SECTION DLK
DOOR & LOCK

CONTENTS

PRECAUTION

PRECAUTIONS

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

INFOID:0000000008942213

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

WARNING:

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

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

WARNING:

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

Precaution for Work

INFOID:0000000008506010

WARNING:

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

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with a new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After installation is complete, be sure to check that each part works properly.
- Follow the steps below to clean components.

- Water soluble dirt: Dip a soft cloth into lukewarm water, and wring the water out of the cloth to wipe the dirty area.
  Then rub with a soft and dry cloth.
- Oily dirt: Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%), and wipe the dirty area.
  Then dip a cloth into fresh water, and wring the water out of the cloth to wipe the detergent off. Then rub with a soft and dry cloth.

- Do not use organic solvent such as thinner, benzene, alcohol, or gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

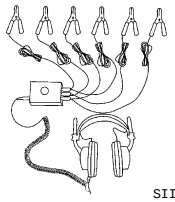
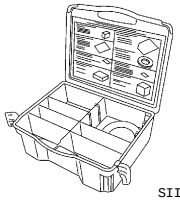
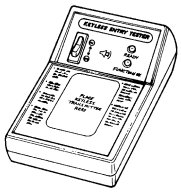
PREPARATION

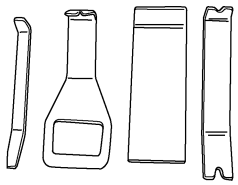
PREPARATION

Special Service Tool

INFOID:0000000008506011

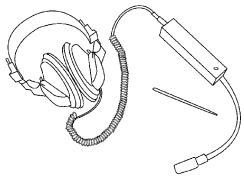
The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name	Description
— (J-39570) Chassis ear  SIIA0993E	Locating the noise
— (J-43980) NISSAN Squeak and Rattle Kit  SIIA0994E	Repairing the cause of noise
— (J-43241) Remote Keyless Entry Tester  LEL946A	Used to test keyfobs

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

Commercial Service Tool

INFOID:0000000008506012

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

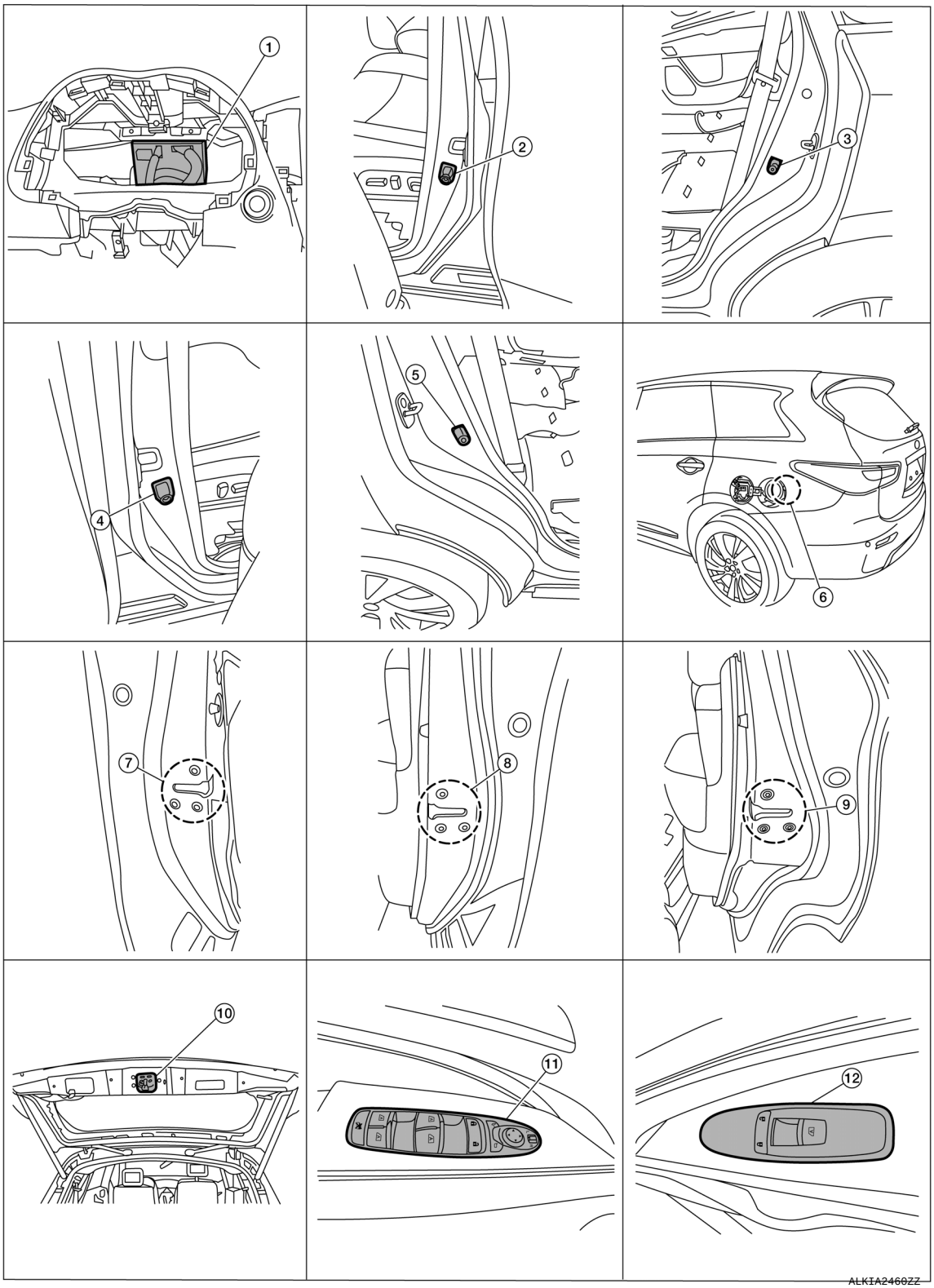
SYSTEM DESCRIPTION

COMPONENT PARTS

POWER DOOR LOCK SYSTEM

POWER DOOR LOCK SYSTEM : Component Parts Location

INFOID:0000000008506013



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

POWER DOOR LOCK SYSTEM : Component Description

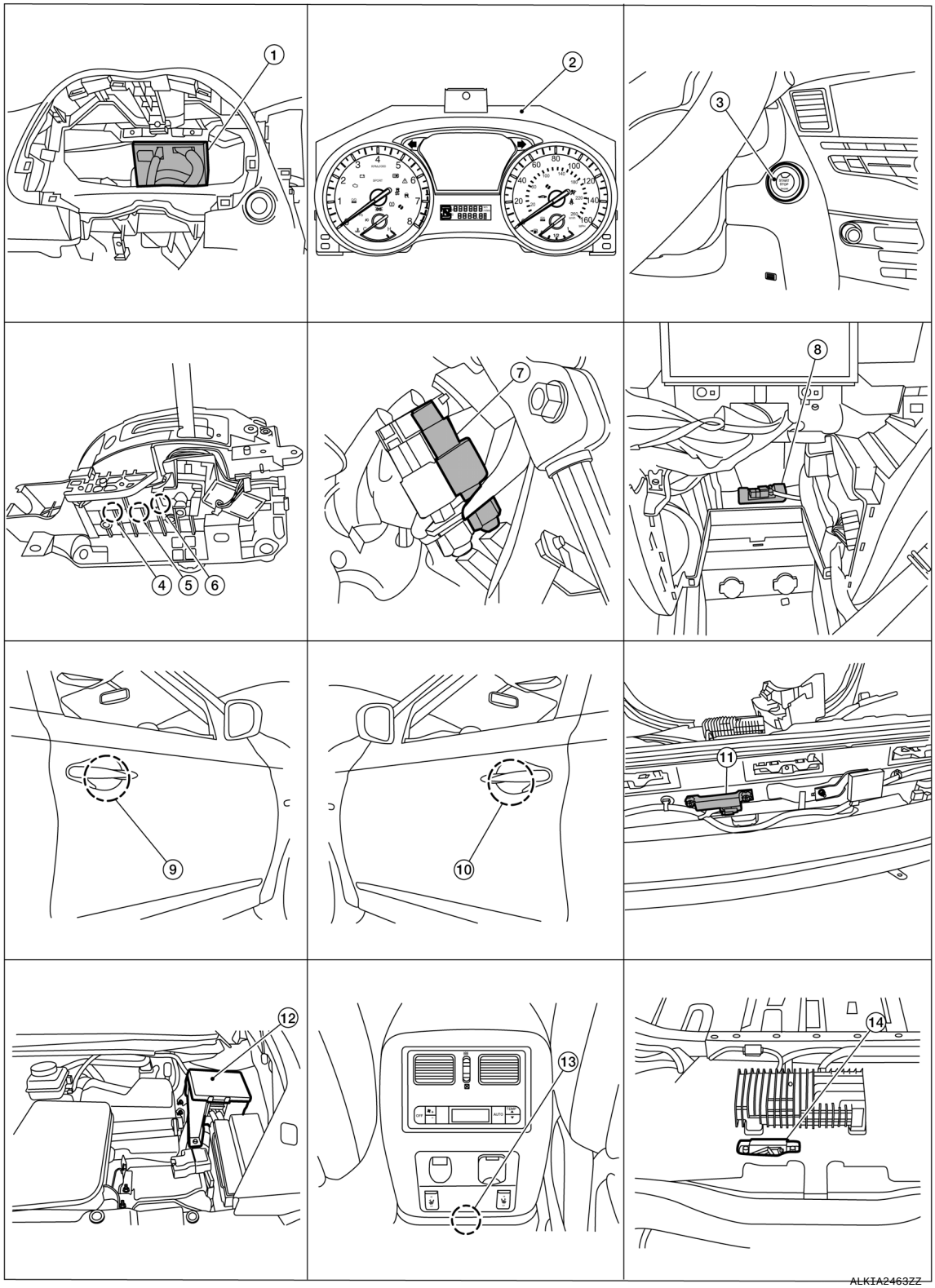
INFOID:0000000008506014

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

INTELLIGENT KEY SYSTEM : Component Parts Location

INFOID:0000000008506015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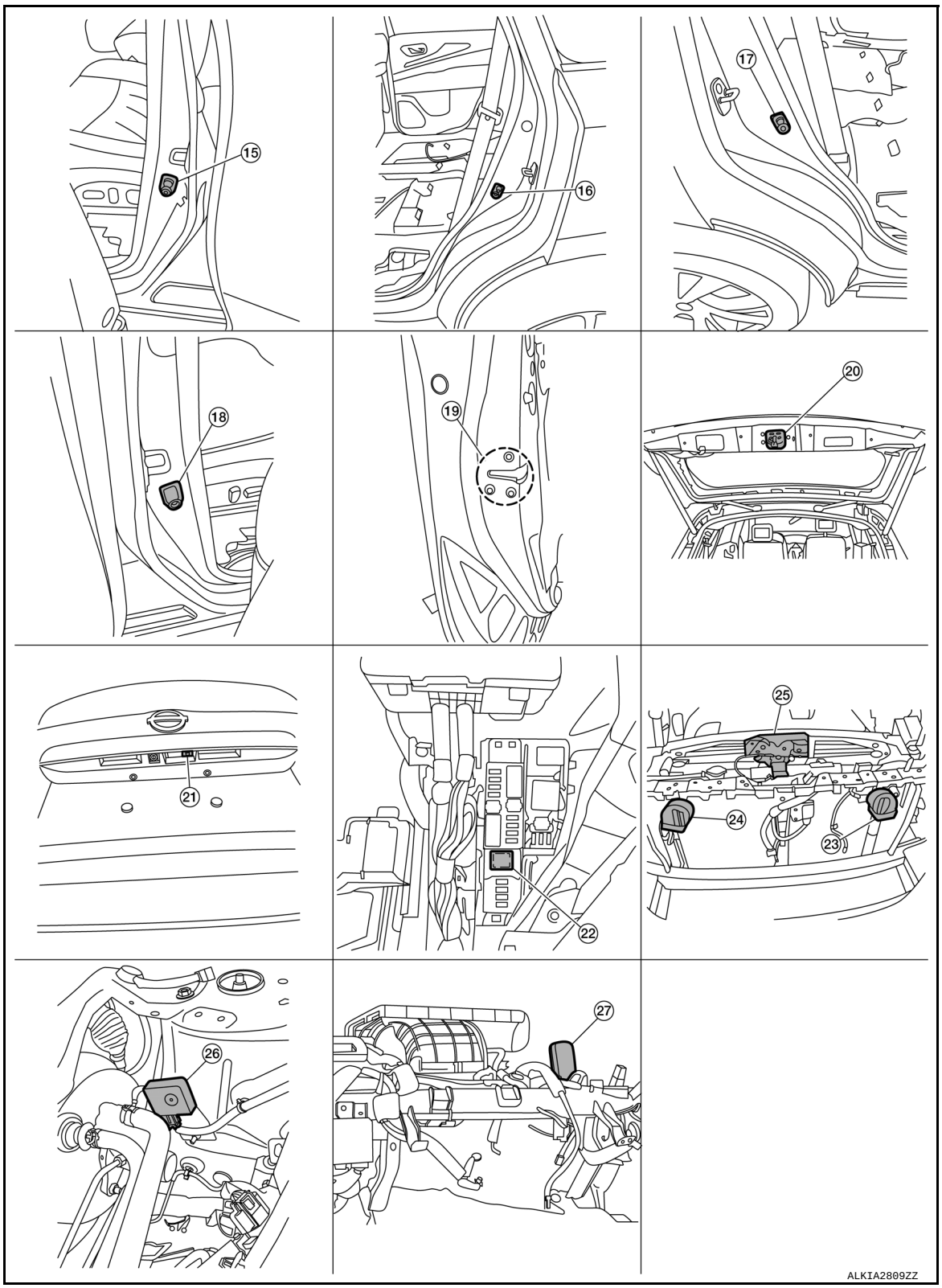
ALKIA2463ZZ



1. BCM (view with combination meter removed)
2. Combination meter
3. Push button ignition switch
4. CVT shift selector (P (Park) position switch) (view with center console removed)
5. CVT shift selector (Shift lock solenoid) (view with center console removed)
6. CVT shift selector (P (Park) position switch) (view with center console removed)
7. Stop lamp switch
8. Inside key antenna (instrument center)
9. Front outside handle RH (RH request switch and outside key antenna passenger side)

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

INTELLIGENT KEY SYSTEM : Component Description

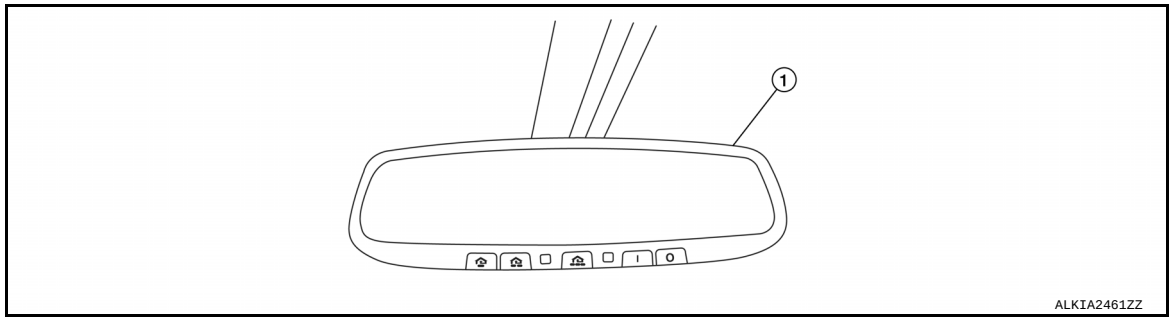
INFOID:0000000008506016

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

INTEGRATED HOMELINK TRANSMITTER

INTEGRATED HOMELINK TRANSMITTER : Component Parts Location

INFOID:0000000008506017



1. Auto anti-dazzling inside mirror

INTEGRATED HOMELINK TRANSMITTER : Component Description

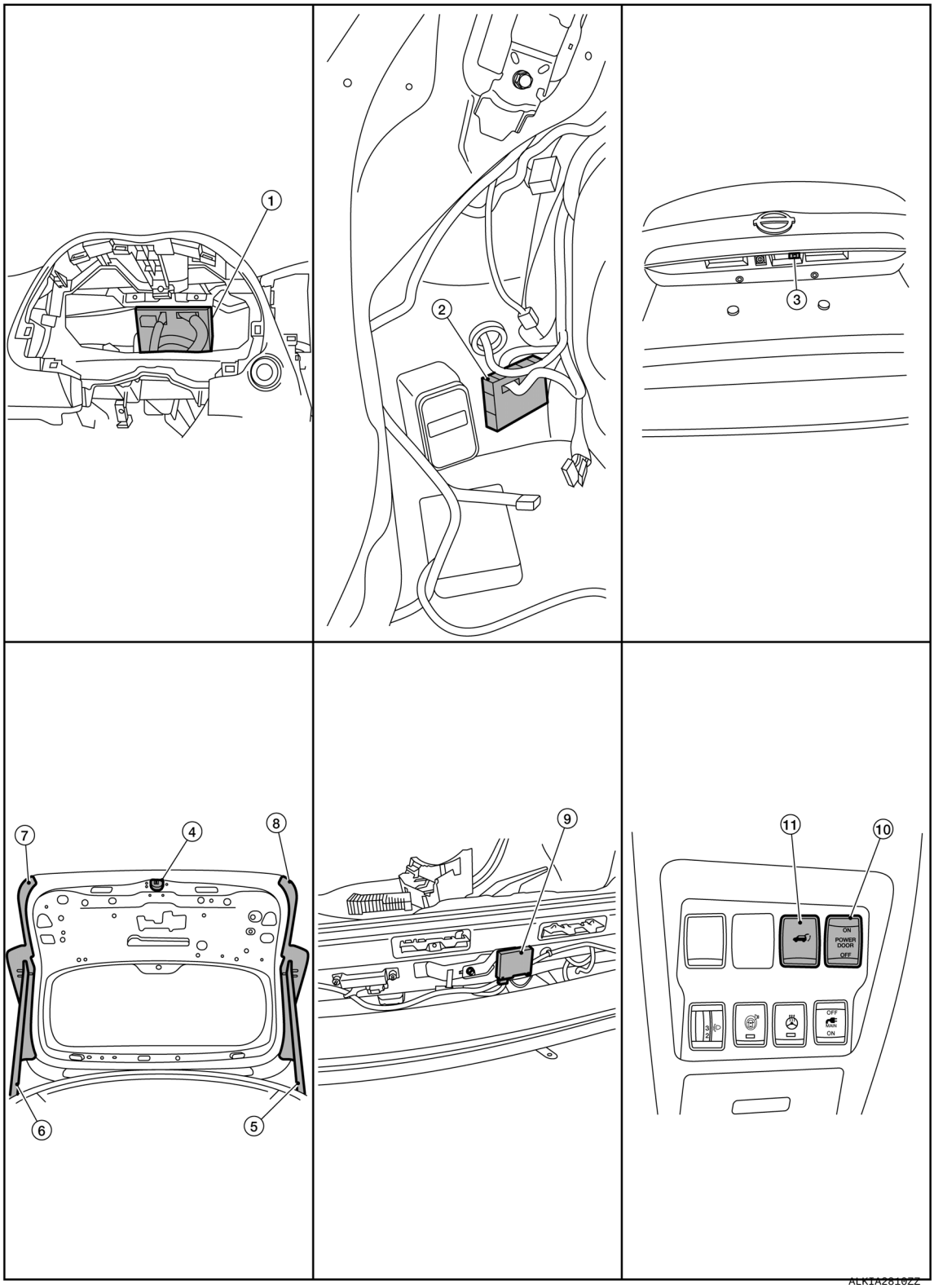
INFOID:0000000008506018

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

AUTOMATIC BACK DOOR SYSTEM : Component Parts Location

INFOID:0000000008506019



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

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

AUTOMATIC BACK DOOR SYSTEM : Component Description

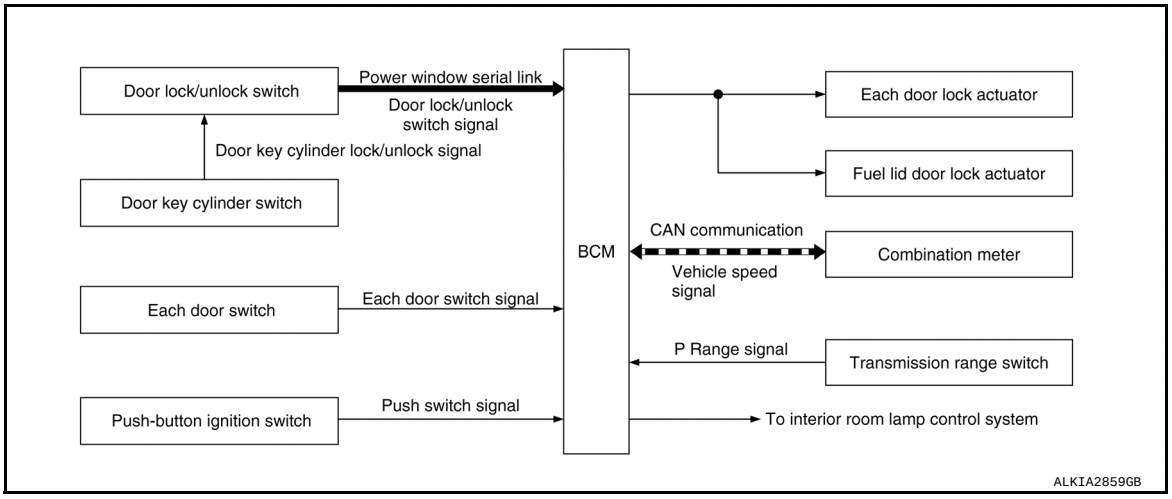
INFOID:0000000008506020

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

SYSTEM (POWER DOOR LOCK SYSTEM)

System Diagram

INFOID:0000000008506021



System Description

INFOID:0000000008506022

DOOR LOCK FUNCTION

Door Lock and Unlock Switch

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

Door Key Cylinder Switch

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

Selective unlock operation mode can be changed using CONSULT.
Refer to BCS-15, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

DOOR KEY CYLINDER SWITCH POWER WINDOW FUNCTION

Driver side door key cylinder LOCK/UNLOCK operation can activate power window. Refer to PWC-10, "System Description".

IGNITION POSITION WARNING FUNCTION

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

INTERIOR ROOM LAMP CONTROL FUNCTION

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

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (LOCK OPERATION)

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

Vehicle Speed Sensing Auto Door Lock

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

P Range Interlock Door Lock

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

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

Setting change of Automatic Door Lock/Unlock Function

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

With CONSULT

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

Without CONSULT

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

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

OFF → ON	: 2 blinks
ON → OFF	: 1 blink

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (UNLOCK OPERATION)

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

IGN OFF Interlock Door Unlock

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

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

P Range Interlock Door Unlock

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

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

Setting change of Automatic Door Lock/Unlock Function

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

With CONSULT

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

Without CONSULT

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

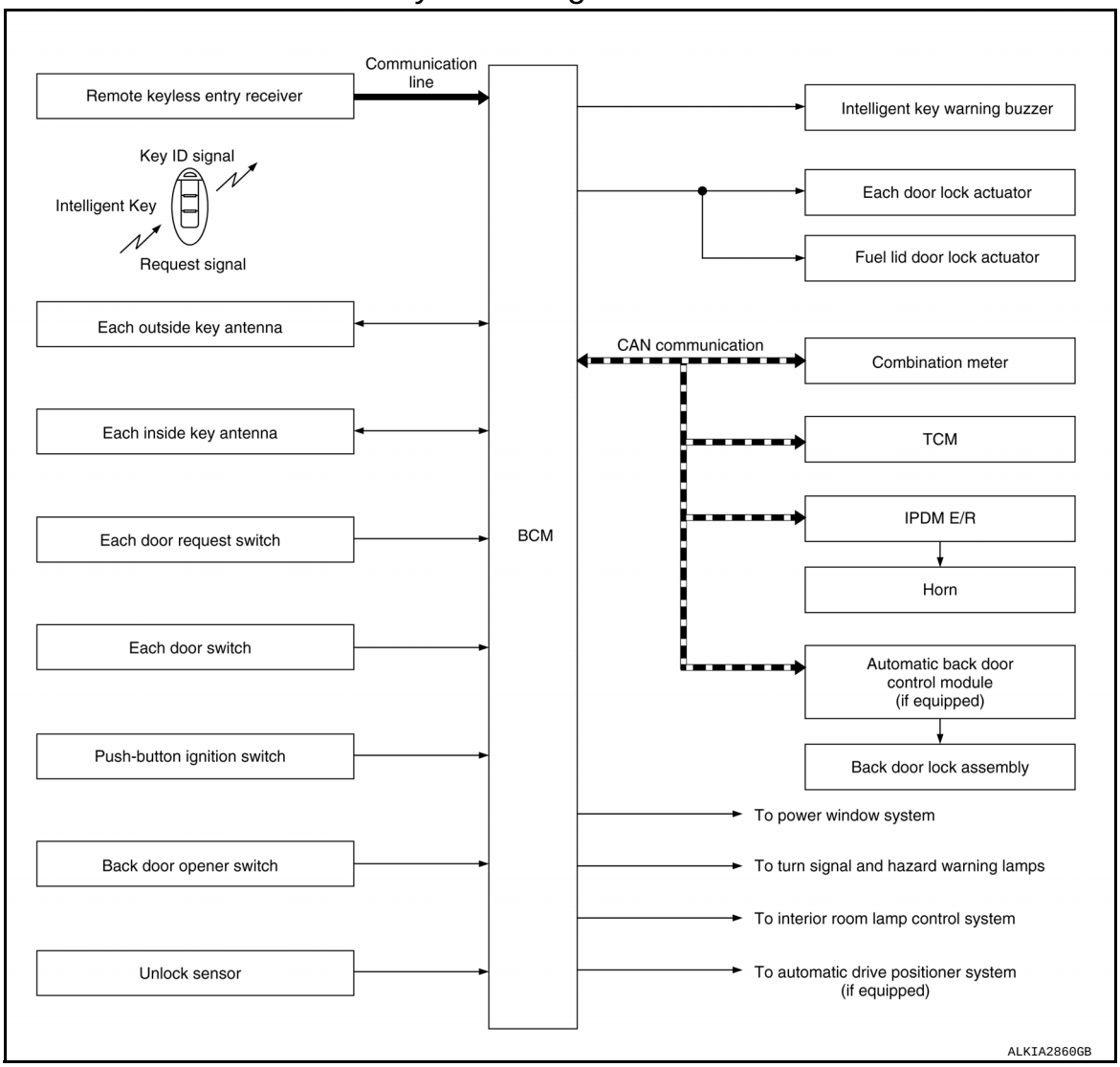
1. Close all doors (door switch OFF)
2. Ignition switch: OFF→ON
3. Press and hold the door lock and unlock switch for 5 seconds or more in the unlock direction within 20 seconds after turning the power supply position ON.
4. The switching is complete when the hazard lamp blinks.

OFF → ON	: 2 blinks
ON → OFF	: 1 blink

SYSTEM (INTELLIGENT KEY SYSTEM)
INTELLIGENT KEY SYSTEM

INTELLIGENT KEY SYSTEM : System Diagram

INFOID:0000000008506023



INTELLIGENT KEY SYSTEM : System Description

INFOID:0000000008506024

- The Intelligent Key system is a system that makes it possible to lock and unlock the door locks (door lock/unlock function) by carrying the Intelligent Key, which operates based on the results of electronic ID verification using two-way communication between the Intelligent Key and the vehicle (BCM).
  CAUTION:
  The driver should always carry the Intelligent Key.
- The settings for each function can be changed with CONSULT.
- If an Intelligent Key is lost, a new Intelligent Key can be registered. A maximum of 4 Intelligent Keys can be registered.
- It is possible to perform a diagnosis on the system and register an Intelligent Key with CONSULT.

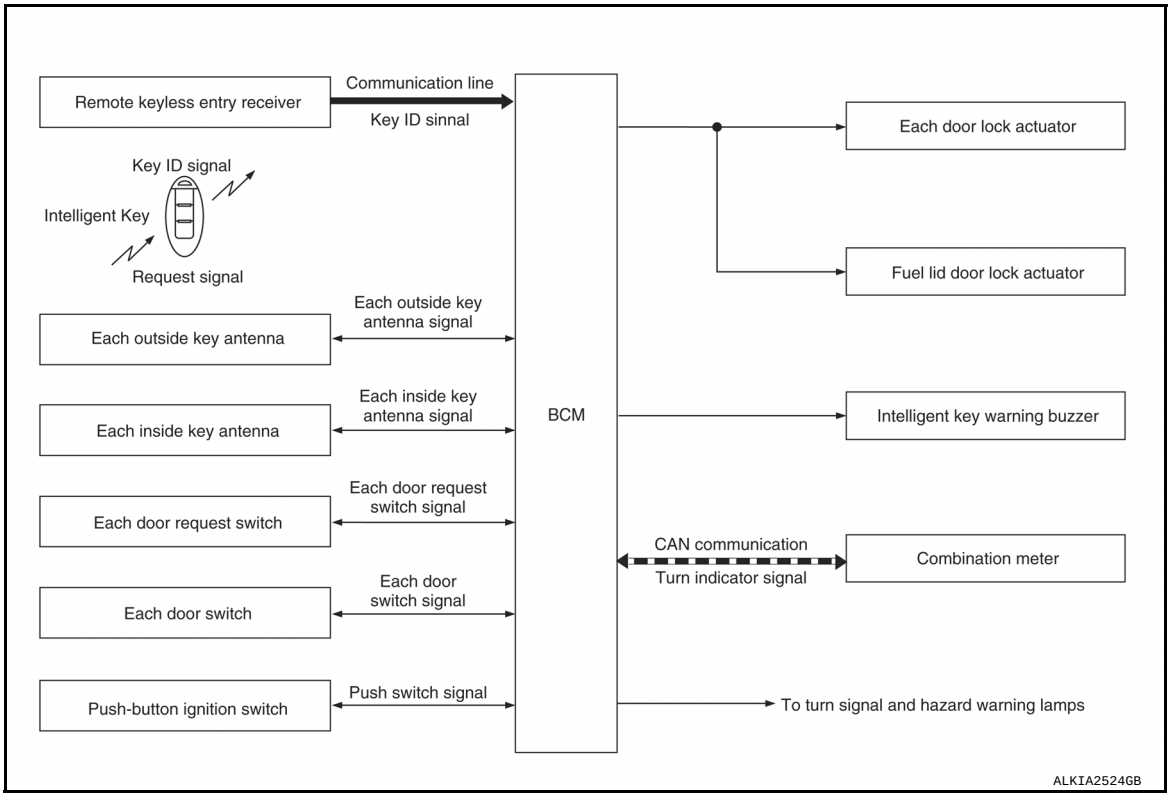
Function	Description	Refer
Door lock	Lock/unlock can be performed by pressing the request switch.	DLK-23
Back door opener	The back door can be opened by carrying the Intelligent Key and pressing the back door opener switch.	DLK-26
Remote keyless entry	Lock/unlock can be performed by pressing the remote controller button of the Intelligent Key.	DLK-27

Function	Description		Refer
Key reminder	The key reminder buzzer sounds a warning if the door is locked with the key left inside the vehicle.		DLK-30
Welcome light	When the Intelligent Key is carried, and vehicle doors are approached, the BCM illuminates interior room lamps and operates heart beat operation of the push-button ignition switch.		DLK-33
Warning	If an action that does not meet the operating condition of the Intelligent Key system is taken, the buzzer sounds to inform the driver.		DLK-34
Engine start	The engine can be turned on while carrying the Intelligent Key.		SEC-9
Interior room lamp control	Interior room lamp is controlled according to door lock/unlock state.		INL-6
Power window	Power window can be operated by Intelligent Key button operation.		PWC-10
Panic alarm	When Intelligent Key panic alarm button is pressed, horn sounds.		SEC-14
Intelligent Key interlock	Setting of auto driving position can be automatically set, according to key ID of Intelligent Key to the position that is registered in advance.	Automatic drive positioner	ADP-11
	Setting of air conditioning system can be set according to key ID of Intelligent Key to the setting value that is set before turning ignition switch OFF.	Air conditioning system	HAC-19
	Setting of multi AV system can be set according to key ID of Intelligent Key to the setting value that is set before turning ignition switch OFF.	Multi AV system	AV-17

DOOR LOCK FUNCTION

DOOR LOCK FUNCTION : System Diagram

INFOID:0000000008506025



DOOR LOCK FUNCTION : System Description

INFOID:0000000008506026

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

OPERATION DESCRIPTION

- When the BCM detects that each door request switch is pressed, it 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

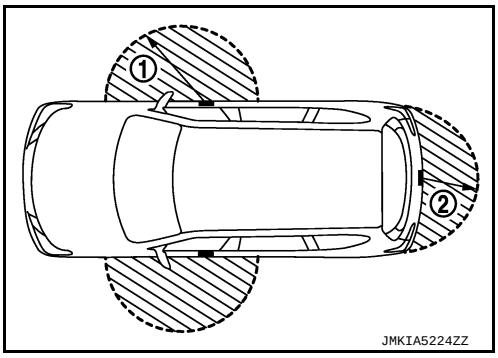
If the following conditions are satisfied, door lock/unlock operation is performed if the door request switch is operated.

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-20, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

HAZARD AND BUZZER REMINDER FUNCTION

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

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-20, "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-20, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

LIST OF OPERATION RELATED PARTS

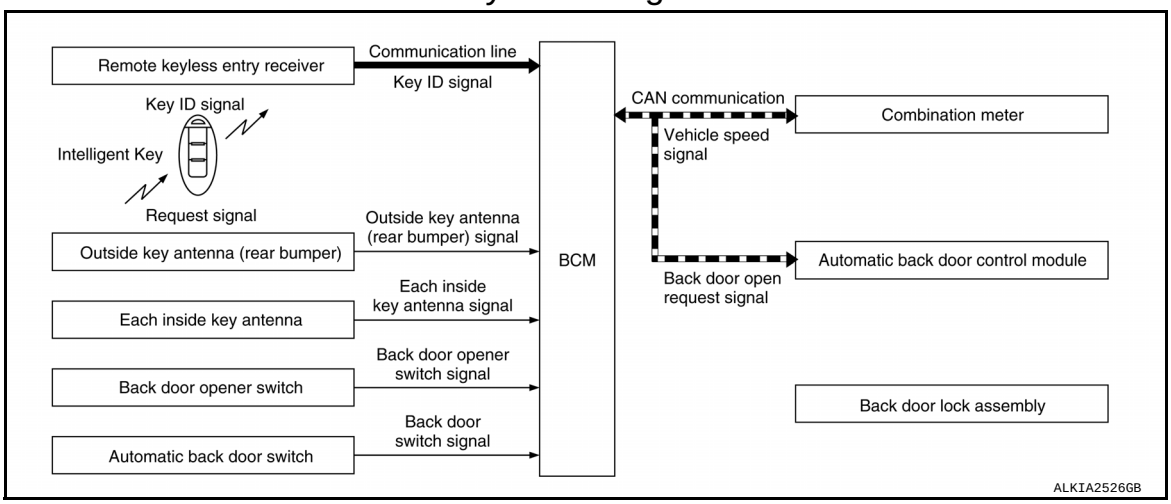
Parts marked with × are the parts related to operation.

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

BACK DOOR OPEN FUNCTION

BACK DOOR OPEN FUNCTION : System Diagram

INFOID:0000000008506027



BACK DOOR OPEN FUNCTION : System Description

INFOID:0000000008506028

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-38, "System Description".

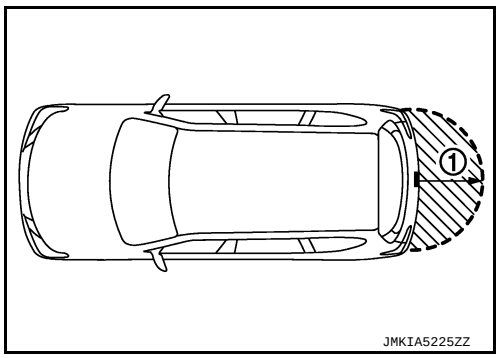
OPERATION CONDITION

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

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



LIST OF OPERATION RELATED PARTS

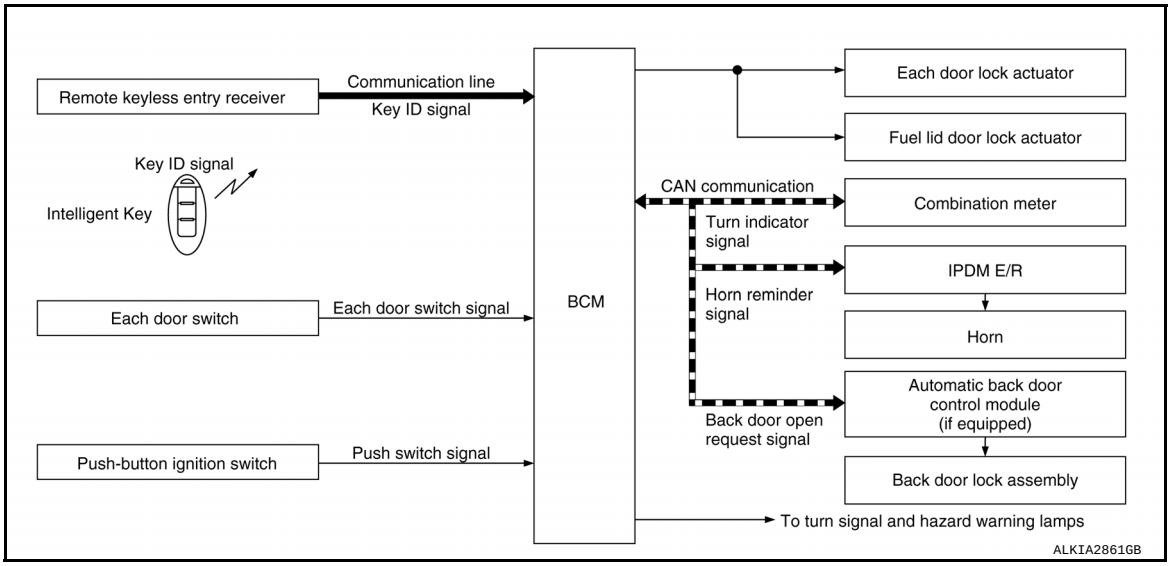
Parts marked with × are the parts related to operation.

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

REMOTE KEYLESS ENTRY FUNCTION

REMOTE KEYLESS ENTRY FUNCTION : System Diagram

INFOID:0000000008506029



REMOTE KEYLESS ENTRY FUNCTION : System Description

INFOID:0000000008506030

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

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

OPERATION AREA

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

REMOTE ENGINE START FUNCTION

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

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.

DOOR LOCK/UNLOCK FUNCTION

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

OPERATION CONDITION

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

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

SELECTIVE UNLOCK FUNCTION

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

How to change selective unlock operation mode.

Selective unlock operation mode can be changed using CONSULT.

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

AUTO DOOR LOCK FUNCTION

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

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

How to change auto door lock operation mode.
Auto door lock mode can be changed using CONSULT.
Refer to BCS-20, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

HAZARD AND HORN REMINDER FUNCTION

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

Operating Function of Hazard and Horn Reminder

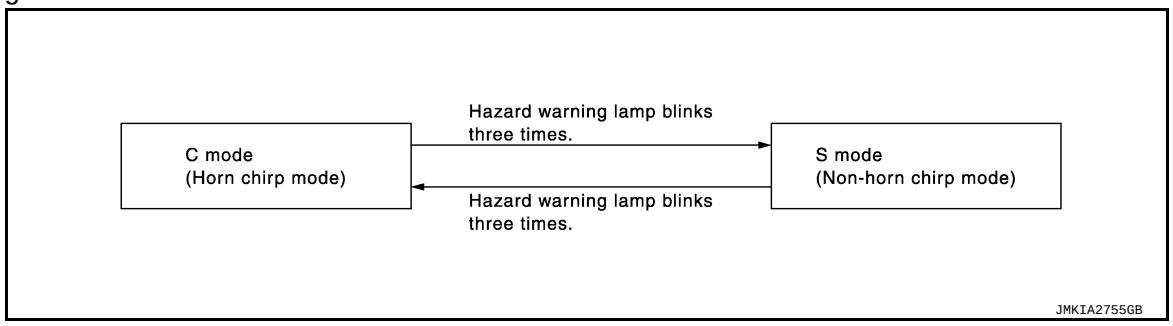
	C mode		S mode	
Intelligent Key operation	Lock	Unlock	Lock	Unlock
Hazard warning lamp blinks	Twice	Once	Twice	—
Horn sound	Once	—	—	—

Hazard and horn reminder does not operate in the following conditions.
- Ignition switch position is ON.
- Door is open (only lock operation).

How to Change Hazard and Horn Reminder Mode

With CONSULT
Hazard and horn reminder operation mode can be changed using CONSULT.
Refer to BCS-20, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Without CONSULT
When LOCK and UNLOCK signals are sent from the Intelligent Key for more than 2 seconds at the same time, the hazard and horn reminder mode is changed and hazard warning lamp blinks and horn sounds as per the following items:



AUTOMATIC BACK DOOR OPEN/CLOSE FUNCTION

When back door button of Intelligent Key is pressed for 0.4 second or more, back door open automatically for detailed description, refer to DLK-38, "System Description".

LIST OF OPERATION RELATED PARTS

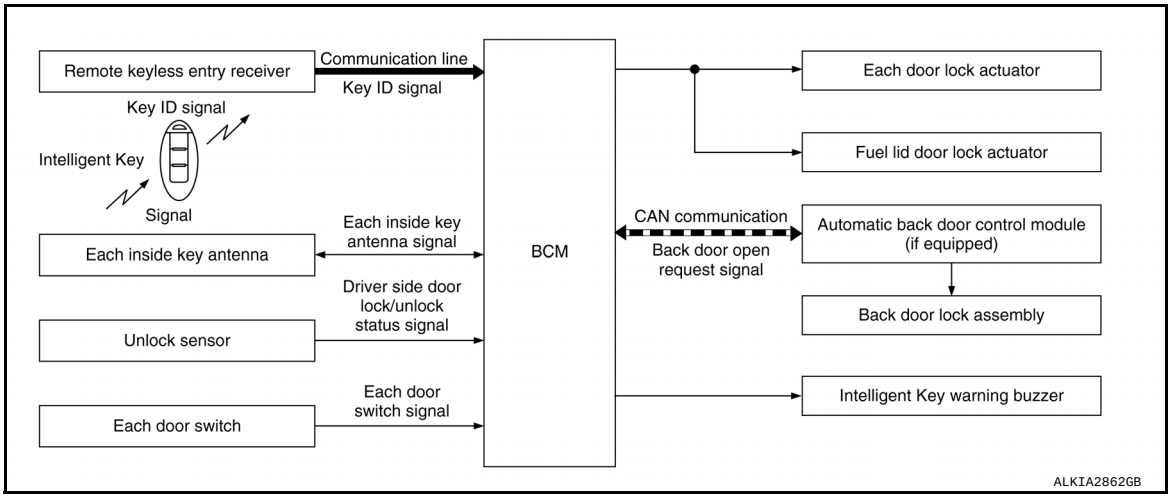
Parts marked with × are the parts related to operation.

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

KEY REMINDER FUNCTION

KEY REMINDER FUNCTION : System Diagram

INFOID:0000000008506031



KEY REMINDER FUNCTION : System Description

INFOID:0000000008506032

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

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

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

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

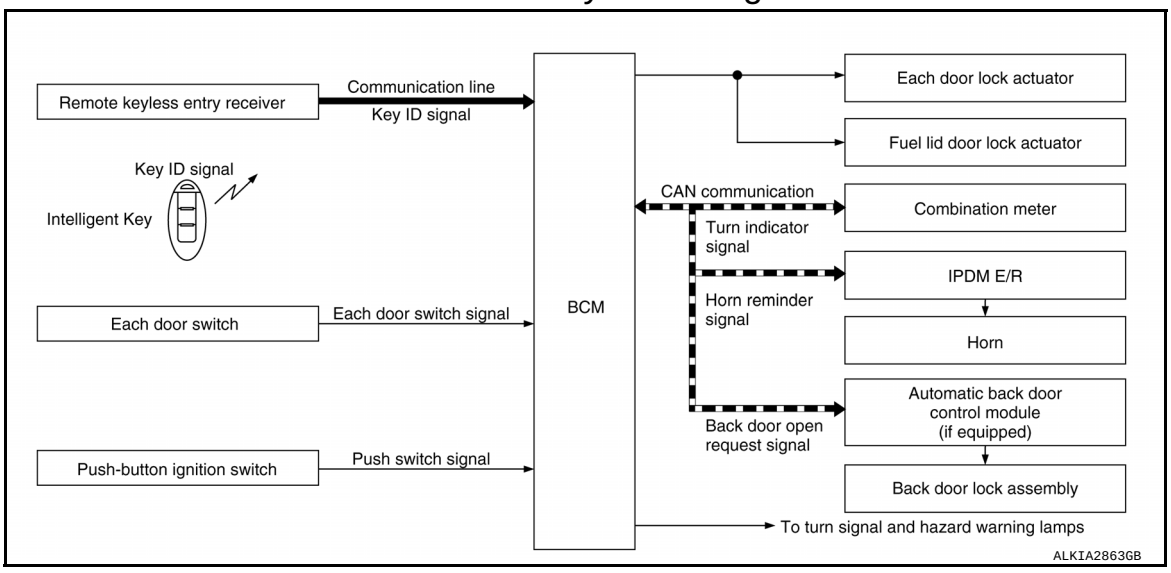
CAUTION:

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

REMOTE ENGINE START FUNCTION

REMOTE ENGINE START FUNCTION : System Diagram

INFOID:0000000008506033



REMOTE ENGINE START FUNCTION : System Description

INFOID:0000000008506034

OPERATION

Remote keyless entry system controls operation of the following items.

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

OPERATION AREA

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

REMOTE ENGINE START FUNCTION

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

Remote engine start cancel 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.

HAZARD AND HORN REMINDER FUNCTION

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

Operating Function of Hazard and Horn Reminder

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

Hazard and horn reminder does not operate in the following conditions.
- Ignition switch position is ON.
- Door is open (only lock operation)

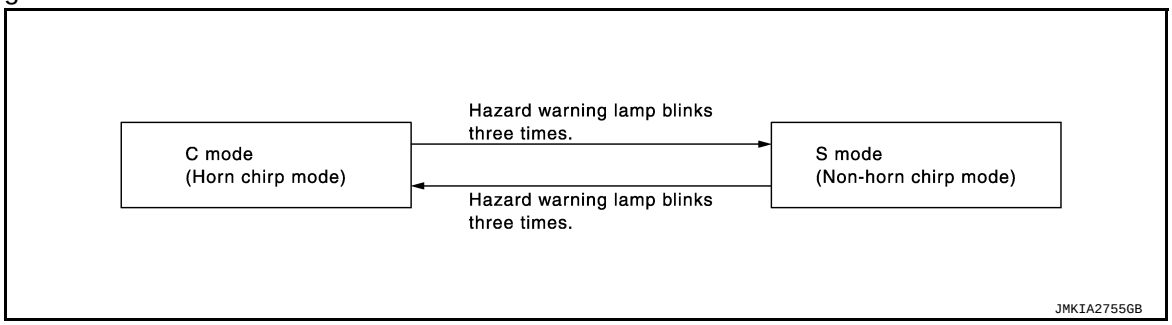
How to Change Hazard and Horn Reminder Mode

With CONSULT

Hazard and horn reminder operation mode can be changed using CONSULT.
Refer to BCS-20, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Without CONSULT

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



LIST OF OPERATION RELATED PARTS

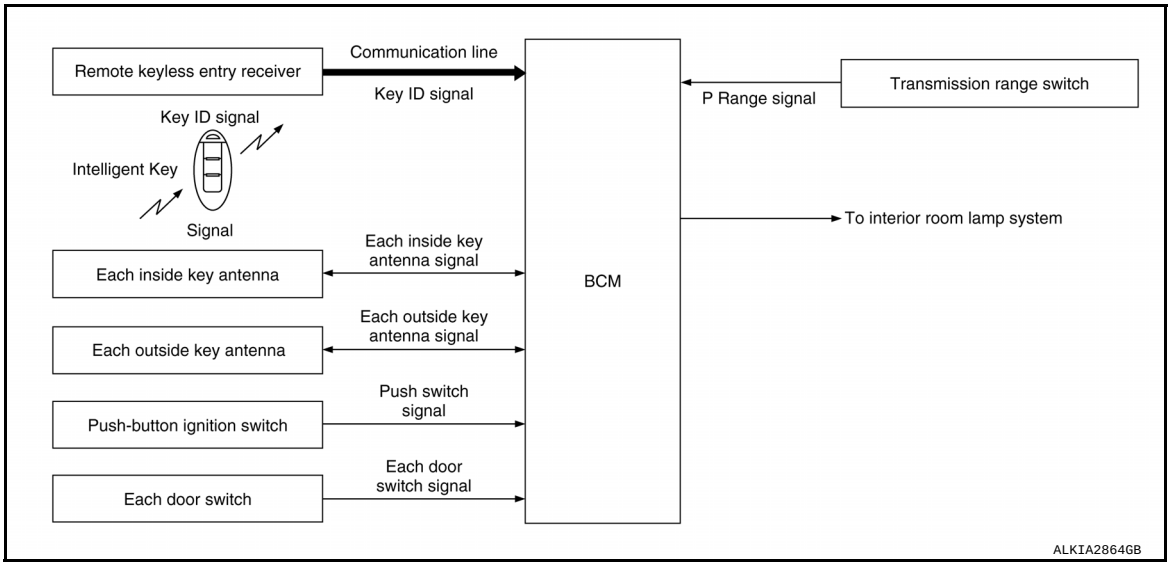
Parts marked with × are the parts related to operation.

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

WELCOME LIGHT FUNCTION

WELCOME LIGHT FUNCTION : System Diagram

INFOID:0000000008506035



WELCOME LIGHT FUNCTION : System Description

INFOID:0000000008506036

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.

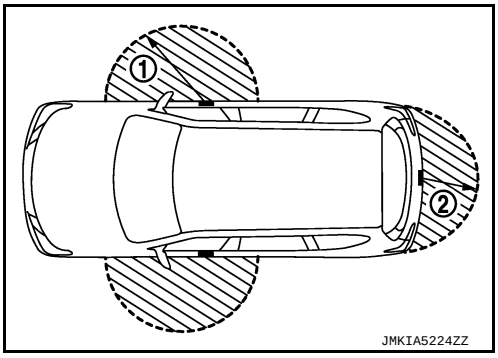
OPERATION CONDITION

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

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



WELCOME LIGHT FUNCTION SETTING

Welcome light function operation mode can be changed using CONSULT

With CONSULT

Refer to BCS-20, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Without CONSULT

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

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

WARNING FUNCTION

WARNING FUNCTION : System Description

INFOID:0000000008506037

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

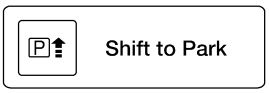
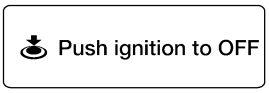
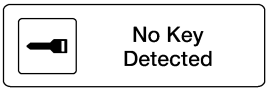
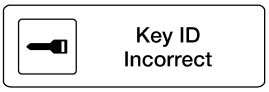
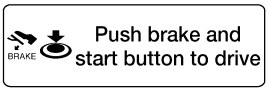
OPERATION CONDITION

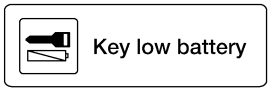
Once the following condition from below is established, alert or warning is executed.

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

WARNING METHOD

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

Warning/Information functions		"KEY" warning lamp	Information display (combination meter)	Warning chime	
				Combination meter buzzer	Intelligent Key warning buzzer
Intelligent Key system malfunction		Indicate	—	—	—
OFF position warning	For internal	—	—	Activate	—
	For external	—	—	—	Activate
P position warning	For internal	—	 ALKIA2515GB	Activate	—
	For external			—	Active
ACC warning		—	 ALKIA2516GB	Activate	—
Take away warning	Door is open to close	—	 ALKIA2517GB	Activate	Activate
	Door is open			—	—
	Push-button ignition switch operation			Activate	—
Door lock operation warning	Request switch operation	—	—	—	Activate
	Intelligent Key	—	—	—	Activate
Key ID warning		—	 ALKIA2518GB	—	—
Engine start information		—	 ALKIA2519GB	—	—

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

LIST OF OPERATION RELATED PARTS

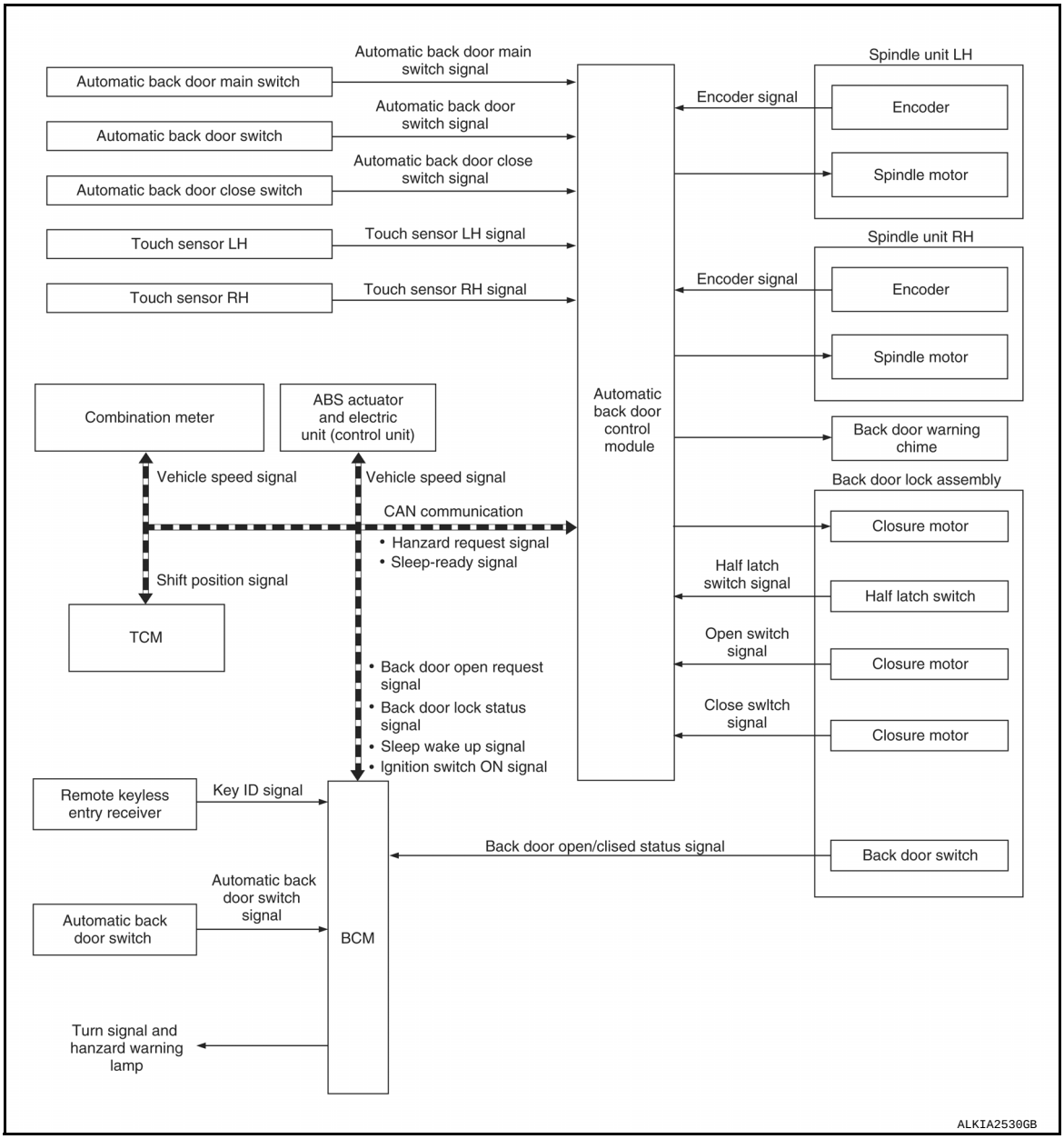
Parts marked with × are the parts related to operation.

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

SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

System Diagram

INFOID:0000000008506038



System Description

INFOID:0000000008506039

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

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

Back Door Opener Switch Operation

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

Automatic Back Door Main Switch Operation

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

BACK DOOR OPEN POSITION SETTING FUNCTION

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

Setting Procedure

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

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

Cancellation Procedure

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

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

BACK DOOR AUTO CLOSURE FUNCTION

Open Function

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

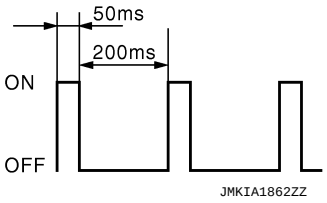
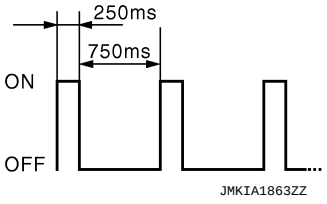
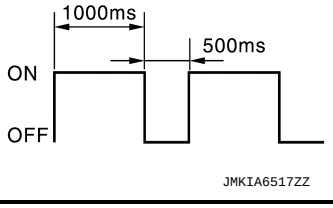
Closure Function

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

WARNING FUNCTION

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

Chime Operation Condition

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

ANTI-PINCH FUNCTION

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

Operation Condition

Detection method		Encoder pulse	Touch sensor
Applicable operation		Open/close operation	Close operation
Operation when any trapped foreign material is detected	Stop the vehicle	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)]

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

AUTOMATIC BACK DOOR OPEN/CLOSE OPERATION CONDITION

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

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

CONTROL IF NOT WITHIN THE OPERATION CONDITIONS DURING THE OPERATION

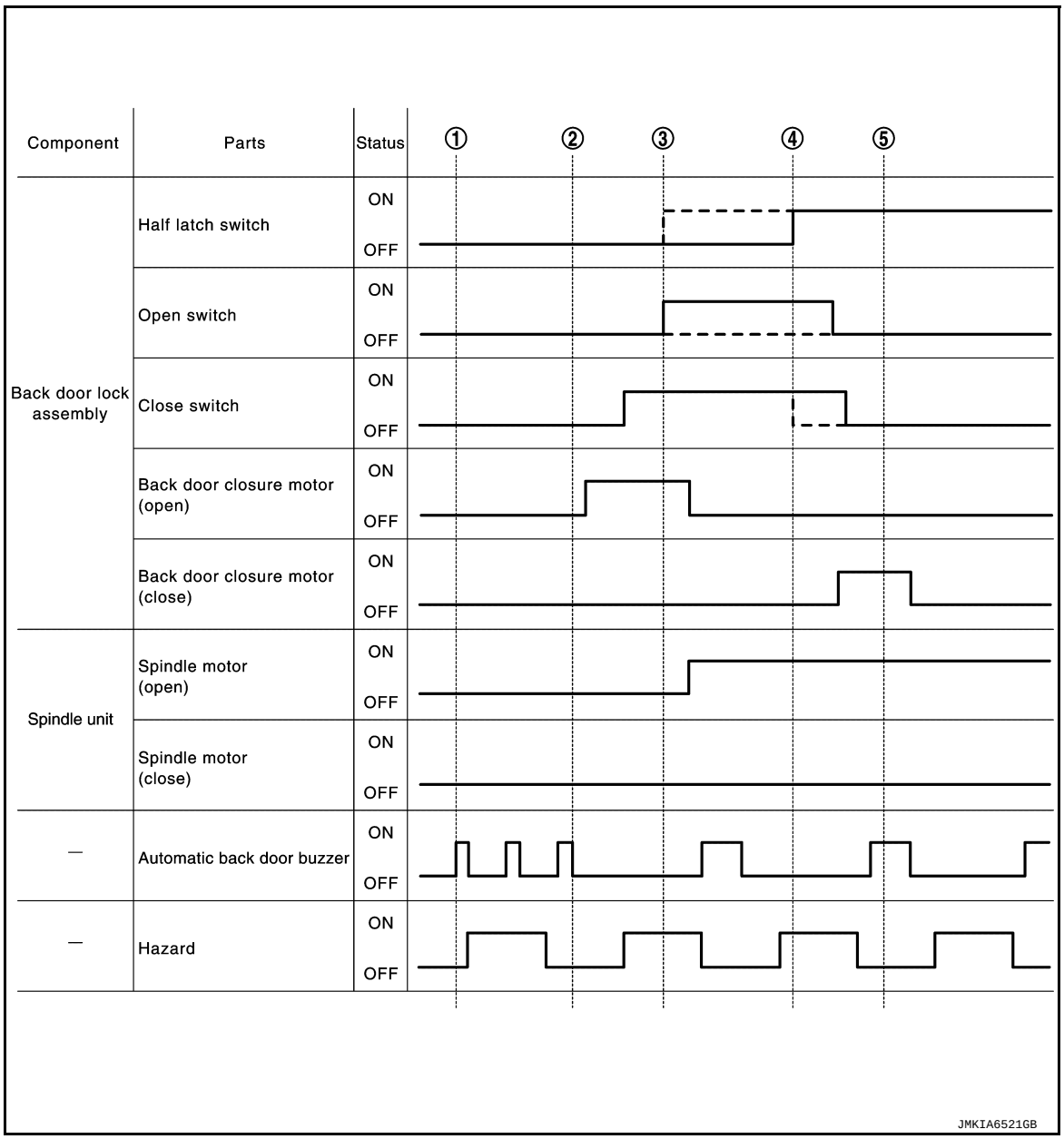
If the back door is not within the operation conditions during the operation, the automatic back door control module performs the control as follows.

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

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

TIME CHART FOR AUTOMATIC BACK DOOR SYSTEM

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



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

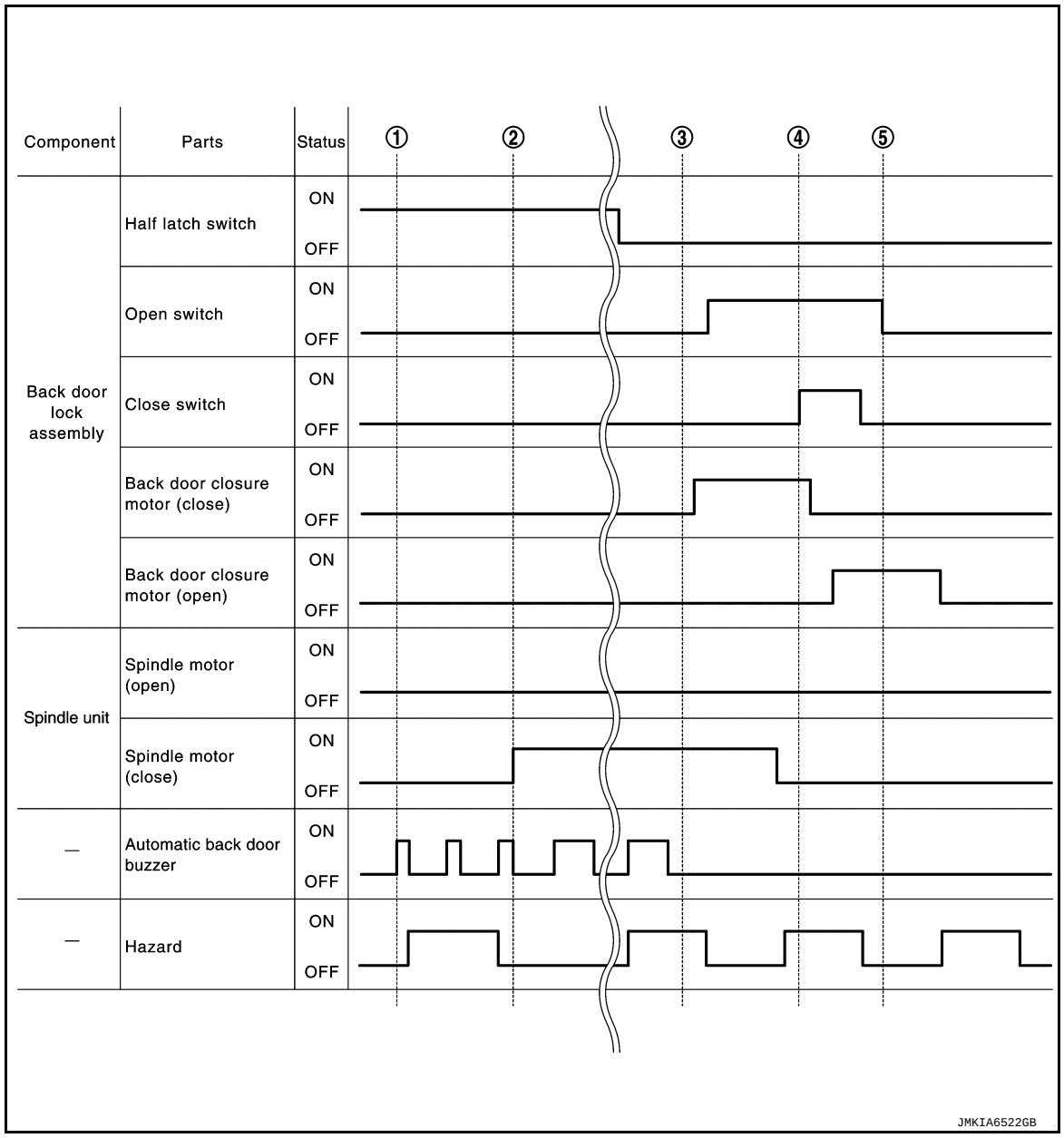
Then, operate the spindle motor to perform the back door open operation.

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

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

Fully Open to Fully Closed Operation

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



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

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

SYSTEM (INTEGRATED HOMELINK TRANSMITTER)

System Description

INFOID:0000000008506040

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

DIAGNOSIS SYSTEM (BCM)
COMMON ITEM
COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000008932610

APPLICATION ITEM
CONSULT performs the following functions via CAN communication with BCM.

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

SYSTEM APPLICATION
BCM can perform the following functions.

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

DOOR LOCK

DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)

INFOID:0000000008932624

SELF DIAGNOSTIC RESULT

Refer to BCS-50, "DTC Index".

DATA MONITOR

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

ACTIVE TEST

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

WORK SUPPORT

Support Item	Setting	Description
DOOR LOCK-UNLOCK SET	On*	Automatic door locks function ON.
	Off	Automatic door locks function OFF.
AUTO UNLOCK TYPE	MODE2	Driver door only unlocks automatically.
	MODE1*	All doors unlock automatically.
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:0000000008932625

SELF DIAGNOSTIC RESULT

Refer to BCS-50, "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.
DOOR STAT -DR [LOCK/READY/UNLK]	×	Indicates condition of driver side door status.
DOOR STAT -AS [LOCK/READY/UNLK]	×	Indicates condition of passenger side door status.
DOOR STAT -RR [LOCK/READY/UNLK]	×	Indicates condition of rear right side door status.
DOOR STAT -RL [LOCK/READY/UNLK]	×	Indicates condition of rear left side door status.
BK DOOR STATE [LOCK/READY/UNLK]	×	Indicates condition of back door status.
ID OK FLAG [Set/Reset]		Indicates condition of Intelligent Key ID.
PRMT ENG STRT [Set/Reset]		Indicates condition of engine start possibility.
PRMT RKE STRT [Set/Reset]		Indicates condition of engine start possibility from Intelligent Key.
I-KEY OK FLAG [Key ON/Key OFF]	×	Indicates condition of Intelligent Key OK flag.
PRBT ENG STRT [Set/Reset]		Indicates condition of engine start prohibit.
ID AUTHENT CANCEL TIMER [STOP]		Indicates condition of Intelligent Key ID authentication.
ACC BATTERY SAVER [STOP]		Indicates condition of battery saver.
CRNK PRBT TMR [On/Off]		Indicates condition of crank prohibit timer.
AUT CRNK TMR [On/Off]		Indicates condition of automatic engine crank timer from Intelligent Key.
CRNK PRBT TME [sec]		Indicates condition of engine crank prohibit time.
AUTO CRNK TME [sec]		Indicates condition of automatic engine crank time from Intelligent Key.
CRANKING TME [sec]		Indicates condition of engine cranking time from Intelligent Key.
DETE SW PWR [On/Off]		Indicates condition of detent switch voltage.
ACC RLY -REQ [On/Off]		Indicates condition of accessory relay control request.

Monitor Item [Unit]	Main	Description
RKE OPE COUN1 [0-19]	×	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing.
RKE OPE COUN2 [0-19]	×	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing.
RKE-LOCK [On/Off]		Indicates condition of lock signal from Intelligent Key.
RKE-UNLOCK [On/Off]		Indicates condition of unlock signal from Intelligent Key.
RKE-TR/BD [On/Off]		Indicates condition of back door open signal from Intelligent Key.
RKE-PANIC [On/Off]		Indicates condition of panic signal from Intelligent Key.
RKE-MODE CHG [On/Off]		Indicates condition of mode change signal from Intelligent Key.
RKE PBD [On/Off]		Indicates condition of power back door signal from Intelligent Key.

ACTIVE TEST

Test Item	Description
INTELLIGENT KEY LINK (CAN)	This test is able to check Intelligent Key identification number [Off/ID No1/ID N02/ID No3/ID No4/ID No5].
INT LAMP	This test is able to check interior room lamp operation [On/Off].
FLASHER	This test is able to check hazard lamp operation [LH/RH/Off].
HORN	This test is able to check horn operation [On].
BATTERY SAVER	This test is able to check battery saver operation [On/Off].
TRUNK/BACK DOOR	This test is able to check back door actuator operation [Open].
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation [On/Off].
INSIDE BUZZER	This test is able to check combination meter warning chime operation [Take Out/Knob/Key/Off].
INDICATOR	This test is able to check combination meter warning lamp operation [KEY ON/KEY IND/Off].
IGN CONT2	This test is able to check ignition relay-2 control operation [On/Off].
ENGINE SW ILLUMI	This test is able to check push-button ignition switch START indicator operation [On/Off].
PUSH SWITCH INDICATOR	This test is able to check push-button ignition switch indicator operation [On/Off].
ACC CONT	This test is able to check accessory relay control operation [On/Off].
IGN CONT1	This test is able to check ignition relay-1 control operation [On/Off].
ST CONT LOW	This test is able to check starter control relay operation [On/Off].
REVERSE LAMP TEST	This test is able to check reverse lamp illumination operation [On/Off].
DOOR HANDLE LAMP TEST	This test is able to check door handle lamp illumination operation [On/Off].
TRUNK/LUGGAGE LAMP TEST	This test is able to check cargo lamp illumination operation [On/Off].
KEYFOB PW TEST	This test is able to check power window operation using the Intelligent Key [P/W up/down OFF/Send P/W down ON/Send P/W up ON].
SHIFTLOCK SOLENOID TEST	This test is able to check shift lock solenoid operation [On/Off].

WORK SUPPORT

Support Item	Setting	Description
IGN/ACC BATTERY SAVER	On*	Battery saver function ON.
	Off	Battery saver function OFF.
REMOTE ENGINE STARTER	On*	Remote engine start function ON.
	Off	Remote engine start function OFF.

Support Item	Setting		Description
ANSWERBACK I-KEY LOCK UNLOCK	BUZZER		Buzzer reminder function by door lock/unlock request switch ON.
	HORN		Horn chirp reminder function by door lock request switch ON.
	Off*		No reminder function by door lock/unlock request switch.
	INVALID		This mode is not used.
ANSWERBACK KEYLESS LOCK UNLOCK	On		Buzzer or horn chirp reminder when doors are locked/unlocked with Intelligent Key.
	Off*		No buzzer or horn chirp reminder when doors are locked/unlocked with Intelligent Key.
WELCOME LIGHT OP SET	On*		Door handle lamp function from request switch ON.
	Off		Door handle lamp function from request switch OFF.
ANSWER BACK	On*		Horn chirp reminder when doors are locked with Intelligent Key.
	Off		No horn chirp reminder when doors are locked with Intelligent Key.
RETRACTABLE MIRROR SET	On		Retractable mirror set ON.
	Off*		Retractable mirror set OFF.
LOCK/UNLOCK BY I-KEY	On*		Door lock/unlock function from Intelligent Key ON.
	Off		Door lock/unlock function from Intelligent Key OFF.
ENGINE START BY I-KEY	On*		Engine start function from Intelligent Key ON.
	Off		Engine start function from Intelligent Key OFF.
TRUNK/GLASS HATCH OPEN	On*		Buzzer reminder function by back door request switch ON.
	Off		Buzzer reminder function by back door request switch OFF.
INTELLIGENT KEY LINK SET	On		Intelligent Key link set ON.
	Off*		Intelligent Key link set OFF.
SHORT CRANKING OUTPUT	Start	70 msec	Starter motor operation duration times.
		100 msec	
		200 msec	
	End		—
INSIDE ANT DIAGNOSIS	—		This function allows inside key antenna self-diagnosis.
AUTO LOCK SET	MODE7	5 min	Auto door lock time can be set in this mode.
	MODE6	4 min	
	MODE5	3 min	
	MODE4	2 min	
	MODE3*	1 min	
	MODE2	30 sec	
	MODE1	Off	

*: Initial Setting

TRUNK

TRUNK : CONSULT Function (BCM - TRUNK)

INFOID:0000000008932632

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.

Monitor Item [Unit]	Description
TR/BD OPEN SW [On/Off]	Indicates condition of back door opener switch.
RKE-TR/BD [On/Off]	Indicates condition of back door open signal from Intelligent Key.

DIAGNOSIS SYSTEM (AUTOMATIC BACK DOOR CONTROL UNIT)

CONSULT Function

INFOID:0000000008506045

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-58, "DTC Index".

DATA MONITOR

Monitor Item	Unit	Description
SPINDLE SENSOR LH	[Pulse]	Displays the condition of the LH encoder
SPINDLE LH SPEED	[mm/s]	Displays the LH spindle operation speed
SPINDLE MOTOR LH DUTY	[%]	Displays the condition of the spindle motor LH duty
VHCL SPEED MTR	[km/h]	Displays the vehicle speed signal received from combination meter by numerical value
VHCL SPEED ABS	[km/h]	Displays the vehicle speed signal received from ABS actuator and electrical unit by numerical value
MAIN SW	[ON/OFF]	Indicates condition of automatic back door main switch
AUTO BD SW	[ON/OFF]	Indicates condition of automatic back door switch
BK DOOR CL SW	[ON/OFF]	Indicates condition of automatic back door close switch
BACK DOOR LOCK STATUS	[ON/OFF]	Indicates condition of back door lock status
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
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

Monitor Item	Unit	Description
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-112, "Work Procedure"

ECU DIAGNOSIS INFORMATION

AUTOMATIC BACK DOOR CONTROL UNIT

Reference Value

INFOID:0000000008506046

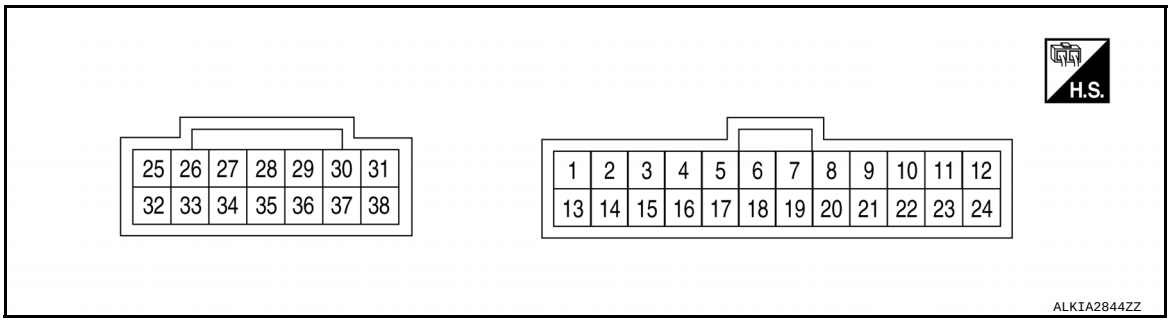
VALUES ON THE DIAGNOSIS TOOL

CONSULT MONITOR ITEM

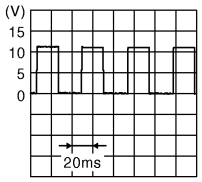
Monitor Item	Condition		Value/Status
SPINDLE SENSOR LH	Back door: Moving		0 – 65535
SPINDLE LH SPEED	Back door: Moving		0 – 6553.5
SPINDLE MOTOR LH DUTY	Back door: Moving		0 – 255
VHCL SPEED MTR	While driving		Equivalent to speedometer reading
VHCL SPEED ABS	While driving		Equivalent to speedometer reading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

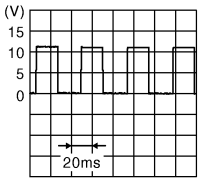
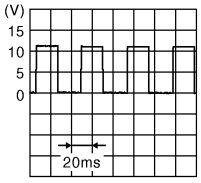
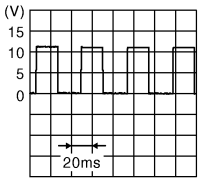
Monitor Item	Condition		Value/Status
AUTO BCK DR POS INITIAL	Calibration of automatic back door position information	Not complete	YET
		Complete	DONE
AUTO BCK DR POS LEARN	Additional service when removing battery negative terminal	Not complete	YET
		Complete	DONE
SPINDLE SENSOR RH	Back door: Moving		0 – 65535
SPINDLE RH SPEED	Back door: Moving		0 – 6553.5
SPINDLE MOTOR RH DUTY	Back door: Moving		0 – 255
SPINDLE RH ENCODER A	Automatic back door	Not operate	No change HI or LO
		Operate	Change HI or LO
SPINDLE RH ENCODER B	Automatic back door	Not operate	No change HI or LO
		Operate	Change HI or LO

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Voltage (Approx.)
(+)	(–)	Signal name	Input/ Output			
1 (BR)	13 (SB)	Touch sensor RH signal	Input	Touch sensor RH	Detect obstruction	1.8 – 5 V
					Other than above	2.72 – 7.27 V
2 (LG)	13 (SB)	Touch sensor LH signal	Input	Touch sensor LH	Detect obstruction	1.8 – 2.72 V
					Other than above	5.0 – 7.27 V
3 (L)	Ground	Half latch switch signal	Input	Back door	Open	0 V
					Fully closed/half latch	Battery voltage
5 (LG)	Ground	Close switch signal	Input	Back door	Fully closed	0 V
					Open/half latch	Battery voltage
6 (V)	Ground	Encoder LH A signal	Input	Back door	Moving (auto or manual)	 JMKIA1864ZZ **NOTE:** Waveform width changes according to back door open/close speed
					When stopped	0 V or Battery voltage

Terminal No. (Wire color)		Description		Condition		Voltage (Approx.)
(+)	(–)	Signal name	Input/ Output			
7 (Y)	Ground	Encoder LH B signal	Input	Back door	Moving (auto or manual)	 JMKIA1864ZZ **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)	 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)	 JMKIA1864ZZ **NOTE:** Waveform width changes according to back door open/close speed
					When stopped	0 V or 12 V
10 (LG)	Ground	Automatic back door main switch	Input	Automatic back door main switch	ON	Battery voltage
					OFF	0 V
11 (BR)	Ground	Open switch signal	Input	Back door	Open	0 V
					Half latch/fully closed	Battery voltage
12 (W)	Ground	CAN - L	Input/ Output	—		—
13 (SB)	Ground	Touch sensor ground	Input	—		0.01 – 0 V
18 (—)	Ground	Ground (noise shield)	—	—		0.01 – 0 V
19 (SB)	Ground	Encoder LH power supply	Output	—		Battery voltage
20 (Y)	Ground	Encoder RH power supply	Output	—		Battery voltage
21 (LG)	Ground	Encoder ground	—	—		0 V

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

Fail Safe

INFOID:0000000008506047

Display contents of CONSULT	Fail-safe	Cancellation
U1000 CAN COMM	Inhibit automatic back door operation	Return to normal status.
U1010 CONTROL UNIT (CAN)	Inhibit automatic back door operation	Return to normal status.
B2401 IGN OPEN	Inhibit automatic back door operation	Automatic back door control module detects ignition switch ON signal via CAN communication.
B2409 HALF LATCH SW	Inhibit automatic back door operation	Automatic back door control module detects that half latch switch 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.

Display contents of CONSULT	Fail-safe	Cancellation
B2426 SPINDLE SENSOR LH	Inhibit automatic back door operation	Return to normal status.
B2427 SPINDLE SENSOR RH	Inhibit automatic back door operation	Return to normal status.
B2428 AUTO BACK DR CNT MODULE	Inhibit automatic back door operation	Return to normal status.
B242A CLSR CONDITION	Inhibit automatic back door operation	Reconnect battery.

DTC Inspection Priority Chart

INFOID:0000000008506048

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

INFOID:0000000008506049

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	×	BCS-66, "DTC Logic"
U1010: CONTROL UNIT(CAN)	×	BCS-67, "DTC Logic"
B2401: IGN OPEN	×	DLK-115, "DTC Logic"
B2409: HALF LATCH SW	×	DLK-116, "DTC Logic"
B2416: TOUCH SEN R OPEN	×	DLK-119, "DTC Logic"
B2417: TOUCH SEN L OPEN	×	DLK-122, "DTC Logic"
B2419: OPEN SW	×	DLK-125, "DTC Logic"
B2420: CLOSE SW	×	DLK-128, "DTC Logic"
B2422: BACK DOOR STATE	×	DLK-131, "DTC Logic"
B2423: ABD MTR TIME OUT	×	DLK-134, "DTC Logic"
B2426: SPINDLE SENSOR LH	×	DLK-136, "DTC Logic"
B2427: SPINDLE SENSOR RH	×	DLK-139, "DTC Logic"
B2428: AUTO BACK DR CNT UNIT	×	DLK-142, "DTC Logic"
B242A: CLSR CONDITION	×	DLK-143, "DTC Logic"

BCM

List of ECU Reference

INFOID:0000000008506050

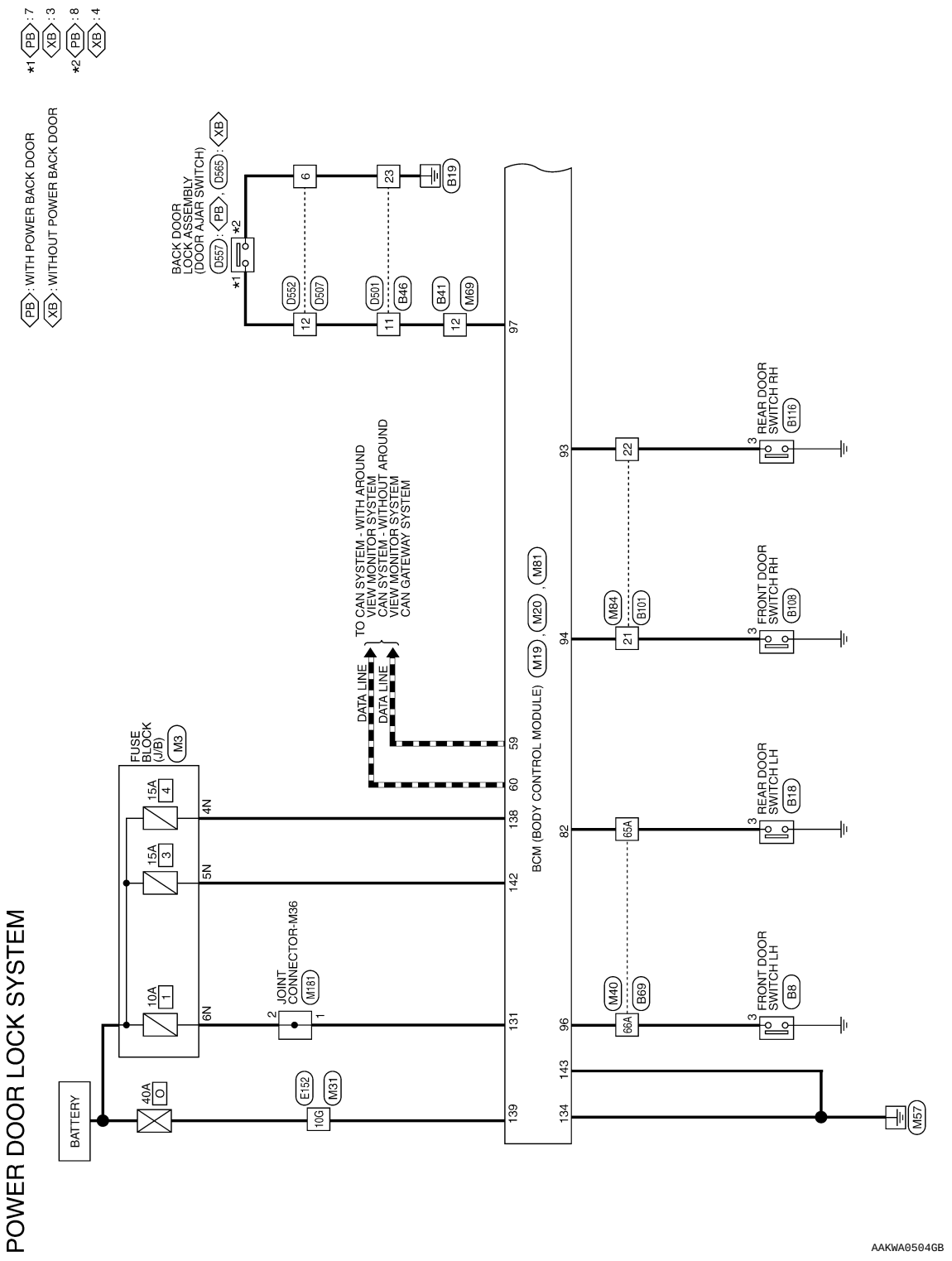
ECU	Reference
BCM	BCS-28, "Reference Value"
	BCS-48, "Fail Safe"
	BCS-48, "DTC Inspection Priority Chart"
	BCS-50, "DTC Index"

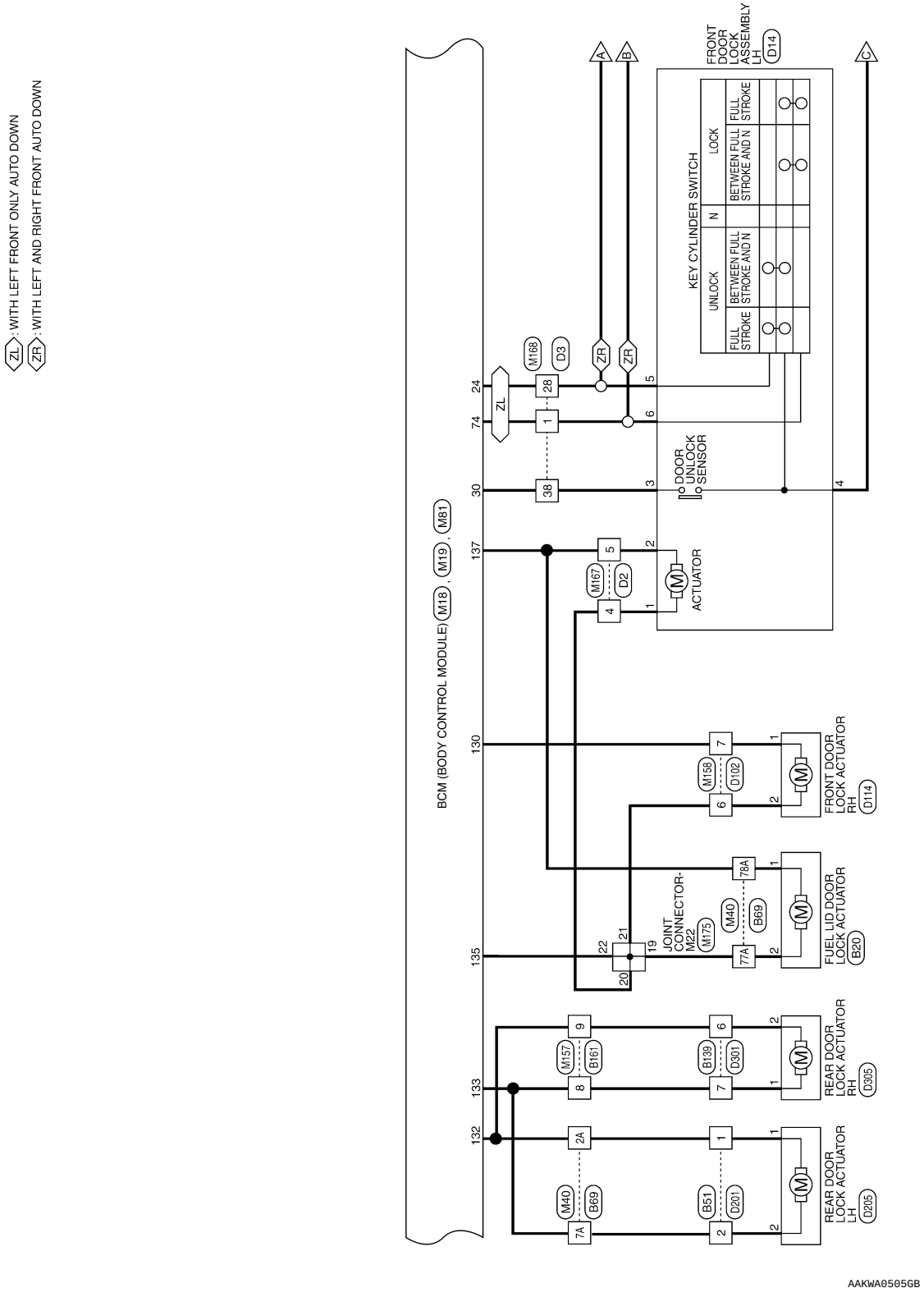
WIRING DIAGRAM

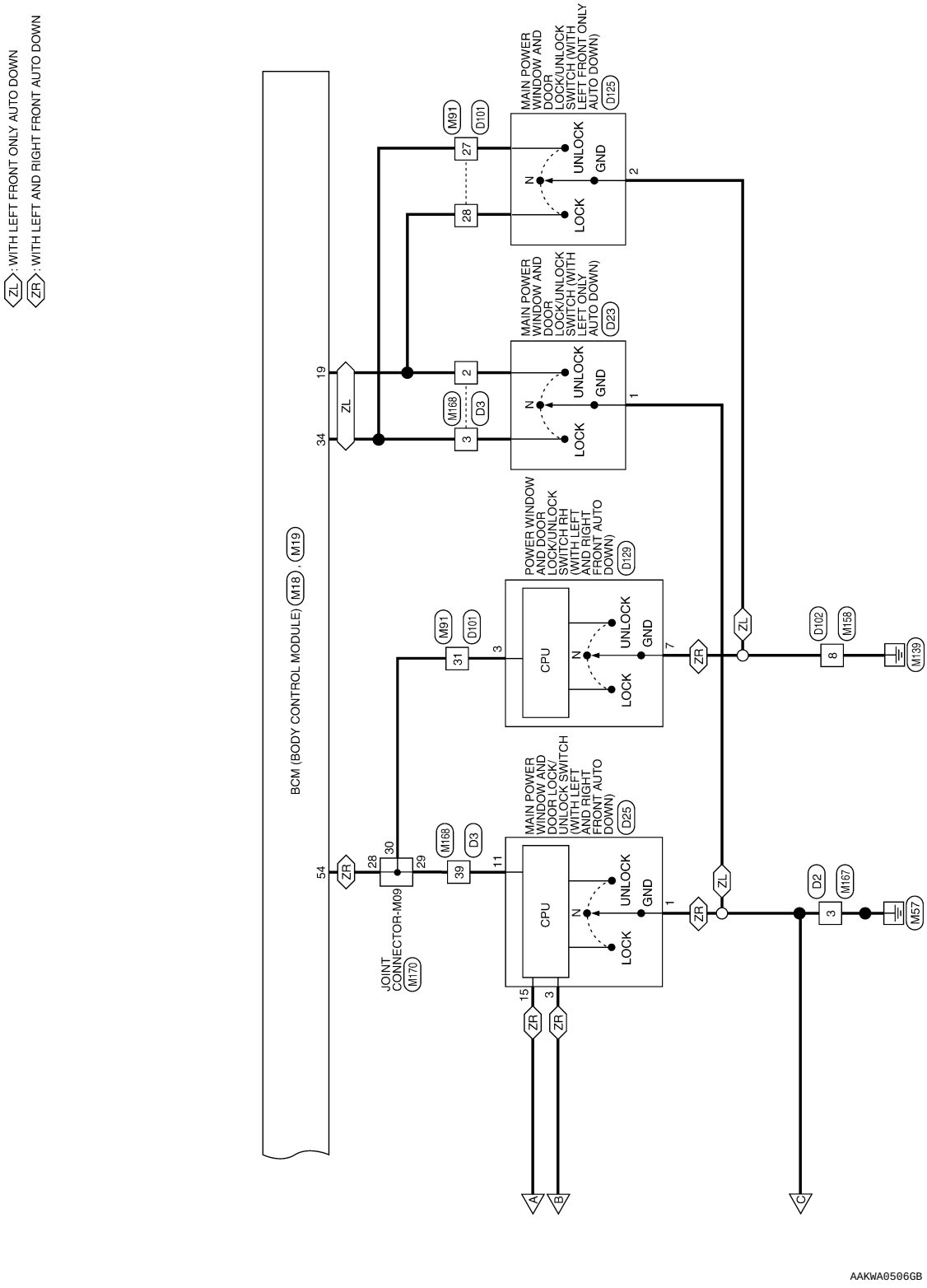
POWER DOOR LOCK SYSTEM

Wiring Diagram

INFOID:0000000008506051




ZL : WITH LEFT FRONT ONLY AUTO DOWN
ZR : WITH LEFT AND RIGHT FRONT AUTO DOWN
BCM (BODY CONTROL MODULE) M18, M19, M81
FRONT DOOR LOCK ASSEMBLY LH D14
KEY CYLINDER SWITCH
UNLOCK
FULL STROKE
BETWEEN FULL STROKE AND N
N
LOCK
BETWEEN FULL STROKE AND N
FULL STROKE
DOOR UNLOCK SENSOR
ACTUATOR
FRONT DOOR LOCK ACTUATOR RH D114
FUEL LID DOOR LOCK ACTUATOR B20
JOINT CONNECTOR-M22 M175
REAR DOOR LOCK ACTUATOR RH D305
REAR DOOR LOCK ACTUATOR LH D205
AAKWA0505GB


ZL : WITH LEFT FRONT ONLY AUTO DOWN
ZR : WITH LEFT AND RIGHT FRONT AUTO DOWN
BCM (BODY CONTROL MODULE) (M18), (M19)
MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH (WITH LEFT FRONT ONLY AUTO DOWN) D125
MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH (WITH LEFT ONLY AUTO DOWN) D23
POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH (WITH LEFT AND RIGHT FRONT AUTO DOWN) D129
MAIN POWER WINDOW AND DOOR LOCK/ UNLOCK SWITCH (WITH LEFT AND RIGHT FRONT AUTO DOWN) D25
CPU
UNLOCK
LOCK
GND
JOINT CONNECTOR-M09 (M170)
M91
D101
M168
D3
M139
M158
D102
M57
M167
D2
AAKWA0506GB

POWER DOOR LOCK SYSTEM CONNECTORS

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

H.S.

3N		2N	1N
8N	7N	6N	5N	4N

Terminal No.	Color of Wire	Signal Name
4N	V	–
5N	Y	–
6N	W	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
19	Y	CENTRAL DOOR LOCK SW
24	SB	DOOR KEY/C UNLOCK SW
30	P	DR DOOR LOCK STATUS
34	BR	CENTRAL DOOR UNLOCK SW

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
54	W	PW LIN/COM
59	P	CAN-L
60	L	CAN-H
74	BR	DOOR KEY/C LOCK SW

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

H.S.

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

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

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

H.S.

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

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

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

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

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

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

Terminal No.	Color of Wire	Signal Name
10G	W	–

AAKIA0920GB

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
12	W	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
21	G	–
22	R	–

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

H.S.

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

11A	12A	13A	14A	15A	16A	17A	18A	19A	20A	21A
	22A	23A	24A	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	58A	59A	60A	61A
	62A	63A	64A	65A	66A	67A	68A	69A	70A	
71A	72A	73A	74A	75A	76A	77A	78A	79A	80A	81A
	82A	83A	84A	85A	86A	87A	88A	89A	90A	

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

Terminal No.	Color of Wire	Signal Name
2A	BR	–
7A	Y	–
65A	W	–
66A	BG	–
77A	L	–
78A	V	–

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

H.S.

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

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

AAKIA0921GB

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

H.S.

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

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

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

H.S.

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

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

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

H.S.

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

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

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

H.S.

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

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

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

H.S.

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

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

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

H.S.

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

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

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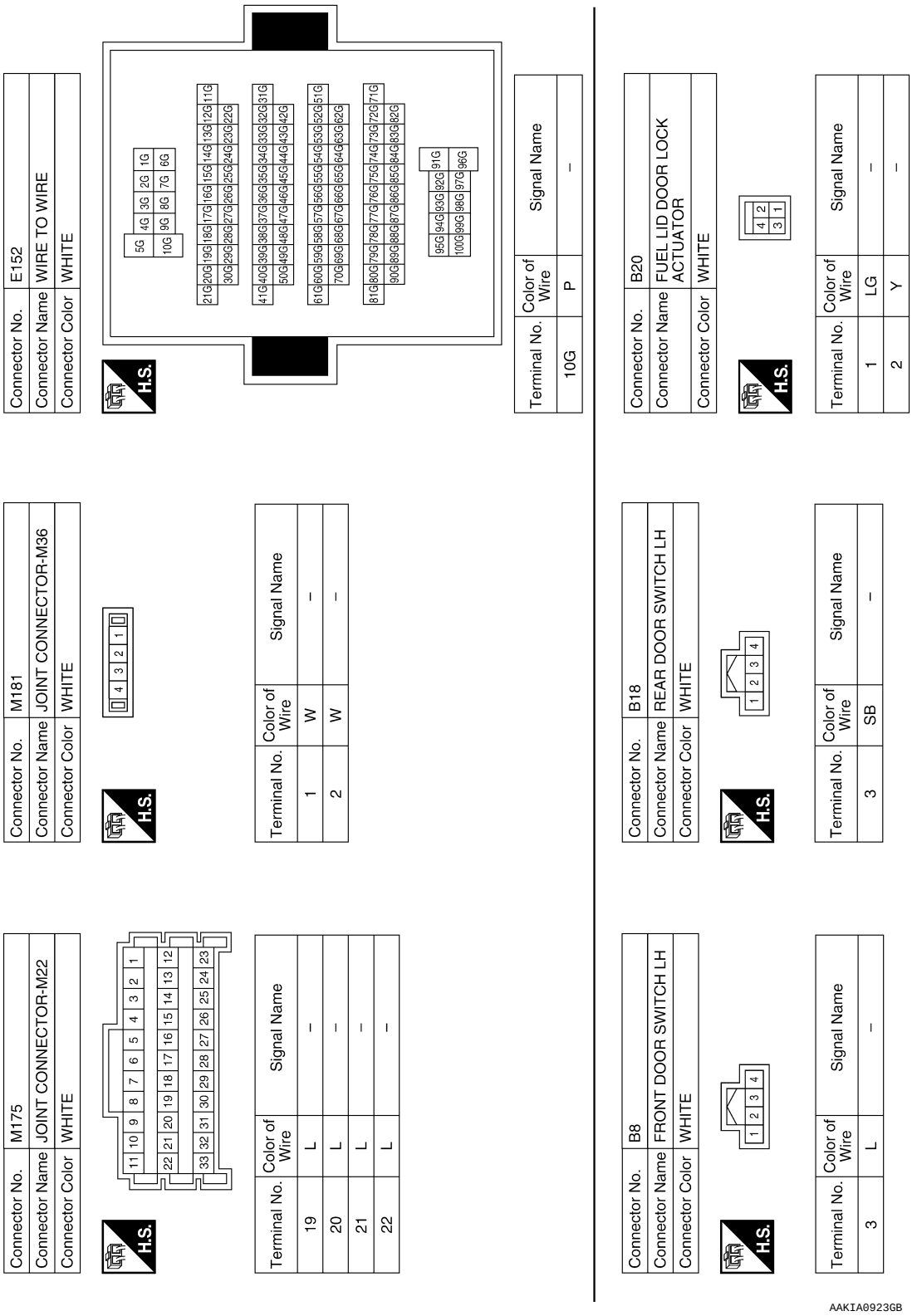
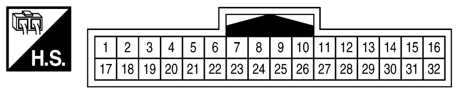
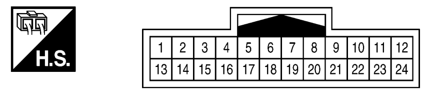

Connector No. E152
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
5G 4G 3G 2G 1G
10G 9G 8G 7G 6G
21G 20G 19G 18G 17G 16G 15G 14G 13G 12G 11G
30G 29G 28G 27G 26G 25G 24G 23G 22G
41G 40G 39G 38G 37G 36G 35G 34G 33G 32G 31G
50G 49G 48G 47G 46G 45G 44G 43G 42G
61G 60G 59G 58G 57G 56G 55G 54G 53G 52G 51G
70G 69G 68G 67G 66G 65G 64G 63G 62G
81G 80G 79G 78G 77G 76G 75G 74G 73G 72G 71G
90G 89G 88G 87G 86G 85G 84G 83G 82G
95G 94G 93G 92G 91G
100G 99G 98G 97G 96G
Terminal No. | Color of Wire | Signal Name
10G | P | –
Connector No. M181
Connector Name JOINT CONNECTOR-M36
Connector Color WHITE
H.S.
4 3 2 1
Terminal No. | Color of Wire | Signal Name
1 | W | –
2 | W | –
Connector No. M175
Connector Name JOINT CONNECTOR-M22
Connector Color WHITE
H.S.
11 10 9 8 7 6 5 4 3 2 1
22 21 20 19 18 17 16 15 14 13 12
33 32 31 30 29 28 27 26 25 24 23
Terminal No. | Color of Wire | Signal Name
19 | L | –
20 | L | –
21 | L | –
22 | L | –
Connector No. B20
Connector Name FUEL LID DOOR LOCK ACTUATOR
Connector Color WHITE
H.S.
4 2
3 1
Terminal No. | Color of Wire | Signal Name
1 | LG | –
2 | Y | –
Connector No. B18
Connector Name REAR DOOR SWITCH LH
Connector Color WHITE
H.S.
1 2 3 4
Terminal No. | Color of Wire | Signal Name
3 | SB | –
Connector No. B8
Connector Name FRONT DOOR SWITCH LH
Connector Color WHITE
H.S.
1 2 3 4
Terminal No. | Color of Wire | Signal Name
3 | L | –
AAKIA0923GB

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



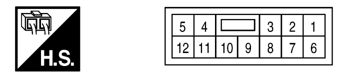
Terminal No.	Color of Wire	Signal Name
12	G	–

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



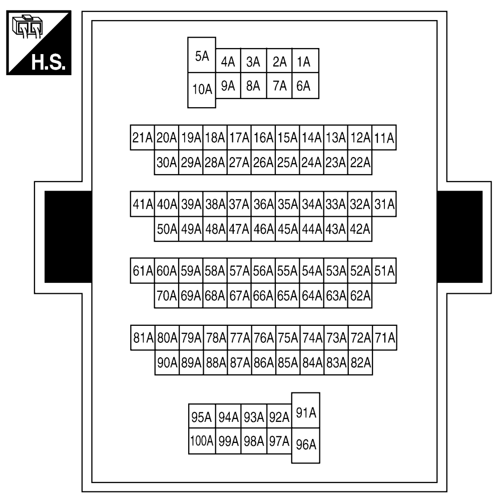
Terminal No.	Color of Wire	Signal Name
11	G	–
23	GR	–

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



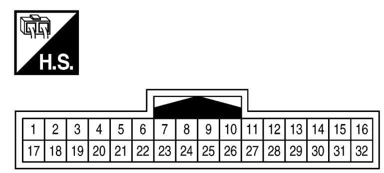
Terminal No.	Color of Wire	Signal Name
1	Y	–
2	BR	–

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



Terminal No.	Color of Wire	Signal Name
2A	Y	–
7A	BR	–
65A	SB	–
66A	L	–
77A	Y	–
78A	LG	–

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



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

AAKIA0924GB

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

H.S.

1	2	3	4

Terminal No.	Color of Wire	Signal Name
3	LG	–

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

H.S.

1	2	3	4

Terminal No.	Color of Wire	Signal Name
3	LG	–

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

H.S.

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

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

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

H.S.

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

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

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

H.S.

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

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

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

H.S.

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

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

AAKIA0925GB

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

H.S.

1	2	3	4	5	6

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

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

H.S.

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

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

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

H.S.

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

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

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

H.S.

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

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

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

H.S.

1	2	3	4
5	6	7	8	9	10

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

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

H.S.

6	5	4	3	2	1

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

AAKIA0926GB

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

H.S.

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

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

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

H.S.

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

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

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

H.S.

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

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

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

H.S.

1	2	3	4	5	6

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

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

H.S.

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

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

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

H.S.

6	5	4	3	2	1

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

AAKIA0927GB

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

H.S.

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

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

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

H.S.

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

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

Connector No.	D565
Connector Name	BACK DOOR LOCK ASSEMBLY (WITH POWER BACK DOOR)
Connector Color	WHITE

H.S.

4	3	2	1

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

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

H.S.

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

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

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

H.S.

1	2	3
4	5	6	7	8

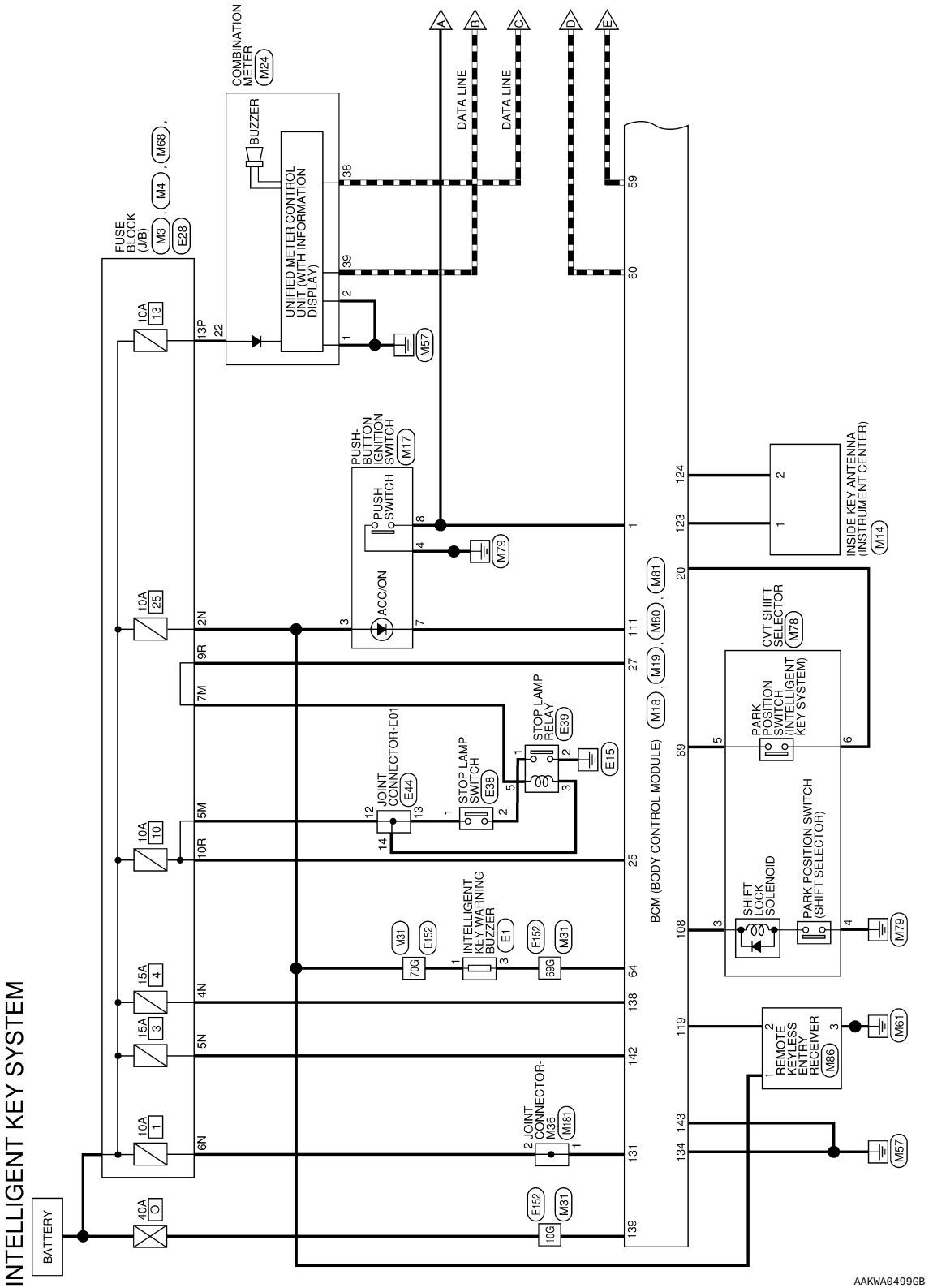
Terminal No.	Color of Wire	Signal Name
7	G	–
8	B	–

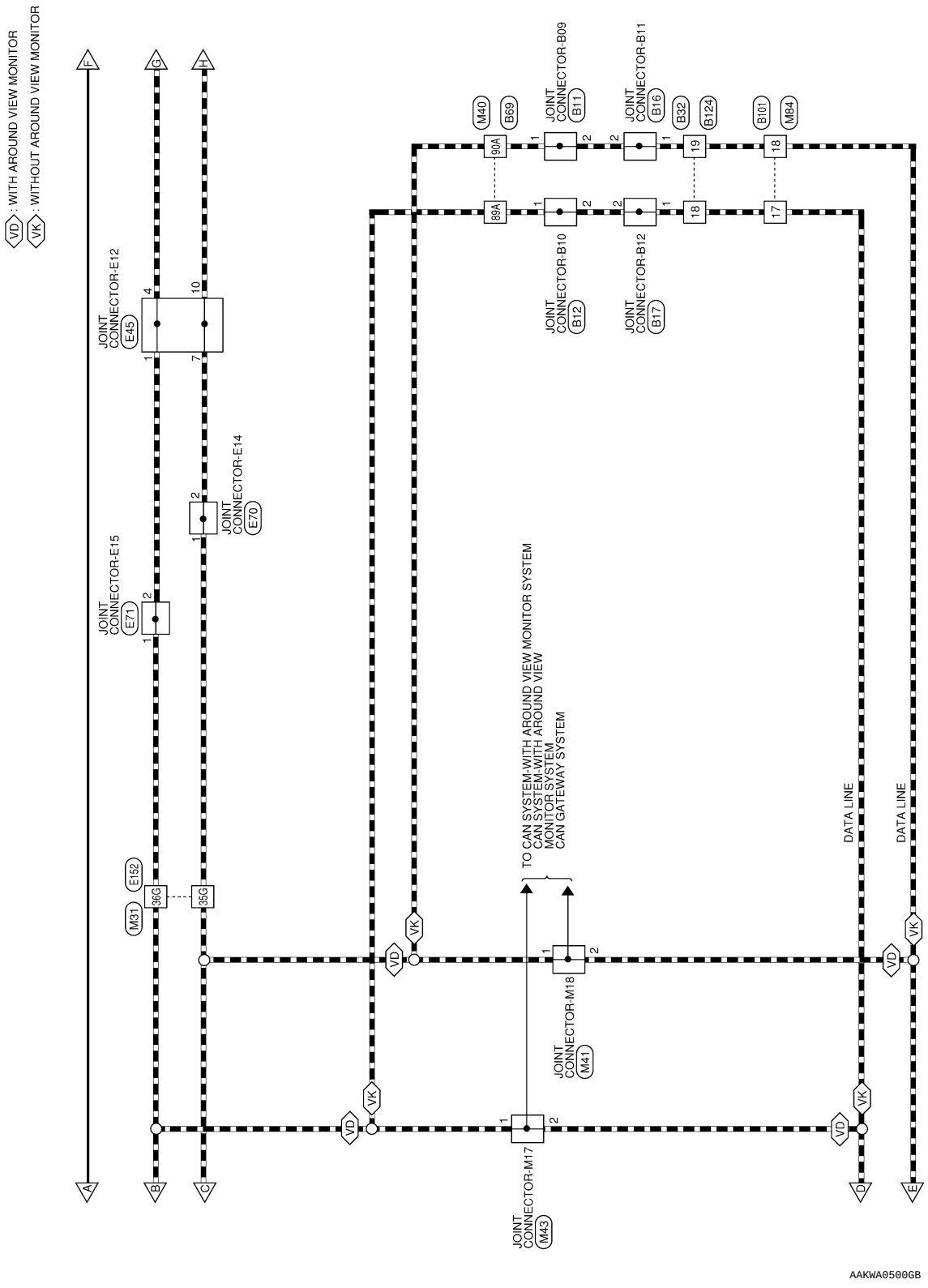
AAKIA0928GB

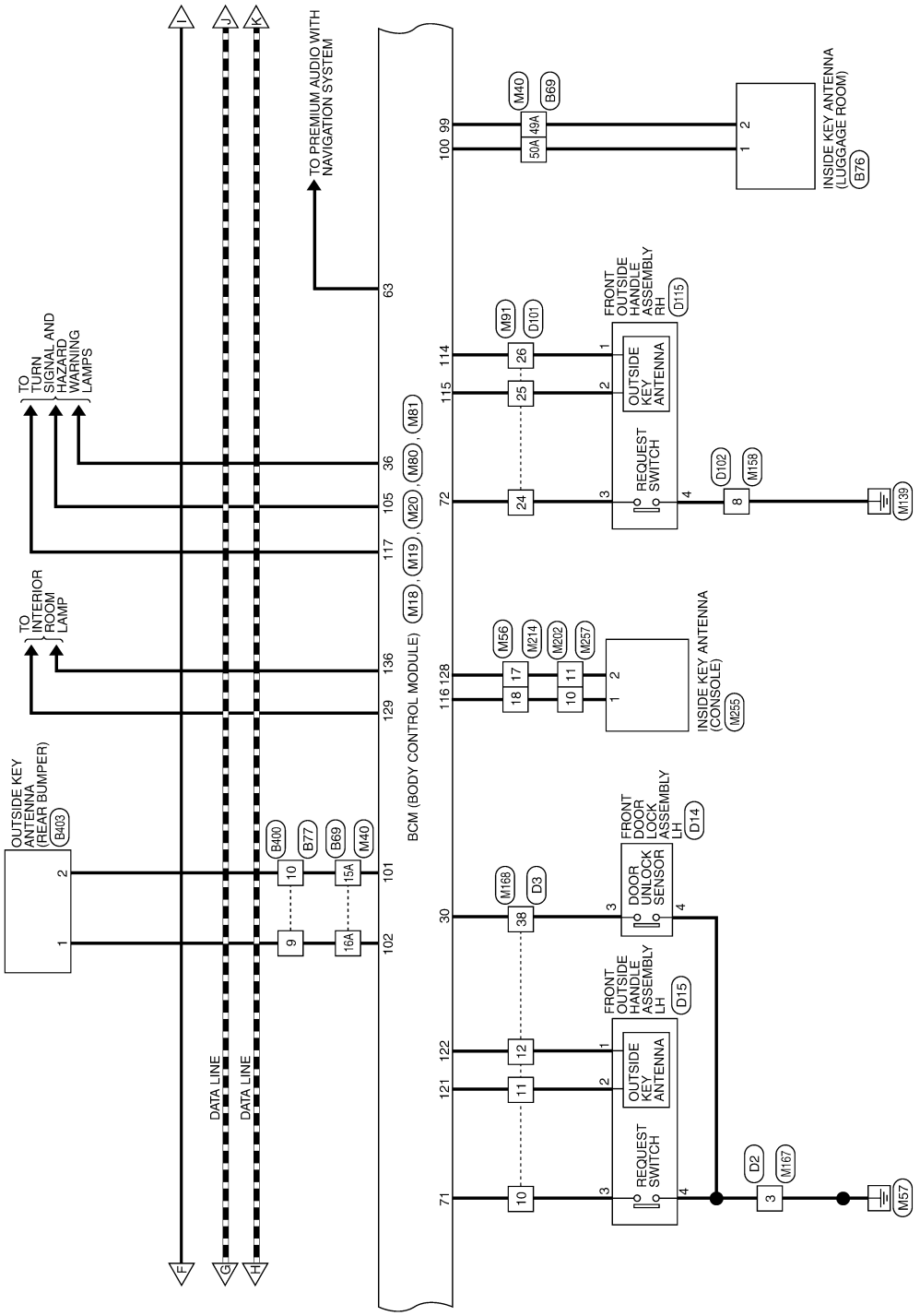
INTELLIGENT KEY SYSTEM

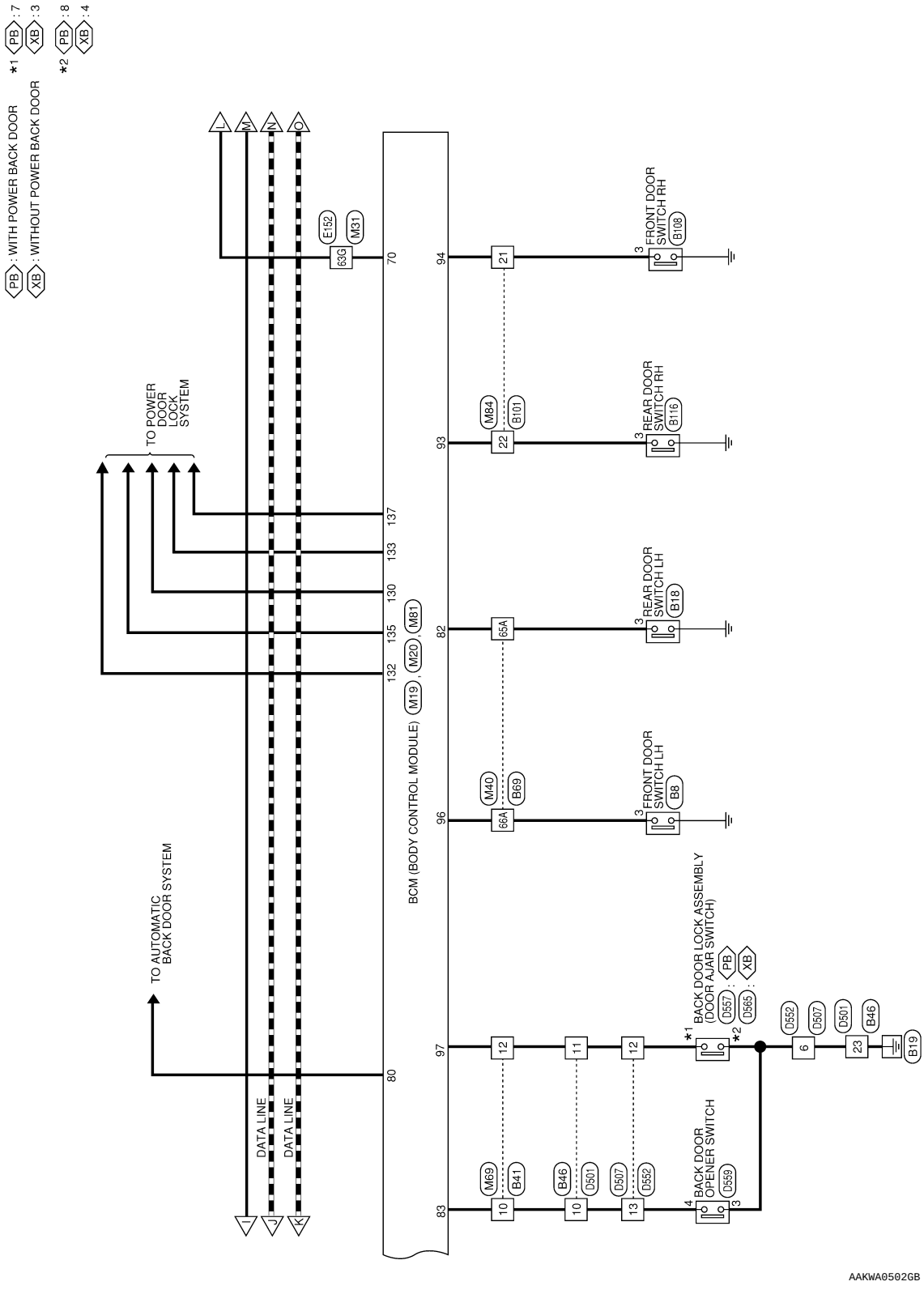
Wiring Diagram

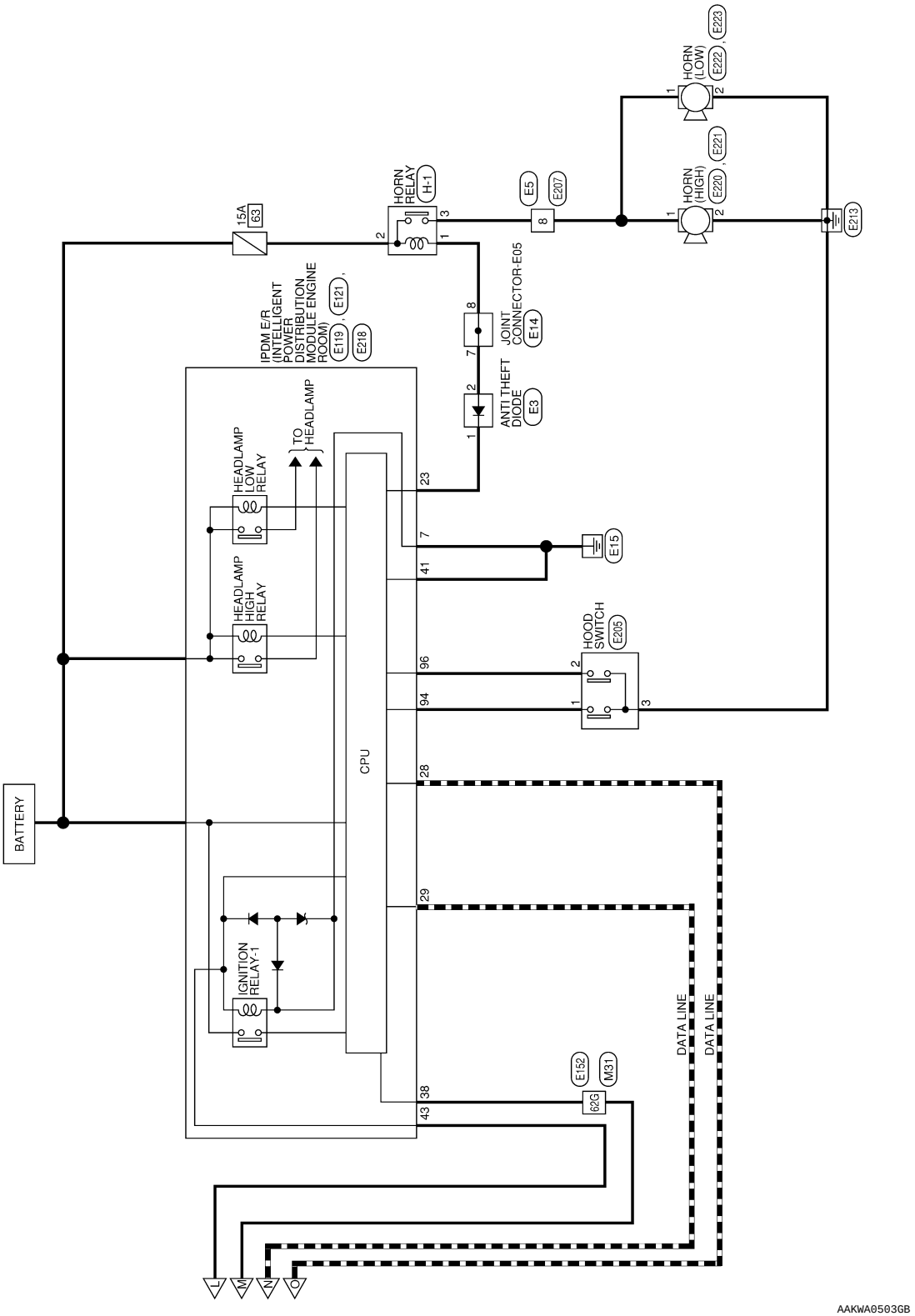
INFOID:0000000008506052




VD : WITH AROUND VIEW MONITOR
VK : WITHOUT AROUND VIEW MONITOR
JOINT CONNECTOR-E12
JOINT CONNECTOR-E45
JOINT CONNECTOR-E14
JOINT CONNECTOR-E70
JOINT CONNECTOR-E15
JOINT CONNECTOR-E71
JOINT CONNECTOR-B09
JOINT CONNECTOR-B11
JOINT CONNECTOR-B10
JOINT CONNECTOR-B12
JOINT CONNECTOR-B12
JOINT CONNECTOR-B17
JOINT CONNECTOR-M18
JOINT CONNECTOR-M41
JOINT CONNECTOR-M17
JOINT CONNECTOR-M43
TO CAN SYSTEM-WITH AROUND VIEW MONITOR SYSTEM
CAN SYSTEM-WITH AROUND VIEW MONITOR SYSTEM
CAN GATEWAY SYSTEM
DATA LINE
DATA LINE
AAKWA0500GB


I
J
K
TO PREMIUM AUDIO WITH NAVIGATION SYSTEM
63
TO TURN SIGNAL AND HAZARD WARNING LAMPS
TO INTERIOR ROOM LAMP
BCM (BODY CONTROL MODULE)
M18, M19, M20, M80, M81
OUTSIDE KEY ANTENNA (REAR BUMPER)
B403
INSIDE KEY ANTENNA (LUGGAGE ROOM)
B76
INSIDE KEY ANTENNA (CONSOLE)
M255
FRONT OUTSIDE HANDLE ASSEMBLY RH
D115
FRONT OUTSIDE HANDLE ASSEMBLY LH
D15
FRONT DOOR LOCK ASSEMBLY LH
D14
OUTSIDE KEY ANTENNA
REQUEST SWITCH
DOOR UNLOCK SENSOR
DATA LINE
DATA LINE
F
G
H
AAKWA0501GB

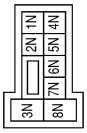

PB : WITH POWER BACK DOOR
XB : WITHOUT POWER BACK DOOR
*1 PB : 7
XB : 3
*2 PB : 8
XB : 4
TO POWER DOOR LOCK SYSTEM
TO AUTOMATIC BACK DOOR SYSTEM
BCM (BODY CONTROL MODULE)
M19
M20
M81
E152
M31
63G
70
137
133
130
135
132
80
DATA LINE
DATA LINE
L
M
N
O
J
K
FRONT DOOR SWITCH RH
B108
REAR DOOR SWITCH RH
B116
M84
B101
22
93
REAR DOOR SWITCH LH
B18
65A
82
FRONT DOOR SWITCH LH
B8
M40
B69
66A
96
BACK DOOR LOCK ASSEMBLY (DOOR AJAR SWITCH)
D557
D565
*1
*2
97
12
11
12
D552
6
D507
D501
23
B46
B19
BACK DOOR OPENER SWITCH
D559
4
3
83
M69
B41
10
B46
D501
10
D507
D552
13
AAKWA0502GB


HORN (LOW) E223, E222
HORN (HIGH) E221, E220
E213
HORN RELAY H-1
E5
E207
8
15A 63
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) E121, E119, E218
JOINT CONNECTOR-E05 E14
ANTI THEFT DIODE E3
TO HEADLAMP
HEADLAMP LOW RELAY
HEADLAMP HIGH RELAY
E15
HOOD SWITCH E205
CPU
BATTERY
IGNITION RELAY-1
DATA LINE
DATA LINE
E152
M31
62G
AAKWA0503GB

INTELLIGENT KEY SYSTEM CONNECTORS

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

H.S.



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

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

H.S.

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

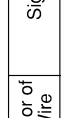
Connector No.	M14
Connector Name	INSIDE KEY ANTENNA (INSTRUMENT CENTER)
Connector Color	GRAY

H.S.

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

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

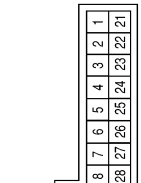
H.S.



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

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

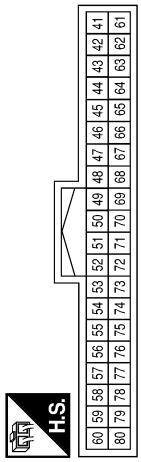
H.S.



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

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

H.S.



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

AAKIA0905GB

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

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

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

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

H.S.

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

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

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

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

H.S.

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

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

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

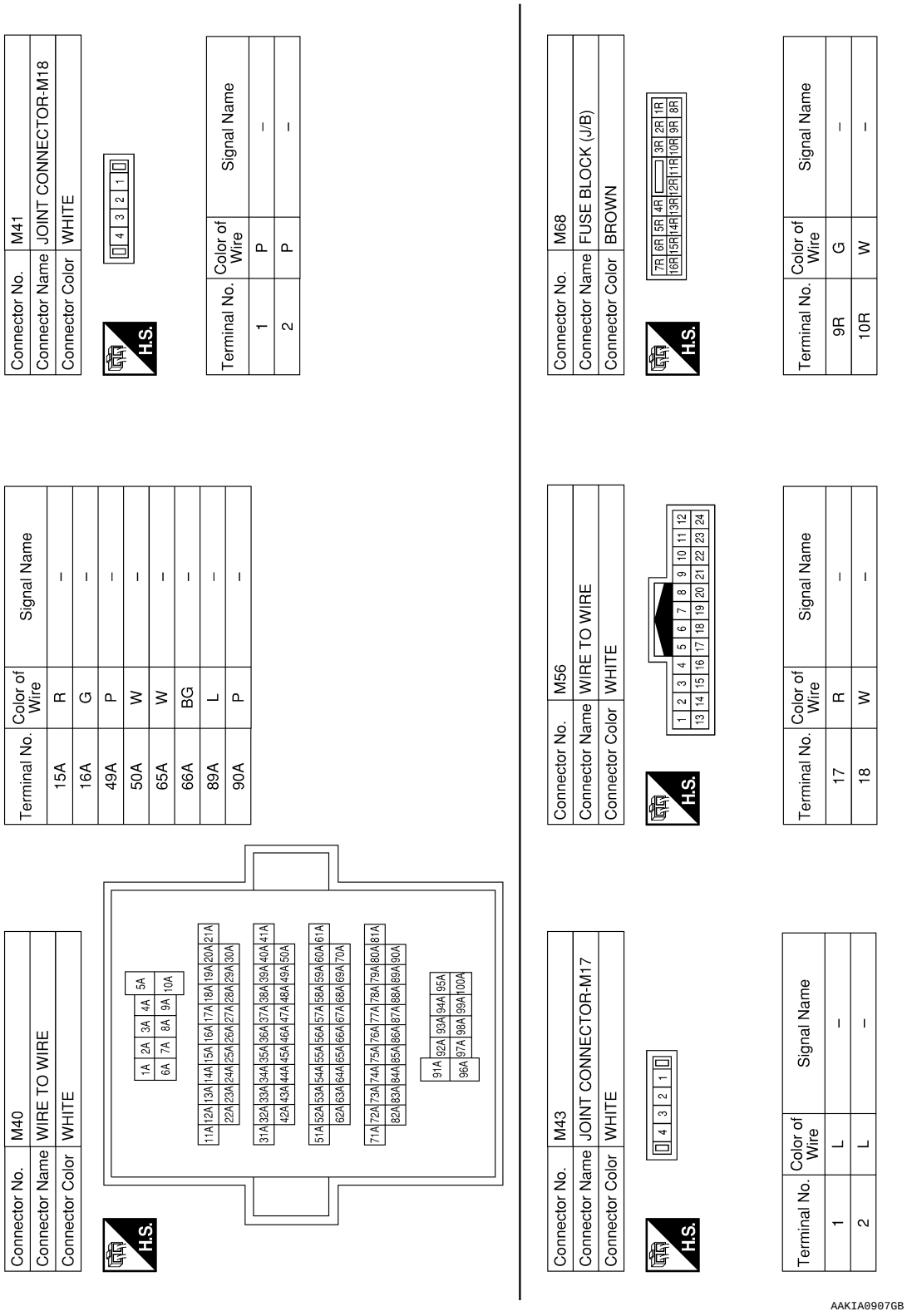
51G	52G	53G	54G	55G	56G	57G	58G	59G	60G	61G
62G	63G	64G	65G	66G	67G	68G	69G	70G		

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

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

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

AAKIA0906GB


Connector No. M41
Connector Name JOINT CONNECTOR-M18
Connector Color WHITE
H.S.
4 3 2 1
Terminal No. Color of Wire Signal Name
1 P –
2 P –
Connector No. M68
Connector Name FUSE BLOCK (J/B)
Connector Color BROWN
H.S.
7R 6R 5R 4R 3R 2R 1R
16R 15R 14R 13R 12R 11R 10R 9R 8R
Terminal No. Color of Wire Signal Name
9R G –
10R W –
Connector No. M40
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
1A 2A 3A 4A 5A
6A 7A 8A 9A 10A
11A 12A 13A 14A 15A 16A 17A 18A 19A 20A 21A
22A 23A 24A 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 58A 59A 60A 61A
62A 63A 64A 65A 66A 67A 68A 69A 70A
71A 72A 73A 74A 75A 76A 77A 78A 79A 80A 81A
82A 83A 84A 85A 86A 87A 88A 89A 90A
91A 92A 93A 94A 95A
96A 97A 98A 99A 100A
Terminal No. Color of Wire Signal Name
15A R –
16A G –
49A P –
50A W –
65A W –
66A BG –
89A L –
90A P –
Connector No. M56
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
1 2 3 4 5 6 7 8 9 10 11 12
13 14 15 16 17 18 19 20 21 22 23 24
Terminal No. Color of Wire Signal Name
17 R –
18 W –
Connector No. M43
Connector Name JOINT CONNECTOR-M17
Connector Color WHITE
H.S.
4 3 2 1
Terminal No. Color of Wire Signal Name
1 L –
2 L –
AAKIA0907GB

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

H.S.

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

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

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

H.S.

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

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

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

H.S.

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

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

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

H.S.

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

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

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

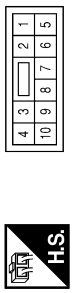
H.S.

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

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

AAKIA0908GB

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

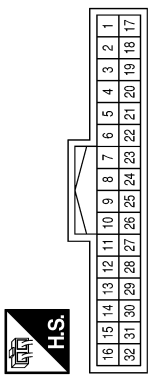


Terminal No.	Color of Wire	Signal Name
8	B	–

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

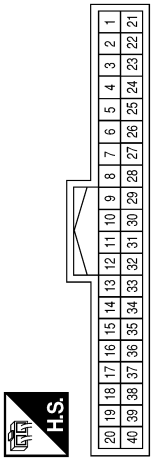
Terminal No.	Color of Wire	Signal Name
1	W	–
2	W	–

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



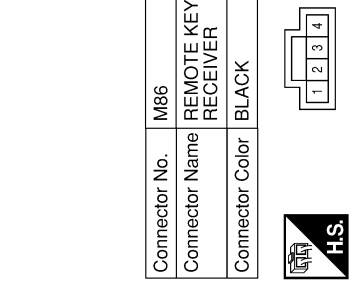
Terminal No.	Color of Wire	Signal Name
24	G	–
25	BG	–
26	W	–

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



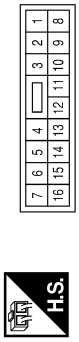
Terminal No.	Color of Wire	Signal Name
10	R	–
11	G	–
12	P	–
38	P	–

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



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

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



Terminal No.	Color of Wire	Signal Name
3	B	–

AAKIA0909GB

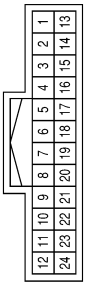
Connector No.	M255
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Color	GRAY

H.S.

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

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

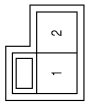
H.S.



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

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

H.S.



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

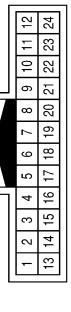
Connector No.	E1
Connector Name	INTELLIGENT KEY WARNING BUZZER
Connector Color	BROWN

H.S.

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

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

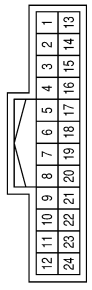
H.S.



Terminal No.	Color of Wire	Signal Name
10	W	–
11	B	–

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

H.S.



Terminal No.	Color of Wire	Signal Name
10	W	–
11	B	–

AAKIA0910GB

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
5M	G	–
7M	P	–

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

H.S.

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

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

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
8	G	–

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

H.S.

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

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

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

H.S.

3	
5	
2	1

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

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

H.S.

3	4
1	2

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

AAKIA0911GB

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

H.S.

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

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

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

H.S.

6 5 4 3 2 1

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

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

H.S.

6 5 4 3 2 1

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

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

H.S.

19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34
35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

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

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

H.S.

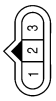
7 8 9 10 11
12 13 14 15 16 17 18

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

AAKIA0912GB

Connector No.	E205
Connector Name	HOOD SWITCH
Connector Color	BROWN

H.S.



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

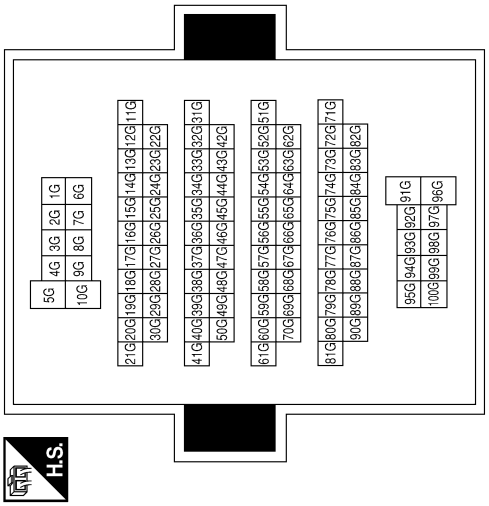
Connector No.	E220
Connector Name	HORN (HIGH)
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	G	–

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

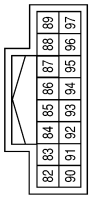
H.S.



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

Connector No.	E218
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

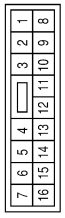
H.S.



Terminal No.	Color of Wire	Signal Name
94	LG	HOOD SW2
96	R	HOOD SW

Connector No.	E207
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
8	G	–

AAKIA0913GB

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

H.S.

Terminal No.	Color of Wire	Signal Name
2	B	–

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

H.S.

Terminal No.	Color of Wire	Signal Name
1	G	–

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

H.S.

Terminal No.	Color of Wire	Signal Name
2	B	–

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

H.S.

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

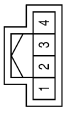
Connector No.	B11
Connector Name	JOINT CONNECTOR-B09
Connector Color	WHITE

H.S.

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

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

H.S.

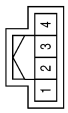


Terminal No.	Color of Wire	Signal Name
3	L	–

AAKIA0914GB

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

H.S.



Terminal No.	Color of Wire	Signal Name
3	SB	–

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

H.S.

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

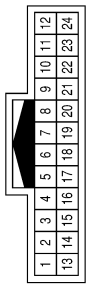
Connector No.	B16
Connector Name	JOINT CONNECTOR-B11
Connector Color	WHITE

H.S.

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

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

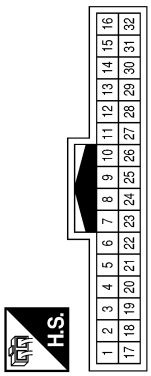
H.S.



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

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

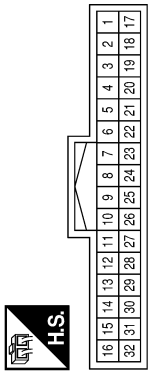
H.S.



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

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

H.S.



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

AAKIA0915GB

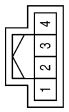
Connector No.	B76
Connector Name	INSIDE KEY ANTENNA (LUGGAGE ROOM)
Connector Color	GRAY

H.S.

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

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

H.S.

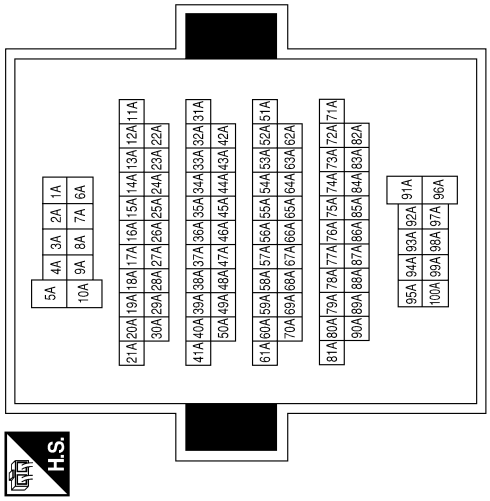


Terminal No.	Color of Wire	Signal Name
3	LG	–

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

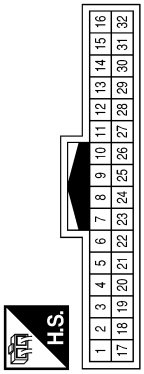
Connector No.	B69
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



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

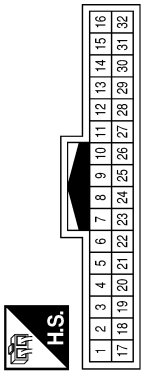
H.S.



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

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

H.S.



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

AAKIA0916GB

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

H.S.

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

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

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

H.S.

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

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

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

H.S.

1	2	3	4

Terminal No.	Color of Wire	Signal Name
3	LG	–

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

H.S.

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

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

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	B	–

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

H.S.

1	2

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

AAKIA0917GB

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

H.S.

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

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

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

H.S.

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

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

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

H.S.

1	2	3	4

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

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

H.S.

1	2	3	4

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

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

H.S.

1	2	3	4	5	6

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

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

H.S.

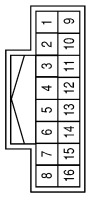
1	2	3	4
5	6	7	8	9	10

Terminal No.	Color of Wire	Signal Name
8	B	–

AAKIA0918GB

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

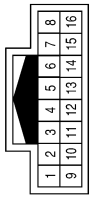
H.S.



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

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

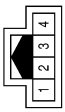
H.S.



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

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

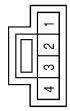
H.S.



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

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

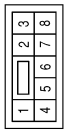
H.S.



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

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

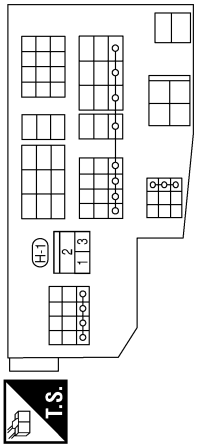
H.S.



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

Connector No.	H-1
Connector Name	HORN RELAY
Connector Color	–

T.S.



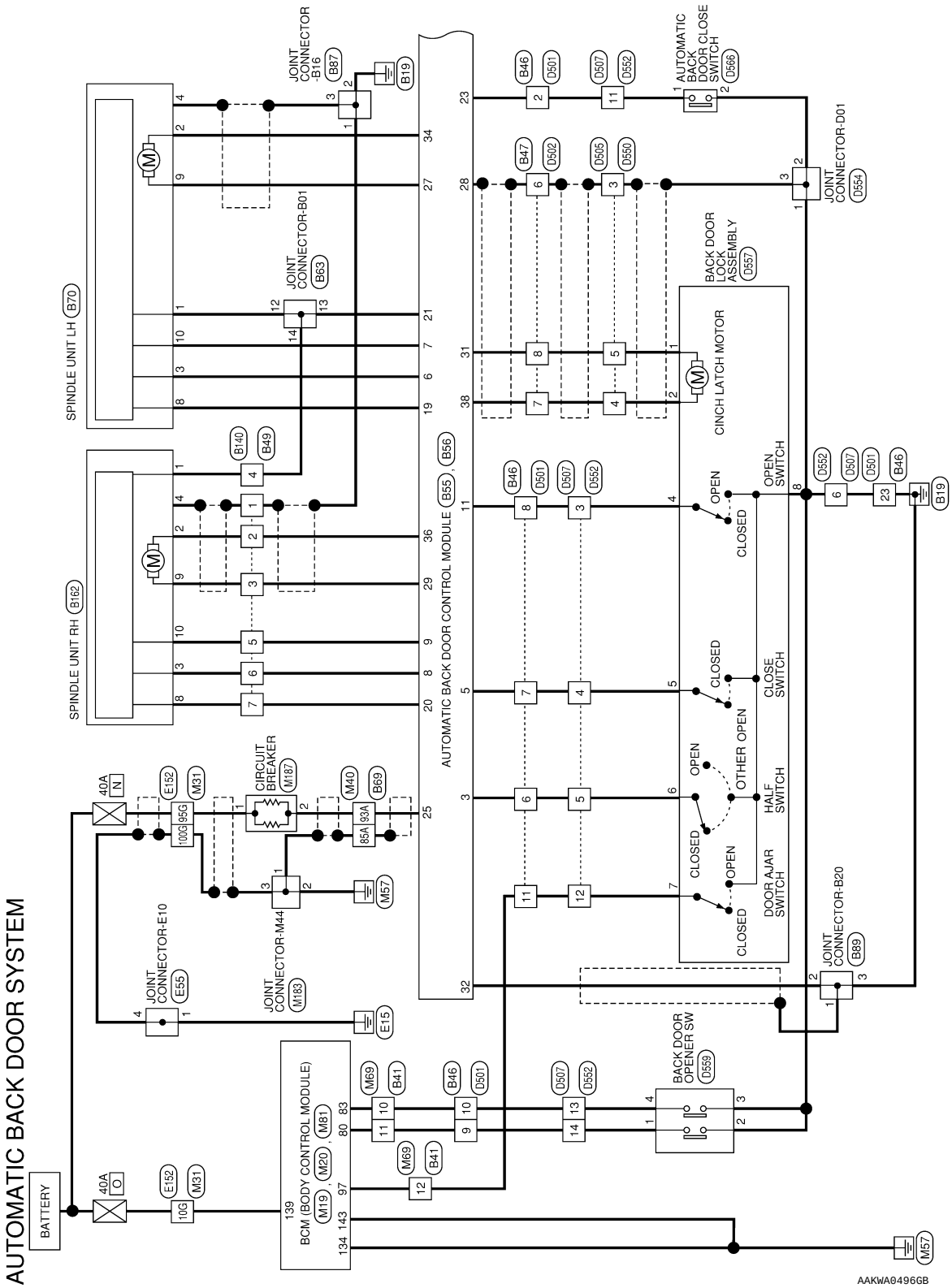
Terminal No.	Color of Wire	Signal Name
1	Y	–
2	W	–
3	G	–

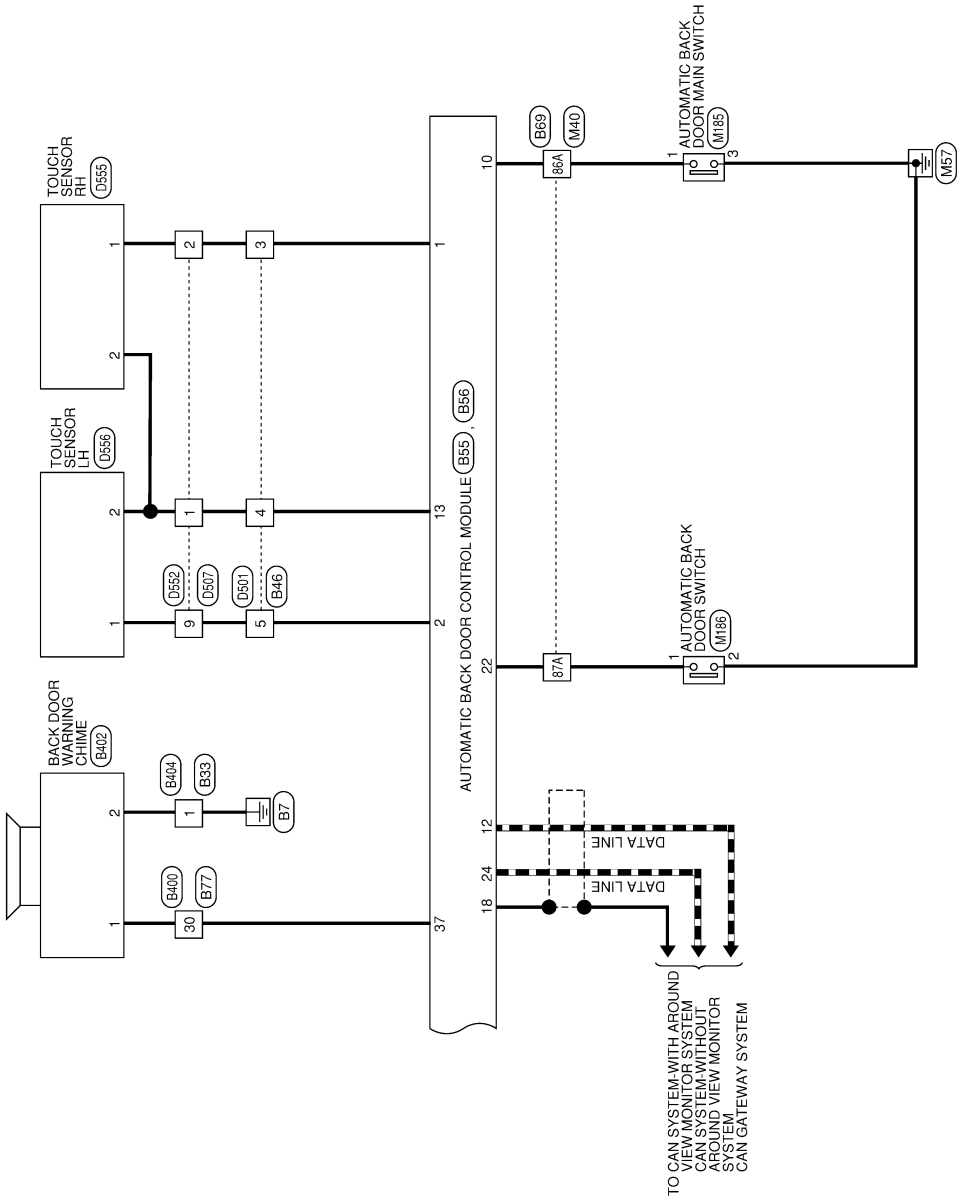
AAKIA0919GB

AUTOMATIC BACK DOOR SYSTEM

Wiring Diagram

INFOID:0000000008506053





AAKWA0497GB

AUTOMATIC BACK DOOR SYSTEM CONNECTORS

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
80	R	BACK DOOR OPEN SW

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

H.S.

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

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

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

H.S.

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

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

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

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

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

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

Terminal No.	Color of Wire	Signal Name
10G	W	–
95G	B	–
100G	SHIELD	–

AAKIA0894GB

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

H.S.

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

11A	12A	13A	14A	15A	16A	17A	18A	19A	20A	21A
22A	23A	24A	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	58A	59A	60A	61A
62A	63A	64A	65A	66A	67A	68A	69A	70A		

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

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

Terminal No.	Color of Wire	Signal Name
85A	SHIELD	–
86A	Y	–
87A	LG	–
93A	B	–

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

H.S.

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

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

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

H.S.

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

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

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

H.S.

4	3	2	1

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

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

H.S.

2	4
1	3

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

AAKIA0895GB

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

H.S.

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

Connector No.	M187
Connector Name	CIRCUIT BREAKER
Connector Color	WHITE

H.S.

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

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

H.S.

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

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

H.S.

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

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

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	–

AAKIA0896GB

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

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

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

H.S.

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

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

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

H.S.

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

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

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

H.S.

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

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

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

H.S.

1	2	3	4
5	6	7	8

Terminal No.	Color of Wire	Signal Name
6	SHIELD	–
7	W	–
8	B	–

AAKIA0897GB

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	BR	TOUCH SENS RH
2	LG	TOUCH SENS LH
3	L	HALF-LATCH-SW
4	–	–
5	LG	CLOSE SW
6	V	A SIGN LH
7	Y	B SIGN LH
8	BR	A SIGN RH
9	L	B SIGN RH
10	LG	MAIN SW
11	BR	OPEN SW
12	W	CAN-L
13	SB	TOUCH SENS GND
14	–	–
15	–	–
16	–	–
17	–	–
18	SHIELD	CAN SHIELD
19	SB	POWER LH
20	Y	POWER RH
21	LG	GND
22	SB	DRIVER SW
23	Y	INSIDE CLOSE SW
24	B	CAN-H

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
25	B	+B
26	–	–
27	B	LH MTR OPEN
28	SHIELD	NOISE SHIELD LATCH
29	B	RH MTR OPEN
30	–	–
31	B	LATCH MTR OPEN
32	B	GND (POWER 1)
33	–	–
34	W	LH MTR CLOSE
35	–	–
36	W	RH MTR CLOSE
37	LG	BUZZER
38	W	LATCH MTR CLOSE

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

H.S.

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

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

AAKIA0898GB

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

H.S.

5A	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	49A	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	79A	78A	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

Terminal No.	Color of Wire	Signal Name
85A	SHIELD	–
86A	LG	–
87A	SB	–
93A	B	–

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

H.S.

1	4	2	9	3	10	8

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

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
30	LG	–

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

H.S.

4	3	2	1

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

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

H.S.

4	3	2	1

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

AAKIA0899GB

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

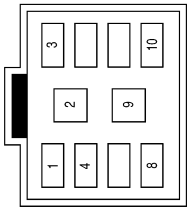
H.S.

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

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

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

H.S.



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

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
30	LG	–

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

H.S.

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

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

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	–

AAKIA0900GB

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	BG	–
3	V	–
4	LG	–
5	G	–
6	SB	–
7	L	–
8	R	–
9	LG	–
10	V	–
11	P	–
23	B	–

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

H.S.

4	3	2	1
8	7	6	5

Terminal No.	Color of Wire	Signal Name
6	SHIELD	–
7	BR/B	–
8	R/G	–

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

H.S.

2		1
6	5	4	3

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

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

H.S.

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

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

Terminal No.	Color of Wire	Signal Name
5	SB	–
6	B	–
9	G	–
11	BG	–
12	P	–
13	V	–
14	LG	–

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

H.S.

1		2
3	4	5	6

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

AAKIA0901GB

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

H.S.

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

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

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

H.S.

4	3	2	1

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

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

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

H.S.

1	2

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

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

H.S.

1	2

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

Connector No.	D557
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Color	WHITE

H.S.

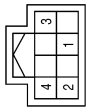
1	2	3
4	5	6	7	8

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

AAKIA0902GB

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

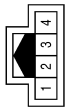
H.S.



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

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

H.S.



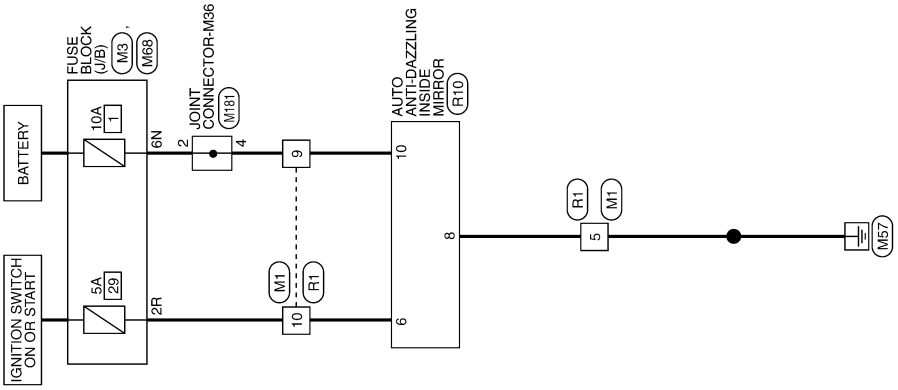
Terminal No.	Color of Wire	Signal Name
1	G	–
2	B	–
3	B	–
4	W	–

AAKIA0903GB

HOMELINK UNIVERSAL TRANSCEIVER

Wiring Diagram

INFOID:0000000008506054



HOMELINK UNIVERSAL TRANSCEIVER

AAKWA0498GB

HOMELINK UNIVERSAL TRANSCEIVER CONNECTORS

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

H.S.

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

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

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

H.S.

3N		2N	1N
8N	7N	6N	5N	4N

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

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

H.S.

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

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

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

H.S.

4	3	2	1

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

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

H.S.

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

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

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

H.S.

5	4	3	2	1
10	9	8	7	6

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

AAKIA0904GB

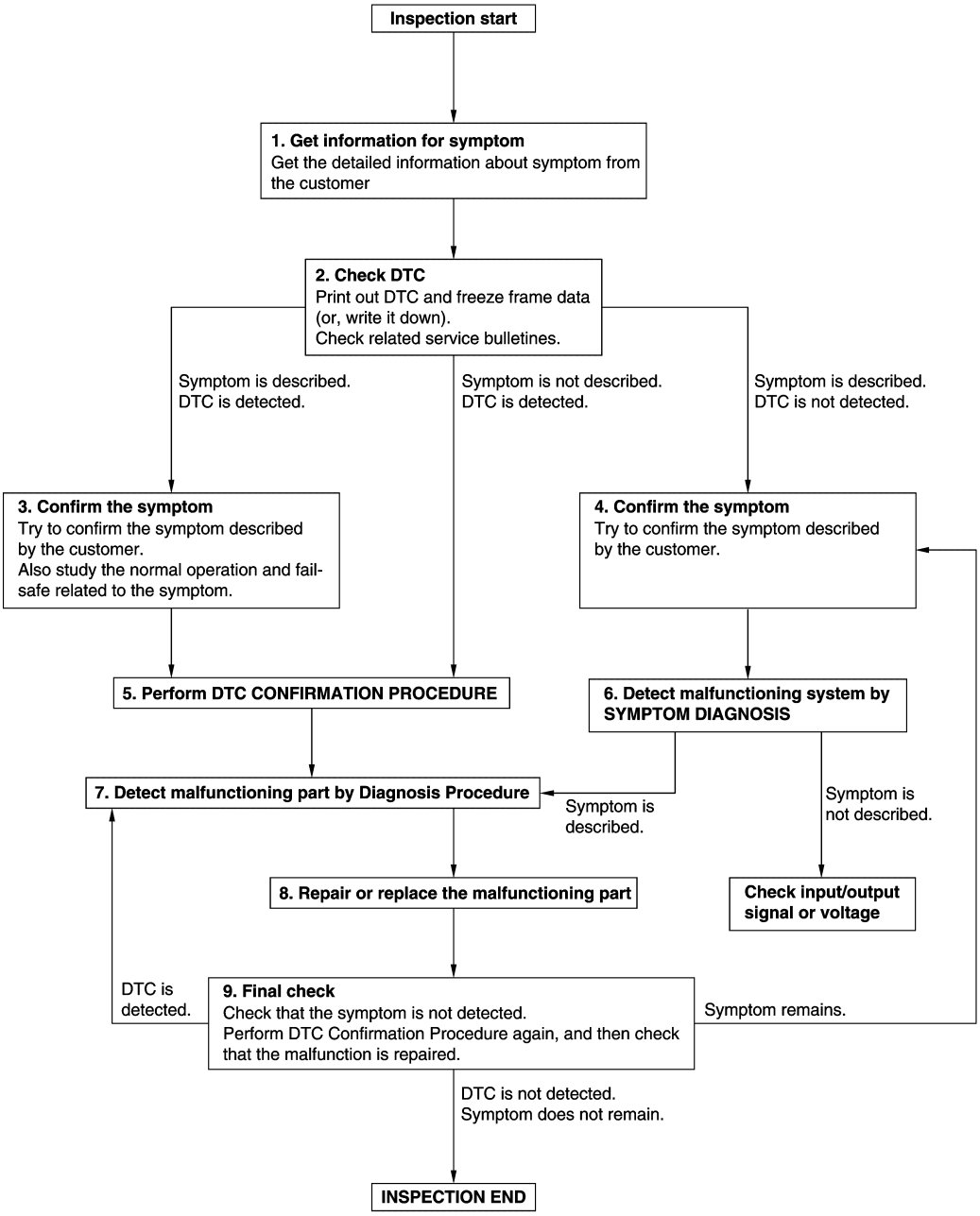
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000008506055

OVERALL SEQUENCE



JMKIA8652GB

DETAILED FLOW

1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2.CHECK DTC

1. Check DTC.
2. Perform the following procedure if DTC is detected.

- Record DTC and freeze frame data. (Print them out using CONSULT.)
- Erase DTC.
- Study the relationship between the cause detected by DTC and the symptom described by the customer.

3. Check related service bulletins for information.

Are any symptoms described and any DTC detected?

Symptom is described, DTC is detected.>>GO TO 3.
Symptom is described, DTC is not detected.>>GO TO 4.
Symptom is not described, DTC is detected.>>GO TO 5.

3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.
Also study the normal operation and fail-safe related to the symptom.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5.

4.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 6.

5.PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC CONFIRMATION PROCEDURE for the detected DTC and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle and check self diagnostic results in real time.
If two or more DTCs are detected, refer to BCS-48, "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-49, "Intermittent Incident".

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

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

Is the symptom described?

YES >> GO TO 7.
NO >> Monitor input data from related sensors or check voltage of related module terminals using CONSULT.

7.DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.
NO >> Check according to GI-49, "Intermittent Incident".

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 9.

9. FINAL CHECK

When DTC is detected in step 2, perform DTC CONFIRMATION PROCEDURE again, and then check that the malfunction is repaired securely.
When symptom is described by the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Is DTC detected and does symptom remain?

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

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

Description

INFOID:0000000008506056

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

NOTE:

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

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

Work Procedure

INFOID:0000000008506057

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.

ADDITIONAL SERVICE WHEN REPLACING BCM

Description

INFOID:0000000008506058

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

Work Procedure

INFOID:0000000008506059

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

ADDITIONAL SERVICE WHEN REPLACING AUTOMATIC BACK DOOR CONTROL UNIT

Description

INFOID:0000000008506060

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:0000000008506061

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.

CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

Description

INFOID:0000000008506062

When the following work is performed, it is necessary to perform initial setting of automatic back door position information to operate automatic back door system.
- After removing and installing or replacing back door assembly
- After removing and installing or replacing spindle unit

Work Procedure

INFOID:0000000008506063

1.STEP 1

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

>> GO TO 2.

2.STEP 2

Fully close the back door manually.

>> GO TO 3.

3.STEP 3

Operate back door opener switch and perform automatic open operation.
NOTE:
At this time, automatic operation of back door is performed at half speed.

>> GO TO 4.

4.STEP 4

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

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

YES >> GO TO 5.
NO >> GO TO 2.

5.STEP 5

Fully close the back door.

>> Inspection End.

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000008942218

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with two communication lines (CAN-H and CAN-L) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.
CAN Communication Signal Chart. Refer to LAN-36, "CAN COMMUNICATION SYSTEM : CAN Communication Signal Chart".

DTC Logic

INFOID:0000000008942219

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC Detection Condition	Possible cause
U1000	CAN COMM CIRCUIT	When CAN gateway cannot communicate CAN communication signal continuously for 2 seconds or more.	CAN communication system

Diagnosis Procedure

INFOID:0000000008942220

1.PERFORM SELF DIAGNOSTIC

1. Turn the ignition switch ON and wait for 2 seconds or more.
2. Check “Self Diagnostic Result”.

Is “U1000: CAN COMM CIRCUIT” displayed?

YES >> Refer to LAN-20, "Trouble Diagnosis Flow Chart".
NO >> Refer to GI-49, "Intermittent Incident".

U1010 CONTROL UNIT (CAN)

Description

INFOID:0000000008942221

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with two communication lines (CAN-H and CAN-L) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.
CAN Communication Signal Chart. Refer to LAN-36, "CAN COMMUNICATION SYSTEM : CAN Communication Signal Chart".

DTC Logic

INFOID:0000000008942222

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:0000000008942223

1.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

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

>> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".

B2401 IGNITION POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000008506069

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to DLK-115, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000008506070

1.CHECK BCM OUTPUT SIGNAL

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Replace BCM. Refer to BCS-78, "Removal and Installation".

B2409 HALF LATCH SWITCH

DTC Logic

INFOID:0000000008506071

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to DLK-116, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000008506072

Regarding Wiring Diagram information, refer to DLK-92, "Wiring Diagram".

1.CHECK FOR FOREIGN MATERIALS IN BACK DOOR LOCK ASSEMBLY

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

Is the inspection result normal?

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

2.CHECK BACK DOOR OPEN/CLOSE OPERATION

Manually check open and close operation of back door.

Is the inspection result normal?

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

3.CHECK HALF LATCH SWITCH MONITOR ITEM

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

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

Is the inspection result normal?

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

4.CHECK HALF LATCH SWITCH INPUT SIGNAL

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

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

Is the inspection result normal?

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

5. CHECK HALF LATCH SWITCH CIRCUIT

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

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

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace harness.

6. CHECK HALF LATCH SWITCH GROUND CIRCUIT

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D557	8		Yes

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace back door lock assembly ground circuit.

7. CHECK HALF LATCH SWITCH

Refer to DLK-117, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 8.
NO >> Replace back door lock assembly. Refer to DLK-305, "DOOR LOCK : Removal and Installation".

8. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000008506073

COMPONENT INSPECTION

1.CHECK SWITCH

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

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

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace back door lock assembly. Refer to DLK-305, "DOOR LOCK : Removal and Installation".

B2416 TOUCH SENSOR RH

DTC Logic

INFOID:0000000008506074

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to DLK-119, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000008506075

Regarding Wiring Diagram information, refer to DLK-92, "Wiring Diagram".

1.CHECK INSTALLATION OF TOUCH SENSOR RH

Check that touch sensor RH is installed normally.
Refer to DLK-306, "TOUCH SENSOR : Removal and Installation".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to DLK-306, "TOUCH SENSOR : Removal and Installation".

2.CHECK TOUCH SENSOR MONITOR ITEM

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

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

Is the inspection result normal?

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

3.CHECK TOUCH SENSOR INPUT SIGNAL

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

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

Is the inspection result normal?

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

4. CHECK TOUCH SENSOR RH CIRCUIT

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

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

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace harness.

5. CHECK TOUCH SENSOR RH GROUND CIRCUIT

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

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

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

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

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace harness.

6. CHECK TOUCH SENSOR RH GROUND CIRCUIT 2

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

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

Is the inspection result normal?

YES >> GO TO 7.
NO >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".

7.CHECK TOUCH SENSOR RH

Refer to DLK-121, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 8.
NO >> Replace touch sensor RH. Refer to DLK-306, "TOUCH SENSOR : Removal and Installation".

8.CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000008506076

1.CHECK TOUCH SENSOR RH

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

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

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace touch sensor RH. Refer to DLK-306, "TOUCH SENSOR : Removal and Installation".

B2417 TOUCH SENSOR LH

DTC Logic

INFOID:0000000008506077

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to DLK-122, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000008506078

Regarding Wiring Diagram information, refer to DLK-92, "Wiring Diagram".

1.CHECK INSTALLATION OF TOUCH SENSOR LH

Check that touch sensor LH is installed normally.
Refer to DLK-306, "TOUCH SENSOR : Removal and Installation".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to DLK-306, "TOUCH SENSOR : Removal and Installation".

2.CHECK TOUCH SENSOR MONITOR ITEM

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

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

Is the inspection result normal?

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

3.CHECK TOUCH SENSOR INPUT SIGNAL

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

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

Is the inspection result normal?

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

4. CHECK TOUCH SENSOR LH CIRCUIT

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

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

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace harness.

5. CHECK TOUCH SENSOR LH GROUND CIRCUIT

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

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

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

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

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace harness.

6. CHECK TOUCH SENSOR LH GROUND CIRCUIT 2

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

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

Is the inspection result normal?

YES >> GO TO 7.
NO >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".

7.CHECK TOUCH SENSOR LH

Refer to DLK-121, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 8.
NO >> Replace touch sensor LH. Refer to DLK-306, "TOUCH SENSOR : Removal and Installation"

8.CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000008506079

1.CHECK TOUCH SENSOR LH

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

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

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace touch sensor LH. Refer to DLK-306, "TOUCH SENSOR : Removal and Installation".

B2419 OPEN SWITCH

DTC Logic

INFOID:0000000008506080

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to DLK-125, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000008506081

Regarding Wiring Diagram information, refer to DLK-92, "Wiring Diagram".

1.CHECK FOR FOREIGN MATERIALS IN BACK DOOR LOCK ASSEMBLY

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

Is the inspection result normal?

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

2.CHECK BACK DOOR OPEN/CLOSE OPERATION

Manually check open and close operation of back door.

Is the inspection result normal?

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

3.CHECK OPEN SWITCH SIGNAL

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

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

Is the inspection result normal?

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

4.CHECK OPEN SWITCH INPUT SIGNAL

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

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

Is the inspection result normal?

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

5.CHECK OPEN SWITCH CIRCUIT

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

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

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace harness.

6.CHECK OPEN SWITCH GROUND CIRCUIT

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D557	8		Yes

Is the inspection result normal?

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

7.CHECK OPEN SWITCH

Refer to DLK-117, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 8.
NO >> Replace back door lock assembly. Refer to DLK-305, "DOOR LOCK : Removal and Installation".

8.CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000008506082

COMPONENT INSPECTION

1.CHECK SWITCH

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

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

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace back door lock assembly. Refer to DLK-305, "DOOR LOCK : Removal and Installation".

B2420 CLOSE SWITCH

DTC Logic

INFOID:0000000008506083

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to DLK-128, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000008506084

Regarding Wiring Diagram information, refer to DLK-92, "Wiring Diagram".

1.CHECK FOR FOREIGN MATERIALS IN BACK DOOR LOCK ASSEMBLY

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

Is the inspection result normal?

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

2.CHECK BACK DOOR OPEN/CLOSE OPERATION

Manually check open and close operation of back door.

Is the inspection result normal?

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

3.CHECK CLOSE SWITCH SIGNAL

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

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

Is the inspection result normal?

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

4.CHECK CLOSE SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.

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

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

Is the inspection result normal?

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

5. CHECK CLOSE SWITCH CIRCUIT

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

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

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace harness.

6. CHECK CLOSE SWITCH GROUND CIRCUIT

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D557	8		Yes

Is the inspection result normal?

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

7. CHECK CLOSE SWITCH

Refer to DLK-117, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 8.
NO >> Replace back door lock assembly. Refer to DLK-305, "DOOR LOCK : Removal and Installation".

8. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000008506085

COMPONENT INSPECTION

1.CHECK SWITCH

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

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

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace back door lock assembly. Refer to DLK-305, "DOOR LOCK : Removal and Installation".

B2422 BACK DOOR STATE

DTC Logic

INFOID:0000000008506086

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to DLK-131, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000008506087

Regarding Wiring Diagram information, refer to SEC-27, "Wiring Diagram".

1.CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

1. Perform initialization setting of automatic back door position information.
   Refer to DLK-111, "Work Procedure".
2. Erase DTC, and then repeat “PERFORM DTC CONFIRMATION PROCEDURE”.

Is DTC detected?

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

2.CHECK INSTALLATION OF BACK DOOR ASSEMBLY

1. Check that back door assembly is installed normally.
   Refer to DLK-291, "BACK DOOR ASSEMBLY : Adjustment".
2. Check back door assembly mechanism deformation, looseness, rattle, interference with other parts and pinched foreign materials.

Is the inspection result normal?

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

3.CHECK ENCODER SIGNAL

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

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

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

YES >> GO TO 4.
NO >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".

4.CHECK ENCODER POWER SUPPLY

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

(+)			(–)	Voltage (Approx.)
Spindle unit				
Connector		Terminal		
LH	B70	8	Ground	Battery voltage
RH	B162			

Is the inspection result normal?

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

5.CHECK ENCODER CIRCUIT

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

Automatic back door control module		Spindle unit			Continuity
Connector	Terminal	Connector		Terminal	
B55	19	LH	B70	8	Yes
	20	RH	B162		

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace harness.

6.CHECK ENCODER CIRCUIT 2

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

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

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

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

Is the inspection result normal?

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

7. CHECK ENCODER CIRCUIT 3

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

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

Is the inspection result normal?

YES >> GO TO 8.
NO >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".

8. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace the malfunctioning parts.

B2423 AUTOMATIC BACK DOOR MOTOR OPERATION TIME

DTC Logic

INFOID:0000000008506088

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to DLK-134, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000008506089

Regarding Wiring Diagram information, refer to DLK-92, "Wiring Diagram".

1.ERASE DTC

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

Is DTC detected?

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

2.CHECK SPINDLE MOTOR CIRCUIT

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

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

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace harness.

B2426 ENCODER

DTC Logic

INFOID:0000000008506090

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to DLK-136, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000008506091

Regarding Wiring Diagram information, refer to DLK-92, "Wiring Diagram".

1.CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

1. Perform initialization setting of automatic back door position information.
   Refer to DLK-111, "Work Procedure".
2. Erase DTC, and then repeat “PERFORM DTC CONFIRMATION PROCEDURE”.

Is DTC detected?

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

2.CHECK INSTALLATION OF BACK DOOR ASSEMBLY

1. Check that back door assembly is installed normally.
   Refer to DLK-291, "BACK DOOR ASSEMBLY : Adjustment".
2. Check back door assembly mechanism deformation, looseness, rattle, interference with other parts, and pinched foreign materials.

Is the inspection result normal?

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

3.CHECK ENCODER SIGNAL

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

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

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".

4.CHECK ENCODER POWER SUPPLY

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

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

Is the inspection result normal?

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

5.CHECK ENCODER CIRCUIT

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

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

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace harness.

6.CHECK ENCODER CIRCUIT 2

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

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

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

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

Is the inspection result normal?

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

7. CHECK ENCODER CIRCUIT 3

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

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

Is the inspection result normal?

YES >> GO TO 8.
NO >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".

8. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace the malfunctioning parts.

B2427 ENCODER

DTC Logic

INFOID:0000000008506092

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to DLK-139, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000008506093

Regarding Wiring Diagram information, refer to DLK-92, "Wiring Diagram".

1.CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

1. Perform initialization setting of automatic back door position information.
   Refer to DLK-111, "Work Procedure".
2. Erase DTC, and then repeat “PERFORM DTC CONFIRMATION PROCEDURE”.

Is DTC detected?

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

2.CHECK INSTALLATION OF BACK DOOR ASSEMBLY

1. Check that back door assembly is installed normally.
   Refer to DLK-291, "BACK DOOR ASSEMBLY : Adjustment".
2. Check back door assembly mechanism deformation, looseness, rattle, interference with other parts, and pinched foreign materials.

Is the inspection result normal?

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

3.CHECK ENCODER SIGNAL

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

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

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".

4.CHECK ENCODER POWER SUPPLY

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

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

Is the inspection result normal?

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

5.CHECK ENCODER CIRCUIT

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

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

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace harness.

6.CHECK ENCODER CIRCUIT 2

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

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

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

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

Is the inspection result normal?

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

7. CHECK ENCODER CIRCUIT 3

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

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

Is the inspection result normal?

YES >> GO TO 8.
NO >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".

8. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace the malfunctioning parts.

B2428 AUTOMATIC BACK DOOR CONTROL UNIT

DTC Logic

INFOID:0000000008506094

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:0000000008506095

1.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

When DTC [B2428] is detected, replace automatic back door control module.

>> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".

B242A CLOSURE CONDITION

DTC Logic

INFOID:0000000008506096

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B242A	CLSR CONDITION	Automatic back door control module detects malfunctions of open switch, close switch and half latch switch when auto closure of back door operates.	• Entry of foreign materials to back door lock assembly • Back door mechanism • Automatic back door control module • Open switch • Close switch • Half latch switch • Harness or connectors

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to DLK-143, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000008506097

Regarding Wiring Diagram information, refer to DLK-92, "Wiring Diagram".

1.CHECK FOR FOREIGN MATERIALS IN BACK DOOR LOCK ASSEMBLY

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

Is the inspection result normal?

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

2.CHECK BACK DOOR OPEN/CLOSE OPERATION

Manually check open and close operation of back door.

Is the inspection result normal?

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

3.CHECK MONITOR ITEM

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

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

Is the inspection result normal?

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

4.CHECK SWITCH INPUT SIGNAL

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

(+)		(–)	Voltage (Approx.)
Back door lock assembly			
Connector	Terminal		
D557	4	Ground	Battery voltage
	5		
	6		

Is the inspection result normal?

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

5.CHECK SWITCH CIRCUIT

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

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B55	3	D557	6	Yes
	5		5	
	11		4	

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

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

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace harness.

6.CHECK SWITCH GROUND CIRCUIT

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D557	8		Yes

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace back door lock assembly ground circuit.

7.CHECK SWITCH

Refer to DLK-117, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 8.
NO >> Replace back door lock assembly. Refer to DLK-305, "DOOR LOCK : Removal and Installation".

8.CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000008506098

COMPONENT INSPECTION

1.CHECK SWITCH

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

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

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace back door lock assembly. Refer to DLK-305, "DOOR LOCK : Removal and Installation".

B261B REMOTE ENGINE START

DTC Logic

INFOID:0000000008506099

DTC DETECTION LOGIC

NOTE:

- If DTC B261B is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-66, "DTC Logic".
- If DTC B261B is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-67, "DTC Logic".

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

Diagnosis Procedure

INFOID:0000000008506100

1. CHECK ECM IGNITION, POWER AND GROUND CIRCUITS

Check ECM ignition power and ground circuits. Refer to EC-170, "Diagnosis Procedure".

Is the inspection result normal?

YES >> Replace ECM. Refer to EC-460, "Removal and Installation". GO TO 2.
NO >> Repair or replace harness or connectors.

2. INSPECTION

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

Does DTC B261B return?

YES >> Replace BCM. Refer to BCS-78, "Removal and Installation".
NO >> Inspection End..

B2621 INSIDE ANTENNA

DTC Logic

INFOID:0000000008506101

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2621	INSIDE ANTENNA	An excessive high or low voltage from inside antenna (instrument center) is sent to BCM.	• Inside key antenna (instrument center) • Harness or connector [Inside key antenna (instrument center) circuit is open or shorted]

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is inside key antenna DTC detected?

YES >> Refer to DLK-147, "Diagnosis Procedure".
NO >> Inside key antenna (instrument center) is OK.

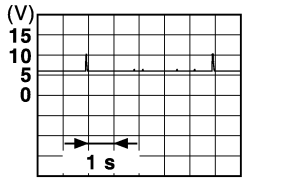
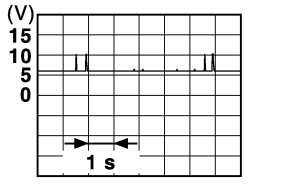
Diagnosis Procedure

INFOID:0000000008506102

Regarding Wiring Diagram information, refer to DLK-72, "Wiring Diagram".

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M80	123, 124	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-78, "Removal and Installation".

NO >> GO TO 2.

2.CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and inside key antenna (instrument center) connector.
2. Check continuity between BCM harness connector and inside key antenna (instrument center) harness connector.

BCM		Inside key antenna (instrument center)		Continuity
Connector	Terminal	Connector	Terminal	
M80	123	M14	1	Yes
	124		2	

3. Check continuity between BCM harness connector and ground.

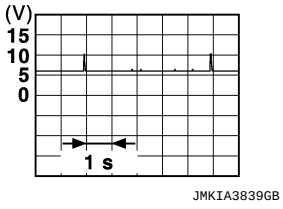
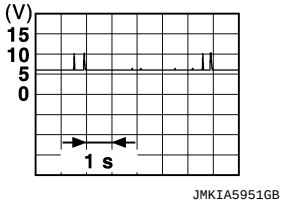
BCM		Ground	Continuity
Connector	Terminal		
M80	123		No
	124		

Is the inspection result normal?

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

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM		(–)	Condition	Signal (Reference value)
Connector	Terminal			
M80	123, 124	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace inside key antenna (instrument center).
NO >> Replace BCM. Refer to BCS-78, "Removal and Installation" .

B2622 INSIDE ANTENNA

DTC Logic

INFOID:0000000008506103

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is inside key antenna DTC detected?

YES >> Refer to DLK-149, "Diagnosis Procedure".
NO >> Inside key antenna (console) is OK.

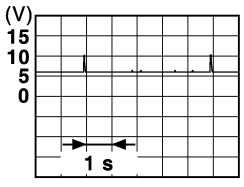
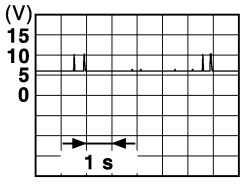
Diagnosis Procedure

INFOID:0000000008506104

Regarding Wiring Diagram information, refer to DLK-72, "Wiring Diagram".

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M80	116, 128	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-78, "Removal and Installation".
NO >> GO TO 2.

2.CHECK INSIDE KEY ANTENNA CIRCUIT

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

BCM		Inside key antenna (console)		Continuity
Connector	Terminal	Connector	Terminal	
M80	116	M255	1	Yes
	128		2	

3. Check continuity between BCM harness connector and ground.

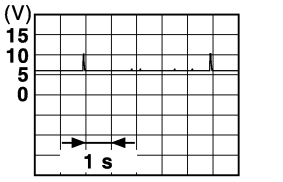
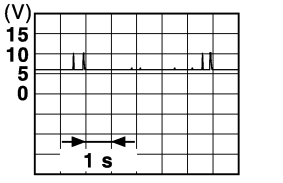
BCM		Ground	Continuity
Connector	Terminal		
M80	116		No
	128		

Is the inspection result normal?

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

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM		(–)	Condition	Signal (Reference value)
Connector	Terminal			
M80	116, 128	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace inside key antenna (console). Refer to DLK-312, "CONSOLE : Removal and Installation".
NO >> Replace BCM. Refer to BCS-78, "Removal and Installation".

B2623 INSIDE ANTENNA

DTC Logic

INFOID:0000000008506105

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is inside key antenna DTC detected?

YES >> Refer to DLK-151, "Diagnosis Procedure".
NO >> Inside key antenna (luggage room) is OK.

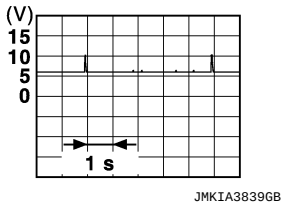
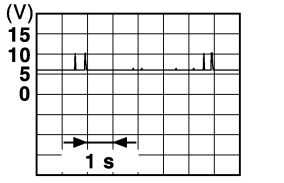
Diagnosis Procedure

INFOID:0000000008506106

Regarding Wiring Diagram information, refer to DLK-72, "Wiring Diagram".

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M20	100, 99	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-78, "Removal and Installation".
NO >> GO TO 2.

2.CHECK INSIDE KEY ANTENNA CIRCUIT

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

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

3. Check continuity between BCM harness connector and ground.

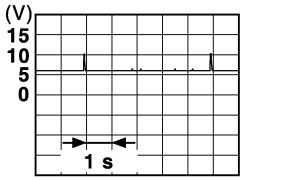
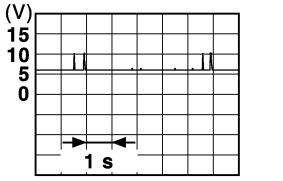
BCM		Ground	Continuity
Connector	Terminal		
M20	100		No
	99		

Is the inspection result normal?

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

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM		(–)	Condition	Signal (Reference value)
Connector	Terminal			
M20	100, 99	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace inside key antenna (luggage room). Refer to DLK-312, "LUGGAGE ROOM : Removal and Installation".
NO >> Replace BCM. Refer to BCS-78, "Removal and Installation".

B26FD SHIFT LOCK SOLENOID

DTC Logic

INFOID:0000000008506107

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B26FD	SHIFT LOCK SOLENOID	BCM shift lock solenoid output control is OFF but shift lock solenoid output feedback is ON.	• Shift lock solenoid • Harness or connector • Shift lock solenoid circuit is open or shorted

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to DLK-153, "Diagnosis Procedure".
NO >> Shift lock solenoid is OK.

Diagnosis Procedure

INFOID:0000000008931696

Regarding Wiring Diagram information, refer to TM-73, "Wiring diagram".

1. CHECK POWER SOURCE (STOP LAMP SWITCH)

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

Stop lamp switch		Ground	Voltage
Connector	Terminal		
E38	1		Battery voltage

Is the inspection result normal?

YES >> GO TO 2.
NO >> Check the following:
- Harness for short or open between fuse block (J/B) and stop lamp switch
- 10A fuse (No. 10, located in fuse block [J/B])

2.CHECK STOP LAMP SWITCH

Check stop lamp switch. Refer to TM-181, "Component Inspection (Stop Lamp Switch)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace stop lamp switch. Refer to BR-20, "Exploded View".

3.CHECK GROUND CIRCUIT (STOP LAMP RELAY)

1. Remove the stop lamp relay.
2. Check continuity between stop lamp relay connector E39 terminal 2 and ground.

Stop lamp relay		Ground	Continuity
Connector	Terminal (+)		
E39	2		Yes

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace damaged parts.

4. CHECK HARNESS BETWEEN STOP LAMP RELAY AND BCM

1. Disconnect BCM connector M18. Check continuity between stop lamp relay connector E39 terminal 5 and BCM connector M18 terminal 27.

BCM		stop lamp relay		Continuity
Connector	Terminal	Connector	Terminal	
M18	27	E39	5	Yes

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace damaged parts.

5. CHECK HARNESS BETWEEN STOP LAMP SWITCH AND STOP LAMP RELAY

Check continuity between stop lamp relay connector E39 terminal 2 and stop lamp switch connector E38 terminal 1.

Stop lamp switch		Stop lamp relay		Continuity
Connector	Terminal	Connector	Terminal	
E38	2	E39	1	Yes

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace damaged parts.

6. CHECK POWER SOURCE (STOP LAMP RELAY)

Check voltage between stop lamp relay connector E39 terminal 3 and ground.

Stop lamp relay		Ground	Continuity
Connector	Terminal (+)		
E39	3		Battery voltage

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace damaged parts.

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

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

BCM		CVT shift selector		Continuity
Connector	Terminal	Connector	Terminal	
M80	108	M78	3	Yes

Is the inspection result normal?

YES >> GO TO 8.
NO >> Repair or replace damaged parts.

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

Check continuity between BCM connector M80 terminal 108 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M80	108		No

Is the inspection result normal?

YES >> GO TO 9.
NO >> Repair or replace damaged parts.

9. CHECK GROUND CIRCUIT (CVT SHIFT SELECTOR)

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

CVT shift selector		Ground	Continuity
Connector	Terminal		
M78	4		Yes

Is the inspection result normal?

YES >> Replace CVT shift selector. Refer to TM-191, "Removal and Installation".
NO >> Repair or replace damaged parts.

B26FE HOOD SWITCH

DTC Logic

INFOID:0000000008506109

DTC DETECTION LOGIC

NOTE:

- If DTC B26FE is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-66, "DTC Logic".
- If DTC B26FE is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-67, "DTC Logic".

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to DLK-156, "Diagnosis Procedure".
NO >> Hood switch is OK.

Diagnosis Procedure

INFOID:0000000008506110

Regarding Wiring Diagram information, refer to DLK-72, "Wiring Diagram".

1.CHECK HOOD SWITCH SIGNAL CIRCUITS

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

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

Is the inspection result normal?

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

2.CHECK HOOD SWITCH SIGNAL CIRCUITS

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

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

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

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

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK HOOD SWITCH GROUND CIRCUIT

Check continuity between hood switch harness connector and ground.

Hood switch		Ground	Continuity
Connector	Terminal		
E205	3		Yes

Is the inspection result normal?

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

4.CHECK HOOD SWITCH

Refer to DLK-157, "Component Inspection" .

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace hood switch. Refer to DLK-297, "Removal and Installation".

5.CHECK BCM CONFIGURATION

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

>> Inspection End.

Component Inspection

INFOID:0000000008506111

1.CHECK HOOD SWITCH

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

Hood switch		Condition		Continuity
Terminal				
1	3	Hood switch	Press	No
1	3	Hood switch	Release	Yes
2	3	Hood switch	Press	No
2	3	Hood switch	Release	Yes

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace hood switch. Refer to DLK-297, "Removal and Installation".

B26FF REMOTE KEYLESS ENTRY RECEIVER

DTC Logic

INFOID:0000000008506112

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to DLK-158, "Diagnosis Procedure".
NO >> Inspection End.

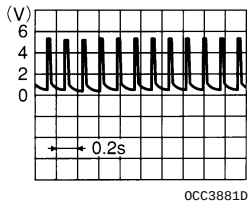
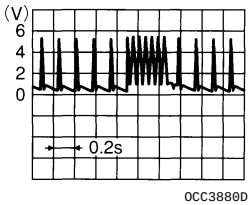
Diagnosis Procedure

INFOID:0000000008506113

Regarding Wiring Diagram information, refer to DLK-72, "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 Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M80	119	Ground	Standby state	 OCC3881D
			Press the Intelligent Key lock or unlock button	 OCC3880D

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-78, "Removal and Installation".
NO >> GO TO 2.

2.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 1

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

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M80	119	M86	2	Yes

3. Check continuity between BCM harness connector and ground.

(+)		(–)	Continuity
BCM			
Connector	Terminal		
M80	119	Ground	No

Is the inspection result normal?

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

3.CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

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

(+)		(–)	Voltage (Approx)
Remote keyless entry receiver			
Connector	Terminal		
M86	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.
NO-1 >> Check 10A fuse No. 25 [located in fuse block J/B].
NO-2 >> Repair or replace harness between remote keyless entry receiver and 10A fuse No. 25.

4.CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

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

Remote keyless entry receiver		Ground	Continuity
Connector	Terminal		
M86	3		Yes

Is the inspection result normal?

YES >> Replace remote keyless entry receiver. Refer to DLK-315, "Removal and Installation".
NO >> Repair or replace harness.

POWER SUPPLY AND GROUND CIRCUIT
AUTOMATIC BACK DOOR CONTROL UNIT

AUTOMATIC BACK DOOR CONTROL UNIT : Diagnosis Procedure

INFOID:0000000008506114

Regarding Wiring Diagram information, refer to DLK-72, "Wiring Diagram".

1.CHECK FUSIBLE LINK

Check that the following fusible link is not open.

Fusible link No.	Signal name
N (40A)	Battery power supply

Is the fusible link open?

YES >> Replace the open fusible link after repairing the affected circuit.
NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

(+)		(–)	Voltage
Automatic back door control module			
Connector	Terminal		
B56	25	Ground	Battery voltage

Is the inspection result normal?

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

3.CHECK GROUND CIRCUIT

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

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	32		Yes
	28		

Does continuity exist?

YES >> Inspection End.
NO >> Repair or replace harness.

BCM

BCM : Diagnosis Procedure

INFOID:0000000008950973

Regarding Wiring Diagram information, refer to BCS-53, "Wiring Diagram".

1. CHECK FUSE AND FUSIBLE LINK

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

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

Is the fuse or fusible link blown?

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

2. CHECK POWER SUPPLY CIRCUIT

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

BCM		Ground	Voltage (Approx.)
Connector	Terminal		
M81	131	—	Battery voltage
	139		

Is the inspection result normal?

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

3. CHECK GROUND CIRCUIT

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

BCM		Ground	Continuity
Connector	Terminal		
M81	134	—	Yes
	143		

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness or connectors.

OUTSIDE KEY ANTENNA (PASSENGER SIDE)

Component Function Check

INFOID:0000000008506116

1.CHECK OUTSIDE KEY ANTENNA (PASSENGER SIDE)

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

Does the door unlock?

YES >> Inspection End.
NO >> Refer to DLK-162, "Diagnosis Procedure".

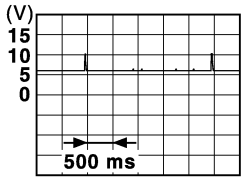
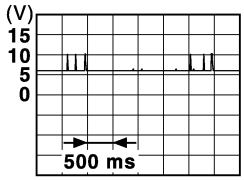
Diagnosis Procedure

INFOID:0000000008506117

Regarding Wiring Diagram information, refer to DLK-72, "Wiring Diagram".

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Signal (Reference value)
M80	114, 115	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-78, "Removal and Installation".
NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

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

BCM		Outside key antenna (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M80	114	D115	1	Yes
	115		2	

3. Check continuity between BCM harness connector and ground.

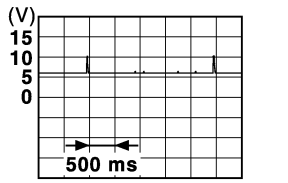
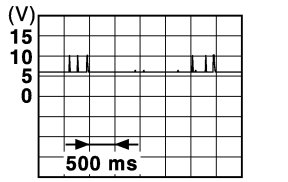
BCM		Ground	Continuity
Connector	Terminal		
M80	114		No
	115		

Is the inspection result normal?

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

3. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM		(–)	Condition		Signal (Reference value)
Connector	Terminal				
M80	114, 115	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace outside key antenna (passenger side). Refer to DLK-313, "PASSENGER SIDE : Removal and Installation".
NO >> Replace BCM. Refer to BCS-78, "Removal and Installation".

OUTSIDE KEY ANTENNA (DRIVER SIDE)

Component Function Check

INFOID:0000000008506118

1.CHECK OUTSIDE KEY ANTENNA (DRIVER SIDE)

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

Does the door unlock?

YES >> Inspection End.
NO >> Refer to DLK-164, "Diagnosis Procedure".

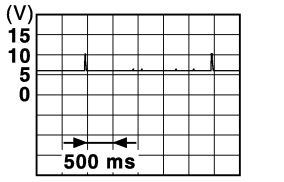
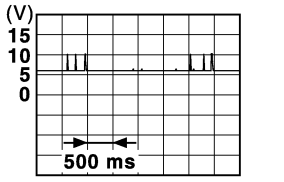
Diagnosis Procedure

INFOID:0000000008506119

Regarding Wiring Diagram information, refer to DLK-72, "Wiring Diagram".

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Signal (Reference value)
M80	121, 122	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-78, "Removal and Installation".
NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

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

BCM		Outside key antenna (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M80	122	D15	1	Yes
	121		2	

3. Check continuity between BCM harness connector and ground.

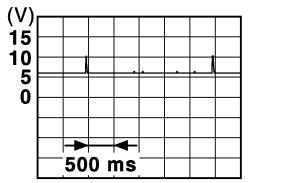
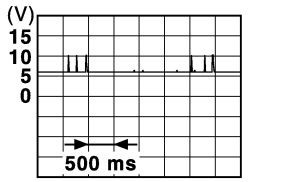
BCM		Ground	Continuity
Connector	Terminal		
M80	122		Not existed
	121		

Is the inspection result normal?

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

3. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Signal (Reference value)
M80	121, 122	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace outside key antenna (driver side). Refer to DLK-313, "DRIVER SIDE : Removal and Installation".
NO >> Replace BCM. Refer to BCS-78, "Removal and Installation".

OUTSIDE KEY ANTENNA (REAR BUMPER)

Component Function Check

INFOID:0000000008506120

1.CHECK OUTSIDE KEY ANTENNA (REAR BUMPER)

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

Does the door unlock?

YES >> Inspection End.
NO >> Refer to DLK-166, "Diagnosis Procedure".

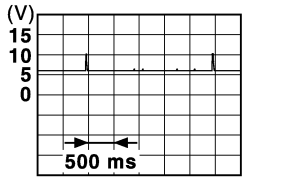
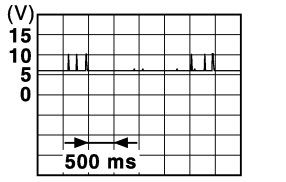
Diagnosis Procedure

INFOID:0000000008506121

Regarding Wiring Diagram information, refer to DLK-72, "Wiring Diagram".

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Signal (Reference value)
M20	101, 102	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-78, "Removal and Installation".
NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

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

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

3. Check continuity between BCM harness connector and ground.

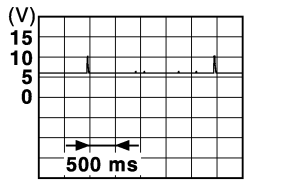
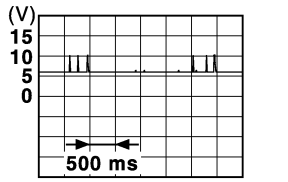
BCM		Ground	Continuity
Connector	Terminal		
M20	102		No
	101		

Is the inspection result normal?

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

3. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Signal (Reference value)
M20	101, 102	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace outside key antenna (rear bumper). Refer to DLK-313, "REAR BUMPER : Removal and Installation".
NO >> Replace BCM. Refer to BCS-78, "Removal and Installation".

DOOR SWITCH

Component Function Check

INFOID:0000000008506122

1.CHECK FUNCTION

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

Monitor item	Condition		Status
DOOR SW-DR	Driver side door	Open	On
		Closed	Off
DOOR SW-AS	Passenger side door	Open	On
		Closed	Off
DOOR SW-RL	Rear door LH	Open	On
		Closed	Off
DOOR SW-RR	Rear door RH	Open	On
		Closed	Off

Is the inspection result normal?

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

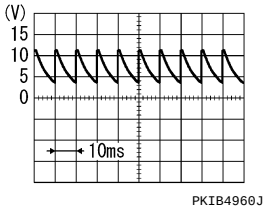
Diagnosis Procedure

INFOID:0000000008506123

Regarding Wiring Diagram information, refer to DLK-72, "Wiring Diagram".

1.CHECK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect malfunctioning door switch connector.
3. Check signal between malfunctioning door switch harness connector and ground using oscilloscope.

(+)			(–)	Signal (Reference value)
Door switch				
Connector		Terminal		
Driver side	B8	3	Ground	
Passenger side	B108			
Rear LH	B18			
Rear RH	B116			

7.0 - 8.0 V

Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

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

Door switch			BCM		Continuity
Connector		Terminal	Connector	Terminal	
Driver side	B8	3	M20	96	Yes
Passenger side	B108			94	
Rear LH	B18			82	
Rear RH	B116			93	

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

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

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-78, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK DOOR SWITCH

Refer to DLK-169, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace malfunctioning door switch. Refer to DLK-310, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000008506124

1.CHECK DOOR SWITCH

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

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

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace malfunction door switch. Refer to DLK-310, "Removal and Installation".

BACK DOOR SWITCH

Component Function Check

INFOID:0000000008506125

1.CHECK FUNCTION

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

Monitor item	Condition		Status
DOOR SW-BK	Driver side door	Open	On
		Closed	Off

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Refer to DLK-170, "Diagnosis Procedure (With Power Back Door)".

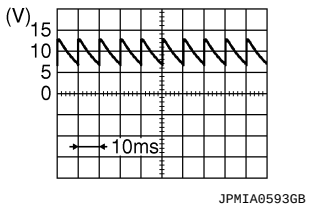
Diagnosis Procedure (With Power Back Door)

INFOID:0000000008506126

Regarding Wiring Diagram information, refer to DLK-92, "Wiring Diagram".

1.CHECK BACK DOOR SWITCH INPUT SIGNAL

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

(+)		(–)	Signal (Reference value)
Back door lock assembly			
Connector	Terminal		
D557	7	Ground	 JPMIA0593GB 9.0 - 10.0 V

Is the inspection result normal?

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

2.CHECK BACK DOOR SWITCH CIRCUIT

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

Back door lock assembly		BCM		Continuity
Connector	Terminal	Connector	Terminal	
D557	7	M20	97	Yes

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D557	7		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-78, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR SWITCH GROUND CIRCUIT

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D557	8		Yes

Is the inspection result normal?

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

4.CHECK BACK DOOR SWITCH

Refer to DLK-172, "Component Inspection (With Power Back Door)".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door lock assembly. Refer to DLK-305, "DOOR LOCK : Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

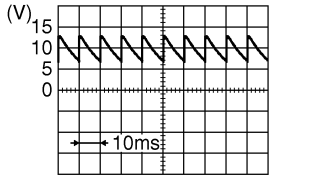
Diagnosis Procedure (Without Power Back Door)

INFOID:0000000008931697

Regarding Wiring Diagram information, refer to DLK-72, "Wiring Diagram".

1.CHECK BACK DOOR SWITCH INPUT SIGNAL

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

(+)		(–)	Signal (Reference value)
Back door lock assembly			
Connector	Terminal		
D565	3	Ground	 JPMIA0593GB 9.0 - 10.0 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	
D565	3	M20	97	Yes

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D565	3		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-78, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR SWITCH GROUND CIRCUIT

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D565	4		Yes

Is the inspection result normal?

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

4.CHECK BACK DOOR SWITCH

Refer to DLK-173, "Component Inspection (Without Power Back Door)".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door lock assembly. Refer to DLK-305, "DOOR LOCK : Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

Component Inspection (With Power Back Door)

INFOID:0000000008506127

1.CHECK BACK DOOR SWITCH

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

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

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace back door lock assembly. Refer to DLK-305, "DOOR LOCK : Removal and Installation".

Component Inspection (Without Power Back Door)

INFOID:0000000008931698

1. CHECK BACK DOOR SWITCH

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

Back door lock assembly		Condition		Continuity
Terminal				
3	4	Door switch	Pressed	No
			Released	Yes

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace back door lock assembly. Refer to DLK-305, "DOOR LOCK : Removal and Installation".

DOOR LOCK AND UNLOCK SWITCH
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000008941482

Transmits door lock/unlock operation to BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000008941483

1.CHECK FUNCTION

With CONSULT
Check CDL LOCK SW, CDL UNLOCK SW in Data Monitor mode with CONSULT.

Monitor item	Condition	
CDL LOCK SW	LOCK	: ON
	UNLOCK	: OFF
CDL UNLOCK SW	LOCK	: OFF
	UNLOCK	: ON

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.
NO >> With LH and RH anti-pinch, refer to DLK-174, "DRIVER SIDE : Diagnosis Procedure (With LH and RH Auto Down)".
NO >> With LH anti-pinch only, refer to DLK-175, "DRIVER SIDE : Diagnosis Procedure (With LH Auto Down Only)".

DRIVER SIDE : Diagnosis Procedure (With LH and RH Auto Down)

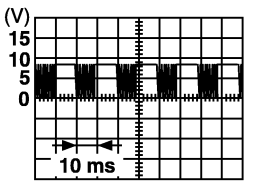
INFOID:0000000008941484

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

1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Read voltage signal between BCM connector and ground with oscilloscope when door lock and unlock switch (driver side) is turned “LOCK” or “UNLOCK”.

2. Check that signals which are shown in the figure below can be detected during 10 second just after door lock and unlock switch (driver side) is turned “LOCK” or “UNLOCK”.

Terminal			Condition	Signal (Reference value)
(+)		(–)		
BCM connector	Terminal			
M19	54	Ground	Door is closed	

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Is the inspection result normal?

YES >> GO TO 4
NO >> GO TO 2

2.CHECK POWER WINDOW SWITCH GROUND

1. Turn ignition switch OFF.

2. Disconnect main power window and door lock/unlock switch connector.
3. Check continuity between main power window and door lock/unlock switch connector and ground.

Main power window and door lock/unlock switch connector	Terminal		Continuity
D25	1	Ground	Yes

Is the inspection result normal?

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

3. CHECK POWER WINDOW SERIAL LINK CIRCUIT

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

BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
M19	54	D25	11	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminals		Continuity
M19	54	Ground	No

Is the inspection result normal?

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

4. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

DRIVER SIDE : Diagnosis Procedure (With LH Auto Down Only)

INFOID:0000000008941485

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

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage at the main power window and door lock/unlock switch connector when the switch (driver side) is turned to “LOCK” or “UNLOCK”.

Connector	Main power window and door lock/unlock switch state	Terminal		Voltage
D23	Neutral → Unlock	15	Ground	Battery voltage → 0
	Neutral → Lock	3		

Is the inspection result normal?

YES >> GO TO 5
NO >> GO TO 2

2. CHECK POWER WINDOW SWITCH GROUND

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

Main power window and door lock/unlock switch connector	Terminal		Continuity
D23	1	Ground	Yes

Is the inspection result normal?

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

3. CHECK POWER WINDOW SWITCH

Check continuity between main power window and door lock/unlock switch terminals.

Main power window and door lock/unlock switch state	Terminals	Continuity
Unlock	1 - 3	Yes
Lock	1 - 15	
Neutral/Unlock	1 - 15	No
Neutral/Lock	1 - 3	

Is the inspection result normal?

YES >> GO TO 4
NO >> Replace main power window and door lock/unlock switch. Refer to PWC-62, "Removal and Installation".

4. CHECK POWER WINDOW SWITCH CIRCUITS

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

BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
M18	34	D23	15	Yes
	19		3	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M18	34	Ground	No
	19		

Is the inspection result normal?

YES >> GO TO 5
NO >> Repair or replace harness.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000008941486

Transmits door lock/unlock operation to BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000008941487

1.CHECK FUNCTION

With CONSULT

Check CDL LOCK SW, CDL UNLOCK SW in Data Monitor mode with CONSULT.

Monitor item	Condition	
CDL LOCK SW	LOCK	: ON
	UNLOCK	: OFF
CDL UNLOCK SW	LOCK	: OFF
	UNLOCK	: ON

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.

NO >> With LH and RH anti-pinch, refer to DLK-177, "PASSENGER SIDE : Diagnosis Procedure (With LH and RH Auto Down)".

NO >> With LH anti-pinch only, refer to DLK-178, "PASSENGER SIDE : Diagnosis Procedure (With LH Auto Down Only)".

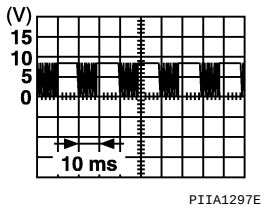
PASSENGER SIDE : Diagnosis Procedure (With LH and RH Auto Down)

INFOID:0000000008941488

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

1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Read voltage signal between BCM connector and ground with oscilloscope when power window and door lock/unlock switch RH is changed to “LOCK” or “UNLOCK”.
2. Check that signals which are shown in the figure below can be detected during 10 second just after ower window and door lock/unlock switch RH is changed “LOCK” or “UNLOCK”.

Terminal			Condition	Signal (Reference value)
(+)		(–)		
BCM connector	Terminal			
M19	54	Ground	Door is closed	

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Is the inspection result normal?

YES >> GO TO 4

NO >> GO TO 2

2.CHECK POWER WINDOW SWITCH GROUND

1. Turn ignition switch OFF.
2. Disconnect power window and door lock/unlock switch RH connector.
3. Check continuity between power window and door lock/unlock switch RH connector and ground.

Power window and door lock/ unlock switch RH connector	Terminal		Continuity
D129	7	Ground	Yes

Is the inspection result normal?

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

3. CHECK POWER WINDOW SERIAL LINK CIRCUIT

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

BCM connector	Terminal	Power window and door lock/unlock switch RH connector	Terminal	Continuity
M19	54	D129	3	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminals		Continuity
M19	54	Ground	No

Is the inspection result normal?

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

4. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

PASSENGER SIDE : Diagnosis Procedure (With LH Auto Down Only)

INFOID:0000000008941489

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

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage at the power window and door lock/unlock switch RH connector when the switch (passenger side) is changed to “LOCK” or “UNLOCK”.

Connector	Power window and door lock/unlock switch RH state	Terminal		Voltage
D125	Neutral → Lock	1	Ground	Battery voltage → 0
	Neutral → Unlock	2		

Is the inspection result normal?

YES >> GO TO 5
NO >> GO TO 2

2. CHECK POWER WINDOW SWITCH GROUND

1. Turn ignition switch OFF.
2. Disconnect power window and door lock/unlock switch RH connector.
3. Check continuity between power window and door lock/unlock switch RH connector and ground.

Power window and door lock/unlock switch RH connector	Terminal		Continuity
D125	3	Ground	Yes

Is the inspection result normal?

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

3. CHECK POWER WINDOW SWITCH

Check continuity between power window and door lock/unlock switch RH terminals.

Power window and door lock/unlock switch RH state	Terminals	Continuity
Lock	1 - 3	Yes
Unlock	2 - 3	
Neutral/Unlock	1 - 3	No
Neutral/Lock	2 - 3	

Is the inspection result normal?

YES >> GO TO 4
NO >> Replace power window and door lock/unlock switch RH.

4. CHECK POWER WINDOW SWITCH CIRCUITS

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

BCM connector	Terminal	Power window and door lock/unlock switch RH connector	Terminal	Continuity
M18	19	D125	1	Yes
	34		2	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M18	19	Ground	No
	34		

Is the inspection result normal?

YES >> GO TO 5
NO >> Repair or replace harness.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

DOOR LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:0000000008506132

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-180, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000008506133

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.

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

Is the inspection result normal?

YES >> Replace front door lock assembly LH. Refer to DLK-298, "DOOR LOCK : Removal and Installation".
NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM		front door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
M81	135	D14	1	Yes
	137		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M81	135		No
	137		

Is the inspection result normal?

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

3.CHECK BCM OUTPUT SIGNAL

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

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

Is the inspection result normal?

YES >> Check for internal short of each door lock actuator and fuel lid door lock actuator.
NO >> Replace BCM. Refer to BCS-78, "Removal and Installation".

PASSENGER SIDE

PASSENGER SIDE : Component Function Check

INFOID:0000000008506134

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-181, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000008506135

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.
3. Check voltage between front door lock actuator RH harness connector and ground.

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

Is the inspection result normal?

YES >> Replace front door lock actuator RH. Refer to DLK-298, "DOOR LOCK : Removal and Installation".
NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

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

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M81	130		No
	135		

Is the inspection result normal?

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

3.CHECK BCM OUTPUT SIGNAL

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

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

Is the inspection result normal?

YES >> Check for internal short of each door lock actuator and fuel lid door lock actuator.
NO >> Replace BCM. Refer to BCS-78, "Removal and Installation".

REAR LH

REAR LH : Component Function Check

INFOID:0000000008506136

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-182, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000008506137

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

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

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

Is the inspection result normal?

YES >> Replace rear door lock actuator LH. Refer to DLK-305, "DOOR LOCK : Removal and Installation".
NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM, all door lock actuators and fuel lid door lock actuator connector.
2. Check continuity between BCM harness connector and rear door lock actuator LH harness connector.

BCM		Rear door lock actuator LH		Continuity
Connector	Terminal	Connector	Terminal	
M81	133	D205	2	Yes
M81	132		1	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M81	133		No
M81	132		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.
2. Check voltage between BCM harness connector and ground.

(+) BCM		(–)	Condition		Voltage (Approx.)
Connector	Terminal				
M81	133	Ground	Door lock and unlock switch	Unlock	12 V
M81	132			Lock	

Is the inspection result normal?

YES >> Check for internal short of each door lock actuator.
NO >> Replace BCM. Refer to BCS-78, "Removal and Installation".

REAR RH

REAR RH : Component Function Check

INFOID:0000000008506138

1.CHECK FUNCTION

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select DOOR LOCK in ACTIVE TEST mode.
3. Touch ALL LOCK or ALL UNLK to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-183, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000008506139

Regarding Wiring Diagram information, refer to DLK-60, "Wiring Diagram".

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect rear door lock actuator RH connector.
3. Check voltage between rear door lock actuator RH harness connector and ground.

(+)		(–)	Condition		Voltage (Approx.)
Rear door lock actuator RH					
Connector	Terminal				
D305	1	Ground	Door lock and unlock switch	Unlock	12 V
	2			Lock	

Is the inspection result normal?

YES >> Replace rear door lock actuator RH. Refer to DLK-302, "DOOR LOCK : Removal and Installation".
NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM, all door lock actuators and fuel lid lock actuator connector.
2. Check continuity between BCM harness connector and rear door lock actuator RH harness connector.

BCM		Rear door lock actuator RH		Continuity
Connector	Terminal	Connector	Terminal	
M81	133	D305	1	Yes
M81	132		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M81	133		No
M81	132		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.
2. Check voltage between BCM harness connector and ground.

(+)		(–)	Condition		Voltage (Approx.)
BCM					
Connector	Terminal				
M81	133	Ground	Door lock and unlock switch	Unlock	12 V
M81	132			Lock	

Is the inspection result normal?

YES >> Check for internal short of each door lock actuator.
NO >> Replace BCM. Refer to BCS-78, "Removal and Installation".

FUEL LID LOCK ACTUATOR

Component Function Check

INFOID:0000000008506140

1.CHECK FUNCTION

1. Select DOOR LOCK of BCM using CONSULT.
2. Select DOOR LOCK in ACTIVE TEST mode.
3. Touch ALL LOCK or ALL UNLK to check that it works normally.

Is the inspection result normal?

YES >> Fuel lid door lock actuator is OK.
NO >> Refer to DLK-185, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008506141

Regarding Wiring Diagram information, refer to DLK-60, "Wiring Diagram".

1.CHECK FUEL LID DOOR LOCK ACTUATOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect fuel lid door lock actuator connector.
3. Check voltage between fuel lid door lock actuator harness connector and ground.

(+)		(–)	Condition		Voltage (Approx.)
Fuel lid door lock actuator					
Connector	Terminal				
B20	1	Ground	Door lock and unlock switch	Unlock	12 V
	2			Lock	

Is the inspection result normal?

YES >> Replace fuel lid door lock actuator. Refer to DLK-307, "Removal and Installation".
NO >> GO TO 2.

2.CHECK FUEL LID DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM, all door lock actuators connector.
2. Check continuity between BCM harness connector and fuel lid door lock actuator harness connector.

BCM		Fuel lid door lock actuator		Continuity
Connector	Terminal	Connector	Terminal	
M81	135	B20	2	Yes
	137		1	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M81	135		No
	137		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.
2. Check voltage between BCM harness connector and ground.

(+)		(–)	Condition		Voltage (Approx.)
BCM					
Connector	Terminal				
M81	135	Ground	Door lock and unlock switch	Lock	12 V
	137			Unlock	

Is the inspection result normal?

YES >> Check for internal short of each door lock actuator.
NO >> Replace BCM. Refer to BCS-78, "Removal and Installation".

UNLOCK SENSOR

Component Function Check

INFOID:0000000008506142

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
		Unlock	ON

Is the inspection result normal?

YES >> Unlock sensor is OK.
NO >> Refer to DLK-187, "Diagnosis Procedure".

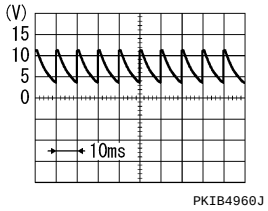
Diagnosis Procedure

INFOID:0000000008506143

Regarding Wiring Diagram information, refer to DLK-60, "Wiring Diagram".

1.CHECK UNLOCK SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly LH connector.
3. Check signal between front door lock assembly LH harness connector and ground with oscilloscope.

(+)		(–)	Signal (Reference value)
Front door lock assembly LH			
Connector	Terminal		
D14	3	Ground	

Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 2.

2.CHECK UNLOCK SENSOR CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and front door lock assembly LH harness connector.

BCM		Front door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
M18	30	D14	3	Yes

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M18	30		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-78, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK UNLOCK SENSOR GROUND CIRCUIT

Check continuity between front door lock assembly LH harness connector and ground.

Front door lock assembly LH		Ground	Continuity
Connector	Terminal		
D14	4		Yes

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4.CHECK UNLOCK SENSOR

Refer to DLK-188, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace front door lock assembly LH. Refer to DLK-298, "DOOR LOCK : Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000008506144

1.CHECK UNLOCK SENSOR

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly LH connector.
3. Check continuity between front door lock assembly LH terminals.

Front door lock assembly LH		Condition		Continuity
Terminal				
3	4	Driver side door	Unlock	Yes
			Lock	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace front door lock assembly LH. Refer to DLK-298, "DOOR LOCK : Removal and Installation".

DOOR KEY CYLINDER SWITCH

Component Function Check

INFOID:0000000008506145

1.CHECK FUNCTION

1. Select DOOR LOCK of BCM using CONSULT.
2. Select KEY CYL LK-SW, KEY CYL UN-SW in DATA MONITOR mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
KEY CYL LK-SW	Driver side door key cylinder	Lock	ON
		Neutral / Unlock	OFF
KEY CYL UN-SW		Unlock	ON
		Neutral / Lock	OFF

Is the inspection result normal?

YES >> Door key cylinder switch is OK.
NO >> Refer to DLK-189, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008506146

Regarding Wiring Diagram information, refer to DLK-60, "Wiring Diagram".

1.CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly LH connector.
3. Check voltage between front door lock assembly LH harness connector and ground.

(+)		(–)	Voltage (Approx.)
Front door lock assembly LH			
Connector	Terminal		
D14	5	Ground	5 V
	6		

Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 2.

2.CHECK DOOR KEY CYLINDER SWITCH SIGNAL CIRCUIT

1. Disconnect power window main switch connector.
2. Check continuity between main power window and door lock/unlock switch harness connector and front door lock assembly LH harness connector.

Main power window and door lock/unlock switch		Front door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
D25	3	D14	6	Yes
	15		5	

3. Check continuity between power window main switch harness connector and ground.

Main power window and door lock/unlock switch		Ground	Continuity
Connector	Terminal		
D25	3		No
	15		

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-62, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

Check continuity between front door lock assembly LH harness connector and ground.

Front door lock assembly LH		Ground	Continuity
Connector	Terminal		
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-190, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace front door lock assembly LH. Refer to DLK-298, "DOOR LOCK : Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000008506147

1.CHECK DOOR KEY CYLINDER SWITCH

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly LH connector.
3. Check continuity between front door lock assembly LH terminals.

Front door lock assembly LH		Condition		Continuity
Terminal				
5	4	Driver side door key cylinder	Unlock	Yes
			Neutral / Lock	No
6			Lock	Yes
			Neutral / Unlock	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace front door lock assembly LH. Refer to DLK-298, "DOOR LOCK : Removal and Installation".

REMOTE KEYLESS ENTRY RECEIVER

Component Function Check

INFOID:0000000008506148

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “RKE OPE COUN1” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition
RKE OPE COUN1	Checks whether value changes when operating Intelligent Key

Is the inspection result normal?

YES >> Remote keyless entry receiver is OK.
NO >> Refer to DLK-191, "Diagnosis Procedure".

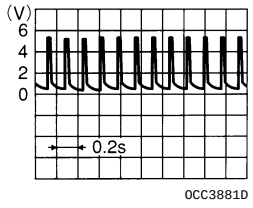
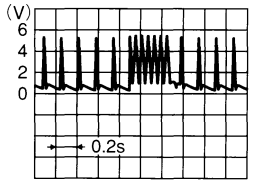
Diagnosis Procedure

INFOID:0000000008506149

Regarding Wiring Diagram information, refer to DLK-72, "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 Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M80	119	Ground	Standby state	 0CC3881D
			Press the Intelligent Key lock or unlock button	 0CC3880D

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-78, "Removal and Installation".
NO >> GO TO 2.

2.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 1

1. Disconnect BCM and remote keyless entry receiver connectors.
2. Check continuity between BCM harness connector and remote keyless entry receiver harness connector.

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M80	119	M86	2	Yes

3. Check continuity between BCM harness connector and ground.

(+)		(–)	Continuity
BCM			
Connector	Terminal		
M80	119	Ground	No

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness.

3. CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

Check voltage between remote keyless entry receiver harness connector and ground.

(+)		(–)	Voltage Approx.
Remote keyless entry receiver			
Connector	Terminal		
M86	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.
NO-1 >> Check 10A fuse No. 25 [located in fuse block J/B].
NO-2 >> Repair or replace harness between remote keyless entry receiver and 10A fuse No. 25.

4. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

Check continuity between remote keyless entry receiver harness connector and ground.

Remote keyless entry receiver		Ground	Continuity
Connector	Terminal		
M86	3		Yes

Is the inspection result normal?

YES >> Replace remote keyless entry receiver. Refer to DLK-315, "Removal and Installation".
NO >> Repair or replace harness.

DOOR REQUEST SWITCH

Component Function Check

INFOID:0000000008506150

1.CHECK FUNCTION

1. Select INTELLIGENT KEY of BCM using CONSULT.
2. Select REQ SW-DR, REQ SW-AS in DATA MONITOR mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
REQ SW -DR	Driver side door request switch	Pressed	ON
		Released	OFF
REQ SW -AS	Passenger side door request switch	Pressed	ON
		Released	OFF

Is the inspection result normal?

YES >> Front door request switch is OK.
NO >> Refer to DLK-193, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008506151

Regarding Wiring Diagram information, refer to DLK-60, "Wiring Diagram".

1.CHECK DOOR REQUEST SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect malfunctioning front door request switch connector.
3. Check voltage between malfunctioning front door request switch harness connector and ground.

(+)			(–)	Voltage (Approx.)
Front door request switch				
Connector		Terminal		
Driver side	D15	3	Ground	12 V
Passenger side	D115			

Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 2.

2.CHECK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between malfunctioning front door request switch harness connector and BCM harness connector.

Front door request switch			BCM		Continuity
Connector		Terminal	Connector	Terminal	
Driver side	D15	3	M19	71	Yes
Passenger side	D115			72	

3. Check continuity between malfunctioning front door request switch harness connector and ground.

Front door request switch			Ground	Continuity
Connector		Terminal		
Driver side	D15	3		No
Passenger side	D115			

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-78, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between malfunctioning front door request switch harness connector and ground.

Front door request switch			Ground	Continuity
Connector		Terminal		
Driver side	D15	4		Yes
Passenger side	D115			

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4.CHECK DOOR REQUEST SWITCH

Refer to DLK-194, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace malfunctioning front outside handle assembly. Refer to DLK-311, "DRIVER SIDE : Removal and Installation" or DLK-311, "PASSENGER SIDE : Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000008506152

1.CHECK DOOR REQUEST SWITCH

1. Turn ignition switch OFF.
2. Disconnect malfunctioning front door request switch connector.
3. Check continuity between malfunctioning front door request switch terminals.

Front door request switch		Condition		Continuity
Terminal				
3	4	Door request switch	Pressed	Yes
			Released	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace malfunctioning front door request switch. Refer to DLK-299, "OUTSIDE HANDLE : Removal and Installation".

BACK DOOR REQUEST SWITCH

Component Function Check

INFOID:0000000008506153

1.CHECK FUNCTION

1. Select INTELLIGENT KEY of BCM using CONSULT.
2. Select REQ SW-BD/TR in DATA MONITOR mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
REQ SW-BD/TR	Back door request switch	Pressed	On
		Released	Off

Is the inspection result normal?

YES >> Back door request switch is OK.
NO >> Refer to DLK-195, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008506154

Regarding Wiring Diagram information, refer to DLK-92, "Wiring Diagram".

1.CHECK BACK DOOR REQUEST SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door opener switch connector.
3. Check voltage between back door opener switch harness connector and ground.

(+)		(–)	Voltage (Approx.)
Back door opener switch			
Connector	Terminal		
D559	4	Ground	12 V

Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 2.

2.CHECK BACK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and back door opener switch harness connector.

BCM		Back door opener switch		Continuity
Connector	Terminal	Connector	Terminal	
M20	83	D559	4	Yes

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	83		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-78, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between back door opener switch harness connector and ground.

Back door opener switch		Ground	Continuity
Connector	Terminal		
D559	3		Yes

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4.CHECK BACK DOOR REQUEST SWITCH

Refer to DLK-196, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door opener switch. Refer to DLK-311, "BACK DOOR : Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000008506155

1.CHECK BACK DOOR REQUEST SWITCH

1. Turn ignition switch OFF.
2. Disconnect back door opener switch assembly connector.
3. Check continuity between back door opener switch assembly terminals.

Back door opener switch assembly		Condition		Continuity
Terminal				
3	4	Back door request switch	Pressed	Yes
			Released	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace back door opener switch assembly. Refer to DLK-311, "BACK DOOR : Removal and Installation".

BACK DOOR OPENER SWITCH

Component Function Check

INFOID:0000000008506156

1.CHECK FUNCTION

1. Select TRUNK of BCM using CONSULT.
2. Select TR/BD OPEN SW in DATA MONITOR mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
TR/BD OPEN SW	Back door opener switch	Pressed	ON
		Released	OFF

Is the inspection result normal?

YES >> Back door opener switch is OK.
NO >> Refer to DLK-197, "Diagnosis Procedure".

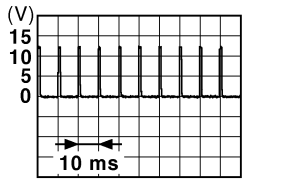
Diagnosis Procedure

INFOID:0000000008506157

Regarding Wiring Diagram information, refer to DLK-92, "Wiring Diagram".

1.CHECK BACK DOOR OPEN INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door opener switch connector.
3. Check signal between back door opener switch harness connector and ground.

(+)		(–)	Signal (Reference value)
Back door opener switch			
Connector	Terminal		
D559	1	Ground	

JPMIA0012GB

Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 2.

2.CHECK BACK DOOR OPENER SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and back door opener switch harness connector.

BCM		Back door opener switch		Continuity
Connector	Terminal	Connector	Terminal	
M19	80	D559	1	Yes

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M19	80		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-78, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR OPENER SWITCH GROUND CIRCUIT

Check continuity between back door opener switch harness connector and ground.

Back door opener switch		Ground	Continuity
Connector	Terminal		
D559	2		Yes

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4.CHECK BACK DOOR OPENER SWITCH

Refer to DLK-198, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door opener switch. Refer to DLK-321, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000008506158

1.CHECK BACK DOOR OPENER SWITCH

1. Turn ignition switch OFF.
2. Disconnect back door opener switch connector.
3. Check continuity between back door opener switch terminals.

Back door opener switch assembly		Condition		Continuity
Terminal				
1	2	Back door opener switch	Pressed	Yes
			Released	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace back door opener switch. Refer to DLK-321, "Removal and Installation".

INTELLIGENT KEY WARNING BUZZER

Component Function Check

INFOID:0000000008506159

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “OUTSIDE BUZZER” in “ACTIVE TEST” mode.
3. Touch “On” or “Off” to check that it works normally.

Is the inspection result normal?

YES >> Intelligent Key warning buzzer is OK.
NO >> Refer to DLK-199, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008506160

Regarding Wiring Diagram information, refer to DLK-72, "Wiring Diagram".

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10 A fuse [No. 10, located in fuse block (J/B)].

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

2.CHECK INTELLIGENT KEY WARNING BUZZER POWER SUPPLY CIRCUIT

1. Disconnect Intelligent Key warning buzzer connector.
2. Check voltage between Intelligent Key warning buzzer harness connector and ground.

(+)		(–)	Voltage (Approx.)
Intelligent Key warning buzzer			
Connector	Terminal		
E1	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness.

3.CHECK INTELLIGENT KEY WARNING BUZZER CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and Intelligent Key warning buzzer harness connector.

BCM		Intelligent Key warning buzzer		Continuity
Connector	Terminal	Connector	Terminal	
M19	64	E1	3	Yes

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M19	64		No

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4.CHECK INTELLIGENT KEY WARNING BUZZER

Refer to DLK-200, "Component Inspection".

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-78, "Removal and Installation".
NO >> Replace Intelligent Key warning buzzer. Refer to DLK-314, "Removal and Installation".

Component Inspection

INFOID:0000000008506161

1. CHECK INTELLIGENT KEY WARNING BUZZER

1. Turn ignition switch OFF.
2. Disconnect Intelligent Key warning buzzer connector.
3. Connect battery power supply directly to Intelligent Key warning buzzer terminals and check the operation.

Intelligent Key warning buzzer		Operation
Terminal		
(+)	(–)	
1	3	Buzzer sounds

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace Intelligent Key warning buzzer. Refer to DLK-314, "Removal and Installation".

INTELLIGENT KEY

Component Function Check

INFOID:0000000008506162

NOTE:
The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.
- Check Intelligent Key relative signal strength.
- Confirm vehicle Intelligent Key antenna signal strength.

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “RKE OPE COUN1” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition
RKE OPE COUN1	Check that the numerical value is changing while operating on the Intelligent Key.

Is the inspection result normal?

YES >> Intelligent Key is OK.
NO >> Refer to DLK-201, "Diagnosis Procedure".

Diagnosis Procedure

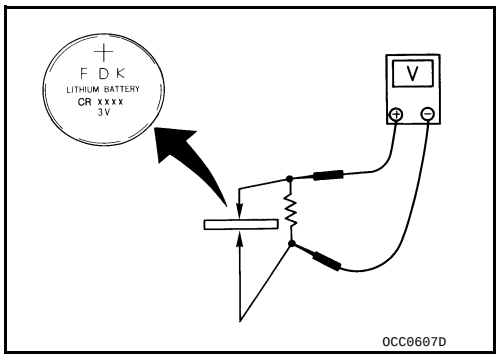
INFOID:0000000008506163

NOTE:
The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.
- Check Intelligent Key relative signal strength.
- Confirm vehicle Intelligent Key antenna signal strength.

1.CHECK INTELLIGENT KEY BATTERY

Check by connecting a resistance (approximately 300Ω) so that the current value becomes about 10 mA. Refer to DLK-316, "Removal and Installation".

Standard : Approx. 2.5 - 3.0V



Is the measurement value within the specification?

YES >> Replace Intelligent Key.
NO >> Replace Intelligent Key battery.

METER BUZZER CIRCUIT

Description

INFOID:0000000008506164

- 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:0000000008506165

1. CHECK OPERATION OF METER BUZZER

1. Select BUZZER of BCM on CONSULT.
2. Perform LIGHT WARN ALM or SEAT BELT WARN TEST of ACTIVE TEST.

Does meter buzzer activate?

YES >> Inspection End.
NO >> Refer to DLK-202, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008506166

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-82, "Removal and Installation".
NO >> Replace BCM. Refer to BCS-78, "Removal and Installation".

KEY WARNING LAMP

Component Function Check

INFOID:0000000008506167

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “INDICATOR” in “ACTIVE TEST” mode.
3. Touch “KEY IND” or “KEY ON” to check that it works normally.

Is the inspection result normal?

YES >> Key warning lamp is OK.
NO >> Refer to DLK-203, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008506168

1.CHECK KEY WARNING LAMP

Refer to MWI-19, "CONSULT Function (METER/M&A)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

HAZARD FUNCTION

Component Function Check

INFOID:0000000008506169

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “FLASHER” in “ACTIVE TEST” mode.
3. Touch “LH” or “RH” to check that it works normally.

Is the inspection result normal?

YES >> Hazard warning lamp circuit is OK.
NO >> Refer to DLK-204, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008506170

1.CHECK HAZARD SWITCH CIRCUIT

Refer to EXL-125, "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-49, "Intermittent Incident".

>> Inspection End.

AUTOMATIC BACK DOOR CLOSE SWITCH

Component Function Check

INFOID:0000000008506171

1.CHECK FUNCTION

1. Select “AUTOMATIC BACK DOOR CONTROL MODULE” using CONSULT.
2. Select “BK DOOR CL SW” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
BK DOOR CL SW	Automatic back door close switch	Pressed	ON
		Released	OFF

Is the inspection result normal?

YES >> Automatic back door close switch is OK.
NO >> Refer to DLK-205, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008506172

Regarding Wiring Diagram information, refer to DLK-92, "Wiring Diagram".

1.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect automatic back door close switch connector.
3. Check voltage between automatic back door close switch harness connector and ground.

(+)		(–)	Voltage (Approx.)
Automatic back door close switch			
Connector	Terminal		
D566	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and automatic back door close switch harness connector.

Automatic back door control module		Automatic back door close switch		Continuity
Connector	Terminal	Connector	Terminal	
B55	23	D566	1	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	23		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH GROUND CIRCUIT

Check continuity between automatic back door close switch harness connector and ground.

Automatic back door close switch		Ground	Continuity
Connector	Terminal		
D566	2		Yes

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4. CHECK AUTOMATIC BACK DOOR CLOSE SWITCH

Refer to DLK-206, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace automatic back door close switch. Refer to DLK-320, "Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000008506173

1. CHECK AUTOMATIC BACK DOOR CLOSE SWITCH

1. Turn ignition switch OFF.
2. Disconnect automatic back door close switch connector.
3. Check continuity between automatic back door close switch terminals.

Automatic back door close switch		Condition		Continuity
Terminal				
1	2	Automatic back door close switch	Pressed	Yes
			Released	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace automatic back door close switch. Refer to DLK-320, "Removal and Installation".

AUTOMATIC BACK DOOR MAIN SWITCH

Component Function Check

INFOID:0000000008506174

1.CHECK FUNCTION

1. Select AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.
2. Select MAIN SW in DATA MONITOR mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
MAIN SW	Automatic back door main switch	ON	ON
		OFF	OFF

Is the inspection result normal?

YES >> Automatic back door main switch is OK.
NO >> Refer to DLK-207, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008506175

Regarding Wiring Diagram information, refer to DLK-92, "Wiring Diagram".

1.CHECK AUTOMATIC BACK DOOR MAIN SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect automatic back door main switch connector.
3. Check voltage between automatic back door main switch harness connector and ground.

(+)		(–)	Voltage (Approx.)
Automatic back door main switch			
Connector	Terminal		
M185	1	Ground	16 – 8 V

Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR MAIN SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and automatic back door main switch harness connector.

Automatic back door control module		Automatic back door main switch		Continuity
Connector	Terminal	Connector	Terminal	
B55	10	M185	1	Yes

3. Check continuity between automatic back door control module connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	10		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK AUTOMATIC BACK DOOR MAIN SWITCH GROUND CIRCUIT

Check continuity between automatic back door main switch connector and ground.

Automatic back door main switch		Ground	Continuity
Connector	Terminal		
M185	3		Yes

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Refer to DLK-208, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace automatic back door main switch. Refer to DLK-319, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000008506176

1.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

1. Turn ignition switch OFF.
2. Disconnect automatic back door switch connector.
3. Check continuity between automatic back door main switch terminals.

Automatic back door main switch		Condition		Continuity
Terminal				
1	3	Automatic back door main switch	ON	Yes
			OFF	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace automatic back door main switch. Refer to DLK-319, "Removal and Installation".

AUTOMATIC BACK DOOR SWITCH

Component Function Check

INFOID:0000000008506177

1.CHECK FUNCTION

1. Select AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.
2. Select AUTO BD SW in DATA MONITOR mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
AUTO BD SW	Automatic back door switch	Pressed	ON
		Released	OFF

Is the inspection result normal?

YES >> Automatic back door switch is OK.
NO >> Refer to DLK-209, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008506178

Regarding Wiring Diagram information, refer to DLK-92, "Wiring Diagram".

1.CHECK AUTOMATIC BACK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect automatic back door switch connector.
3. Check voltage between automatic back door switch harness connector and ground.

(+)		(–)	Voltage (Approx.)
Automatic back door switch			
Connector	Terminal		
M186	1	Ground	16 V

Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and automatic back door switch harness connector.

Automatic back door control module		Automatic back door switch		Continuity
Connector	Terminal	Connector	Terminal	
B55	22	M186	1	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	22		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK AUTOMATIC BACK DOOR SWITCH GROUND CIRCUIT

Check continuity between automatic back door switch harness connector and ground.

Automatic back door switch		Ground	Continuity
Connector	Terminal		
M186	2		Yes

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4.CHECK AUTOMATIC BACK DOOR SWITCH

Refer to DLK-210, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace automatic back door switch. Refer to DLK-321, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000008506179

1.CHECK AUTOMATIC BACK DOOR SWITCH

1. Turn ignition switch OFF.
2. Disconnect automatic back door switch connector.
3. Check continuity between automatic back door switch terminals.

Automatic back door switch		Condition		Continuity
Terminal				
1	2	Automatic back door switch	Pressed	Yes
			Released	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace automatic back door switch. Refer to DLK-321, "Removal and Installation".

HALF LATCH SWITCH

Component Function Check

INFOID:0000000008506180

1.CHECK FUNCTION

1. Select AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.
2. Select HALF LATCH SW in DATA MONITOR mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
HALF LATCH SW	Back door	Fully closed/Half latch	OFF
		Open	ON

Is the inspection result normal?

YES >> Half latch switch is OK.
NO >> Refer to DLK-211, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008506181

Regarding Wiring Diagram information, refer to DLK-92, "Wiring Diagram".

1.CHECK HALF LATCH SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check voltage between back door lock assembly harness connector and ground.

(–)		(–)	Voltage (Approx.)
Back door lock assembly			
Connector	Terminal		
D557	6	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 2.

2.CHECK HALF LATCH SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B55	3	D557	6	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	3		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK HALF LATCH SWITCH GROUND CIRCUIT

Check continuity between back door lock assembly harness connector and ground.

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D557	3		Yes

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4.CHECK HALF LATCH SWITCH

Refer to DLK-212, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door lock assembly. Refer to DLK-305, "DOOR LOCK : Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000008506182

COMPONENT INSPECTION

1.CHECK HALF LATCH SWITCH

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check continuity between back door lock assembly terminals.

Back door lock assembly		Condition		Continuity
Terminal				
6	8	Back door	Open	Yes
			Fully closed/Half latch	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace back door lock assembly. Refer to DLK-305, "DOOR LOCK : Removal and Installation".

TOUCH SENSOR

RH

RH : Component Function Check

INFOID:0000000008506183

1.CHECK FUNCTION

1. Select AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.
2. Select TOUCH SEN RH in DATA MONITOR mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
TOUCH SEN RH	Touch sensor RH	Other than below	OFF
		Detect obstruction	ON

Is the inspection result normal?

YES >> Touch sensor RH is OK.
NO >> Refer to DLK-213, "RH : Diagnosis Procedure".

RH : Diagnosis Procedure

INFOID:0000000008506184

Regarding Wiring Diagram information, refer to DLK-92, "Wiring Diagram".

1.CHECK TOUCH SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between touch sensor RH harness connector and automatic back door control module harness connector.

(+)		(–)		Condition		Voltage (Approx.)
Touch sensor RH		Automatic back door control module				
Connector	Terminal	Connector	Terminal			
D555	1	B55	13	Touch sensor RH	Detect obstruction	1.8 – 5 V
					Other than above	2.72 – 7.27 V

Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 2.

2.CHECK TOUCH SENSOR RH CIRCUIT

1. Disconnect automatic back door control module and touch sensor RH connector.
2. Check continuity between automatic back door control module harness connector and touch sensor RH harness connector.

Automatic back door control module		Touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B55	1	D555	1	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	1		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK TOUCH SENSOR RH GROND CIRCUIT

1. Disconnect automatic back door control module and touch sensor RH connector.
2. Check continuity between automatic back door control module harness connector and touch sensor RH harness connector.

Automatic back door control module		Touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B55	13	D555	2	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	13		No

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4.CHECK TOUCH SENSOR RH GROND CIRCUIT 2

1. Connect automatic back door control module and touch sensor RH connector.
2. Check voltage between automatic back door control module harness connector and ground.

(+)		(–)	Voltage (Approx.)
Automatic back door control module			
Connector	Terminal		
B55	13	Ground	0.01 – 0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace harness.

5.CHECK TOUCH SENSOR RH

Refer to DLK-214, "RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace touch sensor RH. Refer to DLK-306, "TOUCH SENSOR : Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

RH : Component Inspection

INFOID:0000000008506185

1.CHECK TOUCH SENSOR RH

1. Turn ignition switch OFF.
2. Disconnect touch sensor RH connector.
3. Check resistance between touch sensor RH terminals.

Touch sensor RH		Condition		Resistance (Approx.)
Terminal				
1	2	Touch sensor RH	Detect obstruction	380 – 420 kΩ
			Other than above	0.95 – 1.05 kΩ

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace touch sensor RH. Refer to DLK-306, "TOUCH SENSOR : Removal and Installation".

LH

LH : Component Function Check

INFOID:0000000008506186

1.CHECK FUNCTION

1. Select AUTOMATIC BACK DOOR CONTROL MODULE using CONSULT.
2. Select TOUCH SEN LH in DATA MONITOR mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
TOUCH SEN LH	Touch sensor LH	Other than below	OFF
		Detect obstruction	ON

Is the inspection result normal?

YES >> Touch sensor LH is OK.
NO >> Refer to DLK-215, "LH : Diagnosis Procedure".

LH : Diagnosis Procedure

INFOID:0000000008506187

Regarding Wiring Diagram information, refer to DLK-92, "Wiring Diagram".

1.CHECK TOUCH SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between touch sensor LH harness connector and automatic back door control module harness connector.

(+)		(–)		Condition		Voltage (Approx.)
Touch sensor LH		Automatic back door control module				
Connector	Terminal	Connector	Terminal			
D556	1	B55	13	Touch sensor LH	Detect obstruction	1.8 – 5 V
					Other than above	2.72 – 7.27 V

Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 2.

2.CHECK TOUCH SENSOR LH CIRCUIT

1. Disconnect automatic back door control module and touch sensor LH connector.
2. Check continuity between automatic back door control module harness connector and touch sensor LH harness connector.

Automatic back door control module		Touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B55	2	D556	1	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	2		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK TOUCH SENSOR LH GROND CIRCUIT

1. Disconnect automatic back door control module and touch sensor LH connector.
2. Check continuity between automatic back door control module harness connector and touch sensor LH harness connector.

Automatic back door control module		Touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B55	13	D556	2	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	13		No

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4.CHECK TOUCH SENSOR LH GROND CIRCUIT 2

1. Connect automatic back door control module and touch sensor LH connector.
2. Check voltage between automatic back door control module harness connector and ground.

(+)		(–)	Voltage (Approx.)
Automatic back door control module			
Connector	Terminal		
B55	13	Ground	0.01 – 0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace harness.

5.CHECK TOUCH SENSOR LH

Refer to DLK-217, "LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace touch sensor LH. Refer to DLK-306, "TOUCH SENSOR : Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

LH : Component Inspection

INFOID:0000000008506188

1. CHECK TOUCH SENSOR LH

1. Turn ignition switch OFF.
2. Disconnect touch sensor LH connector.
3. Check resistance between touch sensor LH terminals.

Touch sensor LH		Condition		Resistance (Approx.)
Terminal				
1	2	Touch sensor LH	Detect obstruction	380 – 420 kΩ
			Other than above	0.95 – 1.05 kΩ

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace touch sensor LH. Refer to DLK-306, "TOUCH SENSOR : Removal and Installation".

SPINDLE MOTOR

RH

RH : Diagnosis Procedure

INFOID:0000000008506189

Regarding Wiring Diagram information, refer to DLK-92, "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.

(+)		(–)	Condition		Voltage (Approx.)
Spindle unit RH					
Connector	Terminal				
B162	9	Ground	Back door	Auto open operation	16.75 – 8.5 V
	2			Auto close operation	

Is the inspection result normal?

YES >> Replace spindle unit RH. Refer to DLK-293, "SPINDLE UNIT : Removal and Installation".
NO >> GO TO 2.

2.CHECK SPINDLE MOTOR CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and spindle unit harness connector.

Automatic back door control module		Spindle unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B56	29	B162	9	Yes
	36		2	

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	29		No
	36		

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace harness.

LH

LH : Diagnosis Procedure

INFOID:0000000008506190

Regarding Wiring Diagram information, refer to DLK-92, "Wiring Diagram".

1.CHECK SPINDLE MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.

2. Disconnect spindle unit LH connector.
3. Check voltage between spindle unit LH harness connector and ground.

(+)		(–)	Condition		Voltage (Approx.)
Spindle unit LH					
Connector	Terminal				
B70	9	Ground	Back door	Auto open operation	16.75 – 8.5 V
	2			Auto close operation	

Is the inspection result normal?

YES >> Replace spindle unit LH. Refer to DLK-293, "SPINDLE UNIT : Removal and Installation".
NO >> GO TO 2.

2.CHECK SPINDLE MOTOR CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and spindle unit LH harness connector.

Automatic back door control module		Spindle unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B56	27	B70	9	Yes
	34		2	

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	27		No
	34		

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace harness.

BACK DOOR CLOSURE MOTOR

Diagnosis Procedure

INFOID:0000000008506191

Regarding Wiring Diagram information, refer to DLK-92, "Wiring Diagram".

1.CHECK BACK DOOR CLOSURE MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check voltage between back door lock assembly harness connector and ground.

(+)		(–)	Condition		Voltage (Approx.)
Back door lock assembly					
Connector	Terminal				
D557	1	Ground	Back door opener switch	Pressed	16 – 7.8 V
	2			Released	0 V

Is the inspection result normal?

YES >> Replace back door lock assembly. Refer to DLK-305, "DOOR LOCK : Removal and Installation".
NO >> GO TO 2.

2.CHECK BACK DOOR CLOSURE MOTOR CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B56	31	D557	1	Yes
	38		2	

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	31		No
	38		

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace harness.

AUTOMATIC BACK DOOR WARNING BUZZER

Diagnosis Procedure

INFOID:0000000008506192

Regarding Wiring Diagram information, refer to DLK-92, "Wiring Diagram".

1.CHECK BACK DOOR WARNING CHIME POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect back door warning chime connector.
3. Check voltage between back door warning chime harness connector and ground.

(+)		(–)	Voltage (Approx.)
Back door warning chime			
Connector	Terminal		
B402	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 2.

2.CHECK BACK DOOR WARNING CHIME OUTPUT SIGNAL CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door warning chime harness connector.

Automatic back door control module		Back door warning chime		Continuity
Connector	Terminal	Connector	Terminal	
B56	37	B402	1	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	37		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR WARNING CHIME GROUND CIRCUIT

Check continuity between back door warning chime harness connector and ground.

Back door warning chime		Ground	Continuity
Connector	Terminal		
B402	2		Yes

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4.CHECK BACK DOOR WARNING CHIME

Refer to DLK-222, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door warning chime. Refer to DLK-318, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000008506193

1.CHECK BACK DOOR WARNING CHIME

1. Turn ignition switch OFF.
2. Disconnect back door warning chime connector.
3. Check battery power supply directly to back door warning chime terminals and check the operation.

back door warning chime		Operation
Terminal		
(+)	(-)	
1	2	Chime sounds

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace back door warning chime. Refer to DLK-318, "Removal and Installation".

GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000008506194

Regarding Wiring Diagram information, refer to DLK-92, "Wiring Diagram".

1.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door control module connector.
3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	32		Yes
	28		

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
NO >> Repair or replace harness.

HOOD SWITCH

Component Function Check

INFOID:0000000008506195

1.CHECK FUNCTION

1. Select HOOD SW in Data Monitor mode of IPDM E/R using CONSULT.
2. Check HOOD SW indication under the following condition.

Monitor item	Condition		Indication
HOOD SW	Hood	Open	ON
		Close	OFF

Is the indication normal?

YES >> Hood switch is OK.
NO >> Go to DLK-224, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008506196

Regarding Wiring Diagram information, refer to DLK-72, "Wiring Diagram".

1.CHECK HOOD SWITCH SIGNAL CIRCUITS

1. Turn ignition switch OFF.
2. Disconnect hood switch connector.
3. Check voltage between hood switch harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
Hood switch			
Connector	Terminal		
E205	1	Ground	12
	2		

Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 2.

2.CHECK HOOD SWITCH SIGNAL CIRCUITS

1. Disconnect IPDM E/R connector.
2. Check continuity between IPDM E/R harness connector and hood switch harness connector.

IPDM E/R		Hood switch		Continuity
Connector	Terminal	Connector	Terminal	
E218	94	E205	1	Yes
	96		2	

3. Check continuity between IPDM E/R harness connector and ground.

IPDM E/R		Ground	Continuity
Connector	Terminal		
E218	94		No
	96		

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK HOOD SWITCH GROUND CIRCUIT

Check continuity between hood switch harness connector and ground.

Hood switch		Ground	Continuity
Connector	Terminal		
E205	3		Yes

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4.CHECK HOOD SWITCH

Refer to DLK-225, "Component Inspection" .

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace hood switch. Refer to DLK-297, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000008506197

1.CHECK HOOD SWITCH

1. Turn ignition switch OFF.
2. Disconnect hood switch connector.
3. Check continuity between hood switch terminals.

Hood switch		Condition		Continuity
Terminal				
1	3	Hood switch	Press	No
			Release	Yes
2	3		Press	No
			Release	Yes

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace hood switch. Refer to DLK-297, "Removal and Installation".

INTEGRATED HOMELINK TRANSMITTER

Component Function Check

INFOID:0000000008506198

1.CHECK FUNCTION

Check that system receiver (garage door opener, etc.) operates with original hand-held transmitter.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Receiver or hand-held transmitter is malfunctioning.

2.CHECK ILLUMINATE

1. Turn ignition switch OFF.
2. Does red light of transmitter illuminate when any transmitter button is pressed?

Is the inspection result normal?

YES >> GO TO 3.
NO >> Refer to DLK-226, "Diagnosis Procedure".

3.CHECK TRANSMITTER

Check transmitter with Tool*.
*:For details, refer to Technical Service Bulletin.

Is the inspection result normal?

YES >> Receiver or hand-held transmitter malfunction, not vehicle related.
NO >> Replace auto anti-dazzling inside mirror (homelink® universal transceiver). Refer to MIR-16, "Removal and Installation".

Diagnosis Procedure

INFOID:0000000008506199

Regarding Wiring Diagram information, refer to DLK-104, "Wiring Diagram".

1.CHECK POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect auto anti-dazzling inside mirror (homelink® universal transceiver) connector.
3. Check voltage between auto anti-dazzling inside mirror (homelink® universal transceiver) harness connector and ground.

Auto anti-dazzling inside mirror (Homelink® universal transceiver) connector	Terminal		Condition	Voltage (V) (Approx.)
R10	10	Ground	Ignition switch position: OFF	Battery voltage
	6		Ignition switch position: ON	

Is the inspection result normal?

YES >> GO TO 2.
NO >> Check the following items.
- 5A fuse [No. 29 located in the fuse block (J/B)]
- 10A fuse [No. 1 located in the fuse block (J/B)]
- Harness for open or short between fuse and auto anti-dazzling inside mirror (homelink® universal transceiver).

2.CHECK GROUND CIRCUIT

Check continuity between auto anti-dazzling inside mirror (homelink® universal transceiver) harness connector and ground.

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-49, "Intermittent Incident".

>> Inspection End.

SYMPTOM DIAGNOSIS

INTELLIGENT KEY SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000008506200

CAUTION:
Perform the self-diagnosis with CONSULT before the symptom diagnosis. Perform the trouble diagnosis if any DTC is detected.

Symptom	Inspection item
Door does not lock/unlock with door lock and unlock switch.	• All doors inoperative. Refer to DLK-229. • Drivers side door inoperative. Refer to DLK-229. • Passenger side door inoperative. Refer to DLK-230. • Rear LH door inoperative. Refer to DLK-230. • Rear RH door inoperative. Refer to DLK-230.
Door does not lock/unlock with door key cylinder operation.	Refer to DLK-232.
Door does not lock/unlock with door request switch.	• All door request switches. Refer to DLK-233. • Drivers side door request switch. Refer to DLK-234. • Passenger side door request switch. Refer to DLK-234. • Back door request switch. Refer to DLK-234.
Door does not lock/unlock with Intelligent Key.	Refer to DLK-236.
Fuel lid lock actuator does not operate.	Refer to DLK-237.
Ignition position warning function does not operate.	Refer to DLK-238.
Selective unlock function does not operate.	Refer to DLK-239.
Auto door lock operation does not operate.	Refer to DLK-240.
Vehicle speed sensing auto lock operation does not operate.	Refer to DLK-241.
IGN OFF interlock door unlock function does not operate.	Refer to DLK-242.
P (Park) range interlock door lock/unlock function does not operate.	Refer to DLK-243.
Hazard and horn reminder does not operate.	Refer to DLK-244.
Hazard and buzzer reminder does not operate.	Refer to DLK-245.
Welcome light function does not operate.	Refer to DLK-247.
OFF position warning does not operate.	Refer to DLK-249.
ACC warning does not operate.	Refer to DLK-250.
Take away warning does not operate.	Refer to DLK-251.
Key ID warning does not operate.	Refer to DLK-253.
Intelligent Key low battery warning does not operate.	Refer to DLK-254.
Door lock operation warning does not operate.	Refer to DLK-255.
Automatic back door operation does not operate.	• All switches. Refer to DLK-256. • Automatic back door switch. Refer to DLK-257. • Automatic back door close switch. Refer to DLK-257. • Intelligent Key. Refer to DLK-258. • Back door opener switch. Refer to DLK-258. • Open/closure function. Refer to DLK-259. • Open function. Refer to DLK-260. • Closure function. Refer to DLK-261.
Automatic back door warning does not operate.	Refer to DLK-262.
Automatic back door functions do not cancel.	Refer to DLK-264.
Automatic back door anti-pinch functions do not operate.	Refer to DLK-265.
Integrated homelink transmitter does not operate.	Refer to DLK-266.
Squeak and rattle trouble diagnosis.	Refer to DLK-269.

DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH

ALL DOOR

ALL DOOR : Description

INFOID:0000000008506201

All doors do not lock/unlock using door lock and unlock switch.

ALL DOOR : Diagnosis Procedure

INFOID:0000000008506202

1.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch.
- Driver side: Refer to DLK-174, "DRIVER SIDE : Component Function Check".
- Passenger side: Refer to DLK-177, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (driver side).
Refer to DLK-180, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunctioning parts.

3.REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000008506203

Driver side door does not lock/unlock using door lock and unlock switch.

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000008506204

1.CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (driver side).
Refer to DLK-180, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000008506205

Passenger side door does not lock/unlock using door lock and unlock switch.

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000008506206

1.CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (passenger side).
Refer to DLK-181, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

REAR LH

REAR LH : Description

INFOID:0000000008506207

Rear LH side door does not lock/unlock using door lock and unlock switch.

REAR LH : Diagnosis Procedure

INFOID:0000000008506208

1.CHECK DOOR LOCK ACTUATOR

Check rear door lock assembly LH.
Refer to DLK-182, "REAR LH : Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation" .
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

REAR RH

REAR RH : Description

INFOID:0000000008506209

Rear RH side door does not lock/unlock using door lock and unlock switch.

REAR RH : Diagnosis Procedure

INFOID:0000000008506210

1.CHECK DOOR LOCK ACTUATOR

Check rear door lock assembly RH.
Refer to DLK-183, "REAR RH : Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".

- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERATION

Diagnosis Procedure

INFOID:0000000008506211

1.CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

Does door lock/unlock with door lock and unlock switch?

YES >> GO TO 2.
NO >> Refer to DLK-229, "ALL DOOR : Diagnosis Procedure".

2.CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.
Refer to DLK-189, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunctioning parts.

3.REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

ALL DOOR REQUEST SWITCHES

ALL DOOR REQUEST SWITCHES : Description

INFOID:0000000008506212

All doors do not lock/unlock using all door request switches.

ALL DOOR REQUEST SWITCHES : Diagnosis Procedure

INFOID:0000000008506213

1. CHECK REMOTE KEYLESS ENTRY FUNCTION

Check remote keyless entry function.

Does door lock/unlock with Intelligent Key button?

YES >> GO TO 2.
NO >> Refer to DLK-191, "Component Function Check".

2. CHECK “LOCK/UNLOCK BY I-KEY” SETTING IN “WORK SUPPORT”

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “LOCK/UNLOCK BY I-KEY” in “WORK SUPPORT” mode.
3. Check “LOCK/UNLOCK BY I-KEY” setting in “WORK SUPPORT”.
   Refer to BCS-20, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “ON” in “LOCK/UNLOCK BY I-KEY”.

3. CHECK DOOR SWITCH

Check door switch.
Refer to DLK-168, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4. CHECK INSIDE KEY ANTENNA

Check inside key antenna.
- Instrument center: Refer to DLK-147, "DTC Logic".
- Console: Refer to DLK-149, "DTC Logic".
- Luggage room: Refer to DLK-151, "DTC Logic".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunctioning parts.

5. CHECK OUTSIDE KEY ANTENNA

Check outside key antenna.
- Driver side: Refer to DLK-164, "Component Function Check".
- Passenger side: Refer to DLK-162, "Component Function Check".
- Back door: Refer to DLK-166, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.

6. CHECK BACK DOOR SWITCH

Check back door switch.
Refer to DLK-170, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace the malfunctioning parts.

7. REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

DRIVER SIDE DOOR REQUEST SWITCH

DRIVER SIDE DOOR REQUEST SWITCH : Description

INFOID:0000000008506214

All doors do not lock/unlock using driver side door request switch.

DRIVER SIDE DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:0000000008506215

1.CHECK DOOR REQUEST SWITCH

Check front door request switch (driver side).
Refer to DLK-193, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer toGI-49, "Intermittent Incident".

PASSENGER SIDE DOOR REQUEST SWITCH

PASSENGER SIDE DOOR REQUEST SWITCH : Description

INFOID:0000000008506216

All doors do not lock/unlock using passenger side door request switch.

PASSENGER SIDE DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:0000000008506217

1.CHECK DOOR REQUEST SWITCH

Check front door request switch (passenger side).
Refer to DLK-193, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

BACK DOOR REQUEST SWITCH

BACK DOOR REQUEST SWITCH : Description

INFOID:0000000008506218

All doors do not lock/unlock using back door request switch.

BACK DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:0000000008506219

1.CHECK BACK DOOR REQUEST SWITCH

Check back door request switch.

Refer to DLK-195, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2. REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

Diagnosis Procedure

INFOID:0000000008506220

1.CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

Does door lock/unlock with door lock and unlock switch?

YES >> GO TO 2.
NO >> Refer to DLK-229, "ALL DOOR : Diagnosis Procedure".

2.CHECK REMOTE KEYLESS ENTRY RECEIVER

Check remote keyless entry receiver.
Refer to DLK-191, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunctioning parts.

3.CHECK INTELLIGENT KEY

Check Intelligent Key.
Refer to DLK-201, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

FUEL LID LOCK ACTUATOR DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000008506221

1.CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

Does door lock/unlock with door lock and unlock switch?

YES >> GO TO 2.
NO >> Refer to DLK-229, "ALL DOOR : Diagnosis Procedure".

2.CHECK FUEL LID LOCK ACTUATOR

Check fuel lid lock actuator.
Refer to DLK-185, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunctioning parts.

3.REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

IGNITION POSITION WARNING FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000008506222

1.CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

Does door lock/unlock with door lock and unlock switch?

YES >> GO TO 2.
NO >> Refer to DLK-229, "ALL DOOR : Diagnosis Procedure".

2.CHECK DOOR SWITCH

Check door switch
Refer to DLK-168, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunctioning parts.

3.CHECK BACK DOOR SWITCH

Check door switch
Refer to DLK-170, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000008506223

1. CHECK “DOOR LOCK–UNLOCK SET” SETTING IN “WORK SUPPORT”

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “DOOR LOCK-UNLOCK SET” in “WORK SUPPORT” mode.
3. Check “DOOR LOCK-UNLOCK SET” setting in “WORK SUPPORT”.
   Refer to BCS-15, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “On” in “DOOR LOCK-UNLOCK SET”.

2. REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

AUTO DOOR LOCK OPERATION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000008506224

1.CHECK “AUTO LOCK SET” SETTING IN “WORK SUPPORT”

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “AUTO LOCK SET” in “WORK SUPPORT” mode.
3. Check “AUTO LOCK SET” setting in “WORK SUPPORT”.
   Refer to BCS-20, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “MODE 2”, “MODE 3”, “MODE 4”, “MODE 5”, “MODE 6” or “MODE 7” in “AUTO LOCK SET”.

2.REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000008506225

1. CHECK “AUTOMATIC LOCK/UNLOCK SELECT” SETTING IN “WORK SUPPORT”

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “AUTOMATIC LOCK/UNLOCK SELECT” in “WORK SUPPORT” mode.
3. Check “AUTOMATIC LOCK/UNLOCK SELECT” setting in “WORK SUPPORT”.
   Refer to BCS-15, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “Lock Only” or “Lock/Unlock” in “WORK SUPPORT”.

2. CHECK “AUTOMATIC DOOR LOCK SELECT” SETTING IN “WORK SUPPORT”

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “AUTOMATIC DOOR LOCK SELECT” in “WORK SUPPORT” mode.
3. Check “AUTOMATIC DOOR LOCK SELECT” setting in “WORK SUPPORT”.
   Refer to BCS-15, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “VH SPD” in “AUTOMATIC DOOR LOCK SELECT”.

3. REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000008506226

1. CHECK “AUTOMATIC LOCK/UNLOCK SELECT” SETTING IN “WORK SUPPORT”

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “AUTOMATIC LOCK/UNLOCK SELECT” in “WORK SUPPORT” mode.
3. Check “AUTOMATIC LOCK/UNLOCK SELECT” setting in “WORK SUPPORT”.
   Refer to BCS-15, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “Unlock Only” or “Lock/Unlock” in “AUTOMATIC LOCK/UNLOCK SELECT”.

2. CHECK “AUTOMATIC DOOR UNLOCK SELECT” SETTING IN “WORK SUPPORT”

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “AUTOMATIC DOOR UNLOCK SELECT” in “WORK SUPPORT” mode.
3. Check “AUTOMATIC DOOR UNLOCK SELECT” setting in “WORK SUPPORT”.
   Refer to BCS-15, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “MODE 1” or “MODE 3” in “AUTOMATIC DOOR UNLOCK SELECT”.

3. REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

P RANGE INTERLOCK DOOR LOCK/UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000008506227

1. CHECK “AUTOMATIC LOCK/UNLOCK SELECT” SETTING IN “WORK SUPPORT”

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “AUTOMATIC LOCK/UNLOCK SELECT” in “WORK SUPPORT” mode.
3. Check “AUTOMATIC LOCK/UNLOCK SELECT” setting in “WORK SUPPORT”.
   Refer to BCS-15, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “Unlock Only”, “Lock Only” or “Lock/Unlock” in “AUTOMATIC LOCK/UNLOCK SELECT”.

2. CHECK “AUTOMATIC DOOR LOCK SELECT” SETTING IN “WORK SUPPORT”

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “AUTOMATIC DOOR LOCK SELECT” in “WORK SUPPORT” mode.
3. Check “AUTOMATIC DOOR LOCK SELECT” setting in “WORK SUPPORT”.
   Refer to BCS-15, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “P RANGE” in “AUTOMATIC DOOR LOCK SELECT”.

3. CHECK “AUTOMATIC DOOR UNLOCK SELECT” SETTING IN “WORK SUPPORT”

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “AUTOMATIC DOOR UNLOCK SELECT” in “WORK SUPPORT” mode.
3. Check “AUTOMATIC DOOR UNLOCK SELECT” setting in “WORK SUPPORT”.
   Refer to BCS-15, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Set “MODE 2” or “MODE 4” in “AUTOMATIC DOOR UNLOCK SELECT”.

4. REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

HAZARD AND HORN REMINDER DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000008506228

1.CHECK “HAZARD ANSWER BACK” SETTING IN “WORK SUPPORT”

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “HAZARD ANSWER BACK” in “WORK SUPPORT” mode.
3. Check the “HAZARD ANSWER BACK” setting in “WORK SUPPORT”.
   Refer to BCS-20, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set the “Lock Only”, “Unlock Only” or “Lock/Unlock” in “HAZARD ANSWER BACK”.

2.CHECK “HORN WITH KEYLESS LOCK” SETTING IN “WORK SUPPORT”

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “HORN WITH KEYLESS LOCK” in “WORK SUPPORT” mode.
3. Check the “HORN WITH KEYLESS LOCK” in “WORK SUPPORT”.
   Refer to BCS-20, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set the “On” in “HORN WITH KEYLESS LOCK”.

3.CHECK HAZARD FUNCTION

Check hazard function.
Refer to DLK-204, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.CHECK HORN FUNCTION

Check horn function.
Refer to SEC-135, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunctioning parts.

5.REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

HAZARD AND BUZZER REMINDER DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000008506229

1. CHECK “HAZARD ANSWER BACK” SETTING IN “WORK SUPPORT”

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “HAZARD ANSWER BACK” in “WORK SUPPORT” mode.
3. Check the “HAZARD ANSWER BACK” setting in “WORK SUPPORT”.
   Refer to BCS-20, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)" .

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set the “Lock Only”, “Unlock Only” or “Lock/Unlock” in “HAZARD ANSWER BACK”.

2. CHECK “ANS BACK I-KEY LOCK” SETTING IN “WORK SUPPORT”

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “ANS BACK I-KEY LOCK” in “WORK SUPPORT” mode.
3. Check the “ANS BACK I-KEY LOCK”setting in “WORK SUPPORT”.
   Refer to BCS-20, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set the “Horn Chirp” or “Buzzer” in “ANS BACK I-KEY LOCK”.

3. CHECK “ANS BACK I-KEY UNLOCK” SETTING IN “WORK SUPPORT”

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “ANS BACK I-KEY UNLOCK” in “WORK SUPPORT” mode.
3. Check the “ANS BACK I-KEY UNLOCK” setting in “WORK SUPPORT”.
   Refer to BCS-20, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Set the “On” in “ANS BACK I-KEY UNLOCK”.

4. CHECK HAZARD FUNCTION

Check hazard function.
Refer to DLK-204, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunctioning parts.

5. CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-199, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.

6. REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

KEY REMINDER FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000008506230

1.CHECK “ANTI KEY LOCK IN FUNCTI” SETTING IN “WORK SUPPORT”

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “ANTI KEY LOCK IN FUNCTI” in “WORK SUPPORT” mode.
3. Check “ANTI KEY LOCK IN FUNCTI” setting in “WORK SUPPORT”.
   Refer to BCS-20, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “On” in “ANTI KEY LOCK IN FUNCTI”.

2.CHECK INSIDE KEY ANTENNA

Check inside key antenna.
- Instrument center: Refer to DLK-147, "DTC Logic".
- Console: Refer to DLK-149, "DTC Logic".
- Luggage room: Refer to DLK-151, "DTC Logic".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunctioning parts.

3.CHECK UNLOCK SENSOR

Check unlock sensor.
Refer to DLK-187, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

WELCOME LIGHT FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000008506231

1.CHECK “WELCOME LIGHT OP SET” SETTING IN “WORK SUPPORT”

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “WELCOME LIGHT OP SET” in “WORK SUPPORT” mode.
3. Check “WELCOME LIGHT OP SET” setting in “WORK SUPPORT”.
   Refer to BCS-20, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “On” and “WELCOME LIGHT SELECT” in “WORK SUPPORT”.

2.CHECK “WELCOME LIGHT SELECT” SETTING IN “WORK SUPPORT”

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “WELCOME LIGHT SELECT” in “WORK SUPPORT” mode.
3. Check “WELCOME LIGHT SELECT” setting in “WORK SUPPORT”.
   Refer to BCS-20, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “WELCOME LIGHT SELECT” setting in “WORK SUPPORT”.

3.CHECK INSIDE KEY ANTENNA

Check inside key antenna.
- Instrument center: Refer to DLK-147, "DTC Logic".
- Console: Refer to DLK-149, "DTC Logic".
- Luggage room: Refer to DLK-151, "DTC Logic".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.CHECK OUTSIDE KEY ANTENNA

Check outside key antenna.
- Driver side: Refer to DLK-164, "Component Function Check".
- Passenger side: Refer to DLK-162, "Component Function Check".
- Back door: Refer to DLK-166, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunctioning parts.

5.CHECK REMOTE KEYLESS ENTRY FUNCTION

Check remote keyless entry function

Does door lock/unlock with Intelligent Key button?

YES >> GO TO 6.
NO >> Refer to DLK-236, "Diagnosis Procedure".

6.CHECK INTERIOR ROOM LAMP CONTROL SYSTEM

Check interior room lamp control system. Refer to INL-6, "INTERIOR ROOM LAMP CONTROL SYSTEM : System Description".

Does the room lamp and puddle lamp turn ON?

YES >> GO TO 7.
NO >> Refer to INL-56, "Symptom Table".

7.REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

OFF POSITION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000008506232

1.CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK DTC WITH COMBINATION METER

Check that DTC is not detected with combination meter.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Perform trouble diagnosis relevant to DTC indicated.

3.CHECK DOOR SWITCH

Check front door switch (driver side).
Refer to DLK-168, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.CHECK COMBINATION METER BUZZER

Check combination meter buzzer.
Refer to DLK-202, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunctioning parts.

5.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-199, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.

6.REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

ACC WARNING DOES NOT OPERATE

Description

INFOID:0000000008506233

ACC warning function does not operate for vehicle with information display models

NOTE:

Warning functions operating condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-34, "WARNING FUNCTION : System Description".

Diagnosis Procedure

INFOID:0000000008506234

1.CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK DTC WITH COMBINATION METER.

Check that DTC is not detected with combination meter.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Perform trouble diagnosis relevant to DTC indicated.

3.CHECK COMBINATION METER BUZZER

Check combination meter buzzer.
Refer to DLK-202, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

TAKE AWAY WARNING DOES NOT OPERATE

Description

INFOID:0000000008506235

Take away warning function does not operate for vehicle with information display models.

NOTE:

Warning functions operating condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-34, "WARNING FUNCTION : System Description".

Diagnosis Procedure

INFOID:0000000008506236

1.CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK DTC WITH COMBINATION METER

Check that DTC is not detected with combination meter.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Perform trouble diagnosis relevant to DTC indicated.

3.CHECK INSIDE KEY ANTENNA

Check inside key antenna.

- Instrument center: Refer to DLK-147, "DTC Logic".
- Console: Refer to DLK-149, "DTC Logic".
- Luggage room: Refer to DLK-151, "DTC Logic".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.CHECK DOOR SWITCH

Check front door switch (driver side).
Refer to DLK-168, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunctioning parts.

5.CHECK COMBINATION METER BUZZER

Check combination meter buzzer.
Refer to DLK-202, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.

6.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-199, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace the malfunctioning parts.

7.REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

< SYMPTOM DIAGNOSIS >

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

KEY ID WARNING DOES NOT OPERATE

Description

INFOID:0000000008506237

Key ID warning function does not operate for vehicle with information display models.

NOTE:

Warning functions operating condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-34, "WARNING FUNCTION : System Description".

Diagnosis Procedure

INFOID:0000000008506238

1.CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK DTC WITH COMBINATION METER

Check that DTC is not detected with combination meter.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Perform trouble diagnosis relevant to DTC indicated.

3.CHECK INTELLIGENT KEY

Check Intelligent Key.
Refer to DLK-201, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.CHECK INSIDE KEY ANTENNA

Check inside key antenna.

- Instrument center: Refer to DLK-147, "DTC Logic".
- Console: Refer to DLK-149, "DTC Logic".
- Luggage room: Refer to DLK-151, "DTC Logic".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunctioning parts.

5.REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

Description

INFOID:0000000008506239

Intelligent Key low battery warning does not operate for vehicle with information display models.

NOTE:

Warning functions operating condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-34, "WARNING FUNCTION : System Description".

Diagnosis Procedure

INFOID:0000000008506240

1.CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK DTC WITH COMBINATION METER

Check that DTC is not detected with combination meter.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Perform trouble diagnosis relevant to DTC indicated.

3.CHECK “LO- BATT OF KEY FOB WARN” SETTING IN “WORK SUPPORT”

1. Select “INTELLIGENT KEY” of “BCM”.
2. Select “LO- BATT OF KEY FOB WARN” in “WORK SUPPORT” mode.
3. Check “LO- BATT OF KEY FOB WARN” setting in “WORK SUPPORT”.
   Refer to BCS-20, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Set “ON” in “LO- BATT OF KEY FOB WARN”.

4.CHECK INTELLIGENT KEY

Check Intelligent Key.
Refer to DLK-201, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunctioning parts.

5.CHECK INSIDE KEY ANTENNA

Check inside key antenna.

- Instrument center: Refer to DLK-147, "DTC Logic".
- Console: Refer to DLK-149, "DTC Logic".
- Luggage room: Refer to DLK-151, "DTC Logic".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.

6.REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

DOOR LOCK OPERATION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000008506241

1.CHECK DOOR LOCK FUNCTION

Check door lock function.

Does door lock/unlock using door request switch?

YES >> GO TO 2.
NO >> Refer to DLK-233, "ALL DOOR REQUEST SWITCHES : Diagnosis Procedure".

2.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-199, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunctioning parts.

3.REPLACE BCM

- Replace BCM. Refer to BCS-78, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

AUTOMATIC BACK DOOR OPERATION DOES NOT OPERATE
ALL SWITCHES

ALL SWITCHES : Description

INFOID:0000000008506242

Automatic back door open/close function does not operate using all switches.

NOTE:

Automatic back door open/close operation condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-38, "System Description".

ALL SWITCHES : Diagnosis Procedure

INFOID:0000000008506243

1.CHECK DTC WITH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK BACK DOOR AUTO CLOSURE FUNCTION

Check back door auto closure function.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Refer to DLK-259, "OPEN/CLOSURE FUNCTION : Diagnosis Procedure".

3.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check automatic back door control module power supply and ground circuit.
Refer to DLK-115, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.CHECK GROUND CIRCUIT

Check automatic back door control module ground circuit.
Refer to DLK-142, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunctioning parts.

5.CHECK TOUCH SENSOR LH

Check touch sensor LH.
Refer to DLK-124, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.

6.CHECK TOUCH SENSOR RH

Check touch sensor RH.
Refer to DLK-121, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace the malfunctioning parts.

7.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

AUTOMATIC BACK DOOR SWITCH

AUTOMATIC BACK DOOR SWITCH : Description

INFOID:0000000008506244

Automatic back door open/close function does not operate using automatic back door switch.

NOTE:

Automatic back door open/close operation condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-38, "System Description".

AUTOMATIC BACK DOOR SWITCH : Diagnosis Procedure

INFOID:0000000008506245

1.CHECK AUTOMATIC BACK DOOR SWITCH

Check automatic back door switch.

Refer to DLK-209, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

AUTOMATIC BACK DOOR CLOSE SWITCH

AUTOMATIC BACK DOOR CLOSE SWITCH : Description

INFOID:0000000008506246

Automatic back door open/close function does not operate using automatic back door close switch.

NOTE:

Automatic back door open/close operation condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-38, "System Description".

AUTOMATIC BACK DOOR CLOSE SWITCH : Diagnosis Procedure

INFOID:0000000008506247

1.CONFIRM THE OPERATION

1. Turn ON automatic back door main switch.
2. Confirm the operation.

Is the result normal?

YES >> Automatic back door system is normal.

NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH

Check automatic back door close switch.

Refer to DLK-205, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Check automatic back door main switch.

Refer to DLK-207, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

INTELLIGENT KEY

INTELLIGENT KEY : Description

INFOID:0000000008506248

Automatic back door open/close function does not operate using Intelligent Key.

NOTE:
Automatic back door open/close operation condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-38, "System Description".

INTELLIGENT KEY : Diagnosis Procedure

INFOID:0000000008506249

1.CHECK DTC WITH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK DTC WITH BCM

Check that DTC is not detected with BCM

Is the inspection result normal?

YES >> GO TO 3.
NO >> Perform trouble diagnosis relevant to DTC indicated.

3.CHECK REMOTE KEYLESS ENTRY FUNCTION

Check remote keyless entry function.

Does door lock/unlock with Intelligent Key button?

YES >> GO TO 4.
NO >> Refer to DLK-236, "Diagnosis Procedure".

4.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

BACK DOOR OPENER SWITCH

BACK DOOR OPENER SWITCH : Description

INFOID:0000000008506250

Automatic back door open/close function does not operate using back door opener switch.

NOTE:
Automatic back door open/close operation condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-38, "System Description".

BACK DOOR OPENER SWITCH : Diagnosis Procedure

INFOID:0000000008506251

1.CONFIRM THE OPERATION

1. Turn ON automatic back door main switch.
2. Confirm the operation.

Is the result normal?

YES >> Automatic back door system is normal.
NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Check automatic back door main switch.
Refer to DLK-207, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunctioning parts.

3.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.
Refer to DLK-197, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

OPEN/CLOSURE FUNCTION

OPEN/CLOSURE FUNCTION : Description

INFOID:0000000008506252

Back door auto closure function does not operate when back door opening and closing operations are performed.

OPEN/CLOSURE FUNCTION : Diagnosis Procedure

INFOID:0000000008506253

1.CONFIRM THE OPERATION

1. Turn ON automatic back door main switch.
2. Confirm the operation.

Is the result normal?

YES >> Automatic back door system is normal.
NO >> GO TO 2.

2.CHECK DTC WITH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Perform trouble diagnosis relevant to DTC indicated.

3.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Check automatic back door main switch.
Refer to DLK-207, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.
Refer to DLK-197, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunctioning parts.

5.CHECK BACK DOOR CLOSURE MOTOR

Check back door closure motor.
Refer to DLK-220, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.

6.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

OPEN FUNCTION

OPEN FUNCTION : Description

INFOID:0000000008506254

Back door auto closure function does not operate when back door opening operations are performed.

OPEN FUNCTION : Diagnosis Procedure

INFOID:0000000008506255

1.CONFIRM THE OPERATION

1. Turn ON automatic back door main switch.
2. Confirm the operation.

Is the result normal?

YES >> Automatic back door system is normal.
NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Check automatic back door main switch.
Refer to DLK-207, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunctioning parts.

3.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.
Refer to DLK-197, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

CLOSURE FUNCTION

CLOSURE FUNCTION : Description

INFOID:0000000008506256

Back door auto closure function does not operate when back door closing operations are performed.

CLOSURE FUNCTION : Diagnosis Procedure

INFOID:0000000008506257

1.CHECK HALF LATCH SWITCH

Check half latch switch.
Refer to DLK-211, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CHECK BACK DOOR CLOSURE MOTOR

Check back door closure motor.
Refer to DLK-220, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunctioning parts.

3.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

AUTOMATIC BACK DOOR WARNING DOES NOT OPERATE

BUZZER

BUZZER : Description

INFOID:0000000008506258

Automatic back door warning chime does not operate when automatic back door warning function are performed.

BUZZER : Diagnosis Procedure

INFOID:0000000008506259

1.CHECK DTC WITCH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK BACK DOOR WARNING CHIME

Check back door warning chime.
Refer to DLK-221, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunctioning parts.

3.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

HAZARD WARNING LAMP

HAZARD WARNING LAMP : Description

INFOID:0000000008506260

Hazard warning lamp does not operate when automatic back door warning function are performed.

HAZARD WARNING LAMP : Diagnosis Procedure

INFOID:0000000008506261

1.CHECK DTC WITCH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK DTC WITCH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Perform trouble diagnosis relevant to DTC indicated.

3.CHECK GROUND CIRCUIT

Check automatic back door control module ground circuit.
Refer to DLK-223, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts

4.CHECK HAZARD AND HORN REMINDER FUNCTION

Check hazard and horn reminder function.

Is the inspection result normal?

YES >> GO TO 5.
NO >> Refer to DLK-244, "Diagnosis Procedure".

5. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

AUTOMATIC BACK DOOR FUNCTIONS DO NOT CANCEL

Diagnosis Procedure

INFOID:0000000008506262

1.CHECK THE OPERATION

Check automatic back door main switch function.

NOTE:

When the main switch is OFF, the automatic back door operation is not available by back door opener switch and automatic back door close switch.

Is the inspection result normal?

YES >> Automatic back door system is normal.
NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Check automatic back door main switch.
Refer to DLK-207, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunctioning parts.

3.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

AUTOMATIC BACK DOOR ANTI-PINCH FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000008506263

1.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check automatic back door control module power supply and ground circuit.
Refer to DLK-115, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CHECK TOUCH SENSOR LH

Check touch sensor LH.
Refer to DLK-215, "LH : Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunctioning parts.

3.CHECK TOUCH SENSOR RH

Check touch sensor RH.
Refer to DLK-213, "RH : Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-317, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

INTEGRATED HOMELINK TRANSMITTER DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000008506264

1.CHECK INTEGRATED HOMELINK® TRANSMITTER

Check integrated homelink® transmitter.
Refer to DLK-226, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.REPLACE AUTO ANTI-DAZZLING INSIDE MIRROR

Replace auto anti-dazzling inside mirror.
Refer to MIR-16, "Removal and Installation".

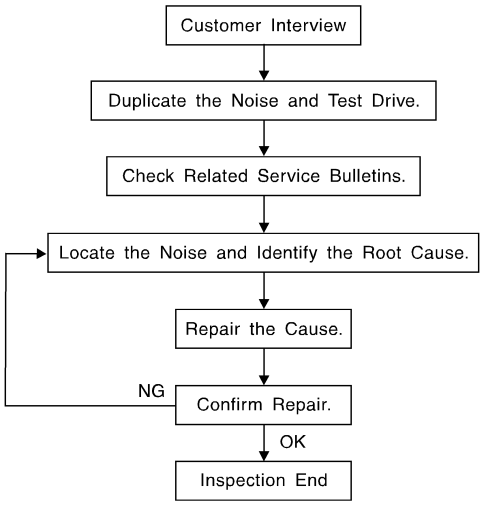
Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000008946128



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CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any customer's comments; refer to DLK-271, "Diagnostic Worksheet". This information is necessary to duplicate the conditions that exist when the noise occurs.

- The customer may not be able to provide a detailed description or the location of the noise. Attempt to obtain all the facts and conditions that exist when the noise occurs (or does not occur).
- If there is more than one noise in the vehicle, be sure to diagnose and repair the noise that the customer is concerned about. This can be accomplished by test driving the vehicle with the customer.
- After identifying the type of noise, isolate the noise in terms of its characteristics. The noise characteristics are provided so the customer, service adviser and technician are all speaking the same language when defining the noise.
- Squeak —(Like tennis shoes on a clean floor)
  Squeak characteristics include the light contact/fast movement/brought on by road conditions/hard surfaces = higher pitch noise/softer surfaces = lower pitch noises/edge to surface = chirping.
- Creak—(Like walking on an old wooden floor)
  Creak characteristics include firm contact/slow movement/twisting with a rotational movement/pitch dependent on materials/often brought on by activity.
- Rattle—(Like shaking a baby rattle)
  Rattle characteristics include the fast repeated contact/vibration or similar movement/loose parts/missing clip or fastener/incorrect clearance.
- Knock —(Like a knock on a door)
  Knock characteristics include hollow sounding/sometimes repeating/often brought on by driver action.
- Tick—(Like a clock second hand)
  Tick characteristics include gentle contacting of light materials/loose components/can be caused by driver action or road conditions.
- Thump—(Heavy, muffled knock noise)
  Thump characteristics include softer knock/dead sound often brought on by activity.
- Buzz—(Like a bumble bee)
  Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending upon the person. A noise that you may judge as acceptable may be very irritating to the customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

DUPLICATE THE NOISE AND TEST DRIVE

If possible, drive the vehicle with the customer until the noise is duplicated. Note any additional information on the Diagnostic Worksheet regarding the conditions or location of the noise. This information can be used to duplicate the same conditions when you confirm the repair.

If the noise can be duplicated easily during the test drive, to help identify the source of the noise, try to duplicate the noise with the vehicle stopped by doing one or all of the following:

1) Close a door.
2) Tap or push/pull around the area where the noise appears to be coming from.
3) Rev the engine.
4) Use a floor jack to recreate vehicle “twist”.
5) At idle, apply engine load (electrical load, half-clutch on M/T model, drive position on CVT and A/T models).
6) Raise the vehicle on a hoist and hit a tire with a rubber hammer.

- Drive the vehicle and attempt to duplicate the conditions the customer states exist when the noise occurs.
- If it is difficult to duplicate the noise, drive the vehicle slowly on an undulating or rough road to stress the vehicle body.

CHECK RELATED SERVICE BULLETINS

After verifying the customer concern or symptom, check ASIST for Technical Service Bulletins (TSBs) related to that concern or symptom.
If a TSB relates to the symptom, follow the procedure to repair the noise.

LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis Ear: J-39570, Engine Ear: J-39565 and mechanic's stethoscope).
2. Narrow down the noise to a more specific area and identify the cause of the noise by:
   - removing the components in the area that you suspect the noise is coming from.
     Do not use too much force when removing clips and fasteners, otherwise clips and fasteners can be broken or lost during the repair, resulting in the creation of new noise.
   - tapping or pushing/pulling the component that you suspect is causing the noise.
     Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
   - feeling for a vibration with your hand by touching the component(s) that you suspect is (are) causing the noise.
   - placing a piece of paper between components that you suspect are causing the noise.
   - looking for loose components and contact marks.
     Refer to DLK-269, "Generic Squeak and Rattle Troubleshooting".

REPAIR THE CAUSE

- If the cause is a loose component, tighten the component securely.
- If the cause is insufficient clearance between components:

- separate components by repositioning or loosening and retightening the component, if possible.
- insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or urethane tape. A NISSAN Squeak and Rattle Kit (J-43980) is available through your authorized NISSAN Parts Department.

CAUTION:
Do not use excessive force as many components are constructed of plastic and may be damaged.
Always check with the Parts Department for the latest parts information.
The following materials are contained in the NISSAN Squeak and Rattle Kit (J-43980). Each item can be ordered separately as needed.
URETHANE PADS [1.5 mm (0.059 in) thick]
Insulates connectors, harness, etc.
76268-9E005: 100×135 mm (3.94×5.31 in)/76884-71L01: 60×85 mm (2.36×3.35 in)/76884-71L02: 15×25 mm (0.59×0.98 in)
INSULATOR (Foam blocks)
Insulates components from contact. Can be used to fill space behind a panel.
73982-9E000: 45 mm (1.77 in) thick, 50×50 mm (1.97×1.97 in)/73982-50Y00: 10 mm (0.39 in) thick, 50×50 mm (1.97×1.97 in)
INSULATOR (Light foam block)
80845-71L00: 30 mm (1.18 in) thick, 30×50 mm (1.18×1.97 in)
FELT CLOTH TAPE
Used to insulate where movement does not occur. Ideal for instrument panel applications.
68370-4B000: 15×25 mm (0.59×0.98 in) pad/68239-13E00: 5 mm (0.20 in) wide tape roll. The following materials not found in the kit can also be used to repair squeaks and rattles.
UHMW (TEFLON) TAPE
Insulates where slight movement is present. Ideal for instrument panel applications.
SILICONE GREASE

Used instead of UHMW tape that will be visible or not fit.
Note: Will only last a few months.
SILICONE SPRAY
Use when grease cannot be applied.
DUCT TAPE
Use to eliminate movement.

CONFIRM THE REPAIR

Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.

Generic Squeak and Rattle Troubleshooting

INFOID:0000000008946129

Refer to Table of Contents for specific component removal and installation information.

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. Cluster lid A and the instrument panel
2. Acrylic lens and combination meter housing
3. Instrument panel to front pillar finisher
4. Instrument panel to windshield
5. Instrument panel pins
6. Wiring harnesses behind the combination meter
7. A/C defroster duct and duct joint

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicone spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

CAUTION:
Do not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will not be able to recheck the repair.

CENTER CONSOLE

Components to pay attention to include:

1. Shift selector assembly cover to finisher
2. A/C control unit and cluster lid C
3. Wiring harnesses behind audio and A/C control unit

The instrument panel repair and isolation procedures also apply to the center console.

DOORS

Pay attention to the:

1. Finisher and inner panel making a slapping noise
2. Inside handle escutcheon to door finisher
3. Wiring harnesses tapping
4. Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks from the NISSAN Squeak and Rattle Kit (J-43980) to repair the noise.

TRUNK

Trunk noises are often caused by a loose jack or loose items put into the trunk by the owner.
In addition look for:

1. Trunk lid bumpers out of adjustment
2. Trunk lid striker out of adjustment
3. The trunk lid torsion bars knocking together
4. A loose license plate or bracket

Most of these incidents can be repaired by adjusting, securing or insulating the item(s) or component(s) causing the noise.

SUNROOF/HEADLINING

Noises in the sunroof/headlining area can often be traced to one of the following:

1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
2. Sun visor shaft shaking in the holder
3. Front or rear windshield touching headlining and squeaking

Again, pressing on the components to stop the noise while duplicating the conditions can isolate most of these incidents. Repairs usually consist of insulating with felt cloth tape.

OVERHEAD CONSOLE (FRONT AND REAR)

Overhead console noises are often caused by the console panel clips not being engaged correctly. Most of these incidents are repaired by pushing up on the console at the clip locations until the clips engage.
In addition look for:

1. Loose harness or harness connectors.
2. Front console map/reading lamp lens loose.
3. Loose screws at console attachment points.

SEATS

When isolating seat noise it's important to note the position the seat is in and the load placed on the seat when the noise is present. These conditions should be duplicated when verifying and isolating the cause of the noise.
Cause of seat noise include:

1. Headrest rods and holder
2. A squeak between the seat pad cushion and frame
3. The rear seatback lock and bracket

These noises can be isolated by moving or pressing on the suspected components while duplicating the conditions under which the noise occurs. Most of these incidents can be repaired by repositioning the component or applying urethane tape to the contact area.

UNDERHOOD

Some interior noise may be caused by components under the hood or on the engine wall. The noise is then transmitted into the passenger compartment.
Causes of transmitted underhood noise include:

1. Any component installed to the engine wall
2. Components that pass through the engine wall
3. Engine wall mounts and connectors
4. Loose radiator installation pins
5. Hood bumpers out of adjustment
6. Hood striker out of adjustment

These noises can be difficult to isolate since they cannot be reached from the interior of the vehicle. The best method is to secure, move or insulate one component at a time and test drive the vehicle. Also, engine rpm or load can be changed to isolate the noise. Repairs can usually be made by moving, adjusting, securing, or insulating the component causing the noise.

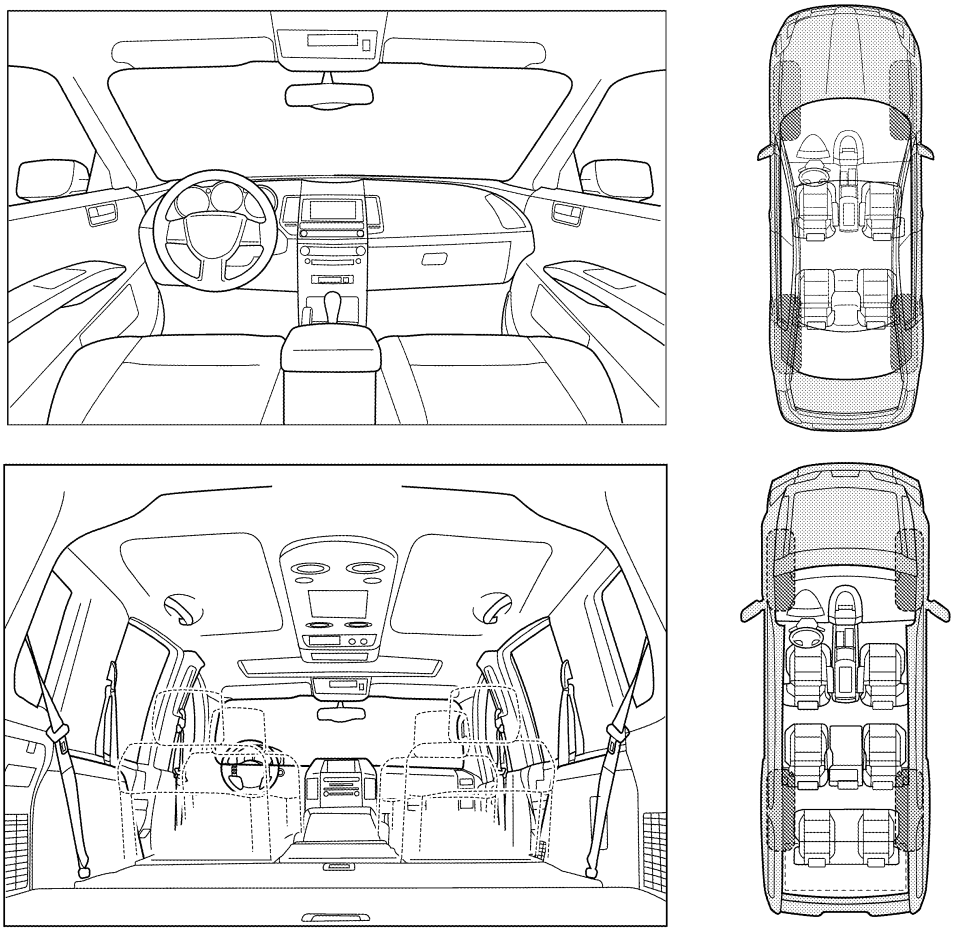
Diagnostic Worksheet

INFOID:0000000008946130

Dear Customer:
We are concerned about your satisfaction with your vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your vehicle right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may be asked to take a test drive with a service advisor or technician to ensure we confirm the noise you are hearing.

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)
The illustrations are for reference only, and may not reflect the actual configuration of your vehicle.



Continue to page 2 of the worksheet and briefly describe the location of the noise or rattle. In addition, please indicate the conditions which are present when the noise occurs.

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SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

_____

_____

II. WHEN DOES IT OCCUR? (please check the boxes that apply)

- ☐ Anytime
- ☐ 1st time in the morning
- ☐ Only when it is cold outside
- ☐ Only when it is hot outside
- ☐ After sitting out in the rain
- ☐ When it is raining or wet
- ☐ Dry or dusty conditions
- ☐ Other:

III. WHEN DRIVING:

- ☐ Through driveways
- ☐ Over rough roads
- ☐ Over speed bumps
- ☐ Only about ____ mph
- ☐ On acceleration
- ☐ Coming to a stop
- ☐ On turns: left, right or either (circle)
- ☐ With passengers or cargo
- ☐ Other: _____
- ☐ After driving _____ miles or _____ minutes

IV. WHAT TYPE OF NOISE

- ☐ Squeak (like tennis shoes on a clean floor)
- ☐ Creak (like walking on an old wooden floor)
- ☐ Rattle (like shaking a baby rattle)
- ☐ Knock (like a knock at the door)
- ☐ Tick (like a clock second hand)
- ☐ Thump (heavy muffled knock noise)
- ☐ Buzz (like a bumble bee)

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

_____

_____

_____

	YES	NO	Initials of person performing
Vehicle test driven with customer	☐	☐	_____
- Noise verified on test drive	☐	☐	_____
- Noise source located and repaired	☐	☐	_____
- Follow up test drive performed to confirm repair	☐	☐	_____

VIN: _____ Customer Name _____

W.O.# _____ Date: _____

This form must be attached to Work Order

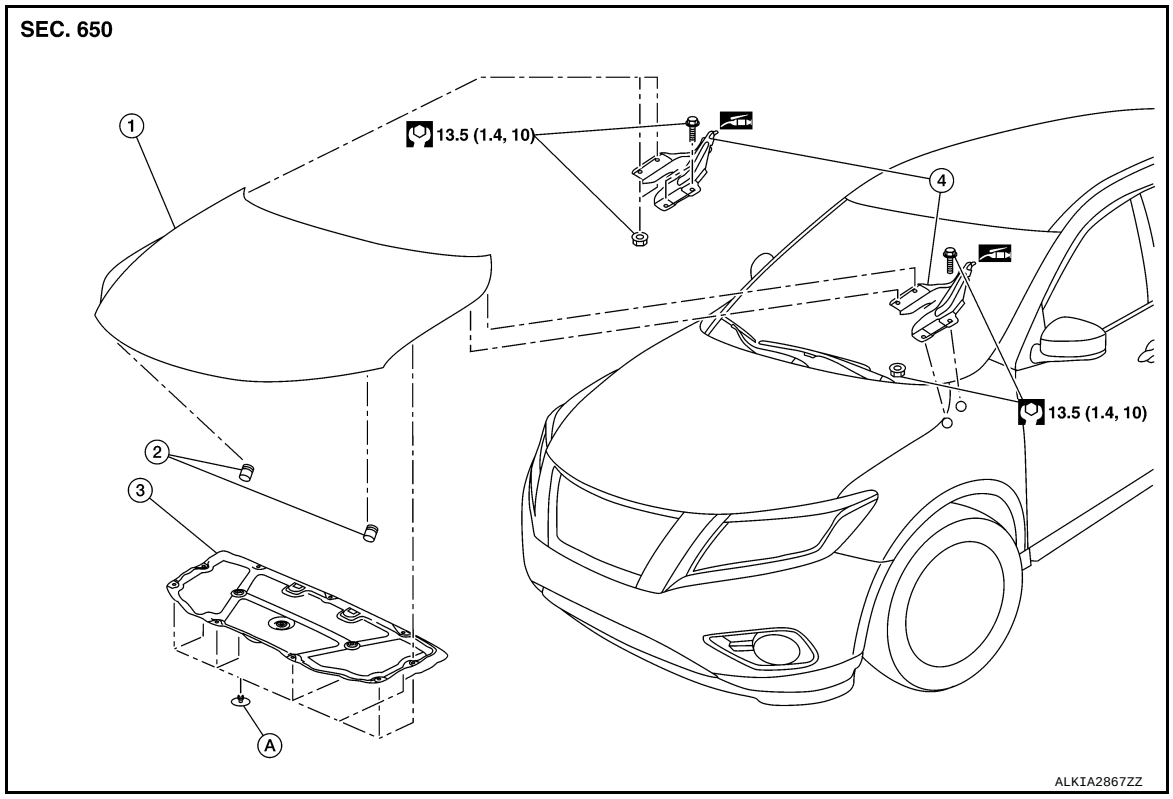
LAIA0071E

REMOVAL AND INSTALLATION

HOOD

Exploded View

INFOID:0000000008506268



1. Hood assembly
2. Hood bumper rubber
3. Hood insulator
4. Hood hinge (LH/RH)
A. Clip

HOOD ASSEMBLY

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000008506269

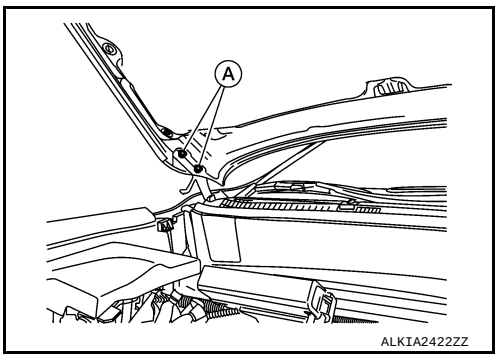
CAUTION:
- **Use two people when removing or installing hood assembly due to its heavy weight.**
- **Use protective tape or shop cloths to protect surrounding components from damage during removal and installation of hood assembly.**

REMOVAL

1. Support the hood assembly using a suitable tool.

   WARNING:
   Bodily injury may occur if hood assembly is not supported properly when removing hood assembly.

2. Remove hood hinge to hood nuts (A) and then remove the hood assembly.



INSTALLATION

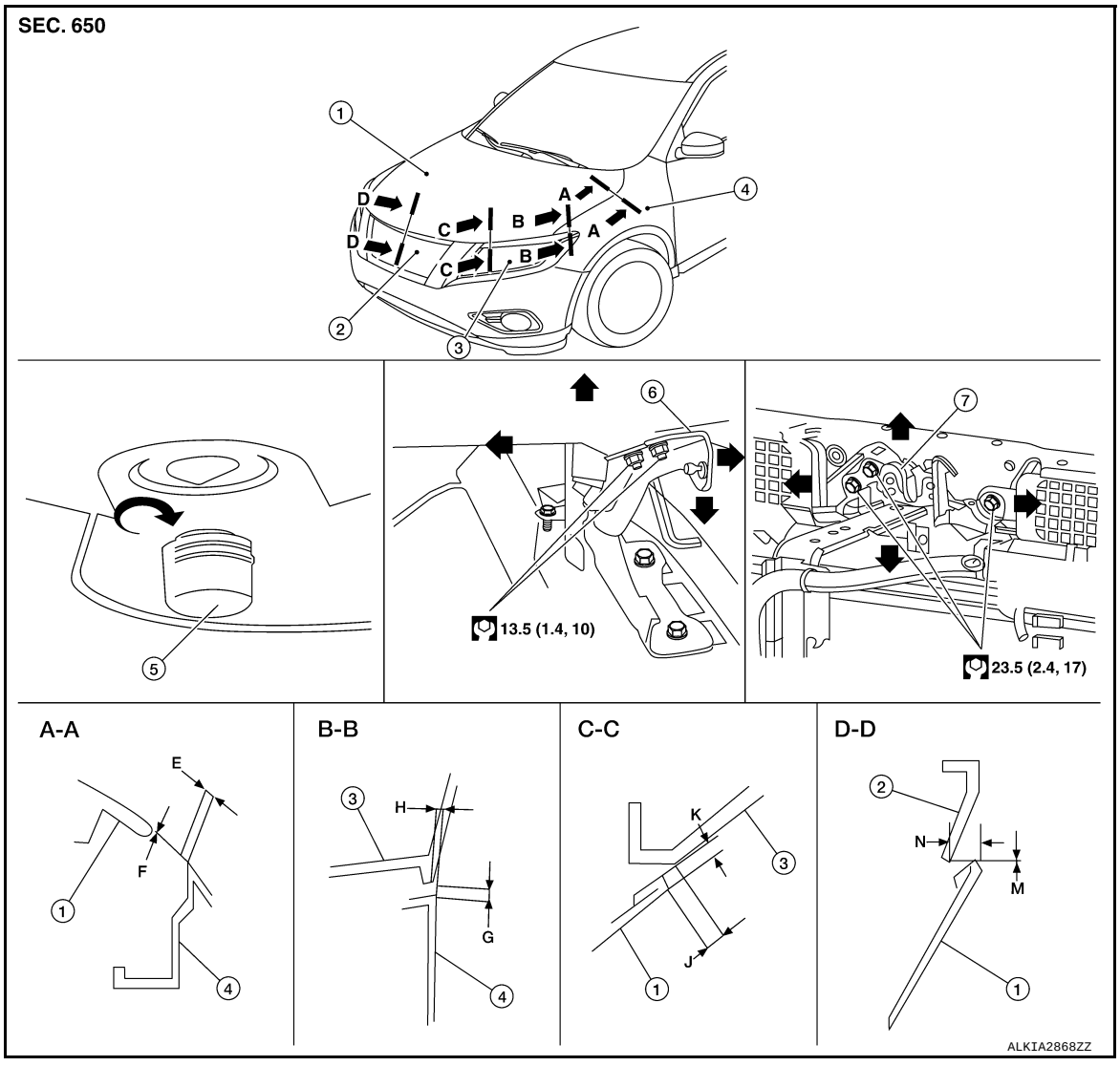
Installation is in the reverse order of removal.

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 DLK-274, "HOOD ASSEMBLY : Adjustment".**

HOOD ASSEMBLY : Adjustment

INFOID:0000000008506270



1. Hood assembly
2. Front grille
3. Front combination lamp

4. Front fender
5. Hood bumper rubber
6. Hood hinge
7. Hood lock assembly

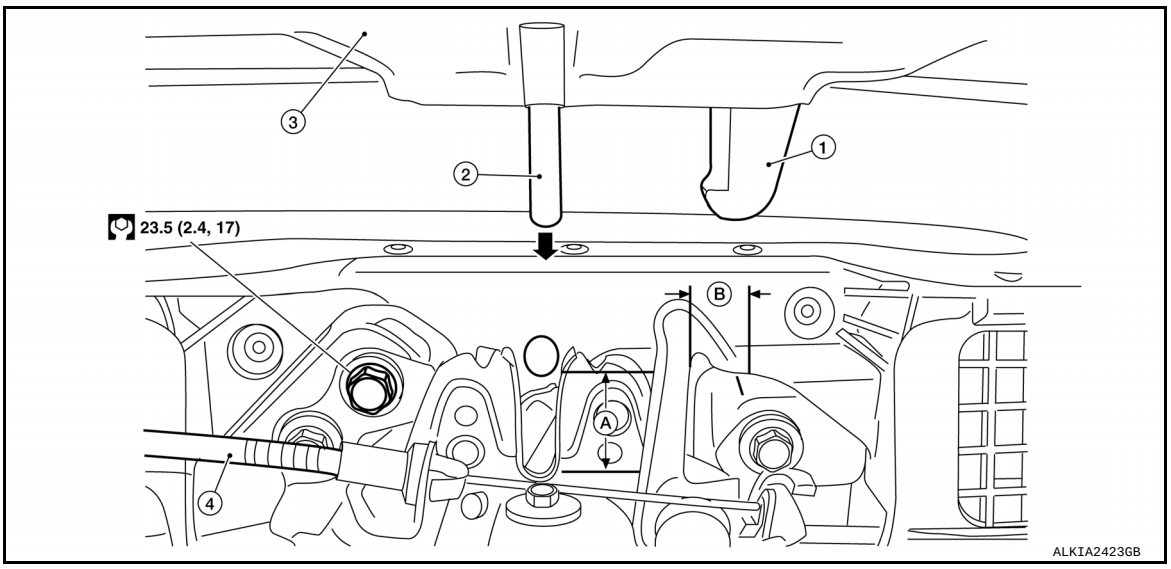
Check the clearance and the surface height between hood and each part by visual inspection and tactile feel. If the clearance and the surface height are out of specification, adjust them according to the adjustment procedures.

Unit: mm (in)

Portion	Section	Item	Measurement	Standard	Parallelism
Hood assembly – Front fender	A – A	E	Clearance	3.5 ± 1.0 (0.14 ± 0.04)	≤ 1.5 (0.06)
		F	Surface height	0.0 ± 1.5 (0.0 ± 0.06)	—
Front fender — Front combination lamp	B – B	G	Clearance	1.5 ± 1.3 (0.06 ± 0.05)	< 1.5 (0.06)
		H	Surface height	0.0 ± 0.5 (0.00 ± 0.00)	< 0.0 (0.00)
Hood assembly — Front combination lamp	C– C	J	Clearance	5.0 ± 2.0 (0.20 ± 0.08)	< 2.0 (0.08)
		K	Surface height	0.0 ± 0.0 (0.0 ± 0.00)	< 0.0 (0.00)
Front bumper upper grille - Hood assembly	D – D	M	Clearance	5.0 ± 2.0 (0.20 ± 0.08)	< 2.0 (0.08)
		N	Surface height	0.0 ± 0.0 (0.0 ± 0.00)	< 0.0 (0.00)

HEIGHT ADJUSTMENT

1. Loosen the hood lock assembly bolts.
2. Adjust the surface height of hood assembly to front grille and front fender according to the specified values by rotating hood bumper rubber.
3. Temporarily tighten hood lock assembly bolts.
4. Adjust (A) and (B) as shown to the following value with hood's own weight by dropping it from approximately 200 mm (7.87 in) height or by pressing hood lightly [approximately 29 N (3.0 kg, 6.5 lb)].



1. Secondary striker
2. Primary striker
3. Hood assembly
4. Secondary latch control cable
A. 20 mm (0.79 in)
B. 6.8 mm (0.27 in)

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) to the head of hood hinge bolts and nuts.**

CLEARANCE ADJUSTMENT

1. Loosen hood hinge nuts and bolts.
2. Loosen the hood lock assembly bolts.

3. Adjust the hood assembly so the clearance measurements are within specifications.
4. Tighten the hood hinge nuts and bolts to specified torque.
5. Tighten the hood lock assembly bolts to specified torque.

HOOD HINGE

HOOD HINGE : Removal and Installation

INFOID:0000000008506271

REMOVAL

1. Remove hood assembly. Refer to DLK-273, "HOOD ASSEMBLY : Removal and Installation".
2. Remove front fender. Refer to DLK-279, "FRONT FENDER : Removal and Installation".
3. Remove hood hinge bolts, and then remove hood hinge.

INSTALLATION

Installation is in the reverse order of removal.

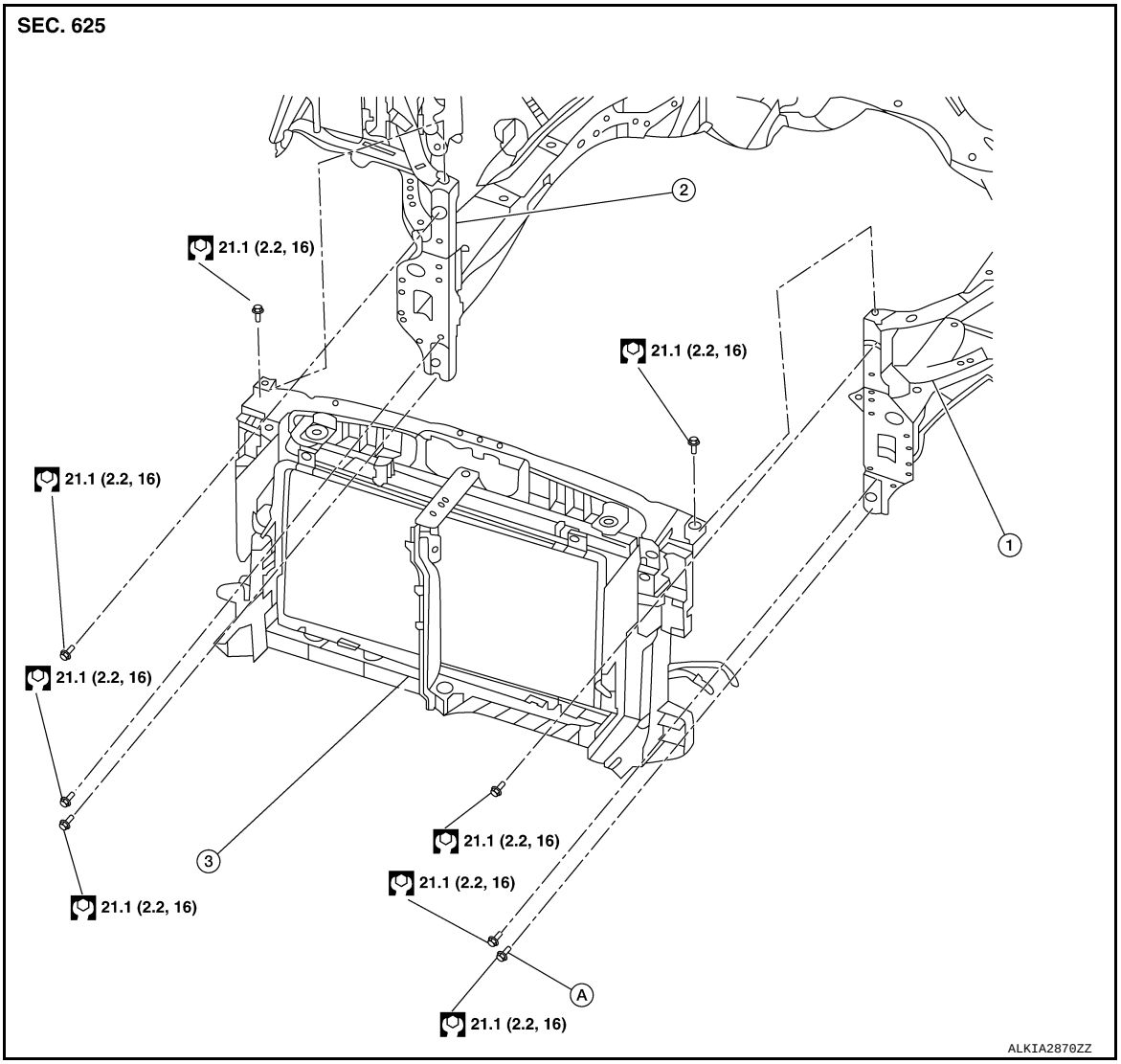
CAUTION:

- **Before installing the hood hinge, apply anticorrosive agent onto the surface of the vehicle.**
- **After installation, perform hood assembly adjustment procedure. Refer to DLK-274, "HOOD ASSEMBLY : Adjustment".**

RADIATOR CORE SUPPORT

Exploded View

INFOID:0000000008506274



1. Radiator support (LH)
2. Radiator support (RH)
3. Radiator core support assembly
A. Refer to installation for sequence order

Removal and Installation

INFOID:0000000008506275

CAUTION:
When removing radiator core support upper, be careful not to damage the painted surface.

REMOVAL

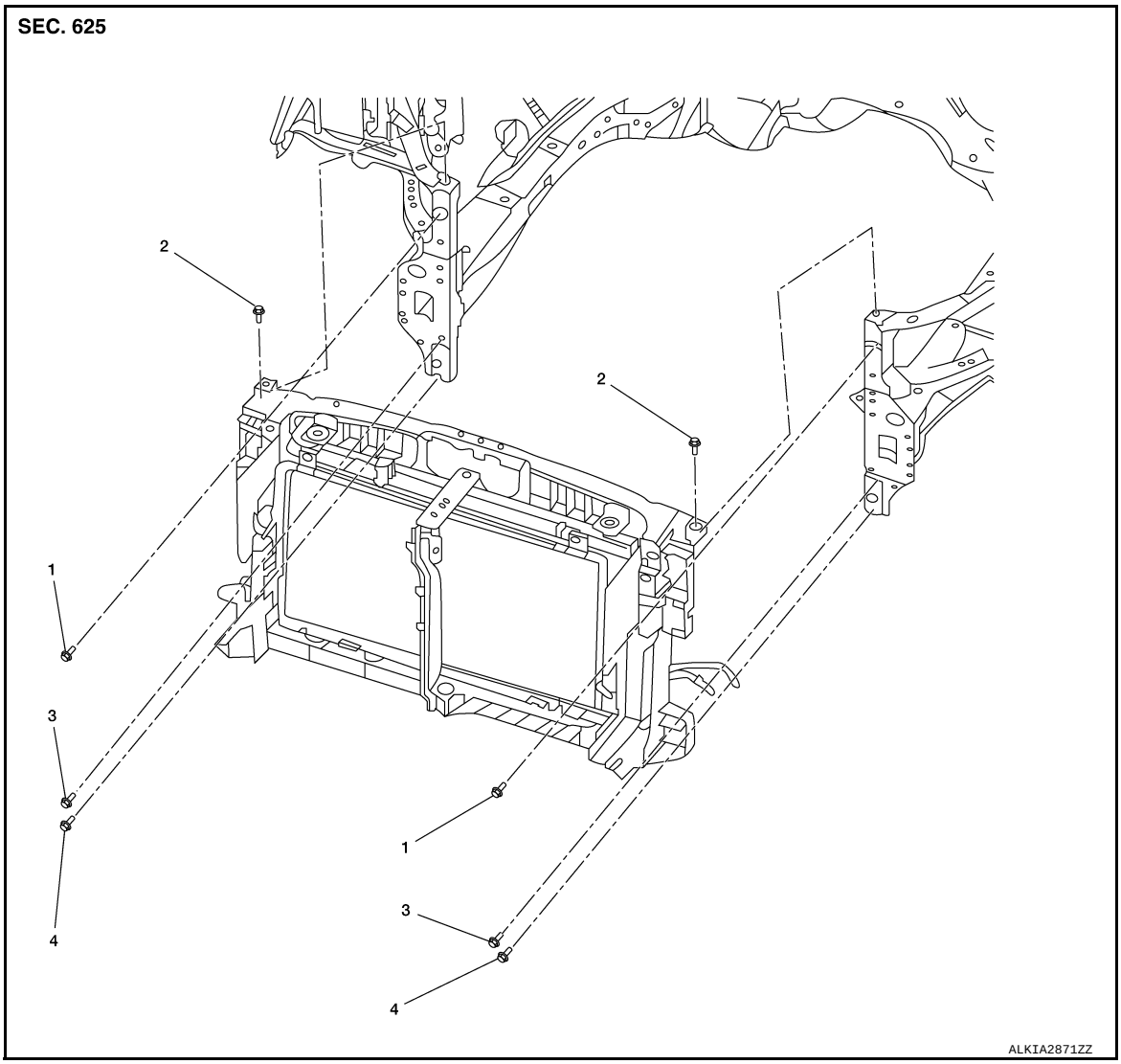
1. Remove front bumper assembly. Refer to EXT-17, "Removal and Installation".
2. Release clips and then remove radiator upper seal.
3. Remove the battery. Refer to PG-89, "Removal and Installation".
4. Disconnect harness connector from refrigerant pressure sensor.
5. Remove upper air intake.
6. Disconnect all harness clips from radiator core support assembly.
7. Remove hood lock assembly. Refer to DLK-297, "Removal and Installation".

8. Release clips of air guide seal and remove.
9. Remove radiator bolts. Refer to CO-15, "Removal and Installation".
10. Remove bolts, and radiator core support assembly.

INSTALLATION

Installation is in the reverse order of removal.

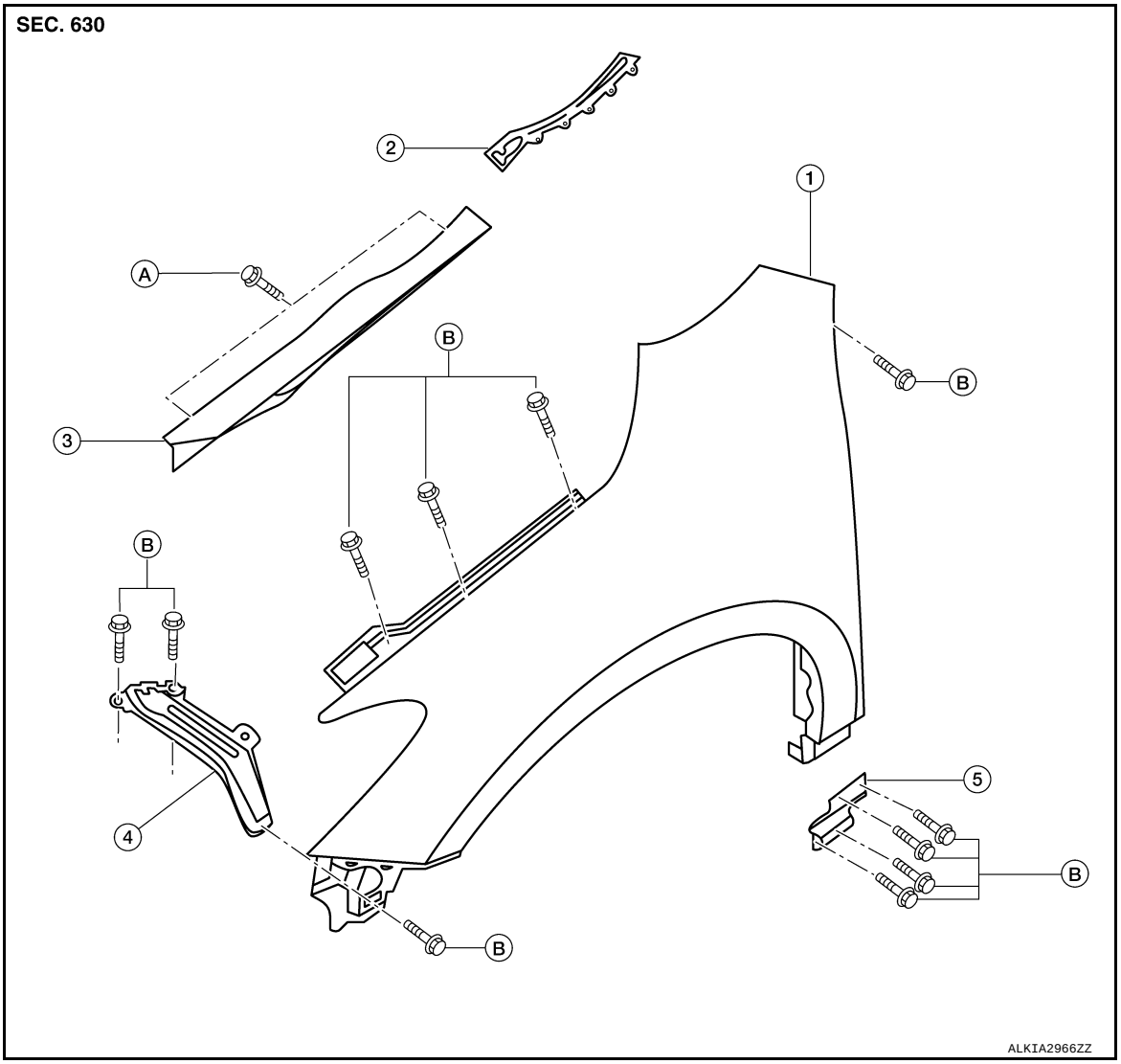
- When installing the radiator core support, tighten the core support bolts in the sequence shown.



FRONT FENDER

Exploded View

INFOID:0000000008506276



1. Front fender
2. Front fender upper seal
3. Front fender hoodledge finisher
4. Front fender bracket
5. Front fender lower bracket
A. Clip
B. Bolt

FRONT FENDER

FRONT FENDER : Removal and Installation

INFOID:0000000008506277

CAUTION:
Use a shop cloths to protect the body from being damaged during removal and installation.

REMOVAL

1. Remove front fender protector. Refer to EXT-28, "FENDER PROTECTOR : Removal and Installation".
2. Remove front combination lamp. Refer to EXL-139, "Removal and Installation".
3. Remove front fender outside lower molding. Refer to EXT-38, "Removal and Installation".
4. Remove front fender bolts and front fender.
   CAUTION:

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:

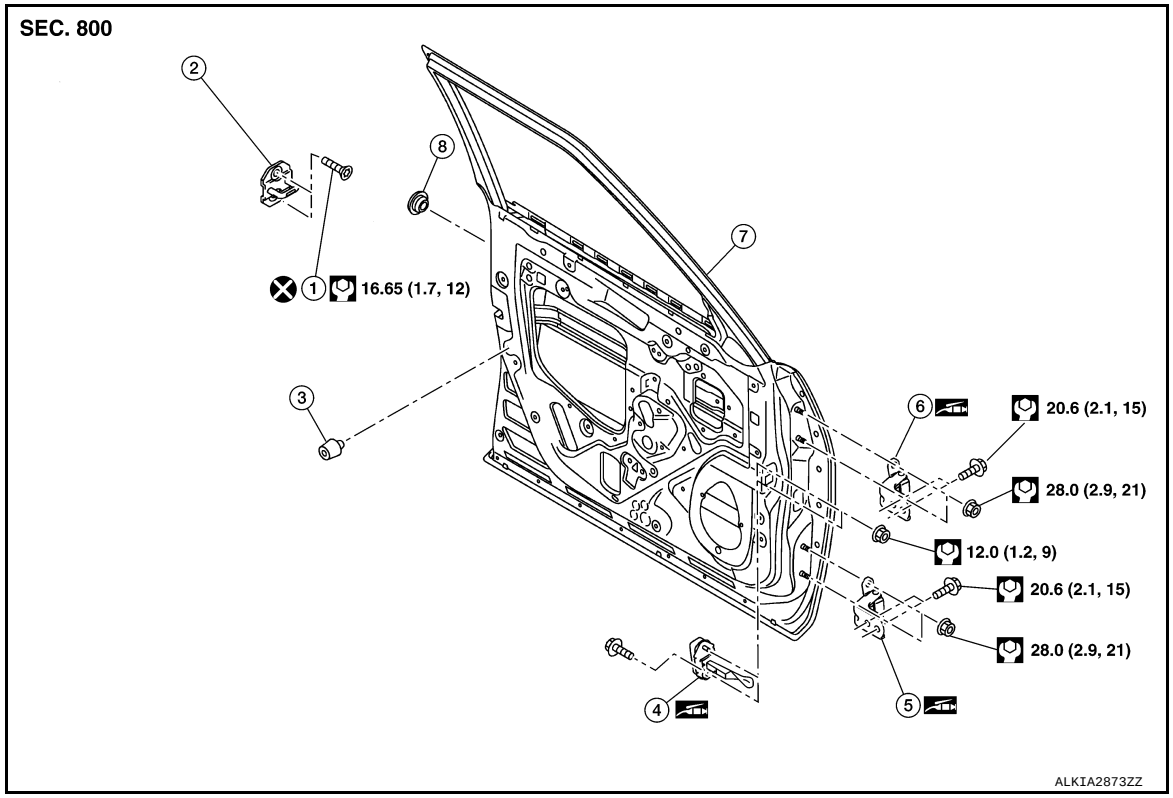
- **After installation apply touch up paint (body color) to the head of front fender bolts.**
- **After installation, adjust the following components as necessary:**

- **Hood assembly: Refer to DLK-274, "HOOD ASSEMBLY : Adjustment".**
- **Front door: Refer to DLK-282, "DOOR ASSEMBLY : Adjustment".**

FRONT DOOR

Exploded View

INFOID:0000000008506278



1. Front door striker bolt
2. Front door striker
3. Bumper rubber
4. Door check link
5. Front door lower hinge
6. Front door upper hinge
7. Front door assembly
8. Grommet

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000008506279

CAUTION:
- **Use two people when removing or installing the front door due to its heavy weight.**
- **When removing and installing front door assembly, support front door with a suitable tool.**

REMOVAL

1. Remove front door finisher. Refer to INT-15, "Removal and Installation".
2. Disconnect the harness connectors from the front door.
3. Remove front door harness grommet, then harness from the front door.
4. Remove front door check link bolt (body side).
5. Remove front door hinge nuts (door side) and front door assembly.

INSTALLATION

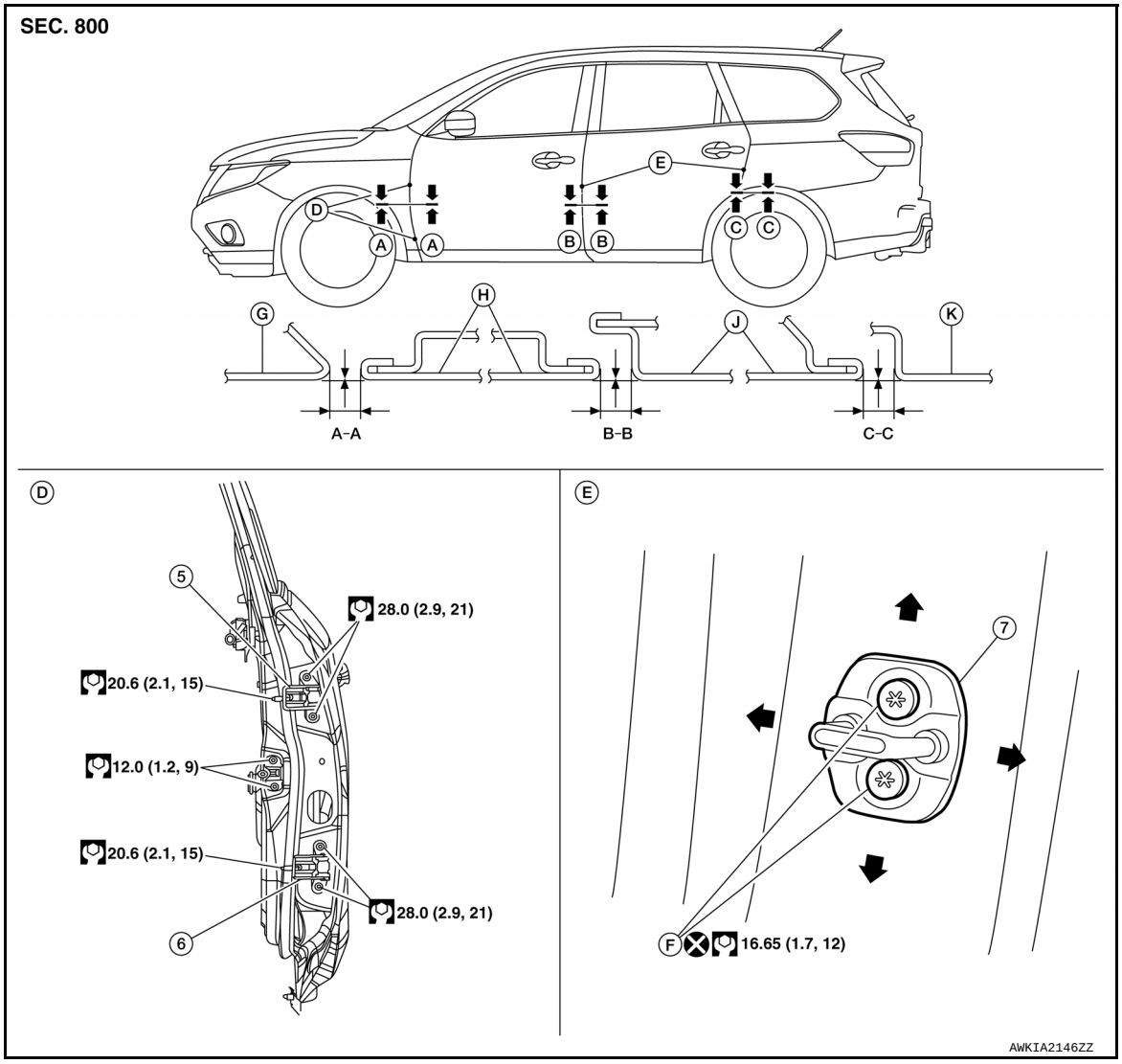
Installation is in the reverse order of removal.

CAUTION:
- **Apply anticorrosive agent where necessary.**
- **After installation, check front door open/close, lock/unlock operation.**
- **After installation, perform the front door adjustment procedure. Refer to DLK-282, "DOOR ASSEMBLY : Adjustment".**

DOOR ASSEMBLY : Adjustment

INFOID:0000000008506280

Adjustment



1. Front fender
2. Front door
3. Rear door
4. Body side outer
5. Front door upper hinge
6. Front door lower hinge
7. Door striker
F. Front door striker bolts

Check the clearance and surface height between front door and each part by visual inspection and tactile feel. If the clearance and the surface height are out of specification, adjust them according to the adjustment procedure.

Unit: mm (in)

Section	Item	Measurement	Standard
A – A	G	Clearance	4.0 ± 1.0 (0.16 ± 0.04)
	H	Surface height	± 1.0 (± 0.04)
B – B	H	Clearance	4.3 ± 1.0 (0.17 ± 0.04)
	J	Surface height	± 1.0 (± 0.04)
C – C	J	Clearance	3.7 ± 1.0 (0.15 ± 0.04)
	K	Surface height	± 1.0 (± 0.04)

1. Remove front fender. Refer to DLK-279, "FRONT FENDER : Removal and Installation".

2. Loosen front door hinge nuts (door side).
3. Adjust the surface height of front door according to the specifications provided.
4. Temporarily tighten front door hinge nuts (door side).
5. Loosen front door hinge bolts (body side).
6. Raise front door at rear end to adjust clearance of the front door according to the specifications provided.
7. After adjustment tighten bolts and nuts to the specified torque.
   CAUTION:
   - **Check door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.**
   - **After adjusting, apply touch-up paint (body color) to the head of front door hinge bolts and nuts.**
8. Install front fender. Refer to refer to DLK-279, "FRONT FENDER : Removal and Installation".

DOOR STRIKER ADJUSTMENT

Adjust front door striker so that it becomes parallel with front door lock insertion direction.

DOOR STRIKER

DOOR STRIKER : Removal and Installation

INFOID:0000000008506281

REMOVAL

1. Remove front door striker 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, lock/unlock operation.**
- **After installation, perform the front door adjustment procedure. Refer to DLK-282, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:0000000008506282

REMOVAL

1. Remove front fender. Refer to DLK-279, "FRONT FENDER : Removal and Installation".
2. Remove front door assembly. Refer to DLK-281, "DOOR ASSEMBLY : Removal and Installation".
3. Remove front door hinge bolts (body side) and front door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Apply anticorrosive agent to the hinge mating surface.**
- **After installation, check front door open/close, lock/unlock operation.**
- **Check door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.**
- **After installation, perform the front door adjustment procedure. Refer to DLK-282, "DOOR ASSEMBLY : Adjustment".**

DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:0000000008506283

REMOVAL

1. Fully close the front door window.
2. Remove front door speakerAV-49, "Removal and Installation" .
3. Remove door check link bolt from body.
4. Remove door check link nuts on door assembly.
5. Remove door check link through the hole in door assembly.

INSTALLATION

Installation is in the reverse order of removal.

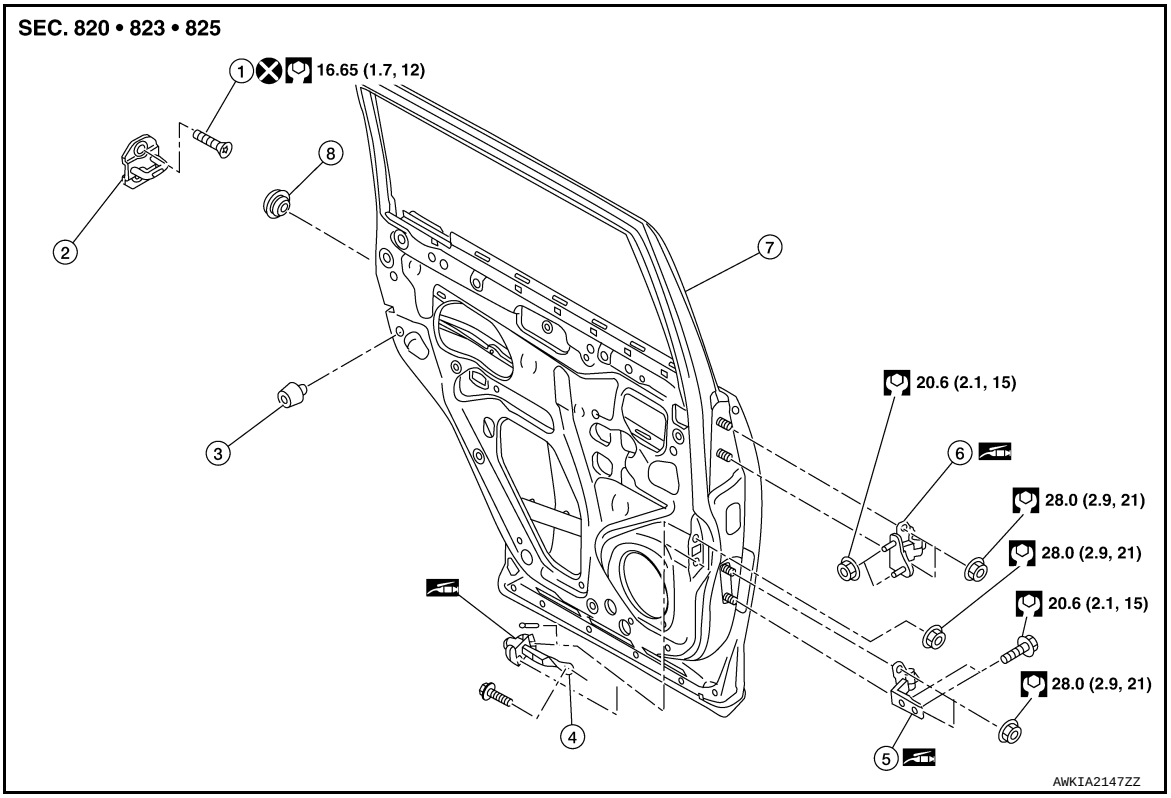
CAUTION:

- **After installation, check front door open/close, lock/unlock operation.**
- **Check door check link rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.**

REAR DOOR

Exploded View

INFOID:0000000008506284



1. Rear door striker bolt
2. Rear door striker
3. Bumper rubber
4. Door check link
5. Rear door lower hinge
6. Rear door upper hinge
7. Rear door assembly
8. Grommet

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000008506285

CAUTION:
- **Use two people when removing or installing the rear door due to its heavy weight.**
- **When removing and installing rear door assembly, support rear door using a suitable tool.**

REMOVAL

1. Remove rear door finisher. Refer to DLK-285, "DOOR ASSEMBLY : Removal and Installation".
2. Disconnect the harness connectors from rear door.
3. Remove harness grommet from rear door, then pull out rear door harness from the rear door.
4. Remove rear door check link bolt (body side).
5. Remove rear door hinge nuts (door side) and rear door assembly.

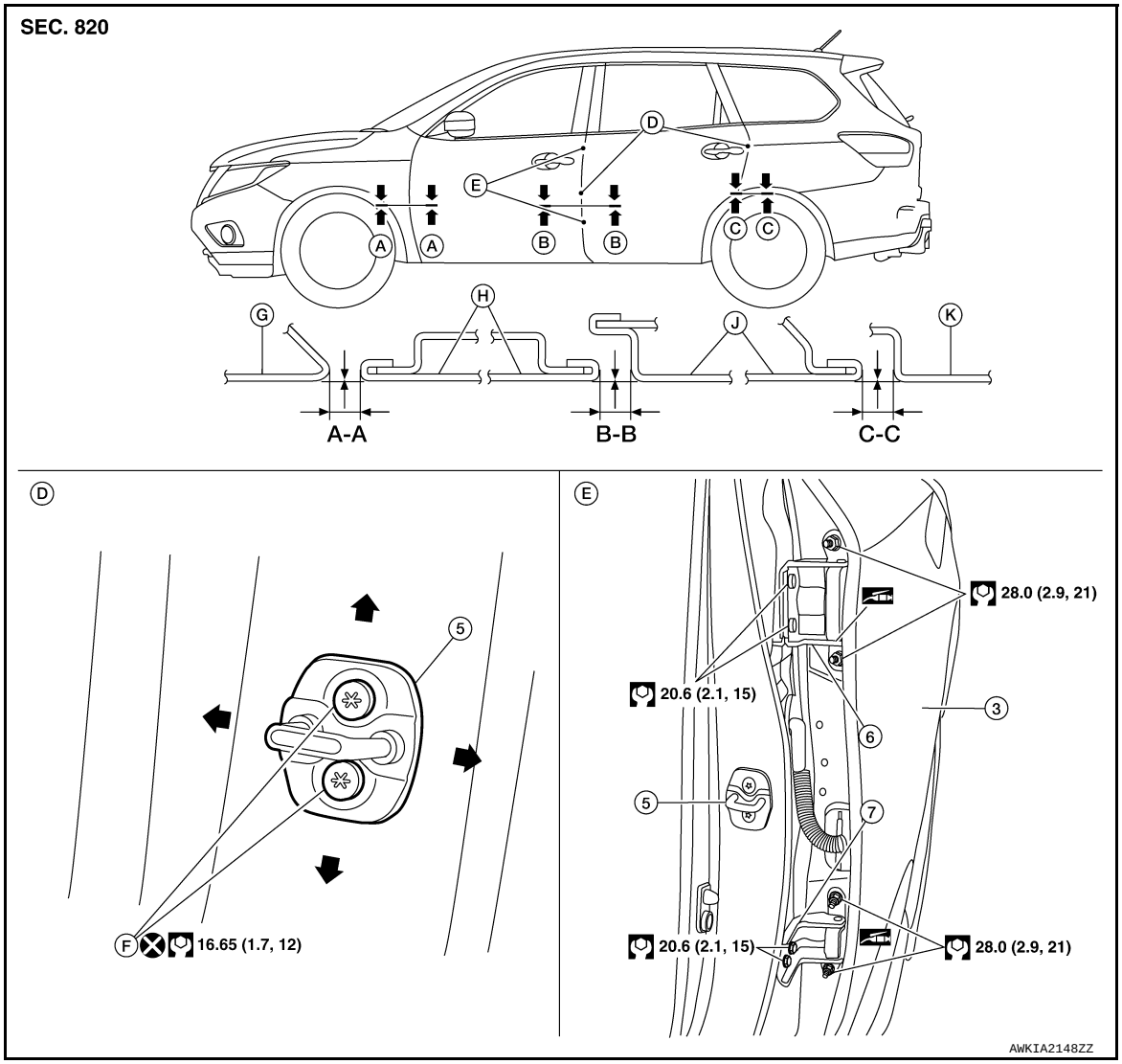
INSTALLATION

Installation is in the reverse order of removal.

CAUTION:
- **Apply anticorrosive agent where necessary.**
- **After installation, check rear door open/close, lock/unlock operation.**
- **After installation, perform the rear door adjustment procedure. Refer to DLK-286, "DOOR ASSEMBLY : Adjustment".**

DOOR ASSEMBLY : Adjustment

INFOID:0000000008506286



1. Front fender
2. Front door assembly
3. Rear door assembly
4. Body side outer
5. Striker
6. Rear door upper hinge
7. Rear door lower hinge
F. Rear door striker bolts

Check the clearance and surface height between rear door and each part by visual inspection and tactile feel. If the clearance and the surface height are out of specification, adjust them according to the adjustment procedures.

Unit: mm (in)

Section	Item	Measurement	Standard
A – A	G	Clearance	4.0 ± 1.0 (0.16 ± 0.04)
	H	Surface height	± 1.0 (± 0.04)
B – B	H	Clearance	4.3 ± 1.0 (0.17 ± 0.04)
	J	Surface height	± 1.0 (± 0.04)
C – C	J	Clearance	3.7 ± 1.0 (0.15 ± 0.04)
	K	Surface height	± 1.0 (± 0.04)

1. Remove center pillar lower finisher. Refer to INT-19, "CENTER PILLAR LOWER FINISHER : Removal and Installation".

2. Loosen rear door hinge nuts (door side).
3. Adjust the surface height of rear door according to specifications provided.
4. Temporarily tighten rear door hinge nuts (door side).
5. Loosen rear door hinge nuts and bolts (body side).
6. Raise rear door at rear end to adjust clearance of rear door according to the specifications provided.
7. After adjustment tighten bolts and nuts to the specified torque.
   CAUTION:
   - **Check rear door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.**
   - **After adjusting, apply touch-up paint (body color) to the head of rear door hinge bolts and nuts.**
8. Install center pillar lower finisher. Refer to INT-19, "CENTER PILLAR LOWER FINISHER : Removal and Installation".

DOOR STRIKER ADJUSTMENT

Adjust rear door striker so that it becomes parallel with rear door lock insertion direction.

DOOR STRIKER

DOOR STRIKER : Removal and Installation

INFOID:0000000008506287

REMOVAL

1. 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, lock/unlock operation.**
- **After installation, perform the rear door adjustment procedure. Refer to DLK-286, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:0000000008506288

REMOVAL

1. Remove rear door assembly. Refer to DLK-285, "DOOR ASSEMBLY : Removal and Installation".
2. Remove center pillar lower finisher. Refer to INT-19, "CENTER PILLAR LOWER FINISHER : Removal and Installation".
3. Remove rear door hinge bolts and nuts (body side) and rear door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:
- **Apply anticorrosive agent onto the hinge mating surface.**
- **After installation, check rear door open/close, lock/unlock operation.**
- **After installation, perform the rear door adjustment procedure. Refer to DLK-286, "DOOR ASSEMBLY : Adjustment".**

DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:0000000008506289

REMOVAL

1. Fully close the rear door window.
2. Remove rear door speaker. Refer to AV-369, "Removal and Installation".
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.

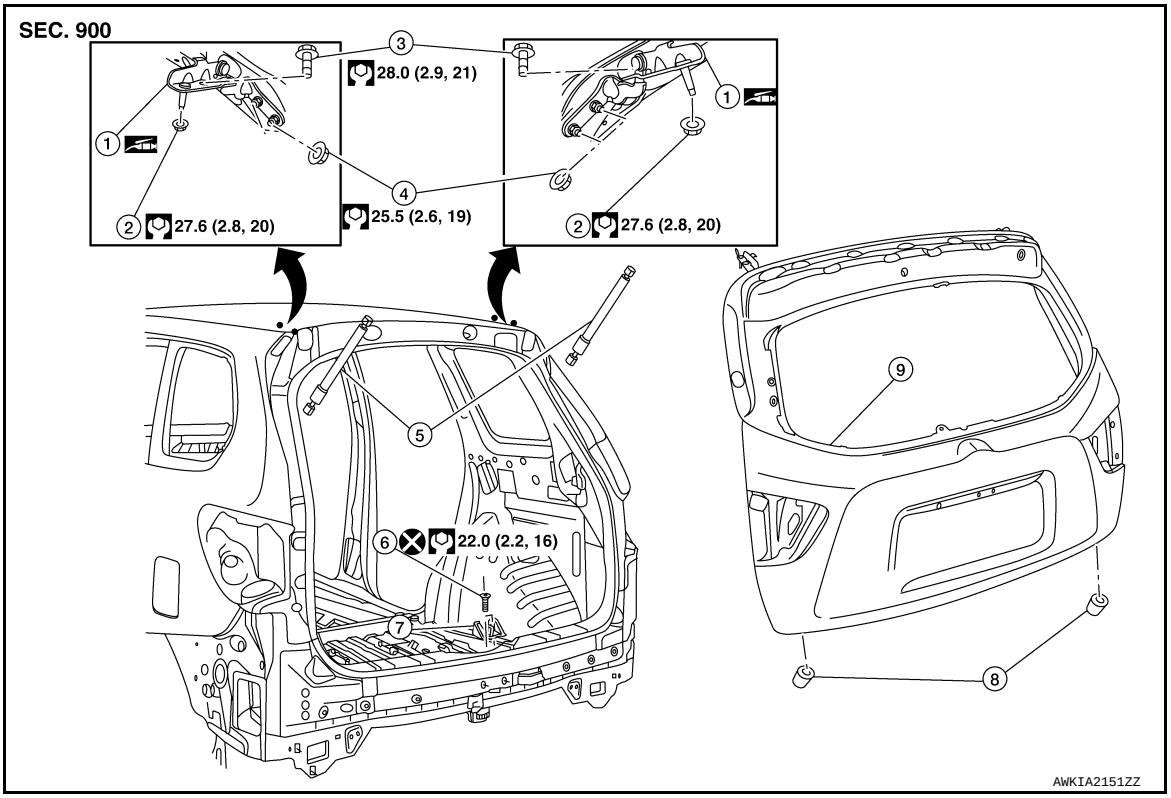
CAUTION:

- **After installation, check rear door open/close, lock/unlock operation.**
- **Check rear door check link rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.**

BACK DOOR

Exploded View

INFOID:0000000008506290



1. Back door hinge
2. Back door hinge nut (body side)
3. Back door hinge bolt (body side)
4. Back door hinge nut (door side)
5. Spindle unit (LH) (RH)
6. Back door striker bolt
7. Back door striker
8. Back door bumper rubber
9. Back door assembly

BACK DOOR ASSEMBLY

BACK DOOR ASSEMBLY : Removal and Installation

INFOID:0000000008506291

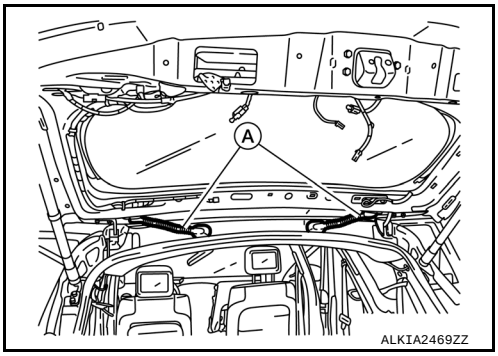
CAUTION:
- **Use two people when removing or installing the back door due to its heavy weight.**
- **Use shop cloths to protect surrounding components from damage during removal and installation of back door.**

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-293, "SPINDLE UNIT : Removal and Installation".
3. Remove roof side moldings (LH/RH). Refer to EXT-31, "Removal and Installation".

4. Disconnect harness connectors (A) from back door.



5. Remove back door harness grommet, then pull harness from the back door.
6. Disconnect washer tube.
7. Remove washer tube grommet, then washer tube from the back door.
8. Remove back door hinge nuts (door side) and remove.

INSTALLATION

Installation is in the reverse order of removal.

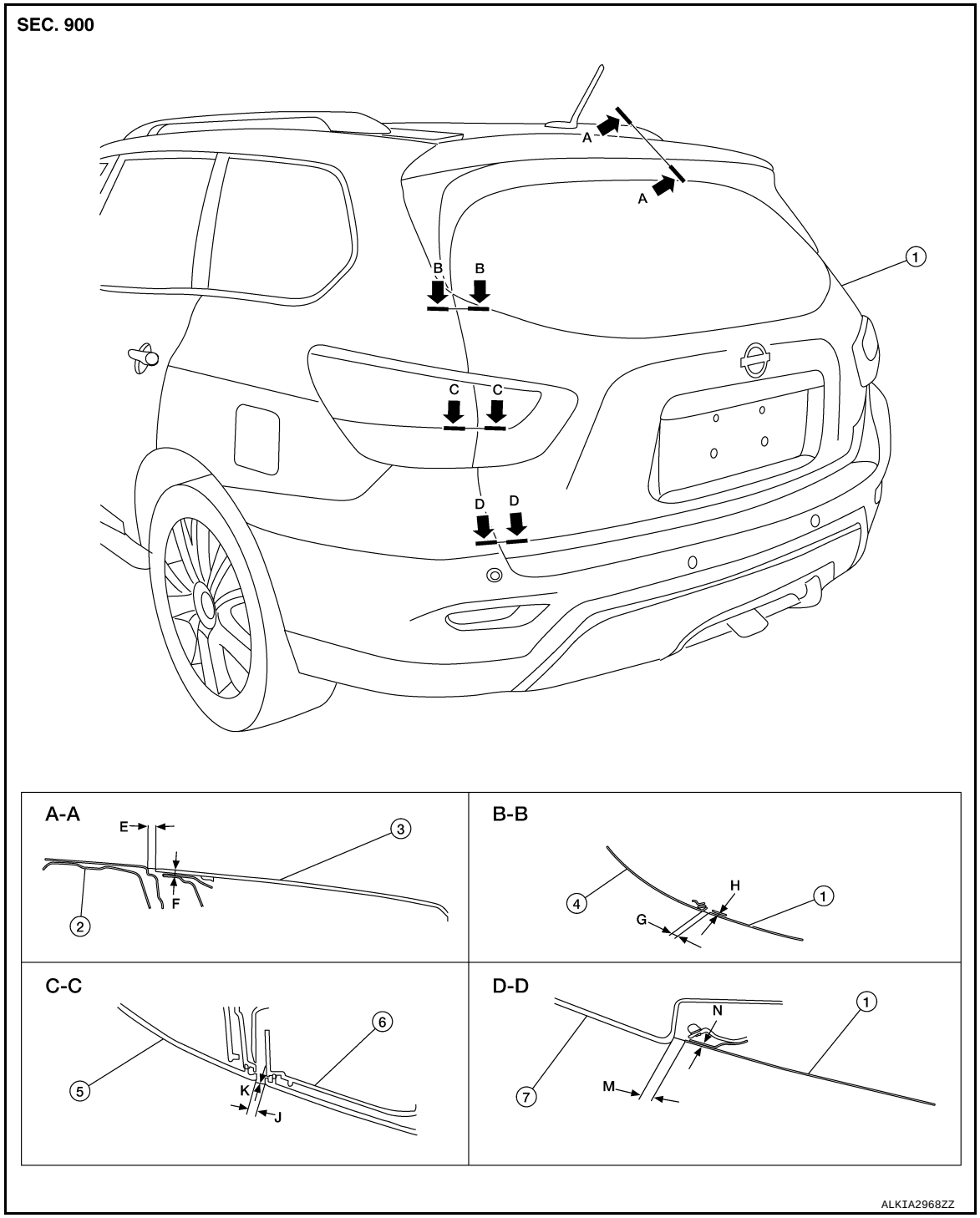
CAUTION:

- **Apply anticorrosive agent onto the surface between hinge and door side.**
- **When reusing stud ball, always apply locking sealant before installing stud ball to back door.**
- **After installation, perform the back door assembly adjustment procedure. Refer to DLK-291, "BACK DOOR ASSEMBLY : Adjustment".**

BACK DOOR ASSEMBLY : Adjustment

INFOID:0000000008506292

SEC. 900



1. Back door assembly
2. Roof panel
3. Rear spoiler
4. Body side outer
5. Rear combination lamp
6. Back-up lamp
7. Rear bumper fascia

Check the clearance and the surface height between back door and each part by visual inspection and tactile feel. If the clearance and the surface height are out of specification, adjust them according to the adjustment procedure.

Unit: mm (in)

Portion	Section	Item	Measurement	Standard
Roof panel – Rear spoiler	A – A	E	Clearance	7.0 ± 1.5 (0.28 ± 0.06)
		F	Surface height	1.5 ± 1.5 (0.06 ± 0.06)
Body side outer – Back door assembly	B – B	G	Clearance	5.0 ± 2.0 (0.20 ± 0.08)
		H	Surface height	0.8 ± 2.0 (0.03 ± 0.08)
Rear combination lamp – Back-up lamp	C – C	J	Clearance	5.0 ± 2.0 (0.20 ± 0.08)
		K	Surface height	0.0 ± 2.1 (0.0 ± 0.08)
Rear bumper fascia – Back door assembly	D – D	M	Clearance	7.0 ± 2.0 (0.28 ± 0.08)
		N	Surface height	5.0 ± 2.0 (0.20 ± 0.08)

1. Loosen back door hinge nuts (door side).
2. Lift up back door approximately 100 – 150 mm (3.94 – 5.91 in) height then close it lightly and check that it is engaged firmly with back door closed.
3. Check the clearance and surface height.
4. Tighten back door hinge nuts and back door striker bolts to specified torque.
5. Install roof side molding (LH / RH). Refer to. EXT-31, "Removal and Installation".

BACK DOOR STRIKER ADJUSTMENT

Adjust back door striker so that it becomes parallel with back door lock insertion direction.

CAUTION:

- **After installation, check back door open/close, lock/unlock operation.**
- **Check back door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.**
- **After adjusting, apply touch-up paint (body color) to the head of rear door hinge bolts and nuts.**

BACK DOOR STRIKER

BACK DOOR STRIKER : Removal and Installation

INFOID:0000000008506293

REMOVAL

1. Remove back door kicking plate. Refer to INT-33, "BACK DOOR KICKING PLATE : Removal and Installation".
2. Remove back door striker bolts, and remove back door striker.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **After installation, check back door open/close, lock/unlock operation.**
- **After installation, perform the back door assembly adjustment procedure. Refer to DLK-291, "BACK DOOR ASSEMBLY : Adjustment".**

BACK DOOR HINGE

BACK DOOR HINGE : Removal and Installation

INFOID:0000000008506294

REMOVAL

1. Remove back door assembly. Refer to DLK-289, "BACK DOOR ASSEMBLY : Removal and Installation".
2. Remove back door hinge nuts and bolts (body side) and then remove back door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Apply anticorrosive agent onto the surface between hinge and body side.**
- **After installation, perform the back door assembly adjustment procedure. Refer to DLK-291, "BACK DOOR ASSEMBLY : Adjustment".**

SPINDLE UNIT

SPINDLE UNIT : Removal and Installation

INFOID:0000000008506295

REMOVAL

1. Support back door using a suitable tool.

   WARNING:
   Bodily injury may occur if the back door is not supported properly when removing the back door spindle unit.
2. Remove rear pillar finisher. Refer to INT-27, "REAR PILLAR FINISHER : Removal and Installation".
3. Remove back pillar finisher. Refer to INT-29, "BACK PILLAR FINISHER : Removal and Installation".
4. Remove luggage side upper finisher. Refer to INT-29, "LUGGAGE SIDE UPPER FINISHER : Removal and Installation".
5. Position aside headliner and disconnect the harness connector from spindle unit.
6. Remove the metal clip located on the connection between spindle unit and the stud ball (body side) by using a suitable tool to release the clip to the side and then toward front.
7. Disengage the stud ball from the spindle unit (back door side) then remove spindle unit.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **When reusing stud ball, always apply locking sealant before installing stud ball to back door.**
- **After installation, check back door open/close, lock/unlock operation.**

BACK DOOR STAY

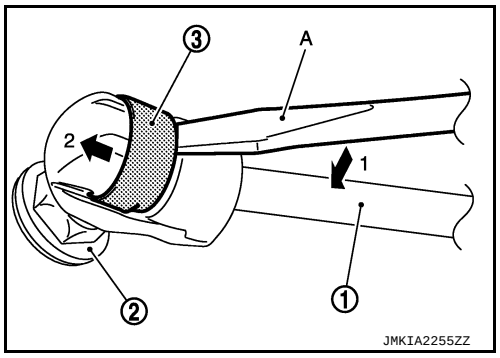
BACK DOOR STAY : Removal and Installation

INFOID:0000000009016981

REMOVAL

1. Support the back door with a suitbale tool too prevent it from falling.

   WARNING:
   Body injury may occur if no supporting rod is holding the back door open when removing the back door stay.
2. Remove the metal clip (3) located on the connection between the back door stay (1) and the stud ball (2) (back door side) by using a flat blade screwdriver (A).
3. Remove the back door stay (back door side).



4. In the same way, remove the back door stay from the body side.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Check the back door open/close operation after installation.

BACK DOOR WEATHER-STRIP

BACK DOOR WEATHER-STRIP : Removal and Installation

INFOID:0000000008506296

REMOVAL

1. Support back door using a suitable tool.
2. Carefully remove back door weather-strip from opening door joint.

INSTALLATION

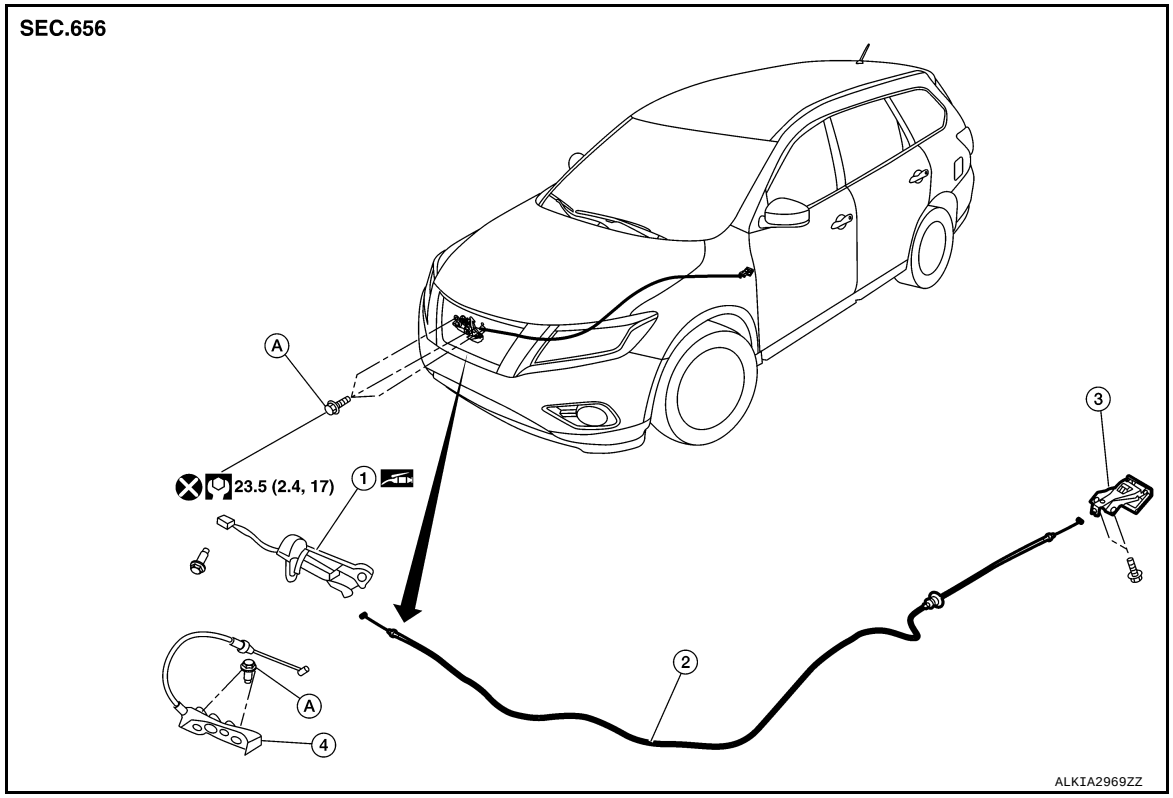
1. Beginning with upper section, align weather-strip mark with vehicle center position mark and install weather strip to the vehicle.
2. For the lower section, align weather-strip seam with center of back door striker.

NOTE:
Pull weather-strip gently to ensure that there are no loose sections.

HOOD LOCK

Exploded View

INFOID:0000000008506297



1. Hood lock assembly
2. Hood lock release cable
3. Hood lock release handle
4. Secondary hood lock latch
A. Bolt

HOOD LOCK

HOOD LOCK : Removal and Installation

INFOID:0000000008506298

REMOVAL

1. Remove front fender protector (LH). Refer to EXT-28, "FENDER PROTECTOR : Removal and Installation".
2. Remove hood lock assembly bolts.
3. Remove secondary hood lock bolts.
4. Disconnect hood lock release cable from hood lock assembly.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Be careful not to bend cable too much, keeping the radius 100 mm (3.94 in) or more.**
- **Check that hood lock release cable is properly engaged with hood lock assembly.**
- **After installation, perform hood assembly adjustment procedure. Refer to DLK-274, "HOOD ASSEMBLY : Adjustment".**
- **After adjusting, perform hood lock inspection. Refer to DLK-295, "Inspection".**

Inspection

INFOID:0000000008506300

NOTE:

If the hood lock cable is bent or deformed, replace it.

1. Check that secondary latch is properly engaged with secondary striker with hoods own weight.

2. While operating hood lock release lever, carefully check that the front end of hood assembly is raised by approximately 20.0 mm (0.79 in). Also check that hood lock release lever returns to the original position.
3. Check that hood lock release lever operates at 49 N (5.0 kg-m, 11.0 ft-lb) or below.
4. Install so that static closing force of hood is 315-490 N (32.1-50.0 kg–m, 70.8-110.2 ft–lb).
   NOTE:
   - Do not exert vertical force on right side and left side of hood lock.
   - Do not press simultaneously on both sides.
5. Check the hood lock lubrication condition. If necessary, apply a suitable multi-purpose grease to hood lock assembly.

HOOD RELEASE CABLE

Removal and Installation

INFOID:0000000008506299

REMOVAL

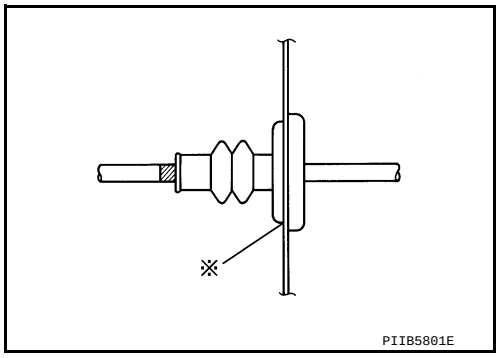
1. Disconnect hood lock release cable from hood lock assembly. Refer to DLK-295, "HOOD LOCK : Removal and Installation".
2. Release all hood lock release cable clips.
3. Remove hood lock release handle bolts, and remove.
4. Disconnect hood lock release cable from hood lock release.
5. Remove grommet on the lower dash, and carefully pull the hood lock release cable into the passenger compartment.
   CAUTION:
   While pulling, be careful not to damage (peel) the outside of hood lock release cable.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Be careful not to bend cable too much, keep the radius 100 mm (3.94 in) or more.**
- **Check that cable is not offset from the positioning grommet, and apply the sealant to the grommet (at * mark) properly.**

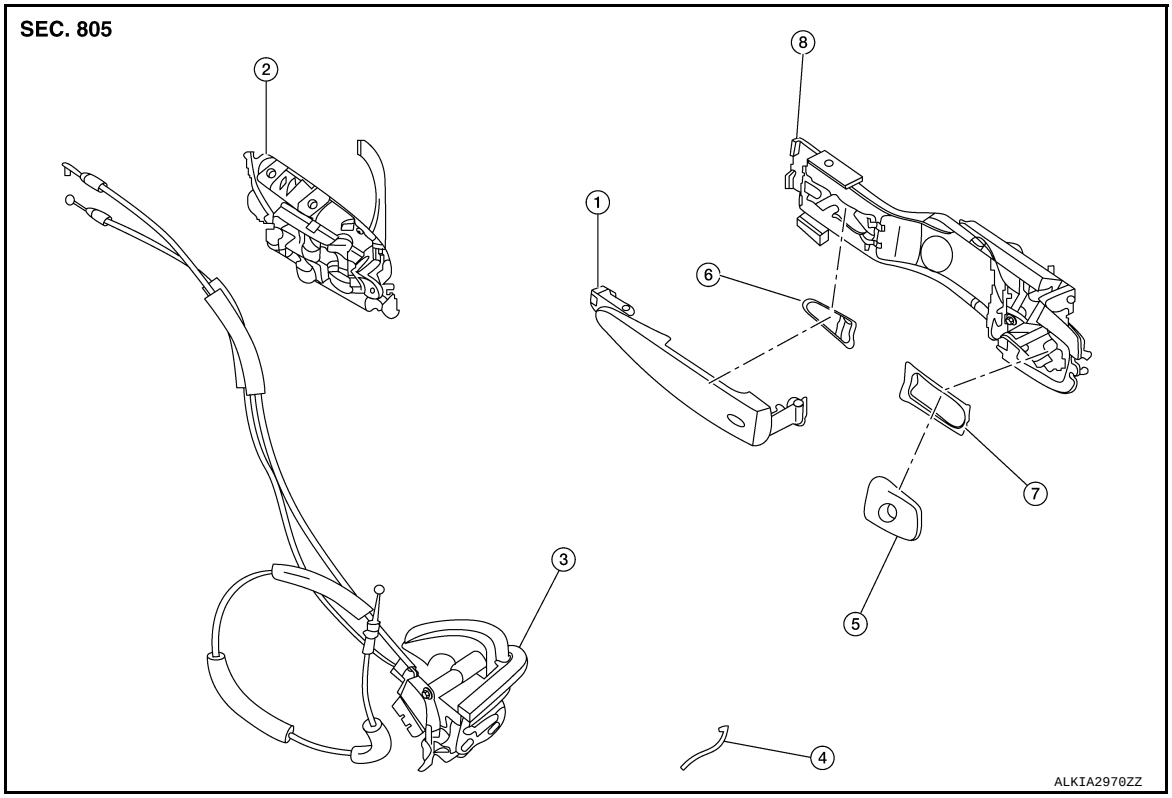


- **Check that hood lock release cable is properly engaged with hood lock assembly.**
- **After installation, perform hood assembly adjustment procedure. Refer to DLK-274, "HOOD ASSEMBLY : Adjustment".**
- **After adjusting, perform hood lock inspection. Refer to DLK-295, "Inspection".**

FRONT DOOR LOCK

Exploded View

INFOID:0000000008506301



1. Outside handle
2. Inside handle assembly
3. Front door lock assembly
4. Door key cylinder rod
5. Outside handle escutcheon
6. Front gasket
7. Rear gasket
8. Outside handle bracket

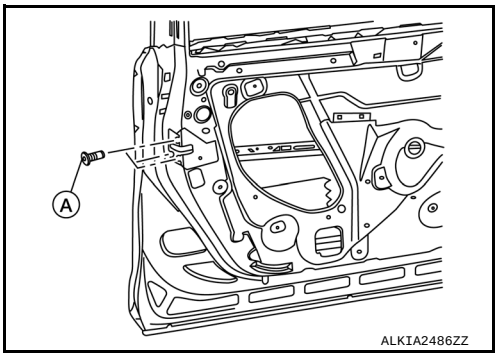
DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:0000000008506302

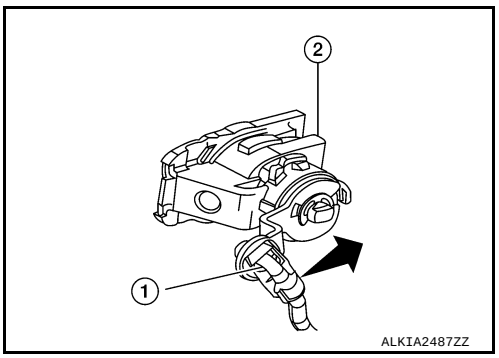
REMOVAL

1. Remove outside handle and outside handle bracket. Refer to DLK-299, "OUTSIDE HANDLE : Removal and Installation".
2. Remove door lock assembly bolts (A).



3. Disconnect the harness connector from the front door lock actuator then remove front door lock assembly.

4. Remove door key cylinder rod (1) from door lock assembly (2) for (LH) front door only.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Do not reuse door lock assembly bolts. Always replace bolts with new ones when removed.**
- **Check door lock cables are properly engaged to inside handle and outside handle bracket.**
- **When installing door key cylinder rod on the (LH) front door, be sure to rotate door key cylinder rod holder until a click is felt.**
- **After installation, check door open/close, lock/unlock operation.**
- **Check door lock assembly for poor lubrication. If necessary apply a suitable multi-purpose grease.**

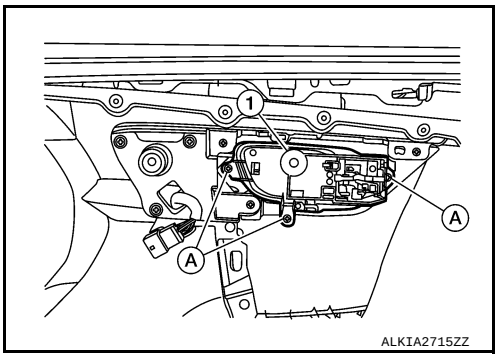
INSIDE HANDLE

INSIDE HANDLE : Removal and Installation

INFOID:0000000008506303

REMOVAL

1. Remove front door finisher. Refer to INT-15, "Removal and Installation".
2. Remove inside handle screws (A) and the inside handle (1).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Check door lock cables are properly engaged to inside handle.**
- **After installation, check door open/close, lock/unlock operation.**

OUTSIDE HANDLE

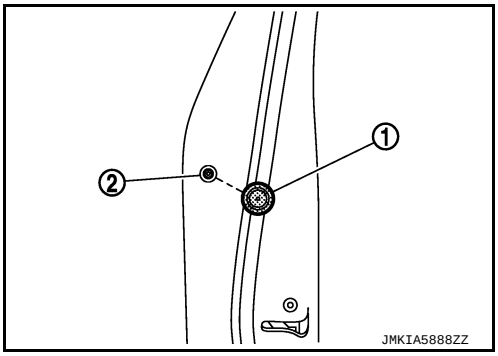
OUTSIDE HANDLE : Removal and Installation

INFOID:0000000008506304

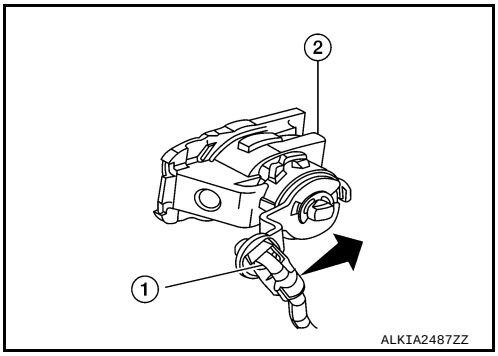
REMOVAL

1. Fully close front door glass.
2. Remove front door finisher. Refer to INT-15, "Removal and Installation".
3. Remove front door vapor barrier.
   NOTE:
   Cut the butyl tape so that some parts of the butyl tape remain on the vapor barrier, if the vapor barrier is reused.
4. Disconnect the harness connectors from the door antenna and door request switch and then remove harness clamp on outside handle bracket.

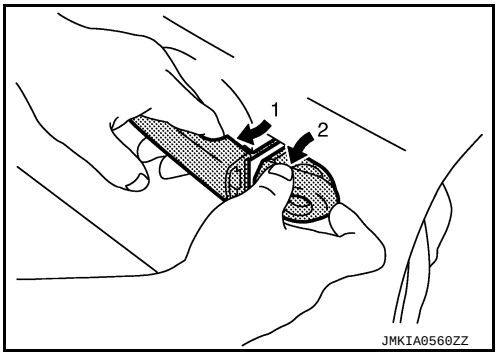
5. Remove door side grommet (1), and remove bolt from grommet hole (2).



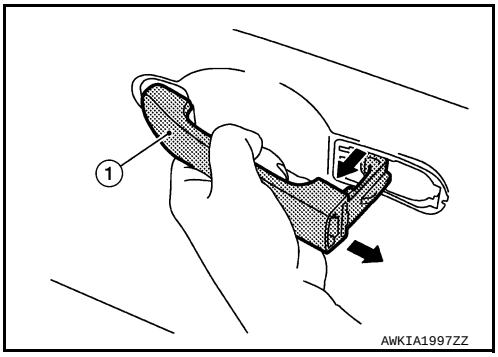
6. Reach in to separate door key cylinder rod (LH side) (1) from door key cylinder assembly (LH side).



7. While pulling (1) outside handle, remove (2) door key cylinder assembly (LH side) or outside handle escutcheon (RH side).

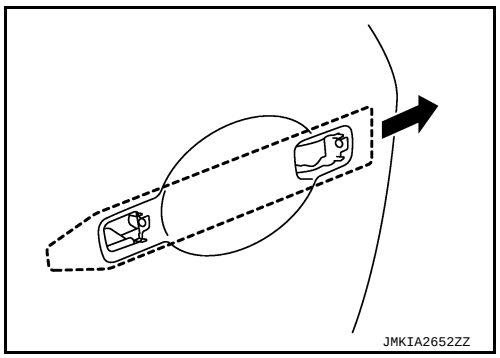


8. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.

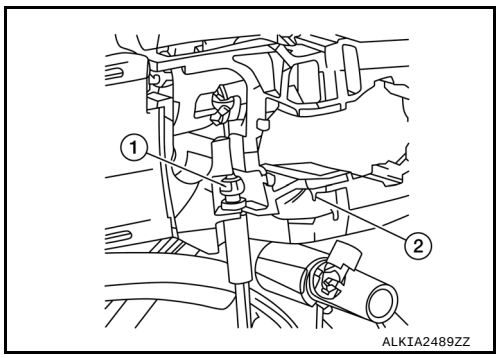


9. Remove front gasket and rear gasket.

10. Slide outside handle bracket toward rear of vehicle to remove.



11. Disconnect outside handle cable (1) from outside handle bracket (2).



INSTALLATION

Installation is in the reverse order of removal.

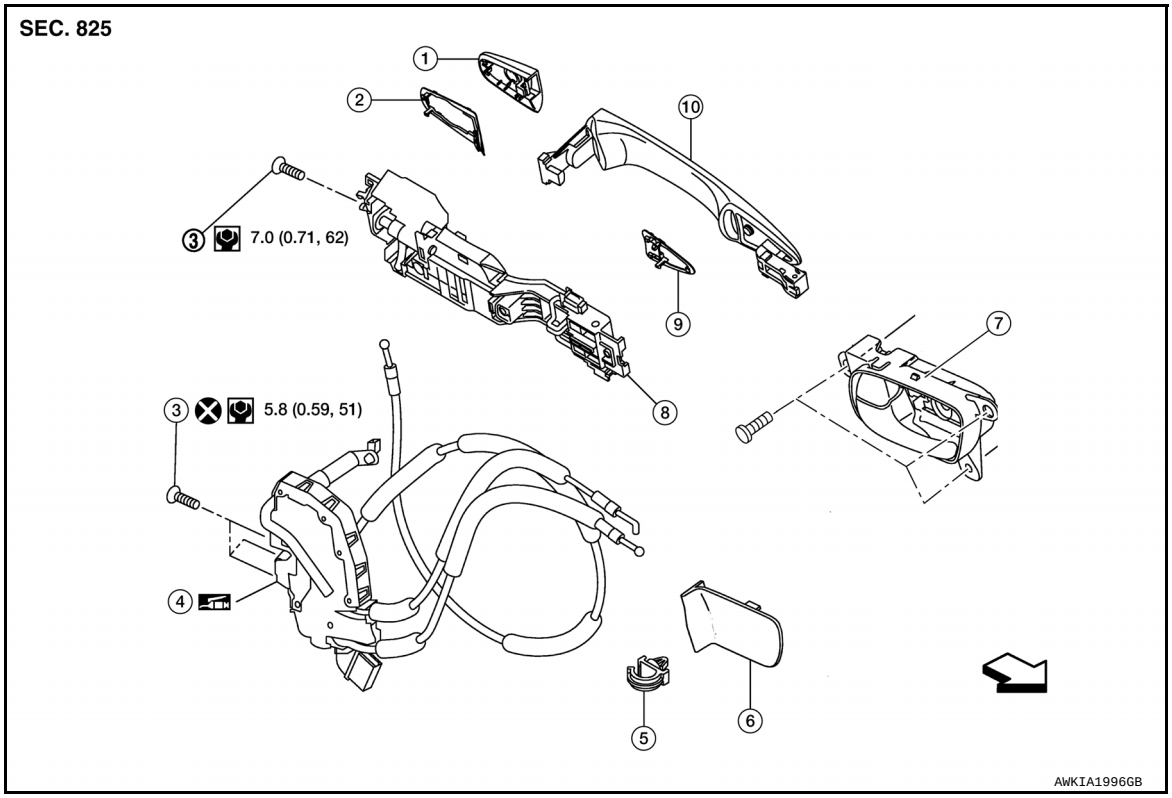
CAUTION:

- **When installing door key cylinder rod on the LH front door, be sure to rotate door key cylinder rod holder until a click is felt.**
- **Check door lock cable is properly engaged to outside handle bracket.**
- **After installation, check door open/close, lock/unlock operation.**

REAR DOOR LOCK

Exploded View

INFOID:0000000008506305



1. Outside handle escutcheon	2. Rear gasket	3. Bolt
4. Rear door lock assembly	5. Cable clip	6. Inside handle finisher
7. Inside handle	8. Outside handle bracket	9. Front gasket
10. Outside handle	⇦ Front	

DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:0000000008506306

REMOVAL

1. Remove outside handle and outside handle bracket.Ref to DLK-303, "OUTSIDE HANDLE : Removal and Installation".
2. Remove rear door lock assembly bolts.
3. Disconnect the harness connector from the rear door lock and then remove rear door lock assembly.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Check door lock cables are properly engaged to inside handle and outside handle.**
- **After installation, check door open/close, lock/unlock operation.**

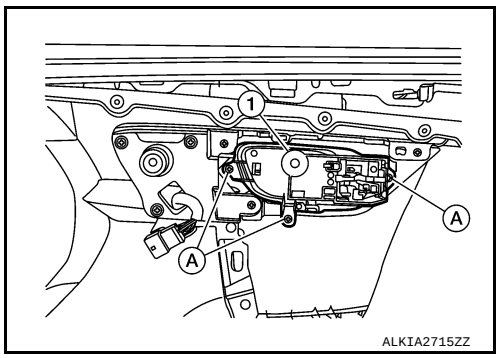
INSIDE HANDLE

INSIDE HANDLE : Removal and Installation

INFOID:0000000008506307

REMOVAL

1. Remove rear door finisher. Refer to INT-16, "Removal and Installation".
2. Remove inside handle screw (A) and inside handle (1).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Check door lock cables are properly engaged to inside handle.**
- **After installation, check door open/close, lock/unlock operation.**

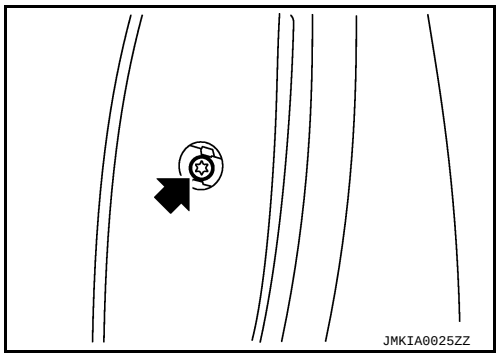
OUTSIDE HANDLE

OUTSIDE HANDLE : Removal and Installation

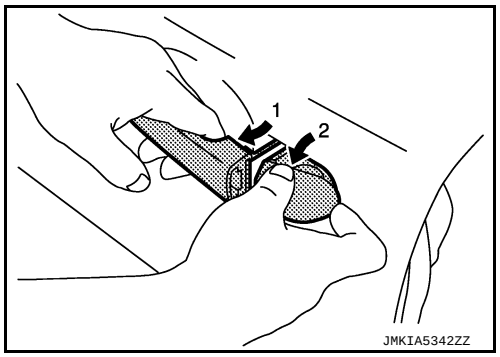
INFOID:0000000008506308

REMOVAL

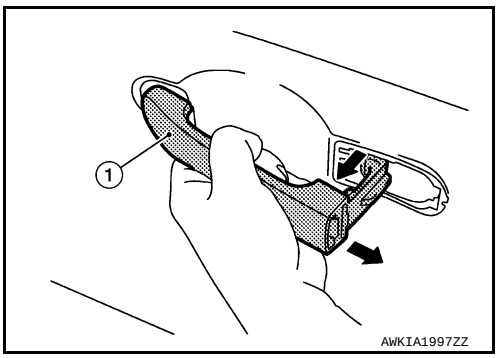
1. Fully close rear door glass.
2. Remove rear door finisher. Refer toINT-16, "Removal and Installation".
3. Remove rear door vapor barrier.
   NOTE:
   Cut the butyl tape so that some parts of the butyl tape remain on the vapor barrier, if the vapor barrier is reused.
4. Remove door side grommet and remove bolt from grommet hole.



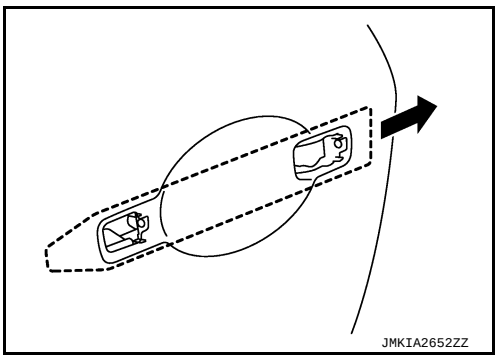
5. While pulling (1) outside handle, remove (2) outside handle escutcheon.



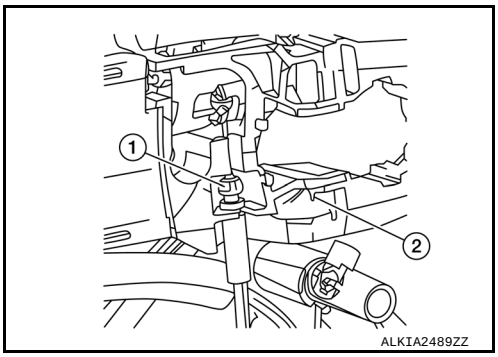
6. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



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).



INSTALLATION

Installation in the reverse order of removal.

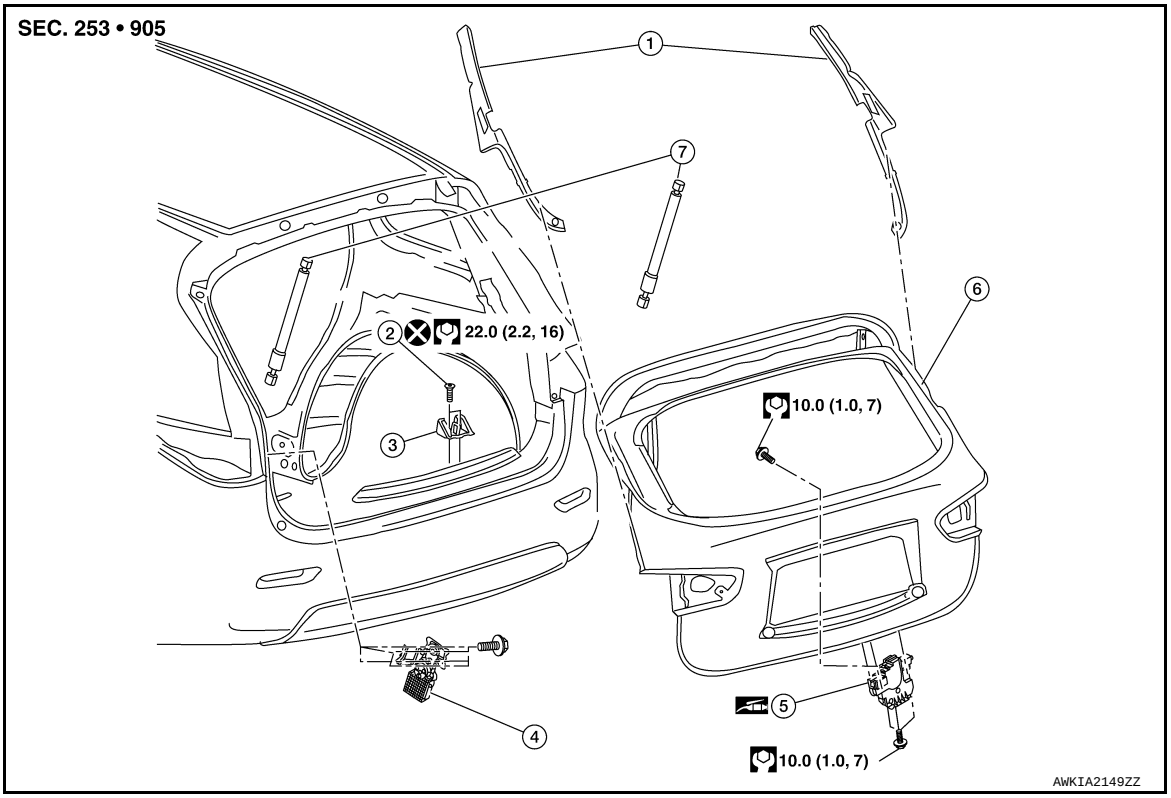
CAUTION:

- **Check door lock cable is properly engaged to outside handle bracket.**
- **After installation, check door open/close, lock/unlock operation.**

BACK DOOR LOCK

Exploded View

INFOID:0000000008506309



1. Back door touch sensor
2. Back door striker bolt
3. Back door striker
4. Automatic back door control module
5. Back door lock assembly
6. Back door assembly
7. Spindle unit

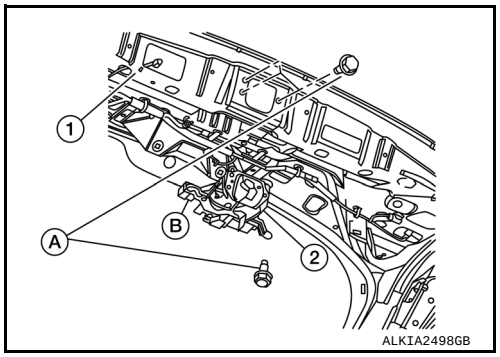
DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:0000000008506310

REMOVAL

1. Remove back door lower finisher. Refer to INT-32, "BACK DOOR LOWER FINISHER : Removal and Installation".
2. Disconnect harness connector (B) from the back door lock assembly (2).
3. Remove back door lock bolts (A) and back door lock assembly (2) from back door assembly (1).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

After installation, check back door open/close, lock/unlock operation.

TOUCH SENSOR

TOUCH SENSOR : Removal and Installation

INFOID:0000000008506311

CAUTION:
Use care not to bend touch sensor.

REMOVAL

1. Remove back door side finishers. Refer to INT-32, "BACK DOOR SIDE FINISHER : Removal and Installation".
2. Disconnect the harness connectors from the touch sensor.
3. Release clips and remove screws that retain touch sensor.
4. Remove touch sensor harness from the back door assembly, then remove touch sensor.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:
After installation, check back door open/close, lock/unlock operation.

EMERGENCY LEVER

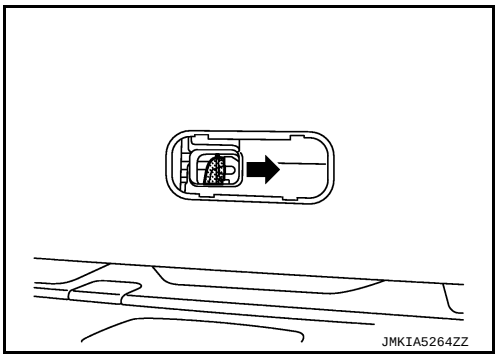
EMERGENCY LEVER : Unlock procedures

INFOID:0000000008506312

UNLOCK PROCEDURES

NOTE:
If back door lock assembly cannot be unlocked due to a malfunction or battery discharge, perform the following procedures to unlock back door assembly.

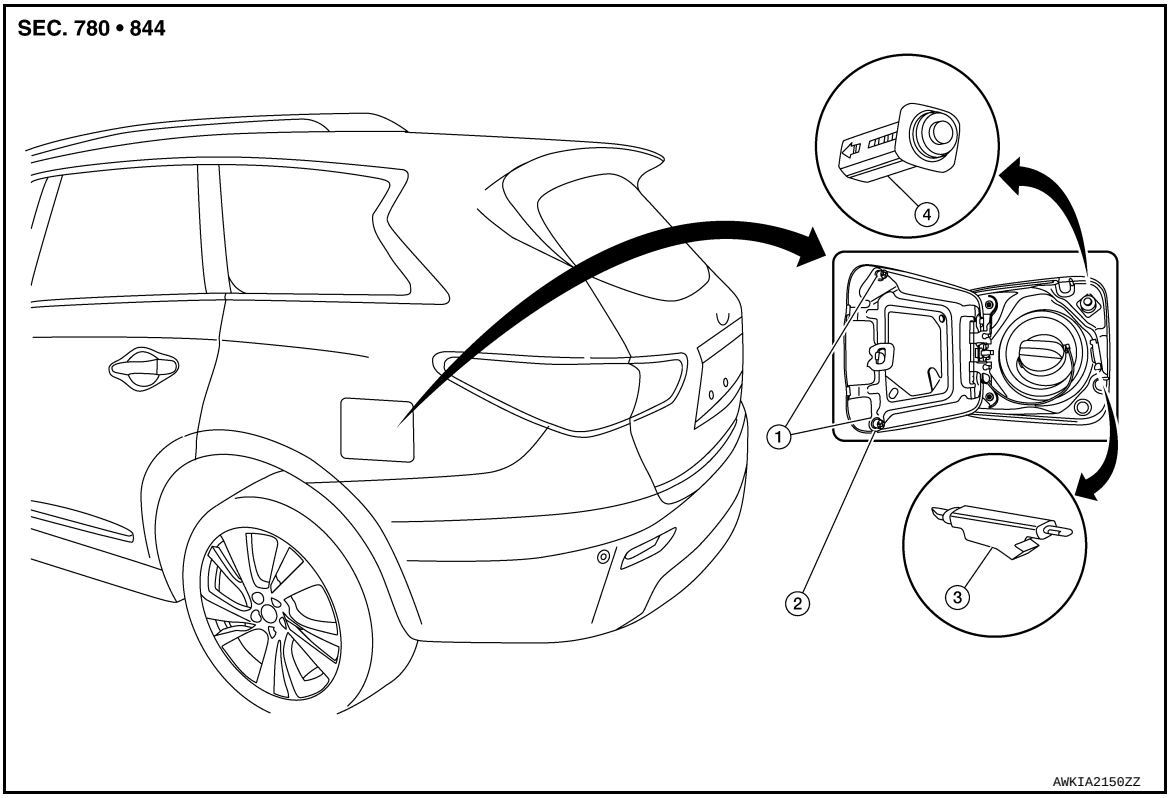
1. Remove the emergency handle mask, using a suitable tool to release.
2. From inside the vehicle, rotate emergency lever in the direction shown to unlock.



FUEL FILLER LID OPENER

Exploded View

INFOID:0000000008506313



1. Fuel filler lid bumper rubber
2. Fuel filler lid assembly
3. Fuel filler lid lock actuator
4. Fuel filler lid lock assembly

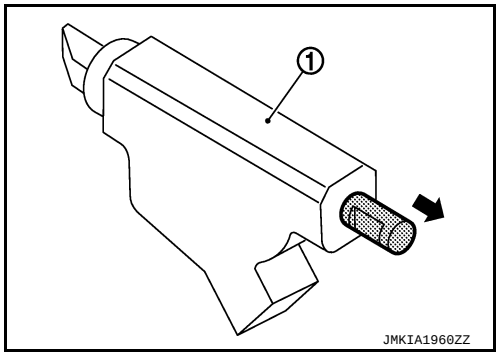
Removal and Installation

INFOID:0000000008506314

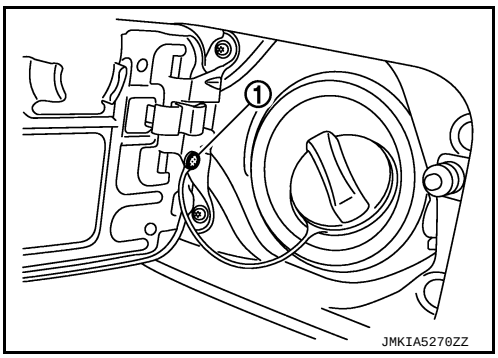
REMOVAL

NOTE:

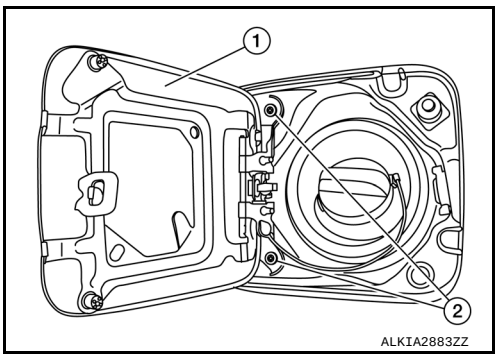
When fuel filler lid lock actuator (1) is not functioning correctly, pull the rod from inside the vehicle to open fuel filler lid assembly.



1. Remove fuel cap pin (1).



2. Remove bolts (2) and fuel filler lid assembly (1).



3. Remove luggage side lower finisher (LH). Refer to INT-28, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation".
4. Rotate lock nut counterclockwise and remove.
5. Remove fuel filler lid lock actuator by releasing the pawl.
6. Disconnect harness connector from fuel filler lid lock actuator.
7. Remove fuel filler lid lock assembly by releasing the pawls.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **After installation, check fuel filler lid assembly open/close, lock/unlock operation.**
- **After installation, apply touch-up paint (body color) to the head of fuel filler lid bolts.**

KEY CYLINDER

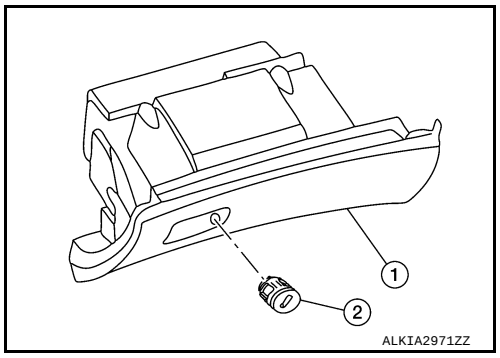
GLOVE BOX LID KEY CYLINDER

GLOVE BOX LID KEY CYLINDER : Removal and Installation

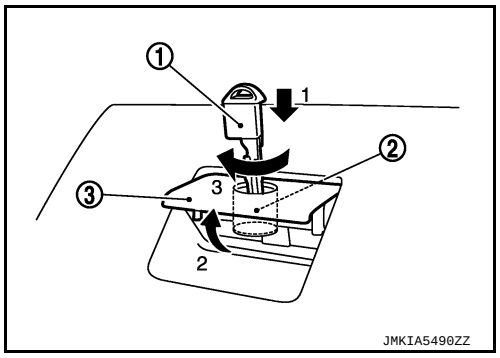
INFOID:0000000008506315

REMOVAL

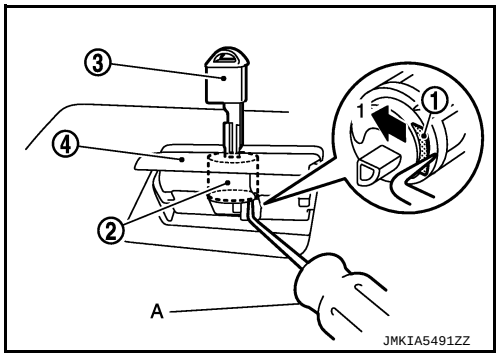
1. Remove glove box assembly (1) to access glove box lid key cylinder (2). Refer to IP-26, "Removal and Installation".



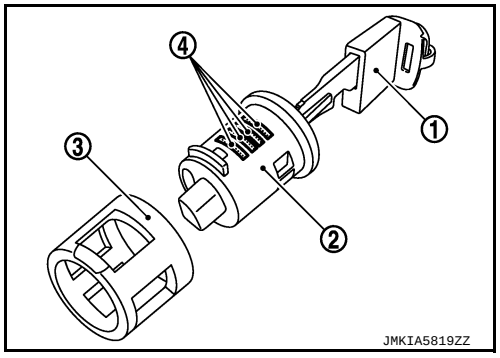
2. Insert key (1) into glove box lid lock cylinder (2).
3. Pull upward on glove box lid release handle (3).
4. Rotate key (1) and turn glove box lid key cylinder (2) to the lock position.



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.

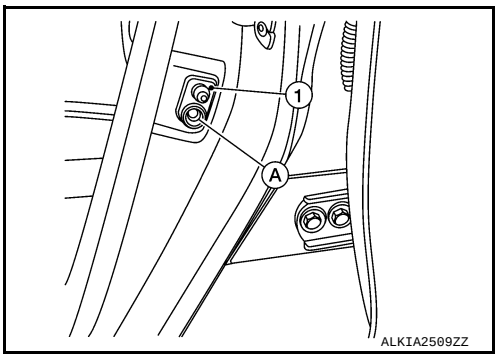
DOOR SWITCH

Removal and Installation

INFOID:0000000008506316

REMOVAL

1. Remove the door switch bolt (A).
2. Disconnect the harness connector from the door switch (1) and remove.



INSTALLATION

Installation is in the reverse order of removal.

DOOR REQUEST SWITCH

DRIVER SIDE

DRIVER SIDE : Removal and Installation

INFOID:0000000008506317

The driver side door request switch and driver side outside handle are serviced as an assembly. Refer to DLK-299, "OUTSIDE HANDLE : Removal and Installation".

PASSENGER SIDE

PASSENGER SIDE : Removal and Installation

INFOID:0000000008506318

The passenger side door request switch and passenger side outside handle are serviced as an assembly. Refer to DLK-299, "OUTSIDE HANDLE : Removal and Installation".

BACK DOOR

BACK DOOR : Removal and Installation

INFOID:0000000008506319

REMOVAL

1. Remove the back door outer finisher. Refer to EXT-43, "Removal and Installation".
2. Disconnect the harness connector from the back door request switch.
3. Remove the back door request switch.

INSTALLATION

Installation is in the reverse order of removal.

INSIDE KEY ANTENNA

INSTRUMENT CENTER

INSTRUMENT CENTER : Removal and Installation

INFOID:0000000008506320

REMOVAL

1. Remove cluster lid C upper. Refer to IP-22, "Removal and Installation - Cluster Lid C".
2. Remove the inside key antenna (instrument center) screw, and then remove inside key antenna (instrument center).

INSTALLATION

Installation is in the reverse order of removal.

CONSOLE

CONSOLE : Removal and Installation

INFOID:0000000008506321

REMOVAL

1. Remove the center console rear finisher. Refer to IP-18, "Removal and Installation".
2. Remove the inside key antenna (console) screws and inside key antenna (console).

INSTALLATION

Installation is in the reverse order of removal.

LUGGAGE ROOM

LUGGAGE ROOM : Removal and Installation

INFOID:0000000008506322

REMOVAL

1. Remove the second row seatback. Refer to SE-100, "Removal and Installation".
2. Remove the inside key antenna (luggage room) clip, and then remove inside key antenna (luggage room).

INSTALLATION

Installation is in the reverse order of removal.

OUTSIDE KEY ANTENNA

DRIVER SIDE

DRIVER SIDE : Removal and Installation

INFOID:0000000008506323

The driver side outside key antenna and driver side outside handle are serviced as an assembly. Refer to DLK-299, "OUTSIDE HANDLE : Removal and Installation".

PASSENGER SIDE

PASSENGER SIDE : Removal and Installation

INFOID:0000000008506324

The passenger side outside key antenna and passenger side outside handle are serviced as an assembly. Refer to DLK-299, "OUTSIDE HANDLE : Removal and Installation".

REAR BUMPER

REAR BUMPER : Removal and Installation

INFOID:0000000008506325

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.
3. Remove the rear bumper outside key antenna.

INSTALLATION

Installation is in the reverse order of removal.

INTELLIGENT KEY WARNING BUZZER

Removal and Installation

INFOID:0000000008506326

REMOVAL

NOTE:

The Intelligent Key warning buzzer is located in the left front area of the engine compartment.

1. Remove the Intelligent Key warning buzzer clips.
2. Disconnect the harness connector from the Intelligent Key warning buzzer and remove.

INSTALLATION

Installation is in the reverse order of removal.

REMOTE KEYLESS ENTRY RECEIVER

Removal and Installation

INFOID:0000000008506327

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.

INTELLIGENT KEY BATTERY

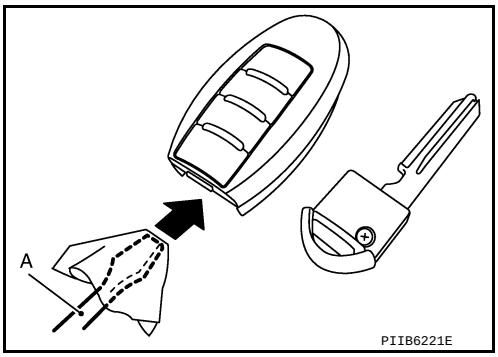
Removal and Installation

INFOID:0000000008506328

1. Release the lock knob on the back of the Intelligent Key and remove the key.
2. Insert a suitable tool (A) wrapped with a cloth into the slit of the corner and twist it to separate the upper part from the lower part.

CAUTION:

- **Do not insert a tool into the notches of the Intelligent Key to pry it open, as this may damage the circuit board.**
- **Do not use excessive force when opening the intelligent key, as this may result in damage to the internal components.**
- **Do not touch the circuit board or battery terminal.**
- **The key fob is water-resistant. However, if it does get wet, immediately wipe it dry.**



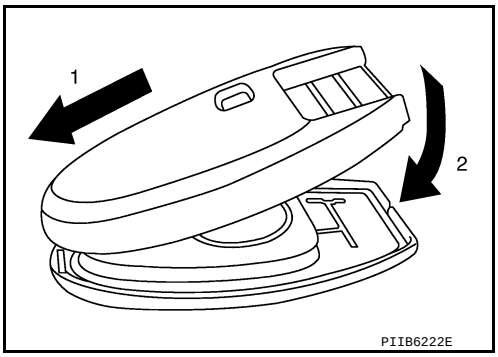
3. Replace the battery with a new one.

Battery replacement	**:Coin-type lithium battery (CR2025)**

4. Align the tips of the upper and lower parts, and then push them together until unit is securely closed.

CAUTION:

- **When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.**
- **After replacing the battery, check that all Intelligent Key functions work normally.**



AUTOMATIC BACK DOOR CONTROL MODULE

Removal and Installation

INFOID:0000000008506329

REMOVAL

1. Remove the luggage side lower finisher (LH). Refer to INT-28, "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.

BACK DOOR WARNING CHIME

Removal and Installation

INFOID:0000000008506330

REMOVAL

1. Remove the rear bumper fascia. Refer to EXT-20, "Removal and Installation".
2. Remove the back door warning chime nut.
3. Disconnect the harness connector from the back door warning chime and remove.

INSTALLATION

Installation is in the reverse order of removal.

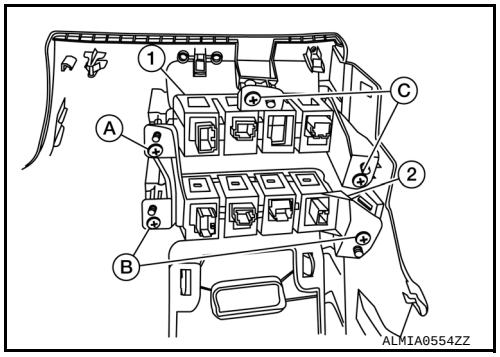
AUTOMATIC BACK DOOR MAIN SWITCH

Removal and Installation

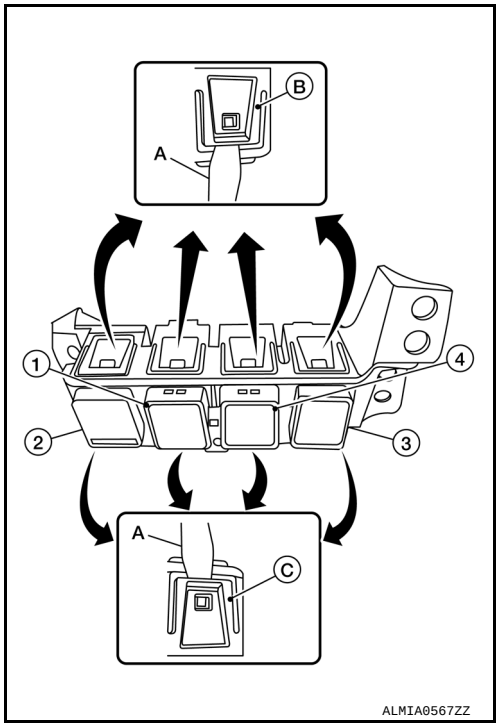
INFOID:0000000008506331

REMOVAL

1. Remove the instrument lower panel LH. Refer to IP-25, "Removal and Installation".
2. Remove the screws (A,B,C) that retain the upper (1) and lower (2) switch carriers.



3. Release upper (B) and lower (C) tab using a suitable tool (A), then remove the automatic back door main switch (3) from the upper switch carrier.
   (1): Heated steering wheel switch
   (2): Traction control switch
   (3): Power door on/off switch
   (4): Automatic back door switch



INSTALLATION

Installation is in the reverse order of removal.

AUTOMATIC BACK DOOR CLOSE SWITCH

Removal and Installation

INFOID:0000000008506332

REMOVAL

1. Open back door assembly.
2. Release the three pawls (one of the top and two on the bottom) using a suitable tool and remove the automatic back door close switch as an assembly.
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.

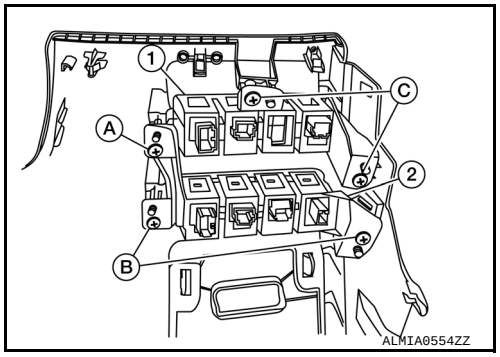
AUTOMATIC BACK DOOR SWITCH

Removal and Installation

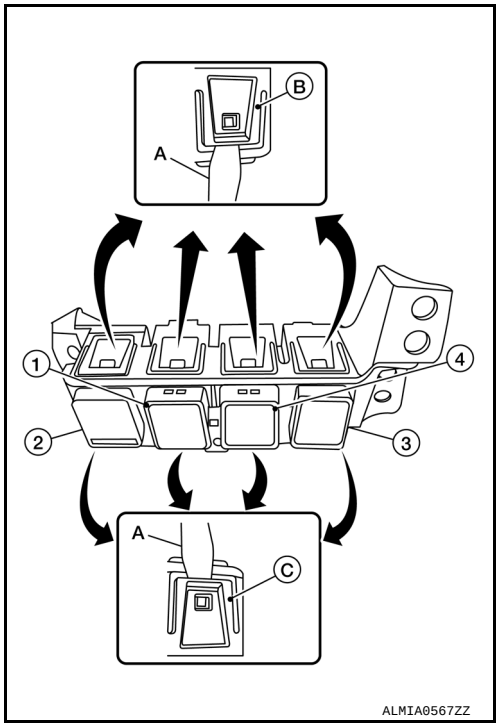
INFOID:0000000008506333

REMOVAL

1. Remove the instrument lower panel LH. Refer to IP-25, "Removal and Installation".
2. Remove the screws (A,B,C) that retain the upper (1) and lower (2) switch carriers.



3. Release upper (B) and lower (C) tab using a suitable tool (A), then remove the automatic back door opener switch (4) from the upper switch carrier.
   (1): Heated steering wheel switch
   (2): Traction control switch
   (3): Power door on/off switch
   (4): Automatic back door opener switch



INSTALLATION

Installation is in the reverse order of removal.