SECTION DLK
DOOR & LOCK

CONTENTS

PRECAUTION

PRECAUTIONS

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

INFOID:0000000009011429

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 “SRS AIR BAG” and “SEAT BELT” of this Service Manual.

WARNING:

Always observe the following items for preventing accidental activation.

- **To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that 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 “SRS AIR BAG”.**
- **Never 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:

Always observe the following items for preventing accidental activation.

- **When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never 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.**

Precautions For Xenon Headlamp Service

INFOID:0000000009011430

WARNING:

Comply with the following warnings to prevent any serious accident.

- **Disconnect the battery cable (negative terminal) or the power supply fuse before installing, removing, or touching the xenon headlamp (bulb included). The xenon headlamp contains high-voltage generated parts.**
- **Never work with wet hands.**
- **Check the xenon headlamp ON-OFF status after assembling it to the vehicle. Never turn the xenon headlamp ON in other conditions. Connect the power supply to the vehicle-side connector. (Turning it ON outside the lamp case may cause fire or visual impairments.)**
- **Never touch the bulb glass immediately after turning it OFF. It is extremely hot.**

CAUTION:

Comply with the following cautions to prevent any error and malfunction.

- **Install the xenon bulb securely. (Insufficient bulb socket installation may melt the bulb, the connector, the housing, etc. by high-voltage leakage or corona discharge.)**
- **Never perform HID circuit inspection with a tester.**
- **Never touch the xenon bulb glass with hands. Never put oil and grease on it.**
- **Dispose of the used xenon bulb after packing it in thick vinyl without breaking it.**
- **Never wipe out dirt and contamination with organic solvent (thinner, gasoline, etc.).**

Work

INFOID:0000000009011431

- After removing and installing the opening/closing parts, be sure to carry out fitting adjustments to check their operational.
- Check the lubrication level, damage, and wear of each part. If necessary, grease or replace it.

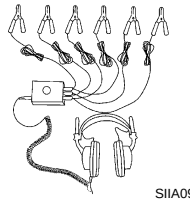
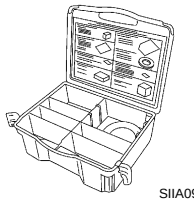
PREPARATION

PREPARATION

Special Service Tools

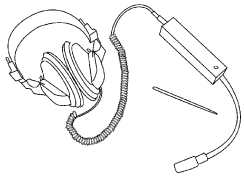
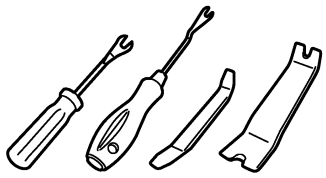
INFOID:0000000009821959

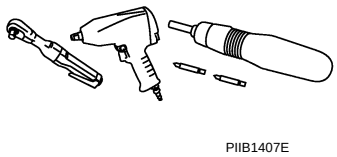
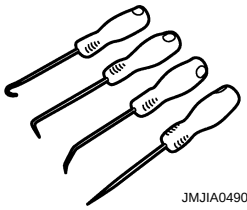
The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name	Description
(J-39570) Chassis ear  SIIA0993E	Locates the noise
(J-50397) NISSAN Squeak and Rattle Kit  SIIA0994E	Repairs the cause of noise

Commercial Service Tools

INFOID:0000000009011432

Tool name	Description
Engine ear  SIIA0995E	Locates the noise
Remover tool  JMKIA3050ZZ	Removes the clips, pawls, and metal clips

Tool name	Description
Power tool  PIIB1407E	
Hook and pick tool  JMJIA0490ZZ	Press tumbler stopper

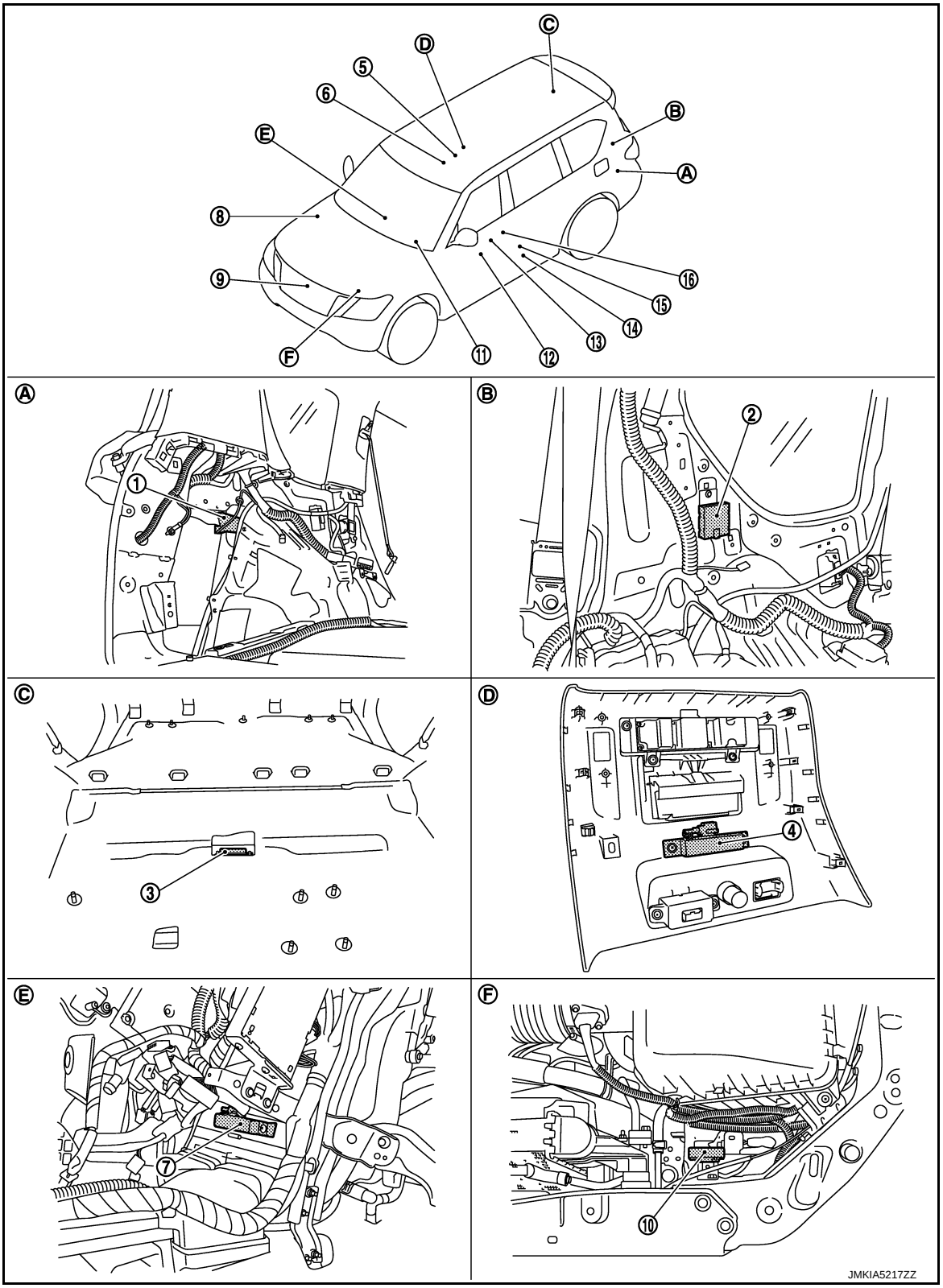
SYSTEM DESCRIPTION

COMPONENT PARTS

DOOR LOCK SYSTEM

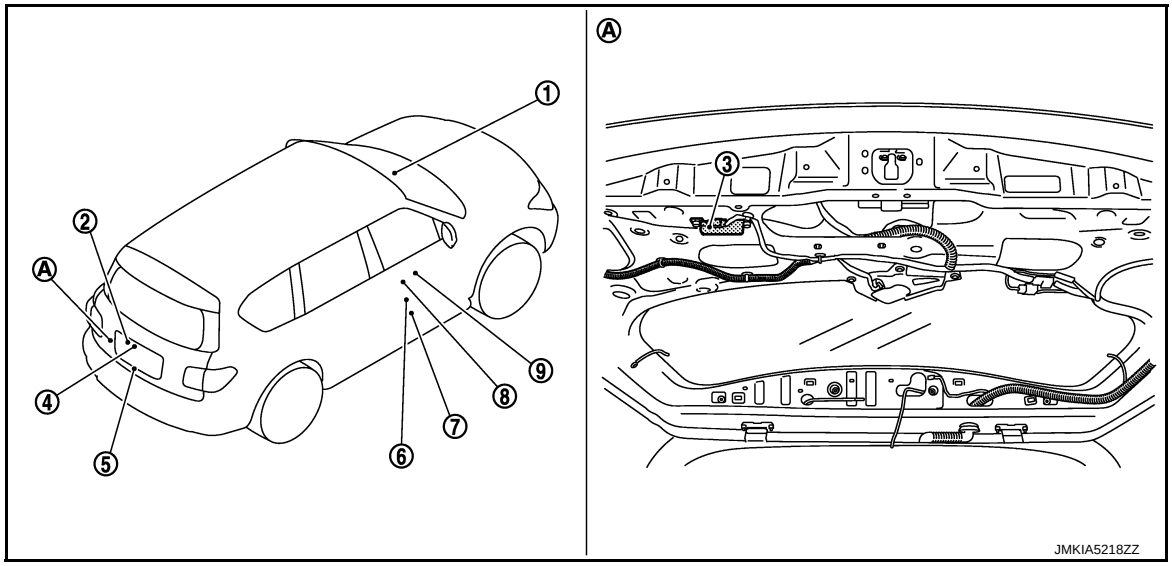
DOOR LOCK SYSTEM : Component Parts Location

INFOID:0000000009011433



1. Fuel lid lock actuator
2. Remote keyless entry receiver
3. Inside key antenna (luggage room)
4. Inside key antenna (console)
5. Air bag diagnosis sensor unit Refer to SRC-7, "Component Parts Location"
6. A/T assembly (TCM) Refer to TM-11, "A/T CONTROL SYSTEM : Component Parts Location"
7. Inside key antenna (instrument center)
8. IPDM E/R Refer to PCS-4, "Component Parts Location"
9. Horn
10. Intelligent Key warning buzzer
11. BCM Refer to BCS-4, "BODY CONTROL SYSTEM : Component Parts Location"
12. Power window main switch (door lock and unlock switch)
13. Outside key antenna (driver side)
14. Front door switch (driver side)
15. Front door lock assembly (driver side)
16. Front door request switch (driver side)

A. View with luggage side finisher lower LHD and rear speaker removed
B. View with luggage side finisher upper removed
C. Under the second seat seatback
D. View with console rear finisher removed
E. View with cluster lid C removed
F. Engine room LH



1. Push-button ignition switch
2. Back door request switch
3. Outside key antenna (back door)
4. Back door opener switch
5. Back door lock assembly
6. Front door lock assembly (passenger side)
7. Front door switch (passenger side)
8. Front door request switch (passenger side)
9. Outside key antenna (passenger side)

A. View with back door finisher inner removed

DOOR LOCK SYSTEM : Component Description

INFOID:0000000009011434

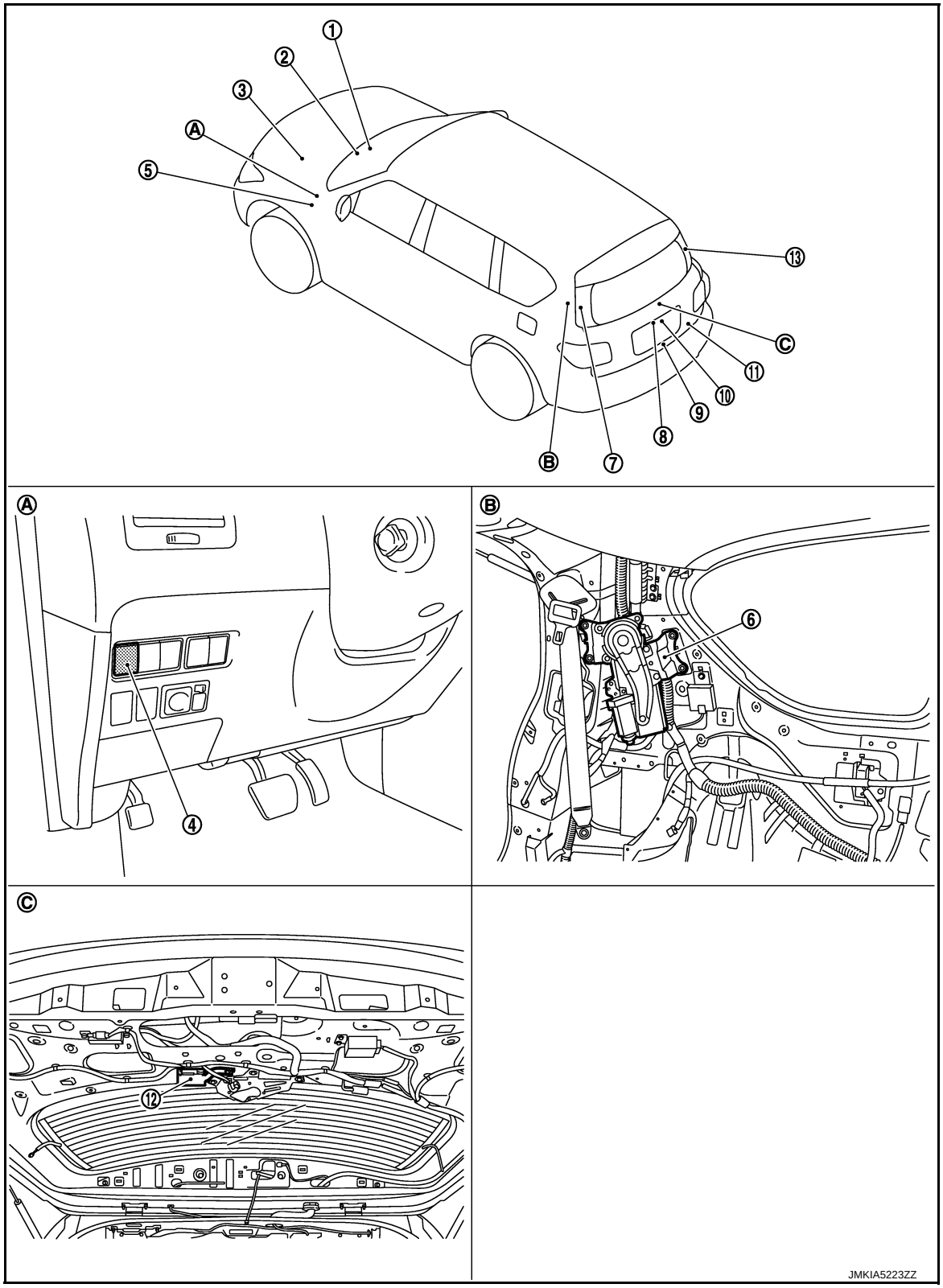
Item	Function
BCM	Controls the door lock system
IPDM E/R	Sounds horn via CAN communication between BCM
Air bag diagnosis sensor unit	• Transmits air bag signal to BCM • Refer to SRC-8, "Component Description"

Item	Function
Combination meter	• Displays each operation method guide and warning for system malfunction • Performs operation method guide and warning with buzzer • Transmits vehicle speed signal to CAN communication line
TCM	Transmits shift position signal to BCM via CAN communication line
Remote keyless entry receiver	Receives Intelligent Key operation and transmits to BCM
Inside key antenna	Detects if Intelligent Key is inside the vehicle
Outside key antenna	Detects if Intelligent Key is outside the vehicle
Push-button ignition switch	Inputs push-button ignition switch ON/OFF condition to BCM
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 power window main switch and front power window switch (passenger side)
Door request switch	• Detects if each door request switch is press/release • Integrated in the outside handle (driver side, passenger side) and back door opener switch assembly
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound
Intelligent Key	The following functions are available when having and carrying electronic ID • Door lock/unlock • Engine start • Remote control entry function is available when operating on button
Hazard warning lamp	Warns the user of the lock/unlock condition and inappropriate operations with the lamps blink
Door lock actuator	Output lock/unlock signal from BCM and locks/unlocks each door
Fuel lid lock actuator	Output lock/unlock signal from BCM and locks/unlocks fuel filler lid

AUTOMATIC BACK DOOR SYSTEM

AUTOMATIC BACK DOOR SYSTEM : Component Parts Location

INFOID:0000000009011435



1. Combination meter
2. BCM
   Refer to BCS-4, "BODY CONTROL SYSTEM : Component Parts Location"
3. ABS actuator and electric unit
   Refer to BRC-9, "Component Parts Location"
4. Automatic back door switch
5. Automatic back door main switch
6. Automatic back door control module

7. Touch sensor LH
8. Back door request switch
9. Back door lock assembly
10. Back door opener switch
11. Automatic back door close switch
12. Automatic back door warning buzzer
13. Touch sensor RH
A. View with luggage side finisher upper removed
B. View with back door finisher inner removed

AUTOMATIC BACK DOOR SYSTEM : Component Description

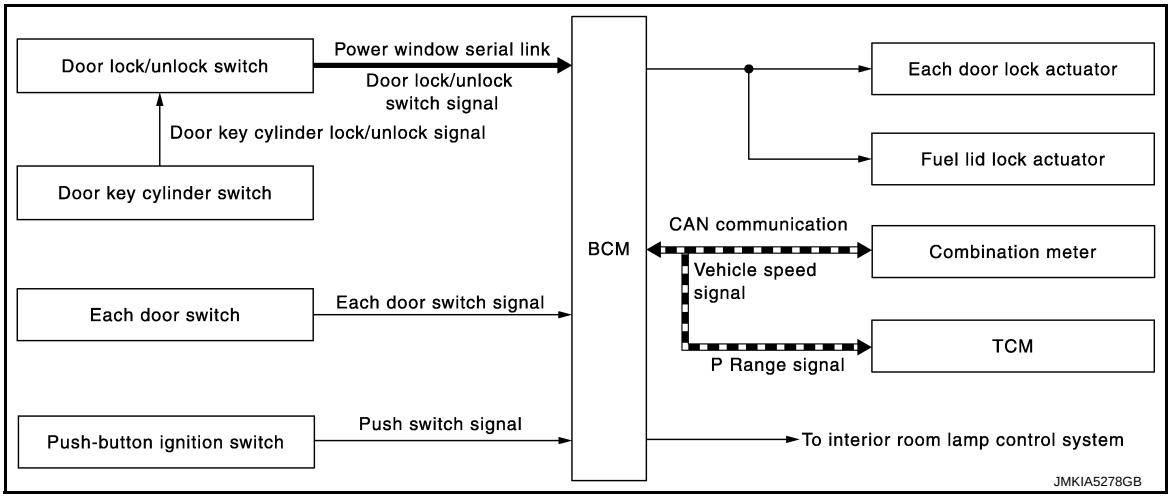
INFOID:0000000009011436

Item	Function
Automatic back door control module	Automatic back door control unit, encoder, automatic back door motor and clutch are installed • Automatic back door control unit: Controls the automatic back door system • Encoder: Automatic back door control unit receives the pulse signals from encoders A and B that occurred due to synchronization with the back door operation. The automatic back door control unit calculates the back door position, operation direction, and operation speed according to the received pulse signals. • Automatic back door motor: Inputs open/close signal from automatic back door control unit and activates the automatic back door open/close operation. • Clutch: Performs the duty control of the power supply to control the operation speed of the back door.
BCM	Transmits and receives signals to the automatic back door control module
ABS actuator and electric unit	Transmits vehicle speed signal to CAN communication line
Combination meter	Transmits vehicle speed signal to CAN communication line
Automatic back door warning buzzer	Warns the user of the automatic back door condition and inappropriate operations with the buzzer 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 unit 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

SYSTEM (POWER DOOR LOCK SYSTEM)

System Diagram

INFOID:0000000009011437



System Description

INFOID:0000000009011438

DOOR LOCK FUNCTION

Door Lock and Unlock Switch

- The door lock and unlock switch (driver side) is build into power window main switch.
- The door lock and unlock switch (passenger side) is build 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 DLK-40, "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-9, "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 position to any position other than P.
BCM outputs the lock signal to all door lock actuators when it detects that the ignition switch is in the ON position, all doors are closed and the shift signal received from the TCM via CAN communication shifted from the P position to any position other than P.

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

Setting change of Automatic Door Lock/Unlock Function

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

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

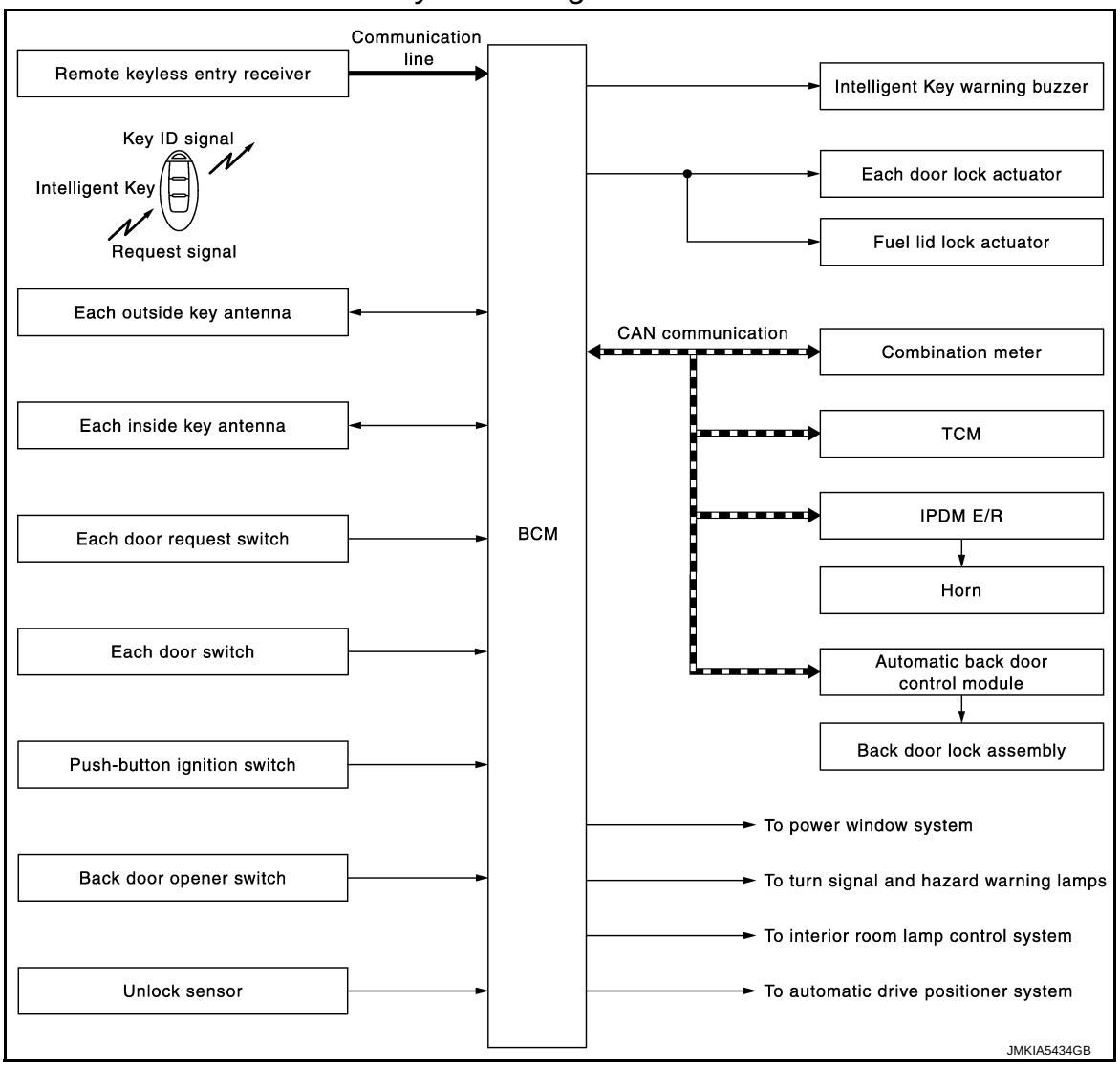
The automatic door lock/unlock function ON/OFF can be switched by performing the following operation.

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:0000000009011439



INTELLIGENT KEY SYSTEM : System Description

INFOID:0000000009011440

- 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.HAC-15
- 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-19
Back door opener	The back door can be opened by carrying the Intelligent Key and pressing the back door opener switch	DLK-22
Remote keyless entry	Lock/unlock can be performed by pressing the remote controller button of the Intelligent Key	DLK-23

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-26
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-27
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-28
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-9
Panic alarm	When Intelligent Key panic alarm button is pressed, horn sounds		SEC-15
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-21
	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-15
	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

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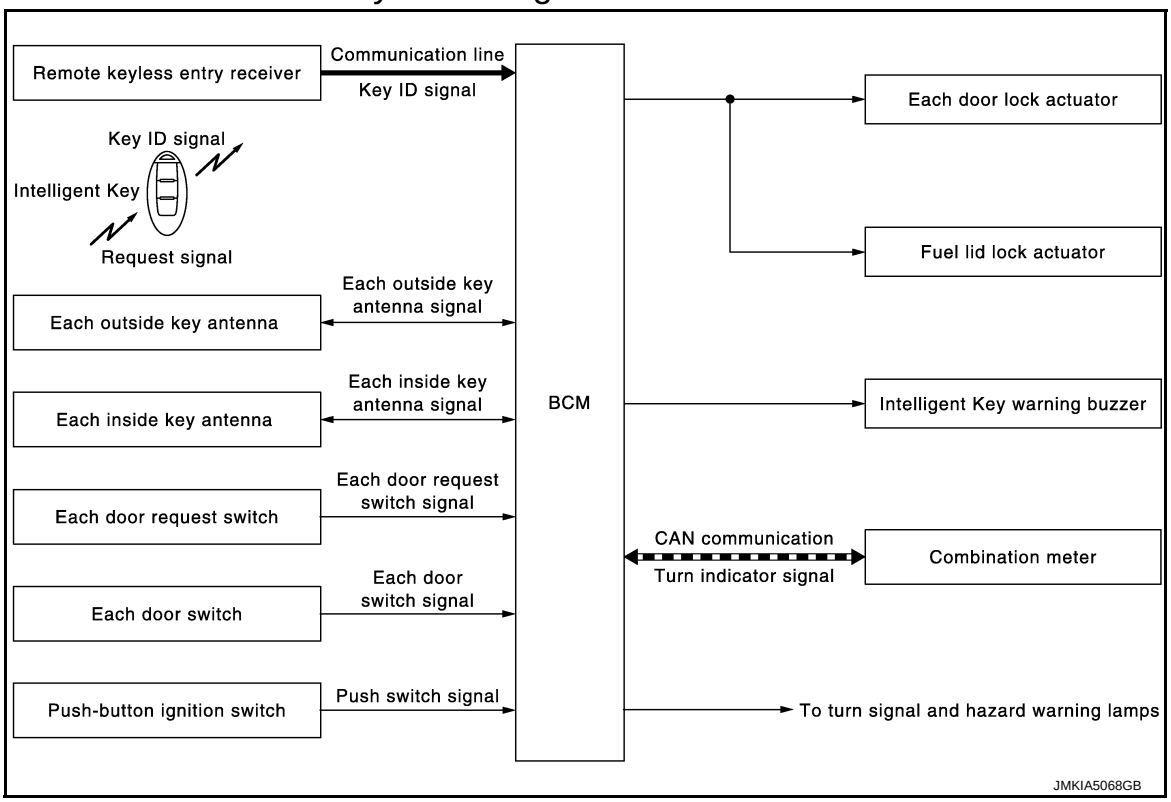


DOOR LOCK FUNCTION : System Description

INFOID:0000000009011442

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. And 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

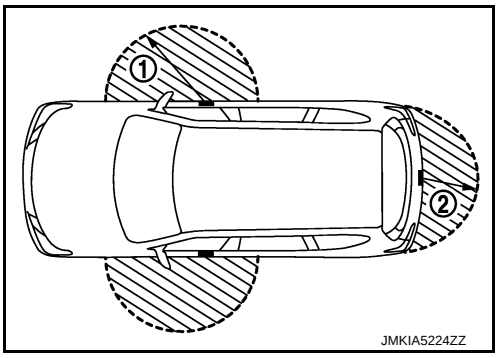
If the following conditions are satisfied, door lock/unlock operation is performed if the door request switch is operated.

Each door request switch operation	Operation condition
Lock	• All doors are closed • Panic alarm is not activated • P 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 an 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 DLK-42, "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 DLK-42, "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 DLK-42, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

LIST OF OPERATION RELATED PARTS

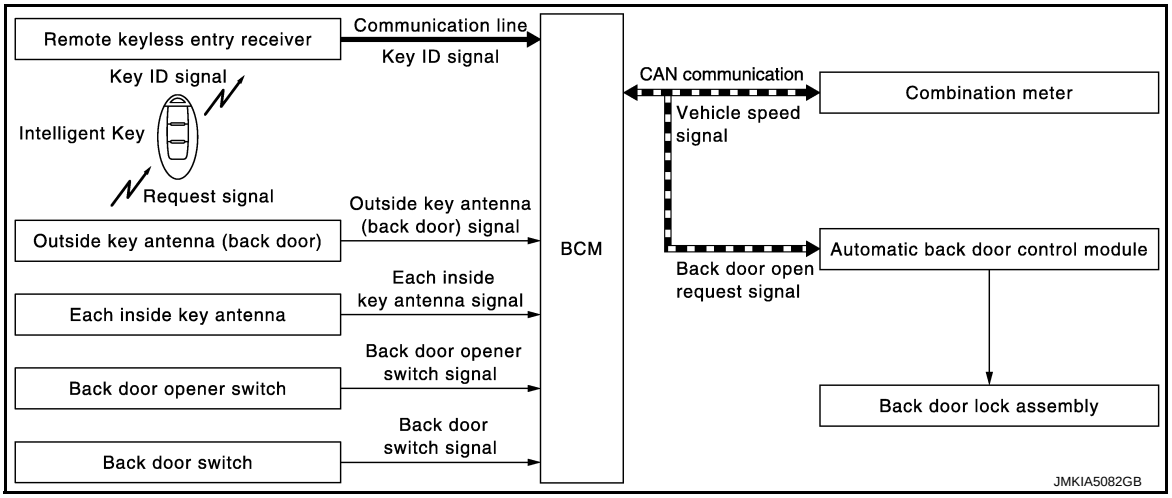
Parts marked with × are the parts related to operation.

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:0000000009011443



BACK DOOR OPEN FUNCTION : System Description

INFOID:0000000009011444

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.Refer to DLK-32, "System Description".

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 (back door) and inside key antenna and transmits the request signal to the Intelligent Key. And then, check 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 unit via CAN communication.
- Automatic back door control unit 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-32, "System Description".

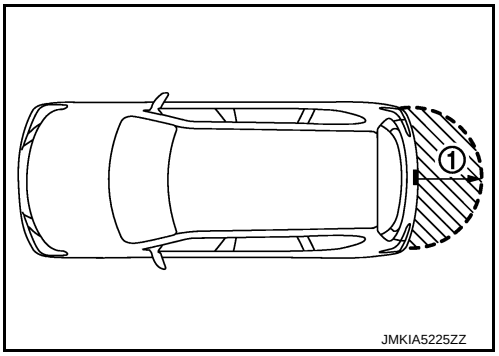
OPERATION CONDITION

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 (back door) 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 (back door) (1). However, this operating range depends on the ambient conditions.



LIST OF OPERATION RELATED PARTS

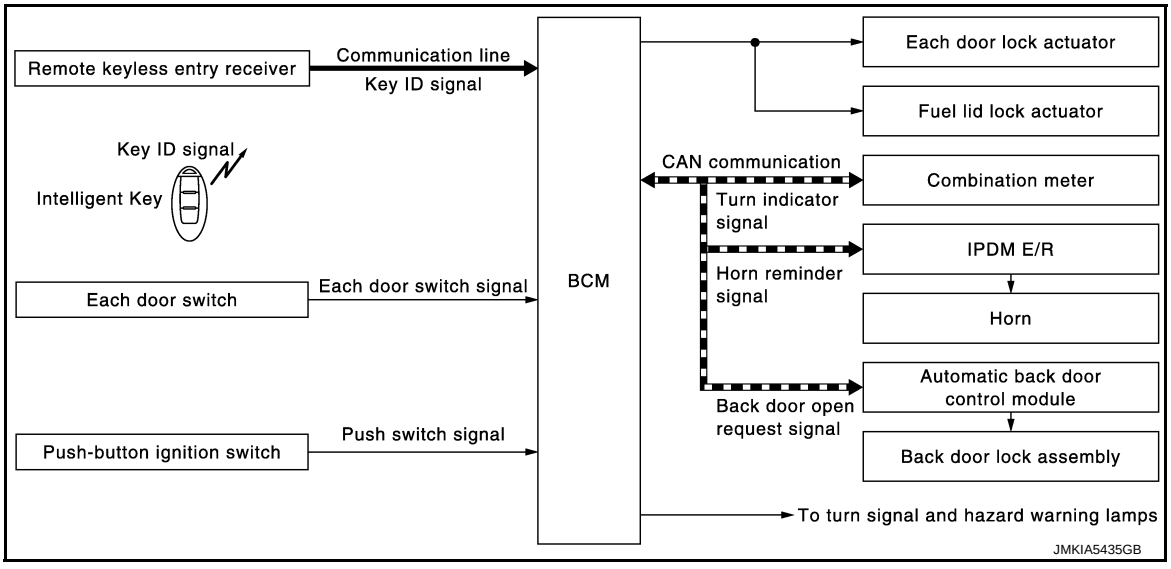
Parts marked with × are the parts related to operation.

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

REMOTE KEYLESS ENTRY FUNCTION

REMOTE KEYLESS ENTRY FUNCTION : System Diagram

INFOID:0000000009011445



REMOTE KEYLESS ENTRY FUNCTION : System Description

INFOID:0000000009011446

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

OPERATION AREA

To check that the Intelligent Key works normally, use within 1 m (3 ft) range of each doors, however the operable range may differ according to surroundings.

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 position warning is not activated
Unlock	Panic alarm is not activated

SELECTIVE UNLOCK FUNCTION

- When an 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 DLK-40, "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 DLK-42, "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)

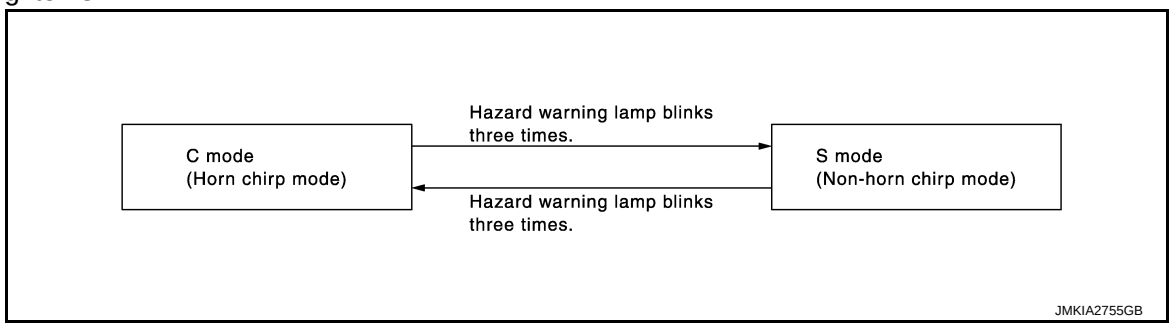
How to Change Hazard and Horn Reminder Mode

With CONSULT

Hazard and horn reminder operation mode can be changed using CONSULT.
Refer to DLK-42, "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-32, "System Description".

REMOTE ENGINE START FUNCTION

Engine start can be operated by Intelligent Key button operation.
Refer to SEC-9, "INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION : System Description".

LIST OF OPERATION RELATED PARTS

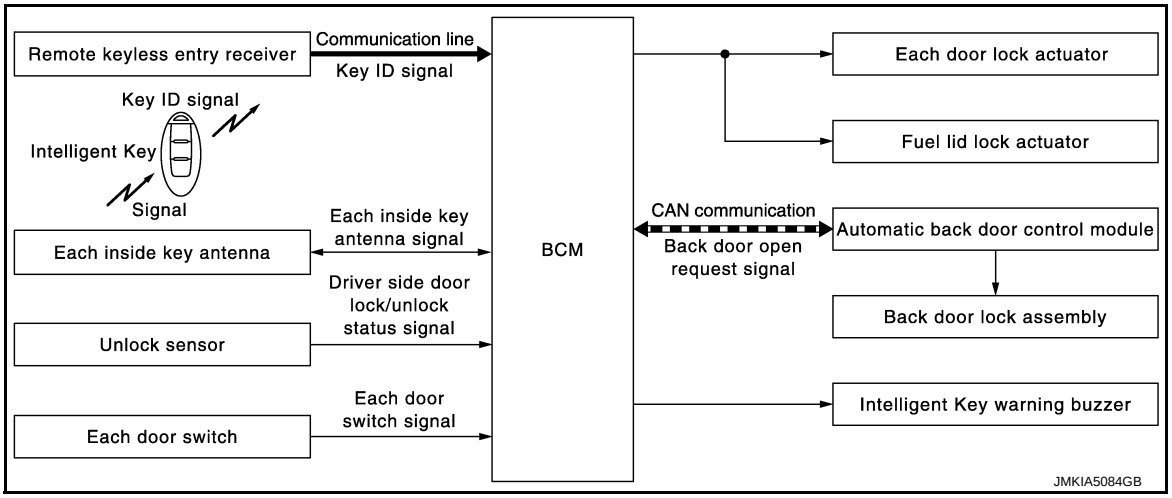
Parts marked with × are the parts related to operation.

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	×					×	×					×	×

KEY REMINDER FUNCTION

KEY REMINDER FUNCTION : System Diagram

INFOID:0000000009011447



KEY REMINDER FUNCTION : System Description

INFOID:0000000009011448

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
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 perform in these cases.

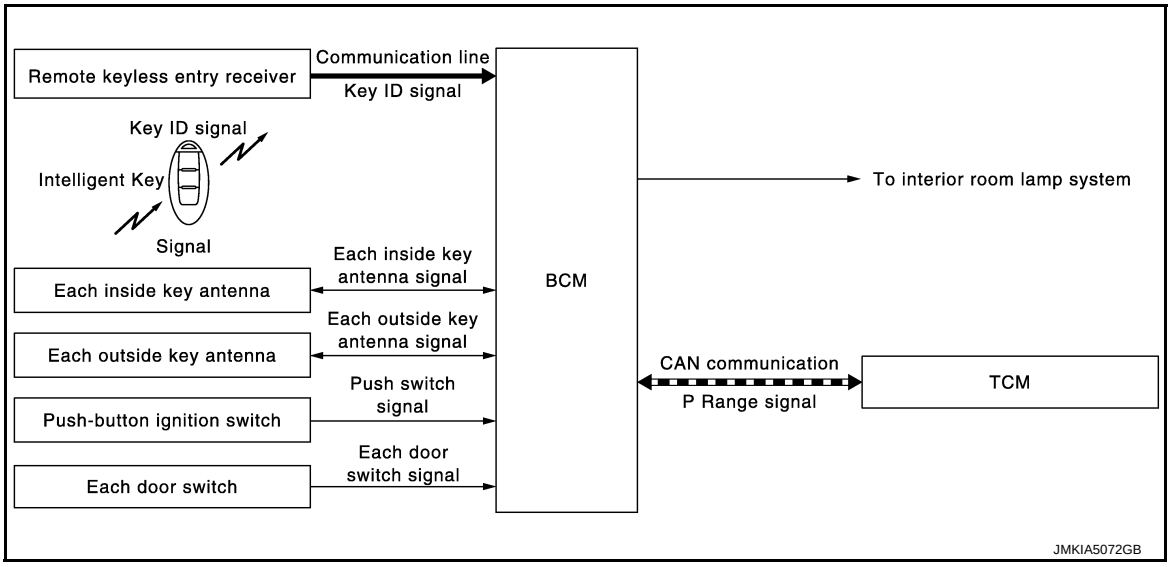
CAUTION:

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

WELCOME LIGHT FUNCTION

WELCOME LIGHT FUNCTION : System Diagram

INFOID:0000000009011449



WELCOME LIGHT FUNCTION : System Description

INFOID:0000000009011450

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.

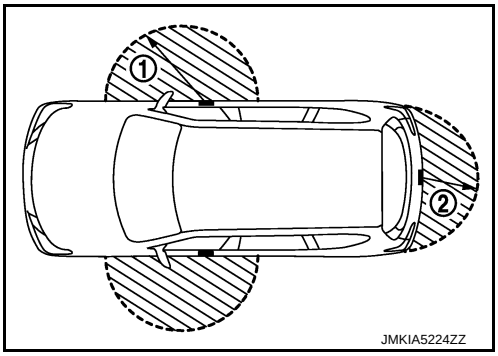
OPERATION CONDITION

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

Function	Operation condition
Welcome light function	• All door are closed • All doors is locked • Ignition switch: OFF position • Shift position: P 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 DLK-42, "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:0000000009011451

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

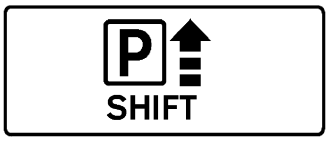
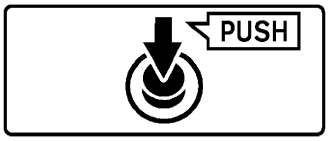
Once the following condition from below is established, alert or warning is executed.

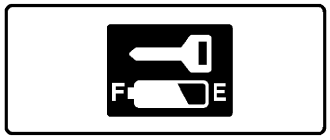
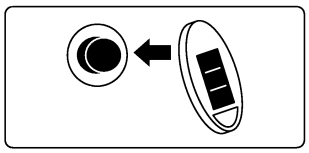
Warning/Information functions	Operation procedure
Intelligent Key system malfunction	When a malfunction is detected on BCM, “KEY” warning lamp illuminates

Warning/Information functions		Operation procedure
OFF position warning	For internal	When condition A, B or condition C is satisfied • Condition A - Ignition switch: ACC position - Door switch (driver side): ON (Door is open) • Condition B - Turn ignition switch from ON to OFF while door is open • Condition C - Intelligent Key backside is contacted to ignition switch while brake pedal is depressed and ignition switch is LOCK or OFF (When the Intelligent Key battery is discharged) - Door switch (driver side): ON (Door is open)
	For external	OFF position warning (For internal) is in active mode, driver side door is closed **NOTE:** OFF position (For external) active only when each of the sequence occurs as below: P position warning → ACC warning → OFF position warning (For internal) → OFF position warning (For internal)
P position warning	For internal	• Shift position: Except P 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 position warning (for inside vehicle) is ON
ACC warning		• When P position warning is in active mode, shift position changes P 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 position* • Engine is stopped
	Ignition switch is except ON position	• Ignition switch: Except ON position • Shift position: P 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	—	 JMKIA0037GB	Activate	—
	For external			—	Active
ACC warning		—	 JMKIA0047GB	Activate	—
Take away warning	Door is open to close	—	 JMKIA4906ZZ	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		—	 JMKIA4906ZZ	—	—
Engine start information		—	 JMKIA0032GB	—	—

Warning/Information functions	"KEY" warning lamp	Information display (combination meter)	Warning chime	
			Combination meter buzzer	Intelligent Key warning buzzer
Intelligent Key low battery warning	—	 JMKIA3049ZZ	—	—
Key ID verification information	—	 JMKIA4907ZZ	—	—

LIST OF OPERATION RELATED PARTS

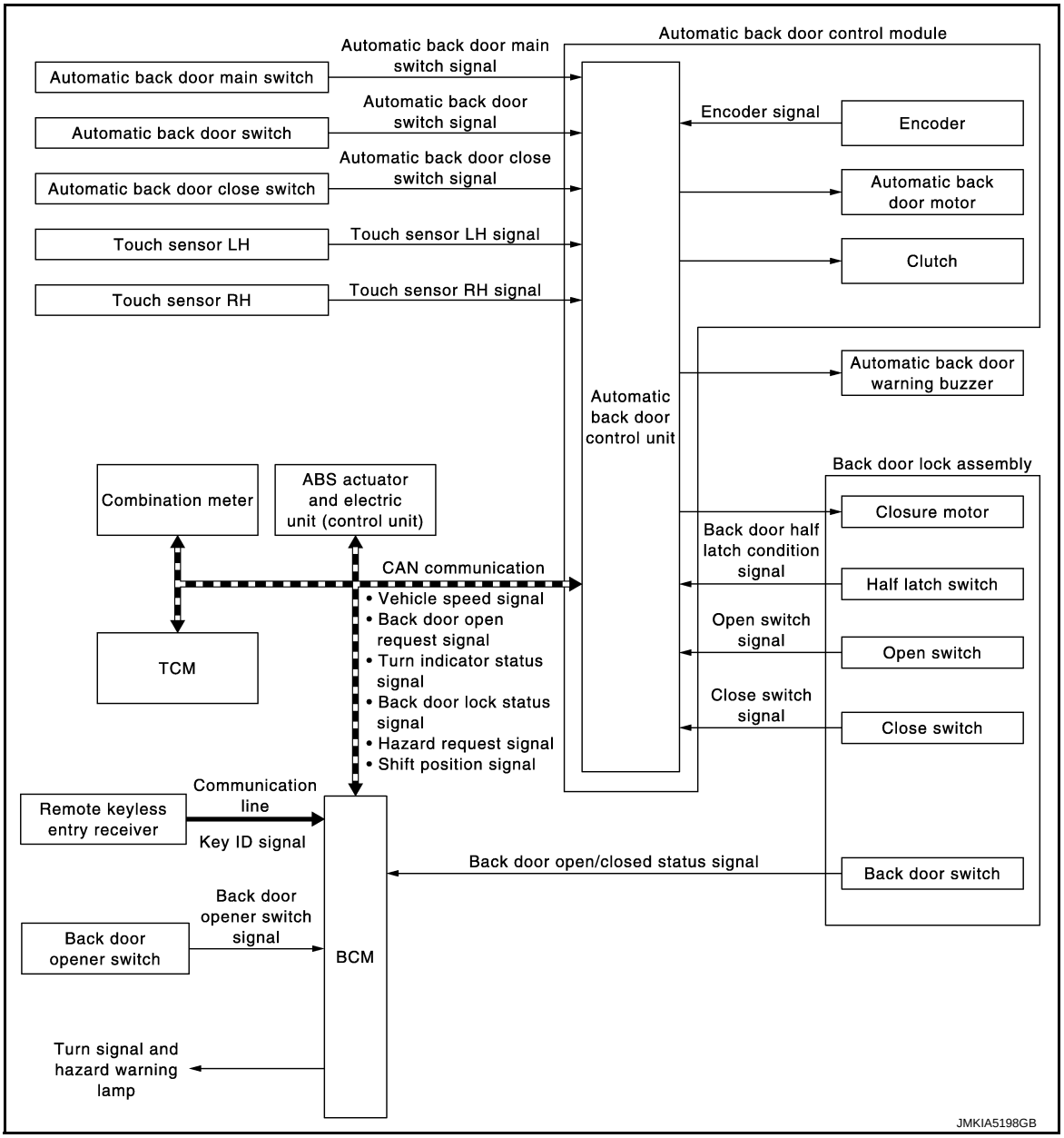
Parts marked with × are the parts related to operation.

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 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:0000000009011452



System Description

INFOID:0000000009011453

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 automatic back door motor opens the back door to the fully open position. Reverse the closure motor 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 automatic back door motor closes the back door to the half-latch position, then the back door closure motor to the full latch position. Then, reverse the closure motor to the neutral position.

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 unit via CAN communication, and automatic back door control unit opens back door lock assembly.

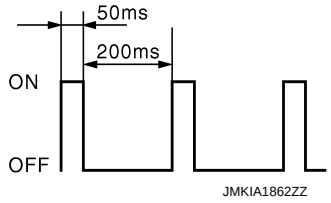
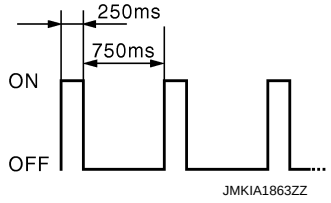
Closure Function

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, reverse the closure motor to the neutral position.

WARNING FUNCTION

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

Buzzer Operation Condition

Pattern		Time	Description
A		0.75 sec.	Operation start announcement Anti-pinch operation start announcement
B	Pi---	2.0 sec.	During the closure operation, the touch sensor detects any trapped foreign material and 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

ANTI-PINCH FUNCTION

During auto 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 in the door's path, a warning chime sounds and the back door operates in the open direction until it is fully open.

Operation Condition

Detection method		Encoder pulse	Touch sensor
Applicable operation		Open/close operation	Close operation
Operation when any trapped foreign material is detected	Stop the vehicle	Buzzer sounds (pattern A) and 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 (buzzer 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

Detection method	Encoder pulse	Touch sensor
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)]
Switch operation during reverse operation	Receive	
Number of allowable reverse operations	Perform the intermittent clutch function after 2 reverse operations regardless of the operation direction	

INTERMITTENT CLUTCH FUNCTION

If the main switch is turned to OFF during auto operation, the back door may be closed suddenly because the operation is interrupted immediately when the operation cannot be continued because of the detection of a system malfunction. Therefore, operate the clutch intermittently to stabilize the back door behavior and ensure safety.

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[*1]		—	—	—	ON	ON	
Ignition position	ON	ACC/ LOCK	—	—		—	ON	ACC/ LOCK
Shift selector lever	P position	—	—	—	—	—	P position	—
Vehicle speed	0 km/h							
Back door lock condition	—		—	—	—	—	Unlock[*2]	
Touch sensor	Normal							
Power supply (Automatic power back door control unit)	Approx. 11 V or more							

[*1]: For Mexico models

[*2]: 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 unit performs the control as follows.

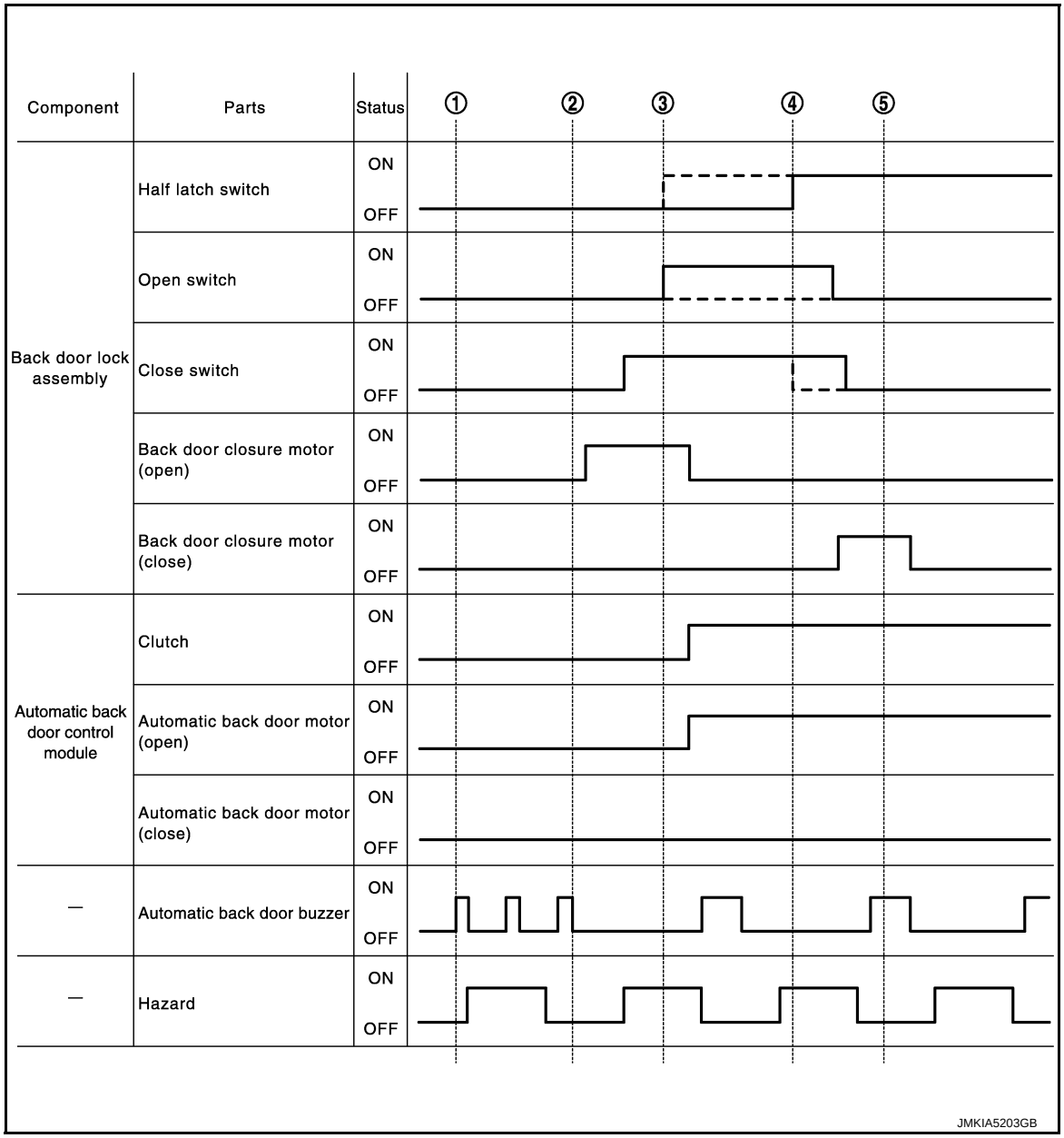
Item (Condition)	Back door condition
Main Switch (ON → OFF)	• Motor: OFF • Clutch: OFF (Intermittent clutch function)
Vehicle stop condition (open operation) • IGN ON and shift P position→IGN ON and other than P position • IGN OFF and shift N position → IGN ON and N position	The operation is continued
Operation condition release during the operation start announcement condition	Automatic back door function does not operate

Item (Condition)	Back door condition	
Vehicle speed (0 km/h → More than 0 km/h)	Open operation	Operation stop and intermittent clutch function [Back door fully closed or buzzer sounds until the vehicle stops (pattern C)]
	Close operation	The operation is continued [buzzer 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 intermittent clutch function)
	Close operation	Intermittent clutch function
	Closure (close) operation	Closure (open) operation and buzzer sounds (pattern B)
	Closure [open (return the latch to the neutral position)]	The operation is continued
Operation time (More than approx. 30 sec.)	Intermittent clutch function	
Back door opener switch (OFF → ON)	Open/close operation	The operation is continued
	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, half latch switch and back door state)	Intermittent clutch function	

TIME CHART FOR AUTOMATIC POWER BACK DOOR SYSTEM

Fully Closed to Fully Open Operation

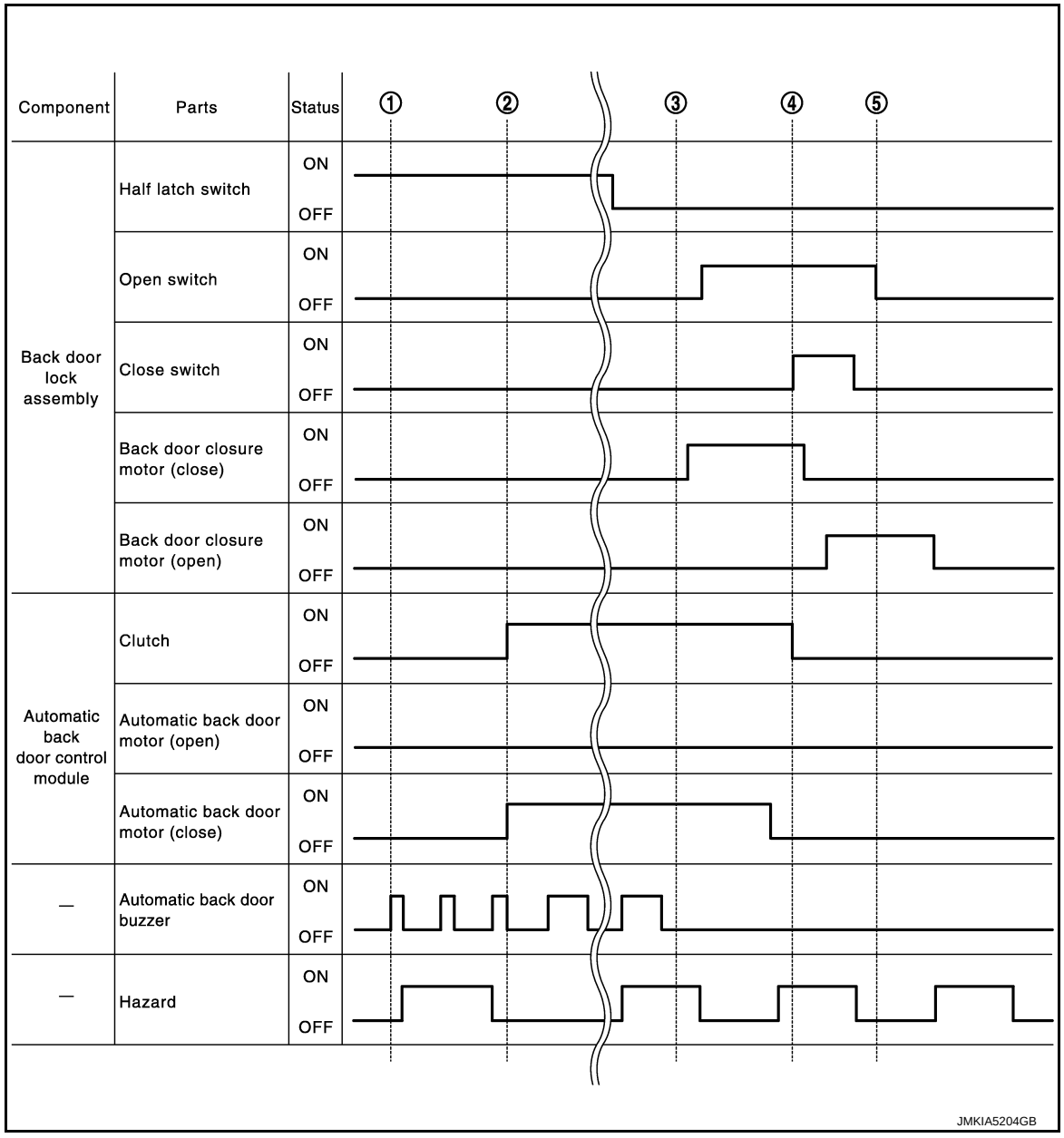
When operating the automatic back door switch, automatic back door opener switch and Intelligent Key in the fully closed position, the system operates as follows.



1. Operates the buzzer and hazard after the operation enable conditions are established
2. The back door closure motor performs the open operation after the buzzer (pattern A) stops sounding
3. Stops the back door closure motor open operation after turning the open switch to ON
   Then, operate the automatic back door motor and clutch 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 weather-strip. 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 buzzer and hazard after the operation enable conditions are established
2. After the buzzer (pattern A) stops sounding, operates the automatic back door motor and clutch to perform the back door close operation
3. The back door closure motor performs the close operation after 300 msec. or more from 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:0000000009011454

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:0000000009814712

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

Diagnosis mode	Function Description
Work Support	Changes the setting for each system function.
Self Diagnostic Result	Displays the diagnosis results judged by BCM. Refer to BCS-57, "DTC Index".
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM.
Data Monitor	The BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Ecu Identification	The BCM part number is displayed.
Configuration	• Read and save the vehicle specification. • Write the vehicle specification when replacing BCM.

SYSTEM APPLICATION
BCM can perform the following functions for each system.
NOTE:
It can perform the diagnosis modes except the following for all sub system selection items.

×: Applicable item

System	Sub system selection item	Diagnosis mode		
		Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
—	AIR CONDITONER*		×	×
• Intelligent Key system • Engine start system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
IVIS	IMMU	×	×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
—	AIR PRESSURE MONITOR*	×	×	×

*: This item is indicated, but not used.

FREEZE FRAME DATA (FFD)
The BCM records the following vehicle condition at the time a particular DTC is detected, and displays on CONSULT.

CONSULT screen item	Indication/Unit	Description	
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected	
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected	
Vehicle Condition	SLEEP>LOCK	Power position status of the moment a particular DTC is detected	While turning BCM status from low power consumption mode to normal mode (Power supply position is “LOCK”)
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is “OFF”.)
	LOCK>ACC		While turning power supply position from “LOCK” to “ACC”
	ACC>ON		While turning power supply position from “ACC” to “IGN”
	RUN>ACC		While turning power supply position from “RUN” to “ACC” (Vehicle is stopping and selector lever is except P position.)
	CRANK>RUN		While turning power supply position from “CRANKING” to “RUN” (From cranking up the engine to run it)
	RUN>URGENT		While turning power supply position from “RUN“ to “ACC” (Emergency stop operation)
	ACC>OFF		While turning power supply position from “ACC” to “OFF”
	OFF>LOCK		While turning power supply position from “OFF” to “LOCK”
	OFF>ACC		While turning power supply position from “OFF” to “ACC”
	ON>CRANK		While turning power supply position from “IGN” to “CRANKING”
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is “OFF”.) to low power consumption mode
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is “LOCK”.) to low power consumption mode
	LOCK		Power supply position is “LOCK” (Ignition switch OFF with steering is locked.)
	OFF		Power supply position is “OFF” (Ignition switch OFF with steering is unlocked.)
	ACC		Power supply position is “ACC” (Ignition switch ACC)
	ON		Power supply position is “IGN” (Ignition switch ON with engine stopped)
	ENGINE RUN		Power supply position is “RUN” (Ignition switch ON with engine running)
	CRANKING		Power supply position is “CRANKING” (At engine cranking)
IGN Counter	0 - 39	The number of times that ignition switch is turned ON after DTC is detected • The number is 0 when a malfunction is detected now. • The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. • The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.	

DOOR LOCK

DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)

INFOID:0000000009011456

BCM CONSULT FUNCTION

CONSULT performs the following functions via CAN communication with BCM.

WORK SUPPORT

Monitor item	Description
DOOR LOCK-UNLOCK SET	Selective unlock function mode can be changed to operation with this mode • On: Operate • Off: Non-operation
AUTOMATIC DOOR LOCK SELECT	Automatic door lock function mode can be selected from the following in this mode • VH SPD: All doors are locked when vehicle speed more than 24 km/h (15 MPH) • P RANGE: All doors are locked when shifting the selector lever from P position to other than the P position
AUTOMATIC DOOR UNLOCK SELECT	Automatic door unlock function mode can be selected from the following in this mode • MODE 1: All doors are unlocked when the power supply position is changed from ON to OFF • MODE 2: All doors are unlocked when shifting the selector lever from any position other than the P to P position • MODE 3: Driver side door is unlocked when the power supply position is changed from ON to OFF • MODE 4: Driver side door is unlocked when shifting the selector lever from any position other than the P to P position • MODE 5: This item is displayed, but cannot be used • MODE 6: This item is displayed, but cannot be used
AUTOMATIC LOCK/UNLOCK SET	Automatic door lock/unlock function mode can be selected from the following in this mode • Off: Non-operation • Unlock Only: Door unlock operation only • Lock Only: Door lock operation only • Lock/Unlock: Lock and unlock operation

DATA MONITOR

NOTE:
The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor Item	Contents
REQ SW-DR	Indicated [On/Off] condition of door request switch (driver side)
REQ SW-AS	Indicated [On/Off] condition of door request switch (passenger side)
REQ SW-BD/TR	Indicated [On/Off] condition of back door request switch
DOOR SW-DR	Indicated [On/Off] condition of front door switch (driver side)
DOOR SW-AS	Indicated [On/Off] condition of front door switch (passenger side)
DOOR SW-RR	Indicated [On/Off] condition of rear door switch RH
DOOR SW-RL	Indicated [On/Off] condition of rear door switch LH
DOOR SW-BK	Indicated [On/Off] condition of back door switch
CDL LOCK SW	Indicated [On/Off] condition of lock signal from door lock unlock switch
CDL UNLOCK SW	Indicated [On/Off] condition of unlock signal from door lock unlock switch
KEY CYL LK-SW	Indicated [On/Off] condition of lock signal from door key cylinder switch
KEY CYL UN-SW	Indicated [On/Off] condition of unlock signal from door key cylinder switch

ACTIVE TEST

Test item	Description
DOOR LOCK	This test is able to check door lock/unlock operation • The all door lock actuators are locked when “ALL LOCK” on CONSULT screen is touched • The all door lock actuators are unlocked when “ALL UNLK” on CONSULT screen is touched • The front door lock actuator (driver side) is unlocked when “DR UNLK” on CONSULT screen is touched • The front door lock actuator (passenger side) is unlocked when “AS UNLK” on CONSULT screen is touched • The door lock actuator (other) is unlocked when “OTR ULK” on CONSULT screen is touched

INTELLIGENT KEY

INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)

INFOID:0000000009011457

WORK SUPPORT

Monitor item	Description
INSIDE ANT DIAGNOSIS	This function allows inside key antenna self-diagnosis
LOCK/UNLOCK BY I-KEY	Door lock/unlock function by door request switch mode can be changed to operation in this mode • On: Operate • Off: Non-operation
ENGINE START BY I-KEY	Engine start function mode can be changed to operation with this mode • On: Operate • Off: Non-operation
TRUNK/GLASS HATCH OPEN	Buzzer reminder function mode by back door opener switch can be changed to operation with this mode • On: Operate • Off: Non-operation
PANIC ALARM SET	Panic alarm button pressing time on Intelligent Key button can be selected from the following with this mode • MODE 1: 0.5 sec. • MODE 2: Non-operation • MODE 3: 1.5 sec.
TRUNK OPEN DELAY	Back door open button pressing to Intelligent Key button can be selected as per the following in this mode • MODE 1: Press and hold • MODE 2: Press twice • MODE 3: Press and hold, or press twice
LO- BATT OF KEY FOB WARN	Intelligent Key low battery warning mode can be changed to operation with this mode • On: Operate • Off: Non-operation
ANTI KEY LOCK IN FUNCTI	Key reminder function mode can be changed to operation with this mode • On: Operate • Off: Non-operation
HAZARD ANSWER BACK	Hazard reminder function mode by door request switch and Intelligent Key button can be selected from the following with this mode • Lock Only: Door lock operation only • Unlock Only: Door unlock operation only • Lock/Unlock: Lock and unlock operation • Off: Non-operation
ANS BACK I-KEY LOCK	Buzzer reminder function (lock operation) mode by door request switch can be selected from the following with this mode • Horn Chirp: Sound horn • Buzzer: Sound Intelligent Key warning buzzer • Off: Non-operation
ANS BACK I-KEY UNLOCK	Buzzer reminder function (unlock operation) mode by door request switch can be changed to operation with this mode • On: Operate • Off: Non-operation
SHORT CRANKING OUTPUT	Starter motor can operate during the times below • 70 msec • 100 msec • 200 msec
CONFIRM KEY FOB ID	It can be checked whether Intelligent Key ID code is registered or not in this mode

Monitor item	Description
AUTO LOCK SET	Auto door lock operation time can be changed in this mode • MODE 1: OFF • MODE 2: 30 sec. • MODE 3: 1 minute • MODE 4: 2 minutes • MODE 5: 3 minutes • MODE 6: 4 minutes • MODE 7: 5 minutes
HORN WITH KEYLESS LOCK	Horn reminder function mode by Intelligent Key button can be selected from the following with this mode • On: Operate • Off: Non-operation
PW DOWN SET	Unlock button pressing time on Intelligent Key button can be selected from the following with this mode • MODE 1: 3 sec. • MODE 2: Non-operation • MODE 3: 5 sec.
WELCOME LIGHT SELECT	Welcome light function mode can be selected from the following with this mode • Puddle/Outside Handle • Room lamp • Head & Tail Lamps (this item is displayed, but cannot be used) • Heart Beat
WELCOME LIGHT OP SET	Welcome light function mode can be changed to operation with this mode • On: Operate • Off: Non-operation

SELF-DIAG RESULT

Refer to BCS-57, "DTC Index".

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor Item	Condition
REQ SW -DR	Indicates [On/Off] condition of door request switch (driver side)
REQ SW -AS	Indicates [On/Off] condition of door request switch (passenger side)
REQ SW -BD/TR	Indicates [On/Off] condition of back door request switch
PUSH SW	Indicates [On/Off] condition of push-button ignition switch
CLUTCH SW	**NOTE:** This item is displayed, but cannot be monitored
BRAKE SW 1	Indicates [On/Off]* condition of stop lamp switch power supply
BRAKE SW 2	Indicates [On/Off] condition of stop lamp switch
DETE/CANCL SW	Indicates [On/Off] condition of P position
SFT PN/N SW	Indicates [On/Off] condition of P or N position
S/L -LOCK	**NOTE:** This item is displayed, but cannot be monitored
S/L -UNLOCK	**NOTE:** This item is displayed, but cannot be monitored
S/L RELAY -F/B	**NOTE:** This item is displayed, but cannot be monitored
UNLK SEN -DR	Indicates [On/Off] condition of driver door UNLOCK status
PUSH SW -IPDM	Indicates [On/Off] condition of push-button ignition switch
IGN RLY1 -F/B	Indicates [On/Off] condition of ignition relay 1
DETE SW -IPDM	Indicates [On/Off] condition of P position

Monitor Item	Condition
SFT PN -IPDM	Indicates [On/Off] condition of P or N position
SFT P -MET	Indicates [On/Off] condition of P position
SFT N -MET	Indicates [On/Off] condition of N position
ENGINE STATE	Indicates [Stop/Stall/Crank/Run] condition of engine states
S/L LOCK-IPDM	**NOTE:** This item is displayed, but cannot be monitored
S/L UNLK-IPDM	**NOTE:** This item is displayed, but cannot be monitored
S/L RELAY-REQ	**NOTE:** This item is displayed, but cannot be monitored
VEH SPEED 1	Display the vehicle speed signal received from combination meter by numerical value [Km/h]
VEH SPEED 2	Display the vehicle speed signal received from ABS or VDC or TCM by numerical value [Km/h]
DOOR STAT-DR	Indicates [LOCK/READY/UNLK] condition of unlock sensor
DOOR STAT-AS	Indicates [LOCK/READY/UNLK] condition of passenger side door status
ID OK FLAG	Indicates [Set/Reset] condition of key ID
PRMT ENG STRT	Indicates [Set/Reset] condition of engine start possibility
PRMT RKE STRT	**NOTE:** This item is displayed, but cannot be monitored
TRNK/HAT MNTR	**NOTE:** This item is displayed, but cannot be monitored
RKE-LOCK	Indicates [On/Off] condition of LOCK signal from Intelligent Key
RKE-UNLOCK	Indicates [On/Off] condition of UNLOCK signal from Intelligent Key
RKE-TR/BD	**NOTE:** This item is displayed, but cannot be monitored
RKE-PANIC	Indicates [On/Off] condition of PANIC button of Intelligent Key
RKE-MODE CHG	Indicates [On/Off] condition of MODE CHANGE signal from Intelligent Key
RKE OPE COUN1	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing
RKE OPE COUN2	**NOTE:** This item is displayed, but cannot be monitored
SHFTLCK SLNID PWR SPLY	Indicates [On/Off] condition of shift lock solenoid

*: OFF is displayed when brake pedal is depressed while brake switch power supply is OFF.

ACTIVE TEST

Test item	Description
BATTERY SAVER	This test is able to check interior room lamp operation • On: Operate • Off: Non-operation
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation • On: Operate • Off: Non-operation
INSIDE BUZZER	This test is able to check warning chime in combination meter operation • Take Out: Take away warning chime sounds when CONSULT screen is touched • Key: Key warning chime sounds when CONSULT screen is touched • Knob: OFF position warning chime sounds when CONSULT screen is touched • Off: Non-operation
INDICATOR	This test is able to check warning lamp operation • KEY ON: “KEY” Warning lamp illuminates when CONSULT screen is touched • KEY IND: “KEY” Warning lamp blinks when CONSULT screen is touched • Off: Non-operation

Test item	Description
INT LAMP	This test is able to check interior room lamp operation • On: Operate • Off: Non-operation
LCD	This test is able to check meter display information • Engine start information displays when “BP N” on CONSULT screen is touched • Engine start information displays when “BP I” on CONSULT screen is touched • Key ID warning displays when “ID NG” on CONSULT screen is touched • ROTAT: This item is displayed, but cannot be monitored • P position warning displays when “SFT P” on CONSULT screen is touched • INSRT: This item is displayed, but cannot be monitored • BATT: This item is displayed, but cannot be monitored • Take away through window warning displays when “NO KY” on CONSULT screen is touched • Take away warning display when “OUTKEY” on CONSULT screen is touched • OFF position warning display when “LK WN” on CONSULT screen is touched
FLASHER	This test is able to check security hazard lamp operation The hazard lamps are activated after “LH/RH/Off” on CONSULT screen is touched
P RANGE	This test is able to check A/T shift selector power supply • On: Operate • Off: Non-operation
ENGINE SW ILLUMI	This test is able to check push-button ignition switch illumination operation Push-ignition switch illumination illuminates when “ON” on CONSULT screen is touched
LOCK INDICATOR	This test is able to check LOCK indicator (push-button ignition switch) operation • On: Operate • Off: Non-operation
ACC INDICATOR	This test is able to check ACC indicator (push-button ignition switch) operation • On: Operate • Off: Non-operation
IGNITION ON IND	This test is able to check ON indicator (push-button ignition switch) operation • On: Operate • Off: Non-operation
HORN	This test is able to check horn operation • On: Operate • Off: Non-operation
TRUNK/BACK DOOR	**NOTE:** This item is displayed, but cannot be used

TRUNK

TRUNK : CONSULT Function (BCM - TRUNK)

INFOID:0000000009011458

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor Item	Contents
PUSH SW	Indicates [On/Off] condition of push switch
UNLK SEN -DR	Indicates [On/Off] condition of unlock sensor
VEH SPEED 1	Indicates [Km/h] condition of vehicle speed signal from combination meter
TR/BD OPEN SW	Indicates [On/Off] condition of back door opener switch
TRNK/HAT MNTR	**NOTE:** This item is displayed, but cannot be monitored
RKE-TR/BD	**NOTE:** This item is displayed, but cannot be monitored

DIAGNOSIS SYSTEM (AUTOMATIC BACK DOOR CONTROL UNIT)

CONSULT Function (AUTOMATIC BACK DOOR CONTROL UNIT)

INFOID:0000000009011459

APPLICATION ITEM

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

Diagnosis mode	Function Description
Self Diagnostic Result	Displays the diagnosis results judged by automatic back door control unit
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from automatic back door control unit
Data Monitor	The automatic back door control unit input/output signals are displayed
Ecu Identification	The automatic back door control unit part number is displayed

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor Item	Unit	Description
VHCL SPEED MTR	[km/h]	Display the vehicle speed signal received from combination meter by numerical value
VHCL SPEED ABS	[km/h]	Display the vehicle speed signal received from ABS actuator and electrical unit by numerical value
VHCL SPEED SIG	[NORMAL/ERROR]	Indicates condition of vehicle speed from automatic back door control unit
MAIN SW	[ON/OFF]	Indicates condition of automatic back door main switch
AUTO BD SW	[ON/OFF]	Indicates condition of automatic back door switch
BK DOOR CL SW	[ON/OFF]	Indicates condition of automatic back door close switch
PKB SW	[ON/OFF]	Indicates condition of parking brake switch
UNLOCK SEN DR	[ON/OFF]	Indicates condition of unlock sensor
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
ENCODER A	[LO/HI]	Indicates condition of encoder signal from encoder A
ENCODER B	[LO/HI]	Indicates condition of encoder signal from encoder B
BD OPENER SW	[ON/OFF]	Indicates condition of back door opener switch
UNLOCK SEN BD	[LOCK/UNLOCK]	**NOTE:** This item is displayed, but cannot be monitored
DESTINATION	[Type 1/Type 2/Type 3/Type 4]	Indicates specification of destination of the automatic back door system • Except for Mexico models: [Type 4] is monitored • For Mexico models: [Type 2] is monitored

SELF-DIAG RESULT

Refer to DLK-51, "DTC Index".

ECU DIAGNOSIS INFORMATION

BCM

List of ECU Reference

INFOID:0000000009011460

ECU	Reference
BCM	BCS-35, "Reference Value"
	BCS-56, "Fail-safe"
	BCS-57, "DTC Inspection Priority Chart"
	BCS-57, "DTC Index"

AUTOMATIC BACK DOOR CONTROL MODULE

Reference Value

INFOID:0000000009011461

CONSULT MONITOR ITEM

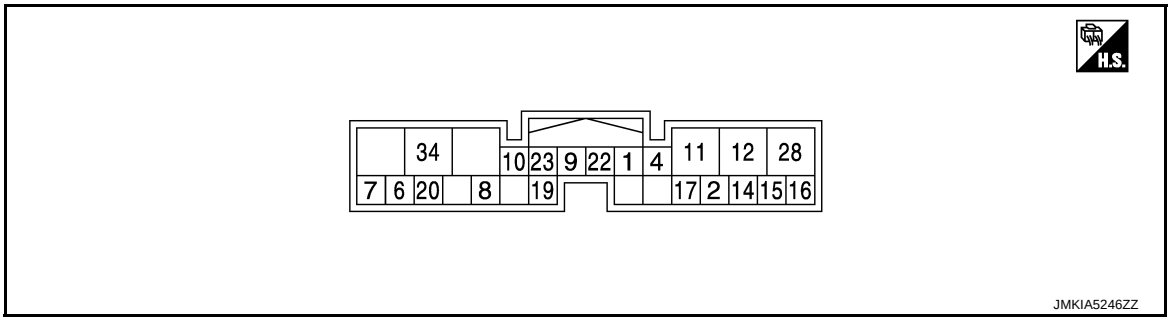
NOTE:
The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

CONSULT MONITOR ITEM

Monitor Item	Condition		Value/Status
VHCL SPEED MTR	While driving		Equivalent to speedometer reading
VHCL SPEED ABS	While driving		Equivalent to speedometer reading
VHCL SPEED SIG	Vehicle speed from automatic back door control unit	Normal	NORMAL
		Error	ERROR
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
PKB SW	Parking brake switch	Off	OFF
		On	ON
UNLOCK SEN DR	Door lock (driver)	Unlock	OFF
		Lock	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 bellow	OFF
		Detect obstruction	ON
TOUCH SEN LH	Touch sensor LH	Other than bellow	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
ENCODER A	Automatic back door	Not operate	No change HI or LO
		Operate	Change HI or LO
ENCODER B	Automatic back door	Not operate	No change HI or LO
		Operate	Change HI or LO

Monitor Item	Condition		Value/Status
BD OPENER SW	Back door opener switch	Release	OFF
		Press	ON
UNLOCK SEN BD	Door lock (back door)	Unlock	OFF
		Lock	ON
DESTINATION	Except for Mexico models		Type 4
	For Mexico models		Type 2

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Voltage (Approx.)
(+)	(–)	Signal name	Input/ Output			
1 (L)	Ground	Automatic back door warning buzzer	Output	Automatic back door warning buzzer	Sounding	0 V
					Not sounding	Battery voltage
2 (Y/B)	Ground	Automatic back door switch	Input	Automatic back door switch	Pressed	0 V
					Released	Battery voltage
4 (GR)	Ground	Automatic back door close switch	Input	Automatic back door close switch	Pressed	0 V
					Released	Battery voltage
6 (P)	Ground	CAN - L	Input/ Output	—		—
7 (L)	Ground	CAN - H	Input/ Output	—		—
8 (L/W)	Ground	Half latch switch signal	Input	Back door	Open	0 V
					Fully closed/half latch	Battery voltage
9 (GR/ L)	Ground	Power supply (IGN)	Input	Ignition switch ON		Battery voltage
10 (Y)	Ground	Power supply (BAT)	Input	—		Battery voltage
11 (R)	Ground	Back door closure motor (open)	Output	Back door	Open operation	Battery voltage
					Other than above	0 V
12 (V)	Ground	Back door closure motor (close)	Output	Back door	Close operation	Battery voltage
					Other than above	0 V
14 (GW)	Ground	Touch sensor LH signal	Input	Touch sensor LH	Detect obstruction	0 V
					Other than above	6 V

Terminal No. (Wire color)		Description		Condition		Voltage (Approx.)
(+)	(–)	Signal name	Input/ Output			
15 (L/R)	Ground	Touch sensor ground	Input	—		0 V
16 (LG)	Ground	Touch sensor RH signal	Input	Touch sensor RH	Detect obstruction	0 V
					Other than above	6 V
17 (O)	Ground	Automatic back door main switch	Input	Automatic back door main switch	ON	Battery voltage
					OFF	0 V
19 (L/Y)	Ground	Close switch signal	Input	Back door	Fully closed	0 V
					Open/half latch	Battery voltage
20 (G/Y)	Ground	Open switch signal	Input	Back door	Open	0 V
					Half latch/fully closed	Battery voltage
22* (B)	Ground	Ground (destination)	—	—		0 V
28 (R/W)	Ground	Power supply (BAT)	Input	—		Battery voltage
34 (B)	Ground	Ground	—	—		0 V

*: Except for Mexico models

Fail Safe

INFOID:0000000009011462

Display contents of CONSULT	Fail-safe	Cancellation
B2401 IGN OPEN	Intermittent clutch function	All following condition are satisfied • Power supply condition of automatic back door control unit: OFF • BCM receive ignition position signal (OFF) via CAN
B2403 PULSE ENCODER	Inhibit automatic back door operation	When receiving the pulse from encoders A and B normally (5 pulses)
B2409 HALF LATCH SW	Intermittent clutch function	Half latch switch is ON from OFF
B2416 TOUCH SEN R OPEN	During close operation: Intermittent clutch function	Normal return
B2417 TOUCH SEN L OPEN	During close operation: Intermittent clutch function	Normal return
B2419 OPEN SW	Inhibit automatic back door operation	Erase DTC, reconnect battery
B2420 CLOSE SW	Inhibit automatic back door operation	Erase DTC, reconnect battery
B2421 CLUTCH TIME OUT	Intermittent clutch function	Reception of next operation request
B2422 BACK DOOR STATE	Intermittent clutch function	Detect back door fully closed position
B2423 ABD MTR TIME OUT	Intermittent clutch function	Reception of next operation request
B2424 CLSR CONDITION	Inhibit automatic back door operation	Normal return or reconnect battery

DTC Inspection Priority Chart

INFOID:0000000009011463

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

Priority	DTC
1	• B2425 AUTO BK DR CNT UNIT • U1000: CAN COMM • U1010: CONTROL UNIT (CAN) • B2401 IGN OPEN
2	• B2403 PULSE ENCODER • B2409 HALF LATCH SW • B2416 TOUCH SEN R OPEN • B2417 TOUCH SEN L OPEN • B2419 OPEN SW • B2420 CLOSE SW • B2421 CLUTCH TIME OUT • B2422 BACK DOOR STATE • B2423 ABD MTR TIME OUT • B2424 CLSR CONDITION

DTC Index

INFOID:0000000009011464

NOTE:

Details of time display

- 1 - 39: Displayed if any previous malfunction is present when current condition is normal. It increases like 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.

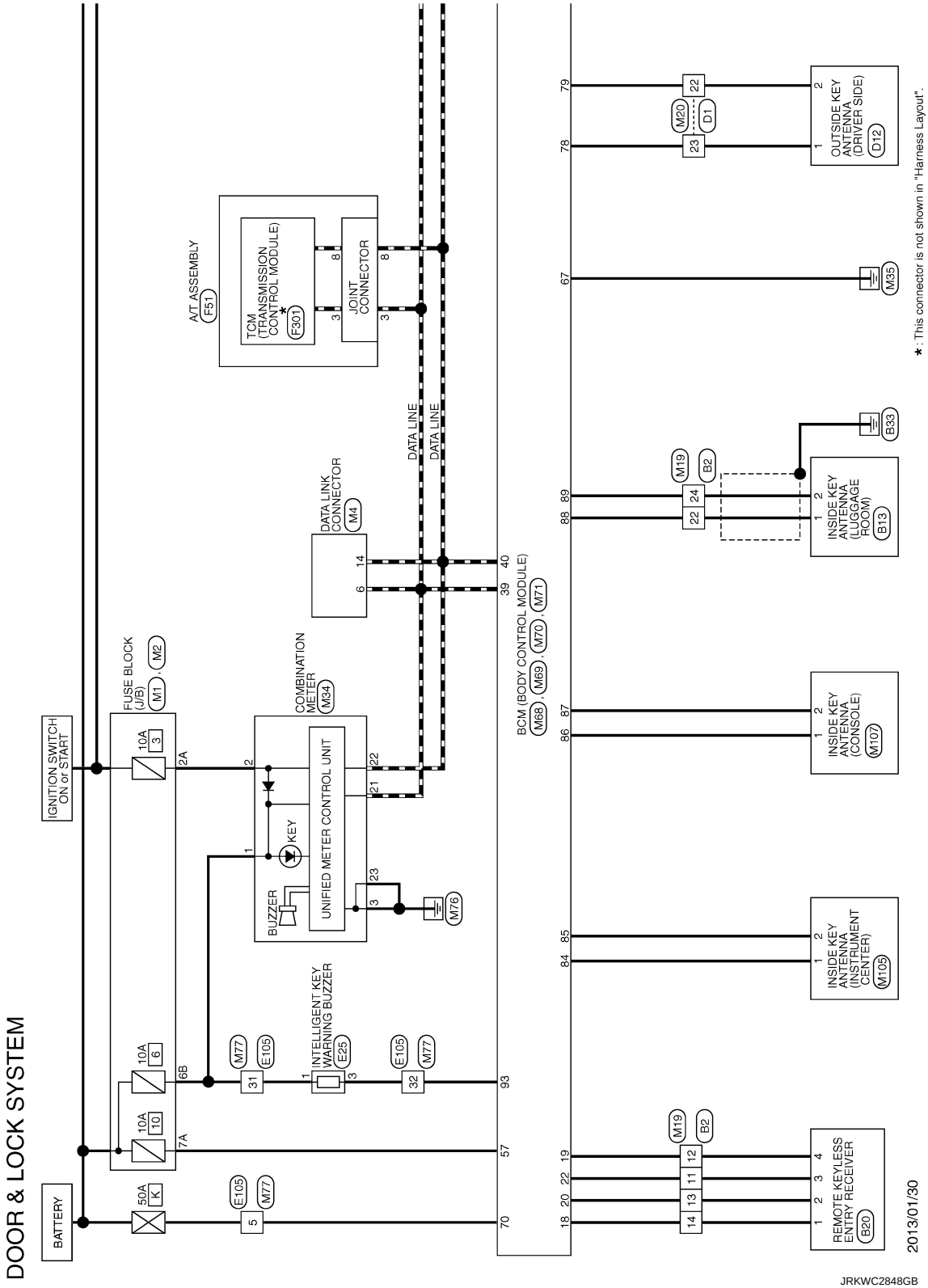
CONSULT display	Fail-safe	Item	Reference page
U1000: CAN COMM	—	CAN communication circuit	DLK-84
U1010: CONTROL UNIT(CAN)	—	Internal CAN communication circuit	DLK-85
B2401: IGN OPEN	×	IGN power supply circuit	DLK-86
B2403: PULSE ENCODER	×	Encoder signal	DLK-87
B2409: HALF LATCH SW	×	Half latch switch signal	DLK-88
B2416: TOUCH SEN R OPEN	×	Touch sensor RH	DLK-90
B2417: TOUCH SEN L OPEN	×	Touch sensor LH	DLK-92
B2419: OPEN SW	×	Open switch signal	DLK-94
B2420: CLOSE SW	×	Close switch signal	DLK-97
B2421: CLUTCH TIME OUT	×	Clutch operation time	DLK-99
B2422: BACK DOOR STATE	×	Back door state	DLK-100
B2423: ABD MTR TIME OUT	×	Automatic back door motor operation time	DLK-101
B2424: CLSR CONDITION	×	Closure condition	DLK-102
B2425: AUTO BCK DR CNT UNIT	—	Automatic back door control unit	DLK-105

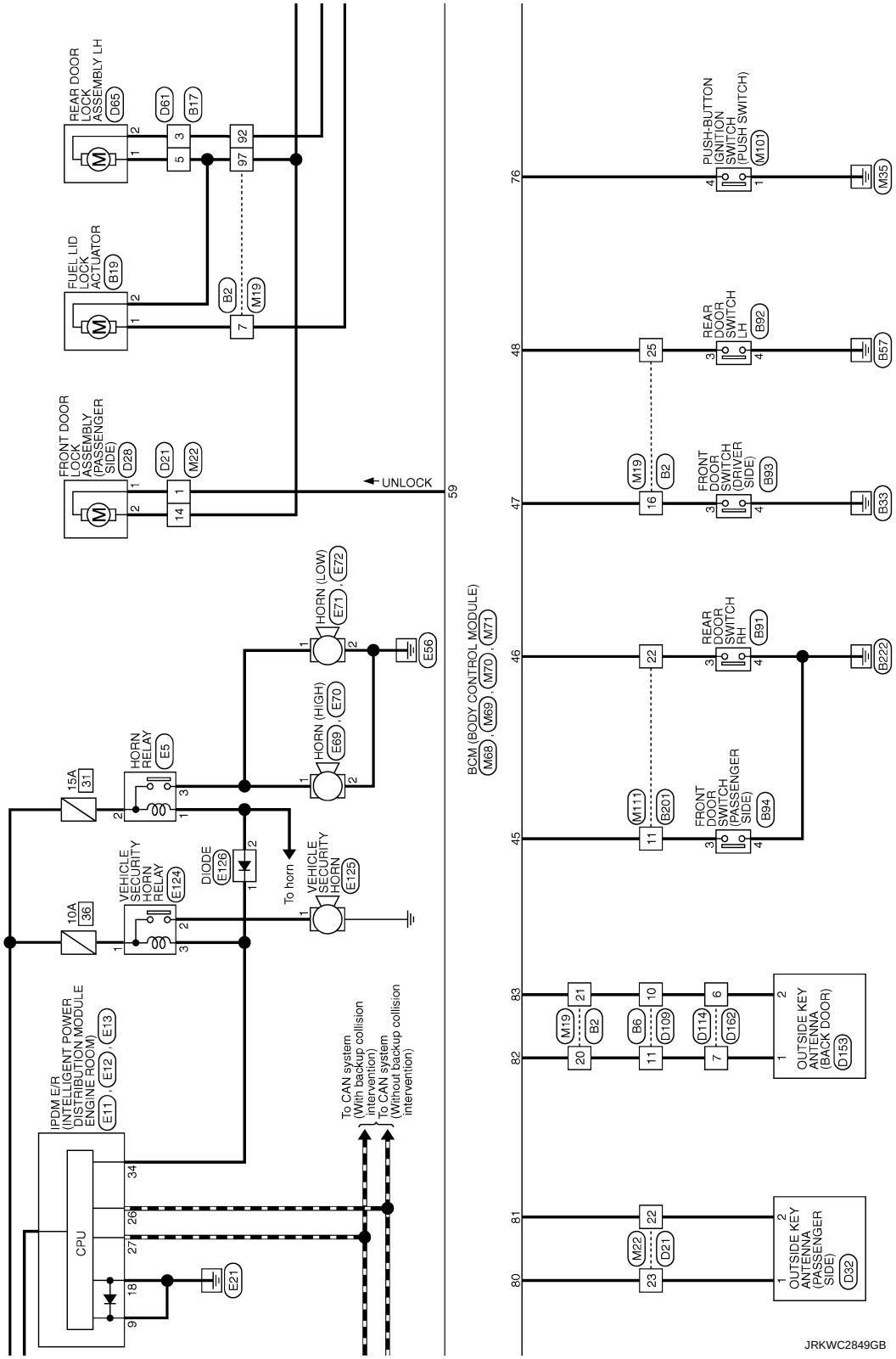
WIRING DIAGRAM

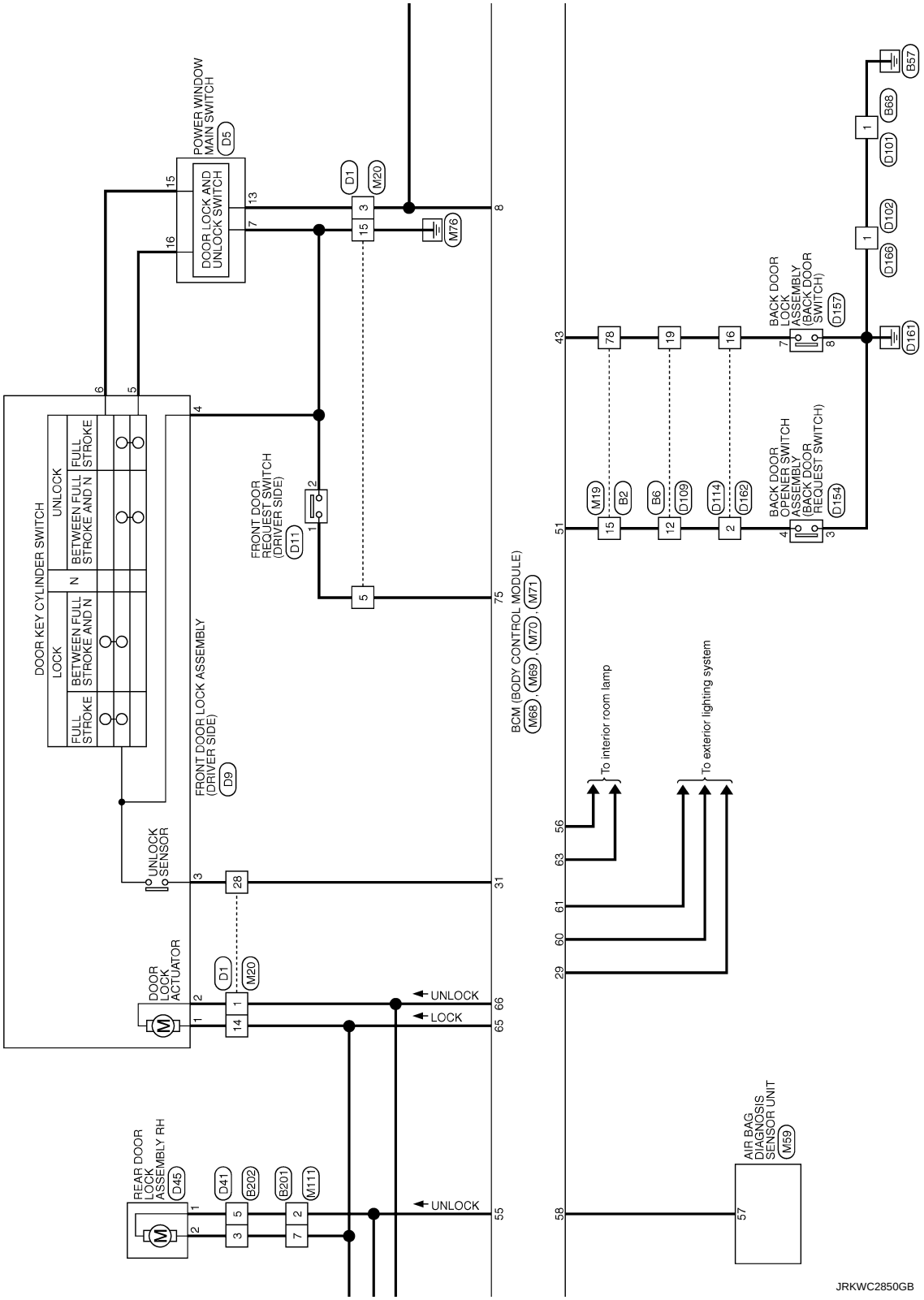
DOOR & LOCK SYSTEM

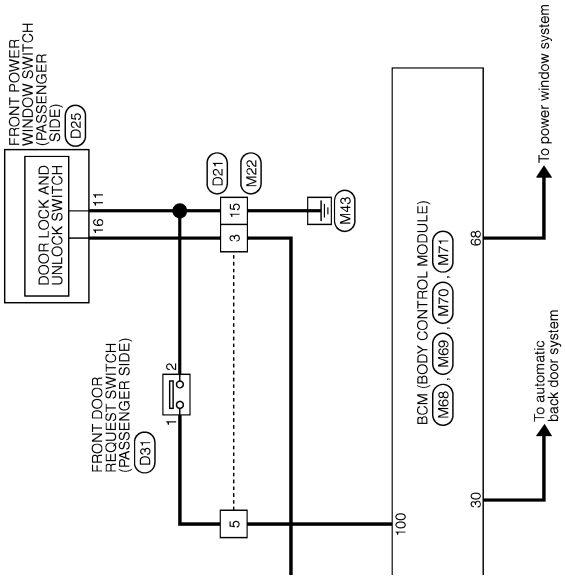
Wiring Diagram

INFOID:0000000009011465




REAR DOOR LOCK ASSEMBLY LH
D65
D61
B17
92
97
FUEL LID LOCK ACTUATOR
B19
B2
M19
7
FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE)
D28
D21
M22
14
UNLOCK
59
HORN (LOW)
E72
E71
E56
HORN (HIGH)
E70
E69
HORN RELAY
E5
15A
31
10A
36
VEHICLE SECURITY HORN RELAY
E124
DIODE
E126
To horn
VEHICLE SECURITY HORN
E125
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E11, E12, E13
CPU
34
26
27
18
9
E21
To CAN system (With backup collision intervention)
To CAN system (Without backup collision intervention)
BCM (BODY CONTROL MODULE)
M68, M69, M70, M71
76
48
47
46
45
83
82
81
80
PUSH-BUTTON IGNITION SWITCH (PUSH SWITCH)
M101
M35
REAR DOOR SWITCH LH
B92
B57
25
FRONT DOOR SWITCH (DRIVER SIDE)
B93
B33
M19
B2
16
REAR DOOR SWITCH RH
B91
B222
22
FRONT DOOR SWITCH (PASSENGER SIDE)
B94
M111
B201
11
OUTSIDE KEY ANTENNA (BACK DOOR)
D153
M19
B2
20
21
B6
D109
10
11
D114
D162
6
7
OUTSIDE KEY ANTENNA (PASSENGER SIDE)
D32
M22
D21
22
23
JRKWC2849GB


POWER WINDOW MAIN SWITCH
D5
DOOR LOCK AND UNLOCK SWITCH
D1
M20
M76
DOOR KEY CYLINDER SWITCH
UNLOCK
LOCK
FULL STROKE
BETWEEN FULL STROKE AND N
N
FRONT DOOR REQUEST SWITCH (DRIVER SIDE)
D11
FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE)
D9
UNLOCK SENSOR
DOOR LOCK ACTUATOR
UNLOCK
LOCK
REAR DOOR LOCK ASSEMBLY RH
D45
D41
B202
B201
M111
BCM (BODY CONTROL MODULE)
M68, M69, M70, M71
To interior room lamp
To exterior lighting system
BACK DOOR LOCK ASSEMBLY (BACK DOOR SWITCH)
D157
BACK DOOR OPENER SWITCH ASSEMBLY (BACK DOOR REQUEST SWITCH)
D154
D161
D166
D102
D101
B68
B57
M19
B2
B6
D109
D114
D162
AIR BAG DIAGNOSIS SENSOR UNIT
M59
JRKWC2850GB



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DOOR & LOCK SYSTEM

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
3	BR	-
5	R/W	-
6	L	-
7	V	-
9	G	-
11	W/B	-
12	BR	-
13	G/R	-
14	B/Y	-
15	W/R	-
16	GR/R	-
18	G/W	-
19	V	-
20	W/G	-
21	B/W	-
22	V	-
24	G	-
25	O	-
26	Y	-
27	L/O	-
28	Y/R	-
29	L	-
30	R	-
31	G/Y	-
32	B/SB	-
33	LG/R	-
34	BR/W	-
35	GR/R	-
36	SB	-
37	LG	-
38	L	-
39	P	-
40	W/G	-
41	O	-
42	G/R	-
43	V/W	-
44	LG/B	-
45	R/Y	-
46	B	-
47	BR	-
49	GR	-
50	R/B	-
51	W/R	-
52	BR/Y	-
53	O/B	-
54	G/O	-
55	R/B	-
56	LG/R	-
57	GR/R	-
58	Y/G	-
59	V/W	-
60	R	-
63	B	-
64	R	-
65	W	-
66	G	-
67	SHIELD	-
69	LG/B	-
70	P/L	-
71	L	-
72	R	-
77	Y/B	-
78	Y/L	-
79	Y	-
80	W/R	-
81	Y/L	-
84	L/O	-
86	O	-
87	W/R	-
88	O	-
89	W/L	-
90	GR/L	-
91	W	-
92	G	-
94	W/R	-
96	L/W	-
97	R	-
98	V	-
99	L/W	-
100	P/B	-

Connector No.	B6
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	R	-
3	B	-
5	LG	-
6	GR	-
7	L/O	-
8	Y	-
9	L	-
10	B/W	-
11	W/G	-
12	W/R	-
13	SHIELD	-
14	G	-
17	BR/Y	-
18	W/L	-
19	Y/L	-
20	G/Y	-
21	L/Y	-
22	L/W	-
23	G/W	-
24	L/R	-

Connector No.	B13
Connector Name	INSIDE KEY ANTENNA (LUGGAGE ROOM)
Connector Type	RK02FL

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	G	-

Connector No.	B17
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W/R	-
3	G	-
5	R	-
6	L/O	-
7	O	-
8	B	-
9	L	-
10	R/Y	-
15	V	-
16	W	-

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DOOR & LOCK SYSTEM

Connector No.	B19
Connector Name	FUEL LID LOCK ACTUATOR
Connector Type	M04FW-LC

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	R	-

Connector No.	B20
Connector Name	REMOTE KEYLESS ENTRY RECEIVER
Connector Type	TK04FW

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
2	W/B	-
3	G/R	-
4	B/Y	-

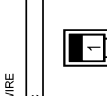
Connector No.	B68
Connector Name	WIRE TO WIRE
Connector Type	M02MW-LC

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	R	-

Connector No.	B91
Connector Name	REAR DOOR SWITCH RH
Connector Type	TH04FW-NH

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
3	GR	DOOR_SW_RR
4	B	GND

Connector No.	B92
Connector Name	REAR DOOR SWITCH LH
Connector Type	TH04FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
3	O	DOOR_SW_RL
4	B	GND

Connector No.	B93
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	TH04FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
3	GR/R	DOOR_SW_DR
4	B	GND

Connector No.	B94
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	TH04FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
3	W	DOOR_SW_AS
4	B	GND

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R/B	-
2	G	-
3	W	-
5	W/B	-
6	L/Y	-
7	R	-
8	G/R	-
9	GR/R	-
11	W	-
12	V	-
13	Y	-
16	L/O	-
17	GR/L	-
18	R/G	-
19	L/Y	-
20	G/Y	-
21	R	-
22	GR	-

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DOOR & LOCK SYSTEM

27	L/W	-
29	W	-
30	R/L	-
31	Y/L	-
32	W/R	-
33	W/G	-
34	L/R	-
36	G	-
37	V	-
38	SHIELD	-
39	P/B	-
40	W/R	-
41	R	-
42	L	-
43	B/W	-
44	L	-
45	P	-
46	SHIELD	-
47	R	-
48	W	-
49	SHIELD	-
50	V	-
51	L/B	-
52	L/R	-
53	SB	-
54	V/W	-
59	L	-
60	GR	-
61	P/L	-
62	B/SB	-
63	R/Y	-
64	BR	-
70	O	-
71	W	-
72	SHIELD	-
73	B	-
74	R	-
75	G	-
76	Y	-
77	SB	-
78	LG	-
79	R/B	-
90	W/B	-
93	Y	-
94	L	-
95	L/R	-
96	R	-
97	W	-
98	V	-
99	L/W	-
100	W	-

9	G	-
10	L	-
12	B/Y	-
13	Y	-
14	R	-
15	B	-
16	GR/R	-
17	R/W	-
18	B	-
19	R	-
20	P	-
22	V	-
23	P/B	-
24	L/O	-
25	BR/W	-
26	W/R	-
27	V	-
28	W/G	-
29	Y/G	-
30	O/L	-
31	GR/B	-
32	BR	-
33	V/W	-
36	G/O	-
37	BR/Y	-
38	SB	-
39	W/L	-
40	L/W	-
41	Y/G	-
42	P/L	-
43	LG	-
44	GR/L	-
45	SHIELD	-
46	W	-
47	LG	-
48	G/W	-
49	Y	-
50	L/Y	-
51	GR/R	-
52	LG/B	-
53	G	-
54	B	-
55	R	-

Connector No.	B202
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W/R	-
3	R	-
5	G	-
6	L	-
7	R	-
8	B	-
9	V	-
10	L	-
15	V	-
16	W	-

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	W	-
3	V	-
4	Y	-
5	LG/R	-
6	BR/W	-
8	V	-

Connector No.	D5
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS16FW-CS

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
3	G/R	-
4	W	-
5	G	-
6	L	-
7	B	-
9	Y	-
10	W/B	-
11	G/Y	-
12	G/W	-
13	V	-
15	R	-
16	W	-

Connector No.	D9
Connector Name	FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE)
Connector Type	ED6FGY-RS

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	V	-
3	W/G	-
4	B	-
5	W	-
6	R	-

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DOOR & LOCK SYSTEM

Connector No.	D11
Connector Name	FRONT DOOR REQUEST SWITCH (DRIVER SIDE)
Connector Type	RK02FL

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG/R	-
2	B	-

Connector No.	D12
Connector Name	OUTSIDE KEY ANTENNA (DRIVER SIDE)
Connector Type	RK02MGY

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	P/B	-
2	V	-

Connector No.	D21
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	W	-
3	V	-
5	P/L	-
6	L/R	-
8	L/W	-
9	G/Y	-
10	L	-
12	B/Y	-
13	L	-
14	R	-
15	B	-
18	B/W	-
19	R	-
20	P	-
22	Y/R	-
23	LG/B	-
24	L/O	-
25	R/W	-
26	W/R	-
36	G/O	-
37	Y/B	-
38	V	-
39	W/L	-
40	L/O	-
44	GR/L	-
45	G	-
46	W	-
47	LG	-
48	L/R	-
49	Y	-
50	R/B	-
53	SHIELD	-
54	B	-
55	R	-

Connector No.	D25
Connector Name	FRONT POWER WINDOW SWITCH (PASSENGER SIDE)
Connector Type	NS16FW-CS

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
3	W/B	-
4	G/R	-
8	L	-
9	G	-
10	W	-
11	B	-
12	G/Y	-
15	G/W	-
16	V	-

Connector No.	D28
Connector Name	FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE)
Connector Type	E06FGY-RS

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	R	-

Connector No.	D31
Connector Name	FRONT DOOR REQUEST SWITCH (PASSENGER SIDE)
Connector Type	RK02FL

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	P/L	-
2	B	-

Connector No.	D32
Connector Name	OUTSIDE KEY ANTENNA (PASSENGER SIDE)
Connector Type	RK02MGY

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG/B	-
2	Y/R	-

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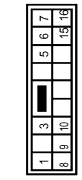
DOOR & LOCK SYSTEM

Connector No.	D41
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W/R	-
3	R	-
5	G	-
6	L	-
7	R	-
8	B	-
9	V	-
10	L	-
15	V	-
16	W	-

Connector No.	D45
Connector Name	REAR DOOR LOCK ASSEMBLY RH
Connector Type	E06FGY-RS

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	R	-

Connector No.	D61
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W/R	-
3	G	-
5	R	-
6	L/O	-
7	O	-
8	B	-
9	L	-
10	R/Y	-
15	V	-
16	W	-

Connector No.	D65
Connector Name	REAR DOOR LOCK ASSEMBLY LH
Connector Type	E06FGY-RS

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	G	-

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Type	M02FW-LC

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	L	-

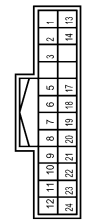
Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	M01FBR-S-LC

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-

Connector No.	D109
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH

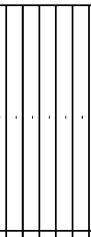
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	R	-
3	B	-
5	LG	-
6	GR	-
7	L/O	-
8	Y	-
9	L	-
10	B/W	-
11	W/G	-
12	W/R	-
13	SHIELD	-
14	G	-
17	BR/Y	-
18	W/L	-
19	Y/L	-
20	G/Y	-
21	L/Y	-
22	L/W	-
23	G/W	-
24	L/R	-

Connector No.	D114
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W/L	-
2	W/R	-
3	L/O	-
4	GR	-
5	BR/Y	-
6	B/W	-
7	W/G	-
10	B	-
11	R	-
12	W	-
13	L/W	-

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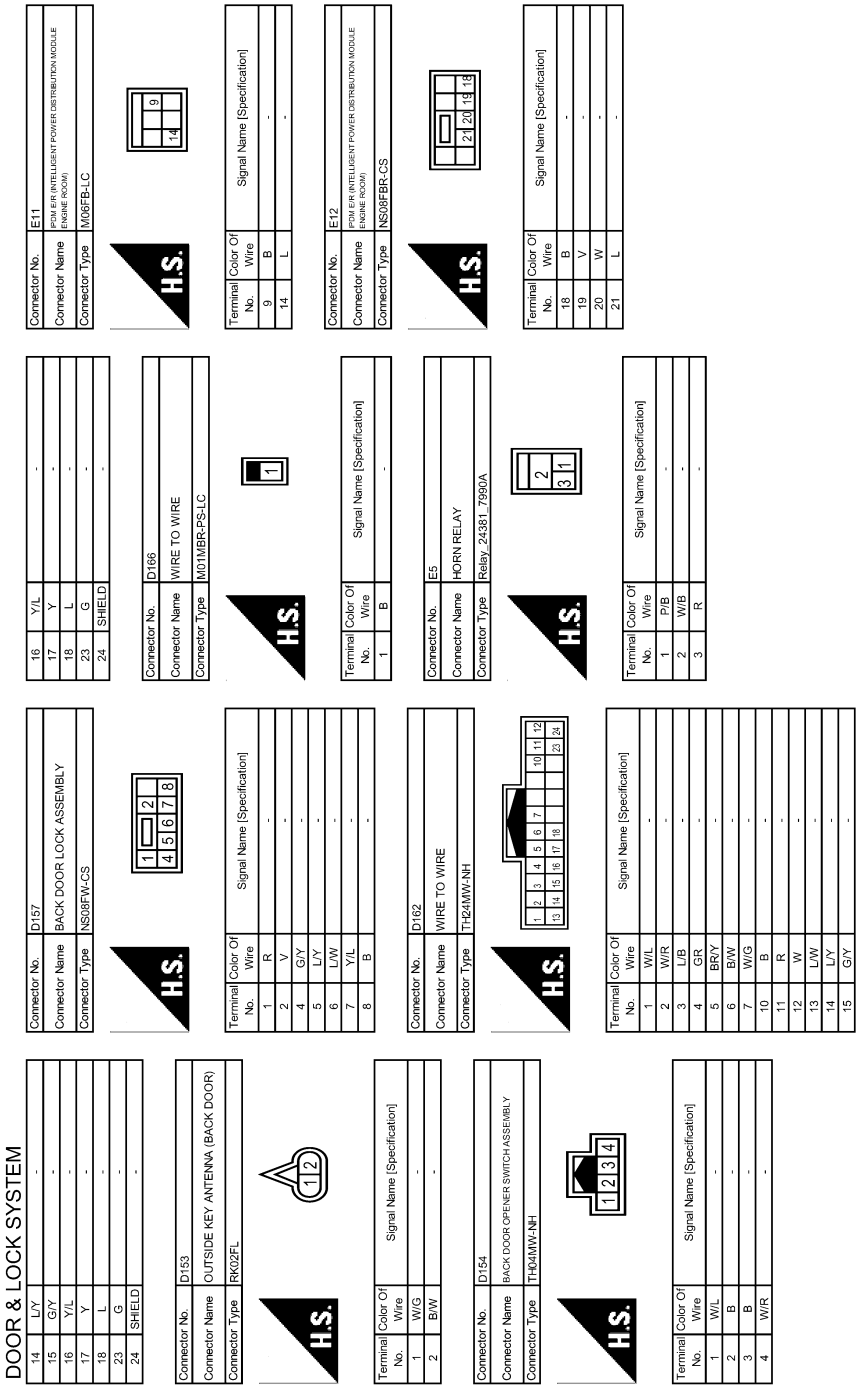

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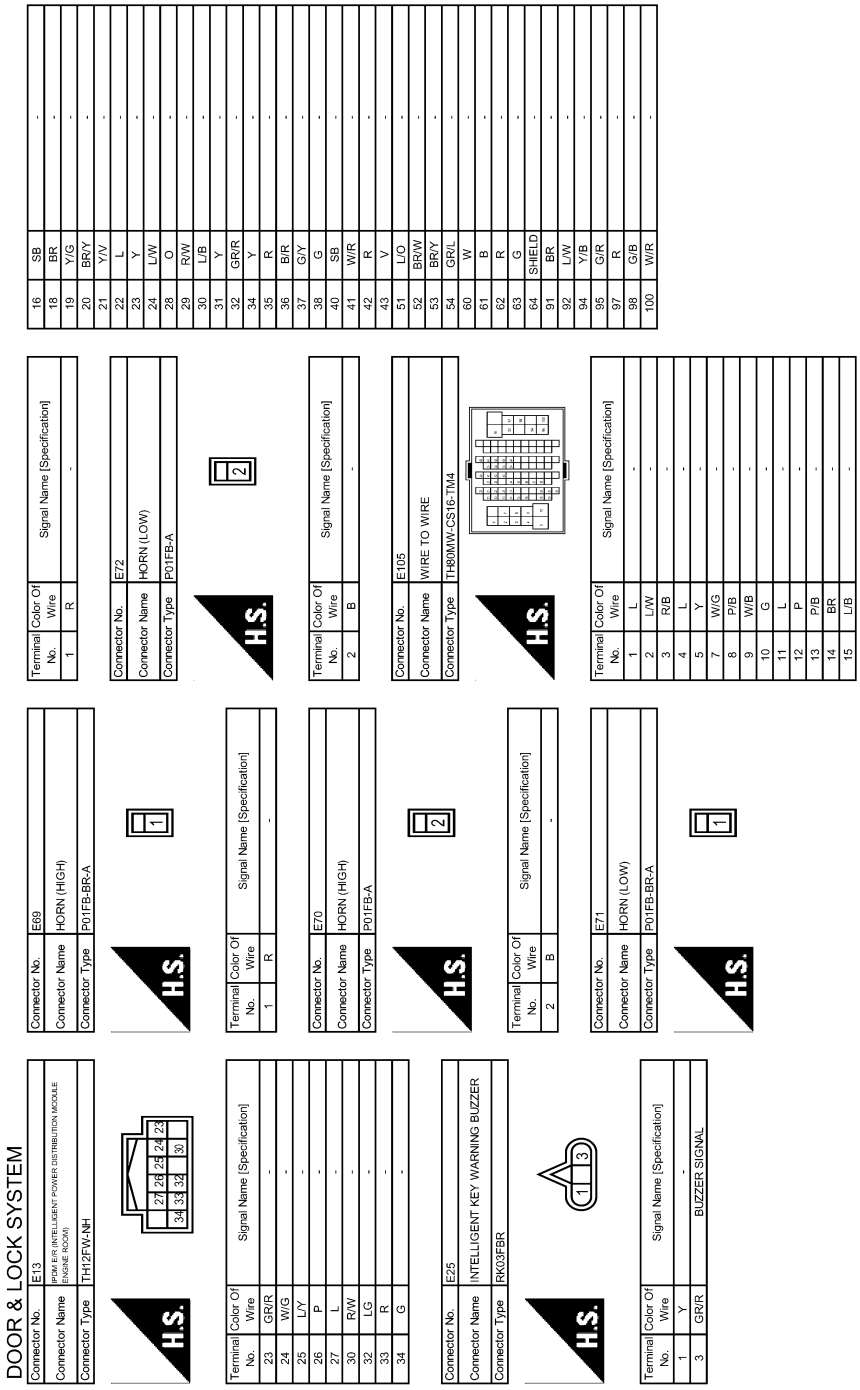


JRKWC5492GB

DOOR & LOCK SYSTEM

Connector No.	E124
Connector Name	VEHICLE SECURITY HORN RELAY
Connector Type	M03FW-R-LC

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L/R	-
2	R	-
3	P/B	-

Connector No.	E125
Connector Name	VEHICLE SECURITY HORN
Connector Type	P01FB-A

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-

Connector No.	E126
Connector Name	DIODE
Connector Type	24335_C9900

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	P/B	-

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	IGNITION POWER SUPPLY
2	P	BATTERY POWER SUPPLY
3	L	CAN-H
4	SB	K-LINE
5	B	GROUND
6	V	IGNITION POWER SUPPLY
7	R	BACK-UP LAMP RELAY
8	P	CAN-L
9	BR	STARTER RELAY
10	B	GROUND

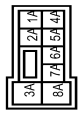
Connector No.	F301
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FG

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	-	IGNITION POWER SUPPLY
2	-	BATTERY POWER SUPPLY
3	-	CAN-H
4	-	K-LINE
5	-	GROUND
6	-	IGNITION POWER SUPPLY
7	-	BACK-UP LAMP RELAY
8	-	CAN-L
9	-	STARTER RELAY
10	-	GROUND

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2

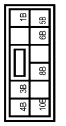
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	-
2A	GR	-
3A	W	-
4A	Y/G	-
5A	V	-
6A	L/W	-
7A	LG	-
8A	W	-

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FW-CS

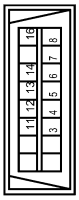
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
10B	W/B	-
1B	R	-
3B	R	-
4B	B	-
5B	BR	-
6B	Y	-
8B	L/O	-

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	-
4	B	-
5	B	-
6	L	-
7	SB	-
8	GR	-
11	SB	-
12	R	-
13	L	-
14	P	-
16	Y	-

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DOOR & LOCK SYSTEM

Connector No.	M19
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
3	BR	-
5	R/W	-
6	L	-
7	V	-
9	G	-
11	W/B	-
12	BR	-
13	G/R	-
14	B/Y	-
15	W/R	-
16	GR/R	-
18	G/W	-
19	V	-
20	W/G	-
21	B/W	-
22	V	-
24	G	-
25	O	-
26	Y	-
27	L/O	-
28	Y/R	-
29	L	-
30	R	-
31	G/Y	-
32	B/SB	-
33	LG/R	-
34	BR/W	-
35	GR/R	-
36	SB	-
37	LG	-
38	L	-
39	P	-
40	W/G	-
41	O	-
42	G/R	-
43	V/W	-
44	LG/B	-
45	R/Y	-
46	B	-
47	BR/W	-
49	GR	-
50	R/B	-
51	W/R	-
52	BR/Y	-
53	O/B	-
54	G/O	-
55	R/B	-
56	LG/R	-
57	GR/R	-
58	Y/G	-
59	V/W	-
60	R	-
63	B	-
64	R	-
65	W	-
66	G	-
67	SHIELD	-
69	LG/B	-
70	P/L	-
71	L	-
72	R	-
77	Y/B	-
78	Y/L	-
79	Y	-
80	W/R	-
81	Y/L	-
84	L/O	-
86	O	-
87	W/R	-
88	O	-
89	W/L	-
90	GR/L	-
91	W	-
92	G	-
94	W/R	-
96	L/W	-
97	R	-
98	V	-
99	L/W	-
100	P/B	-

Connector No.	M20
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	W	-
3	V	-
4	Y	-
5	LG/R	-
6	BR/W	-
8	V	-
9	G	-
10	L	-
12	B/Y	-
13	Y	-
14	R	-
15	B	-
16	GR/R	-
17	V/W	-
18	B	-
19	R	-
20	P	-
22	V	-
23	P/B	-
24	L/O	-
25	BR/W	-
26	W/R	-
27	V	-
28	W/G	-
29	Y/G	-
30	O/L	-
31	GR/B	-
32	BR	-
33	V/W	-
36	G/O	-
37	BR/Y	-
38	SB	-
39	W/L	-
40	L/W	-
41	Y/G	-
42	P/L	-
43	LG	-
44	GR	-
45	SHIELD	-
46	W	-
47	LG	-
48	G/W	-
49	Y	-
50	L/Y	-
51	GR/R	-
52	LG/B	-
53	G	-
54	B	-
55	R	-

Connector No.	M22
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	W	-
3	V	-
5	P/L	-
6	L/R	-
8	L/W	-
9	G/Y	-
10	L	-
12	B/Y	-
13	L	-
14	R	-
15	B	-
18	B/W	-
19	R	-
20	P	-
22	Y/R	-
23	LG/B	-
24	L/W	-
25	W/R	-
26	W/R	-

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DOOR & LOCK SYSTEM

36	G/O	-
37	Y/B	-
38	V	-
39	W/L	-
40	L/O	-
44	GR	-
45	G	-
46	W	-
47	LG	-
48	L/R	-
49	Y	-
50	R/B	-
53	SHIELD	-
54	B	-
55	R	-

25	O/L	ALTERNATOR SIGNAL
26	W	PARKING BRAKE SWITCH SIGNAL
28	GR/R	SECURITY SIGNAL
29	BR	WASHER LEVEL SWITCH SIGNAL
30	SB	VEHICLE SPEED SIGNAL (2-PULSE)
31	BR/W	VEHICLE SPEED SIGNAL (8-PULSE)
33	W	SNOW MODE SIGNAL
34	BR/Y	FUEL LEVEL SENSOR SIGNAL
35	O/B	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)
36	G/Y	PASSENGER SEAT BELT WARNING SIGNAL
37	R/Y	NON-MANUAL MODE SIGNAL
38	L/W	MANUAL MODE SHIFT DOWN SIGNAL
39	Y/B	MANUAL MODE SHIFT UP SIGNAL
40	G/W	MANUAL MODE SIGNAL

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	TH40FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	BATTERY POWER SUPPLY
2	GR	IGNITION SIGNAL
3	B	GROUND
4	B	ILL GND
5	B	ILL CONTROL OUTPUT
7	R	TOW MODE SIGNAL
8	P/L	TRIP RESET SWITCH SIGNAL
11	G	ENTER SWITCH SIGNAL
12	O	SELECT SWITCH SIGNAL
13	W/R	ILLUMINATION CONTROL SWITCH SIGNAL (+)
14	R	ILLUMINATION CONTROL SWITCH SIGNAL (-)
15	R/W	AIR BAG SIGNAL
18	W/R	AMBIENT SENSOR SIGNAL
19	V/W	A/C AUTO AMP. CONNECTION RECOGNITION SIGNAL
20	B	AMBIENT SENSOR GROUND
21	L	CAN-H
22	P	CAN-L
23	B	GROUND
24	V	FUEL LEVEL SENSOR GROUND

Connector No.	M59
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	NR28FY-EX

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R/L	IGN
2	B	GND
3	Y	DR1 (+)
4	Y/R	DR1 (-) DR2 (-)
6	Y/L	AS1 (+)
7	Y/B	AS1 (-)
8	B/Y	AS 2 (+)
9	Y	AS 2 (-)
18	O	ECZS (+)
19	W	ECZS (-)
22	SHIELD	GND
23	R/W	AIRBAG W/L
24	G/Y	SEATBELT W/L
25	R	CUTOFF TELLTALE
57	R/W	DEPLOYMENT INFORMATION
59	L	CAN-H
60	P	CAN-L

Connector No.	M68
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	BR/Y	COMBI SW INPUT 5
3	GR	COMBI SW INPUT 4
4	L	COMBI SW INPUT 3
5	G	COMBI SW INPUT 2
6	V	COMBI SW INPUT 1
8	V	POWER WINDOW SW COMM
9	R	STOP LAMP SW 1
11	R	RAIN SENSOR SERIAL LINK
14	P/B	OPTICAL SENSOR
16	L/O	DIMMER SIGNAL
17	Y/G	SENSOR PWR SPLY
18	B/Y	RECEIVER/SENSOR GND
19	BR	RECEIVER PWR SPLY
20	G/R	KYLS ENT RECEIVER COMM
21	P	NATS ANT AMP.
22	W/B	KYLS ENT RECEIVER RSSI
23	GR/R	SECURITY IND CONT
24	SB	DONGLE LINK
25	LG/R	NATS ANT AMP.
26	O	INTELLIGENT KEY IDENTIFICATION
29	W	HAZARD SW
30	W/L	BK DOOR OPNR SW
31	W/G	DR DOOR UNLOCK SENSOR
32	LG	COMBI SW OUTPUT 5
33	Y	COMBI SW OUTPUT 4
34	W	COMBI SW OUTPUT 3
35	R/W	COMBI SW OUTPUT 2
36	SB	COMBI SW OUTPUT 1
37	G/Y	SHIFT P
39	L	CAN-H
40	P	CAN-L

Connector No.	M69
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA09FB-FHA6-SA

H.S.

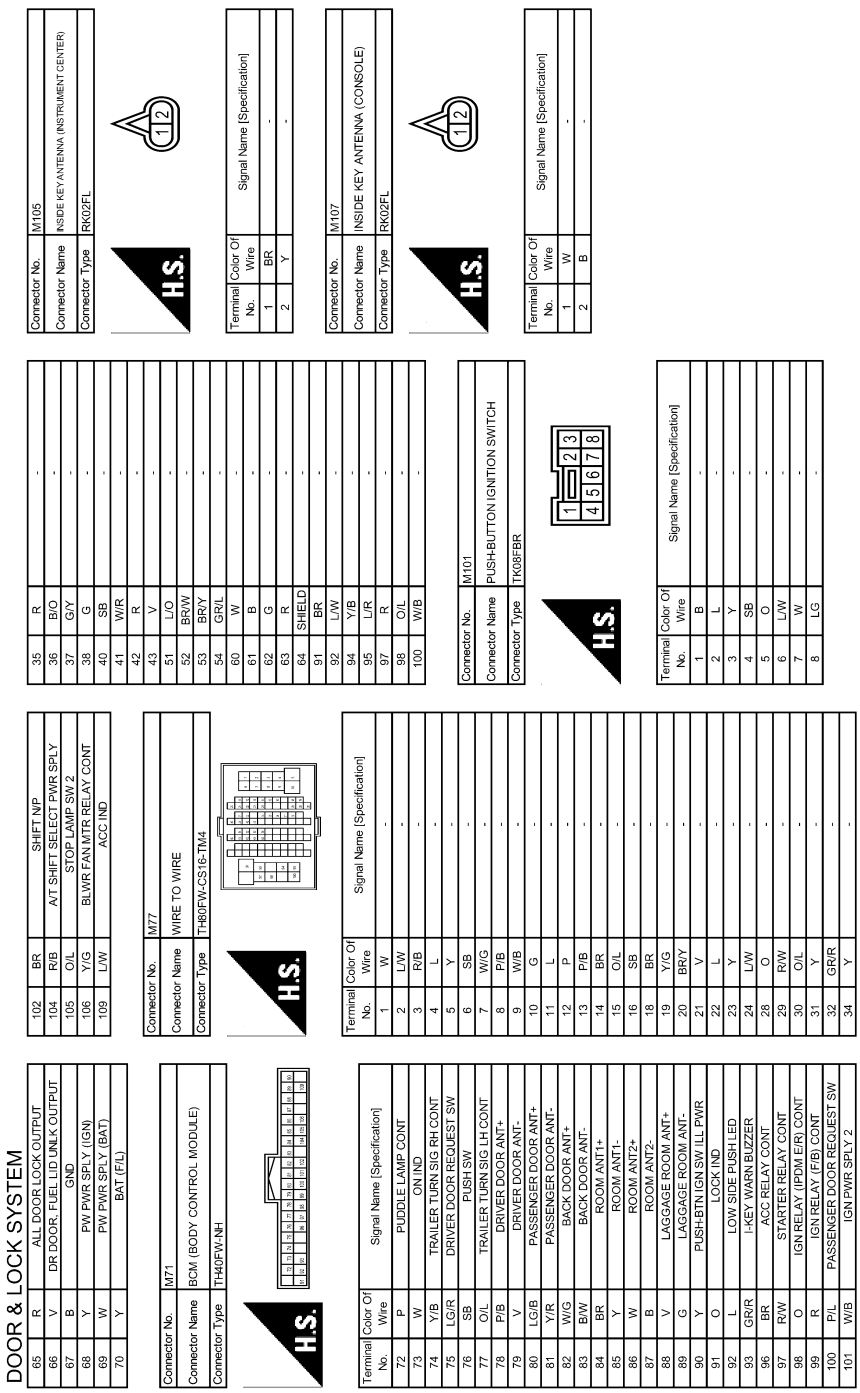
Terminal No.	Color Of Wire	Signal Name [Specification]
43	Y/L	BK DOOR SW
44	G/W	REAR WIPER STOP POSITION
45	W	PASSENGER DOOR SW
46	GR	REAR RH DOOR SW
47	GR/R	DRIVER DOOR SW
48	O	REAR LH DOOR SW
49	BR/Y	LUGGAGE ROOM LAMP CONT
50	B/Y	REMOTE ENGINE START
51	W/R	BACK DOOR REQ. SW
54	L	REAR WIPER OUTPUT
55	G	REAR DOOR UNLK OUTPUT

Connector No.	M70
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA09FW-FHA6-SA

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
56	W/R	INT ROOM LAMP PWR SPLY
57	LG	BAT (FUSE)
58	R/W	SHOCK DETECT. SENS
59	G	PASSENGER DOOR UNLK OUTPUT
60	G	TURN SIGNAL LH OUTPUT
61	G/Y	TURN SIGNAL RH OUTPUT
62	R	STEP LAMP CONT
63	BR	ROOM LAMP TIMER CONT
64	GR/R	CRANKING REQUEST

JRKWC5495GB



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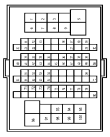
DOOR & LOCK SYSTEM

Connector No.	M111
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R/B	-
2	G	-
3	W/R	-
5	W/B	-
6	L/Y	-
7	R	-
8	G/R	-
9	GR/R	-
11	W	-
12	V	-
13	Y	-
16	L/O	-
17	GR/L	-
18	R/G	-
19	L/Y	-
20	G/Y	-
21	R	-
22	GR	-
27	L/O	-
29	SB	-
30	R/L	-
31	Y/L	-
32	W/R	-
33	W/G	-
34	L/R	-
36	G	-
37	V	-
38	SHIELD	-
39	P/B	-
40	W/R	-
41	R	-
42	L/W	-
43	B/W	-
44	L	-
45	P	-
46	SHIELD	-
47	R	-
48	W	-
49	SHIELD	-
50	V	-
51	O/L	-
52	L/R	-
53	SB	-
54	V/W	-
59	L	-
60	GR	-
61	P/L	-
62	B/SB	-
63	R/Y	-
64	BR	-
70	O	-
71	W	-
72	SHIELD	-
73	B	-
74	R	-
75	G	-
76	Y	-
77	SB	-
78	LG	-
79	R/B	-
90	W/B	-
93	Y	-
94	L	-
95	L/R	-
96	R	-
97	W	-
98	V	-
99	L/W	-
100	W	-

JRKWC5497GB

AUTOMATIC BACK DOOR SYSTEM

Wiring Diagram

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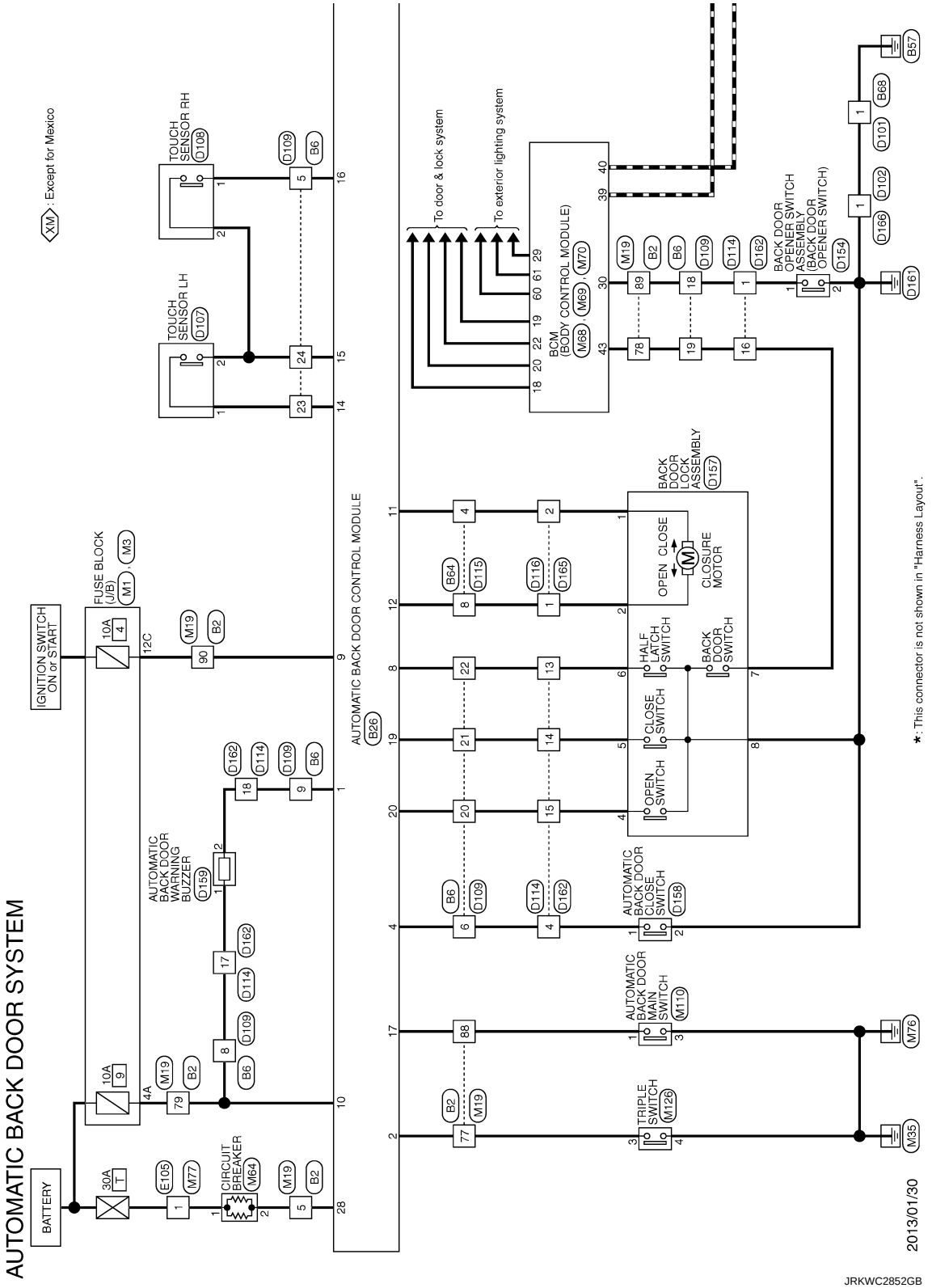

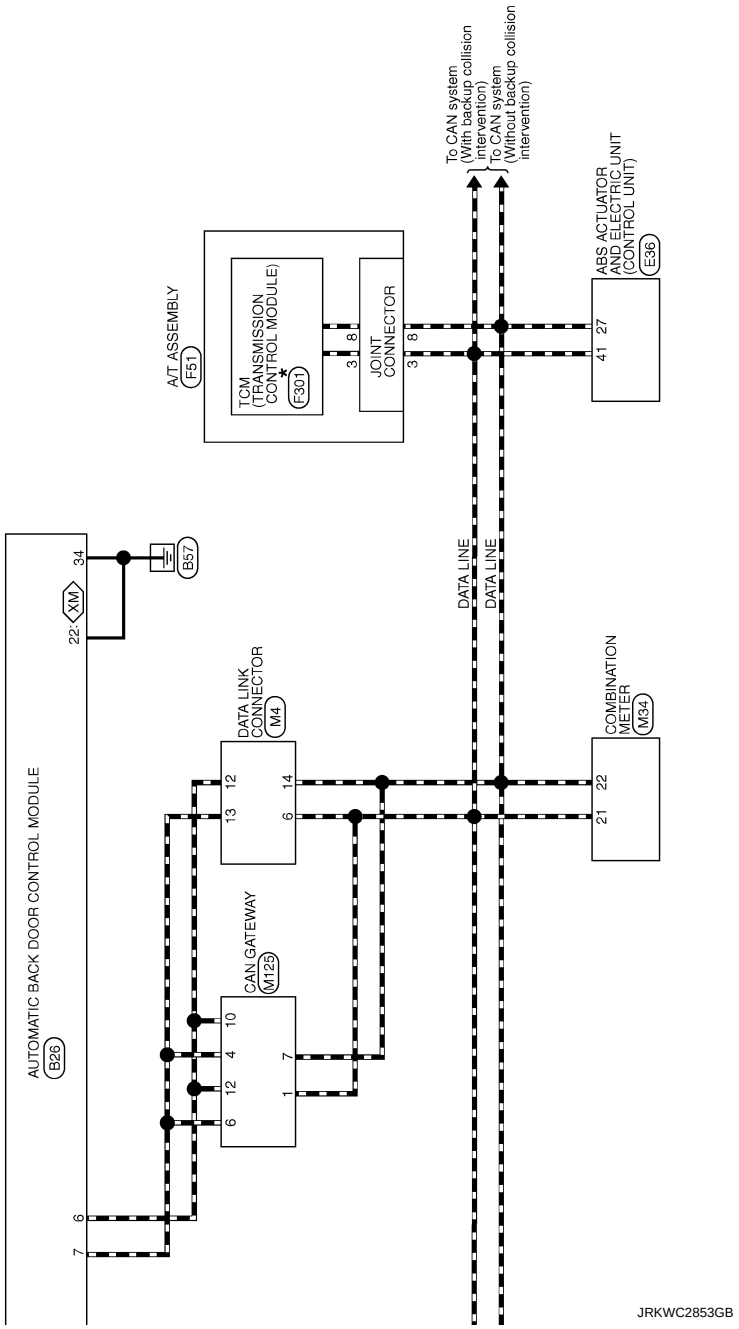
To CAN system
(With backup collision intervention)
To CAN system
(Without backup collision intervention)
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
E36
41 27
A/T ASSEMBLY
F51
TCM (TRANSMISSION CONTROL MODULE)
F301
JOINT CONNECTOR
3 8
3 8
DATA LINE
DATA LINE
AUTOMATIC BACK DOOR CONTROL MODULE
B26
22 XM 34
B57
DATA LINK CONNECTOR
M4
13 12
6 14
COMBINATION METER
M34
21 22
CAN GATEWAY
M125
6 12 4 10
1 7
7 6
JRKWC2853GB

AUTOMATIC BACK DOOR SYSTEM

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
3	BR	-
5	R/W	-
6	L	-
7	V	-
9	G	-
11	W/B	-
12	BR	-
13	G/R	-
14	B/Y	-
15	W/R	-
16	GR/R	-
18	G/W	-
19	V	-
20	W/G	-
21	B/W	-
22	V	-
24	G	-
25	O	-
26	Y	-
27	L/O	-
28	Y/R	-
29	L	-
30	R	-
31	G/Y	-
32	B/SB	-
33	LG/R	-
34	BR/W	-
35	GR/R	-
36	SB	-
37	LG	-
38	L	-
39	P	-
40	W/G	-
41	O	-
42	G/R	-
43	V/W	-
44	LG/B	-
45	R/Y	-
46	B	-
47	BR	-
49	GR	-
50	R/B	-
51	W/R	-
52	BR/Y	-
53	O/B	-
54	G/O	-
55	R/B	-
56	LG/R	-
57	GR/R	-
58	Y/G	-
59	V/W	-
60	R	-
63	B	-
64	R	-
65	W	-
66	G	-
67	SHIELD	-
69	LG/B	-
70	P/L	-
71	L	-
72	R	-
77	Y/B	-
78	Y/L	-
79	Y	-
80	W/R	-
81	Y/L	-
84	L/O	-
86	O	-
87	W/R	-
88	O	-
89	W/L	-
90	GR/L	-
91	W	-
92	G	-
94	W/R	-
96	L/W	-
97	R	-
98	V	-
99	L/W	-
100	P/B	-

Connector No.	B6
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	R	-
3	B	-
5	LG	-
6	GR	-
7	L/O	-
8	Y	-
9	L	-
10	B/W	-
11	W/G	-
12	W/R	-
13	SHIELD	-
14	G	-
17	BR/Y	-
18	W/L	-
19	Y/L	-
20	G/Y	-
21	L/Y	-
22	L/W	-
23	G/W	-
24	L/R	-

Connector No.	B26
Connector Name	AUTOMATIC BACK DOOR CONTROL MODULE
Connector Type	TH20FW-TB6

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	BUZZER
2	Y/B	ABD SW
4	GR	ABD CLOSE SW
6	P	CAN-L
7	L	CAN-H
8	L/W	HALF LATCH SW
9	GR/L	IGN
10	Y	BAT
11	R	CLOSURE MTR (CLOSE)
12	V	CLOSURE MTR (OPEN)
14	G/W	TOUCH SENS LH
15	L/R	TOUCH SENS GND
16	LG	TOUCH SENS RH
17	O	MAIN SW
19	L/Y	CLOSE SW
20	G/Y	OPEN SW
22	B	GND
28	R/W	BAT
34	B	GND

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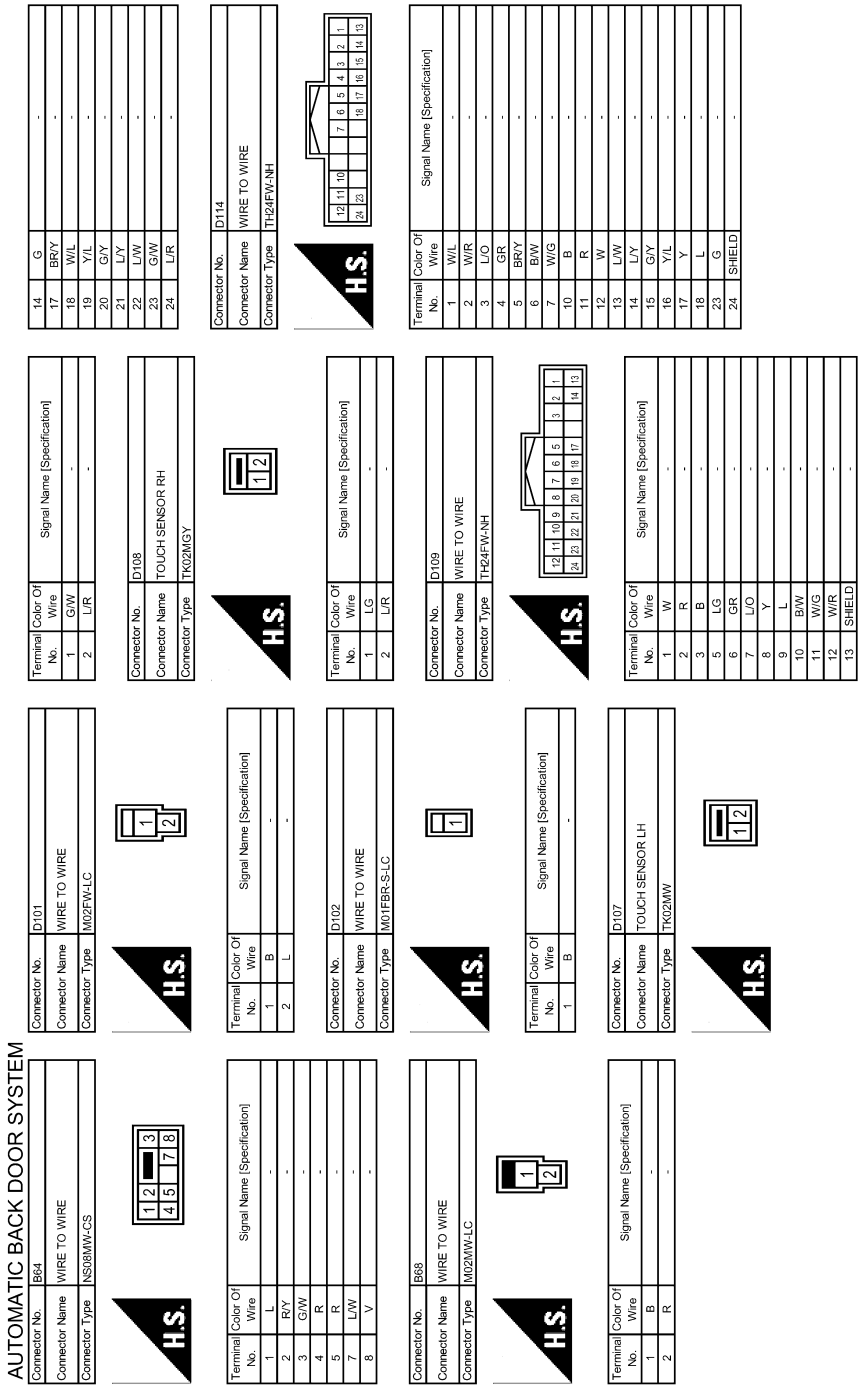


JRKWC5499GB

AUTOMATIC BACK DOOR SYSTEM

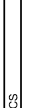
Connector No.	D115
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	R/Y	-
3	G/W	-
4	R	-
5	R	-
7	L/W	-
8	V	-

Connector No.	D116
Connector Name	WIRE TO WIRE
Connector Type	NS06FW-CS

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	R	-
3	G/W	-
4	L/W	-
5	R/Y	-
6	L	-

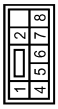
Connector No.	D154
Connector Name	BACK DOOR OPENER SWITCH ASSEMBLY
Connector Type	TH04MW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W/L	-
2	B	-
3	B	-
4	W/R	-

Connector No.	D157
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS08FW-CS

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	V	-
4	G/Y	-
5	L/Y	-
6	L/W	-
7	Y/L	-
8	B	-

Connector No.	D158
Connector Name	AUTOMATIC BACK DOOR CLOSE SWITCH
Connector Type	TK06FGY

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
2	B	-
3	L/B	-
4	BR/Y	-

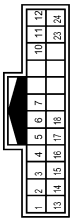
Connector No.	D159
Connector Name	AUTOMATIC BACK DOOR WARNING BUZZER
Connector Type	RK02FBR

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	L	-

Connector No.	D162
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W/L	-
2	W/R	-
3	L/B	-
4	GR	-
5	BR/Y	-
6	B/W	-
7	W/G	-
10	B	-
11	R	-
12	W	-
13	L/W	-
14	L/Y	-
15	G/Y	-
16	Y/L	-
17	Y	-
18	L	-
23	G	-
24	SHIELD	-

Connector No.	D165
Connector Name	WIRE TO WIRE
Connector Type	NS06MW-CS

H.S.

JRKWC5500GB

AUTOMATIC BACK DOOR SYSTEM

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	R	-
3	G/W	-
4	L/W	-
5	R/Y	-
6	L	-

Connector No.	D166
Connector Name	WIRE TO WIRE
Connector Type	M01MBR-PS-LC

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-

Connector No.	E36
Connector Name	ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
Connector Type	SAZ42FB-SJZ4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	BAT
2	B	GND
3	B	GND
4	W	MOTOR SUPPLY
9	R/B	YAW RATE / SIDE / DECEL G SENSOR COMMUNICATION-H
10	P/B	YAW RATE / SIDE / DECEL G SENSOR COMMUNICATION-L
13	GR	BRAKE FLUID LEVEL SW
17	L/R	STP2
18	W/B	IGN

19	O	DS FR
20	SB	DP FL
21	R/O	DS RR
22	V	DP RL
27	P	CAN-L
33	LG	DP FR
34	G	DS FL
35	BR	DP RR
36	P	DS RL
37	R	STP
39	L/W	VDC OFF SW
41	L	CAN-H
46	W	STOP LAMP SW ON

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	L/W	-
3	R/B	-
4	L	-
5	Y	-
7	W/G	-
8	P/B	-
9	W/B	-
10	G	-
11	L	-
12	P	-
13	P/B	-
14	BR	-
15	L/B	-
16	SB	-
18	BR	-
19	Y/G	-
20	BR/Y	-
21	Y/V	-
22	L	-
23	Y	-

24	L/W	-
28	O	-
29	R/W	-
30	L/B	-
31	Y	-
32	GR/R	-
34	Y	-
35	R	-
36	B/R	-
37	G/Y	-
38	G	-
40	SB	-
41	W/R	-
42	R	-
43	V	-
51	L/O	-
52	BR/W	-
53	BR/Y	-
54	GR/L	-
60	W	-
61	B	-
62	R	-
63	G	-
64	SHIELD	-
91	BR	-
92	L/W	-
94	Y/B	-
95	G/R	-
97	R	-
98	G/B	-
100	W/R	-

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	IGNITION POWER SUPPLY
2	P	BATTERY POWER SUPPLY
3	L	CAN-H

4	SB	K-LINE
5	B	GROUND
6	V	IGNITION POWER SUPPLY
7	R	BACK-UP LAMP RELAY
8	P	CAN-L
9	BR	STARTER RELAY
10	B	GROUND

Connector No.	F301
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FG

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	-	IGNITION POWER SUPPLY
2	-	BATTERY POWER SUPPLY
3	-	CAN-H
4	-	K-LINE
5	-	GROUND
6	-	IGNITION POWER SUPPLY
7	-	BACK-UP LAMP RELAY
8	-	CAN-L
9	-	STARTER RELAY
10	-	GROUND

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2

H.S.

JRKWC5501GB

AUTOMATIC BACK DOOR SYSTEM

Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	-
2A	GR	-
3A	W	-
4A	Y/G	-
5A	V	-
6A	L/W	-
7A	LG	-
8A	W	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
10C	GR	-
11C	R/L	-
12C	GR/L	-
6C	R	-
7C	B	-
8C	W	-

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	-
4	B	-
5	B	-
6	L	-
7	SB	-
8	GR	-
11	SB	-
12	R	-
13	L	-
14	P	-
16	Y	-

Connector No.	M19
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.

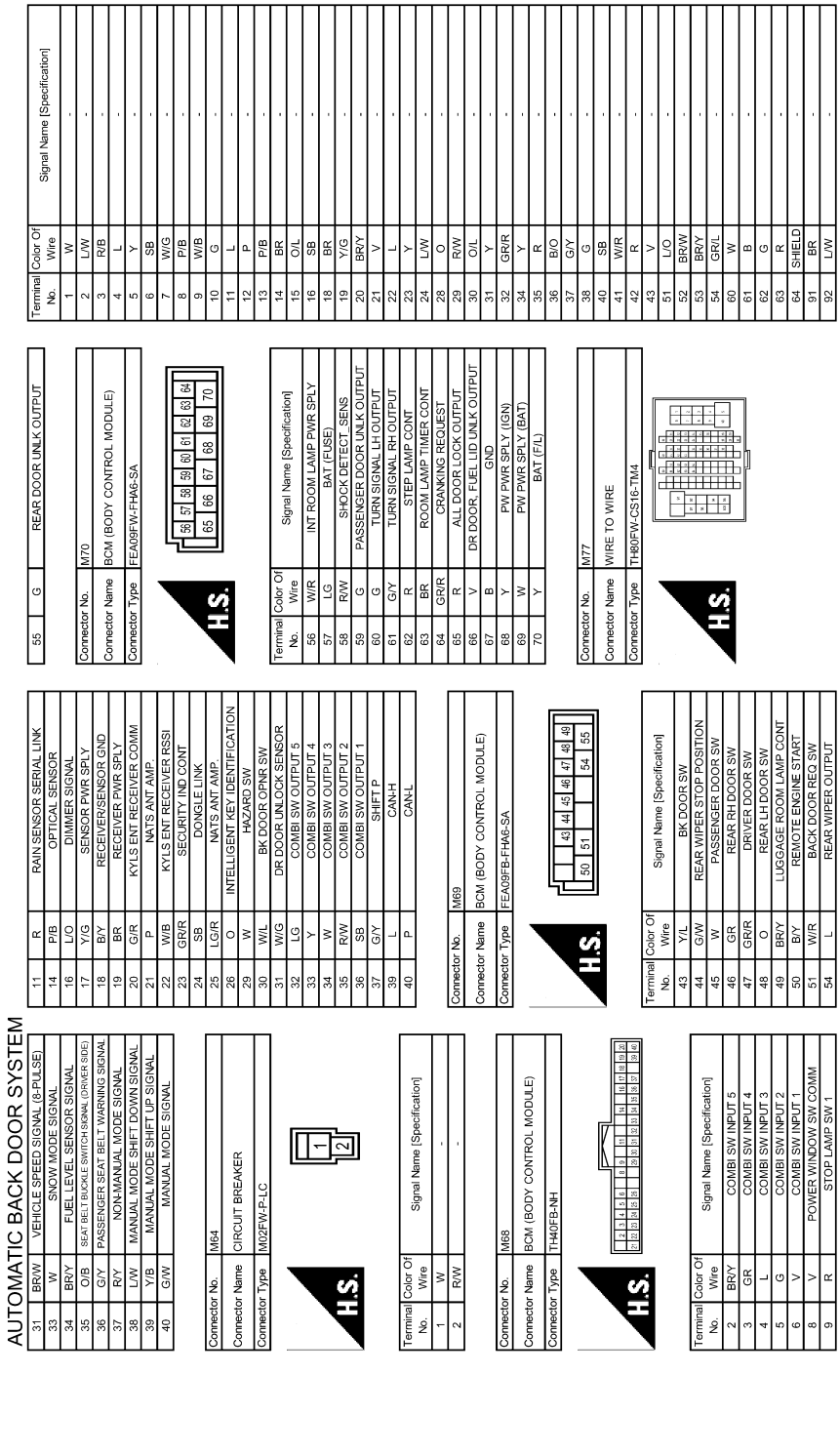
Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
3	BR	-
5	R/W	-
6	L	-
7	V	-
9	G	-
11	W/B	-
12	BR	-
13	G/R	-
14	B/Y	-
15	W/R	-
16	GR/R	-
18	G/W	-
19	V	-
20	W/G	-
21	B/W	-
22	V	-
24	G	-
25	O	-
26	Y	-
27	L/O	-
28	Y/R	-
29	L	-
30	R	-
31	G/Y	-
32	B/SB	-
33	LG/R	-
34	BR/W	-
35	GR/R	-
36	SB	-
37	LG	-
38	L	-
39	P	-
40	W/G	-
41	O	-
42	G/R	-
43	V/W	-
44	LG/B	-
45	R/Y	-
46	B	-
47	BR/W	-
49	GR	-
50	R/B	-
51	W/R	-
52	BR/Y	-
53	O/B	-
54	G/O	-
55	R/B	-
56	LG/R	-
57	GR/R	-
58	Y/G	-
59	V/W	-
60	R	-
63	B	-
64	R	-
65	W	-
66	G	-
67	SHIELD	-
69	LG/B	-
70	P/L	-
71	L	-
72	R	-
77	Y/B	-
78	Y/L	-
79	Y	-
80	W/R	-
81	Y/L	-
84	L/O	-
86	O	-
87	W/R	-
88	O	-
89	W/L	-
90	GR/L	-
91	W	-
92	G	-
94	W/R	-
96	L/W	-
97	R	-
98	V	-
99	L/W	-
100	P/B	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	TH40FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	BATTERY POWER SUPPLY
2	GR	IGNITION SIGNAL
3	B	GROUND
4	B	ILL GND
5	B	ILL CONTROL OUTPUT
7	R	TOW MODE SIGNAL
8	P/L	TRIP RESET SWITCH SIGNAL
11	G	ENTER SWITCH SIGNAL
12	O	SELECT SWITCH SIGNAL
13	W/R	ILLUMINATION CONTROL SWITCH SIGNAL (+)
14	R	ILLUMINATION CONTROL SWITCH SIGNAL (-)
15	R/W	AIR BAG SIGNAL
18	W/R	AMBIENT SENSOR SIGNAL
19	V/W	A/C AUTO AMP. CONNECTION RECOGNITION SIGNAL
20	B	AMBIENT SENSOR GROUND
21	L	CAN-H
22	P	CAN-L
23	B	GROUND
24	V	FUEL LEVEL SENSOR GROUND
25	O/L	ALTERNATOR SIGNAL
26	W	PARKING BRAKE SWITCH SIGNAL
28	GR/R	SECURITY SIGNAL
29	BR	WASHER LEVEL SWITCH SIGNAL
30	SB	VEHICLE SPEED SIGNAL (2-PULSE)

JRKWC5502GB



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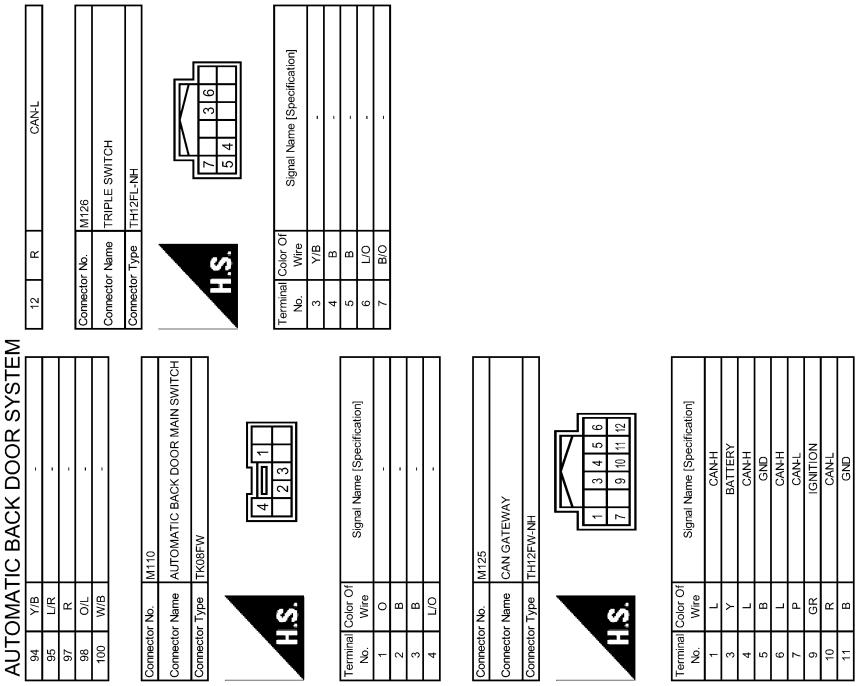

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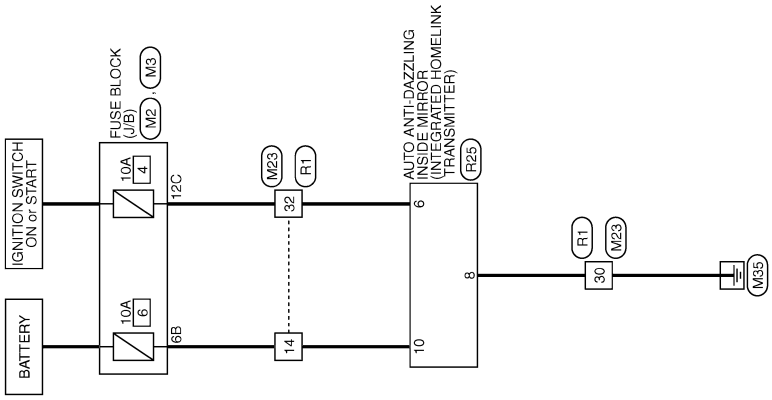
INTEGRATED HOMELINK TRANSMITTER SYSTEM

Wiring Diagram

INFOID:0000000009011467

INTEGRATED HOMELINK TRANSMITTER



2010/05/13

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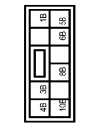
INTEGRATED HOMELINK TRANSMITTER

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FW-CS

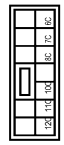
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
10B	W/B	-
1B	R	-
3B	R	-
4B	B	-
5B	BR	-
6B	Y	-
8B	L/O	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS

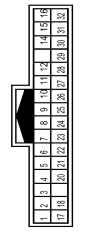
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
10C	GR	-
11C	R/L	-
12C	GR/L	-
6C	R	-
7C	B	-
8C	W	-

Connector No.	M23
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH

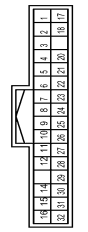
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	V	-
3	B	-
4	Y	-
5	G/R	-
6	B/Y	-
7	B	-
8	Y/L	-
9	G	-
10	B	-
11	R	-
12	Y	-
14	Y	-
15	W/R	-
16	L/O	-
17	Y	-
18	L/O	-
20	W	-
21	O	-
22	SB	-
23	Y/R	-
24	SHIELD	-
25	Y/G	-
26	L/O	-
27	W/G	-
28	Y	-
29	L	-
30	B/SB	-
31	BR	-
32	GR/L	-

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH

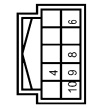
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	V	-
3	B	-
4	Y	-
5	B/R	-
6	B/Y	-
7	B	-
8	Y/L	-
9	G	-
10	B	-
11	R	-
12	Y	-
14	B/Y	-
15	W/R	-
16	L/O	-
17	Y	-
18	L/O	-
20	W	-
21	O	-
22	SB	-
23	Y	-
24	SHIELD	-
25	Y/G	-
26	L	-
27	W/G	-
28	Y	-
29	L	-
30	B/SB	-
31	BR	-
32	B/R	-

Connector No.	R25
Connector Name	AUTO ANTI-DAZZLING INSIDE MIRROR
Connector Type	TH10FB-NH

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
4	B/R	-
6	B/R	-
8	B	-
9	B/Y	-
10	B/Y	-

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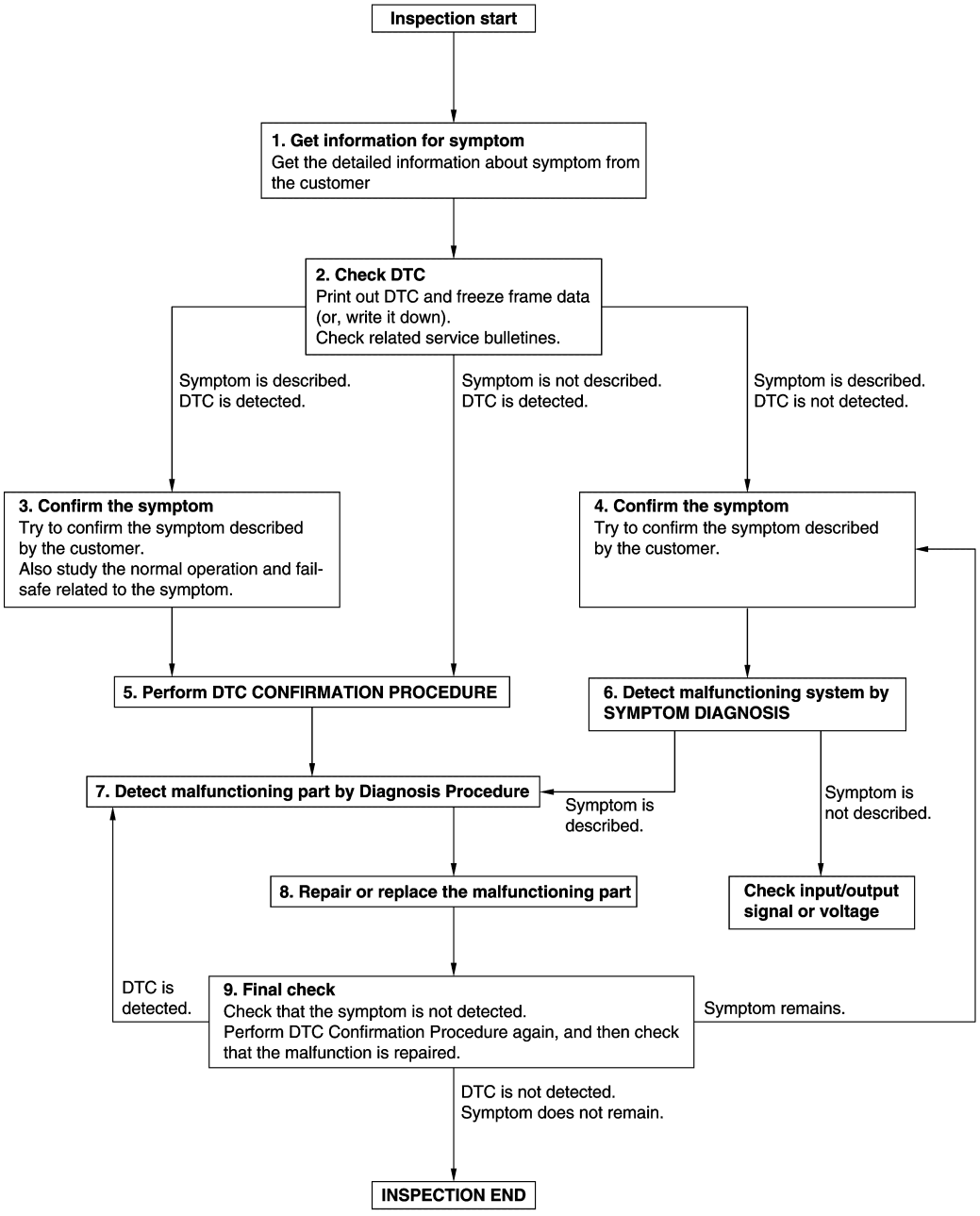
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000009011468

OVERALL SEQUENCE



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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-57, "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-43, "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-43, "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.

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

INFOID:0000000009011469

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

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Work Procedure

INFOID:0000000009011470

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.

>> WORK END

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM)

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM) : Description

INFOID:0000000009011471

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

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM) : Work Procedure

INFOID:0000000009011472

Refer to the CONSULT operation manual for the initialization procedure.

ADDITIONAL SERVICE WHEN REPLACING (AUTOMATIC BACK DOOR CONTROL MODULE)

ADDITIONAL SERVICE WHEN REPLACING (AUTOMATIC BACK DOOR CONTROL MODULE) : Description

INFOID:0000000009011473

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

ADDITIONAL SERVICE WHEN REPLACING (AUTOMATIC BACK DOOR CONTROL MODULE) : Work Procedure

INFOID:0000000009011474

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.

>> WORK END

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000009011475

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H-line, CAN L-line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.
CAN Communication Signal Chart. Refer to LAN-32, "CAN COMMUNICATION SYSTEM : CAN Communication Signal Chart".

DTC Logic

INFOID:0000000009011476

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
U1000	CAN COMM	When automatic back door control unit cannot communicate CAN communication signal continuously for 2 seconds or more.	CAN communication system

Diagnosis Procedure

INFOID:0000000009011477

1.PERFORM SELF DIAGNOSTIC

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

Is “CAN COMM CIRCUIT” displayed?

YES >> Refer to LAN-22, "Trouble Diagnosis Flow Chart".
NO >> Refer to GI-43, "Intermittent Incident".

U1010 CONTROL UNIT (CAN)

DTC Logic

INFOID:0000000009011478

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting 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:0000000009011479

1.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

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

>> Replace automatic back door control module. Refer to DLK-268, "Removal and Installation".

B2401 IGNITION POWER SUPPLY CIRCUIT

DTC Logic

INFOID:0000000009011480

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2401	IGN OPEN	When the automatic back door control unit detects the following condition for 0.3 second or more • Power supply condition (OFF) of automatic back door control unit and Ignition position signal (ON) from BCM via CAN	• Fuse • Harness or connectors (Ignition power supply condition circuit is open or shorted)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON and wait for at least 1 second.
2. Check “Self Diagnostic Result” mode of “AUTOMATIC BACK DOOR CONTROL UNIT” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-86, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009011481

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10A fuse, [No. 4, 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 POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door control unit connector.
3. Check voltage between automatic back door control unit harness connector and ground.

(+)		(–)	Condition		Voltage (Approx.)
Automatic back door control unit					
Connector	Terminal				
B26	9	Ground	Ignition switch	ON	Battery voltage
				OFF	0 V

Is the measurement value normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".
NO >> Repair or replace harness.

B2403 ENCODER

DTC Logic

INFOID:0000000009011482

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2403	PULSE ENCODER	When the automatic back door control unit can not receive the signal from the encoder just after starting the open/close operation	• Battery voltage (low battery) • 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 UNIT” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-87, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009011483

1.CHECK AUTOMATIC BACK DOOR CONTROL MODULE POWER SUPPLY AND GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check automatic back door control module power supply and ground circuit.
   Refer to DLK-118, "AUTOMATIC BACK DOOR CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-268, "Removal and Installation".
NO >> Repair or replace the malfunctioning parts.

B2409 HALF LATCH SWITCH

DTC Logic

INFOID:0000000009011484

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2409	HALF LATCH SW	When the automatic back door control unit can not detects the half latch switch ON condition even when the back door is in the open position	• Half latch switch • Harness or connectors (Half latch switch circuit is open) • 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 UNIT” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-88, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009011485

1.CHECK HALF LATCH SWITCH SIGNAL

1. Select “AUTOMATIC BACK DOOR CONTROL UNIT” 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 6.
NO >> GO TO 2.

2.CHECK HALF LATCH 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		
D157	6	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.
NO >> GO TO 3.

3.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	
B26	8	D157	6	Existed

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-268, "Removal and Installation".
NO >> Repair or replace harness.

4.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		
D157	8		Existed

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace back door lock assembly ground circuit.

5.CHECK HALF LATCH SWITCH

Refer to DLK-89, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace back door lock assembly.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000009011486

COMPONENT INSPECTION

1.CHECK HALF LATCH 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				
6	8	Back door lock	Open	Existed
			Fully closed/Half latch	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace back door lock assembly.

B2416 TOUCH SENSOR RH

DTC Logic

INFOID:0000000009011487

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2416	TOUCH SEN R OPEN	When the automatic back door control unit detects the open circuit of the touch sensor RH	• Touch sensor RH • Harness or connectors (Touch sensor RH circuit is open) • 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 UNIT” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-90, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009011488

1.CHECK HALF LATCH SWITCH SIGNAL

1. Select “AUTOMATIC BACK DOOR CONTROL UNIT” 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 6.
NO >> GO TO 2.

2.CHECK TOUCH SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect touch sensor RH connector.
3. Check voltage between touch sensor RH harness connector and ground.

(+)		(–)	Voltage (Approx.)
Touch sensor RH			
Connector	Terminal		
D108	1	Ground	6 V

Is the inspection result normal?

YES >> GO TO 4.
NO >> GO TO 3.

3.CHECK TOUCH SENSOR RH CIRCUIT

1. Disconnect automatic back door control module 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	
B26	16	D108	1	Existed

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-268, "Removal and Installation".
NO >> Repair or replace harness.

4.CHECK TOUCH SENSOR RH GROUND CIRCUIT

1. Disconnect automatic back door control module and touch sensor LH connectors.
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	
B26	15	D108	2	Existed

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace harness.

5.CHECK TOUCH SENSOR RH

Refer to DLK-91, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace touch sensor RH.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000009011489

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	120 Ω or less
			Other than above	1 kΩ ± 10%

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace touch sensor RH.

B2417 TOUCH SENSOR LH

DTC Logic

INFOID:0000000009011490

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2417	TOUCH SEN L OPEN	When the automatic back door control unit detects the open circuit of the touch sensor LH.	• Touch sensor LH • Harness or connectors (Touch sensor LH circuit is open) • 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 UNIT” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-92, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009011491

1.CHECK HALF LATCH SWITCH SIGNAL

1. Select “AUTOMATIC BACK DOOR CONTROL UNIT” 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 6.
NO >> GO TO 2.

2.CHECK TOUCH SENSOR INPUT SIGNAL

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

(+)		(–)	Voltage (Approx.)
Touch sensor LH			
Connector	Terminal		
D107	1	Ground	6 V

Is the inspection result normal?

YES >> GO TO 4.
NO >> GO TO 3.

3.CHECK TOUCH SENSOR LH CIRCUIT

1. Disconnect automatic back door control module.
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	
B26	14	D107	1	Existed

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-268, "Removal and Installation".
NO >> Repair or replace harness.

4.CHECK TOUCH SENSOR LH GROUND CIRCUIT

1. Disconnect automatic back door control module and touch sensor RH connectors.
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	
B26	15	D107	2	Existed

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace harness.

5.CHECK TOUCH SENSOR LH

Refer to DLK-93, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace touch sensor LH.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000009011492

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	120 Ω or less
			Other than above	1 kΩ ± 10%

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace touch sensor LH.

B2419 OPEN SWITCH

DTC Logic

INFOID:0000000009011493

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2419	OPEN SW	When the automatic back door control unit detects any of the following conditions • The change of open switch cannot be detected for 1 second or more after starting the closure open output for the 3rd time in a row • The change of open switch cannot be detected for 0.5 second or more after starting the closure close output for the 3rd time in a row • The condition that the open switch is in the ON position and the close switch is in the OFF position is detected when starting the closure open/close output for the 3rd time in a row	• Open switch • Harness or connectors (Open switch circuit is open or shorted) • 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 UNIT” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-94, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009011494

1.CHECK OPEN SWITCH SIGNAL

1. Select “AUTOMATIC BACK DOOR CONTROL UNIT” 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 6.
NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR CONTROL MODULE OUTPUT 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		
D157	4	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.
NO >> GO TO 3.

3.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	
B26	20	D157	4	Existed

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

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B26	20		Not existed

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-268, "Removal and Installation".
NO >> Repair or replace harness.

4.CHECK OPEN SWITCH GROUND CIRCUIT

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D157	8		Existed

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace harness.

5.CHECK OPEN SWITCH

Refer to DLK-95, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace back door lock assembly.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000009011495

COMPONENT INSPECTION

1.CHECK OPEN 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	Open	Existed
			Fully closed/Half latch	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace back door lock assembly.

B2420 CLOSE SWITCH

DTC Logic

INFOID:0000000009011496

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2420	CLOSE SW	When the automatic back door control unit detects any of the following conditions • The change of close switch cannot be detected for 3 second or more after starting the closure close output for the 3rd time in a row	• Close switch • Harness or connectors (Close switch circuit is open or shorted) • 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 UNIT” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-97, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009011497

1.CHECK CLOSE SWITCH SIGNAL

1. Select “AUTOMATIC BACK DOOR CONTROL UNIT” 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 6.
NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR CONTROL MODULE OUTPUT 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		
D157	5	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.
NO >> GO TO 3.

3.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	
B26	19	D157	5	Existed

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

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B26	19		Not existed

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-268, "Removal and Installation".
NO >> Repair or replace harness.

4.CHECK CLOSE SWITCH GROUND CIRCUIT

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D157	8		Existed

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace harness.

5.CHECK CLOSE SWITCH

Refer to DLK-98, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace back door lock assembly.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000009011498

COMPONENT INSPECTION

1.CHECK CLOSE 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				
5	8	Back door	Fully closed	Existed
			Open/Half latch	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace back door lock assembly.

B2421 CLUTCH OPERATION TIME

DTC Logic

INFOID:0000000009011499

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2421	CLUTCH TIME OUT	When the automatic back door control unit detects the power distribution to the clutch for 2 minutes or more	• Automatic back door control module • Battery voltage (low voltage)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTOMATIC BACK DOOR CONTROL UNIT” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-99, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009011500

1.CHECK AUTOMATIC BACK DOOR CONTROL MODULE POWER SUPPLY AND GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check automatic back door control module power supply and ground circuit.
   Refer to DLK-118, "AUTOMATIC BACK DOOR CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-268, "Removal and Installation".
NO >> Repair or replace the malfunctioning parts.

B2422 BACK DOOR STATE

DTC Logic

INFOID:0000000009011501

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2422	BACK DOOR STATE	When the automatic back door control unit detects back door position malfunction according to the pulse signal	• Back door mechanism • 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 UNIT” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-100, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009011502

1.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

When DTC [B2422] is detected, replace automatic back door control module.

>> Replace automatic back door control module. Refer to DLK-268, "Removal and Installation".

B2423 AUTOMATIC BACK DOOR MOTOR OPERATION TIME

DTC Logic

INFOID:0000000009011503

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2423	ABD MTR TIME OUT	When the automatic back door control unit and automatic back door motor operate in the same direction for 30 seconds or more continuously	• Back door mechanism • Automatic back door control module • Battery voltage (low battery)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTOMATIC BACK DOOR CONTROL UNIT” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-101, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009011504

1.CHECK AUTOMATIC BACK DOOR CONTROL MODULE POWER SUPPLY AND GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check automatic back door control module power supply and ground circuit.
   Refer to DLK-118, "AUTOMATIC BACK DOOR CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-268, "Removal and Installation".
NO >> Repair or replace the malfunctioning parts.

B2424 CLOSURE CONDITION

DTC Logic

INFOID:0000000009011505

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2424	CLSR CONDITION	When the following conditions are detected after OPEN/CLOSE operation of the back door closure motor • Open switch and close switch are ON	• Harness or connector (Open switch or close switch circuit is open or shorted) • Back door lock assembly

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTOMATIC BACK DOOR CONTROL UNIT” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-102, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009011506

1.CHECK OPEN/CLOSE SWITCH SIGNAL

1. Select “AUTOMATIC BACK DOOR CONTROL UNIT” using CONSULT.
2. Select “CLOSE SW”, “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	Half latch/fully closed	OFF
		Open	ON
CLOSE SW		Open/half latch	OFF
		Fully closed	ON

Is the inspection result normal?

YES >> GO TO 6.
NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR CONTROL MODULE OUTPUT

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		
D157	4	Ground	Battery voltage
	5		

Is the inspection result normal?

YES >> GO TO 4.
NO >> GO TO 3.

3.CHECK OPEN/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	
B26	19	D157	5	Existed
	20		4	

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

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B26	19		Not existed
	20		

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-268, "Removal and Installation".
NO >> Repair or replace harness.

4.CHECK GROUND CIRCUIT

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D157	8		Existed

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace harness.

5.CHECK OPEN/CLOSE SWITCH

Refer to DLK-103, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace back door lock assembly.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000009011507

COMPONENT INSPECTION

1.CHECK OPEN/CLOSE 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				
5	8	Back door lock	Fully closed	Existed
			Open/half latch	Not existed
4			Open	Existed
			Fully closed/half latch	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace back door lock assembly.

B2425 AUTOMATIC BACK DOOR CONTROL UNIT

DTC Logic

INFOID:0000000009011508

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC Detection Condition	Possible cause
B2425	AUTO BCK DR CNT UNIT	Automatic back door control unit detected CPU malfunction	Automatic back door control module

Diagnosis Procedure

INFOID:0000000009011509

1.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

When DTC [B2425] is detected, replace automatic back door control module.

>> Replace automatic back door control module. Refer to DLK-268, "Removal and Installation".

B2621 INSIDE ANTENNA

DTC Logic

INFOID:0000000009011510

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?

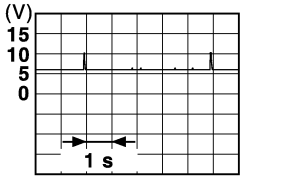
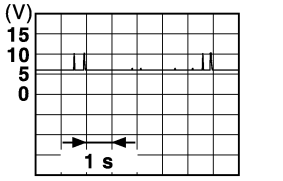
YES >> Refer to DLK-106, "Diagnosis Procedure".
NO >> Inside key antenna (instrument center) is OK.

Diagnosis Procedure

INFOID:0000000009011511

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)
M71	84, 85	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-95, "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	
M71	84	M105	1	Existed
	85		2	

3. Check continuity between BCM harness connector and ground.

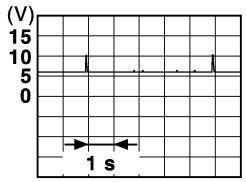
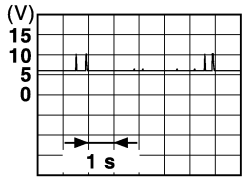
BCM		Ground	Continuity
Connector	Terminal		
M71	84		Not existed
	85		

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			
M71	84, 85	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-95, "Removal and Installation".

B2622 INSIDE ANTENNA

DTC Logic

INFOID:0000000009011512

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?

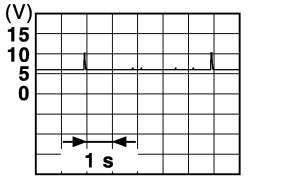
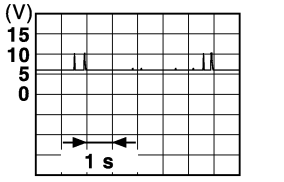
YES >> Refer to DLK-108, "Diagnosis Procedure".
NO >> Inside key antenna (console) is OK.

Diagnosis Procedure

INFOID:0000000009011513

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)
M71	86, 87	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-95, "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	
M71	86	M107	1	Existed
	87		2	

3. Check continuity between BCM harness connector and ground.

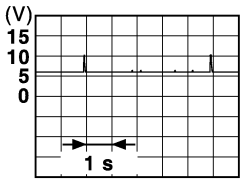
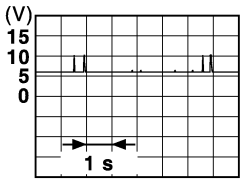
BCM		Ground	Continuity
Connector	Terminal		
M71	86		Not existed
	87		

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 Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M71	86, 87	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).
NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

B2623 INSIDE ANTENNA

DTC Logic

INFOID:0000000009011514

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?

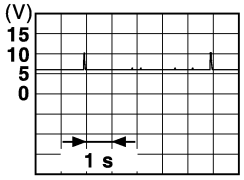
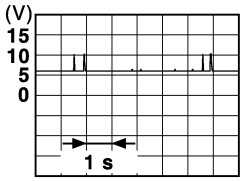
YES >> Refer to DLK-110, "Diagnosis Procedure".
NO >> Inside key antenna (luggage room) is OK.

Diagnosis Procedure

INFOID:0000000009011515

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)
M71	88, 89	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-95, "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	
M71	88	B13	1	Existed
	89		2	

3. Check continuity between BCM harness connector and ground.

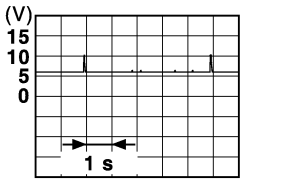
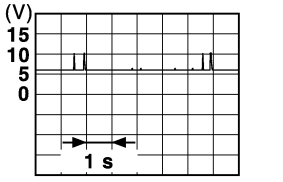
BCM		Ground	Continuity
Connector	Terminal		
M71	88		Not existed
	89		

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 Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M71	88, 89	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).
NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

B2626 OUTSIDE ANTENNA

DTC Logic

INFOID:0000000009011516

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2626	OUTSIDE ANTENNA	An excessive high or low voltage from front door right outside key antenna is sent to BCM	• Front door right outside key antenna • Harness or connector [Front door right outside key antenna 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?

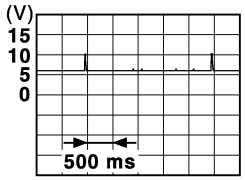
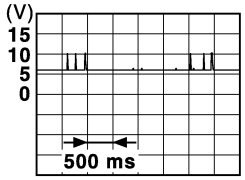
YES >> Refer to DLK-110, "Diagnosis Procedure".
NO >> Outside key antenna (passenger side) is OK.

Diagnosis Procedure

INFOID:0000000009011517

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)
M71	80, 81	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-95, "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	
M71	80	D32	1	Existed
	81		2	

3. Check continuity between BCM harness connector and ground.

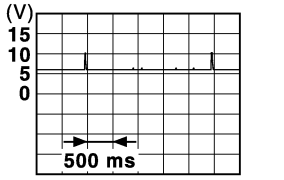
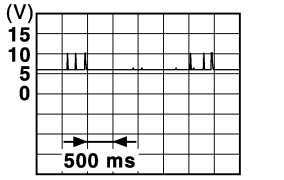
BCM		Ground	Continuity
Connector	Terminal		
M71	80		Not existed
	81		

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 Connector	(+) BCM Terminal	(–)	Condition		Signal (Reference value)
M71	80, 81	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).
NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

B2627 OUTSIDE ANTENNA

DTC Logic

INFOID:0000000009011518

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2627	OUTSIDE ANTENNA	An excessive high or low voltage from front door left outside key antenna is sent to BCM	• Front door left outside key antenna • Harness or connector [Front door left outside key antenna 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?

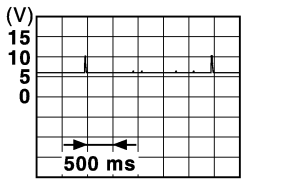
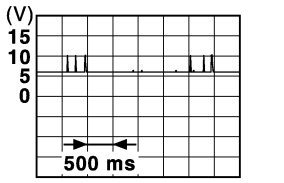
YES >> Refer to DLK-110, "Diagnosis Procedure".
NO >> Outside key antenna (driver side) is OK.

Diagnosis Procedure

INFOID:0000000009011519

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)
M71	78, 79	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-95, "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	
M71	78	D12	1	Existed
	79		2	

3. Check continuity between BCM harness connector and ground.

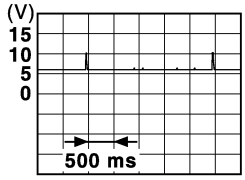
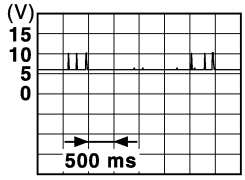
BCM		Ground	Continuity
Connector	Terminal		
M71	78		Not existed
	79		

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)
M71	78, 79	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).
NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

B2628 OUTSIDE ANTENNA

DTC Logic

INFOID:0000000009011520

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2628	OUTSIDE ANTENNA	An excessive high or low voltage from outside key antenna (back door) is sent to BCM	• Outside key antenna (back door) • Harness or connector [Outside key antenna (back door) 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?

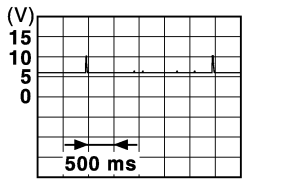
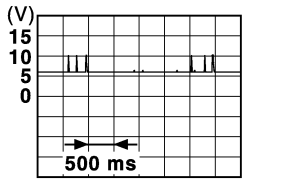
YES >> Refer to DLK-110, "Diagnosis Procedure".
NO >> Outside key antenna (back door) is OK.

Diagnosis Procedure

INFOID:0000000009011521

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)
M71	82, 83	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-95, "Removal and Installation".
NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and outside key antenna (back door) connector.
2. Check continuity between BCM harness connector and outside key antenna (back door) harness connector.

BCM		Outside key antenna (back door)		Continuity
Connector	Terminal	Connector	Terminal	
M71	82	D153	1	Existed
	83		2	

3. Check continuity between BCM harness connector and ground.

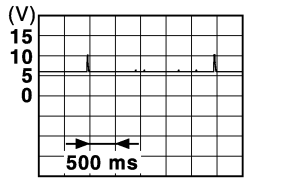
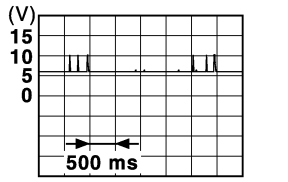
BCM		Ground	Continuity
Connector	Terminal		
M71	82		Not existed
	83		

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 (back door). (New antenna or other antenna)
2. Connect BCM and outside key antenna (back door) connector.
3. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Signal (Reference value)
M71	82, 83	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 (back door).
NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

POWER SUPPLY AND GROUND CIRCUIT
AUTOMATIC BACK DOOR CONTROL UNIT

AUTOMATIC BACK DOOR CONTROL UNIT : Diagnosis Procedure

INFOID:0000000009011522

1.CHECK FUSE, FUSIBLE LINK AND CIRCUIT BREAKER

Check that the following fuse, fusible link and circuit breaker are not fusing.

Fuse and fusible link No.	Signal name
T (30A)	Battery power supply
9 (10A)	
4 (10A)	Ignition power supply

Is the fuse fusing?

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

(+)		(–)	Condition		Voltage (Approx.)
Automatic back door control module					
Connector	Terminal				
B26	9	Ground	Ignition switch	ON	Battery voltage
	10			—	
	28				

Is the measurement value 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		
B26	34		Existed

Does continuity exist?

YES >> INSPECTION END
NO >> Repair or replace harness.

DOOR SWITCH

Component Function Check

INFOID:0000000009011523

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?

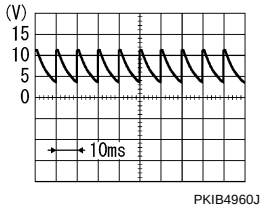
YES >> Door switch is OK.
NO >> Refer to DLK-119, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009011524

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	B93	3	Ground	 PKIB4960J 7.0 - 8.0 V
Passenger side	B94			
Rear LH	B92			
Rear RH	B91			

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	B93	3	M69	47	Existed
Passenger side	B94			45	
Rear LH	B92			48	
Rear RH	B91			46	

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

Door switch				Continuity
Connector		Terminal		
Driver side	B93	3	Ground	Not existed
Passenger side	B94			
Rear LH	B92			
Rear RH	B91			

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK DOOR SWITCH GROUND CIRCUIT

Check continuity between door switch harness connector and ground.

Door switch		Ground	Continuity
Connector	Terminal		
B93	4	Ground	Existed
B94			
B92			
B91			

Is the inspection result normal?

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

4.CHECK DOOR SWITCH

Refer to DLK-120, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace malfunctioning door switch.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000009011525

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	4	Door switch	Pressed	Not existed
			Released	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace malfunction door switch.

BACK DOOR SWITCH

Component Function Check

INFOID:0000000009011526

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?

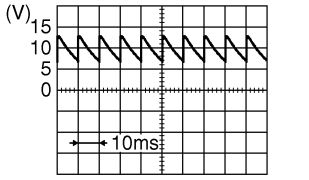
YES >> Door switch is OK.
NO >> Refer to DLK-122, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009011527

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		
D157	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	
D157	7	M69	43	Existed

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D157	7		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "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		
D157	8		Existed

Is the inspection result normal?

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

4.CHECK BACK DOOR SWITCH

Refer to DLK-123, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door lock assembly.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000009011528

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	Not existed
			Released	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace back door lock assembly.

DOOR LOCK AND UNLOCK SWITCH

DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:0000000009011529

1.CHECK FUNCTION

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

Monitor item	Condition		Status
CDL LOCK SW	Door lock and unlock switch	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 >> Refer to DLK-124, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000009011530

1.CHECK POWER WINDOW SWITCH

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

Does power window operate?

YES >> Replace power window main switch.
NO >> Refer to PWC-62, "Diagnosis Procedure".

PASSENGER SIDE

PASSENGER SIDE : Component Function Check

INFOID:0000000009011531

1.CHECK FUNCTION

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

Monitor item	Condition		Status
CDL LOCK SW	Door lock and unlock switch	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 >> Refer to DLK-124, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000009011532

1.CHECK POWER WINDOW SWITCH

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

Does power window operate?

YES >> Replace front power window switch (passenger side).
NO >> Refer to PWC-62, "Diagnosis Procedure".

DOOR LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:0000000009011533

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-125, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000009011534

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly (driver side) connector.
3. Check voltage between front door lock assembly (driver side) harness connector and ground.

(+)		(–)	Condition		Voltage (Approx.)
Front door lock assembly (driver side)					
Connector	Terminal				
D9	1	Ground	Door lock and unlock switch	Lock	12 V
	2			Unlock	

Is the inspection result normal?

YES >> Replace front door lock assembly (driver side).
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 front door lock assembly (driver side) harness connector.

BCM		Front door lock assembly (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M70	65	D9	1	Existed
	66		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M70	65		Not existed
	66		

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				
M70	65	Ground	Door lock and unlock switch	Lock	12 V
	66			Unlock	

Is the inspection result normal?

YES >> Check for internal short of each door lock actuator and fuel lid lock actuator.
NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

PASSENGER SIDE

PASSENGER SIDE : Component Function Check

INFOID:0000000009011535

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-126, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000009011536

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly (passenger side) connector.
3. Check voltage between front door lock assembly (passenger side) harness connector and ground.

(+)		(–)	Condition		Voltage (Approx.)
Front door lock assembly (passenger side)					
Connector	Terminal				
D28	1	Ground	Door lock and unlock switch	Unlock	12 V
	2			Lock	

Is the inspection result normal?

YES >> Replace front door lock assembly (passenger side).
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 front door lock assembly (passenger side) harness connector.

BCM		Front door lock assembly (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M70	59	D28	1	Existed
	65		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M70	59		Not existed
	65		

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				
M70	59	Ground	Door lock and unlock switch	Unlock	12 V
	65			Lock	

Is the inspection result normal?

YES >> Check for internal short of each door lock actuator and fuel lid lock actuator.
NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

REAR LH

REAR LH : Component Function Check

INFOID:0000000009011537

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-127, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000009011538

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+) Rear door lock assembly LH		(–)	Condition		Voltage (Approx.)
Connector	Terminal				
D65	1	Ground	Door lock and unlock switch	Lock	12 V
	2			Unlock	

Is the inspection result normal?

YES >> Replace rear door lock assembly LH.
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 assembly LH harness connector.

BCM		Rear door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
M69	55	D65	2	Existed
M70	65		1	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M69	55		Not existed
M70	65		

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				
M69	55	Ground	Door lock and unlock switch	Unlock	12 V
M70	65			Lock	

Is the inspection result normal?

YES >> Check for internal short of each door lock actuator and fuel lid lock actuator.
NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

REAR RH

REAR RH : Component Function Check

INFOID:0000000009011539

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-128, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000009011540

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+) Rear door lock assembly RH		(–)	Condition		Voltage (Approx.)
Connector	Terminal				
D45	1	Ground	Door lock and unlock switch	Unlock	12 V
	2			Lock	

Is the inspection result normal?

YES >> Replace rear door lock assembly RH.
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 assembly RH harness connector.

BCM		Rear door lock assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
M69	55	D45	1	Existed
M70	65		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M69	55		Not existed
M70	65		

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				
M69	55	Ground	Door lock and unlock switch	Unlock	12 V
M70	65			Lock	

Is the inspection result normal?

YES >> Check for internal short of each door lock actuator and fuel lid lock actuator.
NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

FUEL LID LOCK ACTUATOR

Component Function Check

INFOID:0000000009011541

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 lock actuator is OK.
NO >> Refer to DLK-130, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009011542

1.CHECK FUEL LID LOCK ACTUATOR INPUT SIGNAL

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

(+)		(–)	Condition		Voltage (Approx.)
Fuel lid lock actuator					
Connector	Terminal				
B19	1	Ground	Door lock and unlock switch	Unlock	12 V
	2			Lock	

Is the inspection result normal?

YES >> Replace fuel lid lock actuator.
NO >> GO TO 2.

2.CHECK FUEL LID LOCK ACTUATOR CIRCUIT

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

BCM		Fuel lid lock actuator		Continuity
Connector	Terminal	Connector	Terminal	
M70	65	B19	2	Existed
	66		1	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M70	65		Not existed
	66		

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				
M70	65	Ground	Door lock and unlock switch	Lock	12 V
	66			Unlock	

Is the inspection result normal?

YES >> Check for internal short of each door lock actuator.
NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

UNLOCK SENSOR

Component Function Check

INFOID:0000000009011543

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “UNLK SEN-DR” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
UNLK SEN -DR	Driver side door	Lock	OFF
		Unlock	ON

Is the inspection result normal?

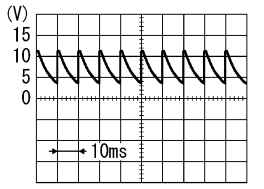
YES >> Unlock sensor is OK.
NO >> Refer to DLK-132, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009011544

1.CHECK UNLOCK SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly (driver side) connector.
3. Check signal between front door lock assembly (driver side) harness connector and ground with oscilloscope.

(+)		(–)	Signal (Reference value)
Front door lock assembly (driver side)			
Connector	Terminal		
D9	3	Ground	

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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 (driver side) harness connector.

BCM		Front door lock assembly (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M68	31	D9	3	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M68	31		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".

NO >> Repair or replace harness.

3.CHECK UNLOCK SENSOR GROUND CIRCUIT

Check continuity between front door lock assembly (driver side) harness connector and ground.

Front door lock assembly (driver side)		Ground	Continuity
Connector	Terminal		
D9	4		Existed

Is the inspection result normal?

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

4.CHECK UNLOCK SENSOR

Refer to DLK-133, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace front door lock assembly (driver side).

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000009011545

1.CHECK UNLOCK SENSOR

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly (driver side) connector.
3. Check continuity between front door lock assembly (driver side) terminals.

Front door lock assembly (driver side)		Condition		Continuity
Terminal				
3	4	Driver side door	Unlock	Existed
			Lock	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace front door lock assembly (driver side).

DOOR KEY CYLINDER SWITCH

Component Function Check

INFOID:0000000009011546

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-134, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009011547

1.CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly (driver side) connector.
3. Check voltage between front door lock assembly (driver side) harness connector and ground.

(+)		(–)	Voltage (Approx.)
Front door lock assembly (driver side)			
Connector	Terminal		
D9	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 power window main switch harness connector and front door lock assembly (driver side) harness connector.

Power window main switch		Front door lock assembly (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
D5	15	D9	6	Existed
	16		5	

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

Power window main switch		Ground	Continuity
Connector	Terminal		
D5	15		Not existed
	16		

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-75, "Removal and Installation".

NO >> Repair or replace harness.

3. CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

Check continuity between front door lock assembly (driver side) harness connector and ground.

Front door lock assembly (driver side)		Ground	Continuity
Connector	Terminal		
D9	4		Existed

Is the inspection result normal?

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

4. CHECK DOOR KEY CYLINDER SWITCH

Refer to DLK-135, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace front door lock assembly (driver side).

5. CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000009011548

1. CHECK DOOR KEY CYLINDER SWITCH

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly (driver side) connector.
3. Check continuity between front door lock assembly (driver side) terminals.

Front door lock assembly (driver side)		Condition		Continuity
Terminal				
5	4	Driver side door key cylinder	Unlock	Existed
			Neutral / Lock	Not existed
6			Lock	Existed
			Neutral / Unlock	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace front door lock assembly (driver side).

REMOTE KEYLESS ENTRY RECEIVER

Component Function Check

INFOID:0000000009011549

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-136, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009011550

1.CHECK BCM SIGNAL 1

1. Turn ignition switch OFF.
2. Disconnect remote keyless entry receiver connector.
3. Check voltage between remote keyless entry receiver harness connector and ground.

Without remote engine start funciton models

(+)		(–)	Voltage (V) (Approx.)
Remote keyless entry receiver			
Connector	Terminal		
B21	4	Ground	5

With remote engine start funciton models

(+)		(–)	Voltage (V) (Approx.)
Remote keyless entry receiver			
Connector	Terminal		
B20	1	Ground	5

Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 2.

2.CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLYCIRCUIT

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

Without remote engine start funciton models

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M68	19	B21	4	Existed

With remote engine start funciton models

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M68	19	B20	1	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M68	19		Not existed

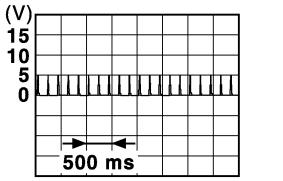
Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".
NO >> Repair or replace harness.

3. CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

1. Reconnect remote keyless entry receiver connector.
2. Check signal between remote keyless entry receiver harness connector and ground using oscilloscope.

Without remote engine start funciton models

(+)		(–)	Voltage (V) (Approx.)
Remote keyless entry receiver			
Connector	Terminal		
B21	4	Ground	

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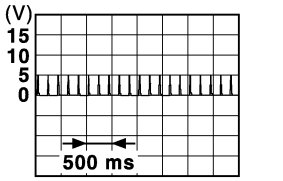
With remote engine start funciton models

(+)		(–)	Voltage (V) (Approx.)
Remote keyless entry receiver			
Connector	Terminal		
B20	1	Ground	

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Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace remote keyless entry receiver.

4. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

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

Without remote engine start funciton models

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M68	18	B21	1	Existed

With remote engine start funciton models

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M68	18	B20	4	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M68	18		Not existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5.CHECK BCM SIGNAL 2

1. Reconnect BCM connector.
2. Check voltage between remote keyless entry receiver harness connector and ground.

Without remote engine start funciton models

(+)		(–)	Voltage (V) (Approx.)
Remote keyless entry receiver			
Connector	Terminal		
B21	2	Ground	5

With remote engine start funciton models

(+)		(–)	Voltage (V) (Approx.)
Remote keyless entry receiver			
Connector	Terminal		
B20	3	Ground	5

Is the inspection result normal?

YES >> GO TO 7.
NO >> GO TO 6.

6.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT

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

Without remote engine start funciton models

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M68	20	B21	2	Existed

With remote engine start funciton models

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M68	20	B20	3	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M68	20		Not existed

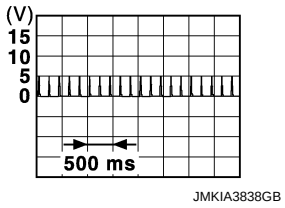
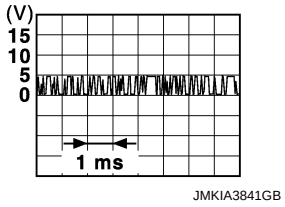
Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".
NO >> Repair or replace harness.

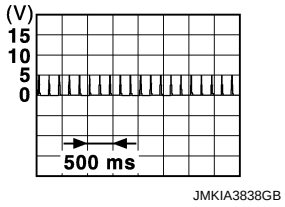
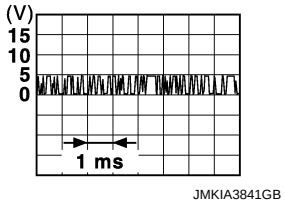
7.CHECK REMOTE KEYLESS ENTRY RECEIVER SIGNAL

1. Reconnect remote keyless entry receiver connector.
2. Check signal between remote keyless entry receiver harness connector and ground using oscilloscope.

Without remote engine start funciton models

(+) Remote keyless entry receiver Connector	(+) Remote keyless entry receiver Terminal	(–)	Condition	Signal (Reference value)
B21	2	Ground	Waiting	 JMKIA3838GB
			Press the Intelligent Key lock or unlock button	 JMKIA3841GB

With remote engine start funciton models

(+) Remote keyless entry receiver Connector	(+) Remote keyless entry receiver Terminal	(–)	Condition	Signal (Reference value)
B20	3	Ground	Waiting	 JMKIA3838GB
			Press the Intelligent Key lock or unlock button	 JMKIA3841GB

Is the inspection result normal?

YES >> GO TO 8.
NO >> Replace remote keyless entry receiver.

8. CHECK BCM SIGNAL 3

1. Disconnect remote keyless entry receiver connector.
2. Check voltage between remote keyless entry receiver harness connector and ground.

Without remote engine start funciton models

(+) Remote keyless entry receiver Connector	(+) Remote keyless entry receiver Terminal	(–)	Voltage (V) (Approx.)
B21	3	Ground	5

With remote engine start funciton models

(+)		(–)	Voltage (V) (Approx.)
Remote keyless entry receiver			
Connector	Terminal		
B20	2	Ground	5

Is the inspection result normal?

YES >> GO TO 10.
NO >> GO TO 9.

9. CHECK REMOTE KEYLESS ENTRY RECEIVER RSSI CIRCUIT

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

Without remote engine start funciton models

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M68	22	B21	3	Existed

With remote engine start funciton models

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M68	22	B20	2	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M68	22		Not existed

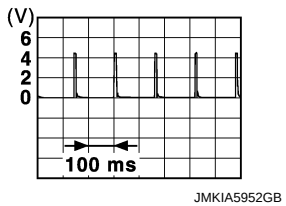
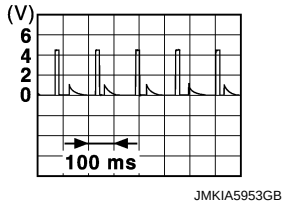
Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".
NO >> Repair or replace harness.

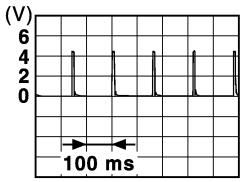
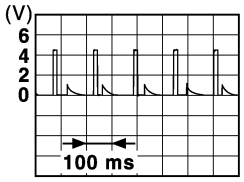
10. CHECK REMOTE KEYLESS ENTRY RECEIVER RSSI OUTPUT SIGNAL

1. Reconnect remote keyless entry receiver connector.
2. Check signal between remote keyless entry receiver harness connector and ground using oscilloscope.

Without remote engine start funciton models

(+)		(–)	Condition	Signal (Reference value)
Remote keyless entry receiver				
Connector	Terminal			
B21	3	Ground	Waiting	 JMKIA5952GB
			Press and hold Intelligent Key lock or unlock button	 JMKIA5953GB

With remote engine start funciton models

(+)		(–)	Condition	Signal (Reference value)
Remote keyless entry receiver				
Connector	Terminal			
B20	2	Ground	Waiting	 JMKIA5952GB
			Press and hold Intelligent Key lock or unlock button	 JMKIA5953GB

Is the inspection result normal?

YES >> GO TO 11.
NO >> Replace remote keyless entry receiver.

11. CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

DOOR REQUEST SWITCH

Component Function Check

INFOID:0000000009011551

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-142, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009011552

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	D11	1	Ground	12 V
Passenger side	D31			

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	D11	1	M71	75	Existed
Passenger side	D31			100	

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

Front door request switch			Ground	Continuity
Connector		Terminal		
Driver side	D11	1		Not existed
Passenger side	D31			

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "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	D11	2		Existed
Passenger side	D31			

Is the inspection result normal?

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

4.CHECK DOOR REQUEST SWITCH

Refer to DLK-143, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace malfunctioning front door request switch.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000009011553

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				
1	2	Door request switch	Pressed	Existed
			Released	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace malfunctioning front door request switch.

BACK DOOR REQUEST SWITCH

Component Function Check

INFOID:0000000009011554

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-144, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009011555

1.CHECK BACK DOOR REQUEST SWITCH INPUT SIGNAL

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

(+)		(–)	Voltage (Approx.)
Back door opener switch assembly			
Connector	Terminal		
D154	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 assembly harness connector.

BCM		Back door opener switch assembly		Continuity
Connector	Terminal	Connector	Terminal	
M69	51	D154	4	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M69	51		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR REQUEST SWITCH GROUND CIRCUIT

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

Back door opener switch assembly		Ground	Continuity
Connector	Terminal		
D154	3		Existed

Is the inspection result normal?

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

4.CHECK BACK DOOR REQUEST SWITCH

Refer to DLK-145, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door opener switch assembly.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000009011556

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	Existed
			Released	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace back door opener switch assembly.

BACK DOOR OPENER SWITCH

Component Function Check

INFOID:0000000009011557

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?

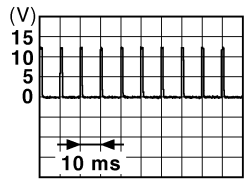
YES >> Back door opener switch is OK.
NO >> Refer to DLK-146, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009011558

1.CHECK BACK DOOR OPEN INPUT SIGNAL

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

(+)		(–)	Signal (Reference value)
Back door opener switch assembly			
Connector	Terminal		
D154	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 assembly harness connector.

BCM		Back door opener switch assembly		Continuity
Connector	Terminal	Connector	Terminal	
M68	30	D154	1	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M68	30		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR OPENER SWITCH GROUND CIRCUIT

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

Back door opener switch assembly		Ground	Continuity
Connector	Terminal		
D154	2		Existed

Is the inspection result normal?

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

4.CHECK BACK DOOR OPENER SWITCH

Refer to DLK-147, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door opener switch assembly.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000009011559

1.CHECK BACK DOOR OPENER 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				
1	2	Back door opener switch	Pressed	Existed
			Released	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace back door opener switch assembly.

INTELLIGENT KEY WARNING BUZZER

Component Function Check

INFOID:0000000009011560

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-148, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009011561

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10 A fuse, [No. 6, 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		
E25	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	
M71	93	E25	3	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M71	93		Not existed

Is the inspection result normal?

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

4.CHECK INTELLIGENT KEY WARNING BUZZER

Refer to DLK-149, "Component Inspection".

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".
NO >> Replace Intelligent Key warning buzzer.

Component Inspection

INFOID:0000000009011562

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.

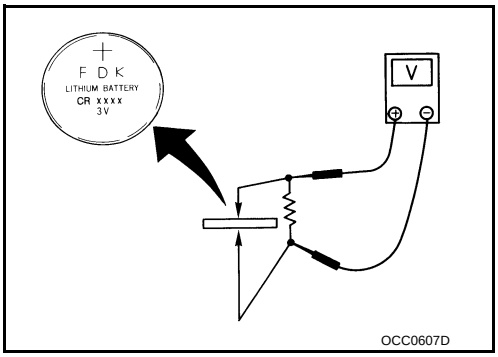
INTELLIGENT KEY BATTERY

Component Inspection

INFOID:0000000009011564

1.CHECK INTELLIGENT KEY BATTERY

Check by connecting a resistance (approximately 300Ω) so that the current value becomes about 10 mA. Refer to DLK-266, "Removal and Installation".



Standard : Approx. 2.5 - 3.0V

Is the measurement value within the specification?

YES >> INSPECTION END
NO >> Replace Intelligent Key battery.

COMBINATION METER BUZZER

Component Function Check

INFOID:0000000009011565

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “INSIDE BUZZER” in “ACTIVE TEST” mode.
3. Touch “Key”, “Knob” or “Take Out” to check that it works normally.

Is the inspection result normal?

Yes >> Combination meter buzzer is OK.
No >> Refer to DLK-151, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009011566

1.CHECK COMBINATION METER BUZZER CIRCUIT

Refer to WCS-40, "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-43, "Intermittent Incident".

>> INSPECTION END

INFORMATION DISPLAY

Component Function Check

INFOID:0000000009011567

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “LCD” in “ACTIVE TEST” mode.
3. Check each warning display on meter display.

Is the inspection result normal?

YES >> Information display is OK.
NO >> Refer to DLK-152, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009011568

1.CHECK COMBINATION METER

Refer to MWI-30, "On Board Diagnosis Function".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

KEY WARNING LAMP

Component Function Check

INFOID:0000000009011569

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-153, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009011570

1.CHECK KEY WARNING LAMP

Refer to MWI-30, "On Board Diagnosis Function".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

HAZARD FUNCTION

Component Function Check

INFOID:0000000009011571

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-154, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009011572

1.CHECK HAZARD LAMP

Refer toEXL-17, "TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM : System Description".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to EXL-112, "Symptom Table".

2.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

AUTOMATIC BACK DOOR CLOSE SWITCH

Component Function Check

INFOID:0000000009011573

1.CHECK FUNCTION

1. Select “AUTOMATIC BACK DOOR CONTROL UNIT” 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-155, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009011574

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		
D158	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	
B26	4	D158	1	Existed

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

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B26	4		Not existed

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-268, "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		
D158	2		Existed

Is the inspection result normal?

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

4.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH

Refer to DLK-156, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace automatic back door close switch.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000009011575

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	Existed
			Released	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace automatic back door close switch.

AUTOMATIC BACK DOOR MAIN SWITCH

Component Function Check

INFOID:0000000009011576

1.CHECK FUNCTION

1. Select “AUTOMATIC BACK DOOR CONTROL UNIT” 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-157, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009011577

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		
M110	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR MAIN SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and automatic back door main switch harness connector.

Automatic back door control module		Automatic back door main switch		Continuity
Connector	Terminal	Connector	Terminal	
B26	17	M110	1	Existed

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

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B26	17		Not existed

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-268, "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		
M110	3		Existed

Is the inspection result normal?

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

4.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Refer to DLK-158, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace automatic back door main switch.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000009011578

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	Existed
			OFF	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace automatic back door main switch.

AUTOMATIC BACK DOOR SWITCH

Component Function Check

INFOID:0000000009011579

1.CHECK FUNCTION

1. Select “AUTOMATIC BACK DOOR CONTROL UNIT” 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-159, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009011580

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		
M127	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR SWITCH CIRCUIT

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

Automatic back door control module		Automatic back door switch		Continuity
Connector	Terminal	Connector	Terminal	
B26	2	M127	1	Existed

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

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B26	2		Not existed

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-268, "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		
M127	3		Existed

Is the inspection result normal?

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

4.CHECK AUTOMATIC BACK DOOR SWITCH

Refer to DLK-160, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace automatic back door switch.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000009011581

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	3	Automatic back door switch	Pressed	Existed
			Released	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace automatic back door switch.

HALF LATCH SWITCH

Component Function Check

INFOID:0000000009011582

1.CHECK FUNCTION

1. Select “AUTOMATIC BACK DOOR CONTROL UNIT” 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-161, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009011583

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		
D157	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	
B26	8	D157	6	Existed

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

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B26	8		Not existed

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-268, "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		
D157	8		Existed

Is the inspection result normal?

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

4.CHECK HALF LATCH SWITCH

Refer to DLK-162, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door lock assembly.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000009011584

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	Existed
			Fully closed/Half latch	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace back door lock assembly.

TOUCH SENSOR

RH

RH : Component Function Check

INFOID:0000000009011585

1.CHECK FUNCTION

1. Select “AUTOMATIC BACK DOOR CONTROL UNIT” 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-163, "RH : Diagnosis Procedure".

RH : Diagnosis Procedure

INFOID:0000000009011586

1.CHECK TOUCH SENSOR RH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect touch sensor RH connector.
3. Check voltage between touch sensor RH harness connector and ground.

(+)		(–)	Voltage (Approx.)
Touch sensor RH			
Connector	Terminal		
D108	1	Ground	6 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 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	
B26	16	D108	1	Existed

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

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B26	16		Not existed

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-268, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK TOUCH SENSOR RH GROUND CIRCUIT

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	
B26	15	D108	2	Existed

Is the inspection result normal?

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

4.CHECK TOUCH SENSOR RH

Refer to DLK-164, "RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace touch sensor RH.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

RH : Component Inspection

INFOID:0000000009011587

1.CHECK TOUCH SENSOR RH

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

Touch sensor RH		Condition		Resistance (Approx.)
Terminal				
1	2	Touch sensor RH	Detect obstruction	120 Ω or less
			Other than above	1 kΩ ± 10%

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace touch sensor RH.

LH

LH : Component Function Check

INFOID:0000000009011588

1.CHECK FUNCTION

1. Select “AUTOMATIC BACK DOOR CONTROL UNIT” 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-164, "LH : Diagnosis Procedure".

LH : Diagnosis Procedure

INFOID:0000000009011589

1.CHECK TOUCH SENSOR LH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect touch sensor LH connector.

3. Check voltage between touch sensor harness connector and ground.

(+)		(–)	Voltage (Approx.)
Touch sensor LH			
Connector	Terminal		
D107	1	Ground	6 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 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	
B26	14	D107	1	Existed

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

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B26	14		Not existed

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-268, "Removal and Installation".
NO >> Repair or replace harness.

3. CHECK TOUCH SENSOR LH GROUND CIRCUIT

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	
B26	15	D107	2	Existed

Is the inspection result normal?

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

4. CHECK TOUCH SENSOR LH

Refer to DLK-165, "LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace touch sensor LH.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

LH : Component Inspection

INFOID:0000000009011590

1. CHECK TOUCH SENSOR LH

1. Turn ignition switch OFF.
2. Disconnect touch sensor LH connector.

3. Check continuity between touch sensor LH terminals.

Touch sensor LH		Condition		Resistance (Approx.)
Terminal				
1	2	Touch sensor LH	Detect obstruction	120 Ω or less
			Other than above	1 kΩ ± 10%

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace touch sensor LH.

BACK DOOR CLOSURE MOTOR

Diagnosis Procedure

INFOID:0000000009011591

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				
D157	1	Ground	Back door opener switch	Pressed	Battery voltage
	2			Released	0 V

Is the inspection result normal?

YES >> Replace back door lock assembly.
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	
B26	11	D157	1	Existed
	12		2	

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

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B26	11		Not existed
	12		

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-268, "Removal and Installation".
NO >> Repair or replace harness.

AUTOMATIC BACK DOOR WARNING BUZZER

Diagnosis Procedure

INFOID:0000000009011592

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10 A fuse, [No.9, 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 AUTOMATIC BACK DOOR WARNING BUZZER POWER SUPPLY CIRCUIT

1. Disconnect automatic back door warning buzzer connector.
2. Check voltage between automatic back door warning buzzer harness connector and ground.

(+)		(–)	Voltage (Approx.)
Automatic back door warning buzzer			
Connector	Terminal		
D159	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness.

3.CHECK AUTOMATIC BACK DOOR WARNING BUZZER OUTPUT SIGNAL CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and automatic back door warning buzzer harness connector.

Automatic back door control module		Automatic back door warning buzzer		Continuity
Connector	Terminal	Connector	Terminal	
B26	1	D159	2	Existed

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

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B26	1		Not existed

Is the inspection result normal?

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

4.CHECK AUTOMATIC BACK DOOR WARNING BUZZER

Refer to DLK-168, "Component Inspection"

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-268, "Removal and Installation".
NO >> Replace automatic back door warning buzzer.

Component Inspection

INFOID:0000000009011593

1.CHECK AUTOMATIC BACK DOOR WARNING BUZZER

1. Turn ignition switch OFF.
2. Disconnect automatic back door warning buzzer connector.
3. Check battery power supply directly to automatic back door warning buzzer terminals and check the operation.

Automatic back door warning buzzer		Operation
Terminal		
(+)	(-)	
1	2	Buzzer sounds

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace automatic back door warning buzzer.

GROUND CIRCUIT

Component Function Check

INFOID:0000000009011594

1.CHECK FUNCTION

1. Select “AUTOMATIC BACK DOOR CONTROL UNIT” using CONSULT.
2. Select “DESTINATION” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition	Status
DESTINATION	Except for Mexico models	Type 4
	For Mexico models	Type 2

Is the inspection result normal?

YES >> Automatic back door ground circuit is OK.
NO-1 >> Except for Mexico models: refer to DLK-170, "Diagnosis Procedure".
NO-2 >> For Mexico models: Repair or replace automatic back door control module.

Diagnosis Procedure

INFOID:0000000009011595

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		
B26	22		Existed

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-268, "Removal and Installation".
NO >> Repair or replace harness.

INTEGRATED HOMELINK TRANSMITTER

Component Function Check

INFOID:0000000009011596

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-171, "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 (integrated homelink transmitter).

Diagnosis Procedure

INFOID:0000000009011597

1.CHECK POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect auto anti-dazzling inside mirror (integrated homelink transmitter) connector.
3. Check voltage between auto anti-dazzling inside mirror (integrated homelink transmitter) harness connector and ground.

(+)		(–)	Voltage (Approx.)
Auto anti-dazzling inside mirror (Integrated homelink transmitter)			
Connector	Terminal		
R25	6	Ground	Battery voltage
	10		

Is the inspection result normal?

YES >> GO TO 2.
NO-1 >> Check 10 A fuse [No. 6 located in the fuse block (J/B)].
NO-2 >> Harness for open or short between fuse and auto anti-dazzling inside mirror (integrated homelink transmitter).

2.CHECK GROUND CIRCUIT

Check continuity between auto anti-dazzling inside mirror (integrated homelink transmitter) harness connector and ground.

Auto anti-dazzling inside mirror (Integrated homelink transmitter)		Ground	Continuity
Connector	Terminal		
R25	8		Existed

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

SYMPTOM DIAGNOSIS

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

ALL DOOR

ALL DOOR : Description

INFOID:0000000009011598

All doors do not lock/unlock using door lock and unlock switch.

ALL DOOR : Diagnosis Procedure

INFOID:0000000009011599

1. CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch.
- Driver side: Refer to DLK-124, "DRIVER SIDE : Component_Function_Check".
- Passenger side: Refer to DLK-124, "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-125, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000009011600

Driver side door does not lock/unlock using door lock and unlock switch.

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000009011601

1. CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (driver side).
Refer to DLK-125, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000009011602

Passenger side door does not lock/unlock using door lock and unlock switch.

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000009011603

1.CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (passenger side).
Refer to DLK-126, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

REAR LH

REAR LH : Description

INFOID:0000000009011604

Rear LH side door does not lock/unlock using door lock and unlock switch.

REAR LH : Diagnosis Procedure

INFOID:0000000009011605

1.CHECK DOOR LOCK ACTUATOR

Check rear door lock assembly LH.
Refer to DLK-127, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

REAR RH

REAR RH : Description

INFOID:0000000009011606

Rear RH side door does not lock/unlock using door lock and unlock switch.

REAR RH : Diagnosis Procedure

INFOID:0000000009011607

1.CHECK DOOR LOCK ACTUATOR

Check rear door lock assembly RH.
Refer to DLK-128, "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-95, "Removal and Installation".

- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERATION

Diagnosis Procedure

INFOID:0000000009011608

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-173, "ALL DOOR : Diagnosis Procedure".

2.CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.
Refer to DLK-134, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

ALL DOOR REQUEST SWITCHES

ALL DOOR REQUEST SWITCHES : Description

INFOID:0000000009011609

All doors do not lock/unlock using all door request switches.

ALL DOOR REQUEST SWITCHES : Diagnosis Procedure

INFOID:0000000009011610

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-136, "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 DLK-42, "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-119, "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-106, "DTC Logic".
- Console: Refer to DLK-108, "DTC Logic".
- Luggage room: Refer to DLK-110, "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-114, "DTC Logic".
- Passenger side: Refer to DLK-112, "DTC Logic".
- Back door: Refer to DLK-116, "DTC Logic".

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-122, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

DRIVER SIDE DOOR REQUEST SWITCH

DRIVER SIDE DOOR REQUEST SWITCH : Description

INFOID:0000000009011611

All doors do not lock/unlock using driver side door request switch.

DRIVER SIDE DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:0000000009011612

1.CHECK DOOR REQUEST SWITCH

Check front door request switch (driver side).
Refer to DLK-142, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

PASSENGER SIDE DOOR REQUEST SWITCH

PASSENGER SIDE DOOR REQUEST SWITCH : Description

INFOID:0000000009011613

All doors do not lock/unlock using passenger side door request switch.

PASSENGER SIDE DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:0000000009011614

1.CHECK DOOR REQUEST SWITCH

Check front door request switch (passenger side).
Refer to DLK-142, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

BACK DOOR REQUEST SWITCH

BACK DOOR REQUEST SWITCH : Description

INFOID:0000000009011615

All doors do not lock/unlock using back door request switch.

BACK DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:0000000009011616

1.CHECK BACK DOOR REQUEST SWITCH

Check back door request switch.

Refer to DLK-144, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

Diagnosis Procedure

INFOID:0000000009011617

1.CHECK INTELLIGENT KEY

For Intelligent Key that cannot be used for door lock and unlock, check that the Intelligent Key belongs to the vehicle to be checked.

Does the Intelligent Key belong to the vehicle to checked?

YES >> GO TO 2.
NO >> Check Intelligent Key button operation with registered Intelligent Key belonging to the vehicle.

2.CHECK INTELLIGENT KEY LOW BATTERY WARNING

Check that the Intelligent Key low battery warning is operated.

Is the Intelligent Key low battery warning operated?

YES >> GO TO 6.
NO-1 >> With another registered Intelligent Key: GO TO 3.
NO-2 >> Without another registered Intelligent Key: GO TO 4.

3.CHECK INTELLIGENT KEY BUTTON OPERATION

Check that door lock and unlock can be performed by operating the buttons of another registered Intelligent Key.

Can door lock and unlock be performed with another registered Intelligent Key?

YES >> GO TO 4.
NO >> GO TO 7.

4.CHECK ENGINE START

While depressing the brake pedal, contact the backside of the Intelligent Key that cannot be used to perform door lock and unlock operation to the push-button ignition switch. Operate the push-button ignition switch, and check that the vehicle is in START status.

Is the vehicle in START status?

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

5.CHECK INTELLIGENT KEY

Check the inside of the Intelligent Key for rust or corrosion by water. Simultaneously check the internal circuits for damage.

Is the vehicle in START status?

YES >> GO TO 6.
NO >> Replace Intelligent Key.

6.CHECK INTELLIGENT KEY BATTERY

Check the Intelligent Key battery.
Refer to DLK-150, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 7.
NO >> Replace Intelligent Key battery.

7.CHECK POWER DOOR LOCK OPERATION

Check door lock/unlock using door lock and unlock switch.

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

YES >> GO TO 8.
NO >> Refer to DLK-173, "ALL DOOR : Diagnosis Procedure".

8.CHECK REMOTE KEYLESS ENTRY RECEIVER

Check remote keyless entry receiver.
Refer to DLK-136, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 9.
NO >> Repair or replace the malfunctioning parts.

9. CHECK DOOR SWITCH

Check door switch.
Refer to DLK-119, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 10.
NO >> Repair or replace the malfunctioning parts.

10. REPLACE INTELLIGENT KEY

1. Replace Intelligent Key.
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

FUEL LID LOCK ACTUATOR DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000009011618

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-173, "ALL DOOR : Diagnosis Procedure".

2.CHECK FUEL LID LOCK ACTUATOR

Check fuel lid lock actuator.
Refer to DLK-130, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

IGNITION POSITION WARNING FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000009011619

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-173, "ALL DOOR : Diagnosis Procedure".

2.CHECK DOOR SWITCH

Check door switch
Refer to DLK-119, "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-122, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000009011620

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 DLK-40, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

AUTO DOOR LOCK OPERATION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000009011621

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 DLK-42, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000009011622

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 DLK-40, "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 DLK-40, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000009011623

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 DLK-40, "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 DLK-40, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

P RANGE INTERLOCK DOOR LOCK/UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000009011624

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 DLK-40, "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 DLK-40, "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 DLK-40, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

HAZARD AND HORN REMINDER DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000009011625

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 DLK-42, "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 DLK-42, "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-154, "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-121, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

HAZARD AND BUZZER REMINDER DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000009011626

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 DLK-42, "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 DLK-42, "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 DLK-42, "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-154, "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-148, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

KEY REMINDER FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000009011627

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 DLK-42, "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-106, "DTC Logic".
- Console: Refer to DLK-108, "DTC Logic".
- Luggage room: Refer to DLK-110, "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-132, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

WELCOME LIGHT FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000009011628

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 DLK-42, "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 DLK-42, "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-106, "DTC Logic".
- Console: Refer to DLK-108, "DTC Logic".
- Luggage room: Refer to DLK-110, "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-114, "DTC Logic".
- Passenger side: Refer to DLK-112, "DTC Logic".
- Back door: Refer to DLK-116, "DTC Logic".

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-180, "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-68, "Symptom Table".

7.REPLACE BCM

- Replace BCM. Refer to BCS-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

OFF POSITION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000009011629

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-119, "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-151, "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-148, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

P POSITION WARNING DOES NOT OPERATE

Description

INFOID:0000000009011630

P position 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-28, "WARNING FUNCTION : System Description".

Diagnosis Procedure

INFOID:0000000009011631

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-119, "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-151, "Component Function Check".

Is the inspection result normal?

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

5.CHECK INFORMATION DISPLAY

Check information display.
Refer to DLK-152, "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-148, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

ACC WARNING DOES NOT OPERATE

Description

INFOID:0000000009011632

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-28, "WARNING FUNCTION : System Description".

Diagnosis Procedure

INFOID:0000000009011633

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-151, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK INFORMATION DISPLAY

Check information display.

Refer to DLK-152, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

TAKE AWAY WARNING DOES NOT OPERATE

Description

INFOID:0000000009011634

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-28, "WARNING FUNCTION : System Description".

Diagnosis Procedure

INFOID:0000000009011635

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-106, "DTC Logic".
- Console: Refer to DLK-108, "DTC Logic".
- Luggage room: Refer to DLK-110, "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-119, "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-151, "Component Function Check".

Is the inspection result normal?

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

6.CHECK INFORMATION DISPLAY

Check information display.
Refer to DLK-152, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace the malfunctioning parts.

7.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-148, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 8.
NO >> Repair or replace the malfunctioning parts.

8. REPLACE BCM

- Replace BCM. Refer to BCS-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

KEY ID WARNING DOES NOT OPERATE

Description

INFOID:0000000009011636

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-28, "WARNING FUNCTION : System Description".

Diagnosis Procedure

INFOID:0000000009011637

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 BATTERY

Check Intelligent Key battery.
Refer to DLK-150, "Component Inspection".

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-106, "DTC Logic".
- Console: Refer to DLK-108, "DTC Logic".
- Luggage room: Refer to DLK-110, "DTC Logic".

Is the inspection result normal?

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

5.CHECK INFORMATION DISPLAY

Check information display.
Refer to DLK-152, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

Description

INFOID:0000000009011638

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-28, "WARNING FUNCTION : System Description".

Diagnosis Procedure

INFOID:0000000009011639

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 DLK-42, "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 BATTERY

Check Intelligent Key battery.
Refer to DLK-150, "Component Inspection".

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-106, "DTC Logic".
- Console: Refer to DLK-108, "DTC Logic".
- Luggage room: Refer to DLK-110, "DTC Logic".

Is the inspection result normal?

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

6. CHECK INFORMATION DISPLAY

Check information display.
Refer to DLK-152, "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-95, "Removal and Installation".

- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

DOOR LOCK OPERATION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000009011640

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-177, "ALL DOOR REQUEST SWITCHES : Diagnosis Procedure".

2.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-148, "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-95, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

AUTOMATIC BACK DOOR OPERATION DOES NOT OPERATE
ALL SWITCHES

ALL SWITCHES : Description

INFOID:0000000009011641

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-32, "System Description".

ALL SWITCHES : Diagnosis Procedure

INFOID:0000000009011642

1.CHECK AUTOMATIC BACK DOOR CONTROL MODULE PARTS NUMBER

Check that an automatic back door control module with the appropriate part number is installed to the vehicle normally.

Is the inspection result normal?

YES >> GO TO 2.
NO >> GO TO 8.

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 BACK DOOR AUTO CLOSURE FUNCTION

Check back door auto closure function.

Is the inspection result normal?

YES >> GO TO 4.
NO >> Refer to DLK-207, "OPEN/CLOSURE FUNCTION : Diagnosis Procedure".

4.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check automatic back door control module power supply and ground circuit.
Refer to DLK-118, "AUTOMATIC BACK DOOR CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

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

5.CHECK GROUND CIRCUIT

Check automatic back door control module ground circuit.
Refer to DLK-170, "Component_Function_Check".

Is the inspection result normal?

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

6.CHECK TOUCH SENSOR LH

Check touch sensor LH.
Refer to DLK-164, "LH : Component_Function_Check".

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace the malfunctioning parts.

7.CHECK TOUCH SENSOR RH

Check touch sensor RH.
Refer to DLK-163, "RH : Component_Function_Check".

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace the malfunctioning parts.

8. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-268, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

AUTOMATIC BACK DOOR SWITCH

AUTOMATIC BACK DOOR SWITCH : Description

INFOID:0000000009011643

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-32, "System Description".

AUTOMATIC BACK DOOR SWITCH : Diagnosis Procedure

INFOID:0000000009011644

1. CHECK AUTOMATIC BACK DOOR SWITCH

Check automatic back door switch.
Refer to DLK-159, "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-268, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

AUTOMATIC BACK DOOR CLOSE SWITCH

AUTOMATIC BACK DOOR CLOSE SWITCH : Description

INFOID:0000000009011645

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-32, "System Description".

AUTOMATIC BACK DOOR CLOSE SWITCH : Diagnosis Procedure

INFOID:0000000009011646

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-155, "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-157, "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-268, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

INTELLIGENT KEY

INTELLIGENT KEY : Description

INFOID:0000000009011647

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-32, "System Description".

INTELLIGENT KEY : Diagnosis Procedure

INFOID:0000000009011648

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-180, "Diagnosis Procedure".

4. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-268, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

BACK DOOR OPENER SWITCH

BACK DOOR OPENER SWITCH : Description

INFOID:0000000009011649

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-32, "System Description".

BACK DOOR OPENER SWITCH : Diagnosis Procedure

INFOID:0000000009011650

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-157, "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-146, "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-268, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

OPEN/CLOSURE FUNCTION

OPEN/CLOSURE FUNCTION : Description

INFOID:0000000009011651

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

OPEN/CLOSURE FUNCTION : Diagnosis Procedure

INFOID:0000000009011652

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-157, "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-146, "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-167, "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-267, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

OPEN FUNCTION

OPEN FUNCTION : Description

INFOID:0000000009011653

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

OPEN FUNCTION : Diagnosis Procedure

INFOID:0000000009011654

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-157, "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-146, "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-268, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

CLOSURE FUNCTION

CLOSURE FUNCTION : Description

INFOID:0000000009011655

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

CLOSURE FUNCTION : Diagnosis Procedure

INFOID:0000000009011656

1.CHECK HALF LATCH SWITCH

Check half latch switch.
Refer to DLK-161, "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-167, "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-268, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

AUTOMATIC BACK DOOR WARNING DOES NOT OPERATE

BUZZER

BUZZER : Description

INFOID:0000000009011657

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

BUZZER : Diagnosis Procedure

INFOID:0000000009011658

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 AUTOMATIC BACK DOOR WARNING BUZZER

Check automatic back door warning buzzer.
Refer to DLK-168, "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-268, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

HAZARD WARNING LAMP

HAZARD WARNING LAMP : Description

INFOID:0000000009011659

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

HAZARD WARNING LAMP : Diagnosis Procedure

INFOID:0000000009011660

1.CHECK AUTOMATIC BACK DOOR CONTROL MODULE PARTS NUMBER

Check that an automatic back door control module with the appropriate part number is installed to the vehicle normally.

Is the inspection result normal?

YES >> GO TO 2.
NO >> GO TO 6.

2.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 3.
NO >> Perform trouble diagnosis relevant to DTC indicated.

3.CHECK DTC WITCH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 4.
NO >> Perform trouble diagnosis relevant to DTC indicated.

4.CHECK HAZARD FUNCTION

Check hazard function.
Refer to DLK-154, "Component Function Check".

Is the inspection result normal?

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

5. CHECK GROUND CIRCUIT

Check automatic back door control module ground circuit.
Refer to DLK-170, "Component Function Check".

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-268, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

AUTOMATIC BACK DOOR FUNCTIONS DO NOT CANCEL

Diagnosis Procedure

INFOID:0000000009011661

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-157, "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-268, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

AUTOMATIC BACK DOOR ANTI-PINCH FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000009011662

1.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check automatic back door control module power supply and ground circuit.
Refer to DLK-118, "AUTOMATIC BACK DOOR CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CHECK TOUCH SENSOR LH

Check touch sensor LH.
Refer to DLK-164, "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-163, "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-268, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

INTEGRATED HOMELINK TRANSMITTER DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000009011663

1.CHECK INTEGRATED HOMELINK TRANSMITTER

Check integrated homelink transmitter.
Refer to DLK-171, "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-31, "Removal and Installation".

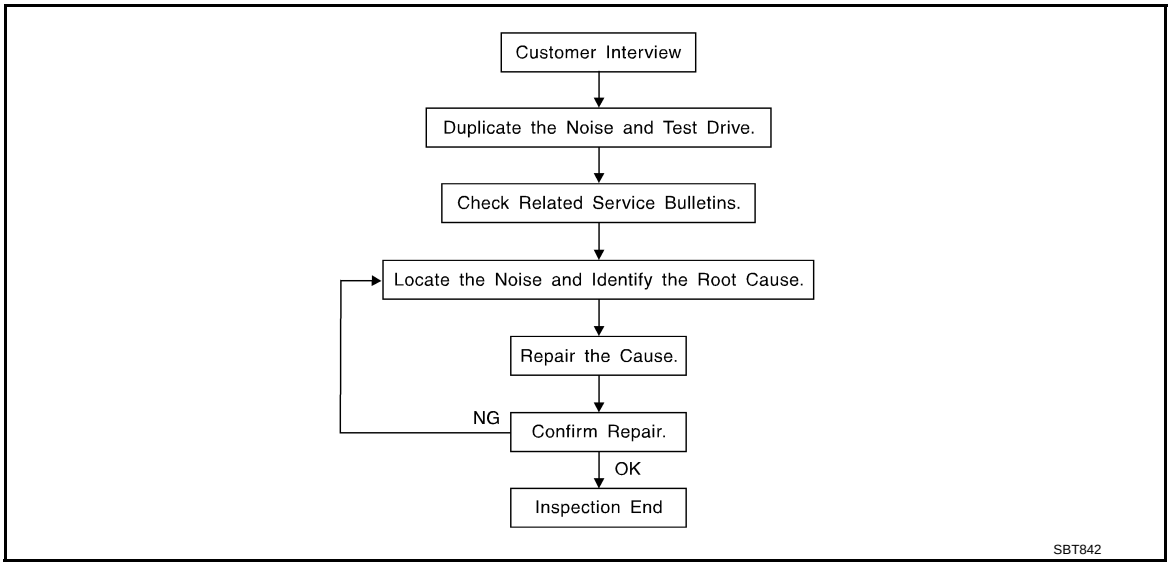
Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000009011664



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 of customer's comments; refer to DLK-219, "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, perform a diagnosis and repair the noise that the customer is concerned about. This can be accomplished by performing a cruise test on 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 bumblebee)
  Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending up on the person. A noise that a technician 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 the repair is reconfirmed.

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 models, drive position on 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 and mechanics 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 is are suspected to be the cause of the noise.
  Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
- Tapping or pushing/pulling the component that is are suspected to be the cause of 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 by hand by touching the component(s) that is are suspected to be the cause of the noise.
- Placing a piece of paper between components that are suspected to be the cause of the noise.
- Looking for loose components and contact marks.
  Refer to DLK-217, "Inspection Procedure".

REPAIR THE CAUSE

- If the cause is a loose component, tighten the component securely.
- If the cause is insufficient clearance between components:

- Separate components by repositioning or loosening and retightening the component, if possible.
- Insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or urethane tape. A Nissan Squeak and Rattle Kit (J-50397) is available through the authorized Nissan Parts Department.

CAUTION:
Never use excessive force as many components are constructed of plastic and may be damaged.
NOTE:
Always check with the Parts Department for the latest parts information.
The following materials are contained in the Nissan Squeak and Rattle Kit (J-50397) are listed the inside cover of the kit; and can each 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 × 1.97in)
FELT CLOTHTAPE
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 in place of UHMW tape that is be visible or does not fit. Will only last a few months.
SILICONE SPRAY
Used when grease cannot be applied.
DUCT TAPE
Used 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.

Inspection Procedure

INFOID:0000000009011665

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 instrument panel
2. Acrylic lens and combination meter housing
3. Instrument panel to front pillar garnish
4. Instrument panel to windshield
5. Instrument panel mounting 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 silicon 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. Shifter 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 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 dumpers out of adjustment
2. Trunk lid striker out of adjustment
3. 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. Sunvisor 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.

SEATS

When isolating seat noise it is 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. 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 mounted to the engine wall
2. Components that pass through the engine wall
3. Engine wall mounts and connectors
4. Loose radiator mounting 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

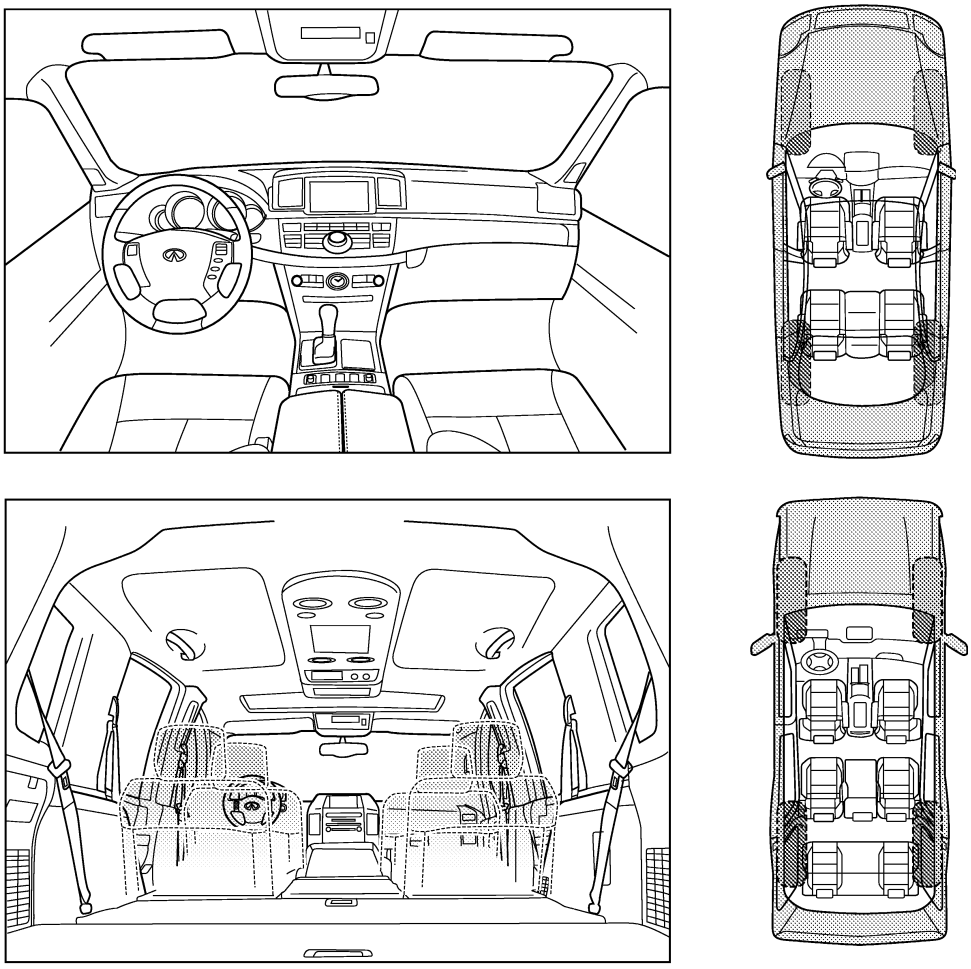
INFOID:0000000009011666

INFINITI

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

Dear Infiniti Customer:
We are concerned about your satisfaction with your Infiniti vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Infiniti 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 consultant or technician to ensure we confirm the noise you are hearing.

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.

PIIB8741E

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

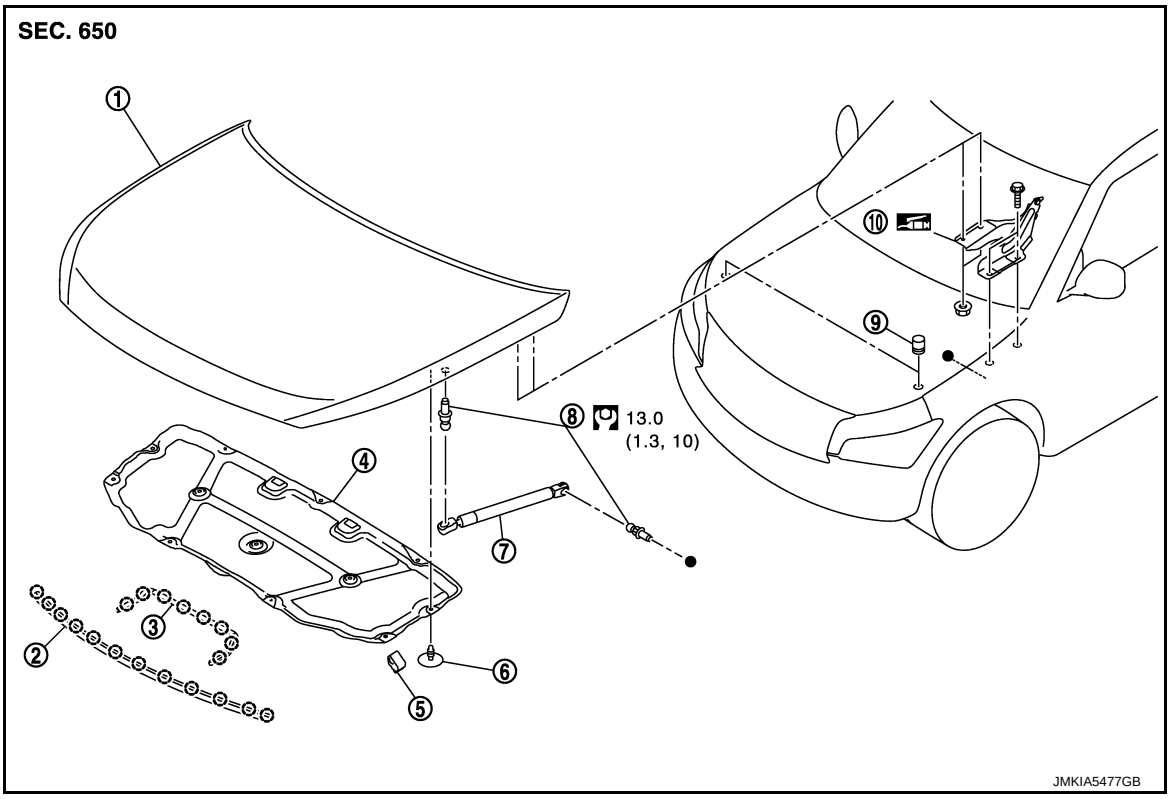
PIIB8742E

REMOVAL AND INSTALLATION

HOOD

Exploded View

INFOID:0000000009011667



1. Hood assembly
2. Hood front seal
3. Radiator core seal
4. Hood insulator
5. Hood side bumper
6. Clip
7. Hood stay
8. Stud ball
9. Hood bumper rubber
10. Hood hinge

: Clip

Refer to GI-4, "Components" for symbols in the figure.

HOOD ASSEMBLY

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000009011668

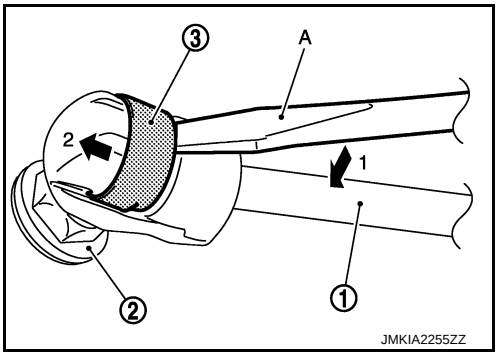
CAUTION:
- **Operate with two workers, because of its heavy weight.**
- **Use protective tape or shop cloth to protect from damage during removal and installation.**

REMOVAL

1. Support hood assembly with the proper material to prevent it from falling.

   WARNING:
   Bodily injury may occur if no proper material is holding hood open when removing hood stay.

2. Remove the metal clip (3) located on the connection between the hood stay (1) and the stud ball (2) (hood side), by using a flatted-blade screwdriver (A).
3. Disengage the stud ball from the hood stay (hood side).



4. Remove hood hinge mounting nuts on the hood to remove the hood assembly.

INSTALLATION

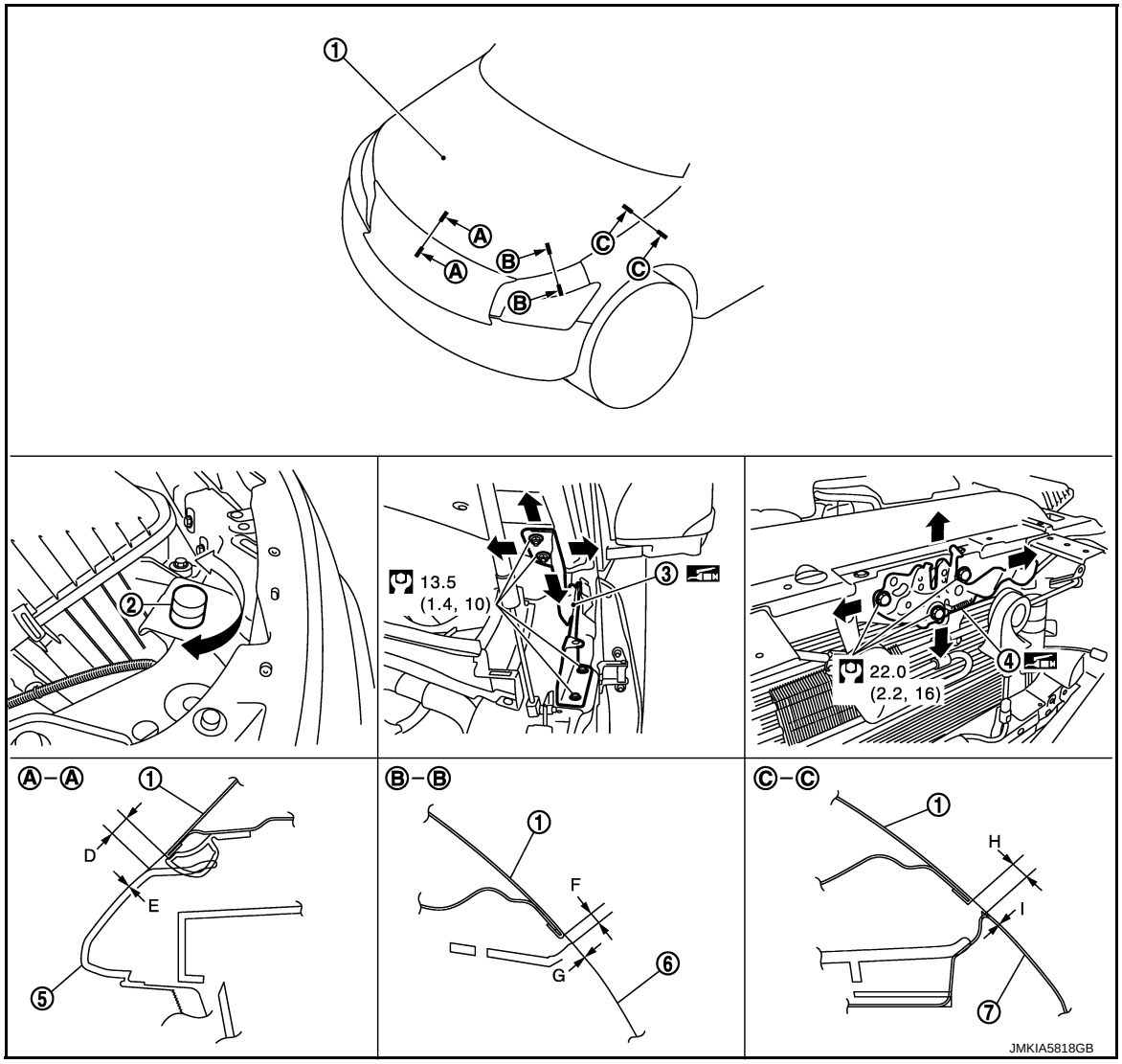
Note the following items, and then install in the reverse order of removal.

CAUTION:

- **Before installing the hood hinge, apply anticorrosive agent onto the mounting surface of the vehicle body.**
- **After installing, perform hood fitting adjustment. Refer to DLK-222, "HOOD ASSEMBLY : Adjustment".**

HOOD ASSEMBLY : Adjustment

INFOID:0000000009011669



1. Hood assembly
2. Hood bumper rubber
3. Hood hinge
4. Hood lock assembly
5. Front grille
6. Bumper molding
7. Front fender

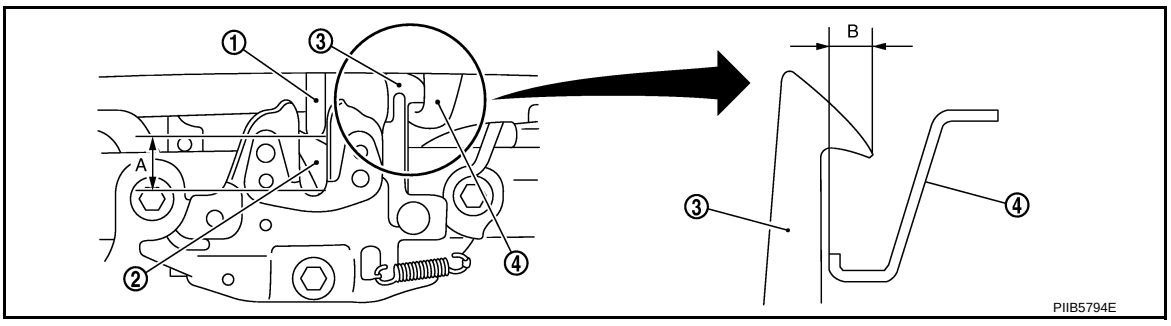
Refer to GI-4, "Components" for symbols in the figure.

Check the clearance and the surface height between hood and each part by visually and touching.
If the clearance and the surface height are out of specification, adjust them according to the procedures shown below.

Unit: mm (in)

Portion				Standard	Difference (RH/LH, MAX)
Hood – Front grille	A – A	D	Clearance	3.7 – 8.3 (0.146 – 0.327)	—
		E	Surface height	(-0.9) – (+3.9) [(-0.035) – (+0.154)]	—
Hood – Bumper molding	B – B	F	Clearance	1.2 – 5.8 (0.047 – 0.228)	2.2 (0.087)
		G	Surface height	(-2.4) –– (+0.094)]	2.2 (0.087)
Hood – Front fender	C – C	H	Clearance	2.5 – 4.5 (0.098 – 0.177)	1.0 (0.039)
		I	Surface height	(-1.0) – (+1.0) [(-0.039 – (+0.039)]	—

1. Remove hood lock and adjust the surface height of hood, bumper molding and front fender according to the fitting standard dimension, by rotating hood bumper rubber.
2. Loosen hood hinge mounting nuts on the hood.
3. Adjust the clearance of hood, bumper molding and front fender according to the fitting standard dimension, for the hood.
4. Temporarily tighten hood lock.
5. Adjust A and B shown in the figure to the following value with hood's own weight by dropping it from approximately 200 mm (7.874 in) height or by pressing hood lightly [approximately 29 N (3.0 kg, 6.5lb)].



1. Hood striker
2. Primary latch
3. Secondary striker
4. Secondary latch

A : 20.0 mm (0.787 in)
B : 6.8 mm (0.268 in)

6. Install as static closing force of hood is 680N (69.0 kg, 502lb) or less.
7. After adjustment, tighten hood hinge mounting nuts to the specified torque.

CAUTION:
- **Before installing hood hinge, apply anticorrosive agent onto the mounting surface of the vehicle body.**
- **Check hood hinge rotating part for poor lubrication. If necessary, apply body grease.**

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

HOOD HINGE

HOOD HINGE : Removal and Installation

INFOID:0000000009011670

REMOVAL

1. Remove hood assembly. Refer to DLK-221, "HOOD ASSEMBLY : Removal and Installation".
2. Remove front fender cover. Refer to EXT-22, "Exploded View".
3. Remove front fender mounting bolt. DLK-228, "Exploded View".
4. Remove hood hinge mounting bolts, and then remove hood hinge.

INSTALLATION

Note the following items, and install in the reverse order of removal.

CAUTION:

- **Before installation of hood hinge, apply anticorrosive agent onto the mounting surface of the vehicle body.**
- **After installation, apply touch-up paint (the body color) onto the head of the hinge mounting bolts and nuts.**
- **After installation, perform hood fitting adjustment. Refer to DLK-222, "HOOD ASSEMBLY : Adjustment".**

HOOD STAY

HOOD STAY : Removal and Installation

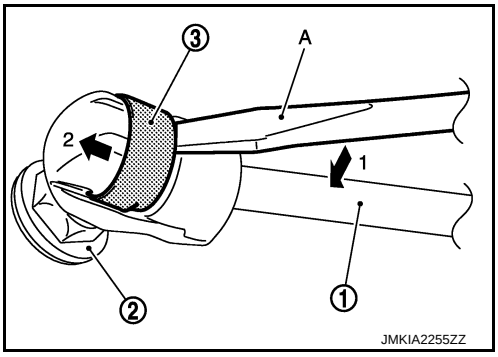
INFOID:0000000009011671

REMOVAL

1. Support hood assembly with a proper material to prevent it from falling.

   WARNING:
   Bodily injury may occur if no proper material is holding the hood open when removing the hood stay.

2. Remove the metal clip (3) located on the connection between the hood stay (1) and the stud ball (2) (hood side), by using a flat-bladed screwdriver (A).
3. Disengage the stud ball from the hood stay (hood side).
4. Repeat the same operation to disengage the stud ball from the hood stay (body side), then remove the hood stay.



INSTALLATION

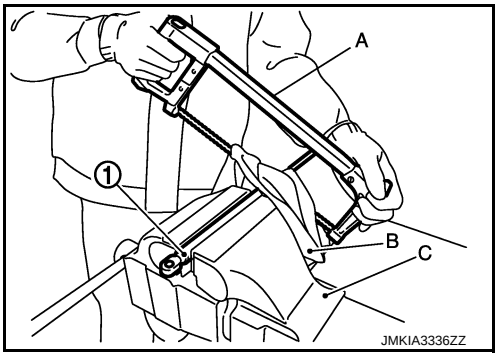
Install in the reverse order of removal.

HOOD STAY : Disposal

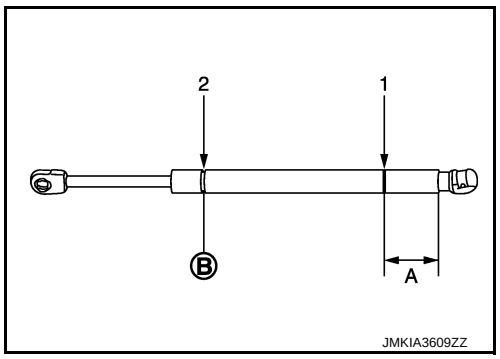
INFOID:0000000009011672

1. Fix hood stay (1) using a vise (C).
2. Using hacksaw (A) slowly make 2 holes in the hood stay, in numerical order as shown in the figure.

   CAUTION:
   - **When cutting a hole on hood stay, always cover a hacksaw using a shop cloth (B) to avoid scattering metal fragments or oil.**
   - **Wear eye protection (safety glasses).**
   - **Wear gloves.**



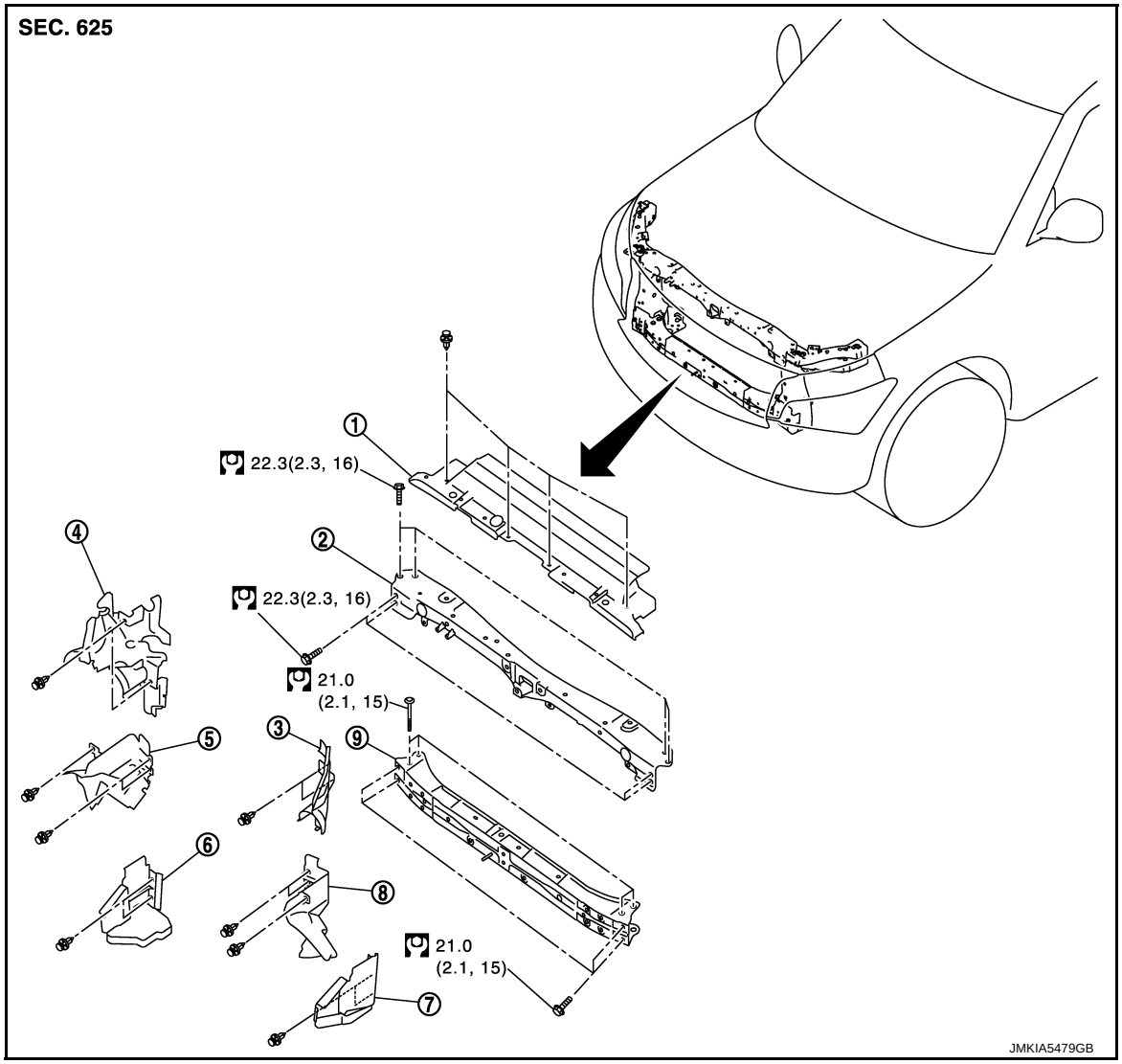
A: 20 mm (0.787 in)
B: Cut at the groove.



RADIATOR CORE SUPPORT

Exploded View

INFOID:0000000009011673



1. Radiator upper seal
2. Radiator core support upper
3. Air guide seal LH
4. Air guide seal RH
5. Radiator side seal RH
6. Radiator lower seal RH
7. Radiator lower seal LH
8. Radiator side seal LH
9. Radiator core support main

Refer to for symbols in the figure.GI-4, "Components"

Removal and Installation

INFOID:0000000009011674

RADIATOR CORE SUPPORT UPPER

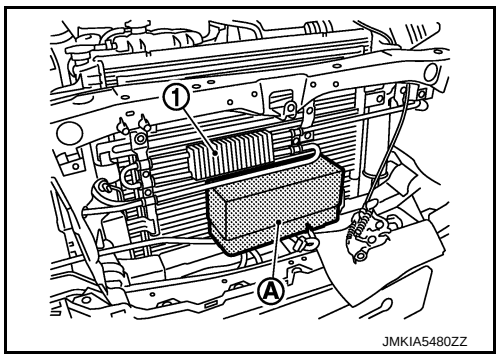
Removal

CAUTION:

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

1. Remove bumper molding, bumper molding stay LH and RH. Refer to EXT-13, "Removal and Installation".
2. Remove fixing clips, and then radiator upper seal.
3. Remove horn (LOW and HIGH). Refer to HRN-6, "Removal and Installation".
4. Remove exhaust gas / outside oder sensor. Refer to HAC-157, "Removal and Installation".
5. Disconnect refrigerant pressure sensor harness connector.

6. Disconnect all harness clips.
7. Remove hood lock assembly. Refer to DLK-244, "Removal and Installation".
8. Remove fixing clips of air guide seal.
9. Remove mounting bolts, and then remove power steering oil cooler. Refer to ST-54, "Exploded View".
   CAUTION:
   Put a wooden block (A) under the oil cooler (1) to prevent the oil cooler from falling.



10. Remove radiator mounting bolts. Refer to CO-14, "Removal and Installation".
11. Remove mounting bolts, and then radiator core support upper.

Installation

Note the following items, and then install in the reverse order of removal.

CAUTION:

- **If aluminum plate remains to the body side when removing radiator core support upper, be sure to pinch aluminum plate between radiator core support upper and hoodledge upper when installing radiator core support upper, for preventing electric corrosion.**
- **When installing radiator core support upper, be careful not to damage the painted surface.**

RADIATOR CORE SUPPORT LOWER

Removal

1. Remove front bumper fascia, bumper retainer and Bumper retainer bracket CTR. Refer to EXT-13, "Removal and Installation".
2. Remove fixing clips, and then air guide seal and radiator side seal.
3. Remove ambient sensor. Refer to HAC-153, "Removal and Installation".
4. Remove crash zone sensor. Refer to SR-23, "Removal and Installation".
5. Remove all harness clips.
6. Remove mounting bolts, and then remove radiator core support main.

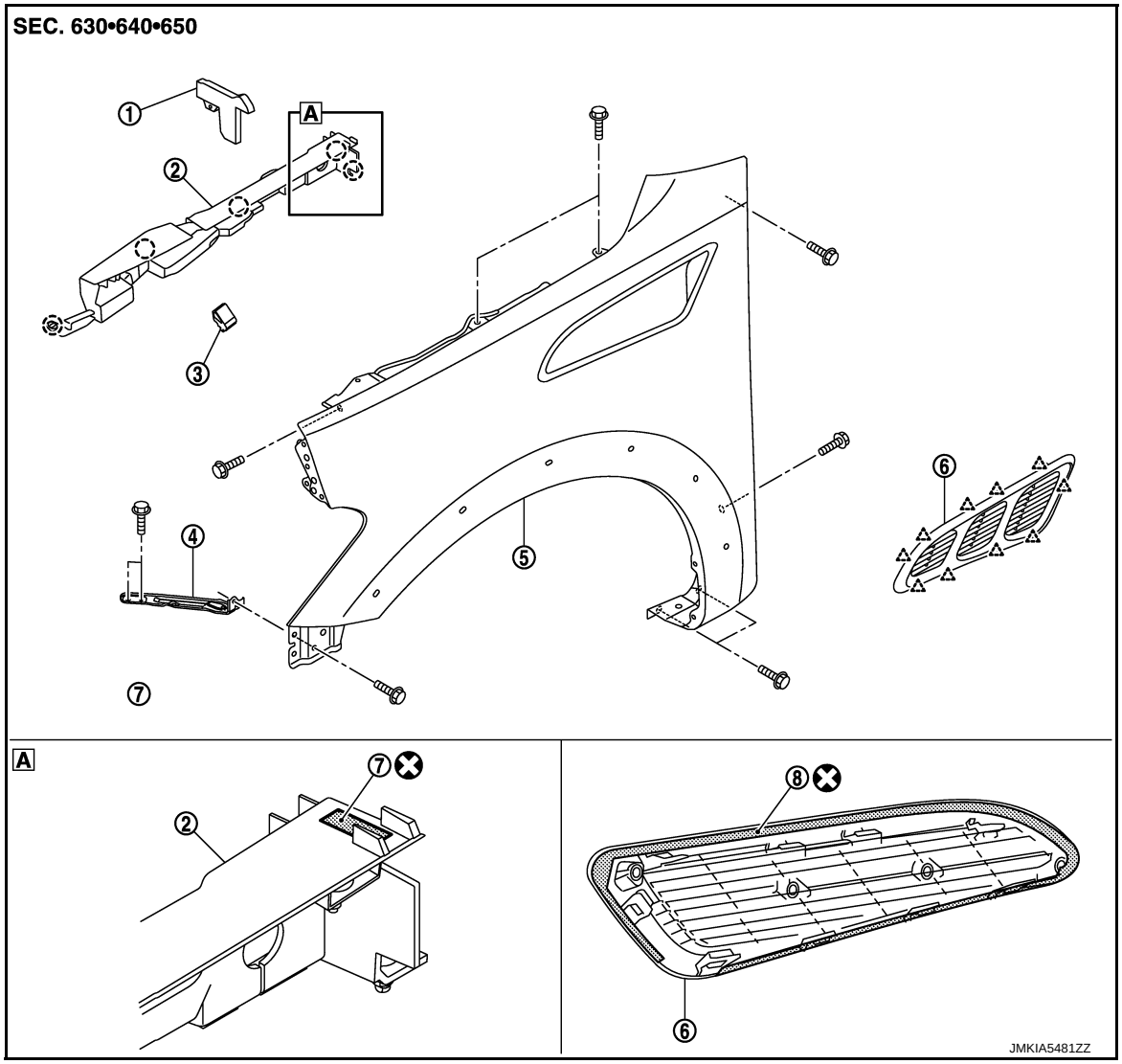
Installation

Install in the reverse order of removal.

FRONT FENDER

Exploded View

INFOID:0000000009011675



1. Cowl top seal
2. Front fender drip cover
3. Hood side bumper
4. Front fender stay
5. Front fender assembly
6. Front fender duct
7. Double-sided tape [t: 0.8 mm (0.031 in)]
8. Double-sided tape [t: 1.2 mm (0.047 in)]

: Clip

: Pawl

Refer to for symbols in the figure.GI-4, "Components"

FRONT FENDER

FRONT FENDER : Removal and Installation

INFOID:0000000009011676

CAUTION:

Use a shop cloth to protect the body from being damaged during removal and installation.

REMOVAL

1. Remove side step. Refer to EXT-46, "Removal and Installation".
2. Remove front over fender. Refer to EXT-27, "Removal and Installation".

3. Remove front combination lamp. Refer to EXL-124, "Removal and Installation".
4. Remove front fender drip cover. Refer to DLK-229, "FRONT FENDER DRIP COVER : Removal and Installation"
5. Remove front fender cover. Refer to EXT-22, "Exploded View".
6. Remove front fender protector. Refer to EXT-24, "FENDER PROTECTOR : Removal and Installation".
7. Remove mounting bolts and remove front fender.

CAUTION:
An viscous urethane foam is installed on the back surface of front fender. When removing the front fender, be careful to not deform the front fender while performing the procedure and removing the viscous urethane foam a little at a time.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:
- **After installation, apply the touch-up paint (the body color) onto the head of front fender mounting bolts.**
- **After installation, adjust the following part.**
- **Hood assembly: Refer to DLK-222, "HOOD ASSEMBLY : Adjustment".**
- **Front door: Refer to DLK-231, "DOOR ASSEMBLY : Adjustment".**

FRONT FENDER DRIP COVER

FRONT FENDER DRIP COVER : Removal and Installation

INFOID:0000000009011677

REMOVAL

1. Remove fixing clips, and then front fender drip cover.
2. Remove cowl top seal from front fender drip cover.

INSTALLATION

Install in the reverse order of removal.

FRONT FENDER DUCT

FRONT FENDER DUCT : Removal and Installation

INFOID:0000000009011678

REMOVAL

1. Remove front fender protector. Refer to EXT-24, "FENDER PROTECTOR : Removal and Installation".
2. Remove washer tank. Refer to WW-57, "Removal and Installation".
3. Disengage pawls of front fender duct, from front fender to remove.

CAUTION:
- **When removing front fender duct, peel off the double-sided tape at a time, and carefully to remove it.**
- **Use protective tape or cloth to protect from damage during remove and installation.**

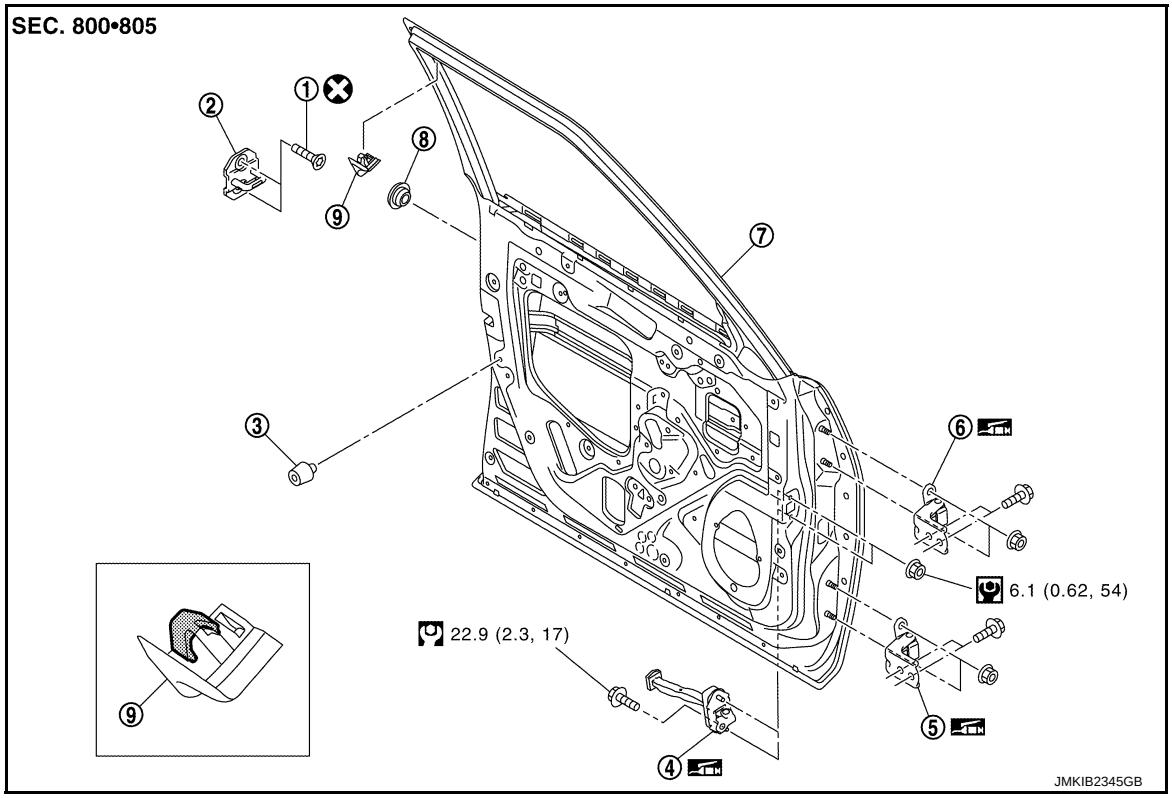
INSTALLATION

Install in the reverse order of removal.

FRONT DOOR

Exploded View

INFOID:0000000009011679



1. TORX bolt
2. Door striker
3. Bumper rubber
4. Door check link
5. Door hinge (lower)
6. Door hinge (upper)
7. Front door panel
8. Grommet
9. Front door sash inner cover

Refer to GI-4, "Components" for symbols in the figure.

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000009011680

CAUTION:
- **Perform work with 2 workers, because of its heavy weight.**
- **When removing and installing front door assembly, support door with a jack and shop cloth to protect door and body.**

REMOVAL

1. Remove mounting bolt of door check link on the vehicle.
2. Disconnect front door harness connector.
3. Remove door hinge mounting nuts (door side), and then remove door assembly.

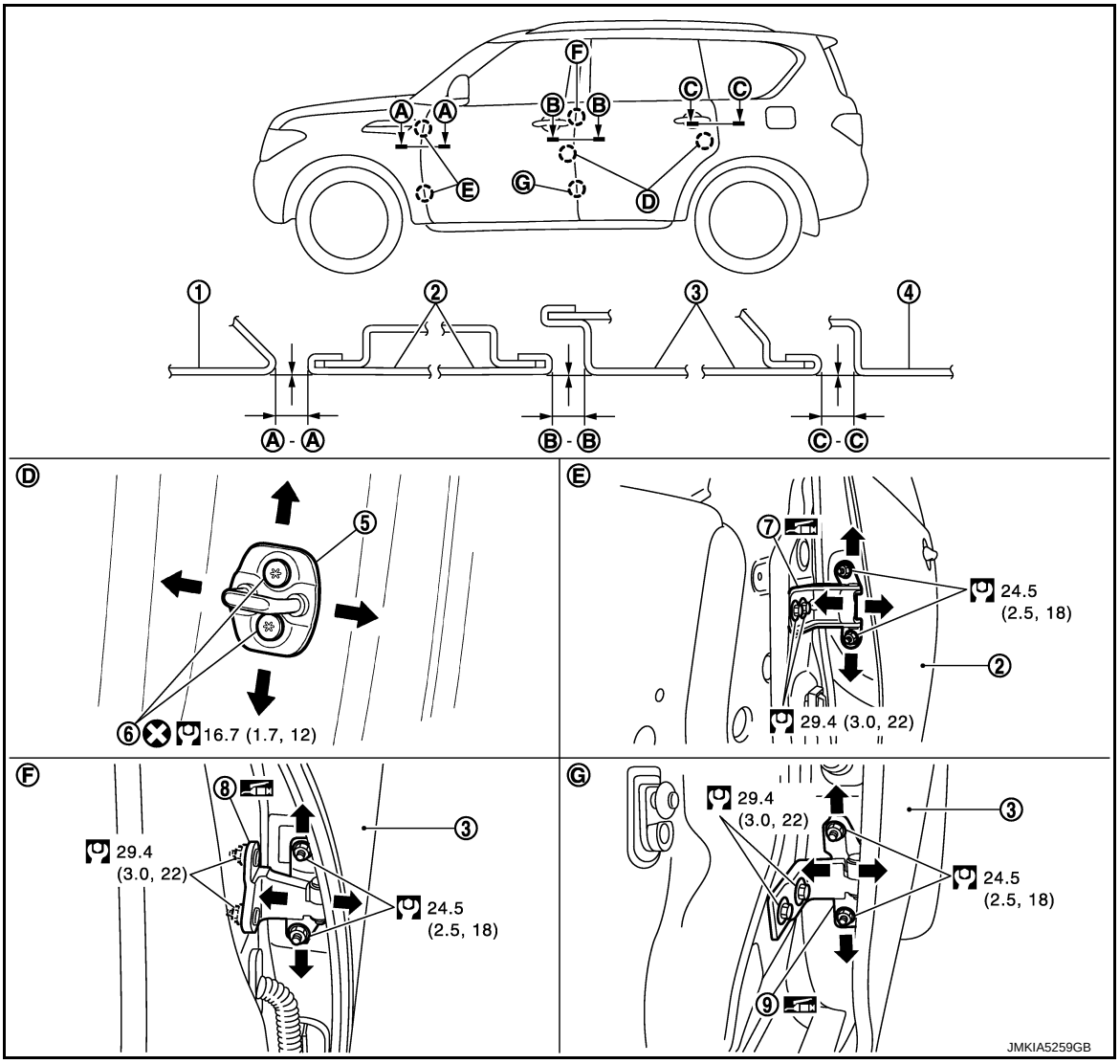
INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:
- **Apply anticorrosive agent onto the mounting surface.**
- **Check front door open/close, lock/unlock operation after installation.**
- **Check door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **After installation, perform the fitting adjustment. Refer to DLK-231, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.**

DOOR ASSEMBLY : Adjustment

INFOID:0000000009011681



1. Front fender
2. Front door
3. Rear door
4. Body side outer
5. Door striker
6. TORX bolt
7. Front door hinge (upper/lower)
8. Rear door hinge (upper)
9. Rear door hinge (lower)

Refer to GI-4, "Components" for symbols in the figure.

Check the clearance and surface height between front door and each part by visually and touching.
If the clearance and the surface height are out of specification, adjust them according to the procedures shown below.

Unit: mm (in)

Portion		Clearance	Surface height
Front fender – Front door	A – A	3.2 – 5.2 (0.126 – 0.205)	(-1.0) – (+1.0) [(-0.039) – (+0.039)]
Front door – Rear door	B – B	3.2 – 5.2 (0.126 – 0.205)	(-1.0) – (+1.0) [(-0.039) – (+0.039)]

1. Remove front fender. Refer to DLK-228, "FRONT FENDER : Removal and Installation".
2. Loosen door hinge mounting nuts on door side.
3. Adjust the surface height of front door according to the fitting standard dimension.

4. Temporarily tighten door hinge mounting nuts on door side.
5. Loosen door hinge mounting bolts on body side.
6. Raise front door at rear end to adjust clearance of the front door according to the fitting standard dimension.
7. After adjustment tighten bolts and nuts to the specified torque.
   CAUTION:
   - **After installation, apply touch-up paint (the body color) onto the head of hinge mounting bolts and nuts.**
   - **Check door hinge rotating part for poor lubrication. If necessary, apply body grease.**
8. Install front fender. Refer to refer to DLK-228, "FRONT FENDER : Removal and Installation".

DOOR STRIKER ADJUSTMENT

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

DOOR STRIKER

DOOR STRIKER : Removal and Installation

INFOID:0000000009011682

REMOVAL

Remove TORX bolts, and then remove door striker.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

- **Check front door open/close, operation after installation.**
- **After installation, be sure to perform the fitting adjustment. Refer to DLK-231, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:0000000009011683

REMOVAL

CAUTION:

- **Perform work with 2 workers, because of its heavy weight.**
- **When removing and installing front door assembly, support door with a jack and shop cloth to protect door and body.**

1. Remove front fender. Refer to DLK-228, "FRONT FENDER : Removal and Installation".
2. Remove front door assembly. Refer to DLK-230, "DOOR ASSEMBLY : Removal and Installation".
3. Remove front door hinge mounting bolts (body side), and then remove front door hinge.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

- **Apply anticorrosive agent onto the mounting surface.**
- **Check front door open/close, lock/unlock operation after installation.**
- **Check door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **After installation, perform the fitting adjustment. Refer to DLK-231, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.**

DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:0000000009011684

REMOVAL

1. Fully close the front door window.
2. Remove front door finisher. Refer to INT-14, "Removal and Installation".
3. Remove front door speaker mounting bolts.
4. Disconnect connector and remove front door speaker.

5. Remove mounting bolts, and then front door speaker bracket.
6. Remove mounting bolt of door check link on the vehicle.
7. Remove mounting nuts of door check link on door panel.
8. Take door check link out from the hole of door panel.

INSTALLATION

Note the following item, and then install in the reverse order of removal.

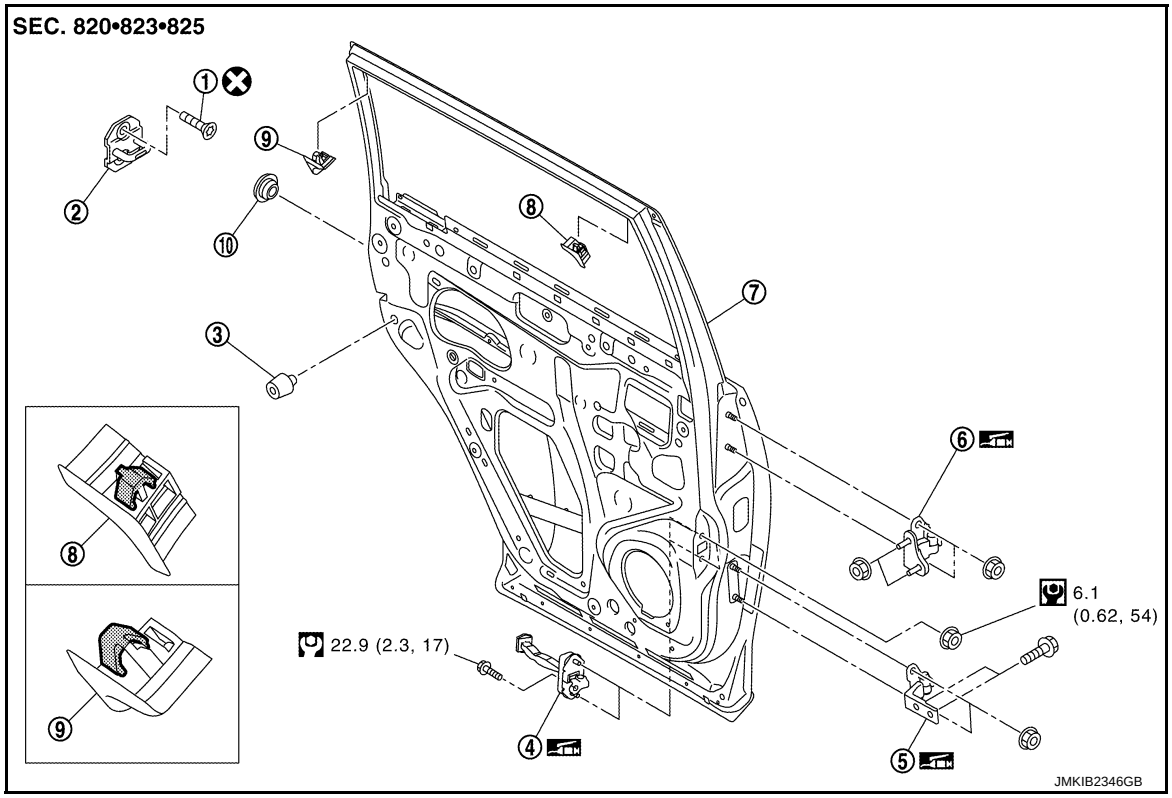
CAUTION:

Check front door open/close operation after installation.

REAR DOOR

Exploded View

INFOID:0000000009011685



1. TORX bolt
2. Door striker
3. Bumper rubber
4. Door check link
5. Door hinge (lower)
6. Door hinge (upper)
7. Rear door panel
8. Rear door sash inner cover (front)
9. Rear door sash inner cover (rear)
10. Grommet

Refer to GI-4, "Components" for symbols in the figure.

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000009011686

CAUTION:
- **Perform work with 2 workers, because of it's heavy weight.**
- **When removing and installing rear door assembly, support door with a jack and shop cloth to protect door and body.**

REMOVAL

1. Remove rear door harness grommet, and then pull out door harness from the vehicle.
2. Disconnect rear door harness connector.
3. Remove mounting bolt of door check link on the vehicle.
4. Remove door hinge mounting nuts (door side), and then remove rear door assembly.

INSTALLATION

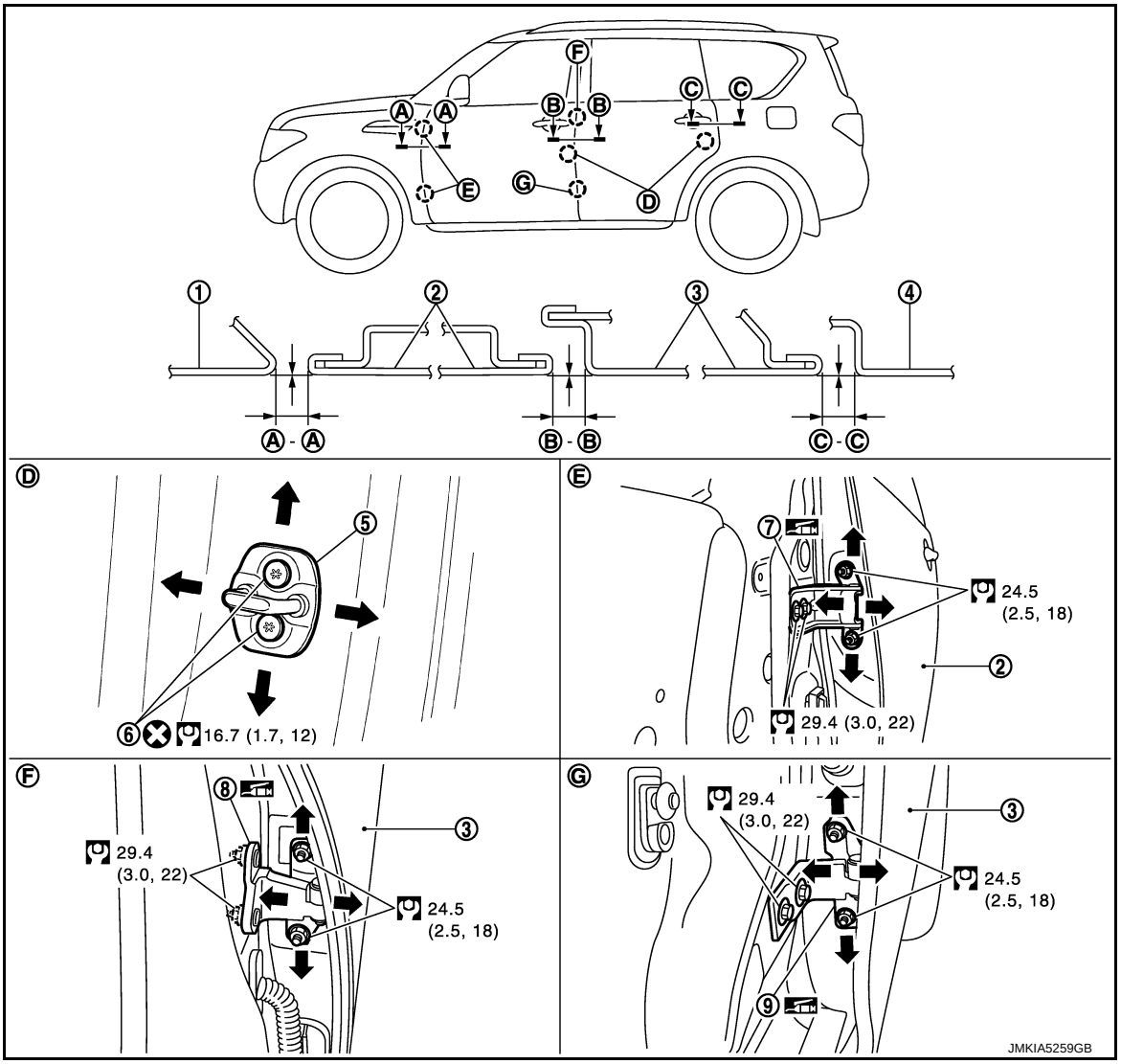
Note the following items, and then install in the reverse order of removal.

CAUTION:
- **Apply anticorrosive agent onto the mounting surface.**
- **Check rear door open/close, lock/unlock operation after installation.**
- **Check door hinge rotating part for poor lubrication. If necessary, apply body grease.**

- **After installation, perform the fitting adjustment. Refer to DLK-235, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.**

DOOR ASSEMBLY : Adjustment

INFOID:0000000009011687



1. Front fender
2. Front door
3. Rear door
4. Body side outer
5. Door striker
6. TORX bolt
7. Front door hinge (upper/lower)
8. Rear door hinge (upper)
9. Rear door hinge (lower)

Refer to GI-4, "Components" for symbols in the figure.

Check the clearance and surface height between rear door and each part by visually and touching.
If the clearance and the surface height are out of specification, adjust them according to the procedures shown below.

Unit: mm (in)

Portion		Clearance	Surface height
Front door – Rear door	B – B	3.2 – 5.2 (0.126 – 0.205)	(-1.0) – (+1.0) [(-0.039) – (+0.039)]
Rear door – Body side outer	C – C	3.2 – 5.2 (0.126 – 0.205)	(-1.0) – (+1.0) [(-0.039) – (+0.039)]

1. Remove center pillar lower garnish. Refer to INT-22, "CENTER PILLAR LOWER GARNISH : Removal and Installation".
2. Loosen door hinge mounting nuts on door side.
3. Adjust the surface height of rear door according to the fitting standard dimension.
4. Temporarily tighten door hinge mounting nuts on door side.
5. Loosen door hinge mounting nuts and bolts on body side.
6. Raise rear door at rear end to adjust clearance of rear door according to the fitting standard dimension.
7. After adjustment tighten bolts and nuts to the specified torque.
   CAUTION:
   - **After installation, apply touch-up paint (the body color) onto the head of hinge mounting bolts and nuts.**
   - **Check door hinge rotating part for poor lubrication. If necessary, apply body grease.**
8. Install center pillar lower garnish. Refer to INT-22, "CENTER PILLAR LOWER GARNISH : Removal and Installation".

DOOR STRIKER ADJUSTMENT

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

DOOR STRIKER

DOOR STRIKER : Removal and Installation

INFOID:0000000009011688

REMOVAL

Remove TORX bolts, and then remove door striker.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:
- **Check rear door open/close, after installation.**
- **After installation, be sure to perform the fitting adjustment. Refer to DLK-235, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:0000000009011689

CAUTION:
- **Perform work with 2 workers, because of it's heavy weight.**
- **When removing and installing rear door assembly, support door with a jack and shop cloth to protect door and body.**

REMOVAL

1. Remove rear door assembly. Refer to DLK-234, "DOOR ASSEMBLY : Removal and Installation".
2. Remove center pillar lower garnish. Refer to INT-22, "CENTER PILLAR LOWER GARNISH : Removal and Installation".
3. Remove rear door hinge mounting bolts and nuts (body side), and then remove door hinge.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:
- **Apply anticorrosive agent onto the mounting surface.**
- **Check rear door open/close operation after installation.**
- **Check door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **When removing and installing rear door assembly, perform the fitting adjustment. Refer to DLK-235, "DOOR ASSEMBLY : Adjustment".**
- **After installing, apply the touch-up paint (the body color) onto the head of door hinge mounting nuts.**

DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:0000000009011690

REMOVAL

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

INSTALLATION

Note the following item, and then install in the reverse order of removal.

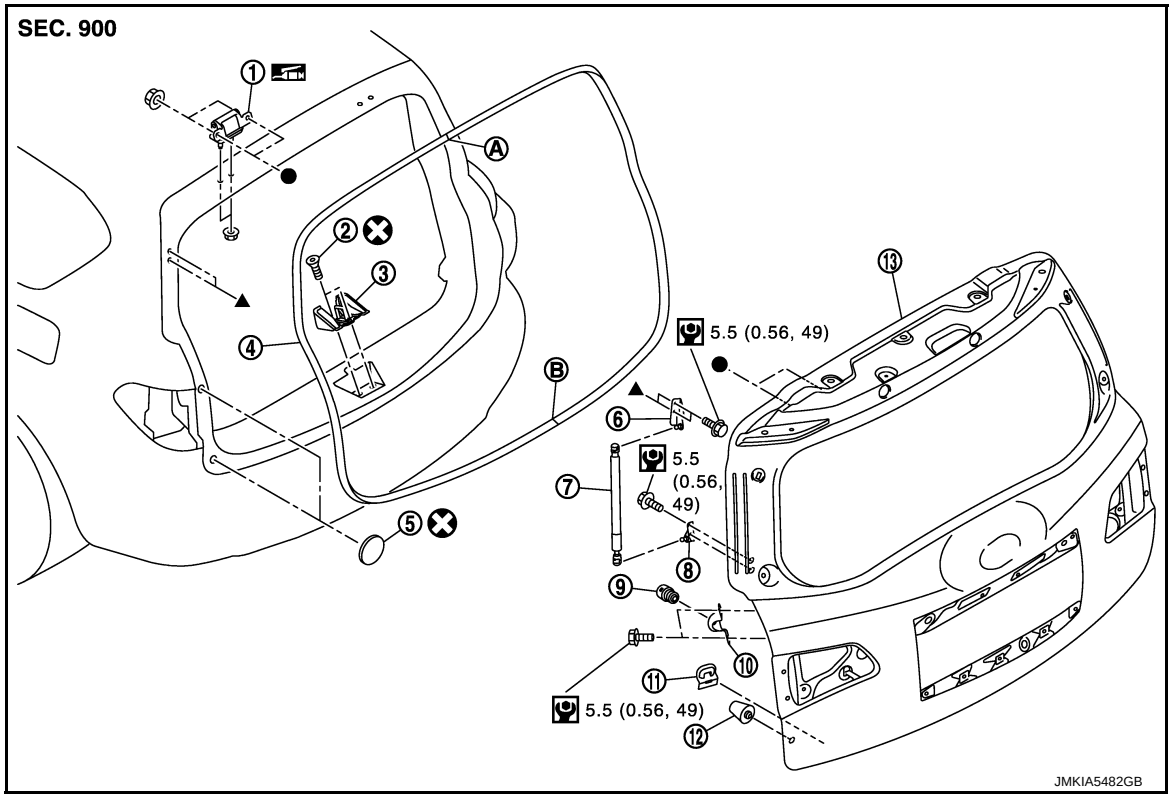
CAUTION:

Check rear door open/close operation after installation.

BACK DOOR

Exploded View

INFOID:0000000009011691



1. Back door hinge
2. TORX bolt
3. Back door striker
4. Back door weather-strip
5. Stopper seal
6. Back door stay bracket
7. Back door stay
8. Back door lower bracket
9. Bumper rubber (side)
10. Bumper rubber bracket
11. Drain plug
12. Bumper rubber (lower)
13. Back door assembly

A : Center mark

B : Seam

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR ASSEMBLY

BACK DOOR ASSEMBLY : Removal and Installation

INFOID:0000000009011692

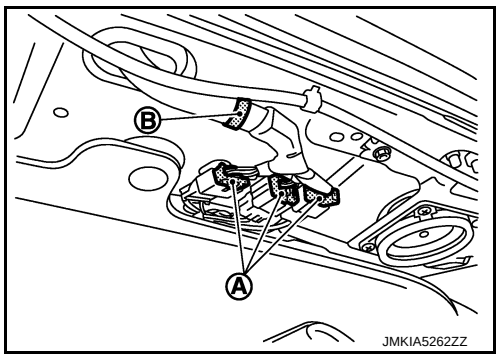
CAUTION:

- **Operate with two workers, because of its heavy weight.**
- **Use protective tape or cloth to protect from damage during remove and installation.**

REMOVAL

1. Remove stud ball of back door support rod. Refer to DLK-253, "BACK DOOR SUPPORT ROD : Removal and Installation".
2. Remove roof garnish. Refer to INT-29, "Removal and Installation".

3. Disconnect back door harness connectors (A) and remove back door harness clip (B).



4. Remove back door harness grommet, and then pull harness out of vehicle through roof panel hole.
5. Disconnect washer tube.
6. Remove washer tube grommet, and then pull washer tube out of vehicle through roof panel hole.
7. Support back door lock with the proper material to 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.

8. Remove back door stay. Refer to DLK-242, "BACK DOOR STAY : Removal and Installation".
9. Remove back door hinge mounting nuts on back door and remove back door assembly.

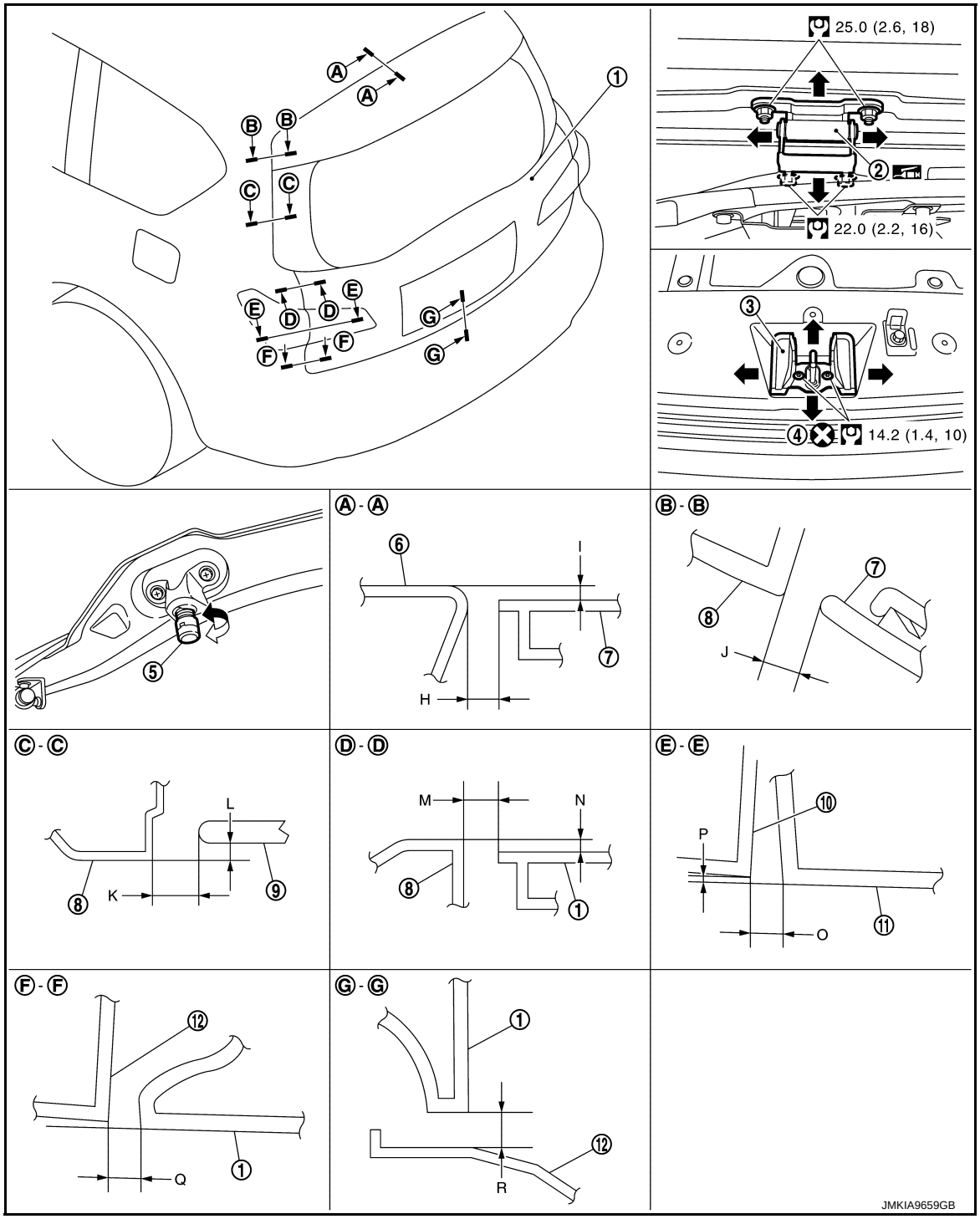
INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:
- **Apply anticorrosive agent onto the mounting surface.**
- **Check back door open/close, lock/unlock operation after installation.**
- **After installation, perform fitting adjustment. Refer to DLK-240, "BACK DOOR ASSEMBLY : Adjustment".**

BACK DOOR ASSEMBLY : Adjustment

INFOID:0000000009011693



1. Back door assembly
2. Back door hinge
3. Back door striker
4. TORX bolt
5. Bumper rubber
6. Roof
7. Rear roof spoiler
8. Body side outer
9. Back door glass
10. Rear combination lamp
11. Back up lamp
12. Rear bumper fascia

Refer to GI-4, "Components" for symbols in the figure.

Check the clearance and the surface height between back door and each part by visually and touching.
If the clearance and the surface height are out of specification, adjust them according to the procedures shown below.

Unit: mm (in)

Portion				Standard	Difference (LH/RH, MAX)
Roof – Rear roof spoiler	A – A	H	Clearance	5.0 – 9.0 (0.197 – 0.354)	—
		I	Surface height	(–1.0) – (+3.0) [(–0.039) – (+0.118)]	—
Body side outer panel – Rear roof spoiler	B – B	J	Clearance	3.8 – 7.8 (0.150 – 0.307)	≤2.0 (0.079)
Body side outer panel – Back door glass	C – C	K	Clearance	3.0 – 7.0 (0.118 – 0.276)	≤2.0 (0.079)
		L	Surface height	0.0 – 4.0 (0.000 – 0.157)	≤2.0 (0.079)
Body side outer panel – Back door	D – D	M	Clearance	4.0 – 6.0 (0.157 – 0.236)	≤1.0 (0.039)
		N	Surface height	(–1.0) – (+1.0) [(–0.039) – (+0.039)]	≤1.0 (0.039)
Rear combination lamp – Back up lamp	E – E	O	Clearance	2.5 – 7.5 (0.098 – 0.295)	≤2.2 (0.087)
		P	Surface height	(–2.2) – (+2.2) [(–0.087) – (+0.087)]	≤2.2 (0.087)
Rear bumper fascia – Back door	F – F	Q	Clearance	2.9 – 7.1 (0.114 – 0.280)	≤2.1 (0.083)
Rear bumper fascia – Back door	G – G	R	Clearance	4.0 – 8.0 (0.157 – 0.315)	—

1. Remove luggage rear plate mask. Refer to INT-35, "LUGGAGE REAR PLATE : Removal and Installation".
2. Loosen back door striker mounting bolts.
3. Loosen back door hinge mounting nuts (back door side).
4. Loosen bumper rubber (side and lower).
5. Lift up back door approximately 100 – 150 mm (3.937 – 5.906 in) height then close it lightly and check that it is engaged firmly with back door closed.
6. Check the clearance and surface height.
7. Finally tighten back door hinge, bumper rubber, and back door striker.
8. Install luggage rear plate mask. Refer to INT-35, "LUGGAGE REAR PLATE : Removal and Installation".

BACK DOOR STRIKER ADJUSTMENT

Adjust back door striker so that i becomes parallel with back door lock insertion direction.

BACK DOOR STRIKER

BACK DOOR STRIKER : Removal and Installation

INFOID:0000000009011694

REMOVAL

1. Remove luggage rear plate. Refer to INT-35, "LUGGAGE REAR PLATE : Removal and Installation".
2. Remove mounting TORX bolts, and then remove back door striker.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

- **Check back door open/close operation after installation.**
- **When removing and installing back door striker, check to perform the fitting adjustment. Refer to DLK-240, "BACK DOOR ASSEMBLY : Adjustment".**

BACK DOOR HINGE

BACK DOOR HINGE : Removal and Installation

INFOID:0000000009011695

CAUTION:
- **Operate with two workers, because of its heavy weight.**
- **Use protective tape or cloth to protect from damage during remove and installation.**

REMOVAL

1. Remove back door assembly. Refer to DLK-238, "BACK DOOR ASSEMBLY : Removal and Installation".
2. Remove back door hinge mounting nuts (body side), and then remove back door hinge.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:
- **Apply anticorrosive agent onto the mounting surface.**
- **Check back door open/close operation after installation.**
- **Check back door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **When removing and installing back door assembly, perform the fitting adjustment. Refer to DLK-240, "BACK DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of back door hinge mounting nuts.**

BACK DOOR STAY

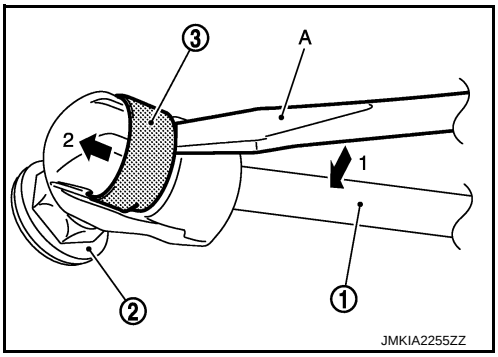
BACK DOOR STAY : Removal and Installation

INFOID:0000000009011696

REMOVAL

1. Support back door lock with the proper material to 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 flatted-blade screwdriver (A).
3. Remove back door stay (back door side).



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

INSTALLATION

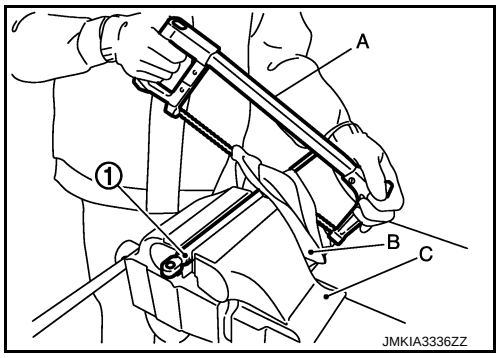
Note the following item, and then install in the reverse order of removal.

CAUTION:
Check back door open/close operation after installation.

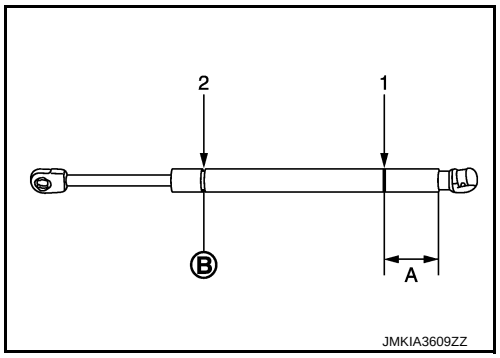
BACK DOOR STAY : Disposal

INFOID:0000000009011697

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



A: 20 mm (0.787 in)
B: Cut at the groove.



BACK DOOR WEATHER-STRIP

BACK DOOR WEATHER-STRIP : Removal and Installation

INFOID:0000000009011698

REMOVAL

1. Remove stud ball of back door support rod from back door assembly. Refer to DLK-253, "BACK DOOR SUPPORT ROD : Removal and Installation".
2. Pull up and remove engagement with body from weather-strip joint.
   CAUTION:
   Never pull strongly on weather-strip.

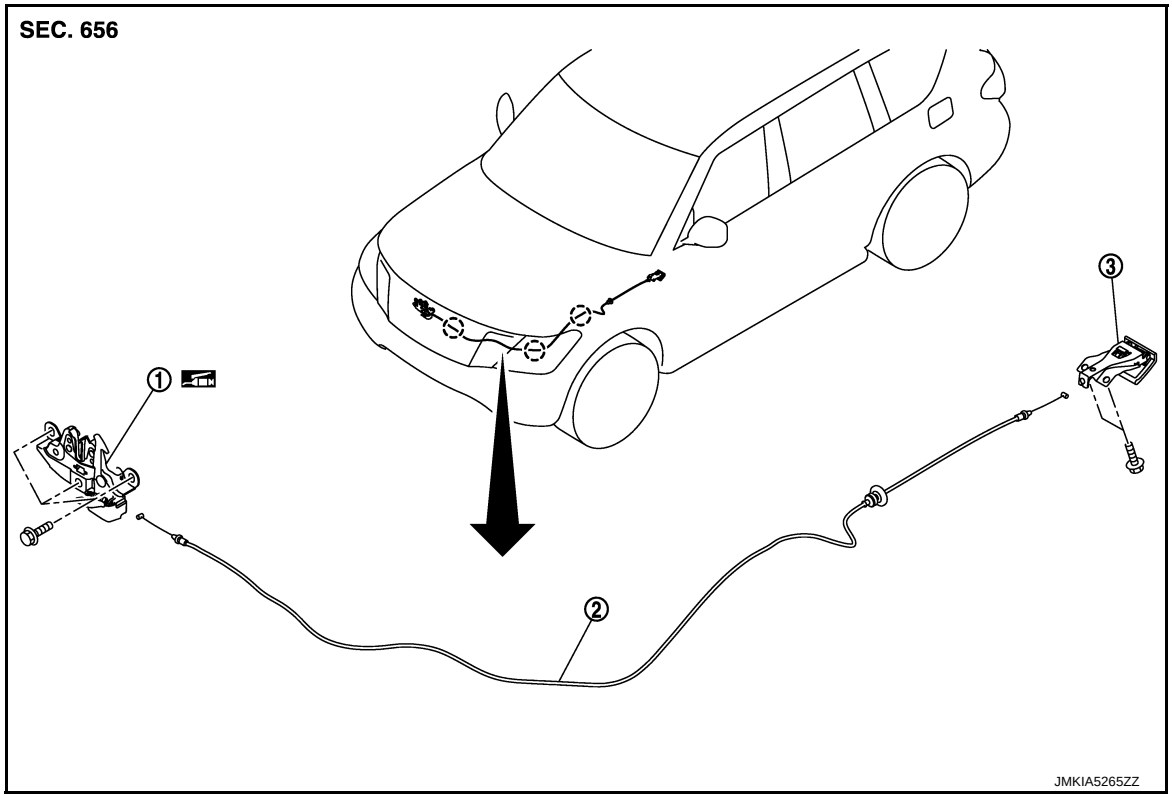
INSTALLATION

1. Working from the upper section, align weather-strip mark with vehicle center position mark and install weather-strip onto the vehicle.
2. For the lower section, align weather-strip seam with center of back door striker.
3. Pull weather-strip gently to ensure that there is no loose section.
   NOTE:
   Check that weather-strip is fit tightly at each corner and luggage rear plate.
4. Install mounting bolts of power back door drive assembly (Back door side).
5. Install stud ball of back door support rod to back door assembly. Refer to DLK-253, "BACK DOOR SUPPORT ROD : Removal and Installation".

HOOD LOCK

Exploded View

INFOID:0000000009011699



1. Hood lock assembly
2. Hood lock control cable
3. Hood lock opener lever

: Clip

Refer to GI-4, "Components" for symbols in the figure.

Removal and Installation

INFOID:0000000009011700

REMOVAL

1. Remove bumper molding. Refer to EXT-13, "Removal and Installation".
2. Remove mounting bolts, and then remove hood lock assembly.
3. Disconnect hood lock cable from hood lock assembly.
4. Remove hood lock cable clip.
5. Remove mounting bolts, and then remove hood lock opener lever.
6. Disconnect hood lock cable from hood lock opener lever.
7. Remove grommet on the lower dash, and pull the hood lock control cable toward the passenger compartment.
   CAUTION:
   While pulling, never to damage (peeling) the outside of hood lock control cable.

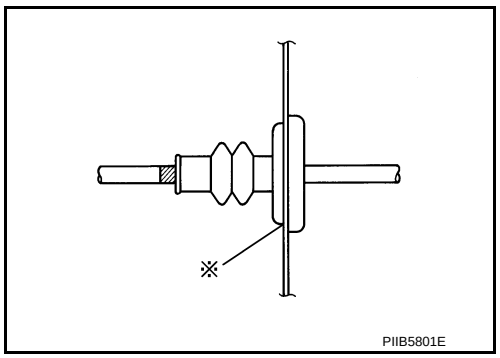
INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

- **Never to bend cable too much, keeping the radius 100 mm (3.937 in) or more.**

- **Check that cable is not offset from the positioning grommet, and apply the sealant to the grommet (at * mark) properly.**



- **Check that hood lock control cable is properly engaged with hood lock.**
- **After installation, perform hood fitting adjustment. Refer to DLK-222, "HOOD ASSEMBLY : Adjustment".**
- **After installation, perform hood lock control inspection. Refer to DLK-245, "Inspection".**

Inspection

INFOID:0000000009011701

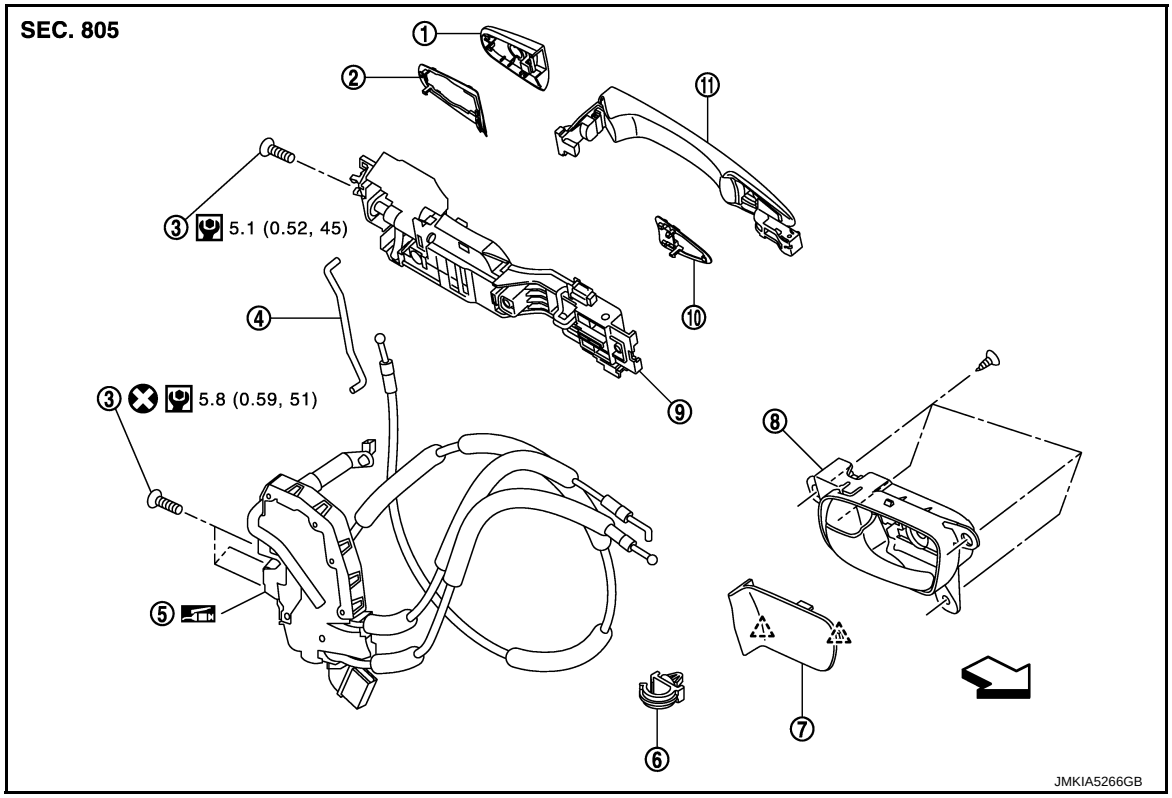
NOTE:
If the hood lock cable is bent or deformed, replace it.

1. Check that secondary latch is properly engaged with secondary striker [6.8 mm (0.268 in)] by hood weight.
2. While operating hood opener, carefully check that the front end of hood is raised by approximately 20.0 mm (0.787 in). Also check that hood opener returns to the original position.
3. Check that hood opener operating is condition 49 N (5.0 kg, 11.0 lb) or below.
4. Install so that static closing face of hood is 680 N·m (69.0 kg–m, 502 ft–lb) or less.
   NOTE:
   - Exert vertical force on right side and left side of hood lock.
   - Never press simultaneously both sides.
5. Check the hood lock lubrication condition. If necessary, apply body grease to hood lock.

FRONT DOOR LOCK

Exploded View

INFOID:0000000009011702



1. Door key cylinder assembly (driver side)
   Outside handle escutcheon (passenger side)
2. Rear gasket
3. TORX bolt
4. Key rod (driver side)
5. Door lock assembly
6. Cable clip
7. Door finisher cap
8. Inside handle
9. Outside handle bracket
10. Front gasket
11. Outside handle

: Pawl

: Vehicle front

Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:0000000009011703

REMOVAL

1. Remove outside handle and outside handle bracket. Refer to DLK-247, "OUTSIDE HANDLE : Removal and Installation".
2. Remove door lock assembly TORX bolts.
3. Disconnect door lock actuator connector, and then remove door lock assembly.
4. Remove key rod from door lock assembly.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

- **Check door lock cables are properly engaged with inside handle and outside handle.**
- **When installing key rod, rotate key rod holder until a click is felt.**

- **After installation, check door open/close, lock/unlock operation.**

INSIDE HANDLE

INSIDE HANDLE : Removal and Installation

INFOID:0000000009011704

REMOVAL

1. Remove front door finisher. Refer to INT-14, "Removal and Installation".
2. Remove inside handle escutcheon. Refer to INT-13, "Exploded View".
3. Remove inside handle mounting screws, and then remove the inside handle.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

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

OUTSIDE HANDLE

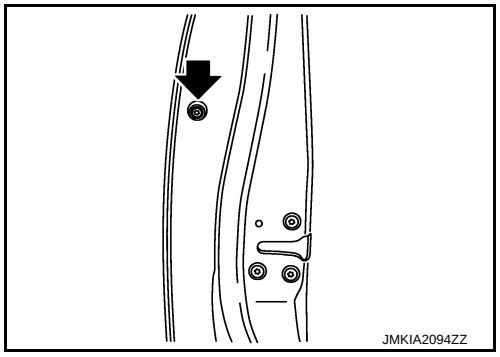
OUTSIDE HANDLE : Removal and Installation

INFOID:0000000009011705

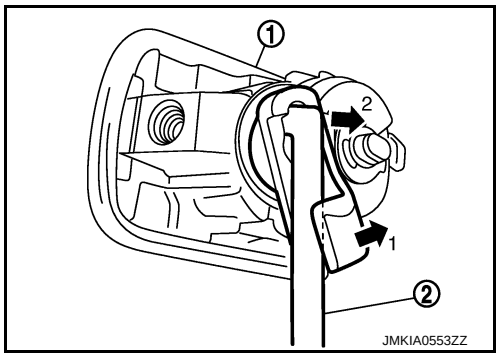
REMOVAL

1. Fully close front door glass.
2. Remove front door finisher. Refer to INT-14, "Removal and Installation".
3. Remove sealing screen.
   NOTE:
   Cat the buty-tape so that some parts of the buty-tape do not remain on the sealing screen, if the sealing screen is reused.
4. Disconnect door antenna and door request switch connector, and then remove harness clamp (models with Intelligent Key system) on outside handle bracket.
5. Remove door side grommet, and loosen TORX bolt from grommet hole.

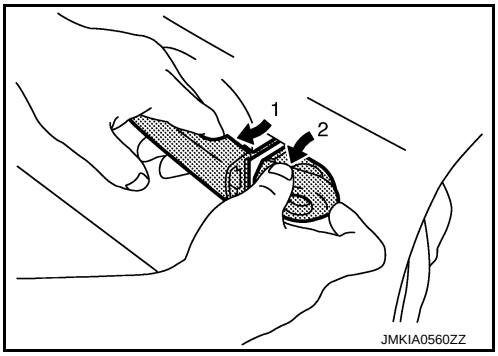
   ⬅ : TORX bolt



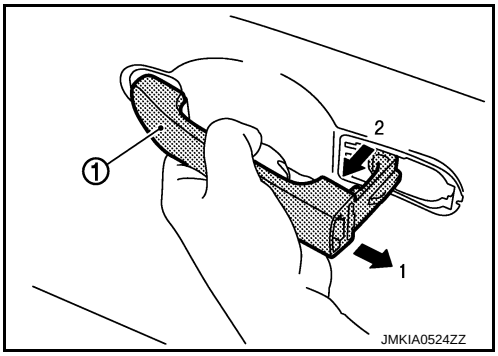
6. Reach in to separate key rod (2) connection [on the door key cylinder assembly (1)] (driver side).



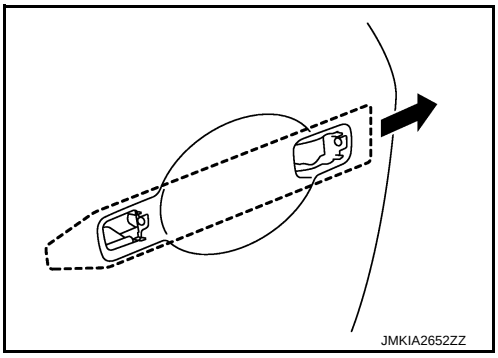
7. While pulling outside handle, remove door key cylinder assembly (driver side) or outside handle escutcheon (passenger side).



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



9. Remove front gasket and rear gasket.
10. Slide toward rear of vehicle to remove outside handle bracket.



11. Disconnect door lock cable from outside handle bracket.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

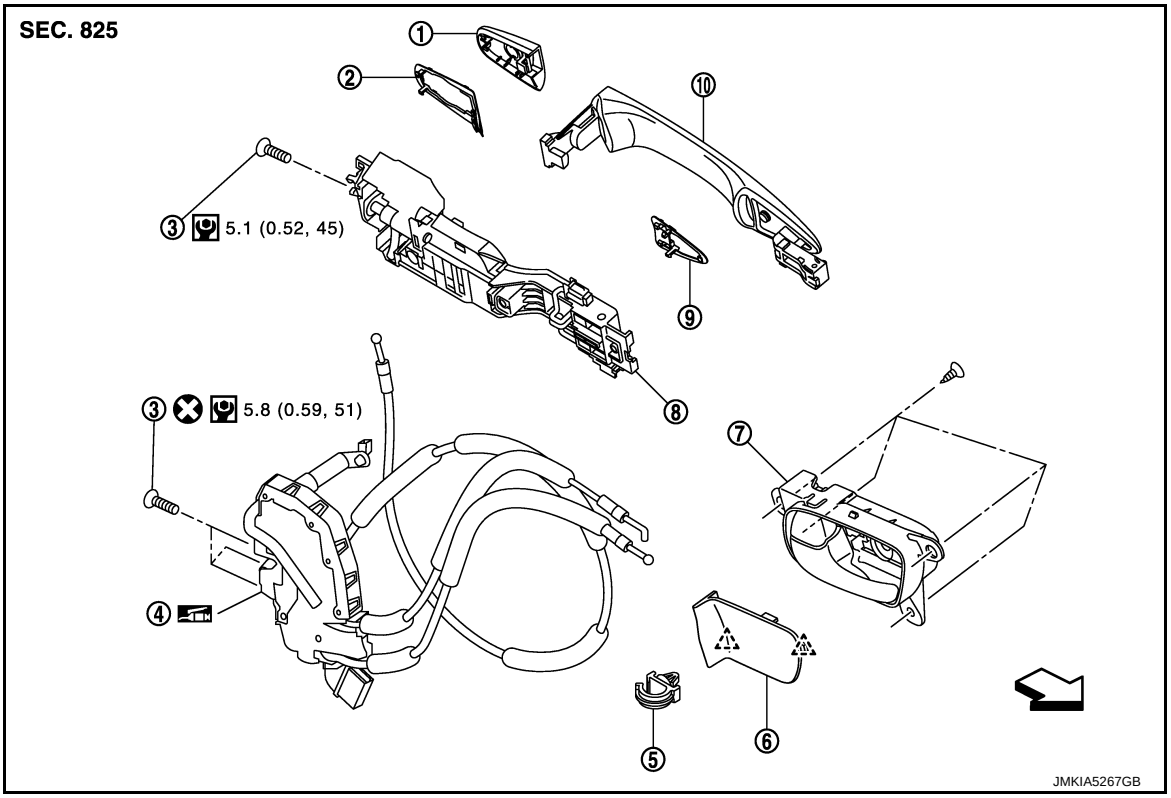
CAUTION:

- **When installing key rod, rotate key rod holder until a click is felt.**
- **Check door lock cable is properly engaged with outside handle bracket.**
- **After installation, check door open/close, lock/unlock operation.**

REAR DOOR LOCK

Exploded View

INFOID:0000000009011706



1. Outside handle escutcheon
2. Rear gasket
3. TORX bolt
4. Door lock assembly
5. Cable clip
6. Door finisher cap
7. Inside handle
8. Outside handle bracket
9. Front gasket
10. Outside handle

: Pawl

: Vehicle front

Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:0000000009011707

REMOVAL

1. Remove outside handle and outside handle bracket. Refer to DLK-250, "OUTSIDE HANDLE : Removal and Installation".
2. Remove door lock assembly TORX bolts.
3. Disconnect door lock actuator connector, and then remove door lock assembly.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

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

INSIDE HANDLE

INSIDE HANDLE : Removal and Installation

INFOID:0000000009011708

REMOVAL

1. Remove rear door finisher. Refer to INT-16, "Removal and Installation".
2. Remove inside handle escutcheon. Refer to INT-16, "Exploded View"
3. Remove inside handle mounting screws, and then remove inside handle.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

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

OUTSIDE HANDLE

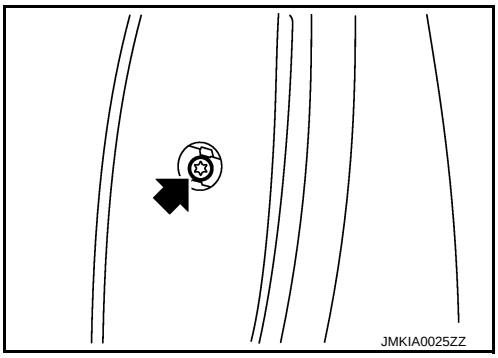
OUTSIDE HANDLE : Removal and Installation

INFOID:0000000009011709

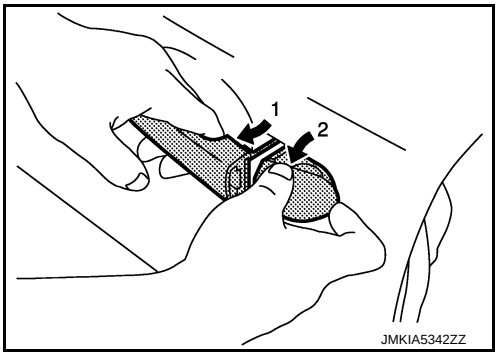
REMOVAL

1. Fully close rear door glass.
2. Remove rear door finisher. Refer to INT-16, "Removal and Installation".
3. Remove sealing screen.
   NOTE:
   Cat the buty-tape so that some parts of the buty-tape do not remain on the sealing screen, if the sealing screen is reused.
4. Remove door side grommet, and loosen TORX bolt from grommet hole.

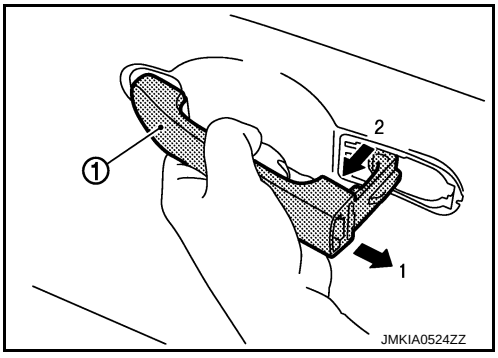
   ⬅ : TORX bolt



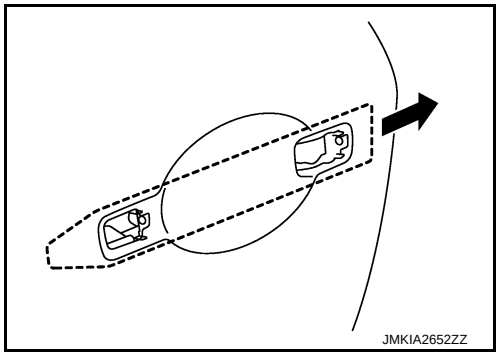
5. While pulling outside handle, remove outside handle escutcheon.



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



7. Remove front gasket and rear gasket.
8. Slide toward rear of vehicle to remove outside handle bracket.



9. Disconnect door lock cable from outside handle bracket.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

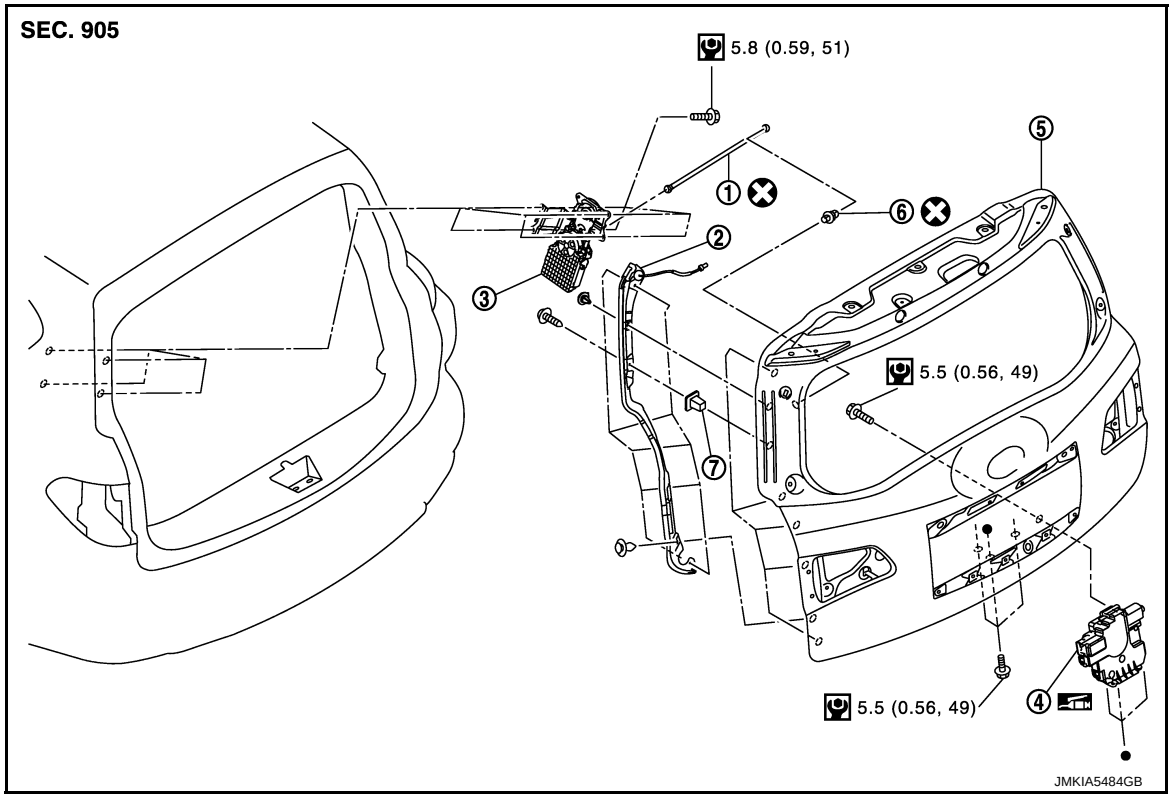
CAUTION:

- **Check door lock cable is properly engaged with outside handle bracket.**
- **After installation, check door open/close, lock/unlock operation.**

BACK DOOR LOCK

Exploded View

INFOID:0000000009011710



1. Back door support rod
2. Touch sensor
3. Automatic back door control module
4. Back door lock assembly
5. Back door assembly
6. Stud ball
7. Screw grommet

Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:0000000009011711

REMOVAL

1. Remove back door finisher lower. Refer to INT-39, "Removal and Installation".
2. Disconnect back door lock assembly harness connector.
3. Remove back door lock mounting bolts, and then remove back door lock assembly.

INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:

Check back door open/close, lock/unlock operation after installation.

TOUCH SENSOR

TOUCH SENSOR : Removal and Installation

INFOID:0000000009011712

CAUTION:

Take care not to bend touch sensor.

REMOVAL

1. Remove back door finisher side. Refer to INT-39, "Removal and Installation".
2. Disconnect touch sensor connector.

3. Remove clips and TORX screws of touch sensor.
4. Pull harness of touch sensor out of back door and remove touch sensor.

INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:

Check back door open/close operation after installation.

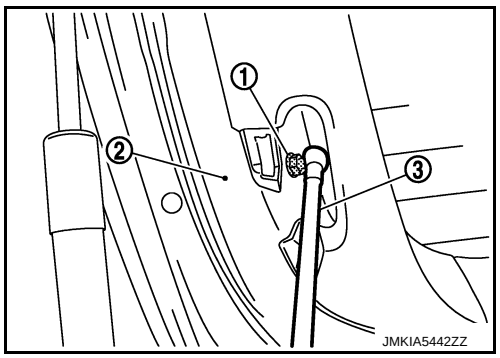
BACK DOOR SUPPORT ROD

BACK DOOR SUPPORT ROD : Removal and Installation

INFOID:0000000009011713

REMOVAL

1. Remove cap of back door finisher side (LH). Refer to INT-39, "Exploded View".
2. Remove stud ball (1) of back door support rod (3) from back door assembly (2).



3. Remove automatic back door control module. Refer to DLK-268, "Removal and Installation".
   NOTE:
   When replacing back door support rod, replace stud ball and automatic back door control module as a set, since back door support rod is engaged and connected to stud ball and automatic back door control module.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

- **When reusing stud ball, always apply locking sealant before installing stud ball to back door.**
- **Check back door open/close operation after installation.**

EMERGENCY LEVER

EMERGENCY LEVER : Unlock procedures

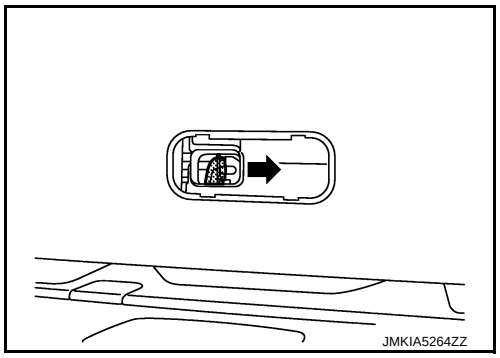
INFOID:0000000009011714

UNLOCK PROCEDURES

NOTE:

If back door lock cannot be unlocked due to a malfunction or battery discharge, follow the procedures to unlock back door.

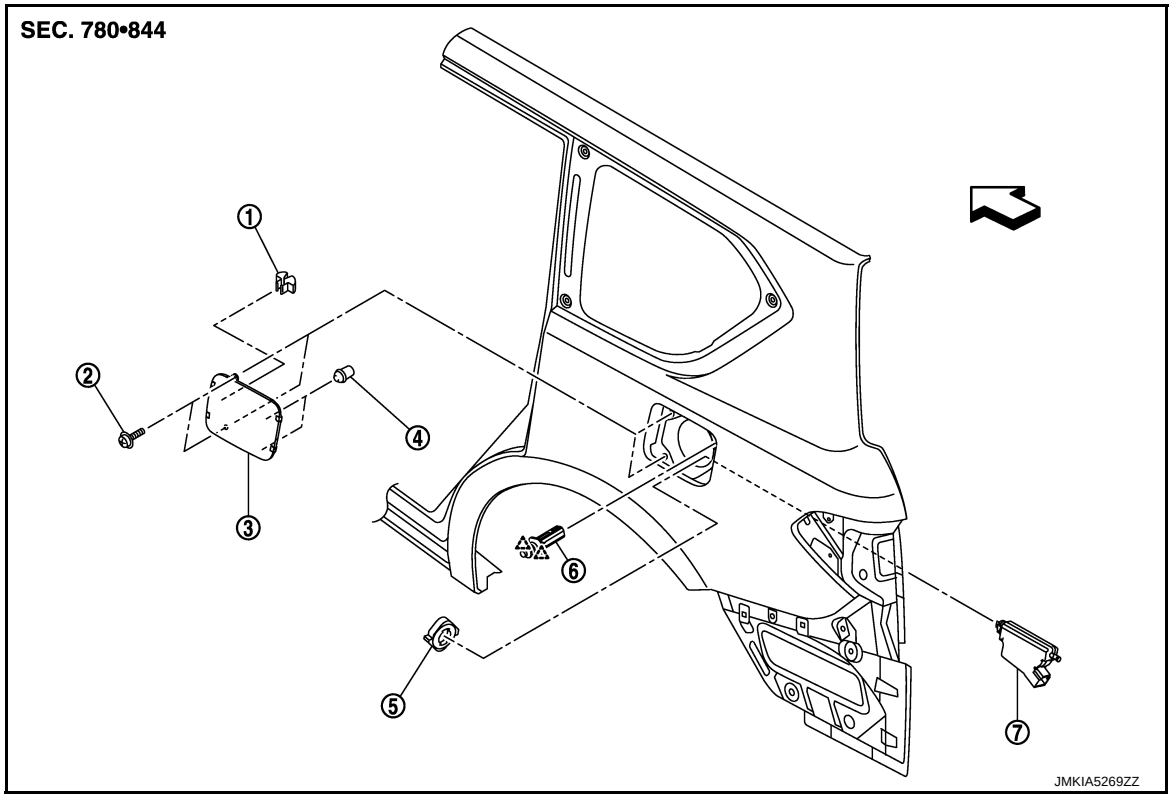
1. Remove the emergency handle mask. Refer to INT-39, "Exploded View".
2. From inside the vehicle, rotate emergency lever toward lower direction and unlock.



FUEL FILLER LID OPENER

Exploded View

INFOID:0000000009011715



1. Fuel filler spring
2. TORX bolt
3. Fuel filler lid assembly
4. Fuel lid bumper rubber
5. Lock nut
6. Lock & rod assembly
7. Fuel filler lid lock actuator

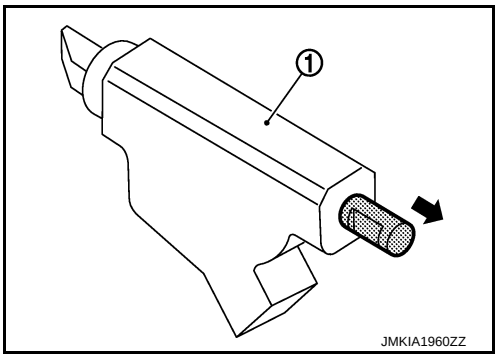
: Pawl

: Vehicle front

Removal and Installation

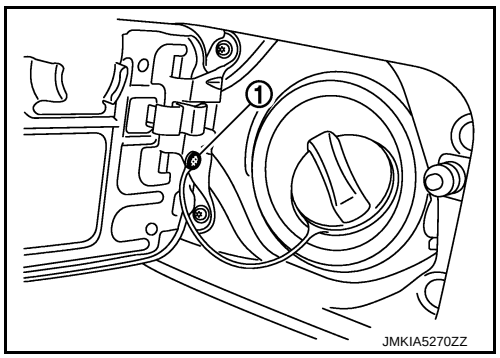
INFOID:0000000009011716

NOTE:
When fuel filler lid lock actuator (1) is a defective operation, pull the rod to open fuel filler lid.



REMOVAL

1. Remove fuel mounting pin (1).



2. Remove mounting TORX bolts, and then remove fuel filler lid.
3. Remove luggage side lower finisher LH. Refer to INT-36, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation".
4. Disconnect woofer connector.
5. Remove woofer mounting bolts, and then remove woofer.
6. Rotate lock nut counterclockwise, and then remove lock nut.
7. Push fuel filler lid lock actuator behind the vehicle, while pushing the pawl.
8. Disconnect harness connector and remove fuel filler lid lock actuator.
9. Pull and remove lock & rod assembly forward, while pushing the pawls.

INSTALLATION

Note the following items, and then install 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 (the body color) onto the head of fuel filler lid mounting screws.**

KEY CYLINDER

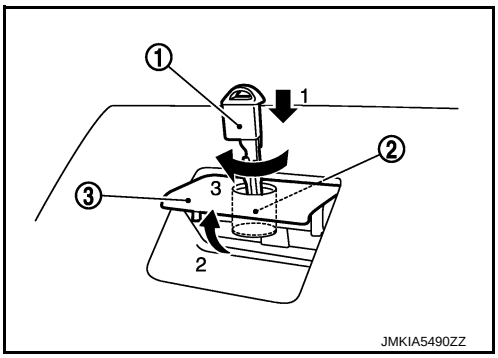
GLOVE BOX LID KEY CYLINDER

GLOVE BOX LID KEY CYLINDER : Removal and Installation

INFOID:0000000009011717

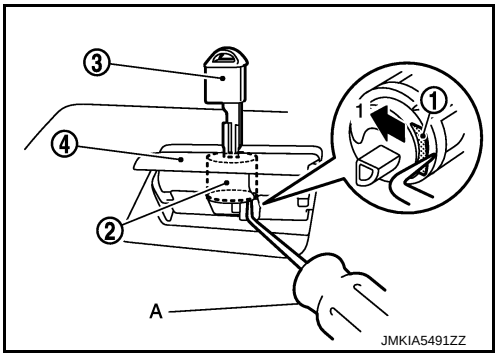
REMOVAL

1. Remove glove box assembly. Refer to IP-14, "Removal and Installation".
2. Insert mechanical key (1) into glove box lid lock cylinder (2).
3. Set glove box lid release handle (3) to the pulled-up status.
4. Rotate mechanical key and turn glove box lid key cylinder to the lock position.



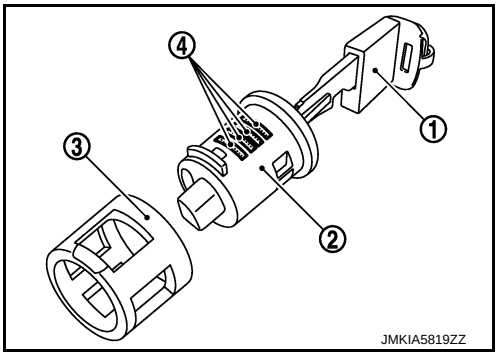
JMKIA5490ZZ

5. Press tumbler stopper (1) into glove box lid lock cylinder (2) using a hook and pick tool (A), and then remove mechanical key (3) and glove box lid lock cylinder together from glove box lid release handle (4).
   NOTE:
   When removing glove box lid lock cylinder, write a short note describing its position against glove box lid release handle.



JMKIA5491ZZ

6. Remove sleeve (3) from glove box lid release handle, and then install sleeve to glove box lid lock cylinder.
   NOTE:
   When removing sleeve, write a short note describing its position against glove box lid release handle.
   CAUTION:
   Never pull out mechanical key (1) from glove box lid lock cylinder (2) while sleeve is uninstalled. Otherwise, tumbler (4) pops out of glove box lid lock cylinder.



JMKIA5819ZZ

INSTALLATION

Note the following item, and then install in the reverse order of removal.

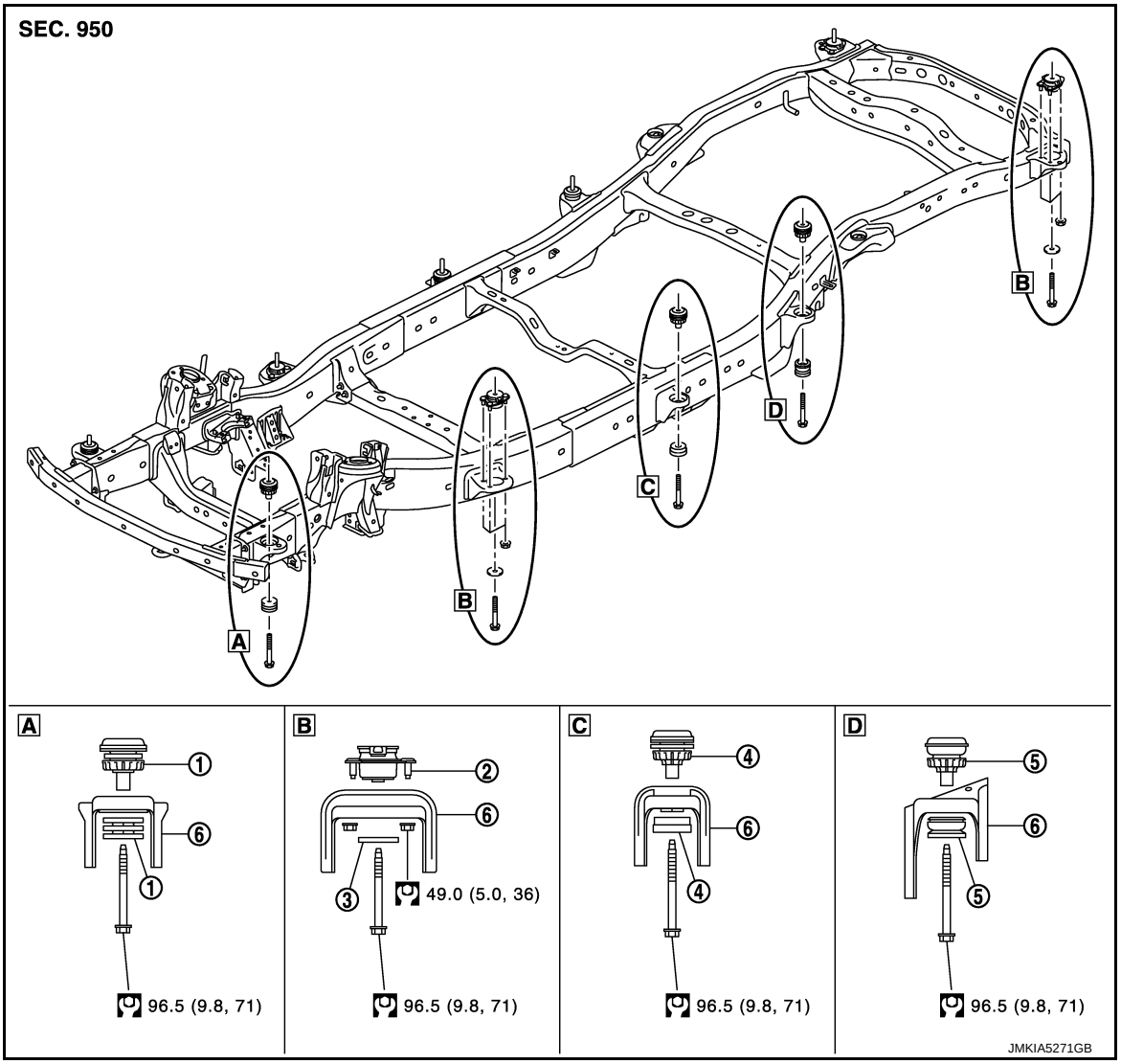
CAUTION:

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

CAB MOUNTING INSULATOR

Exploded View

INFOID:0000000009011718



1. Cab mounting insulator (1st)
2. Cab mounting insulator (2nd and 5th)
3. Washer
4. Cab mounting insulator (3rd)
5. Cab mounting insulator (4th)
6. Frame assembly

Refer to GI-4, "Components" for symbols in the figure.

Removal and Installation

INFOID:0000000009011719

REMOVAL

1. Set the vehicle position for lifting body assembly using a 2-pole lift.
   1. Remove side step. Refer to EXT-46, "Removal and Installation".
   2. For replacing cab mounting insulator, separate body assembly and frame assembly. Because separating operation lifts only body assembly, determine the vehicle position by aligning the position of body side sill portion and arm of 2-pole lift.

      CAUTION:

      Never lift up by body side sill using 2-pole lift before separating body assembly from frame assembly. Otherwise, body may be damaged.
2. Set arm of 2-pole lift to lifting point of frame assembly. Refer to GI-35, "2-Pole Lift".
3. Preparation.

- Drain brake fluid from brake line. Refer to BR-10, "Draining".
- Release fuel pressure.
- VK56VD FOR UAS AND CANADA: Refer to EC-168, "Work Procedure".
- VK56VD FOR MEXICO: Refer to EC-731, "Work Procedure".
- Disconnect both battery cables. Refer to PG-122, "Removal and Installation".
- Drain engine coolant from radiator. Refer to CO-8, "Draining".
- Discharge refrigerant from A/C circuit. Refer to HA-20, "Recycle Refrigerant".
- Drain power steering fluid from reservoir tank.

4. Remove parts relating to connection of body assembly and frame assembly.
   - Tire and wheel: Refer to WT-63, "Removal and Installation" (with TPMS).
   - Front fender protector (LH and RH): Refer to EXT-24, "FENDER PROTECTOR : Removal and Installation".
   - Front bumper: Refer to EXT-13, "Removal and Installation".
   - Radiator core support upper: Refer to DLK-226, "Removal and Installation".
   - Fan shroud: Refer to CO-18, "Removal and Installation".
   - Battery and battery case: Refer to PG-122, "Removal and Installation".
   - Air cleaner case (upper and lower): Refer to EM-28, "Removal and Installation".
   - Engine cover: Refer to EM-26, "Removal and Installation".
   - Rear wheel house protector (LH and RH): EXT-25, "REAR WHEEL HOUSE PROTECTOR : Removal and Installation".
   - Rear bumper: Refer to EXT-18, "Removal and Installation".
   - Fuel filler tube: Remove to FL-9, "Exploded View".
   - Spare tire
   - Towing hook bracket.
5. Separate parts relating to connection of body assembly and frame assembly.
   Vehicle front
   - Disconnect ICC sensor connector. (models with ICC) Refer to CCS-182, "Removal and Installation".
   - Remove radiator upper hose and radiator lower hose from radiator assembly. Refer to CO-14, "Exploded View".
   - Remove A/T fluid cooler hose B and A/T fluid cooler hose E from A/T fluid cooler tubes. Refer to TM-212, "Exploded View".
   - Remove power steering return hose from oil cooler, and then power steering return hose clamp bolt from frame assembly. Refer to ST-54, "Exploded View".
   - Remove power steering suction hose from reservoir tank. Refer to ST-54, "Exploded View".
     CAUTION:
     Never spill power steering fluid in engine room.
   - Remove A/C low-presser flexible hose from A/C low-presser pipe. Refer to HA-36, "LOW-PRESSURE FLEXIBLE HOSE : Removal and Installation".
   - Remove A/C hi-presser flexible hose from condenser. Refer to HA-35, "HIGH-PRESSURE FLEXIBLE HOSE : Removal and Installation".
   - Remove all engine Control Harness connectors, harness clips and others that are connected to the body assembly side of the engine room. (engine room LH and RH side). Refer to PG-103, "Engine Control Harness".
     NOTE:
     Separate harness connectors from ECM (engine control module).
     - VK56VD FOR UAS AND CANADA: Refer to EC-17, "General Precautions".
     - VK56VD FOR MEXICO: Refer to EC-587, "General Precautions".

     CAUTION:
     - **When pulling out harnesses, never damage harnesses or connectors.**
     - **After temporarily securing connectors, cover them with vinyl or similar material to protect against adhesion of foreign materials.**
   - Disconnect engine room harness connectors and remove harness clips from engine assembly (engine RH side). Refer to PG-101, "Engine Room Harness".
   - Remove heater hoses from front water outlet tube (engine room RH side). Refer to HA-34, "Exploded View".
   - Disconnect front wheel sensor connectors (LH and RH). Refer to BRC-143, "FRONT WHEEL SENSOR : Exploded View".
   - Disconnect fuel feed tube and EVAP hose (front wheel well LH side).
   - Remove steering lower shaft from steering gear side assembly. Refer to ST-37, "Removal and Installation"
     CAUTION:

Spiral cable may be cut if steering wheel turns while separating steering column assembly and steering gear assembly.

- Remove brake tube from connector (front wheel well LH and RH side). Refer to BR-22, "FRONT : Exploded View"

Vehicle center side

- Remove A/T control cable from manual lever. Refer to TM-187, "Removal and Installation".
- Separate parking brake rear cable (LH and RH) from parking brake front cable. Refer to PB-5, "Removal and Installation".
- Remove engine room harness connector (frame assembly RH center side). Refer to PG-101, "Engine Room Harness"

- Remove harness connector protector.
- Disconnect chassis harness connector from engine room harness connector.
- Remove harness bracket bolt, and then remove engine room harness connector from frame assembly.

Vehicle rear side

- Remove EVAP hose (canister side).
- Remove rear final drive breather hose from air breather tube (body side). Refer to DLN-214, "Removal and Installation".
- Disconnect body harness connector from chassis harness connectors (frame assembly LH rear side). Refer to PG-105, "Body Harness"

6. Set safety stand to frame assembly. Release arm of 2-pole lift.
7. Remove cab mounting insulator bolts.
8. Set arm of 2-pole lift to body side sill portion of body.
9. Slowly lift 2-pole lift.

CAUTION:

- **Check that there is no interference with the vehicle.**
- **Check that all connection points are disconnected.**

10. Remove cab mounting insulator.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

- **Before starting engine, check oil/fluid levels including engine coolant and engine oil. If levels are less than the required quantity, fill to the specified level.**
- **FOR NORTH AMERICA: Refer to MA-15, "FOR NORTH AMERICA : Fluids and Lubricants".**
- **FOR MEXICO: Refer to MA-16, "FOR MEXICO : Fluids and Lubricants".**
- **Warm up engine thoroughly to check that there is no leakage of fuel, exhaust gases, or any oil/fluids including engine oil and engine coolant.**

DOOR SWITCH

Removal and Installation

INFOID:0000000009011720

REMOVAL

Remove the door switch mounting bolt, and then remove door switch.

INSTALLATION

Install in the reverse order of removal.

DOOR REQUEST SWITCH

DRIVER SIDE

DRIVER SIDE : Removal and Installation

INFOID:0000000009011721

REMOVAL

Remove the driver side outside handle. Refer to DLK-247, "OUTSIDE HANDLE : Removal and Installation".

INSTALLATION

Install in the reverse order of removal.

PASSENGER SIDE

PASSENGER SIDE : Removal and Installation

INFOID:0000000009011722

REMOVAL

Remove the passenger side outside handle. Refer to DLK-247, "OUTSIDE HANDLE : Removal and Installation".

INSTALLATION

Install in the reverse order of removal.

BACK DOOR

BACK DOOR : Removal and Installation

INFOID:0000000009011723

REMOVAL

Remove the back door finisher. Refer to INT-39, "Removal and Installation".

INSTALLATION

Install in the reverse order of removal.

INSIDE KEY ANTENNA

INSTRUMENT CENTER

INSTRUMENT CENTER : Removal and Installation

INFOID:0000000009011724

REMOVAL

1. Remove the cluster lid C. Refer to IP-14, "Removal and Installation".
2. Remove the inside key antenna (instrument center) mounting screw, and then remove inside key antenna (instrument center).

INSTALLATION

Install in the reverse order of removal.

CONSOLE

CONSOLE : Removal and Installation

INFOID:0000000009011725

REMOVAL

1. Remove the console rear finisher. Refer to IP-29, "Removal and Installation".
2. Remove the inside key antenna (console) mounting screw, and then remove inside key antenna (console).

INSTALLATION

Install in the reverse order of removal.

LUGGAGE ROOM

LUGGAGE ROOM : Removal and Installation

INFOID:0000000009011726

REMOVAL

1. Remove the second seat seatback. Refer to SE-127, "SEATBACK : Disassembly and Assembly".
2. Remove the inside key antenna (luggage room) mounting clip, and then remove inside key antenna (luggage room).

INSTALLATION

Install in the reverse order of removal.

OUTSIDE KEY ANTENNA

DRIVER SIDE

DRIVER SIDE : Removal and Installation

INFOID:0000000009011727

REMOVAL

Remove the driver side outside handle. Refer to DLK-247, "OUTSIDE HANDLE : Removal and Installation".

INSTALLATION

Install in the reverse order of removal.

PASSENGER SIDE

PASSENGER SIDE : Removal and Installation

INFOID:0000000009011728

REMOVAL

Remove the passenger side outside handle. Refer to DLK-247, "OUTSIDE HANDLE : Removal and Installation".

INSTALLATION

Install in the reverse order of removal.

BACK DOOR

BACK DOOR : Removal and Installation

INFOID:0000000009011729

REMOVAL

Remove the back door finisher inner. Refer to INT-39, "Removal and Installation".

INSTALLATION

Install in the reverse order of removal.

INTELLIGENT KEY WARNING BUZZER

Removal and Installation

INFOID:0000000009011730

REMOVAL

Remove the Intelligent Key warning buzzer mounting bolt, and then remove the Intelligent Key warning buzzer.

INSTALLATION

Install in the reverse order of removal.

REMOTE KEYLESS ENTRY RECEIVER

Removal and Installation

INFOID:0000000009011731

REMOVAL

1. Remove the luggage side finisher. Refer to INT-38, "LUGGAGE SIDE UPPER FINISHER : Removal and Installation".
2. Remove the remote keyless entry receiver mounting bolt, and then remove remote keyless entry receiver.

INSTALLATION

Install in the reverse order of removal.

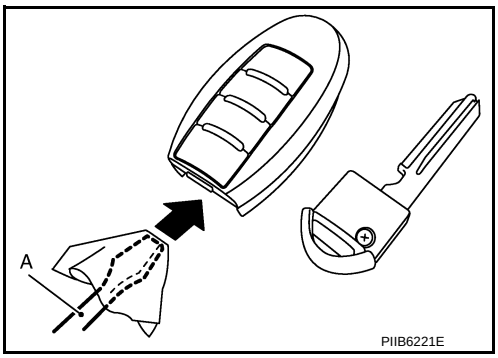
INTELLIGENT KEY BATTERY

Removal and Installation

INFOID:0000000009011732

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

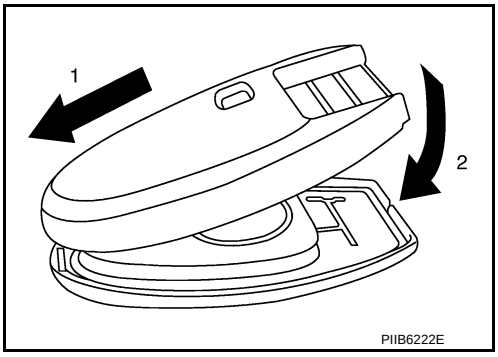
2. Insert a remover tool (A) wrapped with a cloth into the slit of the corner and twist it to separate the upper part from the lower part.
CAUTION:
- **Do not touch the circuit board or battery terminal.**
- **The key fob is water-resistant. However, if it does get wet, immediately wipe it dry.**



3. Replace the battery with 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 it 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.**



BACK DOOR CONTROL UNIT

Removal and Installation

INFOID:0000000009011733

REMOVAL

1. Remove the back door finisher inner. Refer to INT-39, "Removal and Installation".
2. Remove the back door control unit mounting bolts, and then remove back door control unit.

INSTALLATION

Install in the reverse order of removal.

AUTOMATIC BACK DOOR CONTROL MODULE

Removal and Installation

INFOID:0000000009011734

REMOVAL

1. Remove the luggage side finisher lower LHD. Refer to INT-36, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation".
2. Remove the automatic back door control unit bracket mounting bolt and nats, and then remove the automatic back door control unit bracket.
3. Remove the automatic back door control unit mounting bolt, and then remove the automatic back door control unit.

INSTALLATION

Install in the reverse order of removal.

NOTE:

After installing back door control unit, perform additional service when replace control unit. Refer to DLK-82, "ADDITIONAL SERVICE WHEN REPLACING (AUTOMATIC BACK DOOR CONTROL MODULE) : Work Procedure".

AUTOMATIC BACK DOOR WARNING BUZZER

Removal and Installation

INFOID:0000000009011735

REMOVAL

1. Remove the back door finisher inner. Refer to INT-39, "Removal and Installation".
2. Remove the automatic back door warning buzzer mounting nut, and then remove the automatic back door warning buzzer.

INSTALLATION

Install in the reverse order of removal.

AUTOMATIC BACK DOOR MAIN SWITCH

Removal and Installation

INFOID:0000000009011736

REMOVAL

1. Remove the instrument driver lower panel LH. Refer to IP-14, "Removal and Installation".
2. Widen the pawl, and remove the automatic back door main switch from switch bracket.

INSTALLATION

Install in the reverse order of removal.

AUTOMATIC BACK DOOR CLOSE SWITCH

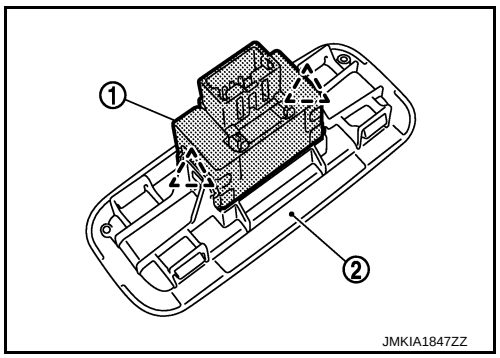
Removal and Installation

INFOID:0000000009011737

REMOVAL

1. Remove the automatic back door close switch finisher.
2. Widen the pawl, and remove the automatic back door close switch (1) from automatic back door close switch finisher (2).

: **Pawl**



INSTALLATION

Install in the reverse order of removal.

AUTOMATIC BACK DOOR SWITCH

Removal and Installation

INFOID:0000000009011738

REMOVAL

1. Remove the instrument driver lower panel. Refer to IP-14, "Removal and Installation".
2. Widen the pawl, and remove the automatic back door switch from automatic back door switch finisher.

INSTALLATION

Install in the reverse order of removal.