SECTION DLK
DOOR & LOCK

CONTENTS

PRECAUTION

PRECAUTIONS

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

INFOID:0000000012352613

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. 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:

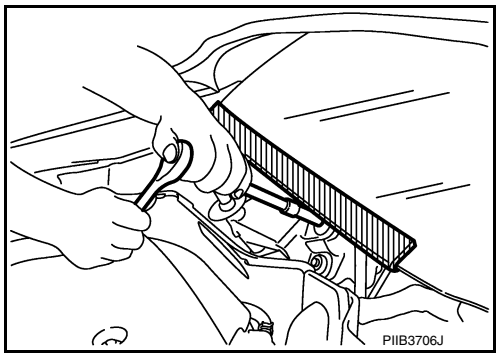
Always observe the following items for preventing accidental activation.

- **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.**

Precaution for Procedure without Cowl Top Cover

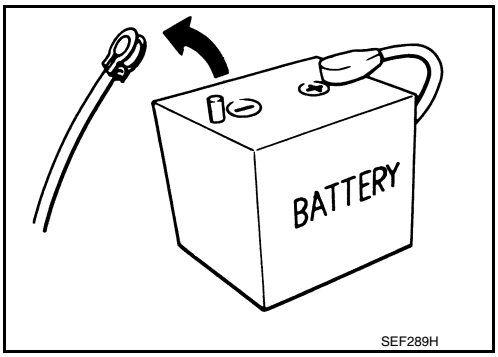
INFOID:0000000012352614

When performing the procedure after removing cowl top cover, cover the lower end of windshield with urethane, etc to prevent damage to windshield.



Precautions for Removing Battery Terminal

INFOID:0000000012352615



- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.
  NOTE:
  ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.
- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.
  NOTE:
  If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.
- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.
  NOTE:
  The removal of 12V battery may cause a DTC detection error.

Work

INFOID:0000000012352616

- 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.

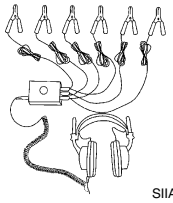
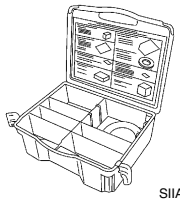
PREPARATION

PREPARATION

Special Service Tools

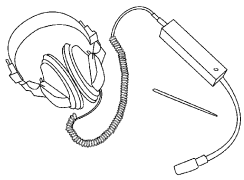
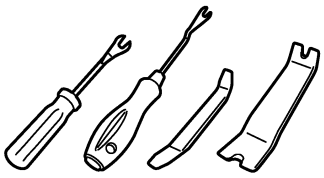
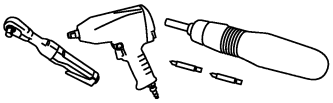
INFOID:0000000012352617

The actual shapes of TechMate tools may differ from those of special service tools illustrated here.

Tool number (TechMate 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:0000000012352618

Tool name		Description
Engine ear	 SIIA0995E	Locates the noise
Remover tool	 JMKIA3050ZZ	Removes clips, pawls and metal clips
Power tool	 PIIB1407E	Loosening bolts, nuts and screws

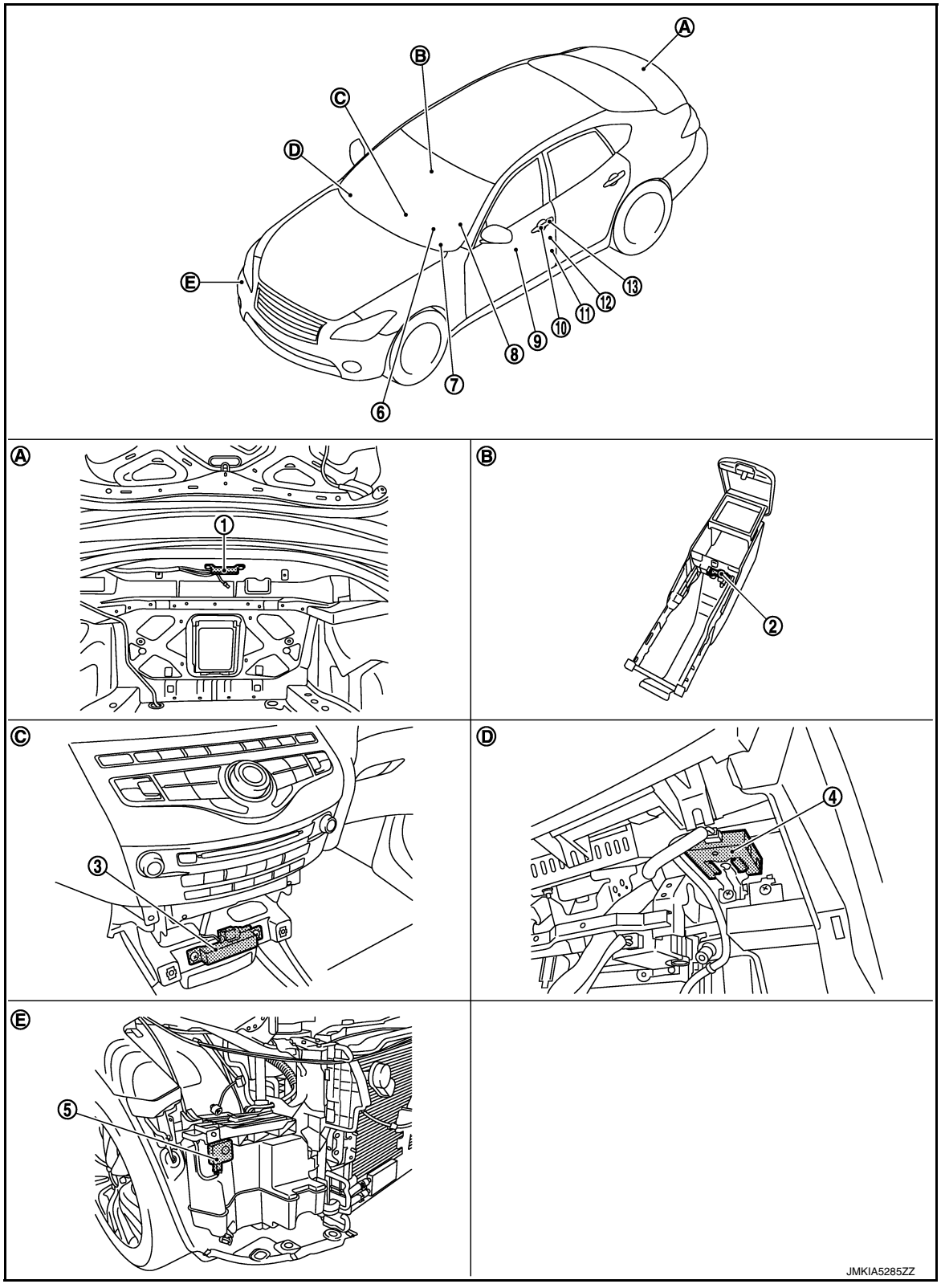
SYSTEM DESCRIPTION

COMPONENT PARTS

DOOR LOCK SYSTEM

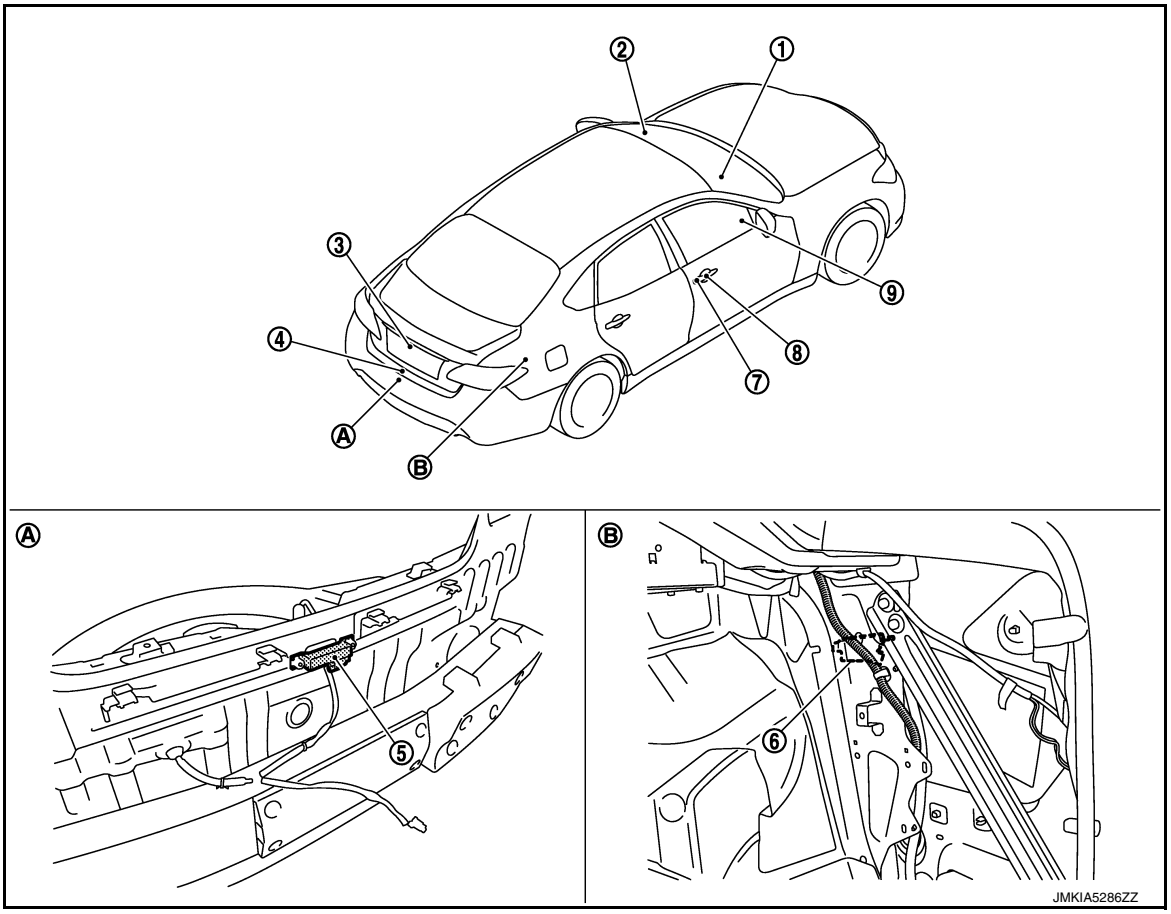
DOOR LOCK SYSTEM : Component Parts Location

INFOID:0000000012352619



1. Inside key antenna (trunk room)
2. Inside key antenna (console)
3. Inside key antenna (instrument center)
4. Remote keyless entry receiver
5. Intelligent Key warning buzzer
6. Combination meter
7. BCM
   Refer to BCS-5, "BODY CONTROL SYSTEM : Component Parts Location"
8. TCM
   Refer to TM-11, "A/T CONTROL SYSTEM : Component Parts Location"
9. Power window main switch (door lock and unlock switch)
10. Outside key antenna (driver side)
11. Front door switch (driver side)
12. Front door lock assembly (driver side)
13. Front door request switch (driver side)

A. View with trunk lid upper finisher removed
B. View with center console assembly removed
C. View with cluster lid C removed
D. View with glove box assembly removed
E. View with front bumper removed



1. Push-button ignition switch
2. Trunk lid opener switch
3. Trunk lid opener request switch
4. Trunk closure assembly
5. Outside key antenna (rear bumper)
6. Fuel lid lock actuator
7. Front door request switch (passenger side)
8. Outside key antenna (passenger side)
9. Trunk lid opener cancel switch

A. View with rear bumper removed
B. View with trunk side finisher removed

DOOR LOCK SYSTEM : Component Description

INFOID:0000000012352620

Item	Function
BCM	Controls the door lock system.
IPDM E/R	Sounds horn and blinks head lamp via CAN communication between BCM
TCM	Transmits shift position signal to BCM via CAN communication line.
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
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then 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	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
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound
Unlock sensor	Detects lock condition of driver door
Trunk closure assembly	Performs trunk lid open and close operation
Trunk lid opener request switch	Performs trunk lid open request when it is pressed
Trunk lid opener cancel switch	Cancels trunk open operation
Trunk rid opener switch	Performs trunk lid open request when it is pressed

REAR DOOR AUTO CLOSURE SYSTEM

REAR DOOR AUTO CLOSURE SYSTEM : Component Parts Location

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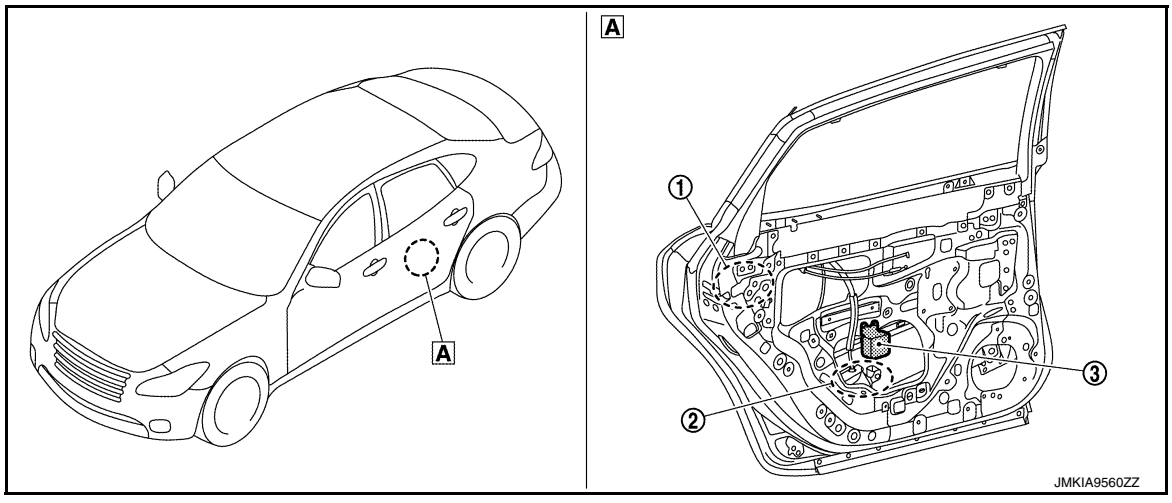


1. Rear door lock assembly LH
2. Rear door closure motor assembly LH
3. Rear door closure control unit LH

A. View with rear door finisher LH removed

REAR DOOR AUTO CLOSURE SYSTEM : Component Description

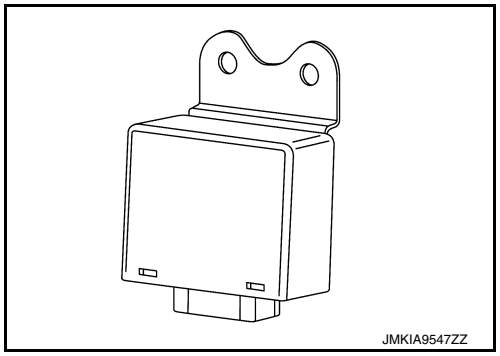
INFOID:0000000012352622

Item	Function
Rear door closure control unit	DLK-13, "REAR DOOR AUTO CLOSURE SYSTEM : Rear Door Closure Control Unit"
Rear door lock assembly	DLK-13, "REAR DOOR AUTO CLOSURE SYSTEM : Rear Door Lock Assembly"
Rear door closure motor assembly	DLK-13, "REAR DOOR AUTO CLOSURE SYSTEM : Rear Door Closure Motor Assembly"

REAR DOOR AUTO CLOSURE SYSTEM : Rear Door Closure Control Unit

INFOID:0000000012352623

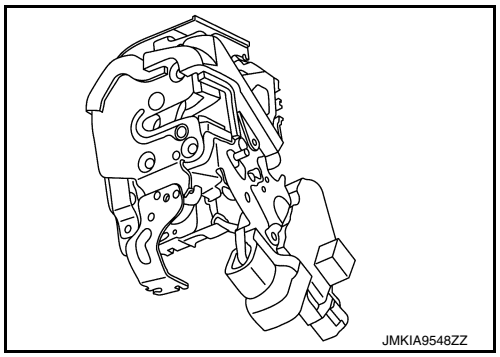
Operates rear door closure motor with signal from each switch.



REAR DOOR AUTO CLOSURE SYSTEM : Rear Door Lock Assembly

INFOID:0000000012352624

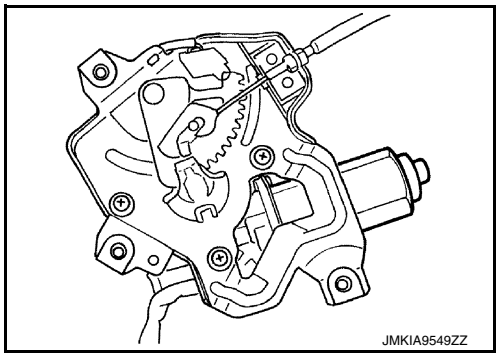
Handle switch, operation switch and reverse switch are installed.
- Handle switch: detects operation/non-operation status of rear door handle and transmits signal to rear door closure control unit.
- Operation switch: detects half latch status of rear door.
- Reverse switch: detects full closed status of rear door.



REAR DOOR AUTO CLOSURE SYSTEM : Rear Door Closure Motor Assembly

INFOID:0000000012352625

Rear door closure motor and neutral switch are installed.
- Rear door closure motor: Inputs close signal from rear door closure control unit and activates the rear door auto closure operation.
- Neutral switch: detects neutral position of rear door closure motor.



SYSTEM (POWER DOOR LOCK SYSTEM)

System Diagram

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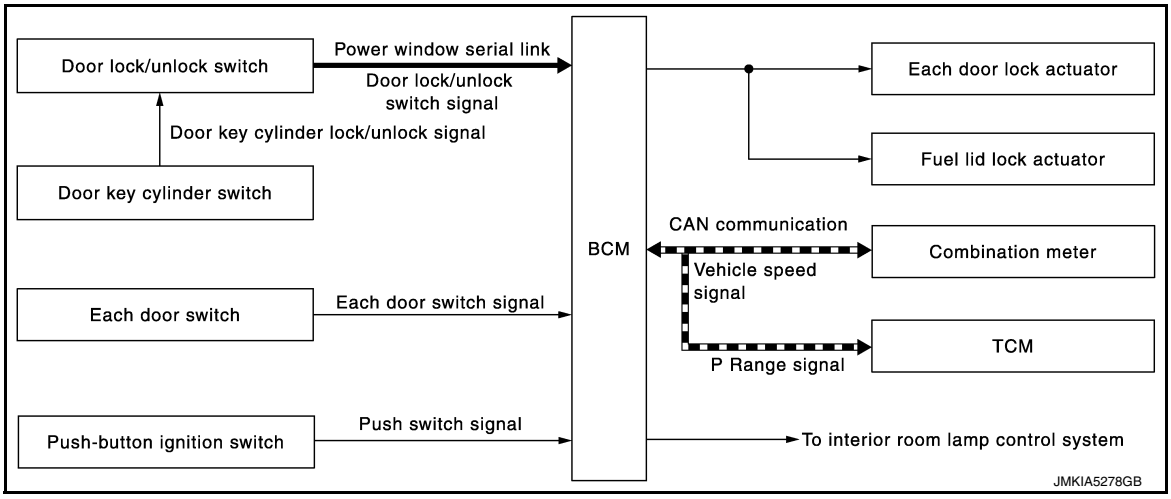


System Description

INFOID:0000000012352627

DOOR LOCK FUNCTION

Door Lock and Unlock Switch

- The door lock and unlock switch (driver side) is build into power window main switch.
- 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-36, "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 operation. Refer to PWC-8, "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-9, "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 the P position.
BCM outputs the lock signal to all door lock actuators when it detects that the ignition switch is in the ON position and the shift signal received from the TCM via CAN communication is shifted from the P position to any position other than the P position.

Setting change of Automatic Door Lock/Unlock Function
The lock operation setting of the automatic door lock/unlock function can be changed.

With CONSULT
Refer to DLK-38, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

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. Turn ignition switch 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 switch is 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 positions.
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 positions.

Setting change of Automatic Door Lock/Unlock Function
The unlock operation setting of the automatic door lock/unlock function can be changed.

With CONSULT
Refer to DLK-38, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

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. Turn ignition switch 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 switch is complete when the hazard lamp blinks.

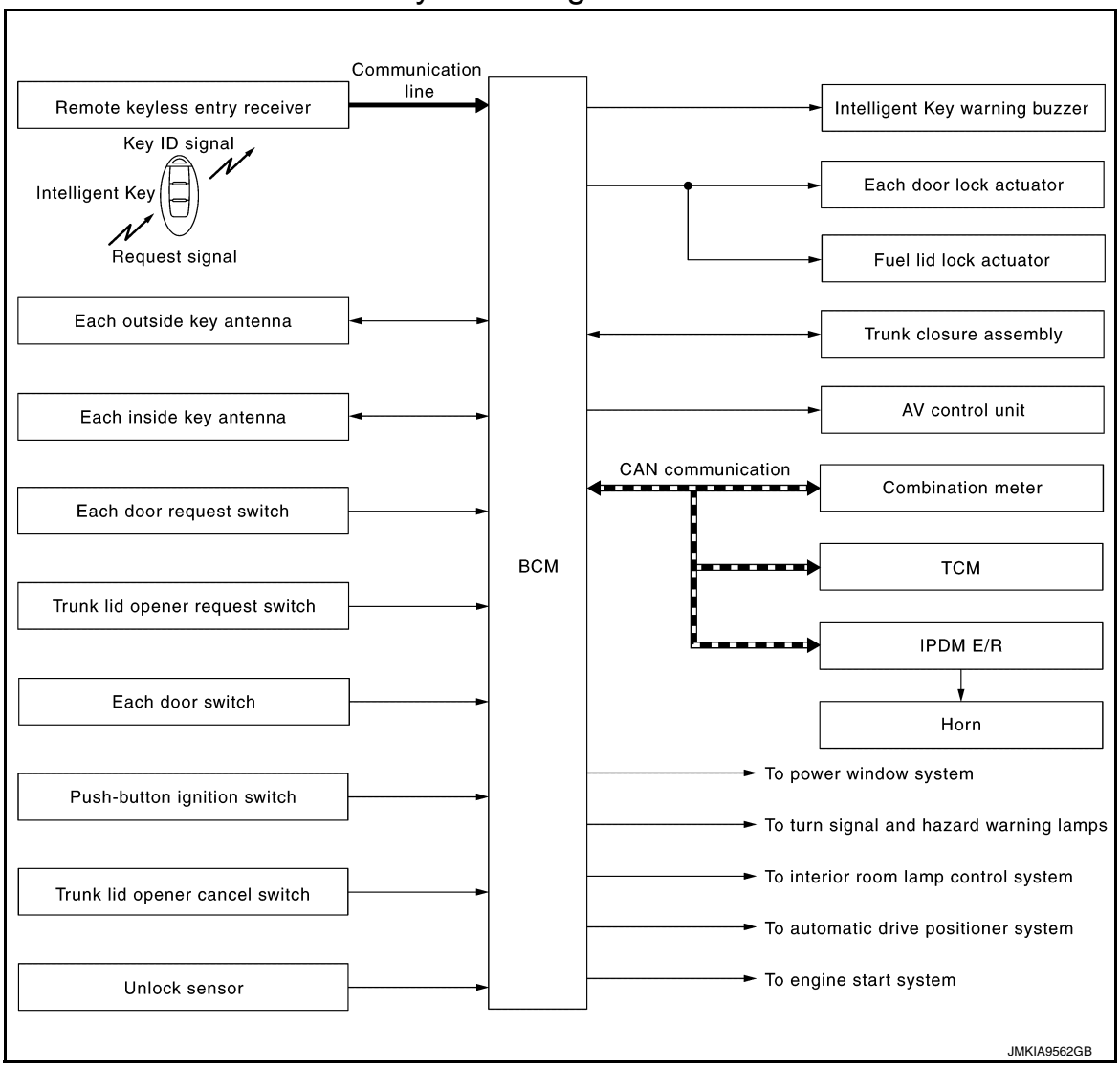
OFF → ON : 2 blinks
ON → OFF : 1 blink

*: This function is set to ON before delivery.

SYSTEM (INTELLIGENT KEY SYSTEM)
INTELLIGENT KEY SYSTEM

INTELLIGENT KEY SYSTEM : System Diagram

INFOID:0000000012352628



INTELLIGENT KEY SYSTEM : System Description

INFOID:0000000012352629

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

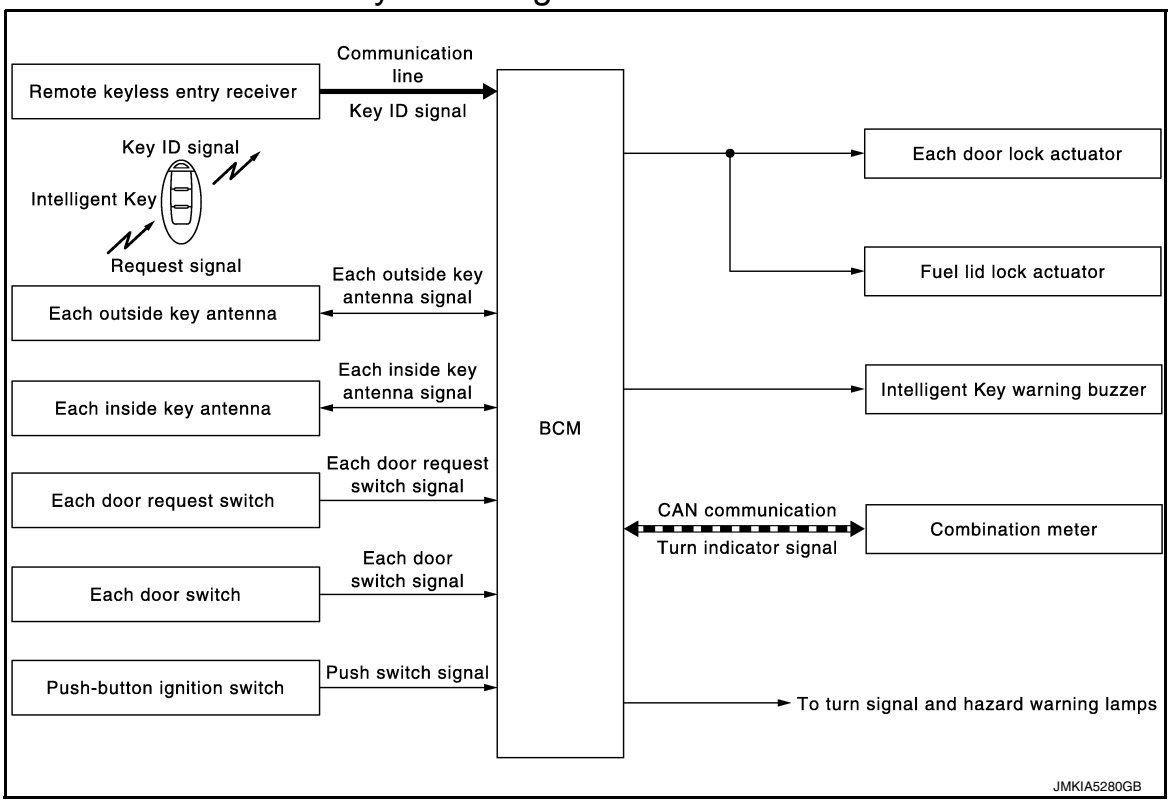
Function	Description	Refer
Door lock	Lock/unlock can be performed by pressing the request switch	DLK-17
Trunk open	The trunk lid can be opened by carrying the Intelligent Key and pressing the trunk lid opener request switch	DLK-20
Remote keyless entry	Lock/unlock can be performed by pressing the remote controller button of the Intelligent Key	DLK-21

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-24
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-25
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-26
Engine start	The engine can be turned on while carrying the Intelligent Key		SEC-11
Interior room lamp control	Interior room lamp is controlled according to door lock/unlock state		INL-9
Power window	Power window can be operated by Intelligent Key button operation		PWC-8
Panic alarm	When Intelligent Key panic alarm button is pressed, horn sounds and headlamp blinks		SEC-16
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-22
	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-17
	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-157

DOOR LOCK FUNCTION

DOOR LOCK FUNCTION : System Diagram

INFOID:0000000012352630



DOOR LOCK FUNCTION : System Description

INFOID:0000000012352631

Only when pressing the 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 starts 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 lock/unlock each door and fuel filler lid and sounds Intelligent Key buzzer warning (lock: 2 time, unlock: 1 times) at the same time as a reminder.

OPERATION CONDITION

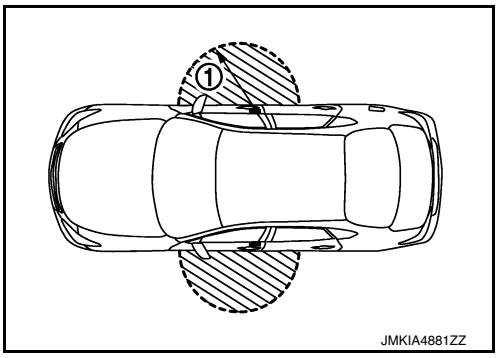
If the following conditions are satisfied, door lock/unlock operation is performed if the request switch is operated.

Each request switch operation	Operation condition
Lock operation	• All doors are closed • P position warning is not activated • Panic alarm is not activated • Intelligent Key is outside the vehicle • Intelligent Key is within outside key antenna detection area*
Unlock Operation	• 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). 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 or passenger side), all doors and fuel filler lid will be locked.

Unlock Operation

- When an UNLOCK signal from driver side door request switch is transmitted, driver side door and fuel filler lid unlocks. When another UNLOCK signal is transmitted within 60 seconds, passenger side door unlock.
- When an UNLOCK signal from passenger side door request switch is transmitted, passenger side door unlock. When another UNLOCK signal is transmitted within 60 seconds, driver side door and fuel filler lid unlocks.

How to Change Selective Unlock Operation Mode

Selective unlock operation mode can be changed using CONSULT.

Refer to DLK-38, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

HAZARD AND BUZZER REMINDER FUNCTION

During lock, unlock, operation by each request switch, the hazard warning lamps and Intelligent Key warning buzzer will blink or honk as a reminder.

When doors are locked, unlocked by each request switch, BCM honks Intelligent Key warning buzzer as a reminder and blinks.

Operating Function of Hazard and Buzzer Reminder

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

Hazard and buzzer reminder does not operate if ignition switch ON position.

How to Change Hazard and Buzzer Reminder Operation Mode

Hazard and buzzer reminder operation mode can be changed using CONSULT.
Refer to DLK-38, "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-38, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

LIST OF OPERATION RELATED PARTS

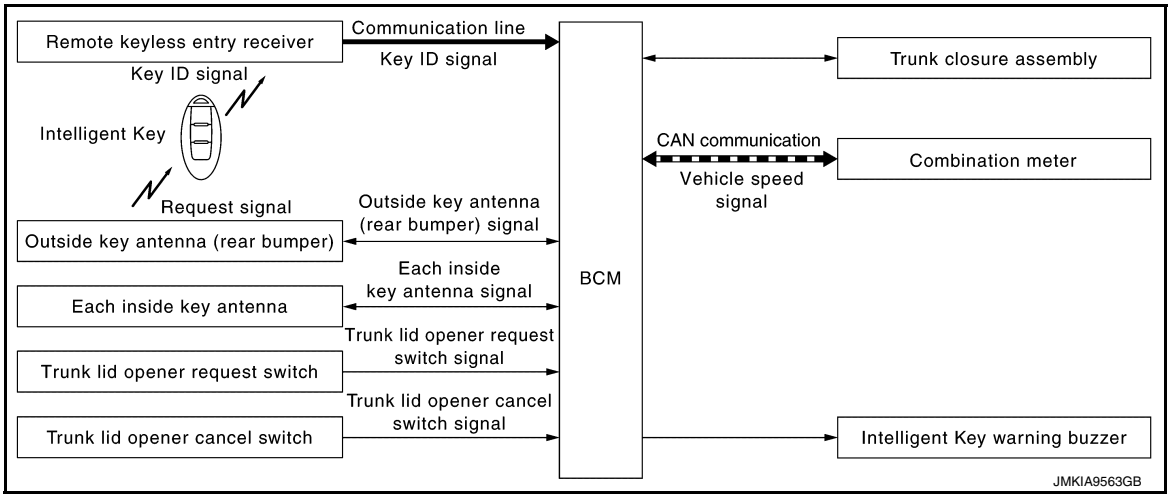
Parts marked with × are the parts related to operation.

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

TRUNK OPEN FUNCTION

TRUNK OPEN FUNCTION : System Diagram

INFOID:0000000012352632



TRUNK OPEN FUNCTION : System Description

INFOID:0000000012352633

TRUNK LID OPEN FUNCTION

- When BCM detects that trunk lid opener request switch is pressed, it activates outside key antenna (rear bumper) and inside key antenna to transmit request signals to the Intelligent Key. And then, BCM checks that the Intelligent Key is near trunk lid.
- If the Intelligent Key is within the outside key antenna detection area, it receives the request signal and transmits the key ID signal to BCM.
- BCM receives the key ID signal via remote keyless entry receiver and compares it with the registered key ID.
- BCM transmits the trunk lid open request signal to trunk closure assembly and sounds Intelligent Key warning buzzer 4 times at the same time (buzzer reminder). However, buzzer reminder does not operate when ignition switch is in the ON position.
- When trunk closure control unit, integrated into the trunk closure assembly, receives the trunk lid open request signal, it operates trunk closure motor to release the interlocking of trunk lid lock and trunk lid striker, and then trunk lid opens.
- To prevent performing open operation due to mis-operation of trunk lid opener request switch by owner, the trunk lid open function is activated when trunk closure control unit receives the trunk lid open request signal from BCM for more than 0.2 sec.
- After closure control unit detects that the trunk is opened, it stops the trunk closure motor and then operates in reverse direction to the neutral position.
- The trunk closure control unit transmits trunk lid open/closed status signal to BCM.
- If trunk lid open operation stops accidentally (because of mis-latching, etc.), trunk lid can be open mechanically using trunk key cylinder.
- For trunk lid auto closure system, refer to DLK-33, "System Description".

OPERATION CONDITION

If the following conditions are not satisfied, trunk open operation is not performed even if the trunk lid opener request switch is operated.

Trunk lid opener request switch operation	Operation condition
Trunk open operation	• Panic alarm is not activated • Vehicle speed is less than 5 km/h (3 MPH) • Intelligent Key is within outside key antenna (rear bumper) detection area (If trunk lid is closed) • Trunk lid opener cancel switch is ON

BUZZER REMINDER FUNCTION

When trunk is opened by trunk lid opener request switch, BCM honks Intelligent Key warning buzzer as a reminder.

Operating Function Of Buzzer Reminder

Operation	Intelligent Key warning buzzer honks
Trunk lid open	Four times

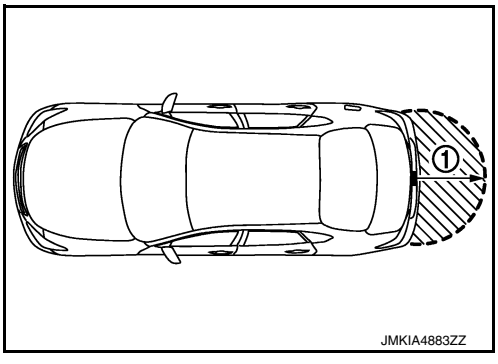
How to change buzzer reminder mode

With CONSULT

Refer to DLK-38, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

OUTSIDE KEY ANTENNA DETECTION AREA

The outside key antenna detection area of trunk open function is in the range of approximately 80 cm (31.50 in) surrounding trunk opener request switch (1). However, this operating range depends on the ambient conditions.



LIST OF OPERATION RELATED PARTS

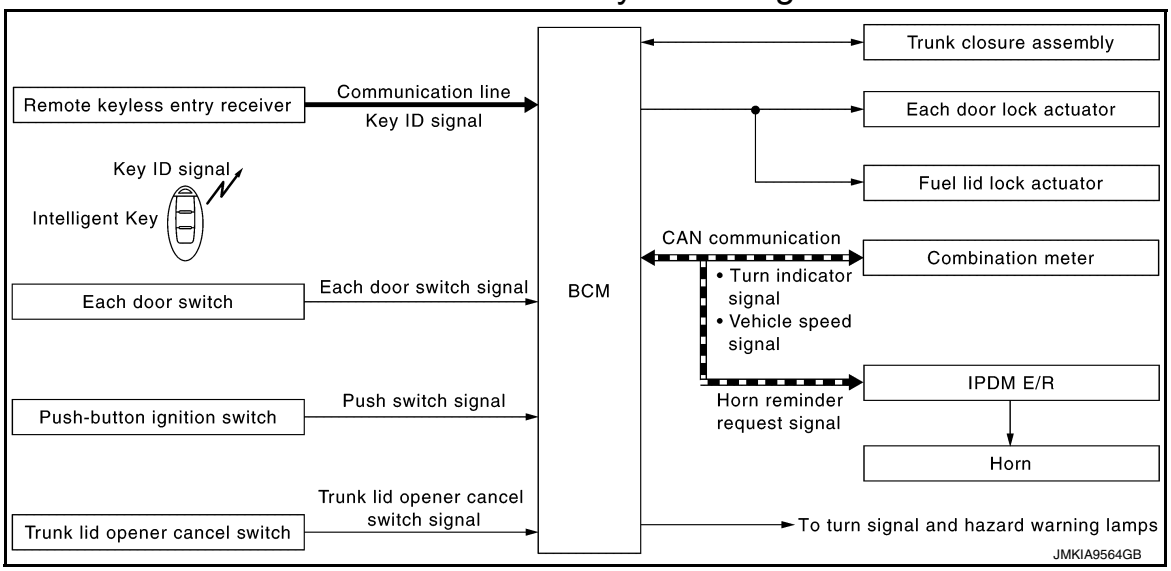
Parts marked with × are the parts related to operation.

Trunk open function	Intelligent Key	Remote keyless entry receiver	Trunk closure assembly	Trunk lid opener request switch	Inside key antenna	Outside key antenna (rear bumper)	Intelligent Key warning buzzer	CAN communication system	BCM	Trunk lid opener cancel switch
Trunk open function	×	×	×	×	×	×		×	×	×
Buzzer reminder function							×	×	×	

REMOTE KEYLESS ENTRY FUNCTION

REMOTE KEYLESS ENTRY FUNCTION : System Diagram

INFOID:0000000012352634



REMOTE KEYLESS ENTRY FUNCTION : System Description

INFOID:0000000012352635

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 using the door lock/unlock button.

OPERATION

Remote keyless entry system controls operation of the following items

- Door lock/unlock function
- Selective unlock function
- Trunk lid open function
- Hazard and horn reminder function
- Auto door lock function

OPERATION AREA

To ensure the Intelligent Key works effectively, use with-in 1 m (3 ft) range of each door, 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 the hazard lamp (lock: 2 times, unlock: 1 time) and horn chirp signal to IPDM E/R at the same time as a reminder.
- IPDM E/R honks horn (lock: 2 times) 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 are unlocked.

How To Change Selective Unlock Operation Mode

Selective unlock operation mode can be changed using CONSULT.
Refer to DLK-36, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

TRUNK OPEN FUNCTION

- When trunk button of the Intelligent Key is pressed, the trunk open signal is transmitted from the Intelligent Key to the BCM via remote keyless entry receiver.
- When BCM receives the trunk open request signal, it performs the trunk lid open function. For details of trunk lid open function, refer to DLK-20, "TRUNK OPEN FUNCTION : System Description".

OPERATION CONDITION

Remote controller operation	Operation condition
Trunk lid open	• Press and hold the trunk open button for 0.5 second or more* • Ignition switch is except the ON position • Trunk lid opener cancel switch is ON • Vehicle speed is less than 5 km/h (3 MPH) • Trunk room is closed • Steering lock status: LOCK

*: Pattern of trunk open button can be selected using CONSULT. Refer to DLK-38, "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 and transmits horn chirp signal to IPDM E/R. IPDM E/R sounds horn 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	Trunk open	Lock	Unlock	Trunk open
Hazard warning lamp blinks	Twice	Once	—	Twice	—	—
Horn sound	Once	—	—	—	—	—

Hazard and horn reminder does not operate if ignition switch ON position.

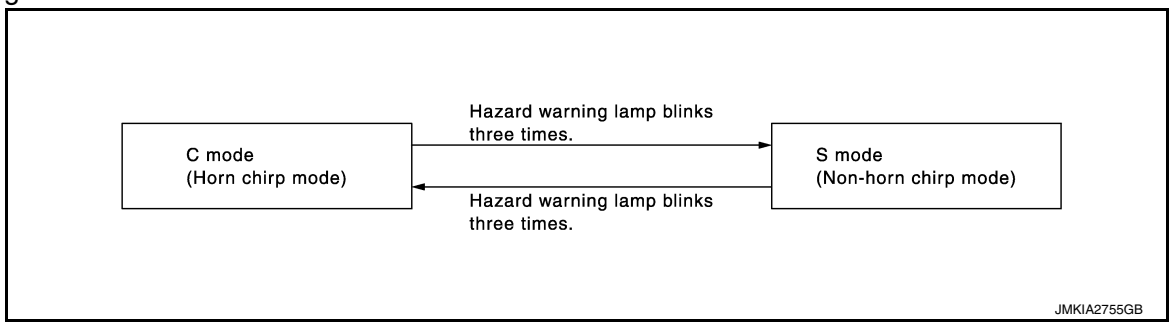
How to change hazard and horn reminder mode

With CONSULT

Refer to DLK-38, "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:



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 operation mode can be changed using CONSULT.

Refer to DLK-38, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

LIST OF OPERATION RELATED PARTS

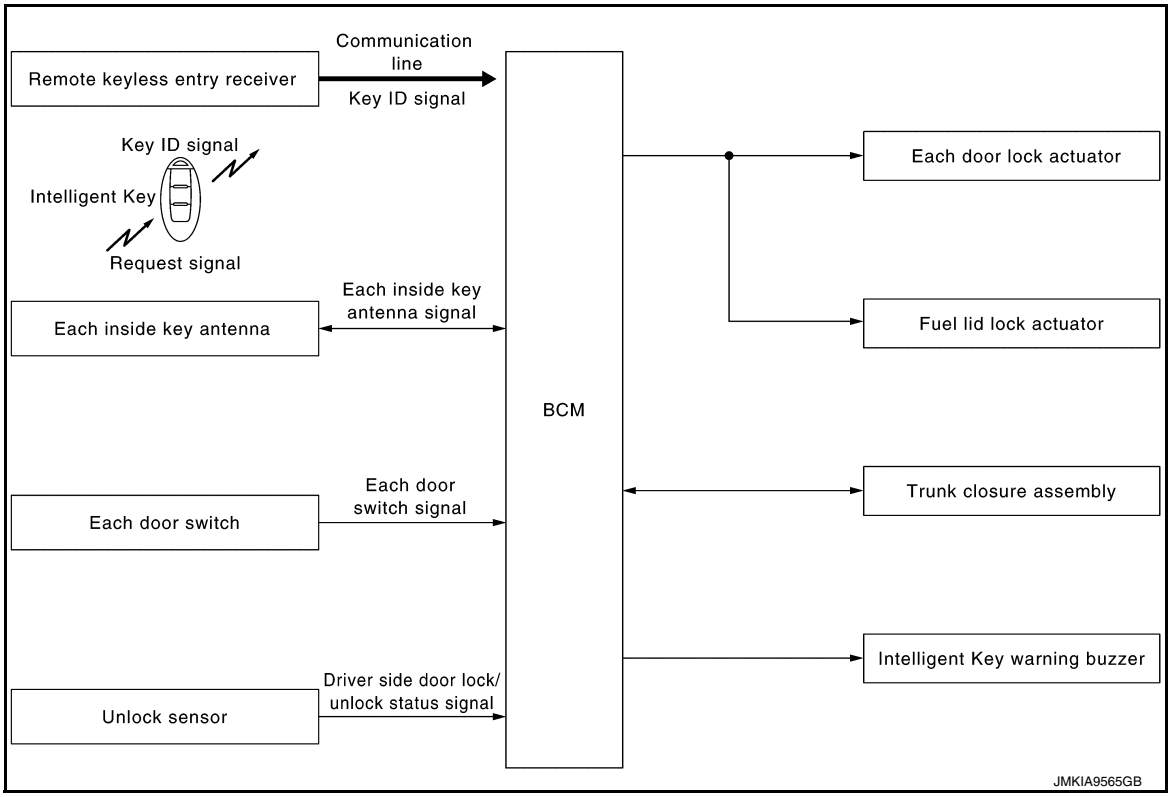
Parts marked with × are the parts related to operation.

Function	Intelligent Key	Door switch	Trunk lid opener cancel switch	Door lock actuator and fuel lid lock actuator	Trunk closure assembly	CAN communication system	BCM	Hazard warning lamp	Door lock status indicator	Push-button ignition switch
Door lock/unlock function	×	×		×			×			×
Trunk lid open function	×		×		×		×			
Auto door lock function	×	×					×			×
Selective unlock function	×	×		×			×			
Hazard and horn reminder function	×					×	×	×		

KEY REMINDER FUNCTION

KEY REMINDER FUNCTION : System Diagram

INFOID:0000000012352636



KEY REMINDER FUNCTION : System Description

INFOID:0000000012352637

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 unlock state	All doors 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 are locked by door lock and unlock switch or door lock knob	• All doors and fuel filler lid unlock • Honk Intelligent Key warning buzzer
Trunk is closed	Right after trunk is closed under the following conditions • Intelligent Key is inside trunk room • All doors are closed • All doors are locked	• Trunk open • 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.

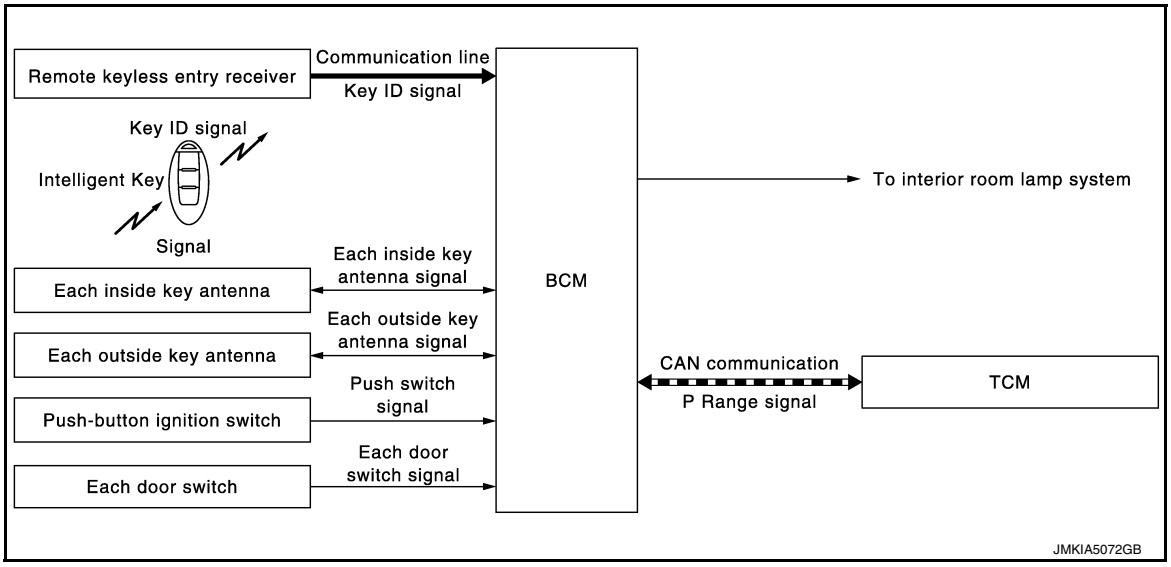
CAUTION:

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 will does not operate when the Intelligent Key is on the instrument panel, or in the glove box. Also, this system sometimes does not operate if the Intelligent Key is in the door pocket of an open door.

WELCOME LIGHT FUNCTION

WELCOME LIGHT FUNCTION : System Diagram

INFOID:0000000012352638



WELCOME LIGHT FUNCTION : System Description

INFOID:0000000012352639

The welcome light function operates as per the following. When the Intelligent Key is carried, and vehicle doors are approached, the BCM illuminates interior room lamp* and operates heart beat operation of the push-button ignition switch.

*: Settings for map lamp, foot lamp, personal lamp, and outside handle 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 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.

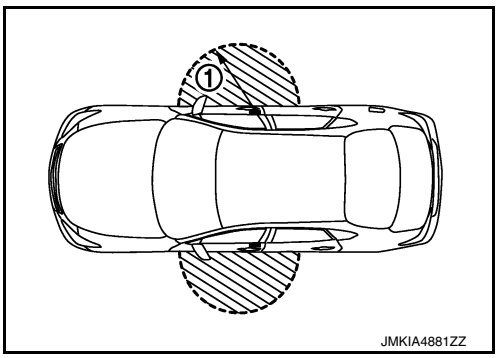
OPERATION CONDITION

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-38, "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:0000000012352640

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 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
- Steering lock information
- Intelligent Key low battery warning
- Key ID warning
- Key ID verification information

OPERATION CONDITION

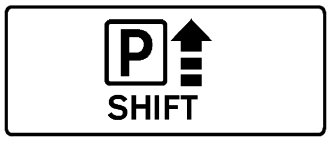
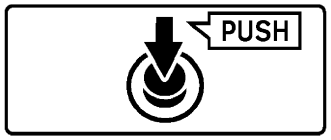
Once the following condition from below is established, alert or warning is executed.

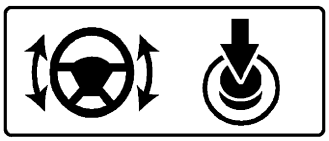
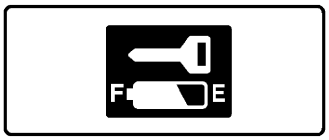
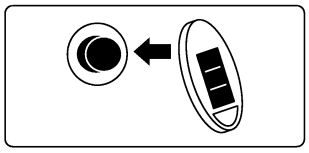
Warning/Information functions	Operation procedure
Intelligent Key system malfunction	When a malfunction is detected on BCM

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)
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 in the passenger room after driver door is opened and closed.
	Ignition switch is ON position to OFF position	• Ignition switch: ON position to OFF position • Shift position: P position **NOTE:** Engine start information turns ON for several seconds and then turns OFF, when ignition switch is turned to the ON position from the OFF position. Engine start information does not turn ON until opening and closing of driver door is detected again.
Steering lock information		When steering lock cannot be released after ignition switch is turned ON
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.
Information display (combination meter) when the warning conditions are met.

Warning/Information functions		Information display (combination meter)	Warning chime	
			Combination meter buzzer	Intelligent Key warning buzzer
Intelligent Key system malfunction		 JMKIA5402ZZ	—	—
OFF position warning	For internal	—	Activate	—
	For external	—	—	Activate
P position warning	For internal	 JMKIA0037GB	Activate	—
	For external		—	Active
ACC warning		 JMKIA0047GB	—	—
Take away warning	Door is open to close	 JMKIA4906ZZ	Activate	Activate
	Door is open		—	—
	Push-ignition switch operation		Activate	—
Door lock operation warning	Request switch operation	—	—	Activate
	Intelligent Key operation	—	—	Activate
Key ID warning		 JMKIA4906ZZ	—	—

Warning/Information functions	Information display (combination meter)	Warning chime	
		Combination meter buzzer	Intelligent Key warning buzzer
Engine start information	 JMKIA0032GB	—	—
Steering lock information	 JMKIA0033GB	—	—
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.

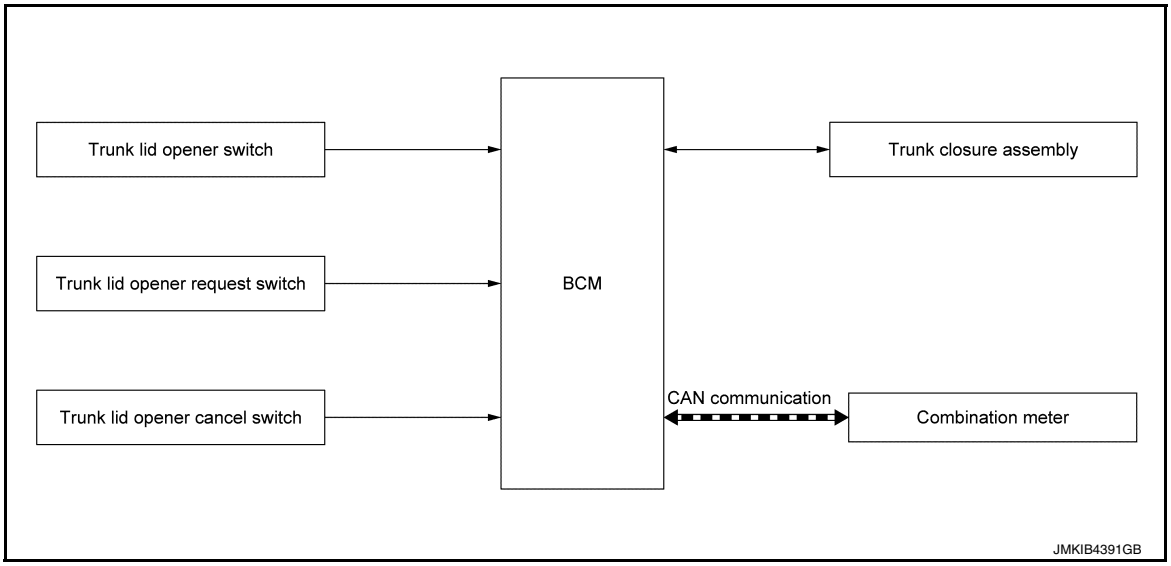
Warning function		Intelligent Key	Ignition switch	Door switch	Door request switch	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	Combination meter buzzer	CAN communication system	BCM	Information display
Intelligent Key system malfunction										×	×	×
OFF position warning	For internal			×					×	×	×	
	For external			×				×			×	
P position warning			×						×	×	×	×
ACC warning			×						×	×	×	×

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
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	×	×			×				×	×	×
Steering lock information			×							×	×	×
Intelligent Key low battery warning		×				×				×	×	×
Key ID verification information		×				×				×	×	×

SYSTEM (TRUNK LID OPENER SYSTEM)

System Diagram

INFOID:0000000012352641



System Description

INFOID:0000000012352642

TRUNK LID OPENER SWTICH OPERATION

- When trunk lid opener switch is turned ON, BCM transmits trunk lid open request signal to trunk closure assembly.
- When trunk closure control unit, integrated into the trunk closure assembly, receives the trunk lid open request signal, it operates trunk closure motor to release the interlocking of trunk lid lock and trunk lid striker, and then trunk lid opens.
- To prevent performing open operation due to mis-operation of trunk lid opener switch by owner, the trunk lid open function is activated when trunk closure control unit receives the trunk lid open request signal from BCM for more than 0.2 sec.
- After trunk closure control unit detects that the trunk is opened, it stops the trunk closure motor and then operates in reverse direction to the neutral position.
- The trunk closure control unit transmits trunk lid open/closed status signal to BCM.
- If trunk lid open operation stops accidentally (because of mislatching, etc.), trunk lid can be open mechanically using trunk key cylinder.
- For trunk lid auto closure system, refer to DLK-33, "System Description".

Operation Condition

If the following conditions are satisfied, trunk open operation is performed.

Trunk lid opener switch operation	Operation condition
Trunk lid open	• Trunk lid opener cancel switch is ON • Vehicle speed is less than 5 km/h (3 MPH) • Vehicle security system is in the disarmed or pre-armed phase (Refer to SEC-16, "VEHICLE SECURITY SYSTEM : System Description".)

TRUNK LID OPENER REQUEST SWTICH OPERATION (DO NOT USE INTELLIGENT KEY SYSTEM)

- When trunk lid opener request switch is turned ON, BCM transmits trunk lid open request signal to trunk closure assembly.
- When trunk closure control unit, integrated into the trunk closure assembly, receives the trunk lid open request signal, it operates trunk closure motor to release the interlocking of trunk lid lock and trunk lid striker, and then trunk lid opens.
- To prevent performing open operation due to mis-operation of trunk lid opener switch by owner, the trunk lid open function is activated when trunk closure control unit receives the trunk lid open request signal from BCM for more than 0.2 sec.

- After trunk closure control unit detects that the trunk is opened, it stops the trunk closure motor and then operates in reverse direction to the neutral position.
- The trunk closure control unit transmits trunk lid open/closed status signal to BCM.
- If trunk lid open operation stops accidentally (because of mislatching, etc.), trunk lid can be open mechanically using trunk key cylinder.
- For trunk lid auto closure system, refer to DLK-33, "System Description".

Operation Condition

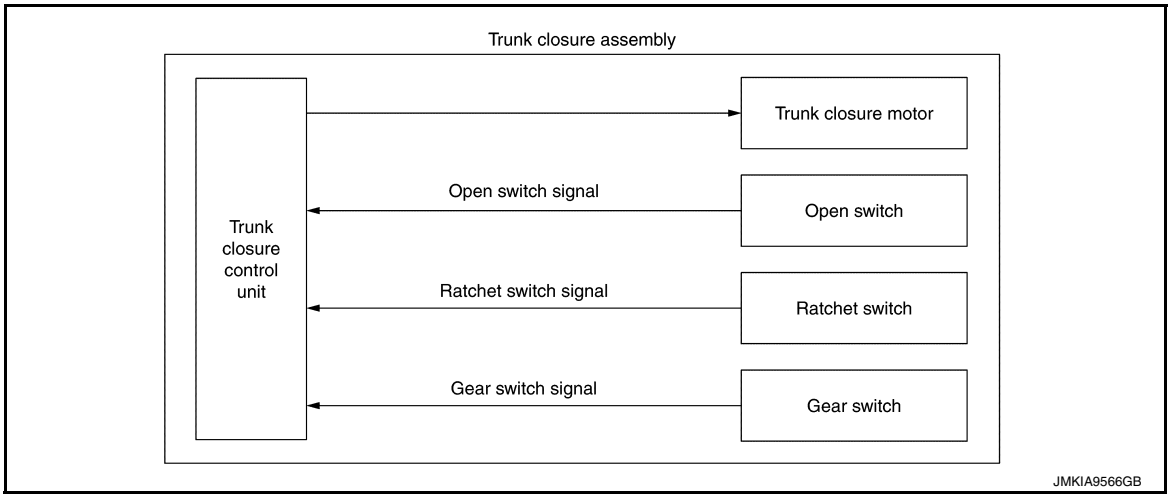
If the following conditions are satisfied, trunk open operation is performed.

Trunk lid opener request switch operation	Operation condition
Trunk lid open	• All doors are unlocked • Trunk lid opener cancel switch is ON • Vehicle speed is less than 5 km/h (3 MPH) • Vehicle security system is in the disarmed or pre-armed phase (Refer to SEC-16, "VEHICLE SECURITY SYSTEM : System Description".)

SYSTEM (TRUNK LID AUTO CLOSURE SYSTEM)

System Diagram

INFOID:0000000012352643



System Description

INFOID:0000000012352644

- Trunk lid auto closure system is performed using trunk closure assembly that consists of trunk closure control unit, trunk closure motor, gear switch, open switch and ratchet switch.
- Trunk lid auto closure system closes trunk lid automatically to the fully closed position when trunk lid is in the half latch status (trunk lid lock and trunk lid striker are in engage status).
- While power source is applied, trunk closure control unit monitors each switch signals to judge the trunk lid status (open, half latch and fully closed).
- Trunk closure control unit transmits trunk lid open signal when the trunk lid is in open or half latch status, and transmits trunk lid close signal when in fully closed status to BCM.

OPERATION DESCRIPTION

- Trunk closure control unit operates trunk closure motor and performs retracting operation when trunk lid is judged to be in the half latch status.
- Trunk closure control unit stops retracting operation of trunk closure motor when trunk is judged to be in fully closed status.
- After stopping retracting operation, trunk closure control unit operates trunk closure motor in reverse direction to the neutral position.
- When any of the following conditions is met during auto closure operation, trunk closure control unit stops retracting operation, and operates trunk closure motor in reverse direction to open trunk lid.

- Trunk closure control unit receives trunk lid open request signal
- The specified time (Approx. 4.6 sec) is past before trunk lid reaches the fully closed position

- For trunk lid open system, refer to DLK-20, "TRUNK OPEN FUNCTION : System Description", DLK-21, "REMOTE KEYLESS ENTRY FUNCTION : System Description", and DLK-31, "System Description",

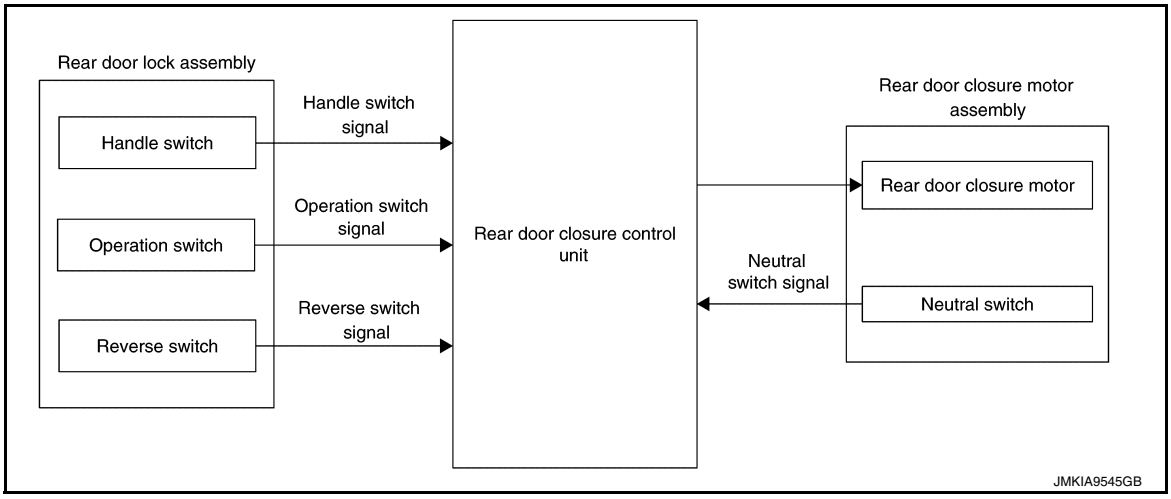
FAIL-SAFE

The fail-safe function is adopted for the trunk closure control unit. Refer to DLK-44, "Fail-safe".

SYSTEM (REAR DOOR AUTO CLOSURE SYSTEM)

System Diagram

INFOID:0000000012352645



System Description

INFOID:0000000012352646

Rear door auto closure system closes automatically rear door to the fully closed position when rear door is in half latch status (lock and striker are in engage status).

OPERATION DESCRIPTION

- Rear door closure control unit operates rear door closure motor and performs retracting operation when rear door is judged to be in half latch status according to operation switch signal.
- Rear door closure control unit stops retracting operation of rear door closure motor when rear door is judged to be in fully closed status according to operation switch signal and reverse switch signal.
- In preparation of auto closure operation that may be repeated, rear door closure control unit operates rear door closure motor in reverse direction to the neutral position continuously after stopping retracting operation.
- Rear door closure control unit detects the neutral position of rear door closure motor according to neutral switch signal and stops reverse operation of rear door closure motor.
- When outside door handle or inside door handle is operated during auto closure operation, rear door closure control unit detects handle switch signal, stops retracting operation of rear door closure motor, and operates rear door closure motor in reverse direction to the neutral position.

Fail-safe

INFOID:0000000012352647

- Rear door closure control unit judges that a malfunction (foreign material pinching, motor malfunction, or reverse switch malfunction) occurs if fully closed status of rear door cannot be detected when more than 2.5 seconds are passed after retracting operation of rear door closure motor is started. Rear door closure control unit stops retracting operation of rear door closure motor and operates rear door closure motor in reverse direction to the neutral position. Rear door auto closure system is not operative until rear door closure control unit detects operation of outside door handle or inside door handle.
- Rear door closure control unit judges that a malfunction (motor malfunction or neutral switch malfunction) occurs if neutral switch signal cannot be detected when more than 0.5 seconds are passed after retracting operation of rear door closure motor is started. Rear door closure control unit stops retracting operation of rear door closure motor and operates rear door closure motor in reverse direction to the neutral position.

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

INFOID:0000000013011870

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.
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 - NATS	IMMU	×	×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk lid open	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
—	AIR PRESSURE MONITOR*	×	×	×

*: This item is 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.	

NOTE:
*: Power supply position shifts to “LOCK” from “OFF”, when ignition switch is in the OFF position, selector lever is in the P position, and any of the following conditions are met.
- Closing door
- Opening door
- Door is locked using door request switch
- Door is locked using Intelligent Key

The power supply position shifts to “ACC” when the push-button ignition switch (push switch) is pushed at “LOCK”.

DOOR LOCK

DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)

INFOID:0000000012352649

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 (15MPH) • 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 the 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-operational • Unlock Only: Door unlock operation only • Lock Only: Door lock operation only • Lock/Unlock: Lock and unlock operation
SIGNATURE LIGHT SETTING	Signature light function can be changed to operation with this mode • On: Operate • Off: Non-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 trunk lid opener 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	**NOTE:** This item is displayed, but cannot be monitored
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:0000000012352650

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 trunk lid opener request switch and Intelligent Key can be changed to operation with this mode • On: Operate • Off: Non-operation
PANIC ALARM SET	Panic alarm button pressing time on Intelligent Key remote control 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	Trunk button pressing on Intelligent Key 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

Monitor item	Description
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
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
INTELLIGENT KEY SETUP	Intelligent Key interlock function mode can be changed to operation with this mode • On: Operate • Off: Non-operation

SELF-DIAG RESULT

Refer to BCS-59, "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 trunk lid opener 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

Monitor Item	Condition
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
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 driver side door status
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	Indicates [On/Off] condition of trunk room lamp switch
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	Indicates [On/Off] condition of trunk open signal from Intelligent Key
RKE-PANIC	Indicates [On/Off] condition of panic alarm 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

*: 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

Test item	Description
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
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 • Steering lock information displays when “ROTAT” on CONSULT screen is touched **NOTE:** For models without steering lock unit, “ROTAT” is displayed, but cannot be tested. • 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 hazard warning lamp operation The hazard warning lamps are activated after “LH/RH/Off” on CONSULT screen is touched
P RANGE	This test is able to check AT shift selector power supply • On: Operate • Off: Non-operation
ENGINE SW ILLUMI	This test is able to check push-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	This test is able to check trunk lid open operation • Open: Operate

Test item	Description
INTELLIGENT KEY LINK	This test is able to check Intelligent Key interlock function • ID No1: BCM transmits Intelligent Key ID No1 to each control unit • ID No2: BCM transmits Intelligent Key ID No2 to each control unit
INTELLIGENT KEY LINK (CAN)	This test is able to check Intelligent Key interlock function • Off: Non-operation • ID No1: BCM transmits Intelligent Key ID No1 to each control unit via CAN communication line • ID No2: BCM transmits Intelligent Key ID No2 to each control unit via CAN communication line • ID No3: BCM transmits Intelligent Key ID No3 to each control unit via CAN communication line • ID No4: BCM transmits Intelligent Key ID No4 to each control unit via CAN communication line • ID No5: This item is displayed, but cannot be used

TRUNK

TRUNK : CONSULT Function (BCM - TRUNK)

INFOID:0000000012352651

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
KEY CYL SW-TR	**NOTE:** This item is displayed, but cannot be monitored
TR CANCEL SW	Indicates [On/Off] condition of trunk lid opener cancel switch
TR/BD OPEN SW	Indicates [Km/h] condition of trunk lid opener switch
TRNK/HAT MNTR	Indicates [On/Off] condition of trunk lid open/close status signal from trunk closure assembly
RKE-TR/BD	Indicates [On/Off] condition of trunk open signal from Intelligent Key

ECU DIAGNOSIS INFORMATION

BCM

List of ECU Reference

INFOID:0000000012352652

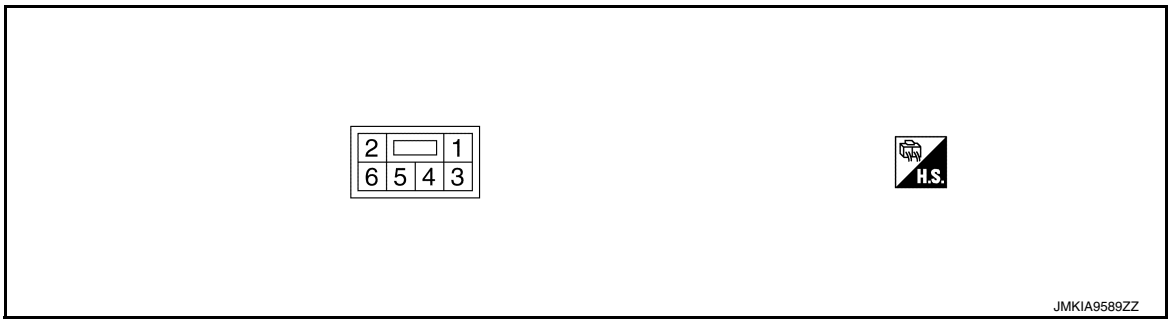
ECU	Reference
BCM	BCS-37, "Reference Value"
	BCS-57, "Fail-safe"
	BCS-58, "DTC Inspection Priority Chart"
	BCS-59, "DTC Index"

TRUNK CLOSURE CONTROL UNIT

Reference Value

INFOID:0000000012352653

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Voltage (V) (Approx.)
(+)	(–)	Signal name	Input/ Output			
1 (G)	Ground	Trunk lid open request signal	Input	When opening trunk lid		9 - 16
				Except above condition		0
2 (L)	Ground	Ground	–	–		0
3 (L)	Ground	Ground	–	–		0
4 (P)	Ground	Battery power supply (Sub)	Input	–		9 - 16
5 (Y)	Ground	Trunk lid open/close status signal	Output	Trunk lid	Closed	9 - 16
					Open	0
6 (R)	Ground	Battery power supply (Main)	Input	–		9 - 16

Fail-safe

INFOID:0000000012352654

Fail-safe function is adopted to the trunk lid auto closure system as per the following.
Fail-safe mode is canceled when the cause of malfunction is fixed.

Malfunction	Trunk closure operation
Switch malfunction	The system enters into either the following condition after trunk closure motor returns to the neutral position depending on the malfunctioning switch. • All operations are not available • Closing operation is not available
Continuous operation	In case that open/close operations are performed continuously (Approximately 50 times at room temperature), trunk closure control unit stops all operations to prevent overheating. The open/close operations can be available after the temperature of trunk closure motor is reduced to the specified value.
Foreign material pinching	In case that fully closed status of trunk lid cannot be detected when more than 4.6 seconds are passed after retracting operation of trunk closure motor is started, trunk closure control unit stops the retracting operation and operates the trunk closure motor in reverse direction to open trunk lid. Then trunk closure motor returns to the neutral position.

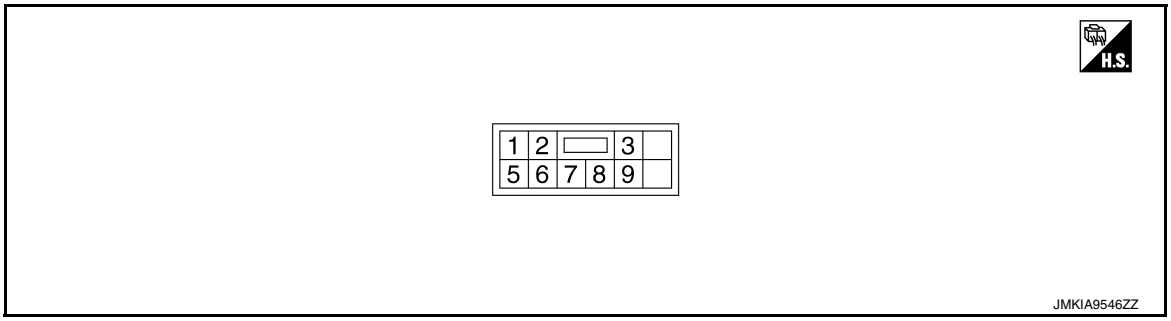
REAR DOOR CLOSURE CONTROL UNIT

LH

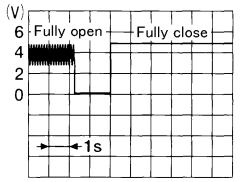
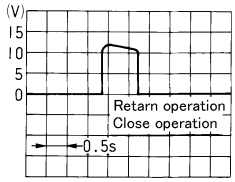
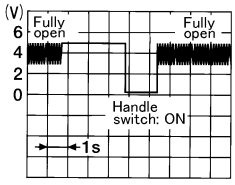
LH : Reference Value

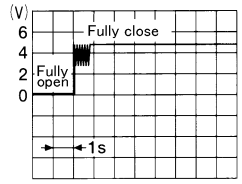
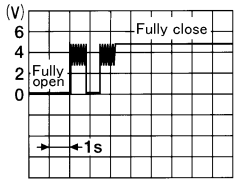
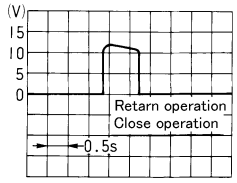
INFOID:0000000012352655

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition	Voltage (Approx.)
(+)	(–)	Signal name	Input/ Output		
1 (V)	Ground	Neutral switch signal	Input	Fully open → half latch → fully closed	 SIIA1112E
2 (B)	Ground	Ground	—	—	0 V
3 (LG)	Ground	Rear door closure motor (close signal)	Output	Fully open → half latch → fully closed	 SIIA1113E
5 (W)	Ground	Handle switch signal	Input	Fully open → half latch → fully closed → handle operation → fully open	 SIIA1114E
6 (P)	Ground	Battery power supply	Input	—	Battery voltage

Terminal No. (Wire color)		Description		Condition	Voltage (Approx.)
(+)	(–)	Signal name	Input/ Output		
7 (R)	Ground	Reverse switch signal	Input	Fully open → half latch → fully closed	 SIIA1115E
8 (G)	Ground	Operation switch signal	Input	Fully open → half latch → fully closed	 SIIA1116E
9 (L)	Ground	Rear door closure motor (Return signal)	Output	Fully open → half latch → fully closed	 SIIA1113E

LH : Fail-safe

INFOID:0000000012352656

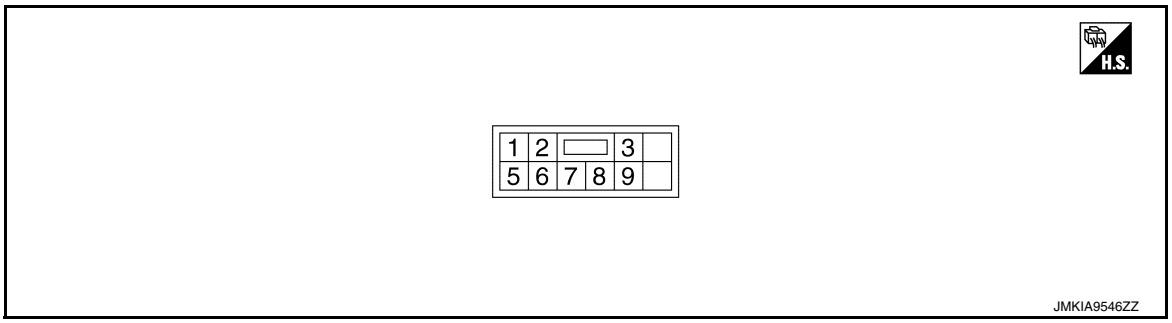
- Rear door closure control unit judges that a malfunction (foreign material pinching, motor malfunction, or reverse switch malfunction) occurs if fully closed status of rear door cannot be detected when more than 2.5 seconds are passed after retracting operation of rear door closure motor is started. Rear door closure control unit stops retracting operation of rear door closure motor and operates rear door closure motor in reverse direction to the neutral position. Rear door auto closure system is not operative until rear door closure control unit detects operation of outside door handle or inside door handle.
- Rear door closure control unit judges that a malfunction (motor malfunction or neutral switch malfunction) occurs if neutral switch signal cannot be detected when more than 0.5 seconds are passed after retracting operation of rear door closure motor is started. Rear door closure control unit stops retracting operation of rear door closure motor and operates rear door closure motor in reverse direction to the neutral position.

RH

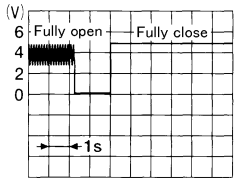
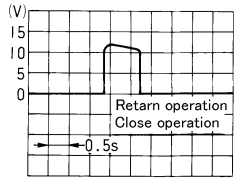
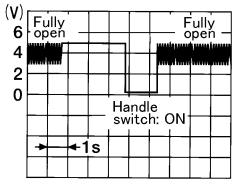
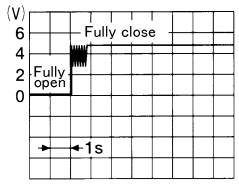
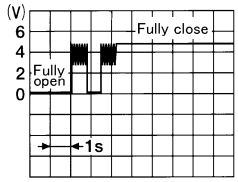
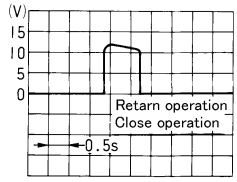
RH : Reference Value

INFOID:0000000012352657

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition	Voltage (Approx.)
(+)	(–)	Signal name	Input/ Output		
1 (V)	Ground	Neutral switch signal	Input	Fully open → half latch → fully closed	 SIIA1112E
2 (B)	Ground	Ground	—	—	0 V
3 (LG)	Ground	Rear door closure motor (close signal)	Output	Fully open → half latch → fully closed	 SIIA1113E
5 (W)	Ground	Handle switch signal	Input	Fully open → half latch → fully closed → handle operation → fully open	 SIIA1114E
6 (P)	Ground	Battery power supply	Input	—	Battery voltage
7 (R)	Ground	Reverse switch signal	Input	Fully open → half latch → fully closed	 SIIA1115E
8 (G)	Ground	Operation switch signal	Input	Fully open → half latch → fully closed	 SIIA1116E
9 (L)	Ground	Rear door closure motor (Return signal)	Output	Fully open → half latch → fully closed	 SIIA1113E

RH : Fail-safe

INFOID:0000000012352658

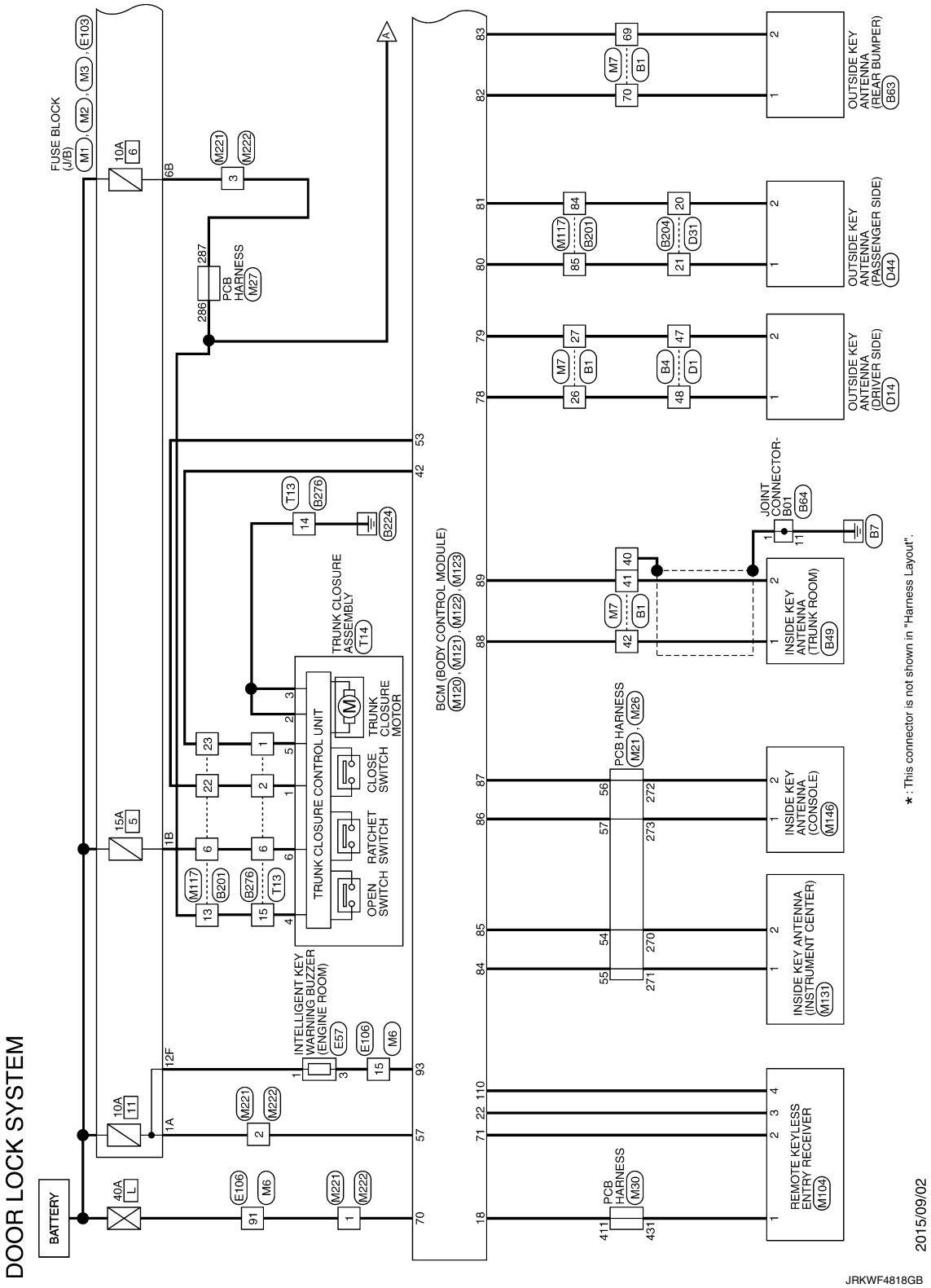
- Rear door closure control unit judges that a malfunction (foreign material pinching, motor malfunction, or reverse switch malfunction) occurs if fully closed status of rear door cannot be detected when more than 2.5 seconds are passed after retracting operation of rear door closure motor is started. Rear door closure control unit stops retracting operation of rear door closure motor and operates rear door closure motor in reverse direction to the neutral position. Rear door auto closure system is not operative until rear door closure control unit detects operation of outside door handle or inside door handle.
- Rear door closure control unit judges that a malfunction (motor malfunction or neutral switch malfunction) occurs if neutral switch signal cannot be detected when more than 0.5 seconds are passed after retracting operation of rear door closure motor is started. Rear door closure control unit stops retracting operation of rear door closure motor and operates rear door closure motor in reverse direction to the neutral position.

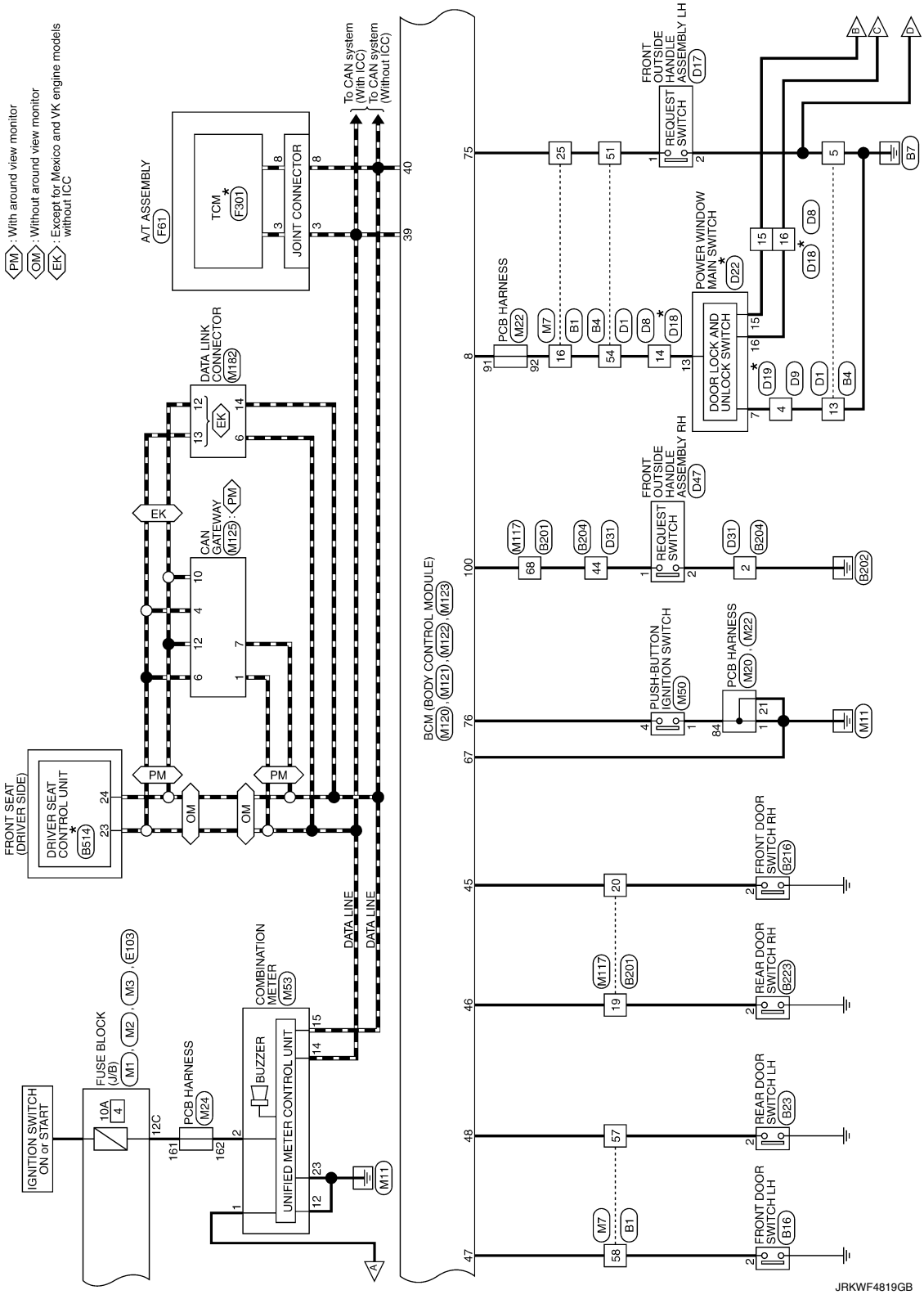
WIRING DIAGRAM

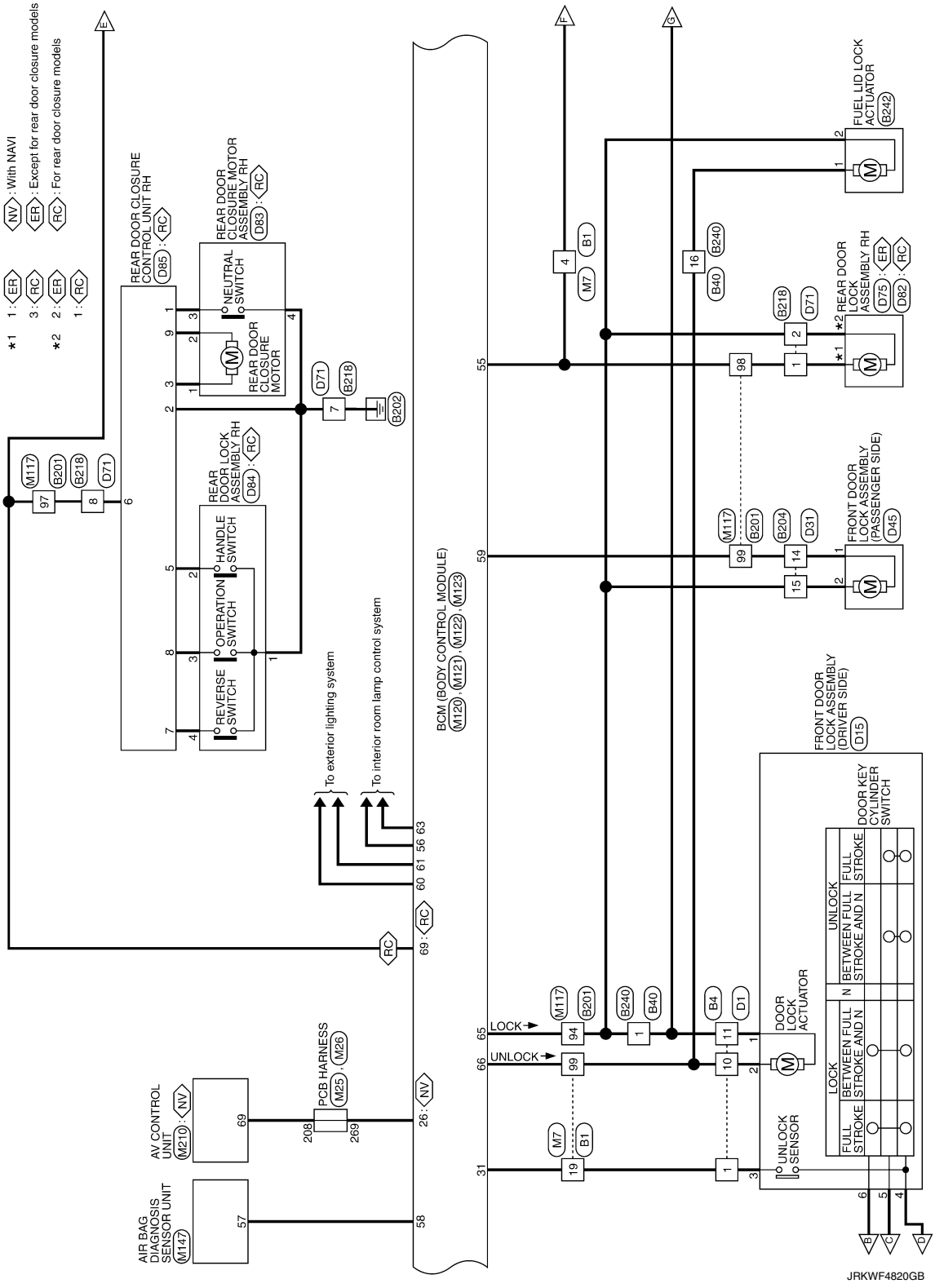
DOOR & LOCK SYSTEM

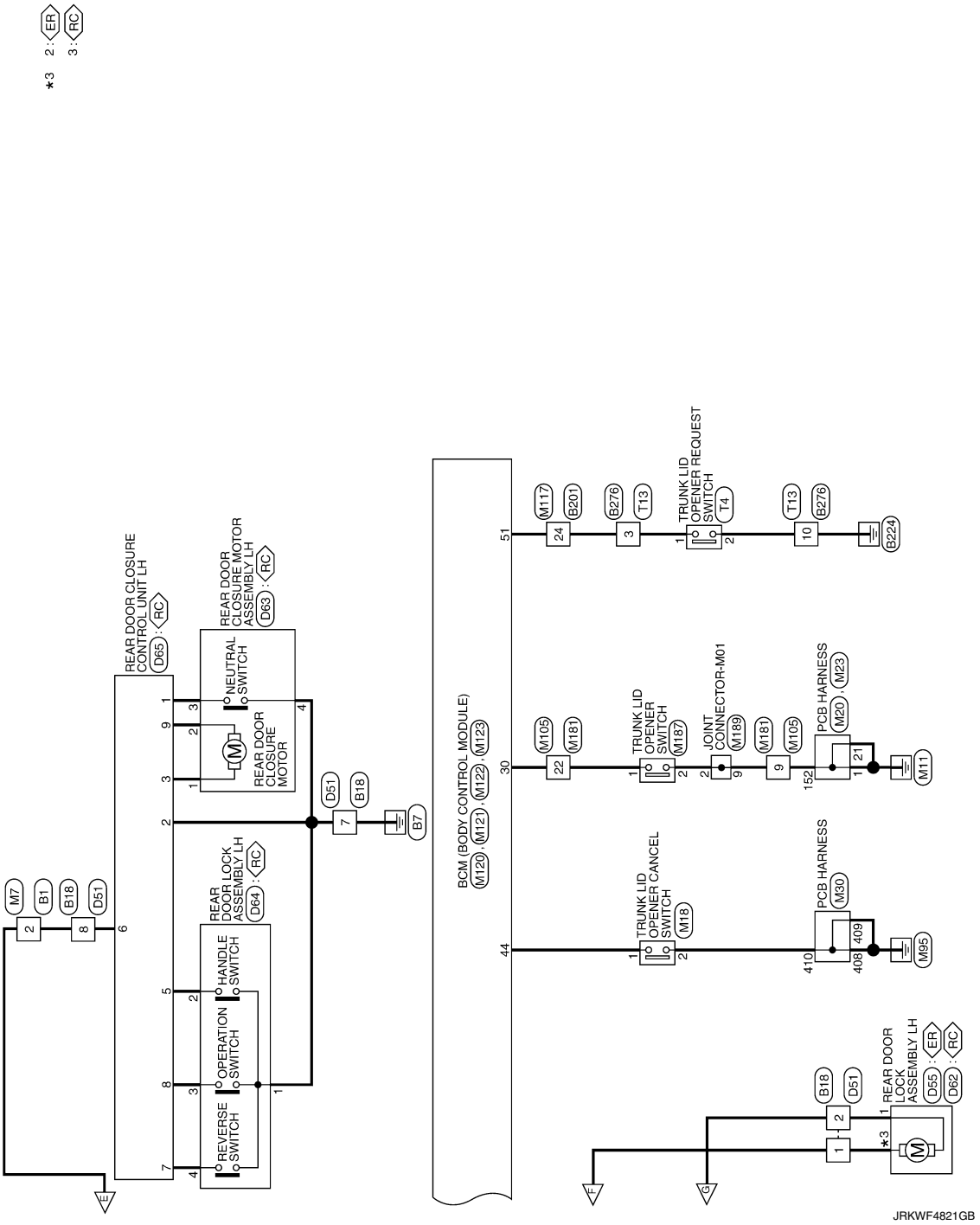
Wiring Diagram - DOOR & LOCK SYSTEM -

INFOID:0000000012352659



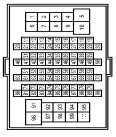

PM : With around view monitor
OM : Without around view monitor
EK : Except for Mexico and VK engine models without ICC
A/T ASSEMBLY F61
TCM * F301
JOINT CONNECTOR
To CAN system (With ICC)
To CAN system (Without ICC)
DATA LINK CONNECTOR M182
CAN GATEWAY M125
DRIVER SEAT CONTROL UNIT * B514
FRONT SEAT (DRIVER SIDE)
DATA LINE
COMBINATION METER M53
UNIFIED METER CONTROL UNIT
BUZZER
PCB HARNESS M24
FUSE BLOCK (J/B) M1, M2, M3, E103
IGNITION SWITCH ON or START
10A
BCM (BODY CONTROL MODULE) M120, M121, M122, M123
PUSH-BUTTON IGNITION SWITCH M50
PCB HARNESS M20, M22
FRONT DOOR SWITCH RH B216
REAR DOOR SWITCH RH B223
REAR DOOR SWITCH LH B23
FRONT DOOR SWITCH LH B16
FRONT OUTSIDE HANDLE ASSEMBLY RH D47
REQUEST SWITCH
FRONT OUTSIDE HANDLE ASSEMBLY LH D17
POWER WINDOW MAIN SWITCH * D22
DOOR LOCK AND UNLOCK SWITCH
PCB HARNESS M22, M7
JRKWF4819GB


NV : With NAVI
ER : Except for rear door closure models
RC : For rear door closure models
*1 1 : ER
3 : RC
*2 2 : ER
1 : RC
REAR DOOR CLOSURE CONTROL UNIT RH (D85) : RC
REAR DOOR CLOSURE ASSEMBLY RH (D83) : RC
NEUTRAL SWITCH
REAR DOOR CLOSURE MOTOR
REAR DOOR LOCK ASSEMBLY RH (D84) : RC
HANDLE SWITCH
OPERATION SWITCH
REVERSE SWITCH
To exterior lighting system
To interior room lamp control system
BCM (BODY CONTROL MODULE) (M120), (M121), (M122), (M123)
FUEL LID LOCK ACTUATOR (B242)
REAR DOOR LOCK ASSEMBLY RH (D75) : ER (D82) : RC
FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE) (D45)
FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE) (D15)
DOOR LOCK ACTUATOR
DOOR KEY CYLINDER SWITCH
UNLOCK SENSOR
LOCK
UNLOCK
FULL STROKE
BETWEEN FULL STROKE AND N
N
AV CONTROL UNIT (M210) : NV
AIR BAG DIAGNOSIS SENSOR UNIT (M147)
PCB HARNESS (M25) : (M26)
JRKWF4820GB


*3 2 : ER 3 : RC
REAR DOOR CLOSURE CONTROL UNIT LH
D65 : RC
REAR DOOR CLOSURE MOTOR ASSEMBLY LH
D63 : RC
NEUTRAL SWITCH
REAR DOOR CLOSURE MOTOR
REAR DOOR LOCK ASSEMBLY LH
D64 : RC
HANDLE SWITCH
OPERATION SWITCH
REVERSE SWITCH
M7
B1
B18
D51
B7
BCM (BODY CONTROL MODULE)
(M120), (M121), (M122), (M123)
TRUNK LID OPENER REQUEST SWITCH
T4
TRUNK LID OPENER SWITCH
M187
TRUNK LID OPENER CANCEL SWITCH
M18
JOINT CONNECTOR-M01
M189
PCB HARNESS
M20, M23
M30
M11
M95
B224
B276
T13
M117
B201
M105
M181
REAR DOOR LOCK ASSEMBLY LH
D55 : ER
D62 : RC
*3
JRKWF4821GB

DOOR LOCK SYSTEM

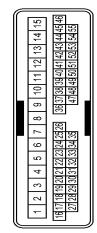
Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	W	-
4	LG	-
5	P	-
7	GR	-
8	Y	-
9	LG	-
10	V	-
11	GR	- [With climate controlled seat]
11	L	- [With heated seat]
12	GR	- [With heated seat]
12	P	- [With climate controlled seat]
13	BR	-
14	R	-
15	O	-
16	V	-
17	B	-
18	R	-
19	W	-
20	L	-
21	B	-
22	LG	-
23	V	-
24	Y	-
25	G	-
26	GR	-
27	SB	-
28	L/O	-
29	W/L	-
30	SHIELD	-
32	L	-
33	R	-
36	G	-
37	SB	-
40	SHIELD	-

41	GR/V	-
42	W/L	-
43	L	-
44	B	-
47	O	-
48	Y	-
49	BR	-
50	SB	-
51	V	-
52	LG	-
53	G	-
56	P	-
57	BR	-
58	LG	-
59	Y	-
60	W	-
61	B	-
62	LG	-
63	V	-
65	O	-
66	BR	-
67	V	-
68	LG	-
69	GR	-
70	R	-
72	L	-
73	P	-
74	L	-
75	P	-
76	Y	-
77	R	-
78	W	-
79	G	-
81	LG	-
82	BR	-
83	SB	-
84	Y	-
85	W	-
86	R	-
87	G	-
88	GR	-
91	SB	-
92	G	-
96	Y	-
97	O	-
98	SB	-
99	LG	-

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



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

36	P	-
37	BR	-
38	W	-
39	O	-
40	L	-
41	W	-
42	B	-
43	R	-
44	G	-
45	Y	-
46	V	-
47	SB	-
48	GR	-
49	LG	-
50	B	-
51	G	-
52	R	-
53	B	-
54	V	-
55	SHIELD	-

Connector No.	B16
Connector Name	FRONT DOOR SWITCH LH
Connector Type	A03FW

Terminal No.	Color Of Wire	Signal Name [Specification]
2	LG	-

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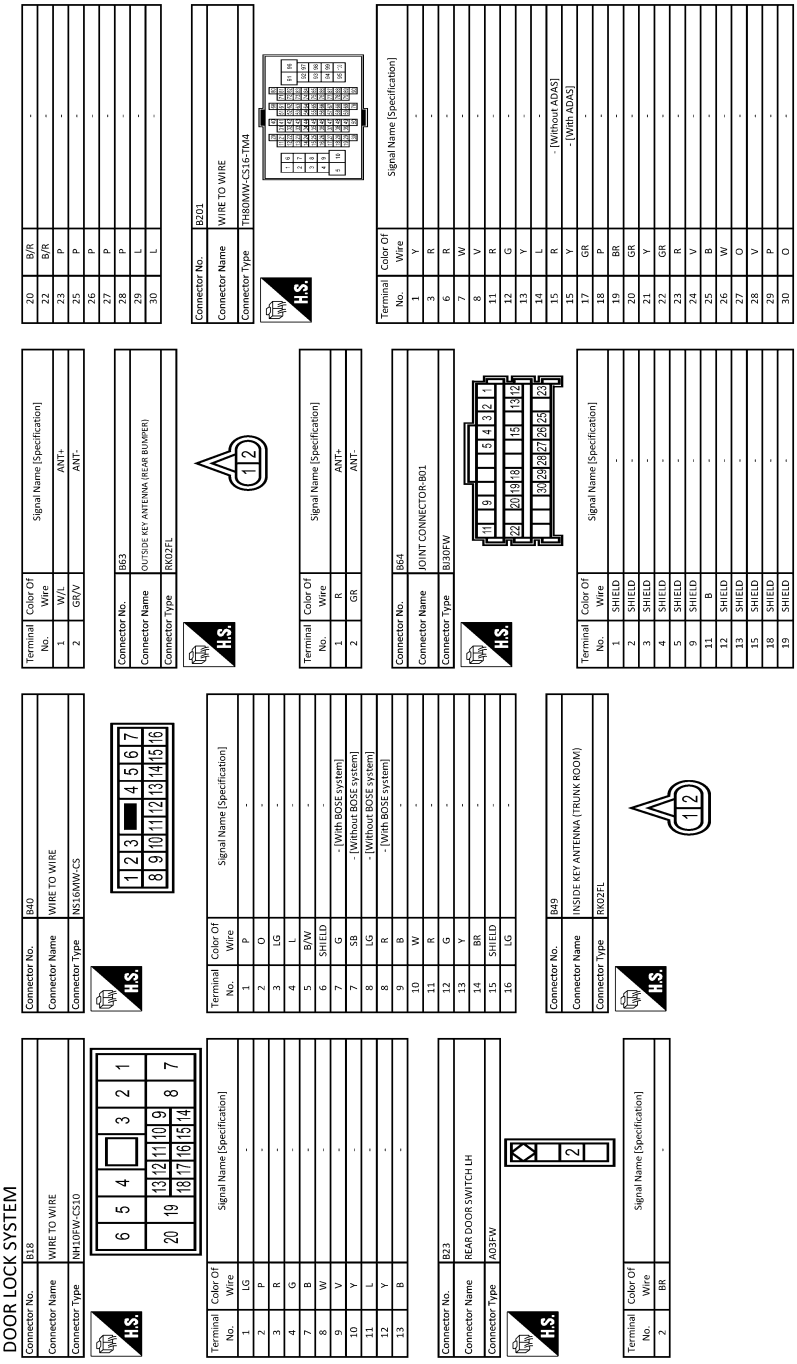

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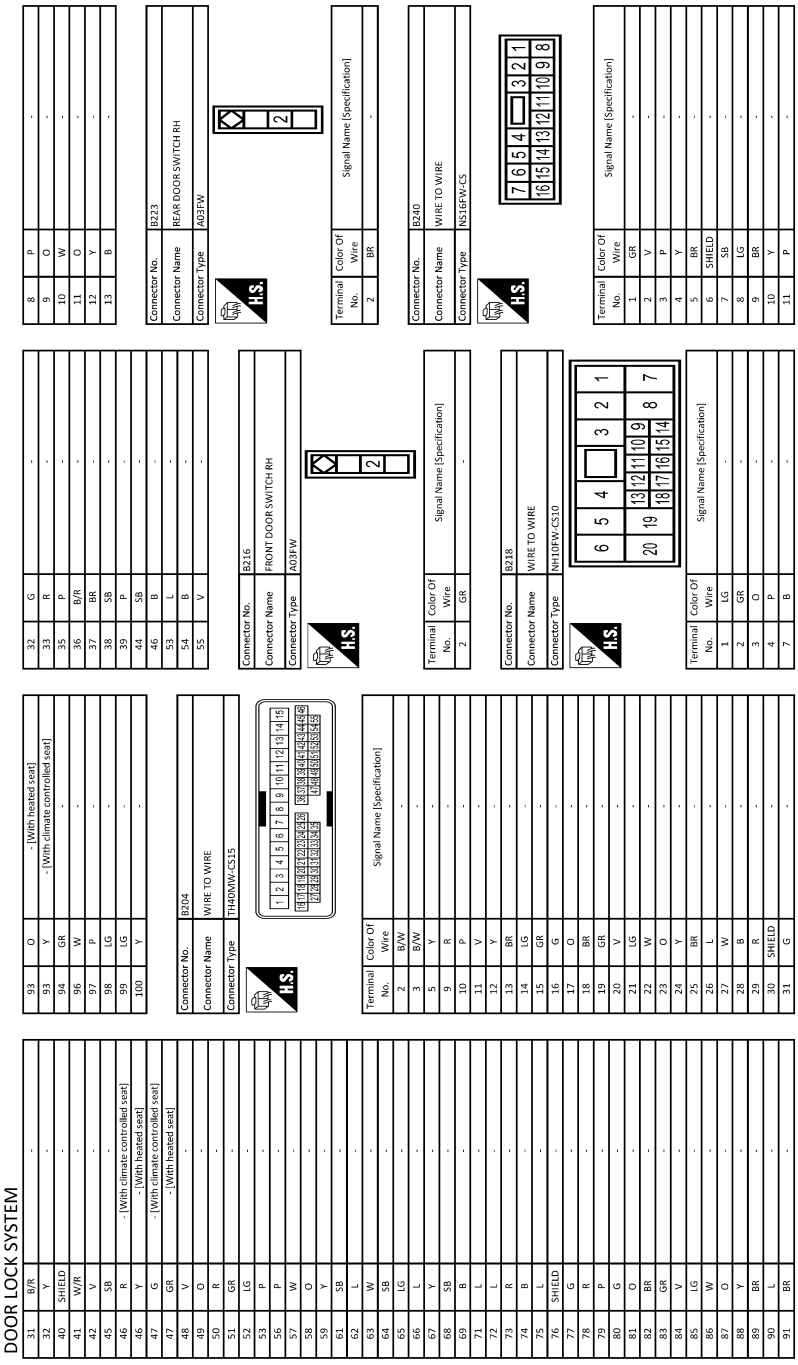
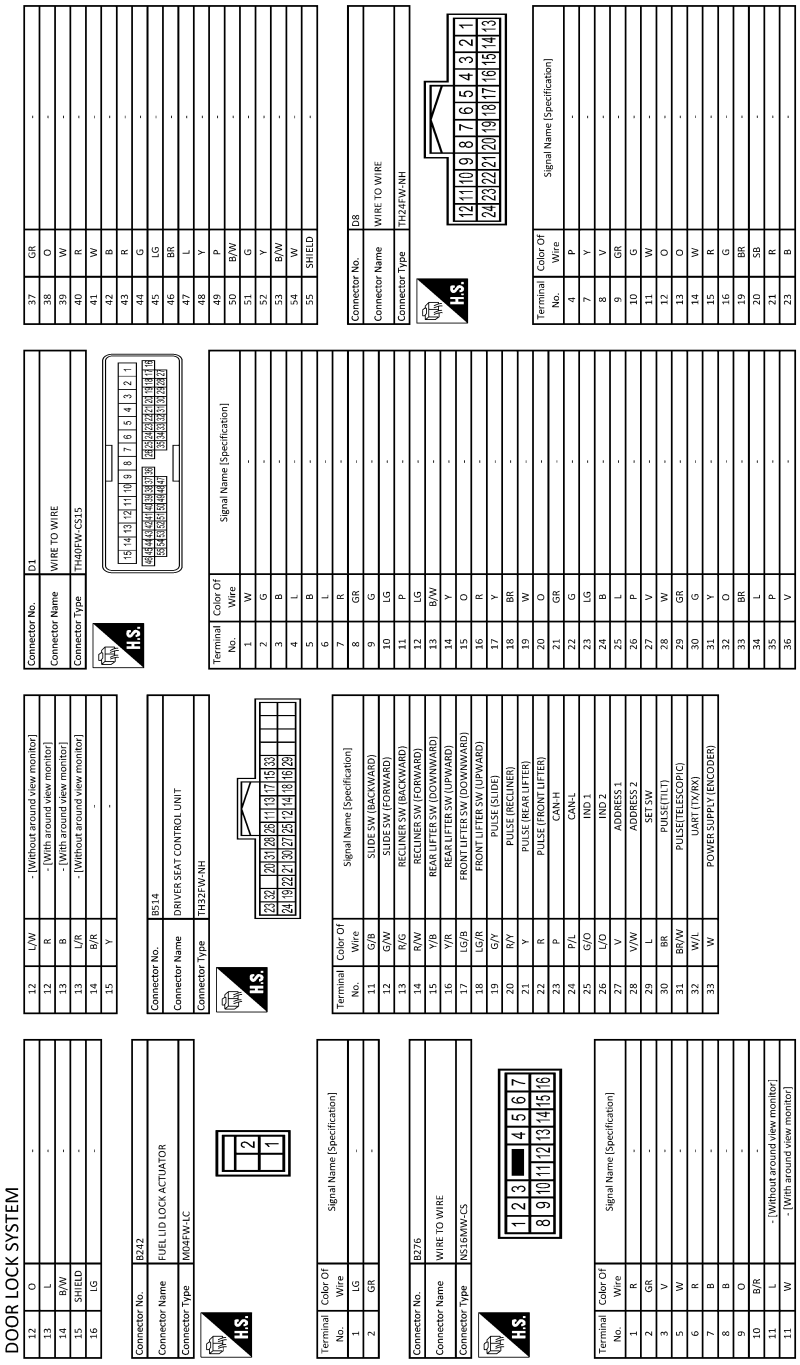
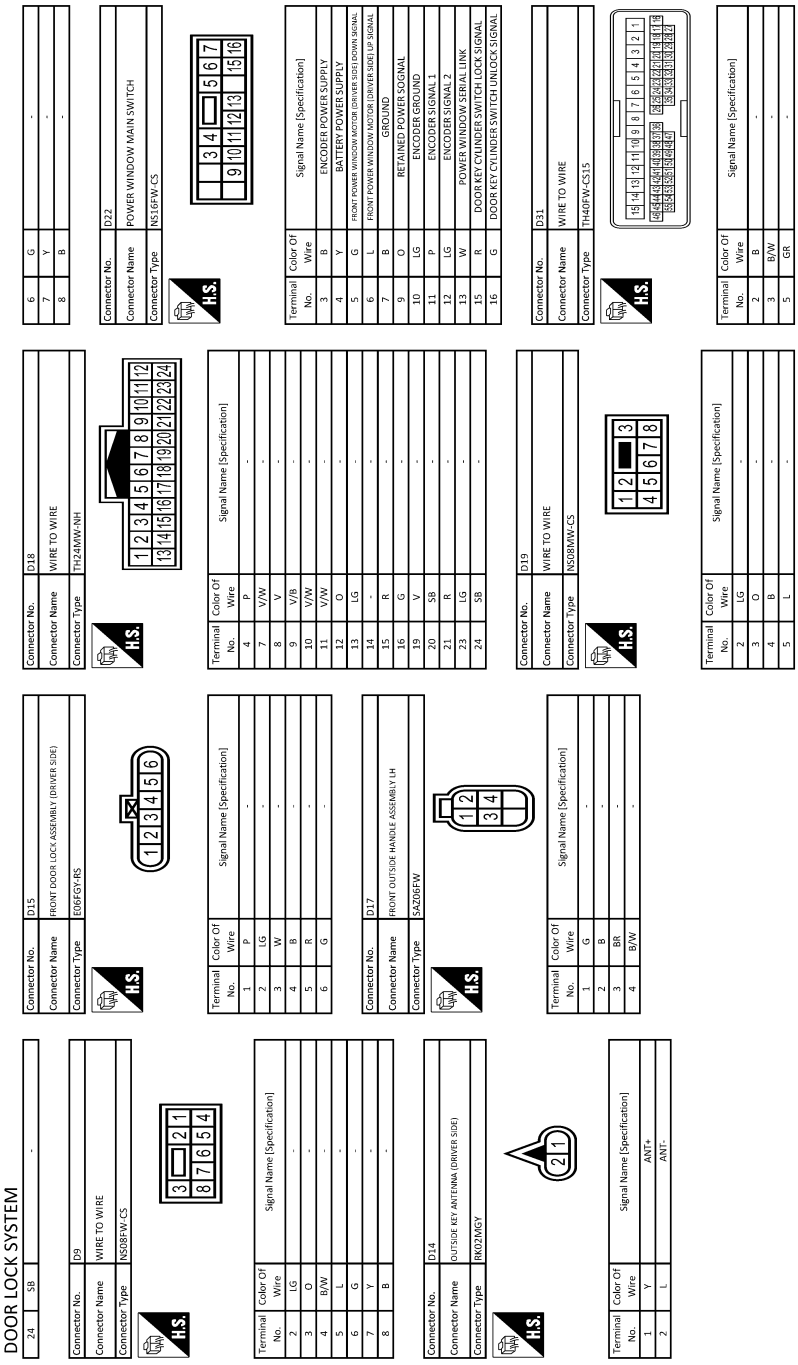


JRKWF4824GB



JRKWF4825GB



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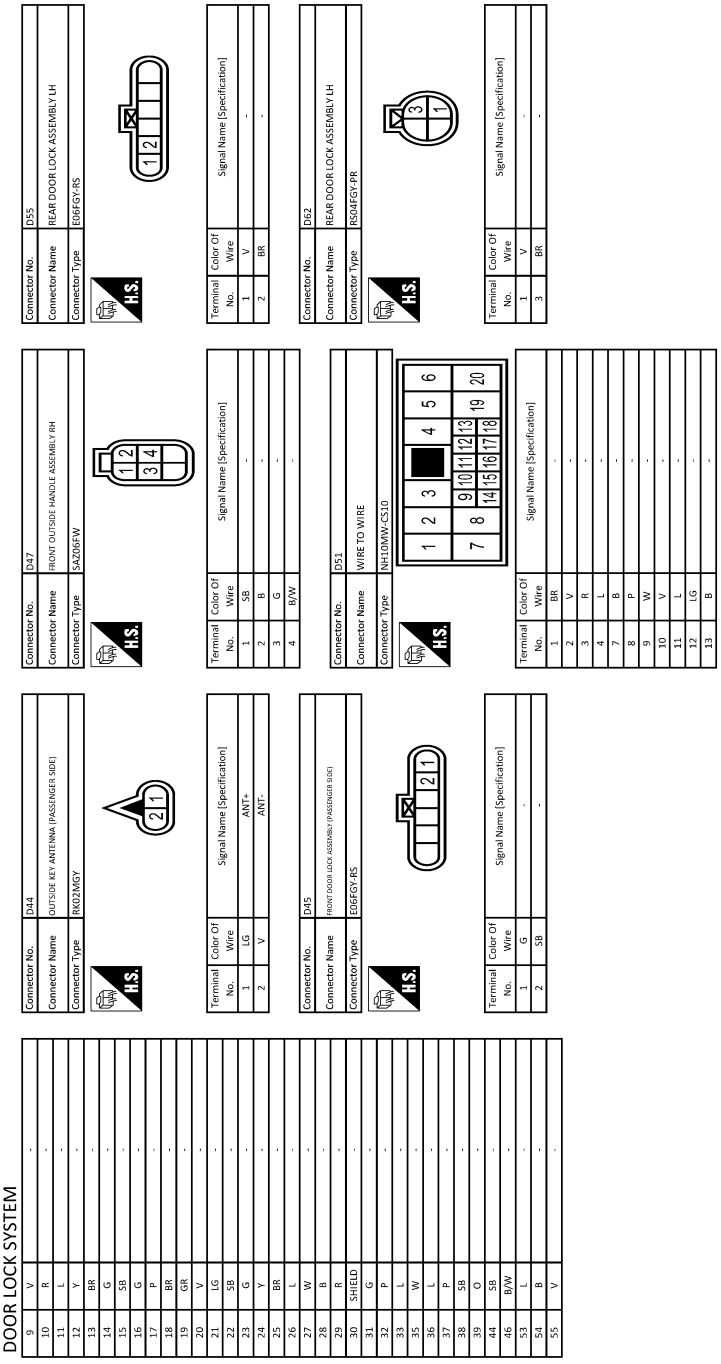

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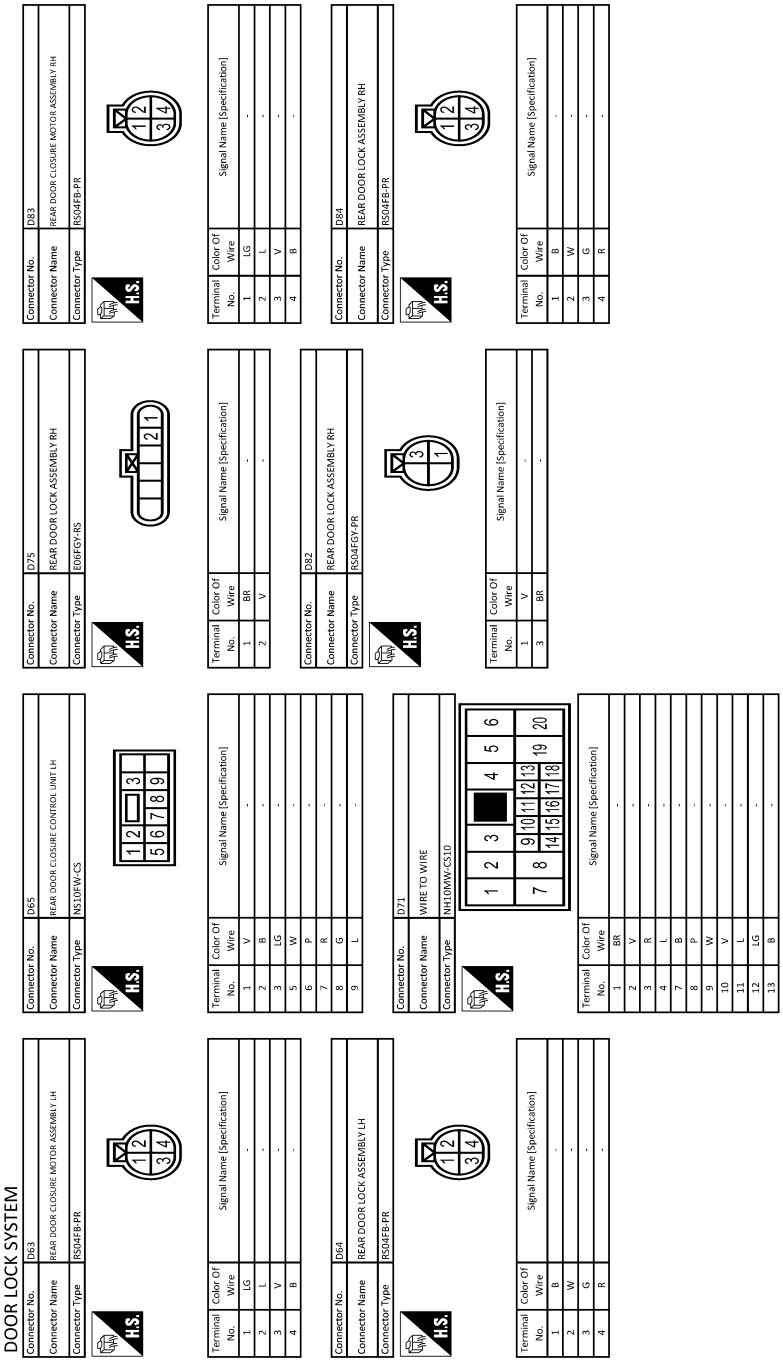
DOOR LOCK SYSTEM



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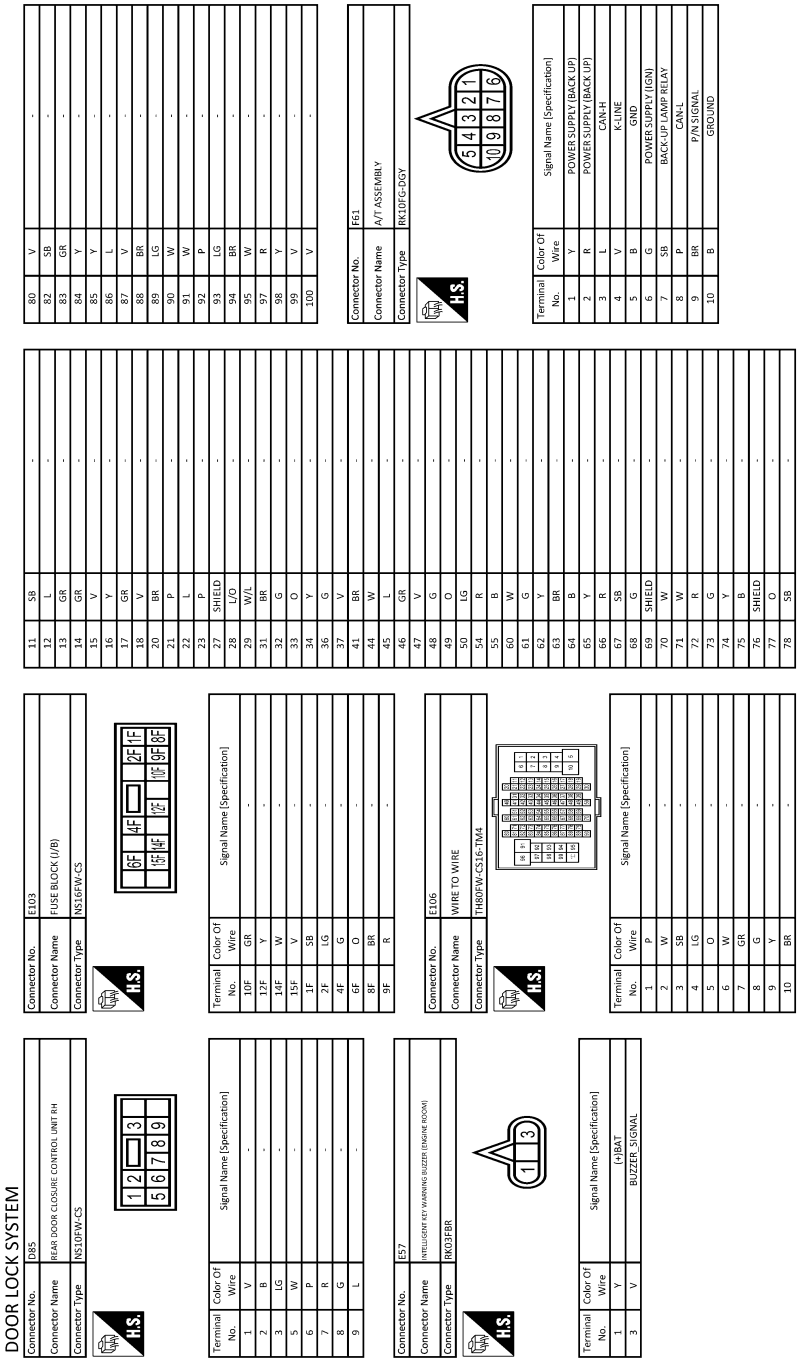


JRKWF4829GB

DOOR LOCK SYSTEM

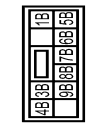
Connector No.	F301
Connector Name	TCM
Connector Type	SP10FG

Terminal No.	Color Of Wire	Signal Name [Specification]
1	-	VIGN
2	-	BATT
3	-	CAN-H
4	-	K LINE
5	-	GND
6	-	VIGN
7	-	REV LAMP RLY
8	-	CAN-L
9	-	START RLY
10	-	GND

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

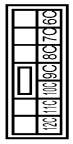
Terminal No.	Color Of Wire	Signal Name [Specification]
1A	R	-
2A	W	-
3A	Y	-
4A	W	-
5A	V	-
6A	Y	-
8A	Y	-

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



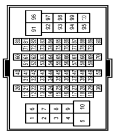
Terminal No.	Color Of Wire	Signal Name [Specification]
1B	R	-
3B	P	-
4B	G	-
5B	SB	-
6B	W	- [With VQ37 engine]
6B	Y	- [With VK56 engine]
7B	Y	-
8B	R	-
9B	R	-

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



Terminal No.	Color Of Wire	Signal Name [Specification]
10C	LG	-
11C	LG	-
12C	O	-
6C	R	-
7C	B	-
8C	B	-
9C	L	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	W	-
3	SB	-
4	LG	-
5	W	-
6	W	-
7	BG	-
8	G	-
9	Y	-
10	W	-
11	R	-
12	V	-
13	LG	-
14	L	-
15	V	-
16	B	-
17	GR	-
18	V	-
20	SB	-
21	BR	-
22	L	-
23	P	-
27	SHIELD	-
28	V	-
29	SB	-
31	BG	-
32	P	-
33	R	-
34	BG	-
36	V	-
37	G	-
41	BR	-
44	BR	-
45	Y	-
46	BG	-
47	V	-
48	G	-
49	BG	-
50	W	-
54	W	-
55	G	-
60	GR	-
61	B	-
62	LG	-
63	BR	-
64	L	- [With ICC] - [Without ICC]
64	SB	- [With ICC] - [Without ICC]
65	R	-
65	Y	-
66	P	-
67	L	-
68	R	-
69	SHIELD	-
70	B	-
71	W	-
72	R	-
73	G	-
74	Y	-
75	B	-
76	SHIELD	-
77	B	-
78	V	-
80	G	-
82	B	-
83	BG	-
84	SB	-
85	Y	-
86	L	-
87	V	-
88	V	-
89	LG	-
90	BG	-
91	W	-
92	BG	-
93	G	-
94	Y	-
95	W	-
97	SB	-
98	R	-
99	W	-
100	L	-

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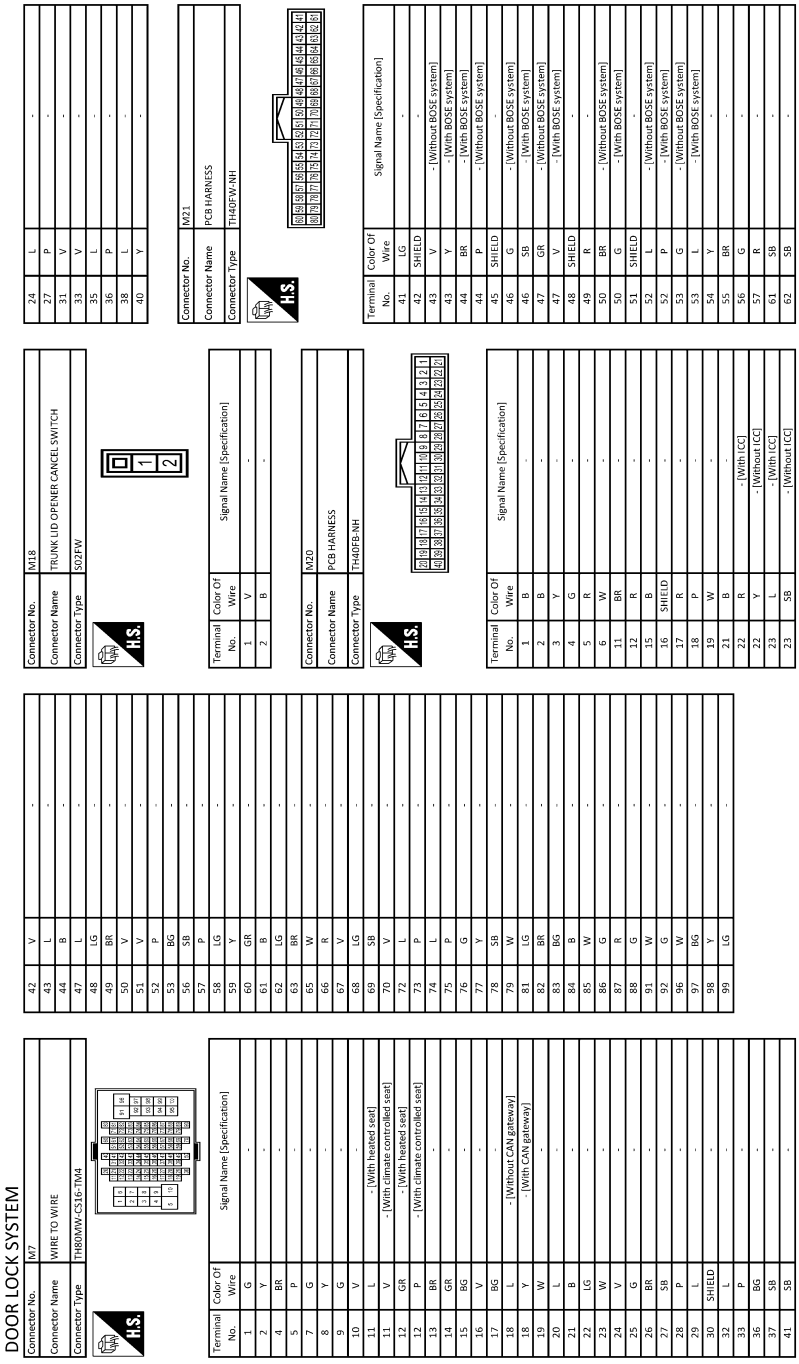


JRKWF4831GB

DOOR LOCK SYSTEM

63	LG	-
64	B	-
67	SHIELD	-
69	V	-
71	Y	-
72	B	-
73	W	-
74	R	-
75	G	-

Connector No. M22
Connector Name PCB HARNESS
Connector Type TH40FB-NH

H.S.

108	Y	-
109	BR	-
110	Y	-
112	B	-
113	P	-
114	L	-
116	B	-
117	B	- [With VK56 engine]
117	BG	- [With VQ37 engine]
118	B	-
119	LG	-
120	V	-

Connector No. M23
Connector Name PCB HARNESS
Connector Type TH40FW-NH

H.S.

152	B	-
153	W	-
154	W	-
155	W	-
157	W	-
158	R	-
159	R	-
160	SB	-

Connector No. M24
Connector Name PCB HARNESS
Connector Type TH40FW-NH

H.S.

191	LG	-
192	B	-
193	SB	-
194	BR	-
195	SB	-
198	R	-
199	B	-
200	SB	-

Connector No. M25
Connector Name PCB HARNESS
Connector Type TH40FB-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
81	L	-
82	P	-
83	B	-
84	B	-
85	B	-
86	B	-
87	B	-
88	B	-
89	Y	-
91	V	-
92	V	-
93	B	-
94	B	-
95	LG	-
96	BR	-
97	G	-
98	G	-
99	G	-
100	G	-
101	L	-
102	P	-
103	B	-
104	BR	-
105	R	-
107	Y	-

Terminal No.	Color Of Wire	Signal Name [Specification]
121	R	-
122	V	-
123	BG	-
124	BG	-
126	B	-
131	SB	-
132	LG	-
133	L	-
134	L	-
135	P	-
136	P	-
137	Y	-
138	L	-
141	W	-
142	W	-
144	P	-
145	B	-
146	LG	-
147	B	-
149	B	-
150	P	-
151	L	-

Terminal No.	Color Of Wire	Signal Name [Specification]
161	BG	-
162	BG	-
164	V	-
165	V	-
166	R	-
167	LG	-
169	R	-
171	BG	-
172	B	-
174	W	-
176	L	-
177	P	-
178	Y	-
179	L	-
180	LG	-
182	BR	- [With VQ37 engine or with VK56 engine without ICC]
182	R	- [With VK56 engine with ICC]
183	G	-
184	V	-
185	P	-
186	R	-
187	L	- [Without CAN gateway]
187	Y	- [With CAN gateway]
188	L	-
189	B	-
190	V	-

Terminal No.	Color Of Wire	Signal Name [Specification]
201	L	-
206	P	-
207	Y	-
208	G	-
209	G	- [Without BOSE system]
209	L	- [With BOSE system]
210	L	- [Without BOSE system]
210	P	- [With BOSE system]
211	SHIELD	-
212	BR	- [Without BOSE system]
212	G	- [With BOSE system]
213	R	-
214	SHIELD	-
215	GR	- [Without BOSE system]
215	V	- [With BOSE system]
216	G	- [Without BOSE system]
216	LG	- [With BOSE system]
217	SHIELD	-
218	BR	- [With BOSE system]
218	P	- [Without BOSE system]
219	GR	- [With BOSE system]
219	V	- [Without BOSE system]
220	SHIELD	-
221	P	-
222	LG	-
223	SB	-

JRKWF4832GB

DOOR LOCK SYSTEM

224	SB	-
225	LG	-
226	R	-
229	SB	-
230	BR	-
231	SB	-
232	V	-
233	L	-
234	P	-
235	B	-
239	V	-
240	W	-

Connector No.	M26
Connector Name	PCB HARNESS
Connector Type	TH40FW-NH

H.S.

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

Terminal No.	Color Of Wire	Signal Name [Specification]
241	L	-
242	L	-
243	R	- [With ICC]
243	Y	- [Without ICC]
244	L	- [With ICC]
244	SB	- [Without ICC]
245	B	-
246	B	-
247	B	-
248	SHIELD	-
251	SHIELD	-
252	B	-
253	B	-
254	B	- [With heated seat]
254	W	- [With climate controlled seat]
255	B	-
258	R	-
259	L	-
260	BG	-
261	P	-
262	P	-
267	P	-

268	Y	-
269	G	-
270	Y	-
271	BR	-
272	G	-
273	R	-
274	R	-
275	Y	-
276	B	-
277	G	-
278	R	-
279	R	-
280	Y	-

Connector No.	M27
Connector Name	PCB HARNESS
Connector Type	TH40FB-NH

H.S.

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

Terminal No.	Color Of Wire	Signal Name [Specification]
281	O	-
282	BG	-
283	BG	-
284	BG	-
286	W	-
287	Y	-
288	W	-
289	SHIELD	-
290	B	-
291	SHIELD	-
292	B	-
293	B	-
294	B	-
295	B	-
296	GR	-
297	B	-
298	B	-
299	L	-
300	W	-
301	R	-
302	R	-

303	R	-
304	SHIELD	-
305	P	-
306	V	-
309	G	-
310	R	-
311	W	-
312	B	-
313	B	-
314	Y	-
315	G	-
316	R	-
317	W	-
318	SHIELD	-
319	V	-
320	W	-

Connector No.	M30
Connector Name	PCB HARNESS
Connector Type	TH40FW-NH

H.S.

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

Terminal No.	Color Of Wire	Signal Name [Specification]
402	R	-
403	R	-
406	B	-
407	V	-
408	B	-
409	B	-
410	B	-
411	B	-
413	Y	-
414	BR	-
416	LG	-
417	B	-
419	SB	-
420	SHIELD	-
422	V	-
427	P	-
428	V	-
429	P	-

430	LG	-
431	B	-
432	Y	-
435	V	-
436	BG	-
437	B	-
438	P	-
439	L	-
440	B	-

Connector No.	M50
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Type	TK08FBR

H.S.

1		2	3
4	5	6	7	8

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

Connector No.	M53
Connector Name	COMBINATION METER
Connector Type	TH40FW-NH

H.S.

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

JRKWF4833GB

DOOR LOCK SYSTEM

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BATTERY POWER SUPPLY
2	BG	IGNITION SIGNAL
3	GR	VEHICLE SPEED SIGNAL (2-PULSE)
4	R	VEHICLE SPEED SIGNAL (8-PULSE)
5	B	ILLUMINATION CONTROL SIGNAL
6	B	METER CONTROL SWITCH GROUND
7	SB	ENTER SWITCH SIGNAL
8	LG	SELECT SWITCH SIGNAL
9	G	ILLUMINATION CONTROL SWITCH SIGNAL (+)
10	GR	ILLUMINATION CONTROL SWITCH SIGNAL (-)
11	L	TRIP RESET SWITCH SIGNAL
12	B	GROUND
14	L	CAN-H
15	P	CAN-L
16	R	AIR BAG SIGNAL
17	G	LED HEADLAMP (RH) WARNING SIGNAL
18	V	LED HEADLAMP (LH) WARNING SIGNAL
23	B	GROUND
24	B	FUEL LEVEL SENSOR GROUND
25	W	ALTERNATOR SIGNAL
26	V	PARKING BRAKE SWITCH SIGNAL
27	V	BRAKE FLUID LEVEL SWITCH SIGNAL
28	G	SECURITY SIGNAL
29	L	WASHER LEVEL SWITCH SIGNAL
32	G	PADDLE SHIFTER SHIFT DOWN SIGNAL
33	BG	PADDLE SHIFTER SHIFT UP SIGNAL
34	G	FUEL LEVEL SENSOR SIGNAL
35	W	SEAT BELT BUCKLE SWITCH SIGNAL [DRIVER SIDE]
36	G	PASSENGER SEAT BELT WARNING SIGNAL
37	G	NON-MANUAL MODE SIGNAL
38	V	MANUAL MODE SHIFT DOWN SIGNAL
39	L	MANUAL MODE SHIFT UP SIGNAL
40	W	MANUAL MODE SIGNAL

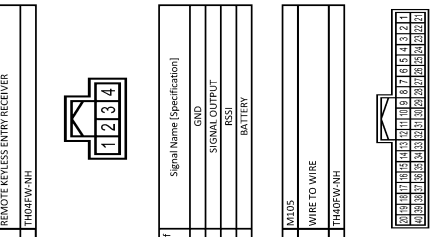
Connector No.	M104
Connector Name	REMOTE KEYLESS ENTRY RECEIVER
Connector Type	TH04FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GND
2	BR	SIGNAL OUTPUT
3	GR	RSSI
4	R	BATTERY

Connector No.	M105
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-NH

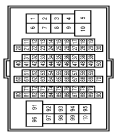
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
2	R	-
3	B	-
5	LG	-
6	P	-
7	L	-
8	P	-
9	B	-
10	W	-
11	W	-
12	SB	-
14	SB	-
15	BR	-
16	V	-
18	G	-
22	BG	-
23	B	-
25	W	-
30	R	-
31	BR	-
32	L	-
33	P	-
34	LG	-
35	W	-
36	LG	-
37	L	-

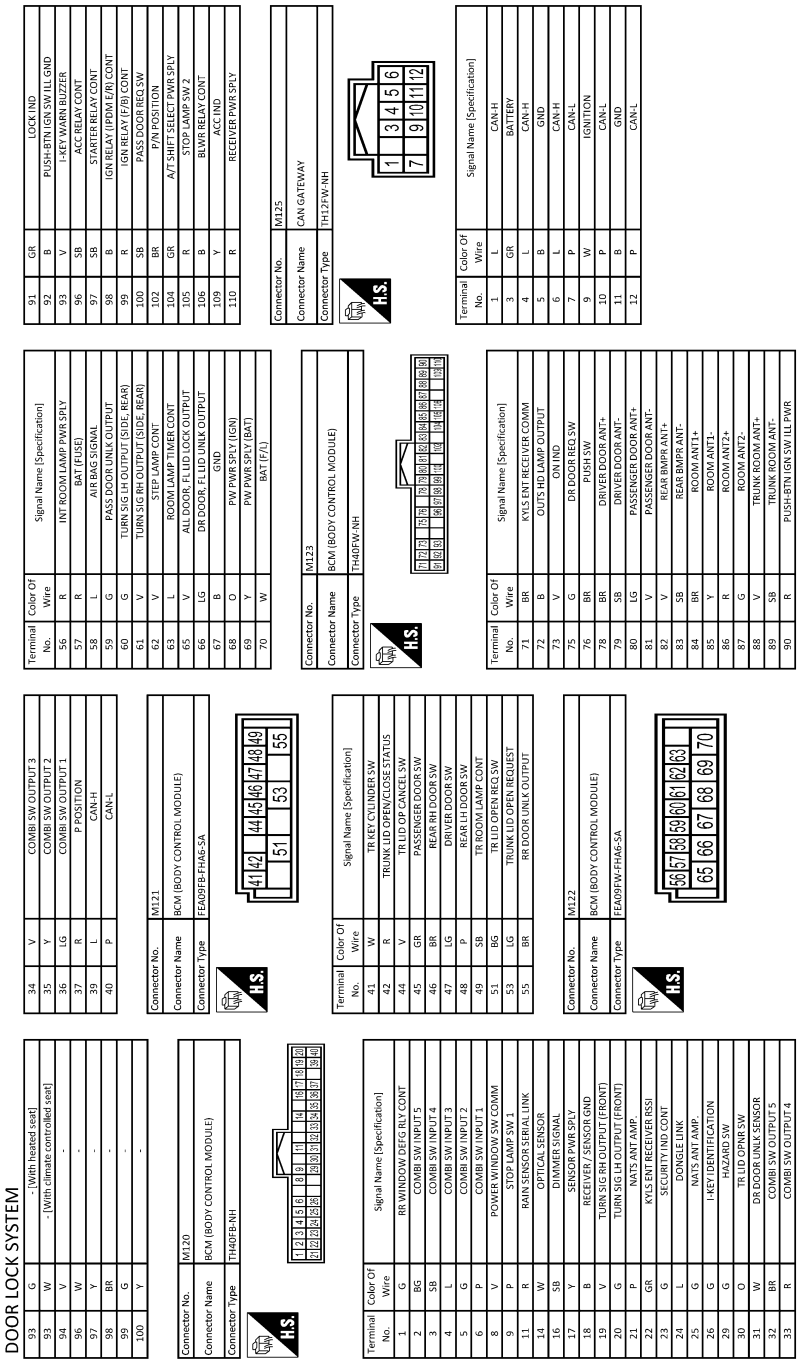
Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
3	Y	-
6	R	-
7	W	-
8	V	-
11	R	-
12	G	-
13	W	-
14	L	-
15	R	- [Without ADAS]
15	Y	- [With ADAS]
17	GR	-
18	P	-
19	BR	-
20	GR	-
21	Y	-
22	LG	-
23	R	-
24	BG	-
25	BG	-
26	W	-
27	R	-
28	V	-
29	P	-
30	B	-
31	G	-
32	Y	-
40	SHIELD	-
41	R	-
42	V	-
45	SB	-
46	BG	- [With heated seat]
46	L	- [With climate controlled seat]
47	G	- [With climate controlled seat]
47	GR	- [With heated seat]
48	V	-
49	BG	-
50	LG	-
51	SB	-
52	Y	-
53	W	-
56	B	-
57	G	-
58	R	-
59	W	-
61	LG	-
62	V	-
63	R	-
64	SB	-
65	LG	-
66	L	-
67	Y	-
68	SB	-
69	B	-
71	L	-
72	L	-
73	P	-
74	B	-
75	L	-
76	SHIELD	-
77	G	-
78	R	-
79	L	-
80	G	-
81	BG	-
82	BR	-
83	GR	-
84	V	-
85	LG	-
86	V	-
87	R	-
88	Y	-
89	BR	-
90	L	-
91	Y	-

JRKWF4834GB

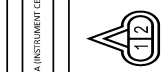


JRKWF4835GB

DOOR LOCK SYSTEM

Connector No.	M131
Connector Name	INSIDE KEY ANTENNA (INSTRUMENT CENTER)
Connector Type	RK02FL

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	ANT+
2	Y	ANT-

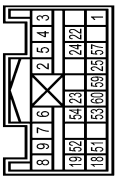
Connector No.	M146
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Type	RK02FL

H.S.

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

Connector No.	M147
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	NH28FY-EX

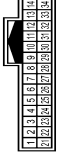
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	IGN
2	B	GND
3	Y	DR1 (+)
4	Y	DR1 (-) DR2 (-)
5	Y	DR2 (+)
6	Y	AS1 (+)
7	Y	AS1 (-)
8	Y	AS2 (+)
9	Y	AS2 (-)
18	SB	ECZS (+)
19	V	ECZS (-)
22	SHIELD	GND
23	R	AIR BAG W/L
24	G	SEAT BELT
25	R	CUTOFF TELLTALE
51	G	SATELLITE RH2 (+)
52	R	SATELLITE RH2 (-)
53	P	SATELLITE RH2 (+)
54	L	SATELLITE RH2 (-)
57	L	IVCS
59	L	CAN-H
60	P	CAN-L

Connector No.	M181
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-NH

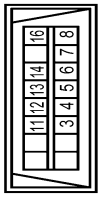
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
2	R	-
3	B	-
5	R	-
6	BR	-
7	L	-
8	P	-
9	B	-
10	W	-
11	LG	-
12	SB	-
14	SB	-
15	BR	-
16	V	-
18	G	-
22	BG	-
23	B	-
25	W	-
30	R	-
31	BR	-
32	L	-
33	P	-
34	LG	-
35	W	-
36	LG	-
37	L	-

Connector No.	M182
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	M-CAN_L
4	B	EARTH
5	B	EARTH
6	L	CAN-H
7	V	KLINE
8	LG	IGN_SW
11	SB	M-CAN_H
12	P	CAN-L
13	L	CAN-H
14	P	CAN-L
16	W	POWER

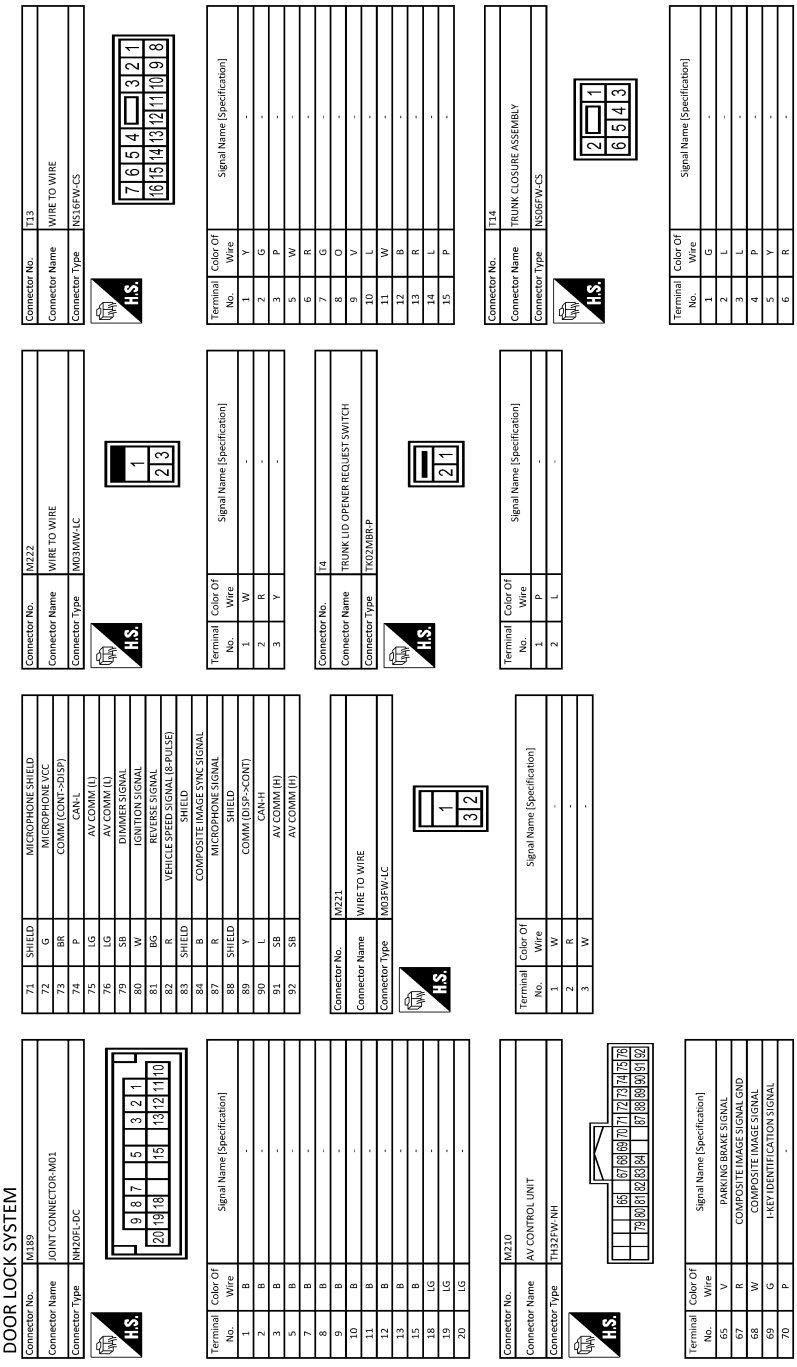
Connector No.	M187
Connector Name	TRUNK LID OPENER SWITCH
Connector Type	TH08FB-NH

H.S.

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

JRKWF4836GB

DOOR LOCK SYSTEM



JRKWF4837GB

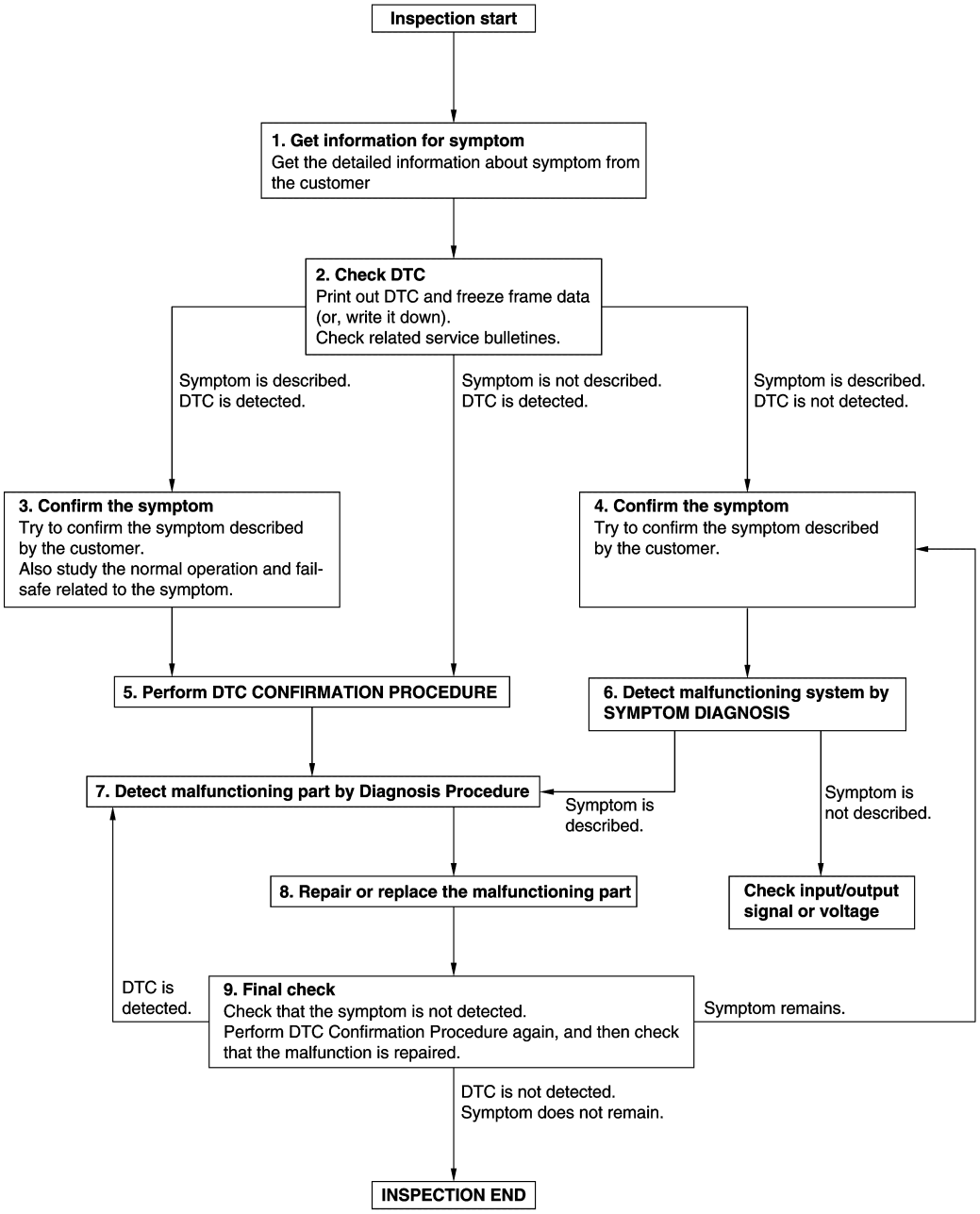
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000012352660

OVERALL SEQUENCE



JMKIA8652GB

DETAILED FLOW

1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2.CHECK DTC

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

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

3. Check related service bulletins for information.

Are any symptoms described or any DTC detected?

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

3.CONFIRM THE SYMPTOM

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 diagnostic results in real time.
If two or more DTCs are detected, refer to BCS-58, "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 >> Refer to GI-45, "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-45, "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 for DTC. If DTC is displayed, 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 completely repaired.
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 REPLACING CONTROL UNIT
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000013011954

Perform the following operations when replacing BCM. [For details, refer to DLK-72, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Work Procedure".]

BEFORE REPLACEMENT

When replacing BCM, save or print current vehicle specification with CONSULT configuration before replacement.

NOTE:

If “Before Replace ECU” of “Read / Write Configuration” cannot be used, use the “Manual Configuration” after replacing BCM.

AFTER REPLACEMENT

CAUTION:

When replacing BCM, always perform “Read / Write Configuration” or “Manual Configuration” with CONSULT. Or not doing so, BCM control function does not operate normally.

- **Complete the procedure of “Read / Write Configuration” in order.**
- **Configuration is different for each vehicle model. Confirm configuration of each vehicle model.**
- **If you set incorrect “Read / Write Configuration” or “Manual Configuration”, incidents might occur.**

NOTE:

When replacing BCM, perform the system initialization (NATS).

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Work Procedure

INFOID:0000000013011955

1. SAVING VEHICLE SPECIFICATION

CONSULT Configuration

Perform “Before Replace ECU” of “Read / Write Configuration” to save or print current vehicle specification. Refer to BCS-80, "CONFIGURATION (BCM) : Description".

NOTE:

If “Before Replace ECU” of “Read / Write Configuration” cannot be used, use the “Manual Configuration” after replacing BCM.

>> GO TO 2.

2. REPLACE BCM

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

>> GO TO 3.

3. WRITING VEHICLE SPECIFICATION

CONSULT Configuration

Perform “After Replace ECU” of “Read / Write Configuration” or “Manual Configuration” to write vehicle specification. Refer to BCS-80, "CONFIGURATION (BCM) : Work Procedure".

>> GO TO 4.

4. INITIALIZE BCM (NATS)

Perform BCM initialization. (NATS)

>> WORK END

DTC/CIRCUIT DIAGNOSIS

B2621 INSIDE ANTENNA

DTC Logic

INFOID:0000000012352663

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) • Between BCM and Inside key antenna (instrument center)

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?

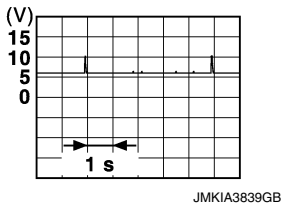
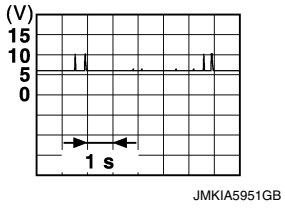
YES >> Refer to DLK-73, "Diagnosis Procedure".
NO >> Inside key antenna (instrument center) is OK.

Diagnosis Procedure

INFOID:0000000012352664

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M123	84, 85	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in 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 connector (instrument center).

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	
M123	84	M131	1	Existed
	85		2	

3. Check continuity between BCM harness connector and ground.

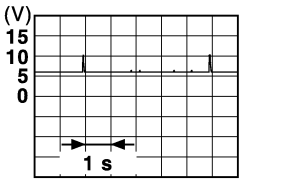
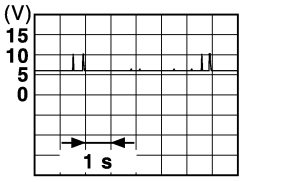
BCM		Ground	Continuity
Connector	Terminal		
M123	84		Not existed
	85		

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 with oscilloscope.

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M123	84, 85	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in 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:0000000012352665

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) • Between BCM and Inside key antenna (console)

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?

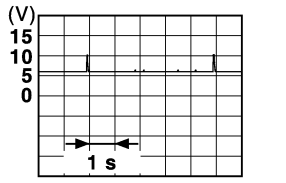
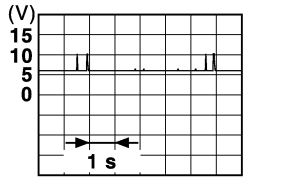
YES >> Refer to DLK-75, "Diagnosis Procedure".
NO >> Inside key antenna (console) is OK.

Diagnosis Procedure

INFOID:0000000012352666

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M123	86, 87	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in 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	
M123	86	M146	1	Existed
	87		2	

3. Check continuity between BCM harness connector and ground.

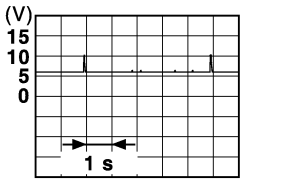
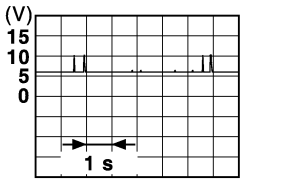
BCM		Ground	Continuity
Connector	Terminal		
M123	86		Not existed
	87		

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 with oscilloscope.

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M123	86, 87	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in 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:0000000012352667

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2623	INSIDE ANTENNA	An excessive high or low voltage from inside antenna (trunk room) is sent to BCM.	• Inside key antenna (trunk room) • Between BCM and Inside key antenna (trunk room)

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?

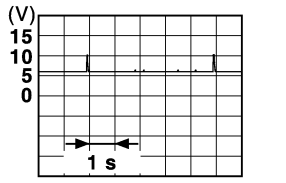
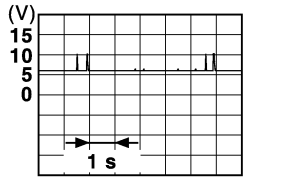
YES >> Refer to DLK-77, "Diagnosis Procedure".
NO >> Inside key antenna (trunk room) is OK.

Diagnosis Procedure

INFOID:0000000012352668

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M123	88, 89	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in 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 (trunk room) connector.
2. Check continuity between BCM harness connector and inside key antenna (trunk room) harness connector.

BCM		Inside key antenna (trunk room)		Continuity
Connector	Terminal	Connector	Terminal	
M123	88	B49	1	Existed
	89		2	

3. Check continuity between BCM harness connector and ground.

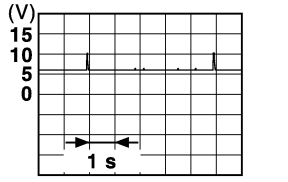
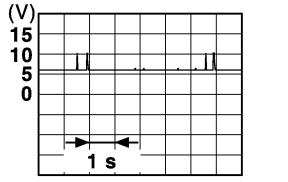
BCM		Ground	Continuity
Connector	Terminal		
M123	88		Not existed
	89		

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 (trunk room). (New antenna or other antenna)
2. Connect BCM connector and inside key antenna (trunk room) connector.
3. Check signal between BCM harness connector and ground with oscilloscope.

(+) BCM		(–)	Condition	Signal (Reference value)
Connector	Terminal			
M123	88, 89	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace inside key antenna (trunk room).
NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

B2626 OUTSIDE ANTENNA

DTC Logic

INFOID:0000000012352669

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2626	OUTSIDE ANTENNA	An excessive high or low voltage from outside key antenna (driver side) is sent to BCM	• Outside key antenna (driver side) • Between BCM ~ Outside key antenna (driver side)

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?

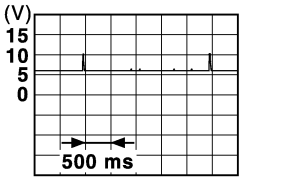
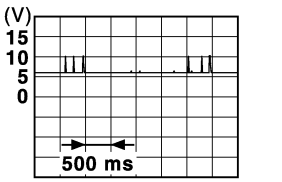
YES >> Refer to DLK-79, "Diagnosis Procedure".
NO >> Inside key antenna (driver side) is OK.

Diagnosis Procedure

INFOID:0000000012352670

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)
M123	78 79	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (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	
M123	78	D14	1	Existed
	79		2	

3. Check continuity between BCM harness connector and ground.

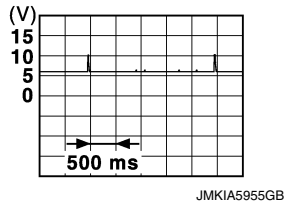
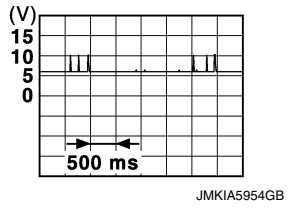
BCM		Ground	Continuity
Connector	Terminal		
M123	78		Not existed
	79		

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		(–)	Condition		Signal (Reference value)
Connector	Terminal				
M123	78 79	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (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".

B2627 OUTSIDE ANTENNA

DTC Logic

INFOID:0000000012352671

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2627	OUTSIDE ANTENNA	An excessive high or low voltage from outside key antenna (passenger side) is sent to BCM	• Outside key antenna (passenger side) • Between BCM ~ Outside key antenna (passenger side)

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?

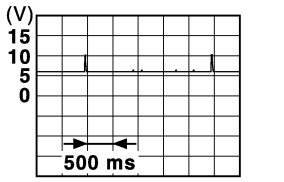
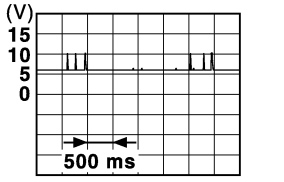
YES >> Refer to DLK-81, "Diagnosis Procedure".
NO >> Inside key antenna (passenger side) is OK.

Diagnosis Procedure

INFOID:0000000012352672

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)
M123	78 79	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (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	
M123	80	D44	1	Existed
	81		2	

3. Check continuity between BCM harness connector and ground.

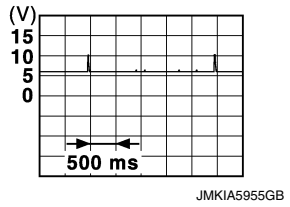
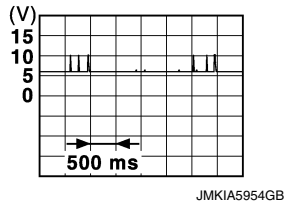
BCM		Ground	Continuity
Connector	Terminal		
M123	80		Not existed
	81		

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		(–)	Condition		Signal (Reference value)
Connector	Terminal				
M123	78 79	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (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".

B2628 OUTSIDE ANTENNA

DTC Logic

INFOID:0000000012352673

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 (rear bumper) is sent to BCM	• Outside key antenna (rear bumper) • Between BCM – Outside key antenna (rear bumper)

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?

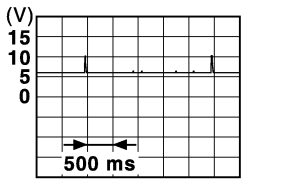
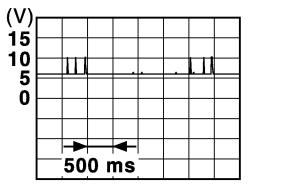
YES >> Refer to DLK-83, "Diagnosis Procedure".
NO >> Inside key antenna (rear bumper) is OK.

Diagnosis Procedure

INFOID:0000000012352674

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)
M123	78 79	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (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 (rear bumper) connector.
2. Check continuity between BCM harness connector and outside key antenna (rear bumper) harness connector.

BCM		Outside key antenna (rear bumper)		Continuity
Connector	Terminal	Connector	Terminal	
M123	82	B63	1	Existed
	83		2	

3. Check continuity between BCM harness connector and ground.

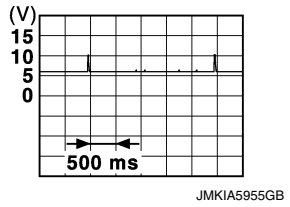
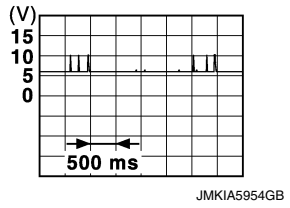
BCM		Ground	Continuity
Connector	Terminal		
M123	82		Not existed
	83		

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

(+) BCM		(–)	Condition		Signal (Reference value)
Connector	Terminal				
M123	78 79	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace outside key antenna (rear bumper).
NO >> Replace BCM. Refer to BCS-95, "Removal and Installation".

POWER SUPPLY AND GROUND CIRCUIT
TRUNK CLOSURE CONTROL UNIT

TRUNK CLOSURE CONTROL UNIT : Diagnosis Procedure

INFOID:0000000012352675

1.CHECK FUSES

1. Turn ignition switch OFF.
2. Check that the following fuses are not blown (open).

Signal name	Fuse No.
Battery power supply	1 (15 A)
	6 (10 A)

Is the fuse blown (open)?

YES >> Replace the blown (open) fuse after repairing the affected circuit.
NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

1. Disconnect trunk closure assembly connector.
2. Check voltage between trunk closure assembly harness connector and ground.

(+)		(−)	Voltage (Approx.)
Trunk closure assembly			
Connector	Terminal		
T14	4	Ground	Battery voltage
	6		

Is the inspection result normal?

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

3.CHECK GROUND CIRCUIT

Check continuity between trunk closure assembly harness connector and ground.

Trunk closure assembly		Ground	Continuity
Connector	Terminal		
T14	2		Existed
	3		

Is the inspection result normal?

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

REAR DOOR CLOSURE CONTROL UNIT

REAR DOOR CLOSURE CONTROL UNIT : Diagnosis Procedure

INFOID:0000000012352676

1.CHECK REAR DOOR CLOSURE CONTROL UNIT POWER SUPPLY

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

(+)		(−)	Voltage (Approx.)
Rear door closure control unit			
Connector	Terminal		

LH	D65	6	Ground	12 V
RH	D85			

Is the inspection result normal?

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

2.CHECK REAR DOOR CLOSURE CONTROL UNIT CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and trunk lid opener request switch harness connector.

BCM		Rear door closure control unit			Continuity
Connector	Terminal	Connector		Terminal	
M122	69	LH	D65	6	Existed
		RH	D85		

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M122	69		Not existed

Is the inspection result normal?

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

3.CHECK GROUND CIRCUIT

Check continuity between rear door closure control unit harness connector and ground.

Rear door closure control unit			Ground	Continuity
Connector		Terminal		
LH	D65	2		Existed
RH	D85			

Is the inspection result normal?

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

DOOR SWITCH

Component Function Check

INFOID:0000000012352677

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 side door LH	Open	On
		Closed	Off
DOOR SW-RR	Rear side door RH	Open	On
		Closed	Off

Is the inspection result normal?

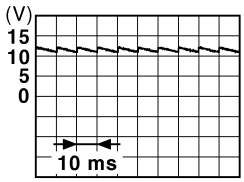
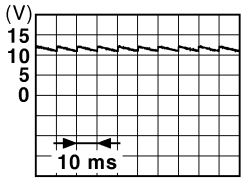
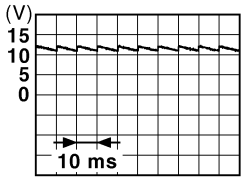
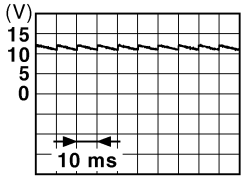
YES >> Door switch is OK.
NO >> Refer to DLK-87, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012352678

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 with oscilloscope.

(+)			(–)	Signal (Reference value)
Door switch				
Connector		Terminal		
Front LH	B16	2	Ground	 JPMIA0011GB
Front RH	B216			 JPMIA0011GB
Rear LH	B23			 JPMIA0011GB
Rear RH	B223			 JPMIA0011GB

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 BCM harness connector and door switch harness connector.

BCM		Door switch		Continuity
Connector	Terminal	Connector	Terminal	
M121	47	B16 (Front LH)	2	Existed
	45	B216 (Front RH)		
	48	B23 (Rear LH)		
	46	B223 (Rear RH)		

3. Check continuity between BCM harness connector and ground.

BCM			
Connector	Terminal	Ground	Continuity
M121	47		Not existed
	45		
	48		
	46		

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Refer to DLK-89, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace malfunctioning door switch.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012352679

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Disconnect malfunction door switch connector.
3. Check continuity between door switch terminals.

Door switch		Condition		Continuity
Terminal				
2	Ground part of door switch	Door switch	Pressed	Not exists
			Released	Exists

Is the inspection result normal?

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

DOOR REQUEST SWITCH

Component Function Check

INFOID:0000000012352680

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 >> Door request switch is OK.
NO >> Refer to DLK-90, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012352681

1.CHECK DOOR REQUEST SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect malfunctioning front outside handle assembly connector.
3. Check voltage between malfunctioning front outside handle assembly harness connector and ground.

(+)			(–)	Voltage (Approx.)
Front outside handle assembly (request switch)				
Connector		Terminal		
LH	D17	1	Ground	12 V
RH	D47			

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 BCM harness connector and malfunctioning front outside handle assembly harness connector.

BCM		Front outside handle assembly (request switch)			Continuity
Connector	Terminal	Connector		Terminal	
M123	75	LH	D17	1	Existed
	76 (Models with steering lock unit)	RH	D47		
	100 (Models without steering lock unit)				

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M123	75	Ground	Not existed
	76 (Models with steering lock unit)		
	100 (Models without steering lock unit)		

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 outside handle assembly harness connector and ground.

Front outside handle assembly (request switch)			Ground	Continuity
Connector		Terminal		
LH	D17	2		Existed
RH	D47			

Is the inspection result normal?

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

4.CHECK DOOR REQUEST SWITCH

Refer to DLK-91, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace malfunctioning front outside handle assembly.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012352682

1.CHECK DOOR REQUEST SWITCH

1. Turn ignition switch OFF.
2. Disconnect front outside handle assembly connector.
3. Check continuing between front outside handle assembly terminal.

Front outside handle assembly (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 front outside handle.

DOOR KEY CYLINDER SWITCH

Component Function Check

INFOID:0000000012352683

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-92, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012352684

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		
D15	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	
D22	15	D15	6	Existed
	16		5	

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

Power window main switch		Ground	Continuity
Connector	Terminal		
D22	15		Not existed
	16		

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-74, "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		
D15	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-93, "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-45, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012352685

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) Terminal		Condition		Continuity
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).

DOOR LOCK AND UNLOCK SWITCH

Component Function Check

INFOID:0000000012352686

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-94, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012352687

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-61, "Diagnosis Procedure".

DOOR LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:0000000012352688

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-95, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000012352689

1.CHECK DOOR LOCK ACTUATOR OUTPUT 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				
D15	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 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	
M122	65	D15	1	Existed
	66		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M122	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				
M122	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:0000000012352690

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-96, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000012352691

1.CHECK DOOR LOCK ACTUATOR OUTPUT 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				
D45	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 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	
M122	59	D45	1	Existed
	65		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M122	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				
M122	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:0000000012352692

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-97, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000012352693

1.CHECK DOOR LOCK ACTUATOR OUTPUT SIGNAL

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

Without rear door auto closure system

(+) Rear door lock assembly LH		(–)	Condition		Voltage (Approx.)
Connector	Terminal				
D55	1	Ground	Door lock and unlock switch	Lock	12 V
	2			Unlock	

With rear door auto closure system

(+) Rear door lock assembly LH		(–)	Condition		Voltage (Approx.)
Connector	Terminal				
D62	1	Ground	Door lock and unlock switch	Lock	12 V
	3			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 connector.
2. Check continuity between BCM harness connector and rear door lock assembly LH harness connector.

Without rear door auto closure system

BCM		Rear door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
M122	55	D55	2	Existed
	65		1	

With rear door auto closure system

BCM		Rear door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
M122	55	D62	3	Existed
	65		1	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M122	55		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.

(+)		(–)	Condition		Voltage (Approx.)
BCM					
Connector	Terminal				
M122	55	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 RH

REAR RH : Component Function Check

INFOID:0000000012352694

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-99, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000012352695

1.CHECK DOOR LOCK ACTUATOR OUTPUT SIGNAL

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

Without rear door auto closure system

(+)		(–)	Condition		Voltage (Approx.)
Rear door lock assembly RH					
Connector	Terminal				
D75	1	Ground	Door lock and unlock switch	Unlock	12 V
	2			Lock	

With rear door auto closure system

(+)		(–)	Condition		Voltage (Approx.)
Rear door lock assembly RH					
Connector	Terminal				
D82	3	Ground	Door lock and unlock switch	Unlock	12 V
	1			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 connector.
2. Check continuity between BCM harness connector and rear door lock assembly RH harness connector.

Without rear door auto closure system

BCM		Rear door lock assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
M122	55	D75	1	Existed
	65		2	

With rear door auto closure system

BCM		Rear door lock assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
M122	55	D82	3	Existed
	65		1	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M122	55		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.

(+)		(–)	Condition		Voltage (Approx.)
BCM					
Connector	Terminal				
M122	55	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".

TRUNK LID OPEN SIGNAL CIRCUIT

Description

INFOID:0000000012352696

BCM transmits trunk lid open request signal to trunk closure assembly to open trunk lid, and trunk closure assembly transmits trunk lid open/close status signal to BCM.

Component Function Check

INFOID:0000000012352697

1.CHECK TRUNK LID OPENER CANCEL SWITCH

Check trunk lid opener cancel switch position.

Does trunk lid opener cancel switch turn OFF (CANCEL)?

YES >> Turn on trunk lid opener cancel switch.
NO >> GO TO 2.

2.CHECK BCM OUTPUT SIGNAL CIRCUIT

1. Turn ignition switch ON.
2. Select “TRUNK/BACK DOOR” in “Active Test” mode of “INTELLIGENT KEY” of “BCM” using CONSULT.
3. Touch “OPEN”.
4. Check that trunk lid opens normally.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Refer to DLK-101, "Diagnosis Procedure".

3.CHECK BCM INPUT SIGNAL CIRCUIT

1. Select “TRNK/HAT MNTR” in “Data Monitor” mode of “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Check that CONSULT display varies according to the trunk lid position.

Monitor item	Condition		Status
TRNK/HAT MNTR	Trunk lid	Open	On
		Closed	Off

Is the inspection result normal?

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

Diagnosis Procedure

INFOID:0000000012352698

1.INSPECTION START

Check that which circuit is malfunctioning. Refer to DLK-101, "Component Function Check".

Which circuit is malfunctioning?

Output signal circuit>>GO TO 2.
Input signal circuit>>GO TO 4.

2.CHECK TRUNK LID OPEN REQUEST SIGNAL

1. Turn ignition switch ON.
2. Select “TRUNK/BACK DOOR” in “Active Test” mode of “INTELLIGENT KEY” of “BCM” using CONSULT.
3. Check voltage between trunk closure assembly harness connector and ground when touching “OPEN”.

(+)		(–)	CONSULT Active Test condition		Voltage (V) (Approx.)
Trunk closure assembly					
Connector	Terminal				
T14	1	Ground	TRUNK/GLASS HATCH	OPEN	0 → 12 → 0

Is the inspection result normal?

YES >> GO TO 6.
NO >> GO TO 3.

3.CHECK TRUNK LID OPEN REQUEST SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect negative battery cable.
3. Disconnect BCM connector.
4. Disconnect trunk closure assembly harness connector.
5. Check continuity between BCM harness connector and trunk closure assembly harness connector.

BCM		Trunk closure assembly		Continuity
Connector	Terminal	Connector	Terminal	
M121	53	T14	1	Existed

6. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M121	53		Not existed

Is the inspection result normal?

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

4.CHECK TRUNK LID OPEN/CLOSE STATUS SIGNAL

1. Check voltage between BCM harness connector and ground under the following conditions.

(+)		(–)	Condition		Voltage (V) (Approx.)
BCM					
Connector	Terminal				
M121	42	Ground	Trunk lid	Open	0
				Closed	12

Is the inspection result normal?

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

5.CHECK TRUNK LID OPEN/CLOSE STATUS SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect negative battery cable.
3. Disconnect BCM connector.
4. Disconnect trunk closure assembly harness connector.
5. Check continuity between BCM harness connector and trunk closure assembly harness connector.

BCM		Trunk closure assembly		Continuity
Connector	Terminal	Connector	Terminal	
M121	42	T14	5	Existed

6. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M121	42		Not existed

Is the inspection result normal?

YES >> Replace trunk closure assembly. Refer to DLK-221, "Removal and Installation".
NO >> Repair harness or connector.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

TRUNK LID OPENER REQUEST SWITCH

Component Function Check

INFOID:0000000012352699

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	Trunk lid opener request switch	Pressed	On
		Released	Off

Is the inspection result normal?

YES >> Trunk lid opener request switch is OK.
NO >> Refer to DLK-104, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012352700

1.CHECK TRUNK LID OPENER REQUEST SWITCH OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect trunk lid opener request switch connector.
3. Check voltage between trunk lid opener request switch harness connector and ground.

(+)		(–)	Voltage (Approx.)
Trunk lid opener request switch			
Connector	Terminal		
T4	1	Ground	12 V

Is the inspection result normal?

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

2.CHECK TRUNK LID OPENER REQUEST SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and trunk lid opener request switch harness connector.

BCM		Trunk lid opener request switch		Continuity
Connector	Terminal	Connector	Terminal	
M121	51	T4	1	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M121	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 TRUNK LID OPENER REQUEST SWITCH GROUND CIRCUIT

Check continuity between trunk lid opener request switch harness connector and ground.

Trunk lid opener request switch		Ground	Continuity
Connector	Terminal		
T4	2		Existed

Is the inspection result normal?

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

4.CHECK TRUNK LID OPENER REQUEST SWITCH

Refer to DLK-105, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace trunk lid opener request switch.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012352701

1.CHECK TRUNK LID OPENER REQUEST SWITCH

1. Turn ignition switch OFF.
2. Disconnect trunk lid opener request switch connector.
3. Check continuing between trunk lid opener request switch terminal.

Trunk lid opener request switch		Condition		Continuity
Terminal				
1	2	Trunk lid opener request switch	Pressed	Existed
			Released	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace trunk lid opener request switch.

TRUNK LID OPENER SWITCH

Component Function Check

INFOID:0000000012352702

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	Trunk lid opener switch	Pressed	On
		Released	Off

Is the inspection result normal?

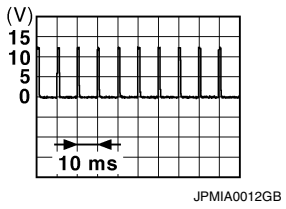
YES >> Trunk lid opener switch is OK.
NO >> Refer to DLK-106, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012352703

1.CHECK TRUNK LID OPENER INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect trunk lid opener switch connector.
3. Check signal between trunk lid opener switch harness connector and ground using oscilloscope.

(+)		(–)	Signal (Reference value)
Trunk lid opener switch			
Connector	Terminal		
M187	1	Ground	

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Is the inspection result normal?

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

2.CHECK TRUNK LID OPENER SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and trunk lid opener switch harness connector.

BCM		Trunk lid opener switch		Continuity
Connector	Terminal	Connector	Terminal	
M120	30	M187	1	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M120	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 TRUNK LID OPENER SWITCH GROUND CIRCUIT

Check continuity between trunk lid opener switch harness connector and ground.

Trunk lid opener switch		Ground	Continuity
Connector	Terminal		
M187	2		Existed

Is the inspection result normal?

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

4.CHECK TRUNK LID OPENER SWITCH

Refer to DLK-107, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace trunk lid opener switch.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012352704

1.CHECK TRUNK LID OPENER SWITCH

1. Turn ignition switch OFF.
2. Disconnect trunk lid opener switch connector.
3. Check continuity between trunk lid opener switch terminals.

Trunk lid opener switch		Condition		Continuity
Terminal				
1	2	Trunk lid opener switch	Pressed	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace trunk lid opener switch.

TRUNK LID OPENER CANCEL SWITCH

Component Function Check

INFOID:0000000012352705

1.CHECK FUNCTION

1. Select “TRUNK” of “BCM” using CONSULT.
2. Select “TR CANCEL SW” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
TR CANCEL SW	Trunk lid opener cancel switch	Pressed	On
		Released	Off

Is the inspection result normal?

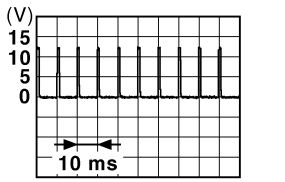
YES >> Trunk lid opener cancel switch is OK.
NO >> Refer to DLK-108, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012352706

1.CHECK TRUNK LID OPENER CANCEL INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect trunk lid opener cancel switch connector.
3. Check signal between trunk lid opener cancel switch harness connector and ground using oscilloscope.

(+)		(–)	Signal (Reference value)
Trunk lid opener cancel switch			
Connector	Terminal		
M18	1	Ground	

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Is the inspection result normal?

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

2.CHECK TRUNK LID OPENER SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and trunk lid opener cancel switch harness connector.

BCM		Trunk lid opener cancel switch		Continuity
Connector	Terminal	Connector	Terminal	
M121	44	M18	1	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M121	44		Not existed

Is the inspection result normal?

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

3.CHECK TRUNK LID OPENER CANCEL SWITCH GROUND CIRCUIT

Check continuity between trunk lid opener cancel switch harness connector and ground.

Trunk lid opener cancel switch		Ground	Continuity
Connector	Terminal		
M18	2		Existed

Is the inspection result normal?

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

4.CHECK TRUNK LID OPENER CANCEL SWITCH

Refer to DLK-109, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace trunk lid opener cancel switch.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012352707

1.CHECK TRUNK LID OPENER CANCEL SWITCH

1. Turn ignition switch OFF.
2. Disconnect trunk lid opener cancel switch connector.
3. Check continuity between trunk lid opener cancel switch terminal.

Trunk lid opener cancel switch		Condition		Continuity
Terminal				
1	2	Trunk lid opener cancel switch	Press and hold	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace trunk lid opener cancel switch.

TRUNK CLOSURE ASSEMBLY

Component Function Check

INFOID:0000000012352708

1.CHECK TRUNK LID OPEN OPERATION

1. Check that trunk lid is fully closed.
2. Check that trunk lid opener cancel switch is turned ON.
3. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
4. Select “TRUNK/GLASS HATCH” in “ACTIVE TEST” mode.
5. Touch “OPEN” to check that trunk lid opens normally.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to DLK-110, "Diagnosis Procedure".

2.CHECK TRUNK LID AUTO CLOSE OPERATION

1. Close trunk lid manually to the half latched position. (Clicking noise is heard.)
2. Check that trunk lid is retracted to the fully closed position and locked.

Is the inspection result normal?

YES >> INSPECTION END
NO >> Refer to DLK-110, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012352709

1.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check trunk closure assembly power supply and ground circuit.
Refer to DLK-85, "TRUNK CLOSURE CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair harness or connector.

2.CHECK TRUNK LID OPEN SIGNAL CIRCUIT

Check trunk lid open signal circuit.
Refer to DLK-101, "Component Function Check".

Is the inspection result normal?

YES >> Replace trunk closure assembly. Refer to DLK-221, "Removal and Installation".
NO >> Repair harness or connector.

FUEL LID LOCK ACTUATOR

Component Function Check

INFOID:0000000012352710

1.CHECK FUNCTION

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “DOOR LOCK” in “ACTIVE TEST” mode.
3. Touch “ALL LCK” 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-111, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012352711

1.CHECK FUEL LID LOCK ACTUATOR INPUT SIGNAL

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

(+)		(–)	Condition		Voltage (Approx.)
Fuel lid lock actuator					
Connector	Terminal				
B242	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 connector.
2. Check continuity between BCM harness connector and all door lock actuator harness connector.

BCM		Fuel lid lock actuator		Continuity
Connector	Terminal	Connector	Terminal	
M122	65	B242	2	Existed
	66		1	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M122	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				
M122	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".

REMOTE KEYLESS ENTRY RECEIVER

Component Function Check

INFOID:0000000012352712

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “RKE OPE COUN1” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition
RKE OPE COUN1	Check whether value changes when operating Intelligent Key

Is the inspection result normal?

YES >> Remote keyless entry receiver is OK.
NO >> Refer to DLK-113, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012352713

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.

(+)		(–)	Voltage (V) (Approx.)
Remote keyless entry receiver			
Connector	Terminal		
M104	4	Ground	5

Is the inspection result normal?

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

2.CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY CIRCUIT

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

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M123	110	M104	4	Existed

3. Check continuity between BCM harness connector and ground.

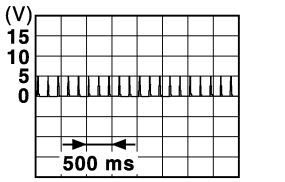
BCM		Ground	Continuity
Connector	Terminal		
M123	110		Not existed

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.

(+)		(–)	Signal (Reference value)
Remote keyless entry receiver			
Connector	Terminal		
M104	4	Ground	

JMKIA3838GB

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace remote keyless entry receiver. Refer to DLK-235, "Removal and Installation".

4. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

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

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M120	18	M104	1	Existed

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M120	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.

(+)		(–)	Voltage (V) (Approx.)
Remote keyless entry receiver			
Connector	Terminal		
M104	2	Ground	5

Is the inspection result normal?

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

6. CHECK REMOTE KEYLESS ENTRY RECEIVER SIGNAL CIRCUIT

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

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M123	71	M104	2	Existed

3. Check continuity between BCM harness connector and ground.

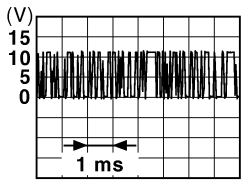
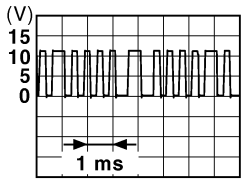
BCM		Ground	Continuity
Connector	Terminal		
M123	71		Not existed

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.

(+)		(–)	Condition	Signal (Reference value)
Remote keyless entry receiver				
Connector	Terminal			
M104	2	Ground	During waiting	 JMKIA0064GB
			When operating either button on the Intelligent Key	 JMKIA0065GB

Is the inspection result normal?

YES >> GO TO 8.
NO >> Replace remote keyless entry receiver. Refer to DLK-235, "Removal and Installation".

8.CHECK BCM SIGNAL 3

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

(+)		(–)	Voltage (V) (Approx.)
Remote keyless entry receiver			
Connector	Terminal		
M104	3	Ground	5

Is the inspection result normal?

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

9.CHECK REMOTE KEYLESS ENTRY RECEIVER RSSI SIGNAL CIRCUIT

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

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M120	22	M104	3	Existed

3. Check continuity between BCM harness connector and ground.

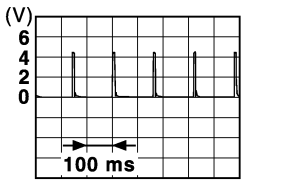
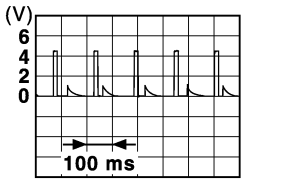
BCM		Ground	Continuity
Connector	Terminal		
M120	22		Not existed

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 SIGNAL

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

(+)		(–)	Condition	Signal (Reference value)
Remote keyless entry receiver				
Connector	Terminal			
M104	3	Ground	During waiting	 JMKIA5952GB
			When pressing and holding either button on Intelligent Key	 JMKIA5953GB

Is the inspection result normal?

YES >> GO TO 11.
NO >> Replace remote keyless entry receiver. Refer to DLK-235, "Removal and Installation".

11. CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

UNLOCK SENSOR

Component Function Check

INFOID:0000000012352714

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?

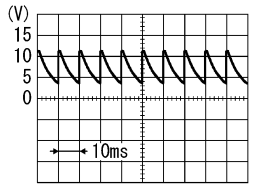
YES >> Unlock sensor is OK.
NO >> Refer to DLK-117, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012352715

1.CHECK BCM OUTPUT 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		
D15	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	
M120	31	D15	3	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M120	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		
D15	4		Existed

Is the inspection result normal?

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

4.CHECK UNLOCK SENSOR

Refer to DLK-118, "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-45, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012352716

1.CHECK UNLOCK SENSOR

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

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

Is the inspection result normal?

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

INTELLIGENT KEY WARNING BUZZER

Component Function Check

INFOID:0000000012352717

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “OUTSIDE BUZZER” in “ACTIVE TEST” mode.
3. Touch “ON” to check that it works normally.

Is the inspection result normal?

YES >> Intelligent Key warning buzzer is OK.
NO >> Refer to DLK-119, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012352718

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10 A fuse, [No.11, 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		
E57	1	Ground	12 V

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	
M123	93	E57	3	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M123	93		Not existed

Is the inspection result normal?

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

4.CHECK INTELLIGENT KEY WARNING BUZZER

Check DLK-120, "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:0000000012352719

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 (engine room).

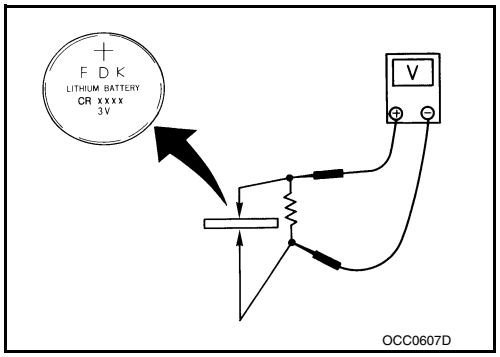
INTELLIGENT KEY BATTERY

Component Inspection

INFOID:0000000012352720

1.CHECK INTELLIGENT KEY BATTERY

Check by connecting a resistance (approximately 300 Ω) so that the current value becomes approximately 10 mA.



Standard : Approx. 2.5 - 3.0 V

Is the measurement value within the specification?

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

INFORMATION DISPLAY

Component Function Check

INFOID:0000000012352721

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-122, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012352722

1.CHECK COMBINATION METER

Refer to MWI-31, "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-45, "Intermittent Incident".

>> INSPECTION END

COMBINATION METER BUZZER

Component Function Check

INFOID:0000000012352723

1.CHECK FUNCTION

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

Is the inspection result normal?

Yes >> Warning buzzer into combination meter is OK.
No >> Refer to DLK-123, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012352724

1.CHECK METER BUZZER CIRCUIT

Refer to WCS-44, "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-45, "Intermittent Incident".

>> INSPECTION END

HAZARD FUNCTION

Component Function Check

INFOID:0000000012352725

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-124, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012352726

1.CHECK HAZARD SWITCH CIRCUIT

Check hazard switch circuit.
Refer to EXL-123, "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-45, "Intermittent Incident".

>> INSPECTION END

REAR DOOR CLOSURE MOTOR

LH

LH : Diagnosis Procedure

INFOID:0000000012352727

1.CHECK REAR DOOR CLOSURE MOTOR INPUT SIGNAL

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

(+)		(–)	Condition		Voltage (Approx.)
Rear door closure motor assembly LH					
Connector	Terminal				
D63	1	Ground	Rear door LH	Close operation	Battery voltage
				Other than above	0 V
	2			Return signal	Battery voltage
				Other than above	0 V

Is the inspection result normal?

YES >> Replace rear door closure motor assembly LH.
NO >> GO TO 2.

2.CHECK REAR DOOR CLOSURE MOTOR CIRCUIT

1. Disconnect rear door closure control unit LH connector.
2. Check continuity between rear door closure control unit LH harness connector and rear door closure motor assembly LH harness connector.

Rear door closure control unit LH		Rear door closure motor assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
D65	3	D63	1	Existed
	9		2	

3. Check continuity between rear door closure control unit LH harness connector and ground.

Rear door closure control unit LH		Ground	Continuity
Connector	Terminal		
D65	3		Not existed
	9		

Is the inspection result normal?

YES >> Replace rear door closure control unit LH. Refer to DLK-237, "Removal and Installation".
NO >> Repair or replace harness.

RH

RH : Diagnosis Procedure

INFOID:0000000012352728

1.CHECK REAR DOOR CLOSURE MOTOR INPUT SIGNAL

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

(+)		(–)	Condition		Voltage (Approx.)
Rear door closure motor assembly RH					
Connector	Terminal				
D83	1	Ground	Rear door RH	Close operation	Battery voltage
				Other than above	0 V
	2			Return signal	Battery voltage
				Other than above	0 V

Is the inspection result normal?

YES >> Replace rear door closure motor assembly RH.
NO >> GO TO 2.

2.CHECK REAR DOOR CLOSURE MOTOR CIRCUIT

1. Disconnect rear door closure control unit RH connector.
2. Check continuity between rear door closure control unit RH harness connector and rear door closure motor assembly RH harness connector.

Rear door closure control unit RH		Rear door closure motor assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
D85	3	D83	1	Existed
	9		2	

3. Check continuity between rear door closure control unit RH harness connector and ground.

Rear door closure control unit RH		Ground	Continuity
Connector	Terminal		
D85	3		Not existed
	9		

Is the inspection result normal?

YES >> Replace rear door closure control unit RH. Refer to DLK-237, "Removal and Installation".
NO >> Repair or replace harness.

NEUTRAL SWITCH

LH

LH : Diagnosis Procedure

INFOID:0000000012352729

1.CHECK NEUTRAL SWITCH INPUT SIGNAL

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

(+)		(–)	Voltage (Approx.)
Rear door closure motor assembly LH			
Connector	Terminal		
D63	3	Ground	5 V

Is the inspection result normal?

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

2.CHECK NEUTRAL SWITCH CIRCUIT

1. Disconnect rear door closure control unit LH connector.
2. Check continuity between rear door closure control unit LH harness connector and rear door closure motor assembly LH harness connector.

Rear door closure control unit LH		Rear door closure motor assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
D65	1	D63	3	Existed

3. Check continuity between rear door closure control unit LH harness connector and ground.

Rear door closure control unit LH		Ground	Continuity
Connector	Terminal		
D65	1		Not existed

Is the inspection result normal?

YES >> Replace rear door closure control unit LH. Refer to DLK-237, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK NEUTRAL SWITCH GROUND CIRCUIT

Check continuity between rear door closure control unit LH harness connector and ground.

Rear door closure motor assembly LH		Ground	Continuity
Connector	Terminal		
D63	4		Existed

Is the inspection result normal?

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

4.CHECK NEUTRAL SWITCH

Refer to DLK-128, "LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace rear door closure motor assembly LH.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

LH : Component Inspection

INFOID:0000000012352730

1.CHECK NEUTRAL SWITCH

1. Turn ignition switch OFF.
2. Disconnect rear door closure motor assembly LH connector.
3. Check continuity between rear door closure motor assembly LH terminals.

Rear door closure motor assembly LH		Condition		Continuity
Terminal				
3	4	Rear door closure motor LH	Neutral position	Not existed
			Other than above	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace rear door closure motor assembly LH.

RH

RH : Diagnosis Procedure

INFOID:0000000012352731

1.CHECK NEUTRAL SWITCH INPUT SIGNAL

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

(+)		(–)	Voltage (Approx.)
Rear door closure motor assembly RH			
Connector	Terminal		
D83	3	Ground	5 V

Is the inspection result normal?

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

2.CHECK NEUTRAL SWITCH CIRCUIT

1. Disconnect rear door closure control unit RH connector.
2. Check continuity between rear door closure control unit RH harness connector and rear door closure motor assembly RH harness connector.

Rear door closure control unit RH		Rear door closure motor assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
D85	1	D83	3	Existed

3. Check continuity between rear door closure control unit RH harness connector and ground.

Rear door closure control unit RH		Ground	Continuity
Connector	Terminal		
D85	1		Not existed

Is the inspection result normal?

YES >> Replace rear door closure control unit RH. Refer to DLK-237, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK NEUTRAL SWITCH GROUND CIRCUIT

Check continuity between rear door closure control unit RH harness connector and ground.

Rear door closure motor assembly RH		Ground	Continuity
Connector	Terminal		
D83	4		Existed

Is the inspection result normal?

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

4.CHECK NEUTRAL SWITCH

Refer to DLK-129, "RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace rear door closure motor assembly RH.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

RH : Component Inspection

INFOID:0000000012352732

1.CHECK NEUTRAL SWITCH

1. Turn ignition switch OFF.
2. Disconnect rear door closure motor assembly RH connector.
3. Check continuity between rear door closure motor assembly RH terminals.

Rear door closure motor assembly RH		Condition		Continuity
Terminal				
3	4	Rear door closure motor RH	Neutral position	Not existed
			Other than above	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace rear door closure motor assembly RH.

HANDLE SWITCH
LH
LH : Diagnosis Procedure

INFOID:0000000012352733

1.CHECK HANDLE SWITCH 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.

(+)		(–)	Voltage (Approx.)
Rear door lock assembly LH			
Connector	Terminal		
D64	2	Ground	5 V

Is the inspection result normal?

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

2.CHECK HANDLE SWITCH CIRCUIT

1. Disconnect rear door closure control unit LH connector.
2. Check continuity between rear door closure control unit LH harness connector and rear door lock assembly LH harness connector.

Rear door closure control unit LH		Rear door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
D65	5	D64	2	Existed

3. Check continuity between rear door closure control unit LH harness connector and ground.

Rear door closure control unit LH		Ground	Continuity
Connector	Terminal		
D65	5		Not existed

Is the inspection result normal?

YES >> Replace rear door closure control unit LH. Refer to DLK-237, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK HANDLE SWITCH GROUND CIRCUIT

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

Rear door lock assembly LH		Ground	Continuity
Connector	Terminal		
D64	1		Existed

Is the inspection result normal?

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

4.CHECK HANDLE SWITCH

Refer to DLK-131, "LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace rear door lock assembly LH.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

LH : Component Inspection

INFOID:0000000012352734

1.CHECK HANDLE SWITCH

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

Rear door lock assembly LH		Condition		Continuity
Terminal				
2	1	Rear door handle LH	Pull	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace rear door lock assembly LH.

RH

RH : Diagnosis Procedure

INFOID:0000000012352735

1.CHECK HANDLE SWITCH 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.

(+)		(–)	Voltage (Approx.)
Rear door lock assembly RH			
Connector	Terminal		
D84	2	Ground	5 V

Is the inspection result normal?

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

2.CHECK HANDLE SWITCH CIRCUIT

1. Disconnect rear door closure control unit RH connector.
2. Check continuity between rear door closure control unit RH harness connector and rear door lock assembly RH harness connector.

Rear door closure control unit RH		Rear door lock assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
D85	5	D84	2	Existed

3. Check continuity between rear door closure control unit RH harness connector and ground.

Rear door closure control unit RH		Ground	Continuity
Connector	Terminal		
D85	5		Not existed

Is the inspection result normal?

YES >> Replace rear door closure control unit RH. Refer to DLK-237, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK HANDLE SWITCH GROUND CIRCUIT

Check voltage between rear door lock assembly RH harness connector and ground.

Rear door lock assembly RH		Ground	Continuity
Connector	Terminal		
D84	1		Existed

Is the inspection result normal?

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

4.CHECK HANDLE SWITCH

Refer to DLK-132, "RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace rear door lock assembly RH.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

RH : Component Inspection

INFOID:0000000012352736

1.CHECK HANDLE SWITCH

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

Rear door lock assembly RH		Condition		Continuity
Terminal				
2	1	Rear door handle RH	Pull	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace rear door lock assembly RH.

OPERATION SWITCH

LH

LH : Diagnosis Procedure

INFOID:0000000012352737

1.CHECK OPERATION SWITCH 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.

(+)		(–)	Voltage (Approx.)
Rear door lock assembly LH			
Connector	Terminal		
D64	3	Ground	5 V

Is the inspection result normal?

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

2.CHECK OPERATION SWITCH CIRCUIT

1. Disconnect rear door closure control unit LH connector.
2. Check continuity between rear door closure control unit LH harness connector and rear door lock assembly LH harness connector.

Rear door closure control unit LH		Rear door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
D65	8	D64	3	Existed

3. Check continuity between rear door closure control unit LH harness connector and ground.

Rear door closure control unit LH		Ground	Continuity
Connector	Terminal		
D65	8		Not existed

Is the inspection result normal?

YES >> Replace rear door closure control unit LH. Refer to DLK-237, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK OPERATION SWITCH GROUND CIRCUIT

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

Rear door lock assembly LH		Ground	Continuity
Connector	Terminal		
D64	1		Existed

Is the inspection result normal?

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

4.CHECK OPERATION SWITCH

Refer to DLK-134, "LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace rear door lock assembly LH.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

LH : Component Inspection

INFOID:0000000012352738

1.CHECK OPERATION SWITCH

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

Rear door lock assembly LH		Condition		Continuity
Terminal				
3	1	Rear door LH	Latch open – less than half latch/ half latch	Existed
			Fully latch/half latch	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace rear door lock assembly LH.

RH

RH : Diagnosis Procedure

INFOID:0000000012352739

1.CHECK OPERATION SWITCH 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.

(+)		(–)	Voltage (Approx.)
Rear door lock assembly RH			
Connector	Terminal		
D84	3	Ground	5 V

Is the inspection result normal?

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

2.CHECK OPERATION SWITCH CIRCUIT

1. Disconnect rear door closure control unit RH connector.
2. Check continuity between rear door closure control unit RH harness connector and rear door lock assembly RH harness connector.

Rear door closure control unit RH		Rear door lock assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
D85	8	D84	3	Existed

3. Check continuity between rear door closure control unit RH harness connector and ground.

Rear door closure control unit RH		Ground	Continuity
Connector	Terminal		
D85	8		Not existed

Is the inspection result normal?

YES >> Replace rear door closure control unit RH. Refer to DLK-237, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK OPERATION SWITCH GROUND CIRCUIT

Check continuity between rear door lock assembly RH harness connector and ground.

Rear door lock assembly RH		Ground	Continuity
Connector	Terminal		
D84	1		Existed

Is the inspection result normal?

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

4.CHECK OPERATION SWITCH

Refer to DLK-135, "RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace rear door lock assembly RH.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

RH : Component Inspection

INFOID:0000000012352740

1.CHECK OPERATION SWITCH

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

Rear door lock assembly RH		Condition		Continuity
Terminal				
3	1	Rear door RH	Latch open – less than half latch/ half latch	Existed
			Fully latch/half latch	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace rear door lock assembly RH.

REVERSE SWITCH
LH
LH : Diagnosis Procedure

INFOID:0000000012352741

1.CHECK REVERSE SWITCH 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.

(+)		(–)	Voltage (Approx.)
Rear door lock assembly LH			
Connector	Terminal		
D64	4	Ground	5 V

Is the inspection result normal?

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

2.CHECK REVERSE SWITCH CIRCUIT

1. Disconnect rear door closure control unit LH connector.
2. Check continuity between rear door closure control unit LH harness connector and rear door lock assembly LH harness connector.

Rear door closure control unit LH		Rear door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
D65	7	D64	4	Existed

3. Check continuity between rear door closure control unit LH harness connector and ground.

Rear door closure control unit LH		Ground	Continuity
Connector	Terminal		
D65	7		Not existed

Is the inspection result normal?

YES >> Replace rear door closure control unit LH. Refer to DLK-237, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK REVERSE SWITCH GROUND CIRCUIT

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

Rear door lock assembly LH		Ground	Continuity
Connector	Terminal		
D64	1		Existed

Is the inspection result normal?

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

4.CHECK REVERSE SWITCH

Refer to DLK-138, "RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace rear door lock assembly LH.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

LH : Component Inspection

INFOID:0000000012352742

1.CHECK REVERSE SWITCH

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

Rear door lock assembly LH		Condition		Continuity
Terminal				
4	1	Rear door LH	Fully close	Not existed
			Other than above	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace rear door lock assembly LH.

RH

RH : Diagnosis Procedure

INFOID:0000000012352743

1.CHECK REVERSE SWITCH 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.

(+)		(–)	Voltage (Approx.)
Rear door lock assembly RH			
Connector	Terminal		
D84	4	Ground	5 V

Is the inspection result normal?

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

2.CHECK REVERSE SWITCH CIRCUIT

1. Disconnect rear door closure control unit RH connector.
2. Check continuity between rear door closure control unit RH harness connector and rear door lock assembly RH harness connector.

Rear door closure control unit RH		Rear door lock assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
D85	7	D84	4	Existed

3. Check continuity between rear door closure control unit RH harness connector and ground.

Rear door closure control unit RH		Ground	Continuity
Connector	Terminal		
D85	7		Not existed

Is the inspection result normal?

YES >> Replace rear door closure control unit RH. Refer to DLK-237, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK REVERSE SWITCH GROUND CIRCUIT

Check continuity between rear door lock assembly RH harness connector and ground.

Rear door lock assembly RH		Ground	Continuity
Connector	Terminal		
D84	1		Existed

Is the inspection result normal?

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

4.CHECK REVERSE SWITCH

Refer to DLK-138, "RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace rear door lock assembly RH.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

RH : Component Inspection

INFOID:0000000012352744

1.CHECK REVERSE SWITCH

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

Rear door lock assembly RH		Condition		Continuity
Terminal				
4	1	Rear door RH	Fully close	Not existed
			Other than above	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace rear door lock assembly RH.

SYMPTOM DIAGNOSIS

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

ALL DOOR

ALL DOOR : Description

INFOID:0000000012352745

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

ALL DOOR : Diagnosis Procedure

INFOID:0000000012352746

1. CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch.
Refer to DLK-94, "Component Function Check"

Is the inspection result normal?

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

2. CHECK DOOR LOCK ACTUATOR CIRCUIT

Check front door lock assembly (driver side).
Refer to DLK-95, "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-45, "Intermittent Incident".

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000012352747

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

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000012352748

1. CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (driver side).
Refer to DLK-95, "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-45, "Intermittent Incident".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000012352749

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

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000012352750

1.CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (passenger side).
Refer to DLK-96, "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-45, "Intermittent Incident".

REAR LH

REAR LH : Description

INFOID:0000000012352751

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

REAR LH : Diagnosis Procedure

INFOID:0000000012352752

1.CHECK DOOR LOCK ACTUATOR

Check rear door lock assembly LH.
Refer to DLK-97, "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-45, "Intermittent Incident".

REAR RH

REAR RH : Description

INFOID:0000000012352753

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

REAR RH : Diagnosis Procedure

INFOID:0000000012352754

1.CHECK DOOR LOCK ACTUATOR

Check rear door lock assembly RH.
Refer to DLK-98, "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-45, "Intermittent Incident".

DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERATION

Diagnosis Procedure

INFOID:0000000012352755

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-139, "ALL DOOR : Diagnosis Procedure".

2.CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.
Refer to DLK-92, "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-45, "Intermittent Incident".

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

ALL DOOR

ALL DOOR : Description

INFOID:0000000012352756

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

ALL DOOR : Diagnosis Procedure

INFOID:0000000012352757

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-145, "Diagnosis Procedure".

2. CHECK “LOCK/UNLOCK BY I-KEY” SETTING IN “WORK SUPPORT”

Check “LOCK/UNLOCK BY I-KEY” in “WORK SUPPORT”.
Refer to DLK-38, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “LOCK/UNLOCK BY I-KEY” in “WORK SUPPORT”.

3. CHECK DOOR SWITCH

Check door switch.
Refer to DLK-87, "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-73, "DTC Logic".
- Console: Refer to DLK-75, "DTC Logic".
- Trunk room: Refer to DLK-77, "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-79, "DTC Logic".
- Passenger side: Refer to DLK-81, "DTC Logic".
- Rear bumper: Refer to DLK-83, "DTC Logic".

Is the inspection result normal?

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

6. REPLACE BCM

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

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000012352758

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

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000012352759

1.CHECK DRIVER SIDE DOOR REQUEST SWITCH

Check driver side door request switch.
Refer to DLK-90, "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-45, "Intermittent Incident".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000012352760

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

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000012352761

1.CHECK PASSENGER SIDE DOOR REQUEST SWITCH

Check passenger side door request switch.
Refer to DLK-90, "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-45, "Intermittent Incident".

DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

Diagnosis Procedure

INFOID:0000000012352762

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-121, "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-139, "ALL DOOR : Diagnosis Procedure".

8.CHECK REMOTE KEYLESS ENTRY RECEIVER

Check remote keyless entry receiver.
Refer to DLK-113, "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-87, "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".

TRUNK LID DOES NOT OPEN

TRUNK LID OPENER SWITCH

TRUNK LID OPENER SWITCH : Description

INFOID:0000000012352763

Trunk lid does not open by trunk lid opener switch operation.

TRUNK LID OPENER SWITCH : Diagnosis Procedure

INFOID:0000000012352764

1.CHECK TRUNK LID OPENER SWITCH CIRCUIT

Check trunk lid opener switch circuit.
Refer to DLK-106, "Component Function Check".

Is the inspection result normal?

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

2.CHECK TRUNK LID OPENER CANCEL SWITCH CIECUIT

Check trunk lid opener cancel switch circuit.
Refer to DLK-108, "Component Function Check".

Is the inspection result normal?

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

3.CHECK TRUNK LID OPEN SIGNAL CIRCUIT

Check trunk lid open signal circuit.
Refer to DLK-101, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.CHECK TRUNK CLOSURE ASSENBLY

Check trunk closure assembly.
Refer to DLK-110, "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-45, "Intermittent Incident".

INTELLIGENT KEY

INTELLIGENT KEY : Description

INFOID:0000000012352765

Trunk lid does not open by Intelligent Key operation.

INTELLIGENT KEY : Diagnosis Procedure

INFOID:0000000012352766

1.CHECK TRUNK LID OPEN FUNCTION

Check trunk lid open function with trunk lid opener switch.

Does trunk lid open with trunk lid opener switch?

YES >> GO TO 2.
NO >> Refer to DLK-147, "TRUNK LID OPENER SWITCH : Diagnosis Procedure".

2.CHECK REMOTE KEYLESS ENTRY FUNCTION

Check remote keyless entry function.

Does door lock/unlock with Intelligent Key button?

YES >> GO TO 3.
NO >> Refer to DLK-145, "Diagnosis Procedure".

3.CHECK INTELLIGENT KEY BATTERY

Check Intelligent Key battery.
Refer to DLK-121, "Component Inspection".

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-45, "Intermittent Incident".

TRUNK LID OPENER REQUEST SWITCH

TRUNK LID OPENER REQUEST SWITCH : Description

INFOID:0000000012352767

Trunk lid does not open by trunk lid opener request switch operation.

TRUNK LID OPENER REQUEST SWITCH : Diagnosis Procedure

INFOID:0000000012352768

1.CHECK TRUNK LID OPEN FUNCTION

Check trunk lid open function with Intelligent Key.

Does trunk lid open with Intelligent Key?

YES >> GO TO 2.
NO >> Refer to DLK-147, "INTELLIGENT KEY : Diagnosis Procedure".

2.CHECK TRUNK LID OPENER REQUEST SWITCH

Check trunk lid opener request switch.
Refer to DLK-104, "Component Function Check".

Is the inspection result normal?

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

3.CHECK OUTSIDE KEY ANTENNA (REAR BUMPER)

Check outside key antenna (rear bumper).
Refer to DLK-83, "DTC Logic".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.CHECK TRUNK LID OPEN SIGNAL CIRCUIT

Check trunk lid open signal circuit.
Refer to DLK-101, "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-45, "Intermittent Incident".

TRUNK LID AUTO CLOSURE SYSTEM DOES NOT OPERATE

OPEN/CLOSURE FUNCTION

OPEN/CLOSURE FUNCTION : Description

INFOID:0000000012352769

Trunk lid auto closure system does not operate when trunk lid opening and closing operations are performed.

OPEN/CLOSURE FUNCTION : Diagnosis Procedure

INFOID:0000000012352770

1.CHECK TRUNK CLOSURE CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT

Check trunk closure control unit power supply and ground circuit.
Refer to DLK-85, "TRUNK CLOSURE CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

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

2.REPLACE TRUNK CLOSURE ASSEMBLY

- Replace trunk closure assembly. Refer to DLK-221, "Removal and Installation".
- Confirm the operation after replacement.

Is the inspection result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

CLOSURE FUNCTION

CLOSURE FUNCTION : Description

INFOID:0000000012352771

Trunk lid auto closure system does not operate when trunk lid closing operation is performed.

CLOSURE FUNCTION : Diagnosis Procedure

INFOID:0000000012352772

1.REPLACE TRUNK CLOSURE ASSEMBLY

- Replace trunk closure assembly. Refer to DLK-221, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

OPEN FUNCTION

OPEN FUNCTION : Description

INFOID:0000000012352773

Trunk lid auto closure system does not operate when trunk lid opening operation is performed.

OPEN FUNCTION : Diagnosis Procedure

INFOID:0000000012352774

1.CHECK TRUNK LID OPEN SIGNAL CIRCUIT

Check trunk lid open signal circuit.
Refer to DLK-101, "Component Function Check".

Is the inspection result normal?

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

2.REPLACE TRUNK CLOSURE ASSEMBLY

- Replace trunk closure assembly. Refer to DLK-221, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

FUEL LID LOCK ACTUATOR DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012352775

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-139, "ALL DOOR : Diagnosis Procedure".

2.CHECK FUEL LID LOCK ACTUATOR

Check fuel lid lock actuator.
Refer to DLK-111, "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-45, "Intermittent Incident".

IGNITION POSITION WARNING FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012352776

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-139, "ALL DOOR : Diagnosis Procedure".

2.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-87, "Component Function Check".

Is the inspection result normal?

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

3.CHECK TRUNK LID OPEN SIGNAL CIRCUIT

Check trunk lid open signal circuit.
Refer to DLK-101, "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-45, "Intermittent Incident".

SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012352777

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-36, "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-45, "Intermittent Incident".

VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012352778

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-36, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “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-36, "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-45, "Intermittent Incident".

IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012352779

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-36, "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-36, "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-45, "Intermittent Incident".

P RANGE INTERLOCK DOOR LOCK/UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012352780

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-36, "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-36, "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-36, "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-45, "Intermittent Incident".

AUTO DOOR LOCK OPERATION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012352781

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-38, "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-45, "Intermittent Incident".

HAZARD AND HORN REMINDER DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012352782

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-38, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “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” setting in “WORK SUPPORT”.
   Refer to DLK-38, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “On” in “HORN WITH KEYLESS LOCK”.

3. CHECK HAZARD FUNCTION

Check hazard function.
Refer to DLK-124, "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-110, "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-45, "Intermittent Incident".

HAZARD AND BUZZER REMINDER DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012352783

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-38, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “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-38, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “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-38, "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-124, "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-119, "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-45, "Intermittent Incident".

KEY REMINDER FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012352784

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-38, "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-73, "DTC Logic".
- Console: Refer to DLK-75, "DTC Logic".
- Trunk room: Refer to DLK-77, "DTC Logic".

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-87, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.CHECK TRUNK LID OPEN SIGNAL CIRCUIT

Check trunk lid open signal circuit.
Refer to DLK-101, "Component Function Check".

Is the inspection result normal?

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

5.CHECK UNLOCK SENSOR

Check unlock sensor.
Refer to DLK-117, "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-45, "Intermittent Incident".

WELCOME LIGHT FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012352785

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-38, "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-38, "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-73, "DTC Logic".
- Console: Refer to DLK-75, "DTC Logic".
- Trunk room: Refer to DLK-77, "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-79, "DTC Logic".
- Passenger side: Refer to DLK-81, "DTC Logic".
- Rear bumper: Refer to DLK-83, "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-145, "Diagnosis Procedure".

6.CHECK INTERIOR ROOM LAMP CONTROL SYSTEM

Check interior room lamp control system. Refer to INL-9, "INTERIOR ROOM LAMP CONTROL SYSTEM : System Description".

Does the room lamp and puddle lamp turn ON?

YES >> GO TO 7.
NO >> Refer to INL-72, "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-45, "Intermittent Incident".

OFF POSITION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012352786

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-123, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
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 DOOR SWITCH

Check door switch (driver side).
Refer to DLK-87, "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-45, "Intermittent Incident".

P POSITION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012352787

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 WARNING BUZZER

Check Intelligent Key warning buzzer.
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-123, "Component Function Check".

Is the inspection result normal?

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

5.CHECK DOOR SWITCH

Check door switch (driver side).
Refer to DLK-87, "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-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-45, "Intermittent Incident".

ACC WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012352788

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-123, "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-122, "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-45, "Intermittent Incident".

TAKE AWAY WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012352789

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 door switch.
Refer to DLK-87, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.CHECK TRUNK LID OPEN SIGNAL CIRCUIT

Check trunk lid open signal circuit.
Refer to DLK-101, "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-123, "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-122, "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-119, "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-45, "Intermittent Incident".

INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012352790

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” using CONSULT.
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-38, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Set “ON” setting in “WORK SUPPORT”.

4.CHECK INTELLIGENT KEY BATTERY

Check Intelligent Key battery.
Refer to DLK-121, "Component Inspection".

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-122, "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-45, "Intermittent Incident".

DOOR LOCK OPERATION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012352791

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-143, "ALL DOOR : Diagnosis Procedure".

2.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-119, "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-45, "Intermittent Incident".

KEY ID WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012352792

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-121, "Component Inspection".

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-122, "Component Function Check".

Is the inspection result normal?

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

5.CHECK INSIDE KEY ANTENNA

Check inside key antenna.
- Instrument center: Refer to DLK-73, "DTC Logic".
- Console: Refer to DLK-75, "DTC Logic".
- Trunk room: Refer to DLK-77, "DTC Logic".

Is the inspection result normal?

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

6.REPLACE BCM

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

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

REAR DOOR AUTO CLOSURE SYSTEM DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012352793

1.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check rear door closure control unit power supply and ground circuit.
Refer to DLK-85, "REAR DOOR CLOSURE CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

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

2.CHECK REAR DOOR CLOSURE MOTOR

Check rear door closure motor.
Refer to DLK-125, "LH : Diagnosis Procedure" (LH) or DLK-125, "RH : Diagnosis Procedure" (RH).

Is the inspection result normal?

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

3.CHECK NEUTRAL SWITCH

Check neutral switch.
Refer to DLK-127, "LH : Diagnosis Procedure" (LH) or DLK-128, "RH : Diagnosis Procedure" (RH).

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.CHECK HANDLE SWITCH

Check handle switch.
Refer to DLK-130, "LH : Diagnosis Procedure" (LH) or DLK-131, "RH : Diagnosis Procedure" (RH).

Is the inspection result normal?

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

5.CHECK OPERATION SWITCH

Check operation switch.
Refer to DLK-133, "LH : Diagnosis Procedure" (LH) or DLK-134, "RH : Diagnosis Procedure" (RH).

Is the inspection result normal?

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

6.CHECK REVERSE SWITCH

Check reverse switch.
Refer to DLK-136, "LH : Diagnosis Procedure" (LH) or DLK-137, "RH : Diagnosis Procedure" (RH).

Is the inspection result normal?

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

7.REPLACE REAR DOOR CLOSURE CONTROL UNIT

1. Replace rear door closure control unit.
2. Confirm the operation after replacement.

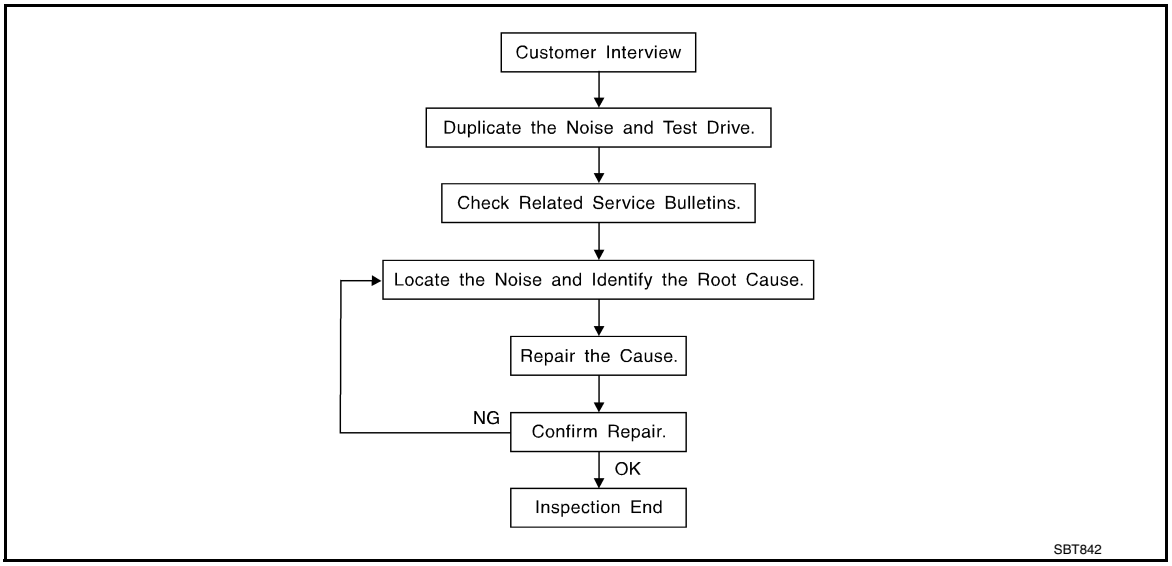
Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000012352794



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-176, "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-174, "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 on 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:0000000012352795

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

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. The 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:
   Never use silicone spray to isolate a squeak or rattle. If the area is saturated with silicone, the recheck of repair becomes impossible.

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 following:

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. The areas can usually be insulated with felt cloth tape or insulator foam blocks from the Nissan Squeak and Rattle Kit (J-50397) to repair the noise.

TRUNK

Trunk noises are often caused by a loose jack or loose items put into the trunk by the customer.
In addition look for the following:

1. Trunk lid dumpers out of adjustment
2. Trunk lid striker out of adjustment
3. The trunk lid torsion bars knocking together
4. A loose license plate or bracket

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

SUNROOF/HEADLINING

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

1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
2. 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's important to note the position the seats in and the load placed on the seat when the noise occurs. These conditions should be duplicated when verifying and isolating the cause of the noise.
Cause of seat noise include:

1. Headrest rods and holder
2. A squeak between the seat pad cushion and frame
3. The rear seatback lock and bracket

These noises can be isolated by moving or pressing on the suspected components while duplicating the conditions under which the noise occurs.Most of these incidents can be repaired by repositioning the component or applying urethane tape to the contact area.

UNDERHOOD

Some interior noise may be caused by components under the hood or on the engine wall. The noise is then transmitted into the passenger compartment.
Causes of transmitted underhood noise include:

1. Any component 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

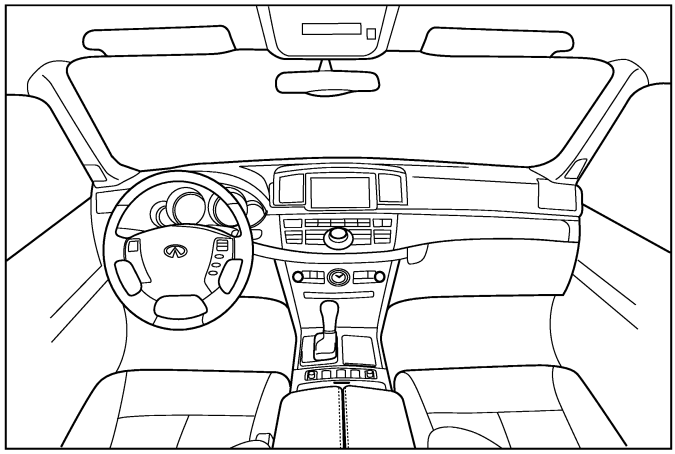
INFOID:0000000012352796

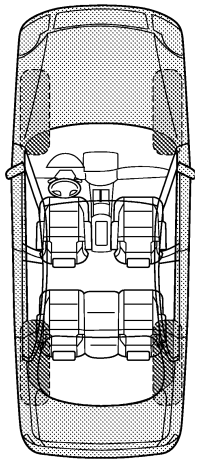
INFINITI

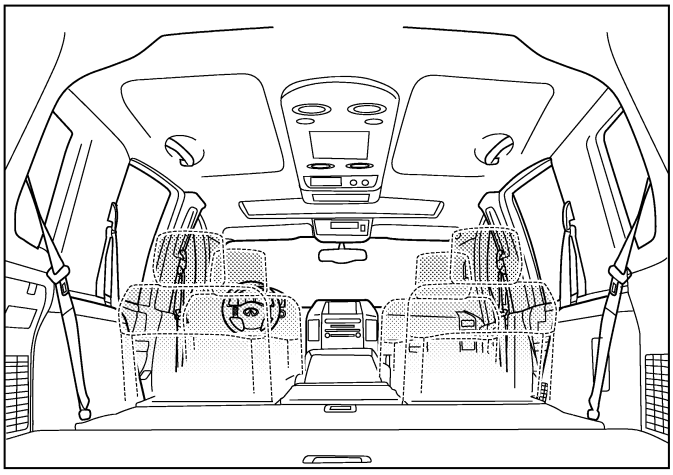
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

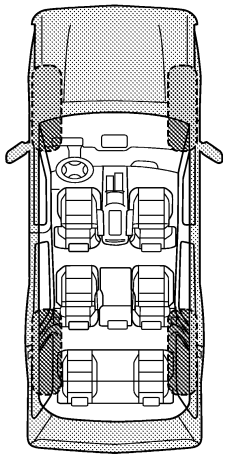
Dear Infiniti Customer:
We are concerned about your satisfaction with your Infiniti vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Infiniti right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under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

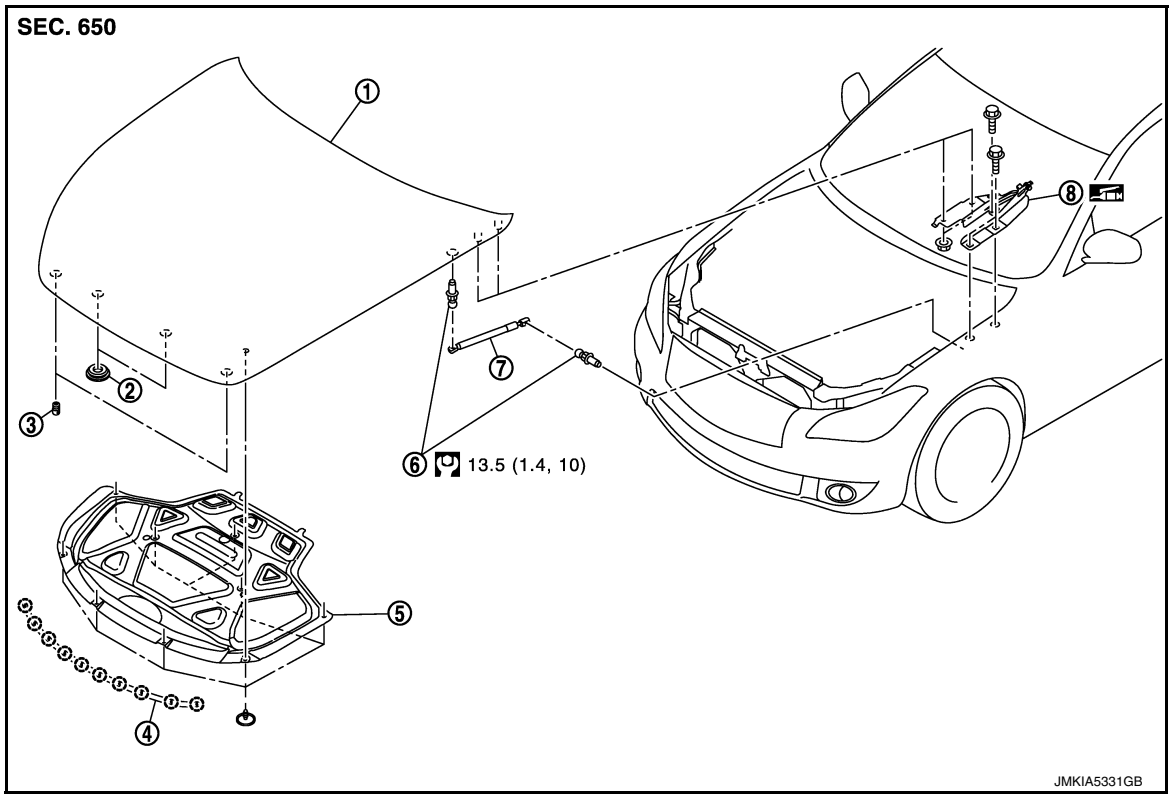
PIIB8742E

REMOVAL AND INSTALLATION

HOOD

Exploded View

INFOID:0000000012352797



1. Hood assembly
2. Grommet
3. Bumper rubber
4. Radiator core seal
5. Hood insulator
6. Stud ball
7. Hood stay
8. Hood hinge

: Clip

: Body grease

: N·m (kg-m, ft-lb)

HOOD ASSEMBLY

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000012352798

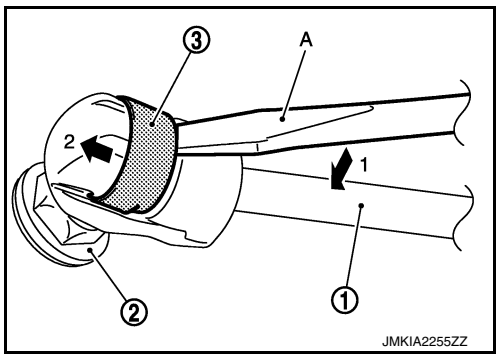
CAUTION:
Operate with 2 workers, because of its heavy weight.

REMOVAL

1. Remove washer nozzle (LH and RH) and washer tube. Refer to WW-52, "Removal and Installation".
2. Support hood lock assembly with a proper material to prevent it from falling.

   WARNING:
   Body injury may occur if no supporting rod is holding the hood open when removing the hood stay.

3. 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).



4. Disengage the stud ball from the hood stay (hood side).
5. Remove hood hinge mounting nuts on the hood to remove the hood assembly.
6. Remove following parts after removing the hood assembly.
   - Radiator core seal
   - Hood insulator
   - Hood bumper rubber
   - Hood striker

INSTALLATION

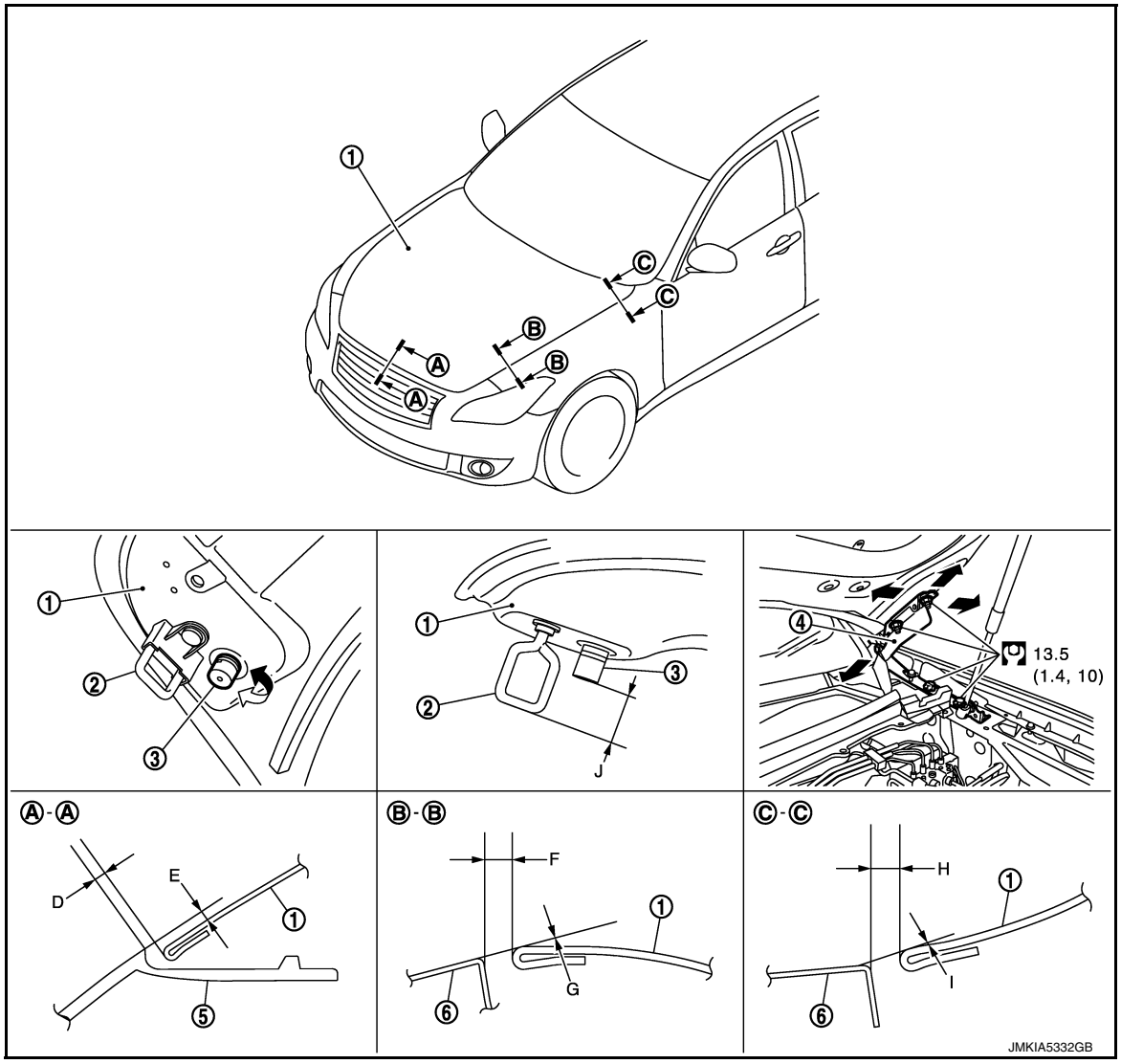
Note the following item, and install in the reverse order of removal.

CAUTION:

- **Before installing hood hinge, apply anticorrosive agent onto the mounting surface of the vehicle body.**
- **After installing, perform hood fitting adjustment. Refer to DLK-180, "HOOD ASSEMBLY : Adjustment".**
- **After installing, perform front washer nozzle and tube inspection and adjustment. Refer to WW-53, "Inspection and Adjustment".**

HOOD ASSEMBLY : Adjustment

INFOID:0000000012352799



1. Hood assembly
2. Hood striker
3. Hood bumper rubber
4. Hood hinge
5. Front bumper fascia
6. Front fender

: N·m (kg-m, ft-lb)

Check the clearance and the surface height between hood and each part visually and by touching. (Fitting standard dimension in the table below should be satisfied.
If the clearance and the surface height are out of specification, adjust them according to the procedures shown below.

Portion				Standard	Difference (LH/RH, MAX)
Hood – Bumper fascia	A – A	D	Clearance	1.7 – 5.3 mm (0.067 – 0.209 in)	2.0 mm (0.079 in)
		E	Surface height	(–0.5) – (+2.5) mm [(–0.020) – (+0.098) in]	2.0 mm (0.079 in)

Portion				Standard	Difference (LH/RH, MAX)
Hood – Fender	B – B	F	Clearance	2.5 – 4.5 mm (0.098 – 0.177 in)	1.0 mm (0.039 in)
		G	Surface height	(–1.5) – (+1.5) mm [(–0.059) – (+0.059) in]	—
	C – C	H	Clearance	2.5 – 4.5 mm (0.098 – 0.177 in)	1.0 mm (0.039 in)
		I	Surface height	(–1.5) – (+1.5) mm [(–0.059) – (+0.059) in]	—
Hood striker – Bumper rubber	—	J	Clearance	32.0 – 36.0 mm (1.260 – 1.417 in)	—

1. Remove striker and adjust the surface height of hood, front bumper fascia and front fender according to the fitting standard dimension, by rotating hood bumper rubbers.
2. Adjust the height difference of striker, hood bumper rubber according to the fitting standard dimension.
3. Loosen hood hinge mounting nuts on the hood.
4. Adjust the clearance of hood, front bumper fascia, front grill and front fender according to the fitting standard dimension, for the hood.
5. Check that hood lock secondary latch is securely engaged with striker by dropping hood from approximately 200 mm (7.874 in) height or pressing lightly on the hood.
   CAUTION:
   Never drop hood from a height of 300 mm (11.811 in) or more.
6. Install as static closing face of hood is 94 – 490 N·m (9.6 – 50.0 kg-m).
   NOTE:
   • Exercise vertical force on right side and left side of hood lock.
   • Never press simultaneously both sides.
7. After adjustment tighten hood hinge mounting nuts to the specified torque.

HOOD HINGE

HOOD HINGE : Removal and Installation

INFOID:0000000012352800

REMOVAL

1. Remove hood assembly. Refer to DLK-178, "HOOD ASSEMBLY : Removal and Installation".
2. Remove front fender cover. Refer to EXT-23, "Exploded View".
3. Remove brake master cylinder cover, battery cover, and hood ledge cover (LH and RH). Refer to EXT-23, "Exploded View".
4. Remove clips of hood seal, and then remove hood seal assembly (side). Refer to DLK-186, "Exploded View".
5. Remove front fender mounting bolt.
6. Remove hood hinge mounting bolts, and then remove hood hinge.

INSTALLATION

Note the following item, and install in the reverse order of removal.

CAUTION:

- **Before installation of hood hinge, apply anticorrosive agent onto the surface of the vehicle body.**
- **Before installation of hood hinge, drop genuine high strength locking sealant or equivalent into bolt hole of hood hinge (body side).**
- **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-180, "HOOD ASSEMBLY : Adjustment".**

HOOD STAY

HOOD STAY : Removal and Installation

INFOID:0000000012352801

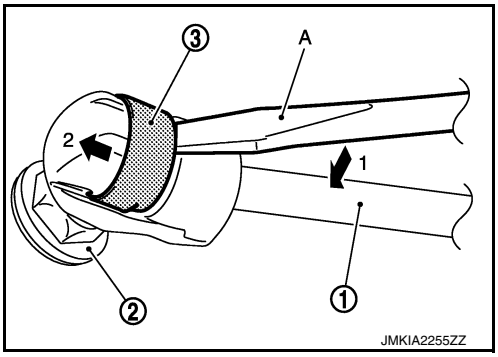
REMOVAL

1. Support hood lock assembly with a proper material to prevent it from falling.

   WARNING:

   Body injury may occur if no supporting rod 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.

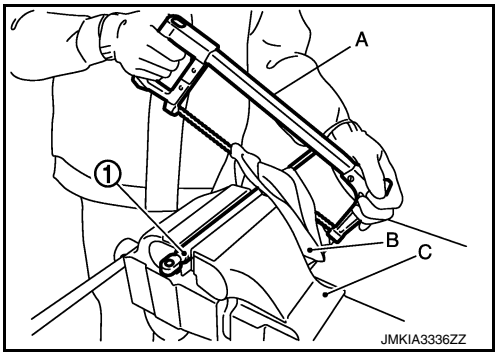
HOOD STAY : Disposal

INFOID:0000000012352802

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.

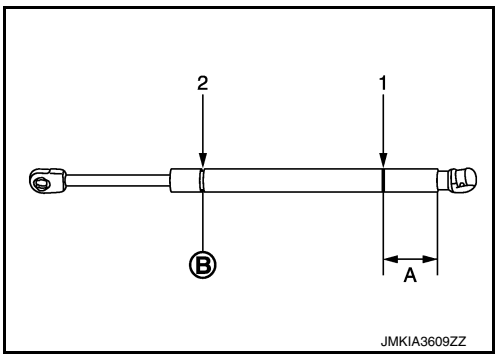
   CAUTION:

   - **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: 20.0 mm (0.787 in)

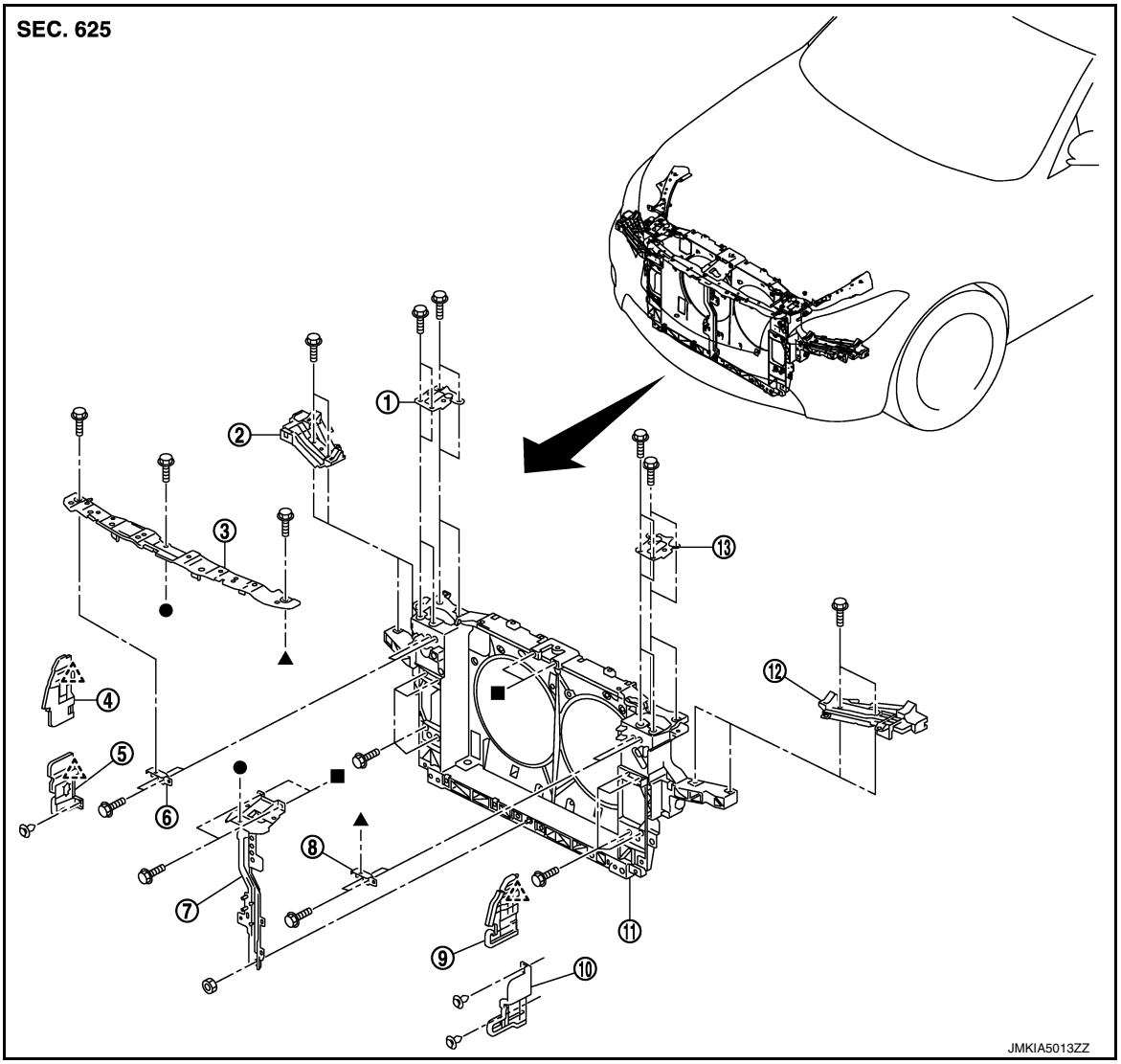
B: Cut at the groove.



RADIATOR CORE SUPPORT

Exploded View

INFOID:0000000012352803



1. Hood lock bracket RH
2. Head lamp bracket RH
3. Front bumper upper retainer
4. Condenser side seal upper RH
5. Condenser side seal lower RH
6. Front bumper side retainer RH
7. Hood lock support stay
8. Front bumper side retainer LH
9. Condenser side seal upper LH
10. Condenser side seal lower LH
11. Radiator core support assembly
12. Head lamp bracket LH
13. Hood lock bracket LH

△ : Pawl

●, ▲, ■: Indicates that the part is connected at points with same symbol in actual vehicle.

Removal and Installation

INFOID:0000000012352804

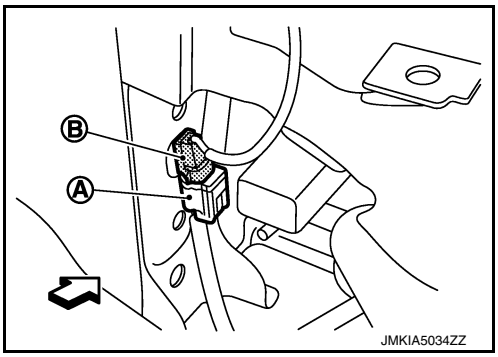
REMOVAL

1. Remove brake master cylinder cover, battery cover, and hood ledge cover (LH and RH). Refer to EXT-23, "Exploded View".
2. Use a refrigerant collecting equipment to discharge the refrigerant. Refer to HA-21, "Recycle Refrigerant".
3. Remove engine under cover. Refer to EXT-32, "ENGINE UNDER COVER : Removal and Installation".
4. Drain engine coolant from radiator.

- VQ engine models: Refer to CO-11, "Draining".
- VK engine models: Refer to CO-39, "Draining".

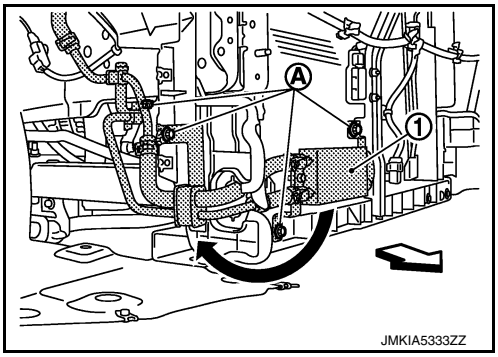
5. Remove air duct (inlet) assembly.
   - VQ engine models: Refer to EM-29, "Removal and Installation".
   - VK engine models: Refer to EM-192, "Removal and Installation".
6. Remove front bumper fascia, energy absorber, and reinforcement. Refer to EXT-16, "Removal and Installation".
7. Remove front combination lamp (LH and RH). Refer to EXL-137, "Removal and Installation".
8. Remove head lamp bracket.
   1. Disconnect harness connector of Intelligent Key warning buzzer.
   2. Remove mounting bolts and remove head lamp bracket.
9. Remove washer tank. Refer to WW-49, "Removal and Installation".
10. Remove mounting bolts and remove hood lock bracket (LH and RH).
    1. Remove hood lock control cable (front) fixing clips from hood lock support stay and condenser upper bracket. Refer to DLK-205, "Exploded View".
    2. Remove hood lock control cable (front) from tube clip of front bumper upper retainer. Refer to DLK-205, "Exploded View".
    3. Remove hood lock bracket mounting bolts.
    4. Remove air cleaner assembly (VK engine models only). Refer to EM-192, "Removal and Installation".
    5. Disconnect harness connector (A), and then remove hood lock switch harness connector (B) from vehicle.

       ⇦ : Vehicle front



    6. Move hood lock bracket to a location where it does not inhibit work.
11. Remove horn (HIGH and LOW). Refer to HRN-7, "Removal and Installation".
12. Disconnect harness connector of refrigerant pressure sensor. Refer to HA-42, "REFRIGERANT PRESSURE SENSOR : Removal and Installation".
13. Disconnect harness connector of ambient sensor. Refer to HAC-127, "Removal and Installation".
14. Remove ICC sensor integrated unit (with intelligent cruise control model). Refer to CCS-133, "Removal and Installation".
15. Move power steering oil cooler to a location where it does not inhibit work.
    1. Remove under side cover RH. Refer to EXT-26, "FENDER PROTECTOR : Exploded View".
    2. Remove mounting bolts (A) and remove power steering oil cooler (1).
    3. Remove power steering oil cooler as show in the figure.

       ⇦ : Vehicle front



16. Remove condenser pipe assembly. Refer to HA-41, "CONDENSER PIPE ASSEMBLY : Removal and Installation".
17. Remove radiator reservoir tank.
    - VQ engine models: Refer to CO-16, "Exploded View".
    - VK engine models: Refer to CO-45, "Exploded View".
18. Remove radiator hose (upper) and radiator hose (lower) at radiator side.
    - VQ engine models: Refer to CO-17, "Removal and Installation".

- VK engine models: Refer to CO-45, "Removal and Installation".

19. Disconnect AT fluid cooler hose (A and B) from fan shroud and remove AT fluid cooler hose (A and B) from radiator.
    - VQ engine (2WD) models: Refer to TM-215, "VQ37VHR (2WD) : Removal and Installation".
    - VQ engine (AWD) models: Refer to TM-217, "VQ37VHR (AWD) : Removal and Installation".
    - VK engine (2WD) models: Refer to TM-219, "VK56VD (2WD) : Removal and Installation".
    - VK engine (AWD) models: Refer to TM-222, "VK56VD (AWD) : Removal and Installation".
20. Disconnect harness connector of cooling fan control modules.
    - VQ engine models: Refer to CO-21, "Removal and Installation".
    - VK engine models: Refer to CO-49, "Removal and Installation".
21. Disconnect harness connector of crash zone sensor. Refer to SR-21, "Removal and Installation".
22. Remove harness fixing clips from the following components.
    - Front bumper upper retainer
    - Hood lock support stay
    - Cooling fan assembly
    - Radiator core support assembly
23. Remove mounting bolts, and then remove radiator core support assembly.
    CAUTION:
    Operate with two workers, because of its heavy weight.
24. Remove the following parts after removing radiator core support assembly.
    - Front bumper upper retainer
    - Front bumper side retainer (LH and RH)
    - Hood lock support stay
    - condenser assembly: Refer to HA-40, "CONDENSER : Removal and Installation".
    - Crash zone sensor: Refer to SR-21, "Removal and Installation".
    - Cooling fan assembly
    - VQ engine models: Refer to CO-21, "Removal and Installation".
    - VK engine models: Refer to CO-49, "Removal and Installation".
    - Remove radiator.
    - VQ engine models: Refer to CO-17, "Removal and Installation".
    - VK engine models: Refer to CO-45, "Removal and Installation".
    - Condenser side seal upper and lower

INSTALLATION

Note the following item, and install in the reverse order of removal.

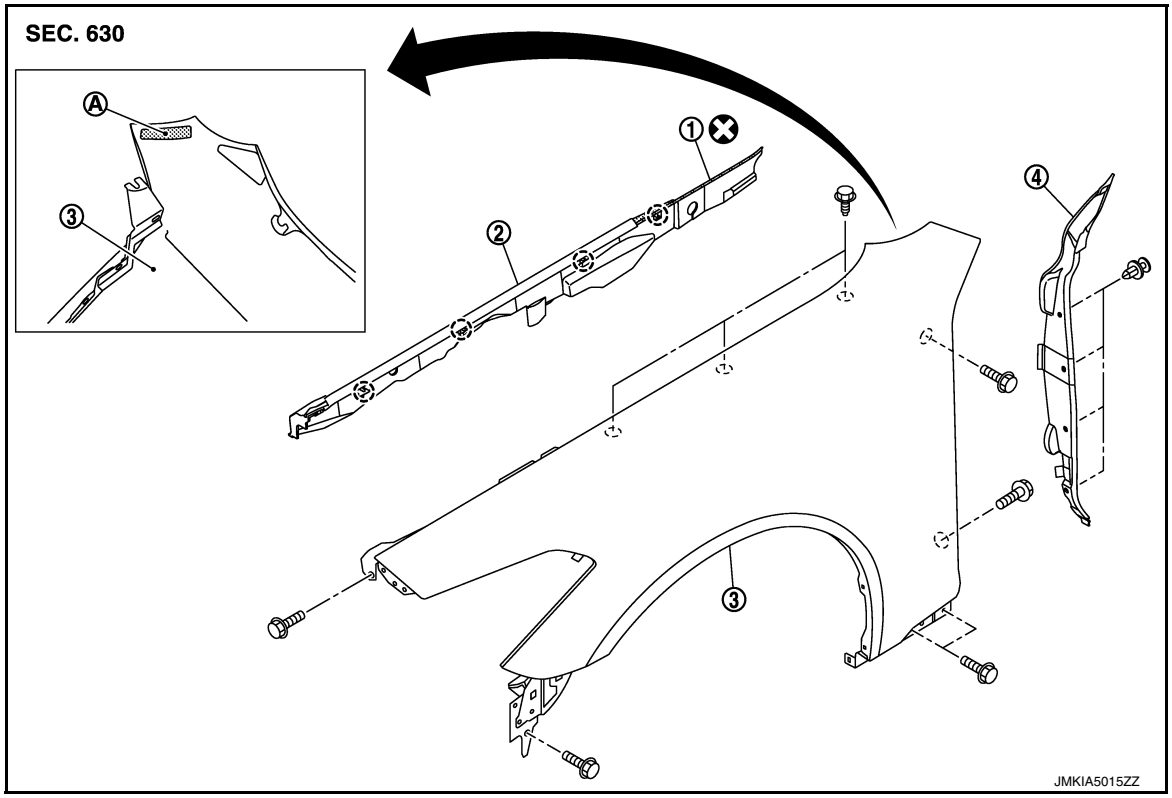
CAUTION:

- **Replenish the following parts.**
- **Refrigerant: Refer to HA-21, "Charge Refrigerant".**
- **Engine coolant (VQ engine models): Refer to CO-11, "Refilling".**
- **Engine coolant (VK engine models): Refer to CO-40, "Refilling".**
- **AT fluid: Refer to TM-182, "Changing".**
- **Power steering oil: Refer to ST-30, "Inspection".**
- **Adjust the following parts.**
- **Front combination lamp: Refer to EXL-133, "Aiming Adjustment Procedure".**
- **ICC sensor integrated unit (with intelligent cruise control model): Refer to CCS-81, "TYPE 1 : Description" (TYPE 1) or CCS-85, "TYPE 2 : Description" (TYPE 2).**

FRONT FENDER

Exploded View

INFOID:0000000012352805



1. Double-faced adhesive tape 2.0 mm (0.079 in)
2. Hood seal assembly (side)
3. Front fender assembly
4. Front fender baffle

: Clip

: Always replace after every disassembly

CAUTION:
A viscous urethane foam (A) is installed on the back surface of front fender. When removing the front fender, peel of the urethane foam bit at a time, and carefully to remove it.

Removal and Installation

INFOID:0000000012352806

CAUTION:
Use a shop cloth to protect the body from being damaged during removal and installation.

REMOVAL

1. Remove front fender cover (RH and LH): Refer to EXT-23, "Exploded View".
2. Remove brake master cylinder cover, battery cover, hood ledge cover (LH and RH). Refer to EXT-23, "Exploded View".
3. Remove hood seal assembly (side).
4. Remove air duct (inlet).
   - VQ37: Refer to EM-29, "Removal and Installation".
   - VK56: Refer to EM-192, "Removal and Installation".
5. Remove front bumper fascia. Refer to EXT-16, "Removal and Installation".
6. Remove front combination lamp. Refer to EXL-137, "Removal and Installation".
7. Remove fender protector. Refer to EXT-26, "FENDER PROTECTOR : Removal and Installation".
8. Remove front door assembly. Refer to DLK-188, "DOOR ASSEMBLY : Removal and Installation".

9. Remove front fender baffle.
10. Remove front fender mounting bolts, and then remove front fender.

INSTALLATION

Note the following item, and install in the reverse order of removal.

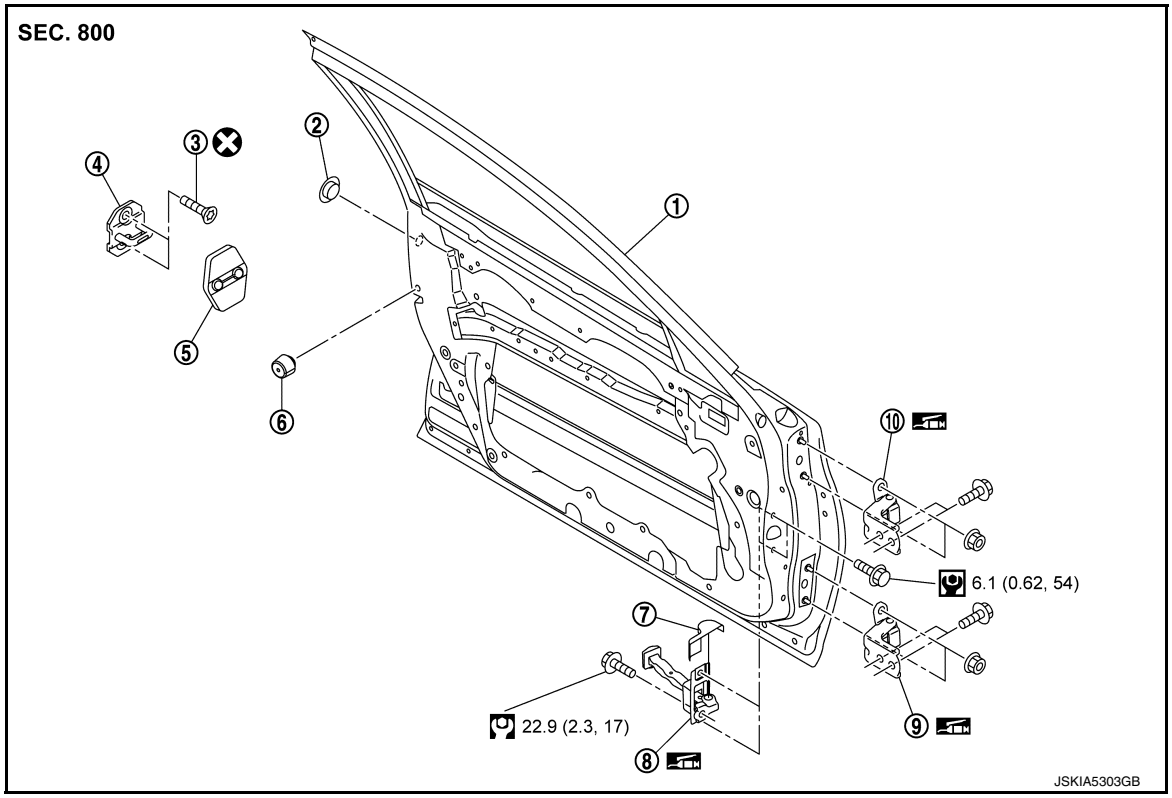
CAUTION:

- **After installation, check front fender adjustment.**
  - **Hood side: Refer to DLK-180, "HOOD ASSEMBLY : Adjustment".**
  - **Front door side: Refer to DLK-190, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply the touch-up paint (the body color) onto the head of front fender mounting bolts.**
- **Adjust the following part.**
  - **Front combination lamp: Refer to EXL-133, "Aiming Adjustment Procedure".**

FRONT DOOR

Exploded View

INFOID:0000000012352807



1. Front door panel
2. Grommet
3. TORX bolt
4. Door striker
5. Door striker cover
6. Bumper rubber
7. Check link cover
8. Door check link
9. Door hinge (lower)
10. Door hinge (upper)

: Always replace after every disassembly

: Body grease

: N·m (kg-m, ft-lb)

: N·m (kg-m, in-lb)

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000012352808

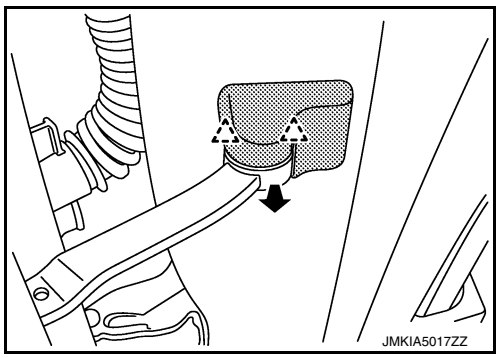
CAUTION:

- **Perform work with 2 workers, because of its heavy weight.**
- **When removing and installing front door assembly, support door with a jack and cloth to protect door and body.**

REMOVAL

1. Remove check link cover toward vehicle rear.

: Pawl



2. Remove mounting bolts of door check link on the vehicle.
3. Disconnect front door harness connector.
4. Remove door hinge mounting nuts (door side), and then remove door assembly.
   NOTE:
   Adjustment of front door for installation is not necessary if front door assembly is removed by removing door hinge mounting nuts.

INSTALLATION

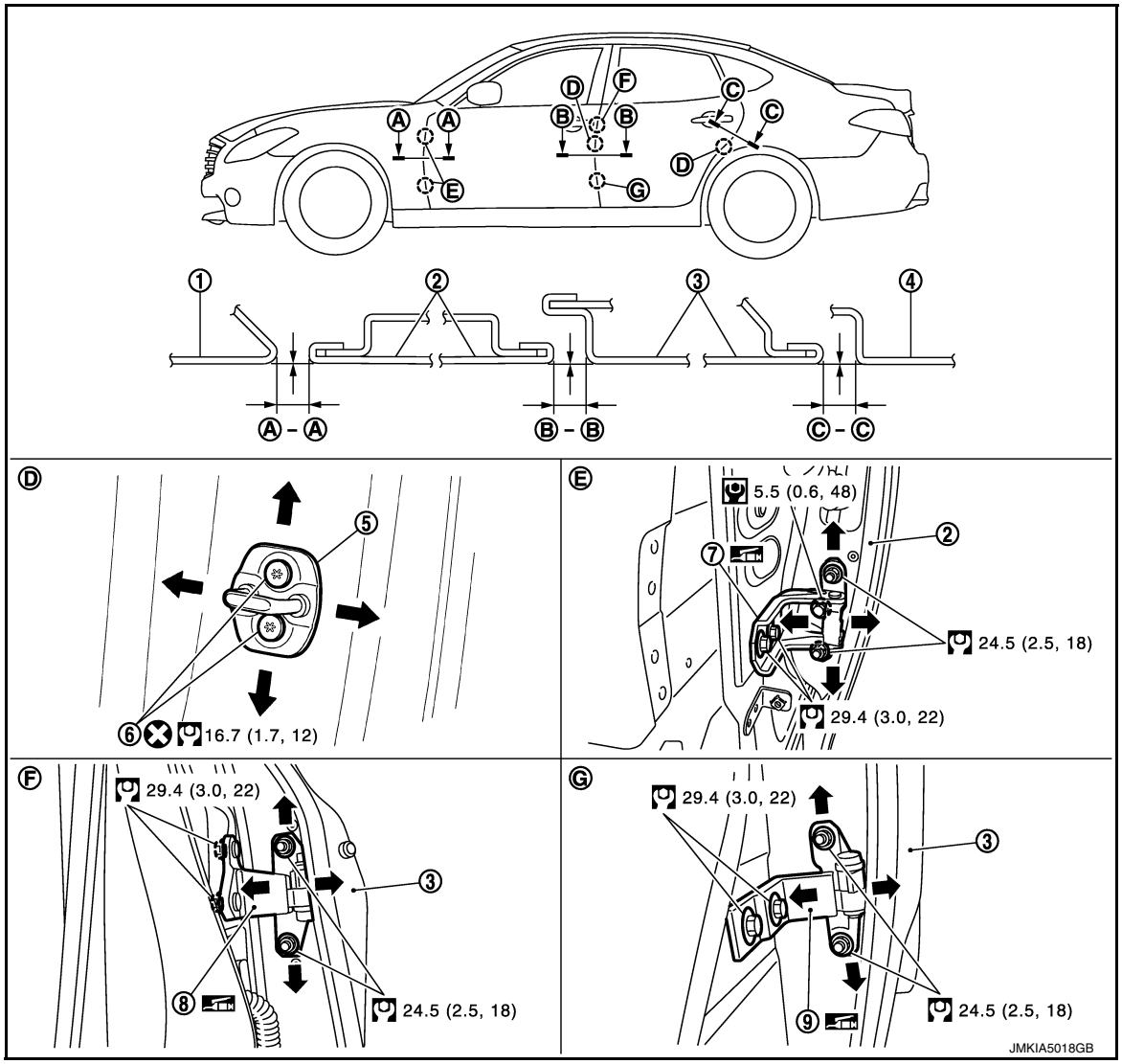
Note the following item, and install in the reverse order of removal.

CAUTION:

- **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-190, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.**

DOOR ASSEMBLY : Adjustment

INFOID:0000000012352809



1. Front fender
2. Front door
3. Rear door
4. Body side outer
5. Door striker
6. TORX bolt
7. Front door hinge
8. Rear door hinge (upper)
9. Rear door hinge (lower)

: Always replace after every disassembly

: Body grease

: N·m (kg-m, ft-lb)

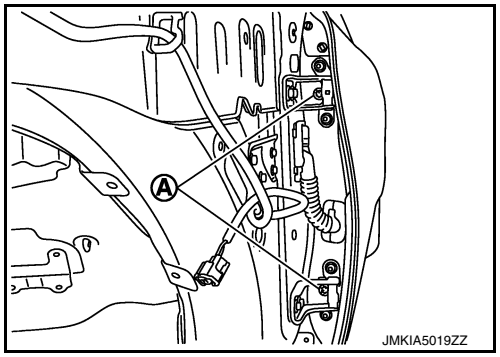
: N·m (kg-m, in-lb)

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.

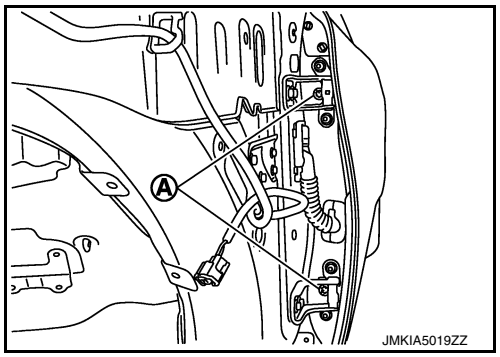
Portion			Standard
Front fender – Front door	A – A	Clearance	2.7 – 4.7 mm (0.106 – 0.185 in)
		Surface height	(–1.0) – (+1.0) mm [(–0.039) – (+0.039) in]

Portion			Standard
Front door – Rear door	B – B	Clearance	2.9 – 4.7 mm (0.114 – 0.185 in)
		Surface height	−1.0) – (+1.0) mm [(−0.039) – (+0.039) in]

1. Remove front fender. Refer to DLK-186, "Removal and Installation".
2. Loosen door hinge mounting nuts on door side.
3. Loosen bolts (A).



4. Adjust the surface height of front door according to the fitting standard dimension.
5. Tighten bolts (A).



6. Temporarily tighten door hinge mounting nuts on door side.
7. Loosen door hinge mounting bolts on body side.
8. Raise front door at rear end to adjust clearance of the front door according to the fitting standard dimension.
9. After adjustment tighten bolts and nuts to the specified torque.
10. Install front fender. Refer to DLK-186, "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:0000000012352810

REMOVAL

Remove door striker cover and TORX bolts, and then remove door striker.

INSTALLATION

Note the following item, and install in the reverse order of removal.

CAUTION:

- **Check front door open/close, lock/unlock operation after installation.**
- **After installation, check to perform the fitting adjustment. Refer to DLK-190, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:0000000012352811

REMOVAL

1. Remove front fender. Refer to DLK-186, "Removal and Installation".
2. Remove front door assembly. Refer to DLK-188, "DOOR ASSEMBLY : Removal and Installation".
3. Remove front door hinge mounting bolts, and then remove front door hinge.

INSTALLATION

Note the following item, and install in the reverse order of removal.

CAUTION:

- **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-190, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.**

DOOR CHECK LINK

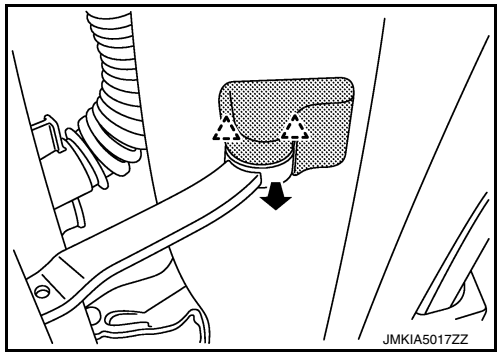
DOOR CHECK LINK : Removal and Installation

INFOID:0000000012352812

REMOVAL

1. Fully close the front door window.
2. Remove front door finisher. Refer to INT-31, "FRONT DOOR FINISHER : Removal and Installation".
3. Remove front door speaker or front door woofer.
   - Front door speaker (base audio without navigation): Refer to AV-127, "Removal and Installation".
   - Front door woofer (BOSE audio without navigation): Refer to AV-408, "Removal and Installation".
4. Remove check link cover toward vehicle rear.

: Pawl



5. Remove mounting bolts of door check link on the vehicle.
6. Remove mounting bolts of door check link on door panel.
7. Take door check link out from the hole of door panel.

INSTALLATION

Note the following item, and install in the reverse order of removal.

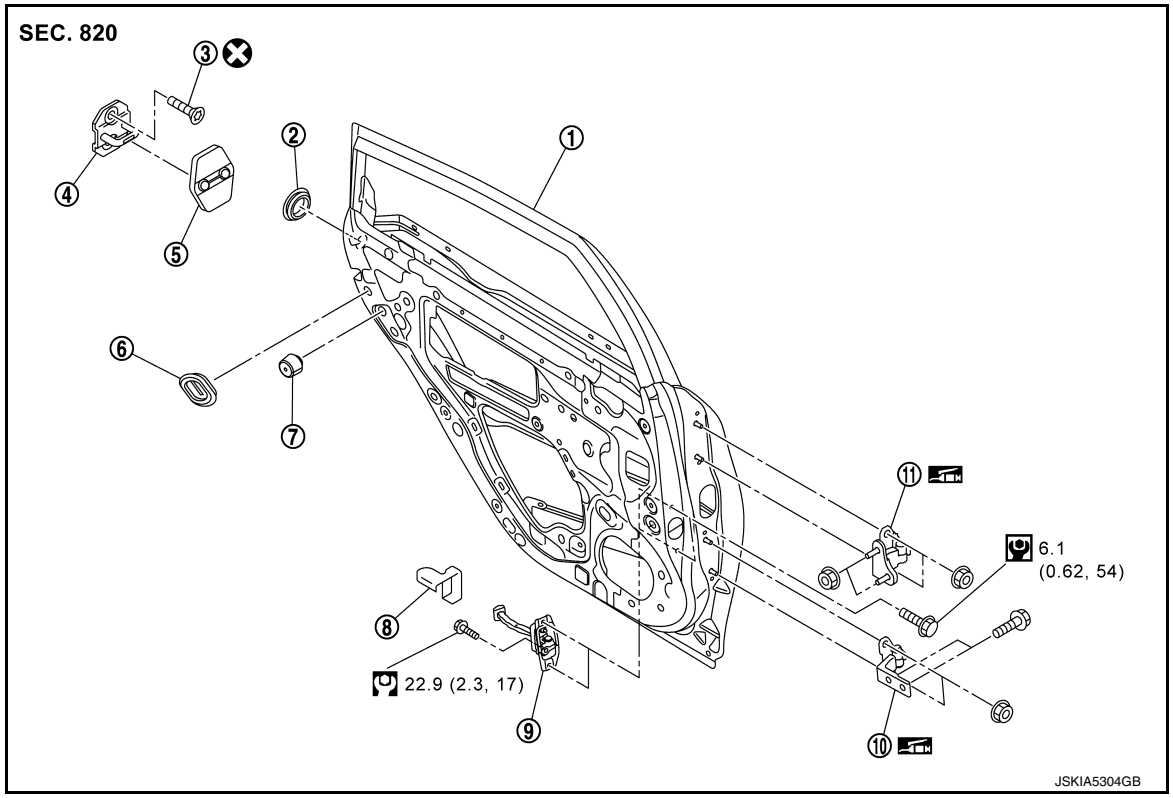
CAUTION:

Check front door open/close operation after installation.

REAR DOOR

Exploded View

INFOID:0000000012352813



1. Rear door panel
2. Grommet
3. TORX bolt
4. Door striker
5. Door striker cover
6. Child lock lever cover
7. Bumper rubber
8. Door check link cover
9. Door check link
10. Door hinge (lower)
11. Door hinge (upper)

: Always replace after every disassembly

: Body grease

: N·m (kg-m, ft-lb)

: N·m (kg-m, in-lb)

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000012352814

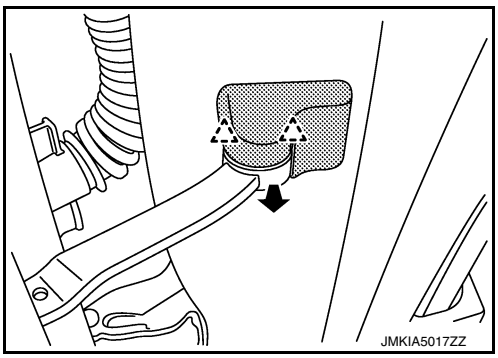
CAUTION:

- **Perform work with 2 workers, because of it's heavy weight.**
- **When removing and installing rear door assembly, support door with a jack and cloth to protect door and body.**

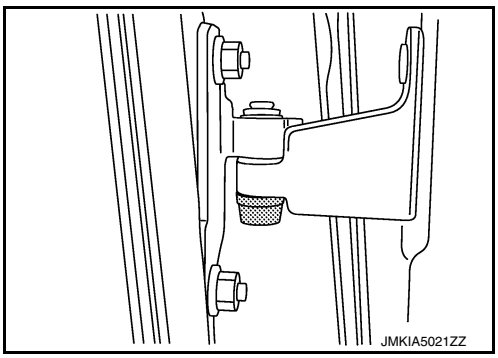
REMOVAL

1. Remove check link cover toward vehicle rear.

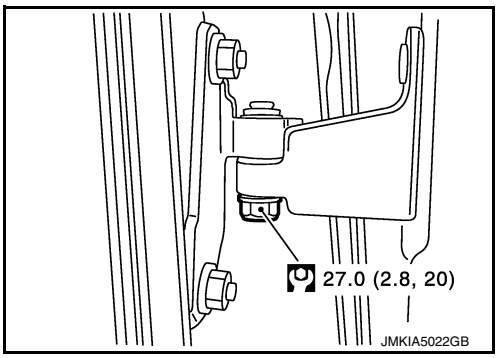
: Pawl



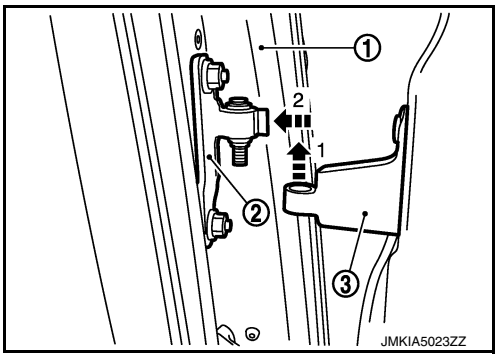
2. Remove mounting bolts of door check link on the vehicle.
3. Remove rear door harness grommet, and then pull out door harness from the vehicle.
4. Disconnect rear door harness connector.
5. Remove nut cup.



6. Remove door hinge mounting nuts (door side), and then remove rear door assembly.



7. Lift up rear door assembly (1). Disconnect door hinge [male-side (door side)] (2) from door hinge [female-side (body side)] (3) and remove toward outside of vehicle.
NOTE:
Adjustment of rear door assembly for installation is not necessary if rear door assembly is removed by disconnecting door hinge [male-side (door side)] from door hinge [female-side (body side)].



INSTALLATION

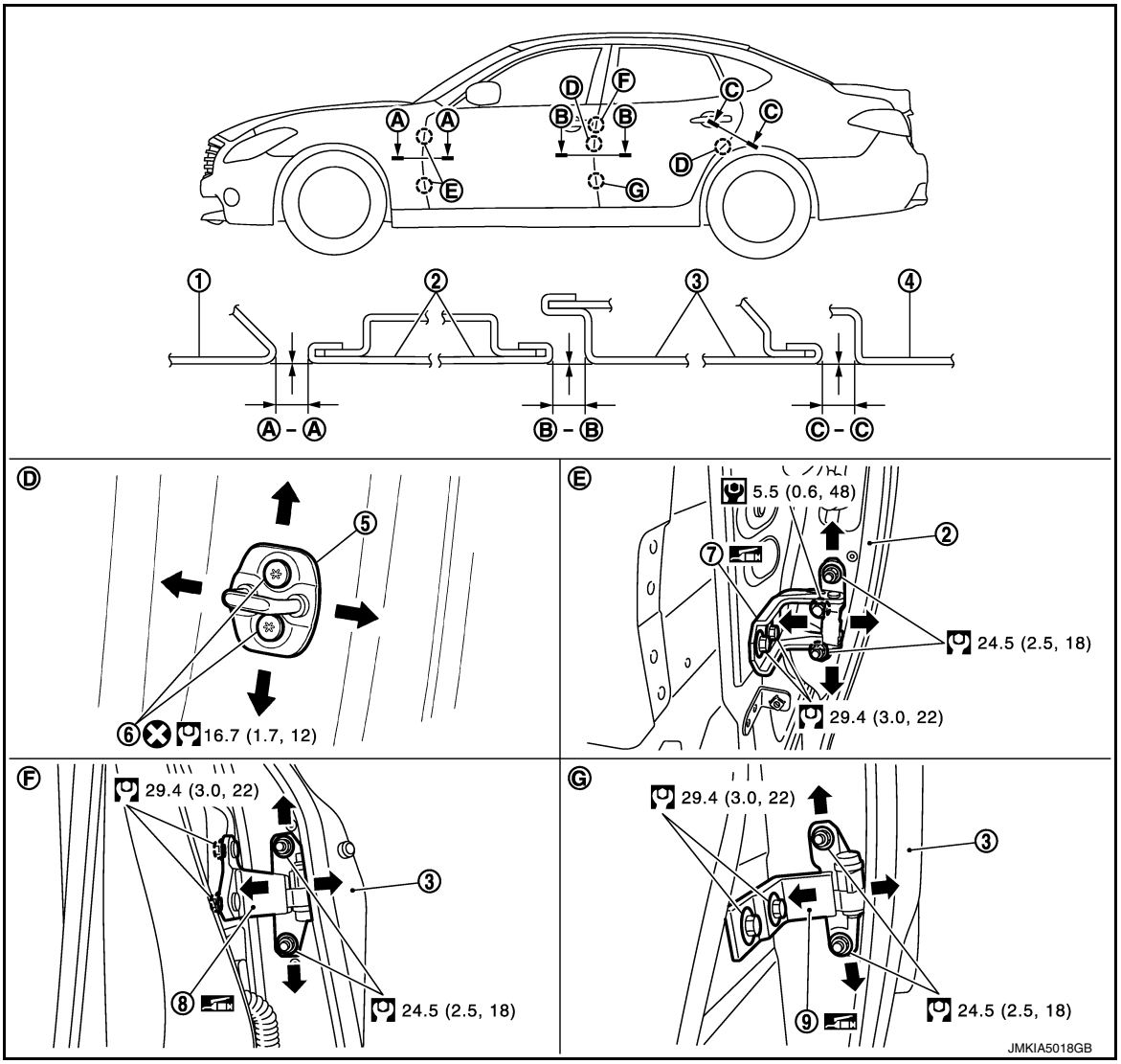
Note the following item, and install in the reverse order of removal.

CAUTION:

- **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.**
- **After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.**

DOOR ASSEMBLY : Adjustment

INFOID:0000000012352815



1. Front fender
2. Front door
3. Rear door
4. Body side outer
5. Door striker
6. TORX bolt
7. Front door hinge
8. Rear door hinge (upper)
9. Rear door hinge (lower)

: Always replace after every disassembly

: Body grease

: N·m (kg-m, ft-lb)

: N·m (kg-m, in-lb)

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.

Portion			Standard
Front door – Rear door	B – B	Clearance	2.9 – 4.7 mm (0.114 – 0.185 in)
		Surface height	(−1.0) – (+1.0) mm [(−0.039) – (+0.039) in]

Portion			Standard
Rear door – Body side outer	C – C	Clearance	2.7 – 4.7 mm (0.106 – 0.185 in)
		Surface height	(−1.0) – (+1.0) mm [(−0.039) – (+0.039) in]

CAUTION:
When performing adjustment for installation, check that door hinge [male-side (door side)] is connected to door hinge [female-side (body side)].

1. Remove center pillar lower garnish. Refer to INT-46, "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.
8. Install center pillar lower garnish. Refer to INT-46, "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:0000000012352816

REMOVAL

1. Remove door striker cover with remover tool.
2. Remove door striker mounting TORX bolts, and then remove door striker.

INSTALLATION

Note the following item, and install in the reverse order of removal.

CAUTION:
- **Check rear door open/close, lock/unlock operation after installation.**
- **After installation, check to perform the fitting adjustment. Refer to DLK-195, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:0000000012352817

REMOVAL

1. Remove center pillar lower garnish. Refer to INT-46, "CENTER PILLAR LOWER GARNISH : Removal and Installation".
2. Remove rear door assembly. Refer to DLK-193, "DOOR ASSEMBLY : Removal and Installation".
3. Remove rear door hinge mounting bolts and nuts (body side), and then remove door hinge.

INSTALLATION

Note the following item, and install in the reverse order of removal.

CAUTION:
- **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-195, "DOOR ASSEMBLY : Adjustment".**
- **After installing, apply the touch-up paint (the body color) onto the head of door hinge mounting nuts.**

DOOR CHECK LINK

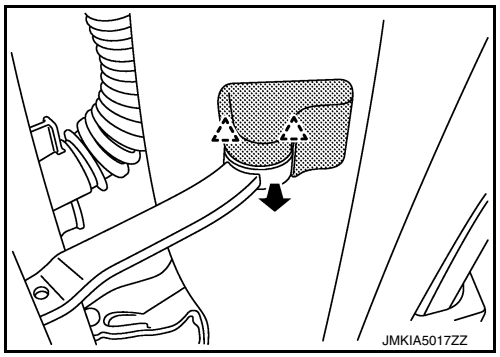
DOOR CHECK LINK : Removal and Installation

INFOID:0000000012352818

REMOVAL

1. Fully close the rear door window.
2. Remove rear door finisher. Refer to INT-34, "REAR DOOR FINISHER : Removal and Installation".
3. Remove rear door speaker.
   - Base audio without navigation: Refer to AV-129, "Removal and Installation".
   - BOSE audio without navigation: Refer to AV-411, "Removal and Installation".
4. Remove check link cover toward vehicle rear.

: Pawl



5. Remove mounting bolts of the check link on the vehicle.
6. Remove mounting bolts 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 install in the reverse order of removal.

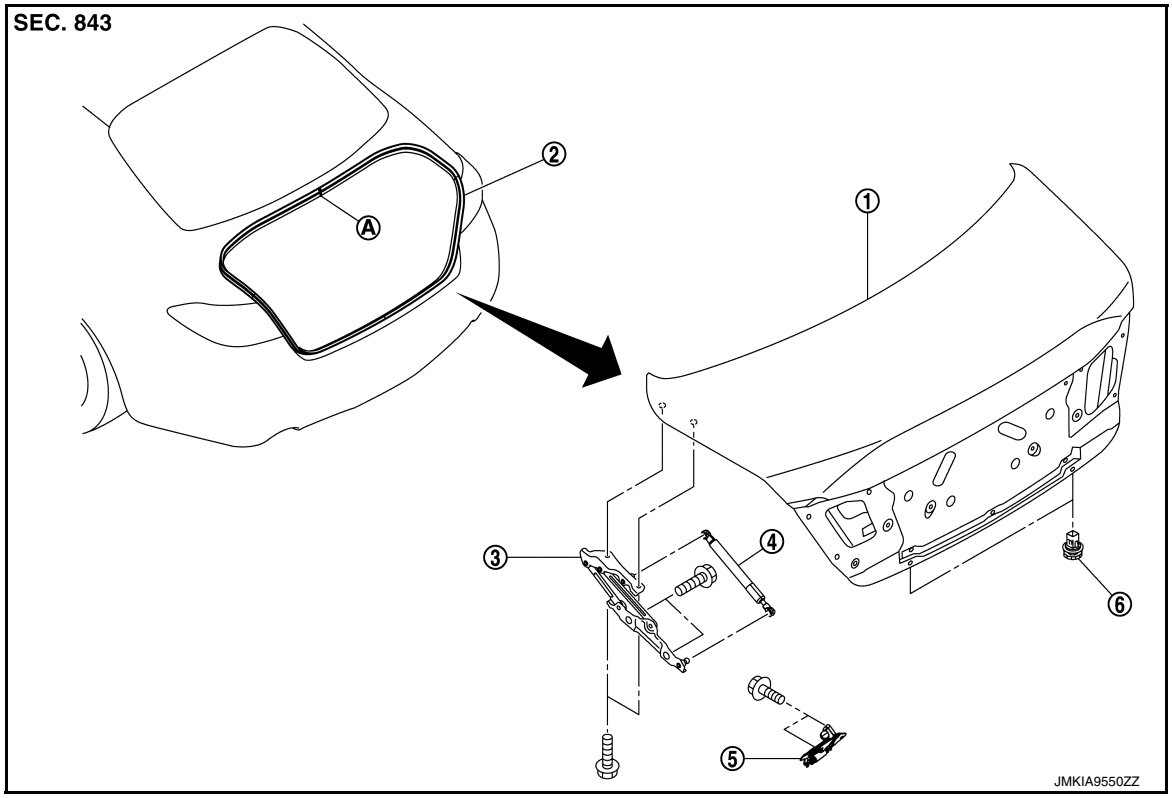
CAUTION:

Check rear door open/close operation after installation.

TRUNK LID

Exploded View

INFOID:0000000012352819



1. Trunk lid assembly
2. Trunk lid weather-strip
3. Trunk lid hinge
4. Trunk lid stay
5. Trunk lid striker
6. Bumper rubber

A : Center mark (upper)

TRUNK LID ASSEMBLY

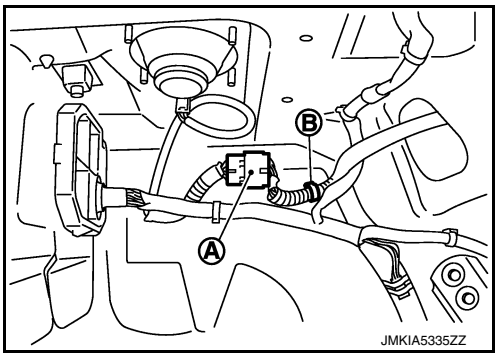
TRUNK LID ASSEMBLY : Removal and Installation

INFOID:0000000012352820

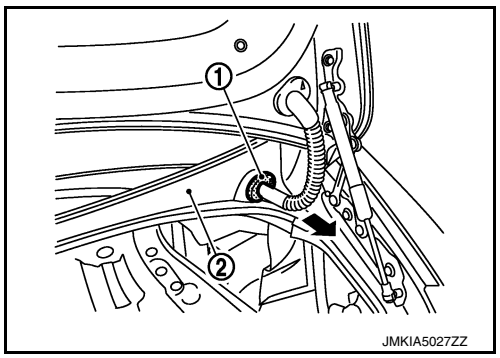
CAUTION:
Operate with two workers, because of its heavy weight.

REMOVAL

1. Remove the trunk lid finisher inner. Refer to INT-64, "Removal and Installation"
2. Disconnect harness connector (A) and harness clip (B) in trunk room.



3. Remove grommet (1), and then pull harness throughout body panel (2).



4. Remove the trunk lid hinge mounting bolts on trunk lid side and remove the trunk lid assembly.

INSTALLATION

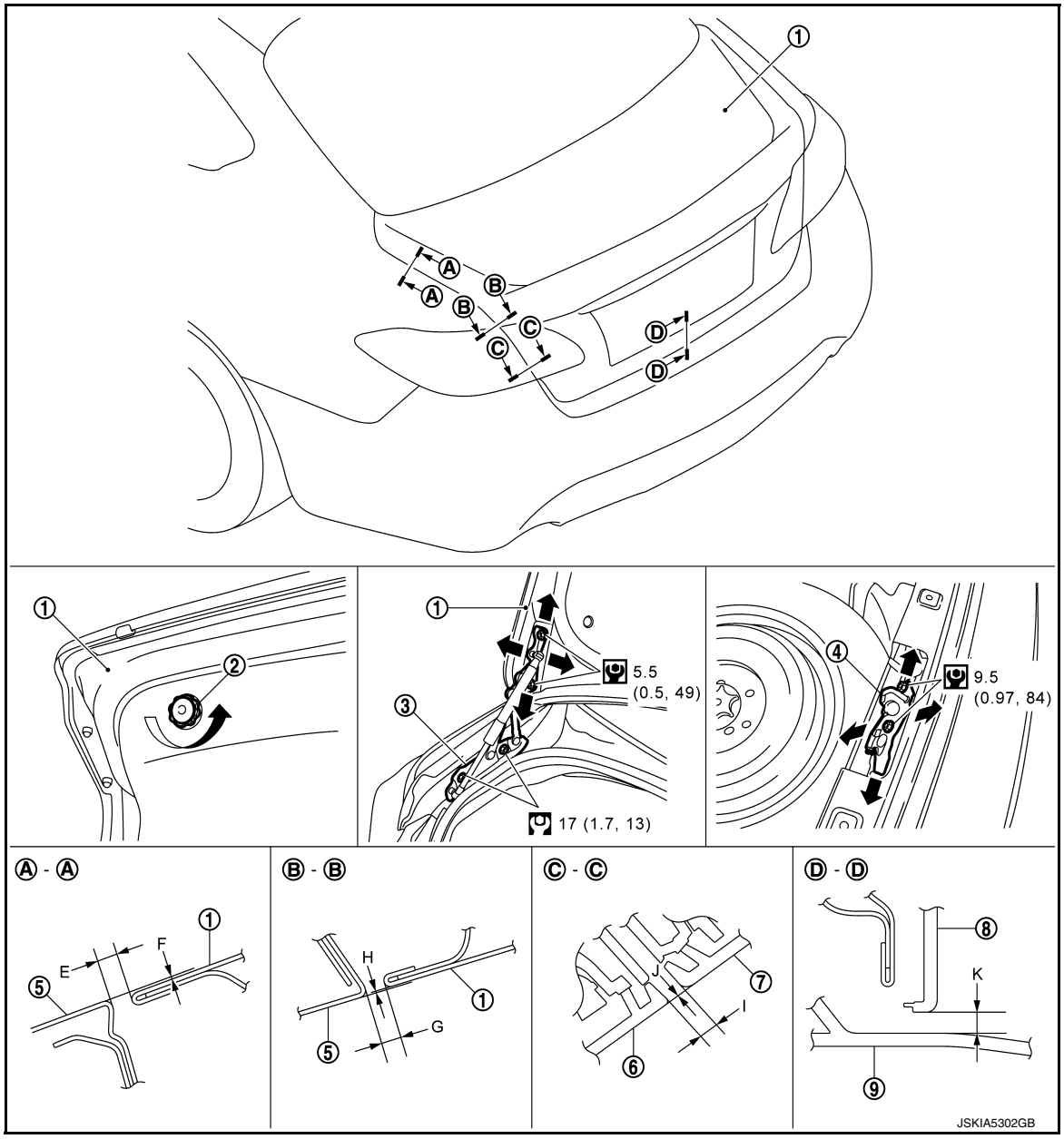
Note the following item, and install in the reverse order of removal.

CAUTION:

- **After installing, apply touch-up paint (the body color) onto the head of the hinge mounting bolts.**
- **Check trunk lid open/close, lock/unlock operation after installation.**
- **After installation, perform fitting adjustment. Refer to DLK-200, "TRUNK LID ASSEMBLY : Adjustment".**

TRUNK LID ASSEMBLY : Adjustment

INFOID:0000000012352821



1. Trunk lid assembly
2. Bumper rubber
3. Trunk lid hinge
4. Trunk lid striker
5. Body side outer
6. Rear combination lamp
7. Reverse lamp
8. Trunk lid finisher
9. Rear bumper fascia

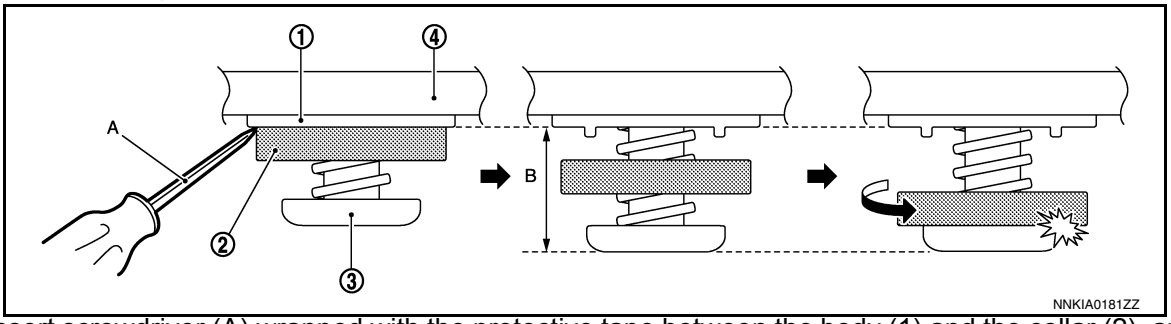
: N·m (kg-m, ft-lb)

: N·m (kg-m, in-lb)

Check the clearance and surface height between trunk lid and each part by visually and touching.
If the clearance and surface height are out of specification, adjust them according to the procedures shown below.

Portion				Standard	Difference (RH/LH, MAX)
Trunk lid – Body side outer	A – A	E	Clearance	2.5 – 4.5 mm (0.098 – 0.177 in)	1.4 mm (0.055 in)
		F	Surface height	(–1.5) – (+0.5) mm [(–0.059) – (+0.020) in]	1.4 mm (0.055 in)
	B – B	G	Clearance	3.0 – 5.0 mm (0.118 – 0.197 in)	1.4 mm (0.055 in)
		H	Surface height	(–1.5) – (+0.5) mm [(–0.059) – (+0.020) in]	1.4 mm (0.055 in)
Rear combination lamp – Reverse lamp	C – C	I	Clearance	2.1 – 5.9 mm (0.083 – 0.232 in)	2.5 mm (0.098 in)
		J	Surface height	(–1.9) – (+1.9) mm [(–0.075) – (+0.075) in]	2.2 mm (0.087 in)
Trunk lid – Rear bumper fascia	D – D	K	Clearance	2.4 – 6.6 mm (0.094 – 0.260 in)	—

1. Loosen trunk lid hinge mounting bolts (trunk lid side).
2. Remove trunk rear plate. Refer to INT-62, "TRUNK REAR PLATE : Removal and Installation".
3. Loosen trunk lid striker mounting bolts.
4. Lift up trunk lid approximately 100 – 150 mm (3.937 – 5.906 in) height then close it lightly and check that it is engaged firmly with trunk lid closed.
5. Check the clearance and surface height.
6. Finally tighten trunk lid hinge and trunk lid striker.
7. Install trunk rear plate. Refer to INT-62, "TRUNK REAR PLATE : Removal and Installation".
8. Initialize the height of bumper rubber.



- Insert screwdriver (A) wrapped with the protective tape between the body (1) and the collar (2), and then pull out the bumper rubber (3) from the trunk lid (4).
- Rotate the collar and contact it with the bumper rubber.

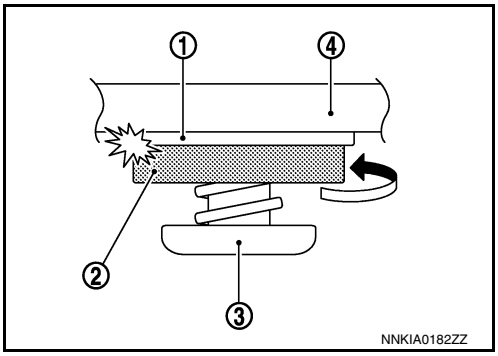
9. Close the trunk lid by pushing with hands.

NOTE:
The bumper rubber is pressed to the vehicle body side, and it is compressed in the trunk lid.

CAUTION:
- **Close the trunk lid gently because the bumper rubber is compressed excessively by slamming the trunk lid.**
- **If the bumper rubber is compressed excessively, initialize the height of bumper rubber, and then repeat the procedure again.**

10. Open the trunk lid, and then engage it with the body by rotating the collar.

(1) : Body
(2) : Collar
(3) : Bumper rubber
(4) : Trunk lid



CAUTION:
- **Apply anticorrosive agent onto the mounting surface.**
- **After installation, check trunk lid open/close, lock/unlock operation.**
- **After installation, apply touch-up paint (the body color) onto the head of trunk lid hinge mounting bolts and nuts.**

TRUNK LID STRIKER ADJUSTMENT

Adjust trunk lid striker so that it becomes parallel with trunk lid lock insertion direction.

TRUNK LID STRIKER

TRUNK LID STRIKER : Removal and Installation

INFOID:0000000012352822

REMOVAL

1. Remove trunk rear plate. Refer to INT-62, "TRUNK REAR PLATE : Removal and Installation".
2. Remove mounting bolts, and then remove trunk lid striker.

INSTALLATION

Note the following item, and install in the reverse order of removal.

CAUTION:
- **Check trunk lid open/close, lock/unlock operation after installation.**
- **When removing and installing trunk lid striker, perform the fitting adjustment. Refer to DLK-200, "TRUNK LID ASSEMBLY : Adjustment".**

TRUNK LID HINGE

TRUNK LID HINGE : Removal and Installation

INFOID:0000000012352823

REMOVAL

1. Remove trunk lid assembly. Refer to DLK-198, "TRUNK LID ASSEMBLY : Removal and Installation".
2. Remove trunk lid stay from trunk lid hinge. Refer to DLK-202, "TRUNK LID STAY : Removal and Installation".
3. Remove trunk lid hinge mounting nuts (body side), and then remove trunk lid hinge.

INSTALLATION

Note the following item, and install in the reverse order of removal.

CAUTION:
- **Check trunk lid open/close, lock/unlock operation after installation.**
- **Check trunk lid hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **When removing and installing trunk lid assembly, perform the fitting adjustment. Refer to DLK-200, "TRUNK LID ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of trunk lid hinge mounting bolts.**

TRUNK LID STAY

TRUNK LID STAY : Removal and Installation

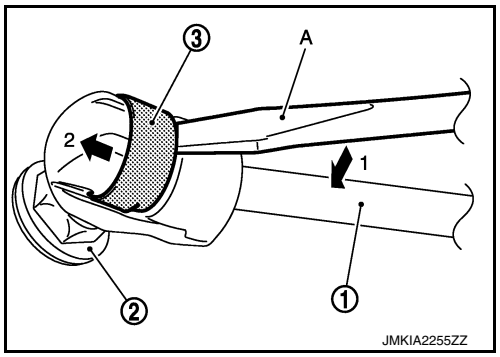
INFOID:0000000012352824

REMOVAL

1. Support trunk lid with the proper material to prevent it from falling.

WARNING:
Bodily injury may occur if no supporting rod is holding the trunk lid open when removing the trunk lid stay.

2. Remove the metal clip (3) located on the connection between the trunk lid stay (1) and the stud ball (2) (trunk lid side) by using a flat-bladed screwdriver (A).



3. Remove trunk lid stay (trunk lid side).
4. In the same way, remove trunk lid stay (body side).

INSTALLATION

Note the following item, and install in the reverse order of removal.

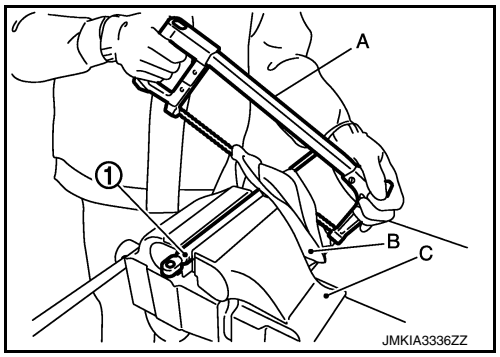
CAUTION:
Check trunk lid open/close operation after installation.

TRUNK LID STAY : Disposal

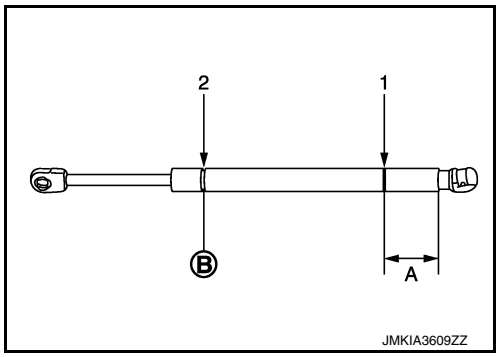
INFOID:0000000012352825

1. Fix trunk lid stay (1) using a vise (C).
2. Using hacksaw (A) slowly make 2 holes in the trunk lid stay, in numerical order as shown in the figure.

CAUTION:
- **When cutting a hole on trunk lid 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: 20.0 mm (0.787 in)
B: Cut at the groove.



TRUNK LID WEATHER-STRIP

TRUNK LID WEATHER-STRIP : Removal and Installation

INFOID:0000000012352826

REMOVAL

Pull up and remove engagement with body from weather-strip joint.

CAUTION:
Never pull strongly on weather-strip.

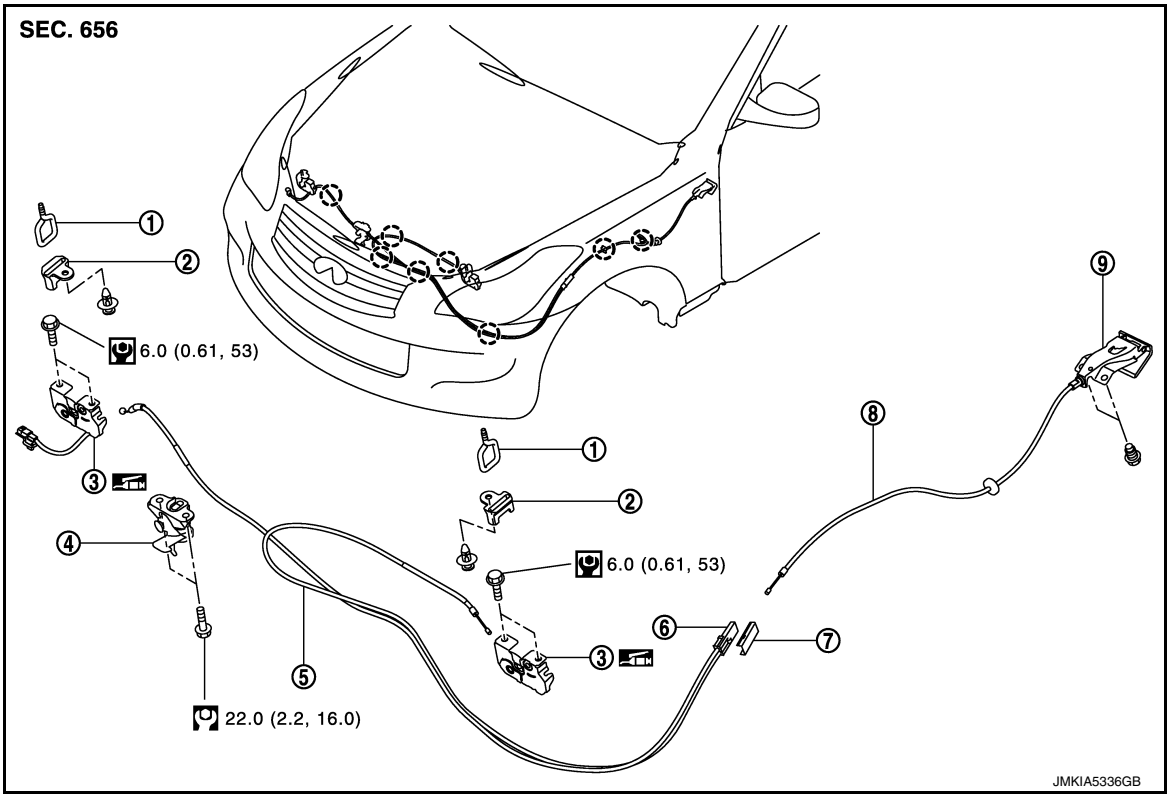
INSTALLATION

1. Working from the upper section, align weather-strip center mark (upper) with vehicle center position mark and install weather-strip onto the vehicle.
2. For the lower section, align weather-strip center mark (lower) with center of trunk lid striker.
3. Pull weather-strip gently to ensure that there is no loose section.
   NOTE:
   Check that weather-strip fits tightly in each corner.

HOOD LOCK

Exploded View

INFOID:0000000012352827



1. Hood striker (LH/RH)
2. Hood striker cover (LH/RH)
3. Hood lock (LH/RH)
4. Secondary latch
5. Hood lock control cable (front)
6. Hood lock control cable protector
7. Hood lock control cable protector cover
8. Hood lock control cable (rear)
9. Hood lock opener lever

: Clip

: Body grease

: N·m (kg-m, ft-lb)

: N·m (kg-m, in-lb)

HOOD LOCK

HOOD LOCK : Removal and Installation

INFOID:0000000012352828

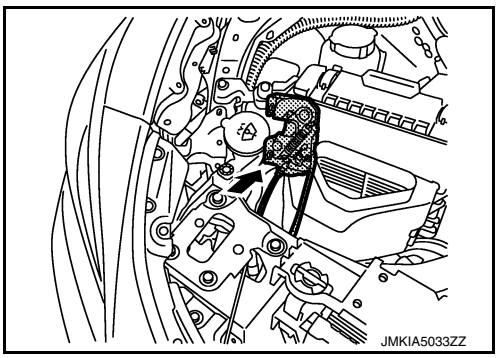
REMOVAL

CAUTION:

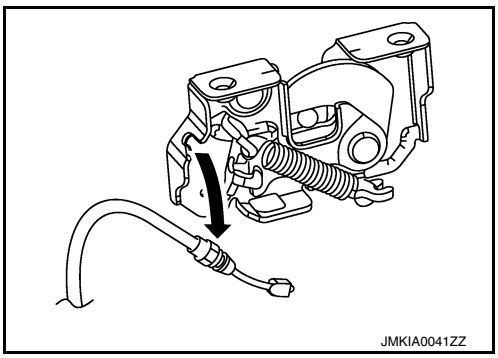
Check wiring of hood lock control before removal.

1. Remove air duct (inlet).
   - VQ engine models: Refer to EM-29, "Exploded View".
   - VK engine models: Refer to EM-192, "Exploded View".
2. Remove hood lock control cable (front) clips from hood lock stay and condenser upper bracket.
3. Remove hood lock control cable (front) from tube clip of front bumper upper retainer.
4. Remove air cleaner assembly (VK engine models only). Refer to EM-192, "Removal and Installation".

5. Remove mounting bolts of hood lock then reward the arrow direction.

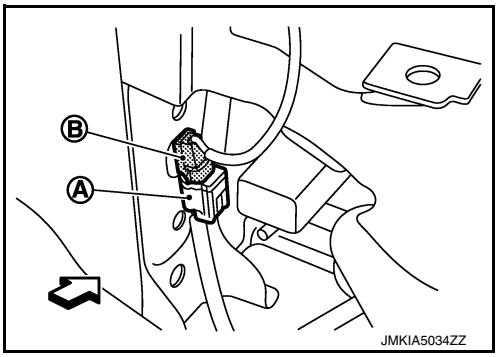


6. Disconnect hood lock control cable (front) from hood lock.



7. Disconnect harness connector (A), and then remove hood lock switch harness connector (B) from vehicle.

⇦ : Vehicle front



8. Remove hood lock.

INSTALLATION

Note the following item, and install in the reverse order of removal.

CAUTION:

- **Check that hood lock control cable is properly engaged with hood lock.**
- **After installation, perform hood fitting adjustment. Refer to DLK-180, "HOOD ASSEMBLY : Adjustment".**
- **After installation, perform hood lock control inspection. Refer to DLK-206, "HOOD LOCK : Inspection".**

HOOD LOCK : Inspection

INFOID:0000000012352829

NOTE:

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

1. Check that the secondary and the hood lock stay are securely engaged by the weight of the hood when letting the hood free fall from a height of approximately 100 mm (3.937 in).
2. Check that the front end of the hood rises by approximately 20 mm (0.787 in) when pulling the hood opener lever gently. Also check that the hood opener lever returns to the original position.
3. Check that the tension of hood opener lever is less than 49.0 N (5.0 kg, 11.02 lb).
4. Check that the hood striker and the hood lock are securely engaged by the weight of the hood when letting the hood free fall from a height of approximately 300 mm (11.811 in).
   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.

HOOD LOCK CONTROL CABLE

HOOD LOCK CONTROL CABLE : Removal and Installation

INFOID:0000000012352830

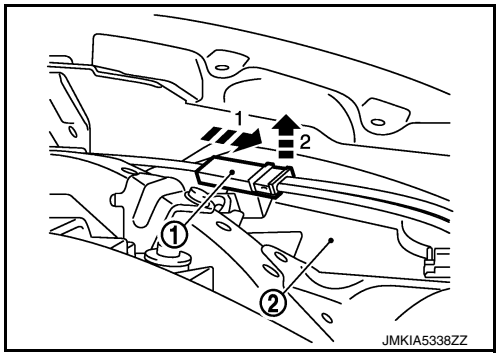
FRONT

Removal

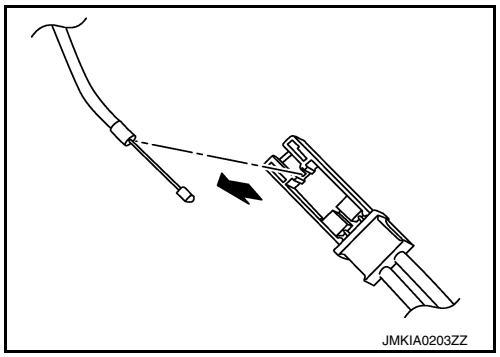
CAUTION:

Check wiring of hood lock control before removal.

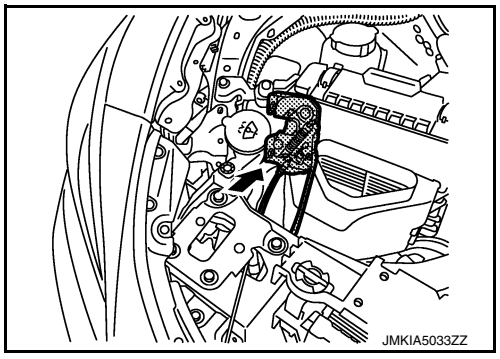
1. Remove clips of hood seal assembly (side).
2. Remove hood lock control cable protector (1) toward the arrow direction, then remove it from front combination lamp assembly (2).



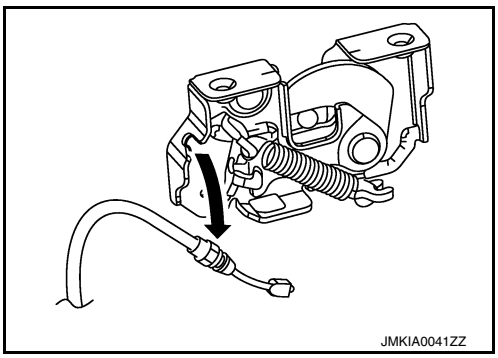
3. Remove hood lock control cable cover from hood lock control cable protector.
4. Disconnect hood lock control cable (front) hood lock control cable protector.



5. Remove air duct (inlet).
   - VQ engine models: Refer to EM-29, "Exploded View".
   - VK engine models: Refer to EM-192, "Exploded View".
6. Remove hood lock control cable (front) fixing clips from hood lock stay and condenser upper bracket.
7. Remove hood lock control cable (front) from tube clip of front bumper upper retainer.
8. Remove air cleaner assembly (VK engine models only). Refer to EM-192, "Removal and Installation".
9. Remove mounting bolts of hood lock then reward the arrow direction.



10. Disconnect hood lock control cable (front) from hood lock.



11. Remove hood lock control cable (front) from vehicle.

Installation

Note the following item, and install in the reverse order of removal.

CAUTION:

Never to bend cable too much, keeping the radius 100 mm (3.937 in) or more.

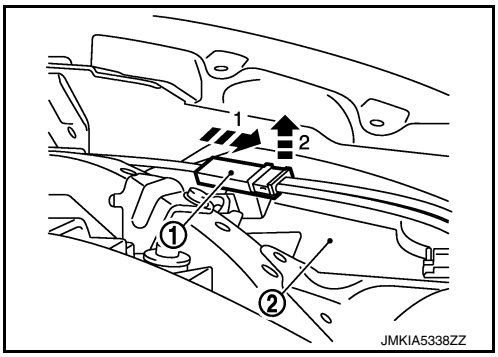
REAR

Removal

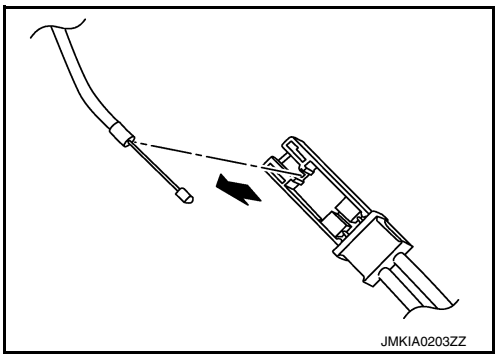
CAUTION:

Check wiring of hood lock control before removal.

1. Remove clips of hood seal assembly (side).
2. Remove hood lock control cable protector (1) toward the arrow direction, then remove it from front combination lamp assembly (2).



3. Remove hood lock control cable cover from hood lock control cable protector.
4. Disconnect hood lock control cable (rear) from hood lock control cable protector.



5. Remove fender protector LH. Refer to EXT-26, "FENDER PROTECTOR : Removal and Installation".
6. Remove mounting bolts and remove hood lock opener lever.
7. Remove front kicking plate inner LH and dash side finisher LH. Refer to INT-38, "Exploded View".
8. Remove grommet on the lower dash, pull hood lock control cable (rear) toward the passenger compartment.

CAUTION:

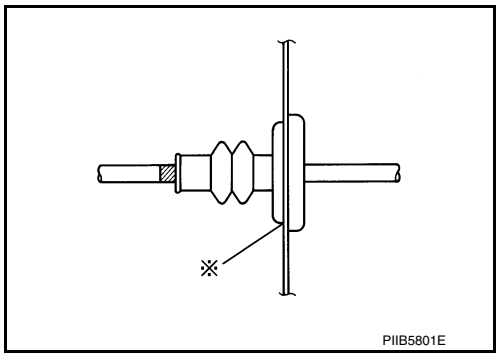
While pulling, never to damage (peeling) the outside of the hood lock control cable.

Installation

Note the following item, and 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-180, "HOOD ASSEMBLY : Adjustment".**
- **After installation, perform hood lock control inspection. Refer to DLK-206, "HOOD LOCK : Inspection".**

HOOD LOCK CONTROL CABLE : Inspection

INFOID:0000000012352831

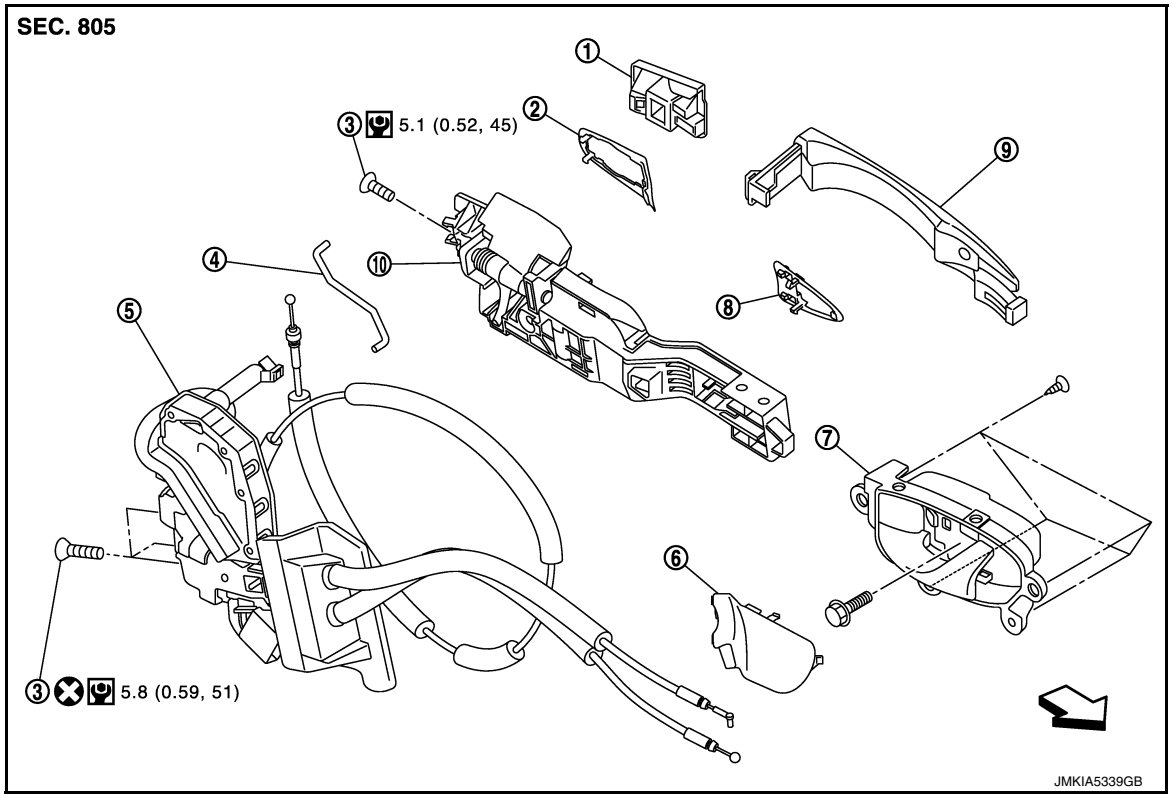
NOTE:
If the hood lock cable is bent or deformed, replace it.

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 force of hood is 94 – 490 N·m (9.6 – 50.0 kg-m, 69 – 361 ft – lb).
   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:0000000012352832



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. Inside handle escutcheon
7. Inside handle
8. Front gasket
9. Outside handle
10. Outside handle bracket

⇦ : Vehicle front

: Always replace after every disassembly

: N·m (kg-m, in-lb)

DOOR LOCK

DOOR LOCK : Removal and Installation

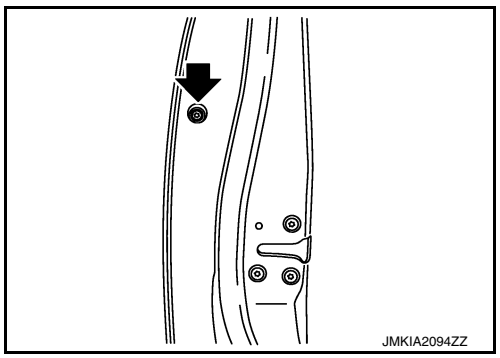
INFOID:0000000012352833

REMOVAL

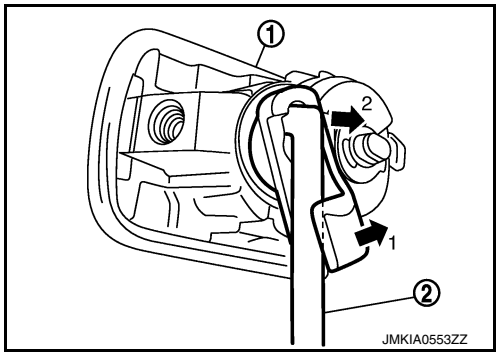
1. Remove front door finisher. Refer to INT-31, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove front door glass. Refer to GW-18, "Removal and Installation".
3. Remove front door module assembly. Refer to GW-20, "Removal and Installation".
4. Disconnect door antenna and door request switch connector and remove harness clamp (with Intelligent Key system model) on outside handle bracket.

5. Remove door side grommet, and loosen TORX bolt from grommet hole.
CAUTION:
Never remove TORX bolt forcibly.

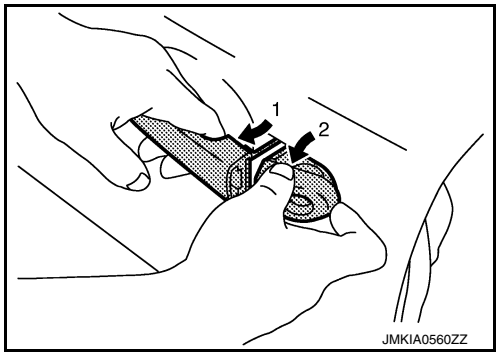
⬅ : TORX bolt



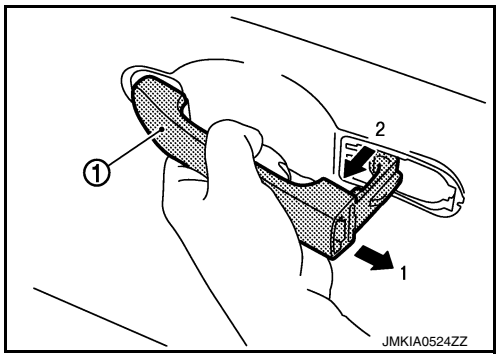
6. Reach in to separate key rod (2) connection [on the door key cylinder assembly (1)] (driver side).



7. While pulling outside handle, remove door key cylinder assembly (driver side) or outside handle escutcheon (passenger side).

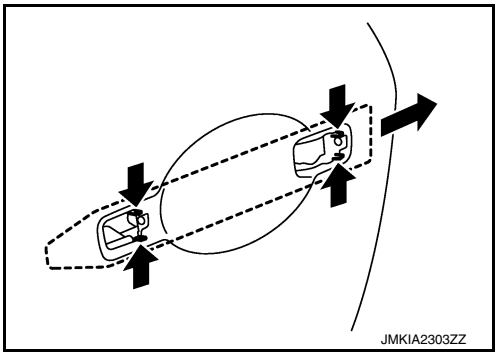


8. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



9. Remove front gasket and rear gasket.

10. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.



11. Reach in to separate outside handle cable connection on outside handle bracket.
12. Remove door lock assembly mounting TORX bolts.
13. Disconnect door lock actuator connector, and then remove door lock assembly.
14. Remove key rod from door lock assembly.

INSTALLATION

Note the following item, and install in the reverse order of removal.

CAUTION:

- **When installing each rod, rotate rod holder until a click is felt.**
- **Check door open/close, lock/unlock operation after installation.**

INSIDE HANDLE

INSIDE HANDLE : Removal and Installation

INFOID:0000000012352834

REMOVAL

1. Remove front door finisher. Refer to INT-31, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove inside handle mounting screws.

INSTALLATION

Note the following item, and install in the reverse order of removal.

CAUTION:

Check door open/close, lock/unlock operation after installation.

OUTSIDE HANDLE

OUTSIDE HANDLE : Removal and Installation

INFOID:0000000012352835

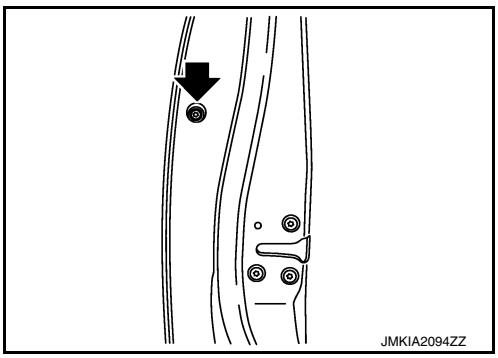
REMOVAL

1. Remove front door finisher. Refer to INT-31, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove front door glass. Refer to GW-18, "Removal and Installation".
3. Remove front door module assembly. Refer to GW-20, "Removal and Installation".
4. Disconnect door antenna and door request switch connector and remove harness clamp (models with Intelligent Key system) on outside handle bracket.
5. Remove door side grommet, and loosen TORX bolt from grommet hole.

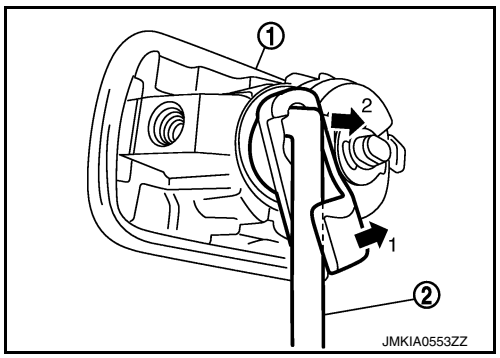
   CAUTION:

   Never remove TORX bolt forcibly.

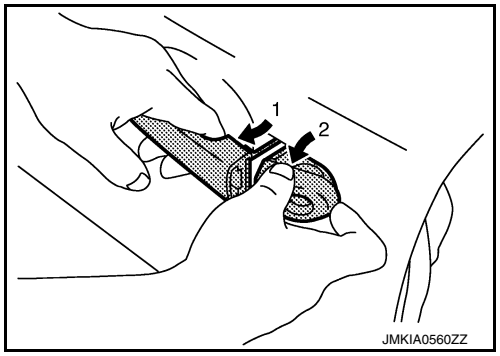
   ⬅ : TORX bolt



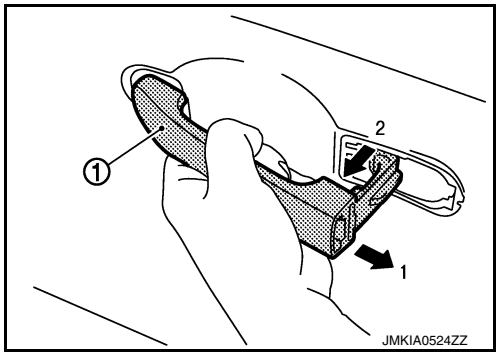
6. Reach in to separate key rod (2) connection [on the door key cylinder assembly (1)] (driver side).



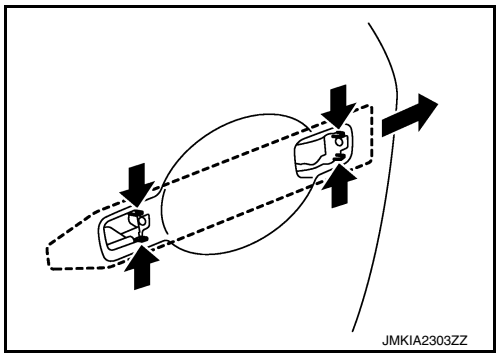
7. While pulling outside handle, remove door key cylinder assembly (driver side) or outside handle escutcheon (passenger side).



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



9. Remove front gasket and rear gasket.
10. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.



11. Reach in to separate outside handle cable connection on outside handle bracket.

INSTALLATION

Note the following item, and install in the reverse order of removal.

CAUTION:

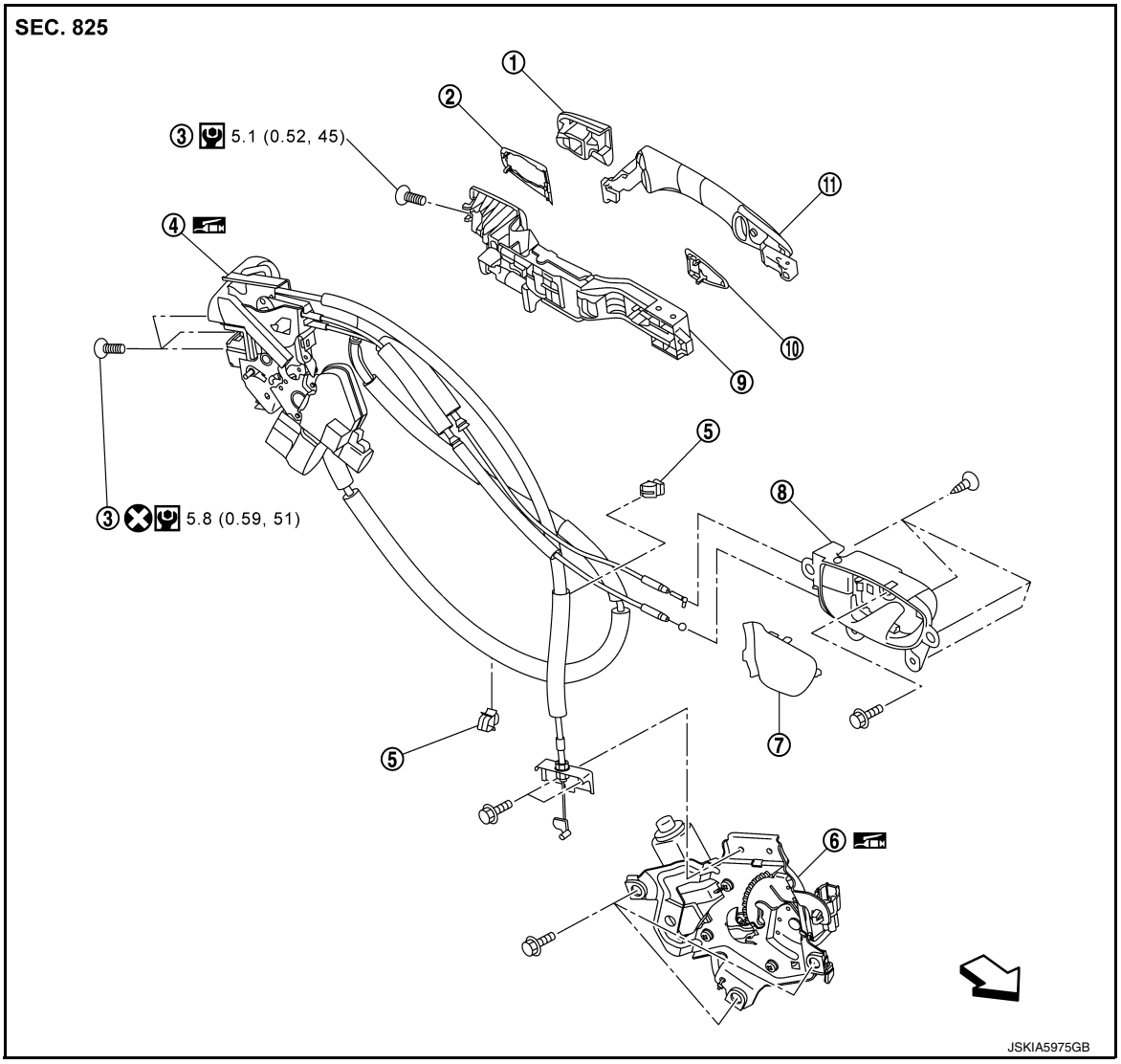
- **When installing each rod, rotate rod holder until a click is felt.**
- **Check door open/close, lock/unlock operation after installation.**

REAR DOOR LOCK

Exploded View

INFOID:0000000012352836

For rear door closure models



1. Outside handle escutcheon
2. Rear gasket
3. TORX bolt
4. Door lock assembly
5. Cable clip
6. Door closure motor assembly
7. Inside handle escutcheon
8. Inside handle
9. Outside handle bracket
10. Front gasket
11. Outside handle

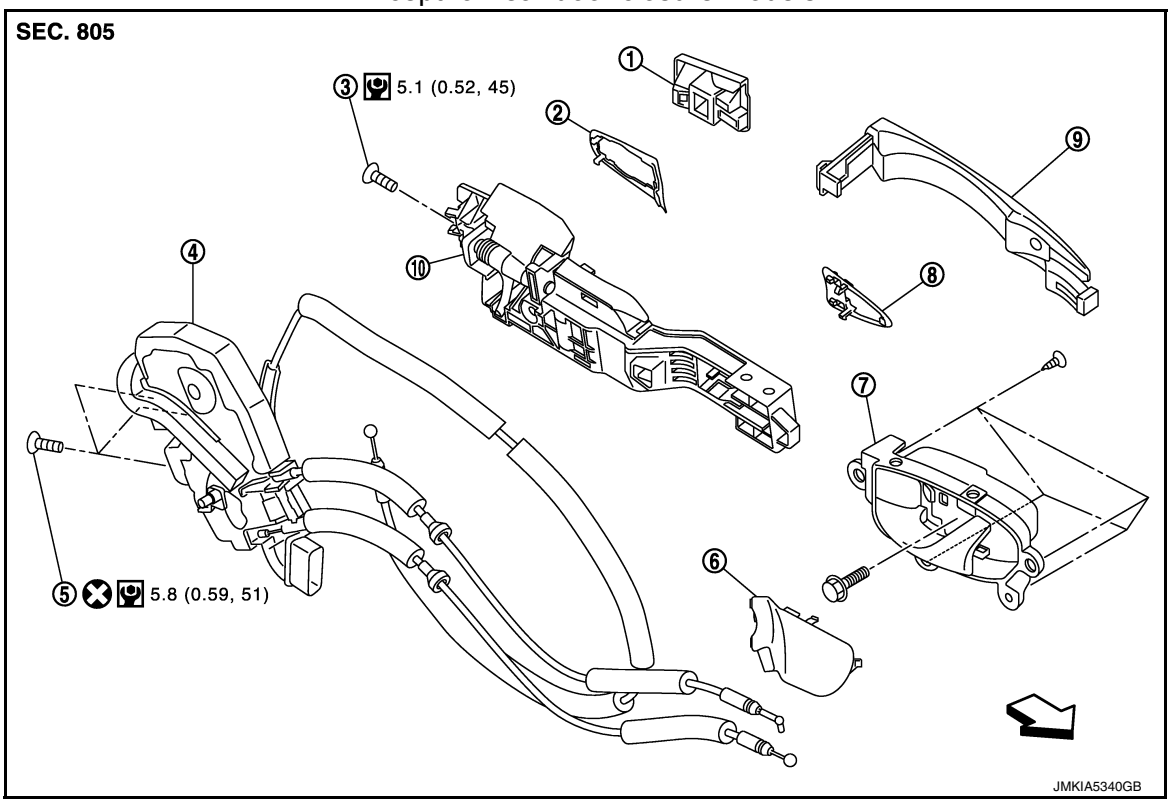
⇦ : Vehicle front

: Always replace after every disassembly

: Body grease

: N·m (kg-m, in-lb)

Except for rear door closure models



1. Outside handle escutcheon
2. Rear gasket
3. TORX bolt
4. Door lock assembly
5. TORX bolt
6. Inside handle escutcheon
7. Inside handle
8. Front gasket
9. Outside handle
10. Outside handle bracket

⇦ : Vehicle front

⊗ : Always replace after every disassembly

: N·m (kg-m, in-lb)

DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:0000000012536387

REMOVAL

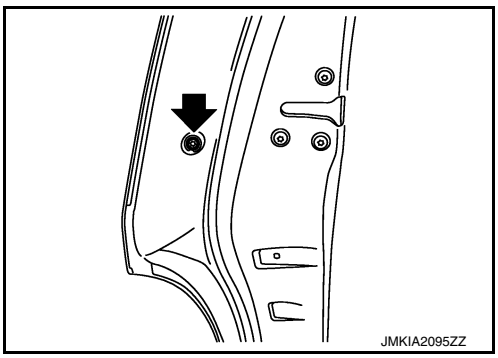
For Rear Door Closure Models

1. Remove rear door finisher. Refer to INT-34, "REAR DOOR FINISHER : Removal and Installation".
2. Remove rear door auto closure control unit. Refer to DLK-237, "Removal and Installation".
3. Remove sealing screen. Refer to GW-23, "Removal and Installation".
4. Remove rear door sash inner cover. Refer to INT-37, "REAR DOOR SASH INNER COVER : Removal and Installation".
5. Remove rear door corner outer cover. Refer to EXT-37, "Removal and Installation".
6. Remove rear door sash and rear door glass. Refer to GW-21, "Removal and Installation".
7. Remove outside handle and outside handle bracket. Refer to DLK-218, "OUTSIDE HANDLE : Removal and Installation".
8. Disconnect door closure cable from door closure motor assembly. Refer to DLK-217, "DOOR CLOSURE MOTOR ASSEMBLY : Removal and Installation"
9. Remove door lock assembly mounting TORX bolts.
10. Disconnect harness connectors, and then remove door lock assembly.

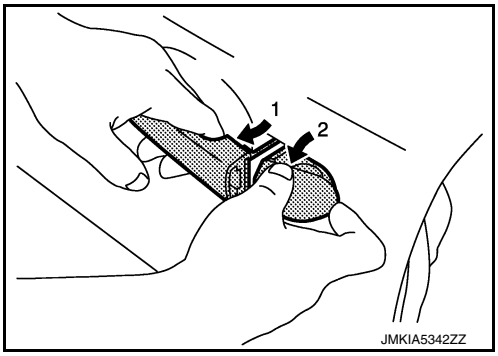
Except For Rear Door Closure Models

1. Remove rear door finisher. Refer to INT-34, "REAR DOOR FINISHER : Removal and Installation".
2. Remove sealing screen. Refer to GW-23, "Exploded View".
3. Fully close the rear door glass.
4. Remove door side grommet, and loosen TORX bolt from grommet hole.
   CAUTION:
   Never remove TORX bolt forcibly.

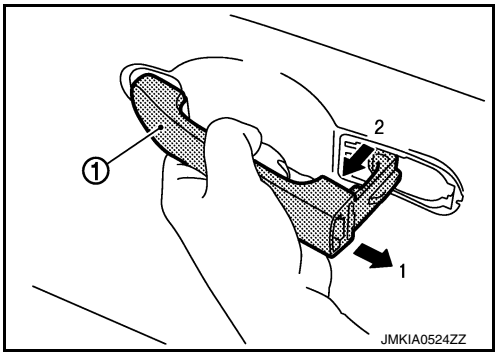
   ⬅ : TORX bolt



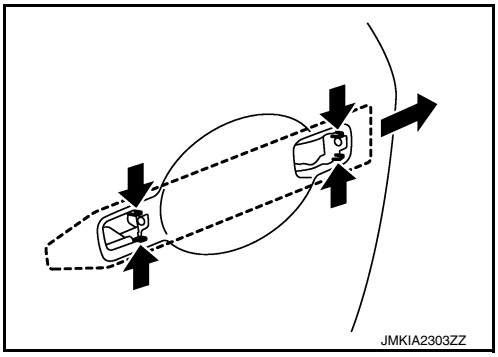
5. While pulling outside handle, remove outside handle escutcheon.



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



7. Remove front gasket and rear gasket.
8. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.



9. Reach in to separate outside handle cable connection on outside handle bracket.
10. Remove door lock assembly mounting TORX bolts.
11. Disconnect door lock actuator connector, and then remove door lock assembly.

INSTALLATION

Note the following item, and install in the reverse order of removal.

CAUTION:
Check door open/close, lock/unlock operation after installation.

DOOR CLOSURE MOTOR ASSEMBLY

DOOR CLOSURE MOTOR ASSEMBLY : Removal and Installation

INFOID:0000000012352838

REMOVAL

For Rear Door Closure Models

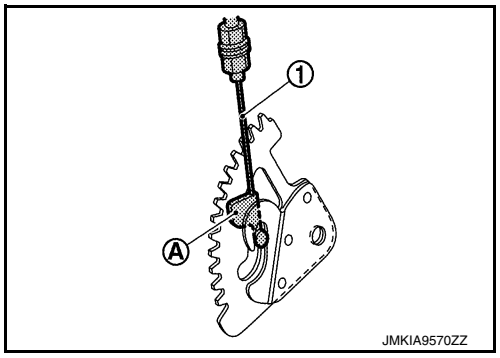
1. Remove rear door finisher. Refer to INT-34, "REAR DOOR FINISHER : Removal and Installation".
2. Remove rear door auto closure control unit. Refer to DLK-237, "Removal and Installation".
3. Remove sealing screen. Refer to GW-23, "Removal and Installation".
4. Remove door closure cable bracket mounting bolts.
5. Disconnect door closure cable and harness connector from door closure motor assembly.
6. Remove mounting bolts and then remove door closure motor assembly.

INSTALLATION

Note the following items, and install in the reverse order of removal.

CAUTION:

- **When installing door closure cable (1), be sure to install so that door closure cable front end (A) faces to the outside of the gear.**



- **Perform adjustment after installing door closure cable. Refer to DLK-217, "DOOR CLOSURE MOTOR ASSEMBLY : Adjustment".**

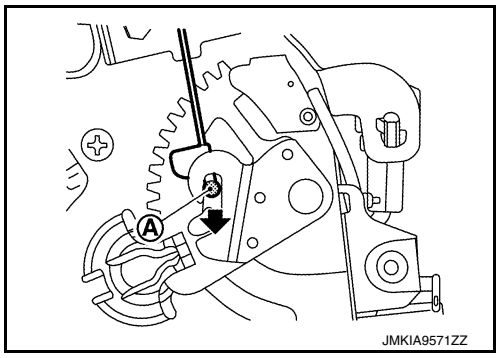
DOOR CLOSURE MOTOR ASSEMBLY : Adjustment

INFOID:0000000012352839

DOOR CLOSURE CABLE ADJUSTMENT METHOD

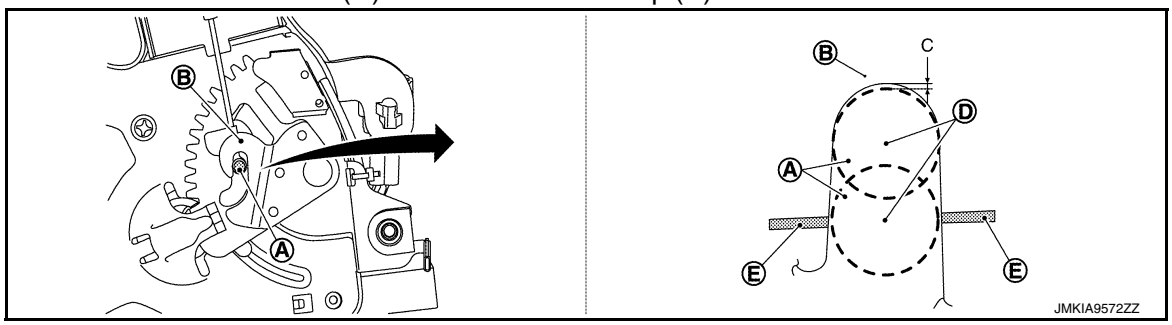
For Rear Door Closure Models

1. Pull door closure cable end (A) lightly.

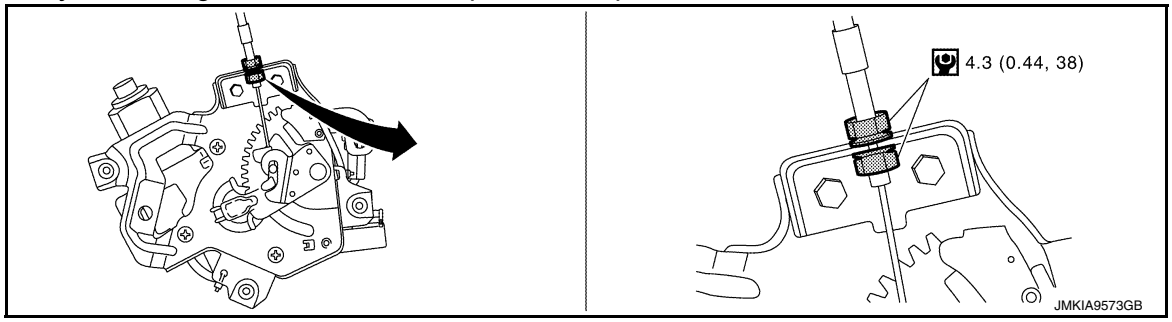


2. Check the following status.
   - Check that clearance C between cable end (A) and gear bracket (B) is not 0.3 mm or less.

- Check that cable end center (D) is not outside of stamp (E).



3. When cable end center is not within the range, loosen lock nut and adjust door closure cable.
4. After adjustment, tighten lock nut to the specified torque.



: N·m (kg-m, in-lb)

INSIDE HANDLE

INSIDE HANDLE : Removal and Installation

INFOID:0000000012352840

REMOVAL

1. Remove rear door finisher. Refer to INT-34, "REAR DOOR FINISHER : Removal and Installation".
2. Remove inside handle mounting screws, and then remove inside handle.

INSTALLATION

Note the following item, and install in the reverse order of removal.

CAUTION:

Check door open/close, lock/unlock operation after installation.

OUTSIDE HANDLE

OUTSIDE HANDLE : Removal and Installation

INFOID:0000000012352841

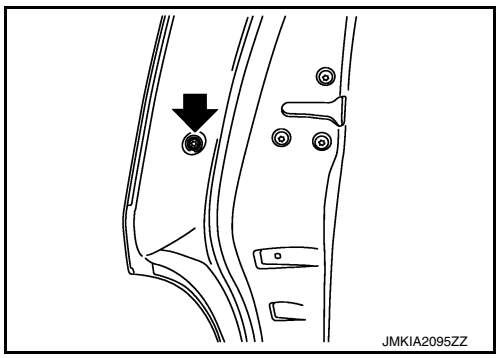
REMOVAL

For Rear Door Closure Models

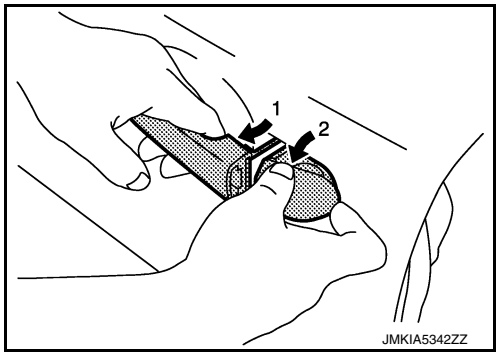
1. Remove rear door finisher. Refer to INT-34, "REAR DOOR FINISHER : Removal and Installation".
2. Remove rear door auto closure control unit. Refer to DLK-237, "Removal and Installation".
3. Remove sealing screen. Refer to GW-23, "Removal and Installation".
4. Fully close rear door glass.

5. Remove door side grommet, and loosen TORX bolt from grommet hole.
CAUTION:
Never remove TORX bolt forcibly.

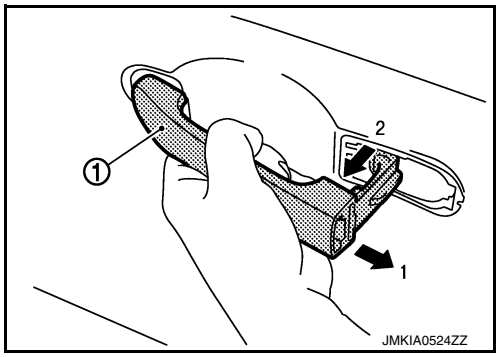
⬅ : TORX bolt



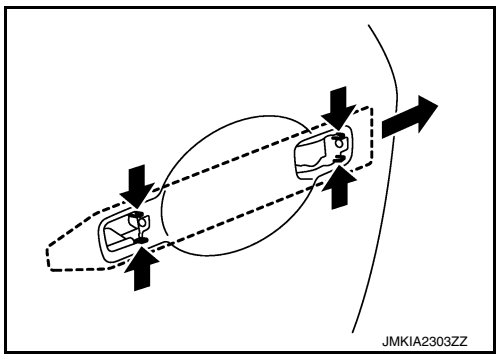
6. While pulling outside handle, remove outside handle escutcheon.



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



8. Remove front gasket and rear gasket.
9. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.

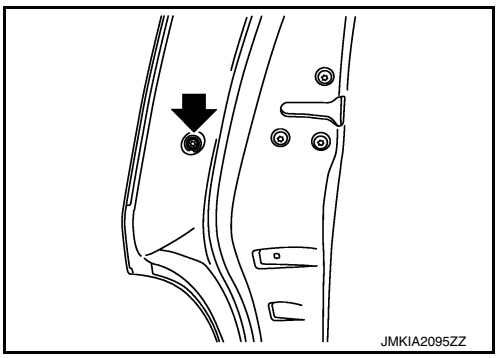


10. Reach in to separate outside handle cable connection on outside handle bracket.

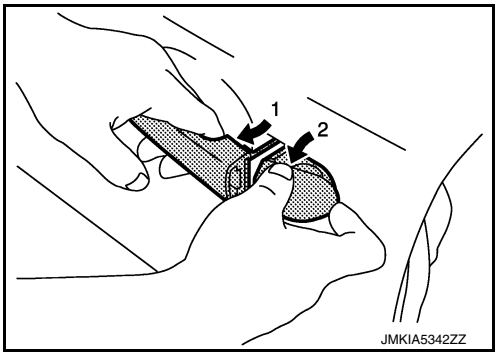
Except For Rear Door Closure Models

1. Remove door side grommet, and loosen TORX bolt from grommet hole.
CAUTION:
Never remove TORX bolt forcibly.

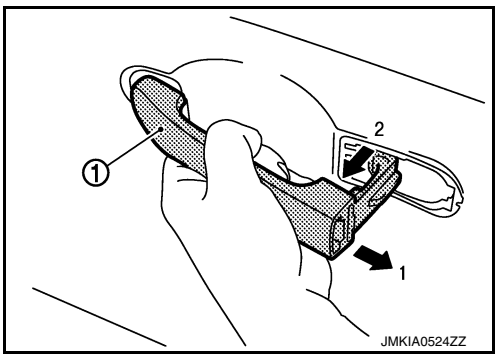
: TORX bolt



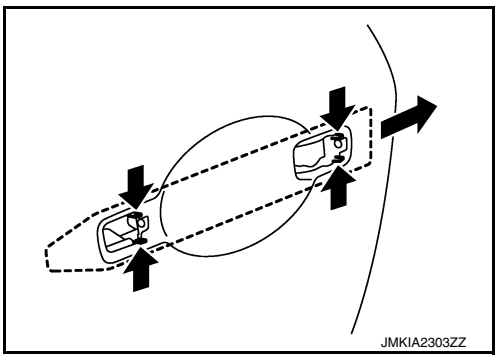
2. While pulling outside handle, remove outside handle escutcheon.



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



4. Remove rear door finisher. Refer to INT-34, "REAR DOOR FINISHER : Removal and Installation".
5. Remove sealing screen. Refer to GW-23, "Removal and Installation".
6. Fully close rear door glass.
7. Remove front gasket and rear gasket.
8. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.



9. Reach in to separate outside handle cable connection on outside handle bracket.

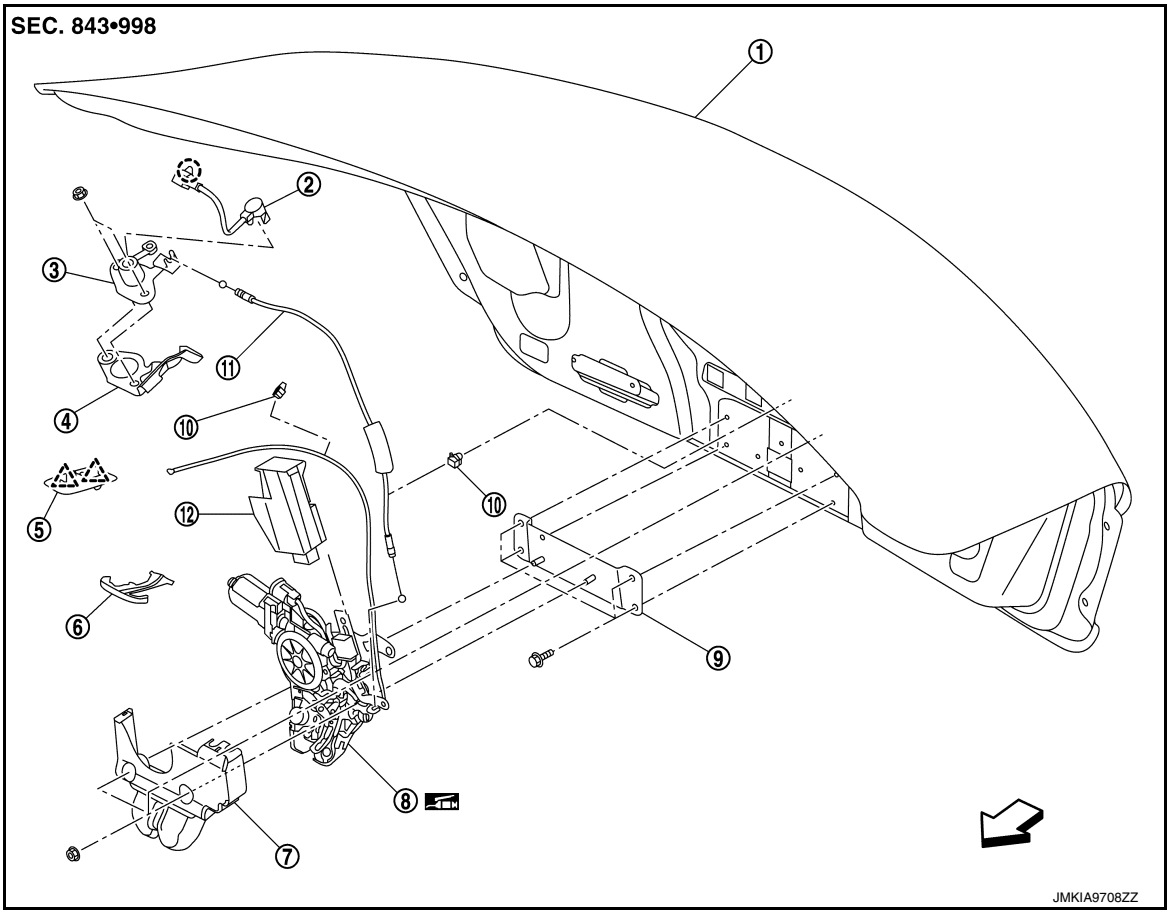
INSTALLATION

Note the following item, and install in the reverse order of removal.
CAUTION:
Check door open/close, lock/unlock operation after installation.

TRUNK LID LOCK

Exploded View

INFOID:0000000012352842



1. Trunk lid
2. Trunk lid cylinder switch
3. Trunk lid cylinder assembly
4. Trunk lid outer protector
5. Emergency holder
6. Emergency inside handle
7. Trunk lid lock cover
8. Trunk closure assembly
9. Trunk opener bracket assembly
10. Cable clip
11. Trunk lid cable
12. Trunk lid closure control unit

: Clip

: Pawl

: Vehicle front

: Body grease

Removal and Installation

INFOID:0000000012352843

REMOVAL

1. Remove trunk lid inner finisher. Refer to INT-64, "Removal and Installation".
2. Disconnect trunk lid cable from trunk lid cylinder assembly.
3. Disconnect trunk closure assembly harness connector.
   CAUTION:
   When disconnecting harness connector, disconnect battery cable from negative terminal, and then disconnect harness connector.
4. Remove trunk closure assembly.

a. Remove emergency inside handle from emergency holder.
b. Remove cable from emergency inside handle.

c. Remove trunk closure assembly mounting nuts, and then remove trunk closure assembly.

5. Remove trunk lid lock cover and trunk lid cable from trunk closure assembly.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

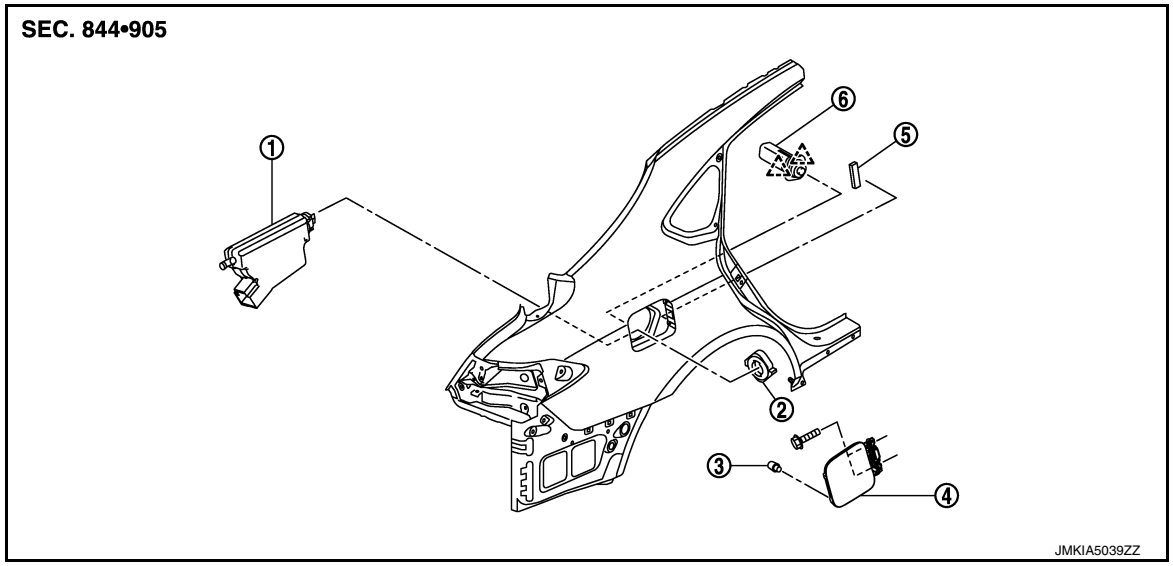
- **Check trunk lid open/close, lock/unlock operation after installation.**
- **For preventing accidental activation of trunk closure assembly, be careful of the following items and perform installation procedures.**

- **Never subject trunk closure assembly to strong impact, such as by hitting it with a tool.**
- **Never use trunk closure assembly that is subjected to strong impact by dropping or hitting.**

FUEL FILLER LID OPENER

Exploded View

INFOID:0000000012352844



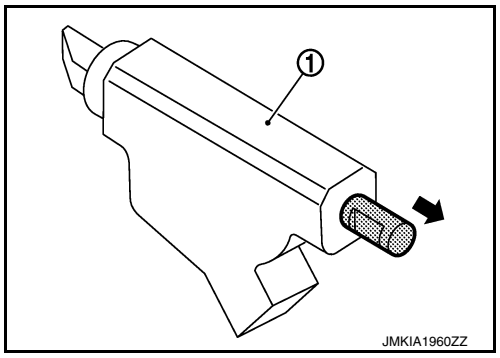
1. Fuel filler lid opener actuator
2. Lock nut
3. Bumper rubber
4. Fuel filler lid assembly
5. Bumper rubber
6. Lock and rod assembly

△ : Pawl

Removal and Installation

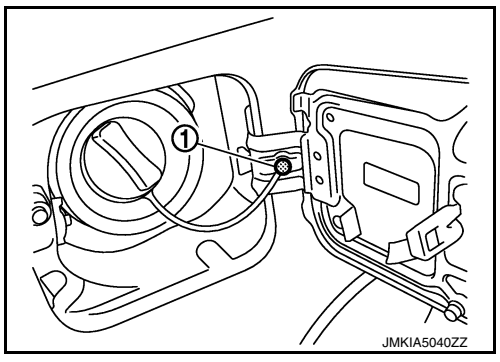
INFOID:0000000012352845

NOTE:
When fuel filler lid opener actuator (1) is a defective operation, pull the rod to open fuel filler lid.



REMOVAL

1. Fully open fuel filler lid.
2. Remove fuel mounting pin (1).



3. Remove mounting screws and then remove fuel filler lid.
4. Rotate lock nut counterclockwise, and then remove lock nut.

5. Remove trunk side finisher RH. Refer to INT-63, "TRUNK SIDE FINISHER : Removal and Installation".
6. Push fuel filler lid opener actuator behind the vehicle, while pushing the pawl.
7. Disconnect harness connector and remove fuel filler lid opener actuator.
8. Pull and remove lock & rod assembly forward, while pushing the pawls.

INSTALLATION

Note the following item, and install in the reverse order of removal.

CAUTION:

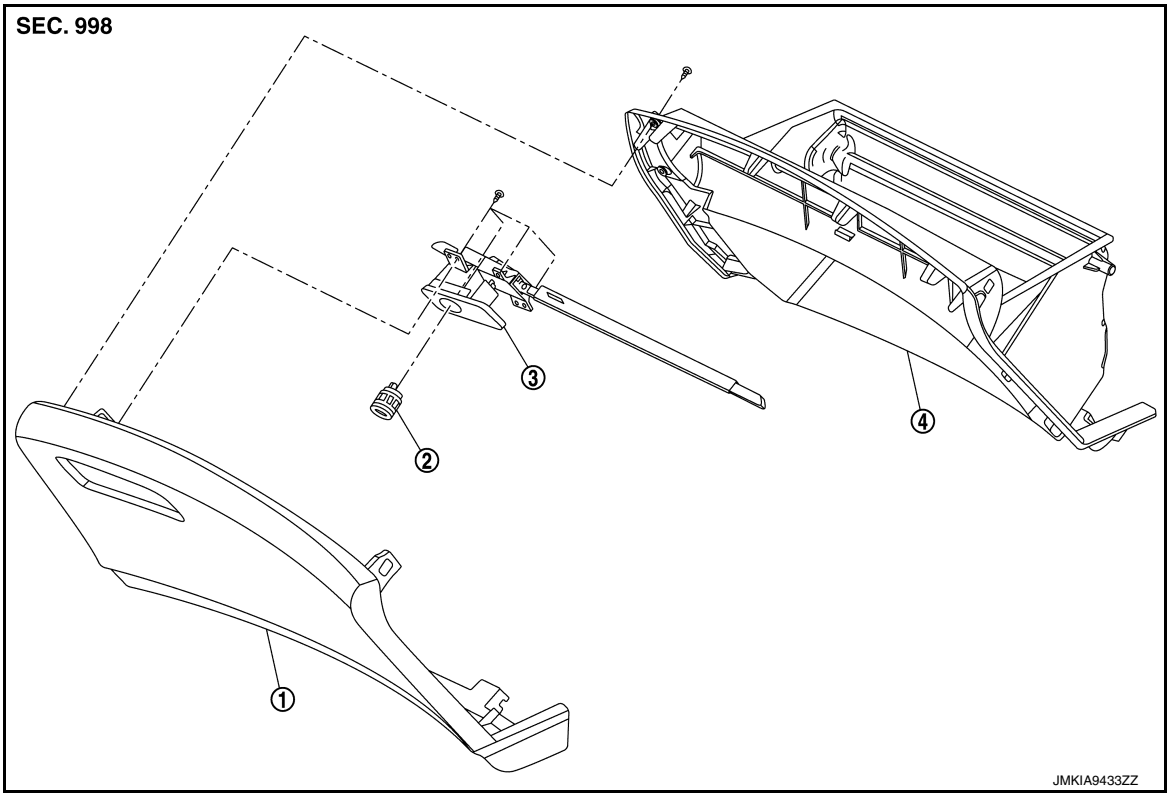
- **After installation, check fuel filler lid assembly open/close, lock/unlock operation.**
- **After installation, apply the touch-up paint (the body color) onto the head of the mounting screws.**

KEY CYLINDER

GLOVE BOX LID KEY CYLINDER

GLOVE BOX LID KEY CYLINDER : Exploded View

INFOID:0000000012352846



1. Glove box outer lid
2. Glove box lid lock cylinder
3. Glove box lock assembly
4. Glove box inner lid

GLOVE BOX LID KEY CYLINDER : Removal and Installation

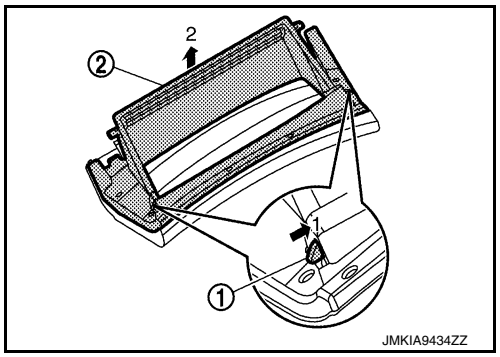
INFOID:0000000012352847

REMOVAL

CAUTION:

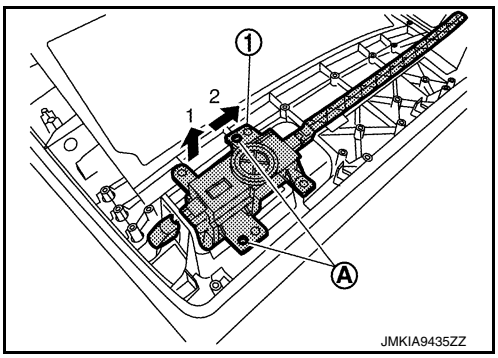
Replace glove box lock assembly when replacing glove box lid lock cylinder.

1. Remove glove box assembly. Refer to IP-13, "Removal and Installation".
2. Remove fixing screws of glove box inner lid.
3. Push rod (1) of glove box lock assembly into the inside of glove box inner lid (2). Remove glove box inner lid.

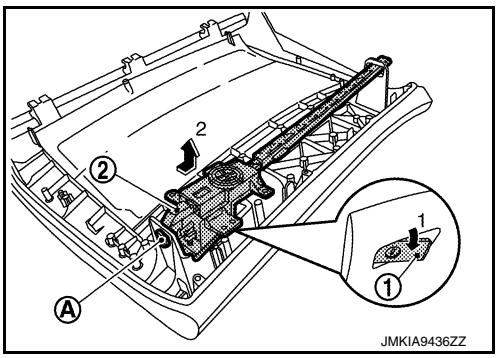


4. Remove fixing screws of glove box lock assembly.

5. Slightly lift up glove box lock assembly (1), and then move it toward the direction as shown by arrow without interfering with pin portion (A).



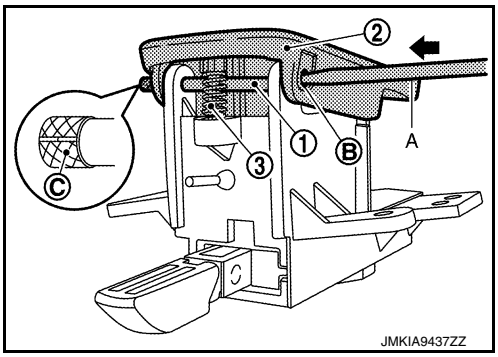
6. Disconnect rod (2) from rod slide hole portion (A) while pulling handle (1) of glove box lock assembly.



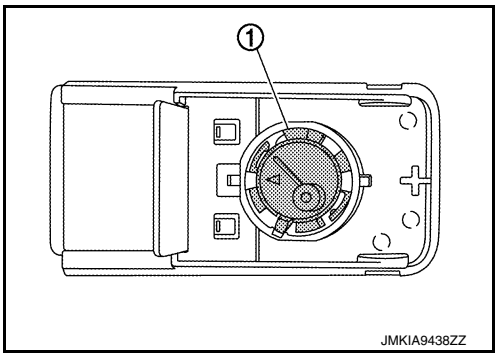
7. Remove glove box lock assembly.
8. Using a screwdriver (A), insert shaft (1) from portion (B) as shown in the figure. Remove shaft, handle (2), and handle spring (3).

CAUTION:

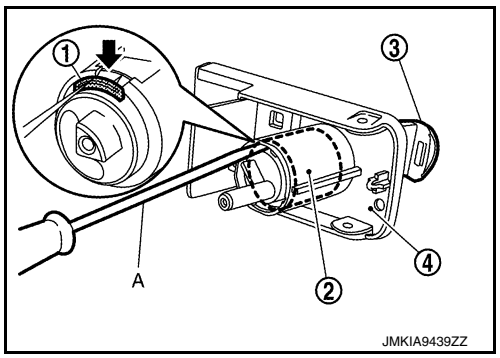
- **Be sure to push shaft toward the specified direction, because treatment (C) is applied on one side of shaft so that shaft can be fixed.**
- **Caulking processing is applied at the end of the shaft. Shaft and handle are damaged when removing the shaft. Therefore, replace glove box lock assembly when replacing glove box lid lock cylinder.**



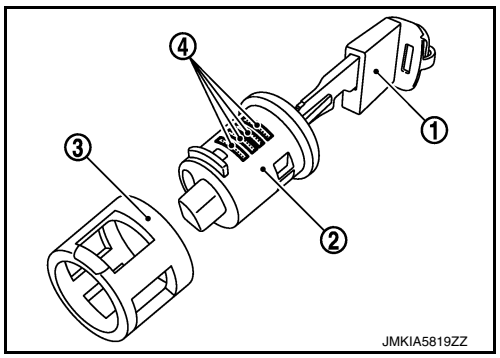
9. Insert mechanical key into glove box lid lock cylinder. Align the position of striker (1) to the same position as shown in the figure.



10. Press tumbler stopper (1) into glove box lid key cylinder (2) using a hook and pick tool (A), and then remove mechanical key (3) and glove box lid key cylinder together from handle (4).
NOTE:
When removing glove box lid key cylinder, write a short note describing its position against handle.



11. Remove sleeve (3) from handle, and then install sleeve to glove box lid key cylinder (2).
NOTE:
When removing sleeve, write a short note describing its position against handle.
CAUTION:
Never pull out mechanical key (1) from glove box lid key cylinder while sleeve is uninstalled. Otherwise, tumbler (4) pops out of glove box lid key cylinder.



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.

DOOR SWITCH

Removal and Installation

INFOID:0000000012352848

REMOVAL

Remove the door switch mounting bolt, and then remove door switch.

INSTALLATION

Install in the reverse order of removal.

INSIDE KEY ANTENNA

INSTRUMENT CENTER

INSTRUMENT CENTER : Removal and Installation

INFOID:0000000012352849

REMOVAL

1. Remove the cluster lid C. Refer to IP-13, "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:0000000012352850

REMOVAL

1. Remove the console ashtray.
2. Remove the center console assembly. Refer to IP-24, "Removal and Installation".
3. Remove the inside key antenna mounting (console) screw, and then remove inside key antenna (console).

INSTALLATION

Install in the reverse order of removal.

TRUNK ROOM

TRUNK ROOM : Removal and Installation

INFOID:0000000012352851

REMOVAL

1. Remove the trunk lid upper finisher. Refer to INT-62, "TRUNK FINISHER FRONT : Removal and Installation".
2. Remove the inside key antenna (trunk room) mounting nuts, and then remove inside key antenna (trunk room).

INSTALLATION

Install in the reverse order of removal.

OUTSIDE KEY ANTENNA

DRIVER SIDE

DRIVER SIDE : Removal and Installation

INFOID:0000000012352852

REMOVAL

Remove the front outside handle LH. Refer to DLK-212, "OUTSIDE HANDLE : Removal and Installation".

INSTALLATION

Install in the reverse order of removal.

PASSENGER SIDE

PASSENGER SIDE : Removal and Installation

INFOID:0000000012352853

REMOVAL

Remove the front outside handle RH. Refer to DLK-212, "OUTSIDE HANDLE : Removal and Installation".

INSTALLATION

Install in the reverse order of removal.

REAR BUMPER

REAR BUMPER : Removal and Installation

INFOID:0000000012352854

REMOVAL

1. Remove the rear bumper. Refer to EXT-20, "Removal and Installation".
2. Remove the outside key antenna (rear bumper) mounting nuts, and then remove outside key antenna (rear bumper).

INSTALLATION

Install in the reverse order of removal.

INTELLIGENT KEY WARNING BUZZER

Removal and Installation

INFOID:0000000012352855

REMOVAL

1. Remove the front bumper. Refer to EXT-16, "Removal and Installation".
2. Remove the Intelligent Key warning buzzer mounting bolt, and then remove the Intelligent Key warning buzzer.

INSTALLATION

Install in the reverse order of removal.

TRUNK OPENER REQUEST SWITCH

Removal and Installation

INFOID:0000000012352856

REMOVAL

1. Remove the trunk lid finisher. Refer to EXT-46, "Removal and Installation".
2. Remove trunk lid request switch from trunk lid finisher.

INSTALLATION

Install in the reverse order of removal.

TRUNK LID OPENER SWITCH

Removal and Installation

INFOID:0000000012352857

REMOVAL

1. Remove the instrument driver lower panel. Refer to IP-13, "Removal and Installation".
2. Remove the trunk lid opener switch from instrument driver lower panel, and then remove pawl. Press trunk lid opener switch front side to disengage from instrument driver lower panel.

INSTALLATION

Install in the reverse order of removal.

TRUNK LID OPENER CANCEL SWITCH

Removal and Installation

INFOID:0000000012352858

REMOVAL

1. Remove the instrument assist lower panel. Refer to IP-13, "Removal and Installation".
2. Remove the trunk lid opener cancel switch instrument assist lower panel, and then remove pawl. Press trunk lid opener cancel switch backside to disengage from instrument assist lower panel.

INSTALLATION

Install in the reverse order of removal.

REMOTE KEYLESS ENTRY RECEIVER

Removal and Installation

INFOID:0000000012352859

REMOVAL

1. Remove the glove box assembly. Refer to IP-13, "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.

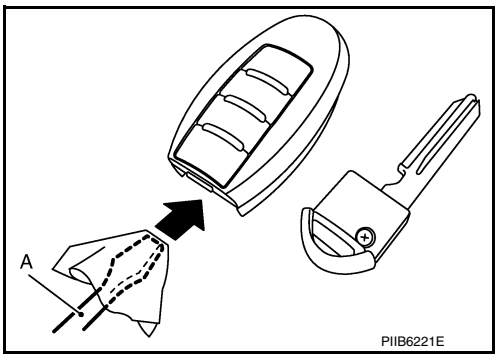
INTELLIGENT KEY BATTERY

Removal and Installation

INFOID:0000000012352860

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

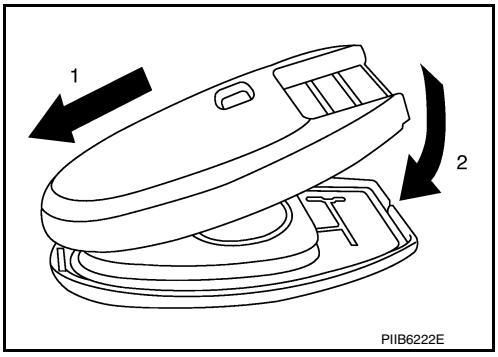
2. Insert remover tool (A) wrapped with a cloth into the slit of the corner and twist it to separate the upper part from the lower part.
CAUTION:
- **Do not touch the circuit board or battery terminal.**
- **The key fob is water-resistant. However, if it does get wet, immediately wipe it dry.**



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.**



REAR DOOR AUTO CLOSURE CONTROL UNIT

Removal and Installation

INFOID:0000000012352861

REMOVAL

1. Remove the rear door finisher. Refer to INT-34, "REAR DOOR FINISHER : Removal and Installation".
2. Remove the rear door closure control unit mounting bolt, and then remove rear door auto closure control unit.

INSTALLATION

Install in the reverse order of removal.