key antenna drivers side)
- 12. Inside key antenna (console)



COMPONENT PARTS

< SYSTEM DESCRIPTION >

14. Front door switch LH 17. Front door switch RH

23. Horn (high)

15. Rear door switch LH 18. Front door lock assembly LH

21. Horn relay

24. Hood switch

- 16. Rear door switch RH 19. Back door lock assembly
- 22. Horn (low)
 - 25. Intelligent Key warning buzzer

- 20. Back door opener switch
- 26. Remote keyless entry receiver (view with instrument panel removed)

INTELLIGENT KEY SYSTEM: Component Description

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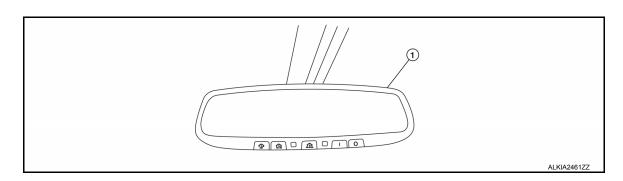
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Item	Function
BCM	Controls the Intelligent Key system.
Back door opener switch	Inputs back door open/close condition to BCM.
Door lock actuator	Output lock/unlock signal from BCM and locks/unlocks each door.
Stop lamp switch	Inputs the brake pedal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



Auto anti-dazzling inside mirror

INTEGRATED HOMELINK TRANSMITTER: Component Description

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

AUTOMATIC BACK DOOR SYSTEM

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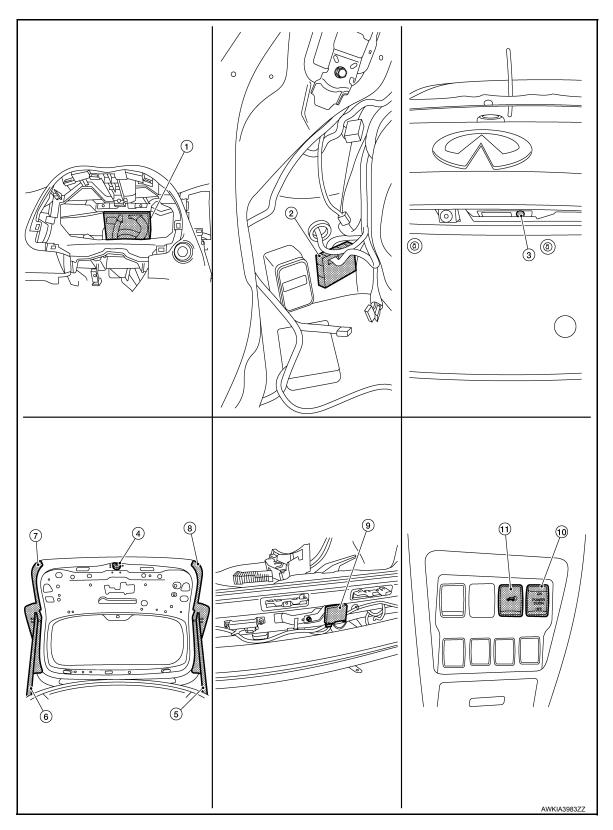
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AUTOMATIC BACK DOOR SYSTEM : Component Parts Location

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- BCM (view with combination meter removed)
- 4. Back door lock assembly
- Automatic back door control module 3. (view with luggage side lower finisher removed)
- 5. Spindle Unit RH

- Back door opener switch
- 6. Spindle Unit LH

COMPONENT PARTS

< SYSTEM DESCRIPTION >

- 7. Touch sensor LH
- 8. Touch sensor RH
- 9. Back door warning chime (view with rear bumper cover removed)

- 10. Automatic back door main switch
- 11. Automatic back door switch

AUTOMATIC BACK DOOR SYSTEM : Component Description

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

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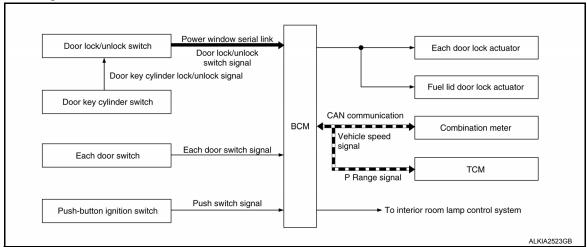
SYSTEM (POWER DOOR LOCK SYSTEM)

< SYSTEM DESCRIPTION >

SYSTEM (POWER DOOR LOCK SYSTEM)

System Diagram

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System Description

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DOOR LOCK FUNCTION

Door Lock and Unlock Switch

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

Door Key Cylinder Switch

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

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

DOOR KEY CYLINDER SWITCH POWER WINDOW FUNCTION

Driver side door key cylinder LOCK/UNLOCK operation can activate power window. Refer to PWC-7, "System <a href="Description".

IGNITION POSITION WARNING FUNCTION

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

INTERIOR ROOM LAMP CONTROL FUNCTION

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

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (LOCK OPERATION)

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

Vehicle Speed Sensing Auto Door Lock

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

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

SYSTEM (POWER DOOR LOCK SYSTEM)

< SYSTEM DESCRIPTION >

P Range Interlock Door Lock

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

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

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Setting change of Automatic Door Lock/Unlock Function

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

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(P) 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.

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Without CONSULT

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

Close all doors (door switch OFF)

E

- Ignition switch: OFF→ON
- 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

G

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (UNLOCK OPERATION)

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

IGN OFF Interlock Door Unlock

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

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

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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.

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Setting change of Automatic Door Lock/Unlock Function

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

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(II) 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.

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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)
- Ignition switch: OFF→ON

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- 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.

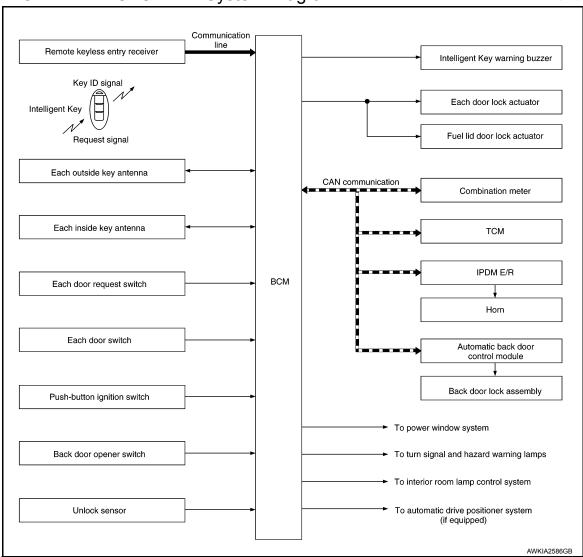
 $OFF \rightarrow ON$: 2 blinks $ON \rightarrow OFF$: 1 blink

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SYSTEM (INTELLIGENT KEY SYSTEM) INTELLIGENT KEY SYSTEM

INTELLIGENT KEY SYSTEM: System Diagram

INFOID:0000000012851880



INTELLIGENT KEY SYSTEM: System Description

INFOID:0000000012851881

 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).

The driver should always carry the Intelligent Key.

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

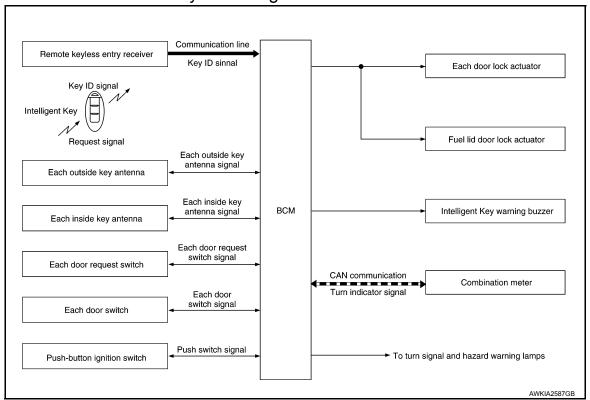
Function	Description	Refer
Door lock	Lock/unlock can be performed by pressing the request switch.	DLK-21
Back door opener	The back door can be opened by carrying the Intelligent Key and pressing the back door opener switch.	DLK-24

< SYSTEM DESCRIPTION >

Function	Description	Refer	
Remote keyless entry	Lock/unlock can be performed by pressing the remote controller b telligent Key.	utton of the In-	DLK-25
Key reminder	The key reminder buzzer sounds a warning if the door is locked w inside the vehicle.	ith the key left	DLK-28
Welcome light	When the Intelligent Key is carried, and vehicle doors are approach illuminates interior room lamps and operates heart beat operation button ignition switch.	<u>DLK-32</u>	
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-33	
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	
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, according to key ID of Intelligent Key to the position that is registered in advance.	Automatic drive posi- tioner	<u>ADP-11</u>
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-19</u>
	Setting of multi AV system can be set according to key ID of Intelligent Key to the setting value that is set before turning ignition switch OFF.	<u>AV-24</u>	

DOOR LOCK FUNCTION

DOOR LOCK FUNCTION: System Diagram



DOOR LOCK FUNCTION : System Description

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

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< SYSTEM DESCRIPTION >

OPERATION DESCRIPTION

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

OPERATION CONDITION

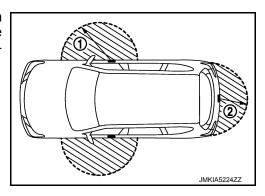
If the following conditions are satisfied, door lock/unlock operation is performed if the door request switch is operated.

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

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

OUTSIDE KEY ANTENNA DETECTION AREA

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



SELECTIVE UNLOCK FUNCTION

Lock Operation

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

Unlock Operation

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

How To Change Selective Unlock Operation Mode

Selective unlock operation mode can be changed using CONSULT.

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

HAZARD AND BUZZER REMINDER FUNCTION

< SYSTEM DESCRIPTION >

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

Operating Function Of Hazard And buzzer Reminder

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

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

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

How To Change Hazard And Buzzer Reminder Mode

Hazard and buzzer reminder mode can be changed using CONSULT.

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

AUTO DOOR LOCK FUNCTION

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

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

How To Change Auto Door Lock Operation Mode

Auto door lock operation mode can be changed using CONSULT.

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

LIST OF OPERATION RELATED PARTS

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

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

BACK DOOR OPEN FUNCTION

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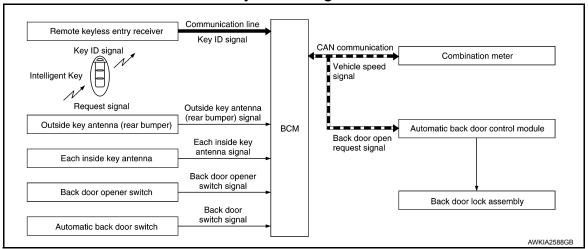
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< SYSTEM DESCRIPTION >

BACK DOOR OPEN FUNCTION: System Diagram

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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 DLK-37, <a href="System Description".

OPERATION CONDITION

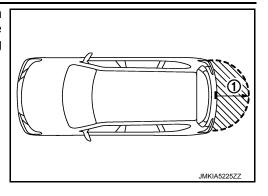
If the following conditions are not satisfied, back door open operation is not performed even if the back door opener switch is operated.

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

OUTSIDE KEY ANTENNA DETECTION AREA

< SYSTEM DESCRIPTION >

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



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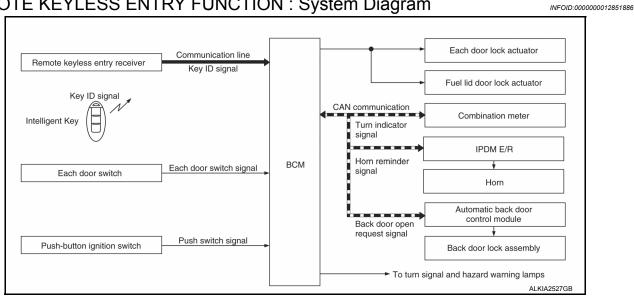
LIST OF OPERATION RELATED PARTS

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

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

REMOTE KEYLESS ENTRY FUNCTION

REMOTE KEYLESS ENTRY FUNCTION: System Diagram



REMOTE KEYLESS ENTRY FUNCTION: System Description

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

OPERATION

Remote keyless entry system controls operation of the following items.

- Door lock/unlock function
- · Selective unlock function

INFOID:0000000012851887

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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 pushbutton ignition switch at the same time.
- To cancel the remote engine start mode away from the vehicle, press the remote engine start button on the Intelligent Key.
- Once the vehicle has been started using the remote engine start feature it will remain running for 10 minutes. Extended run time can be added to the initial 10 minute running time by pressing the lock button and remote engine start button within 5 seconds of each other. This will add an aditional 10 minutes of running time. Extended time can only be added once, for a total run time of up to 20 minutes.

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

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

OPERATION CONDITION

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

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

SELECTIVE UNLOCK FUNCTION

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

How to change selective unlock operation mode.

Selective unlock operation mode can be changed using CONSULT.

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

AUTO DOOR LOCK FUNCTION

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

< SYSTEM DESCRIPTION >

Operating condition	 Door switch is ON (door is open) Door is locked Push switch is pressed
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How to change auto door lock operation mode.

Auto door lock mode can be changed using CONSULT.

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

HAZARD AND HORN REMINDER FUNCTION

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

Operating Function of Hazard and Horn Reminder

	C n	node	Sn	node
Intelligent Key operation	Lock	Unlock	Lock	Unlock
Hazard warning lamp blinks	Twice	Once	Twice	_
Horn sound	Once	_	_	_

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

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

How to Change Hazard and Horn Reminder Mode

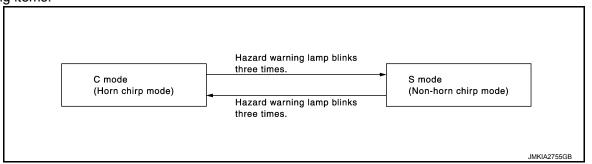
(II) With CONSULT

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

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

Without CONSULT

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



AUTOMATIC BACK DOOR OPEN/CLOSE FUNCTION

When back door button of Intelligent Key is pressed for 0.4 second or more, back door open automatically for detailed description, refer to <u>DLK-37</u>, "System <u>Description</u>".

LIST OF OPERATION RELATED PARTS

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

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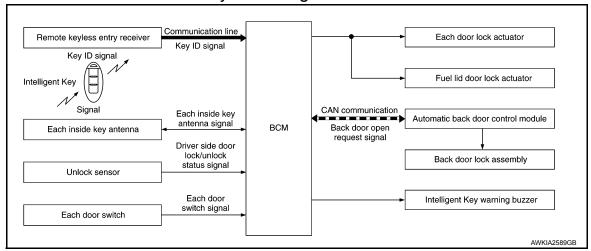
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Function	Intelligent Key	Door switch	Door lock actuator	Fuel lid lock actuator	Push-button ignition switch	CAN communication system	BCM	IPDM E/R	Horn	Combination meter	Hazard warning lamp	Automatic back door control module	Back door lock assembly
Door 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

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KEY REMINDER FUNCTION: System Description

INFOID:0000000012851889

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.

< SYSTEM DESCRIPTION >

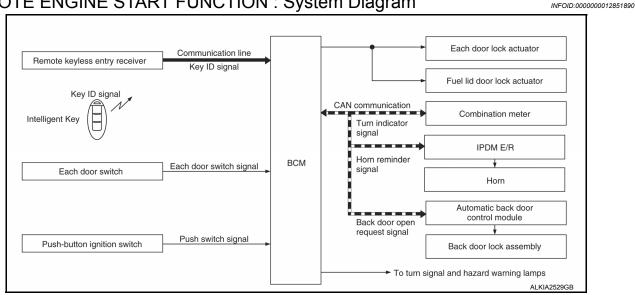
Key remainder func- tion	Operation condition	Operation			
Door is open or closed	Right after all doors are closed under the following conditions: Intelligent Key is inside the vehicle. Any door is open. All doors (except back door) are locked by door lock and unlock switch or door lock knob.	 All doors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

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

 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

INFOID:0000000012851891

OPERATION

Remote keyless entry system controls operation of the following items.

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

OPERATION AREA

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

REMOTE ENGINE START FUNCTION

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< SYSTEM DESCRIPTION >

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

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

HAZARD AND HORN REMINDER FUNCTION

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

Operating Function of Hazard and Horn Reminder

	C n	node	Sm	node
Intelligent Key operation	Lock	Unlock	Lock	Unlock
Hazard warning lamp blinks	Twice	Once	Twice	_
Horn sound	Once	_	_	_

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

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

How to Change Hazard and Horn Reminder Mode

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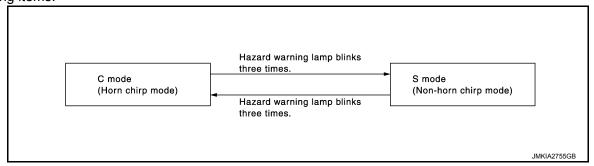
(II) With CONSULT

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

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

Without CONSULT

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



LIST OF OPERATION RELATED PARTS

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

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

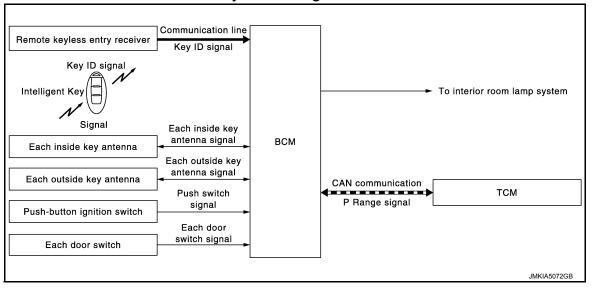
WELCOME LIGHT FUNCTION

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< SYSTEM DESCRIPTION >

WELCOME LIGHT FUNCTION: System Diagram

INFOID:0000000012851892



WELCOME LIGHT FUNCTION: System Description

INFOID:0000000012851893

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

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

OPERATION DESCRIPTION

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

TIMER FUNCTION

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

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

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

OPERATION CONDITION

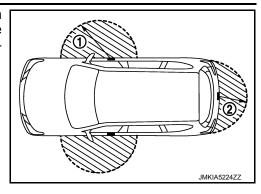
If the following condition are satisfied, welcome light function is operated.

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

OUTSIDE KEY ANTENNA DETECTION AREA

< SYSTEM DESCRIPTION >

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



WELCOME LIGHT FUNCTION SETTING

Welcome light function operation mode can be changed using CONSULT

(P) With CONSULT

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

₩ Without CONSULT

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

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

WARNING FUNCTION

WARNING FUNCTION: System Description

INFOID:0000000012851894

OPERATION DESCRIPTION

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

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

OPERATION CONDITION

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

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

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< SYSTEM DESCRIPTION >

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

WARNING METHOD

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

< SYSTEM DESCRIPTION >

		"KEY"	Intermation display		ng chime
Warning/Info	ormation functions	warning lamp	Information display (combination meter)	Combination meter buzzer	Intelligent Key warning buzzer
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 ALKIA2515GB	_	Active
ACC warning		_	Push ignition to OFF ALKIA2516GB	Activate	_
	Door is open to close			Activate	Activate
Door is open			_	_	
Take away warning	Push-button ignition switch operation	_	No Key Detected	Activate	_
Door lock op- eration warn-	Request switch operation	_	ALKIA2517GB —	_	Activate
ing	Intelligent Key	_	_	_	Activate
Key ID warning	9	_	Key ID Incorrect	_	_
Engine start information		_	Push brake and start button to drive	_	_

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< SYSTEM DESCRIPTION >

	"KEY"	Information display	Warning chime				
Warning/Information functions	warning lamp	(combination meter)	Combination meter buzzer	Intelligent Key warning buzzer			
Intelligent Key low battery warning	_	Key low battery ALKIA2520GB	_	_			
Key ID verification information	_	(I) ((I) (I) (ALKIA2521ZZ	_	_			

LIST OF OPERATION RELATED PARTS

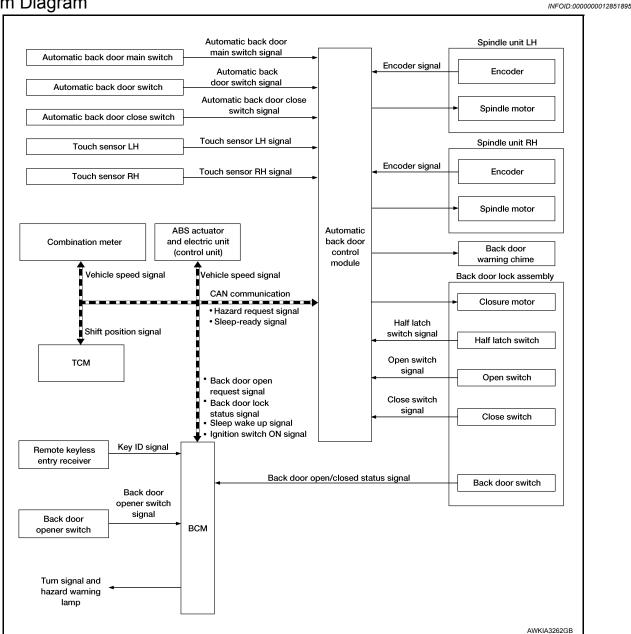
Parts marked with \times are the parts related to operation.

Warning function		Intelligent Key	Ignition switch	Door switch	Door request switch	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	Combination meter buzzer	CAN communication system	ВСМ	Information display	"KEY" warning lamp
Intelligent Key system malfunction										×	×		×
OFF position warning	For internal			×					×	×	×		
Of a position warning	For external			×				×			×		
P (Park) position warning	P (Park) position warning		×						×	×	×	×	×
ACC warning			×						×	×	×	×	
	Door is open or close	×		×		×		×	×	×	×	×	×
Take away warning	Door is open	×		×		×				×	×	×	×
rake away warriing	Push-button ignition switch operation	×	×			×			×	×	×	×	×
Door lock operation warning	Door lock operation warning			×	×	×	×	×			×		
Key ID warning			×			×				×	×	×	×
-	Ignition switch is ON position	×	×			×				×	×	×	
Engine start information	Ignition switch is except ON position	×	×			×				×	×	×	
Intelligent Key low battery warning		×				×				×	×	×	×
Key ID verification information		×				×				×	×	×	-

< SYSTEM DESCRIPTION >

SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

System Diagram



System Description

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

BACK DOOR OPEN POSITION SETTING FUNCTION

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

Setting Procedure

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

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

Cancellation Procedure

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

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

BACK DOOR AUTO CLOSURE FUNCTION

Open Function

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

Closure Function

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

WARNING FUNCTION

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

Chime Operation Condition

< SYSTEM DESCRIPTION >

	Pattern	Time	Description
A	ON 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	250ms 750ms ON JMKIA1863ZZ	During open/close operation	During operation announcement
E	ON 500ms OFF	2.5 sec.	Calibration of automatic back door position information is complete Back door open position setting procedure is complete

ANTI-PINCH FUNCTION

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

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

Operation Condition

Detection method		Encoder pulse	Touch sensor				
Applicable operation		Open/close operation	Close operation				
Operation when any trapped foreign material is detected	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 				
	Running the vehicle	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 motor operation Full range of closure operation Driving 	Back door open operation Closure [open (return the latch to the neutral position)]				

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< SYSTEM DESCRIPTION >

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

AUTOMATIC BACK DOOR OPEN/CLOSE OPERATION CONDITION

	Automa	atic back doc	or switch	Intellig	ent Key			oor opener witch	
Operating direction	Fully closed → Open		Fully open →Closed	$ \begin{array}{c} \text{Fully} \\ \text{closed} \rightarrow \\ \text{Open} \end{array} \rightarrow \begin{array}{c} \text{Fully open} \\ \rightarrow \text{Closed} \end{array} $		Fully open → 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		0 km/h							
Back door lock condition	_	_	_			_	Unlock*		
Touch sensor	Normal								
Power supply (Automatic power back door control module)	Approx. 11 V or more								

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

CONTROL IF NOT WITHIN THE OPERATION CONDITIONS DURING THE OPERATION If the back door is not within the operation conditions during the operation, the automatic back door control module performs the control as follows.

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

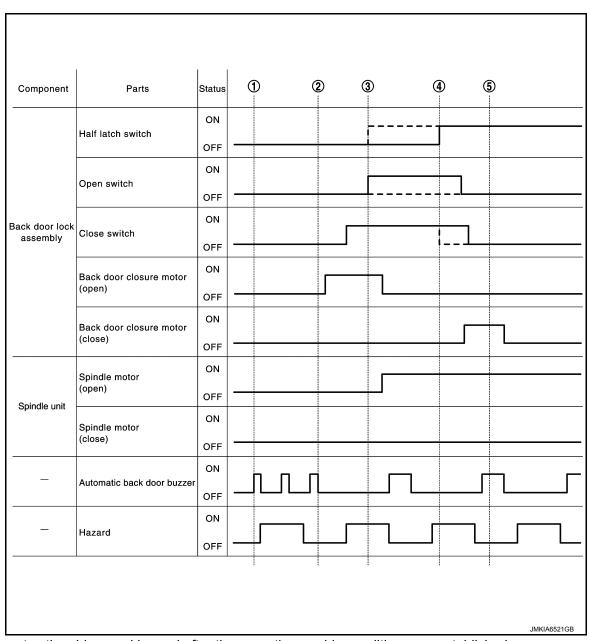
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Item (Condition)	Back door condition			
Pack door opener quitch	Closure (close) operation	Closure (open) operation and back door open		
Back door opener switch (OFF → ON)	Closure [open (return the latch to the neutral position)]	Back door open		
Malfunction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

TIME CHART FOR AUTOMATIC BACK DOOR SYSTEM

Fully Closed to Fully Open Operation

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



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

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< SYSTEM DESCRIPTION >

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

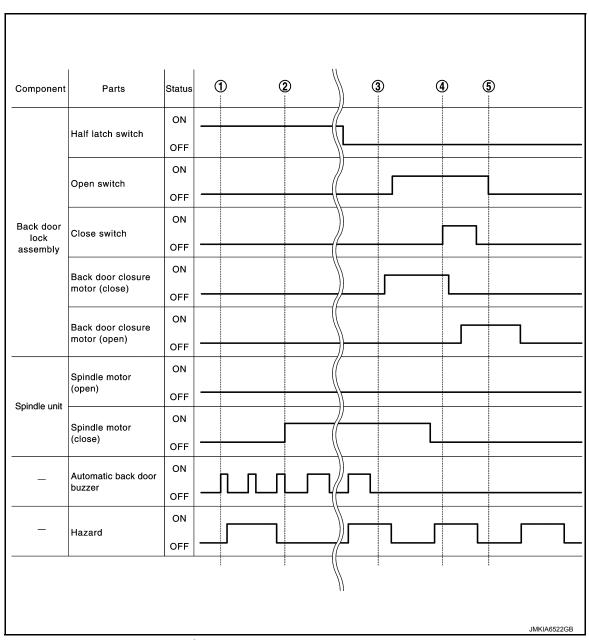
- 4. The back door closure motor performs the close operation after turning the half latch switch to ON.
- Stop the back door closure motor close operation and return the latch to the neutral position after turning the close switch to OFF.

NOTE:

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

Fully Open to Fully Closed Operation

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



- 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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< S	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.	Α	
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SYSTEM (INTEGRATED HOMELINK TRANSMITTER)

< SYSTEM DESCRIPTION >

SYSTEM (INTEGRATED HOMELINK TRANSMITTER)

System Description

INFOID:0000000012851897

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

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM: CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000013577891

CAUTION:

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

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Direct Diagnostic Mode	Description
Ecu Identification	The BCM part number is displayed.
Self Diagnostic Result	The BCM self diagnostic results are displayed.
Data Monitor	The BCM input/output data is displayed in real time.
Active Test	The BCM activates outputs to test components.
Work support	The settings for BCM functions can be changed.
Configuration	 The vehicle specification can be read and saved. The vehicle specification can be written when replacing BCM.
CAN Diag Support Mntr	The result of transmit/receive diagnosis of CAN communication is displayed.

SYSTEM APPLICATION

BCM can perform the following functions.

				Direct 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			×				
всм	BCM	×	×			×	×	×
Immobilizer	IMMU		×	×	×			
Interior room lamp battery saver	BATTERY SAVER			×	×			
Back door open	TRUNK			×				
Vehicle security system	THEFT ALM			×	×	×		
RAP system	RETAINED PWR			×				

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

DOOR LOCK

DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)

INFOID:0000000013577892

CAUTION:

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

SELF DIAGNOSTIC RESULT Refer to <u>BCS-51</u>, "DTC <u>Index"</u>.

DATA MONITOR

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

ACTIVE TEST

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

WORK SUPPORT

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

< SYSTEM DESCRIPTION >

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

^{* :} Initial setting

INTELLIGENT KEY

INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)

INFOID:0000000013577893

CAUTION:

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

SELF DIAGNOSTIC RESULT Refer to BCS-51, "DTC Index".

DATA MONITOR

Monitor Item [Unit]	Main	Description
REQ SW -DR [On/Off]	×	Indicates condition of door request switch LH.
REQ SW -AS [On/Off]	×	Indicates condition of door request switch RH.
REQ SW -BD/TR [On/Off]	×	Indicates condition of back door request switch.
PUSH SW [On/Off]		Indicates condition of push-button ignition switch.
SHFTLCK SLNID PWR SPLY [On/Off]	×	Indicates condition of power supply to shiftlock solenoid.
BRAKE SW 1 [On/Off]	×	Indicates condition of brake switch.
BRAKE SW 2 [On/Off]		Indicates condition of brake switch.
DETE/CANCL SW [On/Off]	×	Indicates condition of P (park) position.
SFT PN/N SW [On/Off]	×	Indicates condition of P (park) or N (neutral) position.
UNLK SEN -DR [On/Off]	×	Indicates condition of door unlock sensor.
PUSH SW -IPDM [On/Off]		Indicates condition of push-button ignition switch received from IPDM E/R on CAN communication line.
IGN RLY1 -F/B [On/Off]		Indicates condition of ignition relay 1 received from IPDM E/R on CAN communication line.
DETE SW -IPDM [On/Off]		Indicates condition of detent switch received from TCM on CAN communication line.
SFT PN -IPDM [On/Off]		Indicates condition of P (park) or N (neutral) position from TCM on CAN communication line.
SFT P -MET [On/Off]		Indicates condition of P (park) position from TCM on CAN communication line.
SFT N -MET [On/Off]		Indicates condition of N (neutral) position from IPDM E/R on CAN communication line.
ENGINE STATE [Stop/Start/Crank/Run]	×	Indicates condition of engine state from ECM on CAN communication line.
VEH SPEED 1 [mph/km/h]	×	Indicates condition of vehicle speed signal received from ABS on CAN communication line.
VEH SPEED 2 [mph/km/h]	×	Indicates condition of vehicle speed signal received from combination meter on CAN communication line.

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< SYSTEM DESCRIPTION >

Monitor Item [Unit]	Main	Description
DOOR STAT -DR [LOCK/READY/UNLK]	×	Indicates condition of driver side door status.
DOOR STAT -AS [LOCK/READY/UNLK]	×	Indicates condition of passenger side door status.
DOOR STAT -RR [LOCK/READY/UNLK]	×	Indicates condition of rear right side door status.
DOOR STAT -RL [LOCK/READY/UNLK]	×	Indicates condition of rear left side door status.
BK DOOR STATE [LOCK/READY/UNLK]	×	Indicates condition of back door status.
ID OK FLAG [Set/Reset]		Indicates condition of Intelligent Key ID.
PRMT ENG STRT [Set/Reset]		Indicates condition of engine start possibility.
PRMT RKE STRT [Set/Reset]		Indicates condition of engine start possibility from Intelligent Key.
I-KEY OK FLAG [Key ON/Key OFF]	×	Indicates condition of Intelligent Key OK flag.
PRBT ENG STRT [Set/Reset]		Indicates condition of engine start prohibit.
ID AUTHENT CANCEL TIMER [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 CRANK TMR [On/Off]		Indicates condition of automatic engine crank timer from Intelligent Key.
CRNK PRBT TME [sec]		Indicates condition of engine crank prohibit time.
AUT CRANK TMR [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.
RKE OPE COUN1 [0-19]	×	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing.
RKE OPE COUN2 [0-19]	×	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing.
TRNK/HAT MNTR [On/Off]		Indicates condition of trunk room lamp switch.
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.

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].

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< SYSTEM DESCRIPTION >

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

WORK SUPPORT

Support Item	Setting		Description	F
ICNUACO DATTEDY CAVED	On*		Battery saver function ON.	
IGN/ACC BATTERY SAVER	Off		Battery saver function OFF.	G
DEMOTE ENGINE CTARTER	On*		Remote engine start function ON.	G
REMOTE ENGINE STARTER	Off		Remote engine start function OFF.	
	BUZZER		Buzzer reminder function by door lock/unlock request switch ON.	Н
ANCWED DACK LIVEY LOCK LINILOCK	HORN		Horn chirp reminder function by door lock request switch ON.	
ANSWER BACK I-KEY LOCK UNLOCK	Off*		No reminder function by door lock/unlock request switch.	
	INVALID		This mode is not used.	ı
ANSWERBACK KEYLESS LOCK UN-	On		Buzzer or horn chirp reminder when doors are locked/unlocked with Intelligent Key.	1
LOCK	Off*		No buzzer or horn chirp reminder when doors are locked/unlocked with Intelligent Key.	0
WELCOME LIGHT OP SET	On*		Door handle lamp function from request switch ON.	DLK
WELCOWE LIGHT OF SET	Off		Door handle lamp function from request switch OFF.	
ANGWED DACK	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.	L
RETRACTABLE MIRROR SET	On		Retractable mirror set ON.	
RETRACTABLE MIRROR SET	Off*		Retractable mirror set OFF.	M
LOCK/UNLOCK BY I-KEY	On*		Door lock/unlock function from Intelligent Key ON.	IVI
LOCK/UNLOCK BT I-RET	Off		Door lock/unlock function from Intelligent Key OFF.	
ENGINE START BY I-KEY	On*		Engine start function from Intelligent Key ON.	Ν
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.	
TRUNK GLASS HATCH OF EN	Off		Buzzer reminder function by back door request switch OFF.	O
INTELLIGENT KEY LINK SET	On		Intelligent Key link set ON.	
INTELLIGENT KET LINK SET	Off*		Intelligent Key link set OFF.	Р
CONFIRM KEY FOB ID	_		Intelligent Key ID code can be checked.	
SHORT CRANKING OUTPUT	Start	70 msec 100 msec 200 msec	Starter motor operation duration times.	
	End	11 11120	<u> </u>	

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< SYSTEM DESCRIPTION >

Support Item	Se	tting	Description
INSIDE ANT DIAGNOSIS	-		This function allows inside key antenna self-diagnosis.
AUTO LOCK SET	MODE7	5 min	
	MODE6	4 min	
	MODE5	3 min	
	MODE4	2 min	Auto door lock time can be set in this mode.
	MODE3*	1 min	
	MODE2	30 sec	
	MODE1	Off	

^{*:} Initial Setting

TRUNK

TRUNK: CONSULT Function (BCM - TRUNK)

INFOID:0000000013577903

CAUTION:

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

DATA MONITOR

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

DIAGNOSIS SYSTEM (AUTOMATIC BACK DOOR CONTROL UNIT)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (AUTOMATIC BACK DOOR CONTROL UNIT)

CONSULT Function

INFOID:0000000012851902

CAUTION:

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

APPLICATION ITEMS

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

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

SELF DIAGNOSTIC RESULTS

Refer to DLK-57, "DTC Index".

DATA MONITOR

Monitor Item	Unit	Description
SPINDLE SENSOR LH	[Pulse]	Displays the condition of the LH encoder
SPINDLE LH SPEED	[mm/s]	Displays the LH spindle operation speed
SPINDLE MOTOR LH DUTY	[%]	Displays the condition of the spindle motor LH duty
VHCL SPEED MTR	[km/h]	Displays the vehicle speed signal received from combination meter by numerical value
VHCL SPEED ABS	[km/h]	Displays the vehicle speed signal received from ABS actuator and electrical unit by numerical value
MAIN SW	[ON/OFF]	Indicates condition of automatic back door main switch
AUTO BD SW	[ON/OFF]	Indicates condition of automatic back door switch
BK DOOR CL SW	[ON/OFF]	Indicates condition of automatic back door close switch
PKB SW	[ON/OFF]	Indicates condition of parking brake 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
DESTINATION	[JPN/NAM]	Indicates specification of destination of the automatic back door system
AUTO BCK DR POS INITIAL	[YET/DONE]	Indicates condition of calibration of automatic back door position information
AUTO BCK DR POS LEARN	[YET/DONE]	Indicates condition of additional service when removing battery negative cable

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DIAGNOSIS SYSTEM (AUTOMATIC BACK DOOR CONTROL UNIT)

< SYSTEM DESCRIPTION >

Monitor Item	Unit	Description
SPINDLE SENSOR RH	[Pulse]	Displays the condition of the RH encoder
SPINDLE RH SPEED	[mm/s]	Displays the RH spindle operation speed
SPINDLE MOTOR RH DUTY	[%]	Displays the condition of the spindle motor RH duty
SPINDLE RH ENCODER A	[LO/HI]	Indicates condition of encoder signal from encoder A
SPINDLE RH ENCODER B	[LO/HI]	Indicates condition of encoder signal from encoder B

WORK SUPPORT

Work item	Description	Refer to
RESET AUTO BACK DOOR STATUS	This item is for calibration of automatic back door position information.	DLK-118, "Work Procedure"

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

AUTOMATIC BACK DOOR CONTROL UNIT

Reference Value

VALUES ON THE DIAGNOSIS TOOL

CONSULT MONITOR ITEM

Monitor Item	Conditio	Value/Status				
SPINDLE SENSOR LH	Back door: Moving	0 – 65535				
SPINDLE LH SPEED	Back door: Moving	Back door: Moving				
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 CW	Automotic hook door main quitab	OFF	OFF			
MAIN SW	Automatic back door main switch	ON	ON			
AUTO BD SW	Automatic back door switch	Release	OFF			
AUTO BD SW	Automatic back door switch	Press	ON			
BK DOOD CL SW	Automatic back door close switch	Release	OFF			
BK DOOR CL SW	Automatic back door close switch	Press	ON			
PKB SW	Parking brake switch	Release	OFF			
FRD SW	Faiking blake Switch	Press	ON			
BACK DOOR LOCK STATUS	Back door lock	Lock	OFF			
BACK DOOK LOCK STATUS	Back door lock	Unlock	ON			
OPEN SW	Back door	Half latch/fully closed	OFF			
OPEN SW	Back door	Open	ON			
CLOSE SW	Back door	Open/half latch	OFF			
CLOSE 3W	Back door	Fully closed	ON			
HALF LATCH SW	Back door	Half latch/fully closed	OFF			
HALI LATOTTOW	Back door	Open	ON			
TOUCH SEN RH	Touch sensor RH	Other than bellow	OFF			
TOUCH SEN KH	TOUCH SENSOF KH	Detect obstruction	ON			
TOUCH SEN LH	Touch sensor LH	Other than bellow	OFF			
TOOCH SEN EH	Touch sensor En	Detect obstruction	ON			
P RANGE IND	Sologtor 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 second)	MOVE			
		Press (just after)	REV			
ICN SW	Ignition quitab	Other than ON position	OFF			
IGN SW	Ignition switch	ON position	ON			
CDINDLE LILENCODED A	Automotic hook deser	Not operate	No change HI or LO			
SPINDLE LH ENCODER A	Automatic back door	Operate	Change HI or LO			
CDINDLE LU ENCODED D	Automatic book door	Not operate	No change HI or LO			
SPINDLE LH ENCODER B	Automatic back door	Operate	Change HI or LO			

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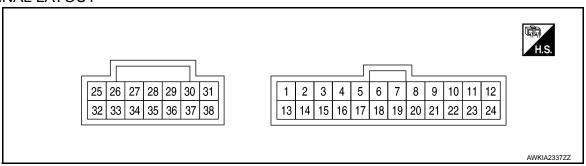
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< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status	
DESTINATION	_		OTHER
AUTO BCK DR POS INITIAL	Calibration of automatic back door	Not complete	YET
AUTO BOR DIVEOS INITIAL	position information	Complete	DONE
AUTO BCK DR POS LEARN	Additional service when removing	Not complete	YET
AO TO BOK DIX FOS LLAKIN	battery negative terminal	Complete	DONE
SPINDLE SENSOR RH	Back door: Moving		0 – 65535
SPINDLE RH SPEED	Back door: Moving		0 – 6553.5
SPINDLE MOTOR RH DUTY	Back door: Moving		0 – 255
SPINDLE RH ENCODER A	Automatic back door	Not operate	No change HI or LO
SFINDLE INTENCODER A	Automatic back door	Operate	Change HI or LO
SPINDLE RH ENCODER B	Automatic back door	Not operate	No change HI or LO
OF INDEL IN LINCODER B	Automatic back door	Operate	Change HI or LO

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description	Description		dition	Voltage	
(+)	(-)	Signal name	Input/ Output	Condition		(Approx.)	
1 (BR)	13	Touch sensor RH sig-	Input Touch sensor RH		Detect obstruc- tion	1.8 – 5 V	
(BK)	BR) (SB) nal			Other than above	2.72 – 7.27 V		
2	13 Touch sensor LH sig-	Input	Touch sensor LH	Detect obstruc- tion	1.8 – 5 V		
(LG)	(SB)	nal				Other than above	2.72 – 7.27 V
3	Cround	Half latch quitab aignal	Innut	Book door	Half latch	0 V	
(L)	Ground	Half latch switch signal	Input	Input Back door	Fully closed/open	Battery voltage	
4* (GR)	Ground	Ground	_	_		0 V	
5	Cround	Close switch signal	Input	Back door	Fully closed	0 V	
(LG)	Ground	Close switch signal	Input	Dack GOOI	Open/half latch	Battery voltage	

< ECU DIAGNOSIS INFORMATION >

	nal No. e color)	Description		Condition		Voltage
(+)	(-)	Signal name	Input/ Output			(Approx.)
6 (V)	Ground	Encoder LH A signal	Input	Back door	Moving (auto or manual)	NOTE: Waveform width changes according to back door open/close speed
					When stopped	0 V or Battery voltage
7 (Y)	Ground	Encoder LH B signal	Input	Back door	Moving (auto or manual)	NOTE: Waveform width changes according to back door open/close speed
					When stopped	0 V or 12 V
8 (BR)	Ground	Encoder RH A signal	Input	Back door	Moving (auto or manual)	(V) 15 10 20ms JMKIA1864ZZ NOTE: Waveform width changes according to back door open/close speed
					When stopped	0 V or 12 V
9 (L)	Ground	Encoder RH B signal	Input	Back door	Moving (auto or manual)	(V) 15 10 5 0 JMKIA1864ZZ NOTE: Waveform width changes accord-
					When stopped	ing to back door open/close speed
10		Automatic back door		Automatic back	ON Stopped	0 V 01 12 V
(LG)	Ground	main switch	Input	door main switch	OFF	Battery voltage
11 (BR)	Ground	Open switch signal	Input	Back door	Moving (auto or manual)	0 V
,/					When stopped	Battery voltage
12			Input/	1		T. Control of the Con

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< ECU DIAGNOSIS INFORMATION >

Termir (Wire	nal No. color)	Description		Con	dition	Voltage	
(+)	(-)	Signal name	Input/ Output	Condition		(Approx.)	
13 (SB)	Ground	Touch sensor ground	Input	-	_	0.01 – 0 V	
18 (Shield)	Ground	Ground (noise shield)	_	-	_	0.01 – 0 V	
19 (SB)	Ground	Encoder LH power supply	Output	-	_	Battery voltage	
20 (Y)	Ground	Encoder RH power supply	Output	-	_	Battery voltage	
21 (LG)	Ground	Encoder ground	_	-	_	0 V	
22	Ground	Automatic back door	Input	Automatic back	Pressed	0 V	
(SB)	Oround	switch	mpat	door switch	Released	Battery voltage	
23	Ground	Automatic back door	Input	Automatic back	Pressed	0 V	
(Y)	Orodria	close switch	прис	door close switch	Released	Battery voltage	
24 (B)	Ground	CAN - H	Input/ Output	_		_	
25 (B)	Ground	Power supply (BAT)	Input	_		Battery voltage	
27 (B)	Ground	Spindle motor LH (open)	Output	Back door	Auto open operation	Battery voltage	
28 (Shield)	Ground	Ground (noise shield)		-	_	0.01 – 0 V	
29 (B)	Ground	Spindle motor RH (open)	Output	Back door	Auto open operation	Battery voltage	
31	Ground	Back door closure mo-	Output	Back door	Open operation	Battery voltage	
(B)	Ground	tor (open)	Output	Dack door	Other than above	0 V	
32 (B)	Ground	Ground	_	_		0 V	
34 (W)	Ground	Spindle motor LH (close)	Output	Back door Auto close operation		Battery voltage	
36 (W)	Ground	Spindle motor RH (close)	Output	Back door	Auto close operation	Battery voltage	
37	_	Back door warning	_	Automatic back	Sounding	Battery voltage	
(LG)	Ground	chime	Output	door warning chime	Not sounding	0 V	
38	Ground	Back door closure mo-	Output	Back door	Close operation	Battery voltage	
(W)	2.333	tor (close)			Other than above	0 V	

^{*:} Except For Mexico

Fail Safe

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

< ECU DIAGNOSIS INFORMATION >

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

DTC Inspection Priority Chart

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

NOTE:

Details of time display

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

CONSULT display	Fail-safe	Reference page
U1000: CAN COMM	×	DLK-119, "DTC Logic"
U1010: CONTROL UNIT(CAN)	×	DLK-120, "DTC Logic"
B2401: IGN OPEN	×	DLK-121, "DTC Logic"
B2409: HALF LATCH SW	×	DLK-122, "DTC Logic"
B2416: TOUCH SEN R OPEN	×	DLK-125, "DTC Logic"
B2417: TOUCH SEN L OPEN	×	DLK-128, "DTC Logic"

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CONSULT display	Fail-safe	Reference page
B2419: OPEN SW	×	DLK-131, "DTC Logic"
B2420: CLOSE SW	×	DLK-134, "DTC Logic"
B2422: BACK DOOR STATE	×	DLK-137, "DTC Logic"
B2423: ABD MTR TIME OUT	×	DLK-140, "DTC Logic"
B2426: SPINDLE SENSOR LH	×	DLK-142, "DTC Logic"
B2427: SPINDLE SENSOR RH	×	DLK-145, "DTC Logic"
B2428: AUTO BACK DR CNT UNIT	×	DLK-148, "DTC Logic"
B242A: CLSR CONDITION	×	DLK-149, "DTC Logic"

BCM

List of ECU Reference

INFOID:0000000012851907

ECU	Reference
	BCS-30, "Reference Value"
BCM	BCS-49, "Fail Safe"
DCIVI	BCS-50, "DTC Inspection Priority Chart"
	BCS-51, "DTC Index"

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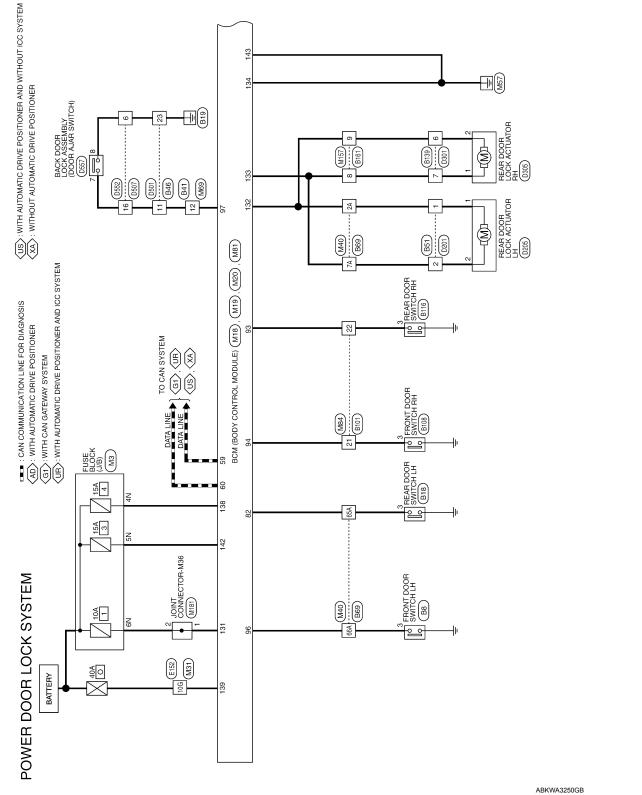
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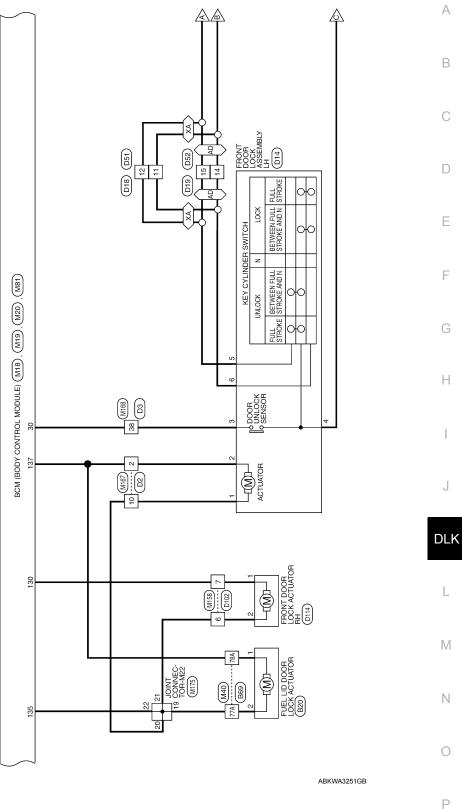
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WIRING DIAGRAM

POWER DOOR LOCK SYSTEM

Wiring Diagram





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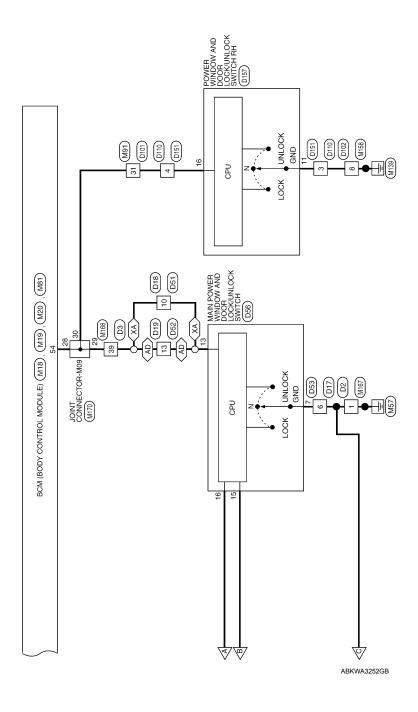
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POWER DOOR LOCK SYSTEM CONNECTORS

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					16	,	TO MAIN HARNESS	10	91	TO BACK DOOR LH HARNESS
Connector No.	B8	Connector No.	\dashv	B20	17	BG	TO MAIN HARNESS - (WITHOUT	9	_	TO BACK DOOR LH HARNESS
Connector Name	FRONT DOOR SWITCH LH	Connector Name	_	FUEL LID DOOR LOCK			NAVI)	7	9	TO BACK DOOR LH HABNESS
Connector Type	TH04FW-NH		T	ACTUATOR	17	>	TO MAIN HARNESS - (WITH NAVI)	80	BB	TO BACK DOOR LH HARNESS
Connector Color	WHITE	Connector Type		M04FW-LC	18	SB	TO MAIN HARNESS - (WITHOUT	6	*	TO BACK DOOR LH HARNESS
E		Connector Color		WHITE	8	M	TO MAIN HABNESS - (WITH NAVI)	10	œ	TO BACK DOOR LH HARNESS
		E			161	>	TO MAIN HARNESS - (WITHOUT	11	В	TO BACK DOOR LH HARNESS
SH							NAVI)	12	Α	TO BACK DOOR LH HARNESS
		H.S.		0	19	a c	TO MAIN HARNESS - (WITH NAVI)	13	Μ	TO BACK DOOR LH HARNESS - (WITH NAVI)
	2			-	8	۵	I O MAIN DARINESS - (WILLIAGO)	13	œ	TO BACK DOOR LH HARNESS -
				⊣ I	20	W	TO MAIN HARNESS - (WITH NAVI)			(WITHOUT NAVI)
					21	œ	TO MAIN HARNESS - (WITHOUT NAVI)	41	œ	TO BACK DOOR LH HARNESS - (WITH NAVI)
No. Wire	OI Signal Name	Terminal	Color of	Sample Name	21	SHIELD	TO MAIN HARNESS - (WITH NAVI)	14	В	TO BACK DOOR LH HARNESS - (WITHOUT NAVI)
1	1	Š.	Wire	0	22	g	TO MAIN HARNESS - (WITHOUT NAVI)	15	g	TO BACK DOOR LH HARNESS -
2 -	1	-	E	UNLOCK	22	8	TO MAIN HARNESS - (WITH NAVI)	,		(WITH NAVI)
3	DR DOOR SW	8 6	>	LOCK	23	SHIELD	TO MAIN HARNESS - (WITHOUT	6	>	IO BACK DOOK LH HAKNESS - (WITHOUT NAVI)
	1	,,	١	1			NAVI)	91	SHIELD	TO BACK DOOR LH HARNESS
		4		1	23	œ	TO MAIN HARNESS - (WITH NAVI)	17	В	TO BACK DOOR LH HARNESS
Connector No.	B18		Ī		24	SHIELD	TO MAIN HARNESS	18	-	TO BACK DOOR LH HARNESS
Connector Name	REAR DOOR SWITCH LH	Connector No.		B41	25	8	TO MAIN HARNESS	19	Α	TO BACK DOOR LH HARNESS
Connector Type	TH04FW-NH	Connector Name		WIRE TO WIRE	26	5	TO MAIN HARNESS	20	Μ	TO BACK DOOR LH HARNESS
odf. populo		Connector Type	Г	TH32MW-NH	27	>	TO MAIN HARNESS - (WITH NAVI)	21	g	TO BACK DOOR LH HARNESS
Connector Color	WHILE	Connector Color	\top	WHITE	27	œ	TO MAIN HARNESS - (WITHOUT	22	#	TO BACK DOOR LH HARNESS
F					86	0	TO MAIN HABNESS - WITH NAW	23	GR	TO BACK DOOR LH HARNESS
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \					28	: a	TO MAIN HARNESS - (WITHOUT	24	9	TO BACK DOOR LH HARNESS
Ċ.		S F					NAVI)			
	1 2 3 4	2	1 2 3 4	4 5 6 7 8 9 10 11 12 13 14 15 16	29	5	TO MAIN HARNESS - (WITH NAVI)			
		17	4 8t 5 6t	21 22 23 24 25 26 27 28	53	8	TO MAIN HARNESS - (WITHOUT NAVI)			
					30	SHIELD	TO MAIN HARNESS			
Terminal Color of					31	В	TO MAIN HARNESS			
	Signal Name	Terminal	Color of		32	-	TO MAIN HARNESS			
1	-		Wire	Signal Name						
2	1	-	8	TO MAIN HARNESS - (WITHOUT	Connector No.		B46			
88	BI DOOB SW			NAVI)	Connector Name	\vdash	WIRE TO WIRE			
+		-	æ	TO MAIN HARNESS - (WITH NAVI)	Collifector	\top	WINE TO WINE			
		2	œ	TO MAIN HARNESS - (WITHOUT	edi ionamico	T	124MW-141			
		c	3	TO MAKE I THINK OF THE PROPERTY OF THE PROPERT	Connector Color		WHITE			
		2 6	: a	TO MAIN HABNESS	F					
		9	SHEID	TO MAIN HABNESS	1					
		- 10	8	TO MAIN HABNESS	H.S.		{			
		0	3	O MANN LIAN OF		7	5 6 7 8 9 10			
		9 2	SHELD	TO MAIN HABNESS		13 14	15 16 17 18 19 20 21 22 23 24			
		. α	a	TO MAIN HABNESS						
		0	>	TO MAIN HABNESS						
		n (> 0	TO MAIN HARINESS	Terminal	Color of				
Al		2 =	r 3	TO MAIN HABNESS	No.	Wire	Signal Name			
BKI		15	. 0	TO MAIN HABNESS	-	>	TO BACK DOOR LH HARNESS			
A74		13		TO MAIN HARNESS	2	>	TO BACK DOOR LH HARNESS			
96G		14		TO MAIN HARNESS	8	BB	TO BACK DOOR LH HARNESS			
SB.		15		TO MAIN HARNESS	4	SB	TO BACK DOOR LH HARNESS			

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POWER DOOR LOCK SYSTEM CONNECTORS

WIRE TO WIRE
NS12FW-CS
WHITE

Connector No.
Connector Name
Connector Type
Connector Color

וט	А	G	ıK	Α.	IV	>	<u>-</u>																									
TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS								
æ	>	97	8	>	_	BG	>	97	SHIELD	9	SB	BG	_	۵	_	97	В				BB	_										
76A	A77	78A	79A	80A	81A	82A	83A	84A	85A	86A	87A	88A	89A	90A	91A	92A	93A	94A	95A	96A	97A	98A	99A	100A								
TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HABNESS	TO MAIN HABNESS	TO MAIN HARNESS - (WITHOUT
SHIELD	8	В	SHIELD	œ	8	BB	1	×	8	SHIELD	1	9	>	SB	H	>	1	1	>	g	>	_	SB	5	Ν	-	-	œ	SB	97	 >	SB
25A	26A	27A	28A	29A	30A	31A	32A	33A	34A	35A	36A	37A	38A	39A	40A	41A	42A	43A	44A	45A	46A	47A	48A	49A	50A	51A	52A	53A	54A	55A	56A	57A
	B69	WIRE TO WIRE	TH80MDGY-CS16-TM4	GRAY				45			21A 20A 18A 18A 17A 16A 15A 14A 13A 12A 11A	344 284 284 274 284 234 234 22A	41A 40A 39A 38A 37A 36A 35A 34A 33A 32A 31A	50A 48A 48A 47A 46A 45A 44A 43A 42A	61A 60A 59A 58A 57A 56A 55A 54A 53A 52A 51A	70A 69A 68A 67A 66A 65A 64A 63A 62A	81A 80A 78A 77A 77A 76A 75A 74A 73A 72A 71A	90A 89A 88A 87A 86A 85A 84A 83A 82A	95A 94A 93A 92A 91A	100A 99A 98A 97A 96A					Signal Name	COLINGATION	I O MAIN HARNESS	TO MAIN HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)				
ľ	_	0									214	_	410		614		818								Color of	D II A	1 3	>	>	5	1	97
	Connector No.	Connector Name	Connector Type	Connector Color	Œ		S II					L				J									lerminal	.	AT 3	2A	3A	4A	5A	6A

					_			_		_					_						_				_
Signal Name	TO MAIN HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)	TO MAIN HARNESS - (WITH CLIMATE CONTROLLED SEAT)	TO MAIN HARNESS																						
Color of Wire	-	٨	٨	В		FG	В	BB	g	Ь	-	W	G	1	н	5	W	В	В	SHIELD	W	SHIELD	-	W	В
Terminal No.	1A	2A	3A	4A	5A	6A	6A	7A	8A	9A	10A	11A	12A	13A	14A	15A	16A	17A	18A	19A	20A	21A	22A	23A	24A

TO MAIN HARNESS
TO MAIN HARNESS
TO MAIN HARNESS
TO MAIN HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)
TO MAIN HARNESS - (WITH CLIMATE CONTROLLED SEAT)
TO MAIN HARNESS

BB BB

57A

TO MAIN HARNESS

2] a ≥ a #

SB

58A 59A 61A 61A 63A 63A 65A 65A 67A 67A 67A 71A 71A 71A 71A 72A 73A

B69	WIRE TO WIRE	TH80MDGY-CS16-TM4	GRAY			5% 4A 3A 2A 1A 10A 9A 8A 7A 6A	21A 20A 19A 18A 17A 16A 15A 14A 13A 12A 11A	30A 29A 28A 27A 26A 25A 24A 23A 22A	41A 40A 39A 38A 37A 36A 35A 34A 33A 32A 31A 50A 48A 48A 47A 46A 45A 44A 43A 42A	614 604 594 584 574 564 554 548 534 534 514	70A 69A 68A 67A 66A 65A 64A 63A 62A	81A 80A 78A 78A 77A 78A 75A 74A 73A 72A 71A	90A 89A 88A 87A 86A 85A 84A 83A 82A	95A 94A 93A 92A 91A	Age and age age
Connector No.	Connector Name	Connector Type	Connector Color	E	S.										

Signal Name	TO REAR DOOR LH HARNESS											
Color of Wire	٨	HH	В	н	-	-	-	٨	,	-	æ	۵
Terminal No.	-	2	3	4	5	9	2	8	6	10	11	12

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POWER DOOR LOCK SYSTEM CONNECTORS

B TO MAIN HARNESS	Y TO MAIN HARNESS	BR TO MAIN HARNESS		_	V TO MAIN HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)	W TO MAIN HARNESS - (WITH CLIMATE CONTROLLED SEAT)	SB TO MAIN HARNESS	W TO MAIN HARNESS	SHIELD TO MAIN HARNESS	- TO MAIN HARNESS	tor No.	ne	Connector Type NS16FW-CS	T.	1		7 6 5 4 3 2 1	14 13 12 11 10		H	al Color of Signal Name Wire	B TO MAIN HARNESS			1	LG TO MAIN HARNESS Y TO MAIN HARNESS	W TO MAIN HARNESS	G TO MAIN HARNESS		BR TO MAIN HARNESS		SHIELD TO MAIN HARNESS	B TO MAIN HARNESS	W TO MAIN HARNESS							
7	8	6	5	=	12	12	13	14	15	16	Connector No.	Connect	Connect	Connect	£		H.S.				Terminal No.	- 0	4 6	4	2	9 1	80	6	10	= 5	4 E	4	15	16							
B139	1 CH 1 CH 1	WIRE TO WIRE	NS12FW-CS	WHITE			13 14 15 0 0 2 1	0 8			of Signal Name	TO REAR DOOR RH HARNESS	TO REAR DOOR RH HARNESS	TO REAR DOOR RH HARNESS	TO REAR DOOR RH HARNESS	TO BEAR DOOR BH HARNESS	TO REAR DOOR RH HARNESS	TO BEAR DOOR BH HARNESS	TO REAR DOOR RH HARNESS	TO REAR DOOR RH HARNESS - (WITH BASE AUDIO SYSTEM)	TO REAR DOOR RH HARNESS - (WITH BOSE AUDIO SYSTEM)	TO REAR DOOR RH HARNESS -	TO REAR DOOR RH HARNESS -	(WITH BOSE AUDIO SYSTEM)	D161	WIRE TO WIRE	NS16MW-CS	WHITE			2 3 4 5 6 7	10 11 12 13 14	51 +1 51 71 01			Signal Name	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS
Connector No.	Commercial No.	Connector Name	Connector Type	Connector Color	唇	H.S.	l			-	Terminal Color of No. Wire				4 r	"		8 6	- 01	11 SB	11 W	12 LG	12 G		old softonion	Connector Name	Connector Type	Connector Color			H.S.	- a	\dashv		\vdash	Terminal Color of No. Wire	H	3 2			9
TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS		B108 FRONT DOOR SWITCH RH	TH04EW-NH	WHITE	AAUII E			1 2 3 4				Signal Name	-	- AS DOOR SW	1		B116 REAR DOOR SWITCH RH	TH04FW-NH	WHITE			7	1 2 3 4			Signal Name			RR DOOR SW	1							
	29 SB	30 FG		-		Connector No.	$^{+}$	Τ.			H.S.				Terminal Color of	_		2 - 2 3 LG			Connector No.		Connector Color	F) <u> </u>	11.0				Terminal Color of		5	3								
B101	1000	WIRE TO WIRE	TH32MW-NH	WHITE			5 6 7 8 9 10 11 12 13 14 15 16	21 22 23 24 25 26 27 28 29 30 31 32			Signal Name	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	REAR ENTERTAINMENT SYSTEM)	TO MAIN HARNESS - (WITH REAR ENTERTAINMENT SYSTEM)	TO MAIN HARNESS - (WITHOUT REAR ENTERTAINMENT SYSTEM)	TO MAIN HARNESS - (WITH REAR		1			TO MAIN HARNESS - (WITH REAR ENTERTAINMENT SYSTEM)	TO MAIN HARNESS	TO MAIN HABNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HABNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS - (WITHOUT	TO MAIN HARNESS - (WITH	CLIMATE CONTROLLED SEAT)	TO MAIN HARNESS	IO MAIN HARNESS
Connector No. B	Т	_	Connector Type Ti	Connector Color M			2 3	17 18 19 20			Color of Wire	a	*	SHIELD	α >	•	>	*	В	α	*	0		α	SHIELD	ъ 88	۵	W	-	,	٠ -		9	ВВ	re	P P	: >	#	g	9 5	2
-		- 1	=	. ≒		H.S.			,	- 1	Terminal No.	Ιl						1							П		1		П		1	1	1								-

Revision: April 2016 **DLK-65** 2016 QX60

TO FRONT DOOR LH SUB HARNESS

15

TO FRONT DOOR LH SUB HARNESS

Signal Name

Color of Wire

Terminal No.

SB BB

TO FRONT DOOR LH SUB HARNESS

16

POWER DOOR LOCK SYSTEM CONNECTORS

Ctor No. D3
WHEE TO WIRE
MIPE TO WIFE
WHITE WHITE WHITE WHITE WHITE WHITE WHITE Signal Name To MAIN HARNESS TO MAIN HARN
Connector No. D3
Connector No. Connector No. Connector Name Connec
Connector Connec

UNLOCK SW

SB

TO FRONT DOOR LH HARNESS TO FRONT DOOR LH HARNESS
TO FRONT DOOR LH HARNESS
TO FRONT DOOR LH HARNESS

TO FRONT DOOR LH HARNESS
TO FRONT DOOR LH HARNESS TO FRONT DOOR LH HARNESS
TO FRONT DOOR LH HARNESS

Signal Name

Color of

Wire 9 E B C

TO FRONT DOOR LH HARNESS (WITH AUTOMATIC DRIVE POSITIONER)

ВВ

SB ១

TO FRONT DOOR LH SUB HARNESS

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POWER DOOR LOCK SYSTEM CONNECTORS

			ľ
Connector No.	D19	54	20
Connector Name	WIRE TO WIRE		
Connector Type	TH24FW-NH	Connector No.	ė.
Connector Color	WHITE	Connector Name	Name
F		Connector Type	Type
		Connector Color	Color
S	7	9	
	12 11 10 9 8 7 6 5 4 3 2 1	EG .	
24	24 23 22 21 20 19 18 17 16 15 14 13	¥	
		Ö.	

D51
WIRE TO WIRE
TH16MW-NH
WHITE

		ľ	
TO FROM TOOOR IN HARMESS	Connector No.		D56
Т	Connector Name		MAIN POWER WINDOW
_			AND DOOB LOCK/LINE OCK
		. 0,	SWITCH
	Tropogno	T	NESTEEM CE
	Collifector ly	+	ASTORW-CS
	Connector Color		WHITE
	E		
	H.S.	L	0 0
			0 10 11 12 13 14 15 1
			21 11 21 71 11 01 0
	Terminal	Color of	
		Wire	Signal Name
	-	,	-
	2	١,	1
	8	œ	ENCODER +
	4	>	8+
	2	BB	MOTOR DN DR
	9	_	MOTOR UP DR
	7	В	GND
	8	,	-
	ō	8	IGN (RAP) (WITHOUT AUTOMATIC DRIVE POSITIONER)
	6	BB	IGN (RAP) (WITH AUTOMATIC DRIVE POSITIONER)
	10	ΓG	ENCODER GND
	#	^	ENCODER SIG1 (DLP)
	12	0	ENCODER SIG2 (ULP)
	13	>	COM
	14		ı
	15	BB	LOCK SW (WITHOUT AUTOMATIC DRIVE POSITIONER)
	15	W	LOCK SW (WITH AUTOMATIC DRIVE POSITIONER)
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		é	≥	١.				c	7	S.	
	က	WIRE TO WIRE	NS08MW-CS		WHITE			-	-	4	
	D53	₹	ž		₹		L		_	_	J
		<u>و</u>			_						
	ė	Connector Name	Connector Type		Connector Color						
	Connector No.	ᅙ	, E		ě	_					
	Jec	Jec.	je C		<u> </u>	_		H.S.			
	ē	Ę	ū		悥	E	Ē	Ŧ			
	U	U		Т.	۷		_		,		
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No.	Wire	Signal Name
-	æ	TO FRONT DOOR LH HARNESS
2	97	TO FRONT DOOR LH HARNESS
6	_	TO FRONT DOOR LH HARNESS
4	0	TO FRONT DOOR LH HARNESS
5	Α	TO FRONT DOOR LH HARNESS
9	8	TO FRONT DOOR LH HARNESS
7	89	TO FRONT DOOR LH HARNESS
œ	97	TO FRONT DOOR LH HARNESS
6		TO FRONT DOOR LH HARNESS
10	>	TO FRONT DOOR LH HARNESS
11	H	TO FRONT DOOR LH HARNESS
12	SB	TO FRONT DOOR LH HARNESS
13	9	TO FRONT DOOR LH HARNESS
14	BB	TO FRONT DOOR LH HARNESS
15	>	TO FRONT DOOR LH HARNESS
16	W	TO FRONT DOOR LH HARNESS
Connector No.		D52
Connector Name		WIRE TO WIRE
Connector Type	Ė	TH24MW-NH
Connector Color		WHITE
F		
Z.		
	1 2	3 4 5 6 7 8 9 10 11 12
	13 14	15 16 17 18 19 20 21 22 23 24

	Ī												S	5 5	S	F)	7			Ē			
Signal Name	TO FRONT DOOR LH SUB HARNESS																						
Color of Wire	ยา	BR	97	9	>	88	SB	9	_	BB	>	>	>	HB	SB	٨	ยา	SB	BR	7	>	æ	8
Terminal No.	1	2	3	4	2	9	7	80	6	10	F	12	13	14	15	16	17	18	19	20	21	22	23
																					ABI	KIA75	00GB

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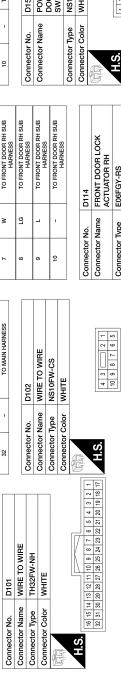
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T DOOR RH HARNESS

POWER DOOR LOCK SYSTEM CONNECTORS



	Terminal No.	Color of Wire	Signal Name
	-	BB	TO FRONT DOOR RH SUB HARNESS
	2	BB	TO FRONT DOOR RH SUB HARNESS
	ε	в	TO FRONT DOOR RH SUB HARNESS
	4	ВВ	TO FRONT DOOR RH SUB HARNESS
	5	^	TO FRONT DOOR RH SUB HARNESS
	9	BG	TO FRONT DOOR RH SUB HARNESS

Signal Name	TO FRONT DOOR RH HARNESS								
Color of Wire	BB	>-	В	BB	۸	æ	0	FG	7
Terminal No.	-	2	8	4	9	9	2	8	6
		•	Т		Ι	_		7	

- TO FRONT DOOR RH HARNESS		D157	POWER WINDOW AND	SWITCH BH	\top	\top		7 2 4	10 11 12 13 14		90	Wire Signal Name	-		_	H ENCODER +			MOTOR UP AS					(DLP) ENCODER SIGI		O (ULP) ENCODER SIG2	BR COM															
- 10		Connector No.	Connector Name		Connector Type	Connector Color	E	H.S.			\vdash	No. Wire	-		1		n 4	-						27 65			16 B															
TO FRONT DOOR RH SUB	TO FRONT DOOR RH SUB	HARNESS	TO FRONT DOOR RH SUB HARNESS	TO FRONT DOOR RH SUB	HARNESS		FRONT DOOR LOCK	ACTUATOR RH E06FGY-RS	GRAY			6 5 4 3 2 1				Signal Name	UNLOCK	ГОСК	-	-	-	1			WIRE TO WIRE	NS10MW-CS	WHITE			I	5 6 7 8 9 10			Signal Name	COLING WILLIAM GOOD PROCESS OF	10 FRONT DOOR HH HARNESS	TO FRONT DOOR RH HARNESS	TO EDONT DOOD BH HABNESS	TO FROMT DOOR BILLIARNESS			
*	97		_	1									_		Polor	Wire	2	>	1	-	1	,			\top	+								Color of	wire	#	>	ا ۵	H PH	> 0	x c	2
7	80	,	6	10			Connector Name	Connector Type	Connector Color	MAN	H.S.				Tominol	No.	-	2	8	4	5	9			Connector No.	Connector Type	Connector Color	F	(Ċ				Terminal	No.	-	5	e	4	5	9 2	- a
TO MAIN HARNESS		D102	WIRE TO WIRE	NS10FW-CS	WHITE		6	8 7		of Signal Name		TO MAIN HARNESS			TO MAIN HARNESS			TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS		D110	WIRE TO WIRE	NS10FW-CS	WHITE			4 3 2 1	10 9 8 7 6 5			of Signal Name	TO FRONT DOOR RH SUB		TO FRONT DOOR RH SUB	TO EDON'T DOOD DU SI ID	HARNESS	TO FRONT DOOR RH SUB	HARNESS	TO FRONT DOOR RH SUB HARNESS		HARNESS
32 -		Connector No.	Connector Name	Connector Type	Connector Color	E	H.S.			lal	No. Wire	- c	to		5 BR	≻ 9			1	10 W		Connector No.	Connector Name	Connector Type	Connector Color			H.S.			- 1	No. Wire	t		2 BR	1	n 	4 BR	1	2	6 BG	
D101	WIBE TO WIBE	TH32FW-NH	WHITE				16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 1 3 2 3 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17		Signal Name	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HABNESS	TO MAIN HARNESS	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)	TO MAIN HARNESS - (WITH	TO MAIN HARNESS - (WITHOUT	AUTOMATIC DRIVE POSITIONER)	AUTOMATIC DRIVE POSITIONER)	TO MAIN HARNESS	TO MAIN HARNESS - (WITHOUT	TO MAIN HABNESS - WITH	AUTOMATIC DRIVE POSITIONER)	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS										
			\top				16 15 14 13 12 11 32 31 30 29 28 27		Color of Wire	g	SHIELD	œ a	ο ≥	: >	_	BR	>	띪	P.G	a	8	,	M/B	1	>	FG	_	>	-	# G	g 91	ď	3	>	9	HH HH	>	Pi	-	1 3	> 2	2 8
Connector No.	Connector Name	Connector Type	Connector Color		n h h h	H.S.		J	Terminal	-	2	8	4 rc	9	7	8	6	10	=	12	13	14	15	16	17	17	18	2	2	6 6	2 2	2		22	33	24	25	26	27	58	50 50	20 20
	. 1 0	. 10	. 10															1				1											1	_1					A	BKI.	 A75	_L 010

D501 WIRE TO WIRE TH24FW-NH

Connector No.
Connector Name
Connector Type
Connector Color

WHITE

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D301	WIRE TO WIRE	NS12MW-CS	WHITE	6 7 8 9 10 11
Connector No.	Connector Name	Connector Type	Connector Color	原列 H.S.
D201	WIRE TO WIRE	NS12MW-CS	WHITE	1 2 3 6 7 8 9 0 11 12 5 12 5 12 5 12 5 12 5 12 5 12 5
Connector No.	Connector Name	Connector Type	Connector Color	中 H.S.

Signal Name

Terminal Color of No. Wire

Color of Wire

Terminal No.

TO BODY HARNESS

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D507	WIRE TO WIRE	TH24FW-NH	WHITE		11 10 9 8 7 6 5 4 3 2 2 22 21 20 19 18 17 16 15 14	of Signal Name	TO BACK DOOR RH HARNESS	TO BACK DOOR BH HABNESS																						
No.	Name	Type	Color		24 24	Color of Wire	PP	>	œ	٦	SB	٨	٠	97	G	1	1	1	g	BB	BG	а	*	ŋ	۸	M	1	1	1	
Connector No.	Connector Name	Connector	Connector Color	F	H.S.	Terminal No.	-	2	ဇ	4	5	9	2	8	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
					4 3 2 1 6 15 14 13	au.	NESS																							

Terminal No.	Color of Wire	Signal Name
-	BR	TO BODY HARNESS
2	BG	TO BODY HARNESS
8	>	TO BODY HARNESS
4	97	TO BODY HARNESS
5	5	TO BODY HARNESS
9	SB	TO BODY HARNESS
7	7	TO BODY HARNESS
œ	œ	TO BODY HARNESS
6	g	TO BODY HARNESS
10	M	TO BODY HARNESS
11	۵	TO BODY HARNESS
12	٨	TO BODY HARNESS
13	W	TO BODY HARNESS
14	В	TO BODY HARNESS
15	œ	TO BODY HARNESS
16	SHIELD	TO BODY HARNESS
17	5	TO BODY HARNESS
18	-	TO BODY HARNESS
19	W	TO BODY HARNESS
20	W	TO BODY HARNESS
21	M	TO BODY HARNESS
22	FG	TO BODY HARNESS
23	٨	TO BODY HARNESS
24	9	TO BODY HARNESS

-	ΛW	TO BODY HARNESS RH
8	1	TO BODY HARNESS RH
ဧ	а	TO BODY HARNESS RH
4	>	TO BODY HARNESS RH
9	-	TO BODY HARNESS RH
9	>	TO BODY HARNESS RH
7	97	TO BODY HARNESS RH
8	SB	TO BODY HARNESS RH
6	B/W	TO BODY HARNESS RH
10	B/G	TO BODY HARNESS RH
11	g	TO BODY HARNESS RH
12	M	TO BODY HARNESS RH
Connector No.	No.	D305
Connector Name	Name	REAR DOOR LOCK
		ACTUALOR KH
Connector Type	Type	E06FGY-RS
Connector Color	Color	GRAY
F		
H.S.		
		6 5 4 3 2 1

TO BODY HARNESS	TO BODY HARNESS		REAR DOOR LOCK ACTUATOR LH	RS		\$\frac{\cappa}{\cappa}\$
	10	D205	REAR DOOR LO ACTUATOR LH	E06FGY-RS	GRAY	1 2
>	ГС	No.	Name	Type	Color	
Ξ	12	Connector No.	Connector Name	Connector Type	Connector Color	H.S.

lor of Vire	Signal Name	UNLOCK	LOCK	-		1	
8 8	Color of Wire	9	\	-	-	-	-
inal .		-	2	3	4	2	9

	_			_	_	_	1
Signal Name	LOCK	UNLOCK	ı	-	1	-	
Color of Wire	H	٦	-	,	-	-	
Terminal No.	-	2	3	4	2	9	
	•				•	Al	BKIA7502GE

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POWER DOOR LOCK SYSTEM CONNECTORS

	Connector	Г	DEED	On retorney		0667	26	W	TO MAIN HARNESS	55G	BB	TO MAIN HARNES:
Tright T	Connector		2002	COIIIICCTOI IN	T	2001	36	а	TO MAIN HARNESS	56G	ч	TO MAIN HARNES:
Threatmy-left		\top	WIRE TO WIRE	Connector No		SACK DOOR LOCK	46	æ	TO MAIN HARNESS	57G	Ь	TO MAIN HARNES
VINTER CONTRICTOR VINTER VINTER CONTRICTOR VINTER CONTRICTOR VINTER CONTRICTOR VINTER CONTRICTOR VINTER VINTER CONTRICTOR VINTER	Connector 1		TH24MW-NH		T	ASSEMBLY	56	۵	TO MAIN HARNESS	586	BG	TO MAIN HARNES:
2 1 1 1 1 1 1 1 1 1	Connector C		WHITE	Connector Ty	\neg	IS08FW-CS	99	*	TO MAIN HARNESS	59G	×	TO MAIN HARNES:
1 1 1 1 1 1 1 1 1 1				Connector Co		WHITE	76	SHELD	TO MAIN HARNESS	509	8	TO MAIN HARNES
1 1 1 1 1 1 1 1 1 1	NAME OF THE PARTY			E			98	G	TO MAIN HARNESS	616	SHELD	TO MAIN HARNE
1 1 1 1 1 1 1 1 1 1	O F			ATT TO			96	FG	TO MAIN HARNESS	62G	۵	TO MAIN HARNES
Color of Signat Name	į		3 4 5 6 7 8 9 10 11	S. I		l	109	۵	TO MAIN HARNESS	63G	_	TO MAIN HARNES
Color of Signat Name			15 16 17 18 19 20 21 22 23			7	116	5	TO MAIN HARNESS	64G	œ	TO MAIN HARNES
The continue contin						2 6 7	12G	۵	TO MAIN HARNESS	65G	G/R	TO MAIN HARNES
Color of Signal Name No. Page							13G	*	TO MAIN HARNESS	999	œ	TO MAIN HARNES
Vince Signal Name	\vdash						14G	BG	TO MAIN HARNESS	676	BG	TO MAIN HARNES:
1		Color of			Jolor		15G	Α	TO MAIN HARNESS	68G	LG/R	TO MAIN HARNES:
1	į,			_	Wire	Signal Name	16G	ж	TO MAIN HARNESS	969	W	TO MAIN HARNES:
1 1 1 1 1 1 1 1 1 1	- •	2 >		-	8	LATCH MTB OPEN	176	В	TO MAIN HARNESS	700	g	TO MAIN HARNES:
1	4 0	-	TO BACK DOOD I LUABNIESS		8	ATCH MTB CLOSE	186	SHIELD	TO MAIN HARNESS	71G	GR	TO MAIN HARN
1	2	r -	TO DACK DOOR LILIABRIESS	1 %	:	1000	196	Μ	TO MAIN HARNESS	72G	1	TO MAIN HARN
10 10 10 10 10 10 10 10	+ u	ا ا	TO BACK DOOR LITTIABILESS	4	α	OPEN SW	200	g	TO MAIN HARNESS	73G	-	TO MAIN HARNES:
State 10 back to cook in Huddress 6 58 HALF LATCHS 9W 200 58 HELD 10 back to cook in Huddress 7 6 6 7 7 6 7 7 7 7	0 4	9 0	TO BACK DOOD IN HABNESS	- 40	-	CLOSESW	216	۵	TO MAIN HARNESS	74G	,	TO MAIN HARNES
1	,	8	TO BACK DOOD IN HADNESS	9	SB SB	HALFLATCH SW	22G	В	TO MAIN HARNESS	75G	5	TO MAIN HARN
10 BACK DOOR LH HARRESS 240		5	TO BACK DOOD IN HABNESS	2	8 6	BACK DOOR SW	23G	SHIELD	TO MAIN HARNESS	769	>	TO MAIN HARN
Connector No. E152 260 SW TO MAIN HARRESS 776 P CONNOT LI HARRESS Connector Order LI	•	2 0	TO BACK DOOD IN HADNESS	. 60	5 8	GROUND	24G	œ	TO MAIN HARNESS	77.6	BB	TO MAIN HARNES
Connector Name WIPE TO WINE E152 276 346 D TO MAIN HARRESS 276 C TO MAIN HARRESS 276 D TO MAIN HARRESS	9 5	,	TO BACK DOOD IH HABNESS				25G	Α	TO MAIN HARNESS	78G	-	TO MAIN HARN
Connector Type TH80MW-CS16-TM4 TH80MW-CS16	2 =	٠ ١	TO BACK DOOR IN HARNESS			3	26G	SHIELD	TO MAIN HARNESS	79G	۵	TO MAIN HARN
G TO BLACK DOOR ILH HARRIESS CONTROCTOR THROUGH CONTRINESS THROUGH CONTRIBUTION	12		TO BACK DOOR LH HARNESS	Connector No.	\top	152	27G	*	TO MAIN HARNESS	808	5	TO MAIN HARN
P TO BACK DOOK LH HARNESS Connector Type TH80MW-CS16-TMA 280 B TO MANN HARNESS 880 -	: 5	G	TO BACK DOOR I H HABNESS	Connector No		WIRE TO WIRE	28G	æ	TO MAIN HARNESS	816	œ	TO MAIN HARN
R TO BACK DOOR LH HARNESS TO BACK DOOR	2 4	5 0	TO BACK DOOR LH HABNESS	Connector Ty		TH80MW-CS16-TM4	296	В	TO MAIN HARNESS	82G		TO MAIN HARN
Color of the Harmess	15	4	TO BACK DOOR LH HARNESS	Connector Co		VHITE	300	5	TO MAIN HARNESS	83@		TO MAIN HARN
W TO BACK DOOR LH HARNESS TO BACK DOOR	16	5	TO BACK DOOR LH HARNESS	E			316	2 اد	TO MAIN HARNESS	84G	'	TO MAIN HARN
C	17	×					250	2 .	IO MAIN DANNESS	500	'	NHAIN NAM
W TO BACK DOOR LH HARNESS TO BACK DOOR	18	9		H.S.	L		336	5 >	TO MAIN HABNESS	866		TO MAIN HARN
w TO BACK DOOR LH HARNESS FOR DAOR LH HARNESS 200 L TO MAIN H	19	×	TO BACK DOOR LH HARNESS			5	2 2	: 0	TO MAIN HADNESS	56		MONTH NAMED
TO BACK DOOR LH HARNESS	20	W	TO BACK DOOR LH HARNESS			36 36 76 66	2000	-	TO MAIN HABINESS	500		TO MAIN HAR
TO BACK DOOR LH HARNESS	21	1	TO BACK DOOR LH HARNESS				376	, B	TO MAIN HARNESS	506	: -	TO MAIN HABIN
TO BACK DOOR LH HARNESS	22	'	TO BACK DOOR LH HARNESS		27	320G 19G 18G 17G 16G 15G 14G 13G 12G 11G	386	3	TO MAIN HABNESS	916	-	TO MAIN HABI
TO BACK DOOR LH HARNESS	23	-	TO BACK DOOR LH HARNESS				396	*	TO MAIN HARNESS	926		TO MAIN HARNES
FORTION FORTION FORTING FORT	24		TO BACK DOOR LH HARNESS		47	5406 396 386 376 386 336 346 336 326 316 500 496 486 476 466 456 446 436 450	40G	>	TO MAIN HARNESS	93G	-	TO MAIN HARNES
Toplor of Signal Name Sign					1		41G	BG	TO MAIN HARNESS	94G	>	TO MAIN HARNES:
					آ ا	70G 69G 68G 67G 66G 65G 64G 63G 62G	42G	۵	TO MAIN HARNESS	95G	*	TO MAIN HARNES
Main					840	28001700170017001700170017001700170017001	43G	œ	TO MAIN HARNESS	996	1	TO MAIN HARNES:
Most						90G89G88G87G86G85G84G83G82G	44G	Α	TO MAIN HARNESS	976	-	TO MAIN HAR
Signal Name							45G	٨	TO MAIN HARNESS	986	-	TO MAIN HARNES:
March Mark						956 946 936 926 916	46G	SB	TO MAIN HARNESS	986	-	TO MAIN HARNES:
48G BR 48G						1006 996 986 966	47G	^	TO MAIN HARNESS	100G	SHIELD	TO MAIN HARN
Color of Signal Name Signa							48G	BB	TO MAIN HARNESS			
Color of Signal Name 526 BR 52							49G	W	TO MAIN HARNESS			
Color of Wire Signal Name 52G BM G TO MAIN HARNESS C.2 C.2							50G	ŋ	TO MAIN HARNESS			
Wire Signal Name 520 BR 520 BR 530 L 530 L 530 L				-	John of		51G	B/W	TO MAIN HARNESS			
G TO MAIN HARNESS					Wire	Signal Name	52G	띪 .	TO MAIN HARNESS			
				15	5	TO MAIN HARNESS	53G	_	TO MAIN HARNESS			

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		15	1	1	52	M	AUDIO DONGLE	68	10	REVERSE LAMP OUT
Connector No.	_	16	'		53		1	06	'	1
Connector Name	\neg	17	æ	GND RF A/L	54	*	PW LIN/COM	16	,	1
Connector Type		18	>	SECURITY INDICATOR	55	BB	R SENSOR K-LINE	92	œ	RR FLASHER
Connector Color	WHITE	19	-	1	99	,	1	83	œ	RR DOOR SW
		20	W	SHIFT P	57		1	94	g	AS DOOR SW
Ī		21	8	STEP LAMP CONT	28		-	96	>	REAR WIPER OUT
H.S.	3N 2N 1N	22	-		20	۵	CAN-L	96	BG	DR DOOR SW
	ZNI CNI	23	-	1	09	-	CAN-H	97	8	BACK DOOR SW
	NO NO	24	1	1	5	58	REAR DEFOGGER RELAY OUT	86		1
		25	>	BRAKE SW FUSE	62	>	STARTER RELAY OUT	66	۵	ROOM ANT 3 B
		26	-	SHORTING INPUT	63	BB	I-KEY LINK SIGNAL	100	8	ROOM ANT 3 A
la O		/2	5	BRAKE SW LAMP	94	- 0	BOZZER OUT	101	x 0	DEAD DIMBED ANT A
No. Wire	ognal Name	87 8			8 9		BI OWED EAN DELAY OLIT	20 50	5 8	DI EL ASHED
1N LG	IGNITION	67		3111413 700 10000 00	8 8	\$ 0	JON TI TO DEI AV OUT A	3 3	50	ne reading
		30		DH DOOH LOCK SIAIUS	۵ و	5 0	IGN ELEC RELAY OUL Z	40.		
3N	IGNITION	5 8	_	1	88 89	٥	TIO SOMEOTY			
V V	BATTERY	25 00			60 6	5 6	AI DEVICE COI			
> NS	BATTERY	3 3	'	1	2 1	، ا	I TOO MED NET			
M N9		34	٠	1		r	DH HEQUEST SW			
		32	-	-	72	5	AS REQUEST SW			
		36	9	HAZARD SW	73	٠	1			
		37	-	-	74	-				
		88	1	-	75	BG	COMBI SW OUT 5			
Connector No.		39	5	SHIFT N/P	92	۵	COMBI SW OUT 4			
Connector Name	BCM (BODY CONTROL	40		-	77	۵	COMBI SW OUT 3			
	MODULE)				78	>	COMBI SW OUT 2			
Connector Type	TH40FG-NH	Connector No.		M19	79	*	COMBI SW OUT 1			
Connector Color	GREEN	Connector Name	e	BCM (BODY CONTROL	80	œ	BACK DOOR OPEN SW			
The state of the s				MODÙLE)						
		Connector Type		TH40FB-NH	Connector No.	\neg	M20			
H.S.		Connector Color		BLACK	Connector Name	_	BCM (BODY CONTROL			
	20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 2 14 4 0 3 9 8 3 3 3 3 8 5 5 8 4 3 3 2 2 1	F			Connector Line		MODULE)			
		S II			Connector Color	\top	GRAY			
ı		_	60 59 58 57 54	60 59 58 57 56 54 53 52 51 50 48 47 46 45 44 43 42 41	F					
Terminal Color of No. Wire	r of Signal Name		80 79 78 77 7	6 75 74 73 72 71 70 69 68 67 66 65 64 63 62 61	J I					
t	ENG START SW				5	92 94	90 89 88 87 86 85 84 83 82 81			
2 -	1	Temple	30			104 10	96			
3 M	A/L POWER SUPPLY 5V	No	Wire	Signal Name						
4	A/L SIGNAL	2								
- 2	-	42	· ·		Terminal	Color of				
9	1	43		1	No.	Wire	Signal Name			
- 2	1	44		1	81	-	BAT REAB WIPEB FUSE			
8	-	45	ľ	1	82	>	BL DOOR SW			
- 6	-	46	ľ	1	83	88	BACK DOOR BEDLIEST SW			
1		47		1	84	8	R WIPER AUTOSTOP SW			
		48	œ	HIGH SIDE START SW LED	85		1			
		49		ı	98	œ	TRAILER FLASHER RL			
		20	-	1	87	۵	TRAILER FLASHER RR			
14 P	COMBI SW IN 1	-			6					

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POWER DOOR LOCK SYSTEM CONNECTORS

TO ENGINE ROOM HARNESS																										
-	1	5	٨	BB	-	ш	Α	5	۵	а	а	а	۵	۵	Ь	н	Ь	_	Ь	Ь	0	В	۵	Ь	Ь	
73G	74G	75G	76G	776	78G	79G	80G	81G	82G	83G	84G	85G	86G	876	88G	89G	900	91G	92G	93G	94G	95G	96G	976	98G	000

	20G	ГG	TO ENGINE ROOM HARNESS
	21G	В	ENGINE
•/	226	В	TO ENGINE ROOM HARNESS
	23G	SHIELD	TO ENGINE ROOM HARNESS
•	24G	W	TO ENGINE ROOM HARNESS
	25G	В	TO ENGINE ROOM HARNESS
	26G	SHIELD	TO ENGINE ROOM HARNESS
	27G	В	TO ENGINE ROOM HARNESS
	28G	W	TO ENGINE ROOM HARNESS
	29G	G	TO ENGINE ROOM HARNESS
	30G	В	TO ENGINE ROOM HARNESS
	31G	٦	TO ENGINE ROOM HARNESS
	326	5	TO ENGINE ROOM HARNESS
Z	33G	9	TO ENGINE ROOM HARNESS
	34G	5	TO ENGINE ROOM HARNESS
	35G	Ь	TO ENGINE ROOM HARNESS
	36G	٦	TO ENGINE ROOM HARNESS
	37G	7	TO ENGINE ROOM HARNESS
_	38G	W	TO ENGINE ROOM HARNESS
	39G	В	TO ENGINE ROOM HARNESS
	40G	γ	TO ENGINE ROOM HARNESS
	41G	7	TO ENGINE ROOM HARNESS
	42G	Р	TO ENGINE ROOM HARNESS
	43G	W	TO ENGINE ROOM HARNESS
	44G	G	TO ENGINE ROOM HARNESS
_	45G	В	TO ENGINE ROOM HARNESS
	46G	γ	TO ENGINE ROOM HARNESS
	47G	>	TO ENGINE ROOM HARNESS
	48G	re	TO ENGINE ROOM HARNESS
	49G	۵	TO ENGINE ROOM HARNESS
	50G	7	ENGINE
	51G	B/W	TO ENGINE ROOM HARNESS
	52G	BB	TO ENGINE ROOM HARNESS
	53G	7	TO ENGINE ROOM HARNESS
	54G	BG	TO ENGINE ROOM HARNESS
	556	5 6	TO THOUSE ROOM HARNESS
	596	ء ا	TO ENGINE HOOM HARNESS
	5/6	-	TO ENGINE DOOM LABNIESS
	500	- ا	TO ENGINE BOOM HABINESS
•	909	8	TO ENGINE BOOM HABNESS
•	616	SHIELD	TO ENGINE ROOM HARNESS
•	626	g	TO ENGINE ROOM HARNESS
•	63G	۵	TO ENGINE ROOM HARNESS
•	64G	W	TO ENGINE ROOM HARNESS
	65G	G/R	TO ENGINE ROOM HARNESS
	599	ж	TO ENGINE ROOM HARNESS
	67G	W	TO ENGINE ROOM HARNESS
	68G	LG/R	TO ENGINE ROOM HARNESS
	969	Ь	TO ENGINE ROOM HARNESS
	70G	BG	TO ENGINE ROOM HARNESS
	716	GR	TO ENGINE ROOM HARNESS
	72G	-	TO ENGINE ROOM HARNESS

Connector Name	M31 WIRE TO WIRE		
Connector Type	TH80FW-CS16-TM4		
Connector Color	WHITE		
H.S.			
	16 76 86 96 106		
	116 126 136 146 156 166 176 186 196 206 216 226 236 246 256 256 276 286 296 306		
	31G 32G 33G 34G 35G 38G 37G 38G 39G 40G 41G 42G 43G 44G 45G 46G 47G 48G 49G 50G		
	51G52C633C54C55C956C97C658C959C90C61G 82C633C64C65C966C97C98C99C97C6	٦L	
	71G72G73G74G75G76G77G78G79G80G81G 82G83G84G85G96G87G88G89G90G		
	910 920 930 940 960		
	200		

								l													
Signal Name	TO ENGINE ROOM HARNESS (WITHOUT CLIMATE CONTROLLED SEAT)	TO ENGINE ROOM HARNESS (WITH CLIMATE CONTROLLED SEAT)	TO ENGINE ROOM HARNESS (WITHOUT CLIMATE CONTROLLED SEAT)	TO ENGINE ROOM HARNESS - (WITH CLIMATE CONTROLLED SEAT)	TO ENGINE ROOM HARNESS																
Color of Wire	SB	۵	Μ	۵	_U	Ь	SB	œ	SHIELD	ច	BG	W	н	9	5	>	W	ж	В	SHIELD	SB
Terminal No.	16	10	2G	36	4G	56	99	99	76	8G	96	10G	116	12G	13G	14G	15G	16G	176	18G	19G
																	ABŁ	(IA	754	6GE	3

NNECTORS
8
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25A SHIELD TO BODY HARNESS 25A SHIELD TO BODY HARNESS 26A R TO RODY HARNESS			75A 76A	LG V	TO BODY HARNESS TO BODY HARNESS TO RODY HARNESS	6 6 7	B N H	TO BODY HARNESS TO BODY HARNESS TO BODY HARNESS
0 0	TO BODY HARNESS		78A	ح ا <i>د</i>	TO BODY HARNESS	8	B	TO BODY HARNESS
28A SHIELD TO BODY HARNESS			79A	FG	TO BODY HARNESS	6	SB	TO BODY HARNESS
29A R TO BODY HARNESS	TO BODY HARNESS	Ш	80A	>	TO BODY HARNESS	10	BG	TO BODY HARNESS
8	TO BODY HARNESS		81A	-	TO BODY HARNESS	Ε	œ	TO BODY HARNESS
32A Y/R TO BODY HARNESS	TO BODY HARNESS TO BODY HARNESS		83A	2 >	TO BODY HARNESS	2 2	A 1	TO BODY HARNESS
M	TO BODY HARNESS		84A	97	TO BODY HARNESS	14		TO BODY HARNESS
В	TO BODY HARNESS		85A	SHIELD	TO BODY HARNESS	15	5	TO BODY HARNESS
SHIELD			86A	>	TO BODY HARNESS	16	_	TO BODY HARNESS
Š	TO BODY HARNESS		87A	PI	TO BODY HARNESS	17	۵	TO BODY HARNESS - (WITHOUT
9 F	TO BODY HARNESS		88A	E B	TO BODY HARNESS	17	>	TO BODY HABNESS - (WITH NAVI)
	TO BODY HARNESS		89A	-	TO BODY HARNESS		>	TO BODY HABNESS - AMITHOLIT
SB	TO BODY HARNESS		90A	۵	TO BODY HARNESS	2	-	NAVI)
BB	TO BODY HARNESS		91A	_	TO BODY HARNESS	18	۵	TO BODY HARNESS - (WITH NAVI)
Y TO BODY HARNESS			92A	_	TO BODY HARNESS	19	8	TO BODY HARNESS - (WITHOUT
.5	TO BODY HARNESS		93A	n ;	TO BODY HARNESS	Ş		NAVI)
- IO BODY HARNESS			94A	8	I O BODY HARNESS	61	2	I O BODY HARNESS - (WITH NAVI)
TO BODY HARNESS	 		95A	8	TO BODY HARNESS	50	ω	TO BODY HARNESS - (WITHOUT NAVI)
¥ ;	I O BODY HARNESS		SeA		IO BODY HARNESS	50	>	TO BODY HARNESS - (WITH NAVI)
BB	TO BODY HARNESS		97A	88	TO BODY HARNESS			TO BODY HABNESS - WITHOUT
නු	TO BODY HARNESS		98A	>	TO BODY HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)			NAVI)
48A R IOBOUY HARNESS	TO BODY HARNESS		98A	_	TO BODY HARNESS - (WITH	2	SHIELD	TO BODY HARNESS - (WITH NAVI)
a >	TO BODY HARNESS				AUTOMATIC DRIVE POSITIONER)	22	g	TO BODY HARNESS - (WITHOUT NAVI)
-	TO BODY HARNESS		99A		TO BODY HARNESS	22	*	TO BODY HARNESS - (WITH NAVI)
۵	TO BODY HARNESS		Tool Tool	-		23	SHIELD	TO BODY HARNESS - (WITHOUT
53A G TO BODY HARNESS CO		ပိ	Connector No.		M69	23	œ	TO BODY HARNESS - (WITH NAVI)
TO BODY HABITES	I	ပိ	Connector Name		WIRE TO WIRE	24	SHIELD	TO BODY HARNESS
BR TO BODY HABNESS		ပိ	Connector Type	Т	TH32FW-NH	25	В	TO BODY HARNESS
HTIWN - SERVICE OF OTHER	T	3 6	20000	Ť	THO W	56	g	TO BODY HARNESS
CLIMATE CONTROLLED SEAT)	_	3 [Connector Color		MILE	27	ш	TO BODY HARNESS - (WITHOUT
57A L TO BODY HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)	TO BODY HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)	Ý.	E C			27	B	TO BODY HARNESS - (WITH NAVI)
58A G TO BODY HARNESS	TO BODY HARNESS	_	SH			58	8	TO BODY HARNESS - (WITHOUT
SB	TO BODY HARNESS	•		16 15 14 13 12 11	12 11 10 9 8 7 6 5 4 3 2	1		NAVI)
60A L TO BODY HARNESS	TO BODY HARNESS		E.	31 30 29	28 27 26 25 24 23 22 21 20 19 18 17		r	TO BODY HARNESS - (WITH INAVI)
61A G TO BODY HARNESS	TO BODY HARNESS					RZ	5 3	IO BOUT HARNESS - (WITH NAVI)
	TO BODY HARNESS					₹3	≥	IO BODY HARNESS - (WITHOUT NAVI)
BR TO BODY HARNESS		12	Terminal	Color of		30	SHIELD	TO BODY HARNESS
Y TO BODY HARNESS				Wire	Signal Name	31	М	TO BODY HARNESS
65A W TO BODY HARNESS	TO BODY HARNESS			*	TO BODY HABNESS - MITHOLIT	32		TO BODY HARNESS
66A BG TO BODY HARNESS	TO BODY HARNESS			:	NAVI)			
67A Y TO BODY HARNESS	TO BODY HARNESS		-	œ	TO BODY HARNESS - (WITH NAVI)			
PI	TO BODY HARNESS	<u> </u>	2	В	TO BODY HARNESS - (WITHOUT			
69A R TO BODY HARNESS	TO BODY HARNESS				NAVI)			
70A P TO BODY HARNESS	TO BODY HARNESS		2	8	TO BODY HARNESS - (WITH NAVI)			
71A BR TO BODY HARNESS	TO BODY HARNESS		က	œ	TO BODY HARNESS - (WITHOUT			
SB	TO BODY HARNESS		6	a	TO BODY HABNESS - (WITH NAV)			
73A BG TO BODY HARNESS	TO BODY HARNESS	_	2	والتاء	TO BODY LABNIESS			
74A BR TO BODY HARNESS	TO BODY HARNESS	_	+	OFFICE	וס פטבו ווחאוו וסטפ טו			

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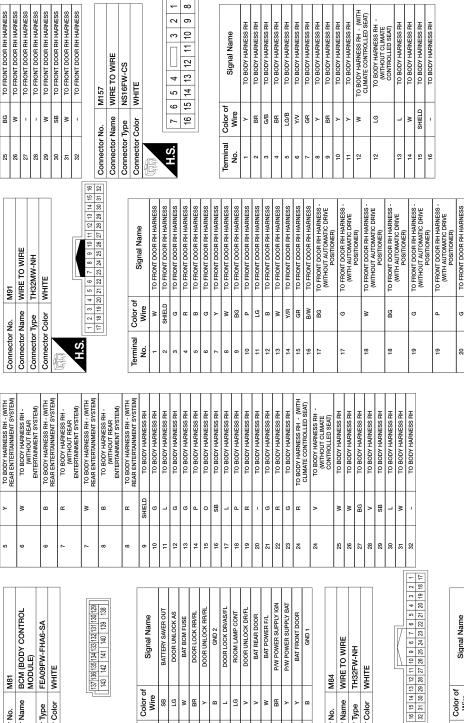
POWER DOOR LOCK SYSTEM CONNECTORS

WHITE

Connector Color Connector Type

Connector Name

Connector No.



BB

132 130 133

Terminal No.

2

BB

141 142 Connector Name Connector Color

Connector No.

Connector Type

H.S.

Signal Name	TO BODY HARNESS RH - (WITHOUT REAR ENTERTAINMENT SYSTEM)				
Color of Wire	В	M	SHIELD	ΓG	۵
Terminal No.	-	2	8	4	r.
			Al	3KI	A7548GI

TO FRONT DOOR RH HARNESS TO FRONT DOOR RH HARNESS

SB

22

24

TO FRONT DOOR RH HARNESS (WITHOUT AUTOMATIC DRIVE TO FRONT DOOR RH HARNESS (WITH AUTOMATIC DRIVE TO FRONT DOOR RH HARNESS

≥

2

POWER DOOR LOCK SYSTEM CONNECTORS

Connector No.
Connector Name
Connector Type
Connector Color

			œ	>	TO FRONT DOOR LH HARNESS -	16	g	TO FRONT DOOR LH HABNESS -	9	gB	SHE	1.00
5	or No.	M158			(WITH BASE AUDIO SYSTEM)			(WITHOUT AUTOMATIC DRIVE	7	SHIELD	SHIE	1
딍	or Name	WIRE TO WIRE	6	Δ.	TO FRONT DOOR LH HARNESS -	ç	*	TO TROUT DOOR IT INDIVIDUAL	8	SHIELD	SHE	1
5	or Type	NS10MW-CS			WITHOUT SURROUND SOUND	2	\$	(WITH AUTOMATIC DRIVE	6	SHIELD	SHIE	1
ř	or Color	WHITE			SYSTEM)			POSITIONER)	10	SHIELD	SHIE	1
			о	o o	TO FRONT DOOR LH HARNESS -	17	g	TO FRONT DOOR LH HARNESS	Ξ		1	1 .
					SURROUND SOUND SYSTEM)	18	>	TO FRONT DOOR LH HARNESS -	12	5	SENS	10
			6	SB	TO FRONT DOOR LH HARNESS -			POSITIONER)	13	1	1	
		7 8 3 4	10	-	TO FBONT DOOR I HABNESS	18	BG	TO FRONT DOOR LH HARNESS -	14	g	SENS	\sim 1
			1	88	TO FRONT DOOR I'H HABNESS			POSITIONER)	15	g	SENS	\sim 1
			12	>	TO FRONT DOOR I H HABNESS	19	Μ	TO FRONT DOOR LH HARNESS	16	g	SENS	\sim 1
			i 5		TO FBONT DOOR I H HABNESS	20	SB	TO FRONT DOOR LH HARNESS	17	g	SENS	\sim 1
-	o rolo		2 2		TO EDONT DOOD IN INDINESS	21	۵	TO FRONT DOOR LH HARNESS	18	>	SENS	~ 1
	Wild	Signal Name	4	SPIELD	TO FROM FOOD LINESS	22	×	TO FRONT DOOR LH HARNESS	19	>	SENS	~
T	3	SOUNDALI LO GOOD TINOGO OT	13	n 3	TO FROM FOOD LEADINGS	23	5	TO FRONT DOOR LH HARNESS	20	>	SENS	91
T	: 0	TO EDONT DOOD BUILDINGS	2		Control Door Elliantess	24	SB	TO FRONT DOOR LH HARNESS	21	>	SENS	~ 1
T	SHEID	+		Ī		25	œ	TO FRONT DOOR LH HARNESS	22	>	SENS	\sim 1
T		+	Connector No.		M168	26	8	TO FRONT DOOR LH HARNESS	23	1	1	
Ť	۲ ۲	TO FROM DOOR HIT HARNESS	Connector Name		WIRE TO WIRE	27		TO FRONT DOOR LH HARNESS	24	1	1	. 1
T	- -	TO FROM FOOD HIS HARNESS	Connector Type		TH40MW-NH	28	8	TO FRONT DOOR LH HARNESS	22	1	1	
Ť	2 د	TO FROM DOOR HIT HARNESS	Connector Color	T	WHITE	29	SHELD	TO FRONT DOOR LH HARNESS	56	1	1	
Ť	2 5	TO FROM DOOR HIT HARNESS		1		30	œ	TO FRONT DOOR LH HARNESS	27	-	-	
T	5 8	TO FHOM I DOOR HIT HARNESS	F			31	g	TO FRONT DOOR LH HARNESS	28	W	PW L	
	ž	(WITH BASE AUDIO SYSTEM)	¥			32	Α	TO FRONT DOOR LH HARNESS	59	W	PW L	
T	g	TO FRONT DOOR BH HARNESS -	N. E.		Z	L	BG	TO FRONT DOOR LH HABNESS	30	۸	PW L	_
\exists		(WITH BOSE AUDIO SYSTEM)		1 2 3 4 5	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20		 >	TO FRONT DOOR LH HARNESS	31		1	1 .
	>	TO FRONT DOOR RH HARNESS -		27 27 27 27 27	31 37	L	œ	TO FRONT DOOR LH HARNESS	32	Α.	PW L	
T		(WITH BASE AUDIO STSTEM)				36	BB	TO FRONT DOOR LH HARNESS	33	>	PW L	_
	>	(WITH BOSE AUDIO SYSTEM)				37	8	TO FRONT DOOR LH HARNESS				1
1			Terminal	Color of	Signal Name	38	۵	TO FRONT DOOR LH HARNESS				
1	or No	M167	No.	Wire	Olyriai Ivallie	39	×	TO FRONT DOOR LH HARNESS				
5 2		Edia OF Edia	-	SB	TO FRONT DOOR LH HARNESS	40	۵	TO FRONT DOOR LH HARNESS				
5	or Name	WIRE IO WIRE	2	œ	TO FRONT DOOR LH HARNESS							
5	or Type	NS16MW-CS	3	G/B	TO FRONT DOOR LH HARNESS	30,000		M4.70				
'n	or Color	WHITE	4	Ь	TO FRONT DOOR LH HARNESS	Confinector No.	+	0/1				
			S	>	TO FRONT DOOR LH HARNESS	Connector Name	a	JOINT CONNECTOR-M09				
			9	ж	TO FRONT DOOR LH HARNESS	Connector Type		BJ30FW				
	Ŀ		2	g	TO FRONT DOOR LH HARNESS	Connector Color		WHITE				
_		2 3 4 5 6 /	œ	Ь	TO FRONT DOOR LH HARNESS	Œ						
	∞	9 10 11 12 13 14 15 16	6	*	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)	S I	11 10	9 8 7 6 5 4 3 2 1				
Ι.		4	6	œ	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE		22 21 20	20 19 18 17 16 15 14 13 12				
	Wire	Of Signal Name	10	œ	TO FRONT DOOR LH HARNESS		33 32	31 30 29 28 27 26 25 24 23				
T	8	TO FRONT DOOR LH HARNESS	=	g	TO FRONT DOOR LH HARNESS							
T	>	TO FRONT DOOR LH HARNESS	12	۵	TO FRONT DOOR LH HARNESS	Terminal	Color of					
Τ	G/B	TO FRONT DOOR LH HARNESS	13	۵	TO FRONT DOOR LH HARNESS	Š.	Wire	Signal Name				
Г	>	TO FRONT DOOR LH HARNESS	14	BG	TO FRONT DOOR LH HARNESS	-	SHIELD	SHIELD				
	SB	TO FRONT DOOR LH HARNESS	15	×	TO FRONT DOOR LH HARNESS -	2	>	SHIELD				
П	BB	TO FRONT DOOR LH HARNESS			(WITHOUT AUTOMATIC DRIVE POSITIONER)	е	SHIELD	SHIELD				
\neg	>	TO FRONT DOOR LH HARNESS	15	g	TO FRONT DOOR LH HARNESS -	4	1	1				
	>	TO FRONT DOOR LH HARNESS - (WITH BOSE AUDIO SYSTEM)			(WITH AUTOMATIC DRIVE POSITIONER)	S						
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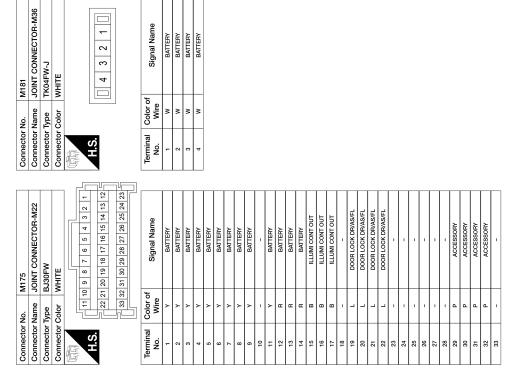
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Terminal No.

Connector No.
Connector Name
Connector Type
Connector Color

Terminal No.

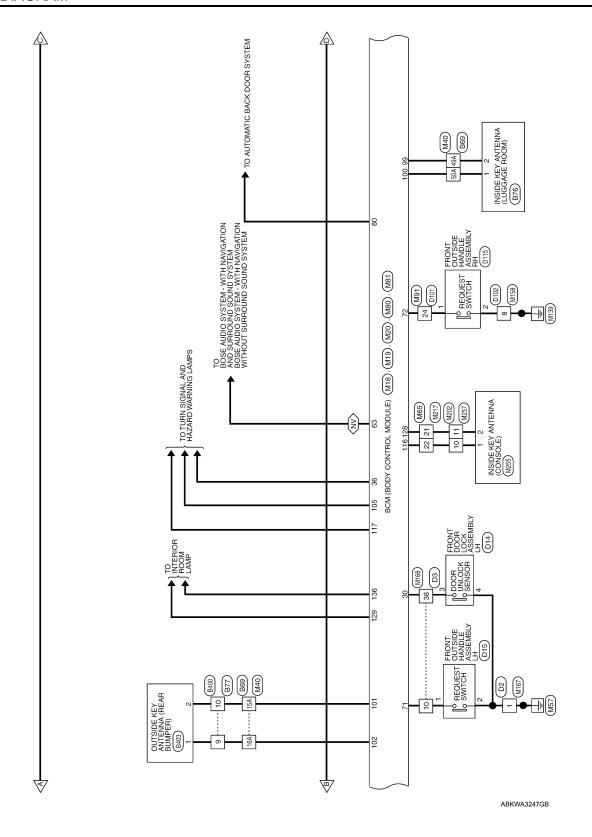
POWER DOOR LOCK SYSTEM CONNECTORS

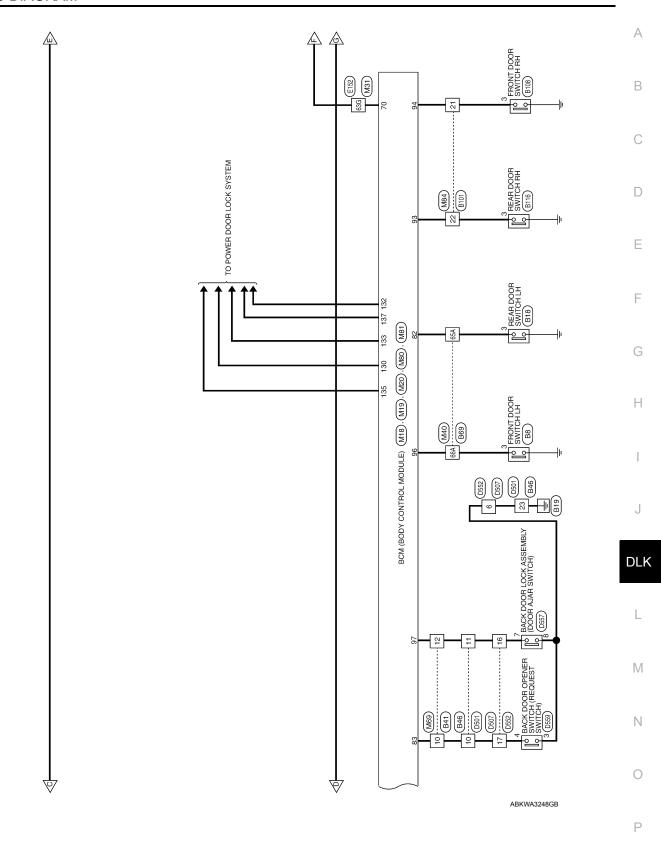


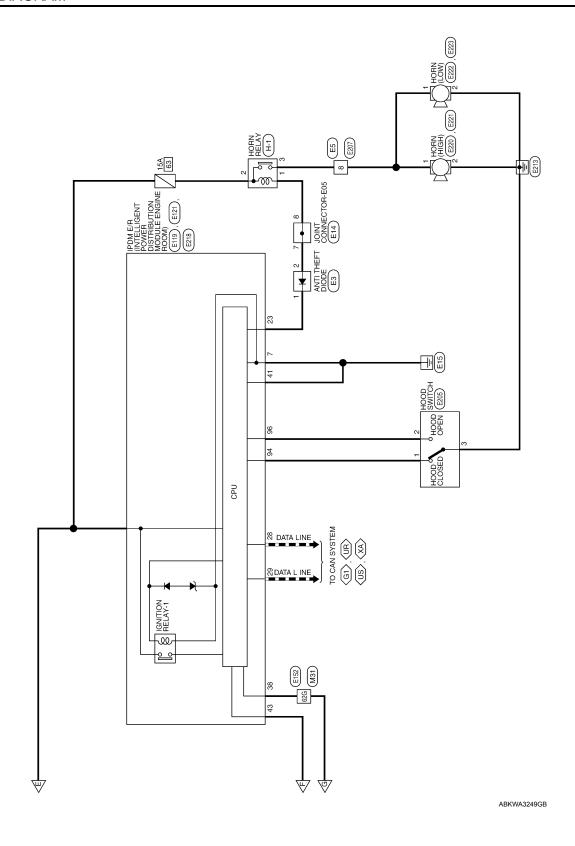
ABKIA7550GB

INTELLIGENT KEY SYSTEM Α Wiring Diagram INFOID:0000000012851909 В COMBINATION METER M24 $\begin{tabular}{ll} $\langle \overline{\text{UF}} \rangle$: with automatic drive positioner and icc system \\ \hline \langle \overline{\text{US}} \rangle$: with automatic drive positioner and without icc system \\ \hline \langle \overline{\text{XA}} \rangle$: without automatic drive positioner \\ \hline \langle \overline{\text{XA}} \rangle$: without automatic drive positioner \\ \hline \end{tabular}$ -11(§) С BUZZER FUSE BLOCK (J/B) M3 , (M4) , (M68) E28 TO CAN SYSTEM (E) (S) UNIFIED METER CONTROL UNIT (WITH INFORMATION DISPLAY) 2 1 OUTSIDE KEY ANTENNA (DRIVER SIDE) D M168 (2) Е 10A F OUTSIDE KEY ANTENNA (PASSENGER SIDE) M91 25 M81 PUSH SWITCH (AD): WITH AUTOMATIC DRIVE FOR DIAGNOSIS (AD): WITH AUTOMATIC DRIVE POSITIONER (G1): WITH CAN GATEWAY SYSTEM (NV): WITH NAVI ,(M80) PUSH-BUTTON IGNITION SWITCH (M17) (M19), (M20), Н ACC/ON 10A CVT SHIFT SELECTOR (M78) BCM (BODY CONTROL MODULE) (M18), 뜮 (F44) J PARK POSITION SWITCH (SHIFT SELECTOR) DLK 10A L E152 M31 INTELLIGENT KEY SYSTEM 138 M HEMOTE KEYLESS ENTRY RECEIVER (M86) 3 Ν 0 (M31) **₩** BATTERY Р

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	C			77	24	SHIELD	TO MAIN HARNESS	18	1	TO BACK DOOR LH HARNESS	
COIIIIECTOI NO.	+	COILIECTOI N	_	10000	25	В	TO MAIN HARNESS	19	Μ	TO BACK DOOR LH HARNESS	
Connector Name		Connector Name	\neg	WIRE TO WIRE	56	g	TO MAIN HARNESS	20	*	TO BACK DOOR LH HARNESS	_
Connector Type		Connector Type	T	TH32MW-NH	27	W	TO MAIN HARNESS - (WITH NAVI)	21	5	TO BACK DOOR LH HARNESS	
Connector Color	WHITE	Connector Color		WHITE	27	œ	TO MAIN HARNESS - (WITHOUT	22	BB	TO BACK DOOR LH HARNESS	
F		F			28	œ	TO MAIN HARNESS - (WITH NAVI)	23	ВБ	TO BACK DOOR LH HARNESS	
U I		J -			28	<u>a</u>	TO MAIN HARNESS - (WITHOUT	24	g	TO BACK DOOR LH HARNESS	_
11.5	H		1 2 3 4 5 6	5 6 7 8 9 10 11 12 13 14 15 16	59	g	TO MAIN HARNESS - (WITH NAVI)				
	1 2 3 4		17 18 19 20	23 24 25 26	29	×	TO MAIN HARNESS - (WITHOUT				
					30	SHIELD	TO MAIN HARNESS				
- 1		-			31	В	TO MAIN HARNESS				
Terminal Color of No. Wire	r of Signal Name	Terminal No.	Color of Wire	Signal Name	32	1	TO MAIN HARNESS				
- (1	-	W	TO MAIN HARNESS - (WITHOUT NAVI)	Connector No		B46				
7 0		-	æ	TO MAIN HARNESS - (WITH NAVI)	Connector Name	9	WIBE TO WIBE				
0 4		2	æ	TO MAIN HARNESS - (WITHOUT	Connector Type		TH24MW-NH				
		2	M	TO MAIN HARNESS - (WITH NAVI)	Connector Color	T	WHITE				
Connector No.	B18	8	a	TO MAIN HARNESS	1						
Connector Name	REAR DOOR SWITCH LH	4	SHIELD	TO MAIN HARNESS	ALT.						
Connector Type	TH04FW-NH	2	В	TO MAIN HARNESS	S						
Connector Color	\top	9	W	TO MAIN HARNESS		1 2	3 4 5 6 7 8 9 10 11 12				
9		7	SHIELD	TO MAIN HARNESS		13 14	15 16 17 18 19 20 21 22 23 24				
		ω (a :	TO MAIN HARNESS							
O II		D (> 0	TO MAIN HARNESS							
2	-	2 =	r s	TO MAIN HARNESS	Terminal	Color of	Signal Name				
	1 2 3 4	12	g	TO MAIN HARNESS	Ö	wire	,				
		13	١	TO MAIN HARNESS	-	>	TO BACK DOOR LH HARNESS				
		14		TO MAIN HARNESS	5	>	TO BACK DOOR LH HARNESS				
Terminal Color of		15		TO MAIN HARNESS	e .	H 1	TO BACK DOOR LH HARNESS				
	re Signal Name	16	,	TO MAIN HARNESS	4	SB	TO BACK DOOR LH HARNESS				
	1	17	BG	TO MAIN HARNESS - (WITHOUT	s «	g _	TO BACK DOOR LH HARNESS				
		17	>	TO MAIN HABNESS - (WITH NAVI)	, ,	. 9	TO BACK DOOR LH HARNESS				
3 SB	3 RL DOOR SW	18	SB	TO MAIN HARNESS - (WITHOUT	8	BB	TO BACK DOOR LH HARNESS				
		œ	×	TO MAIN HABNESS - OWITH NAVI)	6	3 (TO BACK DOOR LH HARNESS				
		19	*	TO MAIN HARNESS - (WITHOUT	2 5	r c	TO BACK DOOR LIN HARNESS				
				NAVI)	: 2	>	TO BACK DOOR LH HABNESS				
		g 00	20 00	TO MAIN HARNESS - (WITH NAVI)	13	W	TO BACK DOOR LH HARNESS -				
		1		NAVI)	5	٥	TO BACK DOOD I H HADNESS				
		50	×	TO MAIN HARNESS - (WITH NAVI)	2	=	(WITHOUT NAVI)				
		21	æ	TO MAIN HARNESS - (WITHOUT NAVI)	14	œ	TO BACK DOOR LH HARNESS - (WITH NAVI)				
		21	SHIELD	TO MAIN HARNESS - (WITH NAVI)	14	а	TO BACK DOOR LH HARNESS -				
		55	g	TO MAIN HARNESS - (WITHOUT NAVI)	15	g	TO BACK DOOR LH HARNESS -				
		22	×	TO MAIN HARNESS - (WITH NAVI)			(WITH NAVI)				
		53	SHIELD	TO MAIN HARNESS - (WITHOUT NAVI)	15	8	TO BACK DOOR LH HARNESS - (WITHOUT NAVI)				
		23	œ	TO MAIN HARNESS - (WITH NAVI)	16	SHIELD	TO BACK DOOR LH HARNESS				
					17	В	TO BACK DOOR LH HABNESS				

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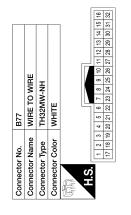
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	VESS	VESS .	ESS	VESS .	VESS .	VESS	VESS	VESS	ESS	VESS	VESS	ESS	VESS	VESS .	VESS .	VESS	VESS	VESS	VESS	VESS .	VESS .	VESS	VESS	VESS	VESS	VESS .	VESS	NESS .	VESS	VESS	VESS .	VESS
Signal Name	TO BODY NO. 3 HARNESS																															
Color of Wire	-	1	-	В	M	œ	W	В	Μ	9	-	_	>	-	5	-	В	В	SHIELD	В	В	M	SHIELD	W	В	SHIELD	В	В	SHIELD	FC	W	,
Terminal No.	-	2	3	4	5	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	56	27	28	59	30	31	32

| TO MAIN HARNESS |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| œ | > | ГG | В | > | ۰ | BG | > | ΓG | SHIELD | FG | SB | BG | ٦ | ۵ | ٦ | 57 | В | 1 | - | | BB | ٦ | - | 1 |
| 76A | A77 | 78A | 79A | 80A | 81A | 82A | 83A | 84A | 85A | 86A | 87A | 88A | 89A | 90A | 91A | 92A | 93A | 94A | 95A | 96A | 97A | 98A | 99A | 100A |
| | | | | | | | | | | | | | | | | | | | | | | | | |

B76	INSIDE KEY ANTENNA (LUGGAGE ROOM)	RK02FGY	GRAY	
Connector No.	Connector Name	Connector Type	Connector Color	

TO MAIN HARNESS
TO MAIN HARNESS
TO MAIN HARNESS
TO MAIN HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)

8 2 > 8

TO MAIN HARNESS - (WITH CLIMATE CONTROLLED SEAT

8 8

Signal Name	TRUNK ANT 1 A	TRUNK ANT 1 B	
Color of Wire	M	g	
Terminal No.	-	2	

TO MAIN HARNESS

SB

2 a ≥ a #

Connector No.	B69	25A 26A	SHIELD	TO MAIN TO MAIN
Connector Name	WIRE TO WIRE	27A	8	TO MAIN
Connector Type	TH80MDGY-CS16-TM4	28A	SHIELD	TO MAIN
Connector Color	GRAY	29A	œ	TO MAIN
		30A	8	TO MAIN
N F		31A	HH	TO MAIN
S II		32A		TO MAIN
	45 40 40	33A	×	TO MAIN
	# # # # # #	34A	8	TO MAIN
	, m	35A	SHIELD	TO MAIN
	214 20A 19A 18A 17A 16A 15A 14A 13A 12A 11A	36A	-	TO MAIN
	3UA 28A 26A 27A 26A 25A 24A 23A 22A	37A	9	TO MAIN
	41A 40A 39A 38A 37A 36A 35A 34A 33A 32A 31A	38A	>	TO MAIN
	3UA 48A 48A 47A 46A 45A 44A 44A 42A 42A	39A	SB	TO MAIN
	61A 60A 58A 58A 57A 56A 55A 54A 53A 52A 51A	40A	H	TO MAIN
	/UA 03A 06A 07A 06A 05A 04A 03A 02A	41A	>	TO MAIN
	81A 80A 73A 78A 77A 78A 75A 74A 73A 72A 71A	42A	-	TO MAIN
	90A 88A 88A 87A 86A 83A 84A 83A 82A	43A		TO MAIN
	95a 94a 93a 92a 91A	44A	>	TO MAIN
	1004 99A 98A 97A 96A	45A	5	TO MAIN
		46A	>	TO MAIN
		47A	_	TO MAIN
		48A	SB	TO MAIN
		49A	g	TO MAIN

49A	50A	51A	52A	53A	24A	55A	56A	57A	57A	402	400	Aec Aos	100	AT9	62A	63A	64A	65A	66A	67A	68A	P69	70A	A17	462	737	746	rt./	754
	Signal Name	COLLEGE	IO MAIN HARNESS	IO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS		TO MAIN HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)	TO MAIN HARNESS - (WITH CLIMATE CONTROLLED SEAT)	TO MAIN HARNESS	TO MAIN HABNESS	TO MAIN HABNESS	O STANDAL MAN OT	IO INIAIN HARINESS	IO MAIN HARNESS	IO MAIN HARNESS	IO MAIN HAHNESS	TO MAIN HARNESS											
	Color of	D	1 2	> :	>	G		97	œ	BB	g	۵	,	×	o		~	: (5 3	> 0	ום	20	SHIELD	>	SHIELD	1	W	8	
	lerminal	<u>,</u>	¥ 3	4	3A	4A	5A	4 9	6A	7.A	8A	98	10A	11A	12A	13A	14A	15.4	¥2	IbA	1/A	18A	19A	20A	21A	22A	23A	24A	
																								Αŀ	3KI	474	870	ЗВ	

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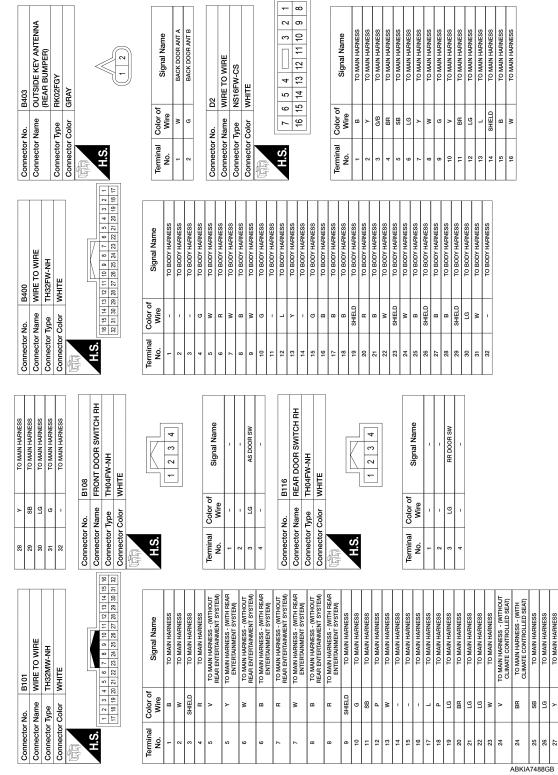
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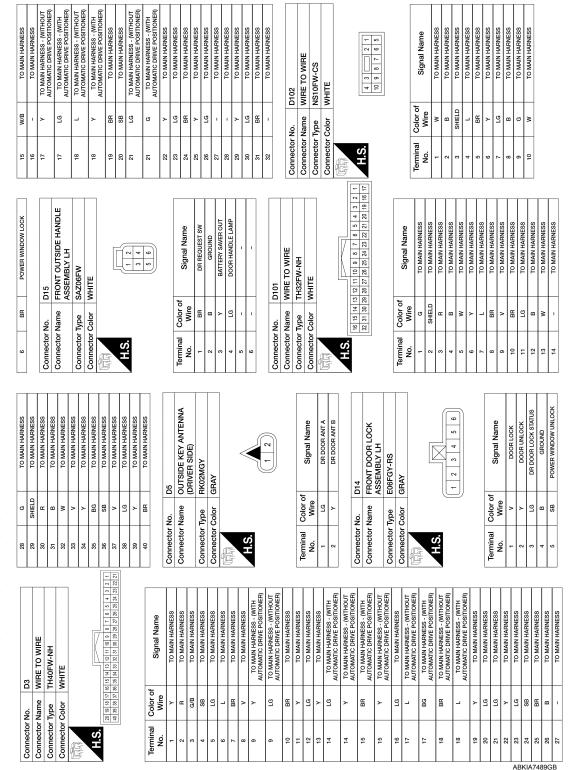
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NTELLIGENT KEY SYSTEM CONNECTORS



Revision: April 2016 **DLK-83** 2016 QX60



TO BACK DOOR LH HARNESS

TO BACK DOOR RH HARNESS
TO BACK DOOR RH HARNESS
TO BACK DOOR RH HARNESS
TO BACK DOOR RH HARNESS
TO BACK DOOR RH HARNESS
TO BACK DOOR RH HARNESS
TO BACK DOOR RH HARNESS

TO BACK DOOR LH HARNESS

TO BACK DOOR LH HARNESS

TO BACK DOOR RH HARNESS

TO BACK DOOR LH HARNESS

20 19

2 2 2 2 2

TO BACK DOOR LH HARNESS

8 8 8

TO BACK DOOR RH HARNESS

g

TO BACK DOOR LH HARNESS TO BACK DOOR LH HARNESS TO BACK DOOR LH HARNESS

2

TO BACK DOOR RH HARNESS
TO BACK DOOR RH HARNESS

2

WIRE TO WIRE TH24MW-NH WHITE

Connector No.

WIRE TO WIRE

TH24FW-NH WHITE

Connector Name
Connector Type
Connector Color

Connector Type Connector Color Connector Name

Color of Wire

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INTELLIGENT KEY SYSTEM CONNECTORS

Connector No.	D115	ဝိ
Connector Name	FRONT OUTSIDE HANDLE ASSEMBLY RH	ၓ ၓ
Connector Type	SAZ06FW	ြပ
Connector Color	WHITE	
中旬 H.S.	1 6 8 C	T

Connector No.	Connector Name	Connector Type	Connector Color		H.S.
D115	FRONT OUTSIDE HANDLE	ASSEMBLY RH	SAZ06FW	WHITE	2 4 8 8
o.	ame		/be	olor	

	Connector No.	D501
IT OUTSIDE HANDLE	Connector Name	WIRE TO WIRE
MBLY RH	Connector Type	TH24FW-NH
6FW	Connector Color	WHITE
Ш		
	WELT	
	SH	
(1)		12 11 10 9 8 7 6 5 4 3 2 1
. 6	24	24 23 22 21 20 19 18 17 16 15 14 13
9		

Connector Name	FRONT OUTSIDE HANDLE	
	ASSEMBLY RH	
Connector Type	SAZ06FW	
Connector Color	WHITE	
H.S.	- 8 B	

Termi	ž	1	2	e	4	5	9	7	
	Signal Name		AS REQUEST SW	GROUND	BATTERY SAVER OUT	DOOR HANDLE LAMP	1	ı	
	Color of	Wire	BR	В	\	re	-	,	
	inal	٥.			_	_			

Terminal No.	Color of Wire	Signal Name
-	HH	AS REQUEST SW
2	8	GROUND
3	>	BATTERY SAVER OUT
4	e P	DOOR HANDLE LAMP
5		-
9		1
Connector No.		D118
Connector Name	Ė	OUTSIDE KEY ANTENNA
	_	(PASSENGER SIDE)
Connector Type		RK02MGY
Connector Color		GRAY
F		

Signal Name	TO BODY HARNESS																							
Color of Wire	BB	BG	>	PI	g	SB	7	œ	g	W	Ь	٨	W	В	œ	SHIELD	G	-	W	W	W	ГG	٨	
Terminal No.	1	2	8	4	2	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	

Signal Name	TO BODY HARNESS	TO BODY HADNESS																						
Color of Wire	BR	BG	۸	FG	5	SB	٦	æ	g	×	۵	٨	Μ	В	æ	SHIELD	5	-	W	W	W	FG	٨	9
Terminal No.	1	2	3	4	5	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

Signal Name	AS DOOR ANT A	AS DOOR ANT B	
Color of Wire	5 D	٨	
Terminal No.	-	2	

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FUSE BLOCK (J/B) NS10FW-CS

Connector Name Connector Color Connector Type Connector No.

TO FRONT END MODULE HARNESS

SB H TO FRONT END MODULE HARNESS

2

TO FRONT END MODULE HARNESS

1M 5M

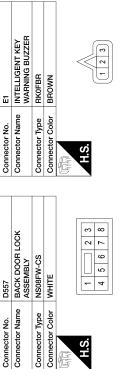
H.S.

TO FRONT END MODULE HARNESS TO FRONT END MODULE HARNESS

M/G

TO FRONT END MODULE HARNESS

NTELLIGENT KEY SYSTEM CONNECTORS



		Signal Name	IGNITION	ı	1	1	BATTERY	TAIL LH	BRAKE PEDAL POSITION SWITCH	BRAKE PEDAL POSITION SWITCH			1	
	Color of	Wire	æ	-		-	٨	7	۵	œ			1	
	Terminal	No.	M1	ZM	эм	4M	5M	W9	MZ	8M	Me		10M	
TO FRONT END MODULE	HARNESS	TO FRONT END MODULE HARNESS	TO FBONT END MODILIE	HARNESS	TO FRONT END MODULE	HARNESS	TO FRONT END MODULE HARNESS	TO EBONT END MODILLE	HARNESS	TO FRONT END MODULE	HARNESS	T III COST CITY FIRE COLUMN	IO FRONT END MODULE HARNESS	

SHIELD SHIELD

5 4 15 16

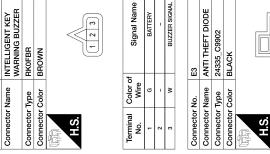
12

14	Connector No.	E38
OINT CONNECTOR-E05	Connector Name	STOP LAMP SWITCH
12FB	Connector Type	M04FW-LC
H ACK	Connector Color WHITE	WHITE

Т	Connector Type		M04FW-LC
Τ	Connector Color		WHITE
	FF. H.S.		8
-			1 2
	Terminal No.	Color of Wire	Signal Name
T	-	>	BATT
T	2	۵	BRAKE PEDAL POSITION SWITCH
Τ	е	*	BATT
	4	5	STP
Γ			

Connector No.	E14
Connector Name	JOINT CONNECTOR-E05
Connector Type	A12FB
Connector Color	BLACK
F	
H.S.	
12	12 11 10 9 8 7 6 5 4 3 2 1

Signal Name	CLUTCH I/L SW	CLUTCH I/L SW	CLUTCH I/L SW	BATTERY	BATTERY	BATTERY	BATTERY	BATTERY	BATTERY	GND	SHIELD	1
Color of Wire	Α	×	8	97	97	97	>	>	٨	GR	SHIELD	1
Terminal No.	1	2	9	4	2	9	7	8	6	10	11	12



Color of Wire

Terminal No.

9

Signal Name	Terminal No.	Color of Wire		
LATCH MTR OPEN	-	5		
LATCH MTR CLOSE	2			
	е	Μ		۳.
OPEN SW				
CLOSE SW	Connector No	S	E C	
HALF LATCH SW	opposition of	No.	FIE	115
BACK DOOR SW	COIIIIECTOI INAIIIE	a la	TINE I	= 17
GROUND	Connector Type	lype	24335_C	75
	Connector Color	Color	BLACK	
	F			
DOOR OPENER H	H.S.			111 11
W-NH				

SB

				Color of Wire	57	
	H.S.			Terminal Color of No. Wire	1	
	E			Г		
	BACK DOOR OPENER SWITCH				4	
	S C	Ŧ			3	_
	ğΞ	Ŋ-			2	_
65	BACK DC SWITCH	TH04MW-NH	WHITE		_	_
D229	SW SW	É	≱	-		

Connector Name

Connector No.

Connector Color

Connector Type

Signal Name

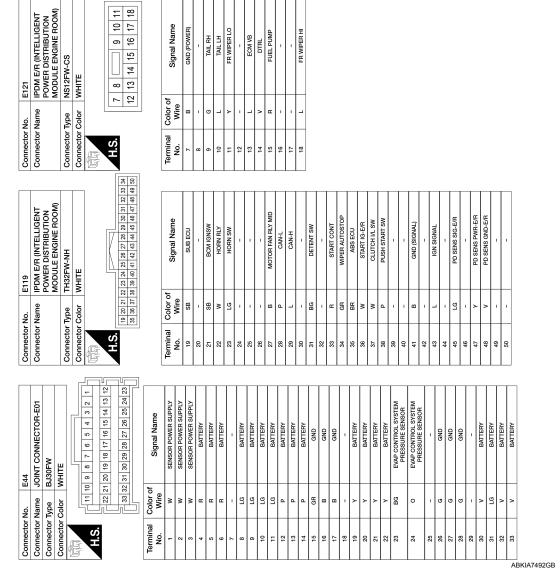
HORN SW BATTERY

Connector No.	No.	ш	品							
Connector Name	Name		WIRE TO WIRE	5	ME				Π	
Connector Type	Type	z	NS16MW-CS	≱	છ					
Connector Color	Color	>	WHITE	lui						
THE SECOND										
H.S.	_	7	က			4	5	9	7	
	∞	တ	9 10 11 12 13 14 15 16	Ξ	12	33	4	15	16	

Signal Name	TO FRONT END MODULE HARNESS
Color of Wire	٨
Terminal No.	

	>			SW
Signal Name	BACK DOOR OPEN SW	GROUND	GROUND	BACK DOOR REQUEST SW
Color of Wire	g	В	<u>а</u>	W
Terminal No.	1	2	3	4

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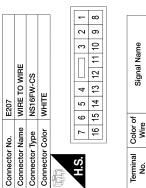
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TO MAIN HARNESS

					_		_									
Signal Name	TO ENGINE ROOM HARNESS															
Color of Wire	۵	۵	œ	В	5	-	-	g	œ	g	а	н	SHIELD	SHIELD		-
Terminal No.	-	2	3	4	5	9	7	8	6	10	1	12	13	14	15	16

TO MAIN HARNESS

TO MAIN HARNESS

826 836 846 866 866 996 996 996 996 996 996

Connector No.	E205
Connector Name	HOOD SWITCH
Connector Type	RK03MBR
Connector Color	BROWN
	٠

1 2 3	Signal Name	HOOD SW 2	WS GOOH	CINICOC
	Color of Wire	57	н	c
Λ. E	erminal No.	- 1	2	,

TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS											
W	œ	В	5	7	57	97	W	۵	_	BG	W	W	٨	BG	۵	œ	W	>	SB	۸	HB	W	9	B/W	BB	٦	а	BR	В	Ь	BG	W	В	SHIELD	Ь	٦	ш
27G	28G	29G	30G	31G	326	33G	34G	35G	36G	376	38G	39G	40G	416	426	43G	446	45G	46G	47G	48G	49G	50G	51G	52G	53G	54G	55G	56G	57G	58G	59G	909	61G	62G	63G	64G
6460	E132	WIRE 10 WIRE	TH80MW-CS16-TM4	WHITE					56 46 36 26 16	100 30 90 10 90	219209199189179189159149139129119	30G/29G/28G/27G/28G/25G/24G/23G/22G	41G 40G 39G 39G 37G 36G 35G 34G 33G 32G 31G	50G49G48G47G48G45G44G43G42G	61G 60G 59G 58G 57G 56G 55G 54G 53G 52G 51G	70G69G68G67G66G65G64G63G62G	81G 80G 79G 77G 76G 75G 74G 73G 72G 71G	90G89G88G87G86G85G84G83G82G	S	100G 94G 93G 92G 91G						Signal Name	TO MAIN HARNESS	D TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS					
9	2	Name	Type	Color			L	_																	Color of	Wire	g	>	۵	α	۵	>	SHIELD	5	9	۵	g
30400	COILIECTO	Connector Name	Connector Type	Connector Color	Œ	ATT T	N H									_									Terminal	Š.	10	26	36	46	56	59	76	28	96	10G	11G

526	53G	54G	55G	56G	57G	58G	59G	909	61G	62G	63G	64G	65G	999	676	989	969	70G	71G	72G	73G	74G	75G	76G	77G	789	79G	
					•					•		•															_	
i	Signal Name	TO MAIN HARNESS																										
Color of	Wire	g	×	۵	æ	۵	Μ	SHIELD	5	PP	۵	ŋ	۵	Α	BG	Μ	ж	8	SHIELD	Α	g	۵	В	SHIELD	ш	Μ	SHIELD	
Terminal	No.	5	26	36	46	56	99	76	86	96	10G	116	12G	13G	14G	15G	16G	17G	18G	19G	200	21G	226	23G	24G	25G	26G	
																		_				1	AE	KIA	749	93G	В	,

TO MAIN HARNESS

TO MAIN HARNESS

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TO MAIN HARNESS

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Connector No.	E218	Connector No. E221	Connector No.		3	16P	=	BLOWER FAIN RELAT OU
Connector Name	IPDM E/R (INTELLIGENT		Connector Name		FUSE BLOCK (J/B)		Ī	1
	POWER DISTRIBUTION		Connector Type		CS06FW-M2	Connector No.	+	VIII.
Connector Type	THISEW-NH	Connector Color BLACK	Connector Color		WHITE	Connector Name		POSH-BOLLON IGNITION SWITCH
Connector Color	WHITE		F	L		Connector Type		TH08FW-NH
F		HS	H.S.		3N 2N 1N	Connector Color		WHITE
H.S.	20 83 78 88 80	2			8N 7N 6N 5N 4N			
	32 38					5		4
		Terminal Color of Signal Name No.	Terminal No.	Color of Wire	Signal Name			5 6 7 8
la O	of Signal Name		Z.	FIG	IGNITION			
			2N	BG	ВАТТЕВУ	Terminal	Color of	Signal Name
83	PD SENS SIG-FEM	Connector No. E222	NS I	- ;	IGNITION	. m	88	BATTERY
"	H/L LEVELIZER RH	Connector Name HORN (LOW)	N4	> >	BALLERY	4	a	GROUND
85 P	DTRL RLY	Connector Type P01FB-A	N 20	- 3	BATTERY	2	œ	HIGH SIDE START SW LED
7 98	PD SENS GND-FEM	Connector Color BLACK	2	: -	BATTERY	9	×	ILL GND
- 78	1			-	NOILING	7	۵	ACC LED
- 88	ı	MAN		1		8	g	ENG START SW
- 68	1			Ī				
90 FG	CLEARANCE	6.1	Connector No.	\neg	4			
	1		Connector Name		FUSE BLOCK (J/B)			
92 L	H/L LEVELIZER LH		Connector Type		NS16FW-CS			
	MOTOR FAN PWM		Connector Color		WHITE			
94 LG	HOODSW 2	Touminal Color of						
1	-							
96 R	MSGOOH	-	S	20	0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0			
- 26	1			16P 15P 1	12P 11P			
		Connector No		5		= 1		
Connector No.	E220	1						
Connector Name	HORN (HIGH)	+						
Connector Type	P01FB-A		lal	Color of	Signal Name			
Connector Color	BLACK	Connector Color BLACK	No.	Wire				
			4	œ	IGNITION			
45			2P	F.G	IGNITION			
ВΗ		T.S.	ЗЪ	g	IGN ELEC RELAY OUT 2			
į			4P	-	1			
		7	5P	Ь	IGNITION			
			д9	BG	REAR DEFOGGER RELAY OUT			
			7P	FG	IGNITION			
t			8	BG	IGNITION			
ام د	of Signal Name	Signal Name	ď	-	ВАТТЕВУ			
No. Wire		wire	1	88	IGNITION			
ъ Б	ВАТТЕВУ	2 B GROUND	1	,	1			
			12P					
			139	>	BATTERY			
			14P	: >	BATTERY			
			15P	-	BATT			

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Ctor Name BCM (BODY CONTROL MODULE) Ctor Type TH40FB-NH Connector Name BCM (BODY CONTROL MODULE) Ctor Color BLACK Connector Color BLACK Connector Name BCM (BAZ) Connector Name BCM (BAZ) Connector Name BCM (BAZ) Connector Name BCM (BAZ) Connector Type TH24FG Connector Type TH24FG Connector Type TH24FG Connector Or Or GRAY Connector Type TH24FG Connector Or Or GRAY Connector Type TH24FG Connector Or Or GRAY Connector Name BCM (BAZ) Connector Type TH24FG Connector Type TH24FG Connector Name BCM (BAZ) TH24FG Connector Name BCM (BAZ) TH24FG Connector Type TH24FG Connector Type TH24FG Connector Type TH24FG Connector Name BCM (BAZ) TH24FG Connector Type TH24FG Connector Type TH24FG Connector Type TH24FG TH24FG Connector Type	Connect						1		OF ICAMO
MODULE		tor Name	BCM (BODY CONTROL	40		-	2 82	2 3	COMBI SW OUT 3
Connector Name Nam			MODULE)		ľ		0 62	\$ \$	COMBI SW OUT 1
Gomestor Name Southeist Course Color Southeist Color South	Connect	tor Type	TH40FG-NH	Connector N	$^{+}$	A19	80	2	BACK DOOR OPEN SW
Connector Type TH4OFB-NH Connector Type TH4OFB-NH Connector Name BCM (BODY CONTFOL	Sonnect	tor Color	GREEN	Connector N		3CM (BODY CONTROL			
Counector Color Co	F			Connector Ty	T	TH40FB-NH	Connecto	r No.	M20
Contraction Part	HS			Connector C	П	SLACK	Connecto	r Name	BCM (BODY CONTROL
Control Signal Name		_	16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 1 1 1 1 1 3 1 3 2 1 1 1 1 1 1 1 1	F			Connecto	r Type	TH24FGY-NH
Color of Auto-Bones Supervisors Colo				L				r Color	GRAY
Mine		_ h		09	59 58 57 56 79 78 77 76	55 54 53 52 51 50 49 48 47 46 45 44 43 42 42 47 75 74 77 77 0 69 68 67 66 65 64 63 62 62			
Color of Engine Entrity With Color of AL Signal Name No. AL POWER SUPPLY SYN No. ALL POWER SUPPLY SYN	Terming No.						H.S.		
Mo. ALL POWER SUPPLY YOW ALL SORVAIL No. ALL POWER SUPPLY YOW ALL SORVAIL No. ALL SORVAIL No. ALL SORVAIL	-	σ	ENG START SW	-				104 1	8 97 96 95 94 82
C C AL SIGNAL C C C C C C C C C	2 0	1 3	-		Color of Wire	Signal Name			-
COMBISWIN 18	o 4	\$ 0	AL FOWER SUPPLY SV	14		1			
COMBISWINS COMBISMINS COM	5	1	1	42		ı	Terminal	Color o	
COMBISWINS COMBISMINS COM	9	-	1	43	-	-	No.	Wire	Olginal Name
1	7		1	44	,	1	8	_	BAT REAR WIPER FUSE
1	8	-	-	45	,	1	82	8	RL DOOR SW
P COMBIS SW N I S 47 - - 84 BR V COMBIS SW N I S 48 -	6	-		46	,	-	83	BG	BACK DOOR REQUEST SW
P COMBIS SW IN 4 48 R HIGH SIDE START SW LED 85 - V COOMBIS SW IN 1 50 - - 88 - P COOMBIS SW IN 1 50 - - 87 P P COOMBIS SW IN 1 50 - - 88 - 88 - R COOMBIS SW IN 1 55 W AUDIO DONGLE 88 LG R R COOMBIS SW IN 1 55 W AUDIO DONGLE 88 LG R R CONDATION DONGLE 56 BR R </td <td>10</td> <td>а</td> <td>COMBI SW IN 5</td> <td>47</td> <td>١</td> <td>1</td> <td>84</td> <td>8</td> <td>R WIPER AUTOSTOP SW</td>	10	а	COMBI SW IN 5	47	١	1	84	8	R WIPER AUTOSTOP SW
V COMBISWIN 3 499 - - 88 R W COMBISWIN 12 51 - - 88 - P COMBISWIN 12 51 - - - 88 - P COMBISWIN 12 51 - - - 88 - - - - - - - 89 LG - N SECURITY INDICATOR 55 W PW LINCOM 92 R V SHIFTP 56 - <t< td=""><td>=</td><td>۵</td><td>COMBI SW IN 4</td><td>48</td><td>œ</td><td>HIGH SIDE START SW LED</td><td>82</td><td>'</td><td>1</td></t<>	=	۵	COMBI SW IN 4	48	œ	HIGH SIDE START SW LED	82	'	1
W COMBISWIN 2 50 - - 87 P - COMBISW NN 1 52 W AUDIO DONGLE 89 - - - S2 W AUDIO DONGLE 89 - - - S3 - - 90 - V SECURITY INDICATOR 55 BR R SENSOR K-LINE 92 R V SHIFT P 56 BR R SENSOR K-LINE 92 R W SHIFT P 57 - - 94 C W SHIFT P 57 - - 96 V W STEP LAMP CONT 58 - - - 94 C W STEP LAMP CONT 58 - - - - 96 V - - - - - - - - - - - - - - - -	12	>	COMBI SW IN 3	49		1	98	۵.	TRAILER FLASHER RL
P COMBLSW IN 1 51 - - 88 - 8	13	>	COMBI SW IN 2	90	,	-	87	۵	TRAILER FLASHER RR
CANDING DONGLE	14	۵	COMBI SW IN 1	51	, 3	1	88 8	' !	-
No.	15	1	-	52	8	AUDIO DONGLE	8 8	2	HEVERSE LAMP OUT
H SECURITY INDICATOR 55 BR RESPONDENTINE 91 - - - - - - - 94 G W SHIFT P 57 - - 94 G W SHIFT P 57 - - 94 G W SHIFT P 58 - - 96 N - - - - 96 N B - - - - 96 N N - - - - - 96 N - - - - - - - - -	ا م			3 1		THOUSAND THE TANKS	8 8		
V STOCHILL INDUCATION SECONDATION SE	4	œ ;	GND RF A/L	54 54	A a	PW LIN/COM	5 8	1 0	- ad Asheb
W STEP LAMP CONT SS	9	>	SECONIT INDICALOR	8 4	5		8	: a	WS ACOULAND
W STEP LAMP CONT 56 - - - 96 V V - - - - - - 96 V Y - - - - - - 96 BG BG -	20	×	- SHEE	57		1	94	: 0	AS DOOR SW
CAN-L CAN-L CAN-L	2	>	STEP LAMP CONT	58		1	96	>	REAR WIPER OUT
CAN-H STATEMENT OF THE STATEMENT OF	22	-		59	۵	CAN-L	96	BG	DR DOOR SW
Color Colo	23		-	09	_	CAN-H	97	>	BACK DOOR SW
W BRAKE SW FUSE 62 W STARTER RELAY OUT 99 P L SHORTING INPUT 68 HG HCZER OUT 100 W C BRAKE SW LAMP 66 W BLOWER FAM PELLY OUT 102 G C C W BLOWER FAM PELLY OUT 103 BG C C C W BLOWER FAM PELLY OUT 103 BG C C C W BLOWER FAM PELLY OUT 104 - C C C W BLOWER FAM PELLY OUT 104 - C C C W BLOWER FAM PELLY OUT 104 - C C C AT DEVICE OUT 104 - - C C C AT DEVICE OUT - - - - C C AT DEVICE OUT - - - - C C AT DEVICE OUT - - -	24	'	1	61	BG	REAR DEFOGGER RELAY OUT	86	-	1
C SHORTING INPUT 63 BG HKFY LINK SIGNAL 100 W	25	>	BRAKE SW FUSE	62	W	STARTER RELAY OUT	66	Ь	ROOM ANT 3 B
Q BRAKE SW LAMP 64 P BUZZER OUT 101 R - - - 65 P DOOR HAMDLE LAMP 102 G - - W BLOOR HAMDLE LAMP 102 G G 0 - W BLOOR HAMDLE LAMP 102 G G G 0 - - - 103 BG G G G G G G G G G G G G G AT DEVICE OUT C C C C AT DEVICE OUT C <td< td=""><td>26</td><td>_</td><td>SHORTING INPUT</td><td>63</td><td>BG</td><td>I-KEY LINK SIGNAL</td><td>100</td><td>W</td><td>ROOM ANT 3 A</td></td<>	26	_	SHORTING INPUT	63	BG	I-KEY LINK SIGNAL	100	W	ROOM ANT 3 A
102 0 0 0 0 0 0 0 0 0	27	g	BRAKE SW LAMP	64	Ь	BUZZER OUT	101	В	REAR BUMPER ANT B
Color Colo	28		-	65	۵	DOOR HANDLE LAMP	102	9	REAR BUMPER ANT A
P DR DOOR LOCK STATUS 67 G GINELEC FIELAY OUT 2	59	-	1	99	W	BLOWER FAN RELAY OUT	103	BG	RL FLASHER
68 P G G G G G G G G G G G G G G G G G G	30	۵	DR DOOR LOCK STATUS	29	g	IGN ELEC RELAY OUT 2	104	1	1
69 G G C C C C C C C C C C C C C C C C C	31	-	1	89	۵	MR OUTPUT			
- - 70 P	32	-	1	69	g	AT DEVICE OUT			
- - 77 R	33	-	1	20	۵	IGN USM OUT 1			
72 G LG HAZAPD SW 73 - 74 - 74 -	34		1	1.1	н	DR REQUEST SW			
LG HAZARD SW 73 - 74 - 74 -	35	'	-	72	g	AS REQUEST SW			
- 42	36	P	HAZARD SW	73	,	1			
	37			7.4					

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Connector No.		M24	39	1	CAN-H	176	В	TO ENGINE ROOM HARNESS	709	BG	TO ENGINE ROOM HARNESS
Connector Name	1	COMBINATION METER	40	1	1	18G	SHIELD	TO ENGINE ROOM HARNESS	716	8	TO ENGINE ROOM HARNESS
1	†	COMBINALION METER				19G	SB	TO ENGINE ROOM HARNESS	72G	,	TO ENGINE ROOM HARNESS
Connector Type		TH40FW-NH	Connector No.		M31	20G	FG	TO ENGINE ROOM HARNESS	73G	-	TO ENGINE ROOM HARNESS
Connector Color		WHITE	N. September 1	$^{+}$	WIDE TO WIDE	21G	œ	TO ENGINE ROOM HARNESS	74G	ı	TO ENGINE ROOM HARNESS
			Collifector	T	WINE TO WINE	22G	В	TO ENGINE ROOM HARNESS	75G	9	TO ENGINE ROOM HARNESS
			connector type	T	HooF W-C3 6-1 M4	23G	SHIELD	TO ENGINE ROOM HARNESS	76G	>	TO ENGINE ROOM HARNESS
H.S.			Connector Color		WHILE	24G	*	TO ENGINE ROOM HARNESS	776	BB	TO ENGINE ROOM HARNESS
Ī	20 19 18 17 16	20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1				25G	œ	TO ENGINE ROOM HARNESS	78G	1	TO ENGINE ROOM HARNESS
	40 39 38 37 38	8	\ -			26G	SHELD	TO ENGINE ROOM HARNESS	79G	œ	TO ENGINE ROOM HARNESS
			E.S.	L		27G	В	TO ENGINE ROOM HARNESS	80@	>	TO ENGINE ROOM HARNESS
					16 26 36 46 56	28G	8	TO ENGINE ROOM HARNESS	81G	G	TO ENGINE ROOM HARNESS
100	30				6G 7G 8G 9G 10G	29G	5	TO ENGINE ROOM HARNESS	82G	Ь	TO ENGINE ROOM HARNESS
lerminal No	Color of	Signal Name				30G	ш	TO ENGINE ROOM HARNESS	83G	Ь	TO ENGINE ROOM HARNESS
ا ز		PONO			77672513C 14515G 1551/G18G19C2UG21G	31G	٦	TO ENGINE ROOM HARNESS	84G	Ь	TO ENGINE ROOM HARNESS
		GIND				32G	g	TO ENGINE ROOM HARNESS	85G	۵	TO ENGINE ROOM HARNESS
7 0	، م	GINDS		£	31G32G33G34G35G36G37G38G39G40G41G	33G	g	TO ENGINE ROOM HARNESS	86G	Ь	TO ENGINE ROOM HARNESS
,		SING SW INPUL 1			42G43G44G45G46G47G48G49G50G	34G	9	TO ENGINE ROOM HARNESS	876	Ь	TO ENGINE ROOM HARNESS
4	98 BC	STRG SW INPUT 2		5	51952953354955956350579589559360819	35G	۵	TO ENGINE ROOM HARNESS	88G	۵	TO ENGINE ROOM HARNESS
5	۵	ACC			620630640650660670680690700	36G	_	TO ENGINE ROOM HARNESS	896	œ	TO ENGINE ROOM HARNESS
9	>	SECURITY			A service of the serv	37G	_	TO ENGINE ROOM HARNESS	506	۵	TO ENGINE ROOM HARNESS
7	œ	AIR BAG			826836846856866876886896906	380	8	TO ENGINE ROOM HARNESS	916	-	TO ENGINE ROOM HARNESS
8	o o	AS BELT				39G	œ	TO ENGINE ROOM HARNESS	926	۵	TO ENGINE ROOM HARNESS
6	>	DR BUCKLE SW			916 926 936 946 956	40G	>	TO ENGINE ROOM HARNESS	93G	۵	TO ENGINE ROOM HARNESS
10	,	1			96G 97G 98G 99G 100G	41G	_	TO ENGINE ROOM HARNESS	94G	0	TO ENGINE ROOM HARNESS
11	BG	ALTERNATOR (CHARGE)				42G	۵	TO ENGINE BOOM HARNESS	956	8	TO ENGINE BOOM HABNESS
12	g	PKB				43G	8	TO ENGINE ROOM HARNESS	596	۵	TO ENGINE ROOM HARNESS
13	1	-				44G	5	TO ENGINE ROOM HARNESS	976	۵	TO ENGINE ROOM HARNESS
14	g	STRG SW OUTPUT 1	Terminal	Color of	:	45G	Œ	TO ENGINE ROOM HARNESS	986	۵	TO ENGINE ROOM HARNESS
15	>	STRG SW OUTPUT 2	No.	Wire	Signal Name	46G	>	TO ENGINE ROOM HARNESS	566	۵	TO ENGINE ROOM HARNESS
16	в	STRG SW OUTPUT GND	5	SB	TO ENGINE ROOM HARNESS -	476	>	TO ENGINE ROOM HARNESS	1000	SHIELD	TO ENGINE ROOM HARNESS
17	-	1			(WITHOUT CLIMATE	48G	9	TO ENGINE ROOM HARNESS			
18	1	-	Ç		TO THOMIS DOOM INDIVISE	49G	۵	TO ENGINE ROOM HARNESS			
19	-	-	2	ı	MITH CLIMATE CONTROLLED	50G	_	TO ENGINE BOOM HARNESS			
20	1	1			SEAT)	516	B/W	TO ENGINE BOOM HABNESS			
21	Bg	IGN	26	M	TO ENGINE ROOM HARNESS	526	8	TO FNGINE BOOM HABNESS			
22	×	BAT	36	Д	TO ENGINE ROOM HARNESS	53G	-	TO ENGINE BOOM HABNESS			
23	В	ILLUMI CONT OUT	46	g	TO ENGINE ROOM HARNESS	546	8	TO FNGINE BOOM HABNESS			
24	æ	STRG SW GND	5G	۵	TO ENGINE ROOM HARNESS	556		TO ENGINE BOOM HABNESS			
25	g	BRAKE OIL SW	99	SB	TO ENGINE ROOM HARNESS -	566		TO FNGINE BOOM HABNESS			
26	В	FUEL SENSOR GND			CONTROLI ED SEAT	576	. a	TO ENGINE BOOM HABNESS			
27	W	FUEL SENSOR	9	a	TO ENGINE BOOM HABNESS -	2 282	-	TO ENGINE BOOM HABNESS			
28	ı	1	}	:	(WITH CLIMATE CONTROLLED	200		TO ENGINE BOOM HABNESS			
29	1	1			SEAT)	566	2 3	TO ENGINE BOOM HABINESS			
30	'	1	76	SHIELD	TO ENGINE ROOM HARNESS	500	A L	TO ENGINE ROOM HARNESS			
31	,	1	8G	ŋ	TO ENGINE ROOM HARNESS	519	SHELD	IO ENGINE HOOM HARNESS			
32	-		98	BG	TO ENGINE ROOM HARNESS	62G	5	TO ENGINE ROOM HARNESS			
33	8	SPEED 2 P/B	10G	Μ	TO ENGINE ROOM HARNESS	923	۵	TO ENGINE ROOM HARNESS			
34	88	SPEED 8 P/B	110	œ	TO ENGINE ROOM HARNESS	64G	>	TO ENGINE ROOM HARNESS			
35			12G	5	TO ENGINE ROOM HARNESS	65G	G/R	TO ENGINE ROOM HARNESS			
98		1	13G	5	TO ENGINE ROOM HARNESS	999	œ	TO ENGINE ROOM HARNESS			
37			14G	>	TO ENGINE ROOM HARNESS	67G	>	TO ENGINE ROOM HARNESS			
38	۵	I-N#3	15G	8	TO ENGINE ROOM HARNESS	68G	LG/R	TO ENGINE ROOM HARNESS			
			16G	œ	TO ENGINE ROOM HARNESS	569	۵	TO ENGINE ROOM HARNESS			

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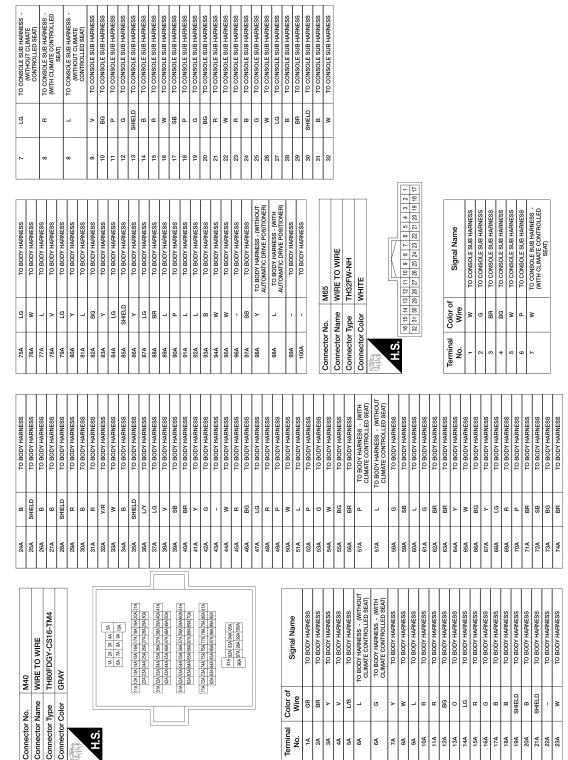
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Terminal Color of WHITE 115 3 4 5 6 7 8
H.S.
Terminal Color of Signal Name 119 R 110
1 2 3 4 5 6 1 12 13 14 5 6
Terminal Color of Signal Name 123 123 124 125
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12 12 12 12 12 12 12 12
128 SHIDTEN SHIPT SW SHIPT SW 5
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SHIFT DN Connector No. M80
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10 P NOT M RANGE Connector Type FEAO 11 B MODE SW 12 -
10 P NOT M RANGE Connector Color WHIT 12 -
11 B MODE SW 12
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16 -
Connector No. M80
Connector Name BCM (BODY CONTROL Demina Color of Name Color of Connector Type TH24FB-NH 130 LG 130 LG Connector Color BLACK 131 W 132 V 133 V 134 B Connector Color Color of Color of
MODULE 1900
Connector Type TH24FB-NH 130 LG
Connector Color BLACK 131 W 132 BR 132 BR 132 BR 133 Y 134 BR 134 BR 134 BR 134 BR 134 BR 135 L L L L L L L L L
132 BR 133 V 133 V 134 C C C C C C C C C
H.S. 133 Y 134 B 134 B 134 B 135 Y 135 D 135 D
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116 116 116 116 116 110 100 100 100 100
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107 W LOW SIDE START SW LED
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1 W TO FRONT DOOR RH HARNESS		SHIELD	BB	5 Y TO FRONT DOOR RH HARNESS	6 L TO FRONT DOOR RH HARNESS	7 LG TO FRONT DOOR RH HARNESS	8 GR TO FRONT DOOR RH HARNESS	Ė		9 G TO FRONT DOOR RH HARNESS - (WITH BOSE AUDIO SYSTEM)	10 Y TO FRONT DOOR RH HARNESS -	À	W IO FRONT DOOR HIT HARNESS - (WITH BOSE AUDIO SYSTEM)																													
TO FRONT DOOR RH HARNESS	TO FRONT DOOR RH HARNESS	TO FRONT DOOR RH HARNESS	TO FRONT DOOR RH HARNESS	TO FRONT DOOR RH HARNESS	TO FRONT DOOR RH HARNESS	TO FRONT DOOR RH HARNESS	TO FRONT DOOR RH HARNESS -	(WITHOUT AUTOMATIC DRIVE	TO FRONT DOOR RH HARNESS -	(WITH AUTOMATIC DRIVE	TO FRONT DOOR RH HARNESS -	(WITHOUT AUTOMATIC DRIVE	TO EDONT DOOD DH HADNESS -	(WITH AUTOMATIC DRIVE	TO EBONT DOOD BU LABNESS	(WITHOUT AUTOMATIC DRIVE	TO FRONT DOOR RH HARNESS - (WITH AUTOMATIC DRIVE	TO FRONT DOOR RH HARNESS	TO FRONT DOOR RH HARNESS - (WITHOUT AUTOMATIC DRIVE	POSITIONER)	(WITH AUTOMATIC DRIVE	TO FRONT DOOR BH HARNESS	TO FRONT DOOR RH HARNESS	TO FRONT DOOR RH HARNESS	TO FRONT DOOR RH HARNESS	TO FRONT DOOR RH HARNESS	TO FRONT DOOR RH HARNESS	TO FRONT DOOR RH HARNESS	TO FRONT DOOR RH HARNESS	TO FRONT DOOR RH HARNESS		85TM	WIRE TO WIRE	NS10MW-CS	WHITE			1 2 3 4	5 6 7 8 9 10			
10 P	F			14 Y/R	15 GR		17 BG		17		18 W		e e		1	<u> </u>	19 P	20 G	21 W	+	r -	SB		24 G	25 BG		- 28 - 20 - M		31 W	32 -			m		Connector Color W	F		Ŋ. K				
TO BODY HARNESS RH	TO BODY HARNESS RH	TO BODY HARNESS BH	TO BODY HARNESS RH	TO BODY HARNESS RH	TO BODY HARNESS RH	TO BODY HARNESS RH	TO BODY HARNESS RH		88	BEMOTE KEVI ESS ENTRY	RECEIVER	AAC04FB	BLACK				1 2 3 4		of Signal Name		SIGNAL	GND	1		M91	WIRE TO WIRE	WHITE				3 4 5 6 7 8 9 10 11 12 13 14 15 16 19 20 21 22 23 24 25 26 27 28 29 30 31 32				Signal Name	TO FRONT DOOR RH HARNESS	\dashv	TO FRONT DOOR RH HARNESS	TO EDONT DOOD BH HADNESS	TO FRONT DOOR BH HABNESS	TO FRONT DOOR RH HARNESS	
25 W				29 SB	30 F	31 W	32 -		Connector No	Connector Name		Connector Type	Connector Color	E		H.S.			lal C	٠	1 BG	ľ	- 4		Connector No.	Connector Name	Connector Color				17 18 19			Terminal Color of		W L	R		4 n			
	M84	WIRE TO WIRE	TH32FW-NH	WHITE				12 11 10 9 8 7 6 5 4 3 2 1	26 25 24 23 22 21 20 19			3	Signal Name	TO BODY HARNESS RH	TO BODY HARNESS RH	TO BODY HARNESS RH	TO BODY HARNESS RH - TO BODY HARNESS RH - (WITHOUT REAR	TO BODY HARNESS RH - (WITH	TO BODY HARNESS RH -	(WITHOUT REAR ENTERTAINMENT SYSTEM)	TO BODY HARNESS RH - (WITH	TO BODY HARNESS BH -	(WITHOUT REAR	TO BODY HARNESS RH - (WITH	TO DODY LABRESS BU	(WITHOUT REAR ENTERTAINMENT SYSTEM)	TO BODY HARNESS RH - (WITH BEAR ENTERTAINMENT SYSTEM)	TO BODY HARNESS RH	TO BODY HARNESS RH	TO BODY HARNESS RH	TO BODY HARNESS RH TO BODY HARNESS RH	TO BODY HARNESS RH	TO BODY HARNESS RH	TO BODY HARNESS RH	TO BODY HARNESS RH	TO BODY HARNESS RH	TO BODY HARNESS RH	TO BODY HARNESS RH	TO BODY HARNESS RH	TO BODY HARNESS RH	TO BODY HARNESS RH - (WITH	
		Connector Name V	Connector Type T	Connector Color V		n/e	Ų.	16 15 14 13 12 11	32 31 30 29			Terminal Color of	_	1 B		3 SHIELD		· ×	M 9		9	7 B		7 W	٥		8 R	6 SHIELD	10 G		12 G		15 0	16 SB	17 L		19 R				24 R	

M168	WIRE TO WIRE	TH40MW-NH	WHITE			21 22 23 24 25 26 27 28 29 30 31 32 32	
Connector No.	Connector Name	Connector Type	Connector Color		H.S.	21 22 23 24	
						9	7
					9	9 10 11 12 13 14 15 16	
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	ш				4	13	
	WIRE TO WIRE	NS16MW-CS				12	
	욘	Μ̈́	ш			=	
M167	/IRE	S16	WHITE		က	9	
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Connector No.	Connector Name	Connector Type	Connector Color	F	H.S.		٦

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Connector No.	Connector Name	Connector Type	Connector Color		21 22 23 24 25 26	
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	MIR	છ			12	
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M167	WIRE TO WIRE	NS16MW-CS	WHITE	က	9 10 11 12 13 14 15 16	
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	me	e	<u>o</u>	-	œ	

TO FRONT DOOR LH HARNESS

TO FRONT DOOR LH HARNESS

TO FRONT DOOR LH HARNESS TO FRONT DOOR LH HARNESS

TO FRONT DOOR LH HARNESS TO FRONT DOOR LH HARNESS TO FRONT DOOR LH HARNESS

SHIELD

Signal Name	
TO FRONT DOOR LH HARNESS	
TO FRONT DOOR LH HARNESS -	
(WITH BOSE AUDIO SYSTEM)	
Control of the same of the sam	

Color of Wire

Terminal No.

g/B

Signal Name	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE								
Color of Wire	SB	œ	G/B	۵	>	œ	5	Ь	W	œ
Terminal No.		2	8	4	5	9	7	8	6	6

JOINT CONNECTOR-M36
TK04FW-J
WHITE

Connector Type Connector Color Connector Name Connector No.

Signal Name

TO FRONT DOOR LH HARNESS
TO FRONT DOOR LH HARNESS
TO FRONT DOOR LH HARNESS

TO FRONT DOOR LH HARNESS TO FRONT DOOR LH HARNESS (WITHOUT AUTOMATIC DRIVE POSITIONER) TO FRONT DOOR LH HARNESS (WITH AUTOMATIC DRIVE

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15 5 9 TO FRONT DOOR LH HARNESS
TO FRONT DOOR LH HARNESS
(WITHOUT AUTOMATIC DRIVE

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TO FRONT DOOR LH HARNESS (WITHOUT AUTOMATIC DRIVE POSITIONER) TO FRONT DOOR LH HARNESS (WITH AUTOMATIC DRIVE POSITIONER) TO FRONT DOOR LH HARNESS TO FRONT DOOR LH HARNESS

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TO FRONT DOOR LH HARNESS

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TO FRONT DOOR LH HARNESS - (WITH BOSE AUDIO SYSTEM)	TO FRONT DOOR LH HARNESS - (WITH BASE AUDIO SYSTEM)	TO FRONT DOOR LH HARNESS - (WITH BOSE AUDIO SYSTEM WITHOUT SURROUND SOUND SYSTEM)	TO FRONT DOOR LH HARNESS - (WITH BOSE AUDIO SYSTEM AND SURROUND SOUND SYSTEM)	TO FRONT DOOR LH HARNESS - (WITH BASE AUDIO SYSTEM)	TO FRONT DOOR LH HARNESS										
>	SB	BB	>	Μ	>	Ф	g	SB	٦	BB	*	ГG	SHIELD	В	M
4	5	9	7	8	8	6	6	6	10	11	12	13	14	15	16

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M202	¥		₹			က	15
_	_	_	^			7	7
No.	Name	Type	Color			-	5
Connector No.	Connector Name	Connector Type	Connector Color	F	SH		

| TO CONSOLE SWITCH SUB
HARNESS |
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| œ | SHIELD | а | œ | Μ | _ | g | œ | SHIELD | * | œ | _ | o o | œ | SHIELD | * | В |
| 24 | 25 | 26 | 27 | 28 | 59 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |

TO CONSOLE SWITCH SUB HARNESS

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Signal Name

Color of Wire

Terminal No.

Connector No. M217 Connector Name WIRE 1 Connector Type TH32M Connector Color WHITE H.S.	7	WIRE TO WIRE	TH32MW-NH	11			6 7 8 9 10 11 12 13 1	17 18 19 20 21 22 23 24 25 28 27 28 29 3
Connector No. Connector Name Connector Type Connector Color	M21	M	표	M			-	202
Connector No. Connector Name Connector Type Connector Color A. H.S.		0					6	6
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	Connector	Connector	Connector	Connector	F	S		

TO CONSOLE SWITCH SUB HARNESS

SHIELD

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M255
INSIDE KEY ANTENNA
(CONSOLE)
RK02FGY
GRAY

Connector No.

Connector Type Connector Color

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1	_	_	
	16	32	
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	12 13 14	28	Φ
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I	9	28	ž
	6	52	Signal Name
	œ	24	įĝ
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	4	20	5
	e	9	olor c Wire
	2	92	Color of Wire
	-	17	0
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Signal Name	ROOM ANT 2 A	ROOM ANT 2 B	
Color of Wire	*	8	
Terminal No.	-	2	

8	_	TO MAIN HARNESS
6	g	TO MAIN HARNESS - (W
6	FG	TO MAIN HARNESS - (WIT) CLIMATE CONTROLLED S
10	>	TO MAIN HARNESS
11	Ь	TO MAIN HARNESS
12	g	TO MAIN HARNESS
13	SHIELD	TO MAIN HARNESS
14	8	TO MAIN HARNESS
15	W	TO MAIN HARNESS
16	œ	TO MAIN HARNESS
17	M	TO MAIN HARNESS
18	_	TO MAIN HARNESS
19	5	TO MAIN HARNESS
20	>	TO MAIN HARNESS
21	В	TO MAIN HARNESS
22	M	TO MAIN HARNESS
23	æ	TO MAIN HARNESS
24	В	TO MAIN HARNESS
25	5	TO MAIN HARNESS
56	W	TO MAIN HARNESS
22	FC	TO MAIN HARNESS
28	В	TO MAIN HARNESS
59	BR	TO MAIN HARNESS
30	SHIELD	TO MAIN HARNESS
31	В	TO MAIN HARNESS
33	W	TO MAIN HADNESS

Signal Name	ROOM ANT 2 A	ROOM ANT 2 B	
Color of Wire	W	В	
Terminal No.	1	2	
			Γ

2 2 2 2 40 44	19 20 21 22 23 24			Color of Signal Nam	Wire	BG TO MAIN HARN	BG TO MAIN HARN	Y TO MAIN HABN	BR TO MAIN HARN	SB TO MAIN HARN	P TO MAIN HARN	V TO MAIN HARNESS CLIMATE CONTROLL	W TO MAIN HARNESS -
	-161			Terminal	No.	-	2	67	4	40	9	7	7
	TO CONSOLE SWITCH SUB HARNESS	TO CONSOLE SWITCH SUB HARNESS	GLIS HOTING I LOSINOO OT	HARNESS	TO CONSOLE SWITCH SUB	HARNESS	TO CONSOLE SWITCH SUB	HANNESS	TO CONSOLE SWITCH SUB HABNESS	TO CONSOLE SWITCH SUB	HARNESS	TO CONSOLE SWITCH SUB HARNESS	TO CONSOLE SWITCH SUB HARNESS
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TO CONSOLE SWITCH SUB HARNESS TO CONSOLE SWITCH SUB HARNESS

SHIELD

TO CONSOLE SWITCH SUB HARNESS

TO CONSOLE SWITCH SUB HARNESS

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Connector No.	M257	
Connector Name	WIRE TO WIRE	
Connector Type	TH24FW-NH	
Connector Color	WHITE	
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HS		
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#7	24 23 22 21 20 19 18 17 10 13 14 13	

Terminal No.	Color of Wire	Signal Name
1	W	TO CONSOLE SUB HARNESS
2	57	TO CONSOLE SUB HARNESS
၈	W	TO CONSOLE SUB HARNESS
4	5	TO CONSOLE SUB HARNESS
22	1	TO CONSOLE SUB HARNESS
9	SHIELD	TO CONSOLE SUB HARNESS
7	В	TO CONSOLE SUB HARNESS
80	W	TO CONSOLE SUB HARNESS
6	BG	TO CONSOLE SUB HARNESS
10	W	TO CONSOLE SUB HARNESS
Ε	8	TO CONSOLE SUB HARNESS
12	SHIELD	TO CONSOLE SUB HARNESS
13	В	TO CONSOLE SUB HARNESS
14	PI PI	TO CONSOLE SUB HARNESS
15	W	TO CONSOLE SUB HARNESS
16	g	TO CONSOLE SUB HARNESS
17	œ	TO CONSOLE SUB HARNESS
18	В	TO CONSOLE SUB HARNESS
19	W	TO CONSOLE SUB HARNESS
20	В	TO CONSOLE SUB HARNESS
21	В	TO CONSOLE SUB HARNESS
22	н	TO CONSOLE SUB HARNESS
23	В	TO CONSOLE SUB HARNESS
24	В	TO CONSOLE SUB HARNESS
25	SHIELD	TO CONSOLE SUB HARNESS
56	œ	TO CONSOLE SUB HARNESS
27	В	TO CONSOLE SUB HARNESS
28	W	TO CONSOLE SUB HARNESS
59	7	TO CONSOLE SUB HARNESS
30	5	TO CONSOLE SUB HARNESS
31	æ	TO CONSOLE SUB HARNESS
32	SHIELD	TO CONSOLE SUB HARNESS
33	W	TO CONSOLE SUB HARNESS
34	В	TO CONSOLE SUB HARNESS
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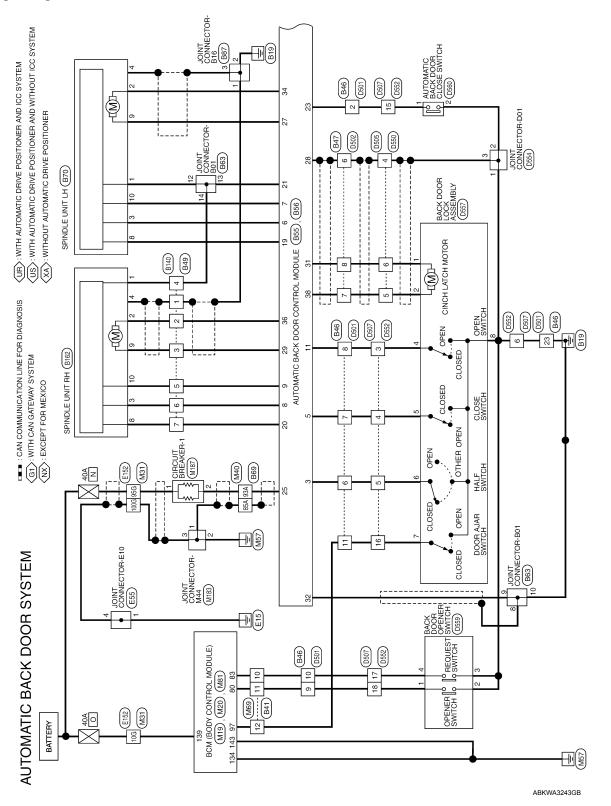
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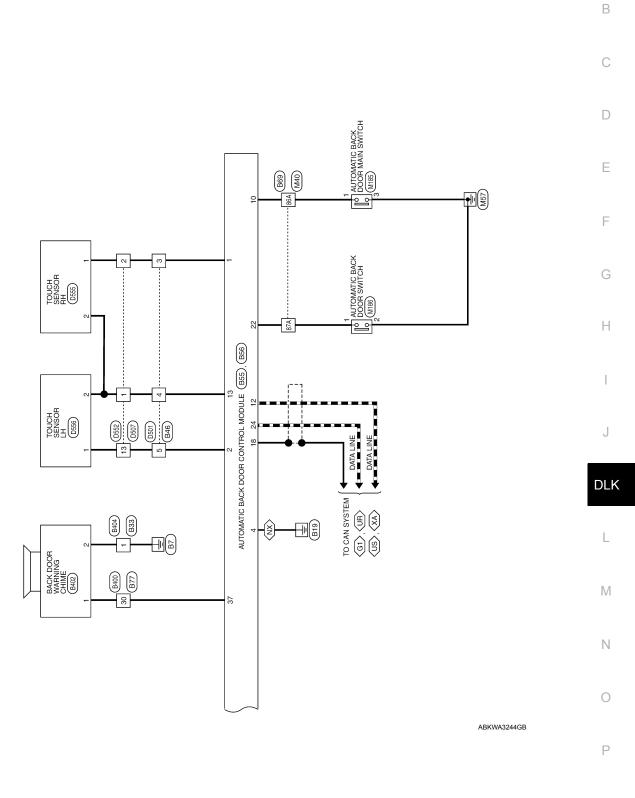
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AUTOMATIC BACK DOOR SYSTEM

Wiring Diagram





2016 QX60

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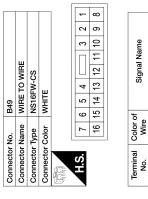
AUTOMATIC BACK DOOR SYSTEM CONNECTORS



WIRE TO WIRE M02MB-P-LC BLACK

Connector Name Connector Color

Connector Type



TO BACK DOOR LH HARNESS
TO BACK DOOR LH HARNESS
TO BACK DOOR LH HARNESS - (WITH NAVI)

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2 5 13 4 14 15

TO BACK DOOR LH HARNESS

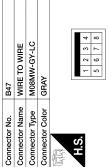
TO BACK DOOR LH HARNESS -(WITHOUT NAVI) TO BACK DOOR LH HARNESS -(WITH NAVI)

Terminal No.	Color of Wire	Signal Name
-	SHIELD	TO BODY HARNESS RH
2	×	TO BODY HARNESS RH
3	8	TO BODY HARNESS RH
4	9	TO BODY HARNESS RH
2	_	TO BODY HARNESS RH
9	BB	TO BODY HARNESS RH
7	>	TO BODY HARNESS RH
8	-	TO BODY HARNESS RH
6	5	TO BODY HARNESS RH
10	×	TO BODY HARNESS RH
11	۵	TO BODY HARNESS RH
12	œ	TO BODY HARNESS RH
13	g	TO BODY HARNESS RH
14	ш	TO BODY HARNESS RH - (WITH BOSE AUDIO SYSTEM WITHOUT SURROUND SOUND SYSTEM)
14	œ	TO BODY HARNESS RH - (WITH BOSE AUDIO SYSTEM AND SURROUND SOUND SYSTEM)
15	В	TO BODY HARNESS RH - (WITH BOSE AUDIO SYSTEM WITHOUT SURROUND SOUND SYSTEM)
15	æ	TO BODY HARNESS RH - (WITH BOSE AUDIO SYSTEM AND SURROUND SOUND SYSTEM)
16	W	TO BODY HARNESS RH - (WITH BOSE AUDIO SYSTEM WITHOUT SURROUND SOUND SYSTEM)
16	W	TO BODY HARNESS RH - (WITH BOSE AUDIO SYSTEM AND SURROUND SOUND SYSTEM)

B47		Connector No.
TO BACK DOOR LH HARNESS	g	24
TO BACK DOOR LH HARNESS	GR	23

TO BACK DOOR LH HARNESS
TO BACK DOOR LH HARNESS

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Signal Name	TO BACK DOOR LH HARNESS							
Color of Wire	W	В	BG	В	В	SHIELD	W	В
Terminal No.	1	2	3	4	5	9	7	8

L_								L										_	_		_		
TO MAIN HARNESS - (WITHOUT NAVI)	TO MAIN HARNESS - (WITH NAVI)	TO MAIN HARNESS - (WITHOUT NAVI)	TO MAIN HARNESS - (WITH NAVI)	TO MAIN HARNESS - (WITHOUT NAVI)	TO MAIN HARNESS - (WITH NAVI)	TO MAIN HARNESS - (WITHOUT NAVI)	TO MAIN HARNESS - (WITH NAVI)	TO MAIN HARNESS - (WITHOUT NAVI)	TO MAIN HARNESS - (WITH NAVI)	TO MAIN HARNESS - (WITHOUT NAVI)	TO MAIN HARNESS - (WITH NAVI)	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS - (WITH NAVI)	TO MAIN HARNESS - (WITHOUT NAVI)	TO MAIN HARNESS - (WITH NAVI)	TO MAIN HARNESS - (WITHOUT NAVI)	TO MAIN HARNESS - (WITH NAVI)	TO MAIN HARNESS - (WITHOUT NAVI)	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS
SB	W	W	8	œ	×	œ	SHIELD	_G	×	SHIELD	œ	SHIELD	ш	g	W	Œ	œ	œ	G	Μ	SHIELD	ω	

TO BACK DOOR LH HARNESS - (WITHOUT NAVI)
TO BACK DOOR LH HARNESS

SHIELD

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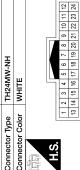
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TO BACK DOOR LH HARNESS - (WITHOUT NAVI)
TO BACK DOOR LH HARNESS - (WITH NAVI)

TO MAIN HARNESS - (WITHOU NAVI)	TO MAIN HARNESS - (WITH NA	TO MAIN HARNESS - (WITHOL NAVI)	TO MAIN HARNESS - (WITH NA	TO MAIN HARNESS - (WITHOL NAVI)	TO MAIN HARNESS - (WITH NA	TO MAIN HARNESS - (WITHOL NAVI)	TO MAIN HARNESS - (WITH NA	TO MAIN HARNESS - (WITHOL NAVI)	TO MAIN HARNESS - (WITH NA	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS - (WITH NA	TO MAIN HARNESS - (WITHOL NAVI)	TO MAIN HARNESS - (WITH NA	TO MAIN HARNESS - (WITHOL NAVI)	TO MAIN HARNESS - (WITH NA	TO MAIN HARNESS - (WITHOL NAVI)	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	
*	В	В	W	В	SHIELD	g	W	SHIELD	œ	SHIELD	В	5	W	ш	œ	В	9	W	SHIELD	В	,	
19	19	20	20	21	21	22	22	23	23	24	25	26	27	27	28	28	29	29	30	31	32	





Signal Name	TO BACK DOOR LH HARNESS						
Color of Wire	۸	>	BB	SB	PT	7	ГG
Terminal No.	1	2	3	4	9	9	2

		\perp												9	0 0	ا ر	2		_				l								
	_		1					1		31 32						_															
Signal Name	TO BODY NO. 3 HARNESS	TO BODY NO. 3 HARNESS		B41	WIRE TO WIRE	TH32MW-NH	WHITE		200	21 22 23 24 25 26 27 28 29 30		Signal Name	TO MAIN HARNESS - (WITHOUT NAVI)	TO MAIN HARNESS - (WITH NAVI)	TO MAIN HARNESS - (WITHOUT NAVI)	TO MAIN HARNESS - (WITH NAVI)	TO MAIN HARNESS - (WITHOUT NAVI)														
Color of Wire	a	Μ								17 18 19 20		Color of Wire	8	œ	œ	*	В	SHIELD	В	W	SHIELD	В	^	В	Μ	9	-	-	,	-	ВВ
Terminal No.	-	2		Connector No.	Connector Name	Connector Type	Connector Color	F	SIL		J	Terminal No.	-	-	2	2	3	4	5	9	7	8	9	10	Ε	12	13	14	15	16	17
									 _																			ABI	ΚIΑ	747	8GB

GND
GND
GND
GND
GND

ILLUMI CONT OUT

2 2 ۳ ALERT SIGNAL ALERT SIGNAL

GND GND SHIELD GND

AUTOMATIC BACK DOOR SYSTEM CONNECTORS

B56	Connector No. Connector Type Connector Color	B55 AUTOMATIC BACK DOOR CONTROL MODULE AAC24FB BLACK 2 3 4 5 6 7 8 9 10 11 12 1 13 14 15 16 17 18 19 20 21 22 23 24	Connector No. Connector Type Connector Color H.S.
25 26 27 28 29 30 31 32 32 33 34 35 36 37 38	原列 H.S.	2 3 4 5 6 7 8 9 10 111 12 14 15 16 17 18 19 20 21 22 23 24	\Q.
	Connector Color	BLACK	
	Connector Type	AAC24FB	Connector Type
	Connector Name	AUTOMATIC BACK DOOR CONTROL MODULE	Connector Name
B56	Connector No.	B55	Connector No.

														ſ
Signal Name	4	1	LH MTR OPEN	NOISE SHIELD LATCH	RH MTR OPEN		LATCH MTR OPEN	GND		LH MTR CLOSE		RH MTR CLOSE	BUZZER	more to seem a recommend
Color of Wire	8	-	8	SHIELD				8	,	×	-	×	F.G	,,,,
Terminal No.	25	56	27	28	29	30	31	32	33	34	35	36	37	00
		•	•	•		•	•	•		•		•		
														г

SHIELD
GND
GND
GND
TAIL
TAIL
TAIL
TAIL

Color of	wire	В	1	В	SHIELD	В		а	8		W		W	FG	W		Š	o and	D C	ype	Solor		11 10	-	7 22 21
Terminal	O	25	26	27	28	59	30	31	32	33	34	35	36	37	38		Connector No.	Connoctor Namo		Connector Type	Connector Color	\ E		SH	
Signal Name		TOUCH SENS RH	TOUCH SENS LH	HALF-LATCH-SW	LOGIC	CLOSE SW	A SIGN LH	B SIGN LH	A SIGN RH	B SIGN RH	MAIN SW	OPEN SW	CAN-L	TOUCH SENS GND	1	_	1	-	CAN SHIELD	POWER LH	POWER RH	GND HALL	DRIVER SW	INSIDE CLOSE SW	CAN-H
Color of	wire	BR	LG	7	ВĐ	57	>	>	ВВ	7	57	BR	Μ	SB	1	-	-	1	SHIELD	SB	>	57	SB	>	В
Terminal	NO.	1	2	3	4	9	9	2	8	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

Signal Name

Color of Wire

Terminal No.

ITS CAN-H
ITS CAN-H
ITS CAN-L
ITS CA

B63 JOINT CONNECTOR-B01

BJ30FW

Connector Color WHITE

ABKIA7479GB

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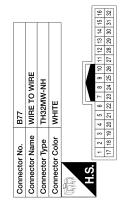
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AUTOMATIC BACK DOOR SYSTEM CONNECTORS



Terminal	Color of Wire	Signal Name
-	-	TO BODY NO. 3 HARNESS
2	-	TO BODY NO. 3 HARNESS
3		TO BODY NO. 3 HARNESS
4	5	TO BODY NO. 3 HARNESS
2	8	TO BODY NO. 3 HARNESS
9	æ	TO BODY NO. 3 HARNESS
7	*	TO BODY NO. 3 HARNESS
8	В	TO BODY NO. 3 HARNESS
6	8	TO BODY NO. 3 HARNESS
10	5	TO BODY NO. 3 HARNESS
Ε	1	TO BODY NO. 3 HARNESS
12	7	TO BODY NO. 3 HARNESS
13	>	TO BODY NO. 3 HARNESS
14	-	TO BODY NO. 3 HARNESS
15	g	TO BODY NO. 3 HARNESS
16	-	TO BODY NO. 3 HARNESS
17	8	TO BODY NO. 3 HARNESS
18	В	TO BODY NO. 3 HARNESS
19	SHIELD	TO BODY NO. 3 HARNESS
20	н	TO BODY NO. 3 HARNESS
21	В	TO BODY NO. 3 HARNESS
22	W	TO BODY NO. 3 HARNESS
23	SHIELD	TO BODY NO. 3 HARNESS
24	W	TO BODY NO. 3 HARNESS
52	8	TO BODY NO. 3 HARNESS
56	SHIELD	TO BODY NO. 3 HARNESS
27	8	TO BODY NO. 3 HARNESS
28	В	TO BODY NO. 3 HARNESS
59	SHIELD	TO BODY NO. 3 HARNESS
30	FG	TO BODY NO. 3 HARNESS
31	M	TO BODY NO. 3 HARNESS
32	-	TO BODY NO. 3 HARNESS

ADB08MB-AHD2 BLACK

Connector Type Connector Color

TO MAIN HARNESS
TO MAIN HARNESS
TO MAIN HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)

8 ~ 말 %

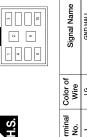
TO MAIN HARNESS - (WITH CLIMATE CONTROLLED SEAT)

TO MAIN HARNESS

8 8

TO MAIN HARNESS																									
ш	>	ΓG	H	٨	۰	BG	*	ΓG	SHIELD	ΓG	SB	BG	٦	۵	٦	FIG	В	1	-		BB	٦		-	
76A	A77	78A	79A	80A	81A	82A	83A	84A	85A	86A	87A	88A	89A	90A	91A	92A	93A	94A	95A	96A	97A	98A	99A	100A	

TO MAIN HARNESS	TO MAIN HARNESS	B70	SPINDLE UNIT LH
1	1	No.	Name
99A	100A	Connector No.	Connector Name



TO MAIN HARNESS

							_
Signal Name	GND HALL	LH MTR CLOSE	A SIGN LH	GND	POWER LH	LH MTR OPEN	HINSISB
Color of Wire	FG	W	>	SHIELD	SB	В	>
Terminal No.	1	2	8	4	8	6	10

2 a ≥ a #

SB

	f		25A	SHIELD	TO MAIN HARNESS
Connector No.	_	609	26A	В	TO MAIN HARNESS
Connector Name		WIRE TO WIRE	27A	В	TO MAIN HARNESS
Connector Type		TH80MDGY-CS16-TM4	28A	SHIELD	TO MAIN HARNESS
Connector Color		GRAY	29A	œ	TO MAIN HARNESS
The state of the s			30A	В	TO MAIN HARNESS
ATT.			31A	BB	TO MAIN HARNESS
SIT			32A	-	TO MAIN HARNESS
		400	33A	Μ	TO MAIN HARNESS
			34A	8	TO MAIN HARNESS
		, m	35A	SHIELD	TO MAIN HARNESS
	21,	21A 20A 19A 18A 17A 16A 15A 14A 13A 12A 11A	36A	1	TO MAIN HARNESS
		34A 28A 26A 27A 26A 25A 24A 23A 22A	37A	97	TO MAIN HARNESS
	4	41A 40A 38A 38A 37A 36A 35A 34A 33A 32A 31A	38A	>	TO MAIN HARNESS
		50A 48A 48A 47A 46A 45A 44A 43A 42A	39A	SB	TO MAIN HARNESS
	61,	81A 60A 59A 58A 57A 56A 55A 54A 53A 52A 51A	40A	BB	TO MAIN HARNESS
		/UA 09A 00A 07A 00A 05A 05A 05A	41A	>	TO MAIN HARNESS
	16	81A 80A 78A 78A 77A 78A 75A 74A 73A 72A 71A	42A		TO MAIN HARNESS
		90A 89A 88A 87A 86A 85A 84A 83A 82A	43A	-	TO MAIN HARNESS
		954 94A 93A 92A 91A	44A	>	TO MAIN HARNESS
		1004 99A 98A 97A 96A	45A	5	TO MAIN HARNESS
			46A	>	TO MAIN HARNESS
J			47A	-	TO MAIN HARNESS
			48A	SB	TO MAIN HARNESS
Н			49A	ŋ	TO MAIN HARNESS
lerminal Cold	Color of	Signal Name	50A	W	TO MAIN HARNESS
+			51A	-	TO MAIN HARNESS
1A	,	TO MAIN HARNESS	100		COLINGE IN CH

49A	50A	51A	52A	53A	54A	55∆	799	97A	57A	101	28A	Aec Ao	100	A P	470	ASA S	P P	Aca S	Agg	67A	68A	P69	70A	71A	462	102	747	C .	754
	Signal Name	COLUMNIA	I O MAIN HARNESS	I O MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS	TO MAIN HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)	TO MAIN HARNESS - (WITH CLIMATE CONTROLLED SEAT)	TO MAIN HARNESS	TO MAIN HABNESS	TO MAIN INDINES	COLINGAL MANAGE	I O MAIN HARINESS	TO MAIN HARNESS	TO MAIN HABNESS	200000000000000000000000000000000000000												
	Color of	0		>	>	g		Pe	œ	BB	G	۵		М	g		œ	g	>	: a		٥	SHIELD	*	SHIELD	,	W		,
	lerminal	. 3	¥ ;	KZ	3A	4A	5A	6A	6A	7A	8A	98	10A	11A	12A	13A	14A	15A	16A	124	40	No.	19A	20A	21A	22A	23A	24A	
					_									•		•	•	•	_					ΑĒ	3KI	4 74	800	ЗВ	5

AUTOMATIC BACK DOOR SYSTEM CONNECTORS

15 B TOB	10 S	TO BODY HARNESS - (WITH BOSE AUDIO SYSTEM WITHOUT SURROUND SOUND SYSTEM)	7 8	≥ m	TO BODY HARNESS TO BODY HARNESS	Connector No.		B404 WIRE TO
15 B Ti	F	TO BODY HARNESS - (WITH BOSE	6	М	TO BODY HARNESS	Connector Na	\top	WINE TO WINE
		AUDIO SYSTEM AND SURROUND	10	5	TO BODY HARNESS	Connector type	T	UZFB-F-LC
16 W		TO BODY HARNESS - (WITH BOSE	= 2	-	TO BODY HARNESS	Connector Color		BLACK
		SURROUND SOUND SYSTEM)	5	>	TO BODY HABNESS			
16 W		TO BODY HARNESS - (WITH BOSE	14	-	TO BODY HARNESS	O FI		
		AUDIO SYSTEM AND SURROUND SOLIND SYSTEM)	15	g	TO BODY HARNESS	5		,
			16	8	TO BODY HARNESS			1 7
			17	8	TO BODY HARNESS			
Connector No.		B162	18	В	TO BODY HARNESS			
Connector Name		SPINDLE UNIT RH	19	SHIELD	TO BODY HARNESS	Н		
Connector Type		ADB08MB-AHD2	20	ш	TO BODY HARNESS	lerminal C	Color of	Signal Name
Connector Color		BLACK	21	В	TO BODY HARNESS	+	2 0	TO BODY HABNESS
			22	>	TO BODY HARNESS		3	TO DODY HABNESS
			23	SHIELD	TO BODY HARNESS	7	:	CONTRACTOR OF THE CONTRACTOR O
S II		3	24	8	TO BODY HARNESS			
		2	25	В	TO BODY HARNESS			
		6	26	SHIELD	TO BODY HARNESS			
		@ @	27	В	TO BODY HARNESS			
			28	В	TO BODY HARNESS			
T.			59	SHIELD	TO BODY HARNESS			
<u></u> 교		of Signal Name	30	Pe	TO BODY HARNESS			
NO.			34	*	TO BODY HARNESS			
1		GND HALL	32	-	TO BODY HARNESS			
	< I.	RH MTR CLOSE						
3	1.5	A SIGN RH	Connector No.		B402			
7	-1.		Connector Name	٩	BACK DOOR WARNING			
5) a	- 1	POWER RH			CHIME			
- -		B SIGN BH	Connector Type	T	RK02FBR-DGY			
-	- 1		2	Ť,	NACO CO			
			Connector Color	\exists	JONN			
Connector No.		B400	F					
Connector Name		WIRE TO WIRE	\ -		<			
Connector Type		TH32FW-NH	H.S.		«			
rolo rotocaro		WUITE			2			
	- 1				<u>-</u>			
)			
¥								
N.I.	11	/-	Terminal	Color of				
16 15 1		5 4 3 2	No.	Wire	Signal Name			
6 16 76		02 17 27	-	re	BUZZER			
			2	8	GROUND			
la C		of Signal Name						
No. Wire								
-		TO BODY HARNESS						
2 -		TO BODY HARNESS						
3	1	TO BODY HARNESS						
4 G	!	TO BODY HARNESS						
2	≥	TO BODY HARNESS						
	1 000	TO BODY HABNESS						

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Revision: April 2016 **DLK-103** 2016 QX60

TO BACK DOOR RH HARNESS

TO BACK DOOR RH HARNESS TO BACK DOOR RH HARNESS

TO BACK DOOR RH HARNESS
TO BACK DOOR RH HARNESS
TO BACK DOOR RH HARNESS
TO BACK DOOR RH HARNESS

LG W SHIELD BR/B R/G

TO BACK DOOR RH HARNESS TO BACK DOOR RH HARNESS Signal Name

Wire

TO BACK DOOR RH HARNESS TO BACK DOOR RH HARNESS

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WIRE TO WIRE MOGMW-LC

Connector Name Connector Color Connector Type Connector No.

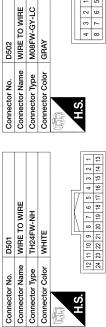
> WIRE TO WIRE TH24FW-NH WHITE

D507

Connector No. Connector Name

Connector Color Connector Type

AUTOMATIC BACK DOOR SYSTEM CONNECTORS



_	>	2	9	
Connector No.	Connector Name	Connector Type	Connector Color	H.S.
D501	WIRE TO WIRE	TH24FW-NH	WHITE	24 23 22 21 20 19 18 17 16 15 14 13
ė.	Vame	lype	Solor	12

Connector Color		GRAY
H.S.		4 ® % % % % % % % % % % % % % % % % % %
Terminal No.	Color of Wire	Signal Name
1	œ	TO BODY HARNESS
2	8	TO BODY HARNESS
3	9	TO BODY HARNESS
4	8	TO BODY HARNESS
5	œ	TO BODY HARNESS
9	SHIELD	TO BODY HARNESS
7	BR/B	TO BODY HARNESS

TO BODY HARNESS
TO BODY HARNESS
TO BODY HARNESS
TO BODY HARNESS TO BODY HARNESS TO BODY HARNESS TO BODY HARNESS

SS.

TO BODY HARNESS

Signal Name

Color of 띪 BG

Terminal ģ TO BACK DOOR LH HARNESS

N W W

TO BACK DOOR RH HARNESS

TO BACK DOOR RH HARNESS

TO BACK DOOR RH HARNESS

2

TO BACK DOOR LH HARNESS Signal Name

Color of Wire

Signal Name

1 2 3

H.S.

D505	WIRE TO WIRE	M06FW-LC	WHITE		3 2 1	6 5 4
Connector No.	Connector Name	Connector Type	Connector Color	SE		

400000	Collect	Connecto	Connecto	E	TIT						Tomino	N N		
	TO BODY HARNESS	TO BODY HABNESS	יייייער וספסו											
	\	×	8	œ	SHIELD	g	-	W	W	W	FG	٨	-	3
	2	9	4	5	9	7	8	6	0.	1	2	3		•

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BACK DOOR OPENER SWITCH

TH04MW-NH WHITE

JOINT CONNECTOR-E10

Connector Name Connector Color

Connector No.

OPEN SW

Connector Type

CLOSE SW
HALF LATCH SW
BACK DOOR SW
GROUND

TK04FW-J

INSIDE CLOSE SW GROUND BATTERY SAVER OUT Signal Name

Terminal No.

BACK DOOR SW

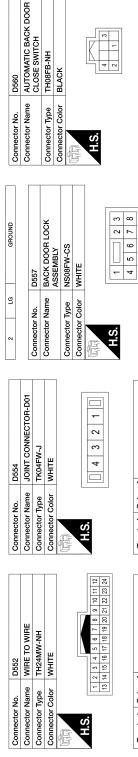
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LATCH MTR OPEN LATCH MTR CLOSE

Signal Name

Color of

AUTOMATIC BACK DOOR SYSTEM CONNECTORS



	0		OOIII GOOD INGING			Cong	Connector No	
Connector Type	. Type	TH24MW-NH	Connector Type	Type	TK04FW-J			
Connector Color	. Color	WHITE	Connector Color	Color	WHITE	Conne	Connector Name	= `
F			F			Conne	Connector Type	- Se
7			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	L		Conne	Connector Color	lo
6.5	13 1	2 3 4 5 6 7 8 9 10 11 12 14 15 16 17 18 19 20 21 22 23 24	6			F		
						H.S.	oj.	
Terminal No.	Color of Wire	f Signal Name	Terminal No.	Color of Wire	Signal Name			
-	P	TO BACK DOOR LH HARNESS	-	В	GND		H	
8	>	TO BACK DOOR LH HARNESS	2	<u>а</u>	GND	Terminal		Color of
ဧ	æ	TO BACK DOOR LH HARNESS	ဧ	SHIELD	GND	S		Wire
4	7	TO BACK DOOR LH HARNESS	4	1	1			۵
r,	SB	TO BACK DOOR LH HARNESS				2		*
9	8	TO BACK DOOR LH HARNESS	30000	O N	2220	8		,
7	BB.	TO BACK DOOR LH HARNESS	COIIIIECTOI NO.	<u>.</u>	Days	4		В
8	PP	TO BACK DOOR LH HARNESS	Connector Name	Name	TOUCH SENSOR RH	9		٦
6	5	TO BACK DOOR LH HARNESS	Connector Type	Type	TK02MGY	9		SB
10	'	TO BACK DOOR LH HARNESS	Connector Color		GRAY	7		g
1		TO BACK DOOR LH HARNESS	E			œ		а
12	-	TO BACK DOOR LH HARNESS	TI T					
13	9	TO BACK DOOR LH HARNESS	SI			Conne	Connector No.	_
14	۵	TO BACK DOOR LH HARNESS				Conne	Connector Name	me
15	В	TO BACK DOOR LH HARNESS			1 2			.,
16	g	TO BACK DOOR LH HARNESS				Conne	Connector Type	e e
17	W	TO BACK DOOR LH HARNESS				0000	Connector Color	2
18	g	TO BACK DOOR LH HARNESS	Tomismor	0,000			3	5
19	W	TO BACK DOOR LH HARNESS	N S	Wire	Signal Name	F	-	
20	Μ	TO BACK DOOR LH HARNESS	-	2 >	TO ICE SENS DI	_		
21	-	TO BACK DOOR LH HARNESS	-		ON DOO	H.S.	'n	
22	-	TO BACK DOOR LH HARNESS	7	2	GNOODS			
23	-	TO BACK DOOR LH HARNESS						
24	-	TO BACK DOOR LH HARNESS	Connector No.	No.	D556			

Signal Name	BACK DOOR OPEN SW	GROUND	GROUND	BACK DOOR REQUEST SW
Color of Wire	5	В	В	W
Terminal No.	1	2	3	4

TOUCH SENSOR LH TK02MW

Connector Name

WHITE

Connector Type Connector Color

Signal Name	TOUCH SENS LH
Color of Wire	b
erminal No.	1

Signal Name	TOUCH SENS LH	
Color of Wire	b	
Terminal No.	1	

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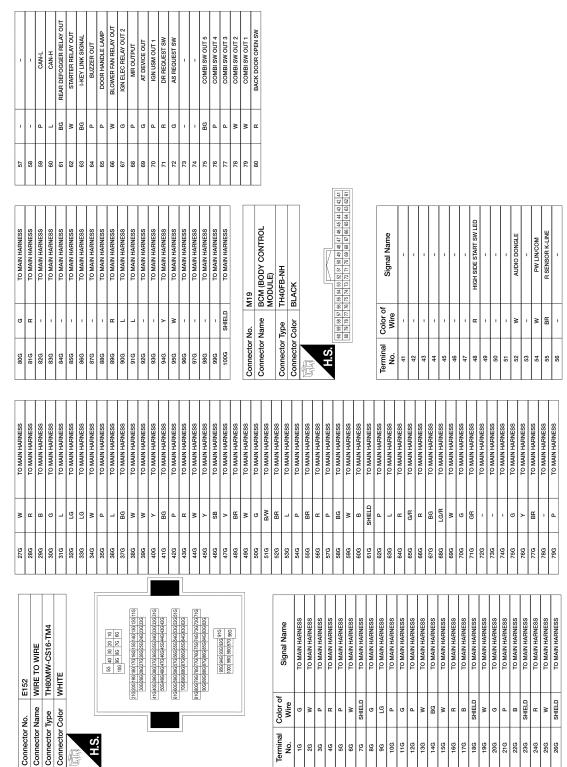
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AUTOMATIC BACK DOOR SYSTEM CONNECTORS



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COILIECTO		MIZO	COILIECTOI NO.		101	21G	œ	TO ENGINE ROOM HARNESS	74G	,	TO ENGINE ROOM HARNESS
Connector Name	Name	BCM (BODY CONTROL	Connector Name	0	WIRE TO WIRE	22G	В	TO ENGINE ROOM HARNESS	75G	g	TO ENGINE ROOM HARNESS
		MODULE)	Connector Type		TH80FW-CS16-TM4	23G	SHIELD	TO ENGINE ROOM HARNESS	76G	>	TO ENGINE ROOM HARNESS
Connector Type	Type	TH24FGY-NH	Connector Color		WHITE	24G	*	TO ENGINE ROOM HARNESS	77.0	BB	TO ENGINE ROOM HARNESS
Connector Color	Color	GRAY	Œ			25G	œ	TO ENGINE ROOM HARNESS	78G		TO ENGINE ROOM HARNESS
E			MEMERINA			26G	SHIELD	TO ENGINE ROOM HARNESS	79G	œ	TO ENGINE ROOM HARNESS
Ī			SH			27G	В	TO ENGINE ROOM HARNESS	80@	>	TO ENGINE ROOM HARNESS
H.S.	L				16 26 36 46 56	28G	W	TO ENGINE ROOM HARNESS	81G	g	TO ENGINE ROOM HARNESS
	35	92 91 90 89 88 87 86 85 84 83 82 81			66 76 86 96 106	29G	g	TO ENGINE ROOM HARNESS	82G	۵	TO ENGINE ROOM HARNESS
	104	103 102 101 100 99 98 97 96 95 94 93		L	Cardonalogical Cardonal Cardon	30G	œ	TO ENGINE ROOM HARNESS	83G	۵	TO ENGINE ROOM HARNESS
				í —	22G23G24G25G26G27G28G29G30G	31G	_	TO ENGINE ROOM HARNESS	84G	۵	TO ENGINE ROOM HARNESS
			L	_ 		326	G	TO ENGINE ROOM HARNESS	85G	۵	TO ENGINE ROOM HARNESS
Terminal	Color of			8	31G32G33G34G35G36G37G38G39G40G41G	330	g (TO ENGINE ROOM HARNESS	86G	۵ (TO ENGINE ROOM HARNESS
No.	Wire	Signal Ivallie				34G	5 4	TO FROM HARNESS	8/6		TO FINGINE ROOM HARNESS
81	٦	BAT REAR WIPER FUSE		اغد	51G52G53G54G55G56G57G58G59G60G61G	300	-	TO ENGINE BOOM HARNESS	588		TO ENGINE BOOM HARNESS
82	×	RL DOOR SW		_		2000	ـ ـ	TO ENGINE DOOM HARNESS	560	c a	TO ENGINE BOOM HABNESS
83	BG	BACK DOOR REQUEST SW		ž.	716726736746756766776786796806816	5/6	۶ لـ	TO ENGINE BOOM HABNESS	900	-	TO ENGINE BOOM HABNESS
84	ä	R WIPER AUTOSTOP SW			5065560 50650	5 00	: 0	TO ENGINE BOOM HABINESS		, ,	TO ENGINE BOOM HABINESS
85	1	1			916 926 936 946 956	409	= >	TO ENGINE BOOM HABNESS	526	. a	TO ENGINE BOOM HABNESS
98	۳	TRAILER FLASHER RL			96G 97G 98G 99G 100G	416		TO ENGINE ROOM HABNESS	946	. 0	TO ENGINE ROOM HARNESS
87	۵	TRAILER FLASHER RR				42G		TO ENGINE ROOM HARNESS	95G		TO ENGINE ROOM HARNESS
88	1	1				43G	*	TO ENGINE ROOM HARNESS	96	۵	TO ENGINE ROOM HARNESS
88	5	REVERSE LAMP OUT				44G	o	TO ENGINE ROOM HARNESS	976	۵	TO ENGINE ROOM HARNESS
00 20	١	-	Terminal	Color of		45G	œ	TO ENGINE ROOM HARNESS	98G	۵	TO ENGINE ROOM HARNESS
56	١	-		Wire	Signal Name	46G	>	TO ENGINE ROOM HARNESS	566	۵	TO ENGINE ROOM HARNESS
92	œ (RR FLASHER		SB	TO ENGINE BOOM HARNESS -	47G	>	TO ENGINE ROOM HARNESS	100G	SHIELD	TO ENGINE ROOM HARNESS
93	æ	RR DOOR SW	!		(WITHOUT CLIMATE	48G	97	TO ENGINE ROOM HARNESS			
94	5 :	AS DOOR SW			CONTROLLED SEAT)	49G	۵	TO ENGINE ROOM HARNESS			
cs 9	> 6	HEAH WIPEH OUT	2	ı	WITH CLIMATE CONTROLLED	500	_	TO ENGINE ROOM HARNESS			
64	3 3	BACK DOOR SW			SEAT)	51G	B/W	TO ENGINE ROOM HARNESS			
8	: '	-	26	M	TO ENGINE ROOM HARNESS	52G	BB	TO ENGINE ROOM HARNESS			
8 8	۵	BOOM ANT 3 B	36	۵	TO ENGINE ROOM HARNESS	53G	٦	TO ENGINE ROOM HARNESS			
100	. 3	BOOM ANT 3 A	46	5	TO ENGINE ROOM HARNESS	54G	BG	TO ENGINE ROOM HARNESS			
6	: a	BEAR BIMPER ANT B	56	۵	TO ENGINE ROOM HARNESS	55G	g	TO ENGINE ROOM HARNESS			
102	: 6	BEAR BUMPER ANT A	59	SB	TO ENGINE ROOM HARNESS -	56G	۵	TO ENGINE ROOM HARNESS			
103	BB	RL FLASHER			CONTROLLED SEAT)	57G	۵	TO ENGINE ROOM HARNESS			
104	1	1	99	œ	TO ENGINE ROOM HARNESS -	58G	_	TO ENGINE ROOM HARNESS			
					SEAT)	59G	m	TO ENGINE ROOM HARNESS			
			76	SHIELD	TO ENGINE ROOM HARNESS	509	A i	TO ENGINE ROOM HARNESS			
			98	ŋ	TO ENGINE ROOM HARNESS	519	SHIELD	IO ENGINE HOOM HARNESS			
			98	BG	TO ENGINE ROOM HARNESS	929	<u> </u>	TO PAGINE ROOM HARNESS			
			10G	W	TO ENGINE ROOM HARNESS	930	r 3	TO ENGINE BOOM HARNESS			
			11G	В	TO ENGINE ROOM HARNESS	5		TO ENGINE HOOM HARINESS			
			12G	g	TO ENGINE ROOM HARNESS	500	5 0	TO ENGINE DOOM LADNIESS			
			13G	G	TO ENGINE ROOM HARNESS	500	c 3	TO ENGINE HOOM HARINESS			
			14G	۸	TO ENGINE ROOM HARNESS	5/9	× 2	TO PROBINE HOOM HARNESS			
ΔRH			15G	W	TO ENGINE ROOM HARNESS	500	10,1	TO FROM HARNESS			
(147			16G	В	TO ENGINE ROOM HARNESS	502	2 8	TO ENGINE BOOM HABNESS			
535			1	В	TO ENGINE ROOM HARNESS	716	8 8	TO ENGINE BOOM HABNESS			
GR			1	SHIELD	TO ENGINE ROOM HARNESS	72G	<u> </u>	TO ENGINE ROOM HARNESS			
			19G	SB	TO ENGINE ROOM HARNESS						

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Revision: April 2016 **DLK-107** 2016 QX60

AUTOMATIC BACK DOOR SYSTEM CONNECTORS

		_	24A	8	TO BODY HARNESS	75A	p	TO BODY HARNESS	20	8	TO BODY HARNESS	
Confinector No.			25A	SHIELD	TO BODY HARNESS	76A	8	TO BODY HARNESS	ဖ	*	TO BODY HARNESS	
Connector Name	_	_	26A	В	TO BODY HARNESS	77A	_	TO BODY HARNESS	7	SHIELD	TO BODY HARNESS	_
Connector Type		_	27A	8	TO BODY HARNESS	78A	>	TO BODY HARNESS	80	8	TO BODY HARNESS	
Connector Color	or GRAY		28A	SHIELD	TO BODY HARNESS	79A	ΓG	TO BODY HARNESS	6	SB	TO BODY HARNESS	
The state of the s			29A	В	TO BODY HARNESS	80A	٨	TO BODY HARNESS	10	BG	TO BODY HARNESS	
			30A	В	TO BODY HARNESS	81A	_	TO BODY HARNESS	1	œ	TO BODY HARNESS	
SH		- Innerent	31A	œ	TO BODY HARNESS	82A	BG	TO BODY HARNESS	12	>	TO BODY HARNESS	
	400		32A	Y/R	TO BODY HARNESS	83A	>	TO BODY HARNESS	13	-	TO BODY HARNESS	
	64 7A 8A 98 40		33A	8	TO BODY HARNESS	84A	9	TO BODY HARNESS	14	-	TO BODY HARNESS	
	100		34A	В	TO BODY HARNESS	85A	SHIELD	TO BODY HARNESS	15	В	TO BODY HARNESS	
	11A 12A 13A 14A 15A 16A 17A 18A 19A 20A 21A		35A	SHIELD	TO BODY HARNESS	86A	٨	TO BODY HARNESS	16	7	TO BODY HARNESS	
	22A 23A 24A 25A 26A 27A 28A 29A 30A		36A	5	TO BODY HARNESS	87A	P	TO BODY HARNESS	17	۵	TO BODY HARNESS - (WITHOUT	
	31A 32A 33A 34A 35A 36A 37A 38A 39A 40A 41A		37A	PP	TO BODY HARNESS	88A	H	TO BODY HARNESS	ļ	,	NAVI)	
	42A 43A 44A 45A 46A 47A 48A 49A 50A		38A	>	TO BODY HARNESS	89A	_	TO BODY HARNESS	17	>	TO BODY HARNESS - (WITH NAVI)	
			39A	SB	TO BODY HARNESS	90A	۵	TO BODY HARNESS		>	TO BODY HARNESS - (WITHOUT	
	574 524 534 544 504 504 574 584 584 584 514 514 514 514 514 514 514 514 514 51		40A	HH	TO BODY HARNESS	91A	_	TO BODY HARNESS	18	۵	TO BODY HABNESS - (WITH NAVI)	
			41A	>	TO BODY HARNESS	92A	_	TO BODY HARNESS	61	. >	TO BODY HABNESS - WITHOUT	
	714 724 734 744 754 764 774 784 794 804 81A		42A	ŋ	TO BODY HARNESS	93A	8	TO BODY HARNESS	2	:	NAVI)	
	824 634 634 634 604 87A 664 634 9UM	_	43A	-	TO BODY HARNESS	94A	W	TO BODY HARNESS	19	В	TO BODY HARNESS - (WITH NAVI)	
	91A 92A 93A 94A 95A		44A	W	TO BODY HARNESS	95A	W	TO BODY HARNESS	20	В	TO BODY HARNESS - (WITHOUT	
	96A 97A 98A 99A 100A		45A	œ	TO BODY HARNESS	96A	'	TO BODY HARNESS	8	W	MANI (TIME SOLINGE LA COLO CT	
			46A	BG	TO BODY HARNESS	97A	SB	TO BODY HARNESS	S	s (TO BODY HARNESS - (WITH NAVI)	
_			47A	97	TO BODY HARNESS	98A	>	TO BODY HARNESS - (WITHOUT		nc .	TO BODY HARNESS - (WITHOUT NAVI)	
			48A	œ	TO BODY HARNESS	Vao	-	TO BODY HADNESS - AMITH	21	SHIELD	TO BODY HARNESS - (WITH NAVI)	
			49A	۵.	TO BODY HARNESS	V.	,	AUTOMATIC DRIVE POSITIONER)	22	g	TO BODY HARNESS - (WITHOUT	
<u>ख</u>	Color of Signal Name		50A	>	TO BODY HARNESS	99A	-	TO BODY HARNESS			NAVI)	
			51A	_	TO BODY HARNESS	100A	,	TO BODY HARNESS	22	>	TO BODY HARNESS - (WITH NAVI)	
			52A	۵	TO BODY HARNESS				53	SHIELD	TO BODY HARNESS - (WITHOUT NAVI)	
	SH TO BODY HARNESS		53A	5	TO BODY HARNESS	Connector No.		69W	23	œ	TO BODY HARNESS - (WITH NAVI)	
1			24A	> 0	TO BODY HARNESS	Connector Name	T	WIRE TO WIRE	24	SHIELD	TO BODY HARNESS	
44 44		 	PSSA ASS	59 8	TO BODY HARNESS	Connector Type	т	TH30EW-NH	25	8	TO BODY HARNESS	
	t		202	5 0	TO DODY HADNESS ANITH		Τ.	11N-W 12011	56	g	TO BODY HARNESS	
			9/A	r	CLIMATE CONTROLLED SEAT)	Connector Color		WHITE	27	œ	TO BODY HARNESS - (WITHOUT	
6A	G TO BODY HARNESS - (WITH CLIMATE CONTROLLED SEAT)	-	57A	_	TO BODY HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)	EG			27	В	TO BODY HARNESS - (WITH NAVI)	
7A	Y TO BODY HARNESS		58A	g	TO BODY HARNESS	ЭН			28	8	TO BODY HARNESS - (WITHOUT	
8A	W TO BODY HARNESS	L	59A	SB	TO BODY HARNESS		16 15 14 1	14 13 12 11 10 9 8 7 6 5 4 3 2			NAVI)	
	L TO BODY HARNESS		60A	_	TO BODY HARNESS		32 31 30 2	26 25 24 23 22 21 20	1	œ	TO BODY HARNESS - (WITH NAVI)	
10A	R TO BODY HARNESS		61A	g	TO BODY HARNESS	_			38	g	TO BODY HARNESS - (WITH NAVI)	
	R TO BODY HARNESS		62A	BB	TO BODY HARNESS				50	>	TO BODY HARNESS - (WITHOUT NAVI)	
			63A	BR	TO BODY HARNESS	Torminal	Color		30	SHIELD	TO BODY HARNESS	
13A	O TO BODY HARNESS		64A	Υ	TO BODY HARNESS	N CN	Wir	Signal Name	8	>	TO BODY HARNESS	
			65A	W	TO BODY HARNESS	-	≥	TO BODY HABNESS - MITHOLIT	32	-	TO BODY HARNESS	
-			999	BG	TO BODY HARNESS			NAVI)				
		_ 	67A	>	TO BODY HARNESS	-	œ	TO BODY HARNESS - (WITH NAVI)				
1			68A	97	TO BODY HARNESS	2	œ	TO BODY HARNESS - (WITHOUT				
t			P69	œ	TO BODY HARNESS		W	TO DODY LADNESS AMITLI MAND				
1	q		70A	۵	TO BODY HARNESS	2 0	s (IO BODY HARNESS - (WITH NAVI)				
			71A	HH HH	TO BODY HARNESS	m 	œ	TO BODY HARNESS - (WITHOUT NAVI)				
1	SHIELD TO BODY HARNESS		72A	SB	TO BODY HARNESS	e	В	TO BODY HARNESS - (WITH NAVI)				
22A		<u>_</u> Т	73A	BB E	TO BODY HARNESS	4	SHIELD	TO BODY HARNESS				
	W TO BODY HARNESS		74A	H	TO BODY HARNESS							

CIRCUIT BREAKER-1 M02FW-P-LC

Connector No.
Connector Name
Connector Type
Connector Color

M187

WHITE

AUTOMATIC BACK DOOR SYSTEM CONNECTORS

	H.S.	7		
WHITE	Connector Color		WHITE	Color
TH10F	Connector Type		FEA09FW-FHA6-SA	Type
AUTO! MAIN	Connector Name		BCM (BODY CONTROL MODULE)	Name
M185	Connector No.		M81	No.

Connector Name	+	AUTOMATIC BACK DOOR
nector		AUTOMATIC B
Connector Type		TH10FW-NH
Connector Color		WHITE
H.S.		2 -
Terminal No.	Color of Wire	Signal Name
1	>	MAIN SW
	c	- I

Signal Name

Color of Wire

Terminal No.

1

BATTERY BAT (PTC)

Signal Name	MAIN SW	ILL GND	GROUND	ILL PWR SUPPLY
Color of Wire	>	8	GR	н
Terminal No.	-	2	3	4

DOOR LOCK RR/RL DOOR UNLOCK RR/RL

132

Signal Name

Terminal No. 129 130

GND 2

4	œ	ILL PWR SUPPLY
Connector No.	No.	M186
Connector Name	Name	AUTOMATIC BACK DOOR SWITCH
Connector Type	Type	TH08FB-NH
Connector Color	Color	BLACK

201	AUTOMATIC SWITCH	TH08FB-NH	BLACK	4 2
	Connector Name	Connector Type	Connector Color	原列 H.S.

M183		Connector No.
1 QND	В	143
BAT FRONT DOOR	٨	142
P/W POWER SUPPLY BAT	\	141
P/W POWER SUPPLY IGN	BR	140
BAT POWER F/L	W	139
BAT REAR DOOR	>	138
DOOR UNLOCK DR/FL	>	137
ROOM LAMP CONT	97	136
DOOR LOCK DR/AS/FL	٦	135

Connector No.	M183
Connector Name	JOINT CONNECTOR-M44
Connector Type	TK04FW-J
Connector Color	WHITE
6.	4 3 2 1

DRIVER SW GROUND L PWR SUPPLY ILL GND

2 a c

Signal Name

Color of Wire

Terminal No.

Signal Name	GND	GND	GND	1	
Color of Wire	SHIELD	В	SHIELD	-	
Terminal O No.	-	2	3	4	
			Al	3KI	A75370

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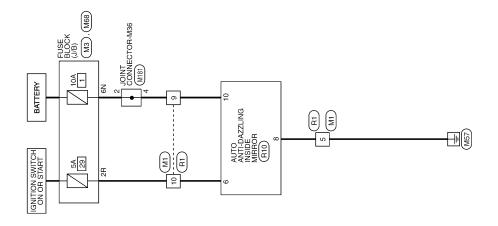
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HOMELINK UNIVERSAL TRANSCEIVER

Wiring Diagram



HOMELINK UNIVERSAL TRANSCEIVER

ABKWA3245GB

HOMELINK UNIVERSAL TRANSCEIVER CONNECTORS

- TO MAIN HARNESS	V TO MAIN HARNESS	W TO MAIN HARNESS	SB TO MAIN HARNESS	L TO MAIN HARNESS	W TO MAIN HARNESS	B TO MAIN HARNESS		tor No. R10	Connector Name AUTO ANTI-DAZZLING	Connector Type TH10FB-NH	Τ.				- 60 00 00 00 00 00 00 00 00 00 00 00 00	1		ı	0	Wire	1		1	1		W		B GND		G BATTERY				
18	19	20	21	22	23	24		Connector No.	Connec	Connec	Connec		1	2					Terminal	O	-	2 0	,,	4	9	9	7	88	6	10				
IGNITION		M181	DINIT CONNECTOR Mase	OCINI-NO INTO INTO	I KU4FW-J	WHITE			4 3 7 1	-		omely leaving	Signal Ivalie	BATTERY	BATTERY	BATTERY	BATTERY		B1	WIBE TO WIBE	TH2/EW-NH	WILLIE					12 11 10 9 8 7 6 5 4 3 2 1	24 23 22 21 20 19 18 17 16 15 14 13				Signal Name	TO MAIN HARNESS	
BG			$^{+}$	+	T							Color of	Wire	Μ	Μ	×	>										12 11	24 23			Color of	Wire	g	
16R		Connector No	Connector No.		Connector lype	Connector Color	F	1	H.S.			Terminal	No.	1	2	က	4		Connector No.	Connector Name	Connector Type	Connector type	Collifector	E		H.S.					Terminal	Š.	-	
M3	CIM COLUMN	FUSE BLOCK (J/B)	CS06FW-M2	WHITE			3N 2N 1N	1	8N /N 6N 5N 4N		of Signal Name	IGNITION	BATTERY	IGNITION	BATTERY	BATTERY	BATTERY	BATTERY	IGNITION		M68	FISE BLOCK (I/B)	Notern Of	NSI OF BR-CS	BROWN			0, 0,	0K 0K 4K 3K 2K IK	16R 15R 14R 13R 12R 11R 10R 9R 8R				Amed Island
No		r Name	r Type	or Color							Color of	P	BG	_	>	>	>	_	_		r No.	r Name		i iybe	r Color				۲/ ۱۹	16R/15			Color of	-
Connector No		Connector Name	Connector Type	Connector Color	E	d Priding	H.S.				Terminal	Z.	2N	NE 3N	A4	NS	N9	N.	8 8		Connector No.	Connector Name		Connector lype	Connector Color	E		SH					Termina	1
	- L	WIRE TO WIRE	TH24MW-NH	WHITE				3 4 5 6 7 8 9 10 11 12	13 14 15 16 17 18 19 20 21 22 23 24		Signal Name	TO ROOM LAMP HARNESS	TO ROOM LAMP HARNESS	TO ROOM LAMP HARNESS	TO ROOM LAMP HARNESS	TO ROOM LAMP HARNESS	TO ROOM LAMP HARNESS	TO ROOM LAMP HARNESS	TO ROOM LAMP HARNESS	TO ROOM LAMP HARNESS	TO ROOM LAMP HARNESS	TO ROOM LAMP HARNESS	TO ROOM LAMP HARNESS	TO ROOM LAMP HARNESS	TO ROOM LAMP HARNESS	TO ROOM LAMP HARNESS	TO ROOM LAMP HARNESS	TO ROOM LAMP HARNESS	TO ROOM LAMP HARNESS	TO ROOM LAMP HARNESS	TO BOOM LAMP HABNESS			
IM.	\neg	\neg						1 2	13 14		Color of Wire	S S	Pe	œ	,	GB.	97	_	>	W	FG	BB	B/G	*	В	SHIELD	н	*		g	BB	re	>	۵
Connector No	000	Connector Name	Connector Type	Connector Color	E	T	H.S.	ı			Terminal	-	2	3	4	2	9	7	8	6	10	=	12	13	14	15	16	17	18	19	20	21	22	33

 NO.
 Wire
 Signal Name

 1
 G
 TO MAIN HARIESS

 2
 R
 TO MAIN HARIESS

 3
 W
 TO MAIN HARIESS

 4
 Y/R
 TO MAIN HARIESS

 5
 B
 TO MAIN HARIESS

 6
 LG
 TO MAIN HARIESS

 7
 F
 TO MAIN HARIESS

 8
 Y
 TO MAIN HARIESS

 10
 W
 TO MAIN HARIESS

 11
 SS
 TO MAIN HARIESS

 12
 R/G
 TO MAIN HARIESS

 13
 W
 TO MAIN HARIESS

 14
 B
 TO MAIN HARIESS

 15
 SHELD
 TO MAIN HARIESS

 16
 B
 TO MAIN HARIESS

 17
 BG
 TO MAIN HARIESS

Signal Name	TAIL LH	IGNITION	BATTERY	1	BATTERY	IGNITION	1	1	BRAKE	BATTERY	-	1	GROUND	1	1
Color of Wire	œ	ΓG	g	-	>	¥	-		5	W	-		GR	-	-
Terminal No.	H.	2R	38	4B	5R	H9	7R	8R	9B	10R	11R	12R	13R	14R	15R

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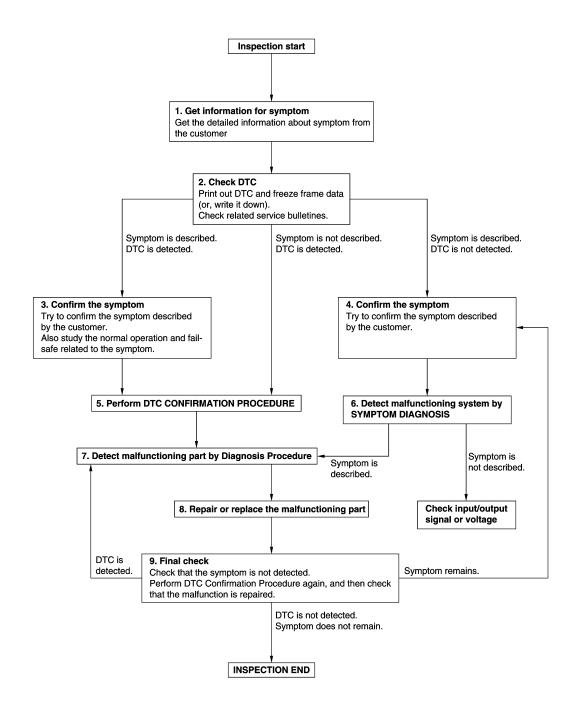
Revision: April 2016 **DLK-111** 2016 QX60

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

OVERALL SEQUENCE



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DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2. CHECK DTC

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

Are any symptoms described and any DTC detected?

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

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

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

3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

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

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

>> GO TO 5.

4. CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

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

>> GO TO 6.

5. PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC CONFIRMATION PROCEDURE for the detected DTC and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle and check self diagnostic results in real time. If two or more DTCs are detected, refer to BCS-50, "DTC Inspection Priority Chart" (BCM) and determine trouble diagnosis order.

NOTE:

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

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

Is DTC detected?

YES >> GO TO 7.

NO >> Check according to GI-50, "Intermittent Incident".

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

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

Is the symptom described?

YES >> GO TO 7.

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

7. DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

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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-50. "Intermittent Incident".

8.REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 9.

9. FINAL CHECK

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

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

Is DTC detected and does symptom remain?

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

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

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

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

< BASIC INSPECTION >

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

Description INFOID:0000000012851913

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

NOTE:

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

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

Work Procedure

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1.INITIALIZATION

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

NOTE:

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

>> Inspection End.

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ADDITIONAL SERVICE WHEN REPLACING BCM

< BASIC INSPECTION >

ADDITIONAL SERVICE WHEN REPLACING BCM

Description INFOID:000000012851915

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

Work Procedure

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

ADDITIONAL SERVICE WHEN REPLACING AUTOMATIC BACK DOOR CONTROL UNIT

< BASIC INSPECTION >

ADDITIONAL SERVICE WHEN REPLACING AUTOMATIC BACK DOOR CONTROL UNIT

Description NFOID:000000012851917

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

NOTE:

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

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

Work Procedure

INFOID:0000000012851918

1.INITIALIZATION

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

NOTE:

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

>> Inspection End.

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Revision: April 2016 **DLK-117** 2016 QX60

CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

< BASIC INSPECTION >

CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

Description INFOID:000000012851919

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

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

NOTE:

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

Work Procedure

INFOID:0000000012851920

1.STEP 1

Fully close the back door manually.

>> GO TO 2.

2.STEP 2

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

>> GO TO 3.

3.STEP 3

Operate back door opener switch and perform automatic open operation.

NOTE:

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

>> GO TO 4.

4.STEP 4

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

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

YES >> GO TO 5.

NO >> GO TO 1.

5.STEP 5

Fully close the back door.

>> Inspection End.

U1000 CAN COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description INFOID:000000012851921

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 <u>LAN-49</u>, "CAN COMMUNICATION SYSTEM: CAN Communication Signal Chart".

DTC Logic

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

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-28, "Trouble Diagnosis Flow Chart".

NO >> Refer to GI-50, "Intermittent Incident".

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Revision: April 2016 **DLK-119** 2016 QX60

U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

U1010 CONTROL UNIT (CAN)

DTC Logic

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
U1010	CONTROL UNIT (CAN)	Automatic back door control module detected internal CAN communication circuit malfunction	Automatic back door control module

Diagnosis Procedure

INFOID:0000000012851925

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 <u>DLK-289</u>, "Removal and Installation".

B2401 IGNITION POWER SUPPLY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

B2401 IGNITION POWER SUPPLY CIRCUIT

DTC Logic INFOID:0000000012851926

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to <u>DLK-121</u>, "<u>Diagnosis Procedure</u>".

>> Inspection End. NO

Diagnosis Procedure

1. CHECK BCM OUTPUT SIGNAL

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-289, "Removal and Installation".

NO >> Replace BCM. Refer to BCS-79, "Removal and Installation". DLK

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DLK-121 Revision: April 2016 2016 QX60

B2409 HALF LATCH SWITCH

< DTC/CIRCUIT DIAGNOSIS >

B2409 HALF LATCH SWITCH

DTC Logic

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 module Half latch switch Harness or connectors

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to <u>DLK-122</u>, "<u>Diagnosis Procedure</u>".

NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000012851929

Regarding Wiring Diagram information, refer to <u>DLK-98, "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 malfunction parts.

3.check half latch switch monitor item

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

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

Is the inspection result normal?

YES >> GO TO 8.

NO >> GO TO 4.

f 4.CHECK HALF LATCH SWITCH INPUT SIGNAL

B2409 HALF LATCH SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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

(+))	(-)	Voltage (Approx.)
Back door loo	k assembly		
Connector	Terminal		(11 /
D557	6	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5.CHECK HALF LATCH SWITCH CIRCUIT

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

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

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

Automatic back d	oor control module		Continuity
Connector Terminal		Ground	Continuity
B55	3		No

Is the inspection result normal?

- YES >> Replace automatic back door control module. Refer to DLK-289, "Removal and Installation".
- NO >> Repair or replace harness.

O.CHECK HALF LATCH SWITCH GROUND CIRCUIT

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

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

Is the inspection result normal?

YES >> GO TO 7.

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

7. CHECK HALF LATCH SWITCH

Refer to DLK-124, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace back door lock assembly. Refer to DLK-276, "DOOR LOCK: Removal and Installation".

8. CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

>> Inspection End.

Component Inspection

COMPONENT INSPECTION

DLK-123 Revision: April 2016 2016 QX60 DLK

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B2409 HALF LATCH SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to DLK-276, "DOOR LOCK: Removal and Installation".

B2416 TOUCH SENSOR RH

< DTC/CIRCUIT DIAGNOSIS >

B2416 TOUCH SENSOR RH

DTC Logic INFOID:0000000012851931

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible 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.	Improper installation of touch sensor Touch sensor RH Harness or connectors Automatic back door control module

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to <u>DLK-125</u>, "<u>Diagnosis Procedure</u>".

NO >> Inspection End.

Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-98, "Wiring Diagram".

1. CHECK INSTALLATION OF TOUCH SENSOR RH

Check that touch sensor RH is installed normally.

Refer to DLK-277, "TOUCH SENSOR: Removal and Installation".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to DLK-277, "TOUCH SENSOR: Removal and Installation".

2.CHECK TOUCH SENSOR MONITOR ITEM

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

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

Is the inspection result normal?

YES >> GO TO 8.

NO >> GO TO 3.

3.CHECK TOUCH SENSOR INPUT SIGNAL

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

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B2416 TOUCH SENSOR RH

< DTC/CIRCUIT DIAGNOSIS >

(+)	(-	-)	Condition		
Touch s	ensor RH		door control mod- le			Voltage (Approx.)
Connector	Terminal	Connector	Terminal			
D555	1	B55	12	Touch sensor	Detect obstruc- tion	1.8 – 5 V
D999	1	D00	13 RH		Other than above	2.72 – 7.27 V

Is the inspection result normal?

YES >> GO TO 5. NO >> GO TO 4.

4. CHECK TOUCH SENSOR RH CIRCUIT

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-289</u>, "Removal and Installation".

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		
Connector	Terminal	Connector	Terminal	Continuity	
B55	13	D555	2	Yes	

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

Automatic back do	or control module		Continuity
Connector	Connector Terminal		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

- 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 >

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

Is the inspection result normal?

YES >> GO TO 7.

NO >> Replace automatic back door control module. Refer to <u>DLK-289</u>, "Removal and Installation".

7.CHECK TOUCH SENSOR RH

Refer to DLK-127, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace touch sensor RH. Refer to <u>DLK-277</u>, "TOUCH SENSOR: Removal and Installation".

8. CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

>> Inspection End.

Component Inspection

1. CHECK TOUCH SENSOR RH

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

Touch so	ensor RH	Condition		Resistance	
Terr	Terminal		Condition		
1	1 2		Detect obstruction	380 – 420 kΩ	
1	2	Touch sensor RH	Other than above	0.95 – 1.05 kΩ	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace touch sensor RH. Refer to <u>DLK-277</u>, "TOUCH SENSOR: Removal and Installation".

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Revision: April 2016 **DLK-127** 2016 QX60

B2417 TOUCH SENSOR LH

< DTC/CIRCUIT DIAGNOSIS >

B2417 TOUCH SENSOR LH

DTC Logic

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.	• louch sensor I H

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to <u>DLK-128</u>, "<u>Diagnosis Procedure</u>".

NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000012851935

Regarding Wiring Diagram information, refer to DLK-98, "Wiring Diagram".

1. CHECK INSTALLATION OF TOUCH SENSOR LH

Check that touch sensor LH is installed normally.

Refer to <u>DLK-277</u>, "TOUCH SENSOR: Removal and Installation".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to <u>DLK-277</u>, "TOUCH SENSOR: Removal and Installation".

2.CHECK TOUCH SENSOR MONITOR ITEM

- 1. Select AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.
- 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
	TOUCH Sensor Ln	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.
- Check voltage between touch sensor LH harness connector and automatic back door control module harness connector.

B2417 TOUCH SENSOR LH

< DTC/CIRCUIT DIAGNOSIS >

((+)	(-	-)	Condition		
Touch s	ensor LH		door control mod- le			Voltage (Approx.)
Connector	Terminal	Connector	Terminal			
D556	1	B55	13	Touch sensor	Detect obstruc- tion	1.8 – 5 V
D330	'	B00	13	LH	Other than above	2.72 – 7.27 V

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4. CHECK TOUCH SENSOR LH CIRCUIT

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

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

Automatic back door control module		Touch se	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 do	or 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-289</u>, "Removal and Installation".

NO >> Repair or replace harness.

5. 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 do	or 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 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 LH GROND CIRCUIT 2

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

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B2417 TOUCH SENSOR LH

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

YES >> GO TO 7.

NO >> Replace automatic back door control module. Refer to <u>DLK-289</u>, "Removal and Installation".

7.CHECK TOUCH SENSOR LH

Refer to DLK-130, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace touch sensor LH. Refer to DLK-277, "TOUCH SENSOR: Removal and Installation"

8. CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000012851936

1. CHECK TOUCH SENSOR LH

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

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace touch sensor LH. Refer to <u>DLK-277</u>, "TOUCH SENSOR: Removal and Installation".

B2419 OPEN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

B2419 OPEN SWITCH

DTC Logic INFOID:0000000012851937

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to <u>DLK-131</u>, "<u>Diagnosis Procedure</u>".

>> Inspection End. NO

Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-98, "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?

YFS >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK OPEN SWITCH SIGNAL

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

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

Is the inspection result normal?

YES >> GO TO 8.

NO >> GO TO 4.

$oldsymbol{4}.$ CHECK OPEN SWITCH INPUT SIGNAL

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DLK-131 Revision: April 2016 2016 QX60

B2419 OPEN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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

(+) Back door lock assembly		(-)	Voltage (Approx.)	
Connector	Terminal		(* (pp. 674)	
D557	4	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5. CHECK OPEN SWITCH CIRCUIT

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

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

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-289, "Removal and Installation"</u>.

NO >> Repair or replace harness.

6.CHECK OPEN SWITCH GROUND CIRCUIT

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

Back door lock assembly			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 DLK-133, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace back door lock assembly. Refer to <u>DLK-276, "DOOR LOCK: Removal and Installation"</u>.

8. CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000012851939

COMPONENT INSPECTION

B2419 OPEN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

1. CHECK SWITCH

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

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to DLK-276, "DOOR LOCK: Removal and Installation".

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DLK-133 Revision: April 2016 2016 QX60

B2420 CLOSE SWITCH

DTC Logic

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 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-134</u>, "<u>Diagnosis Procedure</u>".

NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000012851941

Regarding Wiring Diagram information, refer to <u>DLK-98, "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	Condition		Status
CLOSE SW	Back door	Open/Half latch	OFF
CLOSE SVV	Dack door	Fully closed	ON

Is the inspection result normal?

YES >> GO TO 8.

NO >> GO TO 4.

f 4.CHECK CLOSE SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.

B2420 CLOSE SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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

(+	(+)		Valla
Back door loo	ck assembly	(–)	Voltage (Approx.)
Connector	Terminal		,
D557	5	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5. CHECK CLOSE SWITCH CIRCUIT

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

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

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

Automatic back d	oor control module		Continuity
Connector	Terminal	Ground	Continuity
B55	5		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-289, "Removal and Installation".

NO >> Repair or replace harness.

6.CHECK CLOSE SWITCH GROUND CIRCUIT

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

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

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness.

1.CHECK CLOSE SWITCH

Refer to DLK-135, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace back door lock assembly. Refer to <u>DLK-276, "DOOR LOCK: Removal and Installation"</u>.

8. CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

>> Inspection End.

Component Inspection

COMPONENT INSPECTION

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INFOID:0000000012851942

B2420 CLOSE SWITCH

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to DLK-276, "DOOR LOCK: Removal and Installation".

B2422 BACK DOOR STATE

< DTC/CIRCUIT DIAGNOSIS >

B2422 BACK DOOR STATE

DTC Logic INFOID:0000000012851943

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to DLK-137, "Diagnosis Procedure".

NO >> Inspection End.

Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-98, "Wiring Diagram".

1. CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

- Perform initialization setting of automatic back door position information. Refer to DLK-117, "Work Procedure".
- 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 DLK-262, "BACK DOOR ASSEMBLY: Adjustment".
- 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

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

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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 <u>DLK-289</u>, "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	Voltage (Approx.)
Con	nector	Terminal		(, tpp: 0x.)
LH	B70	0	Ground	Pottoryvoltago
RH	B162	0	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5. CHECK ENCODER CIRCUIT 1

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

Automatic back d	oor control module	Spindle unit		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
B55	19	LH	B70	Q	Yes
В33	20	RH	B162	0	165

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-289</u>, "Removal and Installation".

NO >> Repair or replace harness.

6. CHECK ENCODER CIRCUIT 2

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

B2422 BACK DOOR STATE

< DTC/CIRCUIT DIAGNOSIS >

Automatic back d	oor control module	Spindle unit		Continuity		
Connector	Terminal	Connector Terr		Terminal	Continuity	
	6	D70		3		
DEE	7	LN	LH B70		10	Vaa
B55	8	DII	B162	3	Yes	
	9	RH		10	1	

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

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

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness.

7. CHECK ENCODER CIRCUIT 3

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

Automatic	ack door 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-289</u>, "Removal and Installation".

8. CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-289</u>, "Removal and Installation".

NO >> Repair or replace the malfunctioning parts.

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B2423 AUTOMATIC BACK DOOR MOTOR OPERATION TIME

< DTC/CIRCUIT DIAGNOSIS >

B2423 AUTOMATIC BACK DOOR MOTOR OPERATION TIME

DTC Logic

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-140</u>, "<u>Diagnosis Procedure</u>".

NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000012851946

Regarding Wiring Diagram information, refer to <u>DLK-98, "Wiring Diagram"</u>.

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

Automatic back d	oor control module	Spindle unit		Continuity		
Connector	Terminal	Connector Terminal		Terminal	Continuity	
	27	1 11	27 LH	B70	9	
B56	34	БТО	2	Yes		
B30	29	DU	B162	9	res	
	36	RH		2		

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

B2423 AUTOMATIC BACK DOOR MOTOR OPERATION TIME

< DTC/CIRCUIT DIAGNOSIS >

Automatic back door control module			Continuity	
Connector Terminal		-	Continuity	
	27	Ground		
B56	29	Glound	No	
B30	34			
	36	_		

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-289</u>, "Removal and Installation".

NO >> Repair or replace harness.

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B2426 ENCODER

DTC Logic

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to <u>DLK-142</u>, "<u>Diagnosis Procedure</u>".

NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000012851948

Regarding Wiring Diagram information, refer to DLK-98, "Wiring Diagram".

1. CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

- 1. Perform initialization setting of automatic back door position information. Refer to DLK-117, "Work Procedure".
- 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-262</u>, "<u>BACK DOOR ASSEMBLY</u>: Adjustment".
- 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.
- Check that the function operates normally according to the following conditions.

B2426 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

>> Replace automatic back door control module. Refer to DLK-289, "Removal and Installation". YES NO >> GO TO 4.

4. CHECK ENCODER POWER SUPPLY

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

(+)			No.	
Spindle	unit LH	(–)	Voltage (Approx.)	
Connector	Terminal		(#1.5)	
B70	8	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5. CHECK ENCODER POWER SUPPLY 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 spindle unit LH harness connector.

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

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

Automatic back d	oor control module		Continuity
Connector Terminal		Ground	Continuity
B55	19		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-289</u>, "Removal and Installation".

NO >> Repair or replace harness.

6.CHECK ENCODER SIGNAL CIRCUITS

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

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B2426 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

Automatic back	door control module	Spindle unit LH		Continuity
Connector	Terminal	Connector Terminal		Continuity
P55	6	B70	3	Yes
B55 7		570	10	res

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

Automatic back door control module			Continuity
Connector Terminal		Ground	Continuity
B55	6	Ground	No
D00	7		INO

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness.

7.check encoder ground circuit

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

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

Is the inspection result normal?

YES >> Replace spindle unit LH. Refer to <u>DLK-264, "SPINDLE UNIT: Removal and Installation"</u>.

NO >> Repair or replace harness.

B2427 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

B2427 ENCODER

DTC Logic INFOID:0000000012851949

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2427	SPINDLE SENSOR RH	When the automatic back door control module can not receive the pulse signal from the encoder just after starting the open/close operation.	Improper installation of back door assembly [CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION]: not complete Back door mechanism Automatic back door control module Encoder Harness or connectors

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to DLK-145, "Diagnosis Procedure".

NO >> Inspection End.

Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-98, "Wiring Diagram".

1. CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

- Perform initialization setting of automatic back door position information. Refer to DLK-117, "Work Procedure".
- 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 DLK-262, "BACK DOOR ASSEMBLY: Adjustment".
- 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

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

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B2427 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-289, "Removal and Installation"</u>.

NO >> GO TO 4.

4. CHECK ENCODER POWER SUPPLY

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

(+	•)		
Spindle unit RH		(–)	Voltage (Approx.)
Connector Terminal			, , ,
B162	8	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5. CHECK ENCODER POWER SUPPLY CIRCUIT

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

Automatic back door control module		Spindle ur	Continuity	
Connector	Terminal	Connector Terminal		Continuity
B55	20	B162	8	Yes

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

Automatic back d	oor control module		Continuity
Connector Terminal		Ground	Continuity
B55	20		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-289</u>, "Removal and Installation".

NO >> Repair or replace harness.

6. CHECK ENCODER SIGNAL CIRCUITS

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

B2427 ENCODER

< DTC/CIRCUIT DIAGNOSIS >

Automatic back door control module		Spindle unit RH		Continuity
Connector	Terminal	Connector Terminal		Continuity
B55	8	B162	3	Yes
D33	9	D 102	10	165

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

Automatic back d	oor control module		Continuity
Connector	Terminal	Ground	Continuity
B55	8	Giouna	No
000	9		INO

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness.

7.check encoder ground circuit

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

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

Is the inspection result normal?

YES >> Replace spindle unit RH. Refer to DLK-264, "SPINDLE UNIT: Removal and Installation".

NO >> Repair or replace harness.

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B2428 AUTOMATIC BACK DOOR CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

B2428 AUTOMATIC BACK DOOR CONTROL UNIT

DTC Logic

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:0000000012851952

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 <u>DLK-289</u>, "Removal and Installation".

B242A CLOSURE CONDITION

< DTC/CIRCUIT DIAGNOSIS >

B242A CLOSURE CONDITION

DTC Logic INFOID:0000000012851953

DTC DETECTION LOGIC

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 module Open switch Close switch Half latch switch Harness or connectors

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON.
- Operate back door auto closure operation.
- Check Self-Diagnostic Result mode of AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.

Is DTC detected?

YES >> Refer to <u>DLK-149</u>, "<u>Diagnosis Procedure</u>".

NO >> Inspection End.

Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>DLK-98</u>, "Wiring <u>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 MONITOR ITEM

- Select AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.
- Select HALF LATCH SW, OPEN SW and CLOSE SW in DATA MONITOR mode.
- Check that the function operates normally according to the following conditions.

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B242A CLOSURE CONDITION

< DTC/CIRCUIT DIAGNOSIS >

Monitor item	Condition		Status
LIALE LATOUROW		Fully closed/Half latch	OFF
HALF LATCH SW	Back door	Open	ON
OPEN SW		Fully closed/Half latch	OFF
OPEN SW		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 loo	ck assembly		Voltage (Approx.)	
Connector	Terminal		(* (\$\rightarrow\$)	
	4			
D557	5	Ground	Battery voltage	
	6			

Is the inspection result normal?

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

5. CHECK SWITCH CIRCUIT

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

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	Continuity
	3	D557 6	6	
B55	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 DLK-289, "Removal and Installation".

NO >> Repair or replace harness.

O.CHECK SWITCH GROUND CIRCUIT

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

B242A CLOSURE CONDITION

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

YES >> GO TO 7.

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

7. CHECK SWITCH

Refer to DLK-151, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace back door lock assembly. Refer to <u>DLK-276, "DOOR LOCK: Removal and Installation"</u>.

8.CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

>> Inspection End.

Component Inspection

COMPONENT INSPECTION

1. CHECK SWITCH

1. Turn ignition switch OFF.

2. Disconnect back door lock assembly connector.

3. Check continuity between back door lock assembly terminals.

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to <u>DLK-276, "DOOR LOCK: Removal and Installation"</u>.

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Revision: April 2016 **DLK-151** 2016 QX60

B261B REMOTE ENGINE START

< DTC/CIRCUIT DIAGNOSIS >

B261B REMOTE ENGINE START

DTC Logic

DTC DETECTION LOGIC

NOTE:

- If DTC B261B is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to <u>DLK-119</u>, "<u>DTC Logic"</u>.
- If DTC B261B is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to DLK-120, "DTC Logic".

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

Diagnosis Procedure

INFOID:0000000012851957

1. CHECK ECM IGNITION, POWER AND GROUND CIRCUITS

Check ECM ignition power and ground circuits. Refer to <u>EC-722, "Diagnosis Procedure"</u> (except for Mexico) or <u>EC-190, "Diagnosis Procedure"</u> for Mexico.

Is the inspection result normal?

YES >> Replace ECM. Refer to <u>EC-565</u>, "Removal and Installation" (except for Mexico) or <u>EC-956</u>, "Removal and Installation" (for Mexico). GO TO 2.

NO >> Repair or replace harness or connectors.

2. INSPECTION

- 1. Turn ignition switch ON.
- 2. Select "Self-diagnostic result" mode with CONSULT.
- 3. Touch "ERASE".
- 4. Perform vehicle remote start operation.

Does DTC B261B return?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> Inspection End..

B2622 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

B2622 INSIDE ANTENNA

DTC Logic

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2622	INSIDE ANTENNA	An excessive high or low voltage from inside antenna (console) is sent to BCM.	Inside key antenna (console) Harness or connector [Inside key antenna (console) circuit is open or shorted]

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Select INTELLIGENT KEY of BCM using CONSULT.
- 2. Select INSIDE ANT DIAGNOSIS in WORK SUPPORT mode.
- 3. Perform inside key antenna (INSIDE ANT DIAGNOSIS) on WORK SUPPORT of INTELLIGENT KEY.
- Check BCM for DTC.

Is inside key antenna DTC detected?

YES >> Refer to <u>DLK-153</u>, "<u>Diagnosis Procedure</u>".

NO >> Inside key antenna (console) is OK.

Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>DLK-77, "Wiring Diagram"</u>.

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

	+) CM Terminal	(-)	Condition	Signal (Reference value)
M80	116, 128	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB
	116, 126	Glound	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> GO TO 2.

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B2622 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

$\overline{2}$.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	CM	Inside key antenna (console)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M80	116	M255	1	Yes
IVIOU	128	IVIZOO	2	165

3. Check continuity between BCM harness connector and ground.

ВСМ			Continuity
Connector	Terminal	Ground	Continuity
M80	116	Ground	No
WIOU	128		NO

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.check inside key antenna input signal 2

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

(+) BCM		(–)	Condition	Signal (Reference value)
Connector	Terminal			(
M80	116, 128	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB
Moo	110, 120	Glound	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB

Is the inspection result normal?

YES >> Replace inside key antenna (console). Refer to <u>DLK-283, "CONSOLE : Removal and Installation"</u>.

NO >> Replace BCM. Refer to BCS-79, "Removal and Installation".

B2623 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

B2623 INSIDE ANTENNA

DTC Logic

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2623	INSIDE ANTENNA	An excessive high or low voltage from inside antenna (luggage room) is sent to BCM.	Inside key antenna (luggage room) Harness or connector [Inside key antenna (luggage room) circuit is open or shorted]

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Select INTELLIGENT KEY of BCM using CONSULT.
- 2. Select INSIDE ANT DIAGNOSIS in WORK SUPPORT mode.
- 3. Perform inside key antenna (INSIDE ANT DIAGNOSIS) on WORK SUPPORT of INTELLIGENT KEY.
- Check BCM for DTC.

Is inside key antenna DTC detected?

YES >> Refer to <u>DLK-155</u>, "<u>Diagnosis Procedure</u>".

NO >> Inside key antenna (luggage room) is OK.

Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>DLK-77, "Wiring Diagram"</u>.

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			,
M20	100, 99	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB
0	.55, 66	S. Sulla	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> GO TO 2.

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B2623 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

$\overline{2}$.check inside key antenna circuit

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

В	CM	Inside key antenna (luggage room)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M20	100	B76	1	Yes
IVIZU	99	670	2	165

3. Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector	Terminal	Ground	
M20	100	Ground	No
IVIZU	99		INU

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

- 1. Replace inside key antenna (luggage room). (New antenna or other antenna)
- 2. Connect BCM connector and inside key antenna (luggage room) connector.
- 3. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM		(-)	Condition	Signal (Reference value)
Connector	Terminal			,
M20	100, 99	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
WZU	100, 99	Ground	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB

Is the inspection result normal?

YES >> Replace inside key antenna (luggage room). Refer to <u>DLK-283, "LUGGAGE ROOM : Removal</u> and Installation".

NO >> Replace BCM. Refer to BCS-79, "Removal and Installation".

B26FD SHIFT LOCK SOLENOID

< DTC/CIRCUIT DIAGNOSIS >

B26FD SHIFT LOCK SOLENOID

DTC Logic INFOID:0000000012851964

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B26FD	SHIFT LOCK SOLE- NOID	BCM shift lock solenoid output control is OFF but shift lock solenoid output feedback is ON and these conditions are continuous for 1 second.	Shift lock solenoid Harness or connector Shift lock solenoid circuit is open or shorted

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON.
- Check "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

YES >> Refer to DLK-157, "Diagnosis Procedure".

NO >> Shift lock solenoid is OK.

Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-77, "Wiring Diagram".

1. CHECK POWER SOURCE (STOP LAMP SWITCH)

- Turn ignition switch OFF.
- 2. Disconnect stop lamp switch connector.
- Check voltage between stop lamp switch connector E38 terminal 1 and ground.

Stop lamp switch			Voltage (Approx.)
Connector	Terminal	Ground	voltage (Approx.)
E38	1		Battery voltage

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check the following:

- · Harness for short or open between fuse block (J/B) and stop lamp switch
- 10A fuse (No. 10, located in fuse block [J/B])

2.CHECK STOP LAMP SWITCH

Check stop lamp switch. Refer to TM-187, "Component Inspection (Stop Lamp Switch)" (RE0F10E) or TM-414, "Component Inspection (Stop Lamp Switch)" (RE0F10J).

Is the inspection result normal?

YES >> GO TO 3.

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

3.CHECK GROUND CIRCUIT (BCM)

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

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B26FD SHIFT LOCK SOLENOID

< DTC/CIRCUIT DIAGNOSIS >

ВСМ			Continuity
Connector	Terminal (+) Ground		Continuity
M81	134	Ground	Yes
IVIO I	143		165

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

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

В	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.

${f 5.}$ CHECK HARNESS BETWEEN BCM AND STOP LAMP SWITCH FOR SHORT CIRCUIT

Check continuity between BCM connector M18 terminal 27 and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M18	27		No

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace damaged parts.

$\mathsf{6}.$ CHECK HARNESS BETWEEN BCM AND CVT SHIFT SELECTOR FOR OPEN

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

В	CM	CVT shift selector		Continuity
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.

В	ВСМ		Continuity
Connector	Terminal	Ground	Continuity
M80	108		No

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace damaged parts.

B26FD SHIFT LOCK SOLENOID

< DTC/CIRCUIT DIAGNOSIS >

$8.\mathsf{CHECK}$ GROUND CIRCUIT (CVT SHIFT SELECTOR)

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

CVT shift selector			Continuity
Connector	Terminal	Ground	Continuity
M78	4		Yes

Is the inspection result normal?

YES >> Replace shift lock solenoid. Refer to <u>TM-197, "Exploded View"</u> (RE0F10E) or <u>TM-424, "Exploded View"</u> (RE0F10J).

NO >> Repair or replace damaged parts.

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B26FE HOOD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

B26FE HOOD SWITCH

DTC Logic

DTC DETECTION LOGIC

NOTE:

• If DTC B26FE is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to DLK-119, "DTC Logic".

• If DTC B26FE is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to DLK-120, "DTC Logic".

DTC	CONSULT display description	DTC detecting condition	Possible cause
B26FE	HOOD SWITCH	BCM detects that the hood switch input is malfunctioning for 3 seconds.	Hood switch Harness or connector [hood switch circuit is open or shorted]

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

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

NO >> Hood switch is OK.

Diagnosis Procedure

INFOID:0000000012851967

Regarding Wiring Diagram information, refer to <u>DLK-77</u>, "Wiring <u>Diagram"</u>.

1. CHECK HOOD SWITCH SIGNAL CIRCUITS

- Turn ignition switch OFF.
- 2. Disconnect hood switch connector.
- Check voltage between hood switch harness connector and ground.

(+) Hood switch		(–)	Voltage (V) (Approx.)
Connector	Terminal		(Αρρίολ.)
E205	1	Cround	Pattony voltago
E205	2	- Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK HOOD SWITCH SIGNAL CIRCUITS

- 1. Disconnect IPDM E/R connector.
- 2. Check continuity between IPDM E/R harness connector and hood switch harness connector.

IPDI	M E/R	Hood switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
E218	94	E205	1	Yes
LZTO	96	L203	2	165

B26FE HOOD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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

IPDM	IPDM E/R		Continuity
Connector	Terminal	Ground	Continuity
E218	94		No
E210	96		INO

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-31, "Removal and Installation".

NO >> Repair or replace harness.

3.CHECK HOOD SWITCH GROUND CIRCUIT

Check continuity between hood switch harness connector and ground.

Hood switch			Continuity
Connector	Terminal	Ground	Continuity
E205	3		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK HOOD SWITCH

Refer to DLK-161, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace hood switch. Refer to <u>DLK-266, "HOOD LOCK: Removal and Installation"</u>.

5. CHECK BCM CONFIGURATION

Refer to BCS-64, "CONFIGURATION (BCM): Configuration List".

>> Inspection End.

Component Inspection

1. CHECK HOOD SWITCH

- Turn ignition switch OFF.
- 2. Disconnect hood switch connector.
- 3. Check continuity between hood switch terminals.

Ноо	d switch		Condition	Continuity
Te	rminal		Condition	Continuity
1	3	Hood switch	Press	Yes
1	3	Hood switch	Release	No
2	3	Hood switch	Press	No
2	3	Hood switch	Release	Yes

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace hood switch. Refer to <u>DLK-266, "HOOD LOCK: Removal and Installation"</u>.

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B26FF REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

B26FF REMOTE KEYLESS ENTRY RECEIVER

DTC Logic

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B26FF	INTELLIGENT TUNER COMMUNICATION FAIL	Inactive communication between BCM and remote keyless entry receiver.	 Harness or connector Remote keyless entry receiver BCM

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to <u>DLK-162</u>, "<u>Diagnosis Procedure</u>".

NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000012851970

Regarding Wiring Diagram information, refer to DLK-77, "Wiring Diagram".

1. CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT SIGNAL

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

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

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> GO TO 2.

2.check remote keyless entry receiver circuit

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

B26FF REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

ВС	CM	Remote keyles	s entry receiver	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M80	119	M86	2	Yes

3. Check continuity between BCM harness connector and ground.

(+)			
ВСМ		(–)	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.

(+)			Voltage (Approx)
Remote keyless entry receiver		(–)	
Connector	Terminal		(11/2-2-7)
M86	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.

NO-1 >> Check 10A fuse No. 25 [located in fuse block J/B].

NO-2 >> Repair or replace harness between remote keyless entry receiver and 10A fuse No. 25.

4. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

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

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

Is the inspection result normal?

YES >> Replace remote keyless entry receiver. Refer to <u>DLK-287, "Removal and Installation"</u>.

NO >> Repair or replace harness.

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT AUTOMATIC BACK DOOR CONTROL UNIT

AUTOMATIC BACK DOOR CONTROL UNIT : Diagnosis Procedure

INFOID:0000000012851971

Regarding Wiring Diagram information, refer to <u>DLK-98</u>, "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.
- Check voltage between automatic back door control module harness connector and ground.

Automatic back d	+) oor control module	(–)	Voltage	
Connector Terminal			3.25	
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 de	oor control module		Continuity	
Connector	Terminal		Continuity	
B56	32	Ground		
B30	28		Yes	
B55	4 (Except For Mexico)			

Does continuity exist?

YES >> Inspection End.

NO >> Repair or replace harness.

BCM

BCM: Diagnosis Procedure

INFOID:0000000013578600

Regarding Wiring Diagram information, refer to BCS-54, "Wiring Diagram".

1. CHECK FUSE AND FUSIBLE LINK

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

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Terminal No.	Signal name	Fuse and fusible link No.
139	Fusible link battery power	O (40A)
131	BCM battery fuse	1 (10A)

Is the fuse or fusible link blown?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit.

NO >> GO TO 2

2. CHECK POWER SUPPLY CIRCUIT

- 1. Disconnect BCM connector M81.
- 2. Check voltage between BCM connector M81 terminals 131, 139 and ground.

В	CM	Ground	Voltage (Approx.)	
Connector	Terminal	Giodila		
M81	131		Pattony voltago	
IVIOI	139	_	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness or connectors.

3. CHECK GROUND CIRCUIT

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

BCM		Ground	Continuity	
Connector	Terminal	Giodila	Continuity	
M81	134		Yes	
IVIO	143	_	103	

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness or connectors.

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OUTSIDE KEY ANTENNA (PASSENGER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

OUTSIDE KEY ANTENNA (PASSENGER SIDE)

Component Function Check

INFOID:0000000012851973

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-166</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000012851974

Regarding Wiring Diagram information, refer to DLK-77, "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.

В	+) CM	(-)	Condition		Signal (Reference value)
M80	Terminal 114, 115	Ground	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less) When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	(V) 15 10 5 0 1 s JMKIA0062GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

- 1. Disconnect BCM connector and outside key antenna (passenger side) connector.
- Check continuity between BCM harness connector and outside key antenna (passenger side) harness connector.

В	CM	Outside key antenna (passenger side)		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M80	M80 114 D118		1	Yes	
WIOO	115	DIIO	2	165	

Check continuity between BCM harness connector and ground.

OUTSIDE KEY ANTENNA (PASSENGER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

E	BCM		Continuity	
Connector	Terminal	Ground	Continuity	
M80	114	Ground	No	
IVIOU	115		140	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

${\bf 3.}$ CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

- 1. Replace outside key antenna (passenger side). (New antenna or other antenna)
- 2. Connect BCM connector and outside key antenna (passenger side) connector.
- 3. Check signal between BCM harness connector and ground using oscilloscope.

	+) CM Terminal	(–)	Condition		Signal (Reference value)
M80	114, 115	Ground	When the passenger door request switch is	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 JMKIA0062GB
Midd	114, 113	Glound	operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	(V) 15 10 5 0 1 s JMKIA0063GB

Is the inspection result normal?

YES >> Replace outside key antenna (passenger side). Refer to <u>DLK-284, "PASSENGER SIDE : Removal and Installation"</u>.

NO >> Replace BCM. Refer to <u>BCS-79</u>, "Removal and Installation".

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OUTSIDE KEY ANTENNA (DRIVER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

OUTSIDE KEY ANTENNA (DRIVER SIDE)

Component Function Check

INFOID:0000000012851975

1. CHECK OUTSIDE KEY ANTENNA (DRIVER SIDE)

- 1. Place the Intelligent Key into the detection area of the outside key antenna (driver side).
- 2. Press the door request switch (driver side).

Does the door unlock?

YES >> Inspection End.

NO >> Refer to <u>DLK-168</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000012851976

Regarding Wiring Diagram information, refer to DLK-77, "Wiring Diagram".

1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

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

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

- 1. Disconnect BCM connector and outside key antenna (driver side) connector.
- Check continuity between BCM harness connector and outside key antenna (driver side) harness connector.

В	CM	Outside key antenna (driver side)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M80	122	D5	1	Yes
1000	121	D3	2	165

Check continuity between BCM harness connector and ground.

OUTSIDE KEY ANTENNA (DRIVER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

В	CM		Continuity	
Connector	Terminal	Ground	Continuity	
M80	122	Ground	Not existed	
MINO	121		NOT EXISTED	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

${f 3}.$ CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

- 1. Replace outside key antenna (driver side). (New antenna or other antenna)
- 2. Connect BCM connector and outside key antenna (driver side) connector.
- 3. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM		(–)	Condition		Signal (Reference value)	
Connector	Terminal				(,	
M80	121, 122	Ground	When the driver door request switch is oper-	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 1 s	
MOU	121, 122	Giound	ated with ignition switch OFF	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	(V) 15 10 5 0 1 s JMKIA0063GB	

Is the inspection result normal?

YES >> Replace outside key antenna (driver side). Refer to <u>DLK-284, "DRIVER SIDE : Removal and Installation"</u>.

NO >> Replace BCM. Refer to <u>BCS-79</u>. "Removal and Installation".

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Revision: April 2016 **DLK-169** 2016 QX60

OUTSIDE KEY ANTENNA (REAR BUMPER)

< DTC/CIRCUIT DIAGNOSIS >

OUTSIDE KEY ANTENNA (REAR BUMPER)

Component Function Check

INFOID:0000000012851977

1. CHECK OUTSIDE KEY ANTENNA (REAR BUMPER)

- 1. Place the Intelligent Key into the detection area of the outside key antenna (rear bumper).
- 2. Press the door request switch (back door).

Does the door unlock?

YES >> Inspection End.

NO >> Refer to <u>DLK-170, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000012851978

Regarding Wiring Diagram information, refer to DLK-77, "Wiring Diagram".

1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM		(-)	Condition		Signal (Reference value)
Connector	Terminal				
M20	101, 102	Ground	When the back door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 JMKIA0062GB
			switch OFF	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	(V) 15 10 5 0 1 s JMKIA0063GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

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

В	CM	Outside key ante	Continuity		
Connector	Terminal	Connector	Terminal	Continuity	
M20	102	B403	1	Yes	
IVIZU	101	D 1 03	2	165	

3. Check continuity between BCM harness connector and ground.

OUTSIDE KEY ANTENNA (REAR BUMPER)

< DTC/CIRCUIT DIAGNOSIS >

В	СМ		
Connector	Terminal	Ground	Continuity
M20	102	Ground	No
IVIZO	101		NO

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

${f 3}.$ CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

- 1. Replace outside key antenna (rear bumper). (New antenna or other antenna)
- 2. Connect BCM and outside key antenna (rear bumper) connector.
- 3. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM Connector Terminal		(-)	Condition		Signal (Reference value)
M20	101, 102	Ground	When the back door request switch is op-	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 JMKIA0062GB
WZO	101, 102	Glound	erated with ignition switch OFF	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	(V) 15 10 5 11 1 s JMKIA0063GB

Is the inspection result normal?

YES >> Replace outside key antenna (rear bumper). Refer to <u>DLK-284, "REAR BUMPER : Removal and Installation"</u>.

NO >> Replace BCM. Refer to <u>BCS-79</u>, "Removal and Installation".

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Revision: April 2016 **DLK-171** 2016 QX60

DOOR SWITCH

Component Function Check

INFOID:0000000012851979

1. CHECK FUNCTION

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

Monitor item		Condition	Status
DOOR SW-DR	Driver side door	Open	On
DOOR SW-DR	Driver side door	Closed	Off
DOOD CW AC	Passenger side door	Open	On
DOOR SW-AS		Closed	Off
DOOD OW DI	Deer deer III	Open	On
DOOR SW-RL	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-172</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000012851980

Regarding Wiring Diagram information, refer to <u>DLK-77, "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 Connector Terminal			(–)	Signal (Reference value)	
Driver side	B8				
Passenger side	B108			(V)	
Rear LH	B18			iŏ	
Rear RH	B116	3	Ground	0 → → → → → → → → → → → → → → → → → → →	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK DOOR SWITCH CIRCUIT

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

DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Door switch			В	Continuity		
Connector		Terminal	Connector	Terminal	Continuity	
Driver side	B8			96		
Passenger side	B108	3	2	M20	94	Yes
Rear LH	B18		IVI∠U	82	res	
Rear RH	B116			93		

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

	Door switch		Continuity	
Connector Terminal				Continuity
Driver side	B8		Ground	
Passenger side	B108	3	Ground	No
Rear LH	B18	3		INO
Rear RH	B116			

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> Repair or replace harness.

3. CHECK DOOR SWITCH

Refer to DLK-173, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace malfunctioning door switch. Refer to <u>DLK-281, "Removal and Installation"</u>.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

>> Inspection End.

Component Inspection

1.CHECK DOOR SWITCH

- Turn ignition switch OFF.
- 2. Disconnect malfunctioning door switch connector.
- 3. Check continuity between door switch terminals.

	Door switch	Condition		Continuity	
Terminal		Condition		Continuity	
3	Ground contact is part of the	Door switch	Pressed	No	
switch.		DOOL SWITCH	Released	Yes	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace malfunction door switch. Refer to <u>DLK-281, "Removal and Installation"</u>.

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Revision: April 2016 **DLK-173** 2016 QX60

BACK DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

BACK DOOR SWITCH

Component Function Check

INFOID:0000000012851982

1. CHECK FUNCTION

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

Monitor item	Condition		Status
DOOR SW-BK	Back door	Open	On
DOOK SW-DK		Closed	Off

Is the inspection result normal?

YES >> Door switch is OK.

NO >> Refer to <u>DLK-174, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000012851983

Regarding Wiring Diagram information, refer to DLK-98, "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.

	+) ock assembly	(–)	Signal (Reference value)	
Connector	Terminal			
D557	7	Ground	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.check back door switch circuit

- 1. Disconnect BCM connector.
- 2. Check continuity between back door lock assembly harness connector and BCM harness connector.

Back door lock assembly		BCM		Continuity	
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 door lock assembly			Continuity
Connector	Connector Terminal		Continuity
D557	7		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> Repair or replace harness.

3.check back door switch ground circuit

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

Back door lo	ock assembly		Continuity	
Connector	Terminal	Ground	Continuity	
D557	8		Yes	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK BACK DOOR SWITCH

Refer to DLK-175, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace back door lock assembly. Refer to <u>DLK-276, "DOOR LOCK: Removal and Installation"</u>.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

>> Inspection End.

Component Inspection

1. CHECK BACK DOOR SWITCH

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

Back door lock assembly		Condition		Continuity
Terminal				Continuity
7	8	Back door switch	Pressed	Yes
,			Released	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to DLK-276, "DOOR LOCK: Removal and Installation".

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Revision: April 2016 **DLK-175** 2016 QX60

DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

DOOR LOCK AND UNLOCK SWITCH

DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:0000000012851985

1. CHECK FUNCTION

- 1. Select DOOR LOCK of BCM using CONSULT.
- Select CDL LOCK SW, CDL UNLOCK SW in DATA MONITOR mode.
- 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	OFF
CDL UNLOCK SW		Lock	OFF
		Unlock	ON

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.

NO >> Refer to <u>DLK-176</u>, "<u>DRIVER SIDE</u>: <u>Diagnosis Procedure</u>".

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000012851986

1 . CHECK POWER WINDOW SWITCH

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

Does power window operate?

YES >> Replace power window main switch. Refer to PWC-81, "Removal and Installation".

NO >> Refer to PWC-68, "Diagnosis Procedure".

PASSENGER SIDE

PASSENGER SIDE: Component Function Check

INFOID:0000000012851987

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	OFF
CDL UNLOCK SW		Lock	OFF
		Unlock	ON

Is the inspection result normal?

NO

YES >> Door lock and unlock switch is OK.

>> Refer to PWC-42, "FRONT POWER WINDOW SWITCH (PASSENGER SIDE): Diagnosis Procedure".

PASSENGER SIDE: Diagnosis Procedure

INFOID:0000000012851988

1. CHECK POWER WINDOW SWITCH

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

Does power window operate?

DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

YES	>> Replace front power window switch (passenger side). Refer to PWC-82, "Removal and Installa-
	tion".

NO >> Refer to PWC-68, "Diagnosis Procedure".

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DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

DOOR LOCK ACTUATOR

DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:0000000012851989

1. CHECK FUNCTION

- 1. Select DOOR LOCK of BCM using CONSULT.
- 2. Select DOOR LOCK in ACTIVE TEST mode.
- 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-178</u>, "<u>DRIVER SIDE</u>: <u>Diagnosis Procedure</u>".

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000012851990

Regarding Wiring Diagram information, refer to DLK-60, "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.

(+)			Voltage	
Front door lock assembly LH		(–)	Condition		Voltage (Approx.)
Connector	Terminal				(FF - 7
D14	1	Ground	Door lock and unlock switch	Lock	12 V
	2	Giodila	DOOL LOCK AND UNIOCK SWILCH	Unlock	12 V

Is the inspection result normal?

YES >> Replace front door lock assembly LH. Refer to <u>DLK-269</u>, "<u>DOOR LOCK</u>: <u>Removal and Installation</u>".

NO >> GO TO 2.

2.check door lock actuator circuit

- 1. Disconnect BCM, all door lock actuators and fuel lid door lock actuator connector.
- 2. Check continuity between BCM harness connector and front door lock assembly LH harness connector.

BCM		Front door lock assembly LH		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
M81	135	D14	1	Yes	
IVIOI	137	014	2	165	

3. Check continuity between BCM harness connector and ground.

В	CM		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 >

- Connect BCM connector.
- Check voltage between BCM harness connector and ground.

(+) BCM		(–)	Condition		Voltage (Approx.)
Connector	Terminal				(11 - /
M81	135	Ground	Door lock and unlock switch	Lock	12 V
IVIOT	137	Ground	Door lock and unlock Switch	Unlock	12 V

Is the inspection result normal?

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

>> Replace BCM. Refer to BCS-79, "Removal and Installation". NO

PASSENGER SIDE

PASSENGER SIDE: Component Function Check

1. CHECK FUNCTION

- Select DOOR LOCK of BCM using CONSULT.
- Select DOOR LOCK in ACTIVE TEST mode.
- Touch ALL LOCK or ALL UNLK to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to DLK-179, "PASSENGER SIDE: Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-60, "Wiring Diagram".

1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+)			(–) Condition		Valtana
Front door lock actuator RH		(-)			Voltage (Approx.)
Connector	Terminal				,
D114	1	Ground	Door lock and unlock switch	Unlock	12 V
DIIT	2	Ground	Door lock and unlock switch	Lock	12 V

Is the inspection result normal?

>> Replace front door lock actuator RH. Refer to DLK-269, "DOOR LOCK: Removal and Installa-YES tion".

NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

- Disconnect BCM, all door lock actuators and fuel lid door lock actuator connector.
- Check continuity between BCM harness connector and front door lock actuator RH harness connector.

BCM		Front door lock actuator RH		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M81	130	D114	1	Yes	
	135		2		

Check continuity between BCM harness connector and ground.

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DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

BCM			Continuity	
Connector	Terminal	Ground	Continuity	
M81	130	Ground	No	
IVIO I	135	1	INO	

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.

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

Is the inspection result normal?

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

NO >> Replace BCM. Refer to BCS-79, "Removal and Installation".

REAR LH

REAR LH: Component Function Check

INFOID:0000000012851993

1. CHECK FUNCTION

- 1. Select DOOR LOCK of BCM using CONSULT.
- Select DOOR LOCK in ACTIVE TEST mode.
- Touch ALL LOCK or ALL UNLK to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to DLK-180, "REAR LH: Diagnosis Procedure".

REAR LH: Diagnosis Procedure

INFOID:0000000012851994

Regarding Wiring Diagram information, refer to DLK-60, "Wiring Diagram".

1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+)			Condition		Voltage (Approx.)	
Rear door lock actuator LH		(–)				
Connector	Terminal				(444)	
D205	1	Ground	Door lock and unlock switch	Lock	12 V	
	2			Unlock		

Is the inspection result normal?

YES >> Replace rear door lock actuator LH. Refer to <u>DLK-273, "DOOR LOCK : Removal and Installation"</u>. NO >> GO TO 2.

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

- Disconnect BCM, all door lock actuators and fuel lid door lock actuator connector.
- Check continuity between BCM harness connector and rear door lock actuator LH harness connector.

В	BCM		Rear door lock actuator LH	
Connector	Terminal	Connector	Terminal	Continuity
M81	133	D205	2	Yes
IVIO I	132	D205	1	165

Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector	Terminal	Ground	Continuity
M81	133	Giouna	No
IVIO I	132		No

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

- Connect BCM connector.
- Check voltage between BCM harness connector and ground.

	(+) BCM (–) Condition		Voltage (Approx.)		
Connector	Terminal				(FF 555)
M81	133	Ground	Door look and unlock switch	Unlock	12 V
IVIOI	132		Ground Door lock and unlock switch -		12 V

Is the inspection result normal?

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

>> Replace BCM. Refer to BCS-79, "Removal and Installation". NO

REAR RH

REAR RH: Component Function Check

1. CHECK FUNCTION

- Select "DOOR LOCK" of "BCM" using CONSULT.
- Select DOOR LOCK in ACTIVE TEST mode.
- Touch ALL LOCK or ALL UNLK to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.

>> Refer to <u>DLK-181, "REAR RH: Diagnosis Procedure"</u>.

REAR RH: Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-60, "Wiring Diagram".

1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

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DLK-181 Revision: April 2016 2016 QX60

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

(+)					Valtana	
Rear door lock actuator RH		(–)	Condition		Voltage (Approx.)	
Connector	Terminal				,	
D305	1	Ground Door lock and unlock switch	Unlock	12 V		
	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-273, "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
1010 1	132	5303	2	163

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Terminal	Ground	Continuity	
M81	133		No	
	132		INO	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK BCM OUTPUT SIGNAL

- 1. Connect BCM connector.
- 2. Check voltage between BCM harness connector and ground.

	+) CM	(–)	Condition		Voltage (Approx.)
Connector	Terminal				,
M81	133	Ground	Door lock and unlock switch	Unlock	12 V
IVIOI	132	Giouna	Door lock and unlock switch	Lock	12 V

Is the inspection result normal?

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

NO >> Replace BCM. Refer to BCS-79, "Removal and Installation".

FUEL LID LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

FUEL LID LOCK ACTUATOR

Component Function Check

1.CHECK FUNCTION

- Select DOOR LOCK of BCM using CONSULT.
- 2. Select DOOR LOCK in ACTIVE TEST mode.
- 3. Touch ALL LOCK or ALL UNLK to check that it works normally.

Is the inspection result normal?

YES >> Fuel lid door lock actuator is OK.

NO >> Refer to <u>DLK-183</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-60, "Wiring Diagram".

1. CHECK FUEL LID DOOR LOCK ACTUATOR INPUT SIGNAL

- Turn ignition switch OFF.
- 2. Disconnect fuel lid door lock actuator connector.
- 3. Check voltage between fuel lid door lock actuator harness connector and ground.

(-	+)				.,,,,
Fuel lid door	lock actuator	(–)	Condition		Voltage (Approx.)
Connector	Terminal				
B20	1	Ground	Door lock and unlock	Unlock	12 V
B20	2	Giodila	switch	Lock	12 V

Is the inspection result normal?

YES >> Replace fuel lid door lock actuator. Refer to <u>DLK-278</u>, "Removal and Installation".

NO >> GO TO 2.

2.check fuel lid door lock actuator circuit

- 1. Disconnect BCM, all door lock actuators connector.
- 2. Check continuity between BCM harness connector and fuel lid door lock actuator harness connector.

BCM		Fuel lid door lock actuator		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M81	135	B20	2	Yes	
IVIO I	137	620	1	165	

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Terminal	Crawad	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

- Connect BCM connector.
- 2. Check voltage between BCM harness connector and ground.

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FUEL LID LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

(+) BCM (-)		Condition		Voltage (Approx.)	
Connector	Terminal				(11 -)
M81	135	Ground	Door lock and unlock switch	Lock	12 V
IVIO I	137	Giodila	Door lock and unlock 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-79</u>, "Removal and Installation".

UNLOCK SENSOR

< DTC/CIRCUIT DIAGNOSIS >

UNLOCK SENSOR

Component Function Check

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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
	Driver side door	Unlock	ON

Is the inspection result normal?

YES >> Unlock sensor is OK.

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

Diagnosis Procedure

INFOID:0000000012852000

Regarding Wiring Diagram information, refer to DLK-60, "Wiring Diagram".

1. CHECK UNLOCK SENSOR INPUT SIGNAL

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 Connector Terminal		()	
	3	Ground	10 5 0 10 ms

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK UNLOCK SENSOR CIRCUIT

Disconnect BCM connector.

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

В	CM	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.

ВСМ			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 BCS-79, "Removal and Installation".

NO >> Repair or replace harness.

3.check unlock sensor ground circuit

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

Front door lock assembly LH			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-186, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace front door lock assembly LH. Refer to <u>DLK-269</u>, "<u>DOOR LOCK</u>: <u>Removal and Installation</u>".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000012852001

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
3	3 4		Lock	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace front door lock assembly LH. Refer to <u>DLK-269</u>, "<u>DOOR LOCK</u>: <u>Removal and Installation</u>".

DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

DOOR KEY CYLINDER SWITCH

Component Function Check

INFOID:0000000012852002

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1. CHECK FUNCTION

- Select DOOR LOCK of BCM using CONSULT.
- 2. Select KEY CYL LK-SW, KEY CYL UN-SW in DATA MONITOR mode.
- Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
KEY CYL LK-SW		Lock	ON
	- Driver side door key cylinder	Neutral / Unlock	OFF
KEY CYL UN-SW		Unlock	ON
		Neutral / Lock	OFF

Is the inspection result normal?

YES >> Door key cylinder switch is OK.

>> Refer to DLK-187, "Diagnosis Procedure". NO

Diagnosis Procedure

INFOID:0000000012852003

Regarding Wiring Diagram information, refer to DLK-60, "Wiring Diagram".

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1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

- Turn ignition switch OFF.
- Disconnect front door lock assembly LH connector.
- Check voltage between front door lock assembly LH harness connector and ground.

(+)				
Front door lock assembly LH		(-)	Voltage (Approx.)	
Connector	Terminal		(44.5)	
D14	5	Ground	5.V	
D14	6	Giouna	5 V	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2. M

2.CHECK DOOR KEY CYLINDER SWITCH SIGNAL CIRCUIT

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

Main power window and door lock/unlock switch		Front door lock assembly LH		Continuity
Connector	Terminal	Connector	Connector Terminal	
D56	15	D14	6	Yes
D30	16	014	5	165

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

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DLK-187 Revision: April 2016 2016 QX60

DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Main power window ar	Main power window and door lock/unlock switch		Continuity
Connector	Terminal	Ground	Continuity
D56	15	Ground	No
D30	16		INO

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-81, "Removal and Installation".

NO >> Repair or replace harness.

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

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

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

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK DOOR KEY CYLINDER SWITCH

Refer to DLK-188, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace front door lock assembly LH. Refer to <u>DLK-269</u>, "<u>DOOR LOCK</u>: <u>Removal and Installation</u>".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000012852004

1. CHECK DOOR KEY CYLINDER SWITCH

- Turn ignition switch OFF.
- 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		Condition		Continuity
	5	Driver side door key cylinder	Unlock	Yes
3			Neutral / Lock	No
6	Driver side door key cylinder	Lock	Yes	
			Neutral / Unlock	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace front door lock assembly LH. Refer to <u>DLK-269</u>, "<u>DOOR LOCK</u>: Removal and Installation".

REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

REMOTE KEYLESS ENTRY RECEIVER

Component Function Check

1. CHECK FUNCTION

- Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- Select "RKE OPE COUN1" in "DATA MONITOR" mode.
- Check that the function operates normally according to the following conditions.

Monitor item	Condition
RKE OPE COUN1	Checks whether value changes when operating Intelligent Key

Is the inspection result normal?

YFS >> Remote keyless entry receiver is OK.

>> Refer to DLK-189, "Diagnosis Procedure". NO

Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>DLK-77</u>, "Wiring <u>Diagram"</u>.

1. CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT SIGNAL

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

(+) BCM		(–) Condition		Signal (Reference value)
Connector	Terminal			,
M80	119	Ground	Standby state	(V) 6 4 2 0 + 0.2s OCC3881D
ov	•	S. Guina	Press the Intelligent Key lock or unlock button	(V) 6 4 2 0 + 0.2s OCC3880D

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> GO TO 2.

2.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT

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

В	BCM		Remote keyless entry receiver	
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.

	(+)		
ВСМ		(–)	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 keyless entry receiver		(–)	Voltage Approx.
Connector	Terminal		
M86	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.

NO-1 >> Check 10A fuse No. 25 [located in fuse block J/B].

NO-2 >> Repair or replace harness between remote keyless entry receiver and 10A fuse No. 25.

4. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

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

Remote keyles	ss 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-287, "Removal and Installation"</u>.

NO >> Repair or replace harness.

DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

DOOR REQUEST SWITCH

Component Function Check

INFOID:0000000012852007

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1. CHECK FUNCTION

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

Monitor item	Condition		Status
REQ SW -DR	Driver side door request switch	Pressed	ON
ILQ 3W -DIX	Driver side door request switch	Released	OFF
REQ SW -AS	Passenger side door request switch	Pressed	ON
NEW OW -MO	r assenger side door request switch	Released	OFF

Is the inspection result normal?

YES >> Front door request switch is OK.

NO >> Refer to <u>DLK-191, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000012852008

Regarding Wiring Diagram information, refer to DLK-77, "Wiring Diagram".

1. CHECK DOOR REQUEST SWITCH INPUT SIGNAL

- 1. Turn ignition switch OFF.
- Disconnect malfunctioning front door request switch connector.
- Check signal between malfunctioning front door request switch harness connector and ground using oscilloscope.

	(+) Front door request switch		(-)	Signal (Reference value)
Coni	nector	Terminal		(Reference value)
Driver side	D15			
Passenger side	D115	1	Ground	(V) 15 10 5 0 10 ms JPMIA0016GB

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK DOOR REQUEST SWITCH CIRCUIT

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

Front door request switch		BCM		Continuity	
Coni	nector	Terminal Connector Terminal		Connector Terminal	
Driver side	D15	1 M19		71	Yes
Passenger side	D115	I	IVIT9	72	165

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DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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

F	ront door request swit	ch		Continuity
Con	nector	Terminal	Ground	Continuity
Driver side	D15	1	Ground	No
Passenger side	D115	· '		INU

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-79</u>, "Removal and Installation".

NO >> Repair or replace harness.

3.check door request switch ground circuit

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

Front door request switch				Continuity	
Coni	Connector Terminal		Ground	Continuity	
Driver side	D15	2	Giouria	Yes	
Passenger side	D115	2		168	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK DOOR REQUEST SWITCH

Refer to DLK-192, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace malfunctioning front door request switch. Refer to <u>DLK-282</u>, "<u>DRIVER SIDE</u>: Removal and Installation" or <u>DLK-282</u>, "<u>PASSENGER SIDE</u>: Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

>> Inspection End.

Component Inspection 1. CHECK DOOR REQUEST SWITCH

INFOID:0000000012852009

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

Front door request switch		Condition		Continuity
Terr	minal	Condition		Continuity
1	2	Door request switch	Pressed	Yes
ı	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-282</u>, "<u>DRIVER SIDE</u>: Removal and Installation" or <u>DLK-282</u>, "<u>PASSENGER SIDE</u>: Removal and Installation".

BACK DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

BACK DOOR REQUEST SWITCH

Component Function Check

INFOID:0000000012852010

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1. CHECK FUNCTION

- 1. Select INTELLIGENT KEY of BCM using CONSULT.
- 2. Select REQ SW-BD/TR in DATA MONITOR mode.
- 3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
REQ SW-BD/TR	Back door request switch	Pressed	On
NEQ OW-DD/TN	REQ 5W-BD/TR Back door request switch	Released	Off

Is the inspection result normal?

YES >> Back door request switch is OK.

NO >> Refer to <u>DLK-193, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000012852011

Regarding Wiring Diagram information, refer to DLK-98, "Wiring Diagram".

1. CHECK BACK DOOR REQUEST SWITCH INPUT SIGNAL

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

(+) Back door opener switch		(-)	Voltage (Approx.)
Connector Terminal			(, , , , , , , , , , , , , , , , , , ,
D559	4	Ground	12 V

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.check back door request switch circuit

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

В	BCM Back door opener switch		Back door opener switch	
Connector	Terminal	Connector Terminal		Continuity
M20	83	D559	4	Yes

Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector Terminal		Ground	Continuity
M20	83		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> Repair or replace harness.

3.check back door request switch ground circuit

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

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BACK DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Back door opener switch			Continuity
Connector	Connector Terminal		Continuity
D559	3		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK BACK DOOR REQUEST SWITCH

Refer to DLK-194, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace back door opener switch. Refer to <u>DLK-282, "BACK DOOR: Removal and Installation"</u>.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000012852012

1. CHECK BACK DOOR REQUEST SWITCH

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

Back door opener switch assembly		Condition		Continuity
Terminal				
3 4		Back door request switch	Pressed	Yes
	4	Dack Gool Tequest Switch	Released	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door opener switch assembly. Refer to <u>DLK-282, "BACK DOOR : Removal and</u> Installation".

Revision: April 2016 **DLK-194** 2016 QX60

BACK DOOR OPENER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

BACK DOOR OPENER SWITCH

Component Function Check

INFOID:0000000012852013

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1. CHECK FUNCTION

- 1. Select TRUNK of BCM using CONSULT.
- 2. Select TR/BD OPEN SW in DATA MONITOR mode.
- 3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
TR/BD OPEN SW	Back door opener switch	Pressed	ON
TIVED OF LIN OW	back door opener switch	Released	OFF

Is the inspection result normal?

YES >> Back door opener switch is OK.

NO >> Refer to <u>DLK-195</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000012852014

Regarding Wiring Diagram information, refer to DLK-98, "Wiring Diagram".

1. CHECK BACK DOOR OPEN INPUT SIGNAL

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

(+)			Voltage (Approx.)	
Back door opener switch		(–)		
Connector	Terminal		, , ,	
D559	1	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK BACK DOOR OPENER SWITCH CIRCUIT

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

В	ВСМ		Back door opener switch	
Connector	Terminal	Connector Terminal		Continuity
M19	80	D559	1	Yes

3. Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector Terminal		Ground	Continuity
M19	80		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> Repair or replace harness.

3.check back door opener switch ground circuit

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

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BACK DOOR OPENER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Back door opener switch			Continuity
Connector	Connector Terminal		Continuity
D559	2		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK BACK DOOR OPENER SWITCH

Refer to DLK-196, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace back door opener switch. Refer to <u>DLK-282, "BACK DOOR: Removal and Installation".</u>

5. CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000012852015

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	Back door opener switch assembly		Condition		
Terr	minal	Condition		Continuity	
1	2	Back door opener	Pressed	Yes	
ı	2	switch	Released	No	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door opener switch. Refer to <u>DLK-282, "BACK DOOR: Removal and Installation"</u>.

Revision: April 2016 **DLK-196** 2016 QX60

INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

INTELLIGENT KEY WARNING BUZZER

Component Function Check

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Intelligent Key warning buzzer is OK.

>> Refer to DLK-197, "Diagnosis Procedure". NO

Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-77, "Wiring Diagram".

1.CHECK FUSE

- Turn ignition switch OFF.
- Check 10 A fuse [No. 25, located in fuse block (J/B)].

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

2.CHECK INTELLIGENT KEY WARNING BUZZER POWER SUPPLY CIRCUIT

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

(+)			Voltage (Approx.)	
Intelligent Key warning buzzer		(–)		
Connector	Terminal		(); - /	
E1	1	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.check intelligent key warning buzzer circuit

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

В	BCM Intelligent Key warning buzzer		Intelligent Key warning buzzer	
Connector	Terminal	Connector Terminal		Continuity
M19	64	E1	3	Yes

Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector Terminal		Ground	Continuity
M19	64		No

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK INTELLIGENT KEY WARNING BUZZER

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INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

Refer to DLK-198, "Component Inspection".

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> Replace Intelligent Key warning buzzer. Refer to DLK-285, "Removal and Installation".

Component Inspection

INFOID:0000000012852018

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace Intelligent Key warning buzzer. Refer to <u>DLK-285</u>, "Removal and Installation".

INTELLIGENT KEY

< DTC/CIRCUIT DIAGNOSIS >

INTELLIGENT KEY

Component Function Check

INFOID:0000000012852019

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NOTE:

The Signal Tech II Tool [– (J-50190)] can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- · Check Intelligent Key relative signal strength.
- Confirm vehicle Intelligent Key antenna signal strength.

1. CHECK FUNCTION

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- Select "RKE OPE COUN1" in "DATA MONITOR" mode.
- 3. Check that the function operates normally according to the following conditions.

Monitor item	Condition
RKE OPE COUN1	Check that the numerical value is changing while operating on the Intelligent Key.

Is the inspection result normal?

YES >> Intelligent Key is OK.

NO >> Refer to <u>DLK-199</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000012852020

NOTE:

The Signal Tech II Tool [– (J-50190)] can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- · Check Intelligent Key relative signal strength.
- Confirm vehicle Intelligent Key antenna signal strength.

1.CHECK INTELLIGENT KEY BATTERY

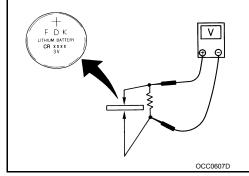
Check by connecting a resistance (approximately 300Ω) so that the current value becomes about 10 mA. Refer to <u>DLK-288</u>, "Removal and Installation".

Standard: Approx. 2.5 - 3.0V

Is the measurement value within the specification?

YES >> Replace Intelligent Key.

NO >> Replace Intelligent Key battery.



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Revision: April 2016 **DLK-199** 2016 QX60

METER BUZZER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

METER BUZZER CIRCUIT

Description INFOID:000000012852021

- The buzzer for the warning chime system is installed in the combination meter.
- The combination meter sounds the buzzer based on the signals transmitted from various units.

Component Function Check

INFOID:0000000012852022

1. CHECK OPERATION OF METER BUZZER

- 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-200</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000012852023

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-94, "Removal and Installation".

NO >> Replace BCM. Refer to BCS-79, "Removal and Installation".

KEY WARNING LAMP

< DTC/CIRCUIT DIAGNOSIS >

KEY WARNING LAMP Α Component Function Check INFOID:0000000012852024 1. CHECK FUNCTION В Select "INTELLIGENT KEY" of "BCM" using CONSULT. 2. Select "INDICATOR" in "ACTIVE TEST" mode. Touch "KEY IND" or "KEY ON" to check that it works normally. Is the inspection result normal? YES >> Key warning lamp is OK. NO >> Refer to <u>DLK-201, "Diagnosis Procedure"</u>. D Diagnosis Procedure INFOID:0000000012852025 Е 1. CHECK KEY WARNING LAMP Refer to MWI-17, "CONSULT Function (METER/M&A)". Is the inspection result normal? F YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2. CHECK INTERMITTENT INCIDENT Refer to GI-50, "Intermittent Incident". Н >> Inspection End.

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HAZARD FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

HAZARD FUNCTION

Component Function Check

INFOID:0000000012852026

1. CHECK FUNCTION

- 1. Select "INTELLIGENT KEY" of "BCM" using CONSULT.
- 2. Select "FLASHER" in "ACTIVE TEST" mode.
- 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-202</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000012852027

1. CHECK HAZARD SWITCH CIRCUIT

Refer to EXL-132, "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-50, "Intermittent Incident".

>> Inspection End.

AUTOMATIC BACK DOOR CLOSE SWITCH

< DTC/CIRCUIT DIAGNOSIS >

AUTOMATIC BACK DOOR CLOSE SWITCH

Component Function Check

INFOID:0000000012852028

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1. CHECK FUNCTION

- Select "AUTOMATIC BACK DOOR CONTROL MODULE" using CONSULT.
- Select "BK DOOR CL SW" in "DATA MONITOR" mode.
- Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
BK DOOR CL SW	Automatic back door close switch	Pressed	ON
BR BOOK CE SW	Automatic back door close switch	Released	OFF

Is the inspection result normal?

YES >> Automatic back door close switch is OK.

NO >> Refer to <u>DLK-203</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000012852029

Regarding Wiring Diagram information, refer to <u>DLK-98</u>, "Wiring Diagram".

1. CHECK AUTOMATIC BACK DOOR CLOSE SWITCH INPUT SIGNAL

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

	(+) Automatic back door close switch		Voltage (Approx.)
Connector	Terminal		(Арргох.)
D560	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH CIRCUIT

- Disconnect automatic back door control module connector.
- Check continuity between automatic back door control module harness connector and automatic back door close switch harness connector.

Automatic back d	oor control module	Automatic back door close switch		Continuity
Connector	Terminal	Connector Terminal		Continuity
B55	23	D560	1	Yes

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

Automatic back door control module			Continuity
Connector Terminal		Ground	Continuity
B55	23		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-289</u>, "Removal and Installation".

NO >> Repair or replace harness.

3.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH GROUND CIRCUIT

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AUTOMATIC BACK DOOR CLOSE SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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

Automatic back door close switch			Continuity
Connector	Connector Terminal		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-204, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace automatic back door close switch. Refer to <u>DLK-292</u>, "Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000012852030

1. CHECK AUTOMATIC BACK DOOR CLOSE SWITCH

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

Automatic back door close switch		Condition		Continuity
Terminal				
1	2	Automatic back door	Pressed	Yes
'	2	close switch	Released	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace automatic back door close switch. Refer to <u>DLK-292, "Removal and Installation"</u>.

Revision: April 2016 **DLK-204** 2016 QX60

AUTOMATIC BACK DOOR MAIN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

AUTOMATIC BACK DOOR MAIN SWITCH

Component Function Check

INFOID:0000000012852031

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1.CHECK FUNCTION

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

Monitor item	Condition		Status	
MAIN SW	Automatic back door main switch	ON	ON	
WAIN OW	Automatic back door main switch	OFF	OFF	

Is the inspection result normal?

YES >> Automatic back door main switch is OK.

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

Diagnosis Procedure

INFOID:0000000012852032

Regarding Wiring Diagram information, refer to <u>DLK-98</u>, "Wiring <u>Diagram"</u>.

1. CHECK AUTOMATIC BACK DOOR MAIN SWITCH INPUT SIGNAL

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

(+)			
Automatic back door main switch		(–)	Voltage (Approx.)
Connector	Terminal		(, , , , , , , , , , , , , , , , , , ,
M185	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR MAIN SWITCH CIRCUIT

- Disconnect automatic back door control module connector.
- Check continuity between automatic back door control module harness connector and automatic back door main switch harness connector.

Automatic back d	oor control module Automatic back door main switch Continuity		Automatic back door main switch	
Connector	Terminal	Connector	Terminal	Continuity
B55	10	M185	1	Yes

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

Automatic back d	oor control module		Continuity
Connector	Terminal	Ground	Continuity
B55	10		No

Is the inspection result normal?

>> Replace automatic back door control module. Refer to DLK-289, "Removal and Installation". YES

NO >> Repair or replace harness.

3.CHECK AUTOMATIC BACK DOOR MAIN SWITCH GROUND CIRCUIT

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AUTOMATIC BACK DOOR MAIN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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

Automatic back door 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-206, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace automatic back door main switch. Refer to <u>DLK-290, "Removal and Installation"</u>.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000012852033

1. CHECK AUTOMATIC BACK DOOR MAIN SWITCH

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

Automatic back door main switch		Condition		Continuity
Terminal				Continuity
1	3	Automatic back door	ON	Yes
	3	main switch	OFF	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace automatic back door main switch. Refer to <u>DLK-290, "Removal and Installation"</u>.

AUTOMATIC BACK DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

AUTOMATIC BACK DOOR SWITCH

Component Function Check

INFOID:0000000012852034

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1. CHECK FUNCTION

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

Monitor item	Condition		Status
AUTO BD SW	Automatic back door switch	Pressed	ON
AOTO BD GW	Automatic back door switch	Released	OFF

Is the inspection result normal?

YES >> Automatic back door switch is OK.

NO >> Refer to <u>DLK-207</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000012852035

Regarding Wiring Diagram information, refer to <u>DLK-98</u>, "Wiring <u>Diagram"</u>.

1. CHECK AUTOMATIC BACK DOOR SWITCH INPUT SIGNAL

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

(+)			
Automatic back d	Automatic back door switch		Voltage (Approx.)
Connector	Terminal		(#)
M186	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR SWITCH CIRCUIT

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

Automatic back d	oor control module	Automatic back door switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B55	22	M186	1	Yes

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

Automatic back door control module			Continuity
Connector	Terminal	Ground	Continuity
B55	22		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-289</u>, "Removal and Installation".

NO >> Repair or replace harness.

3.CHECK AUTOMATIC BACK DOOR SWITCH GROUND CIRCUIT

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AUTOMATIC BACK DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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

Automatic back d	loor 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-208, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace automatic back door switch. Refer to <u>DLK-291, "Removal and Installation"</u>.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000012852036

1. CHECK AUTOMATIC BACK DOOR SWITCH

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

Automatic back door switch		Condition		Continuity
Terr	minal	Condition		Continuity
1	2	Automatic back door switch	Pressed	Yes
ı	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-291, "Removal and Installation"</u>.

Revision: April 2016 **DLK-208** 2016 QX60

HALF LATCH SWITCH

< DTC/CIRCUIT DIAGNOSIS >

HALF LATCH SWITCH

Component Function Check

INFOID:0000000012852037

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1. CHECK FUNCTION

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

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

Is the inspection result normal?

YES >> Half latch switch is OK.

NO >> Refer to <u>DLK-209</u>, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012852038

Regarding Wiring Diagram information, refer to DLK-98, "Wiring Diagram".

1. CHECK HALF LATCH SWITCH INPUT SIGNAL

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

Back door loo	(–) Back door lock assembly		Voltage (Approx.)
Connector	Terminal	. ,	(дрргох.)
D557	6	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK HALF LATCH SWITCH CIRCUIT

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

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

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

Automatic back d	oor control module		Continuity
Connector	Terminal	Ground	Continuity
B55	3		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-289</u>, "Removal and Installation".

NO >> Repair or replace harness.

3.CHECK HALF LATCH SWITCH GROUND CIRCUIT

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HALF LATCH SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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 4.

NO >> Repair or replace harness.

4. CHECK HALF LATCH SWITCH

Refer to DLK-210, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace back door lock assembly. Refer to <u>DLK-276, "DOOR LOCK: Removal and Installation"</u>.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000012852039

COMPONENT INSPECTION

1. CHECK HALF LATCH SWITCH

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

Back door lock assembly		Condition		Continuity
Terminal				Continuity
6	0	8 Back door		Yes
O	0	Back door	Fully closed/Open	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door lock assembly. Refer to <u>DLK-276, "DOOR LOCK: Removal and Installation"</u>.

Revision: April 2016 **DLK-210** 2016 QX60

< DTC/CIRCUIT DIAGNOSIS >

TOUCH SENSOR

RH

INFOID:0000000012852040

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RH: Component Function Check

1. CHECK FUNCTION

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

Monitor item	Condition		Status
TOUCH SEN RH Touch sensor RH	Touch sensor RH	Other than below	OFF
1000H SENTH	TOUCH SEN RH TOUCH SENSOR RH	Detect obstruction	ON

Is the inspection result normal?

YES >> Touch sensor RH is OK.

NO >> Refer to DLK-211, "RH: Diagnosis Procedure".

RH: Diagnosis Procedure

INFOID:0000000012852041

Regarding Wiring Diagram information, refer to <u>DLK-98</u>, "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		_
Touch s	ensor RH		door control mod- lle			Voltage (Approx.)
Connector	Terminal	Connector	Terminal			
D555	1	B55	13	Touch sensor Detect obstruction		1.8 – 5 V
D333	'	555	13	RH	Other than above	2.72 – 7.27 V

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK TOUCH SENSOR RH CIRCUIT

- 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	ensor RH	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B55	1	D555	1	Yes

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

Automatic back door 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-289</u>, "Removal and Installation".

NO >> Repair or replace harness.

3.CHECK TOUCH SENSOR RH GROND CIRCUIT 1

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

Automatic back door control module		Touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B55	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.
- Check voltage between automatic back door control module harness connector and ground.

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

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5.CHECK TOUCH SENSOR RH

Refer to DLK-212, "RH: Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace touch sensor RH. Refer to <u>DLK-277</u>, "TOUCH SENSOR: Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

>> Inspection End.

RH: Component Inspection

INFOID:0000000012852042

1. CHECK TOUCH SENSOR RH

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

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Touch se	ensor RH	Condition		Resistance
Terr	minal			(Approx.)
1	2	Touch sensor RH	Detect obstruction	380 – 420 kΩ
'	2	TOUCH SCHSOF INT	Other than above	0.95 – 1.05 kΩ

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace touch sensor RH. Refer to <u>DLK-277</u>, "TOUCH SENSOR: Removal and Installation".

LH

LH: Component Function Check

1. CHECK FUNCTION

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

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

Is the inspection result normal?

YES >> Touch sensor LH is OK.

NO >> Refer to <u>DLK-213, "LH : Diagnosis Procedure"</u>.

LH : Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>DLK-98</u>, "Wiring <u>Diagram"</u>.

1. CHECK TOUCH SENSOR INPUT SIGNAL

Turn ignition switch OFF.

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

(+)	(-	-)			
Touch s	ensor LH		door control mod- le	Condition		Voltage (Approx.)
Connector	Terminal	Connector	Terminal			
D556	1	B55	13	Touch sensor	Detect obstruc- tion	1.8 – 5 V
2330	'	555	13	LH	Other than above	2.72 – 7.27 V

Is the inspection result normal?

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

2.check touch sensor LH circuit

- 1. Disconnect automatic back door control module and touch sensor LH connector.
- 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	Automatic back door control module		Touch sensor LH	
Connector	Terminal	Connector	Terminal	Continuity
B55	2	D556	1	Yes

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-289, "Removal and Installation".

NO >> Repair or replace harness.

3.CHECK TOUCH SENSOR LH GROND CIRCUIT 1

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

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

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

Automatic back do	or control module		Continuity
Connector	Connector Terminal		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

- 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 of	(+) door control module	(-)	Voltage (Approx.)
Connector Terminal			(Арргох.)
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-215, "LH: Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace touch sensor LH. Refer to <u>DLK-277</u>, "TOUCH SENSOR: Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

>> Inspection End.

< DTC/CIRCUIT DIAGNOSIS >

LH: Component Inspection

INFOID:0000000012852045

1. CHECK TOUCH SENSOR LH

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

Touch sensor LH Terminal		Condition		Resistance	
		Col	idition	(Approx.)	
1	2	Touch sensor LH	Detect obstruction	380 – 420 kΩ	
ı	2	TOUCH SENSOI LIT	Other than above	0.95 – 1.05 kΩ	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace touch sensor LH. Refer to <u>DLK-277</u>, "TOUCH SENSOR: Removal and Installation".

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< DTC/CIRCUIT DIAGNOSIS >

SPINDLE MOTOR

RH

RH: Diagnosis Procedure

INFOID:0000000012852046

Regarding Wiring Diagram information, refer to <u>DLK-98</u>, "Wiring Diagram".

1. CHECK SPINDLE MOTOR INPUT SIGNAL

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

	(+) Spindle unit RH (–) Condition				Voltage (Approx.)
Connector	Terminal				(, , , , , , , , , , , , , , , , , , ,
B162	9	Cround	Back door	Auto open opera- tion	Pattory voltage
D102	2	Ground	Dack GOO!	Auto close opera- tion	Battery voltage

Is the inspection result normal?

YES >> Replace spindle unit RH. Refer to <u>DLK-264, "SPINDLE UNIT: Removal and Installation"</u>.

NO >> GO TO 2.

2. CHECK SPINDLE MOTOR CIRCUIT

- 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 d	Automatic back door control module		Spindle unit RH		
Connector	Terminal	Connector	Terminal	Continuity	
B56	29		9	Yes	
□30	36	B162	2	168	

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

Automatic back door control module			Continuity	
Connector Terminal		Cround	Continuity	
B56	29	Ground	No	
	36	-	INU	

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-289, "Removal and Installation"</u>.

NO >> Repair or replace harness.

LH

LH: Diagnosis Procedure

INFOID:0000000012852047

Regarding Wiring Diagram information, refer to <u>DLK-98</u>, "Wiring Diagram".

1. CHECK SPINDLE MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.

SPINDLE MOTOR

< DTC/CIRCUIT DIAGNOSIS >

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

	(+) Spindle unit LH		(–) Condition		Voltage (Approx.)	
Connector	Terminal				(
B70	9	Ground	Back door	Auto open opera- tion	Battery voltage	
670	2	Ground	Back door	Auto close opera- tion	Dattery Voltage	

Is the inspection result normal?

YES >> Replace spindle unit LH. Refer to <u>DLK-264, "SPINDLE UNIT: Removal and Installation"</u>.

NO >> GO TO 2.

2. CHECK SPINDLE MOTOR CIRCUIT

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

Automatic back d	oor control module	Spindle unit LH		Continuity
Connector	Terminal	Connector Terminal		Continuity
B56	27	B70	9	Yes
В30	34	D/U	2	165

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

Automatic back d	oor control module		Continuity
Connector	Terminal	Ground	Continuity
B56	27	Giodila	No
В30	34		NO

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-289</u>, "Removal and Installation".

NO >> Repair or replace harness.

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BACK DOOR CLOSURE MOTOR

< DTC/CIRCUIT DIAGNOSIS >

BACK DOOR CLOSURE MOTOR

Diagnosis Procedure

INFOID:0000000012852048

Regarding Wiring Diagram information, refer to DLK-98. "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		(–) Condi		Voltage (Approx.)	
Connector	Terminal				(
	1	1			Open operation	Battery voltage
D557		Ground	Back door	Other than above	0 V	
D557	2	Ground	Ground Back door	Close operation	Battery voltage	
	2			Other than above	0 V	

Is the inspection result normal?

YES >> Replace back door lock assembly. Refer to <u>DLK-276, "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.
- Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

Automatic back door control module		Back door lock assembly		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
B56	31	D557	1	Yes	
Б30	38	D337	2	165	

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

Automatic back doo	r control module		Continuity	
Connector	Terminal	Ground	Continuity	
B56	31		No	
000	38		INO	

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-289, "Removal and Installation"</u>.

NO >> Repair or replace harness.

AUTOMATIC BACK DOOR WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

AUTOMATIC BACK DOOR WARNING BUZZER

Diagnosis Procedure

INFOID:0000000012852049

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Regarding Wiring Diagram information, refer to DLK-98, "Wiring Diagram".

1. CHECK BACK DOOR WARNING CHIME POWER SUPPLY CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect back door warning chime connector.
- 3. Check voltage between back door warning chime harness connector and ground.

(+) Back door warning chime		(–)	Voltage (Approx.)	
Connector	Connector Terminal		(*)	
B402	1	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK BACK DOOR WARNING CHIME OUTPUT SIGNAL CIRCUIT

- 1. Disconnect automatic back door control module connector.
- Check continuity between automatic back door control module harness connector and back door warning chime harness connector.

Automatic back d	oor control module	Back door warning chime		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B56	37	B402	1	Yes

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

Automatic back doo	or control module		Continuity
Connector Terminal		Ground	Continuity
B56	37		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-289, "Removal and Installation"</u>.

NO >> Repair or replace harness.

3.CHECK BACK DOOR WARNING CHIME GROUND CIRCUIT

Check continuity between back door warning chime harness connector and ground.

Back door wa	rning chime		Continuity
Connector	Terminal	Ground	Continuity
B402	2		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK BACK DOOR WARNING CHIME

Refer to DLK-220, "Component Inspection".

<u>Is the inspection result normal?</u>

YES >> GO TO 5.

NO >> Replace back door warning chime. Refer to <u>DLK-286</u>, "Removal and Installation".

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AUTOMATIC BACK DOOR WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

5.CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000012852050

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 w	arning chime		
Terminal		Operation	
(+)	(-)		
1	2	Chime sounds	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace back door warning chime. Refer to <u>DLK-286, "Removal and Installation"</u>.

GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000012852051

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Regarding Wiring Diagram information, refer to DLK-98, "Wiring Diagram".

1. CHECK GROUND CIRCUIT

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

Automatic back d	oor control module		Continuity	
Connector Terminal			Continuity	
B56	32	Ground		
B30	28		Yes	
B55	4 (Except For Mexico)			

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to <u>DLK-289</u>, "Removal and Installation".

NO >> Repair or replace harness.

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< DTC/CIRCUIT DIAGNOSIS >

HOOD SWITCH

Component Function Check

INFOID:0000000012852052

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
HOOD SW	11000	Close	OFF

Is the indication normal?

YES >> Hood switch is OK.

NO >> Go to DLK-222, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012852053

Regarding Wiring Diagram information, refer to DLK-77, "Wiring Diagram".

1. CHECK HOOD SWITCH SIGNAL CIRCUITS

- Turn ignition switch OFF.
- 2. Disconnect hood switch connector.
- 3. Check voltage between hood switch harness connector and ground.

(+)		Voltago (V)	
Hood switch		(–)	Voltage (V) (Approx.)	
Connector	Terminal		, , ,	
E205	1 Gr		12	
L203	2	Ground	12	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK HOOD SWITCH SIGNAL CIRCUITS

- 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 Connector Terminal		Continuity
Connector	Terminal			Continuity
E218	E218 94 E205		1	Yes
L210			2	165

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

IPDM E/R			Continuity
Connector	Terminal	Ground	Continuity
E218	94	Giouna	No
E210	96		INO

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-31, "Removal and Installation".

NO >> Repair or replace harness.

HOOD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

3. CHECK HOOD SWITCH GROUND CIRCUIT

Check continuity between hood switch harness connector and ground.

Hood switch			Continuity
Connector	Terminal	Ground	Continuity
E205	3		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK HOOD SWITCH

Refer to DLK-223, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace hood switch. Refer to <u>DLK-266</u>, "HOOD LOCK : Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

>> Inspection End.

Component Inspection

1. CHECK HOOD SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect hood switch connector.
- 3. Check continuity between hood switch terminals.

Hood switch		Condition		Continuity
Terr	minal	Condition		Continuity
1	2		Press	Yes
ı	3	Hood switch	Release	No
2	2	3	Press	No
2	3		Release	Yes

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace hood switch. Refer to DLK-266, "HOOD LOCK: Removal and Installation".

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Revision: April 2016 **DLK-223** 2016 QX60

INTEGRATED HOMELINK TRANSMITTER

< DTC/CIRCUIT DIAGNOSIS >

INTEGRATED HOMELINK TRANSMITTER

Component Function Check

INFOID:0000000012852055

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

- 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-224, "Diagnosis Procedure"</u>.

3. CHECK TRANSMITTER

Check transmitter with Tool*.

*: For details, refer to Technical Service Bulletin.

Is the inspection result normal?

YES >> Receiver or hand-held transmitter malfunction, not vehicle related.

NO >> Replace auto anti-dazzling inside mirror (homelink® universal transceiver). Refer to MIR-33. "Removal and Installation".

Diagnosis Procedure

INFOID:0000000012852056

Regarding Wiring Diagram information, refer to <u>DLK-110</u>, "Wiring <u>Diagram"</u>.

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 transceiver) connector	Terminal		Condition	Voltage (V) (Approx.)	
	10		Ignition switch position: OFF	Battery voltage	
R10	10	Ground	Ignition switch position: ON	Battery voltage	
	6	Glodila	Ignition switch position: OFF	0	
	U		Ignition switch position: ON	Battery 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).

Revision: April 2016 **DLK-224** 2016 QX60

INTEGRATED HOMELINK TRANSMITTER

< DTC/CIRCUIT DIAGNOSIS >

2.CHECK GROUND CIRCUIT

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

Auto anti-dazzling inside mirror (Homelink [®] universal transceiver) connector	Terminal	Ground	Continuity
R10	8		Yes

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-50, "Intermittent Incident".

>> Inspection End.

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INTELLIGENT KEY SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

INTELLIGENT KEY SYSTEM SYMPTOMS

Diagnosis Procedure

INFOID:0000000013542010

NOTE:

Perform the self-diagnosis with CONSULT before the symptom diagnosis. Perform the trouble diagnosis if any DTC is detected.

SYMPTOM TABLE 1 (BOTH INTELLIGENT KEYS HAVE THE SAME SYMPTOMS)

No.	Door lock operation (remote keyless en- try)	Door lock operation (request switch) or back door open oper- ation (opener switch of back door panel)	Engine started with push-button ignition switch operation (registered Intelligent Key is within the detection area of inside key antenna)	Engine started with push-button ignition switch operation (reg- istered Intelligent Key placed next to push- button ignition switch)	Symptom
1	OK	OK	No start	No start	SEC-142
2	OK	NG	OK	OK	DLK-227
3	OK	NG	No crank, No start	OK	DLK-229
4	NG	NG	No crank, No start	OK	DLK-231
5	NG	NG	No start	No start	DLK-232
6	OK	OK	No crank, No start	OK	<u>SEC-143</u>
7	NG	OK	OK	OK	DLK-234
8	NG	NG	OK	OK	DLK-235
9	Poor range	OK	OK	OK	DLK-236

SYMPTOM TABLE 2 (ONE INTELLIGENT KEY HAS THE SYMPTOM, OTHER KEYS OPERATE NORMALLY)

No.	Door lock operation (remote keyless en- try)	Door lock operation (request switch) or back door open oper- ation (opener switch of back door panel)	Engine started with push-button ignition switch operation (Intelligent Key is within the detection area of inside key antenna)	Engine started with push-button ignition switch operation (reg- istered Intelligent Key placed next to push- button ignition switch)	Symptom
1	NG	OK	OK	OK	DLK-238
2	NG	NG	No crank, No start	OK	DLK-239
3	NG	NG	No crank, No start	No crank, No start	DLK-241
4	OK	OK	No crank, No start	No crank, No start	<u>SEC-145</u>
5	OK	NG	No crank, No start	OK	SEC-146
6	Poor range	OK	OK	OK	DLK-243

ALL DOORS DO NOT LOCK/UNLOCK OR TRUNK/BACK DOOR DO NOT OPEN WITH REQUEST SWITCH

< SYMPTOM DIAGNOSIS >

ALL DOORS DO NOT LOCK/UNLOCK OR TRUNK/BACK DOOR DO NOT **OPEN WITH REQUEST SWITCH**

Description INFOID:0000000013542011

All doors do not lock/unlock using front door request switch or back door does not open using back door opener request switch.

NOTE:

Before starting diagnosis check that vehicle condition is as shown in "Conditions of vehicle", and check each symptom.

SYMPTOM TABLE (BOTH INTELLIGENT KEYS HAVE THE SAME SYMPTOMS)

Door lock operation (remote keyless entry)	Door lock operation (request switch) or back door open op- eration (opener switch of back door panel)	Engine started with push-but- ton ignition switch operation (registered Intelligent Key is within the detection area of in- side key antenna)	Engine started with push-but- ton ignition switch operation (registered Intelligent Key placed next to push-button ig- nition switch)
OK	NG	OK	OK

CONDITIONS OF VEHICLE (OPERATING CONDITIONS)

- "LOCK/UNLOCK BY I-KEY" setting in "Work support" mode of "INTELLIGENT KEY" of "BCM" is ON.
- Registered Intelligent Key is within the detection area of outside key antenna.

DIAGNOSIS PROCEDURE

Refer to DLK-227, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK INTELLIGENT KEY SYSTEM SYMPTOM TABLE

Check Intelligent Key system symptom table. Refer to DLK-226, "Diagnosis Procedure".

>> GO TO 2.

2.PERFORM SELF-DIAGNOSIS RESULT

Select "Self Diagnostic Result" mode of "BCM", and check if DTC is detected.

Is DTC detected?

YES >> Perform the trouble diagnosis for detected DTC.

NO >> GO TO 3.

3.CHECK OUTSIDE KEY ANTENNA

Use SIGNAL TECH II to check each outside key antenna. For the inspection method and how to use SIGNAL TECH II, refer to "NISSAN/INFINITI SIGNAL TECH II USER GUIDE".

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 5.

4. CHECK INTELLIGENT KEY OUTPUT SIGNAL

Use SIGNAL TECH II to check Intelligent Key outside signal. For the inspection method and how to use SIG-NAL TECH II, refer to "NISSAN/INFINITI SIGNAL TECH II USER GUIDE".

Is the inspection result normal?

YES >> GO TO 6.

NO

>> Replace the malfunctioning outside key antenna. Refer to DLK-284, "DRIVER SIDE: Removal and Installation" (Drive side), DLK-284, "PASSENGER SIDE: Removal and Installation" (Passenger side) and DLK-284, "REAR BUMPER: Removal and Installation" (Rear bumper).

${f 5.}$ CHECK DOOR REQUEST SWTICH

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2016 QX60

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DLK-227

ALL DOORS DO NOT LOCK/UNLOCK OR TRUNK/BACK DOOR DO NOT OPEN WITH REQUEST SWITCH

< SYMPTOM DIAGNOSIS >

Check each door request switch.

• Front door: Refer to DLK-191, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts. Refer to <u>DLK-270, "OUTSIDE HANDLE : Removal and Installation"</u>.

6.REPLACE BCM

- 1. Replace BCM. Refer to BCS-79, "Removal and Installation".
- 2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-50, "Intermittent Incident".

Revision: April 2016 **DLK-228** 2016 QX60

DOOR DOES NOT LOCK/UNLOCK AND ENGINE DOES NOT START (REQ SW/PUSH SW) (ALL KEYS)

< SYMPTOM DIAGNOSIS >

DOOR DOES NOT LOCK/UNLOCK AND ENGINE DOES NOT START (REQ SW/PUSH SW) (ALL KEYS)

Description INFOID.000000013542013

All doors do not lock/unlock using door request switch or back door does not open using back door opener request switch, and engine does not start when push-button ignition switch is pressed while carrying Intelligent Key.

NOTE:

Before starting diagnosis check that vehicle condition is as shown in "Conditions of vehicle", and check each symptom.

SYMPTOM TABLE (BOTH INTELLIGENT KEYS HAVE THE SAME SYMPTOMS)

Door lock operation (remote keyless entry)	Door lock operation (request switch) or back door open op- eration (opener switch of back door panel)	Engine started with push-but- ton ignition switch operation (registered Intelligent Key is within the detection area of in- side key antenna)	Engine started with push-but- ton ignition switch operation (registered Intelligent Key placed next to push-button ig- nition switch)
OK	NG	No crank, No start	ОК

CONDITIONS OF VEHICLE (OPERATING CONDITIONS)

- "LOCK/UNLOCK BY I-KEY" setting in "Work support" mode of "INTELLIGENT KEY" of "BCM" is ON.
- "ENGINE START BY I-KEY" setting in "Work support" mode of "INTELLIGENT KEY" of "BCM" is ON.

DIAGNOSIS PROCEDURE

Refer to DLK-229, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK INTELLIGENT KEY SYSTEM SYMPTOM TABLE

Check Intelligent Key system symptom table.

Refer to DLK-226, "Diagnosis Procedure".

>> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA AND INSIDE KEY ANTENNA

Use SIGNAL TECH II to check each outside key antenna and inside key antenna. For the inspection method and how to use SIGNAL TECH II, refer to "NISSAN/INFINITI SIGNAL TECH II USER GUIDE".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.register intelligent key

- 1. Register the Intelligent Key again.
- 2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> GO TO 4.

4. REPLACE INTELLIGENT KEY

- 1. Replace the Intelligent Key and perform registration again.
- 2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

Revision: April 2016

NO >> GO TO 5.

5.REPLACE BCM

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DOOR DOES NOT LOCK/UNLOCK AND ENGINE DOES NOT START (REQ SW/PUSH SW) (ALL KEYS)

< SYMPTOM DIAGNOSIS >

- 1. Replace BCM. Refer to BCS-79, "Removal and Installation".
- 2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-50, "Intermittent Incident".

Revision: April 2016 **DLK-230** 2016 QX60

DOOR DOES NOT LOCK/UNLOCK AND ENGINE DOES NOT START (ALL I-**KEY/REQ SW/PUSH SW)**

< SYMPTOM DIAGNOSIS >

DOOR DOES NOT LOCK/UNLOCK AND ENGINE DOES NOT START (ALL I-KEY/REQ SW/PUSH SW)

Description INFOID:0000000013542015

All doors do not lock/unlock using door request switch or back door does not open using back door opener request switch, Intelligent Key, and engine does not start when push-button ignition switch is pressed while carrying Intelligent Key.

SYMPTOM TABLE (BOTH INTELLIGENT KEYS HAVE THE SAME SYMPTOMS)

Door lock operation (remote keyless entry)	Door lock operation (request switch) or back door open op- eration (opener switch of back door panel)	Engine started with push-but- ton ignition switch operation (registered Intelligent Key is within the detection area of in- side key antenna)	Engine started with push-but- ton ignition switch operation (registered Intelligent Key placed next to push-button ig- nition switch)
NG	NG	No crank, No start	OK

CONDITIONS OF VEHICLE (OPERATING CONDITIONS)

"ENGINE START BY I-KEY" setting in "Work support" mode of "INTELLIGENT KEY" of "BCM" is ON.

DIAGNOSIS PROCEDURE

Refer to <u>DLK-231</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

1. CHECK INTELLIGENT KEY SYSTEM SYMPTOM TABLE

Check Intelligent Key system symptom table.

Refer to DLK-226, "Diagnosis Procedure".

>> GO TO 2.

${f 2}$.PERFORM SELF-DIAGNOSIS RESULT

Select "Self Diagnostic Result" mode of "BCM", and check if DTC "B26FF" is detected.

Is DTC "B26FF" detected?

YES >> Perform the trouble diagnosis for detected DTC.

NO >> GO TO 3.

3.CHECK INTELLIGENT KEY BATTERY

Check Intelligent Key battery.

Refer to DLK-199, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

>> Repair or replace the malfunctioning parts. Refer to <u>DLK-288, "Removal and Installation"</u>. NO

4. CHECK REMOTE KEYLESS ENTRY RECEIVER

Check remote keyless entry receiver.

Refer to DLK-189, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts. Refer to <u>DLK-287, "Removal and Installation"</u>.

5.REPLACE BCM

- Replace BCM. Refer to BCS-79, "Removal and Installation".
- Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

>> Check intermittent incident. Refer to GI-50, "Intermittent Incident". NO

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INTELLIGENT KEY SYSTEM ALL FUNCTIONS CANNOT OPERATE (ALL KEYS)

< SYMPTOM DIAGNOSIS >

INTELLIGENT KEY SYSTEM ALL FUNCTIONS CANNOT OPERATE (ALL KEYS)

Description INFOID:000000013542017

Intelligent Key system all functions cannot operate (door lock and engine start).

SYMPTOM TABLE (BOTH INTELLIGENT KEYS HAVE THE SAME SYMPTOMS)

Door lock operation (remote keyless entry)	Door lock operation (request switch) or back door open op- eration (opener switch of back door panel)	Engine started with push-but- ton ignition switch operation (registered Intelligent Key is within the detection area of in- side key antenna)	Engine started with push-but- ton ignition switch operation (registered Intelligent Key placed next to push-button ig- nition switch)
NG	NG	No start	No start

CONDITIONS OF VEHICLE (OPERATING CONDITIONS)

"ENGINE START BY I-KEY" setting in "Work support" mode of "INTELLIGENT KEY" of "BCM" is ON.

DIAGNOSIS PROCEDURE

Refer to DLK-232, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000013542018

1. CHECK INTELLIGENT KEY SYSTEM SYMPTOM TABLE

Check Intelligent Key system symptom table.

Refer to DLK-226, "Diagnosis Procedure".

>> GO TO 2.

2. CHECK INTELLIGENT KEY-1

For both Intelligent Key that cannot be used for door lock and unlock, check that the Intelligent Key belongs to the vehicle to be checked.

- Check if the Intelligent Key that is checked is the Intelligent Key for a different NISSAN/INFINITI vehicle that the user owns.
- Check that the Intelligent Key buttons match the vehicle specifications.

Does the Intelligent Key belong to the vehicle to be checked?

YES >> GO TO 3.

NO >> Check Intelligent Key button operation using a registered Intelligent Key that belongs to the vehicle.

3.CHECK INTELLIGENT KEY-2

Check the inside of the both Intelligent Keys for rust or corrosion by water. Simultaneously check the internal circuits for damage.

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace Intelligent Key.

4. REGISTER INTELLIGENT KEY

- 1. Register the Intelligent Key again.
- 2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> GO TO 5.

5. REPLACE INTELLIGENT KEY

- 1. Replace the Intelligent Key and perform registration again.
- 2. Check operation after replacement.

Revision: April 2016 **DLK-232** 2016 QX60

INTELLIGENT KEY SYSTEM ALL FUNCTIONS CANNOT OPERATE (ALL KEYS)

< SYMPTOM DIAGNOSIS > Is the inspection result normal? Α YES >> Inspection End. NO >> GO TO 6. 6.REPLACE BCM В Replace BCM. Refer to BCS-79, "Removal and Installation". 2. Check the operation after replacement. Is the inspection result normal? С YES >> Inspection End >> Check intermittent incident. Refer to GI-50, "Intermittent Incident". NO D Е F Н J

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DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

< SYMPTOM DIAGNOSIS >

DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

Description INFOID:0000000013542019

All doors do not lock/unlock using Intelligent Key button.

NOTE:

Before starting diagnosis check that vehicle condition is as shown in "Conditions of vehicle", and check each symptom.

SYMPTOM TABLE (BOTH INTELLIGENT KEYS HAVE THE SAME SYMPTOMS)

Door lock operation (remote keyless entry)	Door lock operation (request switch) or back door open op- eration (opener switch of back door panel)	Engine started with push-but- ton ignition switch operation (registered Intelligent Key is within the detection area of in- side key antenna)	Engine started with push-but- ton ignition switch operation (registered Intelligent Key placed next to push-button ig- nition switch)
NG	OK	OK	OK

CONDITIONS OF VEHICLE (OPERATING CONDITIONS)

Registered Intelligent Key is within the detection area of remote keyless entry receiver.

DIAGNOSIS PROCEDURE

Refer to <u>DLK-234</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000013542020

1. CHECK INTELLIGENT KEY SYSTEM SYMPTOM TABLE

Check Intelligent Key system symptom table.

Refer to DLK-226, "Diagnosis Procedure".

>> GO TO 2.

2. CHECK INTELLIGENT KEY OUTPUT SIGNAL

Use SIGNAL TECH II to check Intelligent Key output signal. For the inspection method and how to use SIGNAL TECH II, refer to "NISSAN/INFINITI SIGNAL TECH II USER GUIDE".

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> Replace Intelligent Key.

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH AND IN-**TELLIGENT KEY**

< SYMPTOM DIAGNOSIS >

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH	AND
INTELLIGENT KEY	

Description INFOID:0000000013542021

All doors do not lock/unlock using door request switch or back door does not open using back door opener request switch or Intelligent Key button.

SYMPTOM TABLE (BOTH INTELLIGENT KEYS HAVE THE SAME SYMPTOMS)

Door lock operation (remote keyless entry)	Door lock operation (request switch) or back door open op- eration (opener switch of back door panel)	Engine started with push-but- ton ignition switch operation (registered Intelligent Key is within the detection area of in- side key antenna)	Engine started with push-but- ton ignition switch operation (registered Intelligent Key placed next to push-button ig- nition switch)
NG	NG	OK	OK

DIAGNOSIS PROCEDURE

Refer to DLK-235, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK INTELLIGENT KEY SYSTEM SYMPTOM TABLE

Check Intelligent Key system symptom table. Refer to DLK-226, "Diagnosis Procedure".

>> GO TO 2.

2.CHECK POWER DOOR LOCK OPERATION

Check door lock/unlock using door lock and unlock switch.

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

YES

NO >> Refer to [DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH].

3.REPLACE BCM

- Replace BCM. Refer to BCS-79, "Removal and Installation".
- Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-50, "Intermittent Incident". DLK

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DLK-235 Revision: April 2016 2016 QX60

INTELLIGENT KEY BUTTON OPERATION HAS POOR RANGE (ALL KEYS)

< SYMPTOM DIAGNOSIS >

INTELLIGENT KEY BUTTON OPERATION HAS POOR RANGE (ALL KEYS)

Description INFOID:000000013542023

Intelligent Key button operation has poor range.

SYMPTOM TABLE (BOTH INTELLIGENT KEYS HAVE THE SAME SYMPTOMS)

Door lock operation (remote keyless entry)	Door lock operation (request switch) or back door open op- eration (opener switch of back door panel)	Engine started with push-but- ton ignition switch operation (registered Intelligent Key is within the detection area of in- side key antenna)	Engine started with push-but- ton ignition switch operation (registered Intelligent Key placed next to push-button ig- nition switch)
Poor range	OK	OK	OK

DIAGNOSIS PROCEDURE

Refer to <u>DLK-236</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000013542024

1. CHECK INTELLIGENT KEY SYSTEM SYMPTOM TABLE

Check Intelligent Key system symptom table. Refer to <u>DLK-226</u>, "<u>Diagnosis Procedure</u>".

>> GO TO 2.

2.CHECK INTELLIGENT KEY LOW BATTERY WARNING

Check that the Intelligent Key low battery warning operates.

Is the Intelligent Key low battery warning operated?

YES >> GO TO 3.

NO >> Replace Intelligent Key battery. Refer to <u>DLK-288, "Removal and Installation"</u>.

3.CHECK INTELLIGENT KEY BATTERY

Check the Intelligent Key battery.

Refer to DLK-199, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace Intelligent Key battery. Refer to <u>DLK-288, "Removal and Installation"</u>.

4. PERFORM SELF-DIAGNOSIS RESULT-1

Select "Self Diagnostic Result" mode of "BCM", and check if DTC "B26FF" is detected.

Is DTC "B26FF" detected?

YES >> Perform the trouble diagnosis for detected DTC.

NO >> GO TO 5.

REMOTE AFTERMARKET DEVICE

- 1. If the vehicle is equipped with any interference-generating aftermarket device such as a vehicle security system, charger and remote engine starter etc., remove them.
- Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> GO TO 6.

6. CHECK REMOTE KEYLESS ENTRY RECEIVER

Check remote keyless entry receiver.

Refer to DLK-189, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 7.

Revision: April 2016 **DLK-236** 2016 QX60

INTELLIGENT KEY BUTTON OPERATION HAS POOR RANGE (ALL KEYS)

< SYMPTOM DIAGNOSIS >

NO >> Repair or replace the malfunctioning parts.

7. REPLACE BCM

- 1. Replace BCM. Refer to BCS-79, "Removal and Installation".
- 2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-50, "Intermittent Incident".

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DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY (ONE KEY)

< SYMPTOM DIAGNOSIS >

DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY (ONE KEY)

Description INFOID:000000013542025

All doors do not lock/unlock using Intelligent Key button. (One Intelligent Key has the symptom, other keys operate normally.)

NOTE:

Before starting diagnosis check that vehicle condition is as shown in "Conditions of vehicle", and check each symptom.

SYMPTOM TABLE (ONE INTELLIGENT KEY HAS THE SYMPTOM, OTHER KEYS OPERATE NOR-MALLY)

Door lock operation (remote keyless entry)	Door lock operation (request switch) or back door open op- eration (opener switch of back door panel)	Engine started with push-but- ton ignition switch operation (Intelligent Key is within the detection area of inside key antenna)	Engine started with push-but- ton ignition switch operation (registered Intelligent Key placed next to push-button ig- nition switch)
NG	OK	OK	OK

DIAGNOSIS PROCEDURE

Refer to DLK-238, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000013542026

1. CHECK INTELLIGENT KEY SYSTEM SYMPTOM TABLE

Check Intelligent Key system symptom table.

Refer to DLK-226, "Diagnosis Procedure".

>> GO TO 2.

2. CHECK INTELLIGENT KEY OUTPUT SIGNAL

Use SIGNAL TECH II to check Intelligent Key output signal. For the inspection method and how to use SIGNAL TECH II, refer to "NISSAN/INFINITI SIGNAL TECH II USER GUIDE".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace Intelligent Key.

3. REGISTER INTELLIGENT KEY

- 1. Register the Intelligent Key again.
- Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> GO TO 4.

4. REPLACE INTELLIGENT KEY

- 1. Replace the Intelligent Key and perform registration again.
- 2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> GO TO 5.

5.REPLACE BCM

- 1. Replace BCM. Refer to BCS-79, "Removal and Installation".
- Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-50, "Intermittent Incident".

Revision: April 2016 **DLK-238** 2016 QX60

DOOR DOES NOT LOCK/UNLOCK AND ENGINE DOES NOT START (ONE I-**KEY/REQ SW/PUSH SW)**

< SYMPTOM DIAGNOSIS >

DOOR DOES NOT LOCK/UNLOCK AND ENGINE DOES NOT START (ONE I-KEY/REQ SW/PUSH SW)

Description INFOID:0000000013542027

All doors do not lock/unlock using door request switch or back door does not open using back door opener request switch, Intelligent Key, and engine does not start when push-button ignition switch is pressed while carrying Intelligent Key. (One Intelligent Key has the symptom, other keys operate normally.)

SYMPTOM TABLE (ONE INTELLIGENT KEY HAS THE SYMPTOM, OTHER KEYS OPERATE NOR-MALLY)

Door lock operation (remote keyless entry)	Door lock operation (request switch) or back door open op- eration (opener switch of back door panel)	Engine started with push-but- ton ignition switch operation (Intelligent Key is within the detection area of inside key antenna)	Engine started with push-but- ton ignition switch operation (registered Intelligent Key placed next to push-button ig- nition switch)
NG	NG	No crank, No start	OK

DIAGNOSIS PROCEDURE

Refer to DLK-239, "Diagnosis Procedure".

Diagnosis Procedure

 $1.\mathsf{check}$ intelligent key system symptom table

Check Intelligent Key system symptom table.

Refer to DLK-226, "Diagnosis Procedure".

>> GO TO 2.

2.CHECK INTELLIGENT KEY

Check the inside of the Intelligent Key for rust or corrosion by water. Simultaneously check the internal circuits for damage. Squeeze, twist or bend the Intelligent Key and check the functionality again. Is the Intelligent Key operating normally?

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace Intelligent Key.

${f 3.}$ CHECK INTELLIGENT KEY BATTERY

Check the Intelligent Key battery.

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace Intelligent Key battery. Refer to DLK-288, "Removal and Installation".

4.REGISTER INTELLIGENT KEY

- Register the Intelligent Key again.
- Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> GO TO 5.

${f 5.}$ REPLACE INTELLIGENT KEY

- Replace the Intelligent Key and perform registration again.
- Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

Revision: April 2016

NO >> GO TO 6.

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DOOR DOES NOT LOCK/UNLOCK AND ENGINE DOES NOT START (ONE I-KEY/REQ SW/PUSH SW)

< SYMPTOM DIAGNOSIS >

6.REPLACE BCM

- 1. Replace BCM. Refer to BCS-79, "Removal and Installation".
- 2. Confirm the operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-50, "Intermittent Incident".

Revision: April 2016 **DLK-240** 2016 QX60

INTELLIGENT KEY SYSTEM ALL FUNCTIONS CANNOT OPERATE (ONE KEY) < SYMPTOM DIAGNOSIS > INTELLIGENT KEY SYSTEM ALL FUNCTIONS CANNOT OPERATE (ONE Α KEY) Description INFOID:0000000013542029 В Intelligent Key system all functions cannot operate (door lock and engine start). (One Intelligent Key has the symptom, other keys operate normally.) SYMPTOM TABLE (ONE INTELLIGENT KEY HAS THE SYMPTOM, OTHER KEYS OPERATE NOR-MALLY) D Engine started with push-but-Engine started with push-but-Door lock operation (request ton ignition switch operation ton ignition switch operation Door lock operation (remote switch) or back door open op-(registered Intelligent Key (Intelligent Key is within the keyless entry) eration (opener switch of back detection area of inside key placed next to push-button ig-Е door panel) nition switch) antenna) NG NG No crank, No start No crank. No start F DIAGNOSIS PROCEDURE Refer to <u>DLK-241</u>, "<u>Diagnosis Procedure</u>". Diagnosis Procedure INFOID:0000000013542030 ${f 1}$.CHECK INTELLIGENT KEY SYSTEM SYMPTOM TABLE Check Intelligent Key system symptom table. Н Refer to DLK-226, "Diagnosis Procedure". >> GO TO 2. 2.CHECK INTELLIGENT KEY-1 For Intelligent Key that cannot be used for door lock and unlock, check that the Intelligent Key belongs to the vehicle to be checked. Does the Intelligent Key belong to the vehicle to be checked? YES >> GO TO 3. DLK NO >> Check Intelligent Key button operation using a registered Intelligent Key that belongs to the vehicle. 3.CHECK INTELLIGENT KEY-2 L Check the inside of the Intelligent Key for rust or corrosion by water. Simultaneously check the internal circuits for damage. Is the inspection result normal? M YES >> GO TO 4. NO >> Replace Intelligent Key. 4.REGISTER INTELLIGENT KEY Ν Register the Intelligent Key again. Check the operation after replacement. Is the inspection result normal? YES >> Inspection End.

>> GO TO 5. ${f 5.}$ REPLACE INTELLIGENT KEY

- Replace the Intelligent Key and perform registration again.
- Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> GO TO 6.

NO

DLK-241 Revision: April 2016 2016 QX60

INTELLIGENT KEY SYSTEM ALL FUNCTIONS CANNOT OPERATE (ONE KEY)

< SYMPTOM DIAGNOSIS >

6.REPLACE BCM

- 1. Replace BCM. Refer to BCS-79, "Removal and Installation".
- 2. Check operation after replacement.

<u>Is the inspection result normal?</u>

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-50, "Intermittent Incident".

INTELLIGENT KEY BUTTON OPERATION HAS POOR RANGE (ONE KEY)

< SYMPTOM DIAGNOSIS >

INTELLIGENT KEY BUTTON OPERATION HAS POOR RANGE (ONE KEY)

Description INFOID:0000000013542031

Intelligent Key button operation has poor range. (One Intelligent Key has the symptom, other keys operate normally.)

SYMPTOM TABLE (ONE INTELLIGENT KEY HAS THE SYMPTOM, OTHER KEYS OPERATE NOR-MALLY)

Door lock operation (remote keyless entry)	Door lock operation (request switch) or back door open op- eration (opener switch of back door panel)	Engine started with push-but- ton ignition switch operation (Intelligent Key is within the detection area of inside key antenna)	Engine started with push-but- ton ignition switch operation (registered Intelligent Key placed next to push-button ig- nition switch)	
Poor range	OK	OK	OK	

DIAGNOSIS PROCEDURE

Refer to DLK-243, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK INTELLIGENT KEY SYSTEM SYMPTOM TABLE

Check Intelligent Key system symptom table. Refer to <u>DLK-226</u>, "<u>Diagnosis Procedure"</u>.

>> GO TO 2.

2. CHECK INTELLIGENT KEY LOW BATTERY WARNING

Check that the Intelligent Key low battery warning operates.

Is the Intelligent Key low battery warning operated?

YES >> Replace Intelligent Key battery. Refer to DLK-288, "Removal and Installation".

NO >> GO TO 3.

3. CHECK INTELLIGENT KEY BATTERY

Check the Intelligent Key battery.

Is the inspection result normal?

YES >> Replace Intelligent Key and register new Intelligent Key.

NO >> Replace Intelligent Key battery. Refer to <u>DLK-288</u>, "Removal and Installation".

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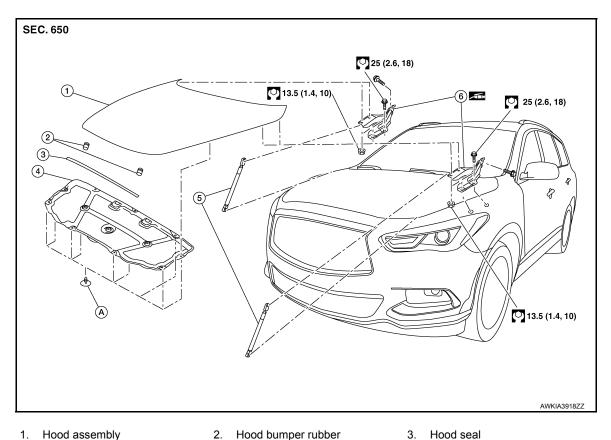
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Revision: April 2016 **DLK-243** 2016 QX60

REMOVAL AND INSTALLATION

HOOD

Exploded View INFOID:0000000012852125



- 1. Hood assembly
- 3. Hood seal

- Hood insulator
- 5. Hood stay (LH/RH)
- 6. Hood hinge (LH/RH)

A. Clip

HOOD ASSEMBLY

HOOD ASSEMBLY: Removal and Installation

INFOID:0000000012852126

CAUTION:

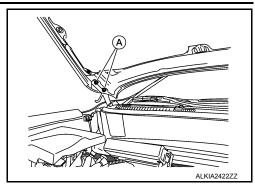
- · Use two people when removing or installing hood assembly due to its heavy weight.
- Use protective tape or shop cloths to protect surrounding components from damage during removal and installation of hood assembly.

REMOVAL

1. Support the hood assembly using a suitable tool.

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

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



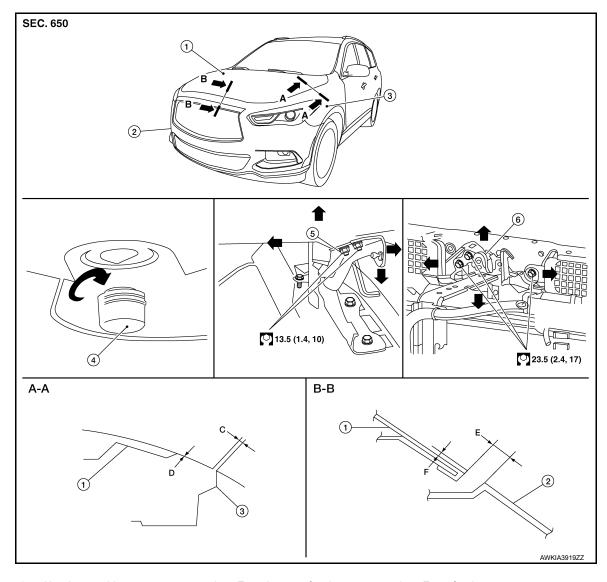
INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Before installing the hood hinge, apply anticorrosive agent onto the surface of the vehicle.
- After installation, perform the hood assembly adjustment procedure. Refer to <u>DLK-245</u>, "HOOD <u>ASSEMBLY</u>: Adjustment".

HOOD ASSEMBLY: Adjustment



- Hood assembly
- Hood bumper rubber
- 2. Front bumper fascia
- 5. Hood hinge
- 3. Front fender
- 6. Hood lock assembly

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< REMOVAL AND INSTALLATION >

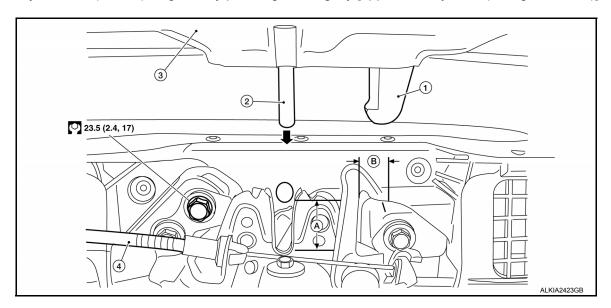
Check the clearance and the surface height between hood and each part by visual inspection and tactile feel. If the clearance and the surface height are out of specification, adjust them according to the adjustment procedures.

Unit: mm (in)

Portion	Section	Item	Measurement	Standard	Parallelism
Hood – Front fender	A – A	С	Clearance	$3.5 \pm 1.0 \; (0.14 \pm 0.04)$	≤ 1.5 (0.06)
		D	Surface height	1.0 ± 1.5 (0.04 ± 0.06)	_
Hood – Front bumper fascia	B – B	E	Clearance	4.1 ± 2.0 (0.16 ± 0.08)	< 2.0 (0.08)
	F	F	Surface height	1.0 ± 1.5 (0.04 ± 0.06)	< 2.0 (0.08)

HEIGHT ADJUSTMENT

- 1. Loosen the hood lock assembly bolts.
- 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.
- 3. Temporarily tighten hood lock assembly bolts.
- 4. Adjust (A) and (B) as shown to the following value with hood's own weight by dropping it from approximately 200 mm (7.87 in) height or by pressing hood lightly [approximately 29 N (3.0 kg-f, 6.5 ft-lb)].



- Secondary striker
- Primary striker
- 3. Hood assembly

- 4. Secondary latch control cable
- A. 20 mm (0.79 in)
- B. 6.8 mm (0.27 in)
- 5. After adjustment, tighten hood hinge nuts and bolts to the specified torque.

CAUTION:

- Check hood hinge rotating part for poor lubrication. If necessary, apply a suitable multi-purpose grease.
- After adjusting, apply touch-up paint (body color) onto the head of hood hinge bolts and nuts.

CLEARANCE ADJUSTMENT

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

HOOD HINGE

HOOD HINGE: Removal and Installation

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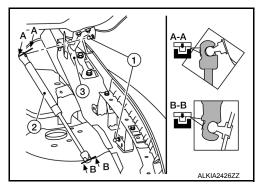
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REMOVAL

- 1. Remove hood assembly. Refer to <u>DLK-244</u>, "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-245</u>, "HOOD ASSEM-<u>BLY</u>: Adjustment".

HOOD STAY

HOOD STAY: Removal and Installation

INFOID:0000000012852129

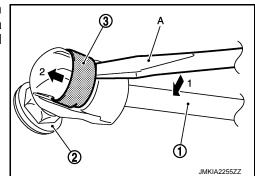
REMOVAL

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

INSTALLATION

Installation is in the reverse order of removal.

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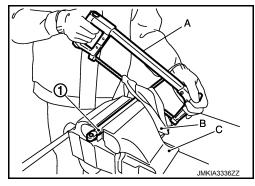
HOOD STAY: Disposal

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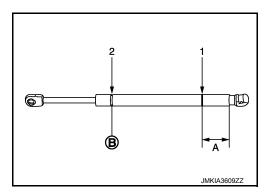
- 1. Fix hood stay (1) using a vise (C).
- 2. Using a hacksaw (A) slowly make two holes in the hood stay (1), in numerical order as shown in the figure.

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.

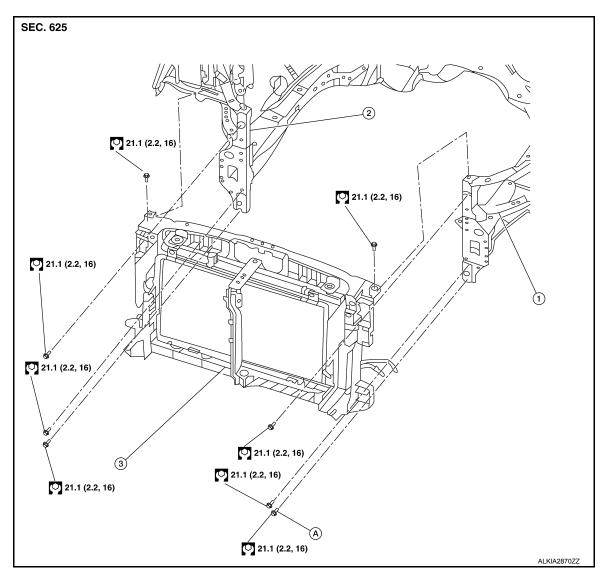


A: 20 mm (0.79 in)
B: Cut at the groove.



RADIATOR CORE SUPPORT

Exploded View INFOID:0000000012852131



- 1. Radiator support (LH)
- Radiator support (RH)
- 3. Radiator core support assembly

Refer to installation for sequence order

Removal and Installation

REMOVAL

CAUTION:

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

- 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-147, "Removal and Installation".
- 4. Disconnect harness connector from refrigerant pressure sensor.
- Remove upper air intake.
- Disconnect all harness clips from radiator core support assembly.
- 7. lation".

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Remove hood lock assembly. Refer to DLK-267, "HOOD LOCK RELEASE CABLE: Removal and Instal-

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RADIATOR CORE SUPPORT

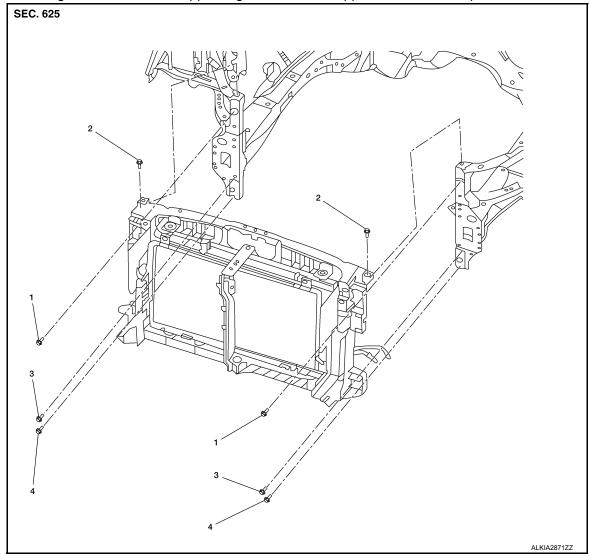
< REMOVAL AND INSTALLATION >

- 8. Release clips of air guide seal and remove.
- 9. Remove radiator bolts. Refer to CO-15, "Removal and Installation".
- 10. Remove bolts, and then radiator core support assembly.

INSTALLATION

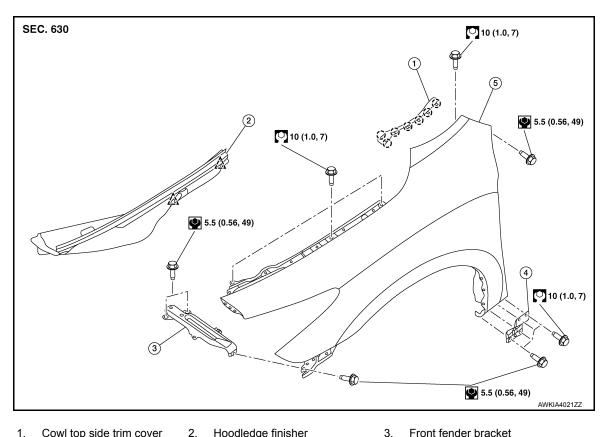
Installation is in the reverse order of removal.

• When installing the radiator core support, tighten the core support bolts in the sequence shown.



FRONT FENDER

Exploded View INFOID:0000000012852133



Cowl top side trim cover

Front fender lower bracket 5.

- Hoodledge finisher Front fender
- Pawl

FRONT FENDER

FRONT FENDER: Removal and Installation

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

REMOVAL

- Remove front fender protector. Refer to <u>EXT-28</u>, "<u>FENDER PROTECTOR</u>: <u>Removal and Installation</u>".
- Remove front combination lamp. Refer to EXL-148, "Removal and Installation".
- Release the clips and pawls using a suitable tool and remove hoodledge finisher.
- 4. Remove front fender outside lower molding. Refer to EXT-40, "Removal and Installation".
- Remove front fender bolts and front fender. **CAUTION:**

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

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- After installation apply touch up paint (body color) to the head of front fender bolts.
- After installation, adjust the following components as necessary:
- Hood assembly: Refer to DLK-245, "HOOD ASSEMBLY: Adjustment".
- Front door: Refer to DLK-253, "DOOR ASSEMBLY : Adjustment".

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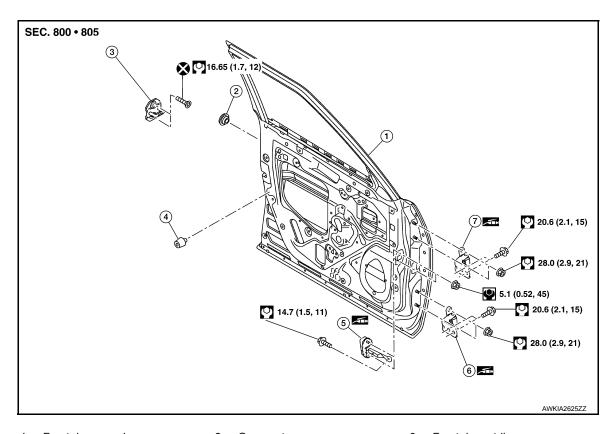
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DLK-251 Revision: April 2016 2016 QX60

FRONT DOOR

Exploded View INFOID:0000000012852135



- 1. Front door panel
- 4. Bumper rubber
- 7. Front door upper hinge
- 2. Grommet
- 5. Door check link
- 3. Front door striker
- 6. Front door lower hinge

INFOID:0000000012852136

DOOR ASSEMBLY

DOOR ASSEMBLY: Removal and Installation

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

- Disconnect the battery negative and positive terminals and wait at least three minutes. Refer to PG-147. "Removal and Installation".
- 2. Remove front door finisher. Refer to <u>INT-15</u>, "Removal and Installation".
- Disconnect the harness connectors from the front door.
- Remove front door harness grommet, then harness from the front door. 4.
- 5. Remove front door check link bolt from the body.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- · Apply anticorrosive agent onto the surface.
- After installation, check front door open/close and lock/unlock operation.
- After installation, perform the front door adjustment procedure. Refer to DLK-253, "DOOR ASSEM-**BLY: Adjustment".**

Remove front door hinge nuts (door side) and front door assembly.

FRONT DOOR

< REMOVAL AND INSTALLATION >

Perform camera image calibration (with around view monitor). Refer to <u>AV-484, "CALIBRATING CAMERA IMAGE (AROUND VIEW MONITOR)</u>: <u>Description"</u> (BOSE AUDIO W/NAVI W/O SURROUND) or <u>AV-779, "CALIBRATING CAMERA IMAGE (AROUND VIEW MONITOR)</u>: <u>Description"</u> (BOSE AUDIO W/NAVI W/SURROUND).

DOOR ASSEMBLY: Adjustment

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Adjustment

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- 1. Front fender
 - Body side outer
- 7. Rear door lower hinge
- 2. Front door
- 5. Front door hinge
- 8. Door striker bolts
- Rear door
- 6. Rear door upper hinge
- 9. Door striker

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

Unit: mm (in)

Portion	Section	Measurement	Gap measurement	
Front fender – Front door	A – A	Clearance	3.8 ± 1.0 (0.15 ± 0.04)	
	A-A	Surface height	± 1.0 (± 0.04)	
Front door – Rear door	B – B	Clearance	4.1 ± 1.0 (0.16 ± 0.04)	
		Surface height	± 1.0 (± 0.04)	

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FRONT DOOR

< REMOVAL AND INSTALLATION >

Portion	Section	Measurement	Gap measurement	
Rear door – Body side outer	C – C	Clearance	$3.7 \pm 1.0 \; (0.15 \pm 0.04)$	
		Surface height	± 1.0 (± 0.04)	

- Remove front fender. Refer to DLK-251, "FRONT FENDER: Removal and Installation".
- 2. Loosen front door hinge nuts on door side.
- 3. Adjust the surface height of front door according to the specifications provided.
- 4. Temporarily tighten front door hinge nuts on door side.
- 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 DLK-251, "FRONT FENDER: Removal and Installation".

DOOR STRIKER

DOOR STRIKER: Removal and Installation

INFOID:0000000012852138

REMOVAL

Remove bolts and front door striker.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

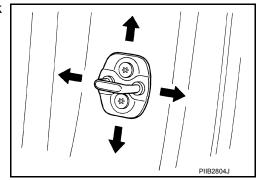
- · Do not reuse front door striker bolts.
- After installation, check front door open/close operation. If necessary, adjust the front door striker.
 Refer to <u>DLK-254</u>, "<u>DOOR STRIKER</u>: <u>Adjustment"</u>.

DOOR STRIKER : Adjustment

INFOID:0000000012852139

DOOR STRIKER ADJUSTMENT

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



Tighten door striker bolts to specification. Refer to <u>DLK-252</u>, "<u>Exploded View</u>".

DOOR HINGE

DOOR HINGE: Removal and Installation

INFOID:0000000012852140

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.

FRONT DOOR

< REMOVAL AND INSTALLATION >

- Remove front fender. Refer to DLK-251, "FRONT FENDER: Removal and Installation".
- 2. Remove front door assembly. Refer to <u>DLK-252</u>, "DOOR ASSEMBLY: Removal and Installation".
- Remove front door hinge bolts (body side) and front door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Apply anticorrosive agent onto the hinge mating surface.
- After installation, check front door open/close and lock/unlock operation.
- Check door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.
- After installation, perform the front door adjustment procedure. Refer to <u>DLK-253</u>, "<u>DOOR ASSEM-BLY</u>: Adjustment".

DOOR CHECK LINK

DOOR CHECK LINK: Removal and Installation

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REMOVAL

- 1. Fully close the front door window.
- Remove front door speaker. Refer to <u>AV-139</u>, "Removal and Installation" (BASE AUDIO), <u>AV-339</u>, "Removal and Installation" (BOSE AUDIO WITHOUT NAVIGATION), <u>AV-625</u>, "Removal and Installation" (BOSE AUDIO W/NAVI W/O SURROUND SOUND) or <u>AV-921</u>, "Removal and Installation" (BOSE AUDIO W/NAVI W/SURROUND).
- 3. Remove door check link bolt (body side).
- Remove door check link nuts (door side).
- 5. Remove door check link through the hole in door panel.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

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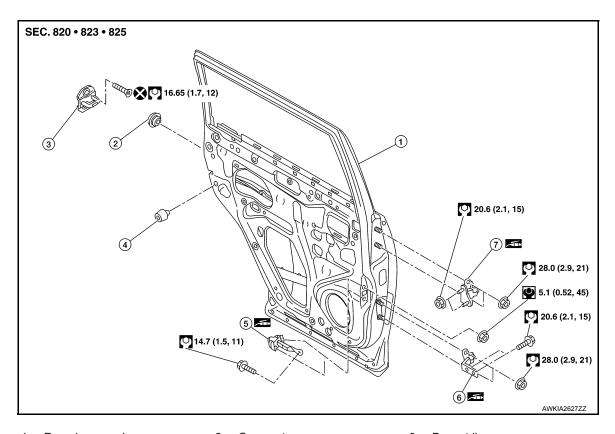
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Revision: April 2016 **DLK-255** 2016 QX60

REAR DOOR

Exploded View



- 1. Rear door panel
- 4. Bumper rubber
- 7. Rear door upper hinge
- 2. Grommet
- 5. Door check link
- Door striker
- 6. Rear door lower hinge

DOOR ASSEMBLY

DOOR ASSEMBLY: Removal and Installation

INFOID:0000000012852143

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

- Remove rear door finisher. Refer to <u>DLK-256</u>, "<u>DOOR ASSEMBLY</u>: <u>Removal and Installation</u>".
- Disconnect the harness connectors from rear door.
- 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.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- · Apply anticorrosive agent onto the surface.
- After installation, check rear door open/close and lock/unlock operation.
- After installation, perform the rear door adjustment procedure. Refer to <u>DLK-257</u>, "<u>DOOR ASSEMBLY</u>: <u>Adjustment</u>".

DOOR ASSEMBLY: Adjustment

INFOID:0000000012852144

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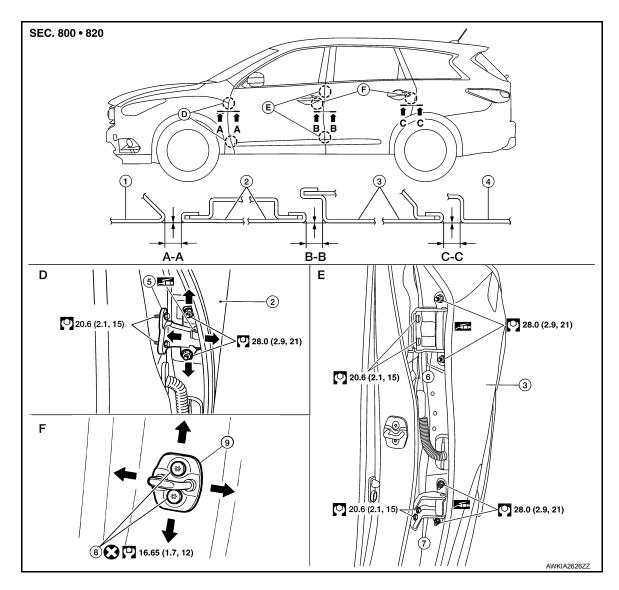
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- Front fender
- Body side outer
- Rear door lower hinge
- Front door
- Front door hinge
- Door striker bolts
- Rear door
- Rear door upper hinge
- Door striker

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

Unit: mm (in)

Portion	Section	Measurement	Gap measurement
Front fender – Front door	A – A	Clearance	3.8 ± 1.0 (0.15 ± 0.04)
		Surface height	± 1.0 (± 0.04)
Front door – Rear door	B – B	Clearance	4.1 ± 1.0 (0.16 ± 0.04)
		Surface height	± 1.0 (± 0.04)
Rear door – Body side outer	C – C	Clearance	3.7 ± 1.0 (0.15 ± 0.04)
		Surface height	± 1.0 (± 0.04)

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

DLK-257 Revision: April 2016 2016 QX60 DLK

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REAR DOOR

< REMOVAL AND INSTALLATION >

- Loosen rear door hinge nuts on rear door side.
- Adjust the surface height of rear door according to specifications provided.
- 4. Temporarily tighten rear door hinge nuts on rear door side.
- 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.
- After adjustment tighten bolts and nuts to the specified torque. CAUTION:
 - Check rear door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.
 - After adjusting, apply touch-up paint (body color) to the head of rear door hinge bolts and nuts.
- 8. Install center pillar lower finisher. Refer to INT-21, "CENTER PILLAR LOWER FINISHER: Removal and Installation".

DOOR STRIKER

DOOR STRIKER: Removal and Installation

INFOID:0000000012852145

REMOVAL

Remove bolts and rear door striker.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

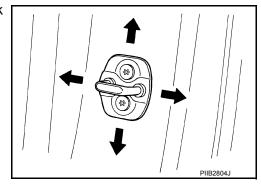
- Do not reuse rear door striker bolts.
- After installation, check rear door open/close operation. If necessary, adjust the door striker. Refer to <u>DLK-258, "DOOR STRIKER: Adjustment"</u>.

DOOR STRIKER : Adjustment

INFOID:0000000012852146

DOOR STRIKER ADJUSTMENT

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



3. Tighten door striker bolts to specification. Refer to <u>DLK-256, "Exploded View"</u>.

DOOR HINGE

DOOR HINGE: Removal and Installation

INFOID:0000000012852147

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 <u>DLK-256, "DOOR ASSEMBLY: Removal and Installation"</u>.
- Remove center pillar lower finisher. Refer to <u>INT-21, "CENTER PILLAR LOWER FINISHER: Removal and Installation".</u>
- Remove rear door hinge bolts and nuts and rear door hinge.

INSTALLATION

Revision: April 2016 **DLK-258** 2016 QX60

REAR DOOR

< REMOVAL AND INSTALLATION >

Installation is in the reverse order of removal.

CAUTION:

- Apply anticorrosive agent onto the hinge mating surface.
- After installation, check rear door open/close and lock/unlock operation.
- After installation, perform the rear door adjustment procedure. Refer to <u>DLK-257</u>, "<u>DOOR ASSEMBLY</u>
 <u>: Adjustment</u>".

DOOR CHECK LINK

DOOR CHECK LINK: Removal and Installation

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REMOVAL

- Fully close the rear door window.
- 2. Remove rear door speaker. Refer to <u>AV-141, "Removal and Installation"</u> (BASE AUDIO), <u>AV-343, "Removal and Installation"</u> (BOSE AUDIO WITHOUT NAVIGATION), <u>AV-629, "Removal and Installation"</u> (BOSE AUDIO W/NAVI W/O SURROUND) or <u>AV-925, "Removal and Installation"</u> (BOSE AUDIO W/NAVI W/SURROUND).
- 3. Remove rear door check link bolt (body side).
- 4. Remove rear door check link nuts (door side).
- 5. Remove rear door check link through the hole in rear door panel.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

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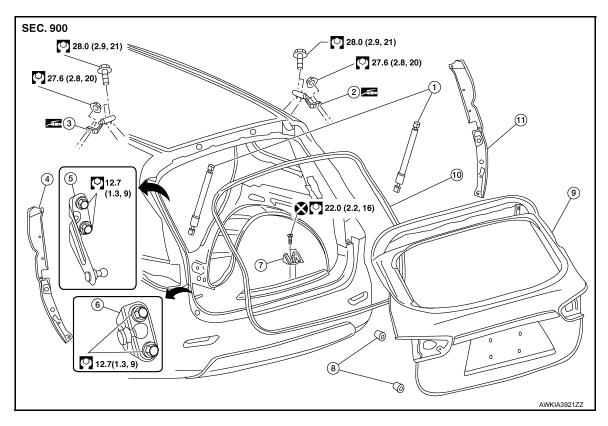
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Revision: April 2016 **DLK-259** 2016 QX60

BACK DOOR

Exploded View



- 1. Spindle unit (LH/RH)
- 4. Back door touch sensor (LH)
- 7. Back door striker
- 10. Back door weatherstrip
- 2. Back door hinge (RH)
- 5. Spindle unit upper hinge
- 8. Bumper rubber
- 11. Back door touch sensor (RH)
- 3. Back door hinge (LH)
- 6. Spindle unit lower hinge
- 9. Back door assembly

BACK DOOR ASSEMBLY

BACK DOOR ASSEMBLY: Removal and Installation

INFOID:0000000012852150

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:

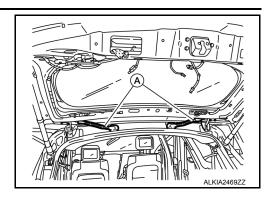
Bodily injury may occur if back door assembly is not supported properly when removing the back door spindle unit.

- 2. Remove back door spindle units (LH/RH). Refer to DLK-264, "SPINDLE UNIT: Removal and Installation".
- Remove roof side moldings (LH/RH). Refer to <u>EXT-31, "Removal and Installation"</u>.

BACK DOOR

< REMOVAL AND INSTALLATION >

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



- 5. Remove back door harness grommet, then pull harness from the back door.
- Disconnect washer tube.
- 7. Remove washer tube grommet and washer tube from the back door.
- 8. Remove back door hinge nuts and 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-262, "BACK DOOR ASSEMBLY: Adjustment"</u>.
- Perform camera image calibration (with around view monitor). Refer to <u>AV-484, "CALIBRATING CAMERA IMAGE (AROUND VIEW MONITOR)</u>: <u>Description"</u> (BOSE AUDIO W/O SURROUND SOUND) or <u>AV-779, "CALIBRATING CAMERA IMAGE (AROUND VIEW MONITOR)</u>: <u>Description"</u> (BOSE AUDIO WITH SURROUND SOUND).

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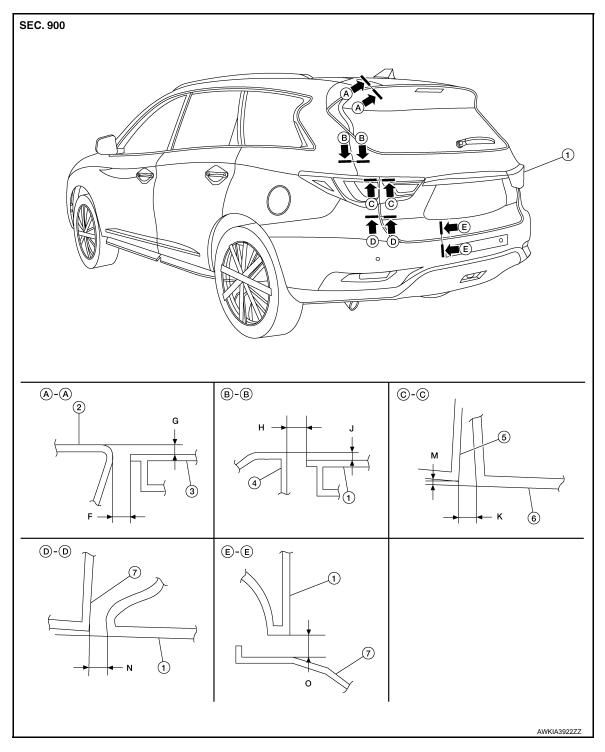
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BACK DOOR ASSEMBLY: Adjustment

INFOID:0000000012852151



- 1. Back door assembly
- 4. Body side outer
- 7. Rear bumper fascia
- 2. Roof panel
- 5. Rear combination lamp
- Rear spoiler
- 6. Back-up lamp

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

					Unit: mm (in)
Portion	Section	Item	Measurement	Standard	Difference (LH/RH, MAX)
Roof panel – Rear spoiler	A – A	F	Clearance	7.0 ± 1.5 (0.28 ± 0.06)	_
	A-A	G	Surface height	1.5 ± 1.5 (0.06 ± 0.06)	_
Body side outer – Back door assembly	B – B	Н	Clearance	$5.0 \pm 2.0 \; (0.20 \pm 0.08)$	≤2.0 (0.08)
		J	Surface height	$0.8 \pm 2.0 \; (0.03 \pm 0.08)$	≤2.0 (0.08)
Rear combination lamp – Back- up lamp	C – C	K	Clearance	$5.0 \pm 2.0 \; (0.20 \pm 0.08)$	≤2.3 (0.09)
		М	Surface height	$0.0 \pm 2.1 \; (0.0 \pm 0.08)$	≤2.5 (0.10)
Rear bumper fascia – Back door assembly	D – D	N	Clearance	$7.0 \pm 2.0 \; (0.28 \pm 0.08)$	_
Rear bumper fascia – Back door assembly	E-E	0	Clearance	$5.0 \pm 2.0 \; (0.20 \pm 0.08)$	≤2.0 (0.08)

- 1. Remove roof side molding. Refer to EXT-31, "Removal and Installation".
- 2. Loosen back door hinge nuts (door side).
- 3. Lift up back door approximately 100 150 mm (3.94 5.91 in) height then close it lightly and check that it is engaged firmly with back door closed.
- Check the clearance and surface height according to the specifications provided.
- Tighten back door hinge nuts and back door striker bolts to specified torque.

CAUTION:

- After installation, check back door open/close, lock/unlock operation.
- · Check back door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-
- After adjusting, apply touch-up paint (body color) to the head of rear door hinge bolts and nuts.
- When removing or replacing back door assembly it is necessary to perform calibration of back door position. Refer to DLK-118, "Description".
- Install roof side molding. Refer to. <u>EXT-31</u>, "Removal and Installation".

BACK DOOR STRIKER

BACK DOOR STRIKER: Removal and Installation

INFOID:0000000012852152

INFOID:0000000012852153

REMOVAL

- Remove back door kicking plate. Refer to INT-36, "BACK DOOR KICKING PLATE: Removal and Installa-
- Remove bolts and back door striker.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Do not reuse back door striker bolts.
- After installation, check back door open/close operation. If necessary, adjust the door striker. Refer to DLK-263, "BACK DOOR STRIKER: Adjustment".
- When removing or replacing back door striker, it is necessary to perform calibration of back door position. Refer to <u>DLK-118, "Description"</u>.

BACK DOOR STRIKER: Adjustment

DOOR STRIKER ADJUSTMENT

Loosen door striker bolts

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DLK-263 Revision: April 2016 2016 QX60 DLK

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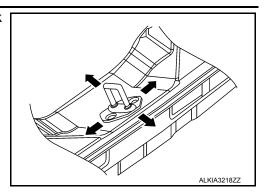
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BACK DOOR

< REMOVAL AND INSTALLATION >

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



Tighten door striker bolts to specification. Refer to <u>DLK-260, "Exploded View"</u>.

BACK DOOR HINGE

BACK DOOR HINGE: Removal and Installation

INFOID:0000000012852154

CAUTION:

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

REMOVAL

- Remove back door assembly. Refer to <u>DLK-260</u>, "BACK <u>DOOR ASSEMBLY</u>: Removal and Installation".
- 2. Remove back door hinge bolts (body side) and back door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- Apply anticorrosive agent onto the surface.
- After installation, perform the back door assembly adjustment procedure. Refer to <u>DLK-262</u>, "<u>BACK</u> DOOR ASSEMBLY: Adjustment".

SPINDLE UNIT

SPINDLE UNIT: Removal and Installation

INFOID:0000000012852155

REMOVAL

1. Support back door using a suitable tool.

WARNING:

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

- 2. Partially remove headlining (rear edge).
- 3. Disconnect the harness connector from the spindle unit.
- 4. Release spindle unit from stud balls and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- When reusing stud ball, always apply locking sealant before installing stud ball to back door.
- After installation, check back door open/close and lock/unlock operation.
- When removing or replacing spindle unit, it is necessary to perform calibration of back door position. Refer to <u>DLK-118</u>, "<u>Description</u>".

BACK DOOR WEATHER-STRIP

BACK DOOR WEATHER-STRIP: Removal and Installation

INFOID:0000000012852156

REMOVAL

Carefully remove back door weather-strip from opening door joint.

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BACK DOOR

< REMOVAL AND INSTALLATION >

INSTALLATION

- 1. Beginning with upper section, align weather-strip mark with vehicle center position mark and install weather strip to the vehicle.

2. For the lower section, align weather-strip seam with center of back door striker.

NOTE:

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

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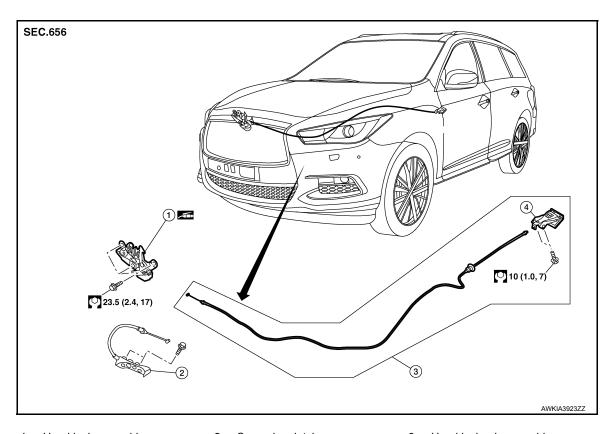
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HOOD LOCK

Exploded View



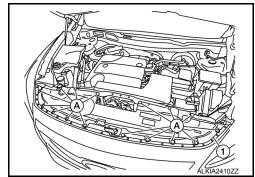
- Hood lock assembly
 Hood lock release lever
- 2. Secondary latch
- 3. Hood lock release cable

HOOD LOCK

HOOD LOCK: Removal and Installation

REMOVAL

1. Remove the core support cover clips (A), then remove the core support cover (1).



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- 2. Remove front air duct. Refer to EM-24, "Removal and Installation".
- 3. Disconnect the harness connector from the hood lock.
- 4. Remove hood lock assembly bolts.
- 5. Disconnect hood lock release cable and secondary latch cable from hood lock assembly and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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HOOD LOCK

< REMOVAL AND INSTALLATION >

- Be careful not to bend cable too much, keeping the radius 100 mm (3.94 in) or more.
- Check that hood lock release cable and secondary latch cable are properly engaged with hood lock assembly.
- After installation, perform hood assembly adjustment procedure. Refer to DLK-245, "HOOD ASSEM-**BLY**: Adjustment".
- After adjusting, perform hood lock inspection. Refer to <u>DLK-267, "HOOD LOCK: Inspection"</u>.

HOOD LOCK: Inspection

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NOTE:

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

- Check that secondary latch is properly engaged with secondary striker with hoods own weight.
- While operating hood lock release handle, carefully check that the front end of hood assembly is raised by approximately 20.0 mm (0.79 in). Also check that hood lock release handle returns to the original position.
- 3. Check that hood lock release handle operates at 49 N (5.0 kg-m, 11.0 ft-lb) or below.
- Install so that static closing force of hood is 315-490 N (32.1-50.0 kg-m, 70.8-110.2 ft-lb). NOTE:
 - Do not exert vertical force on right side and left side of hood lock.
 - Do not press simultaneously on both sides.
- 5. Check the hood lock lubrication condition. If necessary, apply a suitable multi-purpose grease to hood lock assembly.

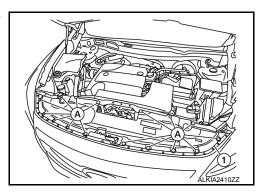
SECONDARY LATCH

SECONDARY LATCH: Removal and Installation

INFOID:0000000012852160

REMOVAL

Remove the core support cover clips (A), then remove the core support cover (1).



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- Disconnect secondary latch cable from hood lock assembly.
- Remove bolts and secondary latch.

INSTALLATION

Installation is in the reverse order of removal.

HOOD LOCK RELEASE CABLE

INFOID:0000000012852161

HOOD LOCK RELEASE CABLE: Removal and Installation

REMOVAL

- Remove fender protector (LH). Refer to <u>EXT-28</u>, "<u>FENDER PROTECTOR</u>: Removal and <u>Installation</u>".
- Remove front under cover. Refer to EXT-30, "Removal and Installation".
- Remove front air duct. Refer to EM-24, "Exploded View".
- Remove radiator core support upper cover. Refer to <u>EXT-16</u>, "Exploded View".
- Disconnect hood lock release cable from hood lock release handle and hood lock assembly.
- 6. Release all hood lock release cable clips using a suitable tool.
- Remove grommet on the lower dash, and carefully pull the hood lock release cable into the passenger compartment.

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CAUTION:

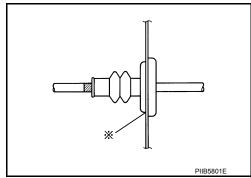
While pulling, be careful not to damage (peel) the outside of hood lock release cable.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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



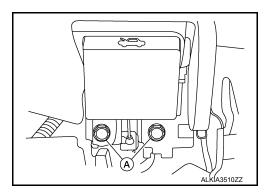
- Check that hood lock release cable is properly engaged with hood lock release handle and hood lock assembly.
- After installation, perform hood assembly adjustment procedure. Refer to <u>DLK-245, "HOOD ASSEM-BLY</u>: Adjustment".
- After adjusting, perform hood lock inspection. Refer to <u>DLK-267, "HOOD LOCK : Inspection"</u>.
 HOOD LOCK RELEASE HANDLE

HOOD LOCK RELEASE HANDLE: Removal and Installation

INFOID:0000000013517869

REMOVAL

Remove hood lock release handle bolts (A).



2. Disconnect the hood lock release cable from hood lock release handle and remove.

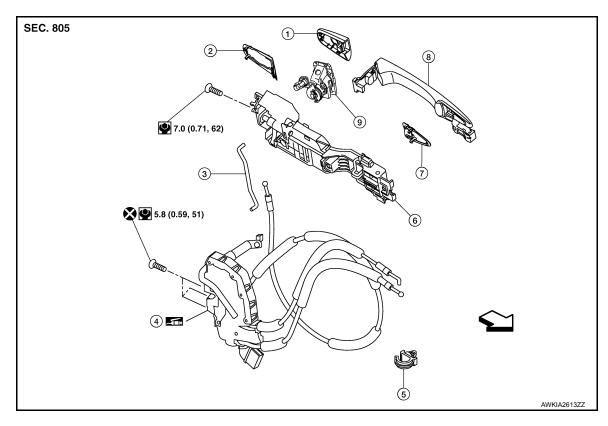
INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Tighten bolts to specification. Refer to DLK-266, "Exploded View".

Exploded View



- 1. Outside handle escutcheon
- 4. Front door lock
- 7. Front gasket

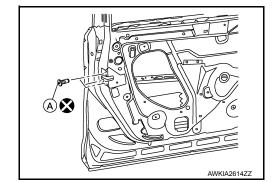
- 2. Rear gasket
- 5. Cable clip
- 8. Outside handle
- 3. Door key cylinder rod (LH only)
- 6. Outside handle bracket
- 9. Door key cylinder (LH only)

DOOR LOCK

DOOR LOCK: Removal and Installation

REMOVAL

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



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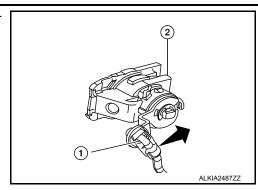
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< REMOVAL AND INSTALLATION >

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



- Disconnect the door lock cables.
- Disconnect the harness connector from the front door lock and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

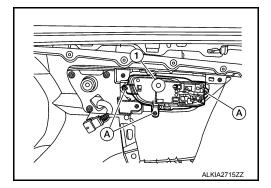
- Do not reuse door lock assembly bolts.
- After installation, check door lock cables are properly engaged to inside handle and outside handle bracket.
- When installing door key cylinder rod (LH only), be sure to rotate door key cylinder rod holder until a click is felt.
- After installation, check door open/close and lock/unlock operation.
- Check door lock assembly for poor lubrication. If necessary apply a suitable multi-purpose grease.
 INSIDE HANDLE

INSIDE HANDLE: Removal and Installation

INFOID:0000000012852164

REMOVAL

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



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

OUTSIDE HANDLE

OUTSIDE HANDLE: Removal and Installation

INFOID:0000000012852165

REMOVAL

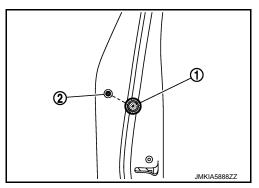
- 1. Fully close front door glass.
- 2. Remove front door finisher. Refer to INT-15, "Removal and Installation".
- 3. Remove vapor barrier.

NOTE:

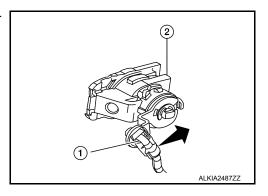
< REMOVAL AND INSTALLATION >

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

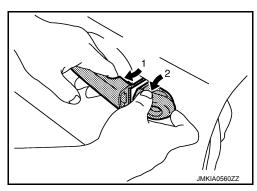
- 4. Disconnect the harness connectors from the Intelligent Key antenna and door request switch and then remove harness clamp on outside handle bracket.
- 5. Remove door side grommet (1), and loosen bolt from grommet hole (2).



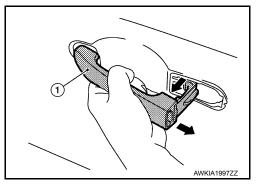
6. Separate door key cylinder rod (LH only) (1) from door key cylinder (LH only).



7. While pulling outside handle (1), remove door key cylinder (driver side) (2) or outside handle escutcheon (passenger side) (2).



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



9. Remove front gasket and rear gasket.

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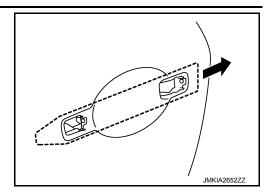
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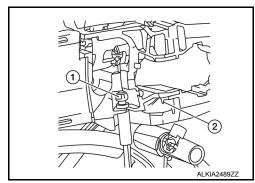
Revision: April 2016 **DLK-271** 2016 QX60

< REMOVAL AND INSTALLATION >

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



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



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

REAR DOOR LOCK

Exploded View

INFOID:0000000012852166

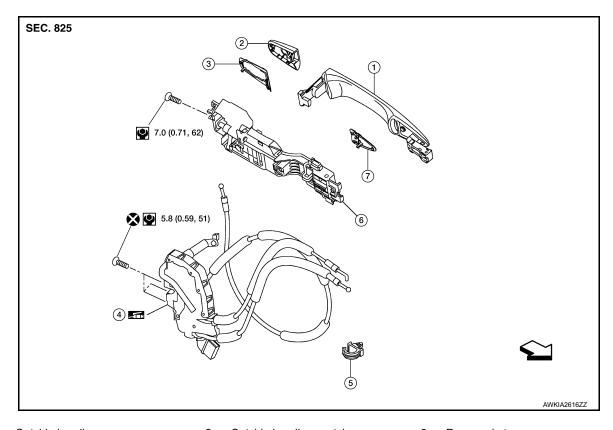
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- Outside handle
- 4. Rear door lock
- 7. Front gasket

- Outside handle escutcheon
- Cable clip
- ← Front

- 3. Rear gasket
- Outside handle bracket

DOOR LOCK

DOOR LOCK: Removal and Installation

REMOVAL

- 1. Remove rear door finisher. Refer to INT-17, "Removal and Installation".
- 2. Remove vapor barrier.
- Remove rear door lock bolts.
- 4. Disconnect the door lock cables.
- Disconnect the harness connector from the rear door lock and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- · Do not reuse rear door lock bolts.
- After installation, check door lock cables are properly engaged to inside handle and outside handle.
- After installation, check door open/close and lock/unlock operation.

INSIDE HANDLE

INSIDE HANDLE: Removal and Installation

INFOID:0000000012852168

INFOID:0000000012852167

REMOVAL

Remove rear door finisher. Refer to <u>INT-17, "Removal and Installation"</u>.

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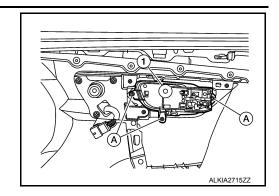
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REAR DOOR LOCK

< REMOVAL AND INSTALLATION >

2. Remove inside handle screw (A) and inside handle (1).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

OUTSIDE HANDLE

OUTSIDE HANDLE: Removal and Installation

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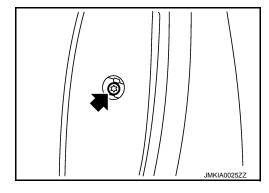
REMOVAL

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

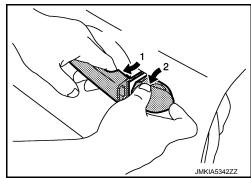
NOTE:

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

4. Remove door side grommet and bolt from grommet hole.



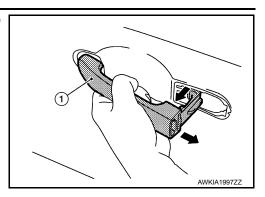
5. While pulling outside handle (1), remove outside handle escutcheon (2).



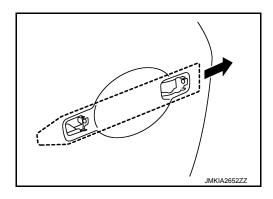
REAR DOOR LOCK

< REMOVAL AND INSTALLATION >

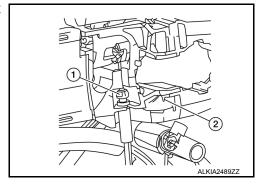
6. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



- 7. Remove front gasket and rear gasket.
- 8. Slide outside handle bracket toward rear of vehicle to remove.



9. Disconnect outside handle cable (1) from outside handle bracket (2) as shown.



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INSTALLATION

Installation in the reverse order of removal.

CAUTION:

- After installation, check door lock cable is properly engaged to outside handle bracket.
- After installation, check door open/close and lock/unlock operation.

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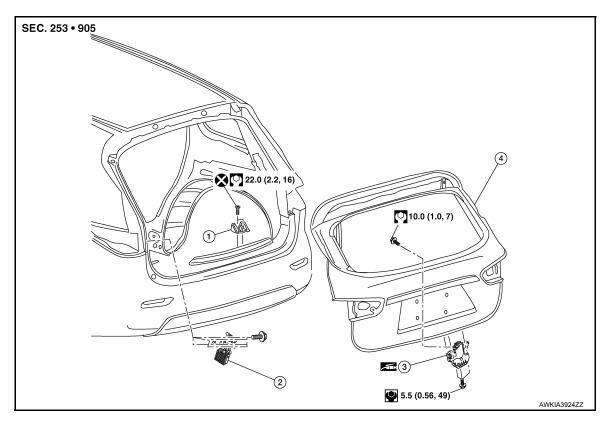
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BACK DOOR LOCK

Exploded View



- 1. Door striker
- 2. Automatic back door control module 3. Back door lock
- 4. Back door panel

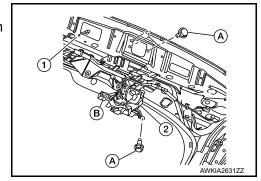
DOOR LOCK

DOOR LOCK: Removal and Installation

INFOID:0000000012852171

REMOVAL

- Remove back door lower finisher. Refer to <u>INT-35</u>, "BACK DOOR LOWER FINISHER: Removal and <u>Installation"</u>.
- 2. Disconnect harness connector (B) from the back door lock (2).
- 3. Remove back door lock bolts (A) and back door lock (2) from back door assembly (1).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

After installation, check back door open/close and lock/unlock operation.

TOUCH SENSOR

BACK DOOR LOCK

< REMOVAL AND INSTALLATION >

TOUCH SENSOR: Removal and Installation

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CAUTION:

Use care not to bend touch sensor.

REMOVAL

- 1. Remove back door side finishers (LH/RH). Refer to INT-35, "BACK DOOR SIDE FINISHER: Removal and Installation".
- 2. Disconnect the harness from the touch sensor.
- 3. Release clips and remove screws that retain touch sensor.
- 4. Remove touch sensor harness from the back door assembly, then remove touch sensor.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

After installation, check back door open/close and lock/unlock operation.

EMERGENCY LEVER

EMERGENCY LEVER: Unlock procedures

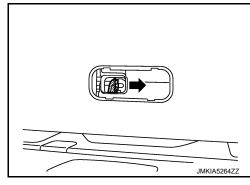
INFOID:0000000013648303

UNLOCK PROCEDURES

NOTE:

If back door lock cannot be unlocked due to a malfunction or battery discharge, perform the following procedures to unlock back door assembly.

- 1. Remove the emergency handle mask, using a suitable tool to release.
- From inside the vehicle, rotate emergency lever in the direction shown to unlock.



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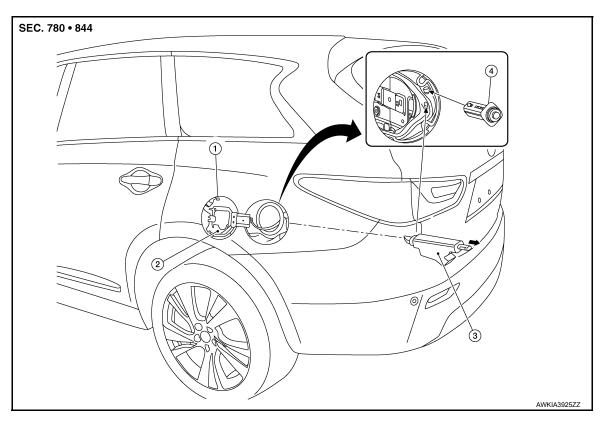
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Revision: April 2016 **DLK-277** 2016 QX60

FUEL FILLER LID OPENER

Exploded View



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

3. Fuel filler lid lock actuator

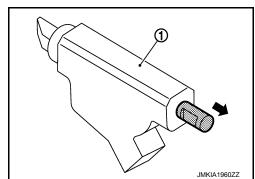
4. Fuel filler lid lock

Removal and Installation

NOTE:

REMOVAL

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

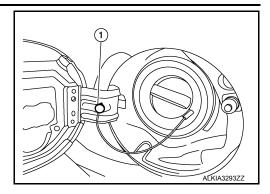


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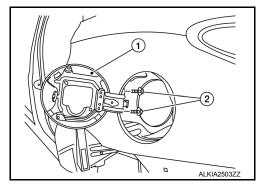
FUEL FILLER LID OPENER

< REMOVAL AND INSTALLATION >

1. Remove fuel cap pin (1).



2. Remove bolts (2) and fuel filler lid (1).



- Remove luggage side lower finisher (LH). Refer to <u>INT-31, "LUGGAGE SIDE LOWER FINISHER: 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 by releasing the pawls.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

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Revision: April 2016 **DLK-279** 2016 QX60

KEY CYLINDER

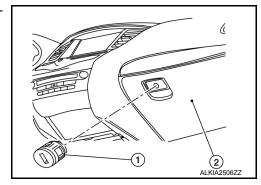
GLOVE BOX LID KEY CYLINDER

GLOVE BOX LID KEY CYLINDER: Removal and Installation

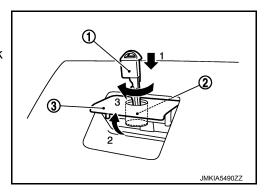
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REMOVAL

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



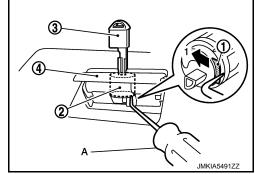
- 2. Insert key (1) into glove box lid lock cylinder (2).
- 3. Pull upward on glove box lid release handle (3).
- 4. Rotate key (1) and turn glove box lid key cylinder (2) to the lock position.



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

NOTE:

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



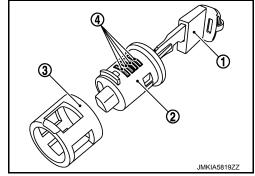
6. Remove sleeve (3) from glove box lid release handle and then install sleeve to glove box lid lock cylinder.

NOTE:

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

CAUTION:

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



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

DOOR SWITCH

< REMOVAL AND INSTALLATION >

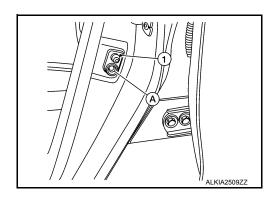
DOOR SWITCH

Removal and Installation

INFOID:0000000012852176

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:0000000012852177

REMOVAL

The driver side door request switch and driver side outside handle are serviced as an assembly. Refer to <u>DLK-270</u>, "OUTSIDE HANDLE: Removal and Installation".

INSTALLATION

Installation is in the reverse order of removal.

PASSENGER SIDE

PASSENGER SIDE: Removal and Installation

INFOID:0000000012852178

REMOVAL

The passenger side door request switch and passenger side outside handle are serviced as an assembly. Refer to <u>DLK-270</u>, "OUTSIDE HANDLE: Removal and Installation".

INSTALLATION

Installation is in the reverse order of removal.

BACK DOOR

BACK DOOR: Removal and Installation

INFOID:0000000012852179

REMOVAL

- 1. Remove the back door outer finisher upper. Refer to EXT-45, "Removal and Installation".
- Disconnect the harness connector from the back door request switch.
- 3. Remove the back door request switch.

INSTALLATION

Installation is in the reverse order of removal.

INSIDE KEY ANTENNA

< REMOVAL AND INSTALLATION >

INSIDE KEY ANTENNA INSTRUMENT CENTER

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INSTRUMENT CENTER: Removal and Installation

REMOVAL

- Remove cluster lid C upper. Refer to <u>IP-23</u>, "<u>CLUSTER LID C UPPER</u>: <u>Removal and Installation</u>".
- 2. Disconnect the harness connector from the inside key antenna (instrument center).
- 3. Remove the inside key antenna (instrument center) screw, and then remove inside key antenna (instrument center).

INSTALLATION

Installation is in the reverse order of removal.

CONSOLE

CONSOLE: Removal and Installation

INFOID:0000000012852181

REMOVAL

- Remove rear center ventilator duct. Refer to <u>VTL-12</u>, "<u>REAR CENTER VENTILATOR DUCT</u>: <u>Removal and Installation</u>".
- Disconnect the harness connector from the inside key antenna (console).
- 3. Remove the inside key antenna (console) screws and inside key antenna (console).

INSTALLATION

Installation is in the reverse order of removal.

LUGGAGE ROOM

LUGGAGE ROOM: Removal and Installation

INFOID:0000000012852182

REMOVAL

- 1. Remove the second row seatback. Refer to SE-134, "Removal and Installation".
- Disconnect the harness connector from the inside key antenna (luggage room).
- 3. Remove the inside key antenna (luggage room) clip, and then remove inside key antenna (luggage room).

INSTALLATION

Installation is in the reverse order of removal.

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OUTSIDE KEY ANTENNA

< REMOVAL AND INSTALLATION >

OUTSIDE KEY ANTENNA

DRIVER SIDE

DRIVER SIDE: Removal and Installation

INFOID:0000000012852183

REMOVAL

The driver side outside key antenna and driver side outside handle are serviced as an assembly. Refer to <u>DLK-270</u>, "<u>OUTSIDE HANDLE</u>: <u>Removal and Installation</u>".

INSTALLATION

Installation is in the reverse order of removal.

PASSENGER SIDE

PASSENGER SIDE: Removal and Installation

INFOID:0000000012852184

REMOVAL

The passenger side outside key antenna and passenger side outside handle are serviced as an assembly. Refer to DLK-270, "OUTSIDE HANDLE: Removal and Installation".

INSTALLATION

Installation is in the reverse order of removal.

REAR BUMPER

REAR BUMPER: Removal and Installation

INFOID:0000000012852185

REMOVAL

- 1. Remove rear bumper fascia. Refer to EXT-20, "Removal and Installation".
- 2. Disconnect the harness connector from the rear bumper outside key antenna and remove.

INSTALLATION

Installation is in the reverse order of removal.

INTELLIGENT KEY WARNING BUZZER

< REMOVAL AND INSTALLATION >

INTELLIGENT KEY WARNING BUZZER

Removal and Installation REMOVAL NOTE: The Intelligent Key warning buzzer is located in the left front area of the engine compartment. Remove Intelligent Key warning buzzer clips.

Disconnect the harness connector from the Intelligent Key warning buzzer and remove.

INSTALLATION

Installation is in the reverse order of removal.

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BACK DOOR WARNING CHIME

< REMOVAL AND INSTALLATION >

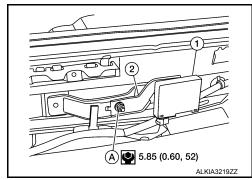
BACK DOOR WARNING CHIME

Removal and Installation

INFOID:0000000012852187

REMOVAL

- 1. Remove the rear bumper fascia. Refer to EXT-20, "Removal and Installation".
- 2. Disconnect the harness connector from the back door warning chime.
- 3. Remove the back door warning chime bracket nut (A) and remove back door warning chime (1).
- 4. Remove back door warning chime (1) from bracket (2) (if necessary).



INSTALLATION

Installation is in the reverse order of removal.

REMOTE KEYLESS ENTRY RECEIVER

< REMOVAL AND INSTALLATION >

REMOTE KEYLESS ENTRY RECEIVER

Removal and Installation

INFOID:0000000012852188

REMOVAL

- 1. Remove the glove box assembly. Refer to IP-26, "Removal and Installation".
- 2. Remove the remote keyless entry receiver bolt.
- 3. Disconnect the harness connector from remote keyless entry receiver and remove.

INSTALLATION

Installation is in the reverse order of removal.

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INTELLIGENT KEY BATTERY

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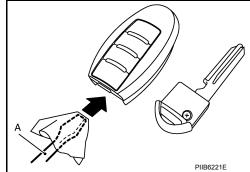
INTELLIGENT KEY BATTERY

Removal and Installation

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.



INFOID:0000000012852189

Replace the battery with a new one.

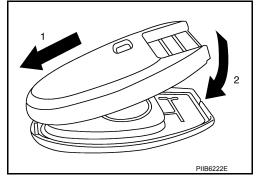
Battery replacement :Coin-type lithium battery

(CR2025)

4. Align the tips of the upper and lower parts, and then push them together until unit is securely closed.

CAUTION:

- When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.
- After replacing the battery, check that all Intelligent Key functions work normally.



AUTOMATIC BACK DOOR CONTROL MODULE

< REMOVAL AND INSTALLATION >

AUTOMATIC BACK DOOR CONTROL MODULE

Removal and Installation

INFOID:0000000012852190

REMOVAL

- В
- 1. Remove the luggage side lower finisher (LH). Refer to INT-31, "LUGGAGE SIDE LOWER FINISHER: Removal and Installation".
- 2. Remove the automatic back door control module bolts.
- 3. Disconnect the harness connector, from the automatic back door control module and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

When removing or replacing automatic back door control module, it is necessary to perform initial settings. Refer to <u>DLK-117</u>, "<u>Description</u>".

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AUTOMATIC BACK DOOR MAIN SWITCH

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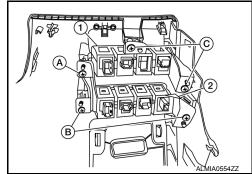
AUTOMATIC BACK DOOR MAIN SWITCH

Removal and Installation

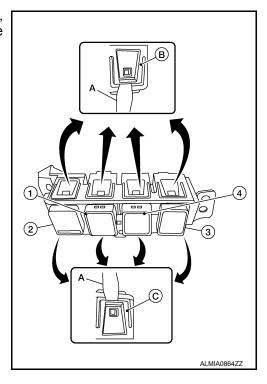
INFOID:0000000012852191

REMOVAL

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



- 3. Release upper (B) and lower (C) tab using a suitable tool (A), then remove the automatic back door main switch (3) from the upper switch carrier.
 - (1): Headlamp washer switch (if equipped)
 - (2): VDC off switch
 - (3): Automatic back door main switch
 - (4): Automatic back door switch



INSTALLATION

Installation is in the reverse order of removal.

AUTOMATIC BACK DOOR SWITCH

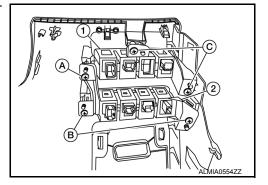
< REMOVAL AND INSTALLATION >

AUTOMATIC BACK DOOR SWITCH

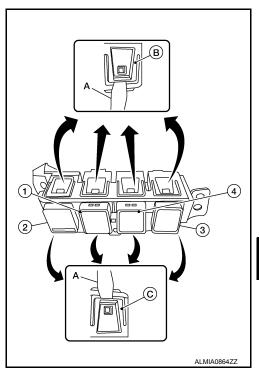
Removal and Installation

REMOVAL

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



- 3. Release upper (B) and lower (C) tab using a suitable tool (A), then remove the automatic back door main switch (4) from the upper switch carrier.
 - (1): Headlamp washer switch (if equipped)
 - (2): VDC off switch
 - (3): Automatic back door main switch
 - (4): Automatic back door switch



INSTALLATION

Installation is in the reverse order of removal.

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Revision: April 2016 **DLK-291** 2016 QX60

AUTOMATIC BACK DOOR CLOSE SWITCH

< REMOVAL AND INSTALLATION >

AUTOMATIC BACK DOOR CLOSE SWITCH

Removal and Installation

INFOID:0000000012852193

REMOVAL

- 1. Open back door assembly.
- 2. Release the automatic back door close switch pawls using a suitable tool.
- 3. Remove the automatic back door close switch screws.
- 4. Disconnect the harness connector from the automatic back door close switch and remove.

INSTALLATION

Installation is in the reverse order of removal.