SECTION DLK
DOOR & LOCK

CONTENTS

PRECAUTION

PRECAUTIONS

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

INFOID:0000000007578774

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:

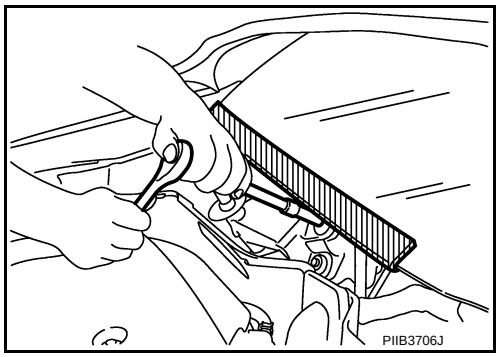
Always observe the following items for preventing accidental activation.

- **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:0000000007578775

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



Work

INFOID:0000000007578776

- 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.

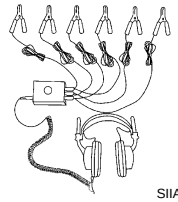
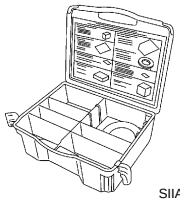
PREPARATION

PREPARATION

Special Service Tools

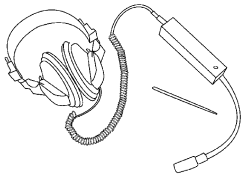
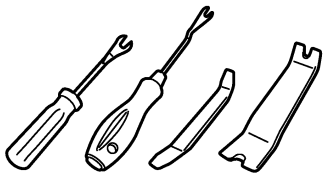
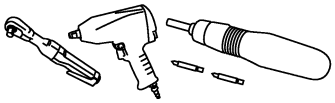
INFOID:0000000007578777

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

Tool number (Kent-Moore No.) Tool name		Description
(J-39570) Chassis ear	 SIIA0993E	Locates the noise
(J-43980) NISSAN Squeak and Rattle Kit	 SIIA0994E	Repairs the cause of noise

Commercial Service Tools

INFOID:0000000007578778

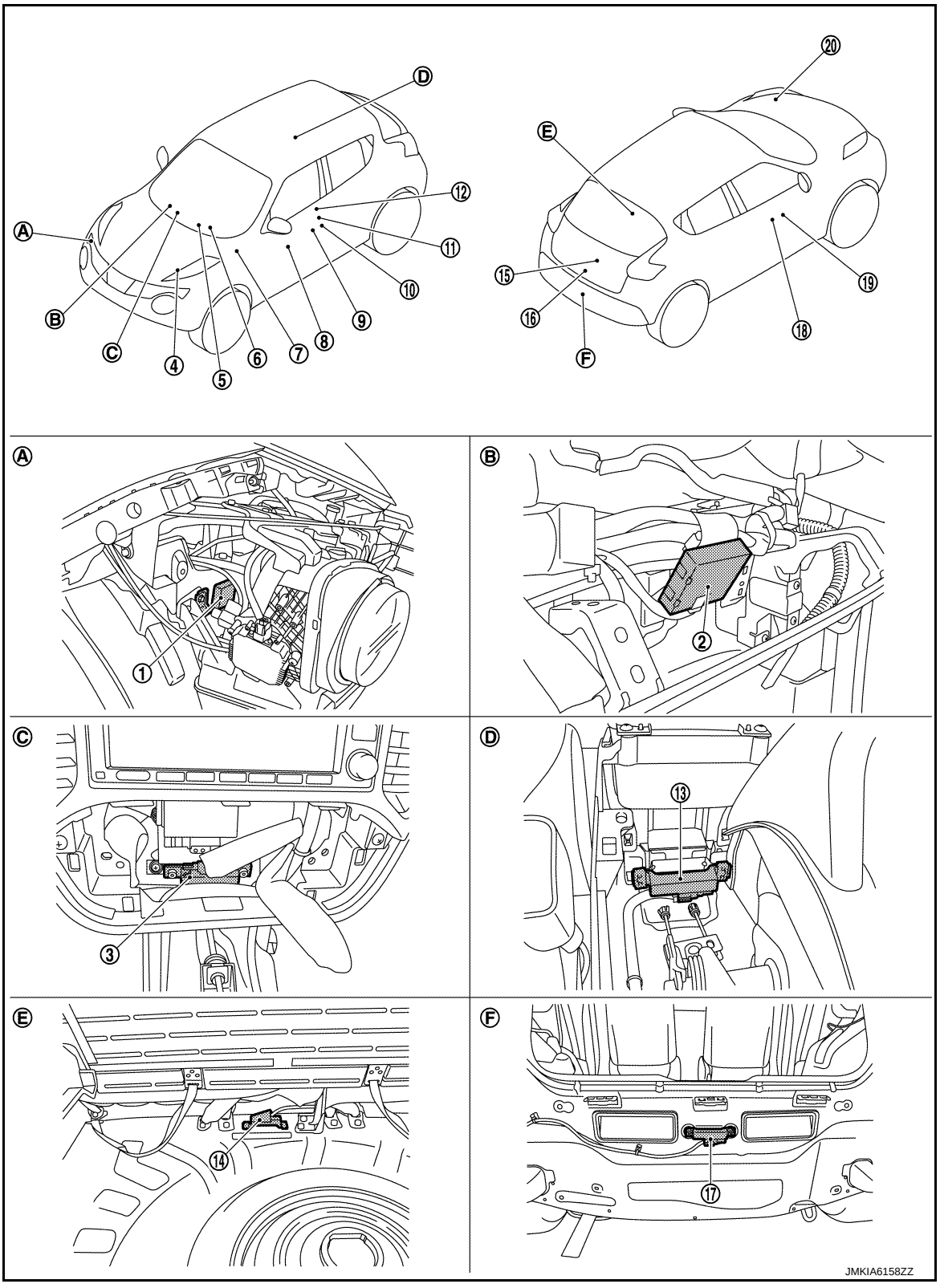
Tool name		Description
Engine ear	 SIIA0995E	Locates the noise
Remover tool	 JMKIA3050ZZ	Removes the clips, pawls, and metal clips
Power tool	 PIIB1407E	

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000007578779



1. Intelligent Key warning buzzer	2. Remote keyless entry receiver	3. Inside key antenna (instrument center)
4. TCM Refer to TM-69, "CVT CONTROL SYSTEM : Component Parts Location"	5. Push-button ignition switch	6. Combination meter
7. BCM Refer to BCS-6, "BODY CONTROL SYSTEM : Component Parts Location"	8. Power window main switch	9. Outside key antenna (driver side)
10. Front door switch (driver side)	11. Front door lock assembly (driver side)	12. Front door request switch (driver side)
13. Inside key antenna (console)	14. Inside key antenna (luggage room)	15. Back door request switch
16. Back door lock assembly	17. Outside antenna (rear bumper)	18. Front door request switch (passenger side)
19. Outside key antenna (passenger side)	20. IPDM E/R Refer to PCS-5, "Component Parts Location"	
A. View with front bumper removed	B. View with instrument panel assembly removed	C. View with multi display unit removed
D. View with center console assembly removed	E. View with luggage room finisher removed	F. View with rear bumper removed

Component Description

INFOID:0000000007578780

Item	Function
BCM	Controls the door lock system.
Back door opener actuator	Opens the back door with the back door open signal from BCM.
Back door opener switch	Inputs back door opener switch operation signal to BCM.
Combination meter	• Displays each operation method guide and warning for system malfunction. • Performs operation method guide and warning with buzzer. • Transmits vehicle seep signal to CAN communication line.
Door lock actuator	• Inputs locks/unlocks signal from BCM and locks/unlocks each door. • Integrated in each door lock assembly.
Door lock and unlock switch	• Transmits door lock/unlock operation to BCM. • Integrated in the power window main switch and front power window switch (passenger side).
Door request switch	• Transmits door lock/unlock operation to BCM. • Integrated in the outside handle (driver side, passenger side and back door).
Door switch	Detects door open/close condition.
Inside key antenna	• Detects whether Intelligent Key is inside the vehicle. • Installed in the instrument center and luggage room.
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.
Intelligent Key warning buzzer	Warns for an inappropriate operation.
IPDM E/R	Sounds horn via CAN communication between BCM.
Outside key antenna	• Detects whether Intelligent Key is outside the vehicle. • Integrated in the outside handle (driver side, passenger side and back door).
Push-button ignition switch	• BCM transmits the change in the power supply position with the push-button ignition switch to IPDM E/R via CAN communication line. IPDM E/R transmits the power supply position status via CAN communication line to BCM. • Immobilizer antenna amp checks Intelligent Key transponder.
Remote keyless entry receiver	Receives Intelligent Key operation and transmits to BCM.
TCM	Transmits shift position signal to BCM via CAN communication line

SYSTEM (POWER DOOR LOCK SYSTEM)

System Diagram

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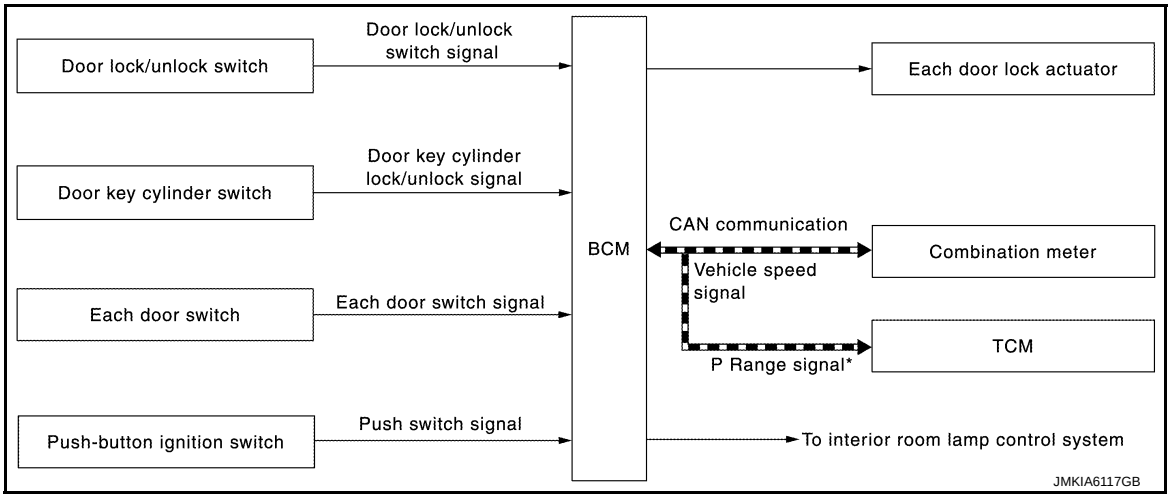


System Description

INFOID:0000000007578782

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 are locked.
- Interlocked with the unlocking operation of door lock and unlock switch, door lock actuators of all doors 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.
- 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 5 seconds after the first unlock operation unlocks all of the other doors actuator. (SELECTIVE UNLOCK OPERATION)

Selective unlock operation mode can be changed using CONSULT.
Refer to DLK-28, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

IGNITION POSITION WARNING FUNCTION

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

INTERIOR ROOM LAMP CONTROL FUNCTION

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

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (LOCK OPERATION)

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

Vehicle Speed Sensing Auto Door Lock

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

P Range Interlock Door Lock*

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

Setting change of Automatic Door Lock/Unlock Function

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

NOTE:

P range interlock door lock can be selected for M/T models, but automatic door lock/unlock function does not operate.

With CONSULT

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

Without CONSULT

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

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

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

*: This function does not operate on M/T models.

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*1

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*2

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

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

Setting change of Automatic Door Lock/Unlock Function

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

NOTE:

P range interlock door lock can be selected for M/T models, but automatic door lock/unlock function does not operate.

With CONSULT

The ON/OFF switching of the automatic door lock/unlock function and the type selection of the automatic door lock/unlock function can be performed at the WORK SUPPORT setting of CONSULT. Refer to DLK-28, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Without CONSULT

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

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

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

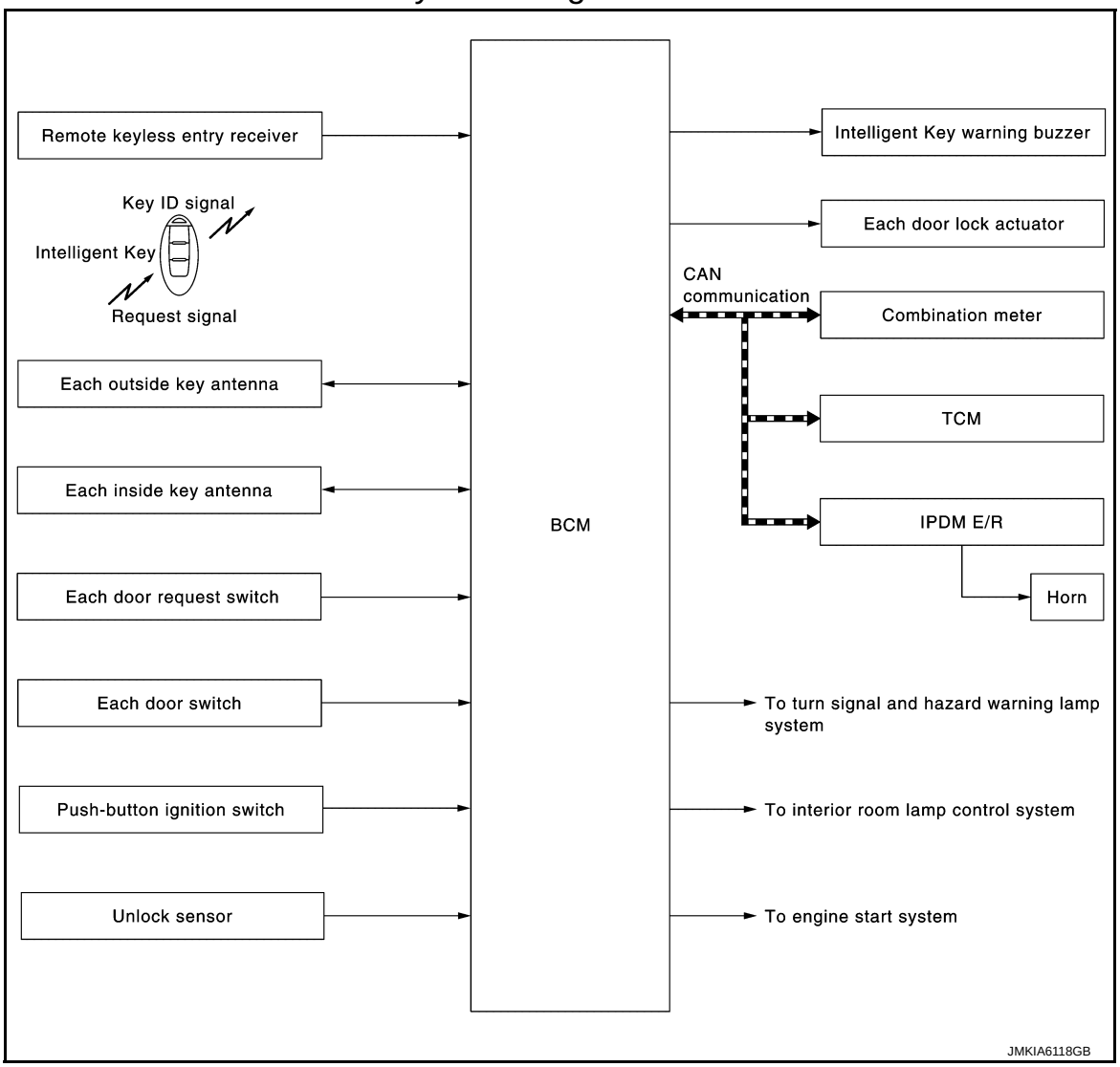
*1: This function is set to ON before delivery.

*2: This function does not operate on M/T models.

SYSTEM (INTELLIGENT KEY SYSTEM)
INTELLIGENT KEY SYSTEM

INTELLIGENT KEY SYSTEM : System Diagram

INFOID:0000000007578783



INTELLIGENT KEY SYSTEM : System Description

INFOID:0000000007578784

- 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.

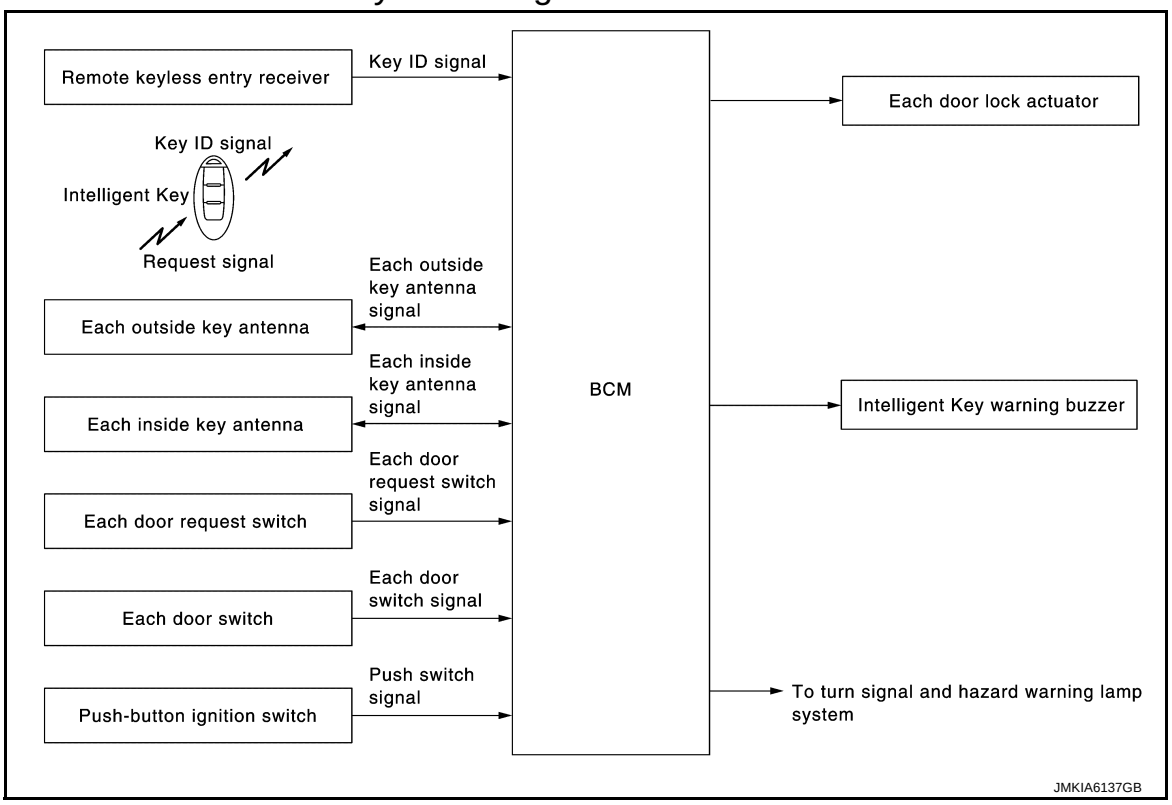
Function	Description	Refer
Door lock	Lock/unlock can be performed by pressing the request switch	DLK-16
Remote keyless entry	Lock/unlock can be performed by pressing the remote controller button of the Intelligent Key	DLK-20
Key reminder	The key reminder buzzer sounds a warning if the door is locked with the key left inside the vehicle	DLK-22

Function	Description	Refer
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-23
Engine start	The engine can be turned on while carrying the Intelligent Key	SEC-12
Interior room lamp control	Interior room lamp is controlled according to door lock/unlock state	INL-6
Panic alarm	When Intelligent Key panic alarm button is pressed, horn sounds	SEC-18

DOOR LOCK FUNCTION

DOOR LOCK FUNCTION : System Diagram

INFOID:0000000007578785



DOOR LOCK FUNCTION : System Description

INFOID:0000000007578786

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

OPERATION DESCRIPTION

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

OPERATION CONDITION

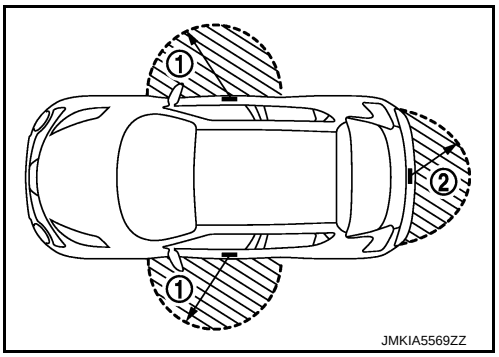
If the following conditions are satisfied, door lock/unlock operation is performed if the door request switch is operated.

Each door request switch operation	Operation condition
Lock	• All doors are closed • Panic alarm is not activated • P position warning is not activated • Intelligent Key is outside the vehicle • Intelligent Key is within outside key antenna detection area
Unlock	• All doors are closed • 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 unlocked from outside of the vehicle with a spare Intelligent Key as long as key IDs are different.

OUTSIDE KEY ANTENNA DETECTION AREA

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



SELECTIVE UNLOCK FUNCTION

Lock Operation

When an LOCK signal is sent from door request switch (driver side, passenger side or back door), all doors are locked.

Unlock Operation

- When an UNLOCK signal from front door request switch (driver side) is transmitted, driver side door unlocks. When another UNLOCK signal is transmitted within 60 seconds, all door unlocks.
- When an UNLOCK signal from front door request switch (passenger side) is transmitted, passenger side door unlocks. When another UNLOCK signal is transmitted within 60 seconds, all door unlocks.
- When an UNLOCK signal from back door request switch is transmitted, back door unlocks. When another UNLOCK signal is transmitted within 60 seconds, all door unlocks.

How to Change Selective Unlock Operation Mode

Selective unlock operation mode can be changed using CONSULT.
Refer to DLK-30, "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-30, "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 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-30, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

LIST OF OPERATION RELATED PARTS

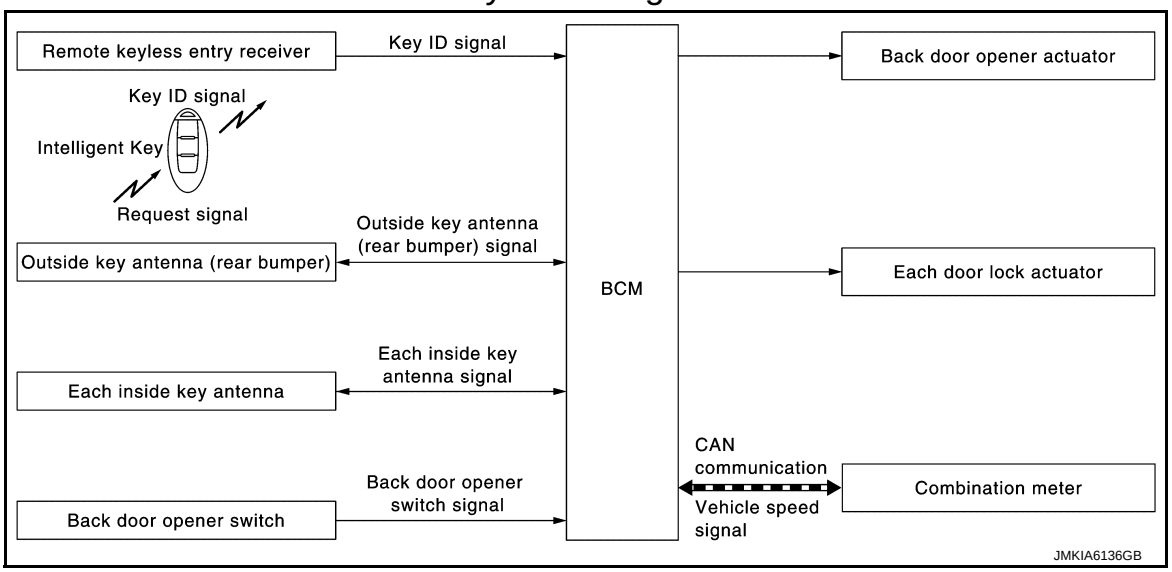
Parts marked with × are the parts related to operation.

Door lock function	Intelligent Key	Remote keyless entry receiver	Door switch	Door request switch	Door lock actuator	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	×				×					×		×	

BACK DOOR OPEN FUNCTION

BACK DOOR OPEN FUNCTION : System Diagram

INFOID:0000000007578787



BACK DOOR OPEN FUNCTION : System Description

INFOID:0000000007578788

While back door open in the permitted state, back door opens when back door opener switch is pressed after back door opener request switch is operated.

BACK DOOR OPEN

- When the BCM detects that back door opener switch is pressed, it starts the outside key antenna (rear bumper) and inside key antenna and transmits the request signal to the Intelligent Key. Then, check that the Intelligent Key is near the back door.
- If the Intelligent Key is within the outside key antenna detection area, it receives the request signal and transmits the key ID signal to the BCM via remote keyless entry receiver.
- BCM receives the key ID signal and compares it with the registered key ID.
- BCM opens back door, simultaneously unlocks all doors.

NOTE:
In selective unlock mode, only back door opens. All doors do not unlock.

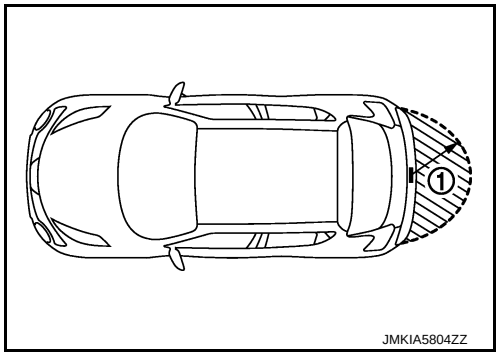
OPERATION CONDITION

If the following conditions are satisfied, the back door can be opened.

Back door open function	Operation condition
Back door open operation	• Vehicle speed is less than 5 km/h (3 MPH) • 3 seconds or more after BCM outputs all doors lock signal • Intelligent Key is outside of vehicle • Intelligent Key is within outside key antenna detection area

OUTSIDE KEY ANTENNA DETECTION AREA

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



LIST OF OPERATION RELATED PARTS

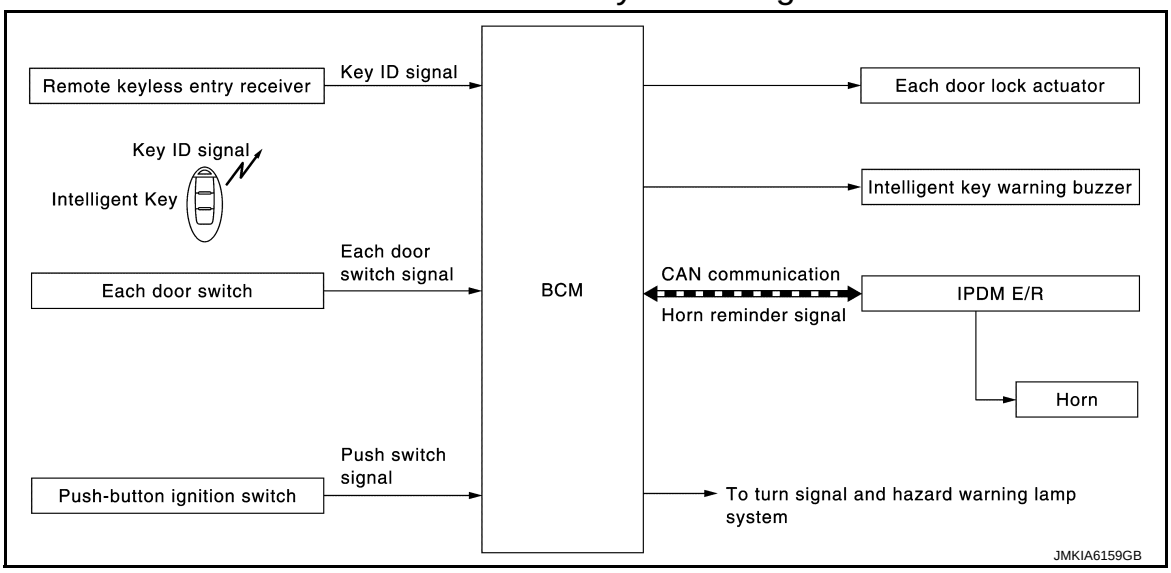
Parts marked with × are the parts related to operation.

Door lock function	Intelligent Key	Remote keyless entry receiver	Back door opener actuator	Door lock actuator	Inside key antenna	Outside key antenna	CAN communication system	BCM	Back door opener switch	Combination meter
Back door open function	×	×	×	×	×	×	×	×	×	×

REMOTE KEYLESS ENTRY FUNCTION

REMOTE KEYLESS ENTRY FUNCTION : System Diagram

INFOID:0000000007578789



REMOTE KEYLESS ENTRY FUNCTION : System Description

INFOID:0000000007578790

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

OPERATION

Remote keyless entry system controls operation of the following items.
- Door lock/unlock
- Selective unlock function
- Hazard reminder function
- Auto door lock

OPERATION AREA

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

DOOR LOCK/UNLOCK FUNCTION

- When door lock/unlock button of the Intelligent Key is pressed, lock signal or unlock signal transmitted from Intelligent Key to BCM via remote keyless entry receiver.
- BCM receives the signal and compares it with the registered key ID to the vehicle.
- When BCM receives the door lock/unlock signal, it operates all door lock actuators and the hazard lamp (lock: 2 times, unlock: 1 time) and horn chirp signal to IPDM E/R at the same time as a reminder.
- IPDM E/R honks horn (lock: 1 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 are locked.
- When an UNLOCK signal is transmitted from Intelligent Key once, driver side door is 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-28, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

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	Back door open	Lock	Unlock	Back door open
Hazard warning lamp blinks	Twice	Once	—	Twice	—	—
Horn sound	Once	—	—	—	—	—

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

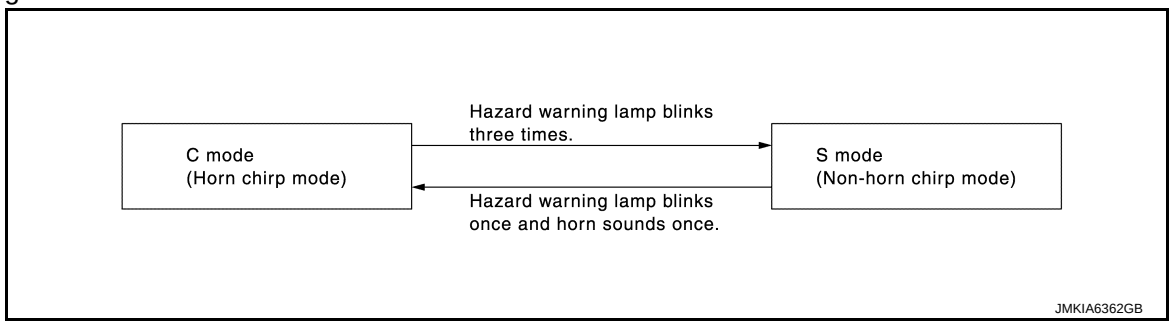
How to change hazard and horn reminder mode

With CONSULT

Refer to DLK-30, "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-30, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

LIST OF OPERATION RELATED PARTS

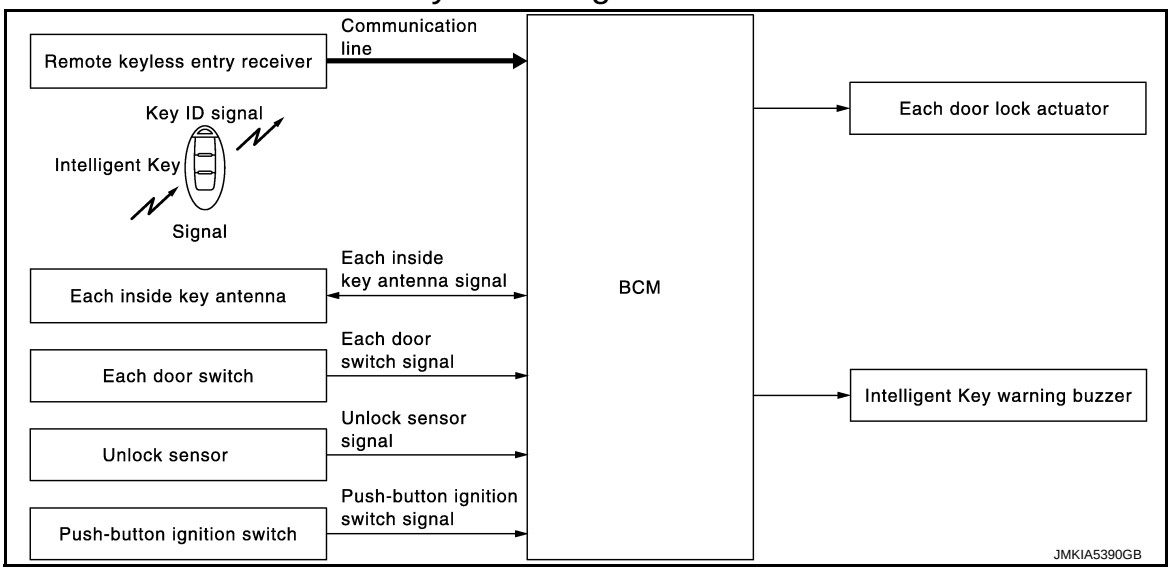
Parts marked with × are the parts related to operation.

Remote keyless entry functions	Intelligent Key	Door switch	Door lock actuator	Push-button ignition switch	Intelligent Key warning buzzer	CAN communication system	BCM	Combination meter	Hazard warning lamp	Horn	IPDM E/R
Door lock/unlock function	×	×	×			×	×				
Hazard and horn reminder function	×				×	×	×	×	×	×	×
Selective unlock function	×	×	×			×	×				
Auto door lock function	×	×		×		×	×				

KEY REMINDER FUNCTION

KEY REMINDER FUNCTION : System Diagram

INFOID:0000000007578791



KEY REMINDER FUNCTION : System Description

INFOID:0000000007578792

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 side door closed*	Right after driver side door is closed under the following conditions • Intelligent Key is inside the vehicle • Driver side door is opened • Driver side door is in unlock state	All doors unlock
Door is open to closed	Right after all doors are closed under the following conditions • Intelligent Key is inside the vehicle • Any door is opened • All doors are locked.	• All doors unlock • Honk Intelligent Key warning buzzer
Back door is closed	Right after back door is closed under the following conditions • Intelligent Key is inside the vehicle • All doors (except back door) are closed • All doors (except back door) are locked	• All doors unlock • Back door can open with back door opener switch • Honk Intelligent Key warning buzzer

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

CAUTION:

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

WARNING FUNCTION

WARNING FUNCTION : System Description

INFOID:0000000007578793

OPERATION DESCRIPTION

The warning function are as per the following items and are given to the user as warning information and warnings using combinations of Intelligent Key warning buzzer, combination meter buzzer, KEY warning lamp, shift P warning lamp and engine start operation indicator lamp.

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

OPERATION CONDITION

Operation condition of warning and information is as per the following table.

Warning/Information functions		Operation procedure
Intelligent Key system malfunction		A malfunction is detected on BCM and key warning lamp turns ON
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 warning (for external) operates only when driver door is closed after each of P position warning, ACC warning, and OFF position warning (internal) sounds.
P position warning*	For internal	• Shift position: Except P position • Engine is running to stopped (Ignition switch is ON to OFF)
	For external	• P position warning (For internal) operates • Door switch: ON to OFF (Door is open to close) • Intelligent Key cannot be detected inside the vehicle
ACC warning*		• After P position warning operates, or when ignition switch is turned ON immediately after P position warning operates • Ignition switch: ACC position

Warning/Information functions		Operation procedure
Take away warning	Door status changes from open to close	• Ignition switch: Except LOCK position • Door switch: ON to OFF (Door is open to close) • Registered Intelligent Key is not detected inside the vehicle
	Door status is open	• Door switch: ON (Door is open) • Registered Intelligent Key is not detected inside the vehicle during Key ID verification for 5 seconds
	Push button-ignition switch operation	• Ignition switch: Except LOCK position • Press push-button ignition switch • Registered Intelligent Key is not detected inside the vehicle
Door lock operation warning		When door lock operation is requested while door lock operating condition of door request switch 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 can be detected inside the vehicle
Intelligent Key low battery warning		BCM detects that Intelligent Key is low battery, after ignition switch is turned ON
Key ID warning		• Push-button ignition switch is pressed • Registered Intelligent Key is not detected inside the vehicle

*: M/T models do not apply.

WARNING METHOD

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

Warning/Information functions		"KEY" warning lamp	Shift P warning lamp	Warning chime		Engine start operation indicator lamp
				Combination meter buzzer	Intelligent Key warning buzzer	
Intelligent Key system malfunction		Indicate	—	—	—	—
OFF position warning	For internal	—	—	Activate	—	—
	For external*	—	—	—	Activate	—
P position warning*	For internal	Blink (yellow)	Indicate	Activate	—	—
	For external		—	—	Active	—
ACC warning*		—	—	Activate	—	—
Take away warning	Door is open to close	Blink (yellow)	—	Activate	Activate	—
	Door is open		—	—	—	—
	Push-ignition switch operation		—	Activate	—	—
Door lock operation warning		—	—	—	Activate	—
Key ID warning		Blink (yellow)	—	—	—	—
Engine start information		—	—	—	—	Indicate
Intelligent Key low battery warning		Blink (green)	—	—	—	—

*: M/T models do not apply.

LIST OF OPERATION RELATED PARTS

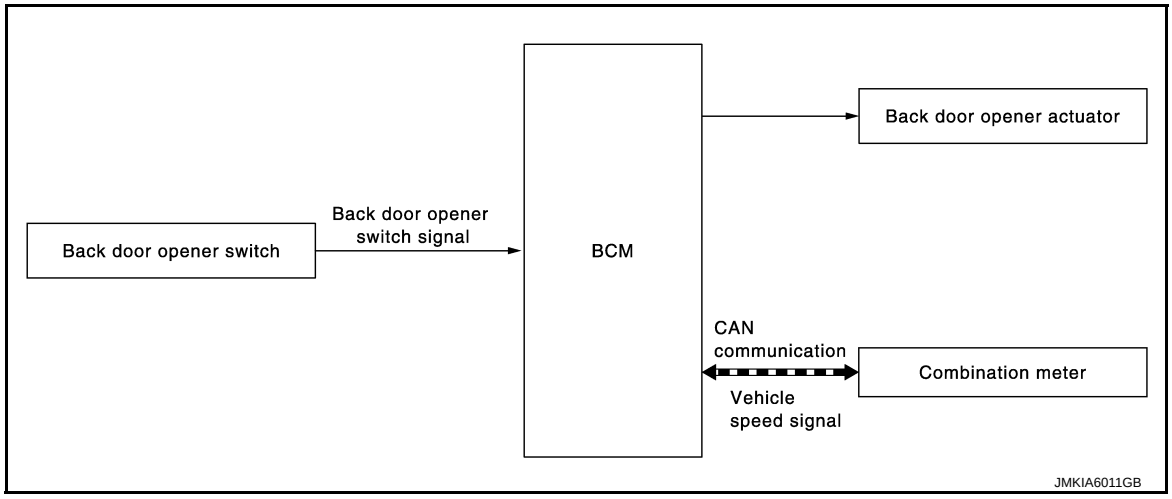
Parts marked with × are the parts related to operation.

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

BACK DOOR OPENER SYSTEM

System Diagram

INFOID:0000000007578794



System Description

INFOID:0000000007578795

BACK DOOR OPENER OPERATION

When back door opener switch is pressed, BCM operates back door opener actuator.

NOTE:

Back door opener actuator is not for locking the back door. The function is only to open the back door.

OPERATION CONDITION

If the following conditions are satisfied, back door opener operation is performed.

Back door opener switch operation	Operation condition
Back door open	• When back door is unlocked using back door opener request switch (selective unlock mode), or after BCM outputs all doors unlock signal • Vehicle speed is less than 5 km/h (3 MPH)

NOTE:

- When battery terminal is disconnected and reconnected during all doors unlock state, back door may not open.
- Regardless of door lock actuator state, BCM resets recognition of all doors unlock state approximately 30 seconds after battery terminal is disconnected and BCM recognizes that all doors are in lock state.
- When battery terminal is reconnected and back door does not open, have BCM recognize that all doors are in unlock state.

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

INFOID:0000000007812893

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 conditioning system	AIR CONDITONER		×	×*
• Intelligent Key system • Engine start system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
NVIS - NATS	IMMU	×	×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door open	TRUNK		×	
Theft warning alarm	THEFT ALM	×	×	×
RAP	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	AIR PRESSURE MONITOR	×	×	×

NOTE:

*: For models with automatic A/C, this diagnosis mode 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 position is “LOCK”*.)
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power position is “OFF”.)
	LOCK>ACC		While turning power position from “LOCK”* *to “ACC”
	ACC>ON		While turning power position from “ACC” to “IGN”
	RUN>ACC		While turning power position from “RUN” to “ACC” (Vehicle is stopping and selector lever is except P position.)
	CRANK>RUN		While turning power position from “CRANKING” to “RUN” (From cranking up the engine to run it)
	RUN>URGENT		While turning power position from “RUN“ to “ACC” (Emergency stop operation)
	ACC>OFF		While turning power position from “ACC” to “OFF”
	OFF>LOCK		While turning power position from “OFF” to “LOCK”*
	OFF>ACC		While turning power position from “OFF” to “ACC”
	ON>CRANK		While turning power position from “IGN” to “CRANKING”
	OFF>SLEEP		While turning BCM status from normal mode (Power position is “OFF”.) to low power consumption mode
	LOCK>SLEEP		While turning BCM status from normal mode (Power position is “LOCK”*.) to low power consumption mode
	LOCK		Power position is “LOCK”*
	OFF		Power position is “OFF” (Ignition switch OFF)
	ACC		Power position is “ACC” (Ignition switch ACC)
	ON		Power position is “IGN” (Ignition switch ON with engine stopped)
	ENGINE RUN		Power position is “RUN” (Ignition switch ON with engine running)
	CRANKING		Power 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 position shifts to “LOCK” from “OFF”, when ignition switch is in the OFF position, selector lever is in the P position (A/T models and CVT models), 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 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:0000000007578797

BCM CONSULT FUNCTION

CONSULT performs the following functions via CAN communication with BCM.

WORK SUPPORT

Monitor item	Description
DOOR LOCK-UNLOCK SET	Anti-hijack 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 24km/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 monitored • MODE 6: This item is displayed, but cannot be monitored
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

*: P range interlock door lock can be selected for M/T models, but automatic door lock/unlock function does not operate.

DATA MONITOR

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

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 door lock actuator (driver side) is unlocked when “DR UNLK” on CONSULT screen is touched • The 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:0000000007578798

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	**NOTE:** This item is displayed, but cannot be monitored
HORN WITH KEYLESS LOCK	Horn reminder function mode by Intelligent Key button can be changed to operate (ON) or not operate (OFF) 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	**NOTE:** This item is displayed, but cannot be monitored
LO- BATT OF KEY FOB WARN	Intelligent Key low battery warning mode can be changed to operation with this mode • On: Operate • Off: Non-operation
ANTI KEY LOCK IN FUNCTI	Key reminder function mode can be changed to operation with this mode • On: Operate • Off: Non-operation
HAZARD ANSWER BACK	Hazard reminder function mode by door request switch and Intelligent Key button can be selected from the following with this mode • Lock Only: Door lock operation only • Unlock Only: Door unlock operation only • Lock/Unlock: Lock and unlock operation • Off: Non-operation
ANS BACK I-KEY LOCK	Buzzer reminder function (lock operation) mode by door request switch can be selected from the following with this mode • Horn Chirp: Sound horn • Buzzer: Sound Intelligent Key warning buzzer • Off: Non-operation
ANS BACK I-KEY UNLOCK	Buzzer reminder function (unlock operation) mode by door request switch can be changed to operation with this mode • On: Operate • Off: Non-operation
SHORT CRANKING OUTPUT	Starter motor can operate during the times below • 70 msec • 100 msec • 200 msec

Monitor item	Description
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

SELF-DIAG RESULT

Refer to BCS-58, "DTC Index".

DATA MONITOR

Monitor Item	Condition
REQ SW -DR	Indicates [On/Off] condition of door request switch (driver side)
REQ SW -AS	Indicates [On/Off] condition of door request switch (passenger side)
REQ SW -BD/TR	Indicates [On/Off] condition of back door request switch
PUSH SW	Indicates [On/Off] condition of push-button ignition switch
CLUTCH SW*1	Indicates [On/Off] condition of clutch interlock switch
BRAKE SW 1	Indicates [On/Off]*2 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
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	**NOTE:** This item is displayed, but cannot be monitored
RKE-LOCK	Indicates [On/Off] condition of LOCK signal from Intelligent Key

Monitor Item	Condition
RKE-UNLOCK	Indicates [On/Off] condition of UNLOCK signal from Intelligent Key
RKE-TR/BD	**NOTE:** This item is displayed, but cannot be monitored
RKE-PANIC	Indicates [On/Off] condition of PANIC button of Intelligent Key
RKE-MODE CHG	Indicates [On/Off] condition of MODE CHANGE signal from Intelligent Key
RKE OPE COUN1	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing
RKE OPE COUN2	**NOTE:** This item is displayed, but cannot be monitored

*1: It is displayed but does not operate on CVT models.

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

ACTIVE TEST

Test item	Description
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation • On: Operate • Off: Non-operation
INSIDE BUZZER	This test is able to check warning chime in combination meter operation • Take Out: Take away warning chime sounds when CONSULT screen is touched • Key: Key warning chime sounds when CONSULT screen is touched • Knob: OFF position warning chime sounds when CONSULT screen is touched • Off: Non-operation
INDICATOR	This test is able to check warning lamp operation • KEY ON: “KEY” Warning lamp illuminates when CONSULT screen is touched • KEY IND: “KEY” Warning lamp blinks when CONSULT screen is touched • Off: Non-operation
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 • BP N: Engine start operation indicator lamp indicate when CONSULT screen is touched • BP I: Engine start operation indicator lamp indicate when CONSULT screen is touched • ID NG: This item is displayed, but cannot be monitored • ROTAT: This item is displayed, but cannot be monitored • SFT P: Shift P warning lamp indicate when CONSULT screen is touched • INSRT: This item is displayed, but cannot be monitored • BATT: Key warning lamp indicator when CONSULT screen is touched • NO KY: Key warning lamp indicator when CONSULT screen is touched • OUTKEY: Engine start operation indicator lamp indicate when CONSULT screen is touched • LK WN: Engine start operation indicator lamp indicate when CONSULT screen is touched
FLASHER	This test is able to check security hazard lamp operation The hazard lamps are activated after “LH/RH/Off” on CONSULT screen is touched
HORN	This test is able to check horn operation The horn is activated after “ON” on CONSULT screen is touched
P RANGE	This test is able to check CVT 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
PUSH SWITCH INDICATOR	This test is able to check LOCK indicator in push-ignition switch operation LOCK indicator in push-ignition switch illuminates when “ON” on CONSULT screen is touched
BATTERY SAVER	This test is able to check interior room lamp operation. The interior room lamp will be activated after “ON” on CONSULT screen is touched.
TRUNK/BACK DOOR	This test is able to check back door opener actuator open operation. This actuator opens when “Open” on CONSULT screen is touched.

TRUNK

TRUNK : CONSULT Function (BCM - TRUNK)

INFOID:0000000007578799

DATA MONITOR

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

ECU DIAGNOSIS INFORMATION

BCM

List of ECU Reference

INFOID:0000000007578800

ECU	Reference
BCM	BCS-35, "Reference Value"
	BCS-56, "Fail-safe"
	BCS-57, "DTC Inspection Priority Chart"
	BCS-58, "DTC Index"

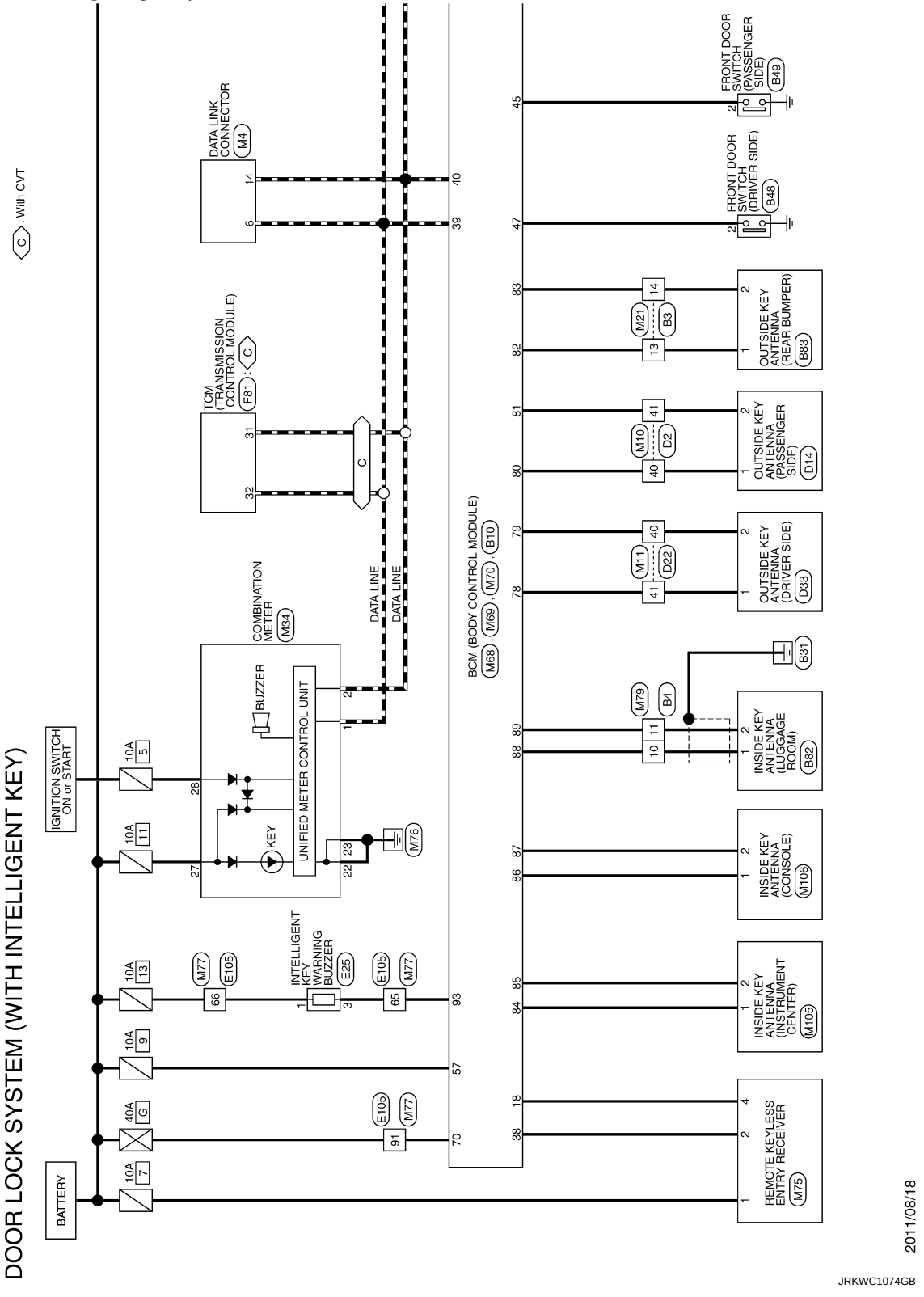
WIRING DIAGRAM

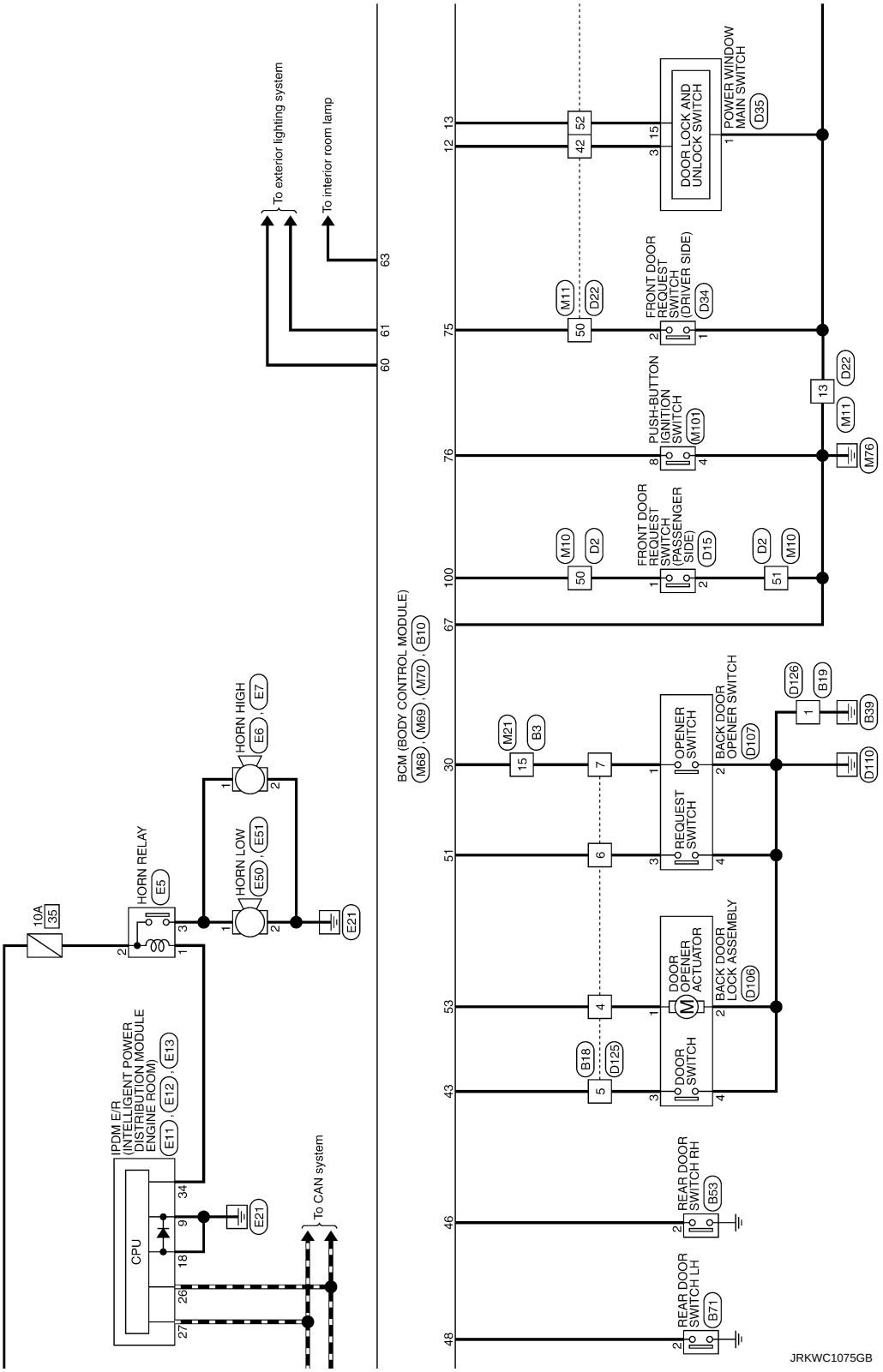
DOOR & LOCK SYSTEM

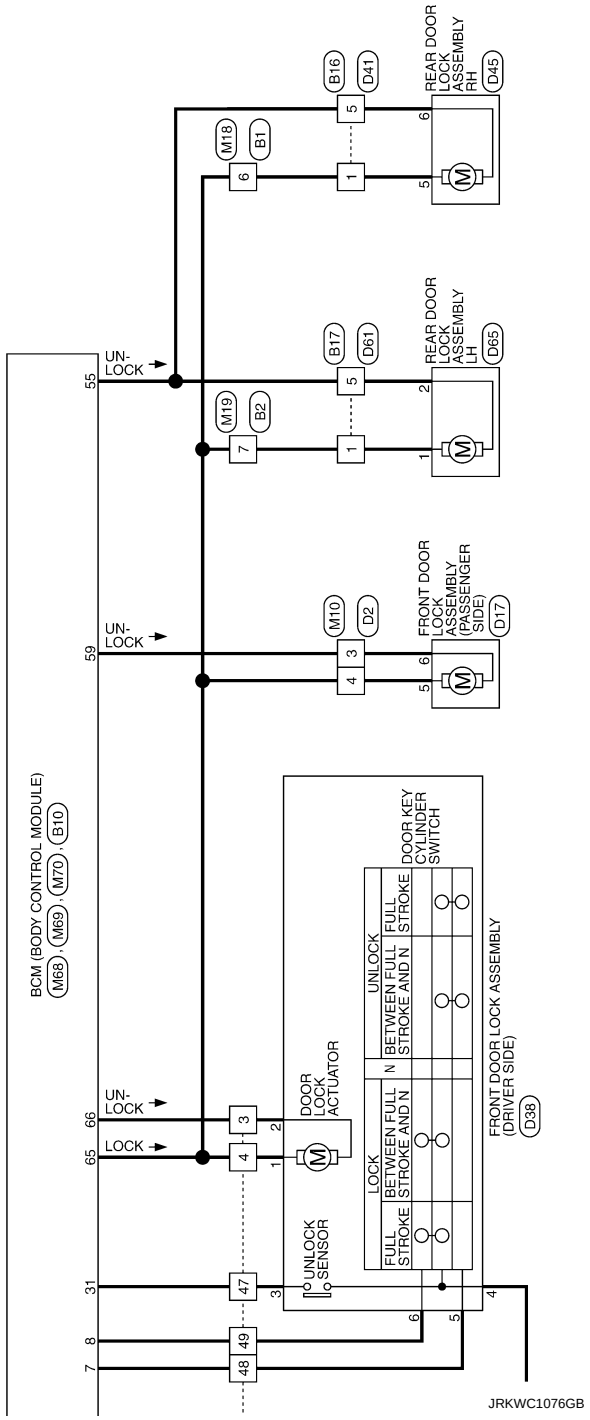
Wiring Diagram

INFOID:0000000007578801

For connector terminal arrangements, harness layouts, and alphabets in a ⬡ (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".




To exterior lighting system
To interior room lamp
63
61
60
10A
35
HORN RELAY
E5
HORN HIGH
E6, E7
HORN LOW
E50, E51
E21
IPDM E/R
(INTELLIGENT POWER
DISTRIBUTION MODULE
ENGINE ROOM)
E11, E12, E13
CPU
34
9
18
26
27
To CAN system
BCM (BODY CONTROL MODULE)
M68, M69, M70, B10
12 13
75
76
100
67
30
51
53
43
46
48
42 52
3 15
1
DOOR LOCK AND
UNLOCK SWITCH
POWER WINDOW
MAIN SWITCH
D35
M11
D22
50
2
1
FRONT DOOR
REQUEST
SWITCH
(DRIVER SIDE)
D34
PUSH-BUTTON
IGNITION
SWITCH
M101
8
4
13
D22
M11
M76
M10
D2
50
1
2
FRONT DOOR
REQUEST
SWITCH
(PASSENGER
SIDE)
D15
D2
M10
51
M21
B3
15
7
OPENER
SWITCH
BACK DOOR
OPENER SWITCH
D107
D126
B19
1
B39
D110
6
3
4
REQUEST
SWITCH
4
1
DOOR
OPENER
ACTUATOR
BACK DOOR
LOCK ASSEMBLY
D106
B18
5
D125
3
DOOR
SWITCH
4
2
REAR DOOR
SWITCH RH
B53
REAR DOOR
SWITCH LH
B71
JRKWC1075GB


BCM (BODY CONTROL MODULE)
M68, M69, M70, B10
UN-LOCK
LOCK
55
59
66
65
31
8
7
REAR DOOR LOCK ASSEMBLY RH
D45
B16
D41
M18
B1
REAR DOOR LOCK ASSEMBLY LH
D65
B17
D61
M19
B2
FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE)
D17
M10
D2
FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE)
D38
DOOR LOCK ACTUATOR
UNLOCK SENSOR
DOOR KEY CYLINDER SWITCH
UNLOCK
LOCK
FULL STROKE
BETWEEN FULL STROKE AND N
N
JRKWC1076GB

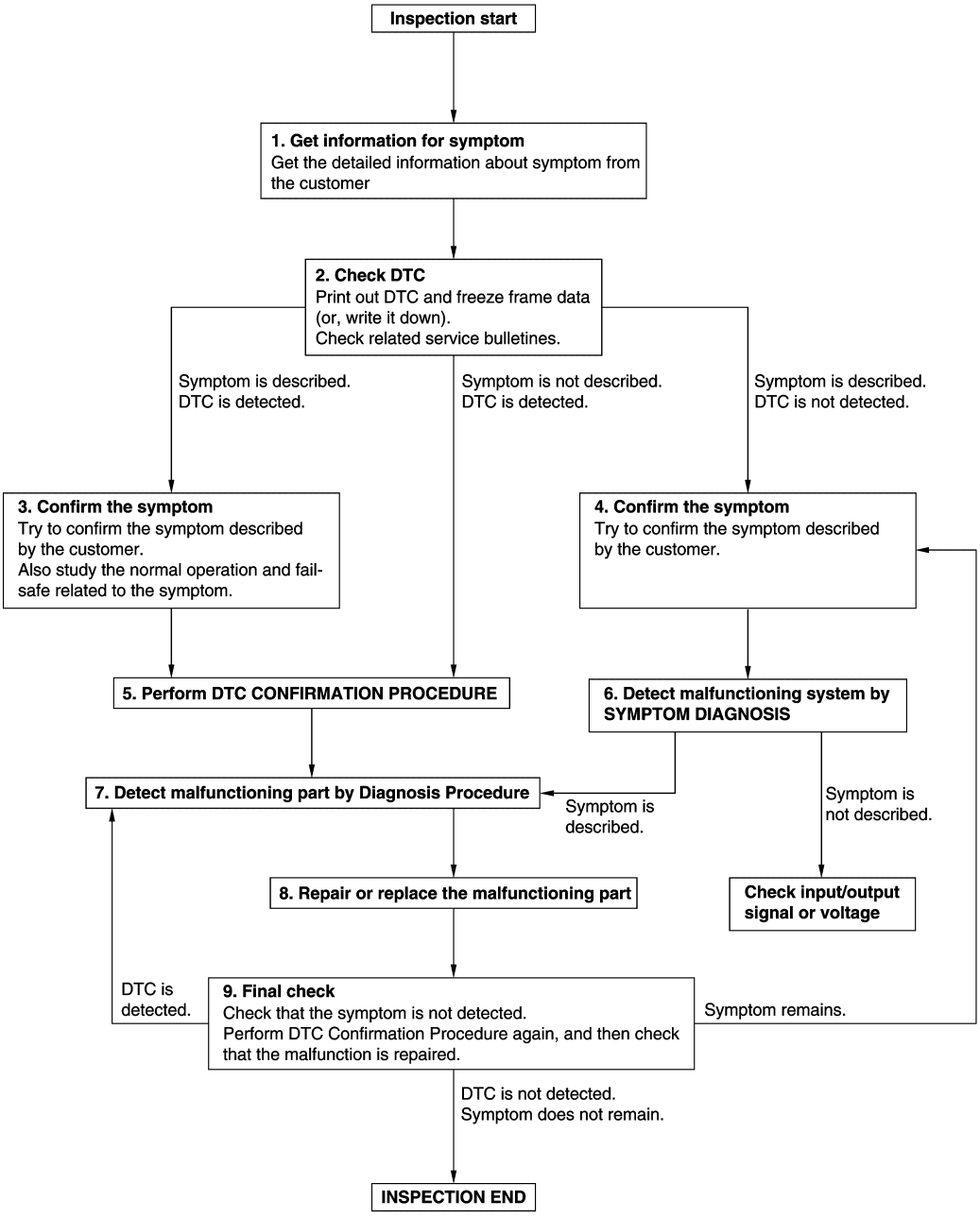
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000007797634

OVERALL SEQUENCE



JMKIA8652GB

DETAILED FLOW

1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2.CHECK DTC

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

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

3. Check related service bulletins for information.

Are any symptoms described and any DTC detected?

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

3.CONFIRM THE SYMPTOM

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

>> GO TO 5.

4.CONFIRM THE SYMPTOM

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

>> GO TO 6.

5.PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC CONFIRMATION PROCEDURE for the detected DTC, and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle, and check self diagnostic results in real time.
If two or more DTCs are detected, refer to BCS-57, "DTC Inspection Priority Chart" (BCM), and determine trouble diagnosis order.

NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC CONFIRMATION PROCEDURE is not included on Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check.
  If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC CONFIRMATION PROCEDURE.

Is DTC detected?

YES >> GO TO 7.
NO >> Check according to GI-43, "Intermittent Incident".

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

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

Is the symptom described?

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

7.DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.
NO >> Check according to GI-43, "Intermittent Incident".

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 9.

9. FINAL CHECK

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

Is DTC detected and does symptom remain?

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

DTC/CIRCUIT DIAGNOSIS

B2621 INSIDE ANTENNA

DTC Logic

INFOID:0000000007578803

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2621	INSIDE ANTENNA	An excessive high or low voltage from inside antenna (instrument center) is sent to BCM	• Inside key antenna (instrument center) • Harness or connector [Inside key antenna (instrument center) circuit is open or shorted]

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is inside key antenna DTC detected?

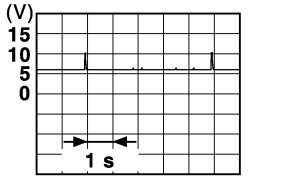
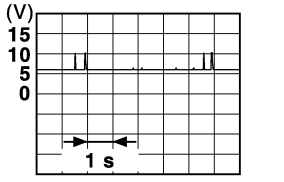
YES >> Refer to DLK-41, "Diagnosis Procedure".
NO >> Inside key antenna (instrument center) is OK.

Diagnosis Procedure

INFOID:0000000007578804

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M70	84 85	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "Removal and Installation".
NO >> GO TO 2.

2. CHECK INSIDE KEY ANTENNA CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector and inside key antenna (instrument center) connector.
3. 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	
M70	84	M105	1	Existed
	85		2	

4. Check continuity between BCM harness connector and ground.

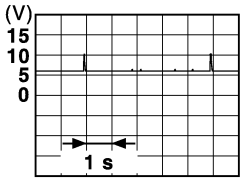
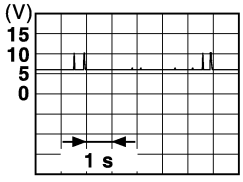
BCM		Ground	Continuity
Connector	Terminal		
M70	84		Not existed
	85		

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. Turn ignition switch ON.
4. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM		(–)	Condition	Signal (Reference value)
Connector	Terminal			
M70	84 85	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace inside key antenna (instrument center).
NO >> Replace BCM. Refer to BCS-80, "Removal and Installation".

B2622 INSIDE ANTENNA

DTC Logic

INFOID:0000000007578805

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is inside key antenna DTC detected?

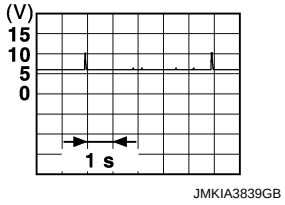
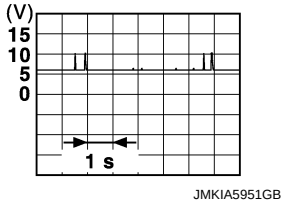
YES >> Refer to DLK-43, "Diagnosis Procedure".
NO >> Inside key antenna (console) is OK.

Diagnosis Procedure

INFOID:0000000007578806

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M70	86 87	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "Removal and Installation".
NO >> GO TO 2.

2.CHECK INSIDE KEY ANTENNA CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector and inside key antenna (console) connector.
3. Check continuity between BCM harness connector and inside key antenna (console) harness connector.

BCM		Inside key antenna (console)		Continuity
Connector	Terminal	Connector	Terminal	
M70	86	M106	1	Existed
	87		2	

4. Check continuity between BCM harness connector and ground.

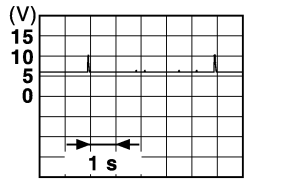
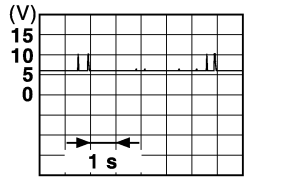
BCM		Ground	Continuity
Connector	Terminal		
M70	86		Not existed
	87		

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. Turn ignition switch ON.
4. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM		(–)	Condition	Signal (Reference value)
Connector	Terminal			
M70	86 87	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace inside key antenna (console).
NO >> Replace BCM. Refer to BCS-80, "Removal and Installation".

B2623 INSIDE ANTENNA

DTC Logic

INFOID:0000000007578807

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is inside key antenna DTC detected?

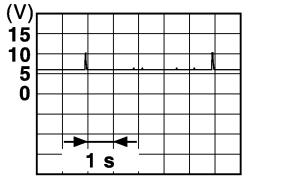
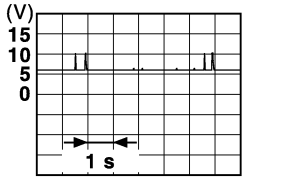
YES >> Refer to DLK-45, "Diagnosis Procedure".
NO >> Inside key antenna (luggage room) is OK.

Diagnosis Procedure

INFOID:0000000007578808

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M70	88 89	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "Removal and Installation".
NO >> GO TO 2.

2.CHECK INSIDE KEY ANTENNA CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector and inside key antenna (luggage room) connector.

3. Check continuity between BCM harness connector and inside key antenna (luggage room) harness connector.

BCM		Inside key antenna (luggage room)		Continuity
Connector	Terminal	Connector	Terminal	
M70	88	B82	1	Existed
	89		2	

4. Check continuity between BCM harness connector and ground.

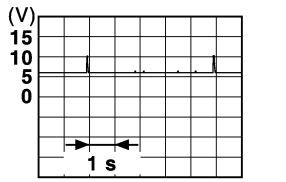
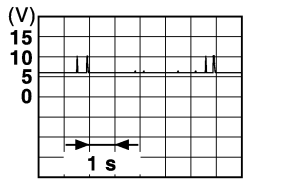
BCM		Ground	Continuity
Connector	Terminal		
M70	88		Not existed
	89		

Is the inspection result normal?

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

3. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM		(–)	Condition	Signal (Reference value)
Connector	Terminal			
M70	88 89	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace inside key antenna (luggage room).
NO >> Replace BCM. Refer to BCS-80, "Removal and Installation".

B2626 OUTSIDE ANTENNA

DTC Logic

INFOID:0000000007578811

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Disconnect outside key antenna (passenger side) connector.
2. Perform “INTELLIGENT KEY” Self Diagnostic Result.

Is outside key antenna DTC detected?

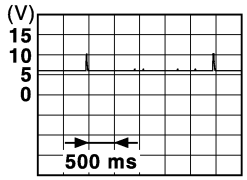
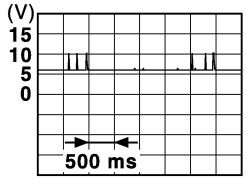
YES >> Refer to DLK-47, "Diagnosis Procedure".
NO >> Outside key antenna (passenger side) is OK.

Diagnosis Procedure

INFOID:0000000007578812

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)
M70	80 81	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "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	
M70	80	D14	1	Existed
	81		2	

3. Check continuity between BCM harness connector and ground.

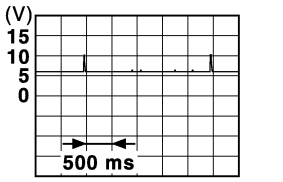
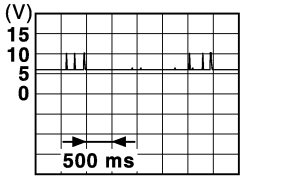
BCM		Ground	Continuity
Connector	Terminal		
M70	80		Not existed
	81		

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				
M70	80 81	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace outside key antenna (passenger side).
NO >> Replace BCM. Refer to BCS-80, "Removal and Installation".

B2627 OUTSIDE ANTENNA

DTC Logic

INFOID:0000000007578809

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Disconnect outside key antenna (driver side) connector.
2. Perform “INTELLIGENT KEY” Self Diagnostic Result.

Is outside key antenna DTC detected?

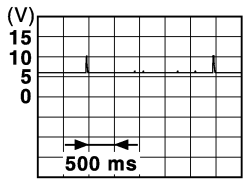
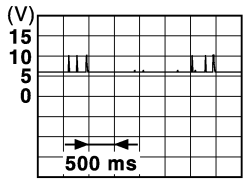
YES >> Refer to DLK-49, "Diagnosis Procedure".
NO >> Outside key antenna (driver side) is OK.

Diagnosis Procedure

INFOID:0000000007578810

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)
M70	78 79	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "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	
M70	78	D33	1	Existed
	79		2	

3. Check continuity between BCM harness connector and ground.

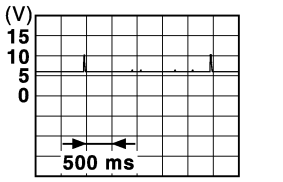
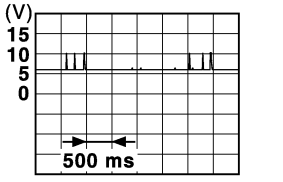
BCM		Ground	Continuity
Connector	Terminal		
M70	78		Not existed
	79		

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				
M70	78 79	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace outside key antenna (driver side).
NO >> Replace BCM. Refer to BCS-80, "Removal and Installation".

B2628 OUTSIDE ANTENNA

DTC Logic

INFOID:0000000007578813

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) • Harness or connector [Outside key antenna (rear bumper) circuit is open or shorted]

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Disconnect outside key antenna (rear bumper) connector.
2. Perform “INTELLIGENT KEY” Self Diagnostic Result.

Is outside key antenna DTC detected?

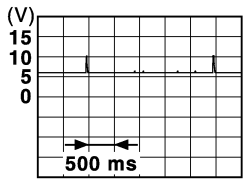
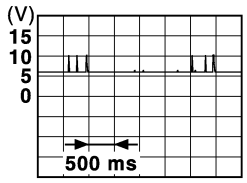
YES >> Refer to DLK-51, "Diagnosis Procedure".
NO >> Outside key antenna (rear bumper) is OK.

Diagnosis Procedure

INFOID:0000000007578814

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)
M70	82 83	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "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	
M70	82	B83	1	Existed
	83		2	

3. Check continuity between BCM harness connector and ground.

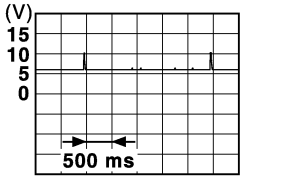
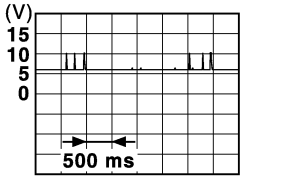
BCM		Ground	Continuity
Connector	Terminal		
M70	82		Not existed
	83		

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				
M70	82 83	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace outside key antenna (rear bumper).
NO >> Replace BCM. Refer to BCS-80, "Removal and Installation".

BACK DOOR OPENER ACTUATOR

Component Function Check

INFOID:0000000007578815

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “TRUNK/BACK DOOR” in “ACTIVE TEST” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item		Status	
TRUNK/BACK DOOR	OPEN	Back door	OPEN

Is the inspection result normal?

YES >> Back door opener actuator is OK.
NO >> Refer to DLK-53, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007578816

1.CHECK BACK DOOR OPENER ACTUATOR INPUT SIGNAL

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

(+)		(–)	Condition		Voltage (Approx.)
Back door lock assembly					
Connector	Terminal				
D106	1	Ground	Back door opener switch	ON	12 V

Is the inspection result normal?

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

2.CHECK BACK DOOR OPENER ACTUATOR CIRCUIT

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

BCM		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B10	53	D106	1	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
B10	53		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR OPENER ACTUATOR GROUND CIRCUIT

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D106	2		Existed

Is the inspection normal?

YES >> Replace back door lock assembly.
NO >> Repair or replace harness.

BACK DOOR OPENER SWITCH

Component Function Check

INFOID:0000000007578817

1.CHECK FUNCTION

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

Monitor item	Condition		Status
TR/BD OPEN SW	Back door opener switch	Pressed	ON
		Released	OFF

Is the inspection result normal?

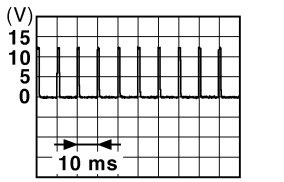
YES >> Back door opener switch is OK.
NO >> Refer to DLK-55, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007578818

1.CHECK BACK DOOR OPENER SWITCH INPUT SIGNAL

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

(+)		(–)	Signal (Reference value)
Back door opener switch			
Connector	Terminal		
D107	1	Ground	

JPMIA0012GB

Is the inspection result normal?

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

2.CHECK BACK DOOR OPENER SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and back door opener switch harness connector.

BCM		Back door opener switch		Continuity
Connector	Terminal	Connector	Terminal	
M68	30	D107	1	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M68	30		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR OPENER SWITCH GROUND CIRCUIT

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

Back door opener switch		Ground	Continuity
Connector	Terminal		
D107	2		Existed

Is the inspection result normal?

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

4.CHECK BACK DOOR OPENER SWITCH

Refer to DLK-56, "Component Inspection".

Is the inspection result normal?

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

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000007578819

1.CHECK BACK DOOR OPENER SWITCH

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

Back door opener switch		Condition		Continuity
Terminal				
1	2	Back door opener switch	Pressed	Existed
			Released	Not existed

Is the inspection result normal?

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

BACK DOOR REQUEST SWITCH

Component Function Check

INFOID:0000000007578820

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “REQ SW-BD/TR” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
REQ SW-BD/TR	Back door request switch	Pressed	On
		Released	Off

Is the inspection result normal?

YES >> Back door request switch is OK.
NO >> Refer to DLK-57, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007578821

1.CHECK BACK DOOR REQUEST SWITCH INPUT SIGNAL

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

(+)		(–)	Voltage (Approx.)
Back door opener switch			
Connector	Terminal		
D107	3	Ground	12 V

Is the inspection result normal?

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

2.CHECK BACK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and back door opener switch harness connector.

BCM		Back door opener switch		Continuity
Connector	Terminal	Connector	Terminal	
M68	51	D107	3	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M68	51		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "Removal and Installation".
NO >> Repair harness or connector.

3.CHECK BACK DOOR REQUEST SWITCH GROUND CIRCUIT

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

Back door opener switch		Ground	Continuity
Connector	Terminal		
D107	4		Existed

Is the inspection result normal?

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

4.CHECK BACK DOOR REQUEST SWITCH

Refer to DLK-58, "Component Inspection".

Is the inspection result normal?

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

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000007578822

1.CHECK BACK DOOR REQUEST SWITCH

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

Back door opener switch		Condition		Continuity
Terminal				
3	4	Back door request switch	Pressed	Existed
			Released	Not existed

Is the inspection result normal?

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

BUZZER (COMBINATION METER)

Component Function Check

INFOID:0000000007578823

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “INSIDE BUZZER” in “ACTIVE TEST” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item			Status	
INSIDE BUZZER	Take Out	ON	Take away warning	Buzzer sounds
		OFF		Buzzer does not sound
	Key	ON	OFF position warning	Buzzer sounds
		OFF		Buzzer does not sound

Is the inspection result normal?

Yes >> Buzzer (combination meter) is OK.
No >> Refer to DLK-59, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007578824

1.CHECK METER BUZZER CIRCUIT

Refer to WCS-36, "Component Function Check".

Is the inspection result normal?

Yes >> GO TO 2.
No >> Repair or replace the malfunctioning parts.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

DOOR KEY CYLINDER SWITCH

Component Function Check

INFOID:0000000007578825

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?

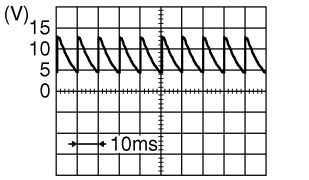
YES >> Door key cylinder switch is OK.
NO >> Refer to DLK-60, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007578826

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 (V) (Approx.)
Front door lock assembly (driver side)			
Connector	Terminal		
D38	5	Ground	 JPMIA0587GB 8.0 - 8.5 V
	6		Battery voltage

Is the inspection result normal?

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

2.CHECK DOOR KEY CYLINDER SWITCH SIGNAL CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and front door lock assembly (driver side) harness connector.

BCM		Front door lock assembly (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M68	7	D38	5	Existed
	8		6	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M68	7		Not existed
	8		

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "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		
D38	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-61, "Component Inspection".

Is the inspection result normal?

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

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000007578827

1.CHECK DOOR KEY CYLINDER SWITCH

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

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

Is the inspection result normal?

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

DOOR LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:0000000007578828

1.CHECK FUNCTION

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “DOOR LOCK” in “ACTIVE TEST” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item		Status	
DOOR LOCK	ALL LOCK	Door lock actuators	LOCK
	ALL UNLK		UNLOCK

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-62, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007578829

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+)		(–)	Condition		Voltage (Approx.)
Front door lock assembly (driver side)					
Connector	Terminal				
D38	2	Ground	Door lock and unlock switch	Unlock	12 V
	1			Lock	

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 and all door lock assembly 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	
M69	65	D38	1	Existed
	66		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M69	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.

(+) BCM		(–)	Condition		Voltage (Approx.)
Connector	Terminal				
M69	66	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.
NO >> Replace BCM. Refer to BCS-80, "Removal and Installation".

PASSENGER SIDE

PASSENGER SIDE : Component Function Check

INFOID:0000000007578830

1.CHECK FUNCTION

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “DOOR LOCK” in “ACTIVE TEST” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item		Status	
DOOR LOCK	ALL LOCK	Door lock actuators	LOCK
	ALL UNLK		UNLOCK

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-62, "DRIVER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000007578831

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+) Front door lock assembly (passenger side)		(–)	Condition		Voltage (Approx.)
Connector	Terminal				
D17	6	Ground	Door lock and unlock switch	Unlock	12 V
	5			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 and all door lock assembly 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	
M69	59	D17	6	Existed
	65		5	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M69	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				
M69	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.
NO >> Replace BCM. Refer to BCS-80, "Removal and Installation".

REAR LH

REAR LH : Component Function Check

INFOID:0000000007578832

1.CHECK FUNCTION

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “DOOR LOCK” in “ACTIVE TEST” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item		Status	
DOOR LOCK	ALL LOCK	Door lock actuators	LOCK
	ALL UNLK		UNLOCK

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-62, "DRIVER SIDE : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000007578833

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

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

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

BCM		Rear door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
B10	55	D65	2	Existed
M69	65		1	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
B10	55		Not existed
M69	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				
B10	55	Ground	Door lock and unlock switch	Unlock	12 V
M69	65			Lock	

Is the inspection result normal?

YES >> Check for internal short of each door lock actuator.
NO >> Replace BCM. Refer to BCS-80, "Removal and Installation".

REAR RH

REAR RH : Component Function Check

INFOID:0000000007578834

1.CHECK FUNCTION

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “DOOR LOCK” in “ACTIVE TEST” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item		Status	
DOOR LOCK	ALL LOCK	Door lock actuators	LOCK
	ALL UNLK		UNLOCK

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-62, "DRIVER SIDE : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000007578835

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+)		(–)	Condition		Voltage (Approx.)
Rear door lock assembly RH					
Connector	Terminal				
D45	6	Ground	Door lock and unlock switch	Unlock	12 V
	5			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 and all door lock assembly connector.
2. Check continuity between BCM harness connector and rear door lock assembly RH harness connector.

BCM		Rear door lock assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
B10	55	D45	6	Existed
M69	65		5	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
B10	55		Not existed
M69	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				
B10	55	Ground	Door lock and unlock switch	Unlock	12 V
M69	65			Lock	

Is the inspection result normal?

YES >> Check for internal short of each door lock actuator.
NO >> Replace BCM. Refer to BCS-80, "Removal and Installation".

DOOR LOCK AND UNLOCK SWITCH

Component Function Check

INFOID:0000000007578836

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?

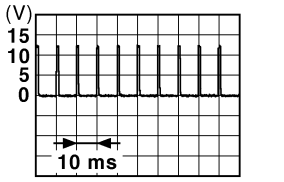
YES >> Door lock and unlock switch is OK.
NO >> Refer to DLK-67, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007578837

1.CHECK DOOR LOCK AND UNLOCK SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect power window main switch connector.
3. Check signal between power window main switch harness connector and ground using oscilloscope.

(+)		(–)	Signal (Reference value)
Power window main switch			
Connector	Terminal		
D35	3	Ground	 JPMIA0012GB 1.0 - 1.5 V
	15		

Is the inspection result normal?

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

2.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

1. Disconnect BCM connector and power window main switch connector.
2. Check continuity between BCM harness connector and power window main switch harness connector.

BCM		Power window main switch		Continuity
Connector	Terminal	Connector	Terminal	
M68	12	D35	3	Existed
	13		15	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M68	12		Not existed
	13		

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

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

Power window main switch		Ground	Continuity
Connector	Terminal		
D35	1		Existed

Is the inspection result normal?

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

4.CHECK DOOR LOCK AND UNLOCK SWITCH

Refer to DLK-68, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace power window main switch. Refer to PWC-48, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000007578838

1.CHECK DOOR LOCK AND UNLOCK SWITCH

1. Turn ignition switch OFF.
2. Disconnect power window main switch connector.
3. Check continuity between power window main switch terminals.

Power window main switch		Condition		Continuity
Terminal				
3	1	Door lock and unlock switch	LOCK	Existed
			UNLOCK	Not existed
15			LOCK	Not existed
			UNLOCK	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace power window main switch.

DOOR REQUEST SWITCH

Component Function Check

INFOID:0000000007578839

1.CHECK FUNCTION

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

Monitor item	Condition		Status
REQ SW -DR	Driver side door request switch	Pressed	ON
		Released	OFF
REQ SW -AS	Passenger side door request switch	Pressed	ON
		Released	OFF

Is the inspection result normal?

YES >> Front door request switch is OK.
NO >> Refer to DLK-69, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007578840

1.CHECK DOOR REQUEST SWITCH INPUT SIGNAL

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

(+)			(–)	Voltage (Approx.)
Front door request switch				
Connector		Terminal		
Driver side	D34	2	Ground	12 V
Passenger side	D15	1		

Is the inspection result normal?

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

2.CHECK DOOR REQUEST SWITCH CIRCUIT

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

Front door request switch			BCM		Continuity
Connector		Terminal	Connector	Terminal	
Driver side	D34	2	M70	75	Existed
Passenger side	D15	1		100	

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

Front door request switch			Ground	Continuity
Connector		Terminal		
Driver side	D34	2		Not existed
Passenger side	D15	1		

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

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

Front door request switch			Ground	Continuity
Connector		Terminal		
Driver side	D34	1		Existed
Passenger side	D15	2		

Is the inspection result normal?

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

4.CHECK DOOR REQUEST SWITCH

Refer to DLK-70, "Component Inspection".

Is the inspection result normal?

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

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000007578841

1.CHECK DOOR REQUEST SWITCH

1. Turn ignition switch OFF.
2. Disconnect malfunctioning front door request switch connector.
3. Check continuity between malfunctioning front door request switch terminals.

Front door request switch		Condition		Continuity
Terminal				
1	2	Door request switch	Pressed	Existed
			Released	Not existed

Is the inspection result normal?

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

DOOR SWITCH

Component Function Check

INFOID:0000000007578842

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”, “DOOR SW-BK” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
DOOR SW-DR	Driver side door	Open	On
		Closed	Off
DOOR SW-AS	Passenger side door	Open	On
		Closed	Off
DOOR SW-RL	Rear door LH	Open	On
		Closed	Off
DOOR SW-RR	Rear door RH	Open	On
		Closed	Off
DOOR SW-BK	Back door	Open	On
		Closed	Off

Is the inspection result normal?

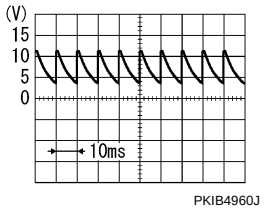
YES >> Door switch is OK.
NO >> Refer to DLK-71, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007578843

1.CHECK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect malfunctioning door switch connector.
3. Check signal between malfunctioning door switch harness connector and ground using oscilloscope.

(+)			(–)	Signal (Reference value)
Door switch				
Connector		Terminal		
Driver side	B48	2	Ground	 PKIB4960J 7.0 - 8.0 V
Passenger side	B49			
Rear LH	B71			
Rear RH	B53			
Back door	D106	3		

Is the inspection result normal?

YES-1 >> Back door: GO TO 3.
YES-2 >> Other door: GO TO 4.
NO >> GO TO 2.

2.CHECK DOOR SWITCH CIRCUIT

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

Door switch			BCM		Continuity
Connector		Terminal	Connector	Terminal	
Driver side	B48	2	B10	47	Existed
Passenger side	B49			45	
Rear LH	B71			48	
Rear RH	B53			46	
Back door	D106	3		43	

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

Door switch				Continuity
Connector		Terminal	Ground	
Driver side	B48	2		Not existed
Passenger side	B49			
Rear LH	B71			
Rear RH	B53			
Back door	D106	3		

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR LOCK ASSEMBLY CIRCUIT

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

Back door switch		Ground	Continuity
Connector	Terminal		
D106	4		Existed

Is the inspection result normal?

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

4.CHECK DOOR SWITCH

Refer to DLK-72, "Component Inspection".

Is the inspection result normal?

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

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000007578844

1.CHECK DOOR SWITCH

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

Door switch			Condition		Continuity
Terminal					
Driver side	2	Ground part of door switch	Door switch	Pressed	Existed
				Released	Not existed
Passenger side				Pressed	Existed
				Released	Not existed
Rear LH				Pressed	Existed
				Released	Not existed
Rear RH				Pressed	Existed
				Released	Not existed
Back door	3	4	Back door lock assembly	Lock	Existed
				Unlock	Not existed

Is the inspection result normal?

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

HAZARD FUNCTION

Component Function Check

INFOID:0000000007578845

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “FLASHER” in “ACTIVE TEST” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item		Status	
FLASHER	LH	Front turn signal lamp LH	Turns ON
	RH	Front turn signal lamp RH	Turns ON
	OFF	Front turn signal lamp	Turns OFF

Is the inspection result normal?

YES >> Hazard warning lamp circuit is OK.
NO >> Refer to DLK-74, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007578846

1.CHECK HAZARD SWITCH CIRCUIT

Refer to EXL-66, "Component Function Check".

Is the inspection result normal?

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

2.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

INTELLIGENT KEY

Component Function Check

INFOID:0000000007578847

1.CHECK FUNCTION

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

Monitor item	Condition
RKE OPE COUN1	Check that the numerical value is changing while operating on the Intelligent Key.

Is the inspection result normal?

YES >> Intelligent Key is OK.
NO >> Refer to DLK-75, "Diagnosis Procedure".

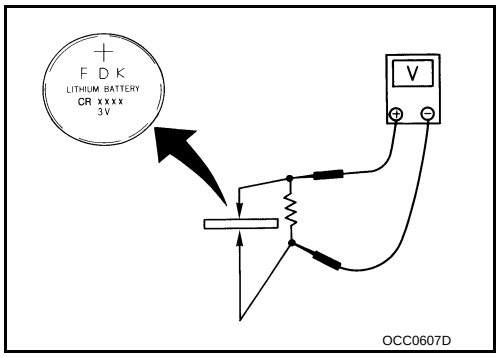
Diagnosis Procedure

INFOID:0000000007578848

1.CHECK INTELLIGENT KEY BATTERY

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

Standard : Approx. 2.5 - 3.0 V



Is the measurement value within the specification?

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

INTELLIGENT KEY WARNING BUZZER

Component Function Check

INFOID:0000000007578849

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “OUTSIDE BUZZER” in “ACTIVE TEST” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item		Status	
OUTSIDE BUZZER	ON	Outside warning buzzer	Buzzer sounds
	OFF		Buzzer does not sound

Is the inspection result normal?

YES >> Intelligent Key warning buzzer is OK.
NO >> Refer to DLK-76, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007578850

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10 A fuse, [No. 13, located in fuse block (J/B)].

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

2.CHECK INTELLIGENT KEY WARNING BUZZER POWER SUPPLY CIRCUIT

1. Disconnect Intelligent Key warning buzzer connector.
2. Check voltage between Intelligent Key warning buzzer harness connector and ground.

(+)		(–)	Voltage (Approx.)
Intelligent Key warning buzzer			
Connector	Terminal		
E25	1	Ground	Battery voltage

Is the inspection result normal?

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

3.CHECK INTELLIGENT KEY WARNING BUZZER CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and Intelligent Key warning buzzer harness connector.

BCM		Intelligent Key warning buzzer		Continuity
Connector	Terminal	Connector	Terminal	
M70	93	E25	3	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M70	93		Not existed

Is the inspection result normal?

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

4. CHECK INTELLIGENT KEY WARNING BUZZER

Refer to DLK-77, "Component Inspection".

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "Removal and Installation".
NO >> Replace Intelligent Key warning buzzer.

Component Inspection

INFOID:0000000007578851

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.

KEY WARNING LAMP

Component Function Check

INFOID:0000000007578852

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “INDICATOR” in “ACTIVE TEST” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item		Status	
INDICATOR	KEY ON	Key warning lamp	Turns ON
	KEY IND		Blinks
	OFF		Turns OFF

Is the inspection result normal?

YES >> Key warning lamp is OK.
NO >> Refer to DLK-78, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007578853

1.CHECK KEY WARNING LAMP

Refer to MWI-19, "On Board Diagnosis Function".

Is the inspection result normal?

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

2.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

REMOTE KEYLESS ENTRY RECEIVER

Component Function Check

INFOID:0000000007578854

1.CHECK FUNCTION

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

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

Is the inspection result normal?

YES >> Remote keyless entry receiver is OK.
NO >> Refer to DLK-79, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007578855

1.CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

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
Remote keyless entry receiver			
Connector	Terminal		
M75	1	Ground	Battery voltage

Is the inspection result normal?

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

2.DETECT MALFUNCTIONING PART

Check the following.
- 10 A fuse (No. 7)
- Harness for open or short between remote keyless entry receiver and battery

Is the inspection result normal?

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

3.CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND 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	
M68	18	M75	4	Existed

3. Check continuity between BCM harness connector and ground.

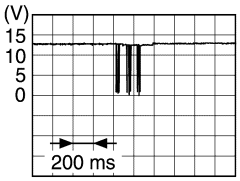
BCM		Ground	Continuity
Connector	Terminal		
M68	18		Existed

Is the inspection result normal?

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

4.CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT SIGNAL

1. Reconnect BCM connector and 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			
M75	2	Ground	Waiting	12 V
			Press the Intelligent Key lock or unlock button	 JMMIA0572GB

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace remote keyless entry receiver.

5.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT

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

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M68	38	M75	2	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M68	38		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "Removal and Installation".
NO >> Repair or replace harness.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

SHIFT P WARNING LAMP

Component Function Check

INFOID:0000000007578856

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “LCD” in “ACTIVE TEST” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item		Status	
LCD	SFT P	Shift P warning lamp	Turns ON

Is the inspection result normal?

YES >> Shift P warning lamp is OK.
NO >> Refer to DLK-81, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007578857

1.CHECK SHIFT P WARNING LAMP

Refer to MWI-19, "On Board Diagnosis Function".

Is the inspection result normal?

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

2.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

UNLOCK SENSOR

Component Function Check

INFOID:0000000007578858

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?

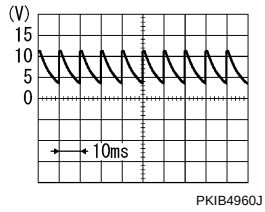
YES >> Unlock sensor is OK.
NO >> Refer to DLK-82, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007578859

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 using oscilloscope.

(+)		(–)	Signal (Reference value)
Front door lock assembly (driver side)			
Connector	Terminal		
D38	3	Ground	

PKIB4960J

Is the inspection result normal?

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

2.CHECK UNLOCK SENSOR CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and front door lock assembly (driver side) harness connector.

BCM		Front door lock assembly (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M68	31	D38	3	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M68	31		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "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		
D38	4		Existed

Is the inspection result normal?

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

4.CHECK UNLOCK SENSOR

Refer to DLK-83, "Component Inspection".

Is the inspection result normal?

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

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000007578860

1.CHECK UNLOCK SENSOR

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

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

Is the inspection result normal?

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

SYMPTOM DIAGNOSIS

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

ALL DOOR

ALL DOOR : Description

INFOID:0000000007578861

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

ALL DOOR : Diagnosis Procedure

INFOID:0000000007578862

1. CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch.
Refer to DLK-67, "Component Function Check".

Is the inspection result normal?

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

2. CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (driver side).
Refer to DLK-62, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

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

3. REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000007578863

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

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007578864

1. CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (driver side).
Refer to DLK-62, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

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

2. REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000007578865

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

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000007578866

1.CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (passenger side).
Refer to DLK-63, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?

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

2.REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

REAR LH

REAR LH : Description

INFOID:0000000007578867

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

REAR LH : Diagnosis Procedure

INFOID:0000000007578868

1.CHECK DOOR LOCK ACTUATOR

Check rear door lock assembly LH.
Refer to DLK-64, "REAR LH : Component Function Check".

Is the inspection result normal?

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

2.REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

REAR RH

REAR RH : Description

INFOID:0000000007578869

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

REAR RH : Diagnosis Procedure

INFOID:0000000007578870

1.CHECK DOOR LOCK ACTUATOR

Check rear door lock assembly RH.
Refer to DLK-65, "REAR RH : Component Function Check".

Is the inspection result normal?

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

2.REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".

2. Confirm the operation after replacement.

Is the result normal?

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

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

ALL DOOR REQUEST SWITCHES

ALL DOOR REQUEST SWITCHES : Description

INFOID:0000000007578871

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

ALL DOOR REQUEST SWITCHES : Diagnosis Procedure

INFOID:0000000007578872

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-20, "REMOTE KEYLESS ENTRY FUNCTION : System Description".

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

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “LOCK/UNLOCK BY I-KEY” in “WORK SUPPORT” mode.
3. Check “LOCK/UNLOCK BY I-KEY” in “WORK SUPPORT”.
   Refer to DLK-30, "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-71, "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-41, "DTC Logic".
- Console: Refer to DLK-43, "DTC Logic".
- Luggage room: Refer to DLK-45, "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-49, "DTC Logic".
- Passenger side: Refer to DLK-47, "DTC Logic".
- Rear bumper: Refer to DLK-51, "DTC Logic".

Is the inspection result normal?

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

6. REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

DRIVER SIDE DOOR REQUEST SWITCH

DRIVER SIDE DOOR REQUEST SWITCH : Description

INFOID:0000000007578873

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

DRIVER SIDE DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:0000000007578874

1.CHECK DRIVER SIDE DOOR REQUEST SWITCH

Check driver side door request switch.
Refer to DLK-69, "Component Function Check".

Is the inspection result normal?

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

2.CHECK OUTSIDE KEY ANTENNA

Check outside key antenna (driver side).
Refer to DLK-49, "DTC Logic".

Is the inspection result normal?

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

3.REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

PASSENGER SIDE DOOR REQUEST SWITCH

PASSENGER SIDE DOOR REQUEST SWITCH : Description

INFOID:0000000007578875

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

PASSENGER SIDE DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:0000000007578876

1.CHECK PASSENGER SIDE DOOR REQUEST SWITCH

Check passenger side door request switch.
Refer to DLK-69, "Component Function Check".

Is the inspection result normal?

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

2.CHECK OUTSIDE KEY ANTENNA

Check outside key antenna (passenger side).
Refer to DLK-47, "DTC Logic".

Is the inspection result normal?

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

3.REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

BACK DOOR REQUEST SWITCH

BACK DOOR REQUEST SWITCH : Description

INFOID:0000000007578877

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

BACK DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:0000000007578878

1.CHECK BACK DOOR REQUEST SWITCH

Check back door request switch.
Refer to DLK-57, "Component Function Check".

Is the inspection result normal?

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

2.CHECK OUTSIDE KEY ANTENNA

Check outside key antenna (rear bumper).
Refer to DLK-51, "DTC Logic".

Is the inspection result normal?

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

3.REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERATION

Diagnosis Procedure

INFOID:0000000007578879

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-67, "Component Function Check".

2.CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.
Refer to DLK-60, "Component Function Check".

Is the inspection result normal?

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

3.REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

Diagnosis Procedure

INFOID:0000000007578880

1.CHECK DTC WITH BCM AND TCM

Check that DTC is not detected with BCM and TCM.

Is the inspection result normal?

YES >> GO TO 2.
NO-1 >> Refer to BCS-58, "DTC Index". (BCM)
NO-2 >> Refer to TM-116, "DTC Index". (TCM)

2.CHECK POWER DOOR LOCK OPERATION

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

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

YES >> GO TO 3.
NO >> Refer to DLK-67, "Component Function Check".

3.CHECK REMOTE KEYLESS ENTRY RECEIVER

Check remote keyless entry receiver.
Refer to DLK-79, "Component Function Check".

Is the inspection result normal?

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

4.CHECK INTELLIGENT KEY

Check Intelligent Key.
Refer to DLK-75, "Component Function Check".

Is the inspection result normal?

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

5.REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

IGNITION POSITION WARNING FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007578881

1.CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to BCS-58, "DTC Index".

2.CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

Does door lock/unlock with driver side door lock knob and door key cylinder?

YES >> GO TO 3.
NO >> Refer to DLK-13, "System Description".

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-71, "Component Function Check".

Is the inspection result normal?

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

4.REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007578882

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” in “WORK SUPPORT”
   Refer to DLK-28, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 2
NO >> Set “DOOR LOCK-UNLOCK SET” in “WORK SUPPORT”.

2. REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

BACK DOOR DOES NOT OPENED

Diagnosis Procedure

INFOID:0000000007578883

1.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.
Refer to DLK-53, "Component Function Check".

Is the inspection result normal?

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

2.CHECK BACK DOOR OPENER ACTUATOR

Check back door opener actuator.
Refer to DLK-53, "Component Function Check".

Is the inspection result normal?

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

3.CHECK VEHICLE SPEED SIGNAL

Check vehicle speed signal.
Refer to MWI-31, "DTC Index".

Is the inspection result normal?

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

4.REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

AUTO DOOR LOCK OPERATION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007578884

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” in “WORK SUPPORT”.
   Refer to DLK-30, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “AUTO LOCK SET” setting in “WORK SUPPORT”.

2. REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007578885

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” in “WORK SUPPORT”.
   Refer to DLK-28, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “AUTOMATIC LOCK/UNLOCK SELECT” in “WORK SUPPORT”.

2. CHECK “AUTOMATIC DOOR LOCK SELECT” SETTING IN “WORK SUPPORT”

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “AUTOMATIC DOOR LOCK SELECT” in “WORK SUPPORT” mode.
3. Check “AUTOMATIC DOOR LOCK SELECT” in “WORK SUPPORT”.
   Refer to DLK-28, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “AUTOMATIC DOOR LOCK SELECT” in “WORK SUPPORT”.

3. REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007578886

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” in “WORK SUPPORT”.
   Refer to DLK-28, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “AUTOMATIC LOCK/UNLOCK SELECT” in “WORK SUPPORT”.

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” in “WORK SUPPORT”.
   Refer to DLK-28, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “AUTOMATIC DOOR UNLOCK SELECT” in “WORK SUPPORT”.

3. REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

P RANGE INTERLOCK DOOR LOCK/UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007578887

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” in “WORK SUPPORT”.
   Refer to DLK-28, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “AUTOMATIC LOCK/UNLOCK SELECT” in “WORK SUPPORT”.

2. CHECK “AUTOMATIC DOOR LOCK SELECT” SETTING IN “WORK SUPPORT”

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “AUTOMATIC DOOR LOCK SELECT” in “WORK SUPPORT” mode.
3. Check “AUTOMATIC DOOR LOCK SELECT” in “WORK SUPPORT”.
   Refer to DLK-28, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “AUTOMATIC DOOR LOCK SELECT” in “WORK SUPPORT”.

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” in “WORK SUPPORT”.
   Refer to DLK-28, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Set “AUTOMATIC DOOR UNLOCK SELECT” in “WORK SUPPORT”.

4. REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

HAZARD AND BUZZER REMINDER DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007578888

1. CHECK DTC WITH BCM AND COMBINATION METER

Check that DTC is not detected with BCM and combination meter.

Is the inspection result normal?

YES >> GO TO 2.
NO-1 >> Refer to BCS-58, "DTC Index". (BCM)
NO-2 >> Refer to MWI-31, "DTC Index". (Combination meter)

2. 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” in “WORK SUPPORT”.
   Refer to DLK-30, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “HAZARD ANSWER BACK” in “WORK SUPPORT”.

3. 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” in “WORK SUPPORT”.
   Refer to DLK-30, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Set “ANS BACK I-KEY LOCK” in “WORK SUPPORT”.

4. 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” in “WORK SUPPORT”.
   Refer to DLK-30, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Set “ANS BACK I-KEY UNLOCK” in “WORK SUPPORT”.

5. CHECK HAZARD FUNCTION

Check hazard function.
Refer to DLK-74, "Component Function Check".

Is the inspection result normal?

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

6. CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-76, "Component Function Check".

Is the inspection result normal?

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

7. REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END

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

KEY REMINDER FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007578889

1.CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to BCS-58, "DTC Index".

2.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” in “WORK SUPPORT”.
   Refer to DLK-30, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “ANTI KEY LOCK IN FUNCTI” in “WORK SUPPORT”.

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-71, "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-41, "DTC Logic".
- Console: Refer to DLK-43, "DTC Logic".
- Luggage room: Refer to DLK-45, "DTC Logic".

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-82, "Component Function Check".

Is the inspection result normal?

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

6.REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

OFF POSITION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007578890

1.CHECK DTC WITH BCM AND COMBINATION METER

Check that DTC is not detected with BCM and combination meter.

Is the inspection result normal?

YES >> GO TO 2.
NO-1 >> Refer to BCS-58, "DTC Index". (BCM)
NO-2 >> Refer to MWI-31, "DTC Index". (Combination meter)

2.CHECK DOOR SWITCH

Check front door switch (driver side).
Refer to DLK-71, "Component Function Check".

Is the inspection result normal?

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

3.CHECK COMBINATION METER BUZZER

Check combination meter buzzer.
Refer to WCS-36, "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-76, "Component Function Check".

Is the inspection result normal?

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

5.REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

P POSITION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007578891

1.CHECK DTC WITH BCM, TCM AND COMBINATION METER

Check that DTC is not detected with BCM, TCM and combination meter.

Is the inspection result normal?

YES >> GO TO 2.
NO-1 >> Refer to BCS-58, "DTC Index". (BCM)
NO-2 >> Refer to TM-116, "DTC Index". (TCM)
NO-3 >> Refer to MWI-31, "DTC Index". (Combination meter)

2.CHECK COMBINATION METER BUZZER

Check combination meter buzzer.
Refer to WCS-36, "Component Function Check".

Is the inspection result normal?

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

3.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-76, "Component Function Check".

Is the inspection result normal?

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

4.CHECK DOOR SWITCH

Check front door switch (driver side).
Refer to DLK-71, "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-41, "DTC Logic".
- Console: Refer to DLK-43, "DTC Logic".
- Luggage room: Refer to DLK-45, "DTC Logic".

Is the inspection result normal?

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

6.CHECK KEY WARNING LAMP

Check key warning lamp.
Refer to DLK-78, "Component Function Check".

Is the inspection result normal?

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

7.REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

ACC WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007578892

1.CHECK COMBINATION METER BUZZER

Check combination meter buzzer.
Refer to WCS-36, "Component Function Check".

Is the inspection result normal?

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

2.REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

TAKE AWAY WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007578893

1.CHECK DTC WITH BCM AND COMBINATION METER

Check that DTC is not detected with BCM and combination meter.

Is the inspection result normal?

YES >> GO TO 2.
NO-1 >> Refer to BCS-58, "DTC Index". (BCM)
NO-2 >> Refer to MWI-31, "DTC Index". (Combination meter)

2.CHECK COMBINATION METER BUZZER

Check combination meter buzzer.
Refer to WCS-36, "Component Function Check".

Is the inspection result normal?

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

3.CHECK KEY WARNING LAMP

Check key warning lamp.
Refer to DLK-78, "Component Function Check".

Is the inspection result normal?

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

4.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-71, "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-76, "Component Function Check".

Is the inspection result normal?

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

6.CHECK INSIDE KEY ANTENNA

Check inside key antenna.
- Instrument center: Refer to DLK-41, "DTC Logic".
- Console: Refer to DLK-43, "DTC Logic".
- Luggage room: Refer to DLK-45, "DTC Logic".

Is the inspection result normal?

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

7.REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007578894

1.CHECK DTC WITH BCM AND COMBINATION METER

Check that DTC is not detected with BCM and combination meter.

Is the inspection result normal?

YES >> GO TO 2.
NO-1 >> Refer to BCS-58, "DTC Index". (BCM)
NO-2 >> Refer to MWI-31, "DTC Index". (Combination meter)

2.CHECK “LO- BATT OF KEY FOB WARN” SETTING IN “WORK SUPPORT”

1. Select “INTELLIGENT KEY” of “BCM”.
2. Select “LO- BATT OF KEY FOB WARN” in “WORK SUPPORT” mode.
3. Check “LO- BATT OF KEY FOB WARN” in “WORK SUPPORT”.
   Refer to DLK-30, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “LO- BATT OF KEY FOB WARN” in “WORK SUPPORT”.

3.CHECK KEY WARNING LAMP

Check key warning lamp.
Refer to DLK-78, "Component Function Check".

Is the inspection result normal?

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

4.CHECK INTELLIGENT KEY

Check Intelligent key.
Refer to DLK-75, "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-41, "DTC Logic".
- Console: Refer to DLK-43, "DTC Logic".
- Luggage room: Refer to DLK-45, "DTC Logic".

Is the inspection result normal?

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

6.REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

DOOR LOCK OPERATION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007578895

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-69, "Component Function Check".

2.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-76, "Component Function Check".

Is the inspection result normal?

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

3.REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

KEY ID WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007578896

1.CHECK DTC WITH BCM AND COMBINATION METER

Check that DTC is not detected with BCM and combination meter.

Is the inspection result normal?

YES >> GO TO 2.
NO-1 >> Refer to BCS-58, "DTC Index". (BCM)
NO-2 >> Refer to MWI-31, "DTC Index". (Combination meter)

2.CHECK INTELLIGENT KEY

Check Intelligent Key.
Refer to DLK-75, "Component Function Check".

Is the inspection result normal?

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

3.CHECK INSIDE KEY ANTENNA

Check inside key antenna.
- Instrument center: Refer to DLK-41, "DTC Logic".
- Console: Refer to DLK-43, "DTC Logic".
- Luggage room: Refer to DLK-45, "DTC Logic".

Is the inspection result normal?

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

4.CHECK KEY WARNING LAMP

Check key warning lamp.
Refer to DLK-78, "Component Function Check".

Is the inspection result normal?

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

5.REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

KEY WARNING LAMP DOES NOT ILLUMINATE

Diagnosis Procedure

INFOID:0000000007578897

1.CHECK KEY WARNING LAMP

Check key warning lamp.
Refer to DLK-78, "Component Function Check".

Is the inspection result normal?

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

2.REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

UNLOCK LINK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007578898

1.REPLACE BCM

1. Replace BCM. Refer to BCS-80, "Removal and Installation".
2. Confirm the operation after replacement.

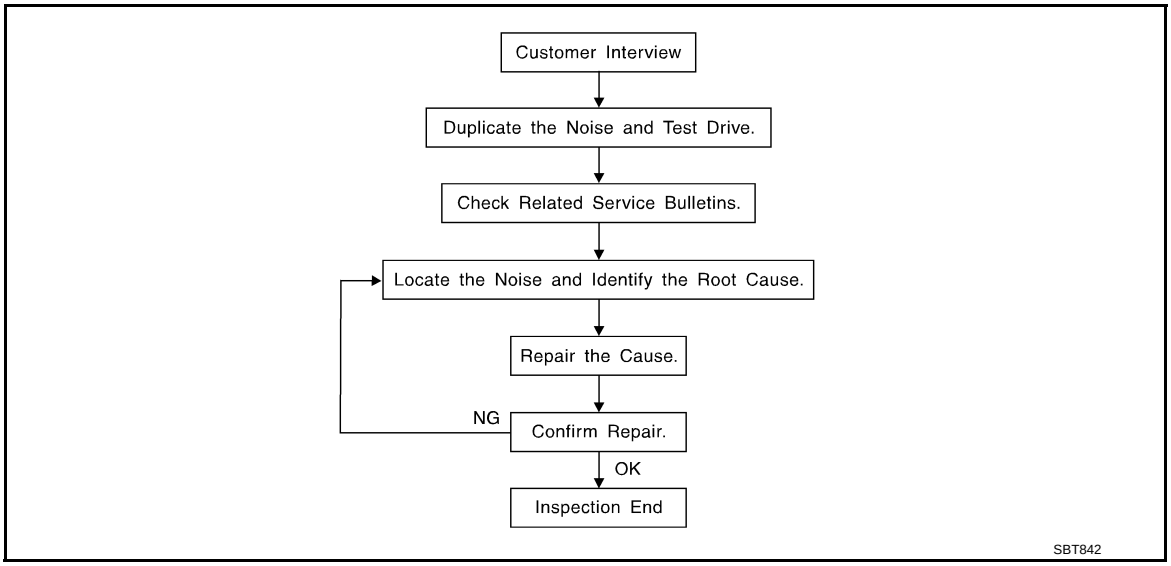
Is the result normal?

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

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000007578899



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-115, "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-113, "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-43980) 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-43980). Each item can be ordered separately as needed.
URETHANE PADS [1.5 mm (0.059 in) thick]
Insulates connectors, harness, etc.
76268-9E005: 100 × 135 mm (3.94 × 5.31 in)/76884-71L01: 60 × 85 mm (2.36 × 3.35 in)/76884-71L02:15 × 25 mm (0.59 × 0.98 in)
INSULATOR (Foam blocks)
Insulates components from contact. Can be used to fill space behind a panel.
73982-9E000: 45 mm (1.77 in) thick, 50 × 50 mm (1.97 × 1.97 in)/73982-50Y00: 10 mm (0.39 in) thick, 50 × 50 mm (1.97 × 1.97 in)
INSULATOR (Light foam block)
80845-71L00: 30 mm (1.18 in) thick, 30 × 50 mm (1.18 × 1.97 in)
FELT 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:0000000007578900

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-43980) 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.

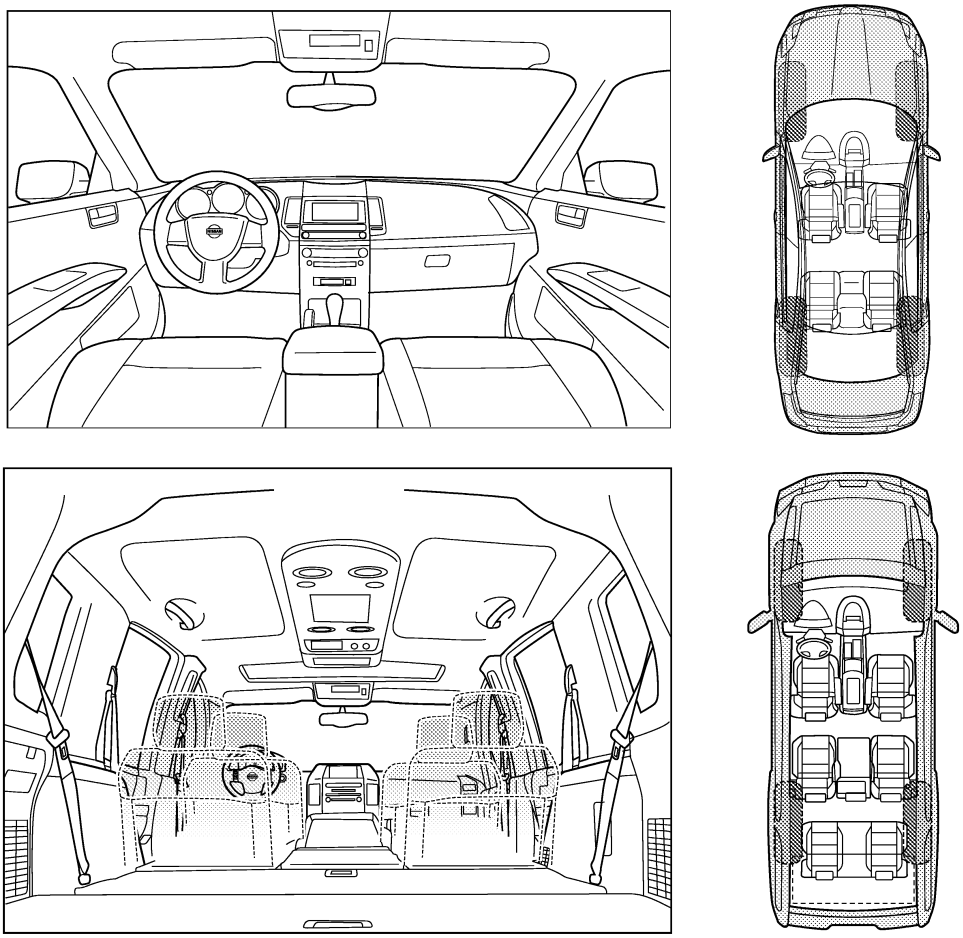
Diagnostic Worksheet

INFOID:0000000007578901

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

Dear Nissan Customer:
We are concerned about your satisfaction with your Nissan vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Nissan right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may be asked to take a test drive with a service advisor or technician to ensure we confirm the noise you are hearing.

I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)
The illustrations are for reference only, and may not reflect the actual configuration of your vehicle.



Continue to page 2 of the worksheet and briefly describe the location of the noise or rattle. In addition, please indicate the conditions which are present when the noise occurs.

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SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

_____

_____

II. WHEN DOES IT OCCUR? (please check the boxes that apply)

- ☐ anytime
- ☐ 1st time in the morning
- ☐ only when it is cold outside
- ☐ only when it is hot outside
- ☐ after sitting out in the rain
- ☐ when it is raining or wet
- ☐ dry or dusty conditions
- ☐ other:

III. WHEN DRIVING:

- ☐ through driveways
- ☐ over rough roads
- ☐ over speed bumps
- ☐ only about ____ mph
- ☐ on acceleration
- ☐ coming to a stop
- ☐ on turns: left, right or either (circle)
- ☐ with passengers or cargo
- ☐ other: _____
- ☐ after driving _____ miles or _____ minutes

IV. WHAT TYPE OF NOISE

- ☐ squeak (like tennis shoes on a clean floor)
- ☐ creak (like walking on an old wooden floor)
- ☐ rattle (like shaking a baby rattle)
- ☐ knock (like a knock at the door)
- ☐ tick (like a clock second hand)
- ☐ thump (heavy, muffled knock noise)
- ☐ buzz (like a bumble bee)

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

_____

_____

_____

	YES	NO	Initials of person performing
Vehicle test driven with customer	☐	☐	_____
- Noise verified on test drive	☐	☐	_____
- Noise source located and repaired	☐	☐	_____
- Follow up test drive performed to confirm repair	☐	☐	_____

VIN: _____ Customer Name: _____

W.O.# _____ Date: _____

This form must be attached to Work Order

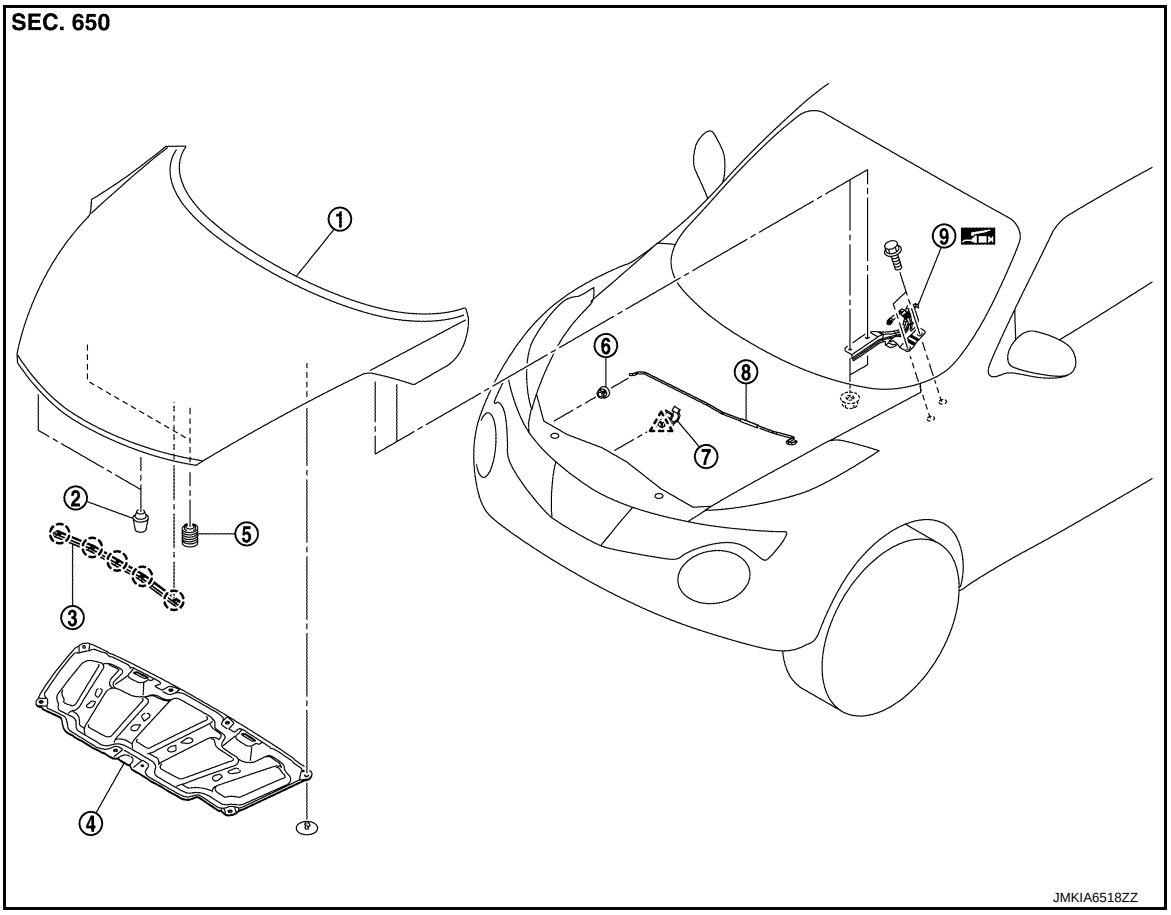
PIIB8742E

REMOVAL AND INSTALLATION

HOOD

Exploded View

INFOID:0000000007578902



1. Hood assembly
2. Hood bumper rubber
3. Radiator core seal
4. Hood insulator
5. Hood bumper rubber
6. Grommet
7. Clamp
8. Hood support rod
9. Hood hinge

: Clip

: Pawl

: Body grease

HOOD ASSEMBLY

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000007578903

CAUTION:
- **Operate with two workers, because of its heavy weight.**
- **Use protective tape or shop cloth to protect from damage during removal and installation.**

REMOVAL

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

   WARNING:
   Injury may occur if hood assembly is not supported by the proper material when removing hood assembly.
2. Remove hood hinge mounting nuts on the hood to remove the hood assembly.

INSTALLATION

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

CAUTION:

- **After installation, apply touch-up paint (the body color) onto the heads of hood hinge mounting bolts and nuts.**
- **After installing, perform hood fitting adjustment. Refer to DLK-118, "HOOD ASSEMBLY : Adjustment".**

HOOD ASSEMBLY : Adjustment

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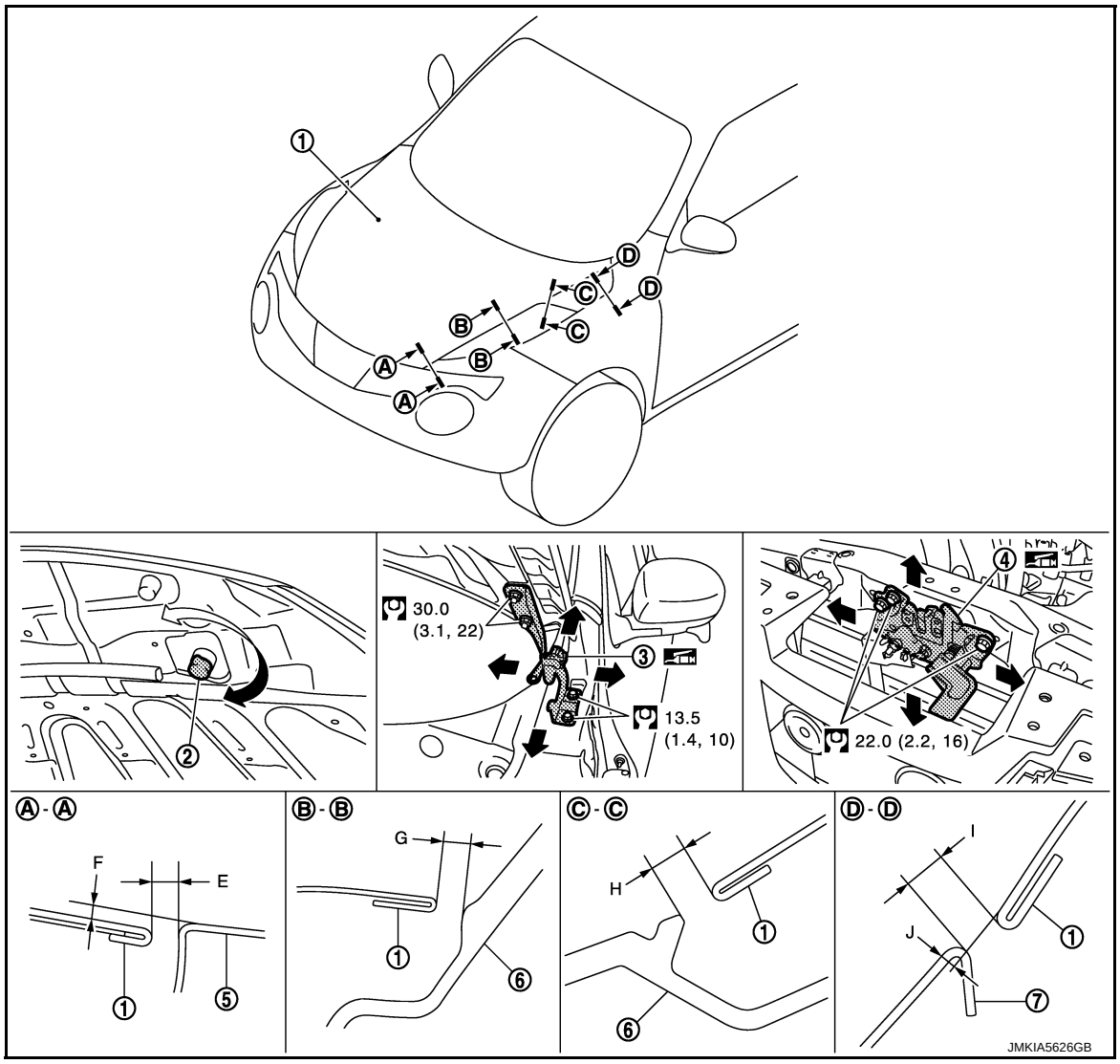


1. Hood assembly
2. Hood bumper rubber
3. Hood hinge
4. Hood lock assembly
5. Front bumper fascia
6. Front combination lamp
7. Front fender

: N·m (kg-m, ft-lb)

: Body grease

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

Unit: mm (in)

Portion				Standard	Difference (RH/LH, MAX)
Hood – Front bumper fascia	A – A	E	Clearance	2.0 – 6.0 (0.079 – 0.236)	< 2.5 (0.098)
		F	Surface height	(-2.0) – (+2.0) [(-0.079) – (+0.079)]	< 2.5 (0.098)
Hood – Front combination lamp	B – B	G	Clearance	2.0 – 6.0 (0.079 – 0.236)	< 2.5 (0.098)
Hood – Front combination lamp	C – C	H	Clearance	2.0 – 6.0 (0.079 – 0.236)	< 2.5 (0.098)
Hood – Front fender	D – D	I	Clearance	2.5 – 4.5 (0.098 – 0.177)	< 1.5 (0.059)
		J	Surface height	(-2.0) – (0.0) [(-0.079) – (0.000)]	< 1.5 (0.059)

FITTING ADJUSTMENT PROCEDURE

1. Remove front center grille. Refer to EXT-17, "Removal and Installation".
2. Remove hood lock assembly, and then adjust the surface height of hood assembly, front fender assembly, and front combination lamp according to the specified value, by rotating hood bumper rubber.
3. Position hood lock assembly and engage hood striker. Check hood lock assembly and hood striker for looseness.
4. Move hood lock assembly laterally until the center of hood striker and hood lock assembly are vertical when viewed from the front.
5. After adjustment, tighten lock bolts to the specified torque.
6. Open hood. Rotate bumper rubber counterclockwise between half a turn and three-quarters of a turn.
7. Check that secondary latch is securely engaged with secondary hood striker from the dead load of the hood assembly.
8. Check that primary latch is securely engaged with primary hood striker when hood assembly is closed [free-fall from approximately 200 mm (7.874 in) height].
   CAUTION:
   Never free-fall hood assembly from a height of 300 (11.811 in) mm or more.
9. Install front center grille. Refer to EXT-17, "Removal and Installation".

HOOD HINGE

HOOD HINGE : Removal and Installation

INFOID:0000000007578905

REMOVAL

1. Remove hood assembly. Refer to DLK-117, "HOOD ASSEMBLY : Removal and Installation".
2. Remove front fender. Refer to DLK-126, "Removal and Installation".
3. Remove hood hinge mounting bolts, and then remove hood hinge.

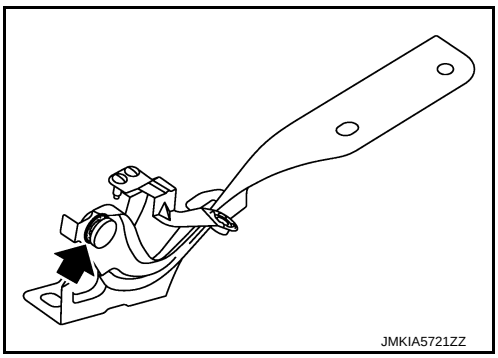
INSTALLATION

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

CAUTION:

- **After installation, perform hood hinge fitting adjustment. Refer to DLK-120, "HOOD HINGE : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the hinge mounting bolts and nuts.**

- **Check hood hinge rotating part for poor lubrication. If necessary, apply grease.**



HOOD HINGE : Adjustment

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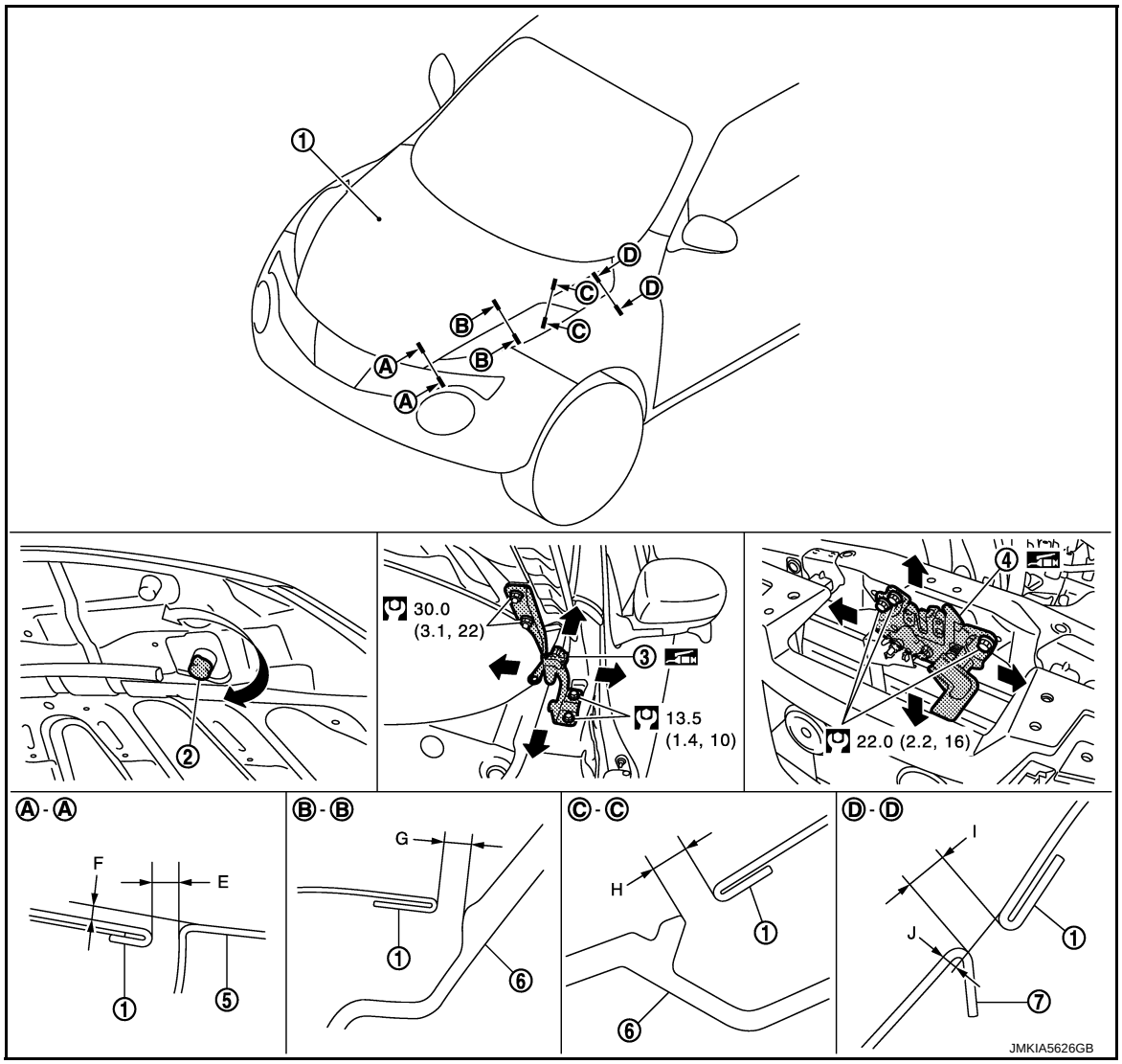


1. Hood assembly
2. Hood bumper rubber
3. Hood hinge
4. Hood lock assembly
5. Front bumper fascia
6. Front combination lamp
7. Front fender

: N·m (kg-m, ft-lb)

: Body grease

Check the clearance and the surface height between hood and each part by visually and touching.

If the clearance and the surface height are out of specification, adjust them according to the procedures shown below.

Unit: mm (in)

Portion				Standard	Difference (RH/LH, MAX)
Hood – Front bumper fascia	A – A	E	Clearance	2.0 – 6.0 (0.079 – 0.236)	< 2.5 (0.098)
		F	Surface height	(-2.0) – (+2.0) [(-0.079) – (+0.079)]	< 2.5 (0.098)
Hood – Front combination lamp	B – B	G	Clearance	2.0 – 6.0 (0.079 – 0.236)	< 2.5 (0.098)
Hood – Front combination lamp	C – C	H	Clearance	2.0 – 6.0 (0.079 – 0.236)	< 2.5 (0.098)
Hood – Front fender	D – D	I	Clearance	2.5 – 4.5 (0.098 – 0.177)	< 1.5 (0.059)
		J	Surface height	(-2.0) – (0.0) [(-0.079) – (0.000)]	< 1.5 (0.059)

1. Remove front center grille. Refer to EXT-17, "Removal and Installation".
2. Remove hood lock assembly.
3. Remove front bumper fascia. Refer to EXT-12, "Removal and Installation".
4. Remove front combination lamp (LH and RH). Refer to EXL-83, "Removal and Installation".
5. Remove front fender assembly (LH and RH). Refer to DLK-126, "Removal and Installation".
6. Loosen hood hinge mounting bolts.
7. Temporarily install front fender assembly (LH and RH), front combination lamp (LH and RH) and front bumper fascia.
8. Adjust the clearance of hood assembly, front fender assembly (LH and RH), front combination lamp (LH and RH) and front bumper fascia according to the specified value, by moving hood hinge (body side).
9. Temporarily tighten hood hinge (LH and RH).
10. Remove front bumper fascia, front combination lamp (LH and RH) and front fender assembly (LH and RH).
11. Tighten hood hinge (LH and RH) to the specified torque.
12. Install front fender assembly (LH and RH). Refer to DLK-126, "Removal and Installation".
13. Install front combination lamp (LH and RH). Refer to EXL-83, "Removal and Installation".
14. Install front bumper fascia. Refer to EXT-12, "Removal and Installation".
15. Adjust the surface height of hood assembly, front fender assembly, and front combination lamp according to the specified value, by rotating hood bumper rubber.
16. Position hood lock assembly and engage hood striker. Check hood lock assembly and hood striker for looseness.
17. Move hood lock assembly laterally until the center of hood striker and hood lock assembly are vertical when viewed from the front.
18. After adjustment, tighten lock bolts to the specified torque.
19. Open hood. Rotate bumper rubber counterclockwise between half a turn and three-quarters of a turn.
20. Check that secondary latch is securely engaged with secondary hood striker from the dead load of the hood assembly.
21. Check that primary latch is securely engaged with primary hood striker when hood assembly is closed [free-fall from approximately 200 mm (7.874 in) height].
    CAUTION:
    Never free-fall hood assembly from a height of 300 (11.811 in) mm or more.
22. Install front center grille. Refer to EXT-17, "Removal and Installation".
    CAUTION:
    After installation, apply touch-up paint (the body color) onto the heads of hood hinge mounting bolts and nuts.

HOOD SUPPORT ROD

HOOD SUPPORT ROD : Removal and Installation

INFOID:0000000007578907

REMOVAL

CAUTION:

Two workers are required to support the hood.

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

   WARNING:

   Injury may occur if hood assembly is not supported by the proper material when removing hood assembly.

2. Pull hood support rod from grommet and remove.

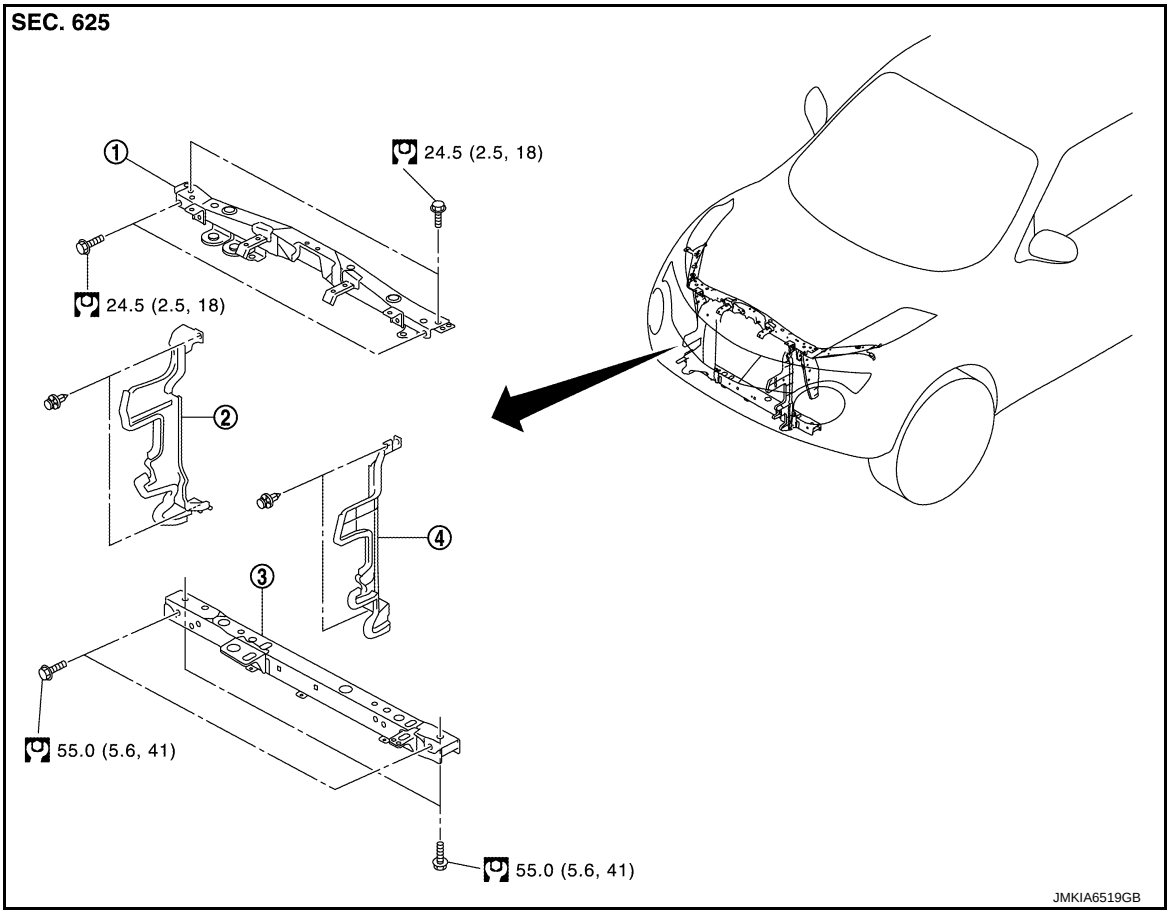
INSTALLATION

Install in the reverse order of removal.

RADIATOR CORE SUPPORT

Exploded View

INFOID:0000000007578908



1. Radiator core support upper
2. Air guide (RH)
3. Radiator core support lower
4. Air guide (LH)

: N·m (kg-m, ft-lb)

Removal and Installation

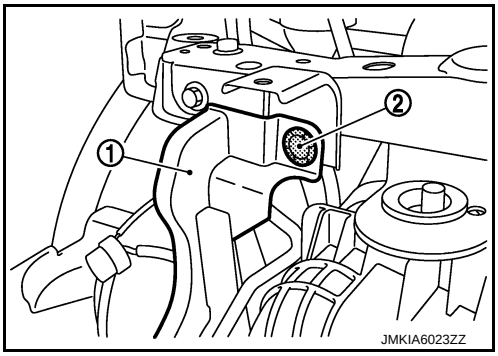
INFOID:0000000007578909

RADIATOR CORE SUPPORT UPPER

Removal

1. Remove front bumper fascia. Refer to EXT-12, "Removal and Installation".
2. Remove front combination lamp (LH and RH). Refer to EXL-83, "Removal and Installation".
3. Remove headlamp (LH and RH). Refer to EXL-81, "Removal and Installation".
4. Disconnect crash zone sensor harness connector. Refer to SR-22, "Removal and Installation".
   CAUTION:
   Turn ignition switch OFF, disconnect battery negative terminal and then wait for at least 3 minutes.
5. Remove hood lock and hood lock cable fixing clip. Refer to DLK-147, "HOOD LOCK CONTROL CABLE : Removal and Installation".
6. Remove horn bracket. Refer to HRN-4, "Removal and Installation".

7. Remove upper fixing clips (2) of air guide (LH and RH) (1).



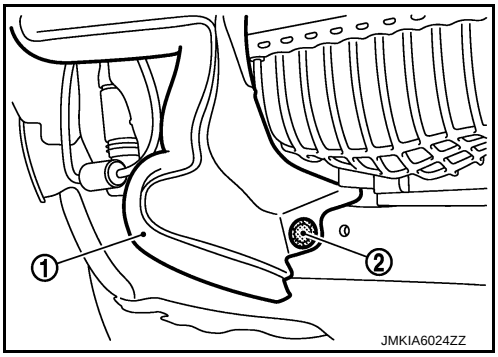
8. Remove hood support rod. Refer to DLK-122, "HOOD SUPPORT ROD : Removal and Installation".
9. Remove mounting bolts, and then remove radiator core support upper.

Installation
Install in the reverse order of removal.

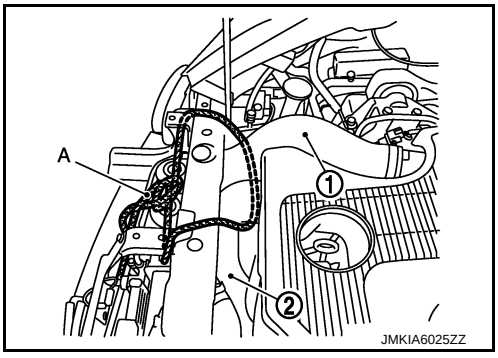
RADIATOR CORE SUPPORT LOWER

Removal

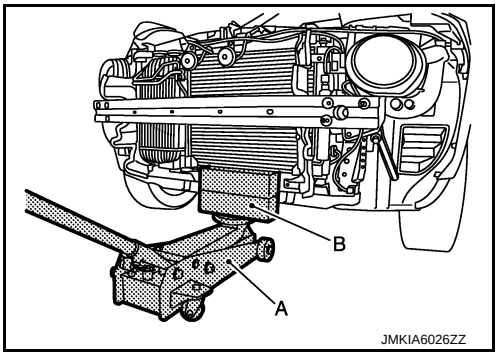
1. Remove front bumper fascia. Refer to EXT-12, "Removal and Installation".
2. Remove lower fixing clips (2) of radiator side seal (LH and RH) (1).



3. Using strings (A), hang inlet hose (1) and inlet hose (2) together with charge air cooler.
CAUTION:
Never damage inlet hoses and charge air cooler.



4. Support lower side radiator using wooden blocks (A) and a floor jack (B).
CAUTION:
Never damage radiator.



5. Remove mounting bolts, and then remove radiator core support lower.

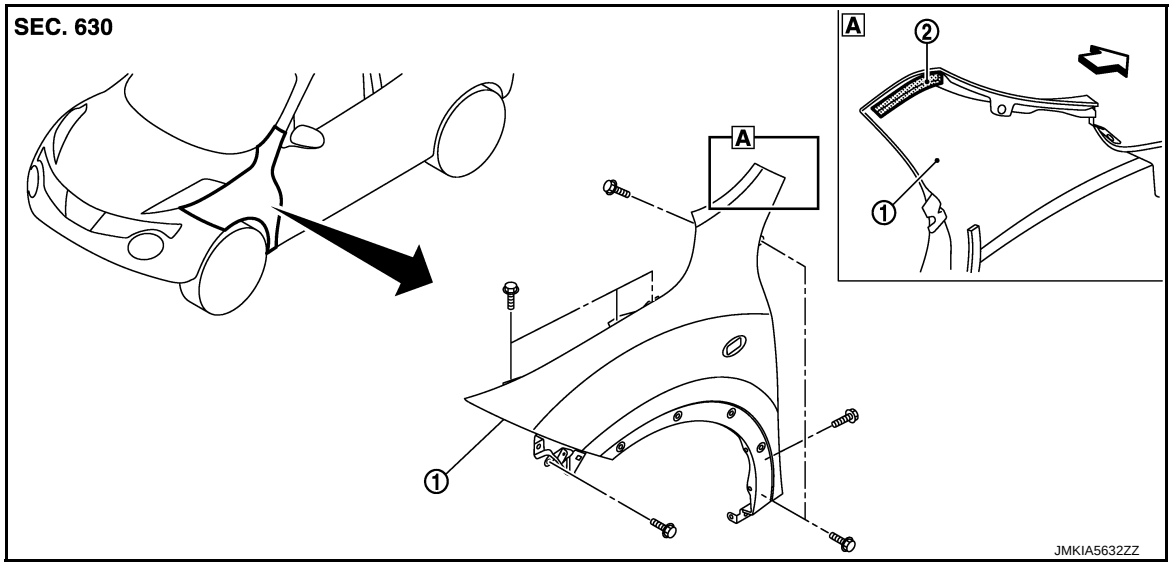
Installation

Install in the reverse order of removal.

FRONT FENDER

Exploded View

INFOID:0000000007578910



1. Front fender assembly
2. Front fender stiffener

⇦ : Vehicle front

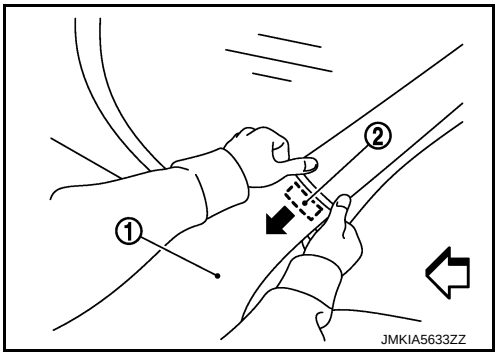
Removal and Installation

INFOID:0000000007578911

REMOVAL

1. Remove front fillet molding. Refer to EXT-25, "FRONT FILLET MOLDING : Removal and Installation".
2. Remove front bumper fascia assembly. Refer to EXT-12, "Removal and Installation".
3. Remove sill cover. Refer to EXT-22, "Removal and Installation".
4. Remove fender protector. Refer to EXT-21, "Removal and Installation".
5. Remove front fender cover. Refer to EXT-21, "Exploded View".
6. Remove front combination lamp. Refer to EXL-83, "Removal and Installation".
7. Remove side turn signal lamp. Refer to EXL-90, "Removal and Installation".
8. Remove mounting bolts of front fender assembly.
9. Remove front fender stiffener (2) from the vehicle body while carefully pulling upper portion of front fender (1) toward vehicle outside.

   ⇦ : Vehicle front



10. Remove front fender assembly.
    CAUTION:
    An viscous urethane foam is installed on the back surface of front fender. When removing the front fender, be careful to not deform the front fender while performing the procedure and removing the viscous urethane foam a little at a time.

INSTALLATION

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

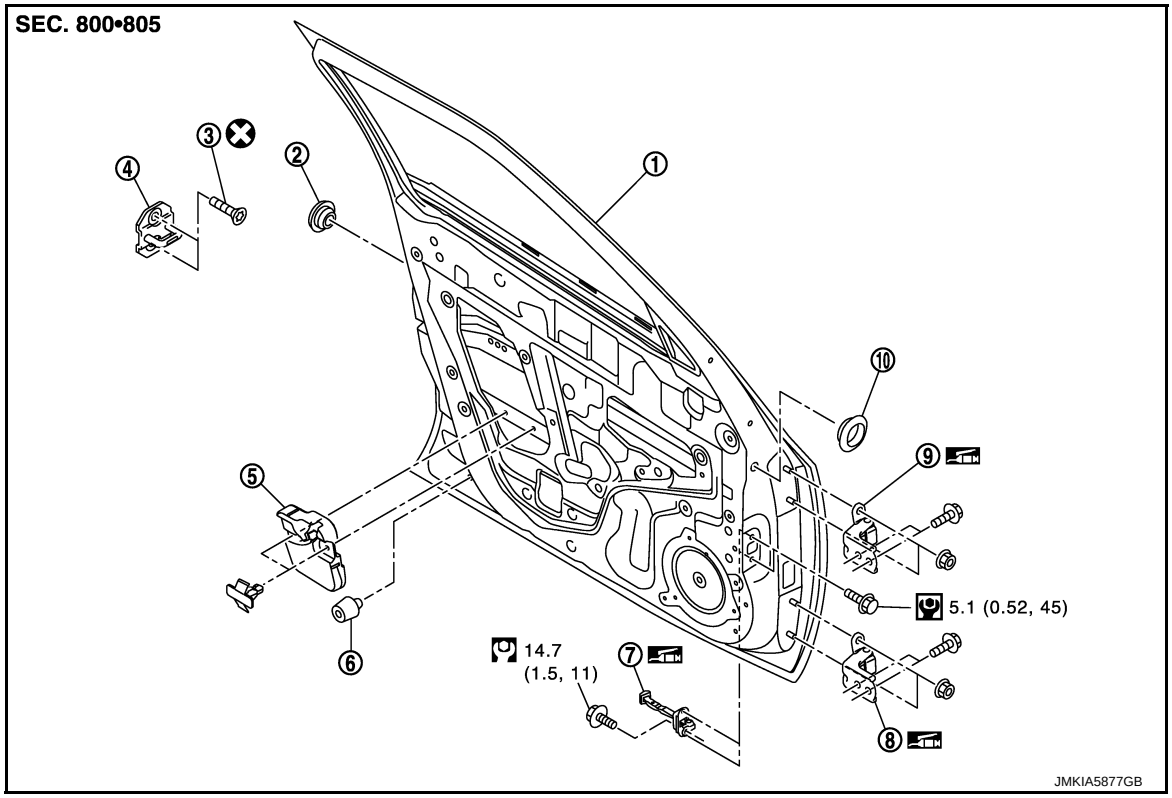
CAUTION:

- **After installation, apply the touch-up paint (the body color) onto the head of front fender mounting bolts.**
- **After installation, adjust the following part.**
- **Hood assembly: Refer to DLK-118, "HOOD ASSEMBLY : Adjustment".**
- **Front door: Refer to DLK-130, "DOOR ASSEMBLY : Adjustment".**

FRONT DOOR

Exploded View

INFOID:0000000007578912



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

: Do not reuse

: N·m (kg-m, in-lb)

: N·m (kg-m, ft-lb)

: Body grease

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

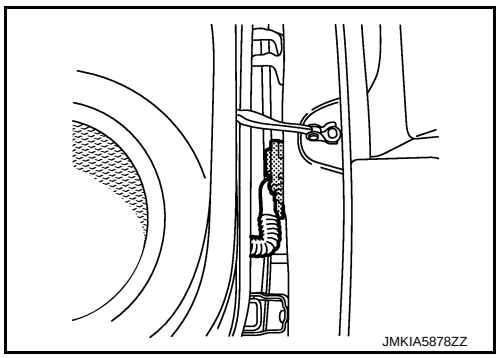
INFOID:0000000007578913

WARNING:
- **Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait 3 minutes or more.**
- **Never use the air tools or electric tools for servicing.**

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

REMOVAL

1. Disconnect front door harness connector.



2. Remove mounting bolt of door check link on the vehicle.
3. Remove door hinge mounting bolts (door side), and then remove door assembly.

INSTALLATION

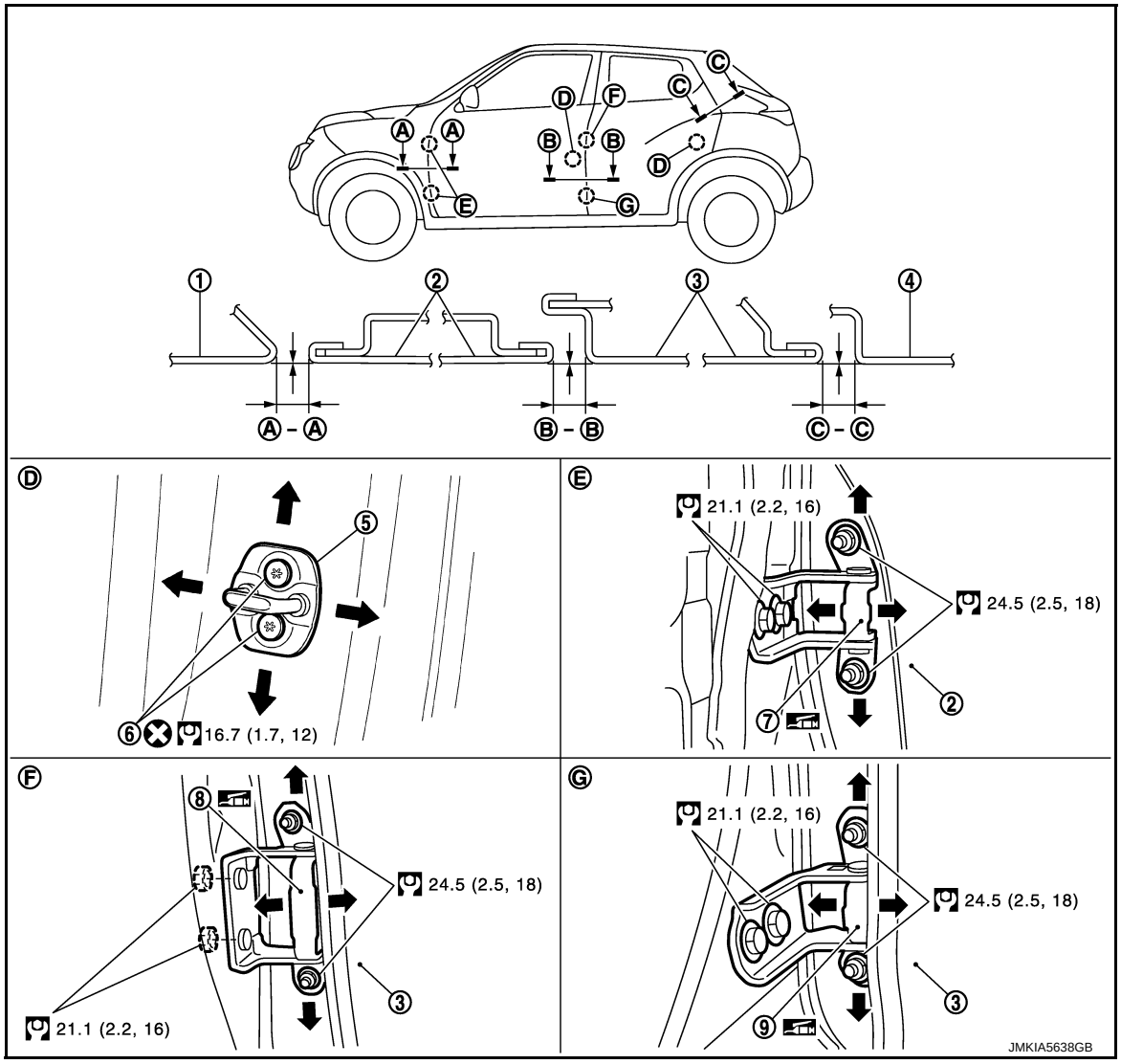
Note the following items, and install in the reverse order of removal.

CAUTION:

- **Apply anticorrosive agent onto the mounting surface.**
- **Check front door open/close, lock/unlock operation after installation.**
- **Check door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **After installation, perform the fitting adjustment. Refer to DLK-130, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.**

DOOR ASSEMBLY : Adjustment

INFOID:0000000007578914



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)

: Do not reuse

: N·m (kg-m, ft-lb)

: Body grease

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

Unit: mm (in)

Portion		Clearance	Surface height
Front fender – Front door	A – A	3.0 – 5.0 (0.118 – 0.197)	(-1.0) – (+1.0) [(-0.039) – (+0.039)]
Front door – Rear door	B – B	3.3 – 5.3 (0.130 – 0.209)	(-1.0) – (+1.0) [(-0.039) – (+0.039)]

FITTING ADJUSTMENT PROCEDURE

1. Remove front fender. Refer to DLK-126, "Removal and Installation".
2. Loosen door hinge mounting nuts on door side.

3. Adjust the surface height of front door according to the fitting standard dimension.
4. Temporarily tighten door hinge mounting nuts on door side.
5. Loosen door hinge mounting bolts on body side.
6. Raise front door at rear end to adjust clearance of the front door according to the fitting standard dimension.
7. After adjustment tighten bolts and nuts to the specified torque.
   CAUTION:
   - **After installation, apply touch-up paint (the body color) onto the head of hinge mounting bolts and nuts.**
   - **Check door hinge rotating part for poor lubrication. If necessary, apply body grease.**
8. Install front fender. Refer to refer to DLK-126, "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:0000000007578915

REMOVAL

Remove TORX bolts, and then remove door striker.

INSTALLATION

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

CAUTION:
- **Check front door open/close, lock/unlock operation after installation.**
- **After installation, be sure to perform the fitting adjustment. Refer to DLK-130, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:0000000007578916

REMOVAL

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

1. Remove front fender. Refer to DLK-126, "Removal and Installation".
2. Remove front door assembly. Refer to DLK-128, "DOOR ASSEMBLY : Removal and Installation".
3. Remove front door hinge mounting bolts (body side), and then remove front door hinge.

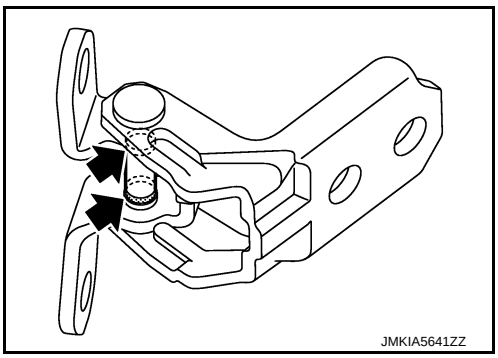
INSTALLATION

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

CAUTION:
- **Apply anticorrosive agent onto the mounting surface.**
- **Check front door open/close, lock/unlock operation after installation.**
- **After installation, perform the fitting adjustment. Refer to DLK-130, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.**

- **Check door hinge rotating part for poor lubrication. If necessary, apply body grease.**

: Grease up point



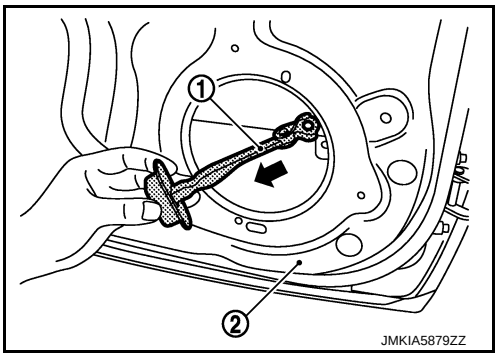
DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:0000000007578917

REMOVAL

1. Fully close the front door window.
2. Remove front door finisher. Refer to INT-12, "Removal and Installation".
3. Disconnect harness connector of front door speaker.
4. Remove mounting bolts of front door speaker, and then remove front door speaker.
5. Remove mounting bolt of door check link on the vehicle.
6. Remove mounting bolts of door check link on door panel.
7. Take door check link (1) out from the hole of door panel (2).



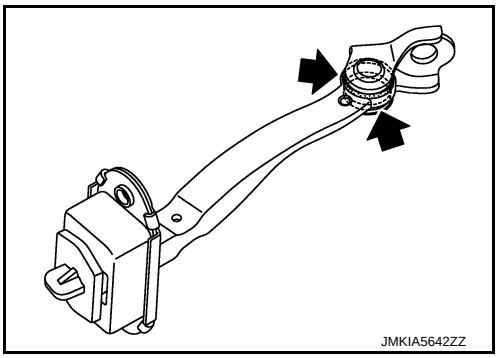
INSTALLATION

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

CAUTION:

- **Check front door open/close operation after installation.**
- **Check door check link rotating part for poor lubrication. If necessary, apply grease.**

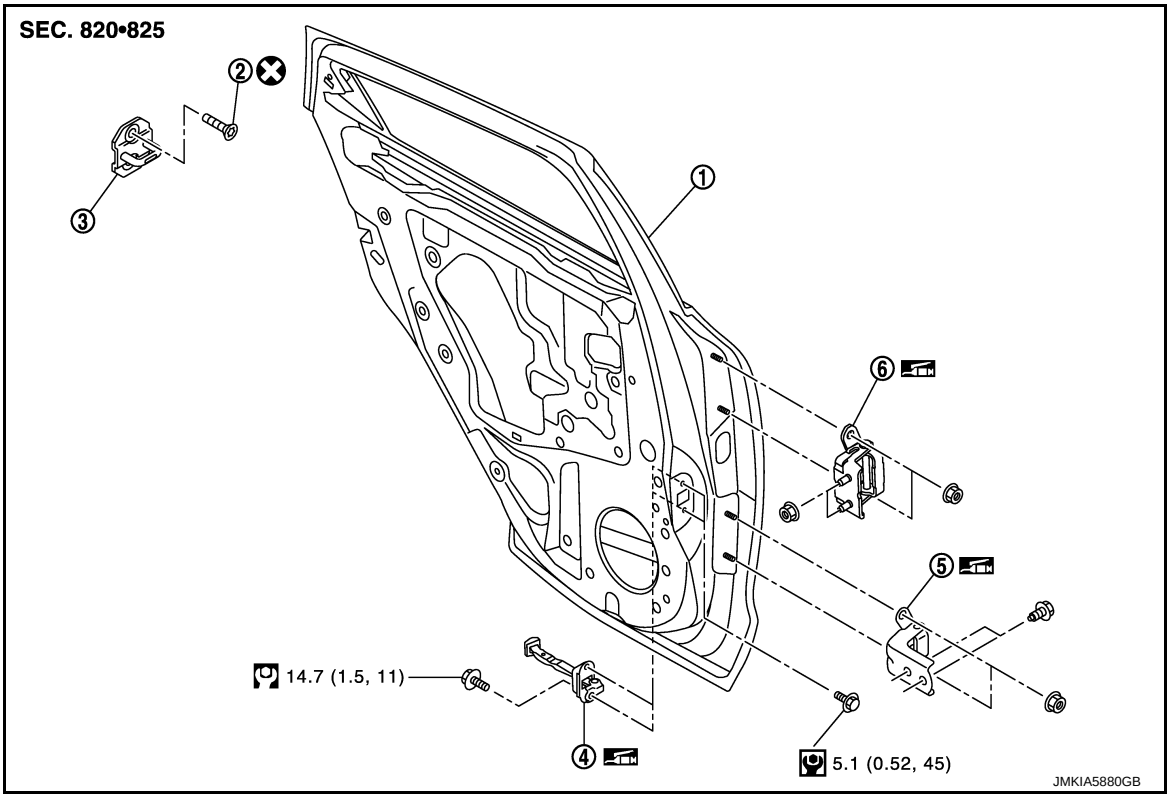
: Grease up point



REAR DOOR

Exploded View

INFOID:0000000007578918



1. Rear door panel
2. TORX bolt
3. Door striker
4. Door check link
5. Door hinge (lower)
6. Door hinge (upper)

: Do not reuse

: N·m (kg-m, in-lb)

: N·m (kg-m, ft-lb)

: Body grease

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

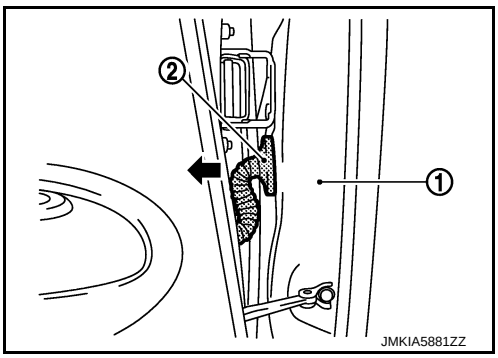
INFOID:0000000007578919

CAUTION:

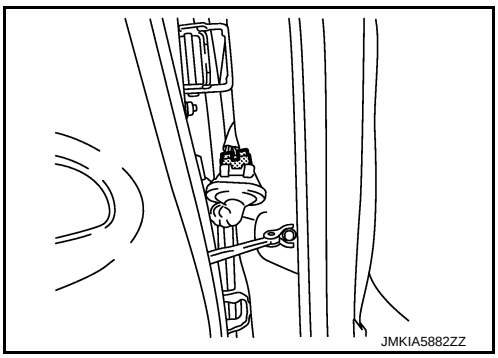
- **Perform work with 2 workers, because of it's heavy weight.**
- **When removing and installing rear door assembly, support door with a jack and shop cloth to protect door and body.**

REMOVAL

1. Remove rear door harness grommet (2) from body side outer (1), and then pull out rear door harness.



2. Disconnect rear door harness connector.



3. Remove mounting bolt of door check link on the vehicle.
4. Remove door hinge mounting bolts (door side), and then remove rear door assembly.

INSTALLATION

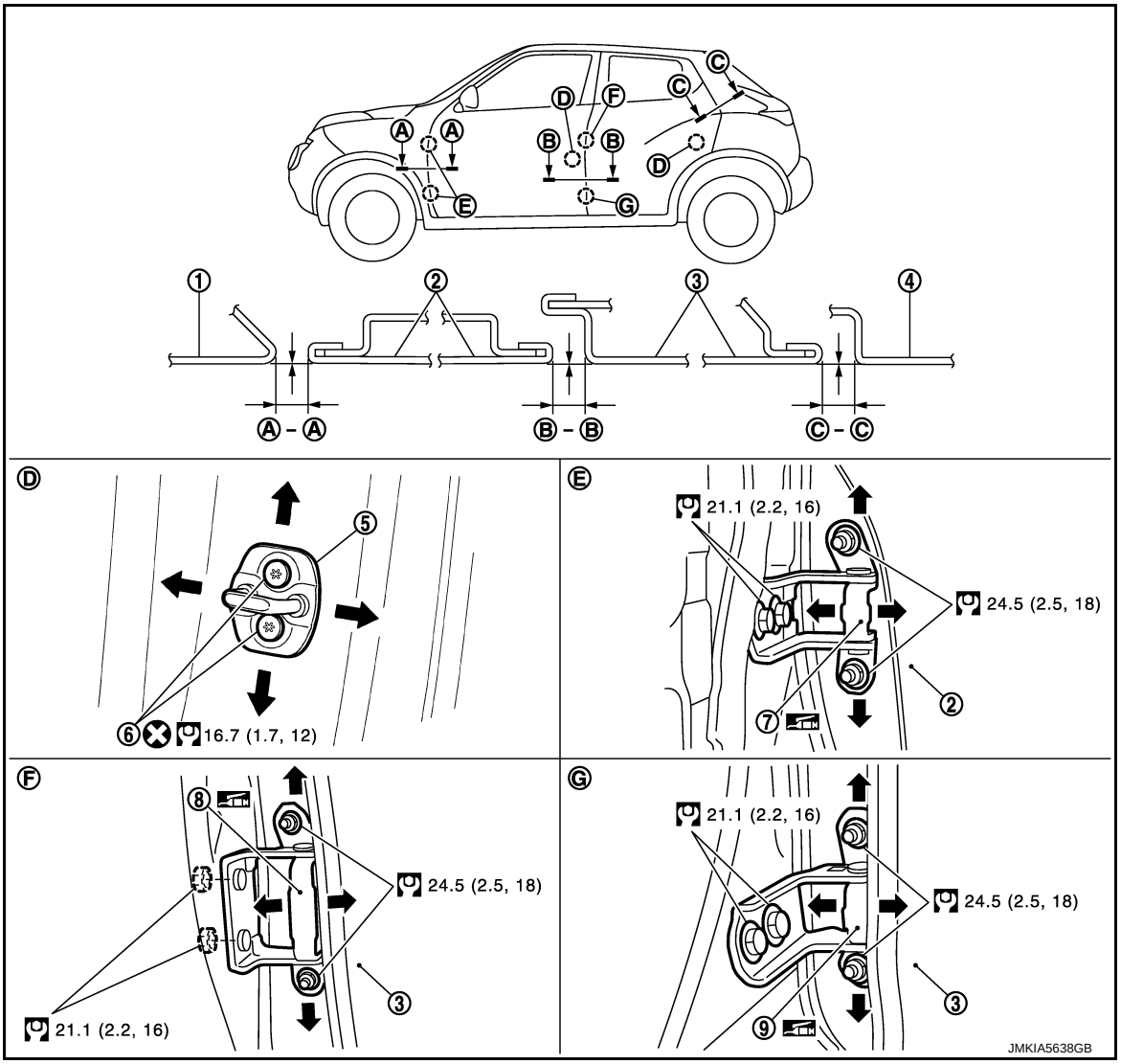
Note the following items, and install in the reverse order of removal.

CAUTION:

- **Apply anticorrosive agent onto the mounting surface.**
- **Check rear door open/close, lock/unlock operation after installation.**
- **Check door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **After installation, perform the fitting adjustment. Refer to DLK-135, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.**

DOOR ASSEMBLY : Adjustment

INFOID:0000000007578920



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)

: Do not reuse

: N·m (kg-m, ft-lb)

: Body grease

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

Unit: mm (in)

Portion		Clearance	Surface height
Front door – Rear door	B – B	3.3 – 5.3 (0.130 – 0.209)	(-1.0) – (+1.0) [(-0.039) – (+0.039)]
Rear door – Body side outer	C – C	2.6 – 4.6 (0.102 – 0.181)	(-1.0) – (+1.0) [(-0.039) – (+0.039)]

FITTING ADJUSTMENT PROCEDURE

1. Remove center pillar lower garnish. Refer to INT-21, "CENTER PILLAR LOWER GARNISH : Removal and Installation".

2. Loosen door hinge mounting nuts on door side.
3. Adjust the surface height of rear door according to the fitting standard dimension.
4. Temporarily tighten door hinge mounting nuts on door side.
5. Loosen door hinge mounting nuts and bolts on body side.
6. Raise rear door at rear end to adjust clearance of rear door according to the fitting standard dimension.
7. After adjustment tighten bolts and nuts to the specified torque.
   CAUTION:
   - **After installation, apply touch-up paint (the body color) onto the head of hinge mounting bolts and nuts.**
   - **Check door hinge rotating part for poor lubrication. If necessary, apply body grease.**
8. Install center pillar lower garnish. Refer to INT-21, "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:0000000007578921

REMOVAL

Remove TORX bolts, and then remove door striker.

INSTALLATION

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

CAUTION:
- **Check rear door open/close, lock/unlock operation after installation.**
- **After installation, be sure to perform the fitting adjustment. Refer to DLK-135, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:0000000007578922

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

REMOVAL

1. Remove rear door assembly. Refer to DLK-133, "DOOR ASSEMBLY : Removal and Installation".
2. Remove center pillar lower garnish. Refer to INT-21, "CENTER PILLAR LOWER GARNISH : Removal and Installation".
3. Remove rear door hinge mounting bolts and nuts (body side), and then remove door hinge.

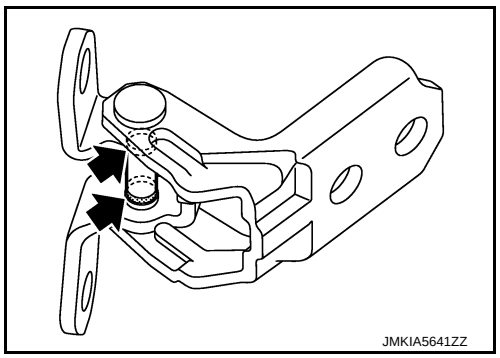
INSTALLATION

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

CAUTION:
- **Apply anticorrosive agent onto the mounting surface.**
- **Check rear door open/close operation after installation.**
- **When removing and installing rear door assembly, perform the fitting adjustment. Refer to DLK-135, "DOOR ASSEMBLY : Adjustment".**
- **After installing, apply the touch-up paint (the body color) onto the head of door hinge mounting nuts.**

- **Check door hinge rotating part for poor lubrication. If necessary, apply body grease.**

: Grease up point



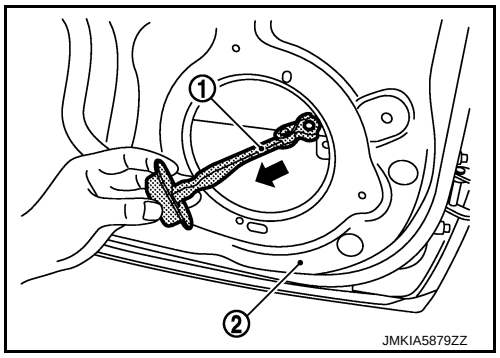
DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:0000000007578923

REMOVAL

1. Fully close the rear door window.
2. Remove rear door finisher. Refer to INT-15, "Removal and Installation".
3. Remove mounting bolts of rear door speaker, and then remove rear door speaker.
4. Disconnect harness connector of rear door speaker.
5. Remove mounting bolt of the check link on the vehicle.
6. Remove mounting bolts of the check link on door panel.
7. Take door check link (1) out from the hole of door panel (2).



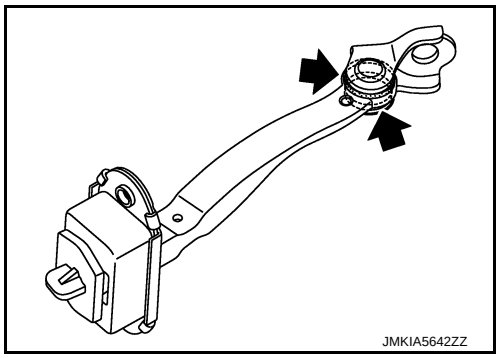
INSTALLATION

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

CAUTION:

- **Check rear door open/close operation after installation.**
- **Check door check link rotating part for poor lubrication. If necessary, apply grease.**

: Grease up point

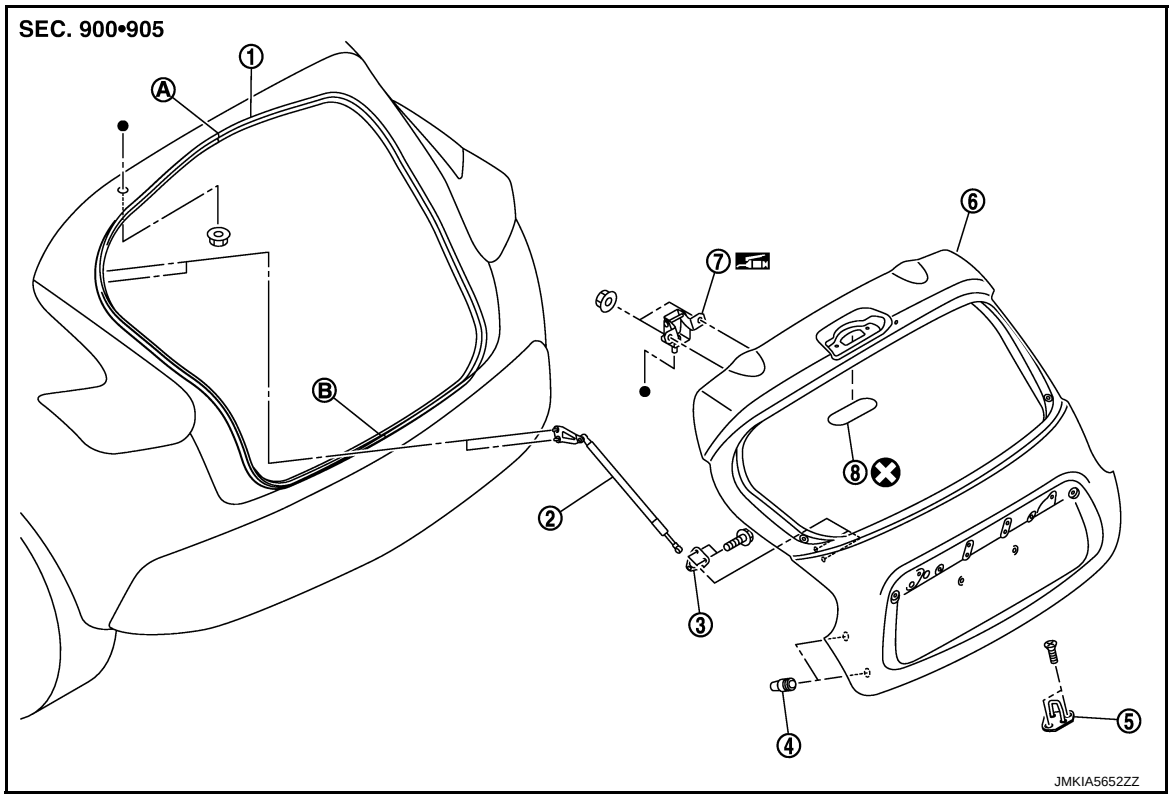


BACK DOOR

Exploded View

INFOID:0000000007578924

REMOVAL



1. Back door weather-strip
2. Back door stay
3. Back door stay lower bracket
4. Bumper rubber
5. Back door striker
6. Back door panel
7. Back door hinge
8. Hole cover

A : Center mark

B : Seam

: Do not reuse

: Body grease

BACK DOOR ASSEMBLY

BACK DOOR ASSEMBLY : Removal and Installation

INFOID:0000000007578925

CAUTION:

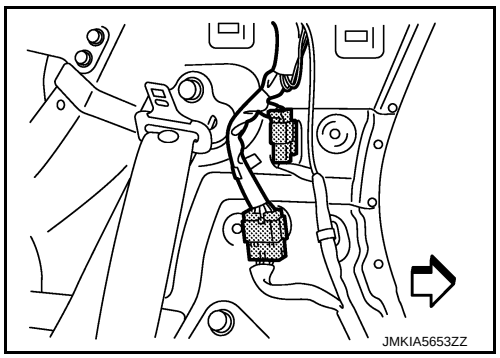
- **Operate with two workers, because of its heavy weight.**
- **Use protective tape or shop cloth to protect from damage during removal and installation.**

REMOVAL

1. Remove luggage side upper finisher (LH and RH). Refer to INT-35, "LUGGAGE SIDE UPPER FINISHER : Removal and Installation".

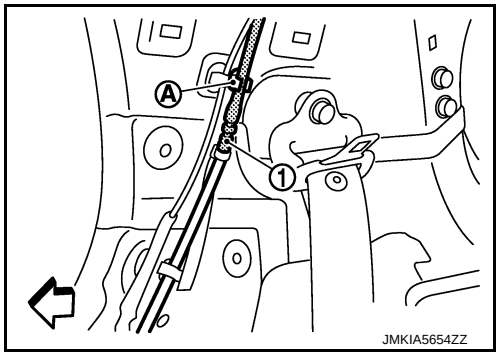
2. Disconnect harness connector.

⇦ : Vehicle front



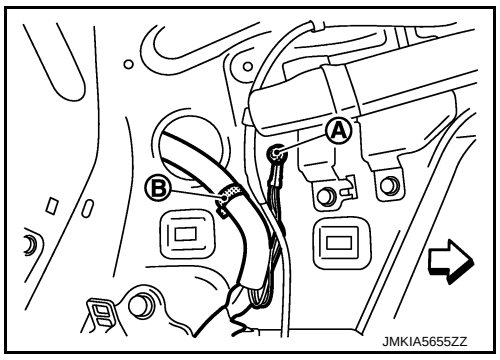
3. Remove rear washer hose (1) from hose mounting clip (A), and then disengage hose.

⇦ : Vehicle front

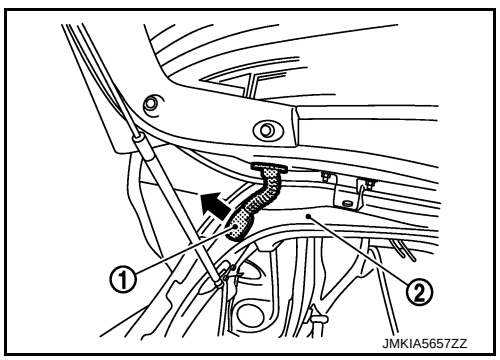


4. Remove center pillar upper garnish. Refer to INT-21, "CENTER PILLAR UPPER GARNISH : Removal and Installation".
5. Remove upper side of back door weather-strip. Refer to DLK-144, "BACK DOOR WEATHER-STRIP : Removal and Installation".
6. Remove rear assist grip (LH and RH) and mounting clips for rear portion of headlining, and then remove rear portion of headlining. Refer to INT-26, "NORMAL ROOF : Exploded View" or INT-29, "SUNROOF : Removal and Installation".
7. Remove ground harness mounting bolt (A) and harness fixing clips (B).

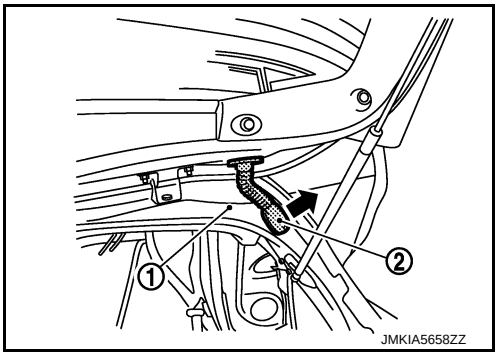
⇦ : Vehicle front



8. Remove grommet (1), and then pull out harness from roof panel (2).



9. Remove grommet (2), and then pull out harness and washer tube from roof panel (1).



10. Support back door with the proper material to prevent it from falling.

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

11. Remove back door stay (back door side). Refer to DLK-143, "BACK DOOR STAY : Removal and Installation".
12. Remove back door hinge mounting nuts on back door and remove back door assembly.

INSTALLATION

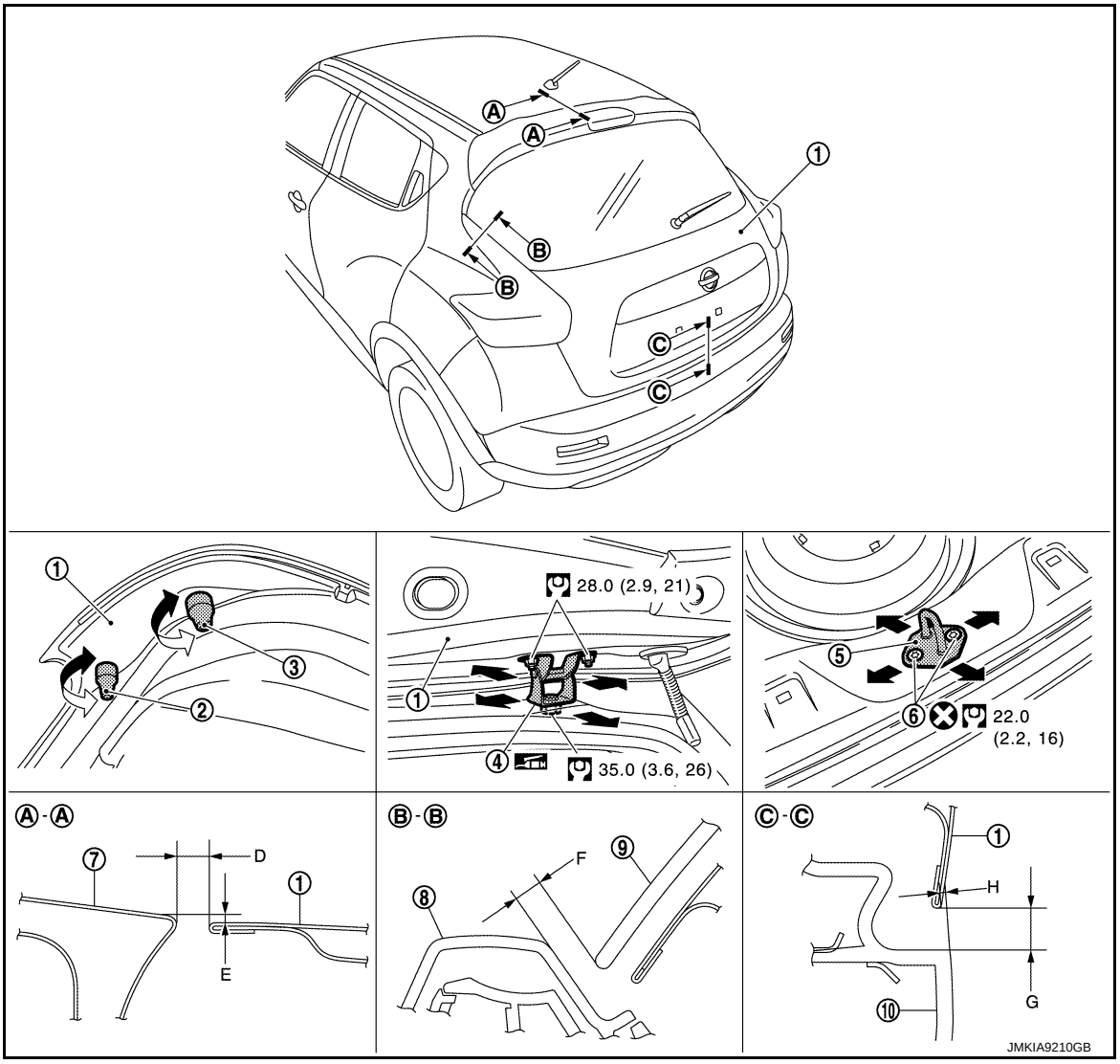
Note the following items, and install in the reverse order of removal.

CAUTION:

- **Check back door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **After installation, check back door open/close, lock/unlock operation.**
- **After installation, perform the fitting adjustment. Refer to DLK-141, "BACK DOOR ASSEMBLY : Adjustment".**

BACK DOOR ASSEMBLY : Adjustment

INFOID:0000000007578926



1. Back door assembly
2. Bumper rubber (upper)
3. Bumper rubber (lower)
4. Back door hinge
5. Back door striker
6. TORX bolt
7. Roof panel
8. Rear combination lamp
9. Back door glass
10. Rear bumper fascia

: Do not reuse

: N·m (kg-m, ft-lb)

: Body grease

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

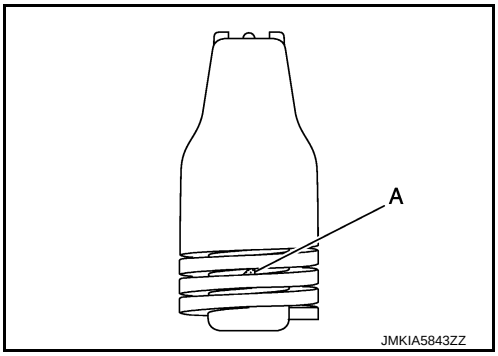
Unit: mm (in)

Portion				Standard	Difference (LH/RH, MAX)
Roof panel – Back door	A – A	D	Clearance	5.0 – 7.0 (0.197 – 0.276)	—
		E	Surface height	0.9 – 2.9 (0.035 – 0.114)	—

Portion				Standard	Difference (LH/RH, MAX)
Rear combination lamp – Back door glass	B – B	F	Clearance	2.8 – 7.2 (0.110 – 0.283)	<2.0 (0.079)
Rear bumper fascia – Back door	C – C	G	Clearance	6.0 – 10.0 (0.236 – 0.394)	—
		H	Surface height	(-2.5) – (+1.0) [(-0.098) – (+0.039)]	—

FITTING ADJUSTMENT PROCEDURE

1. Loosen back door striker mounting bolts.
2. Loosen back door hinge mounting nuts (back door side).
3. Adjust back door using back door striker and back door hinge to the specified value, as shown in the following table.
4. After adjustment tighten back door striker mounting bolts and back door hinge mounting nuts (back door side) to the specified torque.
5. Screw bumper rubber (upper) into the stopper position (A), and then loosen by a half turn.
6. Screw bumper rubber (lower) into the end position of threads.



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

BACK DOOR STRIKER ADJUSTMENT

Adjust back door striker so that it becomes parallel with back door lock insertion direction.

BACK DOOR STRIKER

BACK DOOR STRIKER : Removal and Installation

INFOID:0000000007578927

REMOVAL

1. Remove luggage rear plate. Refer to INT-34, "LUGGAGE REAR PLATE : Removal and Installation".
2. Remove TORX bolts, and then remove back door striker.

INSTALLATION

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

CAUTION:
- **After installation, check back door open/close, lock/unlock operation.**
- **After installation, perform the fitting adjustment. Refer to DLK-141, "BACK DOOR ASSEMBLY : Adjustment".**

BACK DOOR HINGE

BACK DOOR HINGE : Removal and Installation

INFOID:0000000007578928

REMOVAL

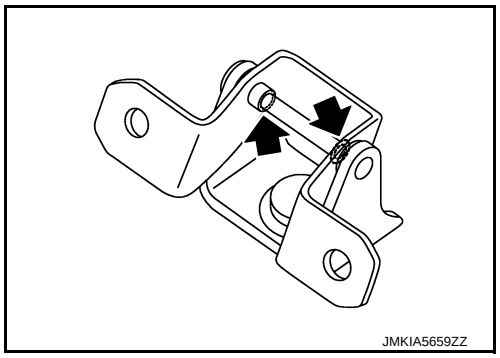
1. Remove back door assembly. Refer to DLK-138, "BACK DOOR ASSEMBLY : Removal and Installation".
2. Remove back door hinge mounting nuts (body side), and then remove back door hinge.

INSTALLATION

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

CAUTION:

- **After installation, check back door open/close, lock/unlock operation.**
- **After installation, perform the fitting adjustment. Refer to DLK-141, "BACK DOOR ASSEMBLY : Adjustment".**
- **Check back door hinge rotating part for poor lubrication. If necessary, apply body grease.**



BACK DOOR STAY

BACK DOOR STAY : Removal and Installation

INFOID:0000000007578929

REMOVAL

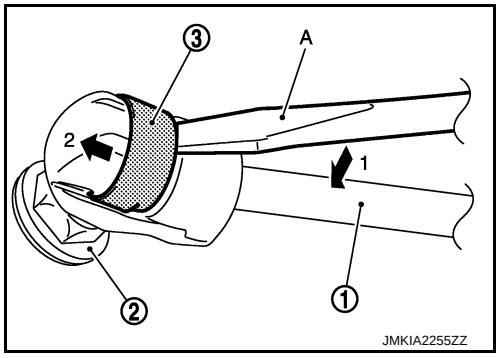
1. Remove luggage side upper finisher and rear pillar cap. Refer to INT-35, "LUGGAGE SIDE UPPER FINISHER : Removal and Installation".
2. Support the back door with the suitable material to prevent it from falling.

   WARNING:

   Bodily injury may occur if no supporting rod is holding the back door open when removing the back door stay.
3. Remove back door stay mounting bolts (body side).
4. Remove the metal clip (3) located on the connection between the back door stay (1) and the stud ball (2) (back door side) by using a flat-bladed screwdriver (A).

   CAUTION:

   Be careful not to damage painted surface.
5. Remove back door stay (back door side).



6. Remove mounting bolts, and then remove back door stay lower bracket.

INSTALLATION

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

CAUTION:

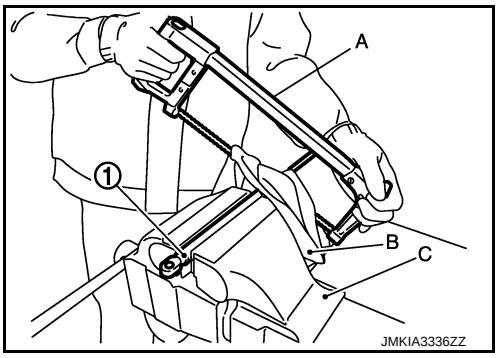
- **Apply anticorrosive agent onto the mounting surface.**
- **After installation, check back door open/close, lock/unlock operation.**

BACK DOOR STAY : Disposal

INFOID:0000000007578930

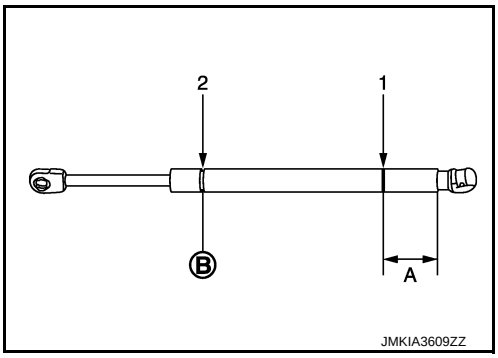
1. Fix back door stay (1) using a vise (C).
2. Using hacksaw (A) slowly make 2 holes in the back door stay, in numerical order as shown in the figure.

CAUTION:
- **When cutting a hole on back door stay, always cover a hacksaw using a shop cloth (B) to avoid scattering metal fragments or oil.**
- **Wear eye protection (safety glasses).**
- **Wear gloves.**



A: 20 mm (0.787 in)

B: Cut at the groove.



BACK DOOR WEATHER-STRIP

BACK DOOR WEATHER-STRIP : Removal and Installation

INFOID:0000000007578931

REMOVAL

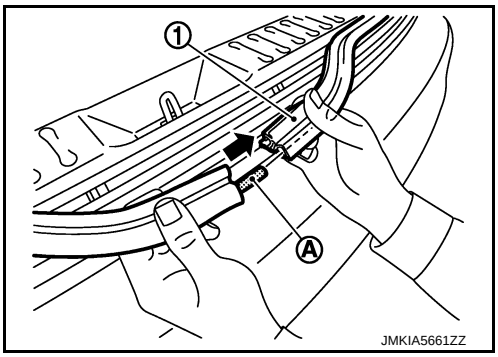
Pull up and remove engagement with body from weather-strip joint.

CAUTION:

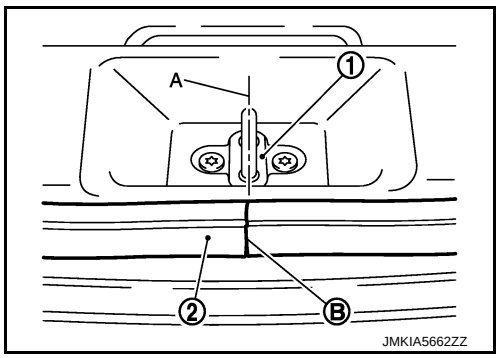
Never pull strongly on weather-strip.

INSTALLATION

1. Working from the upper section, align weather-strip center mark with vehicle center position mark and install weather-strip onto the vehicle.
2. For the lower section, insert pad (A) into weather-strip (1), and then fix the connection point.



3. Align the connecting point (B) of weather-strip (2) to the center (A) of striker (1), and then install as shown in the figure.

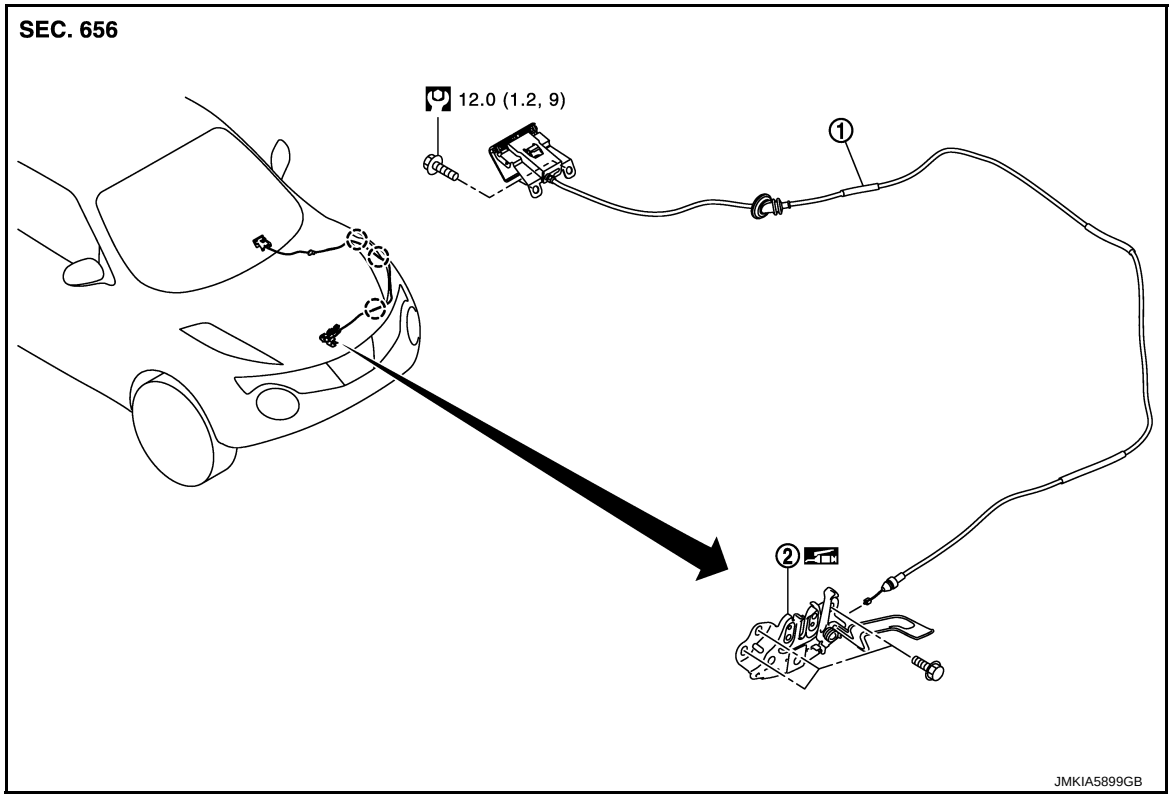


4. Pull weather-strip gently to ensure that there is no loose section.
NOTE:
Check that weather-strip fits tightly in each corner and luggage rear plate.

HOOD LOCK

Exploded View

INFOID:0000000007578932



1. Hood lock control cable assembly
2. Hood lock assembly

: Clip

: N·m (kg-m, ft-lb)

: Body grease

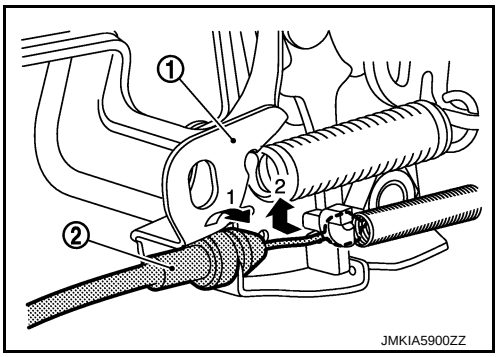
HOOD LOCK

HOOD LOCK : Removal and Installation

INFOID:0000000007578933

REMOVAL

1. Remove front center grille. Refer to EXT-17, "Removal and Installation".
2. Remove crash zone sensor. Refer to SR-22, "Removal and Installation".
3. Remove hood lock assembly mounting bolts, and then remove hood lock assembly.
4. Disconnect hood lock control cable assembly (2) from hood lock assembly (1).



INSTALLATION

Note the following items, 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-118, "HOOD ASSEMBLY : Adjustment".**
- **After installation, perform hood lock control inspection. Refer to DLK-147, "Inspection".**

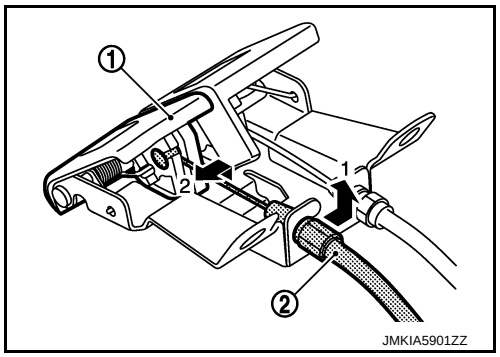
HOOD LOCK CONTROL CABLE

HOOD LOCK CONTROL CABLE : Removal and Installation

INFOID:0000000007578934

REMOVAL

1. Disconnect hood lock control cable assembly from hood lock assembly.
2. Remove fender protector (LH). Refer to EXT-21, "Removal and Installation".
3. Remove hood lock cable clip.
4. Remove hood lock control cable assembly of instrument lower panel (LH), and then remove fuel filler lid opener cable (2) from fuel filler lid opener lever (1).



JMKIA5901ZZ

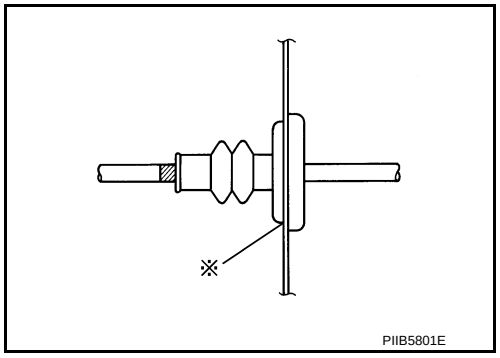
5. Remove grommet on the lower dash, and pull the hood lock control cable toward the passenger compartment.
   CAUTION:
   While pulling, never to damage (peeling) the outside of hood lock control cable.

INSTALLATION

Note the following items, and 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.**



PIIB5801E

- **Check that hood lock control cable is properly engaged with hood lock.**
- **After installation, perform hood fitting adjustment. Refer to DLK-118, "HOOD ASSEMBLY : Adjustment".**
- **After installation, perform hood lock control inspection. Refer to DLK-147, "Inspection".**

Inspection

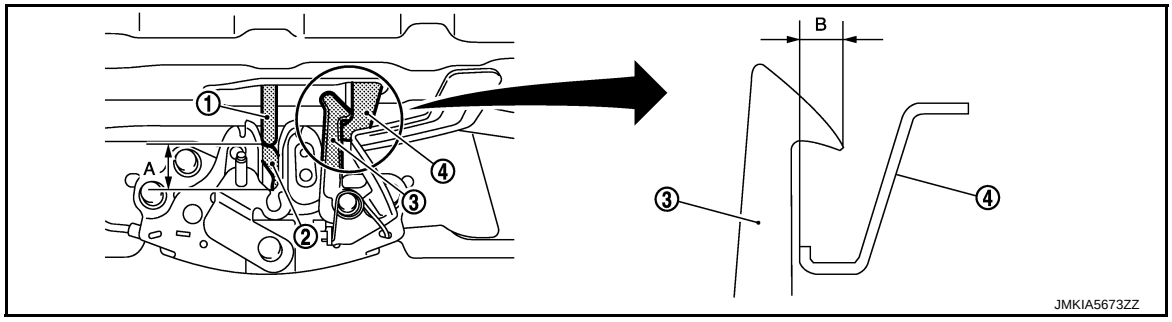
INFOID:0000000007578935

NOTE:

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

1. Check that secondary latch is securely engaged with securely striker from the dead load of the hood assembly.

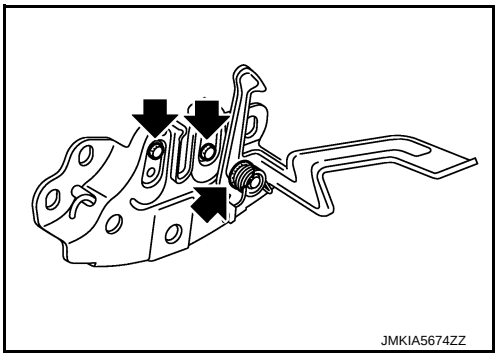
2. Check that primary latch is securely engaged with primary striker when hood assembly is closed [free-fall from approximately 200 mm (7.874 in) height].
   CAUTION:
   Never free-fall hood assembly from a height of 300 (11.811 in) mm or more.
3. While operating the hood opener carefully, check that the front end of the hood is lifted by approximately 20 mm (0.787 in) (A). Also, check that the hood opener returns to the original position.



1. Primary striker
2. Primary latch
3. Secondary latch
4. Secondary striker

4. Check that secondary latch is properly engaged with secondary striker [6.8 mm (0.268 in)] (B).
5. Check the hood lock lubrication condition. If necessary, apply body grease to hood lock.

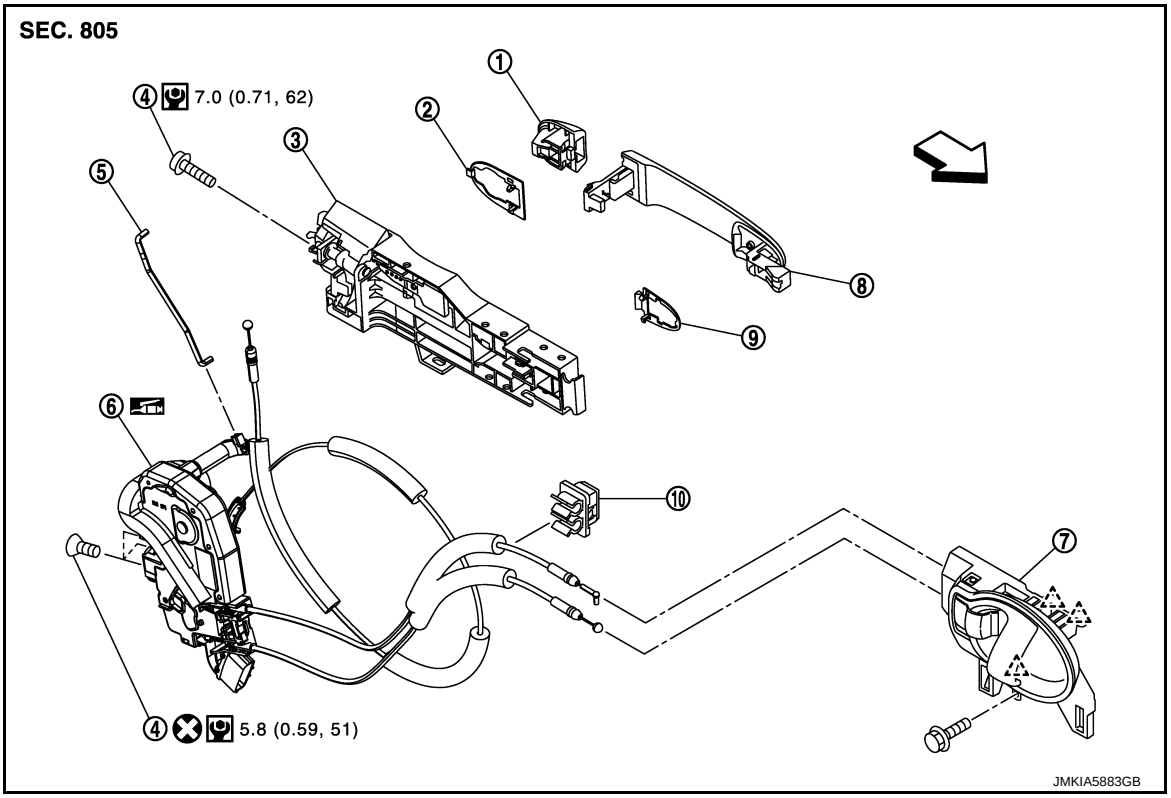
⬅ : Grease up point



FRONT DOOR LOCK

Exploded View

INFOID:0000000007578936



1. Door key cylinder assembly (driver side) Outside handle escutcheon (passenger side)
2. Rear gasket
3. Outside handle bracket
4. TORX bolt
5. Key rod (driver side)
6. Door lock assembly
7. Inside handle
8. Outside handle
9. Front gasket
10. Cable clip

: Pawl
: Vehicle front
: Do not reuse
: N·m (kg-m, in-lb)
: Body grease

DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:0000000007578937

REMOVAL

1. Remove front door glass and front door lower sash (rear). Refer to GW-16, "Removal and Installation".
2. Remove inside handle. Refer to DLK-150, "INSIDE HANDLE : Removal and Installation".
3. Disengage inside handle cable and lock knob cable from cable clip.
4. Remove outside handle bracket. Refer to DLK-150, "OUTSIDE HANDLE : Removal and Installation".
5. Remove door lock assembly TORX bolts.
6. Disconnect door lock actuator connector, and then remove door lock assembly.

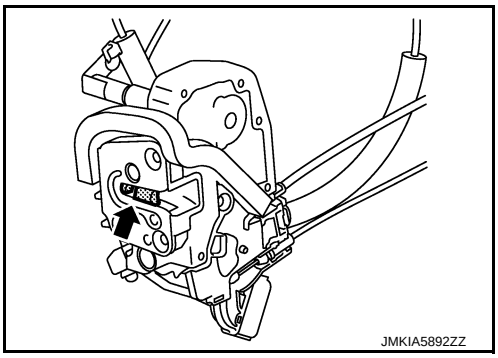
INSTALLATION

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

CAUTION:

- **Never reuse TORX bolt. Always replace it with a new one when it is removed.**
- **Check door open/close, lock/unlock operation after installation.**
- **Check door lock cable is properly engaged with outside handle bracket.**
- **Check door lock assembly for poor lubrication. Apply body grease to door lock if necessary.**

: Grease up point



INSIDE HANDLE

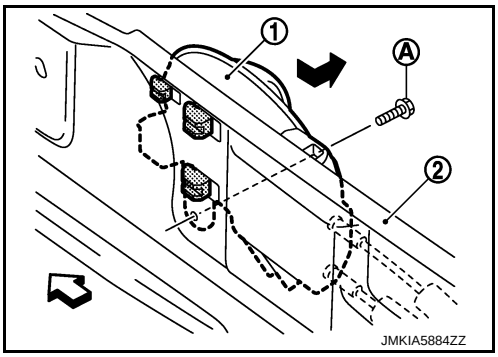
INSIDE HANDLE : Removal and Installation

INFOID:0000000007578938

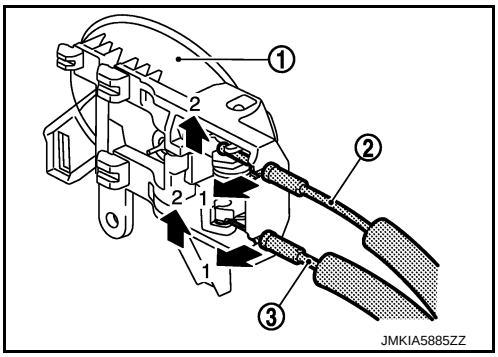
REMOVAL

1. Remove front door finisher. Refer to INT-12, "Removal and Installation".
2. Remove inside handle mounting bolt (A).
3. Disengage inside handle (1) from door panel (2) while sliding inside handle toward vehicle rear, and then separate inside handle.

: Vehicle front



4. Disengage inside handle cable (3) and lock knob cable (2), and then remove inside handle (1).



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

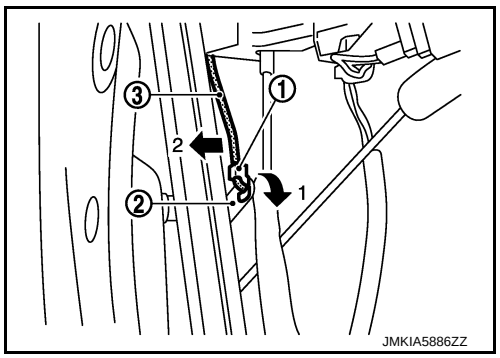
INFOID:0000000007578939

REMOVAL

1. Fully close the front door glass.
2. Remove front door finisher. Refer to INT-12, "Removal and Installation".

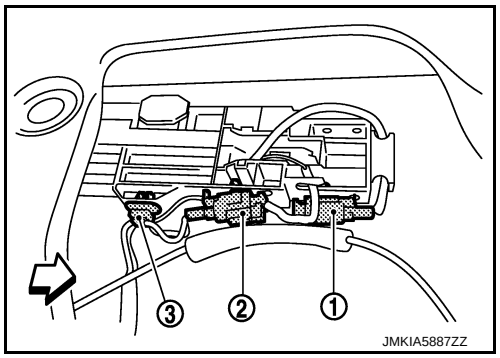
3. Remove sealing screen.
NOTE:
Cut the butyl-tape so that some parts of the butyl-tape do not remain on the sealing screen, if the sealing screen is reused.

4. Disengage lock holder (1), and then separate key rod (3) from door lock assembly (2).(Driver side)

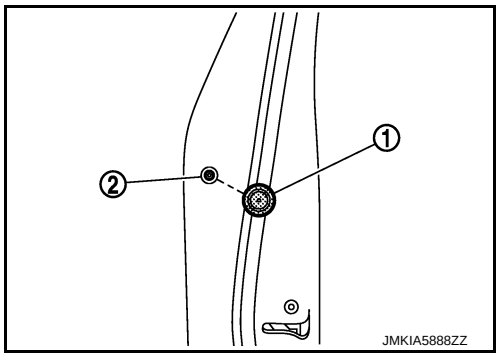


5. Disconnect harness connector of door antenna (1) and door request switch (2) and remove harness clamp (3).

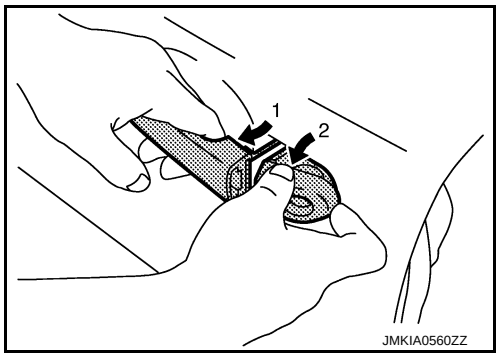
⇦ : Vehicle front



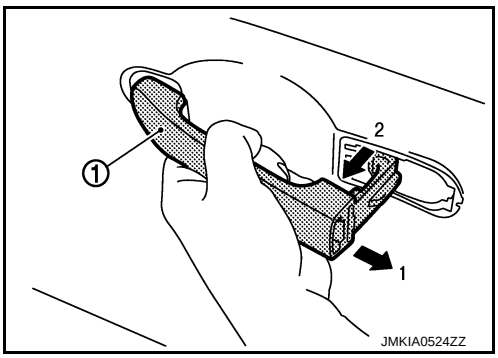
6. Remove grommet (1) of door side. Loosen, through grommet hole, TORX bolt (2) that fixes door lock cylinder. (For passenger side, TORX bolt fixes outside handle escutcheon.)



7. While pulling outside handle, remove door key cylinder assembly (diver side) or outside handle escutcheon (passenger side).

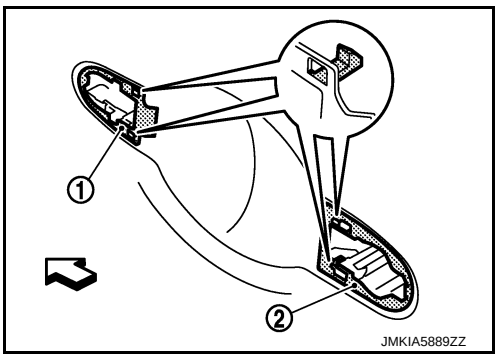


8. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



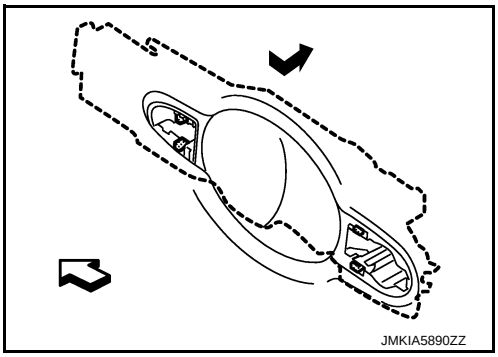
9. Remove front gasket (1) and rear gasket (2).

⇦ : Vehicle front

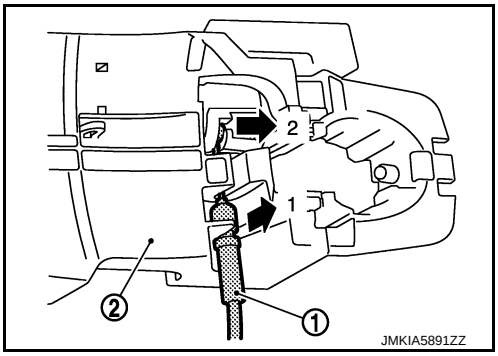


10. Slide outside handle bracket toward rear of vehicle to remove.

⇦ : Vehicle front



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



INSTALLATION

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

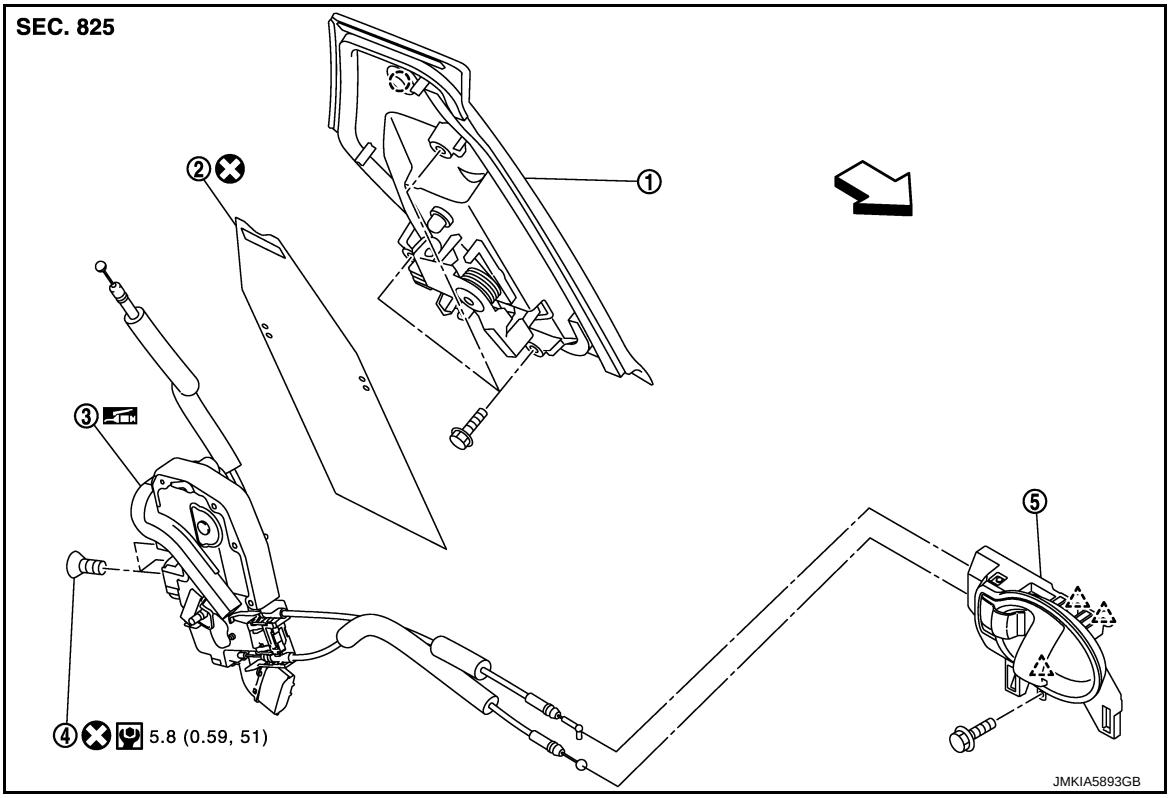
CAUTION:

- **When installing key rod, rotate key rod holder until a click is felt.**
- **Check that door lock cables are normally engaged with inside handle and outside handle.**
- **After installation, check door open/close, and lock/unlock operation.**

REAR DOOR LOCK

Exploded View

INFOID:0000000007578940



1. Outside handle assembly
2. Rear door sealing screen
3. Door lock assembly
4. TORX bolt
5. Inside handle

: Clip
: Pawl
: Vehicle front
: Do not reuse
: N·m (kg-m, in-lb)
: Body grease

DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:0000000007578941

REMOVAL

1. Remove rear door glass and rear door lower sash (rear). Refer to GW-20, "Removal and Installation".
2. Remove inside handle. Refer to DLK-154, "INSIDE HANDLE : Removal and Installation".
3. Remove outside handle. Refer to DLK-154, "OUTSIDE HANDLE : Removal and Installation".
4. Remove door lock assembly TORX bolts.
5. Disconnect door lock actuator connector, and then remove door lock assembly.

INSTALLATION

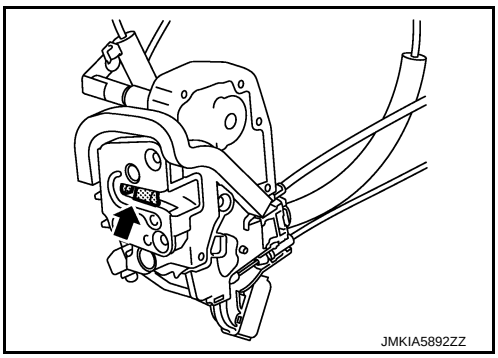
Note the following items, and install in the reverse order of removal.

CAUTION:

- **Never reuse TORX bolt. Always replace it with a new one when it is removed.**
- **Check door open/close, lock/unlock operation after installation.**

- **Check door lock assembly for poor lubrication. Apply body grease to door lock if necessary.**

⬅ : Grease up point



INSIDE HANDLE

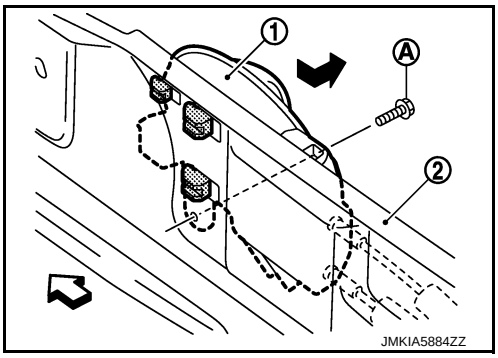
INSIDE HANDLE : Removal and Installation

INFOID:0000000007578942

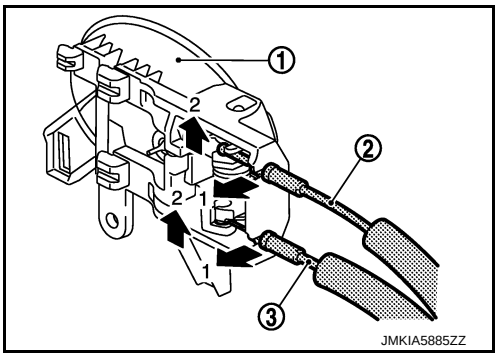
REMOVAL

1. Remove rear door finisher. Refer to INT-15, "Removal and Installation".
2. Remove upper side of sealing screen.
   NOTE:
   Cut the butyl tape so that some parts of the butyl tape do not remain on the sealing screen, if the sealing screen is reused.
3. Remove inside handle mounting bolt (A).
4. Disengage inside handle (1) from door panel (2) while sliding inside handle toward vehicle rear, and then separate inside handle.

⇦ : Vehicle front



5. Disengage inside handle cable (3) and lock knob cable (2), and then remove inside handle (1).



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

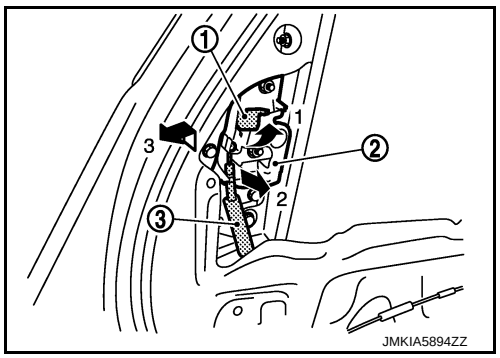
OUTSIDE HANDLE : Removal and Installation

INFOID:0000000007578943

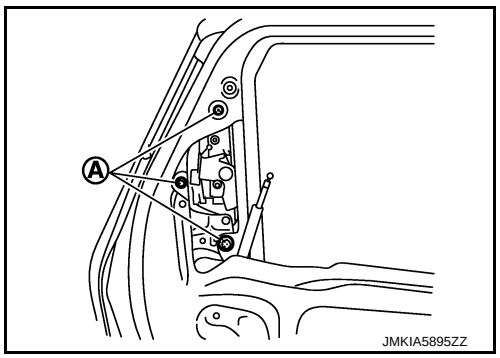
REMOVAL

1. Remove rear door finisher and rear door corner cover inner. Refer to INT-15, "Removal and Installation".
2. Remove rear door sealing screen.

3. Rotate stopper (1) upward.
4. Disengage outside handle cable (2), and then remove outside handle cable from outside handle assembly (3).



5. Remove outside handle assembly mounting bolts (A).

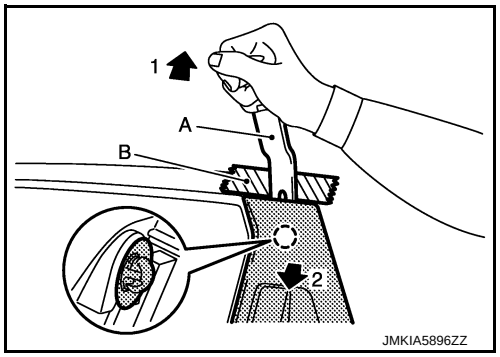


6. Disengage mounting clips using a remover tool (A), and then remove outside handle assembly.

CAUTION:

Apply protective tape (B) on the door panel to protect the painted surface from damage.

: Clip

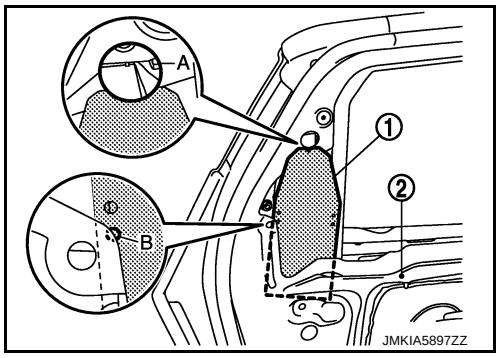


INSTALLATION

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

CAUTION:

- **Never reuse rear door sealing screen. Always replace it with a new one when it is removed. When installing rear door sealing screen, install it according to the following procedure.**
- **Put lower portion of rear door sealing screen (1) into inside of door panel (2).**
- **Perform positioning according to the following procedure, and then install rear door sealing screen.**
- **Align upper portion of rear door sealing screen to hole (A) of door panel as shown in the figure.**
- **Align hole of rear door sealing screen to edge (B) of door panel as shown in the figure.**

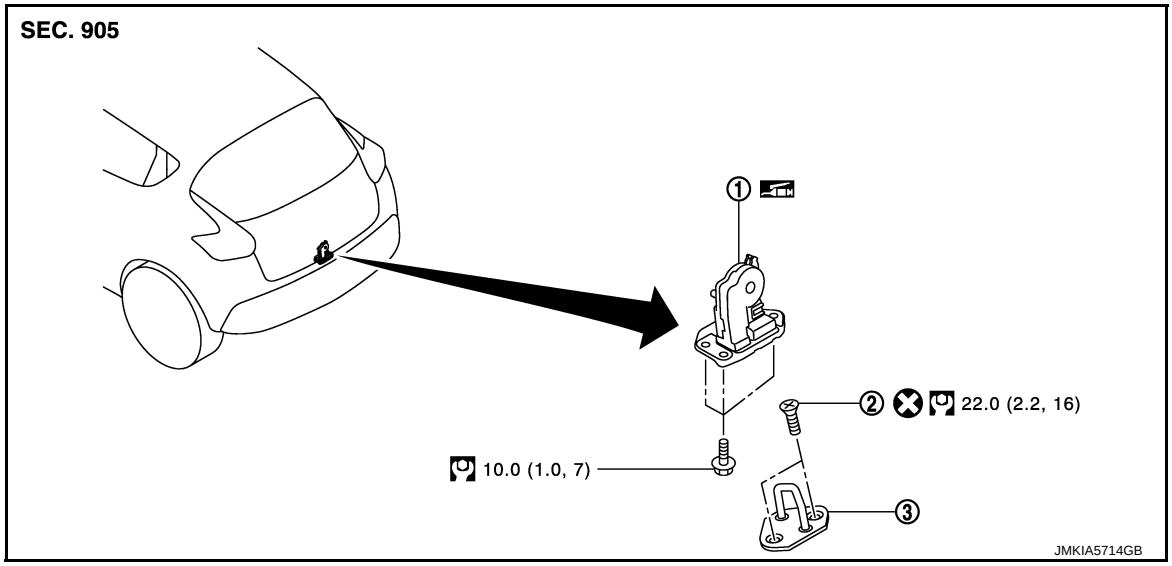


- **Be careful to position outside handle cable normally when installing it. For details, refer to DLK-153, "Exploded View".**
- **Check door open/close, lock/unlock operation after installation.**

BACK DOOR LOCK

Exploded View

INFOID:0000000007578944



1. Back door lock assembly
2. TORX bolt
3. Back door striker

: Do not reuse

: N·m (kg-m, ft-lb)

: Body grease

DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:0000000007578945

REMOVAL

1. Remove the back door lower finisher. Refer to INT-38, "BACK DOOR LOWER FINISHER : Removal and Installation".
2. Remove back door lock assembly mounting bolts.
3. Disconnect back door lock connector, and then remove back door lock assembly.

INSTALLATION

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

CAUTION:

After installation, check back door open/close, and lock/unlock operation.

EMERGENCY LEVER

EMERGENCY LEVER : Unlock procedures

INFOID:0000000007578946

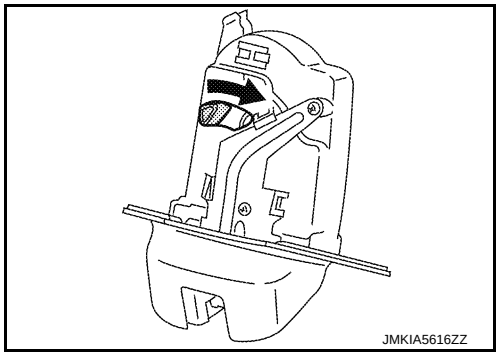
UNLOCK PROCEDURES

NOTE:

If back door lock cannot be unlocked due to a malfunction or battery discharge, follow the procedures to unlock back door.

1. Remove emergency lid. Refer to INT-39, "EMERGENCY LID : Removal and Installation".

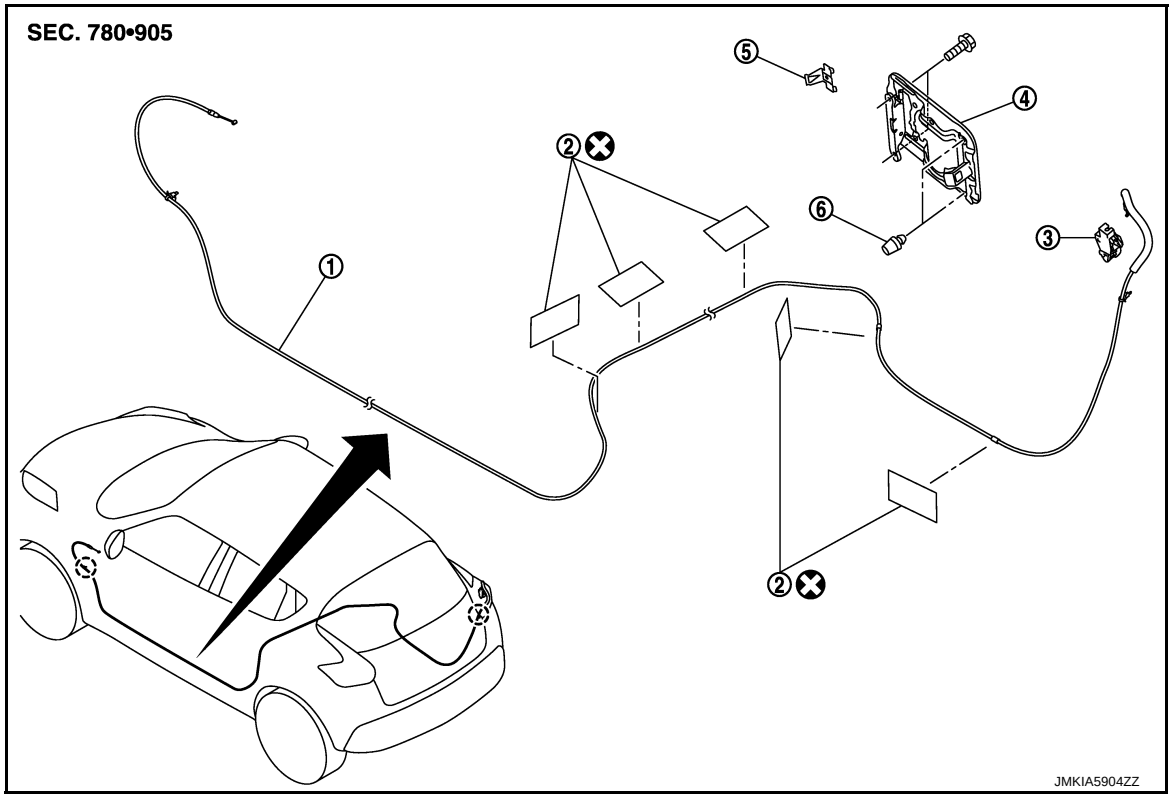
2. From inside the vehicle, rotate emergency lever toward lower direction and unlock.



FUEL FILLER LID OPENER

Exploded View

INFOID:0000000007578947



1. Fuel filler lid opener cable
2. Cable protector
3. Fuel filler lid lock assembly
4. Fuel filler lid assembly
5. Spring
6. Bumper rubber

: Clip

: Do not reuse

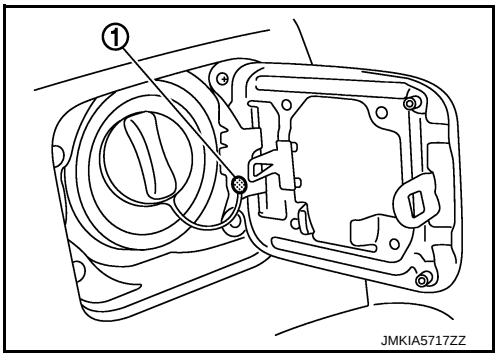
FUEL FILLER LID

FUEL FILLER LID : Removal and Installation

INFOID:0000000007578948

REMOVAL

1. Fully open fuel filler lid.
2. Remove fuel mounting pin (1).



3. Remove mounting screws, and then remove fuel filler lid.

INSTALLATION

Note the following items, 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.**

NOTE:
- The following table shows the specifide values for checking nomal installation status.
- Fitting adjustment cannot be perfomed.

Unit: mm (in)

	Clearance	Evenness
Fuel filler lid – Body side outer	**2.0 – 4.0 (0.079 – 0.157)**	**(-1.0) – (+1.0) [(-0.039) – (+0.039)]**

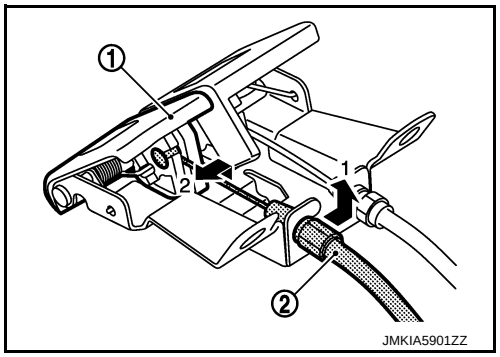
FUEL FILLER OPENER CABLE

FUEL FILLER OPENER CABLE : Removal and Installation

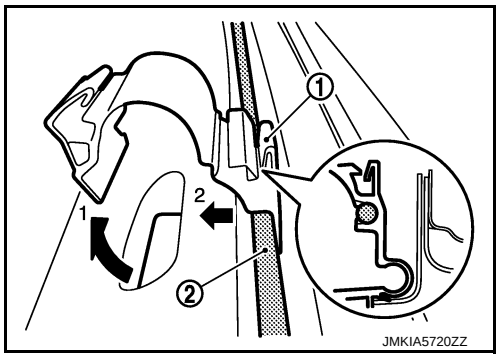
INFOID:0000000007578949

REMOVAL

1. Remove hood lock control cable assembly from instrument lower panel (LH). Refer to DLK-147, "HOOD LOCK CONTROL CABLE : Removal and Installation".
2. Remove fuel filler lid opener cable (2) from fuel filler lid opener lever (1).



3. Remove front kicking plate inner (LH) and rear kicking plate inner (LH and RH). Refer to INT-18, "KICKING PLATE INNER : Removal and Installation".
4. Remove dash side finisher (LH). Refer to INT-20, "DASH SIDE FINISHER : Removal and Installation".
5. Remove center pillar lower garnish (LH). Refer to INT-21, "CENTER PILLAR LOWER GARNISH : Removal and Installation".
6. Remove luggage side lower finisher (RH). Refer to INT-34, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation".
7. Remove fuel filler lid opener cable from fuel filler lid lock assembly. Refer to DLK-160, "FUEL FILLER LID LOCK : Removal and Installation".
8. Disengage each harness protector (1), and then remove fuel filler lid opener cable (2).



9. Remove fuel filler lid opener cable fixing clips, and then remove fuel filler lid opener cable.

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.

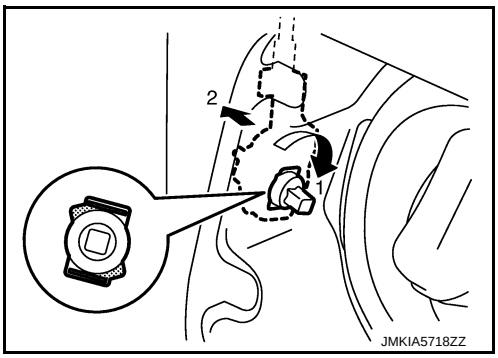
FUEL FILLER LID LOCK

FUEL FILLER LID LOCK : Removal and Installation

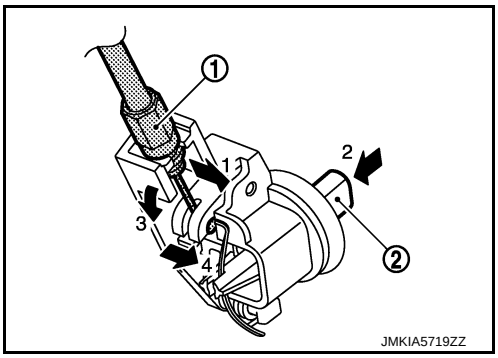
INFOID:0000000007578950

REMOVAL

1. Fully open fuel filler lid.
2. Remove luggage side lower finisher (RH). Refer to INT-34, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation".
3. Rotate and disengage fuel filler lid lock assembly, and then remove fuel filler lid lock assembly.
   NOTE:
   Operation is performed easily when rotating fuel filler lid lock from passenger room side.



4. Disengage fuel filler lid opener cable (1). Remove fuel filler lid opener cable while pressing stopper pin (2).



INSTALLATION

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

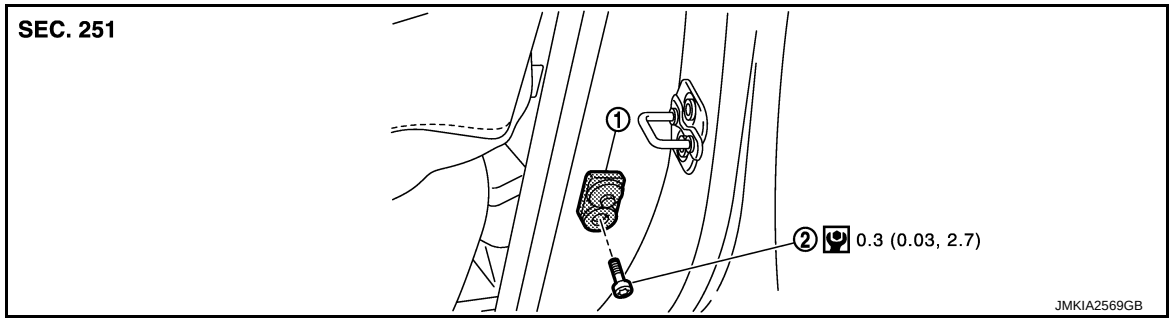
CAUTION:

After installation, check fuel filler lid assembly open/close, lock/unlock operation.

DOOR SWITCH

Exploded View

INFOID:0000000007578951



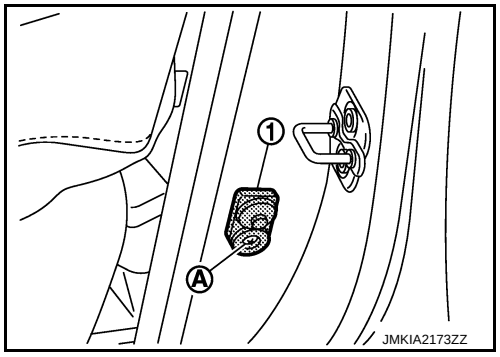
1. Door switch
2. TORX bolt

Removal and Installation

INFOID:0000000007578952

REMOVAL

Remove the TORX bolt (A), and then remove door switch (1).



INSTALLATION

Install in the reverse order of removal.

INSIDE KEY ANTENNA

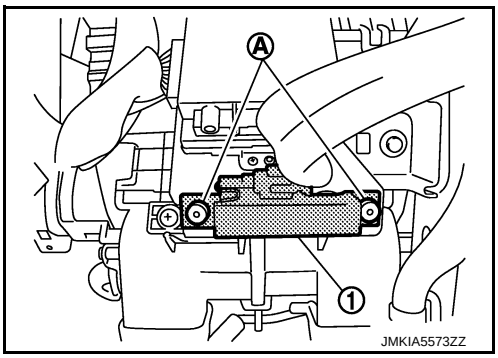
INSTRUMENT CENTER

INSTRUMENT CENTER : Removal and Installation

INFOID:0000000007578953

REMOVAL

1. Remove the multi display unit. Refer to AV-162, "Removal and Installation".
2. Remove the inside key antenna (instrument center) (1) mounting clip (A), and then remove inside key antenna (instrument center).
   CAUTION:
   Be careful not to drop mounting clip (A) into instrument panel.



INSTALLATION

Install in the reverse order of removal.

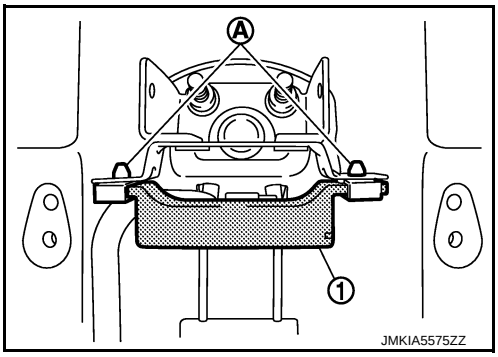
CONSOLE

CONSOLE : Removal and Installation

INFOID:0000000007578954

REMOVAL

1. Remove the center console assembly. Refer to IP-22, "Removal and Installation".
2. Remove the inside key antenna (console) (1) mounting clip (A), and then remove inside key antenna (console).



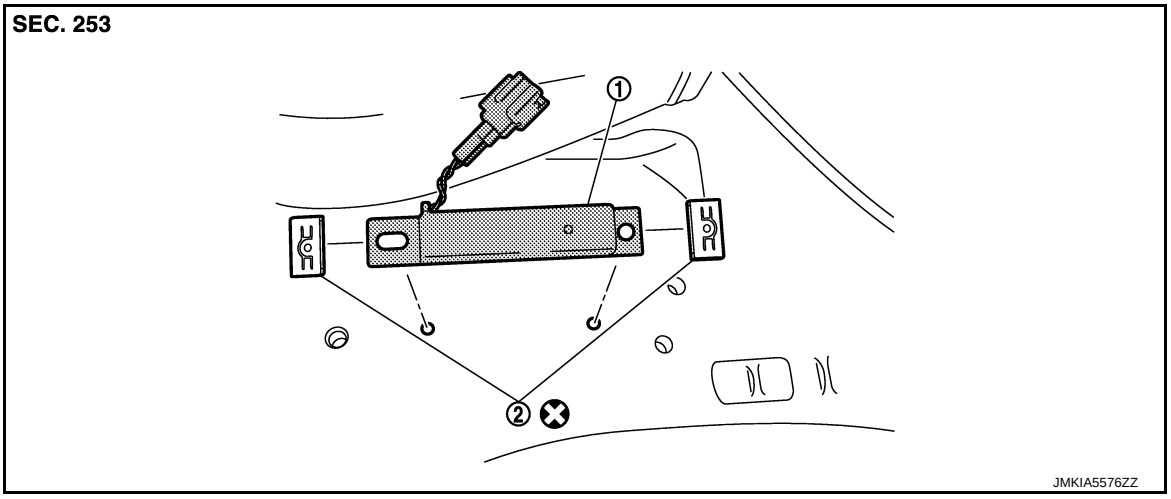
INSTALLATION

Install in the reverse order of removal.

LUGGAGE ROOM

LUGGAGE ROOM : Exploded View

INFOID:0000000007578955



1. Inside key antenna (luggage room) 2. Clip

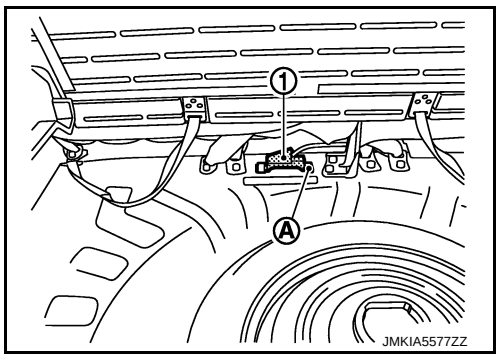
⊗ : Do not reuse

LUGGAGE ROOM : Removal and Installation

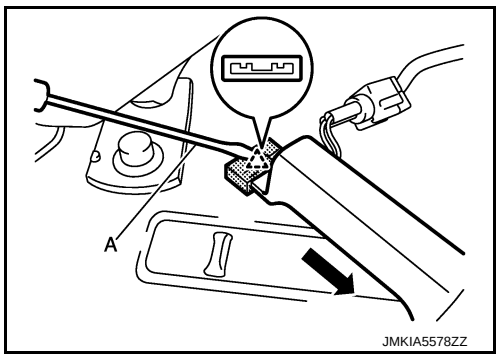
INFOID:0000000007578956

REMOVAL

1. Remove the luggage floor finisher. Refer to INT-32, "Exploded View".
2. Remove the inside key antenna (luggage room) (1) mounting clip RH (A).



3. Disengage inside key antenna (luggage room) fixing clip using a flat-bladed screwdriver (A), and then pull out forward the inside key antenna (luggage room).



INSTALLATION

Install in the reverse order of removal.

CAUTION:

Visually check the clips for deformation and damage during installation.
Replace with new ones if necessary.

OUTSIDE KEY ANTENNA

DRIVER SIDE

DRIVER SIDE : Removal and Installation

INFOID:0000000007578957

REMOVAL

Remove the driver side outside handle. Refer to DLK-150, "OUTSIDE HANDLE : Removal and Installation".

INSTALLATION

Install in the reverse order of removal.

PASSENGER SIDE

PASSENGER SIDE : Removal and Installation

INFOID:0000000007578958

REMOVAL

Remove the passenger side outside handle. Refer to DLK-150, "OUTSIDE HANDLE : Removal and Installation".

INSTALLATION

Install in the reverse order of removal.

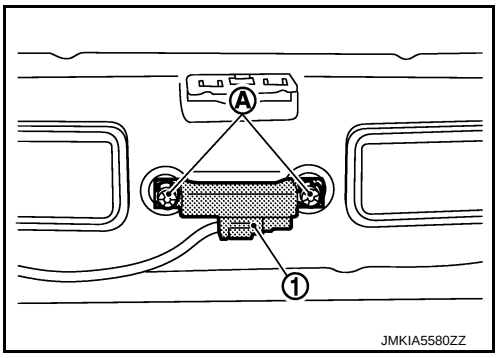
REAR BUMPER

REAR BUMPER : Removal and Installation

INFOID:0000000007578959

REMOVAL

1. Remove the rear bumper fascia. Refer to EXT-15, "Removal and Installation".
2. Remove the outside key antenna (rear bumper) (1) mounting clip (A), then remove outside key antenna (rear bumper).



INSTALLATION

Install in the reverse order of removal.

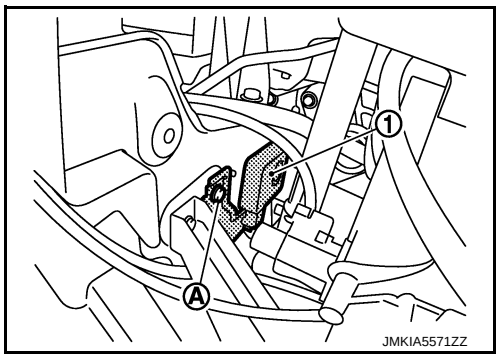
INTELLIGENT KEY WARNING BUZZER

Removal and Installation

INFOID:0000000007578960

REMOVAL

1. Remove the Intelligent Key warning buzzer (1) mounting bolt (A), and then remove the Intelligent Key warning buzzer.



INSTALLATION

Install in the reverse order of removal.

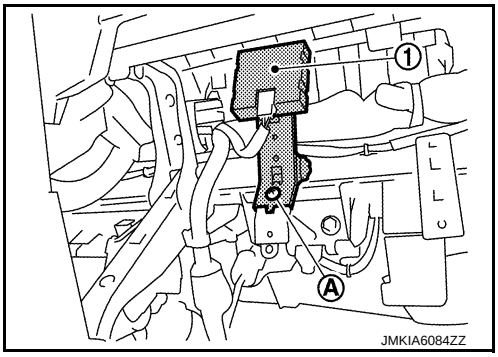
REMOTE KEYLESS ENTRY RECEIVER

Removal and Installation

INFOID:0000000007578961

REMOVAL

1. Remove the glove box assembly. Refer to IP-12, "Removal and Installation".
2. Remove the remote keyless entry receiver (1) mounting bolt (A), and then remove remote keyless entry receiver.



INSTALLATION

Install in the reverse order of removal.

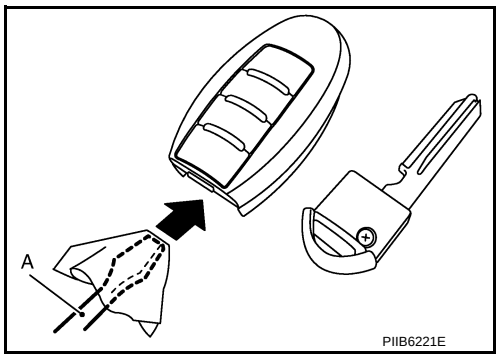
INTELLIGENT KEY BATTERY

Removal and Installation

INFOID:0000000007578962

1. Release the lock knob at the back of the Intelligent Key and remove the mechanical key.

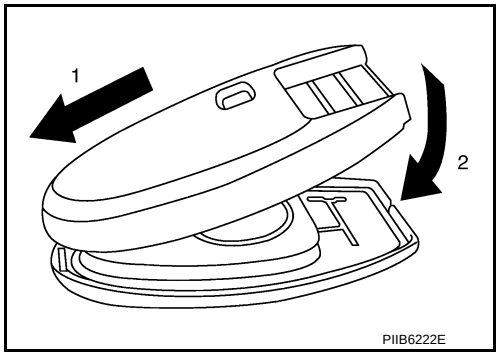
2. Insert a remover tool (A) wrapped with a cloth into the slit of the corner and twist it to separate the upper part from the lower part.
CAUTION:
- **Do not touch the circuit board or battery terminal.**
- **The key fob is water-resistant. However, if it does get wet, immediately wipe it dry.**



3. Replace the battery with new one.

Battery replacement **:Coin-type lithium battery (CR2025)**

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



PRECAUTION

PRECAUTIONS

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

INFOID:0000000007578963

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:

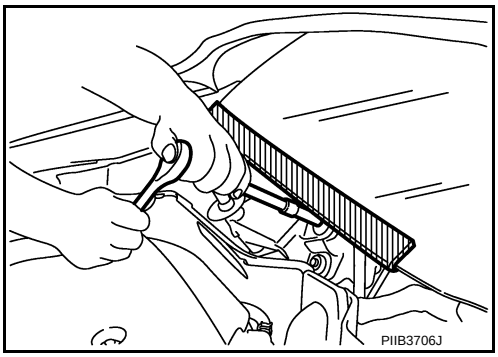
Always observe the following items for preventing accidental activation.

- **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:0000000007578965

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



Work

INFOID:0000000007578966

- 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.

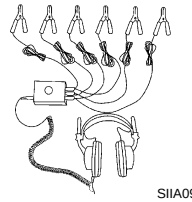
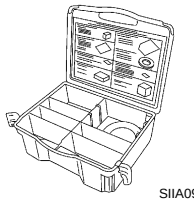
PREPARATION

PREPARATION

Special Service Tools

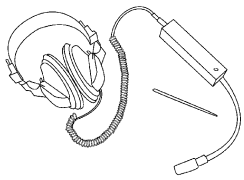
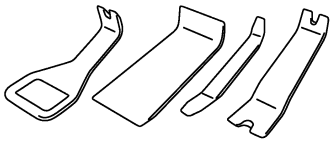
INFOID:0000000007578967

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

Tool number (Kent-Moore No.) Tool name	Description
(J-39570) Chassis ear  SIIA0993E	Locating the noise
(J-43980) NISSAN Squeak and Rattle Kit  SIIA0994E	Repairing the cause of noise

Commercial Service Tools

INFOID:0000000007578968

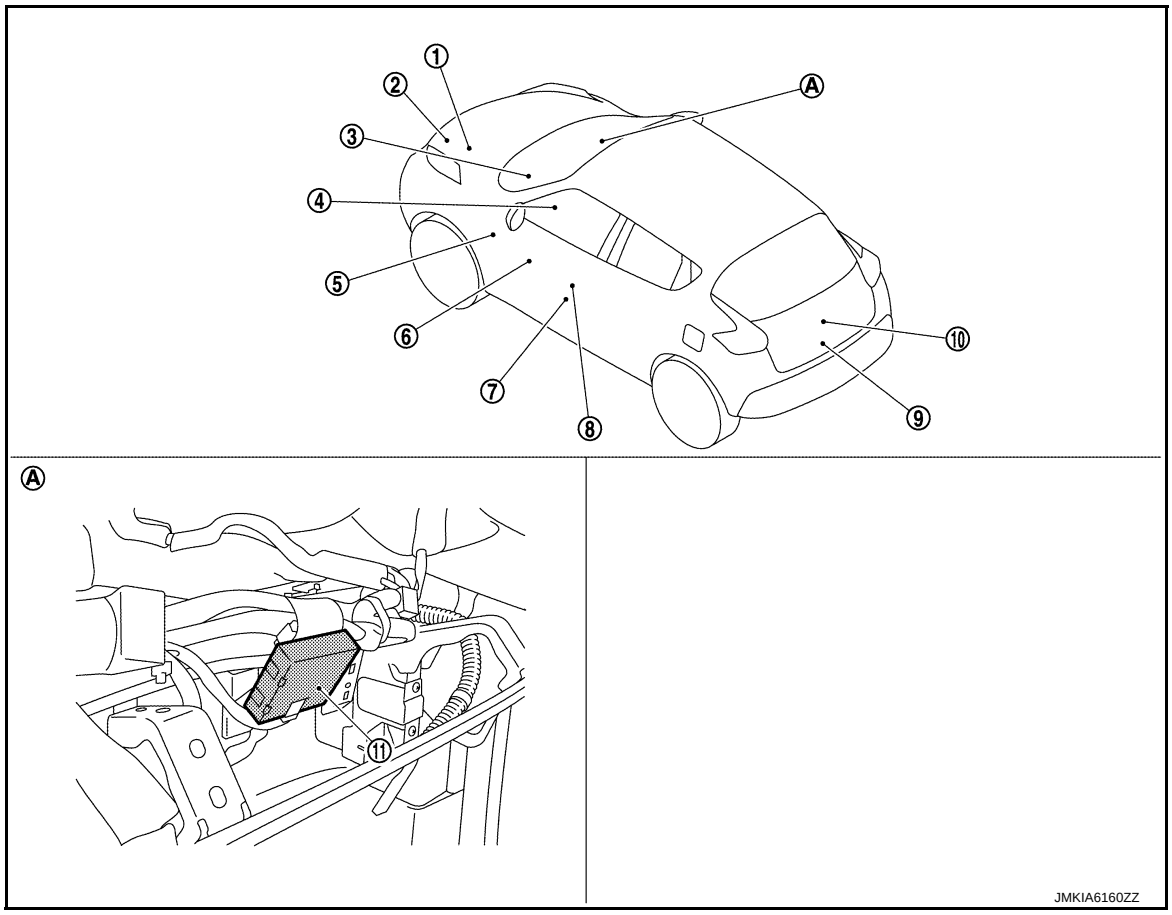
Tool name	Description
Engine ear  SIIA0995E	Locating the noise
Remover tool  PIIB7923J	Remove the clips, pawls, and metal clips
Power tool  PIIB1407E	

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000007578969



1. IPDM E/R
   Refer to PCS-34, "Component Parts Location"
2. TCM
   Refer to TM-69, "CVT CONTROL SYSTEM : Component Parts Location"
3. Combination meter
4. Key switch
5. BCM
   Refer to BCS-83, "BODY CONTROL SYSTEM : Component Parts Location"
6. Power window main switch (door lock/unlock switch)
7. Front door switch (driver side)
8. Front door lock assembly (driver side)
9. Back door opener assembly
10. Back door opener switch
11. Remote keyless entry receiver

A. View with the glove box assembly removed

Component Description

INFOID:0000000007578970

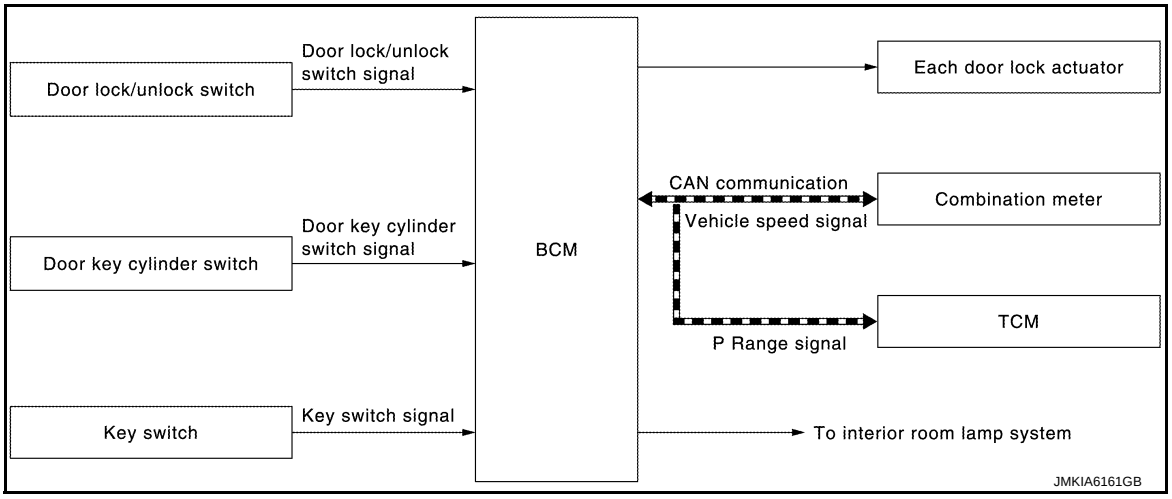
Item	Function
Back door opener actuator	Opens the back door with the back door open signal from BCM.
Back door opener switch	Inputs back door opener switch operation signal to BCM.
BCM	Controls the door lock system.

Item	Function
Combination meter	• Performs operation method guide and warning with buzzer. • Transmits vehicle seep signal to CAN communication line.
Door lock actuator	• Inputs locks/unlocks signal from BCM and locks/unlocks each door. • Integrated in each door lock assembly.
Door lock and unlock switch	Transmits door lock/unlock operation to BCM.
Door switch	Detects door open/close condition.
IPDM E/R	Sounds horn via CAN communication between BCM.
Keyfob	Transmits button operation to remote keyless entry receiver.
Key switch	Key switch detects that ignition key is inserted into the ignition key cylinder, and then transmits the signal to BCM.
Remote keyless entry receiver	Receives keyfob operation and transmits to BCM.
TCM	Transmits shift position signal to BCM via CAN communication line.

POWER DOOR LOCK SYSTEM

System Diagram

INFOID:0000000007578971



System Description

INFOID:0000000007578972

DOOR LOCK FUNCTION

- 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 are locked.
- Interlocked with the unlocking operation of door lock and unlock switch, door lock actuators of all doors and are unlocked.

Door Key Cylinder

- With the door key inserted in the door key cylinder on driver side, turning it to “LOCK”, will lock door lock actuator of all doors.
- With the door key inserted in the door key cylinder on driver side, turning it to “UNLOCK” once unlocks the driver side door lock actuator; turning it to “UNLOCK” again within 5 seconds after the first unlock operation unlocks all of the other doors. (SELECTIVE UNLOCK OPERATION)

KEY REMINDER FUNCTION

When door lock and unlock switch are operated while key is inserted into key switch and any door is open, door locks once but immediately unlocks. This operation prevents keyfob from being left in the vehicle.

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 follows.

Vehicle Speed Sensing Auto Door Lock

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

P Range Interlock Door Lock*

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

Setting change of Automatic Door Lock/Unlock Function

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

With CONSULT

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

Without CONSULT

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

1. Close all doors (door switch OFF)
2. 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 switching is completed when the hazard warning 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 3 types as follows.

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.

Key out Interlock Door Unlock

When ignition key is removed from ignition knob switch, all doors unlock.
When BCM detects that ignition key is removed from ignition knob switch, BCM transmits unlock signal to all door lock actuators.

P Range Interlock Door Unlock*

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

Setting change of Automatic Door Lock/Unlock Function

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

With CONSULT

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

Without CONSULT

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

1. Close all doors below (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 switching is completed when the hazard warning lamp blinks.

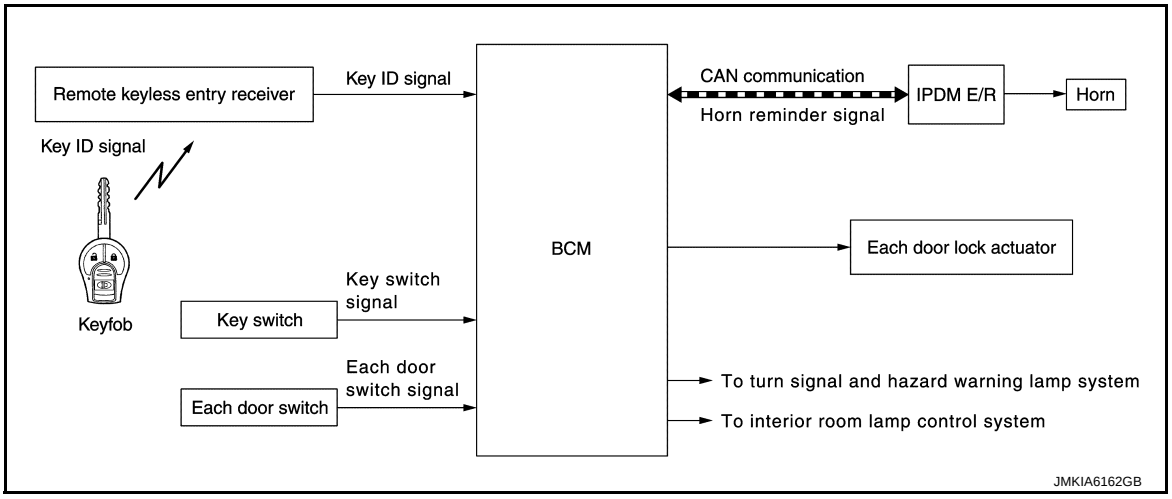
OFF → ON : 2 blinks
ON → OFF : 1 blink

*: This function does not operate on M/T models.

REMOTE KEYLESS ENTRY SYSTEM

System Diagram

INFOID:0000000007578973



System Description

INFOID:0000000007578974

DOOR LOCK AND UNLOCK OPERATION

- When door lock and unlock button of keyfob is pressed, door lock and unlock signal transmits from keyfob to BCM via remote keyless entry receiver.
- When BCM receives the door lock and unlock signal, it operates door lock actuator, blinks the hazard lamp at the same time as a reminder.

OPERATION CONDITION

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

Remote controller operation	Operation condition
Lock/unlock	Ignition key is removed from ignition key cylinder

OPERATION AREA

To ensure that the keyfob works effectively, use within 1 m (3 ft) range of each door, however the operable range may differ according to surroundings.

SELECTIVE UNLOCK FUNCTION

- When an LOCK signal is transmitted from keyfob, all doors are locked.
- When an UNLOCK signal is transmitted from keyfob once, driver side door is unlocked.
- Then, if an UNLOCK signal is transmitted from keyfob again, all other doors are unlocked.

How to change selective unlock mode.

With CONSULT

Selective unlock mode can be set to ON or OFF using CONSULT.
Refer to DLK-177, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Without CONSULT

- ON/OFF can be switched when keyfob lock button and unlock button are pressed simultaneously for 5 seconds or more while steering lock is locked.
- When mode is switched, hazard warning lamp blinks.

OFF → ON : 3 blinks
ON → OFF : 1 blink

HAZARD AND HORN REMINDER FUNCTION

When doors are locked or unlocked by keyfob, 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		
Keyfob operation	Lock	Unlock	Back door open	Lock	Unlock	Back door open
Hazard warning lamp blinks	Twice	Once	—	Twice	—	—
Horn sound	Once	—	—	—	—	—

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

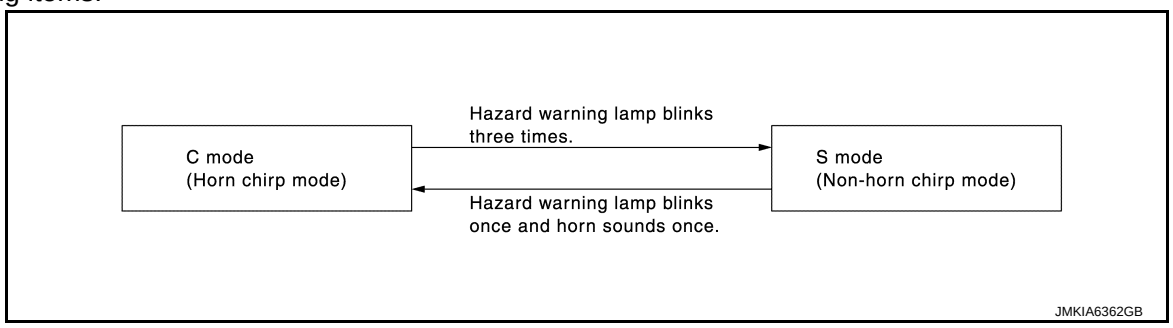
How to change hazard and horn reminder mode

With CONSULT

Refer to DLK-177, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

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 keyfob button operation and if 1 minute or more passes without performing the following operation, all doors are automatically locked. However, operation check function does not activate.

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

Auto door lock mode can be changed by the “AUTO LOCK SET” mode in “WORK SUPPORT”. Refer to DLK-177, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

PANIC ALARM FUNCTION

When key switch in the OFF position, BCM transmits horn reminder signal to IPDM E/R. Then, IPDM E/R turns on and off horn intermittently. Refer to SEC-123, "VEHICLE SECURITY SYSTEM : System Description".

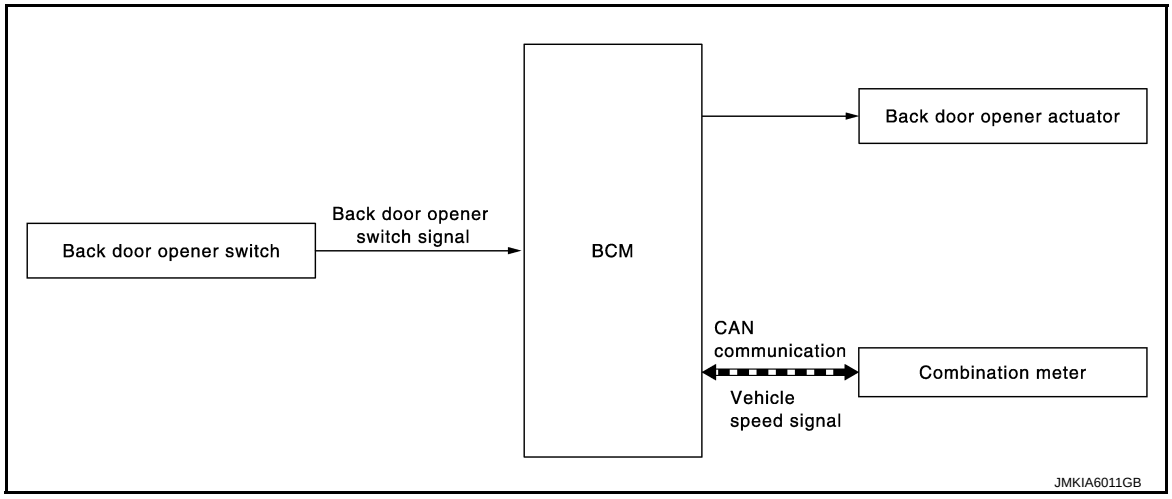
INTERIOR ROOM LAMP CONTROL FUNCTION

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

BACK DOOR OPENER SYSTEM

System Diagram

INFOID:0000000007578975



System Description

INFOID:0000000007578976

BACK DOOR OPENER OPERATION

When back door opener switch is pressed, BCM operates back door opener actuator.

NOTE:

Back door opener actuator is not for locking the back door. The function is only to open the back door.

OPERATION CONDITION

If the following conditions are satisfied, back door opener operation is performed.

Back door opener switch operation	Operation condition
Back door open	• When back door is unlocked using back door opener request switch (selective unlock mode), or after BCM outputs all doors unlock signal • Vehicle speed is less than 5 km/h (3 MPH)

NOTE:

- When battery terminal is disconnected and reconnected during all doors unlock state, back door may not open.
- Regardless of door lock actuator state, BCM resets recognition of all doors unlock state approximately 30 seconds after battery terminal is disconnected and BCM recognizes that all doors are in lock state.
- When battery terminal is reconnected and back door does not open, have BCM recognize that all doors are in unlock state.

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000007818190

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 control	INT LAMP	×	×	×
Remote keyless entry system	MULTI REMOTE ENT	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER		×	×
Air conditioning system	AIR CONDITONER		×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
NATS	IMMU	×		×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door open	TRUNK		×	
Theft warning alarm	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	×
Signal buffer system	SIGNAL BUFFER		×	×
Panic alarm	PANIC ALARM			×
TPMS	AIR PRESSUE MONITOR	×	×	×

DOOR LOCK

DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)

INFOID:0000000007578978

WORK SUPPORT

Monitor item	Description
DOOR LOCK-UNLOCK SET	Anti-hijack function can be changed to operate with this mode • On: Operate • Off: Non-operation
AUTOMATIC DOOR LOCK SELECT	Automatic door lock function can be selected from the following in this mode • VH SPD: All doors are locked when vehicle speed more than 24km/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 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: Driver side door is unlocked when key out of key switch • MODE 6: All doors are unlocked when key out of key switch
AUTOMATIC LOCK/UNLOCK SET	Automatic door lock/unlock function can be selected from the following in this mode • Off: Non-operation • Unlock Only: Door unlock operation only • Lock Only: Door lock operation only • Lock/Unlock: Door lock and unlock operation

*: P range interlock door lock/unlock can be selected for M/T models, but automatic door lock/unlock function does not operate.

DATA MONITOR

Monitor Item	Contents
IGN ON SW	Indicated [On/Off] condition of ignition switch in ON position
KEY ON SW	Indicated [On/Off] condition of key switch
CDL LOCK SW	Indicated [On/Off] condition of lock signal from door lock unlock switch
CDL UNLOCK SW	Indicated [On/Off] condition of unlock signal from door lock unlock switch
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
BACK DOOR SW	Indicated [On/Off] condition of back door switch
LOCK STATUS	Indicated [On/Off] condition of front door driver side
ACC ON SW	Indicated [On/Off] condition of ignition switch in ACC position
KEYLESS LOCK	Indicated [On/Off] condition of lock signal from key fob
KEYLESS UNLOCK	Indicated [On/Off] condition of unlock signal from key fob
KEY CYL LK-SW	Indicated [On/Off] condition of lock signal from door key cylinder
KEY CYL UN-SW	Indicated [On/Off] condition of unlock signal from door key cylinder
VEHICLE SPEED	Display the vehicle speed signal received from combination meter by numerical value [Km/h]

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 LCK” on CONSULT screen is touched • The all door lock actuators are unlocked when “ALL UNLK” on CONSULT screen is touched • The door lock actuator (driver side) is unlocked when “DR UNLK” on CONSULT screen is touched • The back door lock actuator is unlocked when “BD ULK” on CONSULT screen is touched • The door lock actuator (other) is unlocked when “OTR ULK” on CONSULT screen is touched

MULTI REMOTE ENT

MULTI REMOTE ENT : CONSULT Function (BCM - MULTI REMOTE ENT)

INFOID:0000000007578979

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [On/Off] condition of ignition switch in ON position
KEY ON SW	Indicates [On/Off] condition of key switch
ACC ON SW	Indicates [On/Off] condition of ignition switch in ACC position
KEYLESS LOCK	Indicates [On/Off] condition of lock signal from keyfob
KEYLESS UNLOCK	Indicates [On/Off] condition of unlock signal from keyfob
KYLS TRNK/HAT	**NOTE:** This item is displayed, but cannot be tested
DOOR SW-DR	Indicates [On/Off] condition of front door switch (driver side)
DOOR SW-AS	Indicates [On/Off] condition of front door switch (passenger side)
DOOR SW-RR	Indicates [On/Off] condition of rear door switch RH
DOOR SW-RL	Indicates [On/Off] condition of rear door switch LH
BACK DOOR SW	Indicates [On/Off] condition of back door switch
TRNK/HAT MNTR	**NOTE:** This item is displayed, but cannot be tested
CDL LOCK SW	Indicates [On/Off] condition of door lock and unlock switch
CDL UNLOCK SW	Indicates [On/Off] condition of door lock and unlock switch
KEYLESS PANIC	Indicates [On/Off] condition of PANIC button of keyfob

ACTIVE TEST

Test item	Description
INT LAMP	This test is able to check interior room lamp operation • On: Operate • Off: Non-operation
FLASHER	This test is able to check flasher operation [LH/RH/Off]
HORN	This test is able to check horn operation • On: Operate

WORK SUPPORT

Test item	Description
REMO CONT IN REGIST	Keyfob ID code can be registered
REMO CONT IN ERASUR	Keyfob ID code can be erased
REMO CONT IN CONFIR	It can be checked whether Intelligent Key ID code is registered or not in this mode

Test item	Description
HORN CHIRP SET	Hazard and horn reminder function (horn operation) mode can be changed in this mode • On: Operate • Off: Non-operation
HAZARD LAMP SET	Hazard and horn reminder function (hazard operation) mode can be changed in this mode • MODE1: Non-operation • MODE2: Unlock operation only • MODE3: Lock operation only • MODE4: Lock and unlock operation
AUTO LOCK SET	Auto door lock time can be changed in this mode • MODE 1: Non-operation • MODE 2: 30 sec • MODE 3: 1 minute • MODE 4: 2 minute • MODE 5: 3 minute • MODE 6: 4 minute • MODE 7: 5 minute
PANIC ALARM SET	Panic alarm button pressing time on keyfob remote control button can be selected from the following with this mode • MODE1: 0.5 sec • MODE2: Non-operation • MODE3: 1.5 sec
TRUNK OPEN SET	**NOTE:** This item is displayed, but cannot be tested

TRUNK

TRUNK : CONSULT Function (BCM - TRUNK)

INFOID:0000000007578980

DATA MONITOR

Monitor Item	Contents
KEY ON SW	Indicates [On/Off] condition of key switch.
LOCK STATUS	**NOTE:** This item is displayed, but cannot be monitored.
VEHICLE SPEED	Indicates [Km/h] condition of vehicle speed signal from combination meter.
IGN ON SW	Indicates [On/Off] condition of ignition switch.
TRNK OPNR SW	**NOTE:** This item is displayed, but cannot be monitored.
KYLS TRNK/HAT	**NOTE:** This item is displayed, but cannot be monitored.

ECU DIAGNOSIS INFORMATION

BCM

List of ECU Reference

INFOID:0000000007578981

ECU	Reference
BCM	BCS-108, "Reference Value"
	BCS-121, "Fail-safe"
	BCS-122, "DTC Inspection Priority Chart"
	BCS-122, "DTC Index"

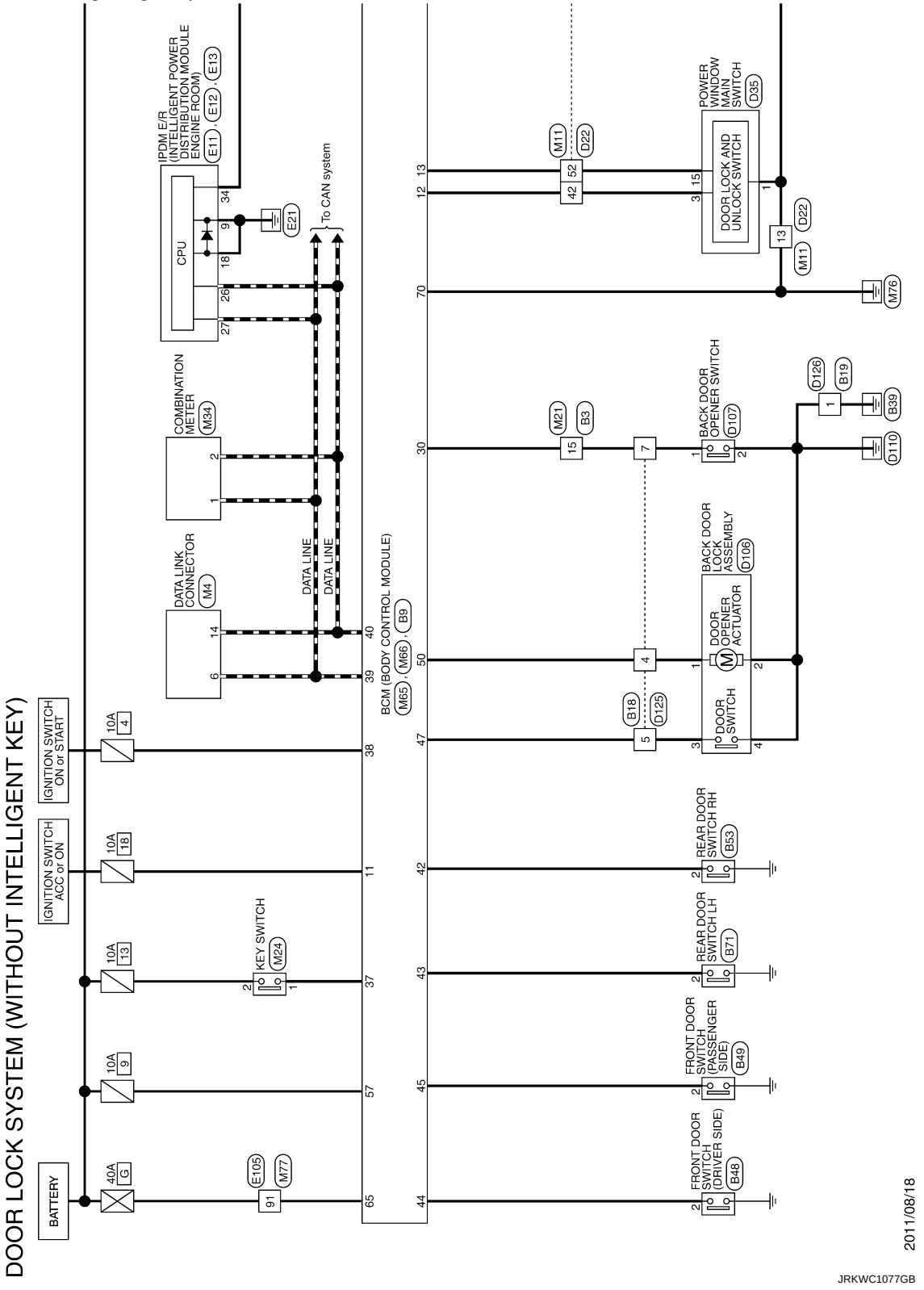
WIRING DIAGRAM

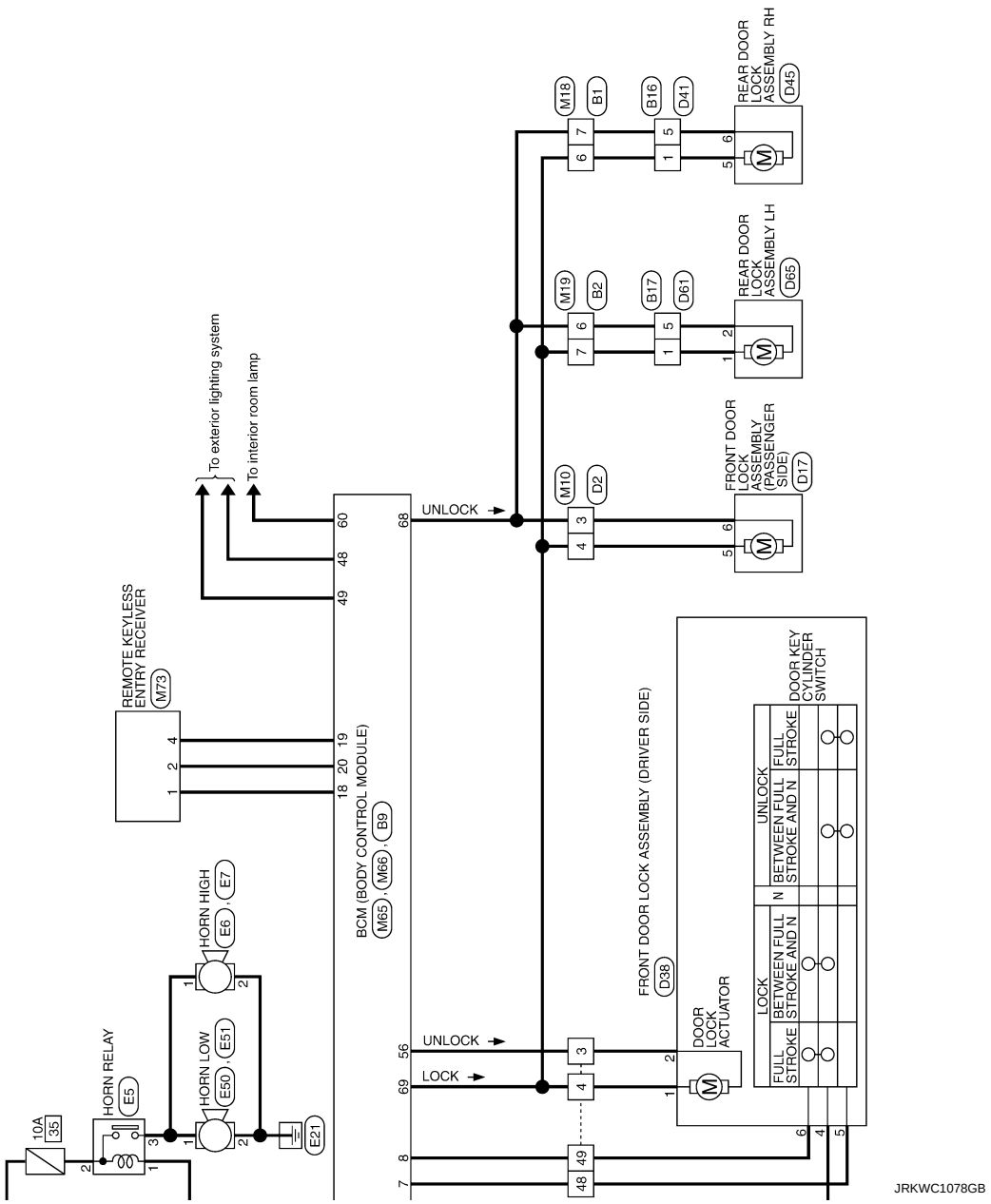
DOOR & LOCK SYSTEM

Wiring Diagram

INFOID:0000000007578982

For connector terminal arrangements, harness layouts, and alphabets in a ⬡ (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".




REAR DOOR LOCK ASSEMBLY RH
D45
M18
B1
B16
D41
REAR DOOR LOCK ASSEMBLY LH
D65
M19
B2
B17
D61
FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE)
D17
M10
D2
To exterior lighting system
To interior room lamp
UNLOCK
REMOTE KEYLESS ENTRY RECEIVER
M73
BCM (BODY CONTROL MODULE)
M65, M66, B9
HORN HIGH
E6, E7
HORN LOW
E50, E51
HORN RELAY
E5
10A
35
E21
UNLOCK
LOCK
FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE)
D38
DOOR LOCK ACTUATOR
DOOR KEY CYLINDER SWITCH
UNLOCK
FULL STROKE
BETWEEN FULL STROKE AND N
N
LOCK
FULL STROKE
BETWEEN FULL STROKE AND N
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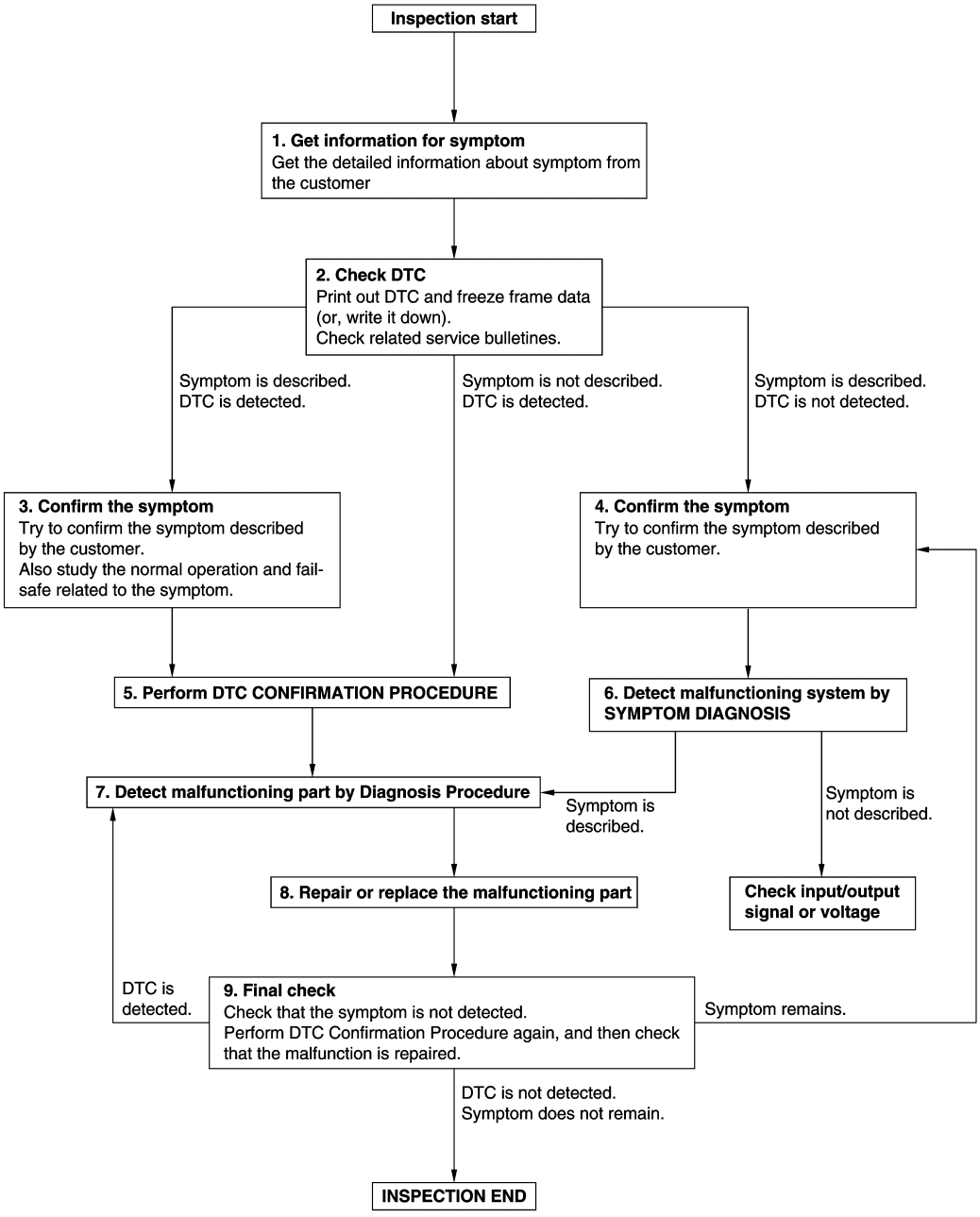
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000007797636

OVERALL SEQUENCE



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DETAILED FLOW

1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2.CHECK DTC

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

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

3. Check related service bulletins for information.

Are any symptoms described and any DTC detected?

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

3.CONFIRM THE SYMPTOM

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

>> GO TO 5.

4.CONFIRM THE SYMPTOM

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

>> GO TO 6.

5.PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC CONFIRMATION PROCEDURE for the detected DTC, and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle, and check self diagnostic results in real time.
If two or more DTCs are detected, refer to BCS-122, "DTC Inspection Priority Chart" (BCM), and determine trouble diagnosis order.

NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC CONFIRMATION PROCEDURE is not included on Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check.
  If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC CONFIRMATION PROCEDURE.

Is DTC detected?

YES >> GO TO 7.
NO >> Check according to GI-43, "Intermittent Incident".

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

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

Is the symptom described?

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

7.DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.
NO >> Check according to GI-43, "Intermittent Incident".

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 9.

9. FINAL CHECK

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

Is DTC detected and does symptom remain?

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

KEYFOB ID REGISTRATION

Description

INFOID:0000000007578984

Perform the following procedure after BCM is replaced or when new keyfob ID is registered

NOTE:

When registering the keyfob ID, perform only one procedure to simultaneously register both ID (IMMOBILIZER ID and keyfob ID).

Work Procedure

INFOID:0000000007578985

1.STEP 1

Close all doors.

>> GO TO 2.

2.STEP 2

Operate lock using the driver side door lock and unlock switch.

>> GO TO 3.

3.STEP 3

1. Remove and insert the key into the ignition key 6 times within 10seconds (turning the key switch from OFF to ON counts as 1 time).
2. Hazard warning lamp blinks(2 times).

NOTE:

On the sixth key insertion, keep the key in the cylinder with the key switch ON.

Does the hazard lamp blink?

YES >> GO TO 4.
NO >> GO TO 1.

4.STEP 4

Within 3 seconds after the hazard lamp blinks, turn ignition switch to the ACC position and operate lock using the driver side door lock and unlock switch.

>> GO TO 5.

5.STEP 5

1. Press the lock or unlock button of the keyfob to be added.
2. All doors unlock simultaneously.
3. Hazard warning lamp blinks(2 times).
4. Key ID is registered.

Is key ID registered?

YES-1 >> When adding a keyfob: GO TO 6.
YES-2 >> When ending registration: GO TO 8.
NO >> GO TO 1.

6.STEP 6

Operate lock using the driver side door lock and unlock switch.

>> GO TO 7.

7.STEP 7

1. Press the lock or unlock button of the keyfob to be added.
2. All doors unlock simultaneously.
3. Hazard warning lamp blinks(2 times).
4. Key ID is registered.

Is key ID registered?

YES-1 >> When adding a keyfob: GO TO 6.
YES-2 >> When ending registration: GO TO 8.
NO >> GO TO 6.

8. STEP 8

Open the front door driver side.

>> REGISTRATION END

DTC/CIRCUIT DIAGNOSIS

BACK DOOR OPENER ACTUATOR

Diagnosis Procedure

INFOID:0000000007578986

1.CHECK BACK DOOR OPENER ACTUATOR INPUT SIGNAL

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

(+)		(–)	Condition		Voltage (Approx.)
Back door lock assembly					
Connector	Terminal				
D106	1	Ground	Back door opener switch	ON	12 V

Is the inspection result normal?

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

2.CHECK BACK DOOR OPENER ACTUATOR CIRCUIT

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

BCM		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
M65	50	D106	1	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M65	50		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-141, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR OPENER ACTUATOR GROUND CIRCUIT

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

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D106	2		Existed

Is the inspection normal?

YES >> Replace back door lock assembly.
NO >> Repair or replace harness.

BACK DOOR OPENER SWITCH

Component Function Check

INFOID:0000000007578987

1.CHECK FUNCTION

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

Monitor item	Condition		Status
TRNK OPNR SW	Back door opener switch	Pressed	ON
		Released	OFF

Is the inspection result normal?

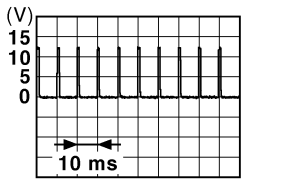
YES >> Back door opener switch is OK.
NO >> Refer to DLK-190, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007578988

1.CHECK BACK DOOR OPEN INPUT SIGNAL

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

(+)		(–)	Signal (Reference value)
Back door opener switch			
Connector	Terminal		
D107	1	Ground	

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Is the inspection result normal?

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

2.CHECK BACK DOOR OPENER SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and back door opener switch harness connector.

BCM		Back door opener switch		Continuity
Connector	Terminal	Connector	Terminal	
M65	30	D107	1	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M65	30		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-141, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR OPENER SWITCH GROUND CIRCUIT

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

Back door opener switch		Ground	Continuity
Connector	Terminal		
D107	2		Existed

Is the inspection result normal?

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

4.CHECK BACK DOOR OPENER SWITCH

Refer to DLK-191, "Component Inspection".

Is the inspection result normal?

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

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000007578989

1.CHECK BACK DOOR OPENER SWITCH

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

Back door opener switch		Condition		Continuity
Terminal				
1	2	Back door opener switch	Pressed	Existed
			Released	Not existed

Is the inspection result normal?

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

DOOR KEY CYLINDER SWITCH

Component Function Check

INFOID:0000000007578990

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?

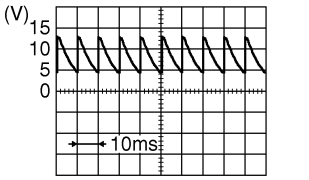
YES >> Door key cylinder switch is OK.
NO >> Refer to DLK-192, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007578991

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 (V) (Approx.)
Front door lock assembly (driver side)			
Connector	Terminal		
D38	5	Ground	 JPMIA0587GB 8.0 - 8.5 V
	6		Battery voltage

Is the inspection result normal?

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

2.CHECK DOOR KEY CYLINDER SWITCH SIGNAL 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	
M65	7	D38	5	Existed
	8		6	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M65	7		Not existed
	8		

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-141, "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		
D38	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-193, "Component Inspection".

Is the inspection result normal?

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

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000007578992

1.CHECK DOOR KEY CYLINDER SWITCH

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

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

Is the inspection result normal?

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

DOOR LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:0000000007578993

1.CHECK FUNCTION

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “DOOR LOCK” in “ACTIVE TEST” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item		Status	
DOOR LOCK	ALL LOCK	Door lock actuators	LOCK
	ALL UNLK		UNLOCK

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-194, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007578994

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+)		(–)	Condition		Voltage (Approx.)
Front door lock assembly (driver side)					
Connector	Terminal				
D38	2	Ground	Door lock and unlock switch	Unlock	12 V
	1			Lock	

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 and all door lock assembly 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	
M66	56	D38	2	Existed
	69		1	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M66	56		Not existed
	69		

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				
M66	56	Ground	Door lock and unlock switch	Unlock	12 V
	69			Lock	

Is the inspection result normal?

YES >> Check for internal short of each door lock actuator.
NO >> Replace BCM. Refer to BCS-141, "Removal and Installation".

PASSENGER SIDE

PASSENGER SIDE : Component Function Check

INFOID:0000000007578995

1.CHECK FUNCTION

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “DOOR LOCK” in “ACTIVE TEST” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item		Status	
DOOR LOCK	ALL LOCK	Door lock actuators	LOCK
	ALL UNLK		UNLOCK

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-194, "DRIVER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000007578996

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+) Front door lock assembly (passenger side)		(–)	Condition		Voltage (Approx.)
Connector	Terminal				
D17	6	Ground	Door lock and unlock switch	Unlock	12 V
	5			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 and all door lock assembly 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	
M66	68	D17	6	Existed
	69		5	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M66	68		Not existed
	69		

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				
M66	68	Ground	Door lock and unlock switch	Unlock	12 V
	69			Lock	

Is the inspection result normal?

YES >> Check for internal short of each door lock actuator.
NO >> Replace BCM. Refer to BCS-141, "Removal and Installation".

REAR LH

REAR LH : Component Function Check

INFOID:0000000007578997

1.CHECK FUNCTION

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “DOOR LOCK” in “ACTIVE TEST” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item		Status	
DOOR LOCK	ALL LOCK	Door lock actuators	LOCK
	ALL UNLK		UNLOCK

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-194, "DRIVER SIDE : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000007578998

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

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

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

BCM		Rear door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
M66	68	D65	2	Existed
	69		1	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M66	68		Not existed
	69		

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				
M66	68	Ground	Door lock and unlock switch	Unlock	12 V
	69			Lock	

Is the inspection result normal?

YES >> Check for internal short of each door lock actuator.
NO >> Replace BCM. Refer to BCS-141, "Removal and Installation".

REAR RH

REAR RH : Component Function Check

INFOID:0000000007578999

1.CHECK FUNCTION

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “DOOR LOCK” in “ACTIVE TEST” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item		Status	
DOOR LOCK	ALL LOCK	Door lock actuators	LOCK
	ALL UNLK		UNLOCK

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-194, "DRIVER SIDE : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000007579000

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+)		(–)	Condition		Voltage (Approx.)
Rear door lock assembly RH					
Connector	Terminal				
D45	6	Ground	Door lock and unlock switch	Unlock	12 V
	5			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 and all door lock assembly connector.
2. Check continuity between BCM harness connector and rear door lock assembly RH harness connector.

BCM		Rear door lock assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
M66	68	D45	6	Existed
	69		5	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M66	68		Not existed
	69		

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				
M66	68	Ground	Door lock and unlock switch	Unlock	12 V
	69			Lock	

Is the inspection result normal?

YES >> Check for internal short of each door lock actuator.
NO >> Replace BCM. Refer to BCS-141, "Removal and Installation".

DOOR LOCK AND UNLOCK SWITCH

Component Function Check

INFOID:0000000007579001

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?

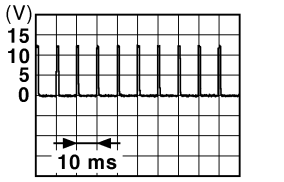
YES >> Door lock and unlock switch is OK.
NO >> Refer to DLK-199, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007579002

1.CHECK DOOR LOCK AND UNLOCK SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect power window main switch connector.
3. Check signal between power window main switch harness connector and ground using oscilloscope.

(+)		(–)	Signal (Reference value)
Power window main switch			
Connector	Terminal		
D35	3	Ground	 JPMIA0012GB 1.0 - 1.5 V
	15		

Is the inspection result normal?

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

2.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

1. Disconnect BCM connector and power window main switch connector.
2. Check continuity between BCM harness connector and power window main switch harness connector.

BCM		Power window main switch		Continuity
Connector	Terminal	Connector	Terminal	
M65	12	D35	3	Existed
	13		15	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M65	12		Not existed
	13		

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-80, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

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

Power window main switch		Ground	Continuity
Connector	Terminal		
D35	1		Existed

Is the inspection result normal?

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

4.CHECK DOOR LOCK AND UNLOCK SWITCH

Refer to DLK-200, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace power window main switch. Refer to PWC-48, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000007579003

1.CHECK DOOR LOCK AND UNLOCK SWITCH

1. Turn ignition switch OFF.
2. Disconnect power window main switch connector.
3. Check continuity between power window main switch terminals.

Power window main switch		Condition		Continuity
Terminal				
3	1	Door lock and unlock switch	LOCK	Existed
			UNLOCK	Not existed
15			LOCK	Not existed
			UNLOCK	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace power window main switch.

DOOR SWITCH

Component Function Check

INFOID:0000000007579004

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”, “BACK DOOR SW” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
DOOR SW-DR	Driver side door	Open	On
		Closed	Off
DOOR SW-AS	Passenger side door	Open	On
		Closed	Off
DOOR SW-RL	Rear door LH	Open	On
		Closed	Off
DOOR SW-RR	Rear door RH	Open	On
		Closed	Off
DOOR SW-BK	Back door	Open	On
		Closed	Off

Is the inspection result normal?

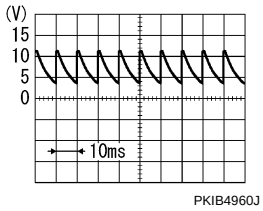
YES >> Door switch is OK.
NO >> Refer to DLK-201, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007579005

1.CHECK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect malfunctioning door switch connector.
3. Check signal between malfunctioning door switch harness connector and ground using oscilloscope.

(+)			(–)	Signal (Reference value)
Door switch				
Connector		Terminal		
Driver side	B48	2	Ground	 PKIB4960J 7.0 - 8.0 V
Passenger side	B49			
Rear LH	B71			
Rear RH	B53			
Back door	D106	3		

Is the inspection result normal?

YES-1 >> Back door: GO TO 3.
YES-2 >> Other door: GO TO 4.
NO >> GO TO 2.

2.CHECK DOOR SWITCH CIRCUIT

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

Door switch			BCM		Continuity
Connector		Terminal	Connector	Terminal	
Driver side	B48	2	B10	44	Existed
Passenger side	B49			45	
Rear LH	B71			43	
Rear RH	B53			42	
Back door	D106	3		47	

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

Door switch			Ground	Continuity
Connector		Terminal		
Driver side	B48	2	Ground	Not existed
Passenger side	B49			
Rear LH	B71			
Rear RH	B53			
Back door	D106	3		

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-141, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR LOCK ASSEMBLY CIRCUIT

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

Back door switch		Ground	Continuity
Connector	Terminal		
D106	4		Not existed

Is the inspection result normal?

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

4.CHECK DOOR SWITCH

Refer to DLK-202, "Component Inspection".

Is the inspection result normal?

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

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000007579006

1.CHECK DOOR SWITCH

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

Door switch			Condition		Continuity
Terminal					
Driver side	2	Ground part of door switch	Door switch	Pressed	Existed
				Released	Not existed
Passenger side				Pressed	Existed
				Released	Not existed
Rear LH				Pressed	Existed
				Released	Not existed
Rear RH				Pressed	Existed
				Released	Not existed
Back door	3	4	Back door lock assembly	Lock	Existed
				Unlock	Not existed

Is the inspection result normal?

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

HAZARD FUNCTION

Component Function Check

INFOID:0000000007579007

1.CHECK FUNCTION

1. Select “MULTI REMOTE ENT” of “BCM” using CONSULT.
2. Select “FLASHER” in “ACTIVE TEST” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item		Status	
FLASHER	LH	Front turn signal lamp LH	Turns ON
	RH	Front turn signal lamp RH	Turns ON
	OFF	Front turn signal lamp	Turns OFF

Is the inspection result normal?

YES >> Hazard warning lamp circuit is OK.
NO >> Refer to DLK-204, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007579008

1.CHECK HAZARD SWITCH CIRCUIT

Refer to EXL-66, "Component Function Check".

Is the inspection result normal?

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

2.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

KEY SWITCH

Component Function Check

INFOID:0000000007579009

1.CHECK FUNCTION

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

Monitor item	Condition		Status
KEY ON SW	Keyfob	Inserted in key cylinder	ON
		Removed from key cylinder	OFF

Is the inspection result normal?

YES >> Key switch is OK.
NO >> Refer to DLK-205, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007579010

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10 A fuse, [No.13, located in fuse block (J/B)].

Is fuse fusing?

YES >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.
NO >> GO TO 2.

2.CHECK KEY SWITCH POWER SUPPLY CIRCUIT

1. Disconnect key switch connector.
2. Check voltage between key switch harness connector and ground.

Key switch		Ground	Voltage
Connector	Terminal		
M24	2		Battery voltage

Is the inspection result normal?

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

3.CHECK KEY SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between key switch harness connector and BCM harness connector.

Key switch		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M24	1	M65	37	Existed

3. Check continuity between key switch connector and ground.

Key switch		Ground	Continuity
Connector	Terminal		
M24	1		Not existed

Is the inspection result normal?

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

4.CHECK KEY SWITCH

Refer to DLK-206, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace key switch.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000007579011

COMPONENT INSPECTION

1.CHECK KEY SWITCH

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

Key switch		Condition		Continuity
Terminal				
1	2	Keyfob	Inserted in key cylinder	Existed
			Removed from key cylinder	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace key switch.

KEYFOB BATTERY

Component Function Check

INFOID:0000000007579012

1.CHECK FUNCTION

Check door lock and unlock operation with keyfob button.

Is the inspection result normal?

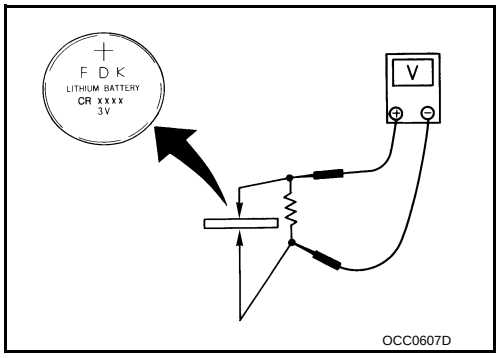
YES >> Keyfob is OK.
NO >> Refer to DLK-207, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007579013

1.CHECK KEYFOB BATTERY

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



Standard : Approx. 2.5 - 3.0 V

Is the measurement value within the specification?

YES >> Replace keyfob.
NO >> Replace keyfob battery.

REMOTE KEYLESS ENTRY RECEIVER

Component Function Check

INFOID:0000000007579014

1.CHECK FUNCTION

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

Monitor item	Condition		Status
KEYLESS LOCK	Keyfob button	LOCK	On
		UNLOCK	Off
KEYLESS UNLOCK		LOCK	Off
		UNLOCK	On

Is the inspection result normal?

YES >> Remote keyless entry receiver is OK.
NO >> Refer to DLK-208, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007579015

1.CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector and 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	
M65	18	M73	1	Existed

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M65	18		Not existed

Is the inspection result normal?

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

2.CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

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

(+)		(–)	Voltage (Approx.)
Remote keyless entry receiver			
Connector	Terminal		
M73	4	Ground	5 V

Is the inspection result normal?

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

3.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 1

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	
M65	19	M73	4	Existed

3. Check continuity between BCM harness connector and ground.

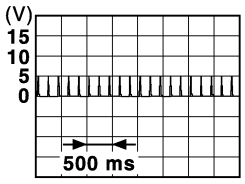
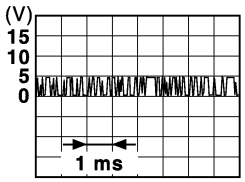
BCM		Ground	Continuity
Connector	Terminal		
M65	19		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-141, "Removal and Installation".
NO >> Repair or replace harness.

4. CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT 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			
M73	2	Ground	Waiting	 JMKIA3838GB
			Press the Intelligent Key lock or unlock button	 JMKIA3841GB

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace remote keyless entry receiver.

5. CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 2

1. Disconnect BCM connector and remote keyless entry receiver 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	
M65	20	M73	2	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M65	20		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-141, "Removal and Installation".

NO >> Repair or replace harness.

SYMPTOM DIAGNOSIS

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

ALL DOOR

ALL DOOR : Description

INFOID:0000000007579016

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

ALL DOOR : Diagnosis Procedure

INFOID:0000000007579017

1. CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch.
Refer to DLK-199, "Component Function Check".

Is the inspection result normal?

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

2. CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (driver side).
Refer to DLK-194, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

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

3. REPLACE BCM

1. Replace BCM. Refer to BCS-141, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000007579018

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

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007579019

1. CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (driver side).
Refer to DLK-194, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

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

2. REPLACE BCM

1. Replace BCM. Refer to BCS-141, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000007579020

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

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000007579021

1.CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (passenger side).
Refer to DLK-195, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?

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

2.REPLACE BCM

1. Replace BCM. Refer to BCS-141, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

REAR LH

REAR LH : Description

INFOID:0000000007579022

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

REAR LH : Diagnosis Procedure

INFOID:0000000007579023

1.CHECK DOOR LOCK ACTUATOR

Check rear door lock assembly LH.
Refer to DLK-196, "REAR LH : Component Function Check".

Is the inspection result normal?

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

2.REPLACE BCM

1. Replace BCM. Refer to BCS-141, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

REAR RH

REAR RH : Description

INFOID:0000000007579024

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

REAR RH : Diagnosis Procedure

INFOID:0000000007579025

1.CHECK DOOR LOCK ACTUATOR

Check rear door lock assembly RH
Refer to DLK-197, "REAR RH : Component Function Check".

Is the inspection result normal?

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

2.REPLACE BCM

1. Replace BCM. Refer to BCS-141, "Removal and Installation".

2. Confirm the operation after replacement.

Is the result normal?

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

DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERATION

Diagnosis Procedure

INFOID:0000000007579026

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 >> Go to DLK-211, "ALL DOOR : Diagnosis Procedure".

2.CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.
Refer to DLK-192, "Component Function Check".

Is the inspection result normal?

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

3.REPLACE BCM

1. Replace BCM. Refer to BCS-141, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

DOOR DOES NOT LOCK/UNLOCK WITH KEYFOB

Diagnosis Procedure

INFOID:0000000007579027

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 >> Go to DLK-211, "ALL DOOR : Diagnosis Procedure".

2.CHECK REMOTE KEYLESS ENTRY RECEIVER

Check remote keyless entry receiver.
Refer to DLK-208, "Component Function Check".

Is the inspection result normal?

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

3.CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.
Refer to DLK-192, "Component Function Check".

Is the inspection result normal?

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

4.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-201, "Component Function Check".

Is the inspection result normal?

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

5.CHECK KEYFOB BATTERY

Check keyfob battery.
Refer to DLK-207, "Component Function Check".

Is the inspection result normal?

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

6.REPLACE BCM

1. Replace BCM. Refer to BCS-141, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

BACK DOOR DOES NOT OPENED

Diagnosis Procedure

INFOID:0000000007579028

1.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.
Refer to DLK-190, "Component Function Check".

Is the inspection result normal?

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

2.CHECK BACK DOOR OPENER ACTUATOR

Check back door opener actuator.
Refer to DLK-189, "Diagnosis Procedure".

Is the inspection result normal?

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

3.CHECK VEHICLE SPEED SIGNAL

Check vehicle speed signal.
Refer to MWI-31, "DTC Index".

Is the inspection result normal?

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

4.REPLACE BCM

1. Replace BCM. Refer to BCS-141, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007579029

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” in “WORK SUPPORT”
   Refer to DLK-177, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 2
NO >> Set “DOOR LOCK-UNLOCK SET” in “WORK SUPPORT”

2.REPLACE BCM

1. Replace BCM. Refer to BCS-141, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007579030

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-177, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “Lock Only” or “Lock/Unlock” in “WORK SUPPORT”.

2. CHECK “AUTOMATIC DOOR LOCK SELECT” SETTING IN “WORK SUPPORT”

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “AUTOMATIC DOOR LOCK SELECT” in “WORK SUPPORT” mode.
3. Check “AUTOMATIC DOOR LOCK SELECT” setting in “WORK SUPPORT”.
   Refer to DLK-177, "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-141, "Removal and Installation".
- Confirm the operation after replacement.

Is the result normal?

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

IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007579031

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” in “WORK SUPPORT”.
   Refer to DLK-177, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “AUTOMATIC LOCK/UNLOCK SELECT” in “WORK SUPPORT”.

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” in “WORK SUPPORT”.
   Refer to DLK-177, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “AUTOMATIC DOOR UNLOCK SELECT” in “WORK SUPPORT”.

3. REPLACE BCM

1. Replace BCM. Refer to BCS-141, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

P RANGE INTERLOCK DOOR LOCK/UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007579032

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-177, "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-177, "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-177, "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. CHECK TCM

Check TCM for DTC.
Refer to TM-116, "DTC Index".

Is the inspection result normal?

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

5. REPLACE BCM

1. Replace BCM. Refer to BCS-141, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

AUTO DOOR LOCK OPERATION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007579033

1.CHECK “AUTO LOCK SET” SETTING WITH CONSULT

1. Select “MULTI REMOTE ENT” of “BCM” using CONSULT.
2. Select “AUTO LOCK SET” in “WORK SUPPORT” mode.
3. Check “AUTO LOCK SET” in “WORK SUPPORT”.
   Refer to DLK-179, "MULTI REMOTE ENT : CONSULT Function (BCM - MULTI REMOTE ENT)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “AUTO LOCK SET” in “WORK SUPPORT”.

2.REPLACE BCM

1. Replace BCM. Refer to BCS-141, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

UNLOCK LINK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007579034

1.REPLACE BCM

1. Replace BCM. Refer to BCS-141, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

KEY OUT INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007579035

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” in “WORK SUPPORT”.
   Refer to DLK-177, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “AUTOMATIC LOCK/UNLOCK SELECT” in “WORK SUPPORT”.

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” in “WORK SUPPORT”.
   Refer to DLK-177, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “AUTOMATIC DOOR UNLOCK SELECT” in “WORK SUPPORT”.

3. CHECK KEY SWITCH

Check key switch.

Is the inspection result normal?

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

4. REPLACE BCM

1. Replace BCM. Refer to BCS-141, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

KEY REMINDER FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007579036

1.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch.
Refer to DLK-199, "Component Function Check".

Is the inspection result normal?

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

2.CHECK KEY SWITCH

Check key switch.
Refer to DLK-205, "Component Function Check".

Is the inspection result normal?

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

3.CHECK DRIVER SIDE DOOR SWITCH

Check driver side door switch.
Refer to DLK-201, "Component Function Check".

Is the inspection result normal?

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

4.REPLACE BCM

1. Replace BCM. Refer to BCS-141, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

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

HAZARD REMINDER OPERATION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007579037

1. CHECK DTC WITH BCM AND COMBINATION METER

Check that DTC is not detected with BCM and combination meter.

Is the inspection result normal?

YES >> GO TO 2.
NO-1 >> Refer to BCS-122, "DTC Index". (BCM)
NO-2 >> Refer to MWI-31, "DTC Index". (Combination meter)

2. CHECK “HAZARD LAMP SET” SETTING IN “WORK SUPPORT”

1. Select “MULTI REMOTE ENT” of “BCM” using CONSULT.
2. Select “HAZARD LAMP SET” in “WORK SUPPORT” mode.
3. Check “HAZARD LAMP SET” in “WORK SUPPORT”.
   Refer to DLK-179, "MULTI REMOTE ENT : CONSULT Function (BCM - MULTI REMOTE ENT)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “HAZARD LAMP SET” in “WORK SUPPORT”.

3. CHECK HAZARD WARNING LAMP

Check hazard warning lamp.
Refer to DLK-204, "Component Function Check".

Is the inspection result normal?

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

4. REPLACE BCM

1. Replace BCM. Refer to BCS-141, "Removal and Installation".
2. Confirm the operation after replacement.

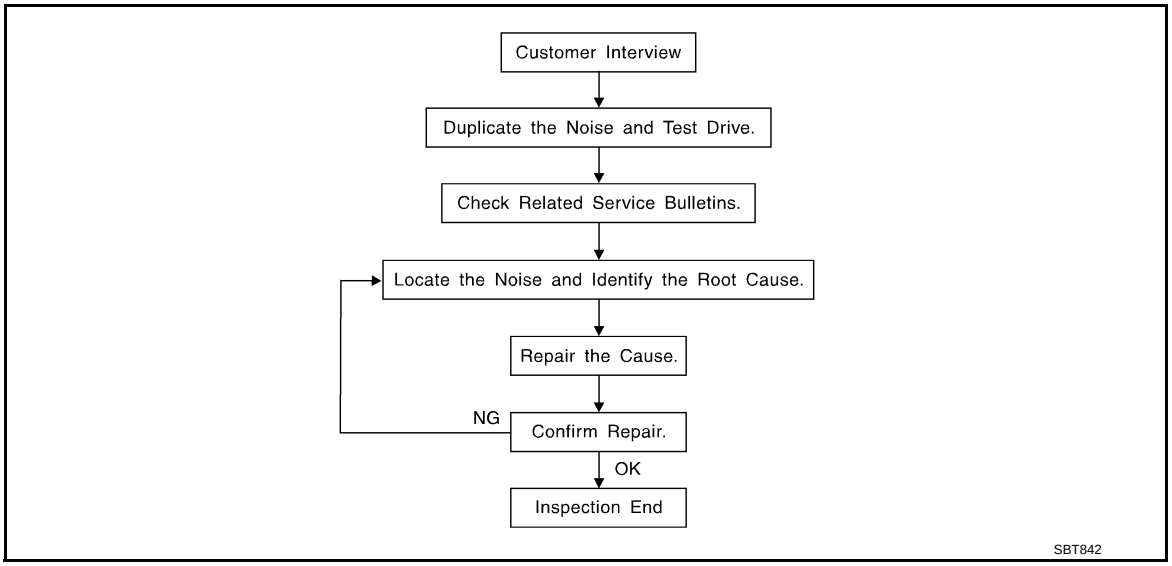
Is the result normal?

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

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000007579038



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-230, "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-228, "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-43980) 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-43980). Each item can be ordered separately as needed.
URETHANE PADS [1.5 mm (0.059 in) thick]
Insulates connectors, harness, etc.
76268-9E005: 100 × 135 mm (3.94 × 5.31 in)/76884-71L01: 60 × 85 mm (2.36 × 3.35 in)/76884-71L02:15 × 25 mm (0.59 × 0.98 in)
INSULATOR (Foam blocks)
Insulates components from contact. Can be used to fill space behind a panel.
73982-9E000: 45 mm (1.77 in) thick, 50 × 50 mm (1.97 × 1.97 in)/73982-50Y00: 10 mm (0.39 in) thick, 50 × 50 mm (1.97 × 1.97 in)
INSULATOR (Light foam block)
80845-71L00: 30 mm (1.18 in) thick, 30 × 50 mm (1.18 × 1.97 in)
FELT 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:0000000007579039

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-43980) 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.

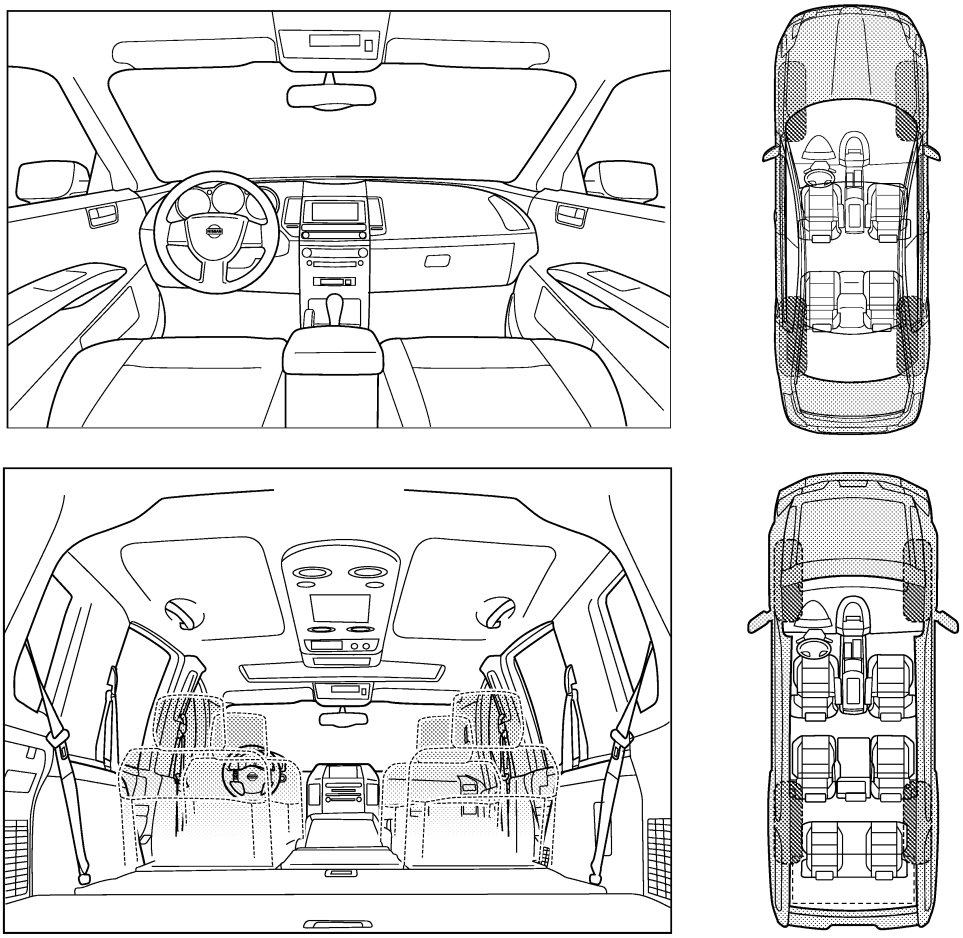
Diagnostic Worksheet

INFOID:0000000007579040

SQUEAK & RATTLE
DIAGNOSTIC WORKSHEET

Dear Nissan Customer:
We are concerned about your satisfaction with your Nissan vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Nissan right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may be asked to take a test drive with a service advisor or technician to ensure we confirm the noise you are hearing.

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.

PIIB8740E

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

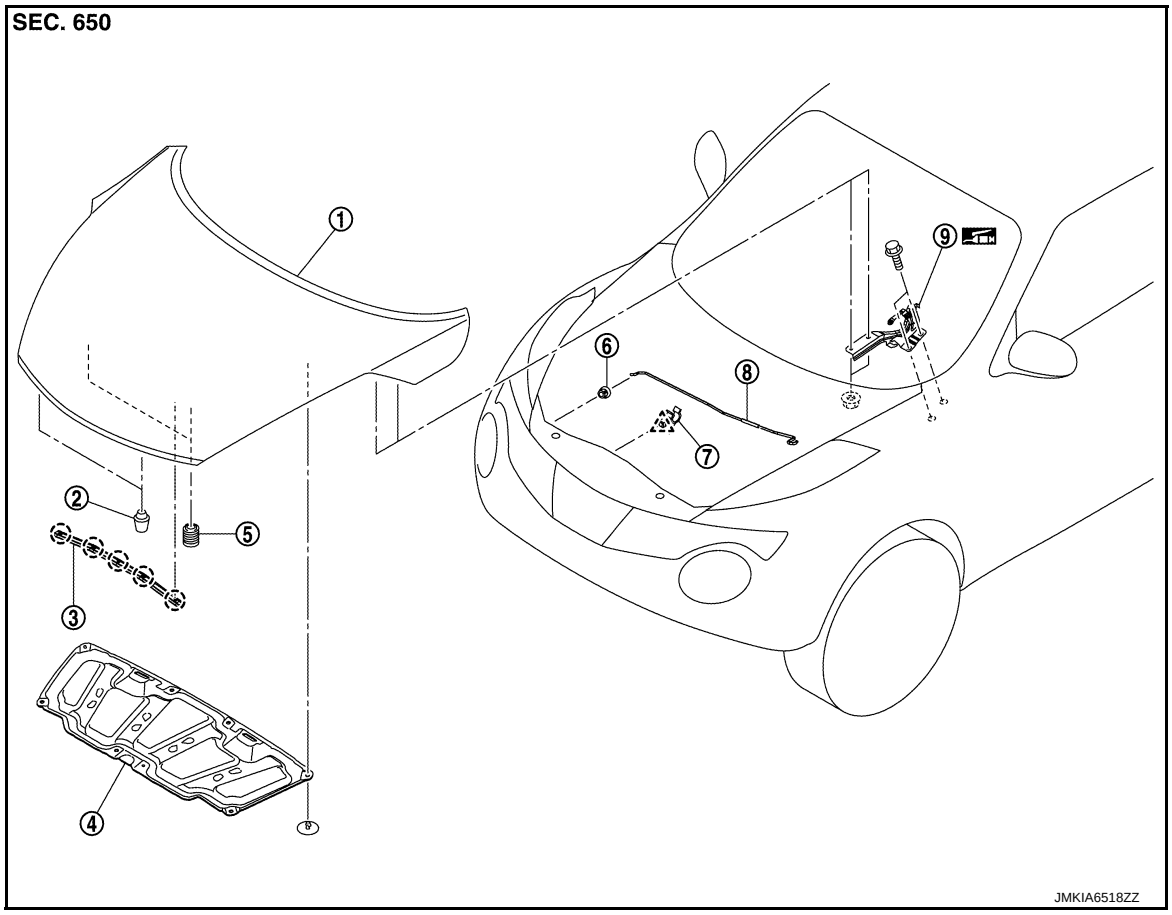
PIIB8742E

REMOVAL AND INSTALLATION

HOOD

Exploded View

INFOID:0000000007579041



1. Hood assembly
2. Hood bumper rubber
3. Radiator core seal
4. Hood insulator
5. Hood bumper rubber
6. Grommet
7. Clamp
8. Hood support rod
9. Hood hinge

: Clip

: Pawl

: Body grease

HOOD ASSEMBLY

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000007579042

CAUTION:
- **Operate with two workers, because of its heavy weight.**
- **Use protective tape or shop cloth to protect from damage during removal and installation.**

REMOVAL

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

   WARNING:
   Injury may occur if hood assembly is not supported by the proper material when removing hood assembly.
2. Remove hood hinge mounting nuts on the hood to remove the hood assembly.

INSTALLATION

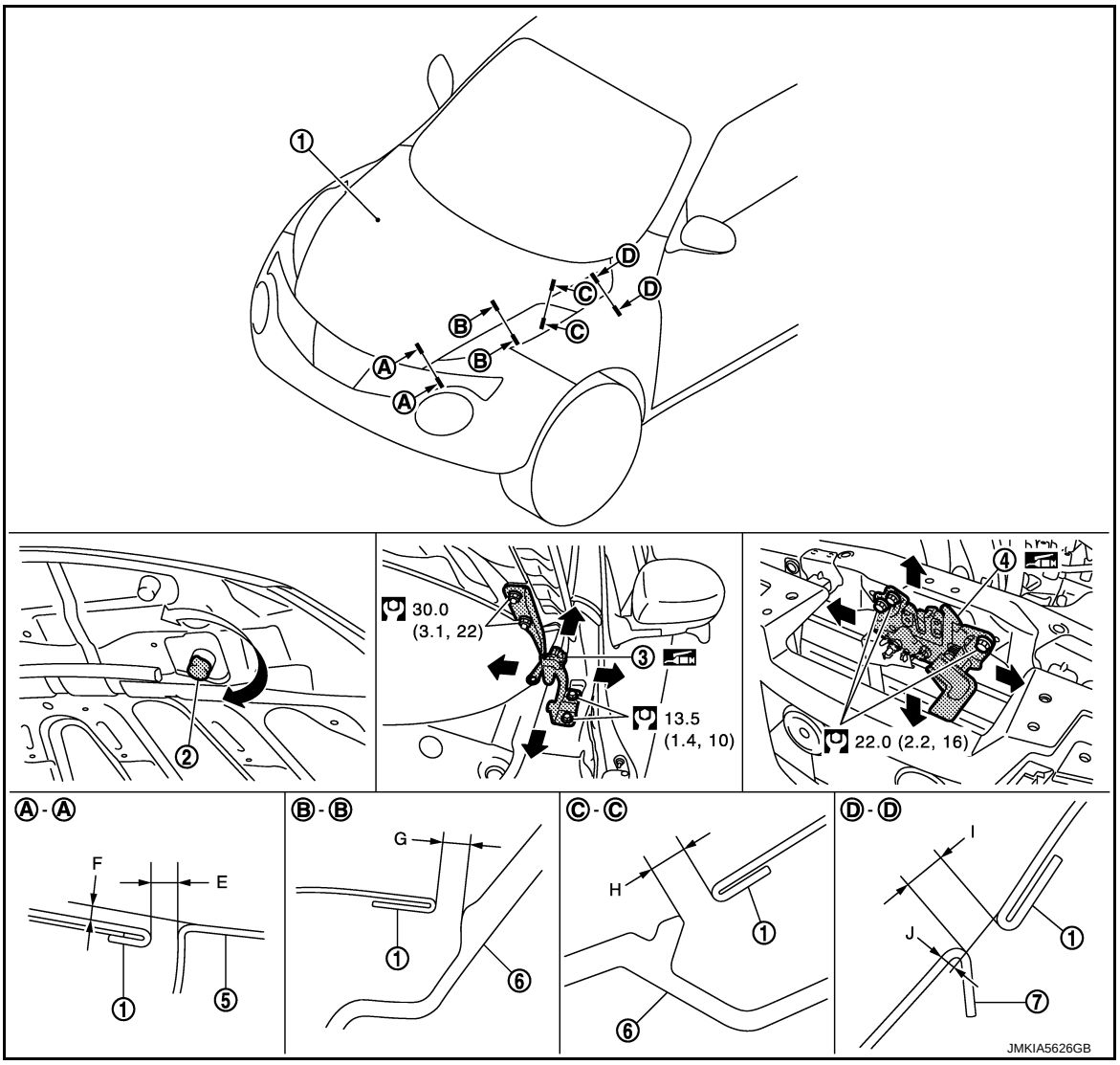
Note the following items, and then install in the reverse order of removal.

CAUTION:

- **After installation, apply touch-up paint (the body color) onto the heads of hood hinge mounting bolts and nuts.**
- **After installing, perform hood fitting adjustment. Refer to DLK-233, "HOOD ASSEMBLY : Adjustment".**

HOOD ASSEMBLY : Adjustment

INFOID:0000000007579043



1. Hood assembly
2. Hood bumper rubber
3. Hood hinge
4. Hood lock assembly
5. Front bumper fascia
6. Front combination lamp
7. Front fender

: N·m (kg-m, ft-lb)

: Body grease

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

Unit: mm (in)

Portion				Standard	Difference (RH/LH, MAX)
Hood – Front bumper fascia	A – A	E	Clearance	2.0 – 6.0 (0.079 – 0.236)	< 2.5 (0.098)
		F	Surface height	(-2.0) – (+2.0) [(-0.079) – (+0.079)]	< 2.5 (0.098)
Hood – Front combination lamp	B – B	G	Clearance	2.0 – 6.0 (0.079 – 0.236)	< 2.5 (0.098)
Hood – Front combination lamp	C – C	H	Clearance	2.0 – 6.0 (0.079 – 0.236)	< 2.5 (0.098)
Hood – Front fender	D – D	I	Clearance	2.5 – 4.5 (0.098 – 0.177)	< 1.5 (0.059)
		J	Surface height	(-2.0) – (0.0) [(-0.079) – (0.000)]	< 1.5 (0.059)

FITTING ADJUSTMENT PROCEDURE

1. Remove front center grille. Refer to EXT-17, "Removal and Installation".
2. Remove hood lock assembly, and then adjust the surface height of hood assembly, front fender assembly, and front combination lamp according to the specified value, by rotating hood bumper rubber.
3. Position hood lock assembly and engage hood striker. Check hood lock assembly and hood striker for looseness.
4. Move hood lock assembly laterally until the center of hood striker and hood lock assembly are vertical when viewed from the front.
5. After adjustment, tighten lock bolts to the specified torque.
6. Open hood. Rotate bumper rubber counterclockwise between half a turn and three-quarters of a turn.
7. Check that secondary latch is securely engaged with secondary hood striker from the dead load of the hood assembly.
8. Check that primary latch is securely engaged with primary hood striker when hood assembly is closed [free-fall from approximately 200 mm (7.874 in) height].
   CAUTION:
   Never free-fall hood assembly from a height of 300 (11.811 in) mm or more.
9. Install front center grille. Refer to EXT-17, "Removal and Installation".

HOOD HINGE

HOOD HINGE : Removal and Installation

INFOID:0000000007579044

REMOVAL

1. Remove hood assembly. Refer to DLK-232, "HOOD ASSEMBLY : Removal and Installation".
2. Remove front fender. Refer to DLK-241, "Removal and Installation".
3. Remove hood hinge mounting bolts, and then remove hood hinge.

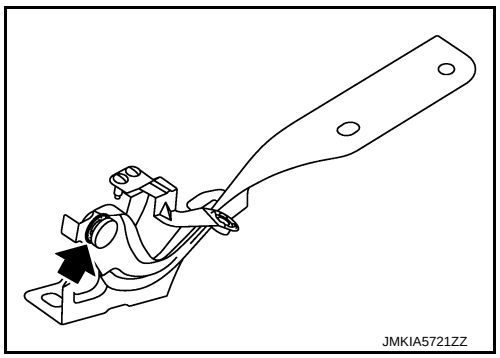
INSTALLATION

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

CAUTION:

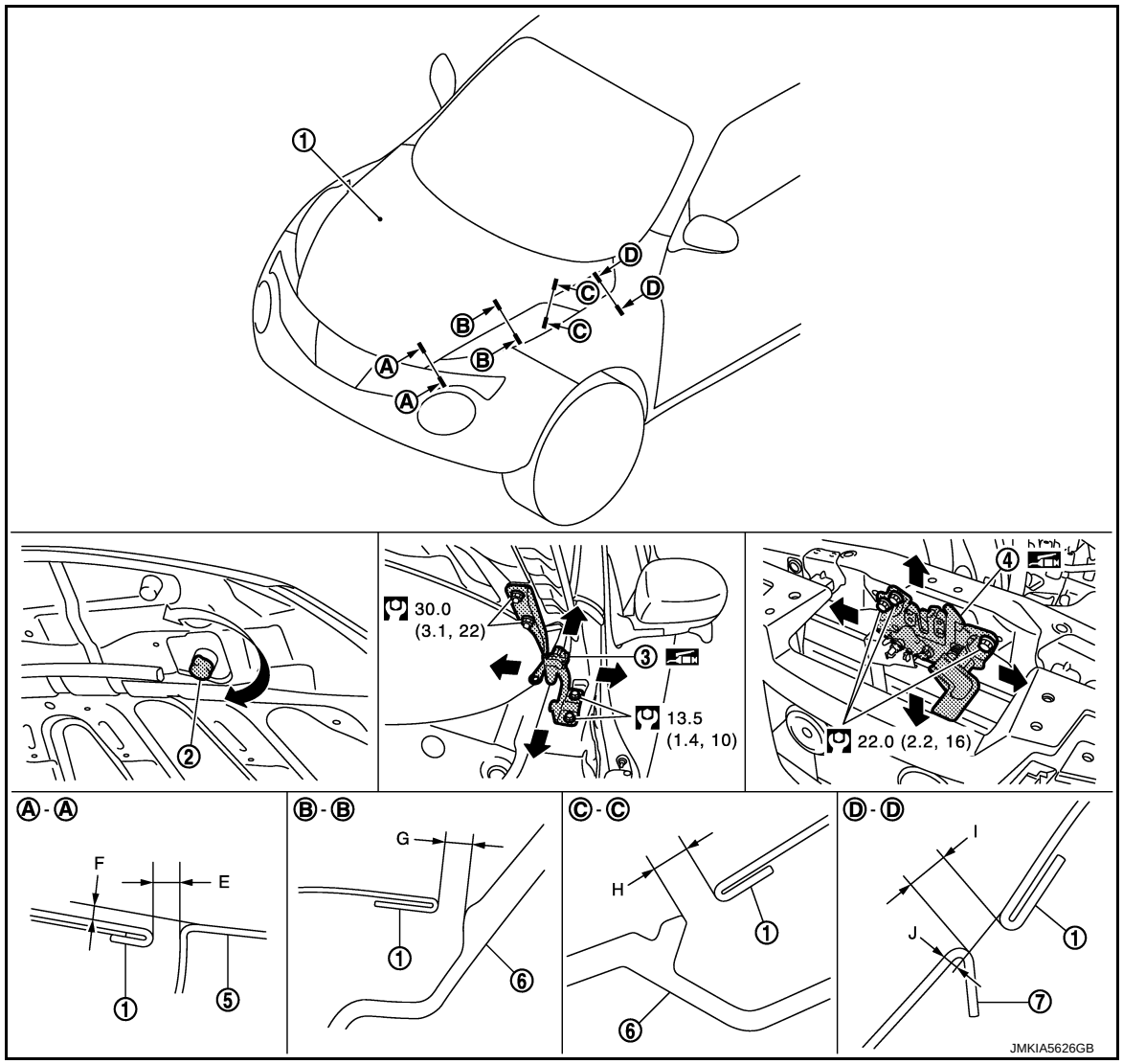
- **After installation, perform hood hinge fitting adjustment. Refer to DLK-235, "HOOD HINGE : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the hinge mounting bolts and nuts.**

- **Check hood hinge rotating part for poor lubrication. If necessary, apply grease.**



HOOD HINGE : Adjustment

INFOID:0000000007579045



1. Hood assembly
2. Hood bumper rubber
3. Hood hinge
4. Hood lock assembly
5. Front bumper fascia
6. Front combination lamp
7. Front fender

: N·m (kg-m, ft-lb)

: Body grease

Check the clearance and the surface height between hood and each part by visually and touching.

If the clearance and the surface height are out of specification, adjust them according to the procedures shown below.

Unit: mm (in)

Portion				Standard	Difference (RH/LH, MAX)
Hood – Front bumper fascia	A – A	E	Clearance	2.0 – 6.0 (0.079 – 0.236)	< 2.5 (0.098)
		F	Surface height	(-2.0) – (+2.0) [(-0.079) – (+0.079)]	< 2.5 (0.098)
Hood – Front combination lamp	B – B	G	Clearance	2.0 – 6.0 (0.079 – 0.236)	< 2.5 (0.098)
Hood – Front combination lamp	C – C	H	Clearance	2.0 – 6.0 (0.079 – 0.236)	< 2.5 (0.098)
Hood – Front fender	D – D	I	Clearance	2.5 – 4.5 (0.098 – 0.177)	< 1.5 (0.059)
		J	Surface height	(-2.0) – (0.0) [(-0.079) – (0.000)]	< 1.5 (0.059)

1. Remove front center grille. Refer to EXT-17, "Removal and Installation".
2. Remove hood lock assembly.
3. Remove front bumper fascia. Refer to EXT-12, "Removal and Installation".
4. Remove front combination lamp (LH and RH). Refer to EXL-83, "Removal and Installation".
5. Remove front fender assembly (LH and RH). Refer to DLK-241, "Removal and Installation".
6. Loosen hood hinge mounting bolts.
7. Temporarily install front fender assembly (LH and RH), front combination lamp (LH and RH) and front bumper fascia.
8. Adjust the clearance of hood assembly, front fender assembly (LH and RH), front combination lamp (LH and RH) and front bumper fascia according to the specified value, by moving hood hinge (body side).
9. Temporarily tighten hood hinge (LH and RH).
10. Remove front bumper fascia, front combination lamp (LH and RH) and front fender assembly (LH and RH).
11. Tighten hood hinge (LH and RH) to the specified torque.
12. Install front fender assembly (LH and RH). Refer to DLK-241, "Removal and Installation".
13. Install front combination lamp (LH and RH). Refer to EXL-83, "Removal and Installation".
14. Install front bumper fascia. Refer to EXT-12, "Removal and Installation".
15. Adjust the surface height of hood assembly, front fender assembly, and front combination lamp according to the specified value, by rotating hood bumper rubber.
16. Position hood lock assembly and engage hood striker. Check hood lock assembly and hood striker for looseness.
17. Move hood lock assembly laterally until the center of hood striker and hood lock assembly are vertical when viewed from the front.
18. After adjustment, tighten lock bolts to the specified torque.
19. Open hood. Rotate bumper rubber counterclockwise between half a turn and three-quarters of a turn.
20. Check that secondary latch is securely engaged with secondary hood striker from the dead load of the hood assembly.
21. Check that primary latch is securely engaged with primary hood striker when hood assembly is closed [free-fall from approximately 200 mm (7.874 in) height].
    CAUTION:
    Never free-fall hood assembly from a height of 300 (11.811 in) mm or more.
22. Install front center grille. Refer to EXT-17, "Removal and Installation".
    CAUTION:
    After installation, apply touch-up paint (the body color) onto the heads of hood hinge mounting bolts and nuts.

HOOD SUPPORT ROD

HOOD SUPPORT ROD : Removal and Installation

INFOID:0000000007579046

REMOVAL

CAUTION:

Two workers are required to support the hood.

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

   WARNING:

   Injury may occur if hood assembly is not supported by the proper material when removing hood assembly.

2. Pull hood support rod from grommet and remove.

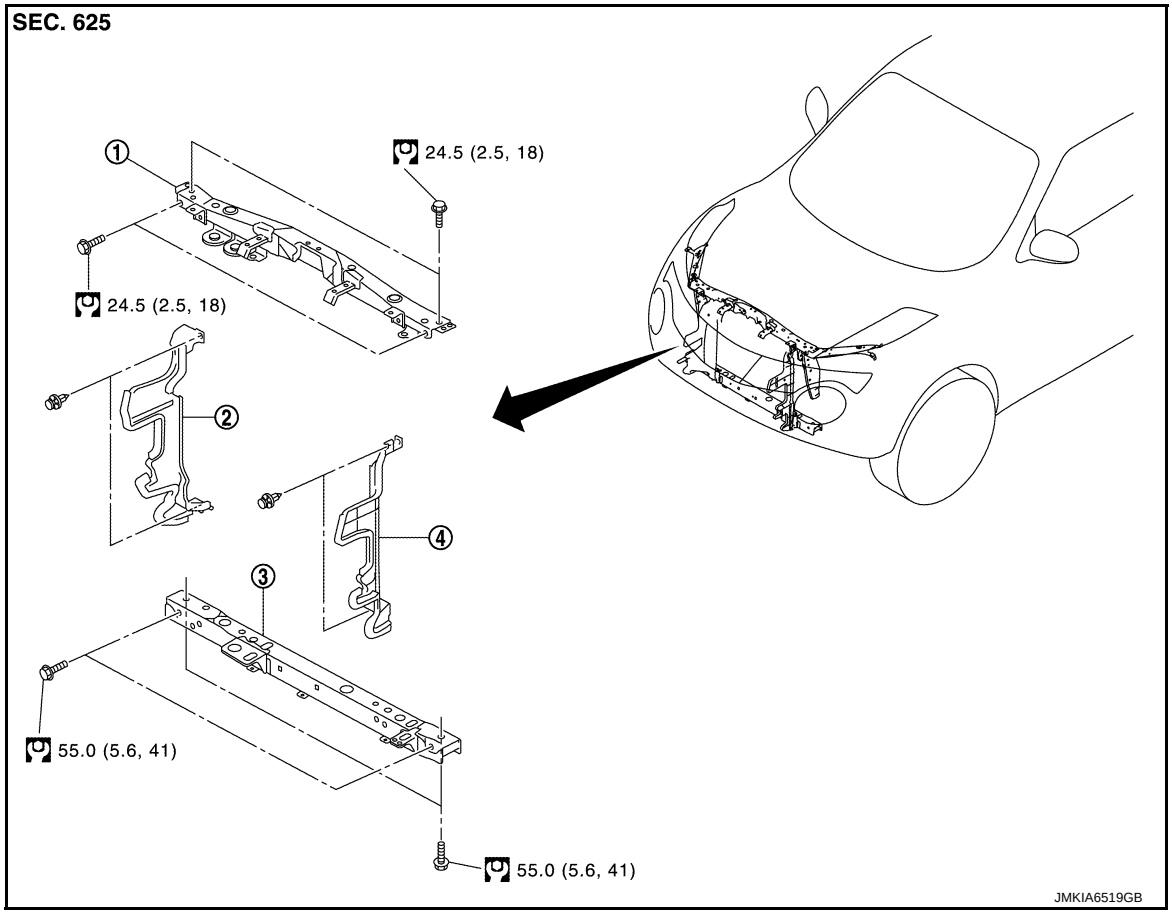
INSTALLATION

Install in the reverse order of removal.

RADIATOR CORE SUPPORT

Exploded View

INFOID:0000000007579047



1. Radiator core support upper
2. Air guide (RH)
3. Radiator core support lower
4. Air guide (LH)

: N·m (kg-m, ft-lb)

Removal and Installation

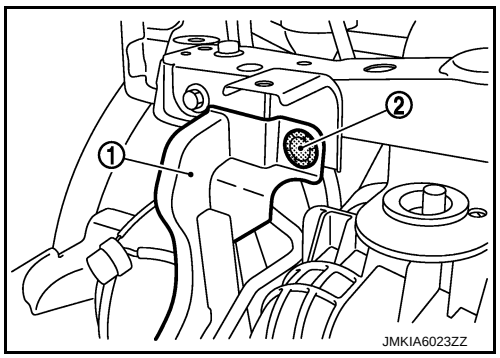
INFOID:0000000007579048

RADIATOR CORE SUPPORT UPPER

Removal

1. Remove front bumper fascia. Refer to EXT-12, "Removal and Installation".
2. Remove front combination lamp (LH and RH). Refer to EXL-83, "Removal and Installation".
3. Remove headlamp (LH and RH). Refer to EXL-81, "Removal and Installation".
4. Disconnect crash zone sensor harness connector. Refer to SR-22, "Removal and Installation".
   CAUTION:
   Turn ignition switch OFF, disconnect battery negative terminal and then wait for at least 3 minutes.
5. Remove hood lock and hood lock cable fixing clip. Refer to DLK-262, "HOOD LOCK CONTROL CABLE : Removal and Installation".
6. Remove horn bracket. Refer to HRN-4, "Removal and Installation".

7. Remove upper fixing clips (2) of air guide (LH and RH) (1).



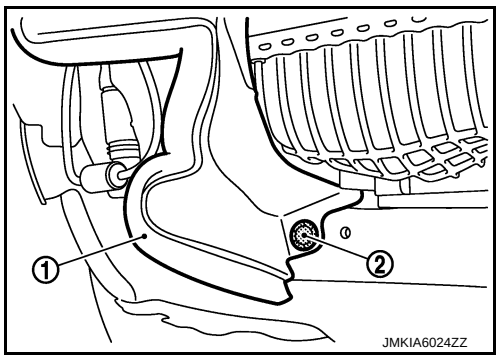
8. Remove hood support rod. Refer to DLK-237, "HOOD SUPPORT ROD : Removal and Installation".
9. Remove mounting bolts, and then remove radiator core support upper.

Installation
Install in the reverse order of removal.

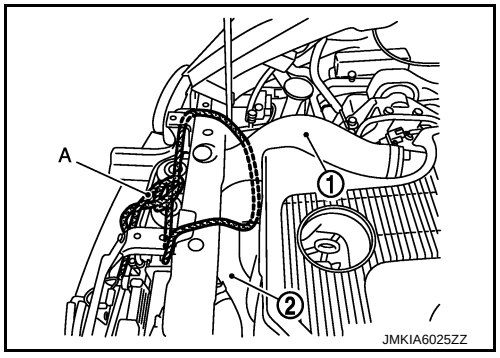
RADIATOR CORE SUPPORT LOWER

Removal

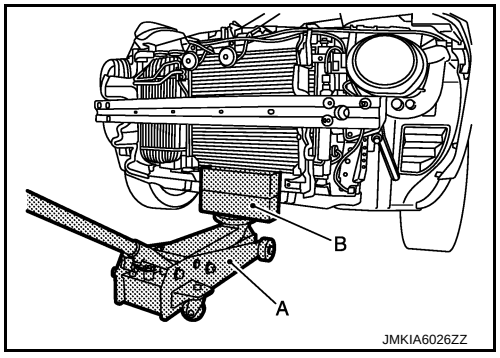
1. Remove front bumper fascia. Refer to EXT-12, "Removal and Installation".
2. Remove lower fixing clips (2) of radiator side seal (LH and RH) (1).



3. Using strings (A), hang inlet hose (1) and inlet hose (2) together with charge air cooler.
CAUTION:
Never damage inlet hoses and charge air cooler.



4. Support lower side radiator using wooden blocks (A) and a floor jack (B).
CAUTION:
Never damage radiator.



5. Remove mounting bolts, and then remove radiator core support lower.

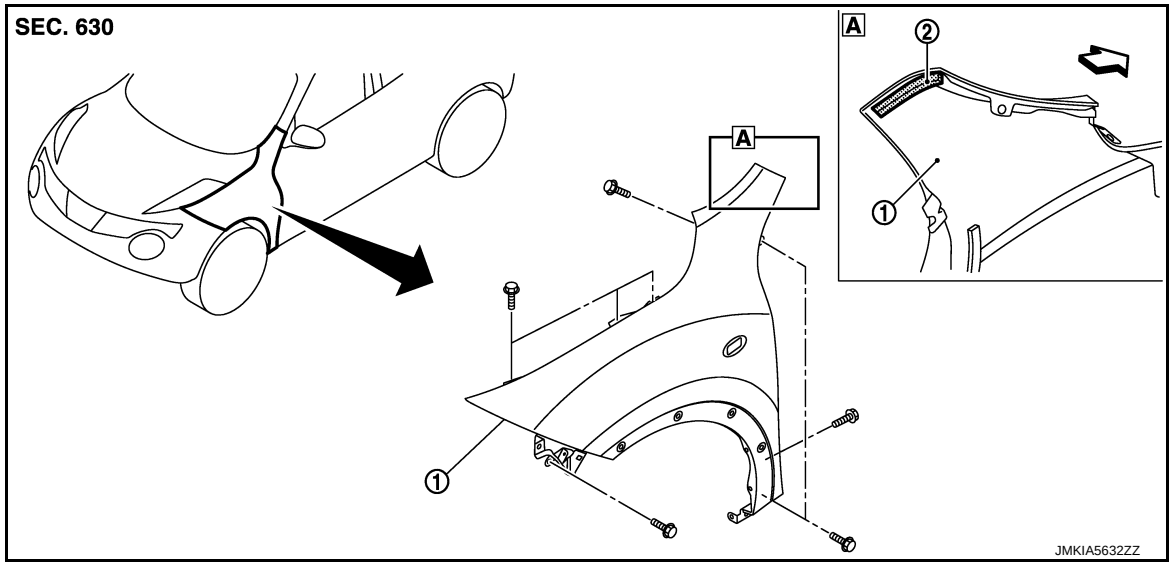
Installation

Install in the reverse order of removal.

FRONT FENDER

Exploded View

INFOID:0000000007579049



1. Front fender assembly
2. Front fender stiffener

⇦ : Vehicle front

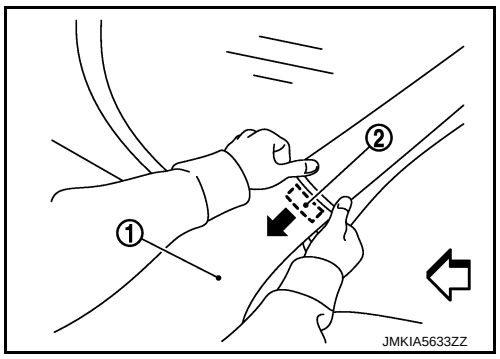
Removal and Installation

INFOID:0000000007579050

REMOVAL

1. Remove front fillet molding. Refer to EXT-25, "FRONT FILLET MOLDING : Removal and Installation".
2. Remove front bumper fascia assembly. Refer to EXT-12, "Removal and Installation".
3. Remove sill cover. Refer to EXT-22, "Removal and Installation".
4. Remove fender protector. Refer to EXT-21, "Removal and Installation".
5. Remove front fender cover. Refer to EXT-21, "Exploded View".
6. Remove front combination lamp. Refer to EXL-83, "Removal and Installation".
7. Remove side turn signal lamp. Refer to EXL-90, "Removal and Installation".
8. Remove mounting bolts of front fender assembly.
9. Remove front fender stiffener (2) from the vehicle body while carefully pulling upper portion of front fender (1) toward vehicle outside.

⇦ : Vehicle front



10. Remove front fender assembly.
CAUTION:
An viscous urethane foam is installed on the back surface of front fender. When removing the front fender, be careful to not deform the front fender while performing the procedure and removing the viscous urethane foam a little at a time.

INSTALLATION

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

CAUTION:

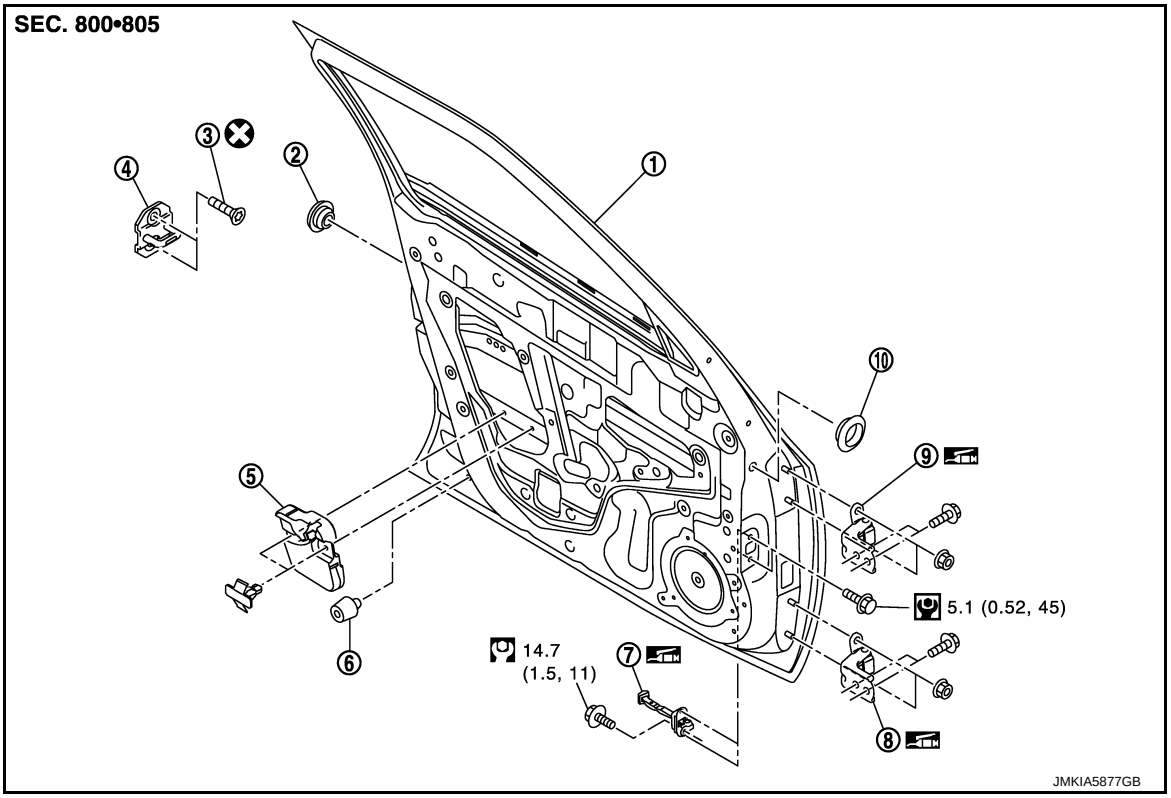
- **After installation, apply the touch-up paint (the body color) onto the head of front fender mounting bolts.**
- **After installation, adjust the following part.**

- **Hood assembly: Refer to DLK-233, "HOOD ASSEMBLY : Adjustment".**
- **Front door: Refer to DLK-245, "DOOR ASSEMBLY : Adjustment".**

FRONT DOOR

Exploded View

INFOID:0000000007579051



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

: Do not reuse

: N·m (kg-m, in-lb)

: N·m (kg-m, ft-lb)

: Body grease

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

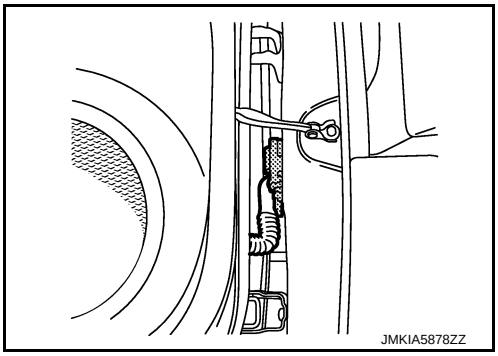
INFOID:0000000007579052

WARNING:
- **Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait 3 minutes or more.**
- **Never use the air tools or electric tools for servicing.**

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

REMOVAL

1. Disconnect front door harness connector.



2. Remove mounting bolt of door check link on the vehicle.
3. Remove door hinge mounting bolts (door side), and then remove door assembly.

INSTALLATION

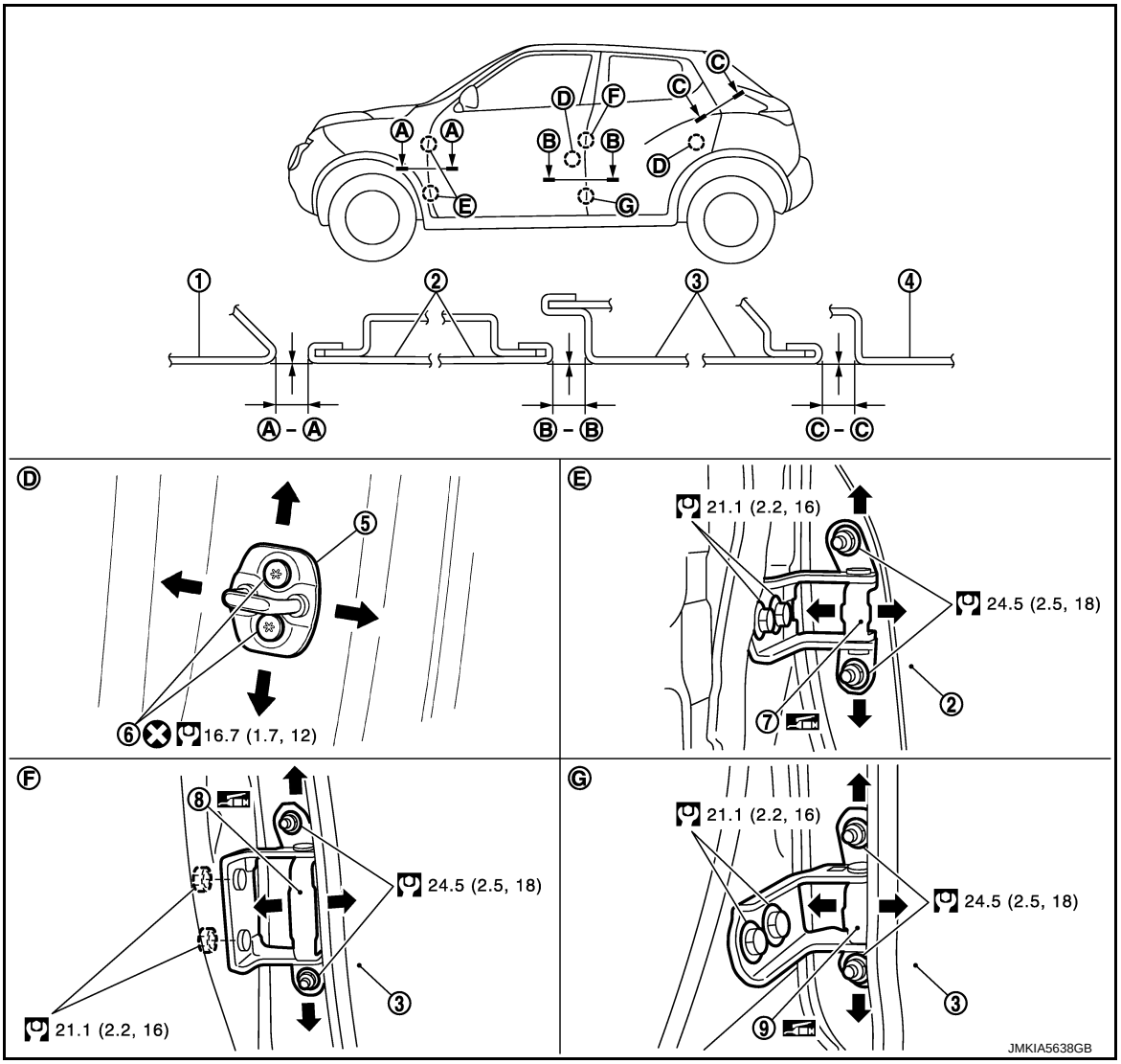
Note the following items, and install in the reverse order of removal.

CAUTION:

- **Apply anticorrosive agent onto the mounting surface.**
- **Check front door open/close, lock/unlock operation after installation.**
- **Check door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **After installation, perform the fitting adjustment. Refer to DLK-245, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.**

DOOR ASSEMBLY : Adjustment

INFOID:0000000007579053



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)

: Do not reuse

: N·m (kg-m, ft-lb)

: Body grease

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

Unit: mm (in)

Portion		Clearance	Surface height
Front fender – Front door	A – A	3.0 – 5.0 (0.118 – 0.197)	(-1.0) – (+1.0) [(-0.039) – (+0.039)]
Front door – Rear door	B – B	3.3 – 5.3 (0.130 – 0.209)	(-1.0) – (+1.0) [(-0.039) – (+0.039)]

FITTING ADJUSTMENT PROCEDURE

1. Remove front fender. Refer to DLK-241, "Removal and Installation".
2. Loosen door hinge mounting nuts on door side.

3. Adjust the surface height of front door according to the fitting standard dimension.
4. Temporarily tighten door hinge mounting nuts on door side.
5. Loosen door hinge mounting bolts on body side.
6. Raise front door at rear end to adjust clearance of the front door according to the fitting standard dimension.
7. After adjustment tighten bolts and nuts to the specified torque.
   CAUTION:
   - **After installation, apply touch-up paint (the body color) onto the head of hinge mounting bolts and nuts.**
   - **Check door hinge rotating part for poor lubrication. If necessary, apply body grease.**
8. Install front fender. Refer to refer to DLK-241, "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:0000000007579054

REMOVAL

Remove TORX bolts, and then remove door striker.

INSTALLATION

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

CAUTION:

- **Check front door open/close, lock/unlock operation after installation.**
- **After installation, be sure to perform the fitting adjustment. Refer to DLK-245, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:0000000007579055

REMOVAL

CAUTION:

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

1. Remove front fender. Refer to DLK-241, "Removal and Installation".
2. Remove front door assembly. Refer to DLK-243, "DOOR ASSEMBLY : Removal and Installation".
3. Remove front door hinge mounting bolts (body side), and then remove front door hinge.

INSTALLATION

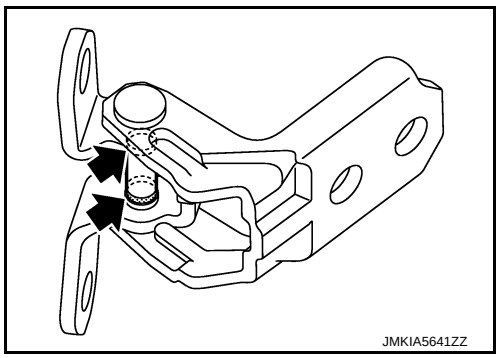
Note the following items, and install in the reverse order of removal.

CAUTION:

- **Apply anticorrosive agent onto the mounting surface.**
- **Check front door open/close, lock/unlock operation after installation.**
- **After installation, perform the fitting adjustment. Refer to DLK-245, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.**

- **Check door hinge rotating part for poor lubrication. If necessary, apply body grease.**

: Grease up point



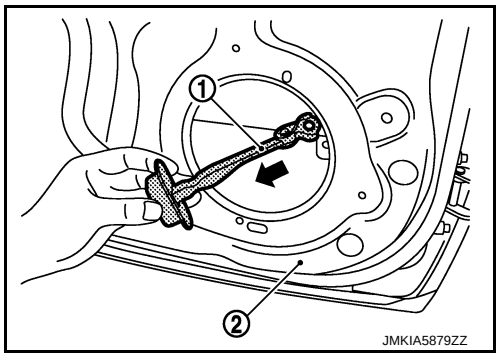
DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:0000000007579056

REMOVAL

1. Fully close the front door window.
2. Remove front door finisher. Refer to INT-12, "Removal and Installation".
3. Disconnect harness connector of front door speaker.
4. Remove mounting bolts of front door speaker, and then remove front door speaker.
5. Remove mounting bolt of door check link on the vehicle.
6. Remove mounting bolts of door check link on door panel.
7. Take door check link (1) out from the hole of door panel (2).



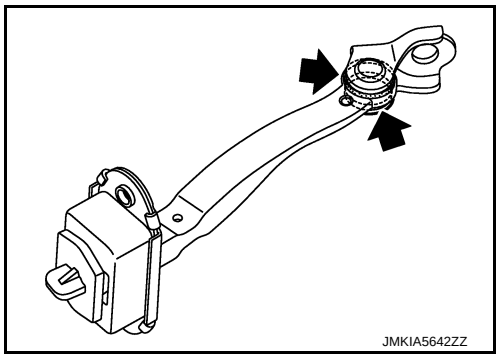
INSTALLATION

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

CAUTION:

- **Check front door open/close operation after installation.**
- **Check door check link rotating part for poor lubrication. If necessary, apply grease.**

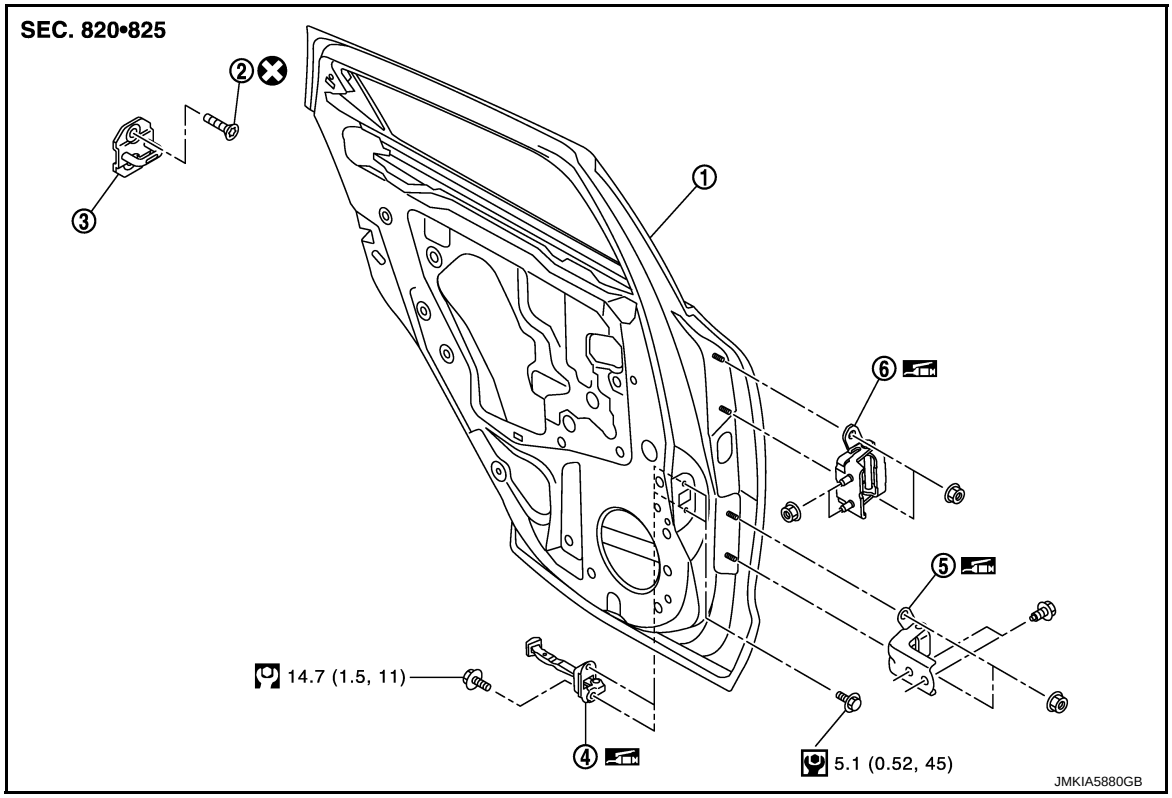
: Grease up point



REAR DOOR

Exploded View

INFOID:0000000007579057



1. Rear door panel
2. TORX bolt
3. Door striker
4. Door check link
5. Door hinge (lower)
6. Door hinge (upper)

: Do not reuse

: N·m (kg-m, in-lb)

: N·m (kg-m, ft-lb)

: Body grease

DOOR ASSEMBLY

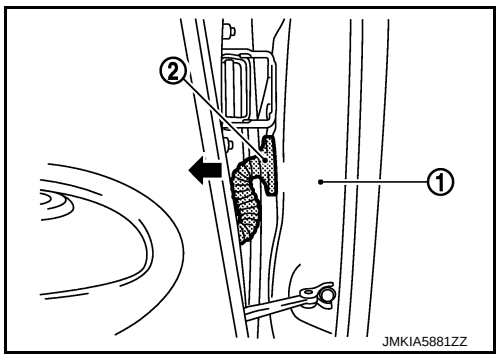
DOOR ASSEMBLY : Removal and Installation

INFOID:0000000007579058

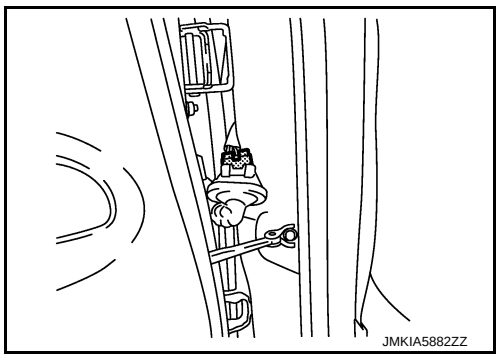
CAUTION:
- **Perform work with 2 workers, because of it's heavy weight.**
- **When removing and installing rear door assembly, support door with a jack and shop cloth to protect door and body.**

REMOVAL

1. Remove rear door harness grommet (2) from body side outer (1), and then pull out rear door harness.



2. Disconnect rear door harness connector.



3. Remove mounting bolt of door check link on the vehicle.
4. Remove door hinge mounting bolts (door side), and then remove rear door assembly.

INSTALLATION

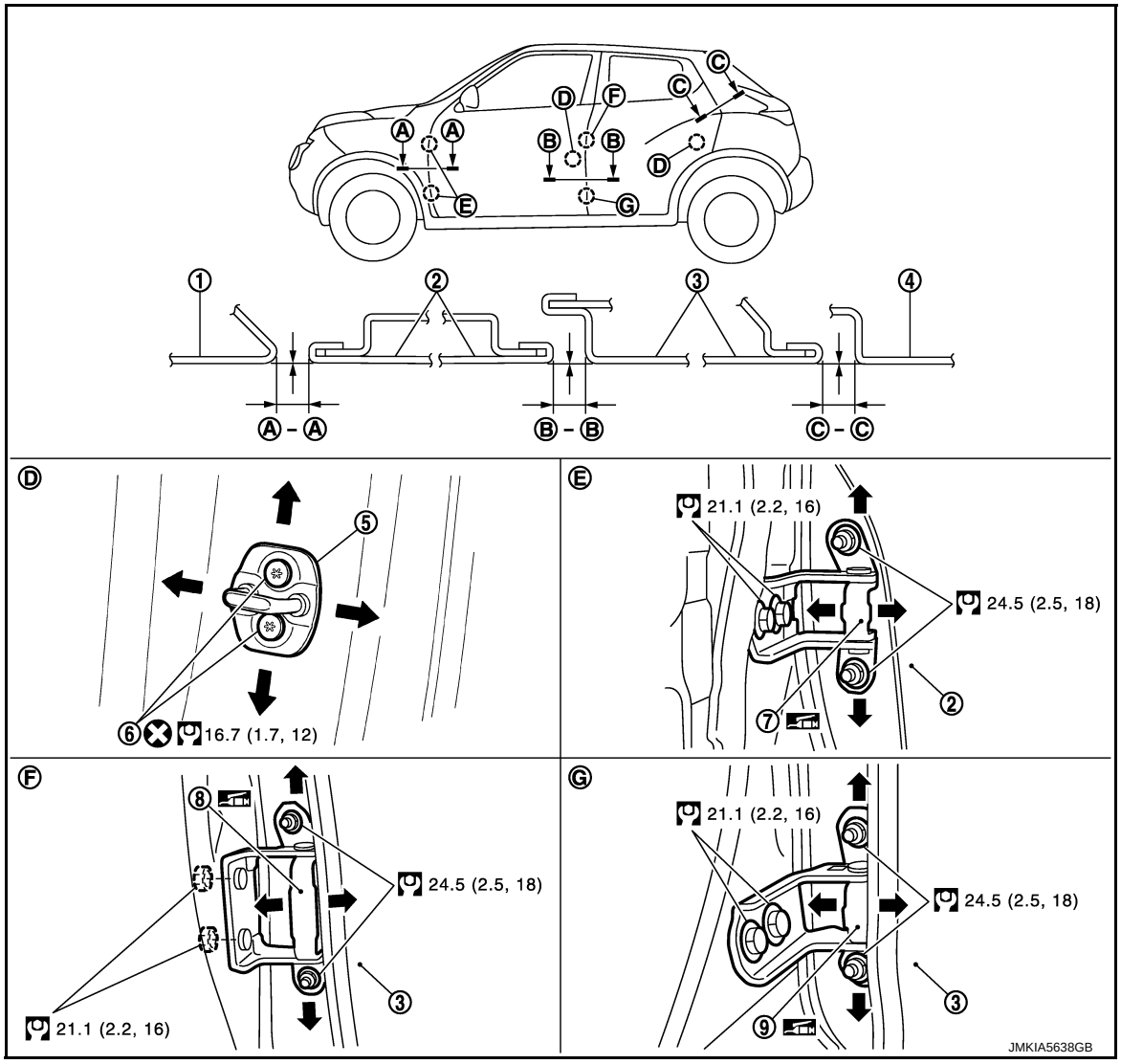
Note the following items, and install in the reverse order of removal.

CAUTION:

- **Apply anticorrosive agent onto the mounting surface.**
- **Check rear door open/close, lock/unlock operation after installation.**
- **Check door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **After installation, perform the fitting adjustment. Refer to DLK-250, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.**

DOOR ASSEMBLY : Adjustment

INFOID:0000000007579059



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)

: Do not reuse

: N·m (kg-m, ft-lb)

: Body grease

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

Unit: mm (in)

Portion		Clearance	Surface height
Front door – Rear door	B – B	3.3 – 5.3 (0.130 – 0.209)	(-1.0) – (+1.0) [(-0.039) – (+0.039)]
Rear door – Body side outer	C – C	2.6 – 4.6 (0.102 – 0.181)	(-1.0) – (+1.0) [(-0.039) – (+0.039)]

FITTING ADJUSTMENT PROCEDURE

1. Remove center pillar lower garnish. Refer to INT-21, "CENTER PILLAR LOWER GARNISH : Removal and Installation".

2. Loosen door hinge mounting nuts on door side.
3. Adjust the surface height of rear door according to the fitting standard dimension.
4. Temporarily tighten door hinge mounting nuts on door side.
5. Loosen door hinge mounting nuts and bolts on body side.
6. Raise rear door at rear end to adjust clearance of rear door according to the fitting standard dimension.
7. After adjustment tighten bolts and nuts to the specified torque.
   CAUTION:
   - **After installation, apply touch-up paint (the body color) onto the head of hinge mounting bolts and nuts.**
   - **Check door hinge rotating part for poor lubrication. If necessary, apply body grease.**
8. Install center pillar lower garnish. Refer to INT-21, "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:0000000007579060

REMOVAL

Remove TORX bolts, and then remove door striker.

INSTALLATION

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

CAUTION:
- **Check rear door open/close, lock/unlock operation after installation.**
- **After installation, be sure to perform the fitting adjustment. Refer to DLK-250, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:0000000007579061

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

REMOVAL

1. Remove rear door assembly. Refer to DLK-248, "DOOR ASSEMBLY : Removal and Installation".
2. Remove center pillar lower garnish. Refer to INT-21, "CENTER PILLAR LOWER GARNISH : Removal and Installation".
3. Remove rear door hinge mounting bolts and nuts (body side), and then remove door hinge.

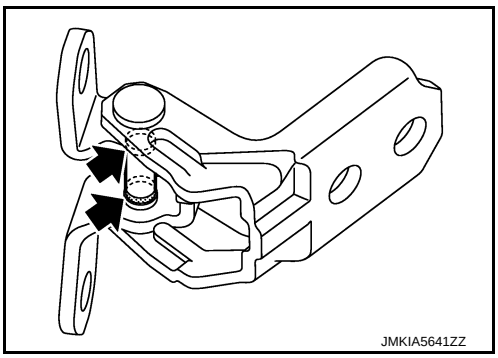
INSTALLATION

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

CAUTION:
- **Apply anticorrosive agent onto the mounting surface.**
- **Check rear door open/close operation after installation.**
- **When removing and installing rear door assembly, perform the fitting adjustment. Refer to DLK-250, "DOOR ASSEMBLY : Adjustment".**
- **After installing, apply the touch-up paint (the body color) onto the head of door hinge mounting nuts.**

- **Check door hinge rotating part for poor lubrication. If necessary, apply body grease.**

: Grease up point



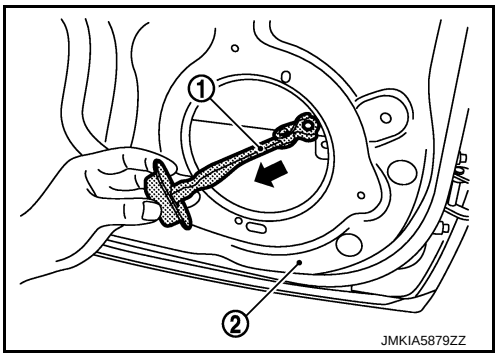
DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:0000000007579062

REMOVAL

1. Fully close the rear door window.
2. Remove rear door finisher. Refer to INT-15, "Removal and Installation".
3. Remove mounting bolts of rear door speaker, and then remove rear door speaker.
4. Disconnect harness connector of rear door speaker.
5. Remove mounting bolt of the check link on the vehicle.
6. Remove mounting bolts of the check link on door panel.
7. Take door check link (1) out from the hole of door panel (2).



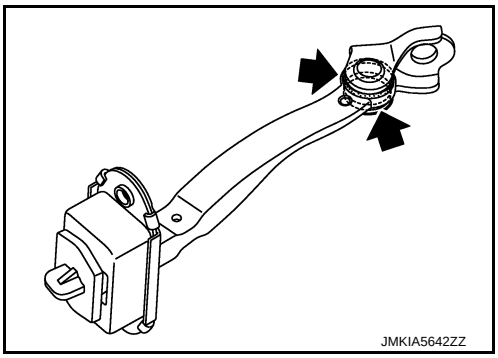
INSTALLATION

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

CAUTION:

- **Check rear door open/close operation after installation.**
- **Check door check link rotating part for poor lubrication. If necessary, apply grease.**

: Grease up point

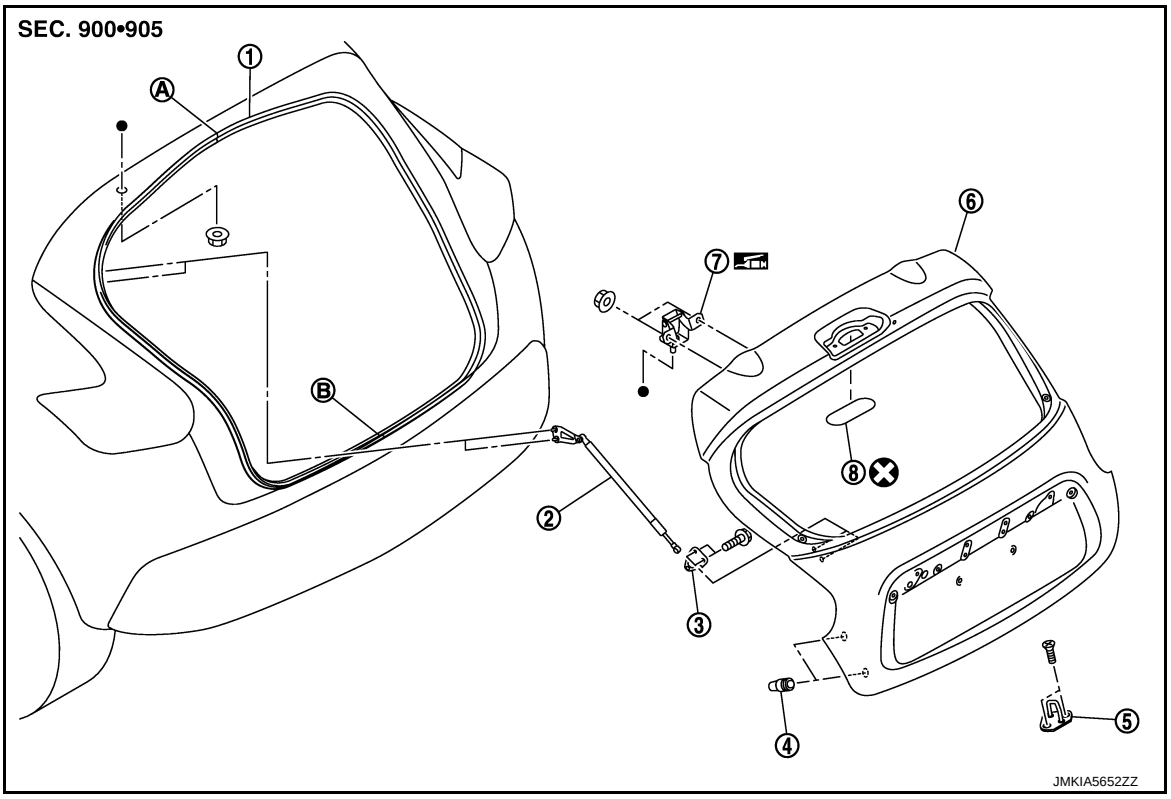


BACK DOOR

Exploded View

INFOID:0000000007579063

REMOVAL



1. Back door weather-strip
2. Back door stay
3. Back door stay lower bracket
4. Bumper rubber
5. Back door striker
6. Back door panel
7. Back door hinge
8. Hole cover
A : Center mark
B : Seam
: Do not reuse
: Body grease

BACK DOOR ASSEMBLY

BACK DOOR ASSEMBLY : Removal and Installation

INFOID:0000000007579064

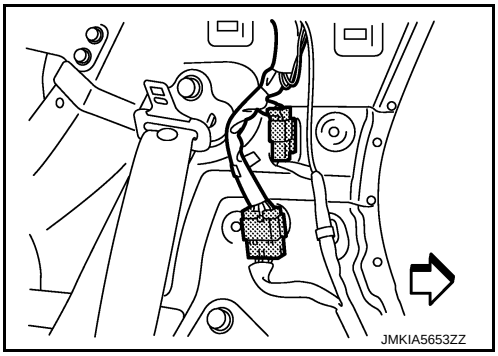
CAUTION:
- **Operate with two workers, because of its heavy weight.**
- **Use protective tape or shop cloth to protect from damage during removal and installation.**

REMOVAL

1. Remove luggage side upper finisher (LH and RH). Refer to INT-35, "LUGGAGE SIDE UPPER FINISHER : Removal and Installation".

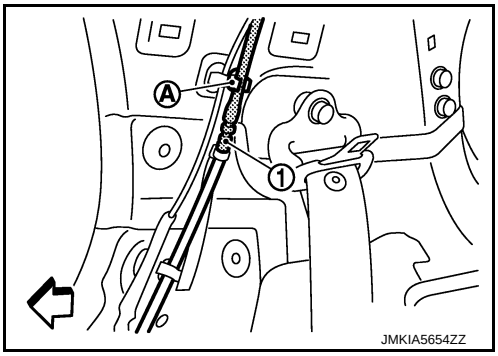
2. Disconnect harness connector.

⇦ : Vehicle front



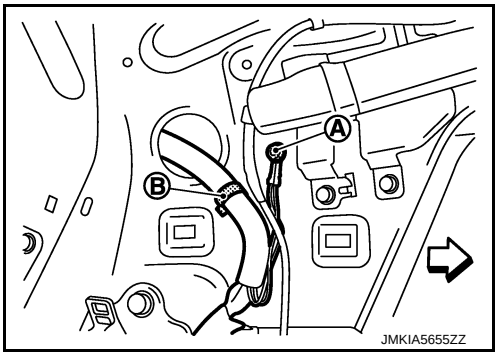
3. Remove rear washer hose (1) from hose mounting clip (A), and then disengage hose.

⇦ : Vehicle front

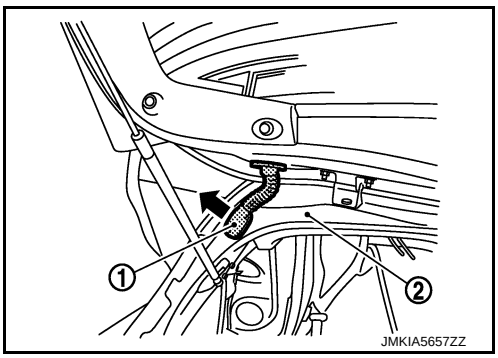


4. Remove center pillar upper garnish. Refer to INT-21, "CENTER PILLAR UPPER GARNISH : Removal and Installation".
5. Remove upper side of back door weather-strip. Refer to DLK-259, "BACK DOOR WEATHER-STRIP : Removal and Installation".
6. Remove rear assist grip (LH and RH) and mounting clips for rear portion of headlining, and then remove rear portion of headlining. Refer to INT-26, "NORMAL ROOF : Exploded View" or INT-29, "SUNROOF : Removal and Installation".
7. Remove ground harness mounting bolt (A) and harness fixing clips (B).

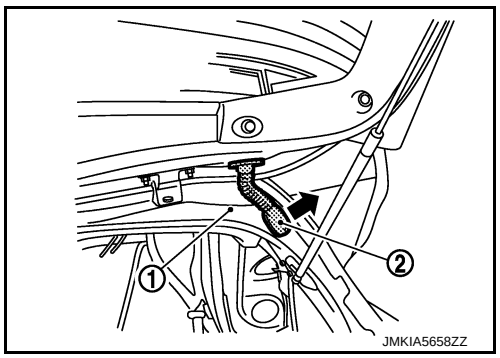
⇦ : Vehicle front



8. Remove grommet (1), and then pull out harness from roof panel (2).



9. Remove grommet (2), and then pull out harness and washer tube from roof panel (1).



10. Support back door with the proper material to prevent it from falling.

WARNING:

Bodily injury may occur if no supporting rod is holding the back door open when removing the back door stay.

11. Remove back door stay (back door side). Refer to DLK-258, "BACK DOOR STAY : Removal and Installation".
12. Remove back door hinge mounting nuts on back door and remove back door assembly.

INSTALLATION

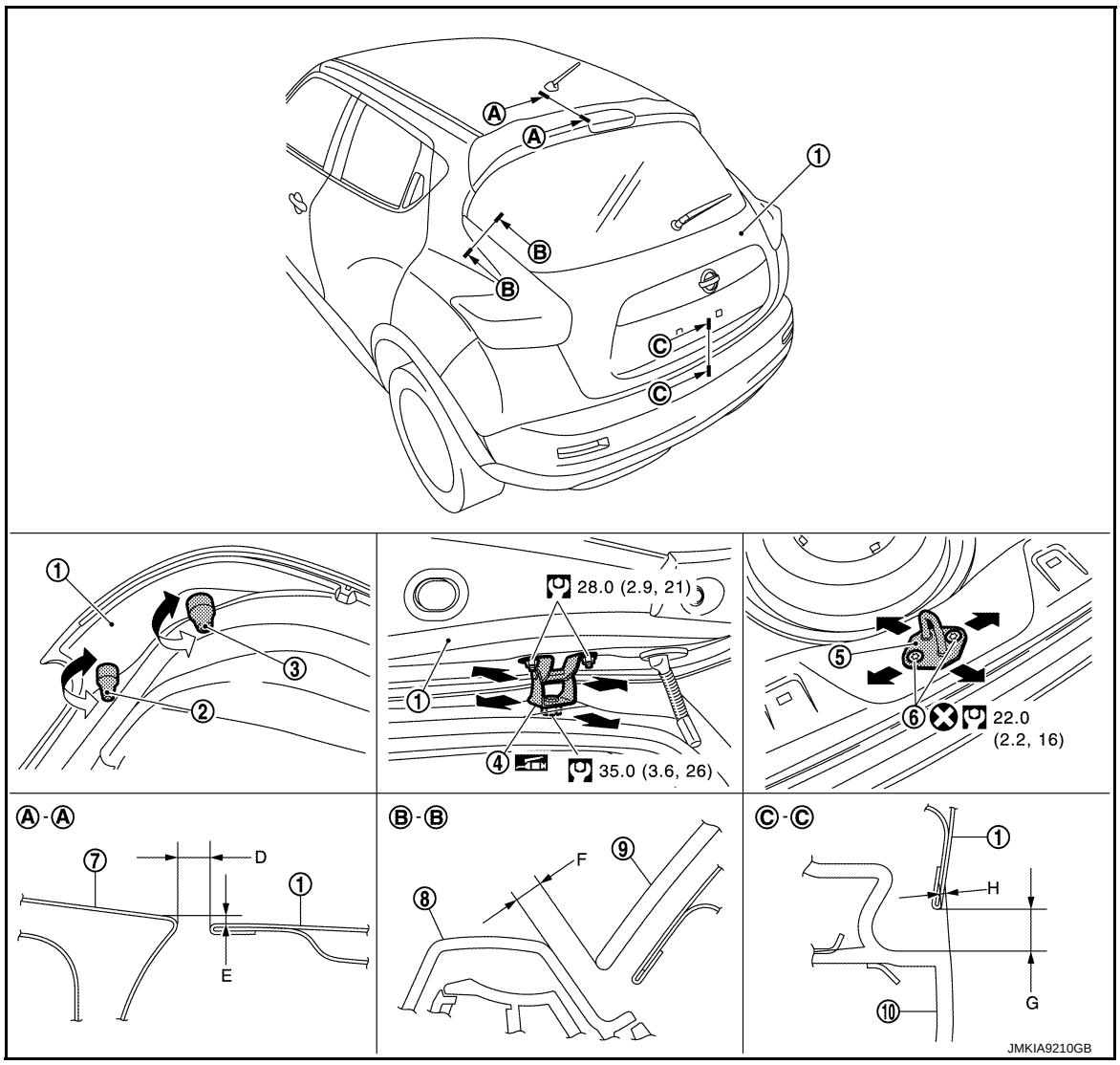
Note the following items, and install in the reverse order of removal.

CAUTION:

- **Check back door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **After installation, check back door open/close, lock/unlock operation.**
- **After installation, perform the fitting adjustment. Refer to DLK-256, "BACK DOOR ASSEMBLY : Adjustment".**

BACK DOOR ASSEMBLY : Adjustment

INFOID:0000000007802620



1. Back door assembly
2. Bumper rubber (upper)
3. Bumper rubber (lower)
4. Back door hinge
5. Back door striker
6. TORX bolt
7. Roof panel
8. Rear combination lamp
9. Back door glass
10. Rear bumper fascia

: Do not reuse

: N·m (kg-m, ft-lb)

: Body grease

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

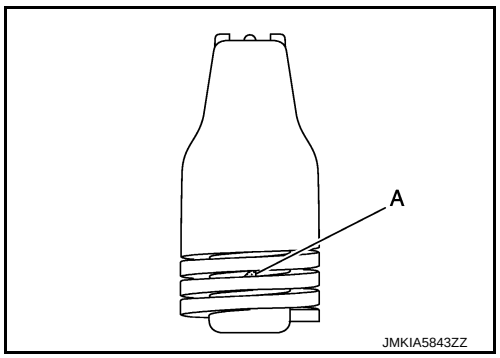
Unit: mm (in)

Portion				Standard	Difference (LH/RH, MAX)
Roof panel – Back door	A – A	D	Clearance	5.0 – 7.0 (0.197 – 0.276)	—
		E	Surface height	0.9 – 2.9 (0.035 – 0.114)	—

Portion				Standard	Difference (LH/RH, MAX)
Rear combination lamp – Back door glass	B – B	F	Clearance	2.8 – 7.2 (0.110 – 0.283)	<2.0 (0.079)
Rear bumper fascia – Back door	C – C	G	Clearance	6.0 – 10.0 (0.236 – 0.394)	—
		H	Surface height	(-2.5) – (+1.0) [(-0.098) – (+0.039)]	—

FITTING ADJUSTMENT PROCEDURE

1. Loosen back door striker mounting bolts.
2. Loosen back door hinge mounting nuts (back door side).
3. Adjust back door using back door striker and back door hinge to the specified value, as shown in the following table.
4. After adjustment tighten back door striker mounting bolts and back door hinge mounting nuts (back door side) to the specified torque.
5. Screw bumper rubber (upper) into the stopper position (A), and then loosen by a half turn.
6. Screw bumper rubber (lower) into the end position of threads.



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

BACK DOOR STRIKER ADJUSTMENT

Adjust back door striker so that it becomes parallel with back door lock insertion direction.

BACK DOOR STRIKER

BACK DOOR STRIKER : Removal and Installation

INFOID:0000000007579066

REMOVAL

1. Remove luggage rear plate. Refer to INT-34, "LUGGAGE REAR PLATE : Removal and Installation".
2. Remove TORX bolts, and then remove back door striker.

INSTALLATION

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

CAUTION:
- **After installation, check back door open/close, lock/unlock operation.**
- **After installation, perform the fitting adjustment. Refer to DLK-256, "BACK DOOR ASSEMBLY : Adjustment".**

BACK DOOR HINGE

BACK DOOR HINGE : Removal and Installation

INFOID:0000000007579067

REMOVAL

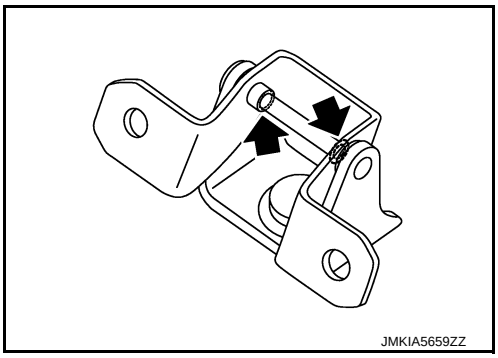
1. Remove back door assembly. Refer to DLK-253, "BACK DOOR ASSEMBLY : Removal and Installation".
2. Remove back door hinge mounting nuts (body side), and then remove back door hinge.

INSTALLATION

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

CAUTION:

- **After installation, check back door open/close, lock/unlock operation.**
- **After installation, perform the fitting adjustment. Refer to DLK-256, "BACK DOOR ASSEMBLY : Adjustment".**
- **Check back door hinge rotating part for poor lubrication. If necessary, apply body grease.**



BACK DOOR STAY

BACK DOOR STAY : Removal and Installation

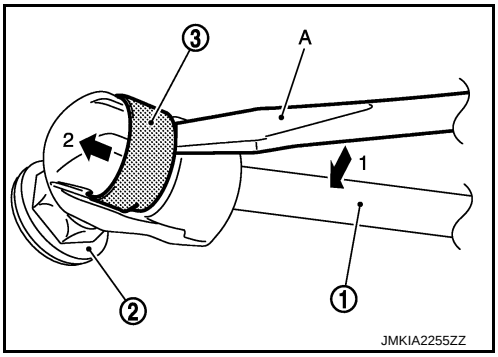
INFOID:0000000007579068

REMOVAL

1. Remove luggage side upper finisher and rear pillar cap. Refer to INT-35, "LUGGAGE SIDE UPPER FINISHER : Removal and Installation".
2. Support the back door with the suitable material to prevent it from falling.

   WARNING:
   Bodily injury may occur if no supporting rod is holding the back door open when removing the back door stay.
3. Remove back door stay mounting bolts (body side).
4. Remove the metal clip (3) located on the connection between the back door stay (1) and the stud ball (2) (back door side) by using a flat-bladed screwdriver (A).

   CAUTION:
   Be careful not to damage painted surface.
5. Remove back door stay (back door side).



6. Remove mounting bolts, and then remove back door stay lower bracket.

INSTALLATION

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

CAUTION:

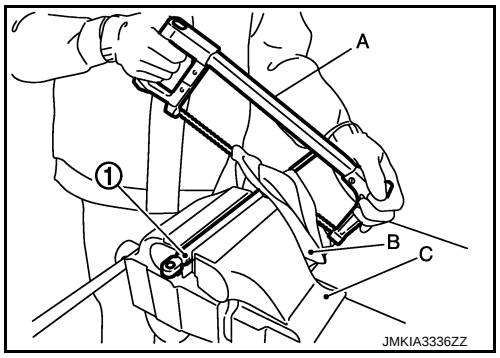
- **Apply anticorrosive agent onto the mounting surface.**
- **After installation, check back door open/close, lock/unlock operation.**

BACK DOOR STAY : Disposal

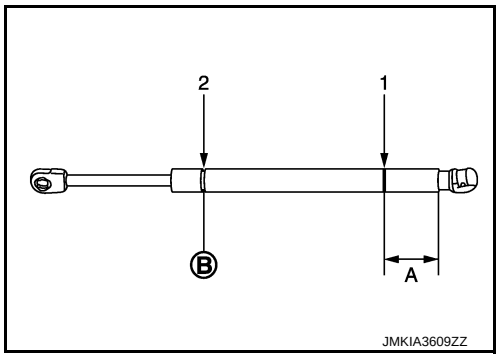
INFOID:0000000007579069

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

CAUTION:
- **When cutting a hole on back door stay, always cover a hacksaw using a shop cloth (B) to avoid scattering metal fragments or oil.**
- **Wear eye protection (safety glasses).**
- **Wear gloves.**



A: 20 mm (0.787 in)
B: Cut at the groove.



BACK DOOR WEATHER-STRIP

BACK DOOR WEATHER-STRIP : Removal and Installation

INFOID:0000000007579070

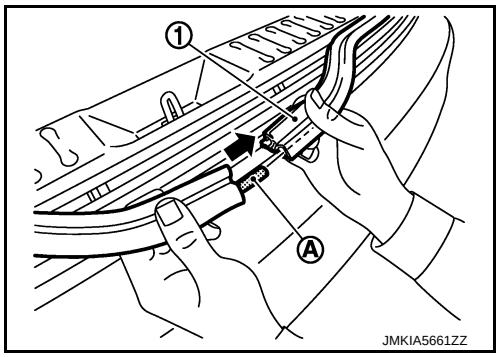
REMOVAL

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

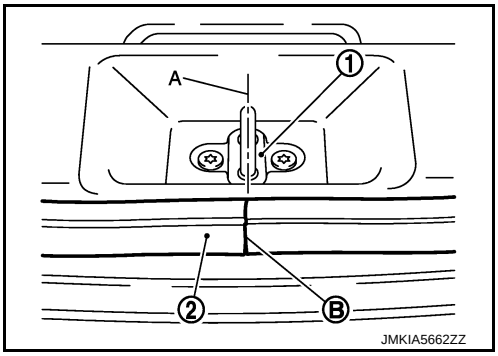
CAUTION:
Never pull strongly on weather-strip.

INSTALLATION

1. Working from the upper section, align weather-strip center mark with vehicle center position mark and install weather-strip onto the vehicle.
2. For the lower section, insert pad (A) into weather-strip (1), and then fix the connection point.



3. Align the connecting point (B) of weather-strip (2) to the center (A) of striker (1), and then install as shown in the figure.

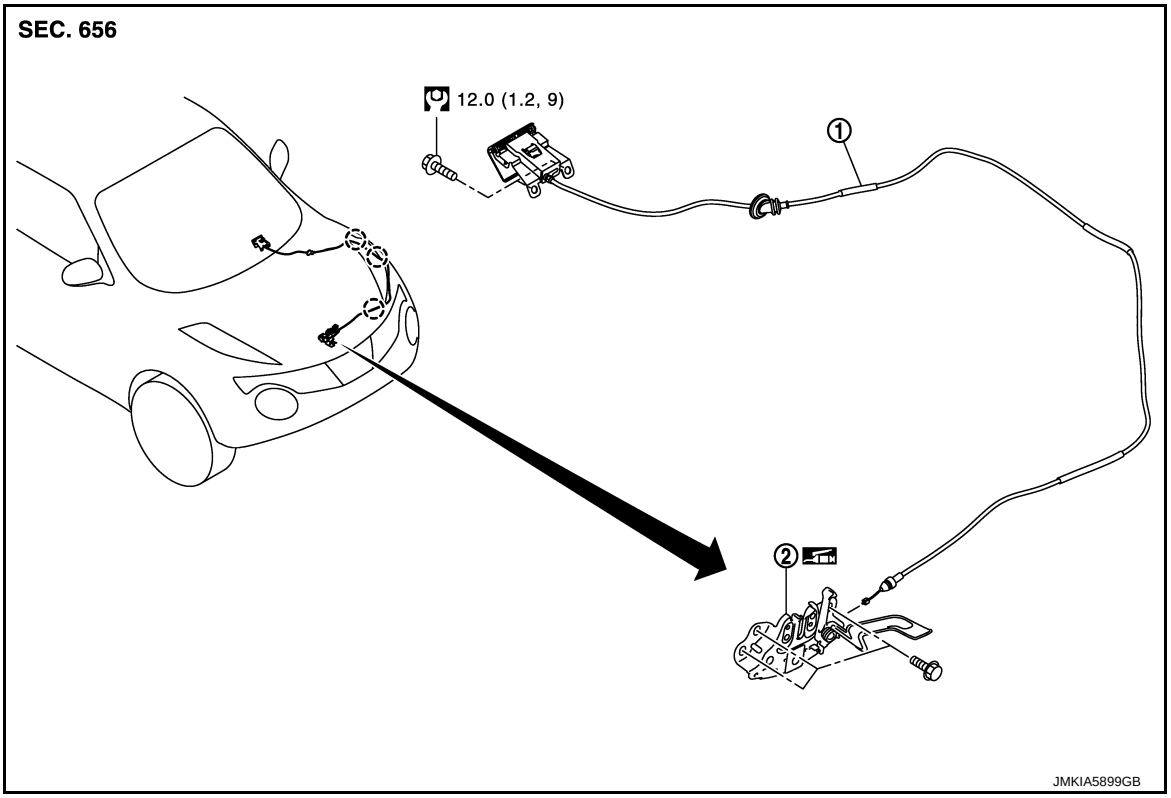


4. Pull weather-strip gently to ensure that there is no loose section.
NOTE:
Check that weather-strip fits tightly in each corner and luggage rear plate.

HOOD LOCK

Exploded View

INFOID:0000000007579071



1. Hood lock control cable assembly
2. Hood lock assembly

: Clip

: N·m (kg-m, ft-lb)

: Body grease

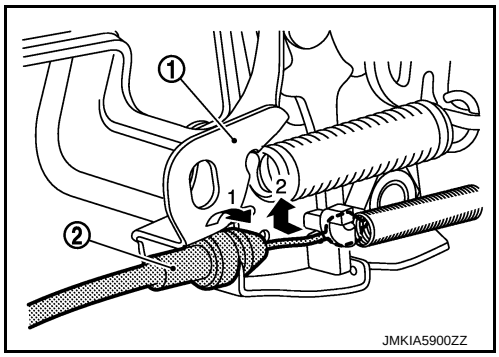
HOOD LOCK

HOOD LOCK : Removal and Installation

INFOID:0000000007579072

REMOVAL

1. Remove front center grille. Refer to EXT-17, "Removal and Installation".
2. Remove crash zone sensor. Refer to SR-22, "Removal and Installation".
3. Remove hood lock assembly mounting bolts, and then remove hood lock assembly.
4. Disconnect hood lock control cable assembly (2) from hood lock assembly (1).



INSTALLATION

Note the following items, 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-233, "HOOD ASSEMBLY : Adjustment".**
- **After installation, perform hood lock control inspection. Refer to DLK-262, "Inspection".**

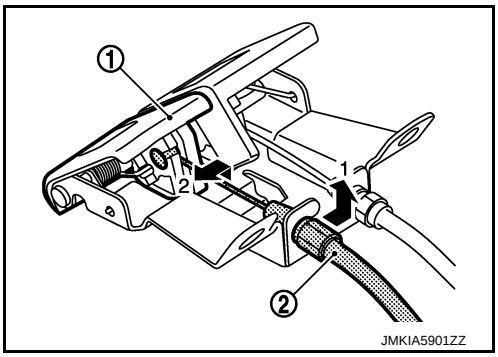
HOOD LOCK CONTROL CABLE

HOOD LOCK CONTROL CABLE : Removal and Installation

INFOID:0000000007579073

REMOVAL

1. Disconnect hood lock control cable assembly from hood lock assembly.
2. Remove fender protector (LH). Refer to EXT-21, "Removal and Installation".
3. Remove hood lock cable clip.
4. Remove hood lock control cable assembly of instrument lower panel (LH), and then remove fuel filler lid opener cable (2) from fuel filler lid opener lever (1).



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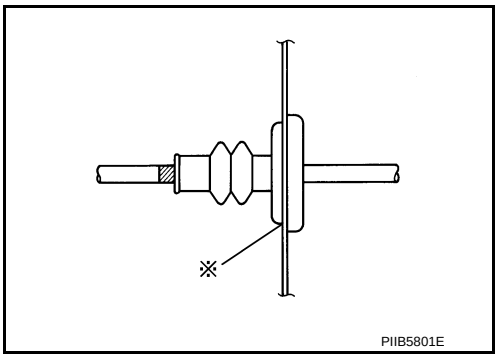
5. Remove grommet on the lower dash, and pull the hood lock control cable toward the passenger compartment.
   CAUTION:
   While pulling, never to damage (peeling) the outside of hood lock control cable.

INSTALLATION

Note the following items, and 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.**



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- **Check that hood lock control cable is properly engaged with hood lock.**
- **After installation, perform hood fitting adjustment. Refer to DLK-233, "HOOD ASSEMBLY : Adjustment".**
- **After installation, perform hood lock control inspection. Refer to DLK-262, "Inspection".**

Inspection

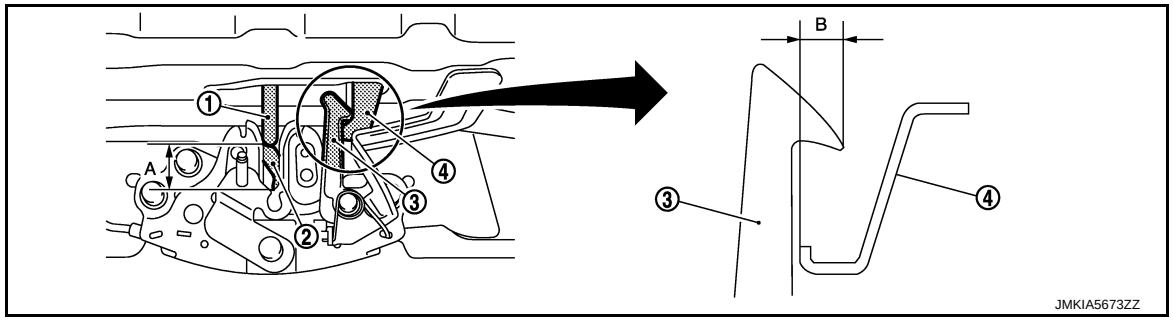
INFOID:0000000007579074

NOTE:

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

1. Check that secondary latch is securely engaged with securely striker from the dead load of the hood assembly.

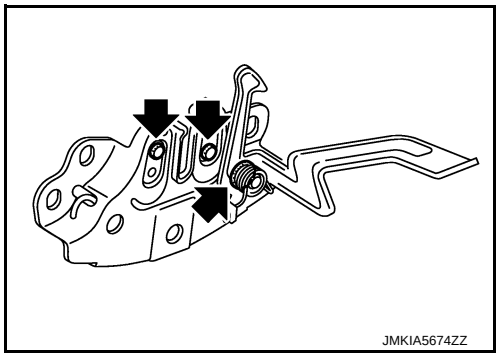
2. Check that primary latch is securely engaged with primary striker when hood assembly is closed [free-fall from approximately 200 mm (7.874 in) height].
CAUTION:
Never free-fall hood assembly from a height of 300 (11.811 in) mm or more.
3. While operating the hood opener carefully, check that the front end of the hood is lifted by approximately 20 mm (0.787 in) (A). Also, check that the hood opener returns to the original position.



1. Primary striker
2. Primary latch
3. Secondary latch
4. Secondary striker

4. Check that secondary latch is properly engaged with secondary striker [6.8 mm (0.268 in)] (B).
5. Check the hood lock lubrication condition. If necessary, apply body grease to hood lock.

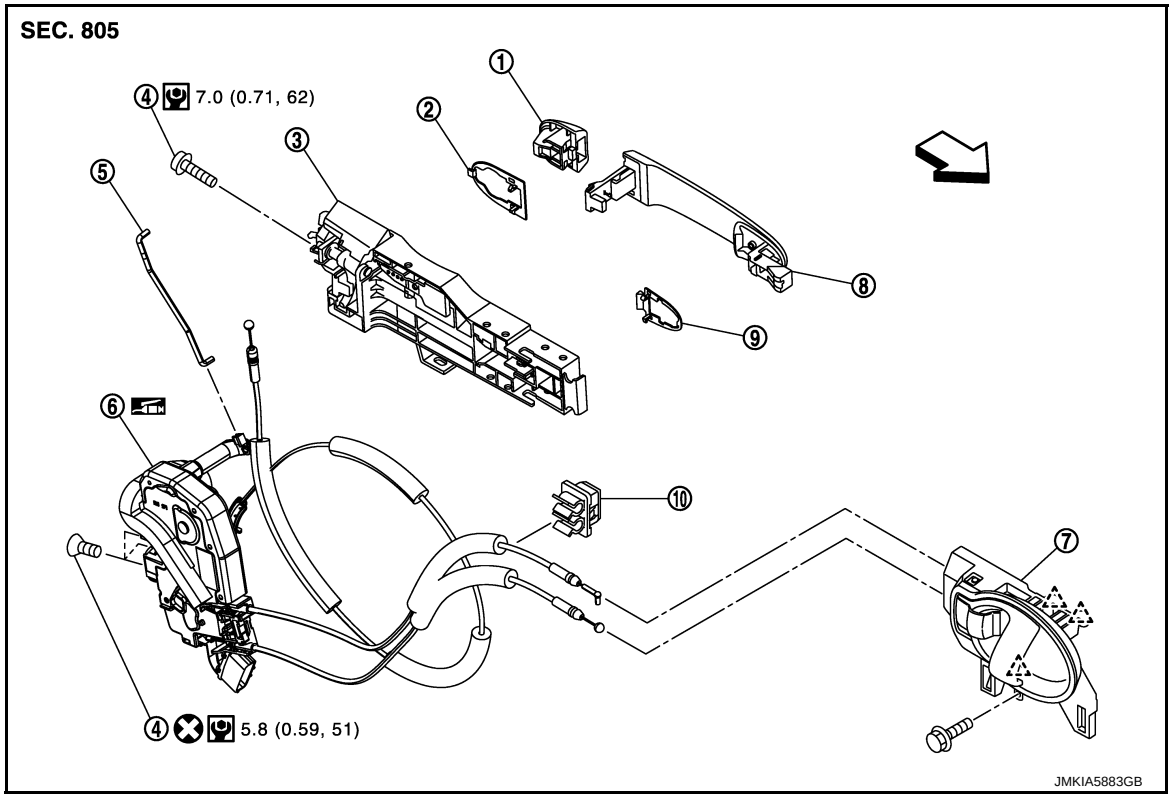
⬅ : Grease up point



FRONT DOOR LOCK

Exploded View

INFOID:0000000007579075



1. Door key cylinder assembly (driver side)
   Outside handle escutcheon (passenger side)
2. Rear gasket
3. Outside handle bracket
4. TORX bolt
5. Key rod (driver side)
6. Door lock assembly
7. Inside handle
8. Outside handle
9. Front gasket
10. Cable clip

: Pawl

: Vehicle front

: Do not reuse

: N·m (kg-m, in-lb)

: Body grease

DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:0000000007579076

REMOVAL

1. Remove front door glass and front door lower sash (rear). Refer to GW-16, "Removal and Installation".
2. Remove inside handle. Refer to DLK-265, "INSIDE HANDLE : Removal and Installation".
3. Disengage inside handle cable and lock knob cable from cable clip.
4. Remove outside handle bracket. Refer to DLK-265, "OUTSIDE HANDLE : Removal and Installation".
5. Remove door lock assembly TORX bolts.
6. Disconnect door lock actuator connector, and then remove door lock assembly.

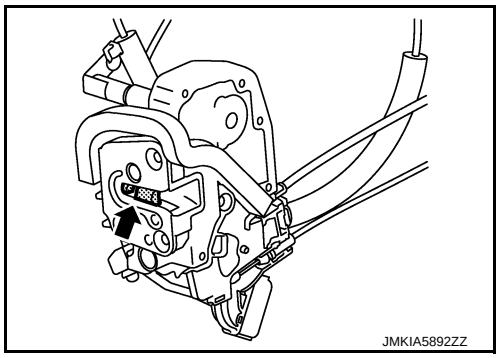
INSTALLATION

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

CAUTION:

- **Never reuse TORX bolt. Always replace it with a new one when it is removed.**
- **Check door open/close, lock/unlock operation after installation.**
- **Check door lock cable is properly engaged with outside handle bracket.**
- **Check door lock assembly for poor lubrication. Apply body grease to door lock if necessary.**

: Grease up point



INSIDE HANDLE

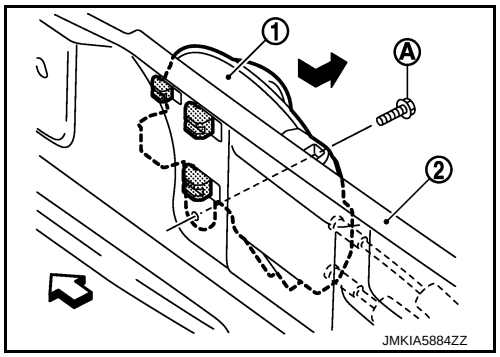
INSIDE HANDLE : Removal and Installation

INFOID:0000000007579077

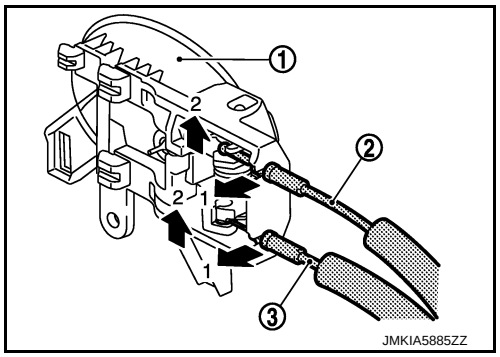
REMOVAL

1. Remove front door finisher. Refer to INT-12, "Removal and Installation".
2. Remove inside handle mounting bolt (A).
3. Disengage inside handle (1) from door panel (2) while sliding inside handle toward vehicle rear, and then separate inside handle.

: Vehicle front



4. Disengage inside handle cable (3) and lock knob cable (2), and then remove inside handle (1).



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

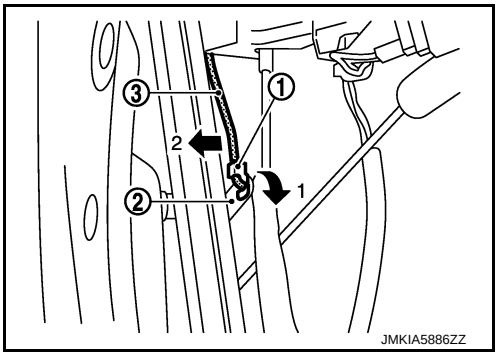
INFOID:0000000007579078

REMOVAL

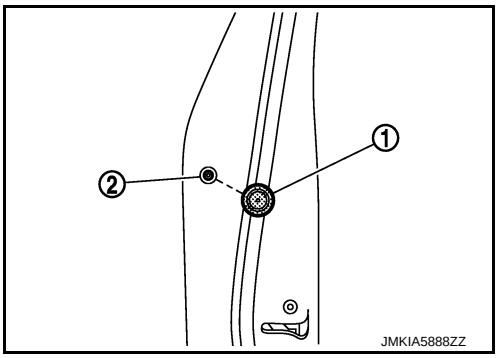
1. Fully close the front door glass.
2. Remove front door finisher. Refer to INT-12, "Removal and Installation".

3. Remove sealing screen.
NOTE:
Cut the butyl-tape so that some parts of the butyl-tape do not remain on the sealing screen, if the sealing screen is reused.

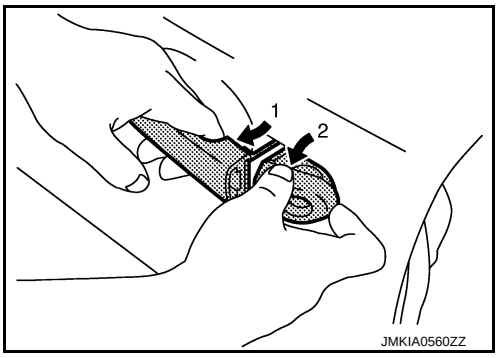
4. Disengage lock holder (1), and then separate key rod (3) from door lock assembly (2).(Driver side)



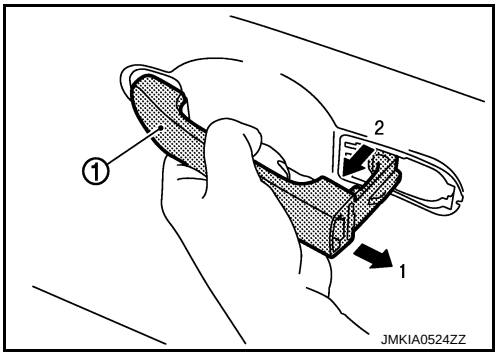
5. Remove grommet (1) of door side. Loosen, through grommet hole, TORX bolt (2) that fixes door lock cylinder. (For passenger side, TORX bolt fixes outside handle escutcheon.)



6. While pulling outside handle, remove door key cylinder assembly (diver side) or outside handle escutcheon (passenger side).

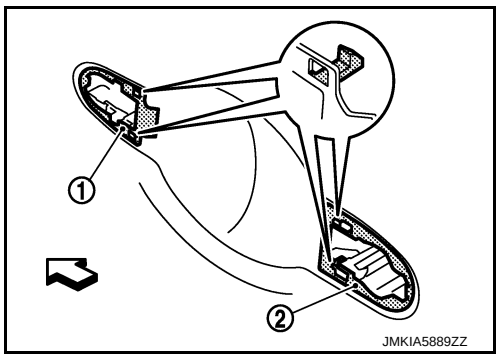


7. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



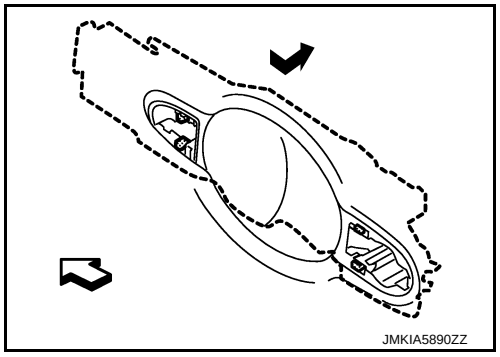
8. Remove front gasket (1) and rear gasket (2).

⇦ : Vehicle front

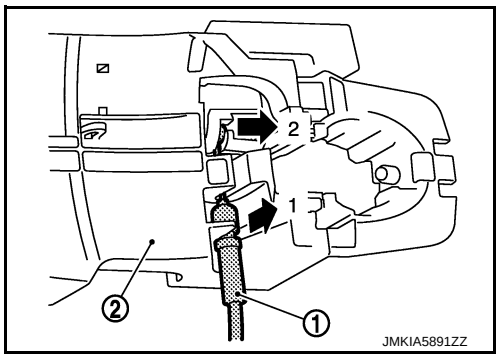


9. Slide outside handle bracket toward rear of vehicle to remove.

⇦ : Vehicle front



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



INSTALLATION

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

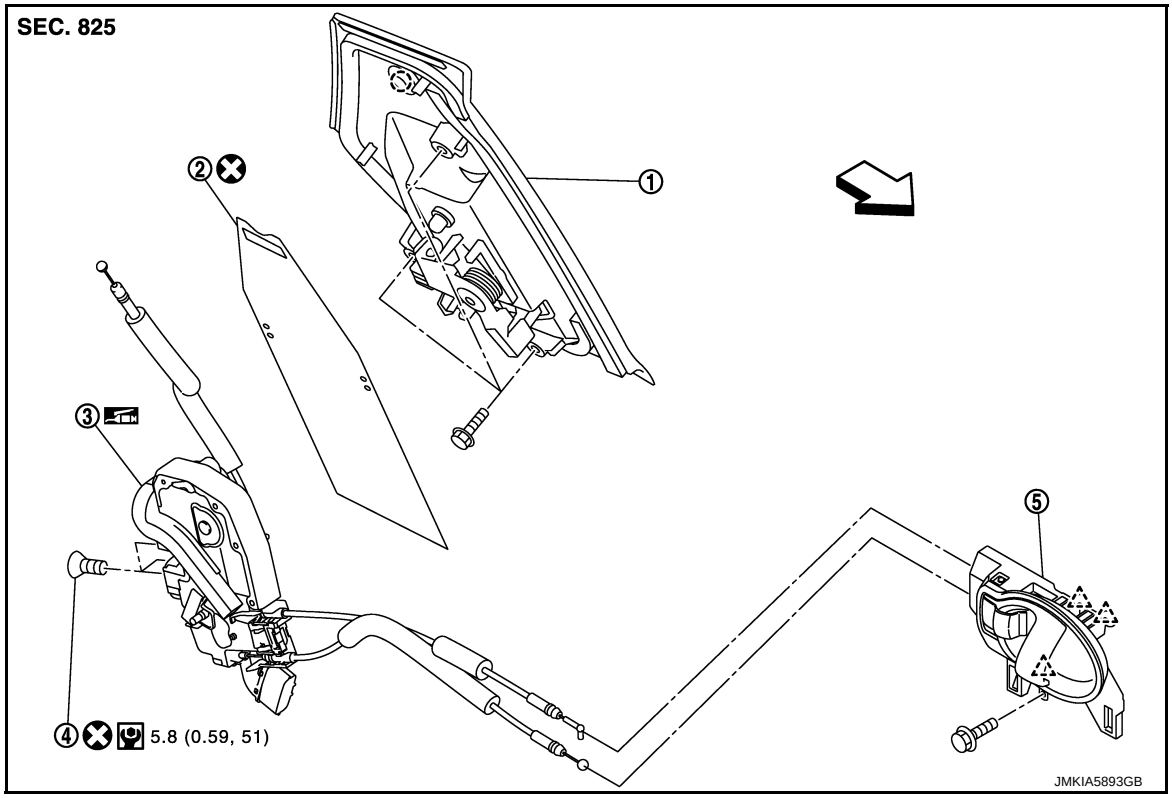
CAUTION:

- **When installing key rod, rotate key rod holder until a click is felt.**
- **Check that door lock cables are normally engaged with inside handle and outside handle.**
- **After installation, check door open/close, and lock/unlock operation.**

REAR DOOR LOCK

Exploded View

INFOID:0000000007579079



1. Outside handle assembly
2. Rear door sealing screen
3. Door lock assembly
4. TORX bolt
5. Inside handle

: Clip
: Pawl
: Vehicle front
: Do not reuse
: N·m (kg-m, in-lb)
: Body grease

DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:0000000007579080

REMOVAL

1. Remove rear door glass and rear door lower sash (rear). Refer to GW-20, "Removal and Installation".
2. Remove inside handle. Refer to DLK-269, "INSIDE HANDLE : Removal and Installation".
3. Remove outside handle. Refer to DLK-269, "OUTSIDE HANDLE : Removal and Installation".
4. Remove door lock assembly TORX bolts.
5. Disconnect door lock actuator connector, and then remove door lock assembly.

INSTALLATION

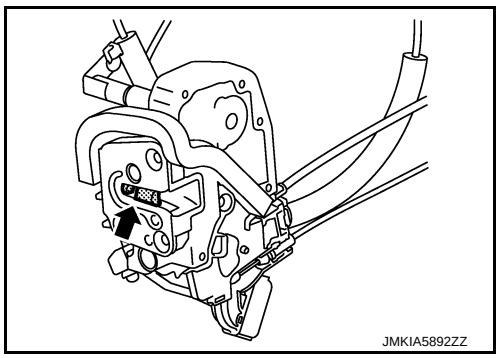
Note the following items, and install in the reverse order of removal.

CAUTION:

- **Never reuse TORX bolt. Always replace it with a new one when it is removed.**
- **Check door open/close, lock/unlock operation after installation.**

- **Check door lock assembly for poor lubrication. Apply body grease to door lock if necessary.**

: Grease up point



INSIDE HANDLE

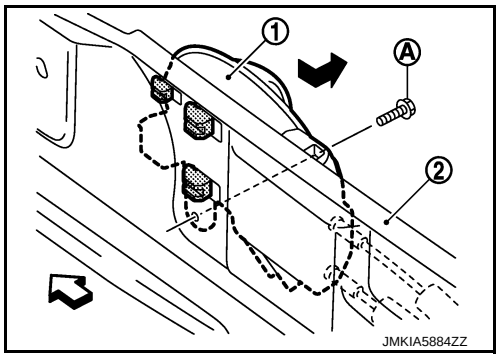
INSIDE HANDLE : Removal and Installation

INFOID:0000000007579081

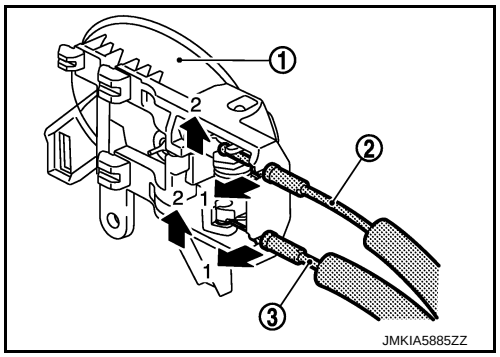
REMOVAL

1. Remove rear door finisher. Refer to INT-15, "Removal and Installation".
2. Remove upper side of sealing screen.
   NOTE:
   Cut the butyl tape so that some parts of the butyl tape do not remain on the sealing screen, if the sealing screen is reused.
3. Remove inside handle mounting bolt (A).
4. Disengage inside handle (1) from door panel (2) while sliding inside handle toward vehicle rear, and then separate inside handle.

: Vehicle front



5. Disengage inside handle cable (3) and lock knob cable (2), and then remove inside handle (1).



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

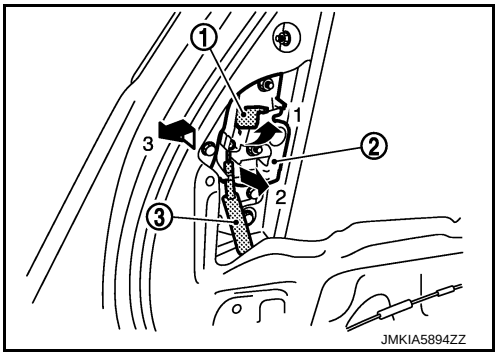
OUTSIDE HANDLE : Removal and Installation

INFOID:0000000007579082

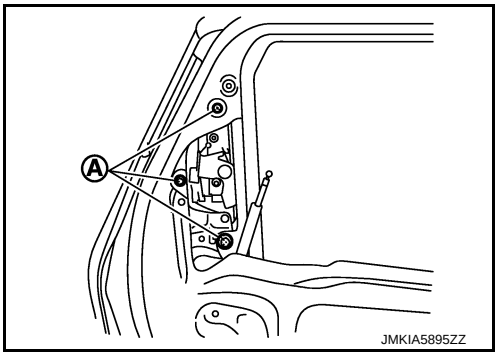
REMOVAL

1. Remove rear door finisher and rear door corner cover inner. Refer to INT-15, "Removal and Installation".
2. Remove rear door sealing screen.

3. Rotate stopper (1) upward.
4. Disengage outside handle cable (2), and then remove outside handle cable from outside handle assembly (3).



5. Remove outside handle assembly mounting bolts (A).

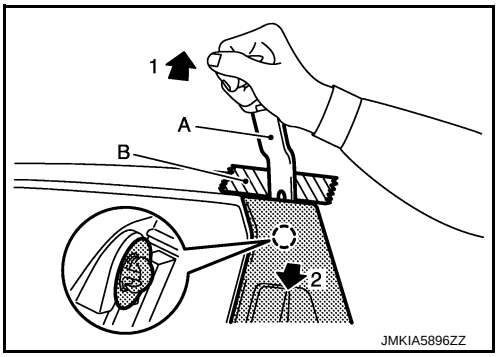


6. Disengage mounting clips using a remover tool (A), and then remove outside handle assembly.

CAUTION:

Apply protective tape (B) on the door panel to protect the painted surface from damage.

: Clip

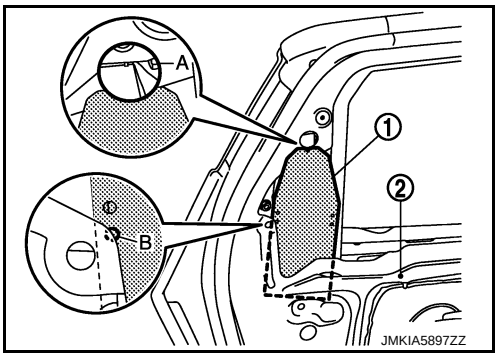


INSTALLATION

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

CAUTION:

- **Never reuse rear door sealing screen. Always replace it with a new one when it is removed. When installing rear door sealing screen, install it according to the following procedure.**
- **Put lower portion of rear door sealing screen (1) into inside of door panel (2).**
- **Perform positioning according to the following procedure, and then install rear door sealing screen.**
- **Align upper portion of rear door sealing screen to hole (A) of door panel as shown in the figure.**
- **Align hole of rear door sealing screen to edge (B) of door panel as shown in the figure.**

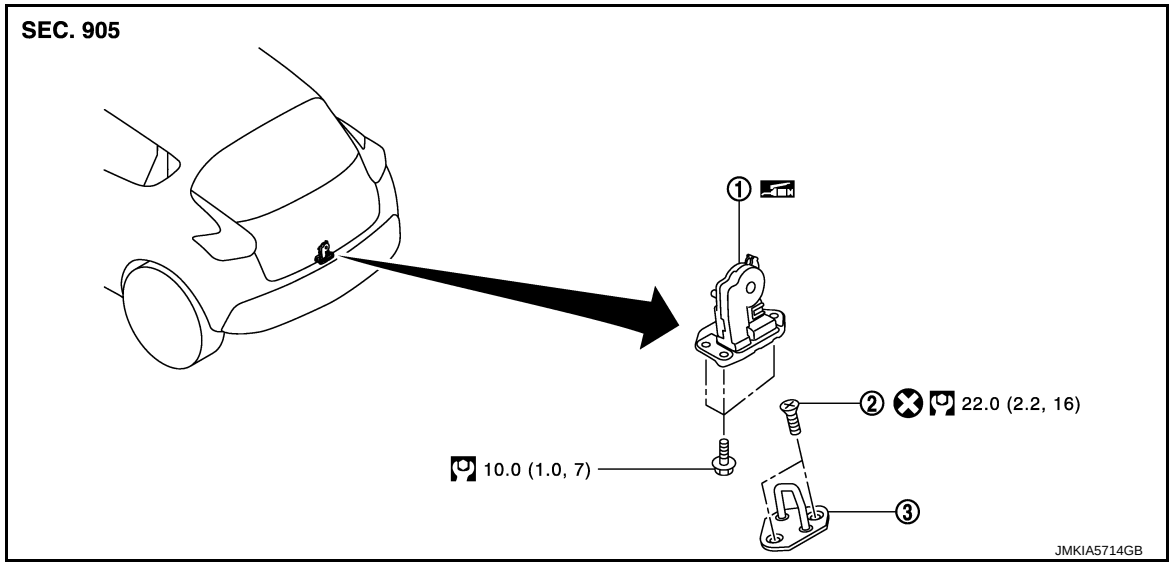


- **Be careful to position outside handle cable normally when installing it. For details, refer to DLK-268, "Exploded View".**
- **Check door open/close, lock/unlock operation after installation.**

BACK DOOR LOCK

Exploded View

INFOID:0000000007579083



1. Back door lock assembly
2. TORX bolt
3. Back door striker

: Do not reuse

: N·m (kg-m, ft-lb)

: Body grease

DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:0000000007579084

REMOVAL

1. Remove the back door lower finisher. Refer to INT-38, "BACK DOOR LOWER FINISHER : Removal and Installation".
2. Remove back door lock assembly mounting bolts.
3. Disconnect back door lock connector, and then remove back door lock assembly.

INSTALLATION

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

CAUTION:

After installation, check back door open/close, and lock/unlock operation.

EMERGENCY LEVER

EMERGENCY LEVER : Unlock procedures

INFOID:0000000007579085

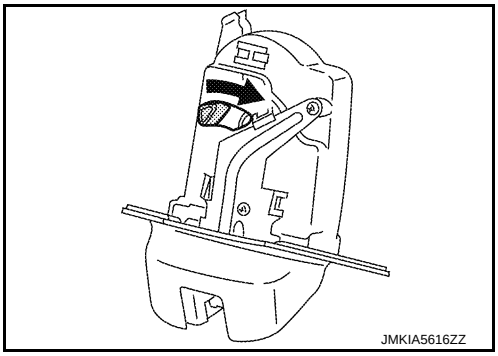
UNLOCK PROCEDURES

NOTE:

If back door lock cannot be unlocked due to a malfunction or battery discharge, follow the procedures to unlock back door.

1. Remove emergency lid. Refer to INT-39, "EMERGENCY LID : Removal and Installation".

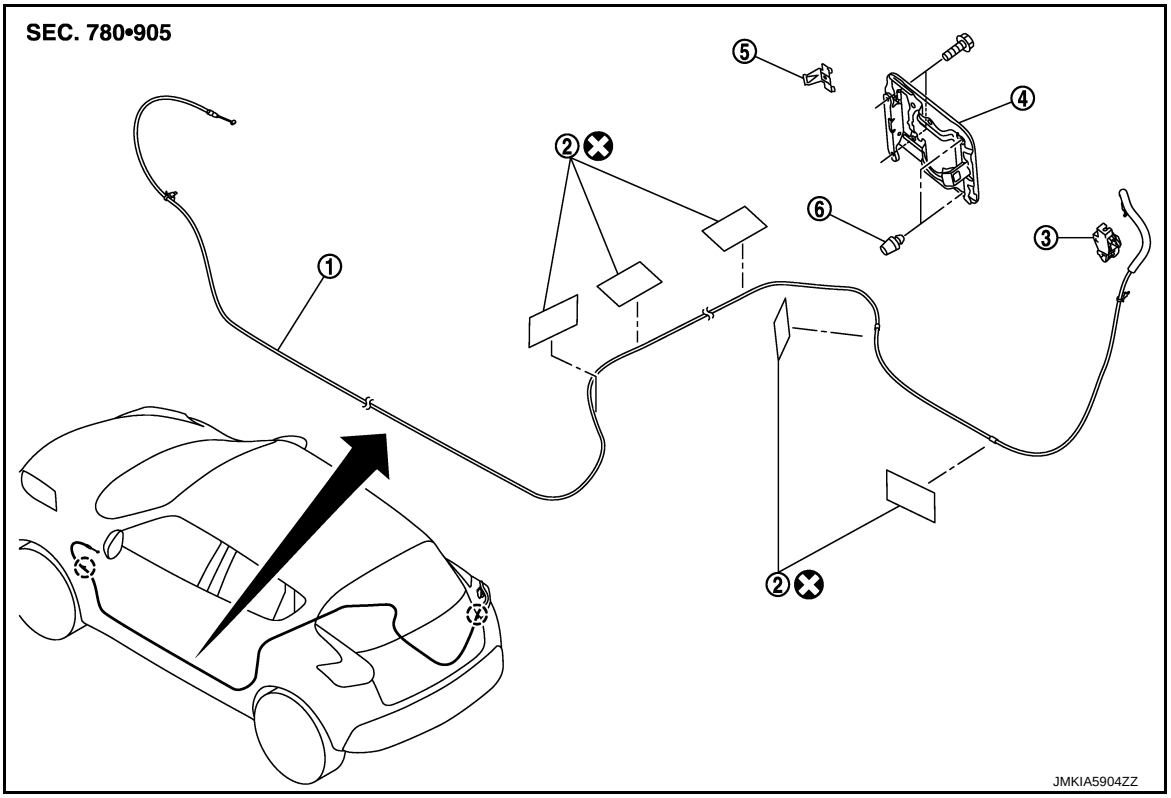
2. From inside the vehicle, rotate emergency lever toward lower direction and unlock.



FUEL FILLER LID OPENER

Exploded View

INFOID:0000000007579086



1. Fuel filler lid opener cable
2. Cable protector
3. Fuel filler lid lock assembly
4. Fuel filler lid assembly
5. Spring
6. Bumper rubber

: Clip

: Do not reuse

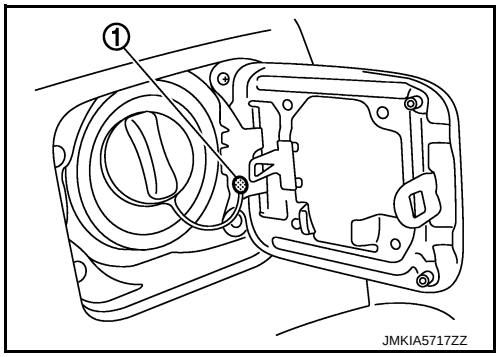
FUEL FILLER LID

FUEL FILLER LID : Removal and Installation

INFOID:0000000007579087

REMOVAL

1. Fully open fuel filler lid.
2. Remove fuel mounting pin (1).



3. Remove mounting screws, and then remove fuel filler lid.

INSTALLATION

Note the following items, 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.**

NOTE:
- The following table shows the specifide values for checking nomal installation status.
- Fitting adjustment cannot be perfomed.

Unit: mm (in)

	Clearance	Evenness
Fuel filler lid – Body side outer	**2.0 – 4.0 (0.079 – 0.157)**	**(-1.0) – (+1.0) [(-0.039) – (+0.039)]**

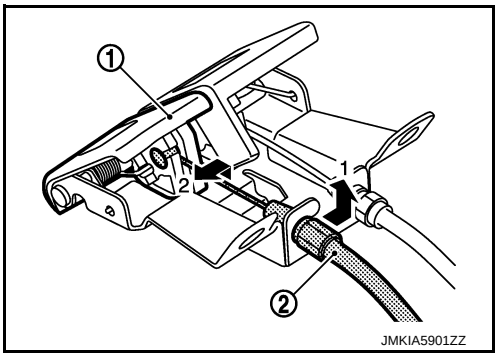
FUEL FILLER OPENER CABLE

FUEL FILLER OPENER CABLE : Removal and Installation

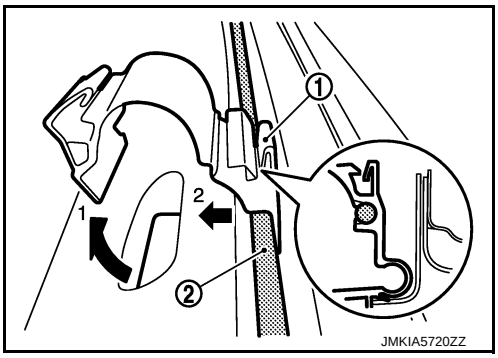
INFOID:0000000007579088

REMOVAL

1. Remove hood lock control cable assembly from instrument lower panel (LH). Refer to DLK-262, "HOOD LOCK CONTROL CABLE : Removal and Installation".
2. Remove fuel filler lid opener cable (2) from fuel filler lid opener lever (1).



3. Remove front kicking plate inner (LH) and rear kicking plate inner (LH and RH). Refer to INT-18, "KICKING PLATE INNER : Removal and Installation".
4. Remove dash side finisher (LH). Refer to INT-20, "DASH SIDE FINISHER : Removal and Installation".
5. Remove center pillar lower garnish (LH). Refer to INT-21, "CENTER PILLAR LOWER GARNISH : Removal and Installation".
6. Remove luggage side lower finisher (RH). Refer to INT-34, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation".
7. Remove fuel filler lid opener cable from fuel filler lid lock assembly. Refer to DLK-275, "FUEL FILLER LID LOCK : Removal and Installation".
8. Disengage each harness protector (1), and then remove fuel filler lid opener cable (2).



9. Remove fuel filler lid opener cable fixing clips, and then remove fuel filler lid opener cable.

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.

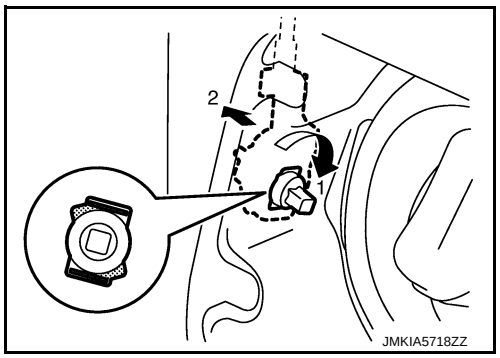
FUEL FILLER LID LOCK

FUEL FILLER LID LOCK : Removal and Installation

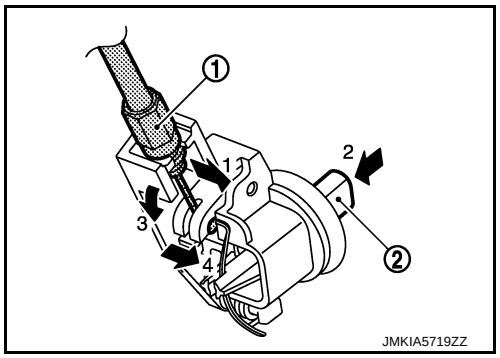
INFOID:0000000007579089

REMOVAL

1. Fully open fuel filler lid.
2. Remove luggage side lower finisher (RH). Refer to INT-34, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation".
3. Rotate and disengage fuel filler lid lock assembly, and then remove fuel filler lid lock assembly.
   NOTE:
   Operation is performed easily when rotating fuel filler lid lock from passenger room side.



4. Disengage fuel filler lid opener cable (1). Remove fuel filler lid opener cable while pressing stopper pin (2).



INSTALLATION

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

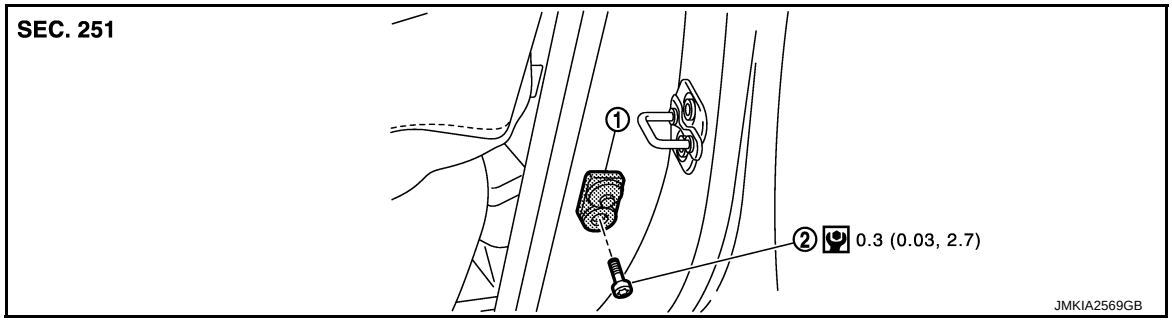
CAUTION:

After installation, check fuel filler lid assembly open/close, lock/unlock operation.

DOOR SWITCH

Exploded View

INFOID:0000000007579090



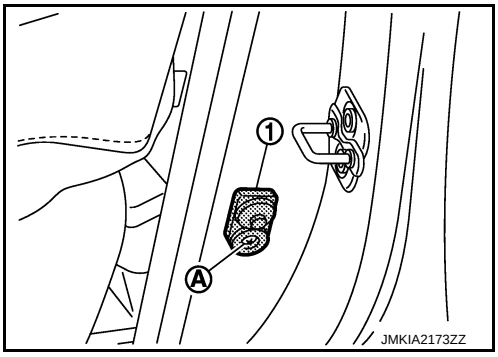
1. Door switch
2. TORX bolt

Removal and Installation

INFOID:0000000007579091

REMOVAL

Remove the TORX bolt (A), and then remove door switch (1).



INSTALLATION

Install in the reverse order of removal.

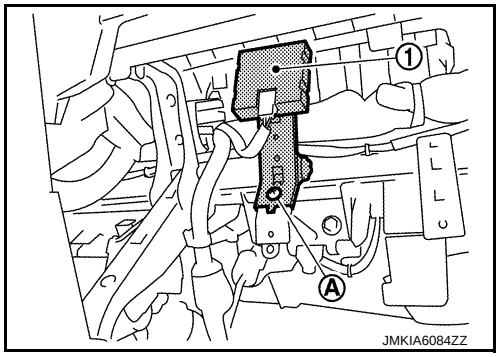
REMOTE KEYLESS ENTRY RECEIVER

Removal and Installation

INFOID:0000000007579092

REMOVAL

1. Remove the glove box assembly. Refer to IP-12, "Removal and Installation".
2. Remove the remote keyless entry receiver (1) mounting bolt (A), and then remove remote keyless entry receiver.



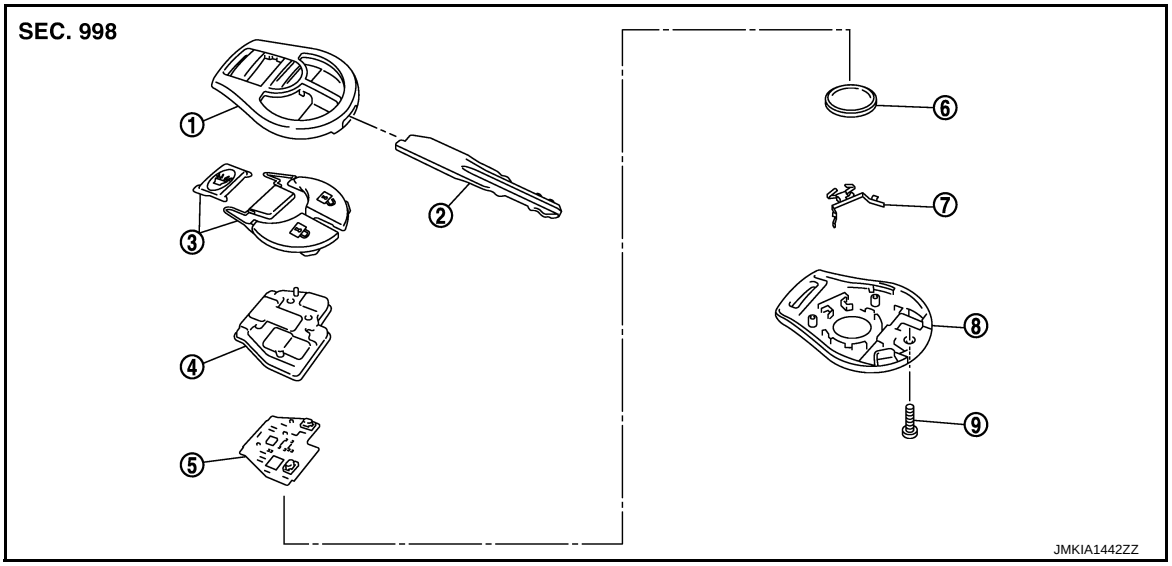
INSTALLATION

Install in the reverse order of removal.

KEYFOB BATTERY

Exploded View

INFOID:0000000007579093



1. Upper case
2. Key
3. Switch cover
4. Switch rubber
5. Board surface
6. Battery
7. plate
8. Lower case
9. Screw

Removal and Installation

INFOID:0000000007579094

REMOVAL

1. Remove screw (9) on the rear of keyfob.
2. Place the key with the lower case (8) facing up. Set a screw-driver wrapped with tape between upper case (1) and lower case (8) and then separate the lower case (8) from the upper case (1).
   CAUTION:
   - **Do not touch the circuit board or battery terminal.**
   - **The keyfob is water-resistant. However, if it does get wet, immediately wipe it dry.**
3. When replacing the circuit board assembly, remove circuit board assembly from the upper case (1). [Circuit board assembly: Switch rubber (4) + Board surface (5)]
   CAUTION:
   Do not touch the printed circuits directly.
4. Remove the battery (6) from the lower case (8) and replace it.

   Battery replacement : Coin-type lithium battery (CR1620)

   CAUTION:
   When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.
5. After replacement, fit the lower and upper cases together, part (4), (7) and tighten with the screw.
   CAUTION:
   After replacing the battery, Be sure to check that door locking operates normally using the keyfob.
   Refer to DLK-207, "Component Function Check".

INSTALLATION

Install in the reverse order of removal.