SECTION DLK
DOOR & LOCK

CONTENTS

PRECAUTION

PRECAUTIONS

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

INFOID:0000000008707234

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

WARNING:

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

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

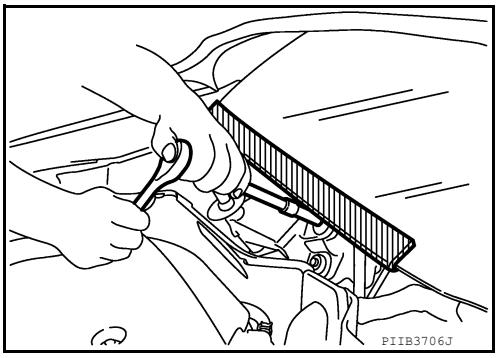
WARNING:

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

Procedure without Cowl Top Cover

INFOID:0000000007987381

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



Precaution for Work

INFOID:0000000008698010

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

- Water soluble dirt:

- Dip a soft cloth into lukewarm water, wring the water out of the cloth and wipe the dirty area.
- Then rub with a soft, dry cloth.

- Oily dirt:

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

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

Precaution for Servicing Doors and Locks

INFOID:0000000008721368

WARNING:

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

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

- Water soluble dirt:
- Dip a soft cloth into lukewarm water, wring the water out of the cloth and wipe the dirty area.
- Then rub with a soft, dry cloth.

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

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

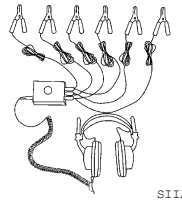
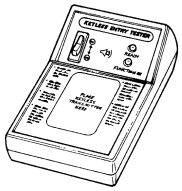
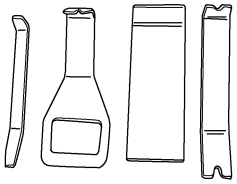
PREPARATION

PREPARATION

Special Service Tools

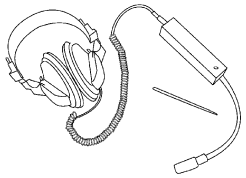
INFOID:0000000007987383

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

Tool number (Kent-Moore No.) Tool name		Description
— (J-39570) Chassis ear	 SIIA0993E	Locating the noise
— (J-43980) NISSAN Squeak and Rattle Kit	 SIIA0994E	Repairing the cause of noise
— (J-43241) Remote Keyless Entry Tester	 LEL946A	Used to test keyfobs
— (J-50190) Signal Tech II	 ALEIA0131ZZ	• Activate and display TPMS transmitter IDs • Display tire pressure reported by the TPMS transmitter • Read TPMS DTCs • Register TPMS transmitter IDs • Check Intelligent Key relative signal strength • Confirm vehicle Intelligent Key antenna signal strength
— (J-46534) Trim Tool Set	 AWJIA0483ZZ	Removing trim components

Commercial Service Tools

INFOID:0000000007987384

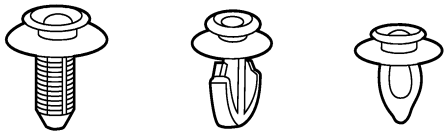
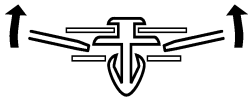
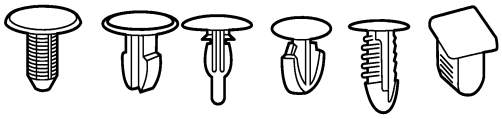
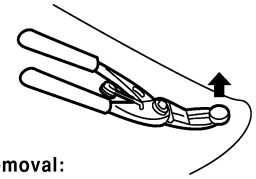
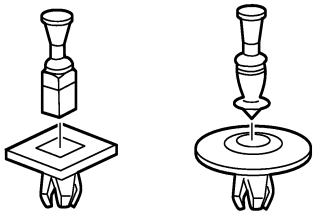
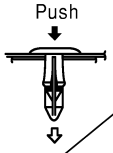
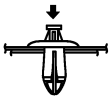
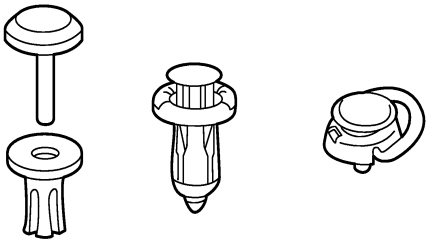
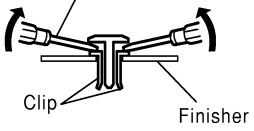
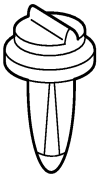
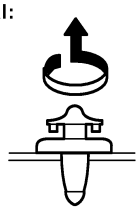
Tool name	Description
Engine ear  SIIA0995E	Locating the noise

CLIP LIST

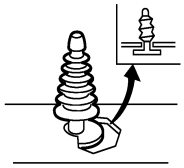
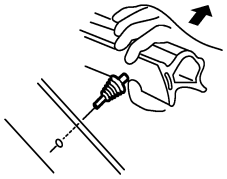
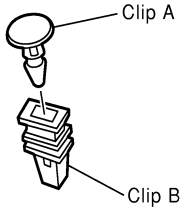
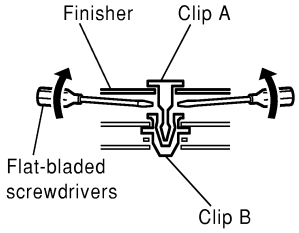
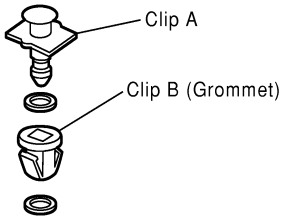
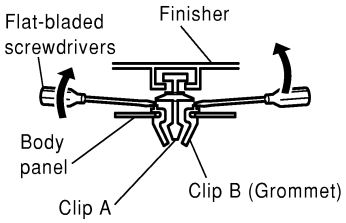
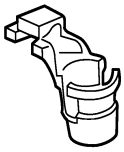
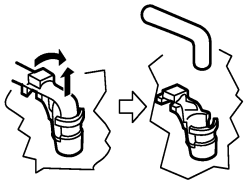
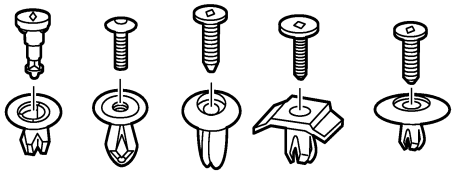
Descriptions for Clips

INFOID:0000000008730518

Replace any clips which are damaged during removal or installation.

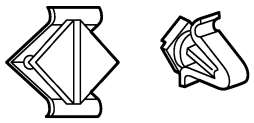
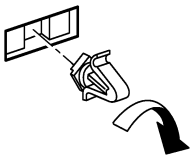
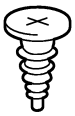
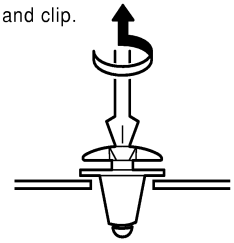
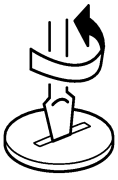
Symbol No.	Shapes	Removal & Installation
C101		**Removal:** Remove by bending up with flat-bladed screwdrivers or clip remover. 
C103		 **Removal:** Remove with a clip remover.
C203		**Removal:** Push center pin to catching position. (Do not remove center pin by hitting it.)  Push  Push **Installation:**
C205		**Removal:** Flat-bladed screwdriver  Clip Finisher
C206		**Removal:** 

SIIA0315E

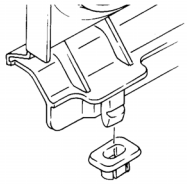
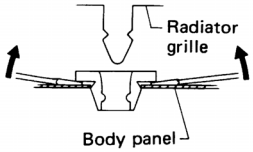
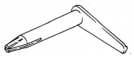
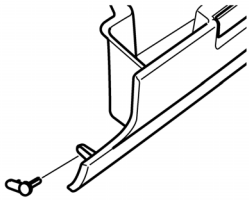
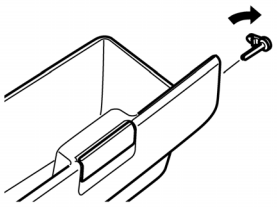
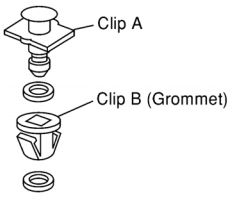
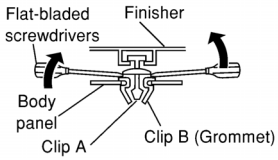
Symbol No.	Shapes	Removal & Installation
CE103 		**Removal:** 
CF110 		**Removal:** 
CF118 		**Removal:** 
CR103		**Removal:** Holder portion of clip must be spread out to remove rod. 
CS101 		**Removal:** 1. Screw out with a Phillips screwdriver. 2. Remove female portion with flat-bladed screwdriver. 

SIIA0316E

CLIP LIST

Symbol No.	Shapes	Removal & Installation
CG101 		**Removal:**  Rotate 45° to remove  **Removal:** **Installation:** 
CS102 		
CS113 		**Removal:** Disconnect upper connection of clip with a flat-bladed screwdriver, then remove clip while inserting a flat-bladed screwdriver between body panel and clip. 
C111 		

SIIA0317E

Symbol No.	Shapes	Removal & Installation
CG104 		**Removal:** **Remove by bending up with flat-bladed screwdrivers.** 
CE114 		
CF118 		**Removal:** 

ALJIA0564GB

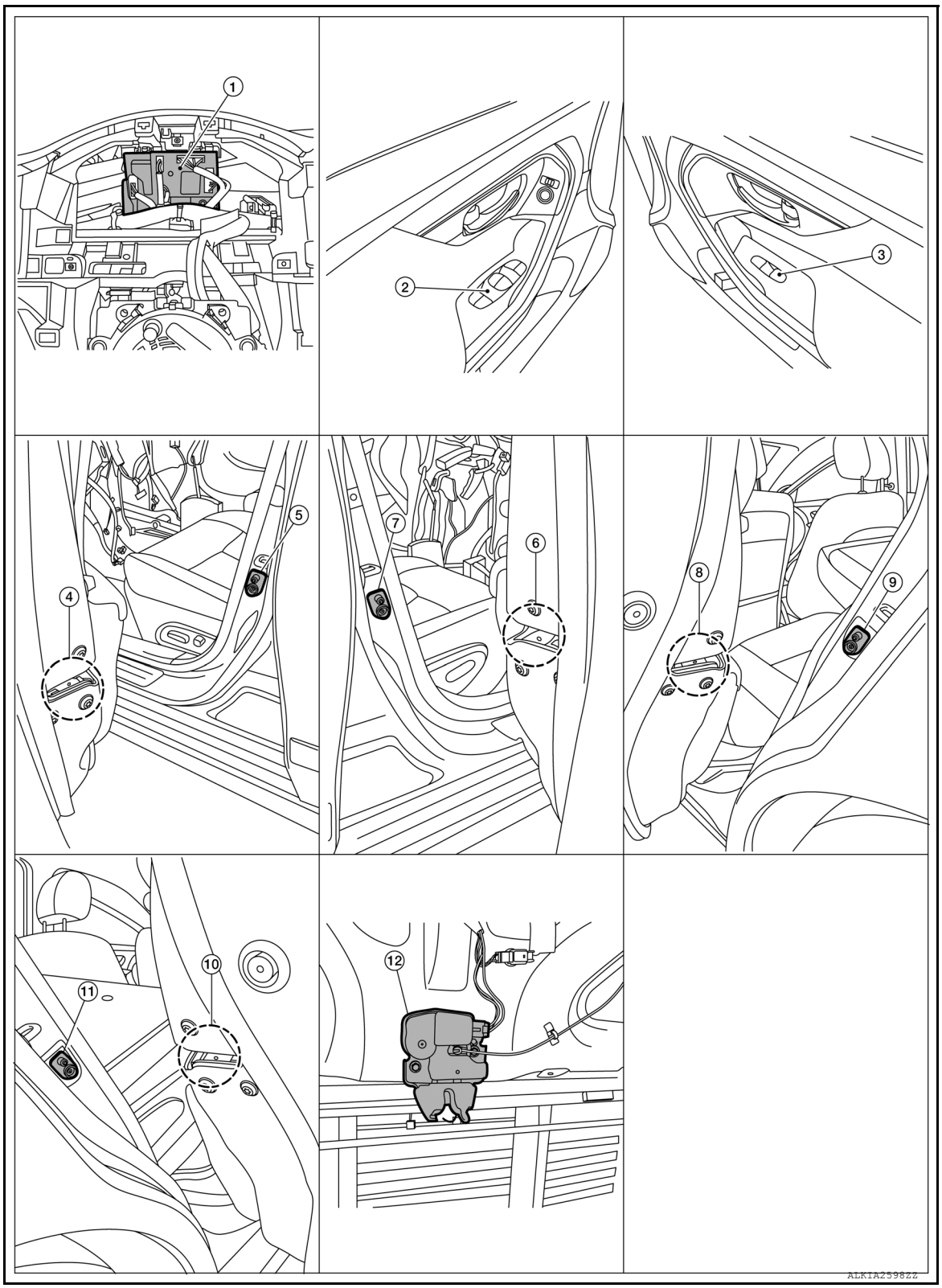
SYSTEM DESCRIPTION

COMPONENT PARTS

POWER DOOR LOCK SYSTEM

POWER DOOR LOCK SYSTEM : Component Parts Location

INFOID:0000000008655951



1. BCM (shown with combination meter removed)
2. Main power window and door lock/unlock switch
3. Power window and door lock/unlock switch RH
4. Front door lock actuator LH
5. Front door switch LH
6. Front door lock actuator RH
7. Front door switch RH
8. Rear door lock actuator LH
9. Rear door switch LH
10. Rear door lock actuator RH
11. Rear door switch RH
12. Trunk lamp switch and trunk release solenoid

POWER DOOR LOCK SYSTEM : Component Description

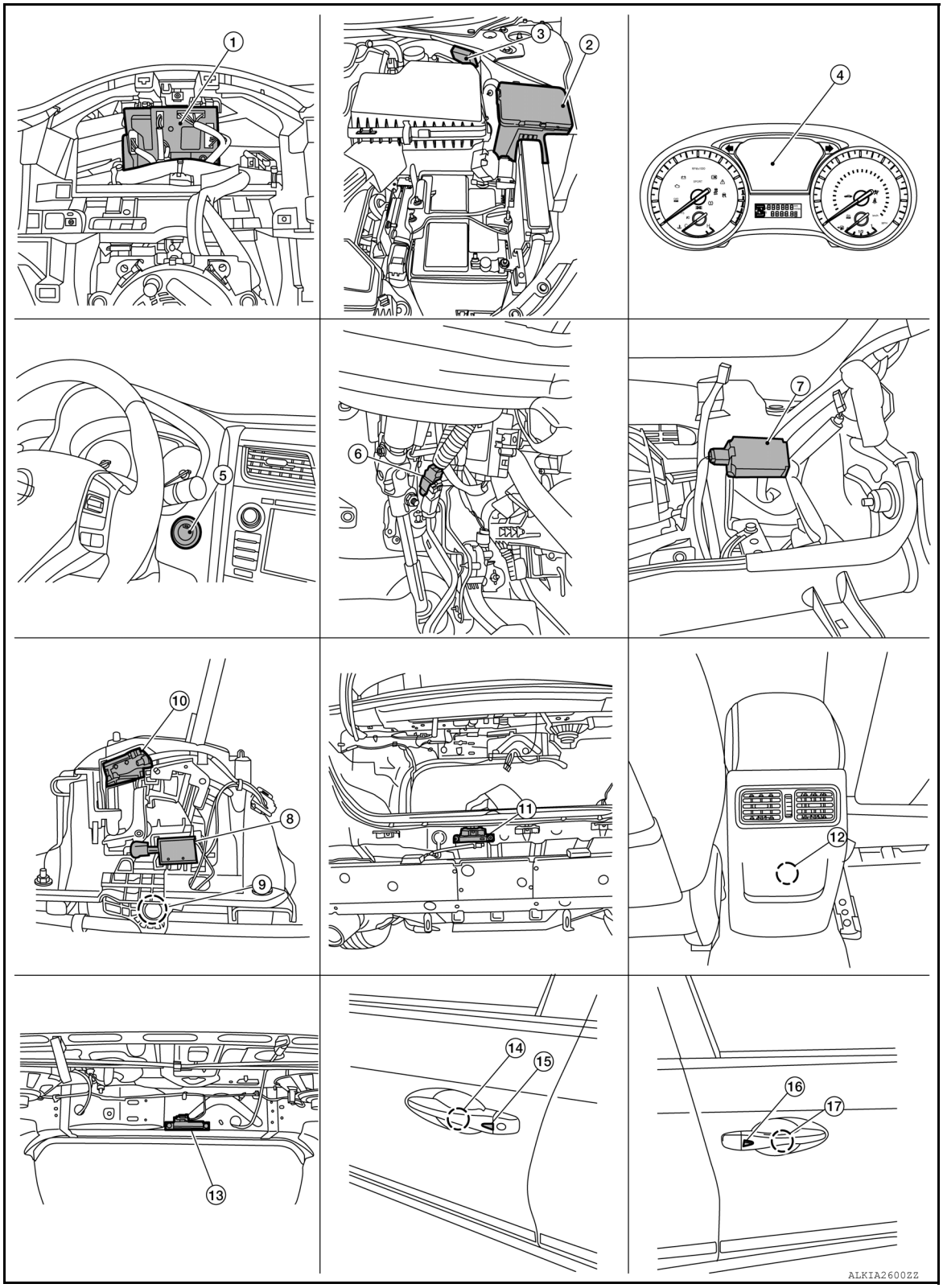
INFOID:0000000008655952

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

INTELLIGENT KEY SYSTEM

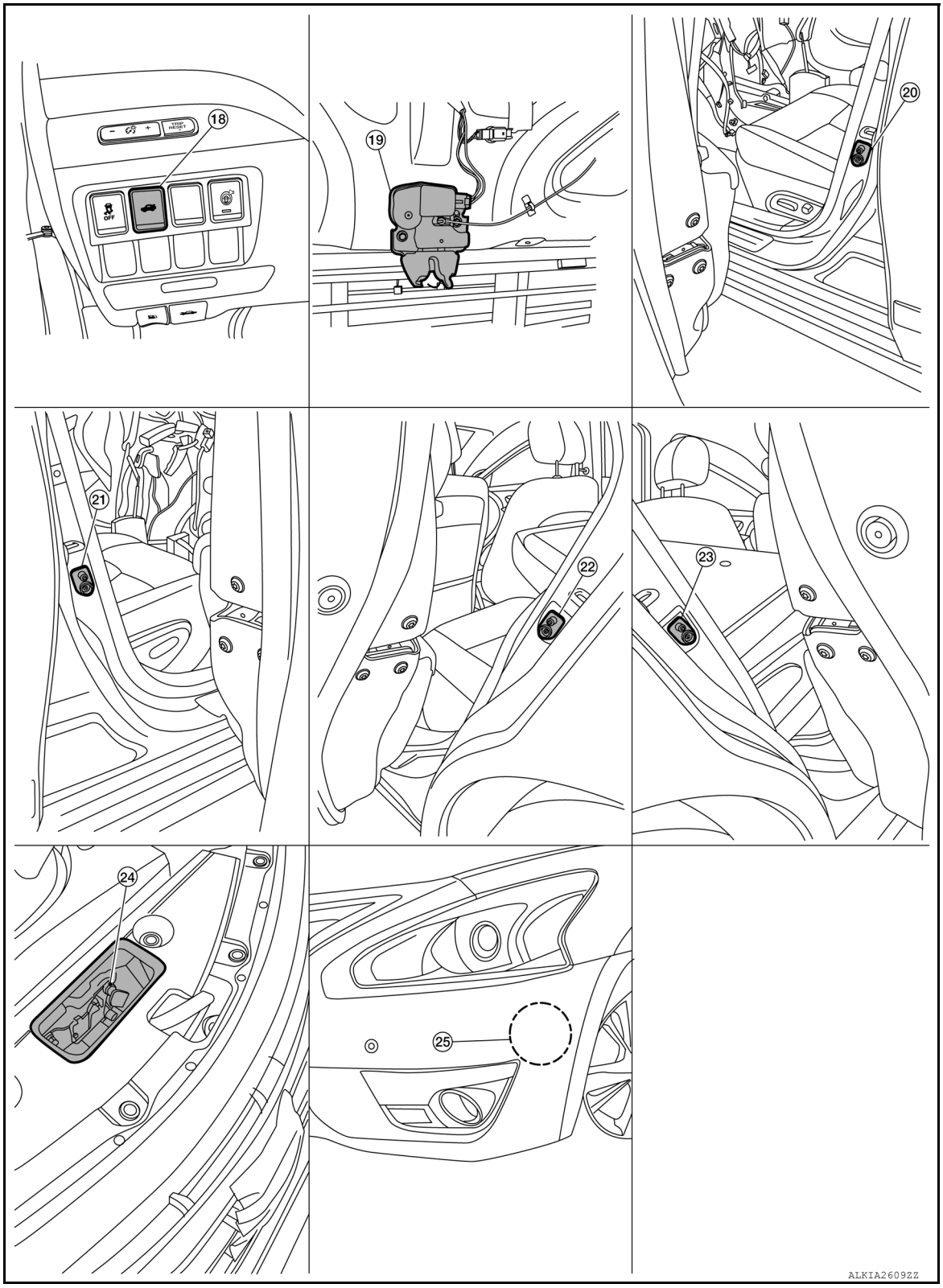
INTELLIGENT KEY SYSTEM : Component Parts Location

INFOID:0000000008655953



1. BCM (view with combination meter removed)
2. IPDM E/R
3. Intelligent Key warning buzzer
4. Combination meter
5. Push button ignition switch
6. Brake switch

7. Remote keyless entry receiver (view from RH side of dash with dash pad removed)
8. CVT shift selector (Shift lock solenoid)
9. CVT shift selector (P (Park) position switch)
10. CVT shift selector (P (Park) position switch Intelligent Key)
11. Outside key antenna (rear bumper) (view with rear bumper cover removed)
12. Inside key antenna (console)
13. Inside key antenna (rear parcel shelf)
14. Outside key antenna (LH)
15. Door request switch (LH) (if equipped)
16. Door request switch (RH) (if equipped)
17. Outside key antenna (RH)



18. Trunk lid opener switch
19. Trunk lamp switch and trunk release solenoid
20. Front door switch LH
21. Front door switch RH
22. Rear door switch LH
    Front door lock assembly LH
23. Rear door switch RH
24. Hood latch (hood switch)
25. Horn (high and low)

INTELLIGENT KEY SYSTEM : Component Description

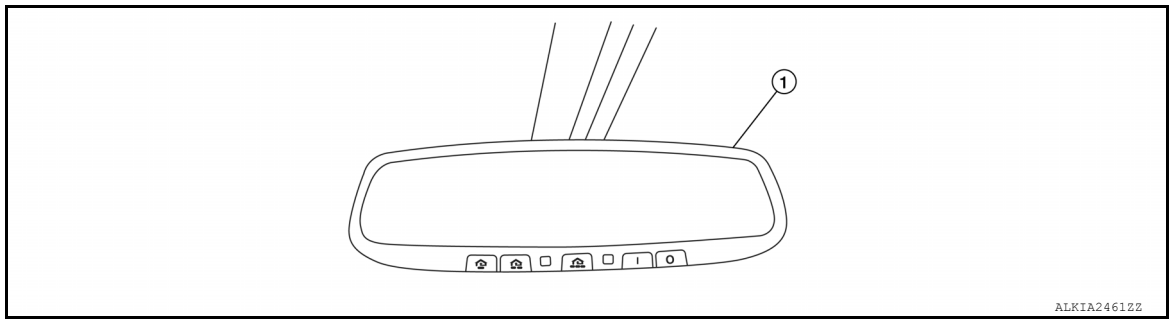
INFOID:0000000008655954

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

INTEGRATED HOMELINK TRANSMITTER

INTEGRATED HOMELINK TRANSMITTER : Component Parts Location

INFOID:0000000008655955



1. Auto anti-dazzling inside mirror

INTEGRATED HOMELINK TRANSMITTER : Component Description

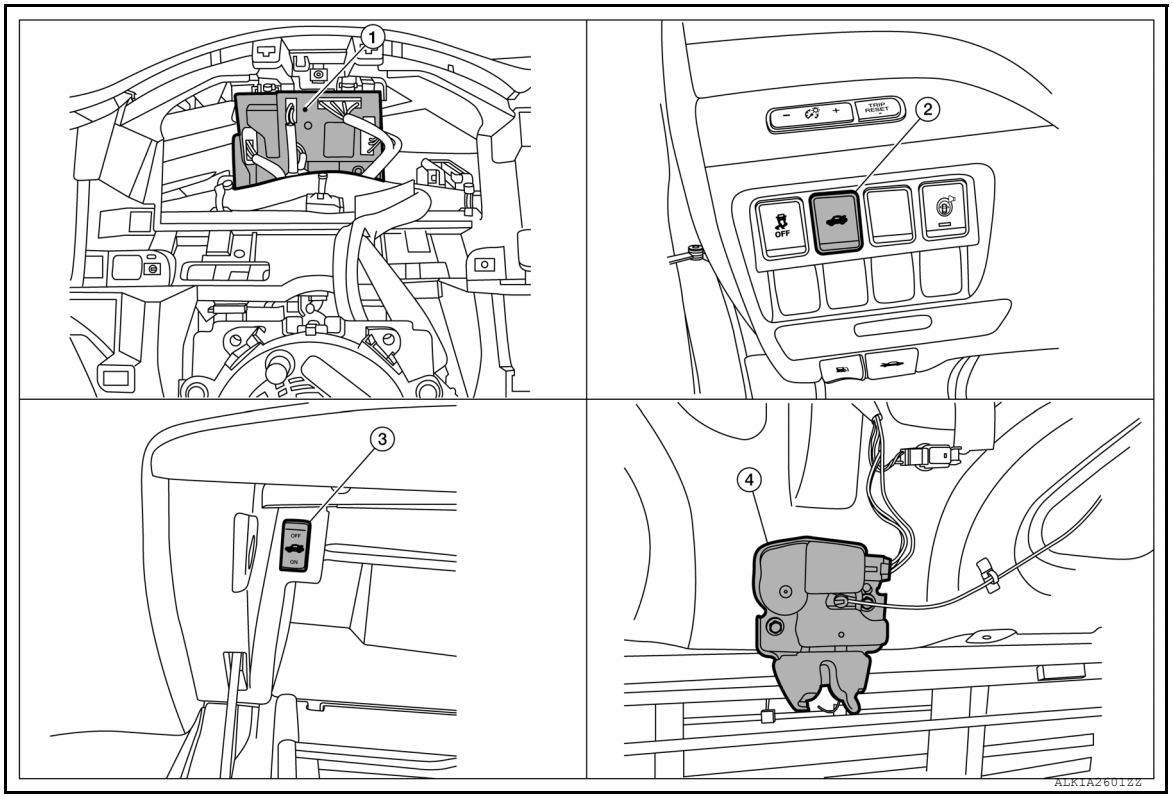
INFOID:0000000008655956

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

TRUNK LID OPENER SYSTEM

TRUNK LID OPENER SYSTEM : Component Parts Location

INFOID:0000000008655982



1. BCM (shown with combination meter removed)
2. Trunk lid opener switch
3. Trunk lid opener cancel switch
4. Trunk lamp switch and trunk release solenoid (trunk release solenoid)

TRUNK LID OPENER SYSTEM : Component Description

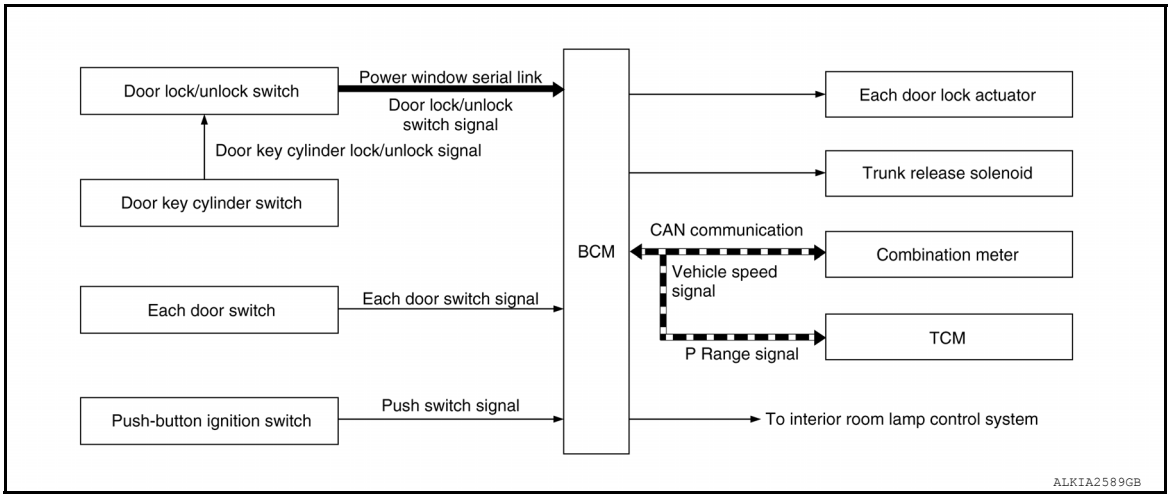
INFOID:0000000008655981

Item	Function
BCM	Transmits trunk open operation to BCM.
Trunk lid opener switch	Transmits trunk open operation to BCM.
Trunk release solenoid	Opens the trunk with the open signal from BCM
Trunk lid opener cancel switch	Cancels the trunk open operation.

SYSTEM (POWER DOOR LOCK SYSTEM)

System Diagram

INFOID:0000000008655959



System Description

INFOID:0000000008655960

DOOR LOCK FUNCTION

Door Lock and Unlock Switch

- The door lock and unlock switch (driver side) is built into power window main switch.
- The door lock and unlock switch (passenger side) is built into front power window switch (passenger side).
- Interlocked with the locking operation of door lock and unlock switch, door lock actuators of all doors are locked.
- Interlocked with the unlocking operation of door lock and unlock switch, door lock actuators of all doors 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 actuators 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 60 seconds after the first unlock operation unlocks all of the other door actuators. (SELECTIVE UNLOCK OPERATION)

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

DOOR KEY CYLINDER SWITCH POWER WINDOW FUNCTION

Driver side door key cylinder LOCK/UNLOCK operation can activate power window. Refer to PWC-73, "System Description".

IGNITION POSITION WARNING FUNCTION

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

INTERIOR ROOM LAMP CONTROL FUNCTION

Interior room lamp is controlled according to door lock/unlock state, refer to INL-7, "System Description".

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (LOCK OPERATION)

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

Vehicle Speed Sensing Auto Door Lock

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

P Range Interlock Door Lock

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

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

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

Without CONSULT
The automatic door lock function ON/OFF can be switched by performing the following operation.

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

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

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (UNLOCK OPERATION)

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

IGN OFF Interlock Door Unlock
All doors are unlocked when the power supply position is changed from ON to OFF.
BCM outputs the unlock signal to all door lock actuators when it detects that the power supply position is changed from ignition switch ON to OFF.

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

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

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

Without CONSULT
The automatic door lock/unlock function ON/OFF can be switched by performing the following operation.

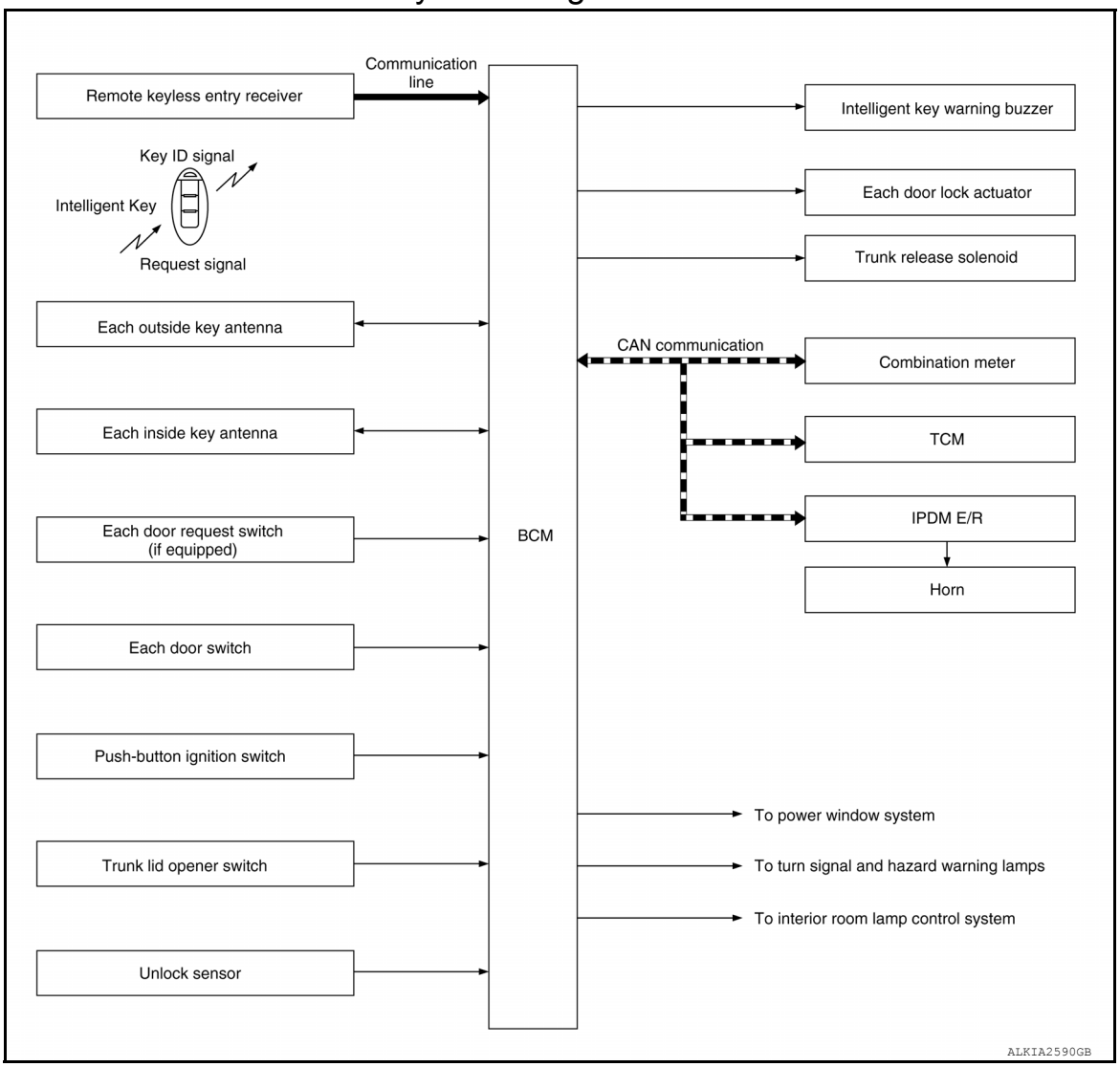
1. Close all doors (door switch OFF)
2. Ignition switch: OFF→ON
3. Press and hold the door lock and unlock switch for 5 seconds or more in the unlock direction within 20 seconds after turning the power supply position ON.
4. The switching is complete when the hazard lamp blinks.

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

SYSTEM (INTELLIGENT KEY SYSTEM)
INTELLIGENT KEY SYSTEM

INTELLIGENT KEY SYSTEM : System Diagram

INFOID:0000000008655961



INTELLIGENT KEY SYSTEM : System Description

INFOID:0000000008655962

- 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.

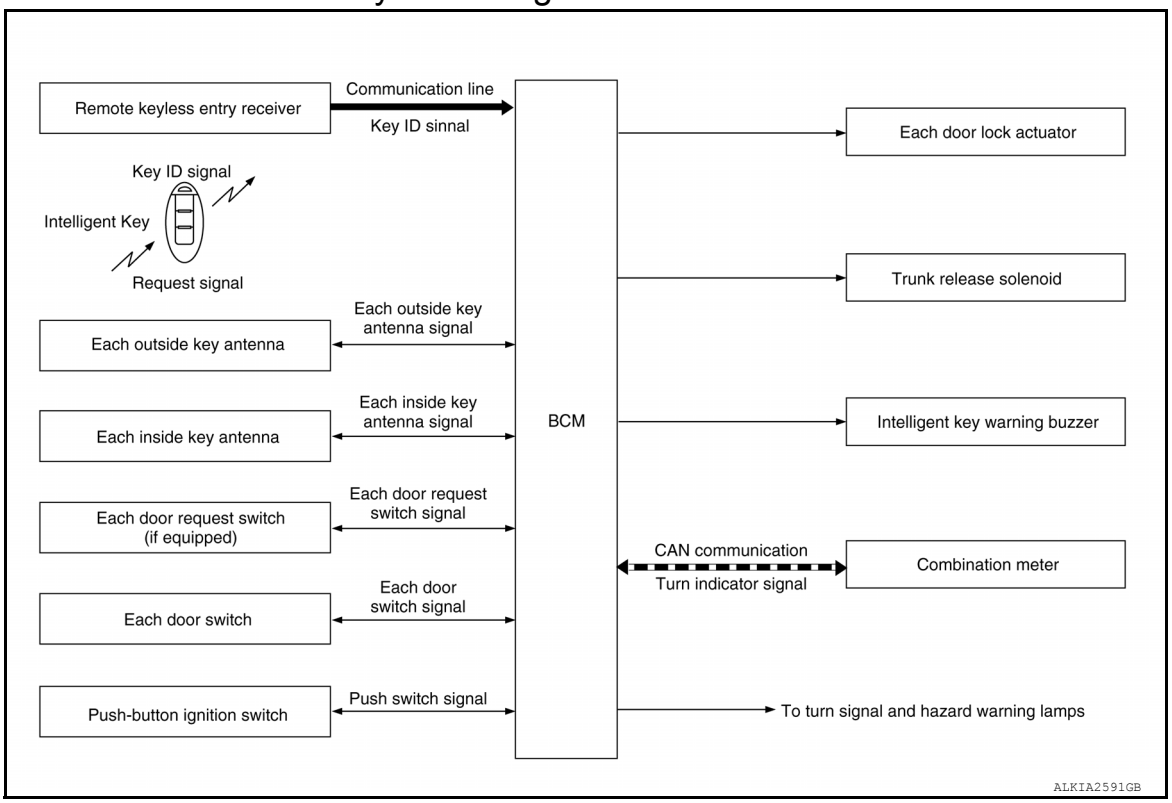
Function	Description	Refer
Door lock	Lock/unlock can be performed by pressing the request switch (if equpped).	DLK-24
Trunk lid opener	The trunk lid can be opened by carrying the Intelligent Key and pressing the trunk lid opener switch.	DLK-41

Function	Description	Refer
Remote keyless entry	Lock/unlock can be performed by pressing the remote controller button of the Intelligent Key.	DLK-27
Key reminder	The key reminder buzzer sounds a warning if the door is locked with the key left inside the vehicle.	DLK-29
Welcome light	When the Intelligent Key is carried, and vehicle doors are approached, the BCM illuminates interior room lamps and operates heart beat operation of the push-button ignition switch.	DLK-32
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-33
Engine start	The engine can be turned on while carrying the Intelligent Key.	DLK-30
Interior room lamp control	Interior room lamp is controlled according to door lock/unlock state.	INL-7
Power window	Power window can be operated by Intelligent Key button operation.	PWC-73
Panic alarm	When Intelligent Key panic alarm button is pressed, horn sounds.	SEC-17
Intelligent Key interlock	Setting of air conditioning system can be set according to key ID of Intelligent Key to the setting value that is set before turning ignition switch OFF.	HAC-13
	Setting of multi AV system can be set according to key ID of Intelligent Key to the setting value that is set before turning ignition switch OFF.	AV-301

DOOR LOCK FUNCTION

DOOR LOCK FUNCTION : System Diagram

INFOID:0000000008655963



DOOR LOCK FUNCTION : System Description

INFOID:0000000008655964

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

OPERATION CONDITION

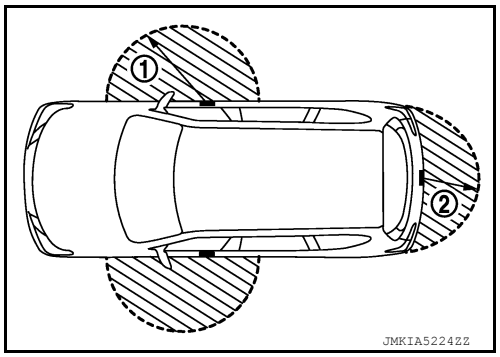
If the following conditions are satisfied, door lock/unlock operation is performed if the door request switch (if equipped) is operated.

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

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

OUTSIDE KEY ANTENNA DETECTION AREA

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



SELECTIVE UNLOCK FUNCTION

Lock Operation

When a LOCK signal is sent from door request switch (if equipped), all doors are locked.

Unlock Operation

- When an UNLOCK signal from driver side door request switch (if equipped) is transmitted, driver side door is unlocked. When another UNLOCK signal is transmitted within 60 seconds, all other doors are unlocked.
- When an UNLOCK signal from passenger side door request switch (if equipped) is transmitted, passenger side door is unlocked. When another UNLOCK signal is transmitted 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 BCS-21, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

HAZARD AND BUZZER REMINDER FUNCTION

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

Operating Function Of Hazard And buzzer Reminder

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

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

How To Change Hazard And Buzzer Reminder Mode

Hazard and buzzer reminder mode can be changed using CONSULT.
Refer to BCS-21, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

AUTO DOOR LOCK FUNCTION

After door is unlocked by door request switch (if equipped) 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 BCS-21, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

LIST OF OPERATION RELATED PARTS

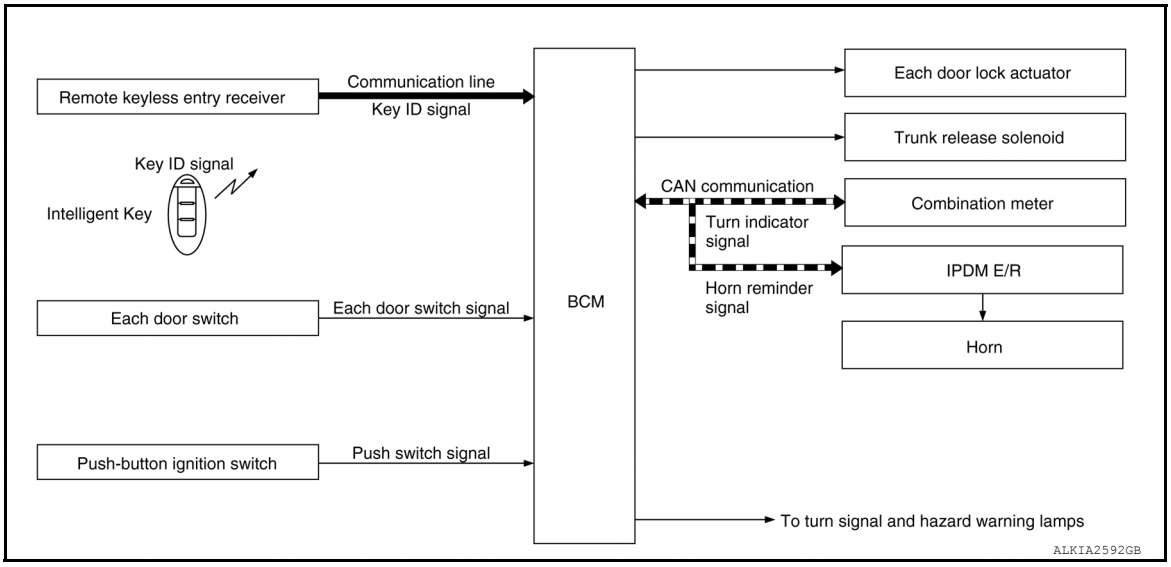
Parts marked with × are the parts related to operation.

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

REMOTE KEYLESS ENTRY FUNCTION

REMOTE KEYLESS ENTRY FUNCTION : System Diagram

INFOID:0000000008655967



REMOTE KEYLESS ENTRY FUNCTION : System Description

INFOID:0000000008655968

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

OPERATION

Remote keyless entry system controls operation of the following items.

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

OPERATION AREA

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

REMOTE ENGINE START FUNCTION

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

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

DOOR LOCK/UNLOCK FUNCTION

- When door lock/unlock button of the Intelligent Key is pressed, lock signal or unlock signal transmitted from Intelligent Key to BCM via remote keyless entry receiver.

- When BCM receives the door lock/unlock signal, it operates all door lock actuators and blinks the hazard lamp (lock: 2 time, unlock: 1 times) and horn chirp signal to IPDM E/R at the same time as a reminder.
- IPDM E/R honks horn (lock: 1 time) as a reminder.

OPERATION CONDITION

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

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

SELECTIVE UNLOCK FUNCTION

- When a LOCK signal is transmitted from Intelligent Key, all doors are locked.
- When an UNLOCK signal is transmitted from Intelligent Key once, driver side door are unlocked.
- Then, if an UNLOCK signal is transmitted from Intelligent Key again within 60 seconds, all other doors are unlocked.

How to change selective unlock operation mode.

Selective unlock operation mode can be changed using CONSULT.

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

AUTO DOOR LOCK FUNCTION

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

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

How to change auto door lock operation mode.

Auto door lock mode can be changed using CONSULT.

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

HAZARD AND HORN REMINDER FUNCTION

When doors are locked or unlocked by Intelligent Key, BCM blinks hazard warning lamps as a reminder.

The hazard and horn reminder has a horn chirp mode (C mode) and a non-horn chirp mode (S mode).

Operating Function of Hazard and Horn Reminder

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

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

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

How to Change Hazard and Horn Reminder Mode

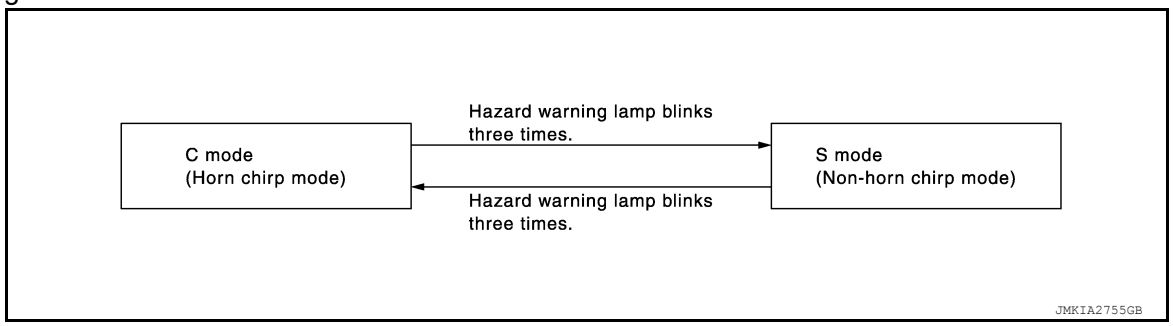
With CONSULT

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

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

Without CONSULT

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



LIST OF OPERATION RELATED PARTS

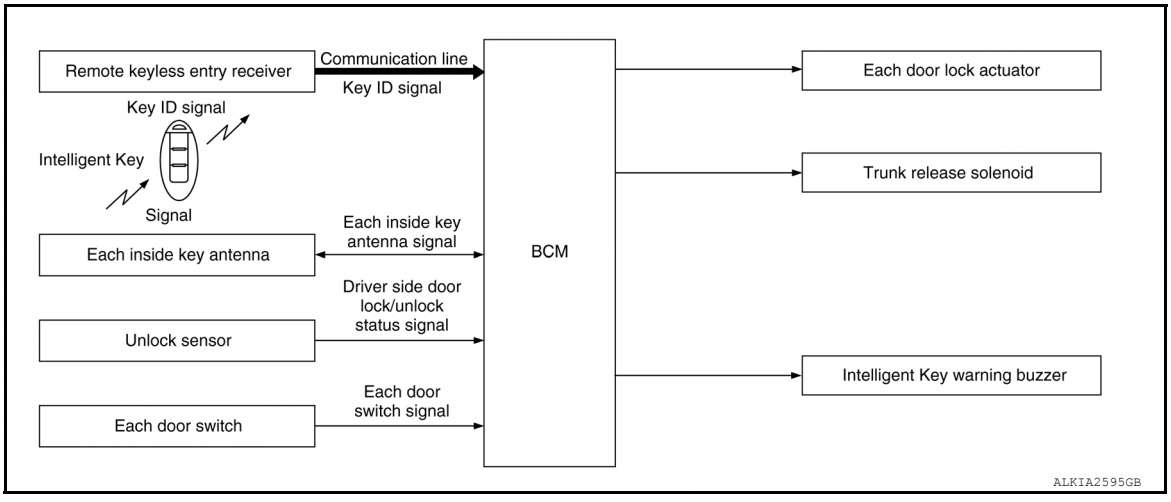
Parts marked with × are the parts related to operation.

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

KEY REMINDER FUNCTION

KEY REMINDER FUNCTION : System Diagram

INFOID:0000000008655969



KEY REMINDER FUNCTION : System Description

INFOID:0000000008655970

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

Key remainder function	Operation condition	Operation
Driver door closed*	Right after driver side door is closed under the following conditions: • Door lock operation is performed. • Driver side door is open. • Driver side door is in lock state.	All doors unlock.
Door is open or closed	Right after all doors are closed under the following conditions: • Intelligent Key is inside the vehicle. • Any door is open. • All doors are locked by door lock and unlock switch or door lock knob.	• All doors unlock. • Honk Intelligent Key warning buzzer.

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

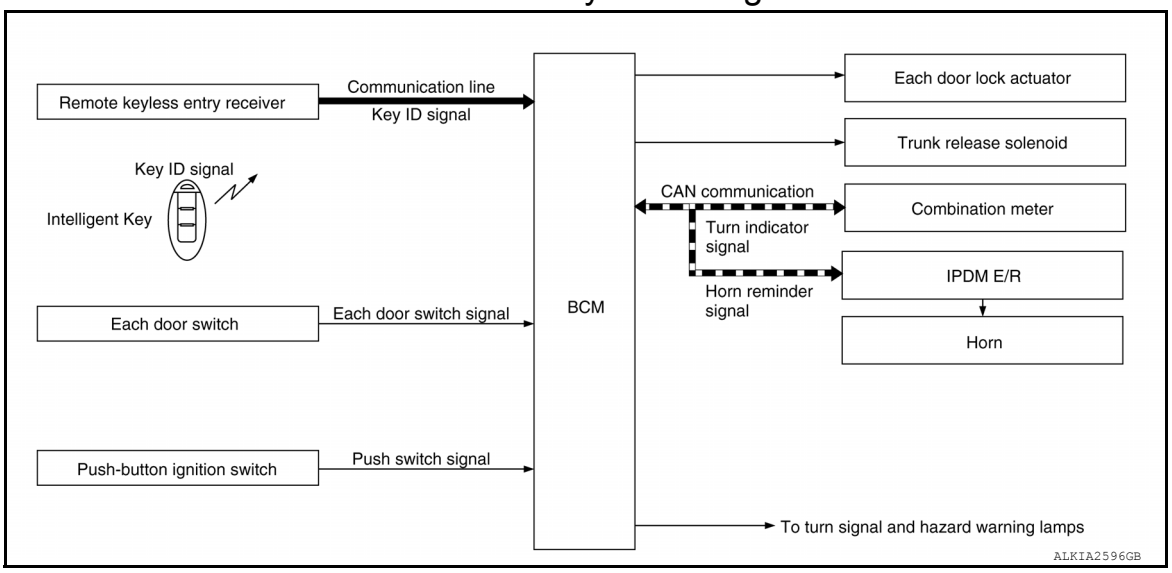
CAUTION:

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

REMOTE ENGINE START FUNCTION

REMOTE ENGINE START FUNCTION : System Diagram

INFOID:0000000008655971



REMOTE ENGINE START FUNCTION : System Description

INFOID:0000000008655972

OPERATION

Remote keyless entry system controls operation of the following items.

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

OPERATION AREA

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

REMOTE ENGINE START FUNCTION

- When the lock button and then the remote engine start button of the Intelligent Key are pressed within 5 seconds of each other, a start signal is transmitted from Intelligent Key to BCM via remote keyless entry receiver.
- When the BCM receives the remote engine start signal, it locks all doors and flashes the hazard lamps and chirps the horn and the engine will then start.

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

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

HAZARD AND HORN REMINDER FUNCTION

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

Operating Function of Hazard and Horn Reminder

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

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

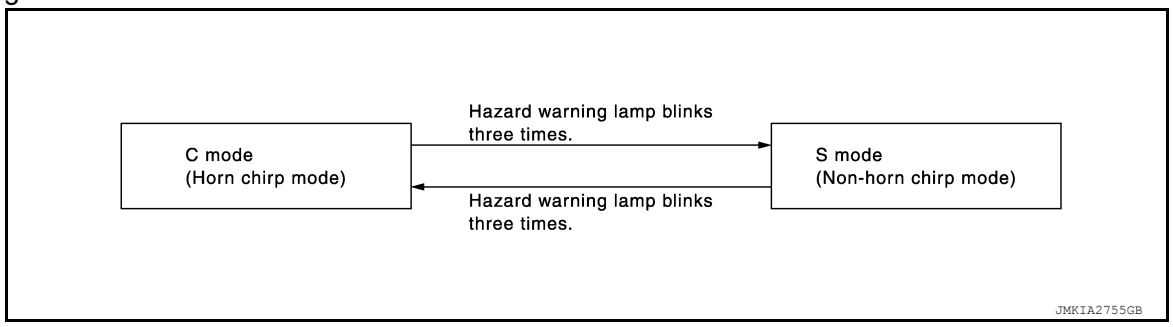
How to Change Hazard and Horn Reminder Mode

With CONSULT

Hazard and horn reminder operation mode can be changed using CONSULT.
Refer to BCS-21, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Without CONSULT

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



LIST OF OPERATION RELATED PARTS

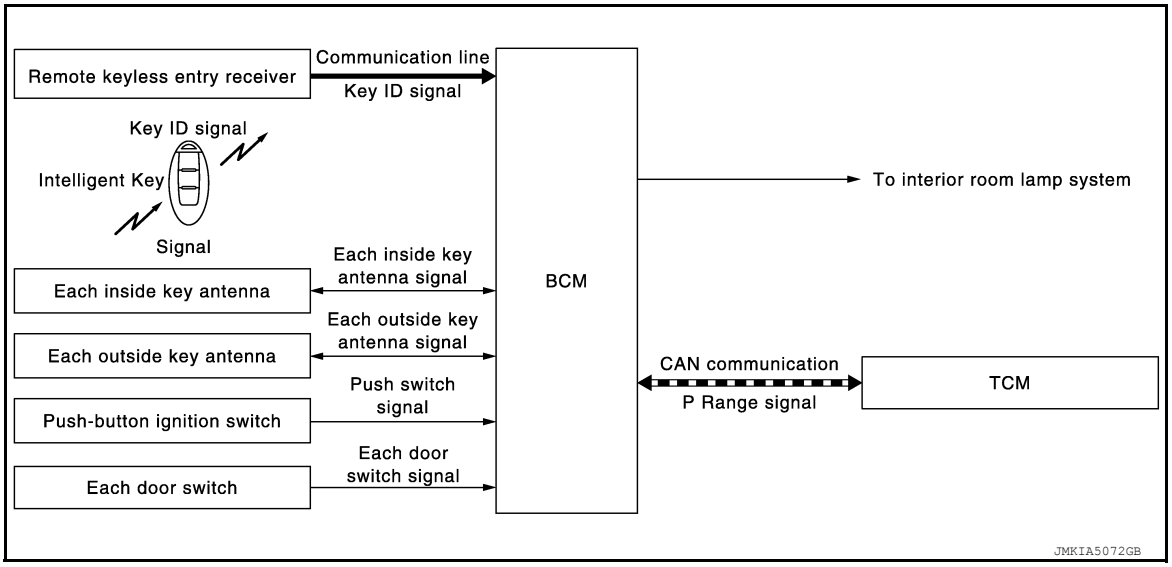
Parts marked with × are the parts related to operation.

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

WELCOME LIGHT FUNCTION

WELCOME LIGHT FUNCTION : System Diagram

INFOID:0000000008655973



WELCOME LIGHT FUNCTION : System Description

INFOID:0000000008655974

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

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

OPERATION DESCRIPTION

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

TIMER FUNCTION

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

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

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

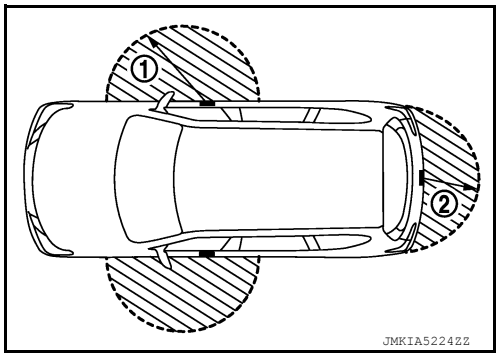
OPERATION CONDITION

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

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

OUTSIDE KEY ANTENNA DETECTION AREA

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



WELCOME LIGHT FUNCTION SETTING

Welcome light function operation mode can be changed using CONSULT

With CONSULT

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

Without CONSULT

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

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

WARNING FUNCTION

WARNING FUNCTION : System Description

INFOID:0000000008655975

OPERATION DESCRIPTION

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

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

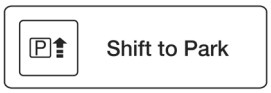
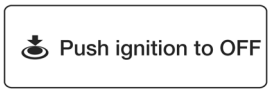
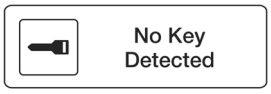
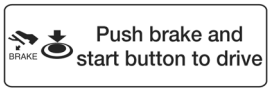
OPERATION CONDITION

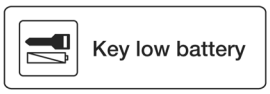
Once the following condition from below is established, alert or warning is executed.

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

WARNING METHOD

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

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

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

LIST OF OPERATION RELATED PARTS

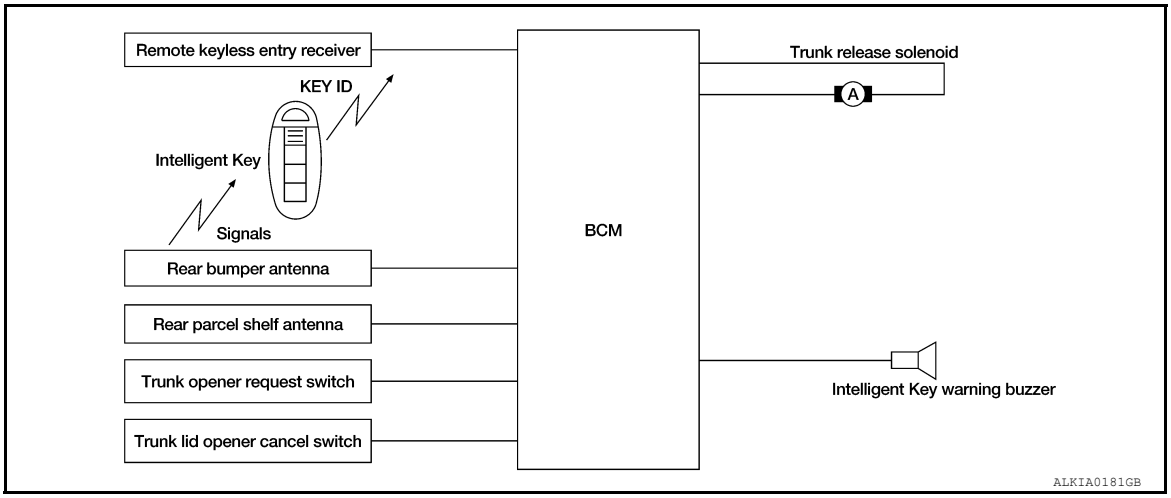
Parts marked with × are the parts related to operation.

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

TRUNK LID OPENER SYSTEM

TRUNK LID OPENER SYSTEM : System Diagram

INFOID:0000000008773745



TRUNK LID OPENER SYSTEM : System Description

INFOID:0000000008773746

Only when pressing the request switch, it is possible to open the trunk by carrying the Intelligent Key.

- The Intelligent Key system is a system that makes it possible to open the trunk (trunk open function) by carrying the Intelligent Key which operates based on the results of electronic ID verification using two-way communications between the Intelligent Key and the vehicle (BCM).

CAUTION:

The driver should always carry the Intelligent Key

- If an action that does not meet the operating conditions of the Intelligent Key system is taken, the buzzer goes off to inform the driver (warning chime functions).
- When trunk is opened with request switch or remote controller button operation, the hazard lamps flash and the Intelligent Key warning buzzer or horns sound (hazard and buzzer/horn reminder function).
- The settings for each function can be changed with the 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 the CONSULT.

OPERATION DESCRIPTION/TRUNK OPEN

- When the BCM detects that trunk open request switch is pressed, it starts the outside key antenna (trunk room) and inside key antenna corresponding to the pressed trunk open request switch and transmits the request signal to the Intelligent Key. And then, check that the Intelligent Key is near the trunk.
- If the Intelligent Key is within the outside key antenna (rear bumper) 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 the trunk open request signal and sounds Intelligent Key warning buzzer 4 consecutive times.
- When BCM receives the trunk open request signal, it operates the trunk release solenoid and opens the trunk.

OPERATION CONDITION

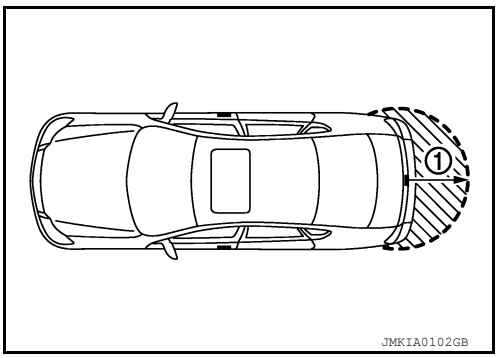
If the following conditions are not satisfied, trunk open operation is not performed even if the request switch is operated.

Each request switch operation	Operation condition
Trunk open operation	• Intelligent Key is within outside key antenna (rear bumper) detection area* • Trunk cancel switch is ON • Key reminder functions operate (trunk)

*: 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 trunk open function is in the range of approximately 80 cm (31.50 in) surrounding trunk opener request switch (1). However, this operating range depends on the ambient conditions.



KEY REMINDER FUNCTION

Key reminder function	Operation condition	Operation
Trunk is closed	Right after trunk is closed under the following conditions • Intelligent Key is inside trunk room • All doors are closed • All doors are locked	• Trunk open • Sound Intelligent Key warning buzzer

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

CAUTION:

- **The above function operates when the Intelligent Key is inside the vehicle. However, there may be times when the Intelligent Key cannot be detected, and this function will 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.**
- **The key reminder function is operated when the trunk is opened/closed and the buzzers sound. If the following operations are performed, the key reminder function is cleared and buzzer sounds are stopped.**

- Remote controller door lock button operation of Intelligent Key
- Remote controller door unlock button operation of Intelligent Key
- When the trunk is closed, the Intelligent Key is not inside the vehicle
- When any door is open

HAZARD AND BUZZER REMINDER FUNCTION

During trunk opening operation by request switch, the hazard warning lamps and Intelligent Key warning buzzer will flash or sound as a reminder.
When trunk open by each request switch, IPDM E/R sounds Intelligent Key warning buzzer as a reminder and transmits hazard request signal to BCM via CAN communication line.
BCM flashes hazard warning lamps as a reminder.

Operating function of hazard and buzzer reminder

Operation	Hazard warning lamp flash	Intelligent Key warning buzzer sounds
Trunk open	—	Four times

How to change hazard and buzzer reminder mode

With CONSULT

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

LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

Trunk open function	Intelligent Key	Remote keyless entry receiver	Door switch	Trunk lamp switch	Trunk opener switch	Trunk release solenoid	Inside key antenna	Outside key antenna (rear bumper)	Intelligent Key warning buzzer	CAN communication system	BCM	Hazard warning lamps	Trunk lid opener cancel switch
Trunk open function by the trunk opener request switch	×	×		×	×	×	×	×		×	×		×
Hazard and buzzer reminder function for door lock/unlock operation									×	×	×	×	
Buzzer reminder for trunk open operation									×	×	×		
Key reminder function	×	×	×				×	×	×	×	×	×	

SYSTEM (INTEGRATED HOMELINK TRANSMITTER)

System Description

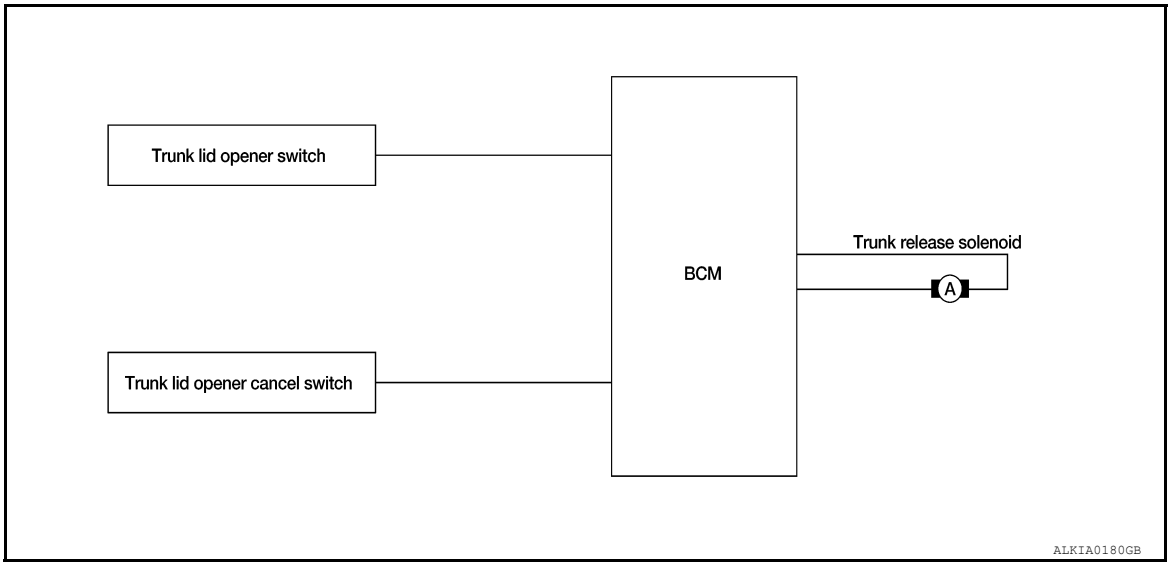
INFOID:0000000008655976

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

SYSTEM (TRUNK LID OPENER SYSTEM)

System Diagram

INFOID:0000000008773747



System Description

INFOID:0000000008773748

TRUNK LID OPENER OPERATION

When trunk lid opener switch is ON, BCM operates trunk lid opener actuator.

OPERATION CONDITION

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

Trunk lid opener switch operation	Operation condition
Trunk lid open	• Trunk lid opener cancel switch is ON • Vehicle speed is less than 5 km/h (3 MPH)

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000008655992

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

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

SYSTEM APPLICATION

BCM can perform the following functions.

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

DOOR LOCK

DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)

INFOID:0000000008655993

SELF DIAGNOSTIC RESULT

Refer to BCS-49, "DTC Index".

DATA MONITOR

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

ACTIVE TEST

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

WORK SUPPORT

Support Item	Setting	Description
DOOR LOCK-UNLOCK SET	On*	Automatic door locks function ON.
	Off	Automatic door locks function OFF.
AUTO UNLOCK TYPE	MODE2	Driver door only unlocks automatically.
	MODE1*	All doors unlock automatically.
AUTO LOCK FUNCTION	MODE3	This mode is not used.
	MODE2	Doors lock automatically when shifted out of P (park).
	MODE1*	Doors lock automatically when vehicle speed reaches 24 km/h (15 mph).
	Off	—
AUTO UNLOCK FUNCTION	MODE3	This mode is not used.
	MODE2	Doors unlock automatically when shifted into P (park).
	MODE1*	Doors unlock automatically when ignition is switched from ON to OFF.
	Off	—

* : Initial setting

INTELLIGENT KEY

INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)

INFOID:0000000008655994

SELF DIAGNOSTIC RESULT

Refer to BCS-49, "DTC Index".

DATA MONITOR

Monitor Item [Unit]	Main	Description
REQ SW -DR [On/Off]	×	Indicates condition of door request switch LH.
REQ SW -AS [On/Off]	×	Indicates condition of door request switch RH.
PUSH SW [On/Off]		Indicates condition of push-button ignition switch.
SHIFTLOCK SOLENOID POWER SUPPLY [On/Off]	×	Indicates condition of power supply to shiftlock solenoid.
BRAKE SW 1 [On/Off]	×	Indicates condition of brake switch.
BRAKE SW 2 [On/Off]		Indicates condition of brake switch.
DETE/CANCL SW [On/Off]	×	Indicates condition of P (park) position.
SFT PN/N SW [On/Off]	×	Indicates condition of P (park) or N (neutral) position.
UNLK SEN -DR [On/Off]	×	Indicates condition of door unlock sensor.
PUSH SW -IPDM [On/Off]		Indicates condition of push-button ignition switch received from IPDM E/R on CAN communication line.
IGN RLY1 -F/B [On/Off]		Indicates condition of ignition relay 1 received from IPDM E/R on CAN communication line.
DETE SW -IPDM [On/Off]		Indicates condition of detent switch received from TCM on CAN communication line.
SFT PN -IPDM [On/Off]		Indicates condition of P (park) or N (neutral) position from TCM on CAN communication line.
SFT P -MET [On/Off]		Indicates condition of P (park) position from TCM on CAN communication line.
SFT N -MET [On/Off]		Indicates condition of N (neutral) position from IPDM E/R on CAN communication line.
ENGINE STATE [Stop/Start/Crank/Run]	×	Indicates condition of engine state from ECM on CAN communication line.
VEH SPEED 1 [mph/km/h]	×	Indicates condition of vehicle speed signal received from ABS on CAN communication line.
VEH SPEED 2 [mph/km/h]	×	Indicates condition of vehicle speed signal received from combination meter on CAN communication line.
DOOR STAT -DR [LOCK/READY/UNLK]	×	Indicates condition of driver side door status.
DOOR STAT -AS [LOCK/READY/UNLK]	×	Indicates condition of passenger side door status.
DOOR STAT -RR [LOCK/READY/UNLK]	×	Indicates condition of rear right side door status.
DOOR STAT -RL [LOCK/READY/UNLK]	×	Indicates condition of rear left side door status.
ID OK FLAG [Set/Reset]		Indicates condition of Intelligent Key ID.
PRMT ENG STRT [Set/Reset]		Indicates condition of engine start possibility.
PRMT RKE STRT [Set/Reset]		Indicates condition of engine start possibility from Intelligent Key.
I-KEY OK FLAG [Key ON/Key OFF]	×	Indicates condition of Intelligent Key OK flag.
PRBT ENG STRT [Set/Reset]		Indicates condition of engine start prohibit.
ID VERI CANCL [STOP]		Indicates condition of Intelligent Key ID authentication.
ACC BATTERY SAVER [STOP]		Indicates condition of battery saver.
CRNK PRBT TMR [On/Off]		Indicates condition of crank prohibit timer.
AUT CRNK TMR [On/Off]		Indicates condition of automatic engine crank timer from Intelligent Key.
CRNK PRBT TME [sec]		Indicates condition of engine crank prohibit time.
AUTO CRNK TME [sec]		Indicates condition of automatic engine crank time from Intelligent Key.
CRANKING TME [sec]		Indicates condition of engine cranking time from Intelligent Key.
DETE SW PWR [On/Off]		Indicates condition of detent switch voltage.
ACC RLY -REQ [On/Off]		Indicates condition of accessory relay control request.
RKE OPE COUN1 [0-19]	×	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing.

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

ACTIVE TEST

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

WORK SUPPORT

Support Item	Setting	Description
IGN/ACC BATTERY SAVER	On*	Battery saver function ON.
	Off	Battery saver function OFF.
REMOTE ENGINE STARTER	On*	Remote engine start function ON.
	Off	Remote engine start function OFF.
ANSWERBACK I-KEY LOCK UNLOCK	BUZZER	Buzzer reminder function by door lock/unlock request switch ON.
	HORN	Horn chirp reminder function by door lock request switch ON.
	Off*	No reminder function by door lock/unlock request switch.
	INVALID	This mode is not used.

Support Item	Setting		Description
ANSWERBACK KEYLESS LOCK UNLOCK	On		Buzzer or horn chirp reminder when doors are locked/unlocked with Intelligent Key.
	Off*		No buzzer or horn chirp reminder when doors are locked/unlocked with Intelligent Key.
ANSWER BACK	On*		Horn chirp reminder when doors are locked with Intelligent Key.
	Off		No horn chirp reminder when doors are locked with Intelligent Key.
RETRACTABLE MIRROR SET	On		Retractable mirror set ON.
	Off*		Retractable mirror set OFF.
LOCK/UNLOCK BY I-KEY	On*		Door lock/unlock function from Intelligent Key ON.
	Off		Door lock/unlock function from Intelligent Key OFF.
ENGINE START BY I-KEY	On*		Engine start function from Intelligent Key ON.
	Off		Engine start function from Intelligent Key OFF.
INTELLIGENT KEY LINK SET	On		Intelligent Key link set ON.
	Off*		Intelligent Key link set OFF.
SHORT CRANKING OUTPUT	Start	70 msec	Starter motor operation duration times.
		100 msec	
		200 msec	
	End		—
INSIDE ANT DIAGNOSIS	—		This function allows inside key antenna self-diagnosis.
AUTO LOCK SET	MODE7	5 min	Auto door lock time can be set in this mode.
	MODE6	4 min	
	MODE5	3 min	
	MODE4	2 min	
	MODE3*	1 min	
	MODE2	30 sec	
	MODE1	Off	

*: Initial Setting

TRUNK

TRUNK : CONSULT Function (BCM - TRUNK)

INFOID:0000000008655996

DATA MONITOR

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

ECU DIAGNOSIS INFORMATION

ECM, IPDM E/R, BCM

List of ECU Reference

INFOID:0000000008707293

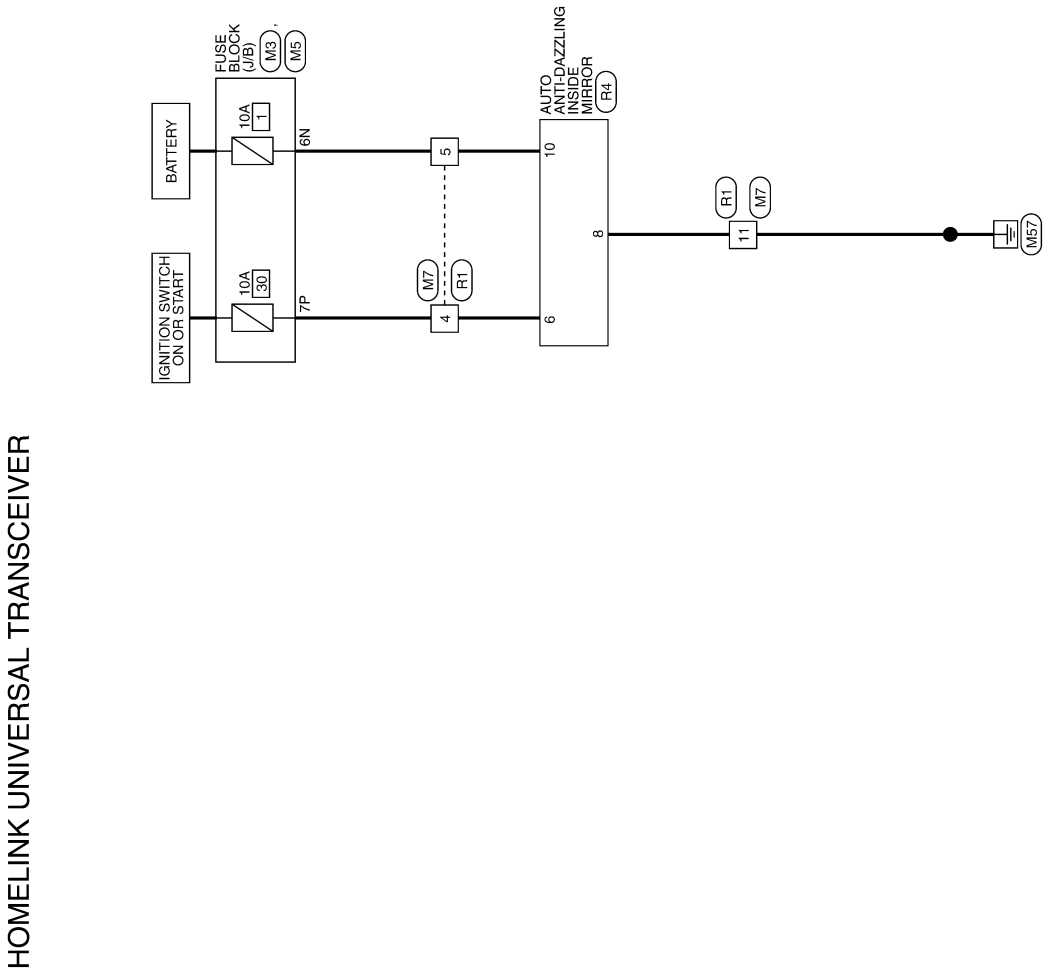
ECU		Reference
ECM (with QR25DE)	Reference Value	EC-88, "Reference Value"
	Fail-safe	EC-101, "Fail Safe"
	DTC Inspection Priority Chart	EC-104, "DTC Inspection Priority Chart"
	DTC Index	EC-105, "DTC Index"
ECM (with VQ35DE)	Reference Value	EC-612, "Reference Value"
	Fail-safe	EC-626, "Fail-safe"
	DTC Inspection Priority Chart	EC-628, "DTC Inspection Priority Chart"
	DTC Index	EC-630, "DTC Index"
IPDM E/R	Reference Value	PCS-12, "Reference Value"
	Fail-safe	PCS-19, "Fail Safe"
	DTC Index	PCS-20, "DTC Index"
BCM	Reference Value	BCS-28, "Reference Value"
	Fail-safe	BCS-47, "Fail Safe"
	DTC Inspection Priority Chart	BCS-47, "DTC Inspection Priority Chart"
	DTC Index	BCS-49, "DTC Index"

WIRING DIAGRAM

HOMELINK UNIVERSAL TRANSCEIVER

Wiring Diagram

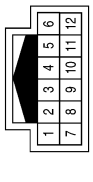
INFOID:0000000007987361



HOMELINK UNIVERSAL TRANSCEIVER CONNECTORS

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Color	WHITE

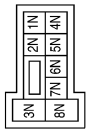
H.S.



Terminal No.	Color of Wire	Signal Name
4	G	–
5	W	–
11	GR	–

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

H.S.



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

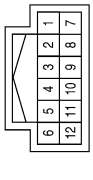
Connector No.	M5
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

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

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

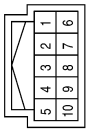
H.S.



Terminal No.	Color of Wire	Signal Name
4	B/R	–
5	B/Y	–
11	GR	–

Connector No.	R4
Connector Name	AUTO ANTI-DAZZLING INSIDE MIRROR
Connector Color	BLACK

H.S.



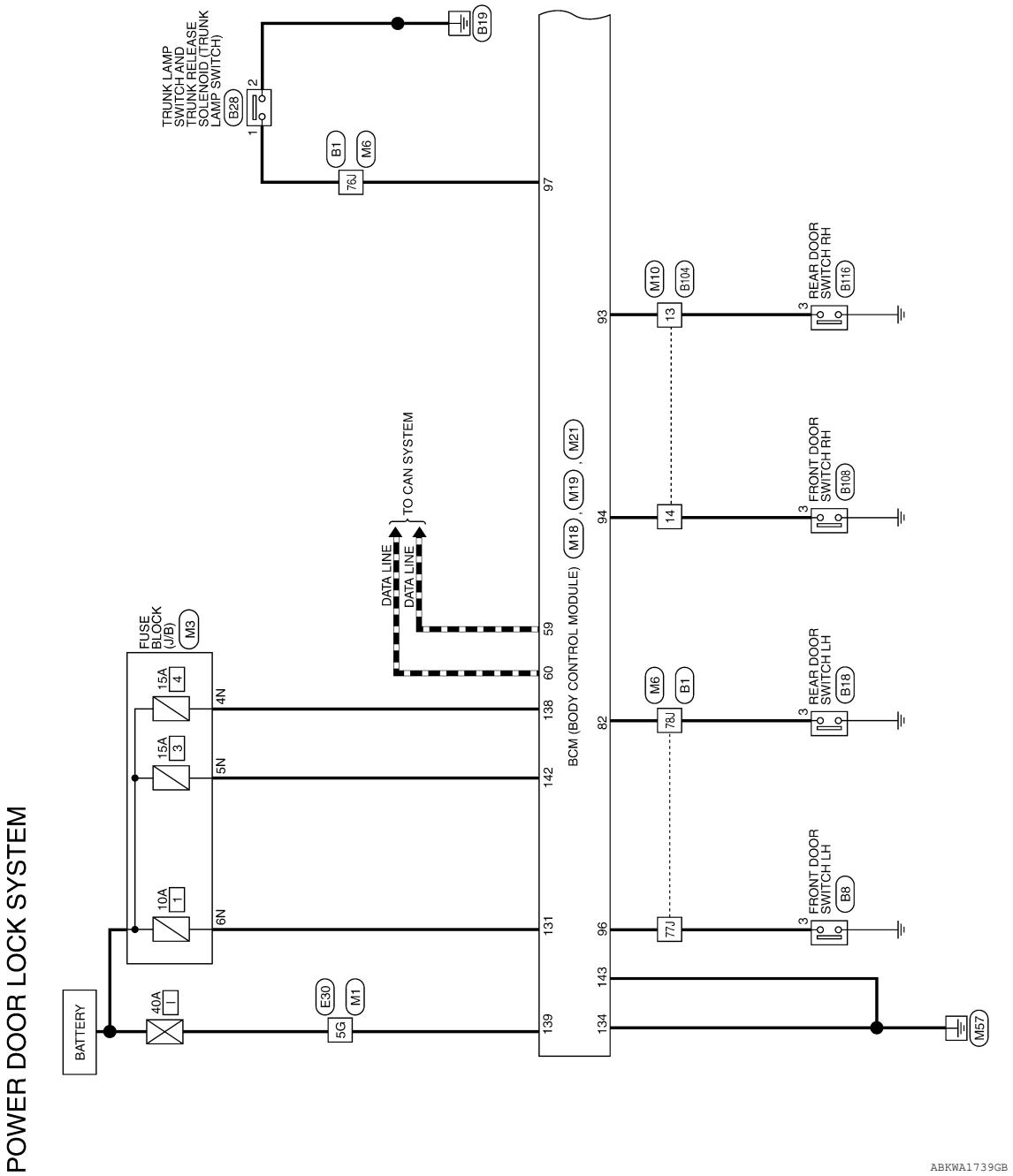
Terminal No.	Color of Wire	Signal Name
6	B/R	IGN
8	B	GND
10	B/Y	BAT+

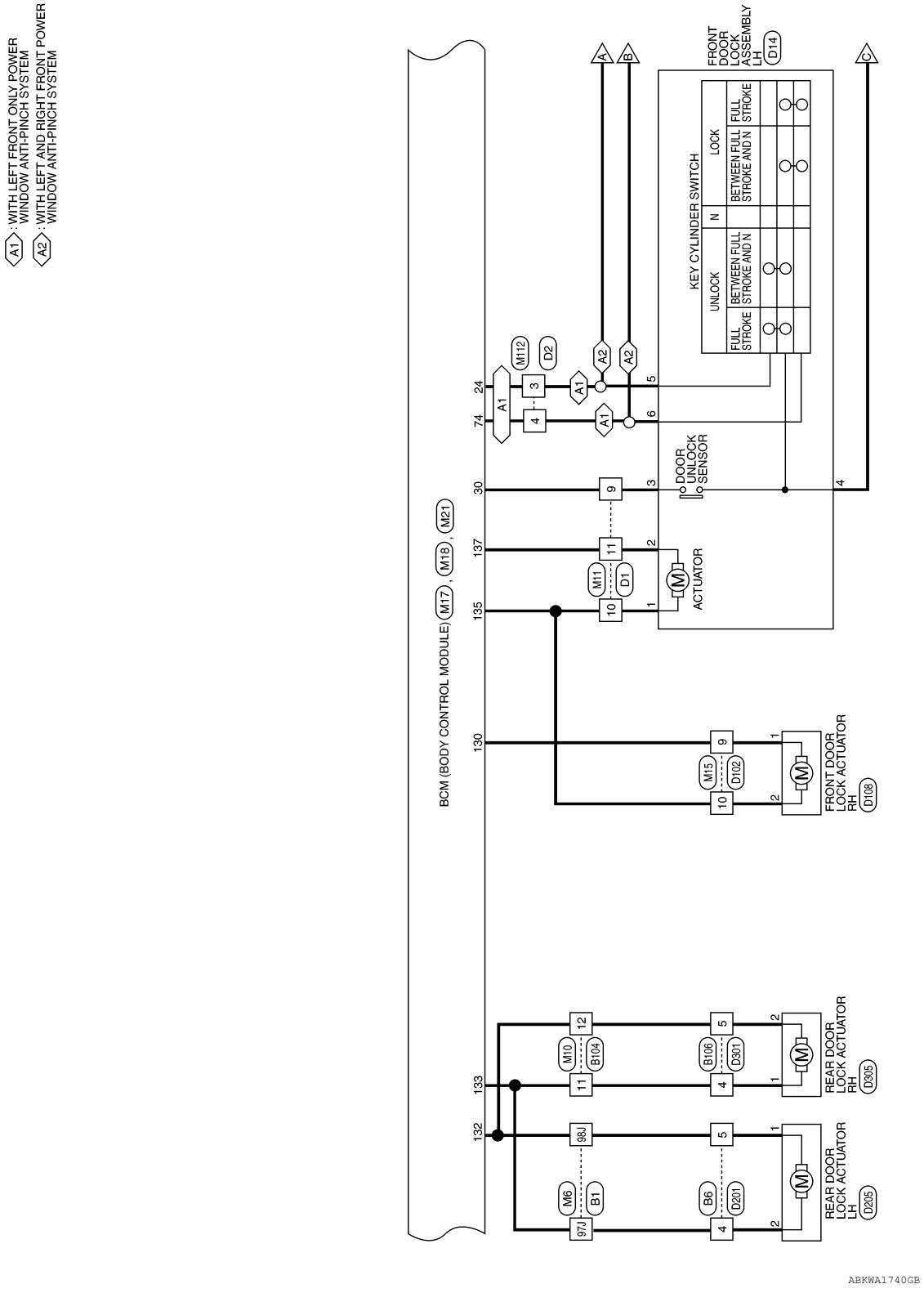
ABKIA3632GB

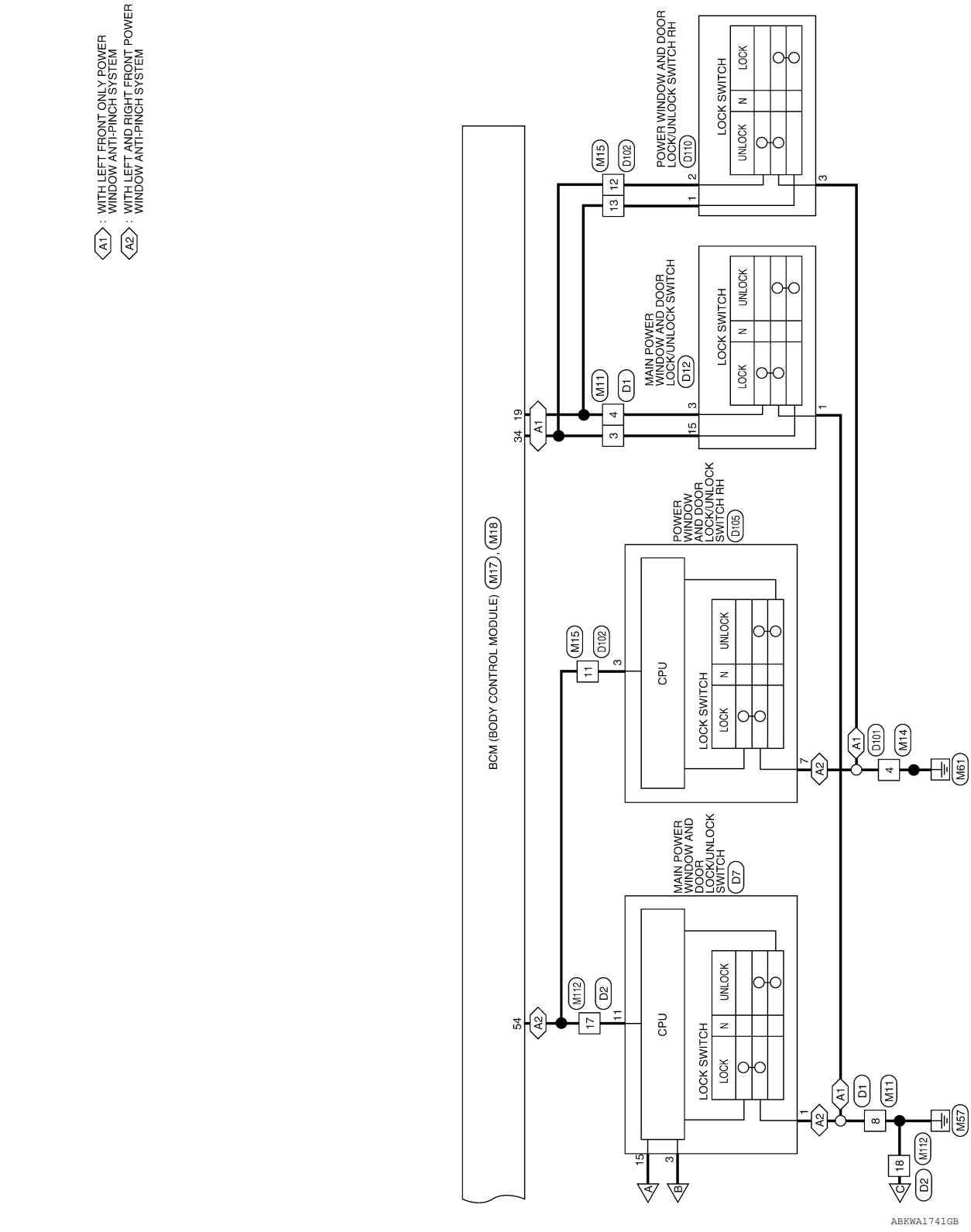
POWER DOOR LOCK SYSTEM

Wiring Diagram

INFOID:0000000007987362




A1 : WITH LEFT FRONT ONLY POWER WINDOW ANTI-PINCH SYSTEM
A2 : WITH LEFT AND RIGHT FRONT POWER WINDOW ANTI-PINCH SYSTEM
BCM (BODY CONTROL MODULE)
M17, M18, M21
FRONT DOOR LOCK ASSEMBLY LH
D14
KEY CYLINDER SWITCH
UNLOCK
FULL STROKE
BETWEEN FULL STROKE AND N
N
LOCK
BETWEEN FULL STROKE AND N
FULL STROKE
DOOR UNLOCK SENSOR
ACTUATOR
FRONT DOOR LOCK ACTUATOR RH
D108
REAR DOOR LOCK ACTUATOR RH
D305
REAR DOOR LOCK ACTUATOR LH
D205
ABKWA1740GB


A1 : WITH LEFT FRONT ONLY POWER WINDOW ANTI-PINCH SYSTEM
A2 : WITH LEFT AND RIGHT FRONT POWER WINDOW ANTI-PINCH SYSTEM
BCM (BODY CONTROL MODULE) M17, M18
POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH D110
MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH D12
POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH D105
MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH D7
LOCK SWITCH
LOCK
N
UNLOCK
CPU
M15
D102
M11
D1
M112
D2
M14
D101
M61
M57
ABKWA1741GB

POWER DOOR LOCK SYSTEM CONNECTORS

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

H.S.

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

11G	12G	13G	14G	15G	16G	17G	18G	19G	20G	21G
	22G	23G	24G	25G	26G	27G	28G	29G	30G	
31G	32G	33G	34G	35G	36G	37G	38G	39G	40G	41G
	42G	43G	44G	45G	46G	47G	48G	49G	50G	
51G	52G	53G	54G	55G	56G	57G	58G	59G	60G	61G
	62G	63G	64G	65G	66G	67G	68G	69G	70G	
71G	72G	73G	74G	75G	76G	77G	78G	79G	80G	81G
	82G	83G	84G	85G	86G	87G	88G	89G	90G	
91G	92G	93G	94G	95G						
96G	97G	98G	99G	100G						

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

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

H.S.

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

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

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Color	GRAY

H.S.

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

11J	12J	13J	14J	15J	16J	17J	18J	19J	20J	21J
	22J	23J	24J	25J	26J	27J	28J	29J	30J	
31J	32J	33J	34J	35J	36J	37J	38J	39J	40J	41J
	42J	43J	44J	45J	46J	47J	48J	49J	50J	
51J	52J	53J	54J	55J	56J	57J	58J	59J	60J	61J
	62J	63J	64J	65J	66J	67J	68J	69J	70J	
71J	72J	73J	74J	75J	76J	77J	78J	79J	80J	81J
	82J	83J	84J	85J	86J	87J	88J	89J	90J	
91J	92J	93J	94J	95J						
96J	97J	98J	99J	100J						

Terminal No.	Color of Wire	Signal Name
76J	SB	–
77J	BR	–
78J	Y	–
97J	Y	–
98J	L	–

ABKIA3596GB

Connector No.	M10
Connector Name	WIRE TO WIRE
Connector Color	BROWN

H.S.

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

Terminal No.	Color of Wire	Signal Name
11	Y	–
12	L	–
13	V	–
14	SB	–

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	R	–
4	G	–
8	B	–
9	P	–
10	BR	–
11	V	–

Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2		3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name
4	GR	–

Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
9	SB	–
10	BR	–
11	P	–
12	BG	–
13	G	–

Connector No.	M17
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN

H.S.

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

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

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

H.S.

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

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

ABKIA3597GB

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
82	Y	RL DOOR SW
93	V	RR DOOR SW
94	SB	AS DOOR SW
96	BR	DR DOOR SW
97	SB	TRUNK SW

Connector No.	M21
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
130	SB	DOOR UNLOCK AS
131	W	BAT BCM FUSE
132	L	DOOR LOCK RR/RL
133	Y	DOOR UNLOCK RR/RL

Terminal No.	Color of Wire	Signal Name
134	B	GND2
135	BR	DOOR LOCK DR/AS/FL
137	V	DOOR UNLOCK DR/FL
138	V	BAT REAR DOOR
139	W	BAT POWER F/L
142	BR	BAT FRONT DOOR
143	B	GND1

Connector No.	M112
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

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

Connector No.	E30
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

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

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

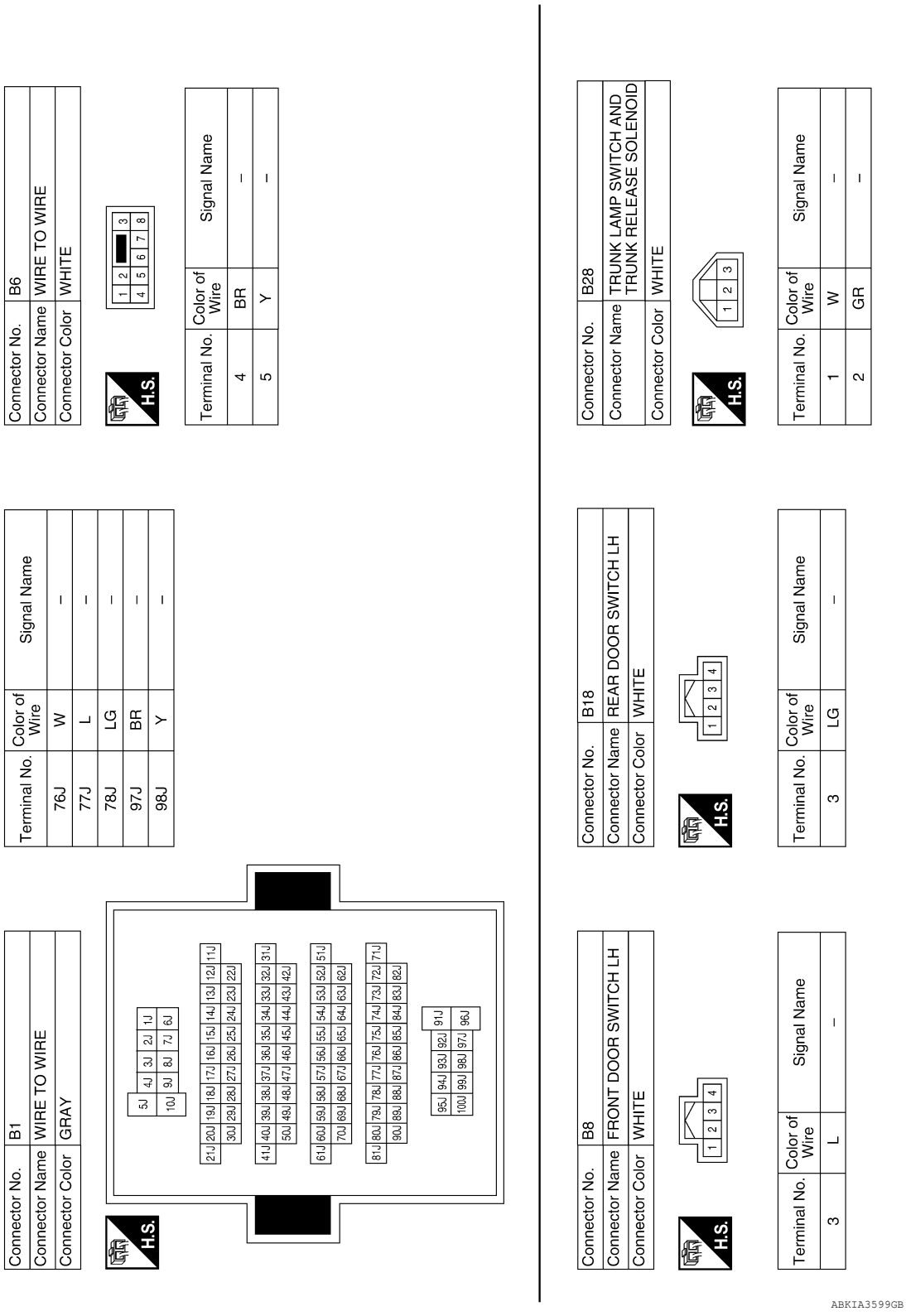
61G	60G	59G	58G	57G	56G	55G	54G	53G	52G	51G
70G	69G	68G	67G	66G	65G	64G	63G	62G		

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

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

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

ABKIA3598GB


Connector No. B1
Connector Name WIRE TO WIRE
Connector Color GRAY
H.S.
5J 4J 3J 2J 1J
10J 9J 8J 7J 6J
21J 20J 19J 18J 17J 16J 15J 14J 13J 12J 11J
30J 29J 28J 27J 26J 25J 24J 23J 22J
41J 40J 39J 38J 37J 36J 35J 34J 33J 32J 31J
50J 49J 48J 47J 46J 45J 44J 43J 42J
61J 60J 59J 58J 57J 56J 55J 54J 53J 52J 51J
70J 69J 68J 67J 66J 65J 64J 63J 62J
81J 80J 79J 78J 77J 76J 75J 74J 73J 72J 71J
90J 89J 88J 87J 86J 85J 84J 83J 82J
95J 94J 93J 92J 91J
100J 99J 98J 97J 96J
Terminal No. Color of Wire Signal Name
76J W –
77J L –
78J LG –
97J BR –
98J Y –
Connector No. B6
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
1 2 3
4 5 6 7 8
Terminal No. Color of Wire Signal Name
4 BR –
5 Y –
Connector No. B8
Connector Name FRONT DOOR SWITCH LH
Connector Color WHITE
H.S.
1 2 3 4
Terminal No. Color of Wire Signal Name
3 L –
Connector No. B18
Connector Name REAR DOOR SWITCH LH
Connector Color WHITE
H.S.
1 2 3 4
Terminal No. Color of Wire Signal Name
3 LG –
Connector No. B28
Connector Name TRUNK LAMP SWITCH AND TRUNK RELEASE SOLENOID
Connector Color WHITE
H.S.
1 2 3
Terminal No. Color of Wire Signal Name
1 W –
2 GR –
ABKIA3599GB

Connector No.	B104
Connector Name	WIRE TO WIRE
Connector Color	BROWN

H.S.

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

Terminal No.	Color of Wire	Signal Name
11	Y	–
12	BR	–
13	V	–
14	L	–

Connector No.	B106
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2		3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name
4	Y	–
5	BR	–

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

H.S.

1	2	3	4

Terminal No.	Color of Wire	Signal Name
3	L	–

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

H.S.

1	2	3	4

Terminal No.	Color of Wire	Signal Name
3	V	–

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	R	–
4	G	–
8	B	–
9	W	–
10	Y	–
11	LG	–

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

H.S.

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

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

ABKIA3600GB

Connector No.	D7
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH (WITH LEFT AND RIGHT FRONT POWER WINDOW ANTI-PINCH SYSTEM)
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	B	GND
3	P	LOCK
11	P	COM
15	G	UNLOCK

Connector No.	D12
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH (WITH LEFT FRONT ONLY POWER WINDOW ANTI-PINCH SYSTEN)
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	B	GND
3	G	LOCK SW
15	R	UNLOCK SW

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

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name
1	Y	–
2	LG	–
3	W	–
4	B	–
5	G	–
6	P	–

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

H.S.

3		2	1
8	7	6	5	4

Terminal No.	Color of Wire	Signal Name
4	B	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
9	LG	–
10	Y	–
11	P	–
12	BG	–
13	G	–

Connector No.	D105
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH (WITH LEFT AND RIGHT POWER WINDOW ANTI-PINCH SYSTEM)
Connector Color	WHITE

H.S.

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

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

ABKIA3601GB

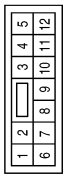
Connector No.	D108
Connector Name	FRONT DOOR LOCK ACTUATOR RH
Connector Color	GRAY

H.S.

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

Connector No.	D110
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH (WITH LEFT POWER WINDOW ANTI-PINCH SYSTEM)
Connector Color	WHITE

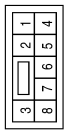
H.S.



Terminal No.	Color of Wire	Signal Name
1	G	LOCK
2	BG	UNLOCK
3	B	GND

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

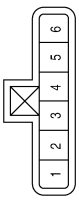
H.S.



Terminal No.	Color of Wire	Signal Name
4	L	–
5	SB	–

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

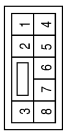
H.S.



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

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

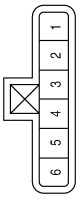
H.S.



Terminal No.	Color of Wire	Signal Name
4	L	–
5	SB	–

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

H.S.



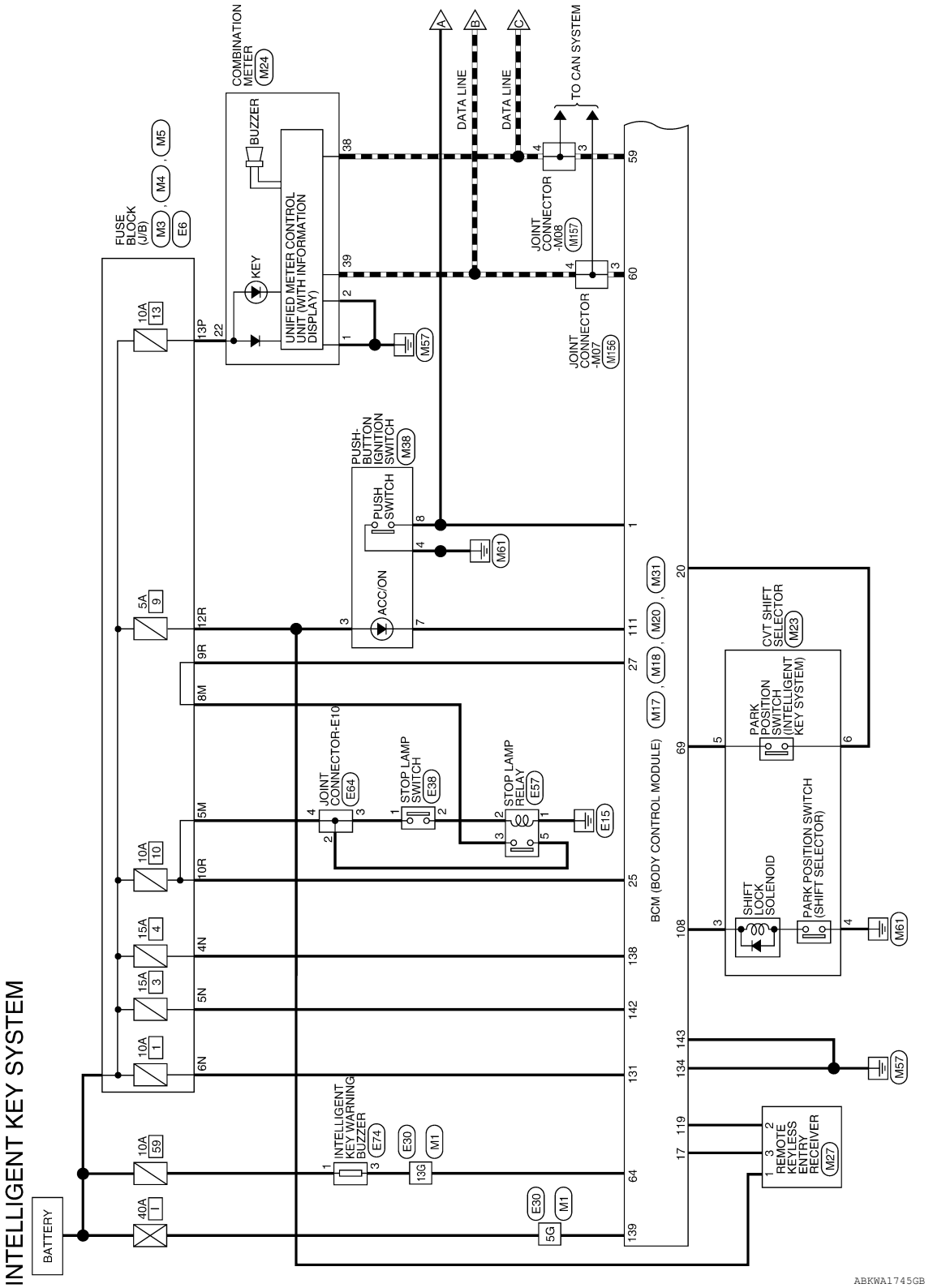
Terminal No.	Color of Wire	Signal Name
1	L	–
2	SB	–

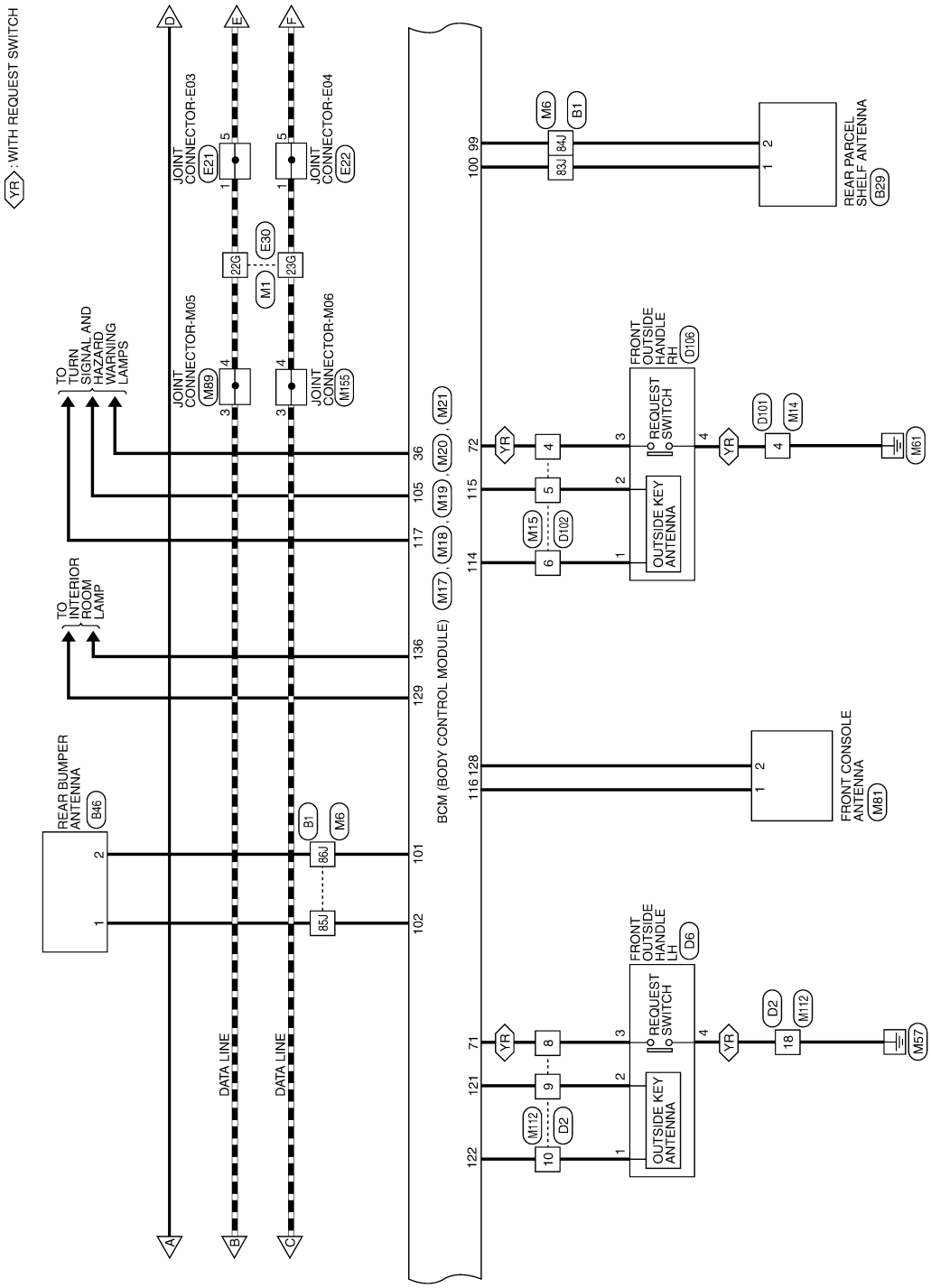
ABKIA3602GB

INTELLIGENT KEY SYSTEM

Wiring Diagram

INFOID:0000000007987363





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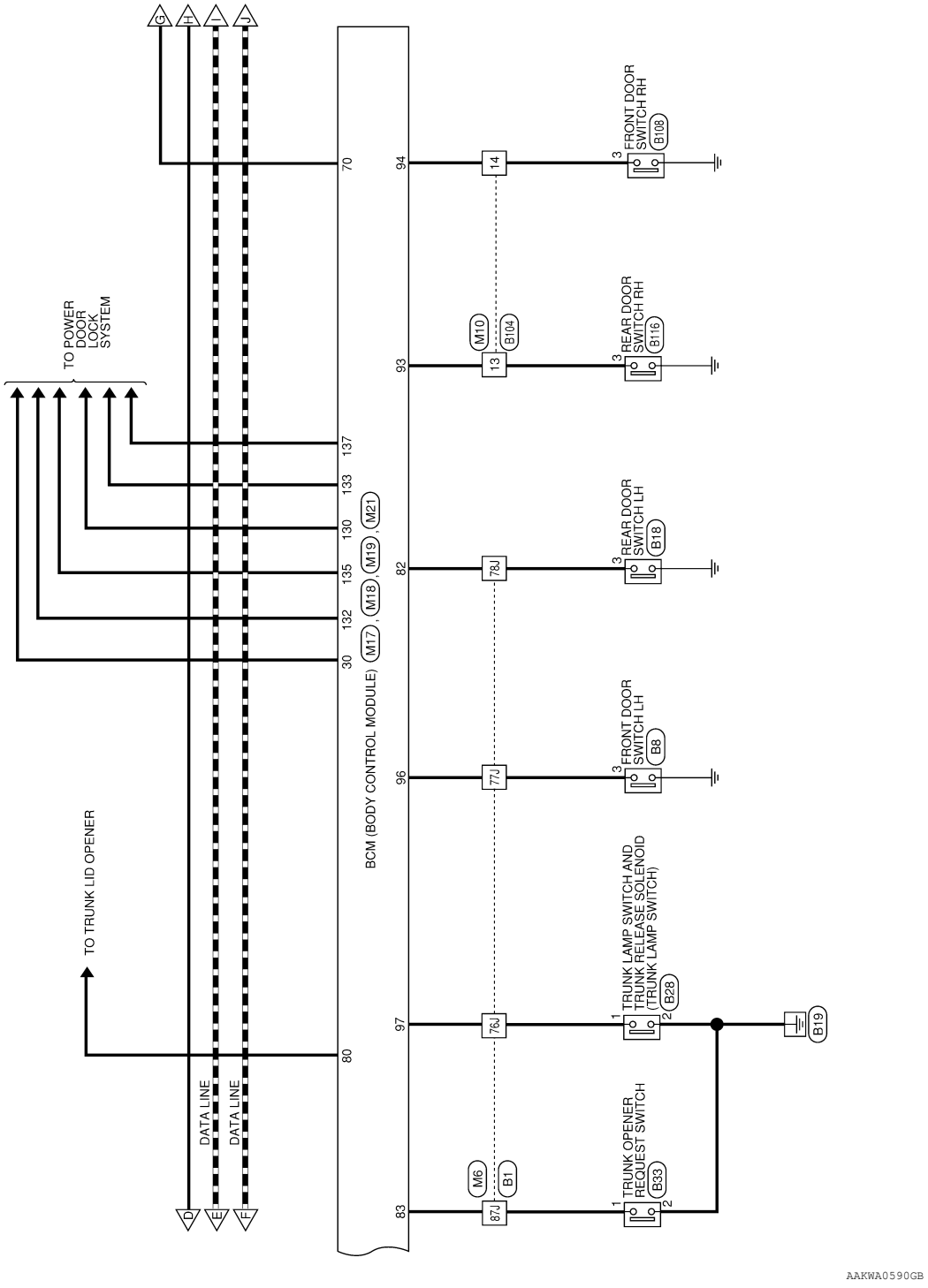
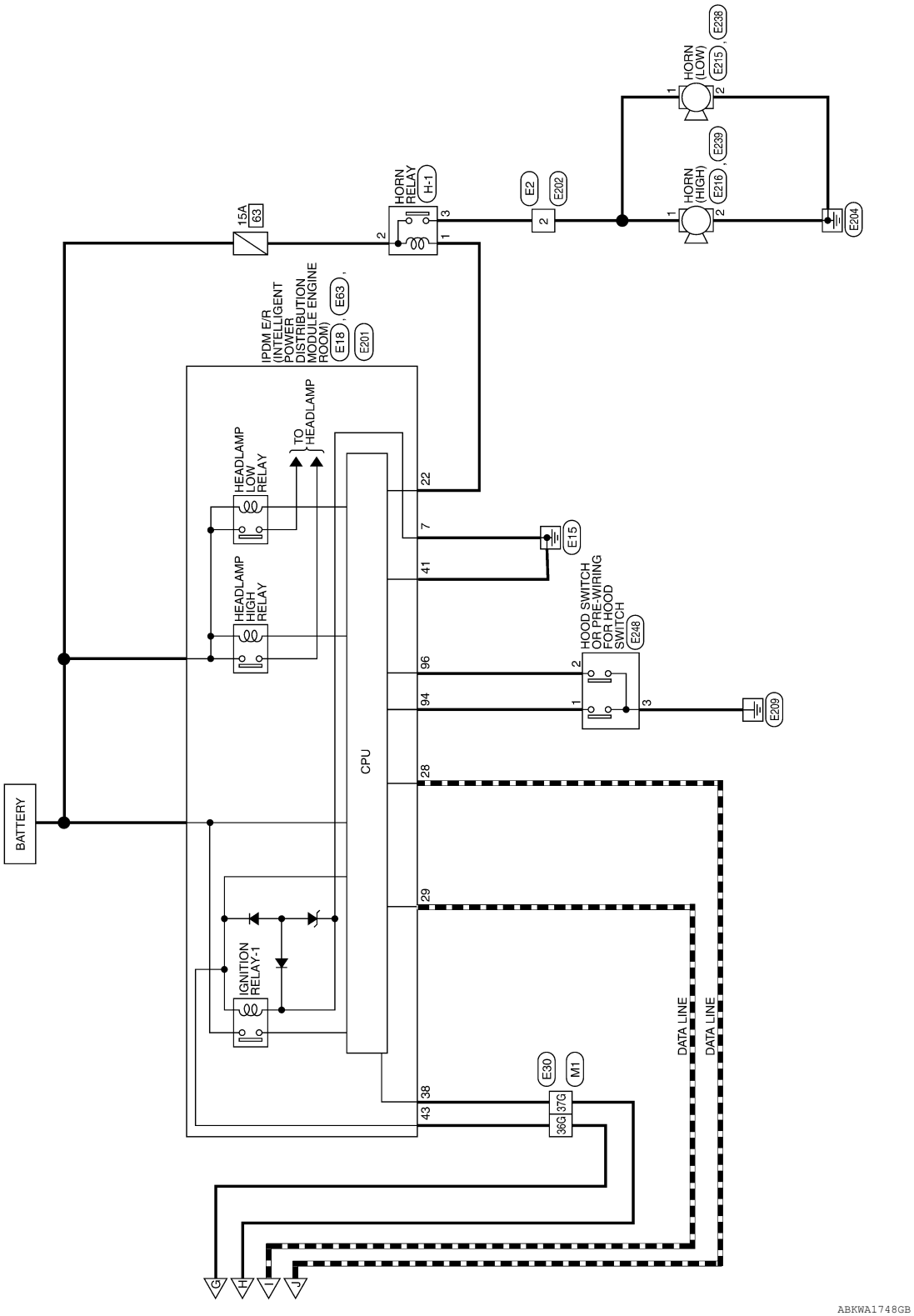
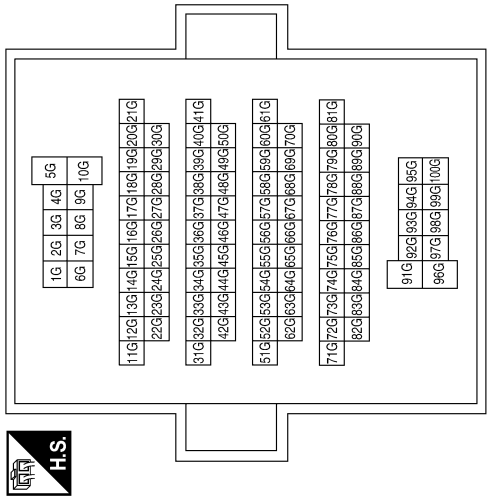

G
H
I
J
TO POWER DOOR LOCK SYSTEM
TO TRUNK LID OPENER
DATA LINE
DATA LINE
D
E
F
BCM (BODY CONTROL MODULE)
70
137
133
130
135
132
30
80
83
94
93
82
96
97
M21
M19
M18
M17
14
13
78J
77J
76J
87J
M10
B104
M6
B1
FRONT DOOR SWITCH RH
B108
REAR DOOR SWITCH RH
B116
REAR DOOR SWITCH LH
B18
FRONT DOOR SWITCH LH
B8
TRUNK LAMP SWITCH AND TRUNK RELEASE SOLENOID (TRUNK LAMP SWITCH)
B28
TRUNK OPENER REQUEST SWITCH
B33
B19
AAKWA0590GB


HORN (LOW)
E238
E215
HORN (HIGH)
E239
E216
E204
HORN RELAY H-1
E2
E202
15A 63
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E18
E63
E201
TO HEADLAMP
HEADLAMP LOW RELAY
HEADLAMP HIGH RELAY
CPU
E15
HOOD SWITCH OR PRE-WIRING FOR HOOD SWITCH
E248
E209
BATTERY
IGNITION RELAY-1
DATA LINE
DATA LINE
E30
M1
37G
36G
22
7
41
96
94
28
29
38
43
G
H
J
P
ABKWA1748GB

INTELLIGENT KEY SYSTEM CONNECTORS

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

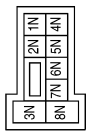
H.S.



Terminal No.	Color of Wire	Signal Name
5G	W	–
13G	W	–
22G	L	–
23G	P	–
36G	G	–
37G	R	–

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

H.S.



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

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

H.S.

Terminal No.	Color of Wire	Signal Name
9R	G	–
10R	BG	–
12R	W	–

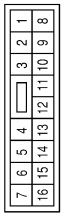
Connector No.	M5
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

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

ABKIA3611GB

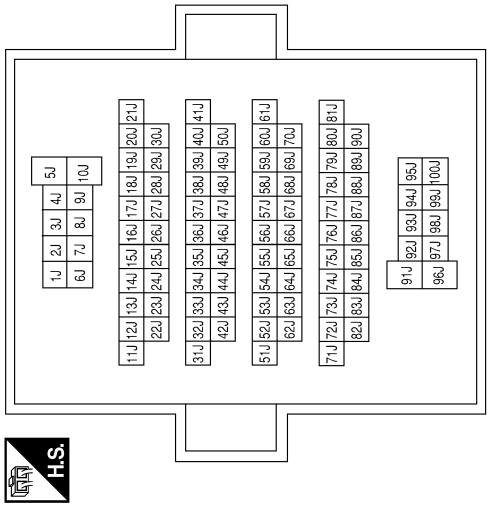
Connector No.	M10
Connector Name	WIRE TO WIRE
Connector Color	BROWN



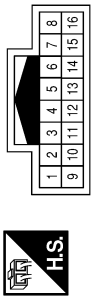
Terminal No.	Color of Wire	Signal Name
13	V	–
14	SB	–

Terminal No.	Color of Wire	Signal Name
76J	SB	–
77J	BR	–
78J	Y	–
83J	R	–
84J	G	–
85J	W	–
86J	G	–
87J	LG	–

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Color	GRAY

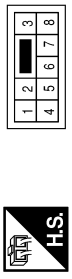


Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
4	Y	–
5	R	–
6	P	–

Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
4	GR	–

AAKIA1159GB

Connector No.	M17
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	R	ENG START SW NO ESCL
17	B	GND RF A/L
20	W	SHIFT P
25	BG	BRAKE SW FUSE
27	G	BRAKE SW LAMP
30	P	DR DOOR LOCK STATUS
36	Y	HAZARD SW

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
59	P	CAN-L
60	L	CAN-H
64	W	BUZZER OUT
69	L	AT DEVICE OUT
70	G	IGN USM OUT1
71	V	DR REQUEST SW
72	Y	AS REQUEST SW
80	BR	TRUNK OPEN SW

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
82	Y	RL DOOR SW
83	LG	TRUNK REQUEST SW
93	V	RR DOOR SW
94	SB	AS DOOR SW
96	BR	DR DOOR SW
97	SB	TRUNK SW
99	G	ROOM ANT 3 B
100	R	ROOM ANT 3 A
101	G	REAR BUMPER ANT B
102	W	REAR BUMPER ANT A

Terminal No.	Color of Wire	Signal Name
114	P	AS DOOR ANT A
115	R	AS DOOR ANT B
116	W	ROOM ANT 2 A
117	SB	FL FLASHER
119	G	RF NIMOCO
121	R	DR DOOR ANT B
122	P	DR DOOR ANT A
128	BG	ROOM ANT 2 B

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
105	BR	FR FLASHER
108	BG	SHIFT LOCK SOLENOID OUT
111	Y	ACC LED

AAKIA1160GB

Connector No.	M21
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
129	G	BATTERY SAVER OUT
130	SB	DOOR UNLOCK AS
131	W	BAT BCM FUSE
132	L	DOOR LOCK RR/RL
133	Y	DOOR UNLOCK RR/RL
134	B	GND2
135	BR	DOOR LOCK DR/AS/FL
136	P	ROOM LAMP CONT
137	V	DOOR UNLOCK DR/FL
138	V	BAT REAR DOOR

Terminal No.	Color of Wire	Signal Name
139	W	BAT ROWER F/L
142	BR	BAT FRONT DOOR
143	B	GND1

Connector No.	M23
Connector Name	CVT SHIFT SELECTOR
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	BG	–
4	B	–
5	L	–
6	W	–

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	B	GND1
2	B	GND2
22	G	BAT
38	P	CAN-L
39	L	CAN-H

Connector No.	M27
Connector Name	REMOTE KEYLESS ENTRY RECEIVER
Connector Color	BLACK

H.S.

1	2	3	4

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

Connector No.	M38
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Color	WHITE

H.S.

			3
4			
5	6	7	8

Terminal No.	Color of Wire	Signal Name
3	W	–
4	B	–
7	Y	–
8	R	–

ABKIA3614GB

Connector No.	M81
Connector Name	FRONT CONSOLE ANTENNA
Connector Color	GRAY

H.S.

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

Connector No.	M89
Connector Name	JOINT CONNECTOR-M05
Connector Color	WHITE

H.S.

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

Connector No.	M112
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
8	V	–
9	R	–
10	P	–
18	B	–

Connector No.	M155
Connector Name	JOINT CONNECTOR-M06
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	P	–
4	P	–

Connector No.	M156
Connector Name	JOINT CONNECTOR-M07
Connector Color	WHITE

H.S.

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

Connector No.	M157
Connector Name	JOINT CONNECTOR-M08
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	P	–
4	P	–

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Connector No.	E18
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

H.S.

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

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

Connector No.	E6
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
5M	G	–
8M	W	–

Connector No.	E2
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2		3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name
2	R	–

Connector No.	E22
Connector Name	JOINT CONNECTOR-E04
Connector Color	GRAY

H.S.

6	5	4	3	2	1

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

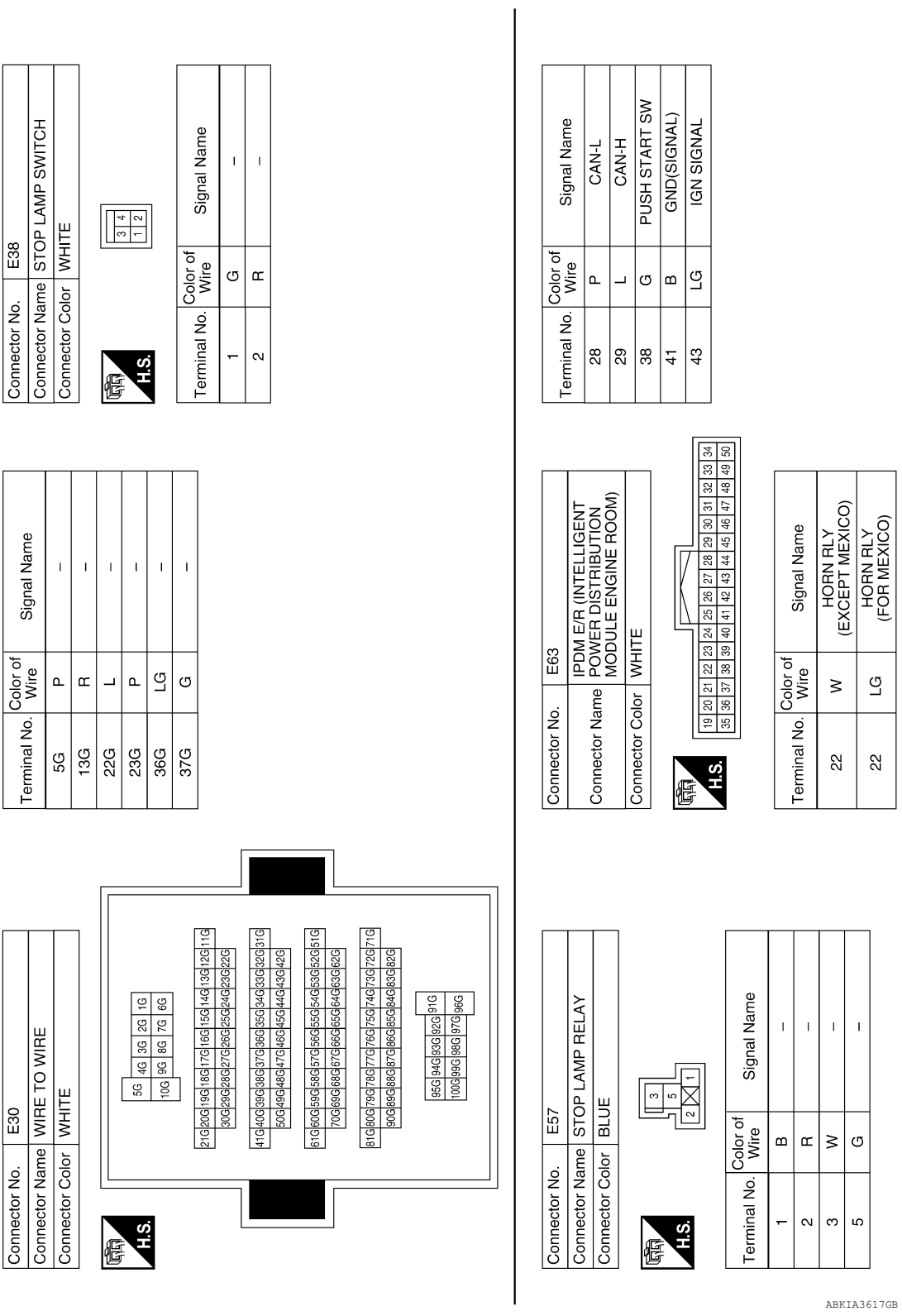
Connector No.	E21
Connector Name	JOINT CONNECTOR-E03
Connector Color	GRAY

H.S.

6	5	4	3	2	1

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

ABKIA3616GB


Connector No. E38
Connector Name STOP LAMP SWITCH
Connector Color WHITE
H.S.
3 4
1 2
Terminal No. Color of Wire Signal Name
1 G –
2 R –
Terminal No. Color of Wire Signal Name
28 P CAN-L
29 L CAN-H
38 G PUSH START SW
41 B GND(SIGNAL)
43 LG IGN SIGNAL
Connector No. E30
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
5G 4G 3G 2G 1G
10G 9G 8G 7G 6G
21G 20G 19G 18G 17G 16G 15G 14G 13G 12G 11G
30G 29G 28G 27G 26G 25G 24G 23G 22G
41G 40G 39G 38G 37G 36G 35G 34G 33G 32G 31G
50G 49G 48G 47G 46G 45G 44G 43G 42G
61G 60G 59G 58G 57G 56G 55G 54G 53G 52G 51G
70G 69G 68G 67G 66G 65G 64G 63G 62G
81G 80G 79G 78G 77G 76G 75G 74G 73G 72G 71G
90G 89G 88G 87G 86G 85G 84G 83G 82G
95G 94G 93G 92G 91G
100G 99G 98G 97G 96G
Terminal No. Color of Wire Signal Name
5G P –
13G R –
22G L –
23G P –
36G LG –
37G G –
Connector No. E63
Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color WHITE
H.S.
19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34
35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
Terminal No. Color of Wire Signal Name
22 W HORN RLY (EXCEPT MEXICO)
22 LG HORN RLY (FOR MEXICO)
Connector No. E57
Connector Name STOP LAMP RELAY
Connector Color BLUE
H.S.
3
5
2 1
Terminal No. Color of Wire Signal Name
1 B –
2 R –
3 W –
5 G –
ABKIA3617GB

Connector No.	E64
Connector Name	JOINT CONNECTOR-E10
Connector Color	WHITE

H.S.

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

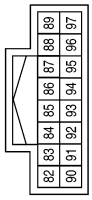
Connector No.	E74
Connector Name	INTELLIGENT KEY WARNING BUZZER
Connector Color	BROWN

H.S.

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

Connector No.	E201
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

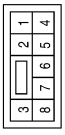
H.S.



Terminal No.	Color of Wire	Signal Name
94	SB	HOODSW 2
96	Y	HOODSW

Connector No.	E202
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
2	G	–

Connector No.	E215
Connector Name	HORN (LOW)
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	G	–

Connector No.	E216
Connector Name	HORN (HIGH)
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	G	–

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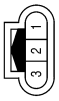
Connector No.	E248
Connector Name	HOOD SWITCH OR PRE-WIRING FOR HOOD SWITCH
Connector Color	BLACK

H.S.



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

Connector No.	E239
Connector Name	HORN (HIGH)
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
2	B	–

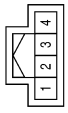
Connector No.	E238
Connector Name	HORN (LOW)
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
2	B	–

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

H.S.

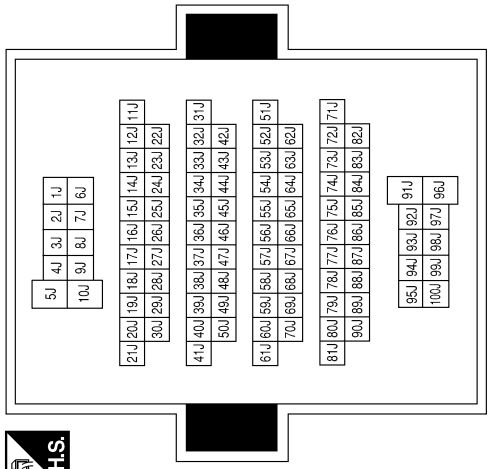


Terminal No.	Color of Wire	Signal Name
3	L	–

Terminal No.	Color of Wire	Signal Name
76J	W	–
77J	L	–
78J	LG	–
83J	BG	–
84J	R	–
85J	W	–
86J	G	–
87J	P	–

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Color	GRAY

H.S.



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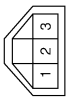
Connector No.	B29
Connector Name	REAR PARCEL SHELF ANTENNA
Connector Color	GRAY

H.S.

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

Connector No.	B28
Connector Name	TRUNK LAMP SWITCH AND TRUNK RELEASE SOLENOID
Connector Color	WHITE

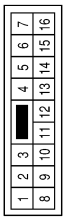
H.S.



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

Connector No.	B104
Connector Name	WIRE TO WIRE
Connector Color	BROWN

H.S.



Terminal No.	Color of Wire	Signal Name
13	V	–
14	L	–

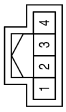
Connector No.	B46
Connector Name	REAR BUMPER ANTENNA
Connector Color	GRAY

H.S.

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

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

H.S.



Terminal No.	Color of Wire	Signal Name
3	LG	–

Connector No.	B33
Connector Name	TRUNK OPENER REQUEST SWITCH
Connector Color	BROWN

H.S.

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

AAKIA1162GB

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

H.S.

Terminal No.	Color of Wire	Signal Name
3	L	–

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

H.S.

Terminal No.	Color of Wire	Signal Name
3	V	–

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

H.S.

Terminal No.	Color of Wire	Signal Name
8	R	–
9	W	–
10	BG	–
18	B	–

Connector No.	D6
Connector Name	FRONT OUTSIDE HANDLE LH
Connector Color	BLACK

H.S.

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

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

H.S.

Terminal No.	Color of Wire	Signal Name
4	B	–

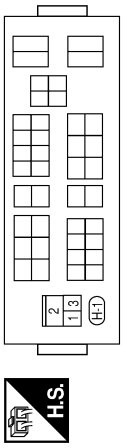
Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
4	P	–
5	W	–
6	BG	–

AAKIA1163GB

Connector No.	H-1
Connector Name	FUSE AND FUSIBLE LINK BOX (HORN RELAY)
Connector Color	–



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

Connector No.	D106
Connector Name	FRONT OUTSIDE HANDLE RH
Connector Color	BLACK

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

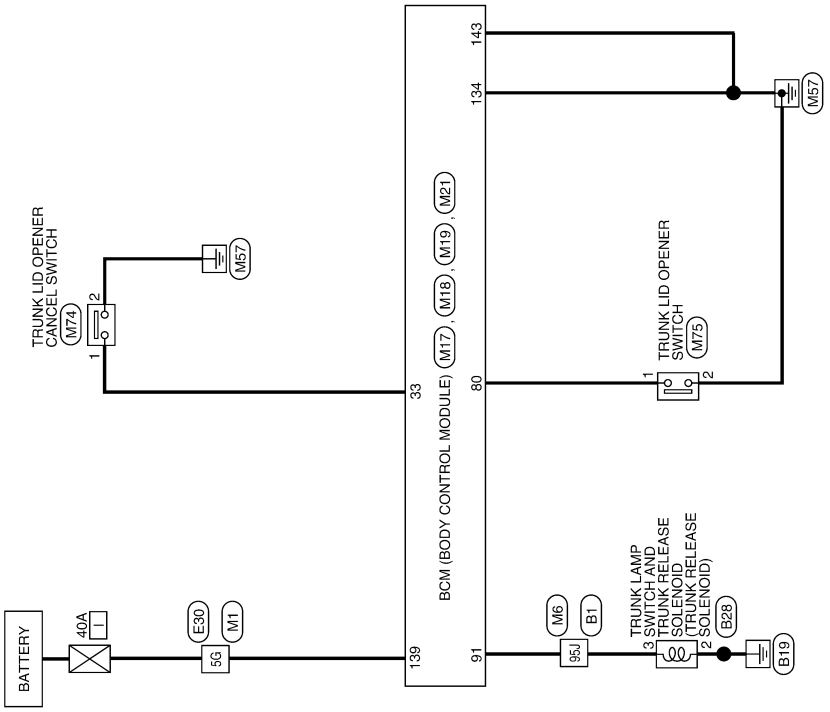
AAKIA1164GB

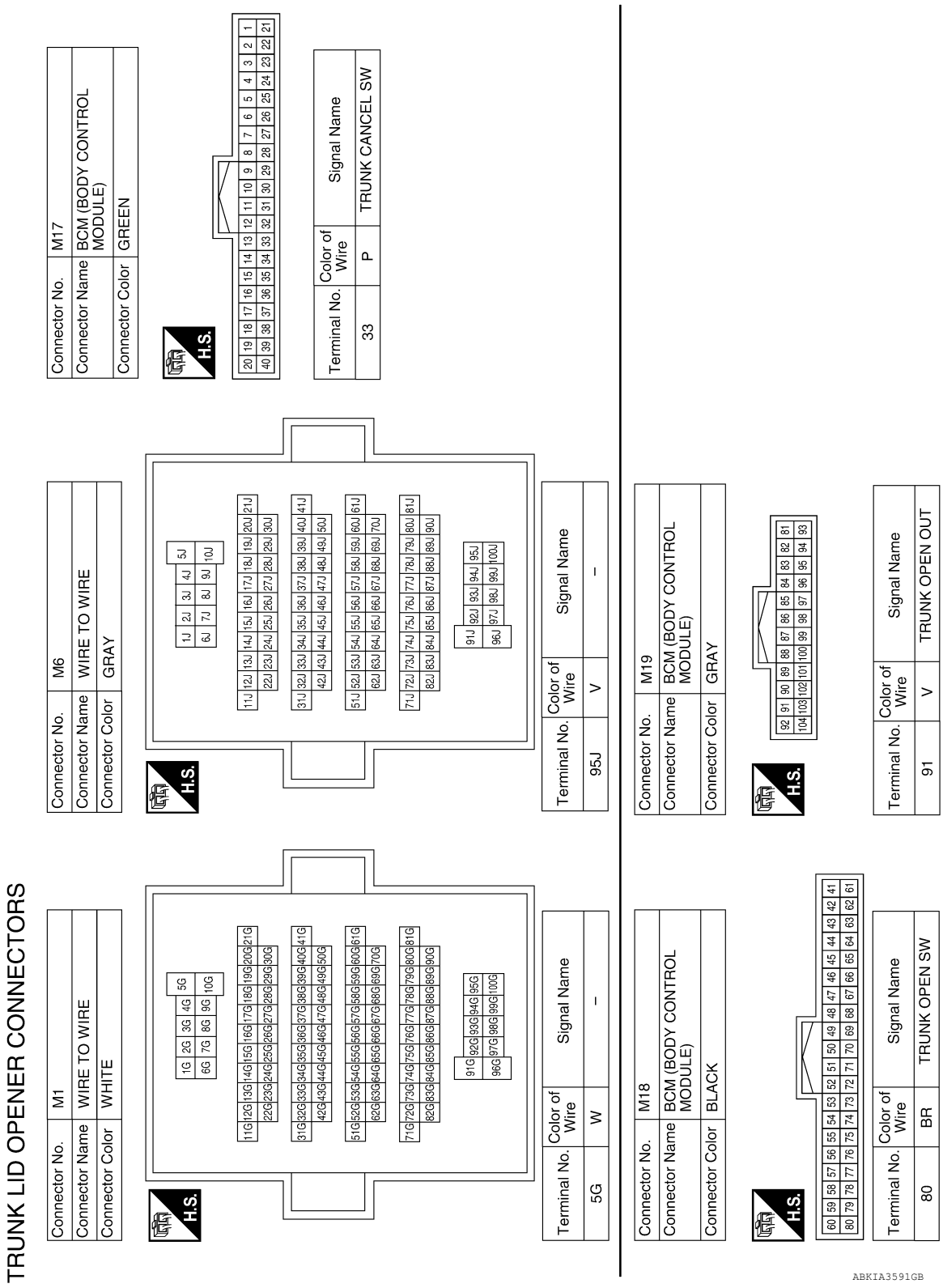
< WIRING DIAGRAM >

TRUNK LID OPENER

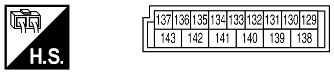
Wiring Diagram

INFOID:0000000007987364




TRUNK LID OPENER CONNECTORS
Connector No. M1
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
Terminal No. Color of Wire Signal Name
5G W –
Connector No. M6
Connector Name WIRE TO WIRE
Connector Color GRAY
H.S.
Terminal No. Color of Wire Signal Name
95J V –
Connector No. M17
Connector Name BCM (BODY CONTROL MODULE)
Connector Color GREEN
H.S.
Terminal No. Color of Wire Signal Name
33 P TRUNK CANCEL SW
Connector No. M18
Connector Name BCM (BODY CONTROL MODULE)
Connector Color BLACK
H.S.
Terminal No. Color of Wire Signal Name
80 BR TRUNK OPEN SW
Connector No. M19
Connector Name BCM (BODY CONTROL MODULE)
Connector Color GRAY
H.S.
Terminal No. Color of Wire Signal Name
91 V TRUNK OPEN OUT
ABKIA3591GB

Connector No.	M21
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE

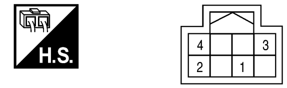


Terminal No.	Color of Wire	Signal Name
134	B	GND2
139	W	BAT POWER F/L
143	B	GND1

Connector No.	M74
Connector Name	TRUNK LID OPENER CANCEL SWITCH
Connector Color	WHITE

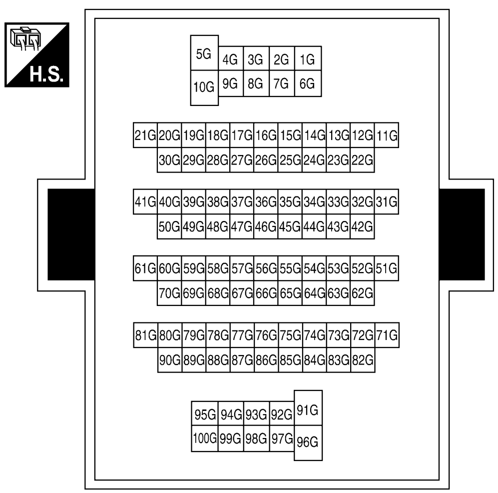
Terminal No.	Color of Wire	Signal Name
1	P	–
2	B	–

Connector No.	M75
Connector Name	TRUNK LID OPENER SWITCH
Connector Color	GREEN



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

Connector No.	E30
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

ABKIA3592GB

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Color	GRAY

H.S.

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

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

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

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

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

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

Terminal No.	Color of Wire	Signal Name
95J	V	–

Connector No.	B28
Connector Name	TRUNK LAMP SWITCH AND TRUNK RELEASE SOLENOID
Connector Color	WHITE

H.S.

1	2	3

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

ABKIA3593GB

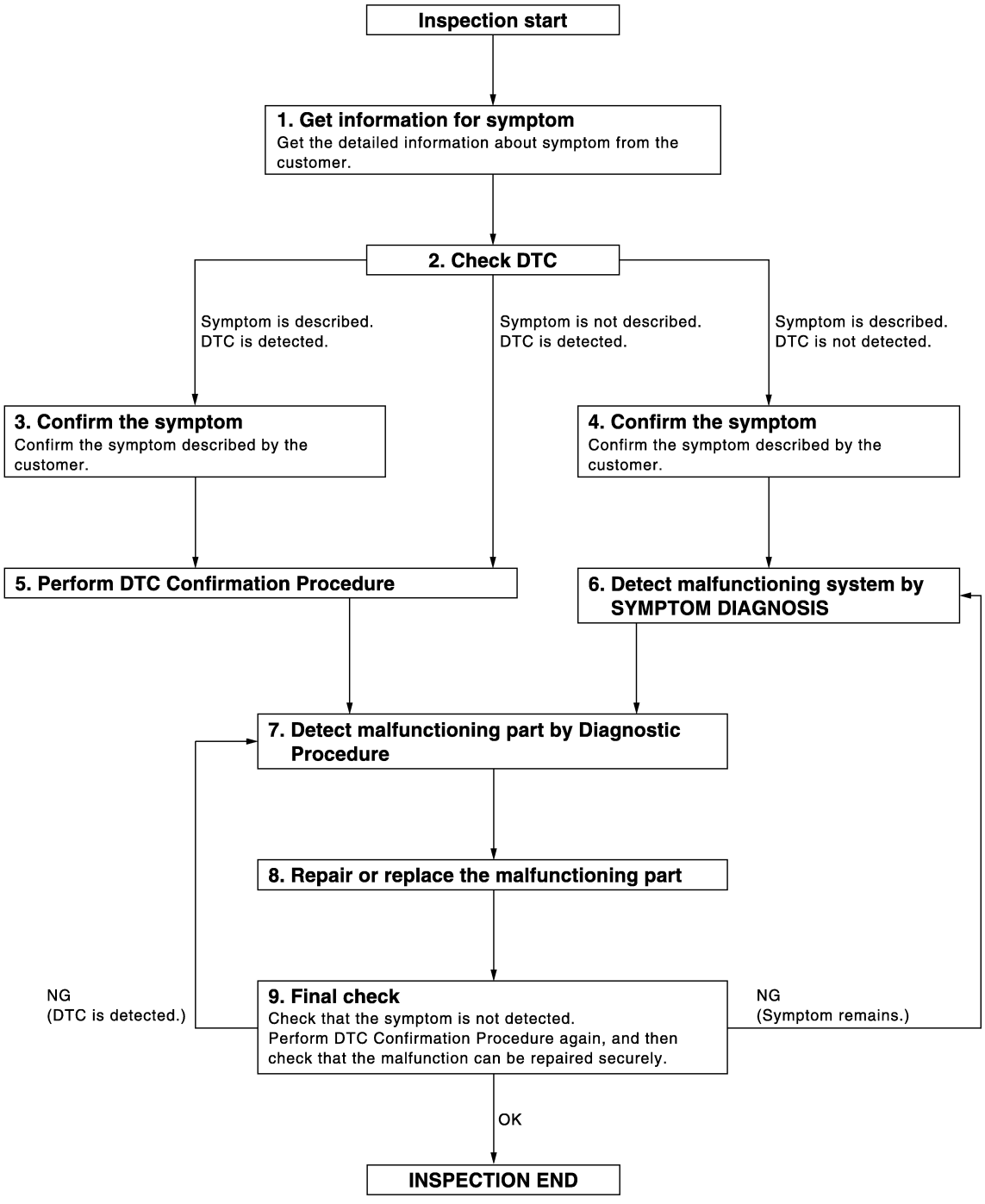
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000007987210

OVERALL SEQUENCE



JMKIA2270GB

DETAILED FLOW

1.GET INFORMATION FOR SYMPTOM

Get the detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurred).

>> GO TO 2

2.CHECK DTC

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

- Record DTC and freeze frame data (Print them out with 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.

Is any symptom described and any DTC detected?

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

3.CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.
Connect CONSULT to the vehicle in “DATA MONITOR” mode and check real time diagnosis results.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5

4.CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.
Connect CONSULT to the vehicle in “DATA MONITOR ” mode and check real time diagnosis results.
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 displayed DTC, and then check that DTC is detected again.
At this time, always connect CONSULT to the vehicle, and check diagnostic results in real time.
If two or more DTCs are detected, refer to BCS-47, "DTC Inspection Priority Chart" 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 in Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check.
  If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC Confirmation Procedure.

Is DTC detected?

Yes >> GO TO 7
No >> Refer to GI-47, "Intermittent Incident".

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

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

>> GO TO 7

7.DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the system.

NOTE:

The Diagnostic Procedure described based on open circuit inspection. A short circuit inspection is also required for the circuit check in the Diagnostic Procedure.

Is malfunctioning part detected?

YES >> GO TO 8
NO >> Check voltage of related BCM terminals using CONSULT.

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 9

9. FINAL CHECK

When DTC was detected in step 2, perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunction have been repaired securely.
When symptom was described from the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Is the inspection result normal?

NO (DTC is detected)>>GO TO 7
NO (Symptom remains)>>GO TO 6
YES >> Inspection End.

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000007987211

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

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:0000000007987212

Refer to the CONSULT Operation Manual for the initialization procedure.

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000007987250

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

DTC Logic

INFOID:0000000007987251

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC Detection Condition	Possible cause
U1000	CAN COMM CIRCUIT	When BCM cannot communicate CAN communication signal continuously for 2 seconds or more.	In CAN communication system, any item (or items) of the following listed below is malfunctioning. • Transmission • Receiving (ECM) • Receiving (VDC/TCS/ABS) • Receiving (METER/M&A) • Receiving (TCM) • Receiving (MULTI AV) • Receiving (IPDM E/R)

Diagnosis Procedure

INFOID:0000000007987252

1.PERFORM SELF DIAGNOSTIC

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

Is “CAN COMM CIRCUIT” displayed?

YES >> Refer to LAN-61, "Diagnosis Procedure".
NO >> Refer to GI-47, "Intermittent Incident".

U1010 CONTROL UNIT (CAN)

DTC Logic

INFOID:0000000007987253

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC Detection Condition	Possible cause
U1010	CONTROL UNIT (CAN)	BCM detected internal CAN communication circuit malfunction.	BCM

Diagnosis Procedure

INFOID:0000000007987254

1.REPLACE BCM

When DTC [U1010] is detected, replace BCM.

>> Replace BCM. Refer to BCS-77, "Removal and Installation".

Special Repair Requirement

INFOID:0000000007987255

1.REQUIRED WORK WHEN REPLACING BCM

Initialize NVIS by CONSULT. For the details of initialization refer to CONSULT Operation Manual.

>> Work End.

B261B REMOTE ENGINE START

DTC Logic

INFOID:0000000008619865

DTC DETECTION LOGIC

NOTE:

- If DTC B261B is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-65, "DTC Logic".
- If DTC B261B is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-66, "DTC Logic".

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

Diagnosis Procedure

INFOID:0000000008619866

1. CHECK ECM IGNITION, POWER AND GROUND CIRCUITS

Check ECM ignition power and ground circuits. Refer to EC-204, "Diagnosis Procedure" (with QR25DE) or EC-707, "Diagnosis Procedure" (with VQ35DE) .

Is the inspection result normal?

YES >> Replace ECM. Refer to EC-538, "Removal and Installation" (with QR25DE) or EC-999, "Removal and Installation" (with VQ35DE). GO TO 2.

NO >> Repair or replace harness or connectors.

2. INSPECTION

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

Does DTC B261B return?

YES >> Replace BCM. Refer to BCS-77, "Removal and Installation".

NO >> Inspection End.

B2621 INSIDE ANTENNA

DTC Logic

INFOID:0000000008619867

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2621	INSIDE ANTENNA	An excessive high or low voltage from inside antenna (rear parcel shelf) is sent to BCM.	• Inside key antenna (rear parcel shelf) • Harness or connector [Inside key antenna (rear parcel shelf) 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-87, "Diagnosis Procedure".
NO >> Inside key antenna (rear parcel shelf) is OK.

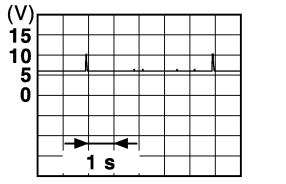
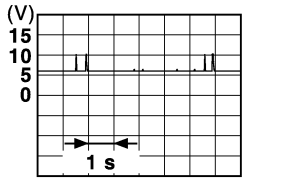
Diagnosis Procedure

INFOID:0000000008619868

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

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M20	100, 99	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-77, "Removal and Installation".

NO >> GO TO 2.

2.CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and inside key antenna (rear parcel shelf) connector.
2. Check continuity between BCM harness connector and inside key antenna (rear parcel shelf) harness connector.

BCM		Inside key antenna (rear parcel shelf)		Continuity
Connector	Terminal	Connector	Terminal	
M20	100	B29	1	Yes
	99		2	

3. Check continuity between BCM harness connector and ground.

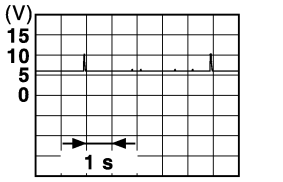
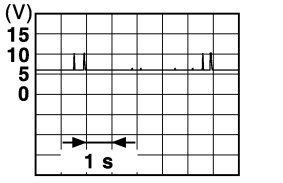
BCM		Ground	Continuity
Connector	Terminal		
M20	100		No
	99		

Is the inspection result normal?

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

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM		(–)	Condition	Signal (Reference value)
Connector	Terminal			
M20	100, 99	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace inside key antenna (rear parcel shelf).
NO >> Replace BCM. Refer to BCS-77, "Removal and Installation" .

B2622 INSIDE ANTENNA

DTC Logic

INFOID:0000000008619869

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2622	INSIDE ANTENNA	An excessive high or low voltage from inside antenna (front console) is sent to BCM.	• Inside key antenna (front console) • Harness or connector [Inside key antenna (front 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-89, "Diagnosis Procedure".
NO >> Inside key antenna (front console) is OK.

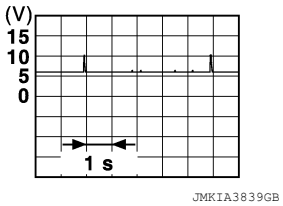
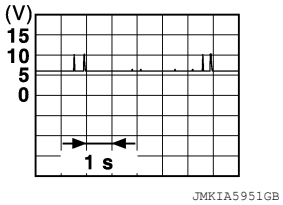
Diagnosis Procedure

INFOID:0000000008619870

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

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M20	116, 128	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-77, "Removal and Installation".
NO >> GO TO 2.

2.CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and inside key antenna (front console) connector.
2. Check continuity between BCM harness connector and inside key antenna (front console) harness connector.

BCM		Inside key antenna (front console)		Continuity
Connector	Terminal	Connector	Terminal	
M20	116	M81	1	Yes
	128		2	

3. Check continuity between BCM harness connector and ground.

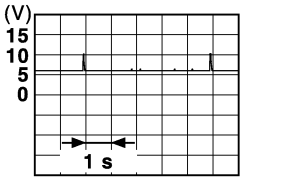
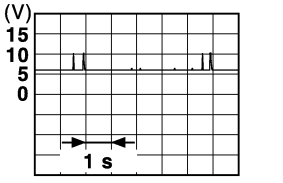
BCM		Ground	Continuity
Connector	Terminal		
M20	116		No
	128		

Is the inspection result normal?

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

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM		(–)	Condition	Signal (Reference value)
Connector	Terminal			
M20	116, 128	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace inside key antenna (front console). Refer to DLK-219, "CONSOLE : Removal and Installation".
NO >> Replace BCM. Refer to BCS-77, "Removal and Installation".

B26FD SHIFT LOCK SOLENOID

DTC Logic

INFOID:0000000008619871

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B26FD	SHIFT LOCK SOLENOID	BCM shift lock solenoid output control is OFF but shift lock solenoid output feedback is ON.	• Shift lock solenoid • Harness or connector • Shift lock solenoid circuit is open or shorted

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to DLK-91, "Diagnosis Procedure".
NO >> Shift lock solenoid is OK.

Diagnosis Procedure

INFOID:0000000008619872

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

1. CHECK POWER SOURCE (STOP LAMP SWITCH)

1. Turn ignition switch OFF.
2. Disconnect stop lamp switch connector.
3. Check voltage between stop lamp switch connector E39 terminal 1 and ground.

Stop lamp switch		Ground	Voltage
Connector	Terminal		
E39	1		Battery voltage

Is the inspection result normal?

YES >> GO TO 2.
NO >> Check the following:
- Harness for short or open between fuse block (J/B) and stop lamp switch
- 10A fuse (No. 10, located in fuse block [J/B])

2.CHECK STOP LAMP SWITCH

Check stop lamp switch. Refer to BRC-73, "Diagnosis Procedure" .

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace stop lamp switch. Refer to BR-18, "Exploded View".

3.CHECK GROUND CIRCUIT (STOP LAMP RELAY)

1. Remove the stop lamp relay.
2. Check continuity between stop lamp relay connector E57 terminal 1 and ground.

Stop lamp relay		Ground	Continuity
Connector	Terminal (+)		
E57	1		Yes

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace damaged parts.

4. CHECK HARNESS BETWEEN STOP LAMP RELAY AND BCM

1. Check continuity between stop lamp relay connector E57 terminal 3 and BCM connector M17 terminal 27.

BCM		stop lamp relay		Continuity
Connector	Terminal	Connector	Terminal	
M17	27	E57	3	Yes

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace damaged parts.

5. CHECK HARNESS BETWEEN STOP LAMP SWITCH AND STOP LAMP RELAY

1. Check continuity between stop lamp relay connector E57 terminal 3 and stop lamp switch connector E39 terminal 2.

Stop lamp switch		Stop lamp relay		Continuity
Connector	Terminal	Connector	Terminal	
E39	2	E57	3	Yes

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace damaged parts.

6. CHECK GROUND CIRCUIT (STOP LAMP RELAY)

1. Remove the stop lamp relay.
2. Check continuity between stop lamp relay connector E57 terminal 1 and ground.

Stop lamp relay		Ground	Continuity
Connector	Terminal (+)		
E57	1		Yes

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace damaged parts.

7. CHECK POWER SOURCE (STOP LAMP RELAY)

1. Check voltage between stop lamp relay connector E57 terminal 5 and ground.

Stop lamp relay		Ground	Continuity
Connector	Terminal (+)		
E57	5		Battery voltage

Is the inspection result normal?

YES >> GO TO 8.
NO >> Repair or replace damaged parts.

8. CHECK HARNESS BETWEEN BCM AND CVT SHIFT SELECTOR FOR OPEN

1. Disconnect CVT shift selector connector.
2. Check continuity between BCM connector M20 terminal 108 and CVT shift selector connector M23 terminal 3.

BCM		CVT shift selector		Continuity
Connector	Terminal	Connector	Terminal	
M20	108	M23	3	Yes

Is the inspection result normal?

YES >> GO TO 9.
NO >> Repair or replace damaged parts.

9. CHECK HARNESS BETWEEN BCM AND CVT SHIFT SELECTOR FOR SHORT CIRCUIT

Check continuity between BCM connector M20 terminal 108 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	108		No

Is the inspection result normal?

YES >> GO TO 10.
NO >> Repair or replace damaged parts.

10. CHECK GROUND CIRCUIT (CVT SHIFT SELECTOR)

Check continuity between CVT shift selector connector M23 terminal 4 and ground.

CVT shift selector		Ground	Continuity
Connector	Terminal		
M23	4		Yes

Is the inspection result normal?

YES >> Replace shift lock solenoid. Refer to TM-178, "Exploded View".
NO >> Repair or replace damaged parts.

B26FE HOOD SWITCH

DTC Logic

INFOID:0000000008619873

DTC DETECTION LOGIC

NOTE:

- If DTC B26FE is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to BCS-65, "DTC Logic".
- If DTC B26FE is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to BCS-66, "DTC Logic".

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to DLK-94, "Diagnosis Procedure".
NO >> Hood switch is OK.

Diagnosis Procedure

INFOID:0000000008619874

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

1.CHECK HOOD SWITCH SIGNAL CIRCUITS

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

(+)		(–)	Voltage (V) (Approx.)
Hood switch			
Connector	Terminal		
E248	1	Ground	Battery voltage
	2		

Is the inspection result normal?

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

2.CHECK HOOD SWITCH SIGNAL CIRCUITS

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

IPDM E/R		Hood switch		Continuity
Connector	Terminal	Connector	Terminal	
E201	94	E248	1	Yes
	96		2	

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
E201	94		No
	96		

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK HOOD SWITCH GROUND CIRCUIT

Check continuity between hood switch harness connector and ground.

Hood switch		Ground	Continuity
Connector	Terminal		
E248	3		Yes

Is the inspection result normal?

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

4.CHECK HOOD SWITCH

Refer to DLK-95, "Component Inspection" .

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace hood switch. Refer to DLK-175, "HOOD LOCK CONTROL : Removal and Installation".

5.CHECK BCM CONFIGURATION

Refer to BCS-63, "CONFIGURATION (BCM) : Configuration list".

>> Inspection End.

Component Inspection

INFOID:0000000008619875

1.CHECK HOOD SWITCH

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

Hood switch		Condition		Continuity
Terminal				
1	3	Hood switch	Press	No
1	3	Hood switch	Release	Yes
2	3	Hood switch	Press	No
2	3	Hood switch	Release	Yes

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace hood switch. Refer to DLK-175, "HOOD LOCK CONTROL : Removal and Installation".

B26FF REMOTE KEYLESS ENTRY RECEIVER

DTC Logic

INFOID:0000000008619876

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Refer to DLK-96, "Diagnosis Procedure".
NO >> Inspection End.

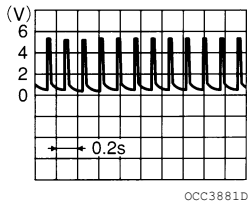
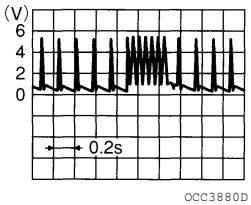
Diagnosis Procedure

INFOID:0000000008619877

Regarding Wiring Diagram information, refer to DLK-50, "Wiring Diagram".

1.CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT SIGNAL

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M20	119	Ground	Standby state	
			Press the Intelligent Key lock or unlock button	

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-77, "Removal and Installation".
NO >> GO TO 3.

2.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 1

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

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M20	119	M27	2	Yes

3. Check continuity between BCM harness connector and ground.

(+)		(–)	Continuity
BCM			
Connector	Terminal		
M20	119	Ground	No

Is the inspection result normal?

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

3.CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

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

(+)		(–)	Voltage (Approx)
Remote keyless entry receiver			
Connector	Terminal		
M27	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.
NO-1 >> Check 10A fuse No. 25 [located in fuse block J/B].
NO-2 >> Repair or replace harness between BCM and 10A fuse No. 25.

4.CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

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

Remote keyless entry receiver		Ground	Continuity
Connector	Terminal		
M27	3		Yes

Is the inspection result normal?

YES >> Replace remote keyless entry receiver. Refer to DLK-223, "Removal and Installation".
NO >> Repair or replace harness.

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000008682974

Regarding Wiring Diagram information, refer to BCS-52, "Wiring Diagram".

1. CHECK FUSE AND FUSIBLE LINK

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

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

Is the fuse or fusible link blown?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit.
NO >> GO TO 2

2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector M21.
2. Check voltage between BCM connector M21 terminals 131, 139 and ground.

BCM		Ground	Voltage (Approx.)
Connector	Terminal		
M21	131	—	Battery voltage
	139		

Is the inspection result normal?

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

3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M21 terminals 134, 143 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M21	134	—	Yes
	143		

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness or connectors.

DOOR SWITCH

Description

INFOID:0000000007987264

Detects door open/close condition.

Component Function Check

INFOID:0000000007987265

1.CHECK FUNCTION

With CONSULT

Check door switches DOOR SW-DR, DOOR SW-AS, DOOR SW-RL, DOOR SW-RR in Data Monitor mode with CONSULT.

Monitor item	Condition
DOOR SW-DR	CLOSE → OPEN: OFF → ON
DOOR SW-AS	
DOOR SW-RL	
DOOR SW-RR	

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Refer to DLK-99, "Diagnosis Procedure".

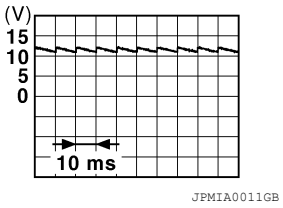
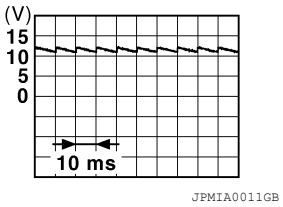
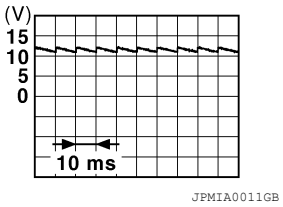
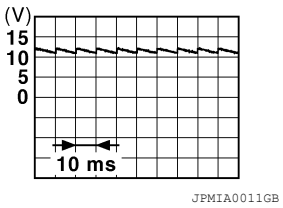
Diagnosis Procedure

INFOID:0000000007987266

Regarding Wiring Diagram information, refer to DLK-50, "Wiring Diagram".

1.CHECK DOOR SWITCH INPUT SIGNAL

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

Terminals (+) BCM connector	Terminals (+) Terminal	Terminals (–)	Door condition		Voltage (V) (Approx.)
M19	96	Ground	Front door switch LH	OPEN	0
				CLOSE	 JPMIA0011GB
	94		Front door switch RH	OPEN	0
				CLOSE	 JPMIA0011GB
	93		Rear door switch RH	OPEN	0
				CLOSE	 JPMIA0011GB
	82		Rear door switch LH	OPEN	0
				CLOSE	 JPMIA0011GB

Is the inspection result normal?

YES >> GO TO 4
NO >> GO TO 2

2.CHECK DOOR SWITCH CIRCUIT

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

BCM connector	Terminal	Door switch connector	Terminal	Continuity
M19	96	Front door switch LH	Ground part of door switch	Yes
	94	Front door switch RH		
	93	Rear door switch RH		
	82	Rear door switch LH		

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M19	96	Ground	No
	94		
	93		
	82		

Is the inspection result normal?

YES >> GO TO 3
NO >> Repair or replace harness between BCM and door switch.

3.CHECK DOOR SWITCH

Refer to DLK-101, "Component Inspection".

Is the inspection result normal?

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

4.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000007987267

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Disconnect door switch connector.
3. Check door switch.

Terminal		Door switch condition	Continuity
Door switch			
3	Ground part of door switch	Pressed	No
		Released	Yes

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace malfunctioning door switch.

DOOR LOCK AND UNLOCK SWITCH
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000007987268

Transmits door lock/unlock operation to BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000007987269

1.CHECK FUNCTION

With CONSULT
Check CDL LOCK SW, CDL UNLOCK SW in Data Monitor mode with CONSULT.

Monitor item	Condition	
CDL LOCK SW	LOCK	: ON
	UNLOCK	: OFF
CDL UNLOCK SW	LOCK	: OFF
	UNLOCK	: ON

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.
NO >> With LH and RH anti-pinch, refer to DLK-102, "DRIVER SIDE : Diagnosis Procedure (With LH and RH Anti-Pinch)".
NO >> With LH anti-pinch only, refer to DLK-103, "DRIVER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)".

DRIVER SIDE : Diagnosis Procedure (With LH and RH Anti-Pinch)

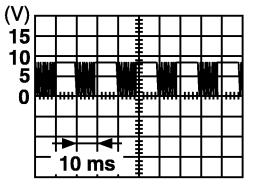
INFOID:0000000007987270

Regarding Wiring Diagram information, refer to DLK-50, "Wiring Diagram".

1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Read voltage signal between BCM connector and ground with oscilloscope when door lock and unlock switch (driver side) is turned “LOCK” or “UNLOCK”.

2. Check that signals which are shown in the figure below can be detected during 10 second just after door lock and unlock switch (driver side) is turned “LOCK” or “UNLOCK”.

Terminal			Condition	Signal (Reference value)
(+)		(–)		
BCM connector	Terminal			
M18	54	Ground	Door is closed	

Is the inspection result normal?

YES >> GO TO 4
NO >> GO TO 2

2.CHECK POWER WINDOW SWITCH GROUND

1. Turn ignition switch OFF.

2. Disconnect main power window and door lock/unlock switch connector.
3. Check continuity between main power window and door lock/unlock switch connector and ground.

Main power window and door lock/unlock switch connector	Terminal		Continuity
D7	1	Ground	Yes

Is the inspection result normal?

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

3.CHECK POWER WINDOW SERIAL LINK CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM connector and main power window and door lock/unlock switch connector.

BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
M18	54	D7	11	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminals		Continuity
M18	54	Ground	No

Is the inspection result normal?

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

4.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

DRIVER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)

INFOID:0000000007987271

Regarding Wiring Diagram information, refer to DLK-50, "Wiring Diagram".

1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage at the main power window and door lock/unlock switch connector when the switch (driver side) is turned to “LOCK” or “UNLOCK”.

Connector	Main power window and door lock/unlock switch state	Terminal		Voltage
D12	Neutral → Unlock	15	Ground	Battery voltage → 0
	Neutral → Lock	3		

Is the inspection result normal?

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

2.CHECK POWER WINDOW SWITCH GROUND

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch connector.
3. Check continuity between main power window and door lock/unlock switch connector and ground.

Main power window and door lock/unlock switch connector	Terminal		Continuity
D12	1	Ground	Yes

Is the inspection result normal?

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

3. CHECK POWER WINDOW SWITCH

Check continuity between main power window and door lock/unlock switch terminals.

Main power window and door lock/unlock switch state	Terminals	Continuity
Lock	1 - 3	Yes
Unlock	1 - 15	
Neutral/Lock	1 - 15	No
Neutral/Unlock	1 - 3	

Is the inspection result normal?

YES >> GO TO 4
NO >> Replace main power window and door lock/unlock switch. Refer to PWC-66, "Removal and Installation".

4. CHECK POWER WINDOW SWITCH CIRCUITS

1. Disconnect BCM connector.
2. Check continuity between BCM connector and main power window and door lock/unlock switch connector.

BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
M17	34	D12	15	Yes
	19		3	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M17	34	Ground	No
	19		

Is the inspection result normal?

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

5. CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000007987272

Transmits door lock/unlock operation to BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000007987273

1.CHECK FUNCTION

With CONSULT

Check CDL LOCK SW, CDL UNLOCK SW in Data Monitor mode with CONSULT.

Monitor item	Condition	
CDL LOCK SW	LOCK	: ON
	UNLOCK	: OFF
CDL UNLOCK SW	LOCK	: OFF
	UNLOCK	: ON

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.

NO >> With LH and RH anti-pinch, refer to DLK-105, "PASSENGER SIDE : Diagnosis Procedure (With LH and RH Anti-Pinch)".

NO >> With LH anti-pinch only, refer to DLK-106, "PASSENGER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)".

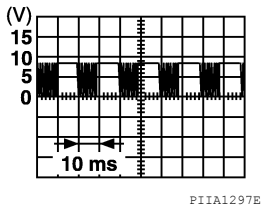
PASSENGER SIDE : Diagnosis Procedure (With LH and RH Anti-Pinch)

INFOID:0000000007987274

Regarding Wiring Diagram information, refer to DLK-50, "Wiring Diagram".

1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Read voltage signal between BCM connector and ground with oscilloscope when power window and door lock/unlock switch RH is changed to “LOCK” or “UNLOCK”.
2. Check that signals which are shown in the figure below can be detected during 10 second just after ower window and door lock/unlock switch RH is changed “LOCK” or “UNLOCK”.

Terminal			Condition	Signal (Reference value)
(+)		(−)		
BCM connector	Terminal			
M18	54	Ground	Door is closed	

Is the inspection result normal?

YES >> GO TO 4

NO >> GO TO 2

2.CHECK POWER WINDOW SWITCH GROUND

1. Turn ignition switch OFF.
2. Disconnect power window and door lock/unlock switch RH connector.
3. Check continuity between power window and door lock/unlock switch RH connector and ground.

Power window and door lock/ unlock switch RH connector	Terminal		Continuity
D105	7	Ground	Yes

Is the inspection result normal?

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

3.CHECK POWER WINDOW SERIAL LINK CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM connector and power window and door lock/unlock switch RH connector.

BCM connector	Terminal	Power window and door lock/unlock switch RH connector	Terminal	Continuity
M18	54	D105	3	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminals		Continuity
M18	54	Ground	No

Is the inspection result normal?

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

4.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

YES >> Inspection End.

PASSENGER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)

INFOID:0000000007987275

Regarding Wiring Diagram information, refer to DLK-50, "Wiring Diagram".

1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage at the power window and door lock/unlock switch RH connector when the switch (passenger side) is changed to “LOCK” or “UNLOCK”.

Connector	Power window and door lock/unlock switch RH state	Terminal		Voltage
D110	Neutral → Lock	1	Ground	Battery voltage → 0
	Neutral → Unlock	2		

Is the inspection result normal?

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

2.CHECK POWER WINDOW SWITCH GROUND

1. Turn ignition switch OFF.
2. Disconnect power window and door lock/unlock switch RH connector.
3. Check continuity between power window and door lock/unlock switch RH connector and ground.

Power window and door lock/unlock switch RH connector	Terminal		Continuity
D110	3	Ground	Yes

Is the inspection result normal?

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

3. CHECK POWER WINDOW SWITCH

Check continuity between power window and door lock/unlock switch RH terminals.

Power window and door lock/unlock switch RH state	Terminals	Continuity
Lock	1 - 3	Yes
Unlock	2 - 3	
Neutral/Unlock	1 - 3	No
Neutral/Lock	2 - 3	

Is the inspection result normal?

YES >> GO TO 4
NO >> Replace power window and door lock/unlock switch RH.

4. CHECK POWER WINDOW SWITCH CIRCUITS

1. Disconnect BCM connector.
2. Check continuity between BCM connector and power window and door lock/unlock switch RH connector.

BCM connector	Terminal	Power window and door lock/unlock switch RH connector	Terminal	Continuity
M17	19	D110	1	Yes
	34		2	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M17	19	Ground	No
	34		

Is the inspection result normal?

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

5. CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

OUTSIDE KEY ANTENNA (PASSENGER SIDE)

Component Function Check

INFOID:0000000008619888

1.CHECK OUTSIDE KEY ANTENNA (RH)

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

Does the door unlock?

YES >> Inspection End.
NO >> Refer to DLK-108, "Diagnosis Procedure".

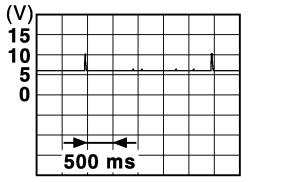
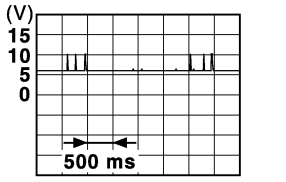
Diagnosis Procedure

INFOID:0000000008619889

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

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM		(–)	Condition		Signal (Reference value)
Connector	Terminal				
M20	114, 115	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-77, "Removal and Installation".
NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

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

BCM		Outside key antenna (RH)		Continuity
Connector	Terminal	Connector	Terminal	
M20	114	D106	1	Yes
	115		2	

3. Check continuity between BCM harness connector and ground.

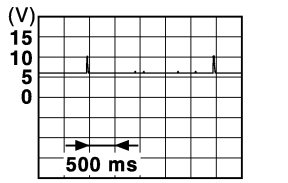
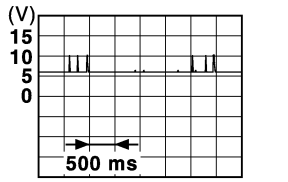
BCM		Ground	Continuity
Connector	Terminal		
M20	114		No
	115		

Is the inspection result normal?

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

3. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Signal (Reference value)
M20	114, 115	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace outside key antenna (RH). Refer to DLK-220, "PASSENGER SIDE : Removal and Installation".
NO >> Replace BCM. Refer to BCS-77, "Removal and Installation".

OUTSIDE KEY ANTENNA (DRIVER SIDE)

Component Function Check

INFOID:0000000008619890

1.CHECK OUTSIDE KEY ANTENNA (LH)

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

Does the door unlock?

YES >> Inspection End.
NO >> Refer to DLK-110, "Diagnosis Procedure".

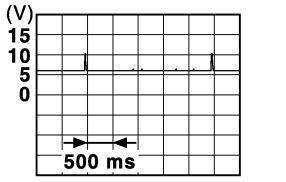
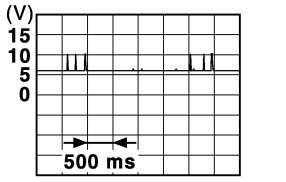
Diagnosis Procedure

INFOID:0000000008619891

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

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Signal (Reference value)
M20	121, 122	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-77, "Removal and Installation".
NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

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

BCM		Outside key antenna (LH)		Continuity
Connector	Terminal	Connector	Terminal	
M20	122	D6	1	Yes
	121		2	

3. Check continuity between BCM harness connector and ground.

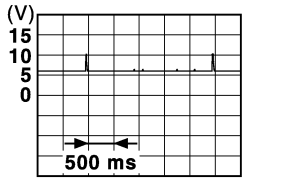
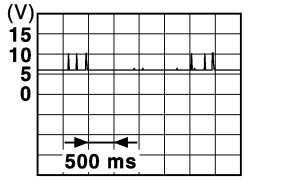
BCM		Ground	Continuity
Connector	Terminal		
M20	122		Not existed
	121		

Is the inspection result normal?

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

3. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Signal (Reference value)
M20	121, 122	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace outside key antenna (LH). Refer to DLK-220, "DRIVER SIDE : Removal and Installation".
NO >> Replace BCM. Refer to BCS-77, "Removal and Installation".

OUTSIDE KEY ANTENNA (REAR BUMPER)

Component Function Check

INFOID:0000000008619892

1.CHECK OUTSIDE KEY ANTENNA (REAR BUMPER)

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

Does the door unlock?

YES >> Inspection End.
NO >> Refer to DLK-112, "Diagnosis Procedure".

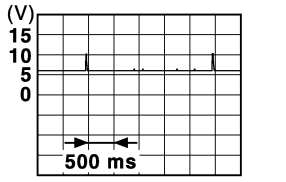
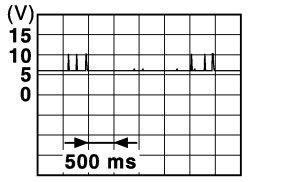
Diagnosis Procedure

INFOID:0000000008619893

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

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Signal (Reference value)
M20	101, 102	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-77, "Removal and Installation".
NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

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

BCM		Outside key antenna (rear bumper)		Continuity
Connector	Terminal	Connector	Terminal	
M20	102	B46	1	Yes
	101		2	

3. Check continuity between BCM harness connector and ground.

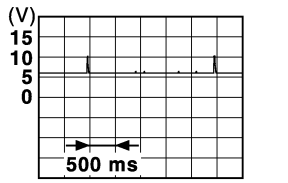
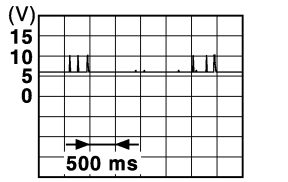
BCM		Ground	Continuity
Connector	Terminal		
M20	102		No
	101		

Is the inspection result normal?

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

3. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Signal (Reference value)
M20	101, 102	Ground	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace outside key antenna (rear bumper). Refer to DLK-220, "REAR BUMPER : Removal and Installation".
NO >> Replace BCM. Refer to BCS-77, "Removal and Installation".

KEY CYLINDER SWITCH

Description

INFOID:0000000008619914

For vehicles equipped with LH and RH anti-pinch system, the main power window and door lock/unlock switch detects condition of the door key cylinder switch and transmits to BCM as the LOCK or UNLOCK signal.

For vehicles equipped with LH anti-pinch system only, the front door lock assembly LH (key cylinder switch) transmits the LOCK or UNLOCK signal directly to the BCM.

Component Function Check

INFOID:0000000008619915

1.CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

Check KEY CYL UN-SW, KEY CYL UN-SW in “DATA MONITOR” mode for “POWER DOOR LOCK SYSTEM” with CONSULT. Refer to DLK-80, "Work Flow".

Monitor item	Condition	
KEY CYL LK-SW	Lock	: ON
	Neutral / Unlock	: OFF
KEY CYL UN-SW	Unlock	: ON
	Neutral / Lock	: OFF

Is the inspection result normal?

YES >> Key cylinder switch is OK.
NO >> With LH and RH anti-pinch, refer to DLK-114, "Diagnosis Procedure (With LH and RH Anti-Pinch)".
NO >> With LH anti-pinch only, refer to DLK-115, "Diagnosis Procedure (With LH Anti-Pinch Only)".

Diagnosis Procedure (With LH and RH Anti-Pinch)

INFOID:0000000008619916

Regarding Wiring Diagram information, refer to DLK-50, "Wiring Diagram".

1.CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage between main power window and door lock/unlock switch connector and ground.

Terminals			Key position	Voltage (V) (Approx.)
(+)		(–)		
Main power window and door lock/unlock switch connector	Terminal			
D7	3	Ground	Lock	0
			Neutral / Unlock	5
	15		Unlock	0
			Neutral / Lock	5

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-144, "Removal and Installation".
NO >> GO TO 2

2.CHECK DOOR KEY CYLINDER SIGNAL CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect main power window and door lock/unlock switch connector and front door lock assembly LH connector.
3. Check continuity between main power window and door lock/unlock switch connector and front door lock assembly LH connector.

Main power window and door lock/unlock switch connector	Terminal	Front door lock assembly LH connector	Terminal	Continuity
D7	3	D14	6	Yes
	15		5	

4. Check continuity between main power window and door lock/unlock switch connector and ground.

Power window main switch connector	Terminal	Ground	Continuity
D7	3		No
	15		

Is the inspection result normal?

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

3.CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

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

Front door lock assembly LH connector	Terminal	Ground	Continuity
D14	4		Yes

Is the inspection result normal?

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

4.CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.
Refer to DLK-116, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".
NO >> Replace front door lock assembly LH. Refer to DLK-202, "FRONT DOOR LOCK : Removal and Installation".

Diagnosis Procedure (With LH Anti-Pinch Only)

INFOID:000000008619917

Regarding Wiring Diagram information, refer to DLK-50, "Wiring Diagram".

1.CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage between BCM connector and ground.

Terminals			Key position	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	74	Ground	Lock	0
			Neutral / Unlock	5
M17	24		Unlock	0
			Neutral / Lock	5

Is the inspection result normal?

YES >> Replace front door lock assembly LH. Refer to PWC-66, "Removal and Installation".
NO >> GO TO 2

2.CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly LH connector.
3. Check continuity between front door lock assembly LH connector and ground.

Front door lock assembly LH connector	Terminal	Ground	Continuity
D14	4		Yes

Is the inspection result normal?

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

3.CHECK DOOR KEY CYLINDER SIGNAL CIRCUIT

1. Disconnect BCM connector M18 and M17.
2. Check continuity between front door lock assembly LH connector and BCM connector M18 or M17.

Front door lock assembly LH connector	Terminal	BCM connector	Terminal	Continuity
D14	5	M17	24	Yes
	6	M18	74	

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

Front door lock assembly LH connector	Terminal	Ground	Continuity
D14	5		No
	6		

Is the inspection result normal?

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

4.CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.
Refer to DLK-116, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-47, "Intermittent Incident".
NO >> Replace front door lock assembly LH. Refer to DLK-202, "FRONT DOOR LOCK : Removal and Installation".

Component Inspection

INFOID:0000000008619918

COMPONENT INSPECTION

1.CHECK DOOR KEY CYLINDER SWITCH

Check front door lock assembly LH.

Terminal		Key position	Continuity
Front door lock assembly LH (key cylinder switch) connector			
5	4	Unlock	Yes
		Neutral / Lock	No
6		Lock	Yes
		Neutral / Unlock	No

Is the inspection result normal?

YES >> Key cylinder switch is OK.
NO >> Replace front door lock assembly LH. Refer to DLK-202, "FRONT DOOR LOCK : Removal and Installation".

UNLOCK SENSOR

Description

INFOID:0000000007987285

Detects door lock condition of driver door.

Component Function Check

INFOID:0000000007987286

1.CHECK FUNCTION

With CONSULT

Check unlock sensor UNLK SEN –DR in “Data Monitor” mode.

Monitor item	Condition
UNLK SEN –DR	Front door lock (driver side) LOCK : ON
	Front door lock (driver side) UNLOCK : OFF

Is the inspection result normal?

YES >> Unlock sensor is OK.
NO >> Refer to DLK-118, "Diagnosis Procedure".

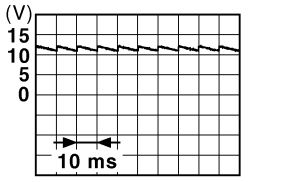
Diagnosis Procedure

INFOID:0000000007987287

Regarding Wiring Diagram information, refer to DLK-50, "Wiring Diagram".

1.CHECK UNLOCK SENSOR POWER SUPPLY

Check signal between BCM connector and ground with oscilloscope.

Terminals			Front door lock assembly LH condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M17	30	Ground	Locked	
			Unlocked	0

Is the inspection result normal?

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

2.CHECK UNLOCK SENSOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM and front door lock assembly LH connector.
3. Check continuity between BCM connector and front door lock assembly LH connector.

BCM connector	Terminal	Front door lock assembly LH connector	Terminal	Continuity
M17	30	D14	3	Yes

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M17	30		No

Is the inspection result normal?

YES >> GO TO 3
NO >> Repair or replace harness between BCM and front door lock assembly LH.

3.CHECK UNLOCK SENSOR GROUND CIRCUIT

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

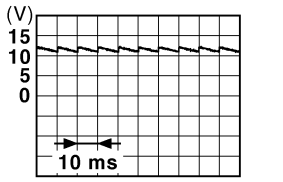
Front door lock assembly LH connector	Terminal	Ground	Continuity
D14	4		Yes

Is the inspection result normal?

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

4.CHECK BCM OUTPUT SIGNAL

1. Connect BCM harness connector.
2. Check signal between BCM connector and ground with oscilloscope.

Terminals (+) BCM connector	Terminals (+) Terminal	Terminals (–)	Voltage (V) (Approx.)
M17	30	Ground	

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace BCM. Refer to BCS-77, "Removal and Installation"

5.CHECK UNLOCK SENSOR

Refer to DLK-119, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6
NO >> Replace front door lock assembly LH. Refer to DLK-202, "FRONT DOOR LOCK : Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000007987288

1.CHECK UNLOCK SENSOR

Check unlock sensor.

Terminal		Front door lock assembly LH condition	Continuity
Front door lock assembly LH			
3	4	Unlock	Yes
		Lock	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace front lock assembly LH. Refer to DLK-202, "FRONT DOOR LOCK : Removal and Installation".

TRUNK LID OPENER SWITCH

Description

INFOID:0000000007987289

Transmits trunk lid open signal to BCM.

Component Function Check

INFOID:0000000007987290

1.CHECK FUNCTION

With CONSULT

Check trunk lid opener switch TR/BD OPEN SW in Data Monitor mode with CONSULT.

- When trunk lid opener switch is turned to “ON”.

Monitor item	Condition
TR/BD OPEN SW	Trunk lid opener switch is pressed: ON
	Trunk lid opener switch is released: OFF

Is the inspection result normal?

YES >> Trunk lid opener switch is OK.
NO >> Refer to DLK-121, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007987291

Regarding Wiring Diagram information, refer to DLK-76, "Wiring Diagram".

1.CHECK TRUNK LID OPEN INPUT SIGNAL

1. Remove Intelligent Key from key slot.
2. Press trunk lid opener switch.
3. Check voltage between BCM connector and ground.

Terminals			Condition of trunk lid opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	80	Ground	ON (press and hold)	0
			OFF (release)	Battery voltage

Is the inspection result normal?

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

2.CHECK TRUNK LID OPENER SWITCH CIRCUIT

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

BCM connector	Terminal	Trunk lid opener switch connector	Terminal	Continuity
M21	80	M75	1	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M21	80		No

Is the inspection result normal?

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

3.CHECK TRUNK LID OPENER SWITCH GROUND CIRCUIT

Check continuity between trunk lid opener switch connector and ground.

Trunk lid opener switch	Terminal	Ground	Continuity
M75	2		Yes

Is the inspection result normal?

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

4.CHECK TRUNK LID OPENER SWITCH

Refer to DLK-122, "Component Inspection".

Is the inspection result normal?

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

5.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000007987292

1.CHECK TRUNK LID OPENER SWITCH

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

Terminal		Condition	Continuity
Trunk lid opener switch			
1	2	ON (press and hold)	Yes
		OFF (release)	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace trunk lid opener switch.

TRUNK LID OPENER CANCEL SWITCH

Description

INFOID:0000000007987293

Cancels trunk lid open operation.

Component Function Check

INFOID:0000000007987294

1.CHECK FUNCTION

With CONSULT

Check trunk lid opener cancel switch TR CANCEL SW in Data Monitor mode with CONSULT.

Monitor item	Condition
TR CANCEL SW	Trunk lid opener cancel switch is turned to “ON”: ON
	Trunk lid opener cancel switch is turned to “OFF”: OFF

Is the inspection result normal?

YES >> Trunk lid opener cancel switch is OK.
NO >> Refer to DLK-123, "Diagnosis Procedure".

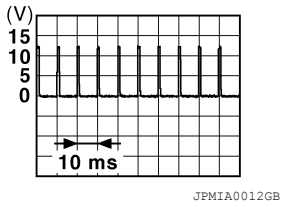
Diagnosis Procedure

INFOID:0000000007987295

Regarding Wiring Diagram information, refer to DLK-76, "Wiring Diagram".

1.CHECK TRUNK LID OPENER CANCEL SIGNAL

Check voltage between BCM connector and ground.

Terminals			Condition of trunk lid opener cancel switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M17	33	Ground	ON	0
			OFF	

JPMIA0012GB

Is the inspection result normal?

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

2.CHECK TRUNK LID OPENER CANCEL SWITCH CIRCUIT

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

BCM connector	Terminal	Trunk lid opener cancel switch connector	Terminal	Continuity
M17	33	M74	1	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M17	33		No

Is the inspection result normal?

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

3.CHECK TRUNK LID OPENER CANCEL SWITCH GROUND CIRCUIT

Check continuity between trunk lid opener switch connector and ground.

Trunk lid opener cancel switch	Terminal	Ground	Continuity
M74	2		Yes

Is the inspection result normal?

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

4.CHECK TRUNK LID OPENER CANCEL SWITCH

Refer to DLK-124, "Component Inspection".

Is the inspection result normal?

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

5.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000007987296

1.CHECK TRUNK LID OPENER CANCEL SWITCH

1. Disconnect trunk lid opener cancel switch connector.
2. Check continuity between trunk lid opener cancel switch terminals.

Terminal		Condition	Continuity
Trunk lid opener cancel switch			
1	2	ON	Yes
		OFF (cancel)	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace trunk lid opener cancel switch.

TRUNK LAMP SWITCH

Description

INFOID:0000000007987297

Detects trunk open/close condition.

Component Function Check

INFOID:0000000007987298

1.CHECK FUNCTION

With CONSULT

Check TRNK/HAT MNTR in Data Monitor mode with CONSULT.

Monitor item	Condition	
TRNK/HAT MNTR	OPEN	: ON
	CLOSE	: OFF

Is the inspection result normal?

YES >> Trunk lamp switch is OK.
NO >> Refer to DLK-125, "Diagnosis Procedure".

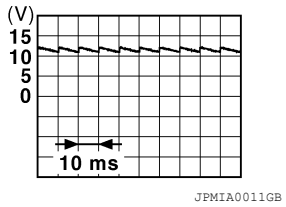
Diagnosis Procedure

INFOID:0000000007987299

Regarding Wiring Diagram information, refer to DLK-50, "Wiring Diagram".

1.CHECK TRUNK LAMP SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector and ground.

Terminals			Trunk condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M19	97	Ground	OPEN	0
			CLOSE	

JPMIA0011GB

Is the inspection result normal?

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

2.CHECK TRUNK LAMP SWITCH CIRCUIT

1. Disconnect BCM and trunk lamp switch and trunk release solenoid connectors.
2. Check continuity between BCM connector and trunk lamp switch and trunk release solenoid connector.

BCM connector	Terminal	Trunk lamp switch and trunk release solenoid connector	Terminal	Continuity
M19	97	B28	1	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M19	97		No

Is the inspection result normal?

YES >> GO TO 3
NO >> Repair or replace harness between BCM and trunk lamp switch and trunk release solenoid.

3.CHECK TRUNK LAMP SWITCH GROUND CIRCUIT

Check continuity between trunk lid lock assembly connector and ground.

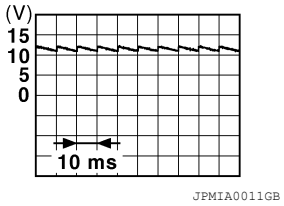
Trunk lamp switch and trunk release solenoid connector	Terminal	Ground	Continuity
B28	2		Yes

Is the inspection result normal?

YES >> GO TO 4
NO >> Repair or replace trunk lamp switch and trunk release solenoid ground circuit.

4.CHECK BCM OUTPUT SIGNAL

1. Insure trunk remains closed during this step.
2. Connect BCM connector.
3. Check voltage between BCM connector and ground.

Terminals			Voltage (V) (Approx.)
(+)		(–)	
BCM connector	Terminal		
M19	97	Ground	

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace BCM. Refer to BCS-77, "Removal and Installation".

5.CHECK TRUNK LAMP SWITCH

Refer to DLK-126, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6
NO >> Replace trunk lamp switch and trunk release solenoid.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000007987300

1.CHECK TRUNK LAMP SWITCH

1. Turn ignition switch OFF.
2. Disconnect trunk lamp switch and trunk release solenoid connector.
3. Check trunk lamp switch.

Terminal		Trunk condition	Continuity
Trunk lamp switch and trunk release solenoid			
1	2	OPEN	Yes
		CLOSE	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace trunk lamp switch and trunk release solenoid.

DOOR REQUEST SWITCH

Description

INFOID:0000000007987301

Transmits door lock/unlock operation to BCM.

Component Function Check

INFOID:0000000007987302

1.CHECK FUNCTION

With CONSULT

Check door request switch REQ SW-DR, REQ SW-AS in Data Monitor mode.

Monitor item	Condition
REQ SW-DR REQ SW-AS	Door request switch is pressed : ON
	Door request switch is released : OFF

Is the inspection result normal?

YES >> Door request switch is OK.
NO >> Refer to DLK-128, "Diagnosis Procedure".

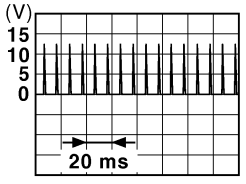
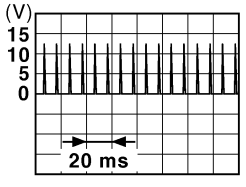
Diagnosis Procedure

INFOID:0000000007987303

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

1.CHECK DOOR REQUEST SWITCH OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM harness connector and ground.

Terminals				Door request switch Condition	Voltage (V) (Approx.)
(+)			(–)		
BCM connector		Terminal			
M18	Door request switch (driver side)	71	Ground	Pressed	0
				Released	 JMKIA0059GB
	Door request switch (passenger side)	72		Pressed	0
				Released	 JMKIA0059GB

Is the inspection result normal?

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

2.CHECK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect BCM and front outside handle connector.
2. Check continuity between BCM connector and front outside handle connector.

BCM connector	Terminal	Front outside handle connector	Terminal	Continuity
M18	71	D6 (driver side)	3	Yes
	72	D106 (passenger side)		

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M18	71		No
	72		

Is the inspection result normal?

YES >> GO TO 3
NO >> Repair or replace harness between BCM and front outside handle.

3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between front outside handle connector and ground.

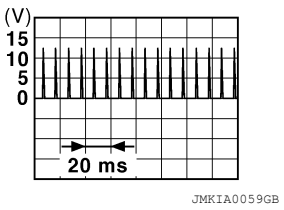
Front outside handle connector	Terminal	Ground	Continuity
D6 (driver side)	4		Yes
D106 (passenger side)			

Is the inspection result normal?

YES >> GO TO 4
NO >> Repair or replace front outside handle ground circuit.

4.CHECK BCM OUTPUT SIGNAL

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

Terminals			Voltage (V) (Approx.)
(+)		(–)	
BCM connector	Terminal		
M18	71	Ground	
	72		

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace BCM. Refer to BCS-77, "Removal and Installation".

5.CHECK DOOR REQUEST SWITCH

Refer to DLK-130, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6

NO >> Replace malfunctioning front outside handle.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000007987304

1.CHECK DOOR REQUEST SWITCH

Check front outside handle (request switch).

Terminal		Door request switch condition	Continuity
Front outside handle (request switch)			
3	4	Pressed	Yes
		Released	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace malfunction front outside handle.

TRUNK OPENER REQUEST SWITCH

Description

INFOID:0000000007987305

Performs trunk lid open request when it is pressed.

Component Function Check

INFOID:0000000007987306

1.CHECK FUNCTION

With CONSULT

Check trunk opener request switch REQ SW -BD/TR in Data Monitor mode.

Monitor item	Condition
REQ SW -BD/TR	Trunk opener request switch is pressed : ON
	Trunk opener request switch is released : OFF

Is the inspection result normal?

YES >> Trunk opener request switch is OK.
NO >> Refer to DLK-131, "Diagnosis Procedure".

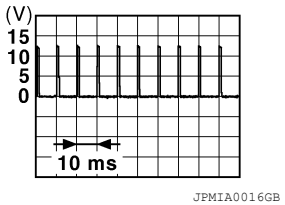
Diagnosis Procedure

INFOID:0000000007987307

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

1.CHECK TRUNK OPENER REQUEST SWITCH OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector and ground.

Terminals			Trunk lid opener request switch condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M19	83	Ground	Pressed	0
			Released	

Is the inspection result normal?

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

2.CHECK TRUNK OPENER REQUEST SWITCH CIRCUIT

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

BCM connector	Terminal	Trunk opener request switch connector	Terminal	Continuity
M19	83	B33	1	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M19	83		No

Is the inspection result normal?

YES >> GO TO 3
NO >> Repair or replace harness between BCM and trunk opener request switch.

3.CHECK TRUNK OPENER REQUEST SWITCH GROUND CIRCUIT

Check continuity between trunk opener request switch connector and ground.

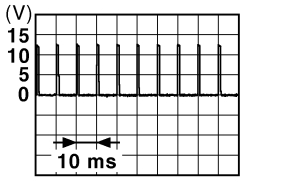
Trunk opener request switch connector	Terminal	Ground	Continuity
B33	2		Yes

Is the inspection result normal?

YES >> GO TO 4
NO >> Repair or replace trunk opener request switch ground circuit.

4.CHECK BCM OUTPUT SIGNAL

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

Terminals			Voltage (V) (Approx.)
(+)		(–)	
BCM connector	Terminal		
M19	83	Ground	

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace BCM. Refer to BCS-77, "Removal and Installation".

5.CHECK TRUNK OPENER REQUEST SWITCH

Refer to DLK-132, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6
NO >> Replace trunk opener request switch.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000007987308

1.CHECK TRUNK OPENER REQUEST SWITCH

Check trunk opener request switch.

Terminal		Trunk opener request switch condition	Continuity
Trunk opener request switch			
1	2	Pressed	Yes
		Released	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace trunk opener request switch.

DOOR LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000007987309

Locks/unlocks the door with the signal from BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000007987310

1.CHECK FUNCTION

1. Use CONSULT to perform Active Test (“DOOR LOCK”).
2. Touch “ALL LOCK” or “ALL UNLOCK” to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-134, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007987311

Regarding Wiring Diagram information, refer to DLK-50, "Wiring Diagram".

1.CHECK OUTPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M21	135	Ground	Lock	0 → Battery voltage → 0
	137		Unlock	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM and front door lock actuator driver side connector.
3. Check continuity between BCM connector and front door lock actuator driver side connector.

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M21	135	D14	1	Yes
	137		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M21	135	Ground	No
	137		

Is the inspection result normal?

YES >> Replace front door lock actuator LH.
NO >> Repair or replace harness.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000007987312

Locks/unlocks the door with the signal from BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000007987313

1.CHECK FUNCTION

1. Use CONSULT to perform Active Test (“DOOR LOCK”).
2. Touch “ALL LOCK” or “ALL UNLOCK” to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-135, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000007987314

Regarding Wiring Diagram information, refer to DLK-50, "Wiring Diagram".

1.CHECK DOOR LOCK ACTUATOR SIGNAL

Check voltage between BCM connector and ground.

Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M21	135	Ground	Lock	0 → Battery voltage → 0
	130		Unlock	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM and front door lock actuator RH connectors.
2. Check continuity between BCM connector and front door lock actuator RH.

BCM connector	Terminal	Front door lock actuator RH connector	Terminal	Continuity
M21	135	D108	2	Yes
	130		1	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M21	135	Ground	No
	130		

Is the inspection result normal?

YES >> Replace front door lock actuator RH.
NO >> Repair or replace harness.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

REAR LH

REAR LH : Description

INFOID:0000000007987315

Locks/unlocks the door with the signal from BCM.

REAR LH : Component Function Check

INFOID:0000000007987316

1.CHECK FUNCTION

1. Use CONSULT to perform Active Test (“DOOR LOCK”).
2. Touch “ALL LOCK” or “ALL UNLOCK” to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-136, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000007987317

Regarding Wiring Diagram information, refer to DLK-50, "Wiring Diagram".

1.CHECK DOOR LOCK ACTUATOR SIGNAL

Check voltage between BCM connector and ground.

Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M21	132	Ground	Lock	0 → Battery voltage → 0
	133		Unlock	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM and rear door lock actuator LH connectors.
2. Check continuity between BCM connector and rear door lock actuator LH connectors.

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M21	132	B: D205	1	Yes
	133		2	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Continuity

M21	132	Ground	No
	133		

Is the inspection result normal?

YES >> Replace rear door lock actuator LH.
NO >> Repair or replace harness.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

REAR RH

REAR RH : Description

INFOID:0000000007987318

Locks/unlocks the door with the signal from BCM.

REAR RH : Component Function Check

INFOID:0000000007987319

1.CHECK FUNCTION

1. Use CONSULT to perform Active Test (“DOOR LOCK”).
2. Touch “ALL LOCK” or “ALL UNLOCK” to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-137, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000007987320

Regarding Wiring Diagram information, refer to DLK-50, "Wiring Diagram".

1.CHECK DOOR LOCK ACTUATOR SIGNAL

Check voltage between BCM connector and ground.

Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M21	132	Ground	Lock	0 → Battery voltage → 0
	133		Unlock	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM and rear door lock actuator RH connectors.
2. Check continuity between BCM connector and rear door lock actuator RH connectors.

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M21	132	D305	2	Yes
	133		1	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M21	132	Ground	No
	133		

Is the inspection result normal?

YES >> Replace rear door lock actuator RH.
NO >> Repair or replace harness.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

TRUNK LID OPENER ACTUATOR

Description

INFOID:0000000007987321

Performs trunk lid open with signal from BCM.

Component Function Check

INFOID:0000000007987322

1.CHECK FUNCTION

1. Perform Active Test TRUNK/GLASS HATCH with CONSULT.
2. Touch “OPEN” and check that trunk lid opens.

Is the inspection result normal?

YES >> Trunk lid opener actuator is OK.
NO >> Refer to DLK-139, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007987323

Regarding Wiring Diagram information, refer to DLK-76, "Wiring Diagram".

1.CHECK OUTPUT CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect trunk lamp switch and trunk release solenoid connector.
3. Check voltage between trunk lamp switch and trunk release solenoid connector and ground.

Terminals			Condition of trunk lid opener switch	Voltage (V) (Approx.)
(+)		(–)		
Trunk lamp switch and trunk release solenoid connector	Terminal			
B28	3	Ground	OFF → ON	0 → Battery voltage → 0

Is the inspection result normal?

YES >> GO TO 4
NO >> GO TO 2

2.CHECK OUTPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			Condition of trunk lid opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M19	91	Ground	OFF → ON	0 → Battery voltage → 0

Is the inspection result normal?

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

3.CHECK TRUNK LID OPENER ACTUATOR CIRCUIT

1. Disconnect BCM.
2. Check continuity between BCM connector and trunk lamp switch and trunk release solenoid connector.

BCM connector	Terminal	Trunk lamp switch and trunk release solenoid connector	Terminal	Continuity
M19	91	B28	3	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M19	91	Ground	No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-77, "Removal and Installation".
NO >> Repair or replace harness.

4. CHECK TRUNK LID OPENER GROUND CIRCUIT

Check continuity between trunk lamp switch and trunk release solenoid connector and ground.

Trunk lamp switch and trunk release solenoid connector	Terminal		Continuity
B28	2	Ground	Yes

Is the inspection result normal?

YES >> Replace trunk lamp switch and trunk release solenoid.
NO >> Repair or replace harness.

INTELLIGENT KEY WARNING BUZZER

Description

INFOID:0000000007987324

Answers back and warns for an inappropriate operation.

Component Function Check

INFOID:0000000007987325

1.CHECK FUNCTION

With CONSULT

Check Intelligent Key warning buzzer OUTSIDE BUZZER in Active Test mode.

Is the inspection result normal?

YES >> Intelligent Key warning buzzer (engine room) is OK.
NO >> Refer to DLK-141, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007987326

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

1.CHECK INTELLIGENT KEY WARNING BUZZER

Check voltage between BCM connector and ground.

Terminals			Warning buzzer operation condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	64	Ground	ON	0
			OFF	Battery voltage

Is the inspection result normal?

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

2.CHECK INTELLIGENT KEY WARNING BUZZER POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect Intelligent Key warning buzzer connector.
3. Check voltage between Intelligent Key warning buzzer connector and ground.

Terminals			Voltage (V) (Approx.)
(+)		(–)	
Intelligent Key warning buzzer connector	Terminal		
E74	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3
NO >> Repair or replace Intelligent Key warning buzzer power supply circuit.

3.CHECK INTELLIGENT KEY WARNING BUZZER CIRCUIT

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

A: BCM connector	Terminal	Intelligent Key warning buzzer connector	Terminal	Continuity
M18	64	E74	3	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M18	64		No

Is the inspection result normal?

OK >> GO TO 4
NG >> Repair or replace harness between BCM and Intelligent Key warning buzzer.

4.CHECK INTELLIGENT KEY WARNING BUZZER

Check DLK-142, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace Intelligent Key warning buzzer.

5.CHECK INTERMITTENT INCIDENT

Check GI-47, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000007987327

1.CHECK INTELLIGENT KEY WARNING BUZZER

Connect battery power supply to Intelligent Key warning buzzer terminals 1 and 3, and check the operation.

1 (BAT+) - 3 (BAT-) : the buzzer sounds

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace Intelligent Key warning buzzer.

REMOTE KEYLESS ENTRY RECEIVER

Description

INFOID:0000000007987331

Receives Intelligent Key operation and transmits to BCM.

Component Function Check

INFOID:0000000008627816

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-143, "Diagnosis Procedure".

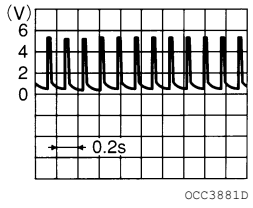
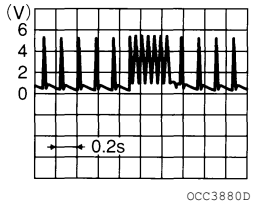
Diagnosis Procedure

INFOID:0000000008627817

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

1.CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT SIGNAL

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M20	119	Ground	Standby state	
			Press the Intelligent Key lock or unlock button	

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-77, "Removal and Installation".
NO >> GO TO 3.

2.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 1

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

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M20	119	M27	2	Yes

3. Check continuity between BCM harness connector and ground.

(+)		(–)	Continuity
BCM			
Connector	Terminal		
M20	119	Ground	No

Is the inspection result normal?

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

3. CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

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

(+)		(–)	Voltage Approx.
Remote keyless entry receiver			
Connector	Terminal		
M27	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.
NO-1 >> Check 5A fuse No. 9 [located in fuse block J/B].
NO-2 >> Repair or replace harness between BCM and 5A fuse No. 9.

4. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

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

Remote keyless entry receiver		Ground	Continuity
Connector	Terminal		
M27	3		Yes

Is the inspection result normal?

YES >> Replace remote keyless entry receiver. Refer to DLK-223, "Removal and Installation".
NO >> Repair or replace harness.

INTELLIGENT KEY BATTERY AND FUNCTION

Description

INFOID:0000000007987334

The following functions are available when having and carrying the Intelligent Key.
- Door lock/unlock
- Trunk open

Remote control entry function and panic alarm function are available when operating the remote buttons.

Component Function Check

INFOID:0000000007987335

NOTE:
The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.
- Check Intelligent Key relative signal strength
- Confirm vehicle Intelligent Key antenna signal strength

1.CHECK FUNCTION

With CONSULT
Check remote keyless entry receiver RKE OPE COUN1 in Data Monitor mode with CONSULT.

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

Is the inspection result normal?

YES >> Intelligent Key is OK.
NO >> Refer to DLK-145, "Diagnosis Procedure".

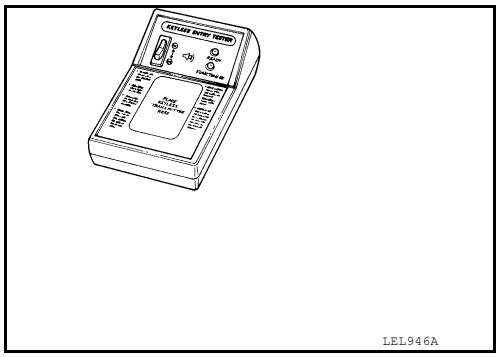
Diagnosis Procedure

INFOID:0000000007987336

NOTE:
The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.
- Check Intelligent Key relative signal strength
- Confirm vehicle Intelligent Key antenna signal strength

1.CHECK INTELLIGENT KEY FUNCTION

Check Intelligent Key function using Signal Tech II Tool J-50190 or Remote Keyless Entry Tester J-43241 (shown).



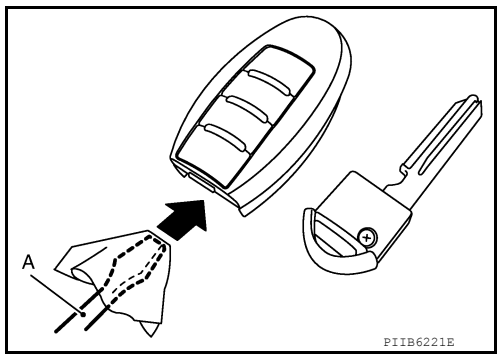
Does the test pass?

YES >> Intelligent Key is OK.
NO >> GO TO 2

2. CHECK INTELLIGENT KEY COMPONENTS

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

2. Insert a flat-blade screwdriver (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 Intelligent Key is water-resistant. However, if it does get wet, immediately wipe it dry.**
3. Remove the Intelligent Key battery.
   CAUTION:
   - **Keep dirt, grease, and other foreign materials off the electrode contact area.**
4. Visually inspect Intelligent Key internal components.



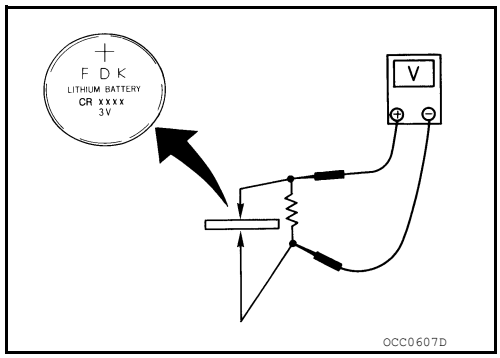
Is the inspection result normal?

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

3. CHECK INTELLIGENT KEY BATTERY

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

Standard : Approx. 2.5 - 3.0V

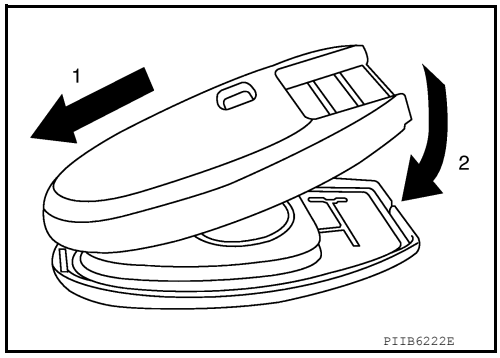


Is the measurement value within specification?

YES >> Intelligent Key battery is OK. Check remote keyless entry receiver. Refer to DLK-143, "Component Function Check".
NO >> GO TO 4

4. REPLACE INTELLIGENT KEY BATTERY

1. Replace the Intelligent Key battery.
2. 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.**
3. After replacing the battery, check that all Intelligent Key functions work properly.



Is the inspection result normal?

YES >> Intelligent Key is OK.
NO >> Check remote keyless entry receiver. Refer to DLK-143, "Component Function Check".

WARNING CHIME FUNCTION

Description

INFOID:0000000007987346

Performs operation method guide and warning with buzzer.

Component Function Check

INFOID:0000000007987347

1.CHECK FUNCTION

With CONSULT

1. Check the operation with “INSIDE BUZZER” in the Active Test.
2. Touch “TAKE OUT”, “KNOB”or “KEY”on screen.

Is the inspection result normal?

YES >> Warning buzzer into combination meter is OK.
NO >> Refer to DLK-147, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000007987348

1.CHECK METER BUZZER CIRCUIT

Operate the hazard lights by turning ON the hazard warning switch.

Is the inspection result normal?

YES >> GO TO 2
NO >> Replace combination meter. Refer to MWI-81, "Removal and Installation".

2.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

HAZARD FUNCTION

Description

INFOID:0000000007987349

Perform answer-back for each operation with number of blinks.

Component Function Check

INFOID:0000000007987350

1.CHECK FUNCTION

Check hazard warning lamp (“FLASHER”) in Active Test.

Is the inspection result normal?

YES >> Hazard warning lamp circuit is OK.
NO >> Refer to EXL-59, "Wiring Diagram".

Diagnosis Procedure

INFOID:0000000007987351

1.CHECK HAZARD SWITCH CIRCUIT

Operate the hazard lights by turning ON the hazard warning switch.

Is the inspection result normal?

YES >> GO TO 2
NO >> Repair or replace hazard warning switch circuit. Refer to EXL-85, "Work Flow".

2.CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

HOMELINK UNIVERSAL TRANSCEIVER

Description

INFOID:0000000007987352

Homelink universal transceiver can store and transmit a maximum of 3 radio signals.
Allows operation of garage doors, gates, home and office lighting, entry door locks and security system, etc.
Homelink universal transceiver power supply uses vehicle battery, which enables it to maintain every program in case battery is discharged or removed.

Component Function Check

INFOID:0000000007987353

1.CHECK FUNCTION

Check that system receiver (garage door opener, etc.) operates with original hand-held transmitter.

Is the inspection result normal?

YES >> GO TO 2
NO >> Receiver or hand-held transmitter is malfunctioning.

2.CHECK ILLUMINATE

1. Turn ignition switch “OFF”.
2. Press each of the transmitter buttons and watch for the red light to illuminate with each button.

Is the inspection result normal?

YES >> GO TO 3
NO >> Refer to DLK-149, "Diagnosis Procedure".

3.CHECK TRANSMITTER

Check transmitter with Tool*.
*:For details, refer to Technical Service Bulletin.

Is the inspection result normal?

YES >> Receiver or hand-held transmitter malfunction, not vehicle related.
NO >> Replace auto anti-dazzling inside mirror (homelink universal transceiver). Refer to MIR-19, "Removal and Installation".

Diagnosis Procedure

INFOID:0000000007987354

Regarding Wiring Diagram information, refer to DLK-48, "Wiring Diagram".

1.CHECK POWER SUPPLY

1. Disconnect auto anti-dazzling inside mirror (homelink universal transceiver) connector.
2. Check voltage between auto anti-dazzling inside mirror (homelink universal transceiver) harness connector and ground.

Auto anti-dazzling inside mirror (Homelink universal transceiver) connector	Terminal		Condition	Voltage (V) (Approx.)
R4	10	Ground	Ignition switch position: LOCK	Battery voltage

Is the inspection result normal?

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

2.CHECK GROUND CIRCUIT

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

Auto anti-dazzling inside mirror (Homelink universal transceiver) connector	Terminal	Ground	Continuity
R4	8		Yes

Is the inspection result normal?

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

3. CHECK INTERMITTENT INCIDENT

Refer to GI-47, "Intermittent Incident".

>> Inspection End.

SYMPTOM DIAGNOSIS

INTELLIGENT KEY SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000007987365

ALL FUNCTIONS OF INTELLIGENT KEY SYSTEM DO NOT OPERATE

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-80, "Work Flow".
- Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.
- If the following symptoms are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)

- “ENGINE START BY I-KEY” and “LOCK/UNLOCK BY I-KEY” are ON when setting on CONSULT.
- All doors are closed.

Symptom	Diagnosis/service procedure	Reference page
All functions of Intelligent Key system do not operate.	1. Check BCM power supply and ground circuit.	BCS-71
	2. Check Intelligent Key function and battery inspection.	DLK-145
	3. Check remote keyless entry receiver.	DLK-143
	4. Check Intermittent Incident.	GI-47

DOOR LOCK FUNCTION SYMPTOMS

DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH : Symptom Table

INFOID:0000000007987366

DOOR LOCK/UNLOCK FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-80, "Work Flow".
- Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.
- If the following symptoms are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)

- “LOCK/UNLOCK BY I-KEY” is ON when setting on CONSULT.
- Intelligent Key is out of key slot.
- All doors are closed.

Symptom	Diagnosis/service procedure		Reference page
Power door locks do not operate with door lock and unlock switch.	1. Check BCM Power supply and ground circuit.		BCS-71
	2. Check door lock and unlock switch.		DLK-102
	3. Check door lock actuator (driver side)		DLK-134
	4. Check Intermittent Incident.		GI-47
Power door locks do not operate with door key cylinder operation. (Power door locks operate properly with door lock and unlock switch.)	1. Check key cylinder switch.		DLK-114
	2. Replace power window main switch.		PWC-66 (LH only anti-pinch) or PWC-144 (LH & RH front anti-pinch).
Specific door lock actuator does not operate.	1. Check door lock actuator.	Driver side	DLK-134
		Passenger side	DLK-135
		Rear LH	DLK-136
		Rear RH	DLK-137
	2. Check Intermittent Incident.		GI-47
Vehicle speed sensing auto door LOCK operation does not operate.	1. Ensure automatic door lock/unlock function (lock operation) is enabled.		BCS-63
	2. Check combination meter vehicle speed signal.		MWI-54
	3. Check intermittent incident.		GI-47
Ignition OFF interlock auto door UNLOCK function does not operate.	1. Ensure automatic door lock/unlock function (unlock operation) is enabled.		BCS-63
	2. Check BCM for DTCs.		BCS-47
	3. Check intermittent incident.		GI-47

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH : Symptom Table

INFOID:0000000007987367

DOOR LOCK/UNLOCK FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-80, "Work Flow".
- Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.
- If the following symptoms” are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)
- “LOCK/UNLOCK BY I-KEY” is ON when setting on CONSULT.
- Intelligent Key is out of key slot.
- All doors are closed.

Symptom	Diagnosis/service procedure	Reference page
Door lock/unlock system does not operate by door request switch.	1. Check BCM power supply and ground circuit.	BCS-71
	2. Check door switch.	DLK-99
	3. Check Intermittent Incident.	GI-47
Door lock/unlock system does not operate by request switch (driver side).	1. Check door request switch (driver side).	DLK-128
	2. Check outside key antenna (driver side).	DLK-110
	3. Check Intermittent Incident.	GI-47
Door lock/unlock system does not operate by request switch (passenger side).	1. Check door request switch (passenger side).	DLK-128
	2. Check outside key antenna (passenger side).	DLK-128
	3. Check Intermittent Incident.	GI-47
Selective unlock function does not operate by door request switch (driver side) (other door lock function operate).	1. Check “DOOR LOCK-UNLOCK SET” setting in “WORK SUPPORT”.	DLK-80
	2. Check selective unlock function with a remote controller or door key cylinder.	DLK-102
	3. Check Intermittent Incident.	GI-47
Selective unlock function does not operate by door request switch (passenger side) (other door lock functions operate).	1. Check “DOOR LOCK-UNLOCK SET” setting in “WORK SUPPORT”.	DLK-80
	2. Check Intermittent Incident.	GI-47
Auto lock function does not operate.	1. Check “AUTO LOCK SET” setting in “WORK SUPPORT”.	DLK-80
	2. Check door switch.	DLK-99
	3. Check Intermittent Incident.	GI-47

INTELLIGENT KEY

INTELLIGENT KEY : Symptom Table

INFOID:0000000007987368

REMOTE KEYLESS ENTRY FUNCTION MALFUNCTION

NOTE:
- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-80, "Work Flow".
- Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.
- If the following symptoms are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)
- Intelligent Key is out of key slot.
- Ignition switch is in OFF or ACC position.
- All doors are closed.
- Retained power operation does not operate.

Symptom	Diagnosis/service procedure	Reference page
All of the remote keyless entry functions do not operate.	1. Check Intelligent Key battery inspection.	DLK-145
	2. Check Intermittent Incident.	GI-47

Symptom	Diagnosis/service procedure	Reference page
Selective unlock function does not operate by Intelligent Key.	1. Check “DOOR LOCK-UNLOCK SET” setting in “WORK SUPPORT”.	DLK-80
	2. Check Intelligent Key battery inspection.	DLK-145
	3. Check Intermittent Incident.	GI-47
Auto lock function does not operate normally.	1. Check “AUTO LOCK SET” setting in “WORK SUPPORT”.	DLK-80
	2. Check door switch.	DLK-99
	3. Check Intermittent Incident.	GI-47
Power window down function does not operate.	1. Check “PW DOWN SET” setting in “WORK SUPPORT”.	DLK-80
	2. Check Intelligent Key battery inspection.	DLK-145

TRUNK OPEN FUNCTION SYMPTOMS

TRUNK LID OPENER SWITCH

TRUNK LID OPENER SWITCH : Symptom Table

INFOID:0000000007987369

TRUNK OPEN FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-80, "Work Flow".
- Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.
- If the following symptoms are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)

- Intelligent Key is out of key slot.
- All doors are closed.

Symptom	Diagnosis/service procedure	Reference page
Trunk open function does not operate by trunk opener switch.	1. Check trunk opener switch.	DLK-121
	2. Check trunk lid opener cancel switch.	DLK-123
	3. Check Intermittent Incident.	GI-47

TRUNK REQUEST SWITCH

TRUNK REQUEST SWITCH : Symptom Table

INFOID:0000000007987370

TRUNK OPEN FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-80, "Work Flow".
- Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.
- If the following symptoms are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)

- Intelligent Key is out of key slot.
- All doors are closed.

Symptom	Diagnosis/service procedure	Reference page
Trunk open function does not operate by trunk opener request switch.	1. Check trunk opener request switch.	DLK-131
	2. Check trunk lid opener cancel switch.	DLK-123
	3. Check outside key antenna (rear bumper).	DLK-112
	4. Check Intermittent Incident.	GI-47

INTELLIGENT KEY

INTELLIGENT KEY : Symptom Table

INFOID:0000000007987371

TRUNK OPEN FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-80, "Work Flow".
- Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.
- If the following symptoms” are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)

- Intelligent Key is out of key slot.
- All doors are closed.

Symptom	Diagnosis/service procedure	Reference page
Trunk open function does not operate by Intelligent Key.	1. Check “TRUNK OPEN DELAY” setting in “WORK SUPPORT”.	DLK-80
	2. Check trunk open function.	DLK-121
	3. Check trunk lamp switch.	DLK-125
	4. Check Intelligent Key battery inspection.	DLK-145
	5. Check Intermittent Incident.	GI-47

WARNING FUNCTION SYMPTOMS

Symptom Table

INFOID:0000000007987372

WARNING FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-80, "Work Flow".
- Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.
- If the following symptoms are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)

Warning chime functions operating condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation.

Symptom		Diagnosis/service procedure	Reference page
OFF position warning does not operate.	For internal	1. Check push-button ignition switch position indicator.	PCS-67
		2. Check door switch.	DLK-99
		3. Check warning chime function.	DLK-147
		4. Check Intermittent Incident.	GI-47
	For external	1. Check push-button ignition switch position indicator.	PCS-67
		2. Check door switch.	DLK-99
		3. Check Intelligent Key warning buzzer.	DLK-141
		4. Check Intermittent Incident.	GI-47
P position warning does not operate.		1. Check transmission range switch.	TM-101
		2. Check door switch.	DLK-99
		3. Check Intelligent Key warning buzzer.	DLK-141
		4. Check warning chime function.	DLK-147
		5. Check combination meter display function.	TM-168
		6. Check Intermittent Incident.	GI-47
ACC warning does not operate		1. Check push-button ignition switch position indicator.	PCS-67
		2. Check warning chime function.	DLK-147
		3. Check combination meter display function.	TM-168
		4. Check Intermittent Incident.	GI-47

Symptom		Diagnosis/service procedure		Reference page
Take away warning does not operate.	Door open to close	1. Check door switch.		DLK-99
		2. Check inside key antenna.	Console	DLK-87
			Rear parcel shelf	DLK-89
		3. Check Intelligent Key warning buzzer.		DLK-141
		4. Check warning chime function.		DLK-147
		5. Check combination meter display function.		MWI-76
		6. Check Intermittent Incident.		GI-47
	Push-button ignition switch operation	1. Check push-button ignition switch position indicator.		PCS-67
		2. Check inside key antenna.	Console	DLK-87
			Rear parcel shelf	DLK-89
		3. Check warning chime function.		DLK-147
		4. Check combination meter display function.		MWI-76
		5. Check Intermittent Incident.		GI-47
	Door is open	1. Check push-button ignition switch position indicator.		PCS-67
		2. Check inside key antenna.	Console	DLK-87
			Rear parcel shelf	DLK-89
		3. Check combination meter display function.		MWI-76
		4. Check Intermittent Incident.		GI-47
	Take away through window	1. Check inside key antenna.	Console	DLK-87
			Rear parcel shelf	DLK-89
		3. Check warning chime function.		DLK-147
		4. Check combination meter display function.		MWI-76
		5. Check Intermittent Incident.		GI-47
Key warning chime does not operate.				
		1. Check door switch.		DLK-99
		2. Check warning chime function.		DLK-147
		3. Check combination meter display function.		MWI-76
		4. Check Intermittent Incident.		GI-47
Door lock operation warning chime does not operate.		1. Check door switch.		DLK-99
		2. Check Intelligent Key warning buzzer.		DLK-141
		3. Check inside key antenna.	Console	DLK-87
			Rear parcel shelf	DLK-89
		4. Check Intermittent Incident.		GI-47

KEY REMINDER FUNCTION SYMPTOMS

Symptom Table

INFOID:0000000007987373

KEY REMINDER FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work flow”. Refer to DLK-80, "Work Flow".
- If the following symptoms are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)

- “LOCK/UNLOCK BY I-KEY” is ON when setting on CONSULT.
- “ANSWER BACK FUNCTION” is ON when setting on CONSULT.
- Ignition switch is in OFF position.
- All doors are closed.
- Intelligent Key is out of key slot.

Symptom	Diagnosis/service procedure	Reference page
Key reminder function does not operate.	1. Check “ANTI KEY LOCK IN FUNCTI”setting in “WORK SUPPORT”.	DLK-80
	2. Check door switch.	DLK-99
	3. Check inside key antenna.	DLK-87
	4. Check unlock sensor.	DLK-118
	5. Check Intelligent Key battery inspection.	DLK-145
	6. Check Intermittent Incident.	GI-47

HAZARD FUNCTION

Symptom Table

INFOID:0000000007987374

HAZARD AND BUZZER REMINDER FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work flow”. Refer to DLK-80, "Work Flow".
- If the following symptoms are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)

- “LOCK/UNLOCK BY I-KEY” is ON when setting on CONSULT.
- “ANSWER BACK FUNCTION” is ON when setting on CONSULT.
- Ignition switch is in OFF position.
- All doors are closed.
- Intelligent Key is out of key slot.

Symptom	Diagnosis/service procedure	Reference page
Hazard reminder does not operate by request switch. (Buzzer reminder operate.)	1. Check “HAZARD ANSWER BACK” setting in “WORK SUPPORT”.	DLK-43
	2. Check hazard function.	DLK-148
	3. Check Intermittent incident.	GI-47
Hazard reminder does not operate by Intelligent Key. (Buzzer reminder operate.)	1. Check “HAZARD ANSWER BACK” setting in “WORK SUPPORT”.	DLK-43
	2. Check hazard function.	DLK-148
	3. Check Intelligent Key battery inspection.	DLK-145
Buzzer reminder does not operate by request switch. (Hazard reminder operate.)	1. Check “ANS BACK I-KEY LOCK” or “ANS BACK I-KEY UNLOCK” setting in “WORK SUPPORT”.	DLK-43
	2. Check Intelligent Key warning buzzer.	DLK-141
	3. Check Intermittent incident.	GI-47
Buzzer reminder does not operate by trunk opener request switch.	1. Check “TRUNK OPEN DELAY” setting in “WORK SUPPORT”.	DLK-43
	2. Check Intelligent Key warning buzzer.	DLK-141
	3. Check trunk open function.	DLK-121
	4. Check Intermittent incident.	GI-47

HORN FUNCTION

Symptom Table

INFOID:0000000007987375

HAZARD AND HORN REMINDER FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work flow”. Refer to DLK-80, "Work Flow".
- If the following symptoms are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)

- “ANSWER BACK FUNCTION” is ON when setting on CONSULT.
- Ignition switch is in OFF position.
- All doors are closed.

Symptom	Diagnosis/service procedure	Reference page
Hazard reminder does not operate by request switch. (Horn reminder operate.)	1. Check “HAZARD ANSWER BACK” setting in “WORK SUPPORT”.	DLK-43
	2. Check hazard function.	DLK-148
	3. Check Intermittent Incident.	GI-47
Hazard reminder does not operate by Intelligent Key. (Horn reminder operate.)	1. Check “HAZARD ANSWER BACK” setting in “WORK SUPPORT”.	DLK-43
	2. Check hazard function.	DLK-148
	3. Check Intelligent Key battery inspection.	DLK-145
Horn reminder does not operate by request switch. (Hazard reminder operate.)	1. Check “ANSWER BACK WITH I-KEY LOCK” or “ANSWER BACK WITH I-KEY UNLOCK” setting in “WORK SUPPORT”.	DLK-43
	2. Check Intelligent Key warning buzzer.	DLK-141
	3. Check Intermittent Incident.	GI-47
Horn reminder does not operate by Intelligent Key. (Hazard reminder operate.)	1. Check “HORN WITH KEYLESS LOCK” setting in “WORK SUPPORT”.	DLK-43
	2. Check horn function.	HRN-3
	3. Check Intermittent Incident.	GI-47

INTEGRATED HOMELINK TRANSMITTER

Symptom Table

INFOID:0000000007987376

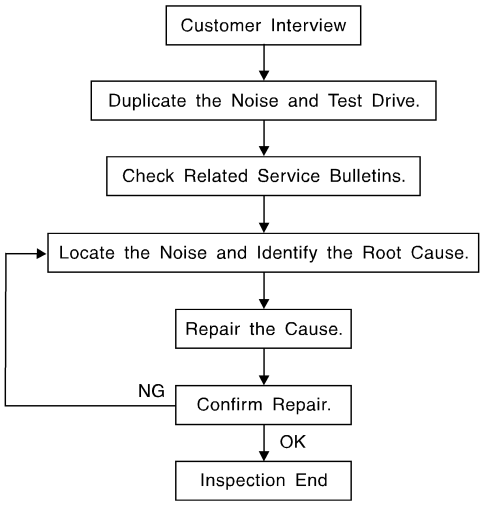
HOMELINK UNIVERSAL TRANSCEIVER MALFUNCTION

Symptom	Diagnosis/service procedure	Reference page
Homelink universal transceiver does not operate properly.	1. Check homelink universal transceiver function.	DLK-149
	2. Check Intermittent Incident.	GI-47

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000008698133



SBT842

CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any customer's comments; refer to DLK-167, "Diagnostic Worksheet". This information is necessary to duplicate the conditions that exist when the noise occurs.

- The customer may not be able to provide a detailed description or the location of the noise. Attempt to obtain all the facts and conditions that exist when the noise occurs (or does not occur).
- If there is more than one noise in the vehicle, be sure to diagnose and repair the noise that the customer is concerned about. This can be accomplished by test driving the vehicle with the customer.
- After identifying the type of noise, isolate the noise in terms of its characteristics. The noise characteristics are provided so the customer, service adviser and technician are all speaking the same language when defining the noise.
- Squeak —(Like tennis shoes on a clean floor)
  Squeak characteristics include the light contact/fast movement/brought on by road conditions/hard surfaces = higher pitch noise/softer surfaces = lower pitch noises/edge to surface = chirping.
- Creak—(Like walking on an old wooden floor)
  Creak characteristics include firm contact/slow movement/twisting with a rotational movement/pitch dependent on materials/often brought on by activity.
- Rattle—(Like shaking a baby rattle)
  Rattle characteristics include the fast repeated contact/vibration or similar movement/loose parts/missing clip or fastener/incorrect clearance.
- Knock —(Like a knock on a door)
  Knock characteristics include hollow sounding/sometimes repeating/often brought on by driver action.
- Tick—(Like a clock second hand)
  Tick characteristics include gentle contacting of light materials/loose components/can be caused by driver action or road conditions.
- Thump—(Heavy, muffled knock noise)
  Thump characteristics include softer knock/dead sound often brought on by activity.
- Buzz—(Like a bumble bee)
  Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending upon the person. A noise that you may judge as acceptable may be very irritating to the customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

DUPLICATE THE NOISE AND TEST DRIVE

If possible, drive the vehicle with the customer until the noise is duplicated. Note any additional information on the Diagnostic Worksheet regarding the conditions or location of the noise. This information can be used to duplicate the same conditions when you confirm the repair.

If the noise can be duplicated easily during the test drive, to help identify the source of the noise, try to duplicate the noise with the vehicle stopped by doing one or all of the following:

1) Close a door.
2) Tap or push/pull around the area where the noise appears to be coming from.
3) Rev the engine.
4) Use a floor jack to recreate vehicle “twist”.
5) At idle, apply engine load (electrical load, half-clutch on M/T model, drive position on CVT and A/T models).
6) Raise the vehicle on a hoist and hit a tire with a rubber hammer.

- Drive the vehicle and attempt to duplicate the conditions the customer states exist when the noise occurs.
- If it is difficult to duplicate the noise, drive the vehicle slowly on an undulating or rough road to stress the vehicle body.

CHECK RELATED SERVICE BULLETINS

After verifying the customer concern or symptom, check ASIST for Technical Service Bulletins (TSBs) related to that concern or symptom.
If a TSB relates to the symptom, follow the procedure to repair the noise.

LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis Ear: J-39570, Engine Ear: J-39565 and mechanic's stethoscope).
2. Narrow down the noise to a more specific area and identify the cause of the noise by:
   - removing the components in the area that you suspect the noise is coming from.
     Do not use too much force when removing clips and fasteners, otherwise clips and fasteners can be broken or lost during the repair, resulting in the creation of new noise.
   - tapping or pushing/pulling the component that you suspect is causing the noise.
     Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
   - feeling for a vibration with your hand by touching the component(s) that you suspect is (are) causing the noise.
   - placing a piece of paper between components that you suspect are causing the noise.
   - looking for loose components and contact marks.
     Refer to DLK-165, "Generic Squeak and Rattle Troubleshooting".

REPAIR THE CAUSE

- If the cause is a loose component, tighten the component securely.
- If the cause is insufficient clearance between components:

- separate components by repositioning or loosening and retightening the component, if possible.
- insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or urethane tape. A NISSAN Squeak and Rattle Kit (J-43980) is available through your authorized NISSAN Parts Department.

CAUTION:
Do not use excessive force as many components are constructed of plastic and may be damaged.
Always check with the Parts Department for the latest parts information.
The following materials are contained in the NISSAN Squeak and Rattle Kit (J-43980). Each item can be ordered separately as needed.
URETHANE PADS [1.5 mm (0.059 in) thick]
Insulates connectors, harness, etc.
76268-9E005: 100×135 mm (3.94×5.31 in)/76884-71L01: 60×85 mm (2.36×3.35 in)/76884-71L02: 15×25 mm (0.59×0.98 in)
INSULATOR (Foam blocks)
Insulates components from contact. Can be used to fill space behind a panel.
73982-9E000: 45 mm (1.77 in) thick, 50×50 mm (1.97×1.97 in)/73982-50Y00: 10 mm (0.39 in) thick, 50×50 mm (1.97×1.97 in)
INSULATOR (Light foam block)
80845-71L00: 30 mm (1.18 in) thick, 30×50 mm (1.18×1.97 in)
FELT CLOTH TAPE
Used to insulate where movement does not occur. Ideal for instrument panel applications.
68370-4B000: 15×25 mm (0.59×0.98 in) pad/68239-13E00: 5 mm (0.20 in) wide tape roll. The following materials not found in the kit can also be used to repair squeaks and rattles.
UHMW (TEFLON) TAPE
Insulates where slight movement is present. Ideal for instrument panel applications.
SILICONE GREASE

Used instead of UHMW tape that will be visible or not fit.
Note: Will only last a few months.
SILICONE SPRAY
Use when grease cannot be applied.
DUCT TAPE
Use to eliminate movement.

CONFIRM THE REPAIR

Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.

Generic Squeak and Rattle Troubleshooting

INFOID:0000000008698134

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

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. Cluster lid A and the instrument panel
2. Acrylic lens and combination meter housing
3. Instrument panel to front pillar finisher
4. Instrument panel to windshield
5. Instrument panel pins
6. Wiring harnesses behind the combination meter
7. A/C defroster duct and duct joint

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicone spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

CAUTION:
Do not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will not be able to recheck the repair.

CENTER CONSOLE

Components to pay attention to include:

1. Shift selector assembly cover to finisher
2. A/C control unit and cluster lid C
3. Wiring harnesses behind audio and A/C control unit

The instrument panel repair and isolation procedures also apply to the center console.

DOORS

Pay attention to the:

1. Finisher and inner panel making a slapping noise
2. Inside handle escutcheon to door finisher
3. Wiring harnesses tapping
4. Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks from the NISSAN Squeak and Rattle Kit (J-43980) to repair the noise.

TRUNK

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

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

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

SUNROOF/HEADLINING

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

1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
2. Sun visor shaft shaking in the holder
3. Front or rear windshield touching headliner and squeaking

Again, pressing on the components to stop the noise while duplicating the conditions can isolate most of these incidents. Repairs usually consist of insulating with felt cloth tape.

OVERHEAD CONSOLE (FRONT AND REAR)

Overhead console noises are often caused by the console panel clips not being engaged correctly. Most of these incidents are repaired by pushing up on the console at the clip locations until the clips engage.
In addition look for:

1. Loose harness or harness connectors.
2. Front console map/reading lamp lens loose.
3. Loose screws at console attachment points.

SEATS

When isolating seat noise it's important to note the position the seat is in and the load placed on the seat when the noise is present. These conditions should be duplicated when verifying and isolating the cause of the noise.
Cause of seat noise include:

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

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

UNDERHOOD

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

1. Any component installed to the engine wall
2. Components that pass through the engine wall
3. Engine wall mounts and connectors
4. Loose radiator installation pins
5. Hood bumpers out of adjustment
6. Hood striker out of adjustment

These noises can be difficult to isolate since they cannot be reached from the interior of the vehicle. The best method is to secure, move or insulate one component at a time and test drive the vehicle. Also, engine rpm or load can be changed to isolate the noise. Repairs can usually be made by moving, adjusting, securing, or insulating the component causing the noise.

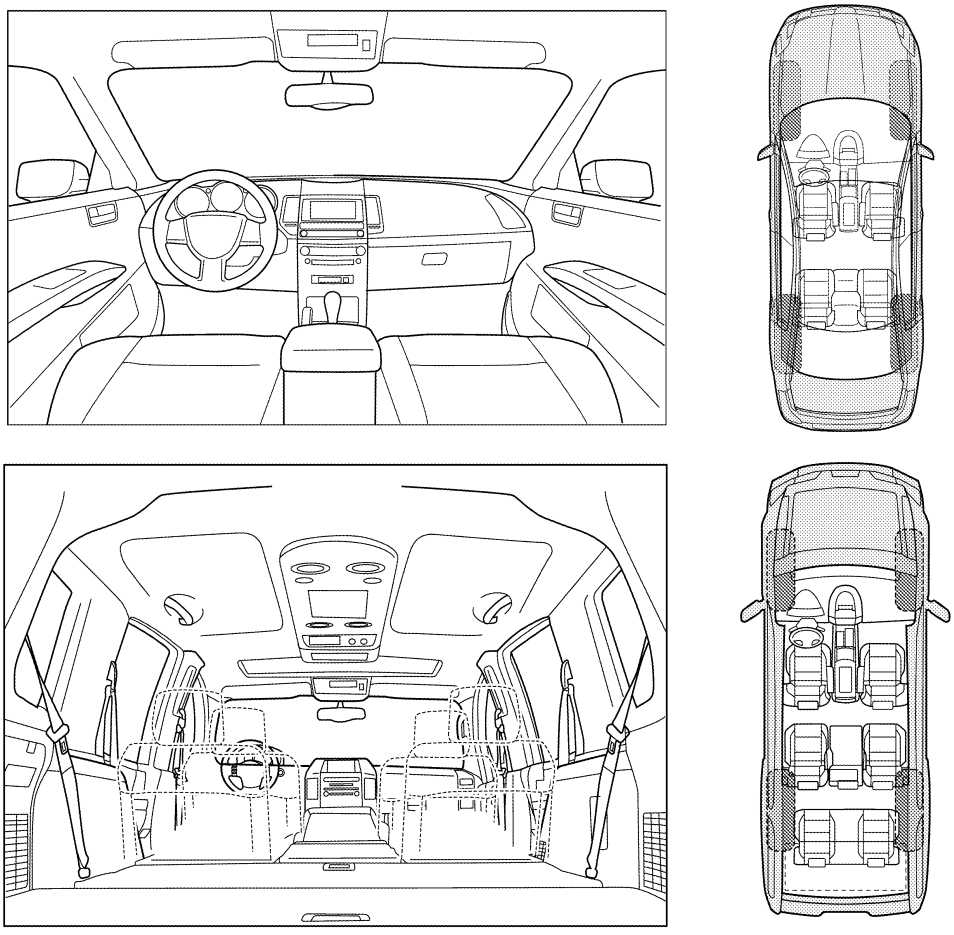
Diagnostic Worksheet

INFOID:0000000008698193

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

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

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



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

-1-

LAIA0072E

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

_____

_____

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

- ☐ Anytime
- ☐ 1st time in the morning
- ☐ Only when it is cold outside
- ☐ Only when it is hot outside
- ☐ After sitting out in the rain
- ☐ When it is raining or wet
- ☐ Dry or dusty conditions
- ☐ Other:

III. WHEN DRIVING:

- ☐ Through driveways
- ☐ Over rough roads
- ☐ Over speed bumps
- ☐ Only about ____ mph
- ☐ On acceleration
- ☐ Coming to a stop
- ☐ On turns: left, right or either (circle)
- ☐ With passengers or cargo
- ☐ Other: _____
- ☐ After driving _____ miles or _____ minutes

IV. WHAT TYPE OF NOISE

- ☐ Squeak (like tennis shoes on a clean floor)
- ☐ Creak (like walking on an old wooden floor)
- ☐ Rattle (like shaking a baby rattle)
- ☐ Knock (like a knock at the door)
- ☐ Tick (like a clock second hand)
- ☐ Thump (heavy muffled knock noise)
- ☐ Buzz (like a bumble bee)

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

_____

_____

_____

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

VIN: _____ Customer Name _____

W.O.# _____ Date: _____

This form must be attached to Work Order

LAIA0071E

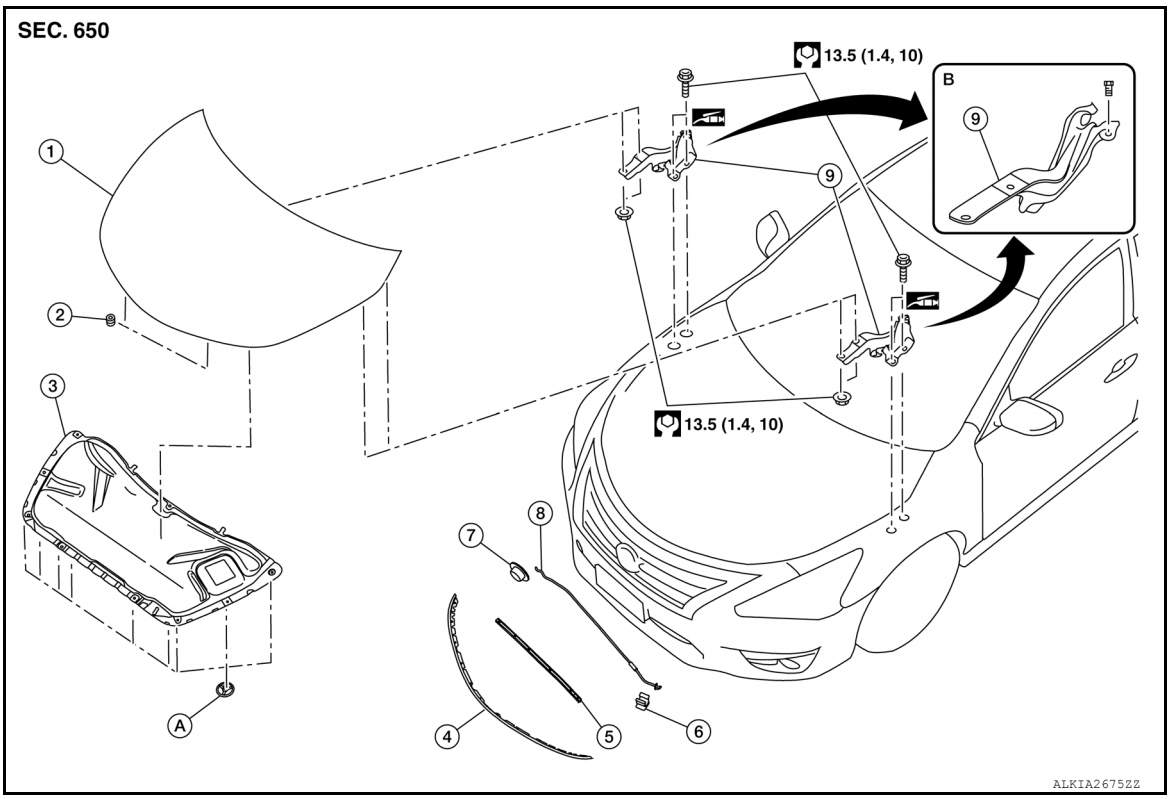
REMOVAL AND INSTALLATION

HOOD

HOOD ASSEMBLY

HOOD ASSEMBLY : Exploded View

INFOID:0000000008704790



1. Hood assembly	2. Hood bumper rubber	3. Hood insulator
4. Hood seal front	5. Hood seal	6. Hood support rod clamp
7. Hood support rod grommet	8. Hood support rod	9. Hood hinge
A. Clip	B. RH shown; LH similar	Grease

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000007987385

CAUTION:

- **Use two people when removing or installing hood assembly due to its heavy weight.**
- **Use protective tape or shop cloths to protect surrounding components from damage during removal and installation of hood assembly.**

REMOVAL

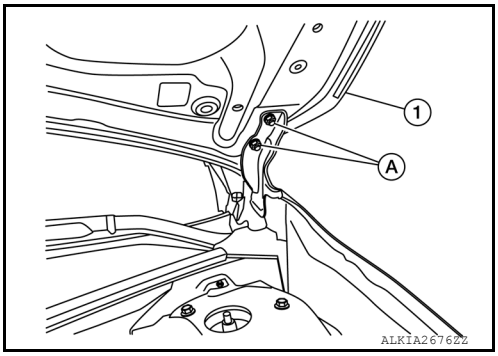
1. Support the hood assembly using a suitable tool.

   WARNING:

   Bodily injury may occur if hood assembly is not supported properly when removing hood assembly.

2. Disconnect front washer nozzle and tube.

3. Remove hood hinge to hood nuts (A) and then remove the hood assembly (1).



INSTALLATION

Installation is in the reverse order of removal.
Tighten hood hinge to hood nuts to specified torque.

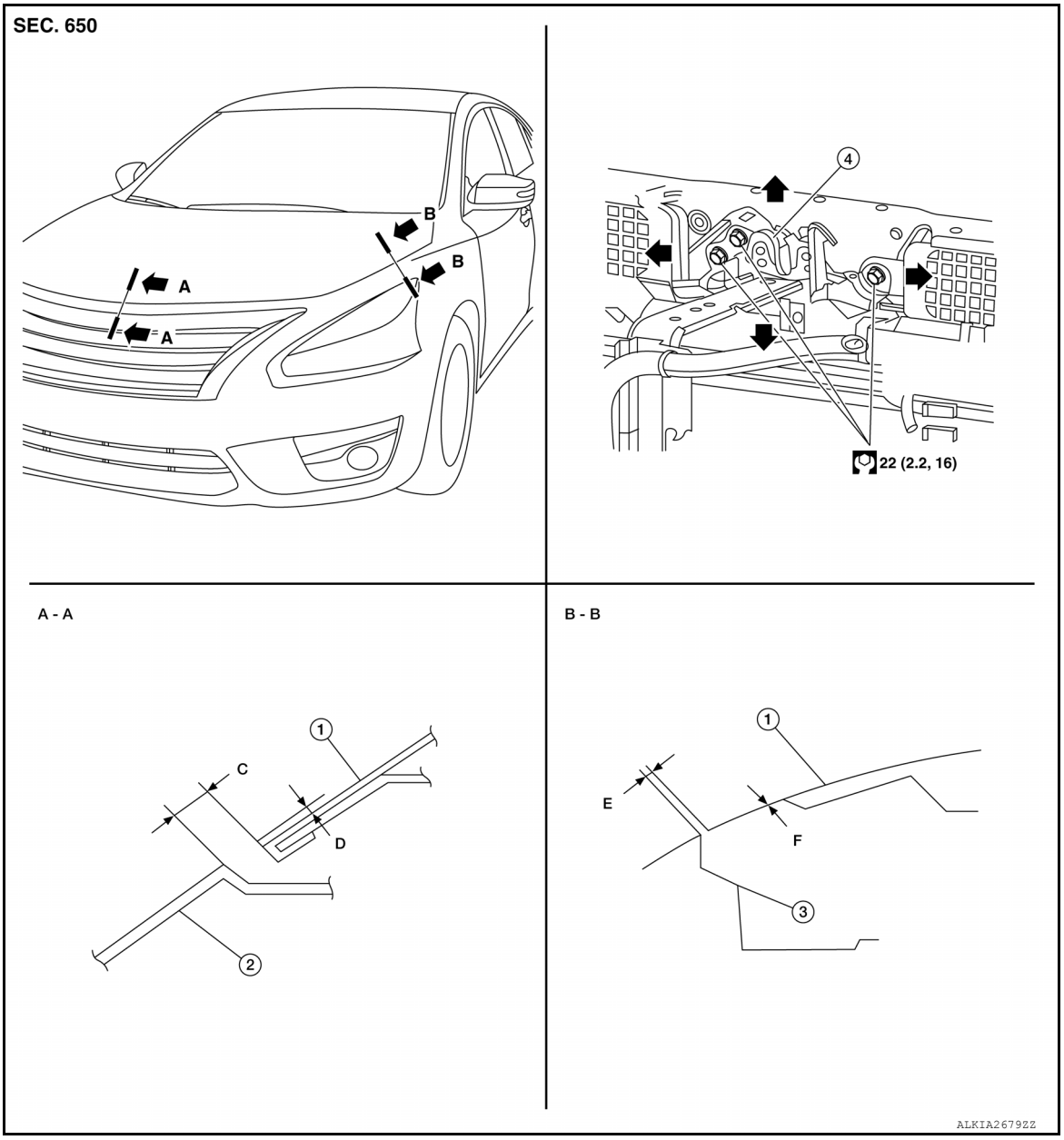
Hood hinge nuts 13.5 N·m (1.4 kg-m, 10 ft-lb)

CAUTION:

- **Before installing the hood hinge, apply anticorrosive agent onto the surface of the vehicle.**
- **After installation, perform the hood assembly adjustment procedure. Refer to DLK-171, "HOOD ASSEMBLY : Adjustment".**

HOOD ASSEMBLY : Adjustment

INFOID:0000000007987386



1. Hood assembly
2. Front fascia
3. Front fender LH
4. Hood lock assembly

Check the clearance and the surface height between hood and each part by visual inspection and tactile feel. If the clearance and the surface height are out of specification, adjust them according to the adjustment procedures.

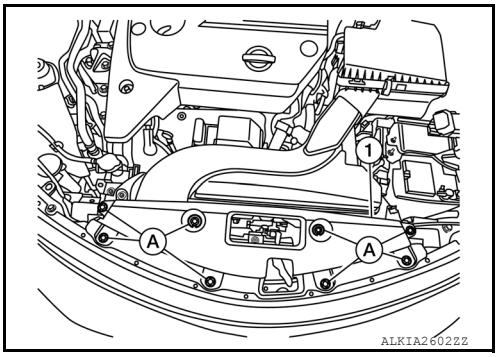
Unit: mm (in)

Section	Item	Measurement	Standard	Parallelism	Equality
A – A	E	Clearance	4.1 ± 2.1 (0.16 ± 0.08)	<2.0 (0.08)	—
	F	Surface height	0.8 +1.2, −1.4 (0.03 +0.05, −0.06)	<2.0 (0.08)	—
B – B	G	Clearance	3.5 ± 1.0 (0.14 ± 0.04)	≤ 1.5 (0.06)	< 2.0 (0.08)
	H	Surface height	0.0 ± 1.0 (0.00 ± 0.04)	—	< 1.5 (0.06)

CLEARANCE ADJUSTMENT

1. Remove the hood ledge finisher (LH/RH).

2. Remove cowl top side trim cover (LH/RH). Refer to EXT-24, "Removal and Installation".
3. Loosen hood hinge (LH/RH) nuts and bolts.
   NOTE:
   The anticorrosive agent applied between the hood ledge and the hood hinges also acts as an adhesive. This seal must be broken before the hinges will move.
4. Remove the radiator core support upper cover clips (A), and remove.



5. Loosen the hood lock assembly bolts.
6. Adjust the hood assembly so the clearance measurements are within specifications provided.
7. Tighten the hood hinge nuts and bolts to specified torque.

Hood hinge nuts	**13.5 N·m (1.4 kg-m, 10 ft-lb)**
Hood hinge to body bolts	**13.5 N·m (1.4 kg-m, 10 ft-lb)**

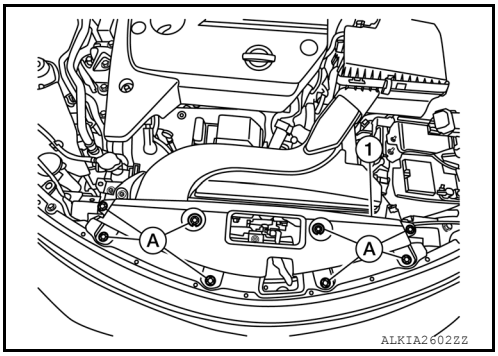
8. Tighten the hood lock assembly bolts to specified torque.

Hood lock assembly bolts	**22 N·m (2.2 kg-m, 16 ft-lb)**

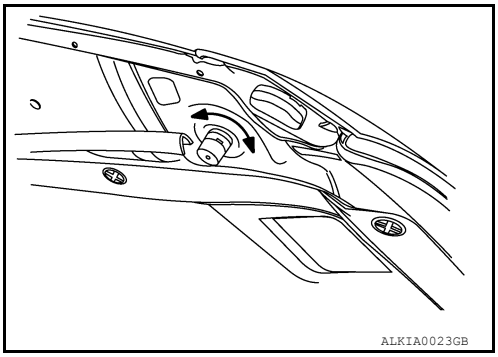
9. Install the radiator core support upper cover.
10. Install the hood ledge finisher.
11. Install cowl top side trim cover. Refer to EXT-24, "Removal and Installation".

HEIGHT ADJUSTMENT

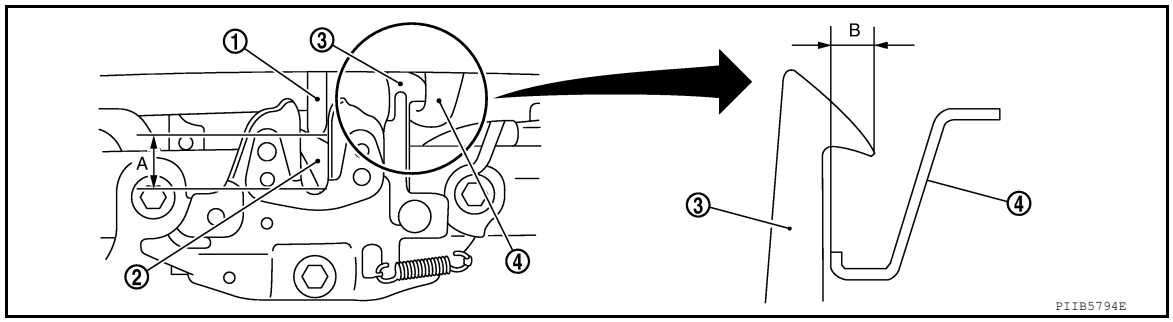
1. Remove the radiator core support upper cover clips (A), and remove.



2. Loosen the hood lock assembly bolts.
3. Adjust the surface height of hood assembly to front bumper fascia and front fender according to the specified values by rotating hood bumper rubber (LH/RH).



4. Temporarily tighten hood lock assembly bolts.
5. Adjust (A) and (B) as shown to the following value with hood's own weight by dropping it from approximately 200 mm (7.87 in) height or by pressing hood lightly [approximately 29 N (3.0 kg-f, 6.5 ft-lb)].



1. Hood striker
2. Primary latch
3. Secondary striker
4. Secondary latch
A. 21 ± 1 mm (0.8 ± 0.04 in)
B. 6.8 mm (0.27 in)

6. After adjustment, tighten hood hinge nuts and bolts to the specified torque.
   CAUTION:
   - **Check hood hinge rotating part for poor lubrication. If necessary, apply a suitable multi-purpose grease.**
   - **After adjusting, apply touch-up paint (body color) onto the head of hood hinge bolts and nuts.**
7. Tighten the hood lock assembly bolts to specified torque.

   Hood lock assembly bolts 22 N·m (2.2 kg-m, 16 ft-lb)

8. Install the radiator core support upper cover.
9. If the clearance measurements between the hood and fender cannot be corrected by adjusting the hood, the fender must be adjusted. Refer to DLK-181, "Adjustment".

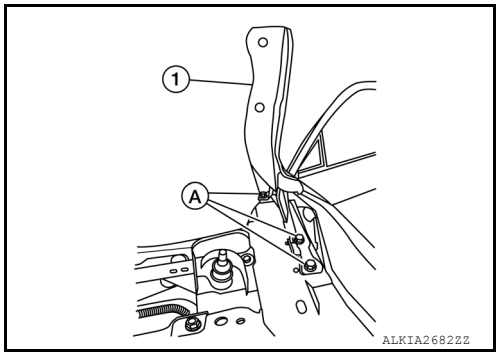
HOOD HINGE

HOOD HINGE : Removal and Installation

INFOID:0000000008704791

REMOVAL

1. Remove hood assembly. Refer to DLK-169, "HOOD ASSEMBLY : Removal and Installation".
2. Remove hood hinge bolts (A), and then remove hood hinge (1).



INSTALLATION

Installation is in the reverse order of removal.
Tighten hood hinge bolts to specified torque.

Hood hinge bolts 13.5 N·m (1.4 kg-m, 10 ft-lb)

CAUTION:
- **Before installing the hood hinge, apply anticorrosive agent onto the surface of the vehicle.**

- **After installation, perform hood assembly adjustment procedure. Refer to DLK-171, "HOOD ASSEMBLY : Adjustment".**

HOOD SUPPORT ROD

HOOD SUPPORT ROD : Removal and Installation

INFOID:0000000008707297

REMOVAL

1. Support hood assembly using a suitable tool.

   WARNING:
   Bodily injury may occur if hood assembly is not supported properly when removing hood support rod.
2. Rotate and remove hood support rod from grommet.
3. Release tab and remove grommet from hood hinge, if necessary.

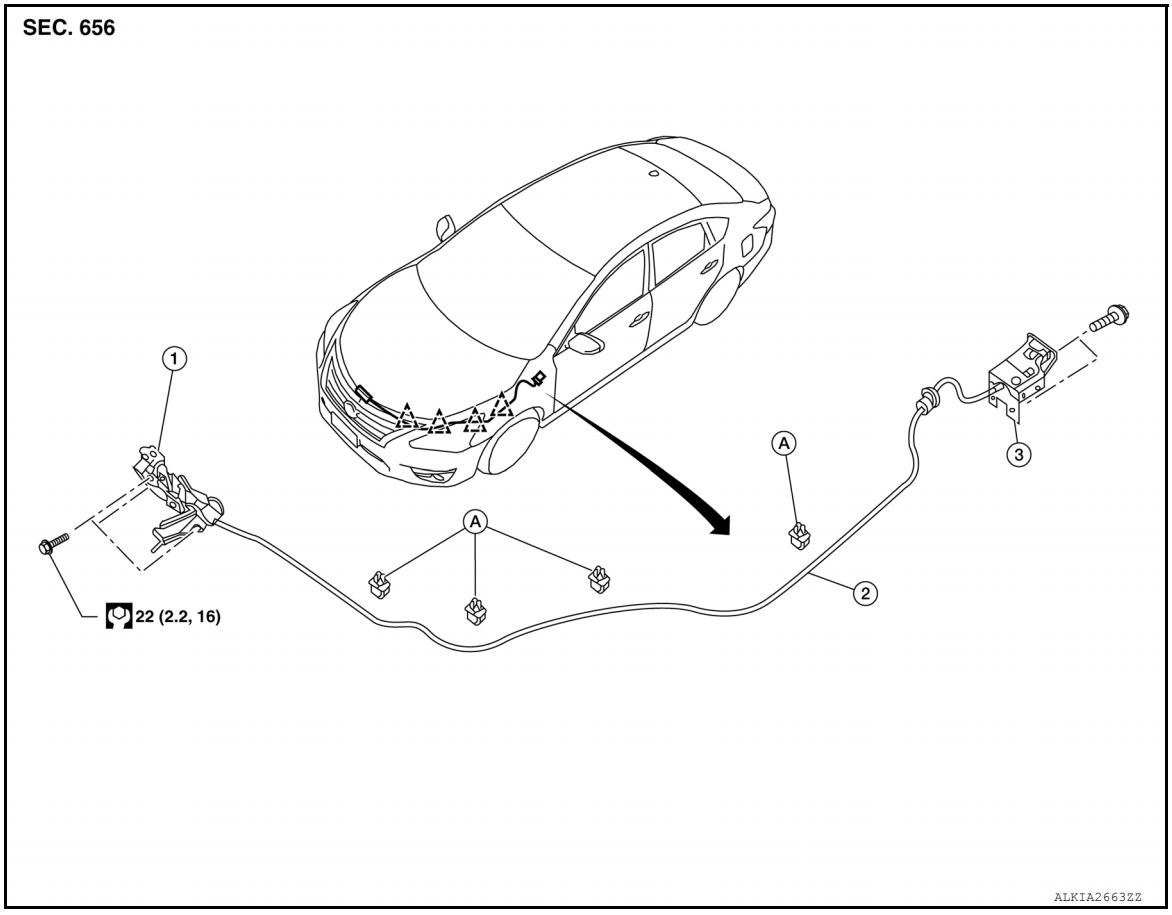
INSTALLATION

Installation is in the reverse order of removal.

HOOD LOCK CONTROL

HOOD LOCK CONTROL : Component Parts Location

INFOID:0000000007987387



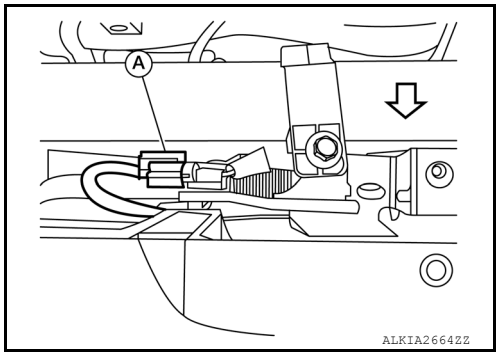
1. Hood lock assembly
2. Hood lock release cable
3. Hood lock/fuel filler door release handle assembly
A. Hood lock release cable clip
Clip

HOOD LOCK CONTROL : Removal and Installation

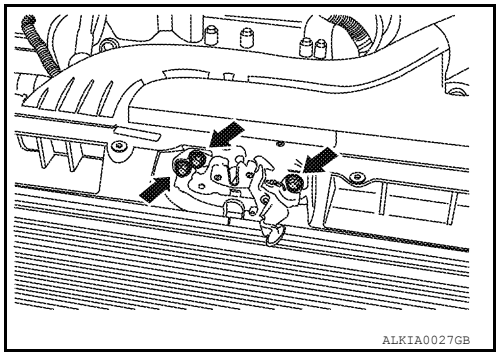
INFOID:0000000007987388

REMOVAL

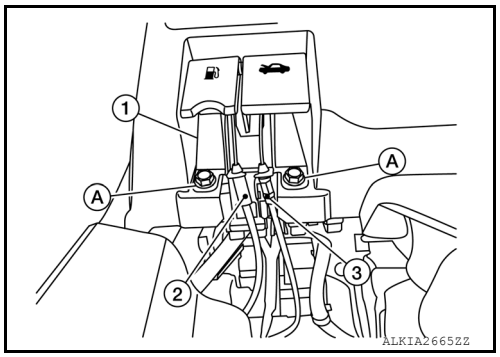
1. Remove the radiator core support upper cover clips, then remove the radiator core support upper cover.
2. Remove the hood ledge finisher clips LH, then remove the hood ledge finisher LH.
3. Disconnect the hood switch harness connector (A) (if equipped).
   ⇦: Front



4. Remove the hood lock assembly bolts (⬅).



5. Disconnect the hood lock release cable from the hood lock assembly and unclip from the hood ledge.
6. Remove the fender protector LH. Refer to EXT-26, "FENDER PROTECTOR : Removal and Installation".
7. Remove the bolts (A), then separate the hood lock/fuel filler door release handle assembly (1) from the hood lock release cable (3) and fuel filler door release cable (2).

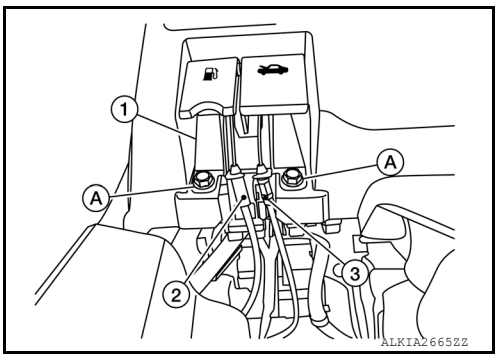


8. Remove the grommet from the upper dash assembly and pull the hood lock release cable into the passenger compartment.
   CAUTION:
   While pulling, be careful not to damage (peel) the outside of the hood lock release cable.

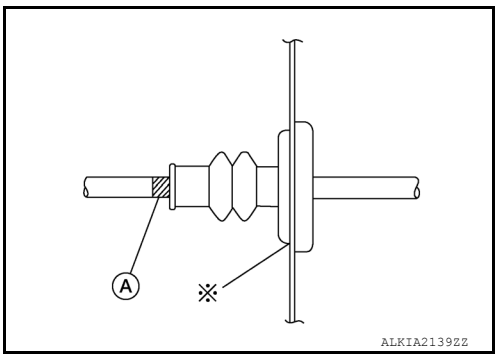
INSTALLATION

1. Pull the hood lock release cable through the upper dash assembly into the engine compartment.
   CAUTION:
   Be careful not to bend the cable too much, keep the radius 100 mm (3.94 in) or more.

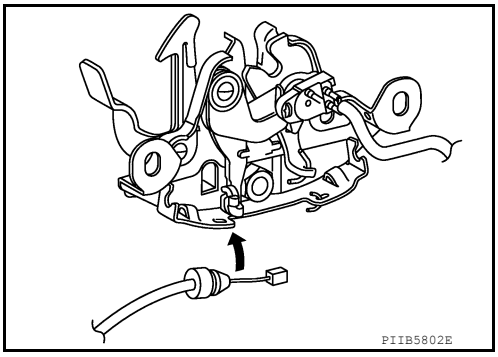
2. Attach the hood lock release cable (3) and the fuel filler door release cable (2) to the hood lock/fuel filler door release handle assembly (1).
3. Place hood lock/fuel filler door release handle assembly in position and retain with bolts (A).



4. Check that the cable is not offset from the center of the grommet and seat the grommet into the upper dash hole.
NOTE:
Make sure that the marked area (A) of the cable is located as shown after mounting grommet to dash upper assembly.
Apply sealant around the grommet at * mark.



5. Position the hood lock release cable and clip it into place.
6. Install the hood ledge finisher LH and retain with clips.
7. Connect the hood lock release cable to the hood lock assembly.

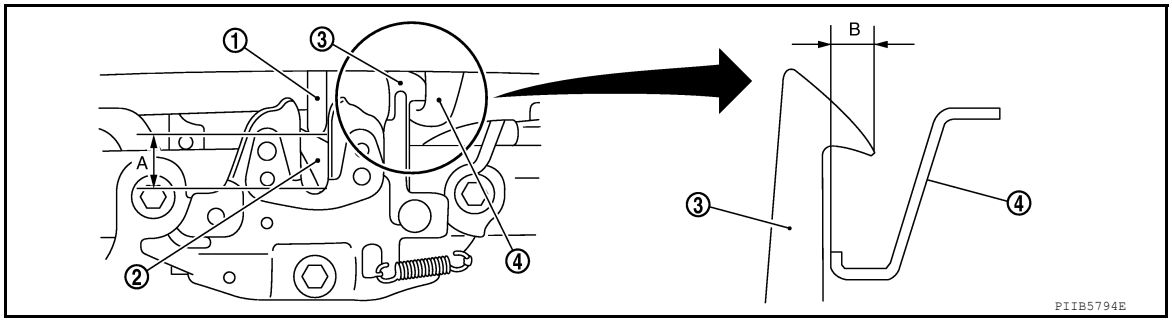


8. Install the fender protector LH. Refer to EXT-26, "FENDER PROTECTOR : Removal and Installation".
9. Perform hood fitting adjustment. Refer to DLK-171, "HOOD ASSEMBLY : Adjustment".
10. Perform the hood lock control inspection.

INSPECTION

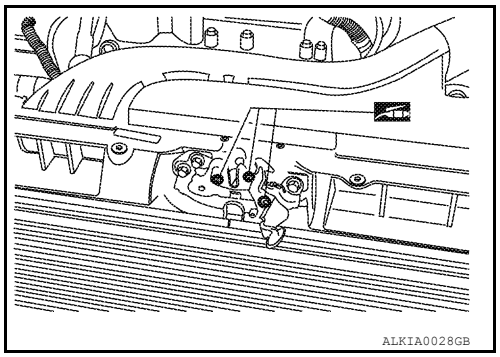
NOTE:
If the hood lock release cable is bent or deformed, replace it.

1. Check that the secondary latch is properly engaged with the secondary striker and meets specification provided (B) with hood's own weight.



1. Hood striker
2. Primary latch
3. Secondary striker
4. Secondary latch
A. 21 ± 1 mm (0.8 ± 0.04 in)
B. 6.8 mm (0.27 in)

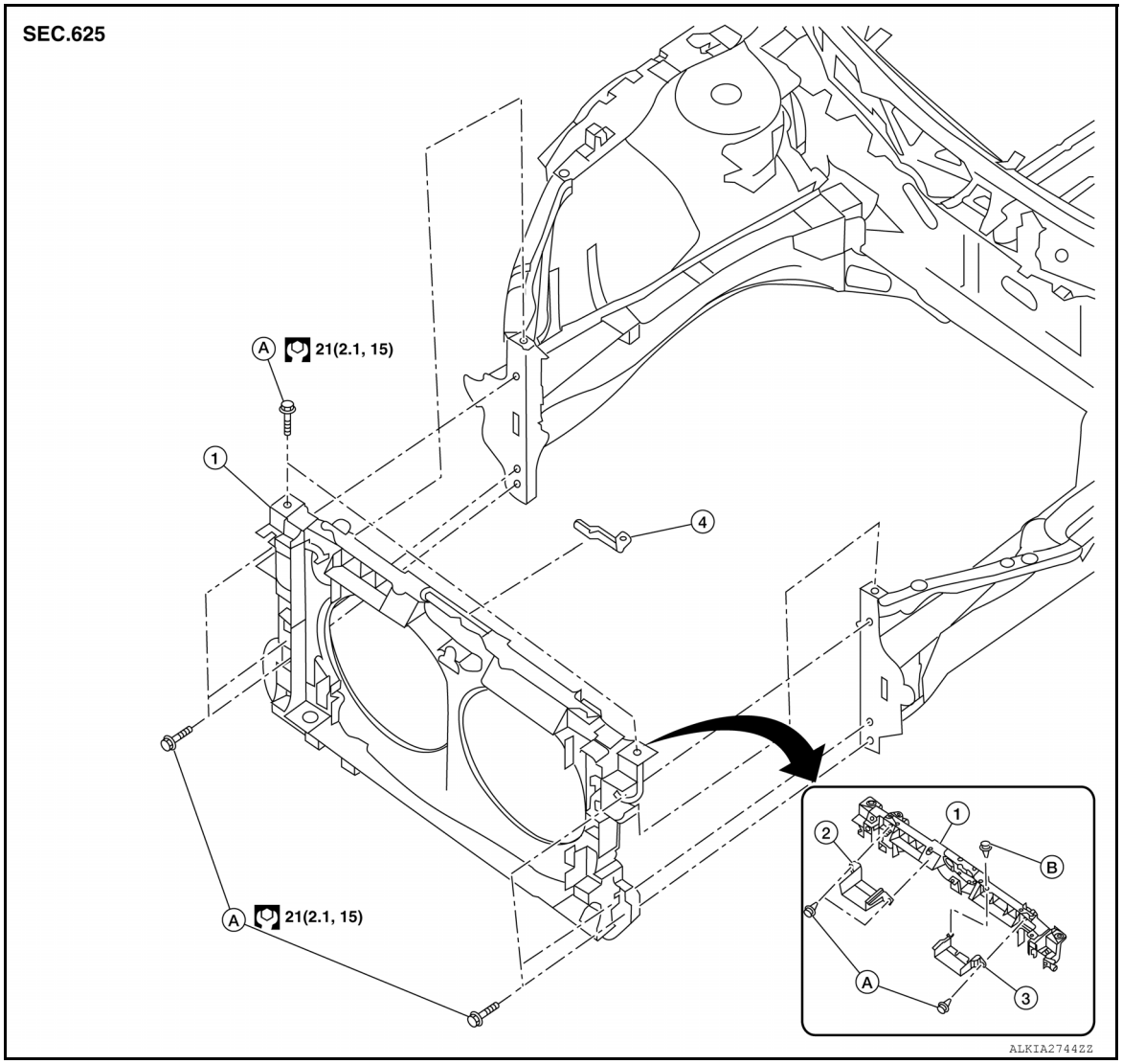
2. While operating the hood lock release handle, carefully check that the front end of the hood assembly is raised and meets the specification provided (A). Also check that the hood lock release handle returns to the original position.
3. Check that the hood lock release handle operating force is 49 N (5.0 kg-f, 11 ft-lb) or less.
4. Install so the static closing force of the hood assembly is 343 – 490 N (35 – 50 kg-f, 77.1 - 110.2 lb-f).
5. Check the hood lock assembly lubrication condition. If necessary, apply a suitable multi-purpose grease as shown.



RADIATOR CORE SUPPORT

Removal and Installation

INFOID:0000000007987389



1. Radiator core support
2. Air guide (QR25DE only)
3. Air guide (VQ35DE only)
4. Hood switch bracket
A. Bolt
B. Clips

CAUTION:
Before servicing, turn ignition switch OFF, disconnect both battery terminals and wait at least three minutes.

REMOVAL

1. Remove crash zone sensor. Refer to SR-22, "Removal and Installation".
2. Remove radiator. Refer to CO-16, "Removal and Installation" (QR25DE) or CO-40, "Removal and Installation" (VQ35DE).
3. Remove the hood lock. Refer to DLK-175, "HOOD LOCK CONTROL : Removal and Installation".
4. Remove air guides (LH/RH).
5. Remove and disconnect all remaining harness connectors and clips from the radiator core support assembly, and position aside.
6. Remove the bolts and the radiator core support assembly.
7. Remove the following parts after removing radiator core support assembly.
   - Cooling fan. Refer to CO-17, "Exploded View" (QR25DE) or CO-41, "Exploded View" (VQ35DE).

- Hood switch bracket (if equipped).

INSTALLATION

Installation is in the reverse order of removal.

Radiator core support bolts	**21 N·m (2.1 kg-m, 15 ft-lb)**

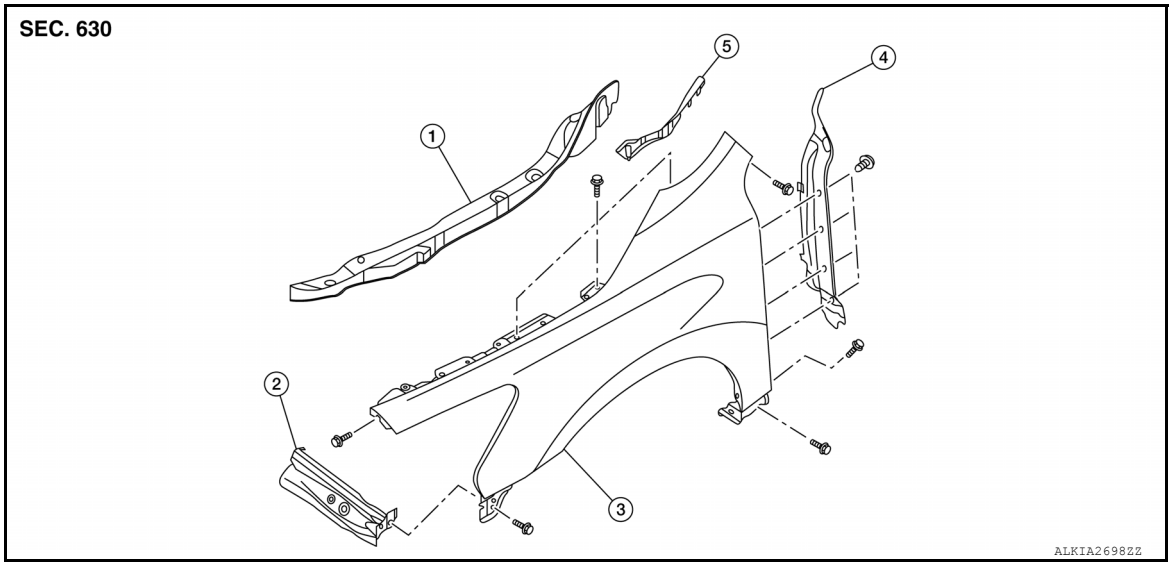
CAUTION:

After installing, perform hood fitting adjustment. Refer to DLK-171, "HOOD ASSEMBLY : Adjustment".

FRONT FENDER

Exploded View

INFOID:0000000008707374



1. Hood ledge finisher LH
2. Front fender stay LH
3. Front fender LH
4. Front fender baffle LH
5. Cowl top side cover

Removal and Installation

INFOID:0000000007987390

NOTE:
LH side shown; RH side similar.

REMOVAL

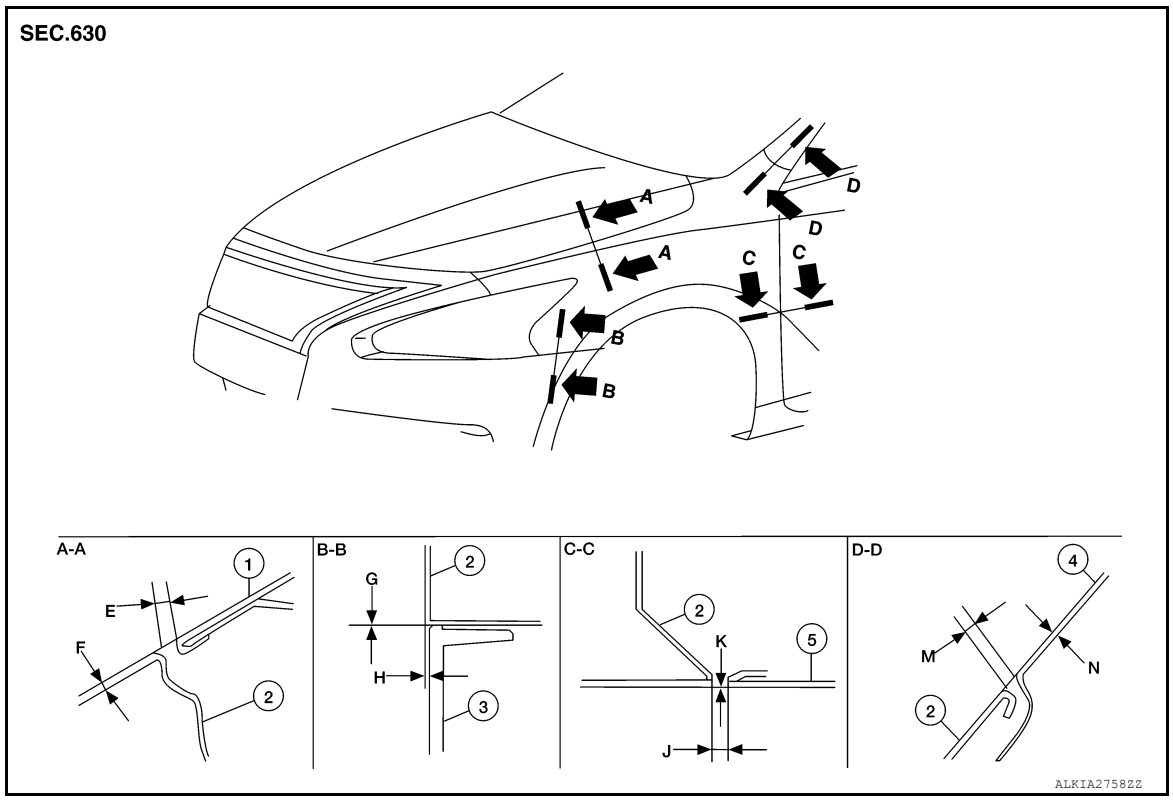
1. Remove fender protector LH. Refer to EXT-26, "FENDER PROTECTOR : Removal and Installation".
2. Remove the front combination lamp. Refer to EXL-125, "Removal and Installation - Xenon".
3. Remove the cowl top side trim cover. Refer to EXT-24, "Removal and Installation".
4. Remove mudguard. Refer to EXT-30, "Removal and Installation".
5. Remove the bolts and the front fender.
   CAUTION:
   Use a shop cloths to protect the body from being damaged during removal and installation.
6. Remove front fender baffle.

INSTALLATION

Installation is in the reverse order of removal.
CAUTION:
After installation, perform fender adjustment procedure. Refer to DLK-181, "Adjustment".

Adjustment

INFOID:0000000007987391



1. Hood assembly
2. Front fender
3. Front fascia
4. Body side outer
5. Front door assembly

Check the clearance and the surface height between hood and each part by visual inspection and tactile feel. If the clearance and the surface height are out of specification, adjust them according to the adjustment procedures.

Unit: mm (in)

Section	Item	Measurement	Standard	Parallelism	Equality
A – A	E	Clearance	4.1 ± 2.1 (0.16 ± 0.08)	< 2.0 (0.08)	—
	F	Surface height	0.8 + 1.2, – 1.4 (0.03 + 0.05, – 0.06)	< 2.0 (0.08)	—
B – B	G	Clearance	0.0 + 0.8, – 0.0 (0.0 + 0.03, – 0.0)	—	—
	H	Surface height	0.7 ± 1.0 (0.03 ± 0.04)	≤ 1.0 (0.04)	≤ 1.0 (0.04)
C – C	J	Clearance	3.6 ± 1.0 (0.14 ± 0.04)	—	—
	K	Surface height	0.0 ± 1.0 (0.0 ± 0.04)	—	—
D – D	M	Clearance	2.35 ± 1.0 (0.09 ± 0.04)	≤ 1.0 (0.04)	—
	N	Surface height	– 0.0 ± 1.0 (0.0 ± 0.04)	—	—

Adjustment

1. Remove hood ledge finisher.
2. Remove the cowl top side trim cover. Refer to EXT-24, "Removal and Installation".
3. Remove front fascia. Refer to EXT-17, "Removal and Installation".
4. Remove the front fender protector. Refer to EXT-26, "FENDER PROTECTOR : Removal and Installation".
5. Remove the mudguard. Refer to EXT-30, "Removal and Installation".
6. Loosen the front fender bolts.
7. Adjust the clearance (J) and surface height (K) between the front fender and the front door.
8. Tighten the rear upper and lower front fender bolts.

9. Adjust the clearance (E) and surface height (F) between the front fender and the hood.
10. Adjust the clearance (M) and surface height (N) between the front fender and the body side outer.
11. Tighten the inner front fender bolts.
12. Adjust the clearance (G) and the surface height (H) between the front fender and the front fascia.
13. Tighten the front fender to front fascia and bracket screws.
14. Install front fascia.
15. Install the center mudguard. Refer to EXT-30, "Removal and Installation".
16. Install the front fender protector. Refer to EXT-26, "FENDER PROTECTOR : Removal and Installation".
17. Install the cowl top side trim cover.
18. Install hood ledge finisher.

CAUTION:

- **If the clearance measurements cannot be corrected by adjusting the fender, adjust the following as necessary.**
  - **Hood assembly: Refer to DLK-171, "HOOD ASSEMBLY : Adjustment".**
  - **Front door: Refer to DLK-185, "DOOR ASSEMBLY : Adjustment".**
- **After adjusting, apply touch-up paint (body color) onto the head of the front fender bolts.**

FRONT DOOR
DOOR ASSEMBLY
DOOR ASSEMBLY : Removal and Installation

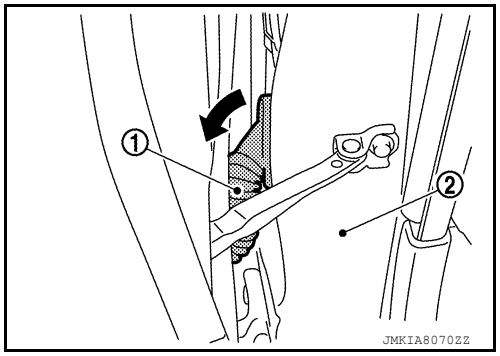
INFOID:0000000007987392

CAUTION:
- **Use two people when removing or installing the front door assembly due to its heavy weight.**
- **When removing and installing front door assembly, support front door with a suitable tool.**
- **Do not use air tools or electric tools for servicing.**
- **Before servicing, turn ignition switch OFF, disconnect both battery terminals and wait at least three minutes.**

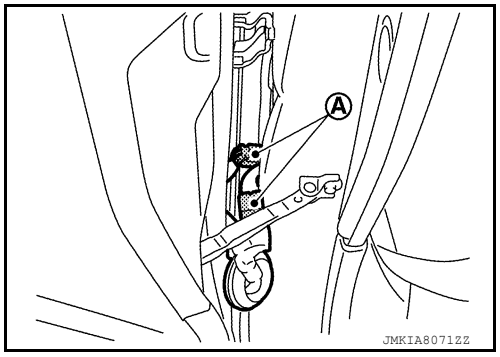
NOTE:
LH side shown; RH side similar.

REMOVAL

1. Disconnect the battery negative and positive terminals and wait at least three minutes, if equipped with the side air bag (satellite) sensor.
2. Remove front door harness grommet LH (1) then pull out door harness from body (2).

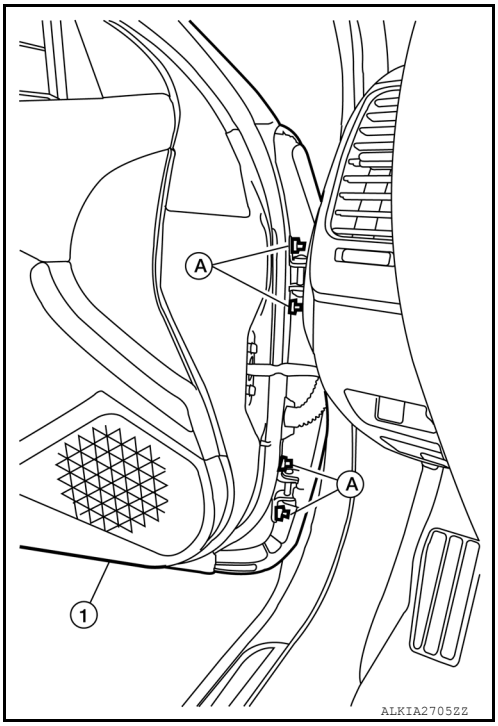


3. Disconnect the harness connectors (A) from the front door harness.



4. Remove the check link bolt (body side).

5. Remove front door hinge nuts (A) (door side) and the door assembly (1).



INSTALLATION

Installation is in the reverse order of removal.
Tighten door hinge nuts to specified torque.

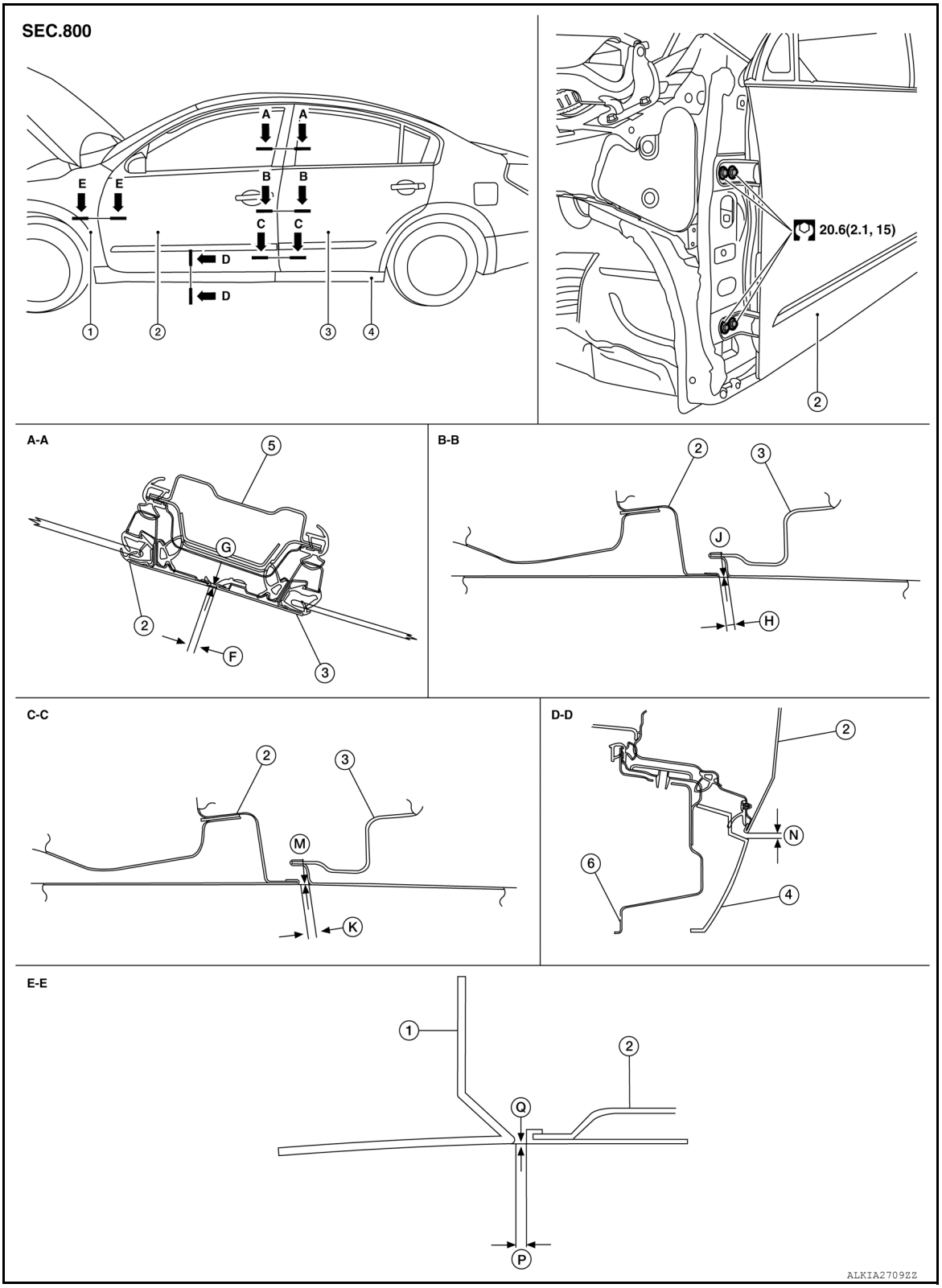
Front door hinge nuts	**24.5 N·m (2.5 kg-m, 18 ft-lb)**

CAUTION:

- **After installation, check front door open/close, lock/unlock operation.**
- **After installation, perform the front door adjustment procedure. Refer to DLK-185, "DOOR ASSEMBLY : Adjustment".**

DOOR ASSEMBLY : Adjustment

INFOID:0000000007987393



1. Front fender
2. Front door assembly
3. Rear door assembly
4. Center mudguard
5. Center pillar
6. Outer sill

Check the clearance and surface height between front door and each part by visual inspection and tactile feel.

If the clearance and the surface height are out of specification, adjust them according to the adjustment procedure.

Unit: mm (in)

Section	Item	Measurement	Standard
A – A	F	Clearance	4.5 ± 1.5 (0.18 ± 0.06)
	G	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
B – B	H	Clearance	4.2 ± 1.0 (0.17 ± 0.04)
	J	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
C – C	K	Clearance	4.2 ± 1.0 (0.17 ± 0.04)
	M	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
D – D	N	Clearance	7.4 ± 1.7 (0.29 ± 0.07)
E – E	P	Clearance	3.6 ± 1.0 (0.14 ± 0.04)
	Q	Surface height	0.0 ± 1.0 (0.0 ± 0.04)

LONGITUDINAL CLEARANCE

1. Remove the front fender. Refer to DLK-180, "Removal and Installation".
2. Loosen the front door hinge to body bolts. Move the door forward or backward as necessary until within specifications provided.
3. Tighten the hinge to body bolts to specified torque.

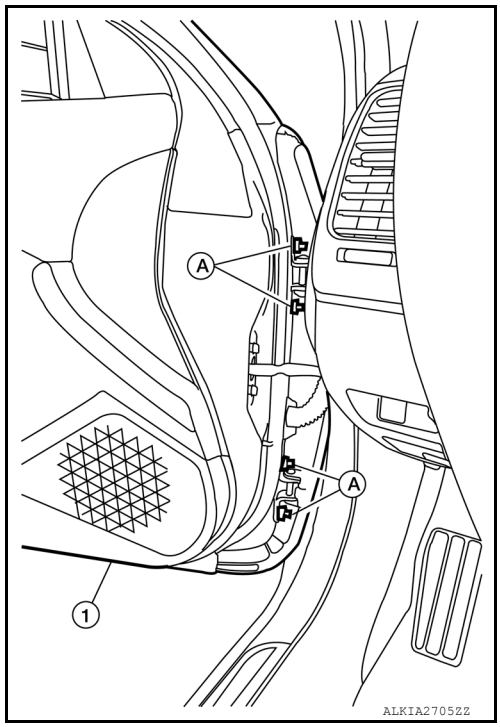
Front door hinge bolts **20.6 N·m (2.5 kg-m, 18 ft-lb)**

4. Install the front fender. Refer to DLK-180, "Removal and Installation".

SURFACE HEIGHT ADJUSTMENT

1. Loosen the front door hinge nuts (A).
2. Move the top and/or bottom of the door (1) in or out as necessary until it is within specifications provided.
3. Tighten the front door hinge nuts to specified torque.

Front door hinge nuts **24.5 N·m (2.5 kg-m, 18 ft-lb)**



CAUTION:

- **Check front door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.**
- **After adjusting, apply touch-up paint (body color) to the head of front door hinge bolts and nuts.**
- **If the clearance measurements cannot be corrected by adjusting the front door, adjust the following as necessary.**

- **Front fender: Refer to DLK-181, "Adjustment".**
- **Rear door: Refer to DLK-190, "DOOR ASSEMBLY : Adjustment".**

DOOR STRIKER ADJUSTMENT

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

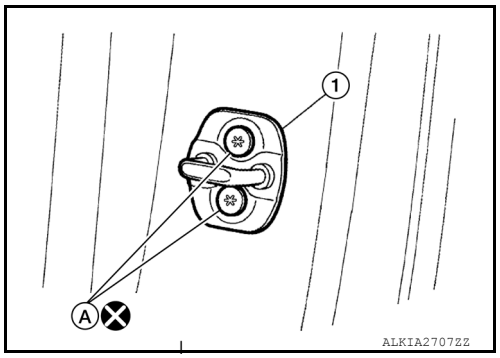
DOOR STRIKER

DOOR STRIKER : Removal and Installation

INFOID:0000000008709165

REMOVAL

Remove striker bolts (A) and remove front door striker (1).



INSTALLATION

Installation is in the reverse order of removal.
Tighten front door striker bolts to specified torque.

Front door striker bolts 16.7 N·m (1.7 kg-m, 12 ft-lb)

CAUTION:

- **When installing do not reuse striker bolts.**
- **After installation, check front door open/close, lock/unlock operation.**
- **After installation, perform the front door adjustment procedure. Refer to DLK-185, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Removal and Installation

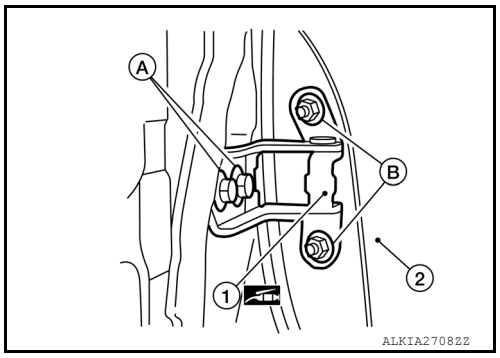
INFOID:0000000008709166

CAUTION:

- **Use two people when removing and installing the front door assembly due to its heavy weight.**
- **When removing and installing front door assembly, support door using a suitable tool.**

REMOVAL

1. Remove front door assembly. Refer to DLK-183, "DOOR ASSEMBLY : Removal and Installation".
2. Remove door hinge bolts (B) and remove hinge (1).
   : Grease



INSTALLATION

Installation is in the reverse order of removal.
Tighten front door hinge bolts to specified torque.

Front door hinge bolts 20.6 N·m (2.5 kg-m, 18 ft-lb)

CAUTION:
- **Apply anticorrosive agent onto the front door hinge mating surface.**
- **After installation, check front door open/close, lock/unlock operation.**
- **After installation, perform the front door adjustment procedure. Refer to DLK-185, "DOOR ASSEMBLY : Adjustment".**

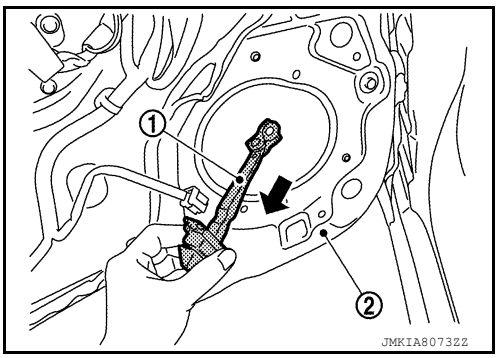
DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:0000000008713804

REMOVAL

1. Fully close the front door glass.
2. Remove front door speaker. Refer to AV-47, "Removal and Installation".
3. Remove door check link bolt from body.
4. Remove door check link bolts on door panel.
5. Remove door check link (1) through the hole in door panel (2).

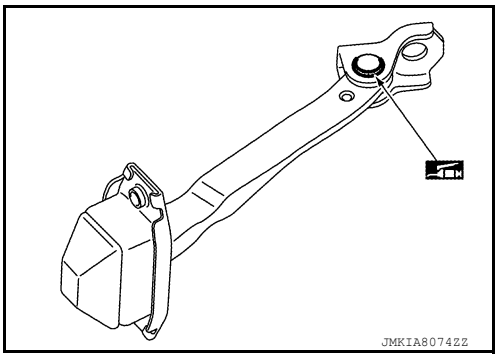


INSTALLATION

Installation is in the reverse order of removal.

CAUTION:
- **After installation, check front door open/close, lock/unlock operation.**
- **Check front door check link rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.**

  : Grease



REAR DOOR

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

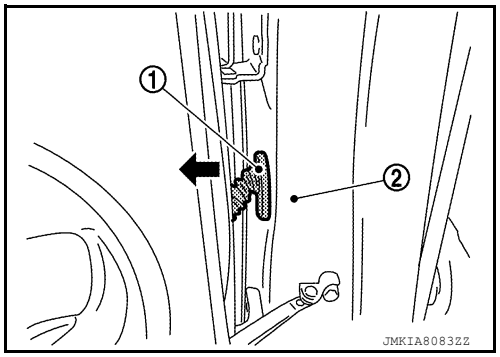
INFOID:0000000007987394

CAUTION:

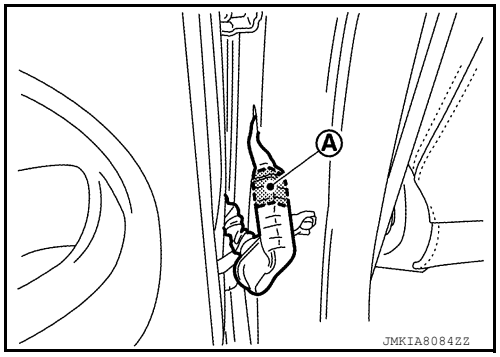
- **Use two people when removing or installing the rear door assembly due to its heavy weight.**
- **When removing and installing rear door assembly, support rear door with a suitable tool.**

REMOVAL

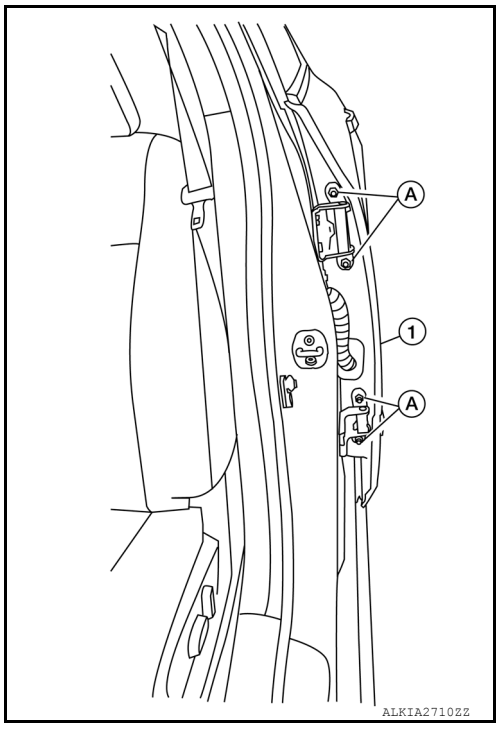
1. Remove rear door harness grommet LH (1) then pull out dear harness from body (2).



2. Disconnect the harness connector (A) from the door harness.



3. Remove the check link bolt from the body.
4. Remove rear door hinge nuts (A) (door side) and the door assembly (1).



INSTALLATION

Installation is in the reverse order of removal.
Tighten rear door hinge nuts (door side) to specified torque.

Rear door hinge nuts	**24.5 N·m (2.5 kg-m, 18 ft-lb)**

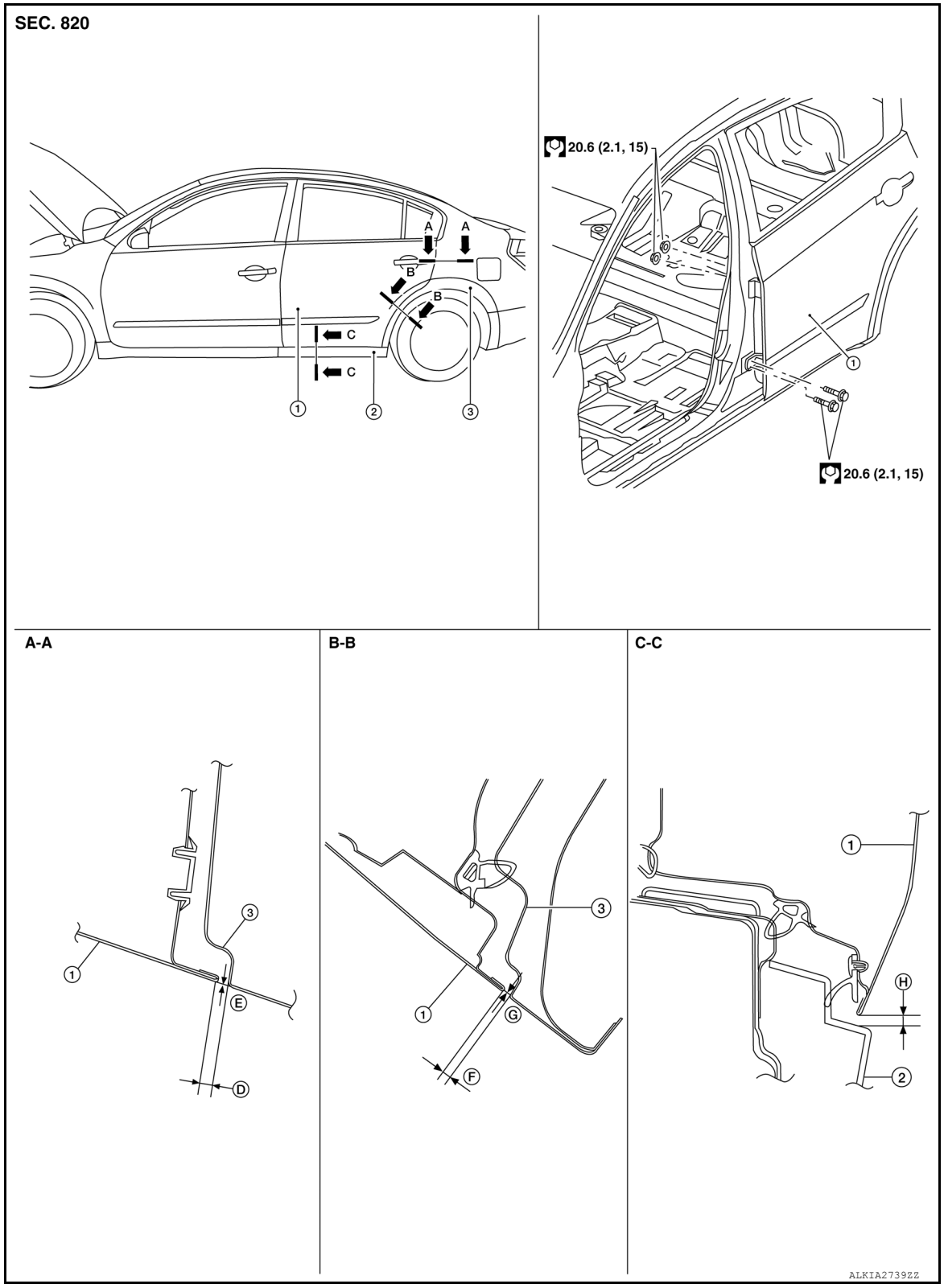
CAUTION:

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

DOOR ASSEMBLY : Adjustment

INFOID:0000000007987395

ADJUSTMENT



1. Rear door assembly
2. Center mudguard
3. Body side outer

Check the clearance and surface height between rear door and each part by visual inspection and tactile feel. If the clearance and the surface height are out of specification, adjust them according to the adjustment procedure.

Unit: mm (in)

Section	Item	Measurement	Standard
A – A	D	Clearance	3.6 ± 1.0 (0.14 ± 0.04)
	E	Surface height	0.0 ± 1.0 (0.00 ± 0.04)
B – B	F	Clearance	3.6 ± 1.0 (0.14 ± 0.04)
	G	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
C – C	H	Clearance	7.1 ± 1.7 (0.28 ± 0.07)

LONGITUDINAL CLEARANCE

1. Remove the center pillar upper finisher. Refer to INT-24, "CENTER PILLAR UPPER FINISHER : Removal and Installation".
2. Loosen the rear door upper hinge nuts.
3. Loosen the rear door lower hinge bolts.
4. Move the rear door forward or backward as necessary until within specifications provided.
5. Tighten the lower hinge bolts to specification.

Rear door lower hinge bolts **20.6 N·m (2.1 kg-m, 15 ft-lb)**

6. Tighten the upper hinge nuts to specification.

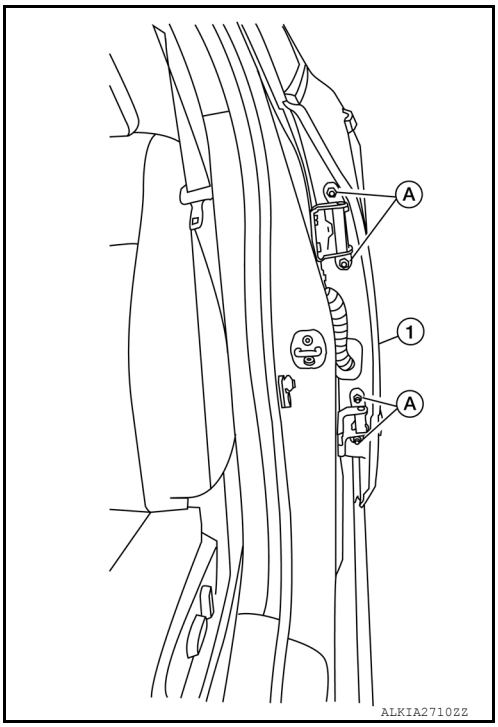
Rear door upper hinge nuts **20.6 N·m (2.1 kg-m, 15 ft-lb)**

7. Install the center pillar upper finisher. Refer to INT-24, "CENTER PILLAR UPPER FINISHER : Removal and Installation".

SURFACE HEIGHT ADJUSTMENT

1. Loosen the rear door hinge nuts (door side) (A).
2. Move the top and/or the bottom of the rear door (1) in or out as necessary until it is within specifications provided.
3. Tighten the rear door hinge nuts (door side) (A) to specification.

Rear door nuts **24.5 N·m (2.5 kg-m, 18 ft-lb)**



CAUTION:

- **Check rear door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.**
- **After adjusting, apply touch-up paint (body color) to the head of rear door hinge bolts and nuts.**

- **If the clearance measurements cannot be corrected by adjusting the rear door, adjust the front door. Refer to DLK-185, "DOOR ASSEMBLY : Adjustment".**

DOOR STRIKER ADJUSTMENT

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

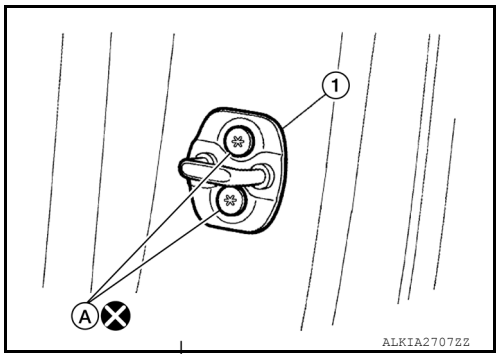
DOOR STRIKER

DOOR STRIKER : Removal and Installation

INFOID:0000000008709159

REMOVAL

Remove bolts (A) and remove rear door striker (1).



INSTALLATION

Installation is in the reverse order of removal.

Tighten rear door striker bolts to specified torque.

Rear door striker bolts 16.7 N·m (1.7 kg-m, 12 ft-lb)

CAUTION:

- **When installing do not reuse striker bolts.**
- **After installation, check rear door open/close, lock/unlock operation.**
- **After installation, perform the rear door adjustment procedure. Refer to DLK-190, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Removal and Installation

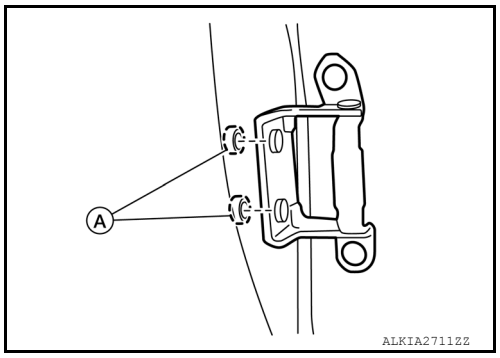
INFOID:0000000008709160

CAUTION:

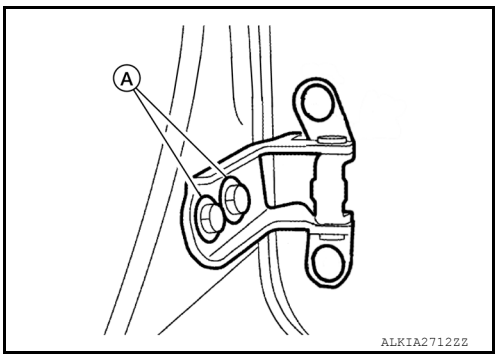
- **Use two people when removing or installing rear door assembly due to its heavy weight.**
- **When removing and installing rear door assembly, support door using a suitable tool.**

REMOVAL

1. Remove rear door assembly. Refer to DLK-189, "DOOR ASSEMBLY : Removal and Installation".
2. Remove center pillar upper finisher (upper hinge only). Refer to INT-24, "CENTER PILLAR UPPER FINISHER : Removal and Installation".
3. Remove rear door upper hinge nuts (A) and remove upper hinge.



4. Remove rear door lower hinge bolts (A) and remove lower hinge.



INSTALLATION

Installation is in the reverse order of removal.

Tighten rear door hinge nuts and bolts to specified torque.

Rear door hinge nuts and bolts	**20.6 N·m (2.1 kg-m, 15 ft-lb)**

CAUTION:

- **Apply anticorrosive agent onto the hinge mating surface.**
- **After installation, check rear door open/close, lock/unlock operation.**
- **After installation, perform the rear door adjustment procedure. Refer to DLK-190, "DOOR ASSEMBLY : Adjustment".**

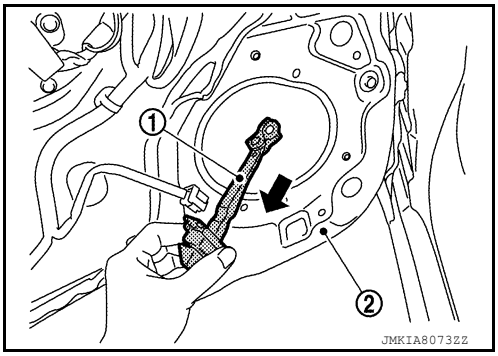
DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:0000000008713852

REMOVAL

1. Fully close the rear door glass.
2. Remove rear door speaker (if equipped). Refer to AV-191, "Removal and Installation" (DISPLAY AUDIO WITH BOSE), or AV-401, "Removal and Installation" (NAVIGATION WITH BOSE).
3. Remove door check link bolt from body.
4. Remove door check link bolts on door panel.
5. Remove door check link (1) through the hole in door panel (2).



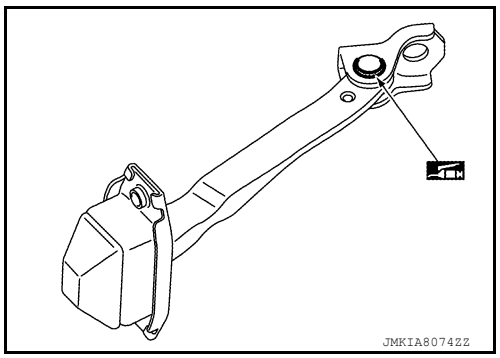
INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **After installation, check rear door open/close, lock/unlock operation.**

- **Check rear door check link rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.**
  : Grease

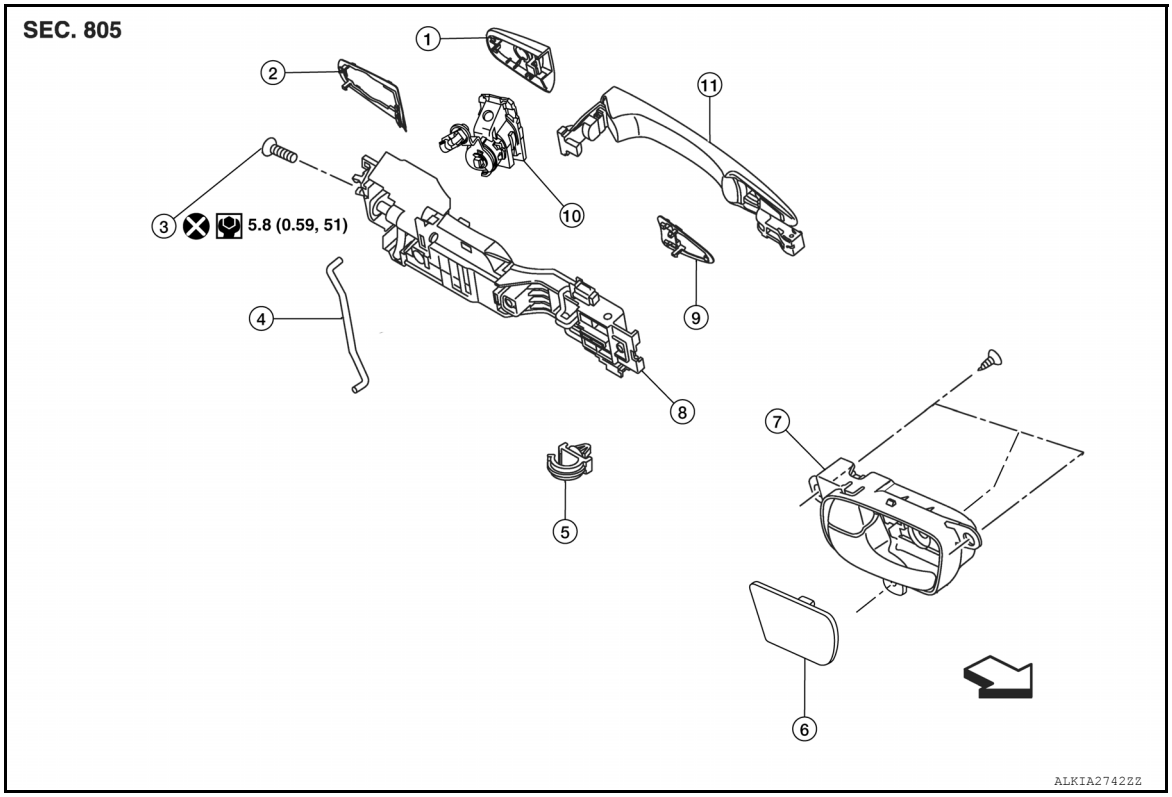


DOOR HANDLE

FRONT DOOR HANDLE

FRONT DOOR HANDLE : Exploded View

INFOID:0000000008729196



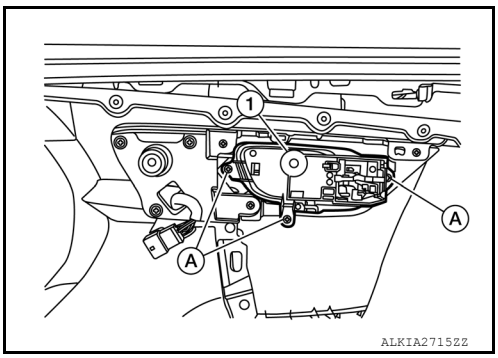
1.	Outside handle escutcheon	2.	Rear gasket	3.	Screw
4.	Door key cylinder rod (driver side)	5.	Cable clip	6.	Inside handle finisher
7.	Inside handle	8.	Outside handle bracket	9.	Front gasket
10.	Door key cylinder assembly (driver side only)	11.	Outside handle	⇦	Front

FRONT DOOR HANDLE : Removal and Installation - Inside Handle

INFOID:0000000008717476

REMOVAL

1. Remove front door finisher. Refer to INT-15, "Removal and Installation".
2. Remove inside handle screws (A) and the inside handle (1).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

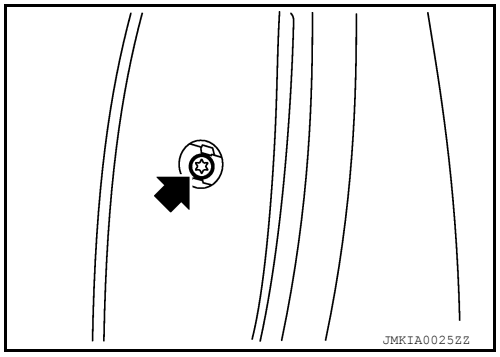
- **Check front door lock cables are properly engaged to inside handle.**
- **After installation, check front door open/close, lock/unlock operation.**

FRONT DOOR HANDLE : Removal and Installation - Outside Handle

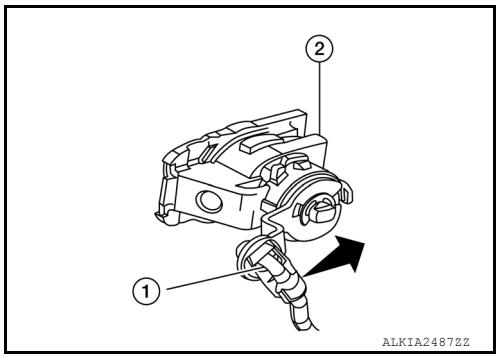
INFOID:0000000008717477

REMOVAL

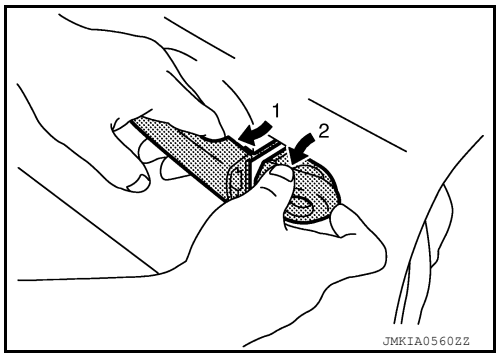
1. Fully close front door glass.
2. Remove front door finisher. Refer to INT-15, "Removal and Installation".
3. Remove front door vapor barrier.
4. Remove front door glass channel rear.
5. Disconnect the harness connectors from the door antenna and door request switch and then remove harness clamp on outside handle bracket.
6. Remove door side grommet, and loosen screw that retains the front door outside handle bracket.



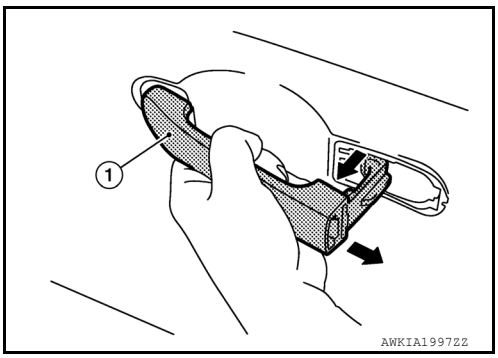
7. Reach in to separate door key cylinder rod (LH side) (1) from door key cylinder assembly (LH side).



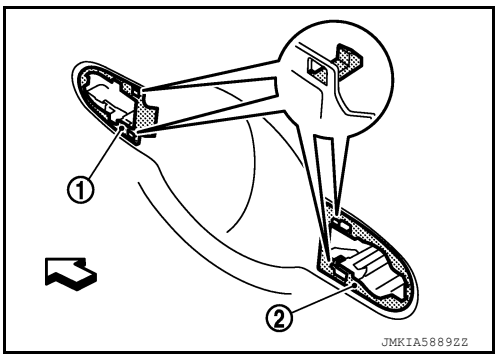
8. While pulling outside handle (1), remove door key cylinder assembly (LH side) or outside handle escutcheon (2) (RH side).



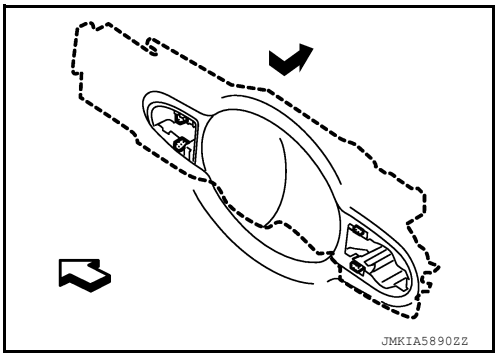
9. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



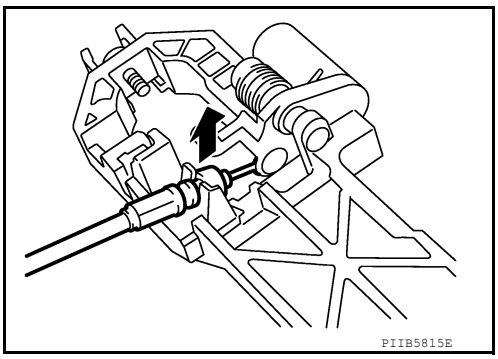
10. Remove front gasket (1) and rear gasket (2).
⇦: Front



11. Slide outside handle bracket toward rear of vehicle to remove.
⇦: Front



12. Disconnect the outside handle cable from the outside handle bracket connection.



INSTALLATION

Installation is in the reverse order of removal.
Tighten front door outside handle bracket screw to specified torque.

Front door outside handle bracket screw	**5.8 N·m (0.59 kg-m, 51 in-lb)**

CAUTION:

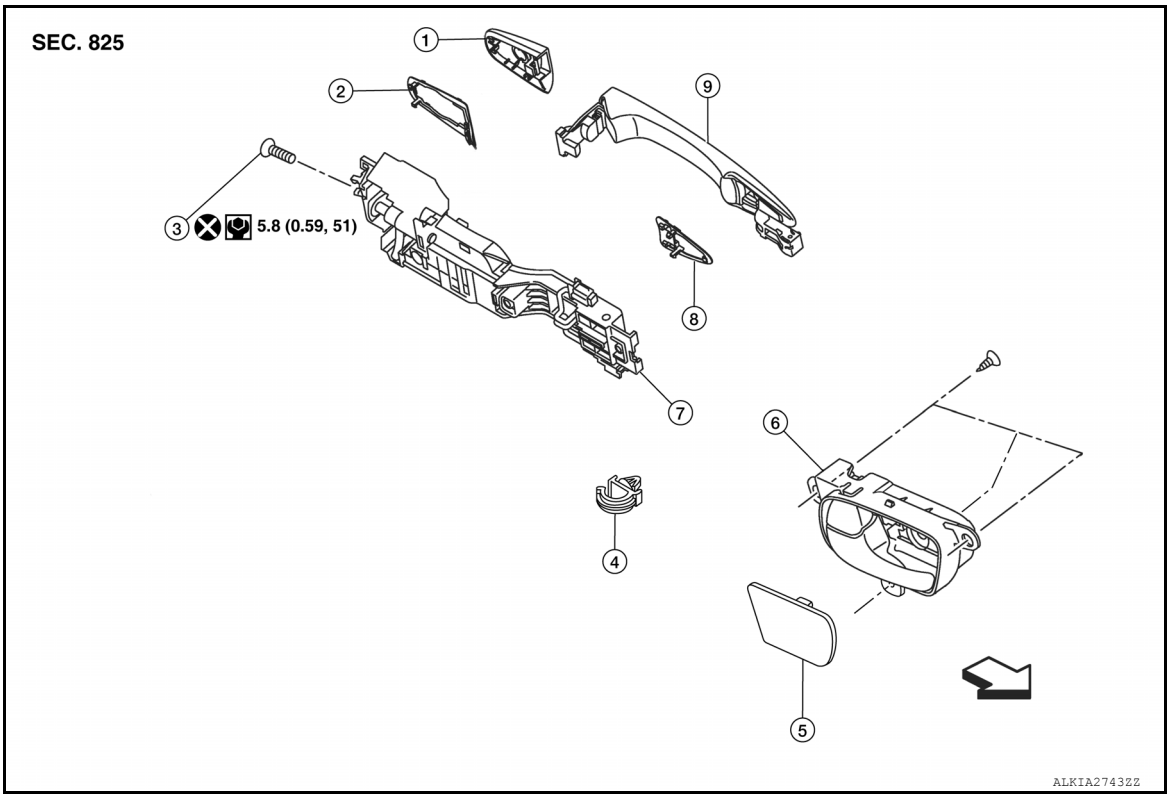
- **When installing do not reuse front door outside handle bracket screw. Always replace screw with new ones when removed.**
- **When installing door key cylinder rod on the LH front door, be sure to rotate door key cylinder rod holder until a click is felt.**

- **Check front door lock cable is properly engaged to outside handle bracket.**
- **After installation, check front door open/close, lock/unlock operation.**

REAR DOOR HANDLE

REAR DOOR HANDLE : Exploded View

INFOID:0000000008729197



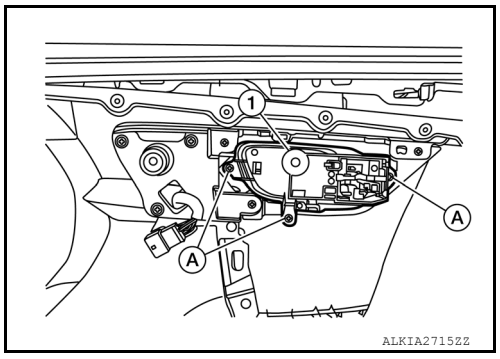
1.	Outside handle escutcheon	2.	Rear gasket	3.	Screw
4.	Cable clip	5.	Inside handle finisher	6.	Inside handle
7.	Outside handle bracket	8.	Front gasket	9.	Outside handle
⇦	Front				

REAR DOOR HANDLE : Removal and Installation - Inside Handle

INFOID:0000000008717478

REMOVAL

1. Remove rear door finisher. Refer to INT-18, "Removal and Installation".
2. Remove inside handle screws (A) and inside handle (1).



INSTALLATION

Installation is in the reverse order of removal.

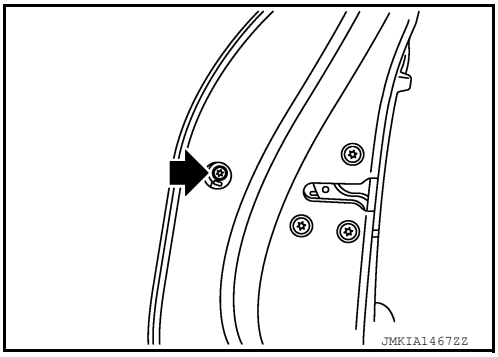
CAUTION:
- **Check rear door lock cables are properly engaged to inside handle.**
- **After installation, check rear door open/close, lock/unlock operation.**

REAR DOOR HANDLE : Removal and Installation - Outside Handle

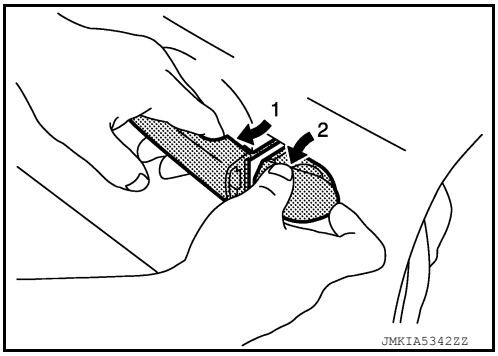
INFOID:0000000008717479

REMOVAL

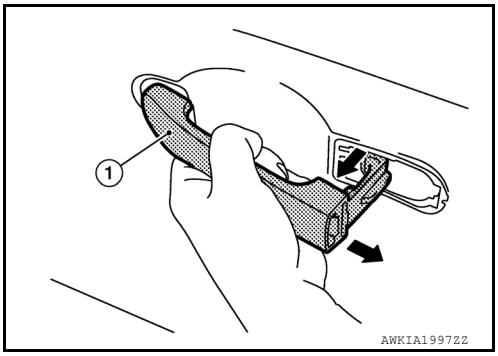
1. Fully close rear door glass.
2. Remove rear door finisher. Refer toINT-18, "Removal and Installation".
3. Remove rear door vapor barrier.
4. Remove door side grommet, and loosen screw that retains the rear door outside handle bracket.



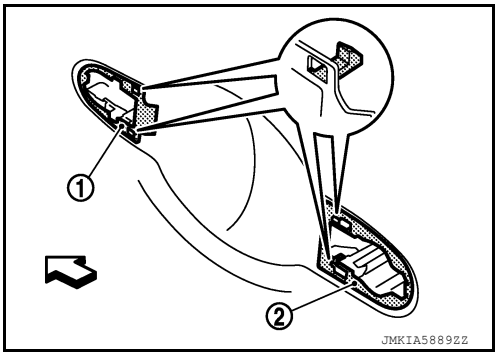
5. While pulling outside handle (1), remove outside handle escutcheon (2).



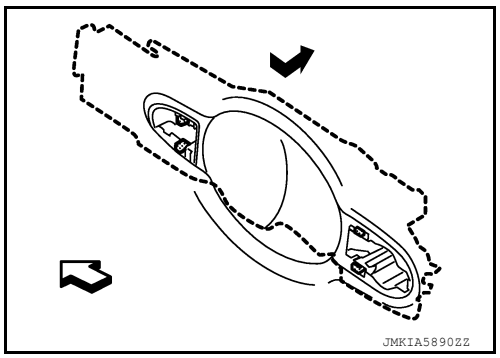
6. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



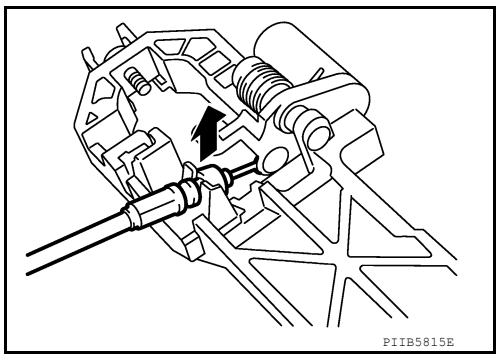
7. Remove front gasket (1) and rear gasket (2).
   ⇦: Front



8. Slide outside handle bracket toward rear of vehicle to remove.
   ⇦: Front



9. Remove clip and disconnect the outside handle cable from the outside handle bracket.



INSTALLATION

Installation in the reverse order of removal.
Tighten rear door outside handle bracket screw to specified torque.

Rear door outside handle bracket screw	**5.8 N·m (0.59 kg-m, 51 in-lb)**

CAUTION:

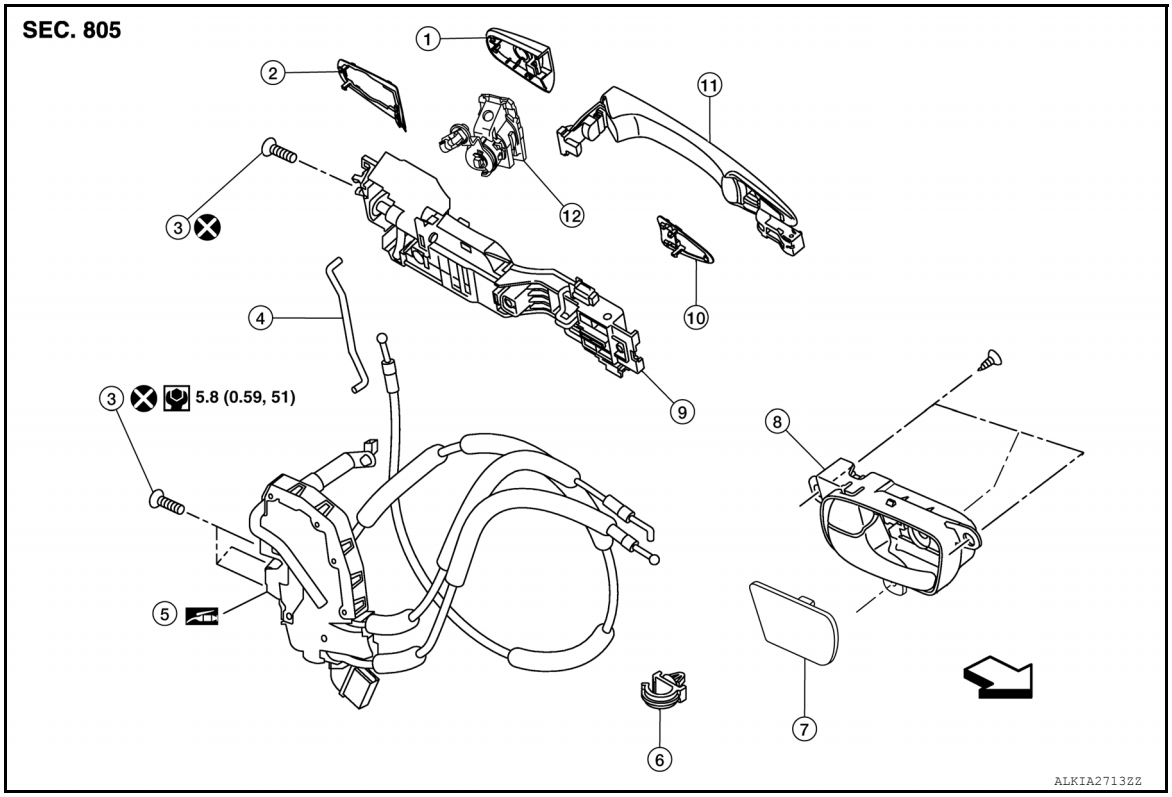
- **When installing do not reuse rear door outside handle bracket screw. Always replace screw with new ones when removed.**
- **Check rear door lock cable is properly engaged to outside handle bracket.**
- **After installation, check rear door open/close, lock/unlock operation.**

DOOR LOCK

FRONT DOOR LOCK

FRONT DOOR LOCK : Exploded View

INFOID:0000000008717469



1.	Outside handle escutcheon	2.	Rear gasket	3.	Screw
4.	Door key cylinder rod (driver side)	5.	Front door lock assembly	6.	Cable clip
7.	Inside handle finisher	8.	Inside handle	9.	Outside handle bracket
10.	Front gasket	11.	Outside handle	12.	Door key cylinder assembly (driver side only)

⇦ Front

FRONT DOOR LOCK : Removal and Installation

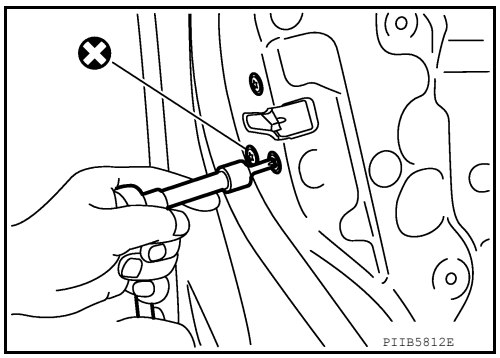
INFOID:0000000007987397

CAUTION:
Before servicing, turn ignition switch OFF, disconnect both battery terminals and wait at least three minutes.

REMOVAL

1. Remove the front door outside handle. Refer to DLK-197, "FRONT DOOR HANDLE : Removal and Installation - Outside Handle".
2. Remove the rear glass run.
3. Disconnect the harness connector from the front door lock actuator.

4. Remove screws, and the door lock assembly.



INSTALLATION

Installation is in the reverse order of removal.

- Tighten front door lock screws to specified torque.

Front door lock screw 5.8 N·m (0.59 kg-m, 51 ft-lb)

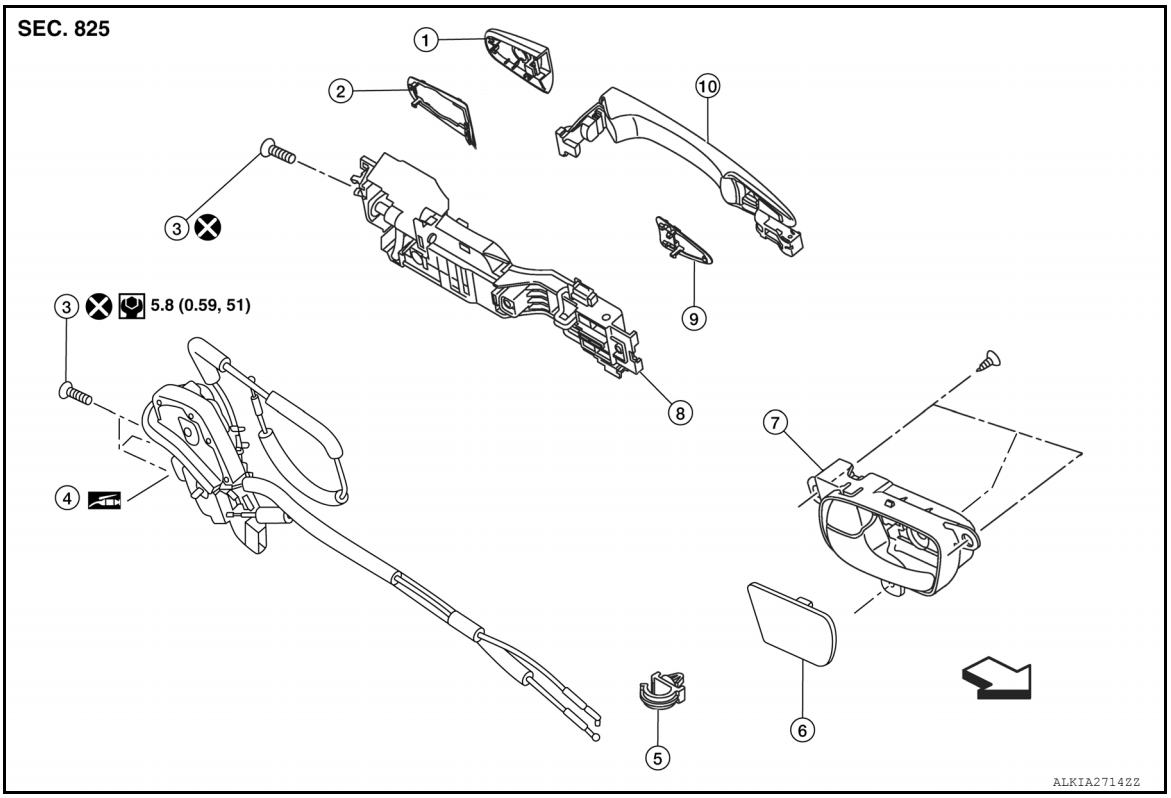
CAUTION:

- **Do not reuse front door lock assembly screws. Always replace screws with new ones when removed.**
- **Check front door lock cables are properly engaged to inside handle and outside handle bracket.**
- **When installing door key cylinder rod on the LH front door, be sure to rotate door key cylinder rod holder until a click is felt.**
- **After installation, check front door open/close, lock/unlock operation.**
- **Check front door lock assembly for poor lubrication. If necessary apply a suitable multi-purpose grease.**

REAR DOOR LOCK

REAR DOOR LOCK : Exploded View

INFOID:0000000008717470



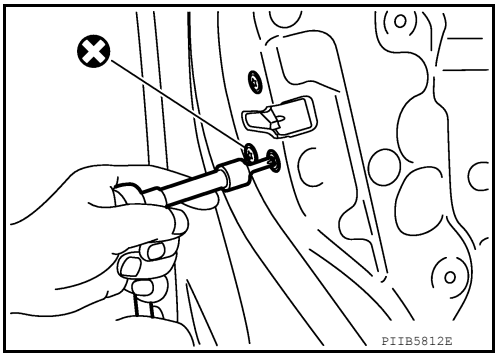
1. Outside handle escutcheon
2. Rear gasket
3. Screw
4. Rear door lock assembly
5. Cable clip
6. Inside handle finisher
7. Inside handle
8. Outside handle bracket
9. Front gasket
10. Outside handle
⇦ Front

REAR DOOR LOCK : Removal and Installation

INFOID:0000000007987399

REMOVAL

1. Remove the rear door outside handle. Refer to DLK-200, "REAR DOOR HANDLE : Removal and Installation - Outside Handle".
2. Disconnect the harness connector from the rear door lock actuator.
3. Remove the screws, and the door lock assembly.



INSTALLATION

Installation is in the reverse order of removal.

- Tighten rear door lock screws to specified torque.

Rear door lock screw **5.8 N·m (0.59 kg-m, 51 ft-lb)**

CAUTION:

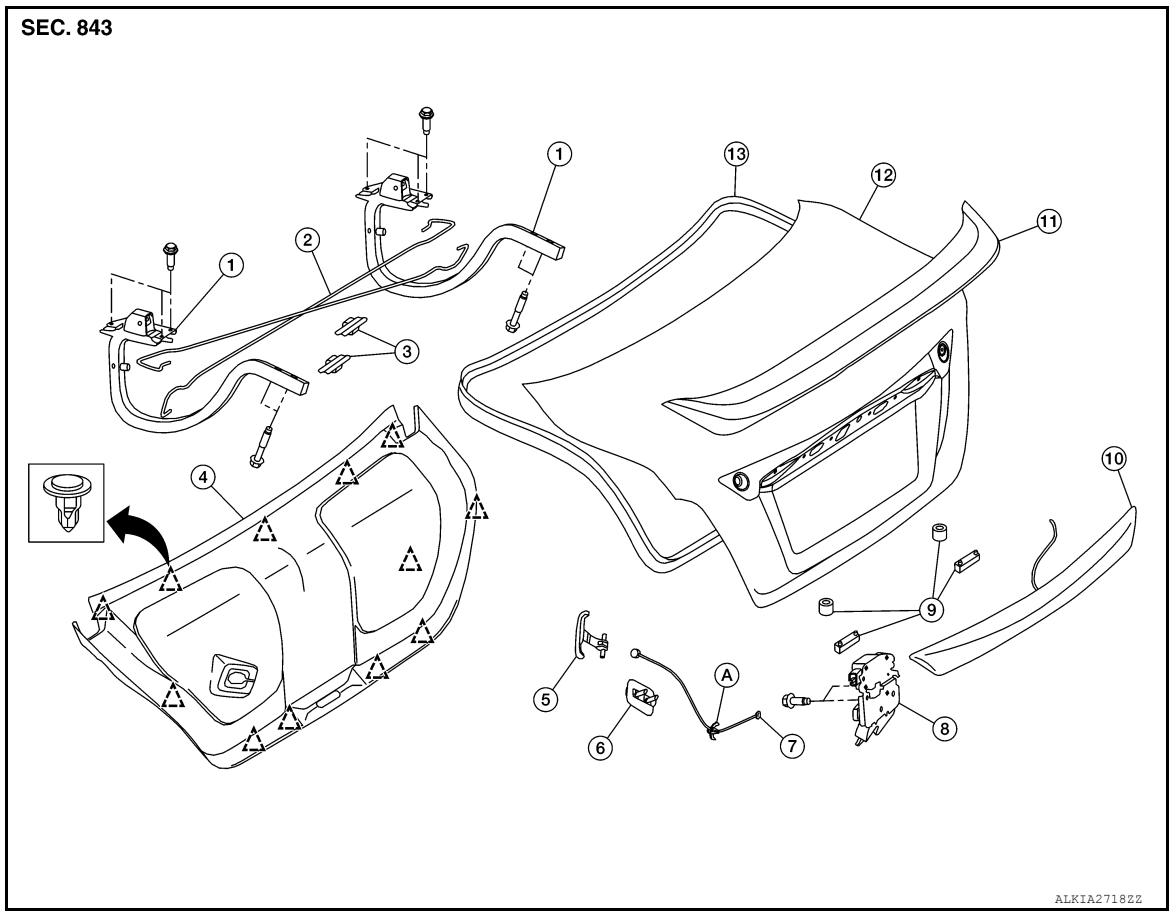
- **Do not reuse rear door lock assembly screws. Always replace screws with new ones when removed.**
- **Check rear door lock cables are properly engaged to inside handle and outside handle bracket.**
- **After installation, check rear door open/close, lock/unlock operation.**
- **Check rear door lock assembly for poor lubrication. If necessary apply a suitable multi-purpose grease.**

TRUNK LID

TRUNK LID ASSEMBLY

TRUNK LID ASSEMBLY : Exploded View

INFOID:0000000008717549



1.	Trunk lid hinge LH/RH	2.	Torsion bar LH/RH	3.	Torsion bar clips
4.	Trunk lid finisher (if equipped)	5.	Emergency release lever handle	6.	Emergency release lever clip
7.	Emergency release lever cable	8.	Trunk lamp switch and trunk release solenoid	9.	Trunk lid bumpers
10.	License plate finisher	11.	Rear spoiler (if equipped)	12.	Trunk lid
13.	Weatherstrip	A.	Clip	△	Clip

TRUNK LID ASSEMBLY : Removal and Installation

INFOID:0000000007987400

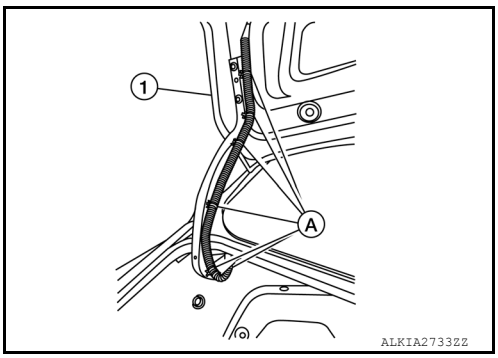
CAUTION:

- **Use two people when removing or installing trunk lid assembly due to its heavy weight.**
- **Use protective tape or shop cloths to protect surrounding components from damage during removal and installation of trunk lid assembly.**

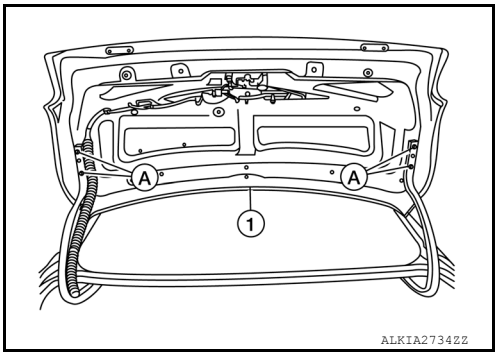
REMOVAL

1. Remove trunk lid finisher (if equipped). Refer to INT-33, "TRUNK LID FINISHER : Removal and Installation".

2. Disconnect the harness connectors in the trunk lid assembly (1) and remove the harness clips (A) then pull out harness from the trunk lid assembly (1).



3. Remove the bolts (A), and remove the trunk lid assembly (1).



INSTALLATION

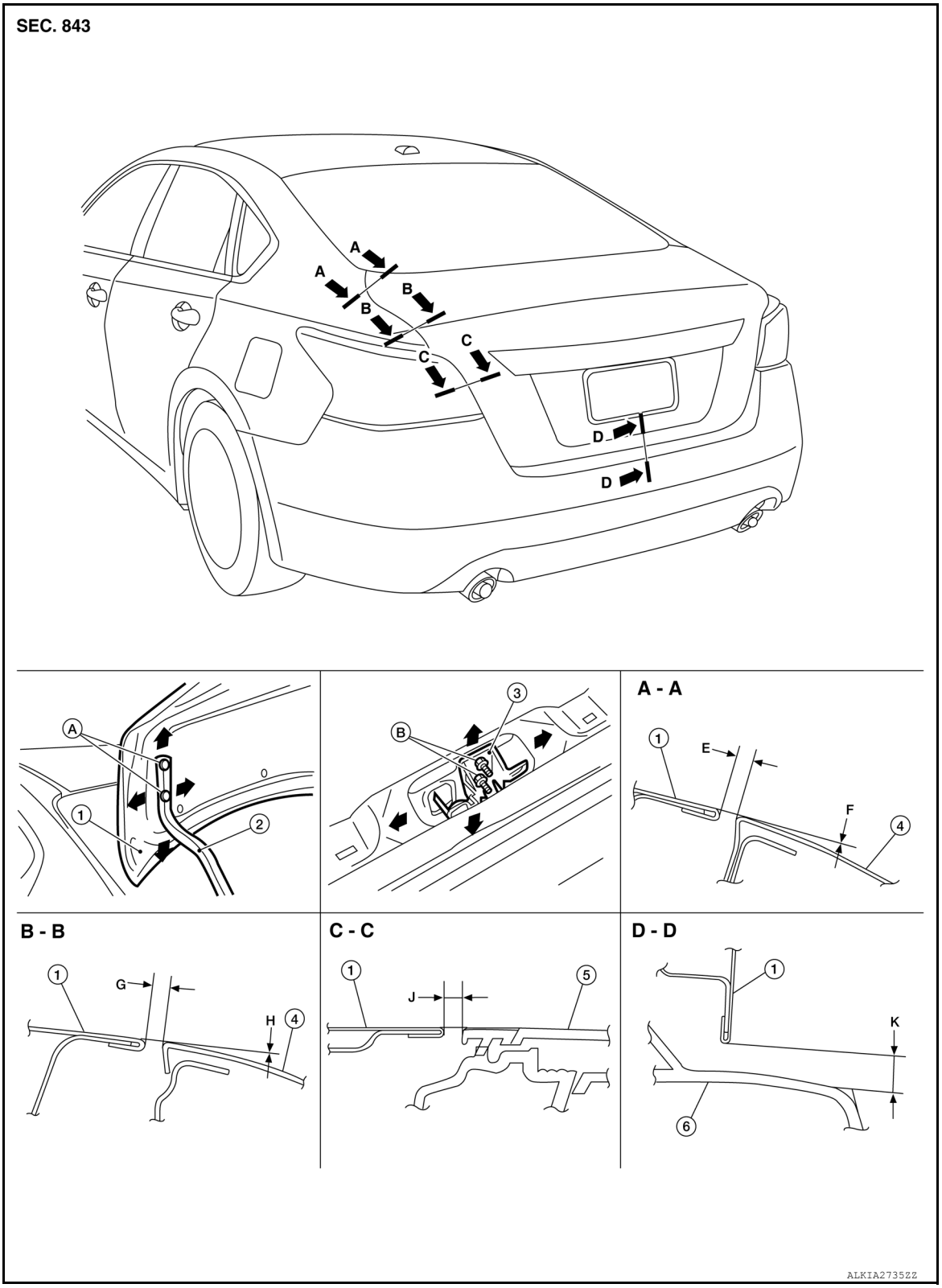
Installation is in the reverse order of removal.

CAUTION:

After installation, perform the trunk lid assembly adjustment procedure. Refer to DLK-207, "TRUNK LID ASSEMBLY : Adjustment".

TRUNK LID ASSEMBLY : Adjustment

INFOID:0000000007987401



1. Trunk lid assembly
2. Trunk lid hinge
3. Trunk lid striker
4. Body side outer
5. Rear combination lamp
6. Rear bumper fascia
A. Trunk bolts
B. Striker bolts

Check the clearance and the surface height between hood and each part by visual inspection and tactile feel.

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

Unit: mm (in)

Section	Item	Measurement	Standard	Parallelism (MAX)	Right/Left Difference (MAX)
A – A	E	Clearance	3.5 ± 1.0 (0.14 ± 0.04)	1.4 (0.06)	1.4 (0.06)
	F	Surface height	0.0 ± 1.0 (0.00 ± 0.04)	1.4 (0.06)	1.4 (0.06)
B – B	G	Clearance	3.5 ± 1.0 (0.14 ± 0.04)	1.4 (0.06)	1.4 (0.06)
	H	Surface height	0.0 ± 1.0 (0.00 ± 0.04)	1.4 (0.06)	1.4 (0.06)
C – C	J	Clearance	5.3 ± 1.5 (0.21 ± 0.06)	—	2.0 (0.08)
D – D	K	Clearance	6.0 ± 2.0 (0.24 ± 0.08)	2.0 (0.08)	—

LONGITUDINAL CLEARANCE

Trunk Lid Removed From Hinge

1. Loosen the trunk lid to hinge bolts.
2. Move the trunk lid so that the clearance measurements are within specifications provided.
3. Tighten the trunk lid to hinge bolts.

Trunk Lid Hinge Removed From Vehicle

1. Remove the rear parcel shelf trim. Refer to INT-26, "Removal and Installation".
2. Loosen the hinge to parcel shelf bolts.
3. Move the trunk lid so that the clearance measurements are within specifications provided.
4. Tighten the hinge to parcel shelf bolts.
5. Install the rear parcel shelf trim. Refer to INT-26, "Removal and Installation".

SURFACE HEIGHT ADJUSTMENT

1. Loosen the bumper rubber.
2. Loosen the striker bolts.
3. Lift up the trunk lid approx. 100 - 150 mm (3.94 - 5.91 in) height then close it lightly. Make sure it engages firmly with the trunk lid closed.
4. Tighten the trunk lid striker.

TRUNK LID HINGE

TRUNK LID HINGE : Removal and Installation

INFOID:0000000008717553

REMOVAL

1. Remove trunk lid assembly. Refer to DLK-205, "TRUNK LID ASSEMBLY : Removal and Installation".
2. Remove torsion bar. Refer to DLK-209, "TORSION BAR : Removal and Installation".
3. Remove rear parcel shelf finisher. Refer to INT-26, "Removal and Installation".
4. Remove trunk lid hinge bolts (body side) and then trunk lid hinge.

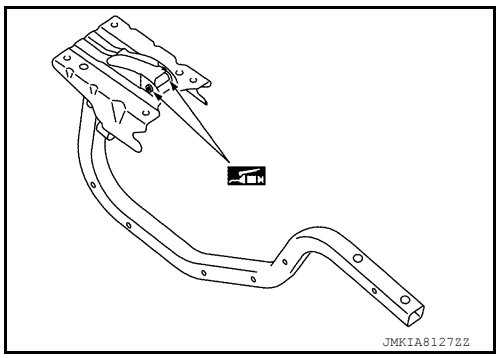
INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Check trunk lid open/close, lock/unlock operation after installation.**
- **After installation, perform the trunk lid assembly adjustment procedure. Refer to DLK-207, "TRUNK LID ASSEMBLY : Adjustment".**

- **Check trunk lid hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.**
  : Grease



TORSION BAR

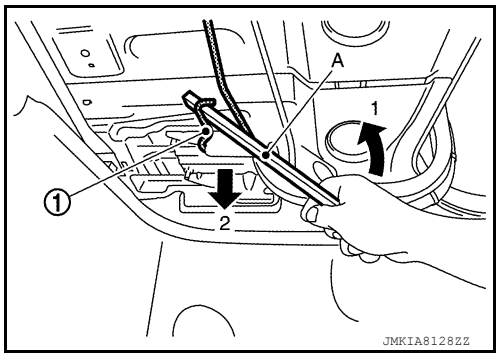
TORSION BAR : Removal and Installation

INFOID:0000000008717550

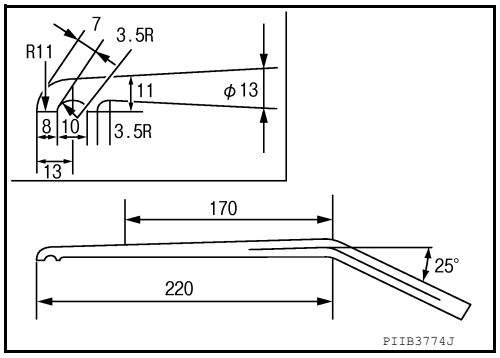
REMOVAL

1. Remove torsion bar clips.
2. Support the trunk lid assembly using a suitable tool.

   WARNING:
   Bodily injury may occur if hood assembly is not supported properly when removing hood assembly.
3. Lift torsion bar (1) using a suitable tool (A) as shown to remove.



NOTE:
The suitable tool specifications are as shown.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:
After installation check the trunk lid open/close, lock/unlock operation.

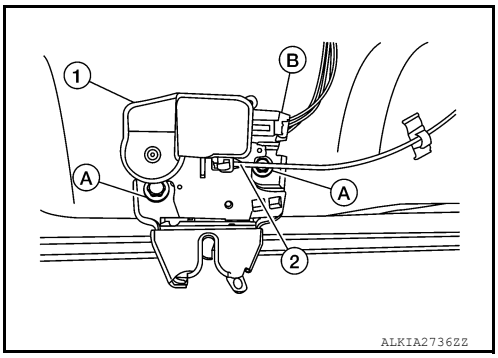
TRUNK LAMP SWITCH AND TRUNK RELEASE SOLENOID

TRUNK LAMP SWITCH AND TRUNK RELEASE SOLENOID : Removal and Installation

INFOID:0000000007987402

REMOVAL

1. Remove the trunk lid finisher (if equipped). Refer to INT-33, "TRUNK LID FINISHER : Removal and Installation".
2. Remove the trunk lamp switch and trunk release solenoid bolts (A).
3. Disconnect the harness connector (B) and emergency release handle (2) from the trunk lamp switch and trunk release solenoid (1) and remove.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

After installation, perform the trunk lid assembly adjustment procedure. Refer to DLK-207, "TRUNK LID ASSEMBLY : Adjustment".

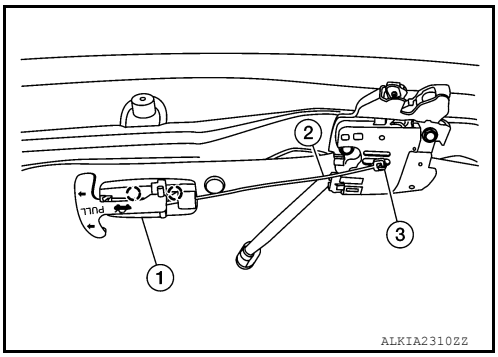
EMERGENCY LEVER

EMERGENCY LEVER : Removal and Installation

INFOID:0000000008717554

Removal

1. Remove the trunk lid finisher. Refer to INT-33, "TRUNK LID FINISHER : Removal and Installation".
2. Using a suitable tool release the pawls and remove emergency release handle (1) from trunk lid assembly.
   ( ): Pawl
3. Disconnect emergency release handle cable (2) from trunk lamp switch and trunk release solenoid (3).



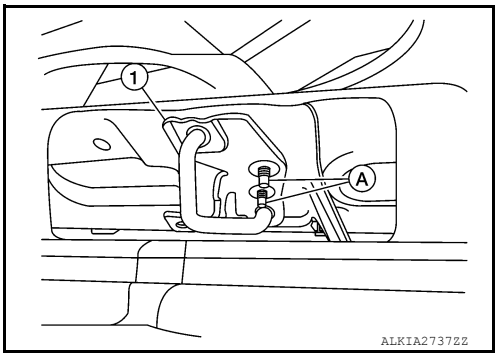
TRUNK LID STRIKER

TRUNK LID STRIKER : Removal and Installation

INFOID:0000000007987403

REMOVAL

1. Remove the trunk kicking plate. Refer to INT-35, "TRUNK REAR FINISHER : Removal and Installation".
2. Remove bolts (A), and striker (1).



INSTALLATION

Installation is in the reverse order of removal.

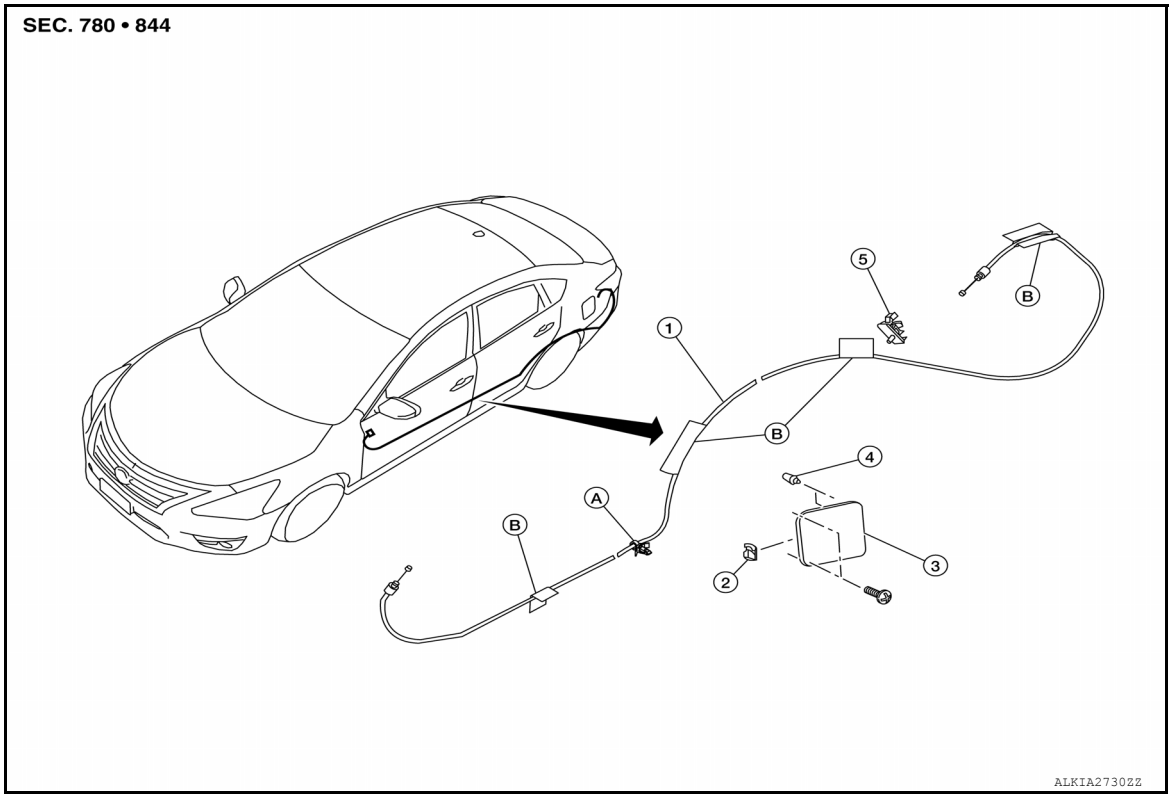
CAUTION:

After installation, perform the trunk lid assembly adjustment procedure. Refer to DLK-207, "TRUNK LID ASSEMBLY : Adjustment".

FUEL FILLER LID OPENER

Exploded View

INFOID:0000000008717576



1. Fuel filler lid opener cable
2. Spring
3. Fuel filler lid
4. Bumper rubber
5. Fuel filler lid lock
A. Clip
B. Cable protector

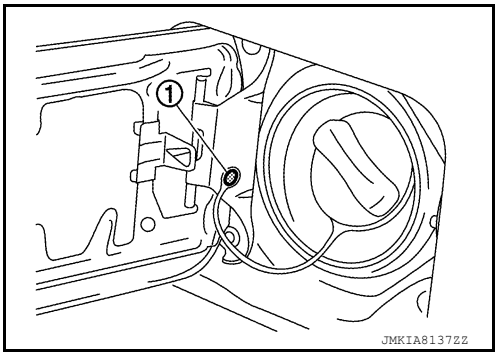
FUEL FILLER LID

FUEL FILLER LID : Removal and Installation

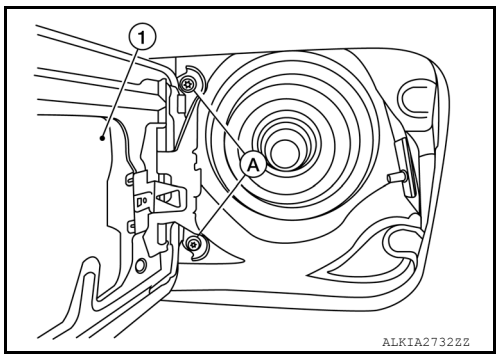
INFOID:0000000008717577

REMOVAL

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



3. Remove fuel filler lid screws (A) and fuel filler lid (1).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

NOTE:

- The following table shows the specifications for a correctly installed fuel filler lid.
- Fitting adjustment cannot be performed.

Unit: mm (in)

Portion	Measurement	Standard
Fuel filler lid – Body side outer	Clearance	3.5 ± 1.0 (0.14 ± 0.04)
Fuel filler lid – Body side outer	Surface height	0.0 ± 1.0 (0.0 ± 0.04)

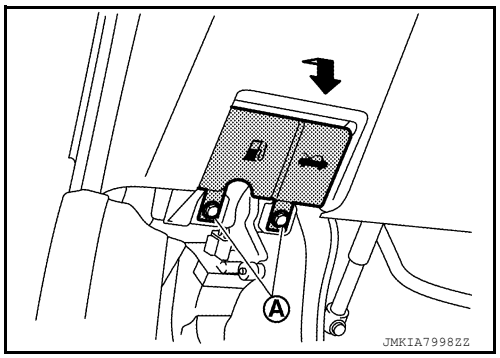
FUEL FILLER OPENER CABLE

FUEL FILLER OPENER CABLE : Removal and Installation

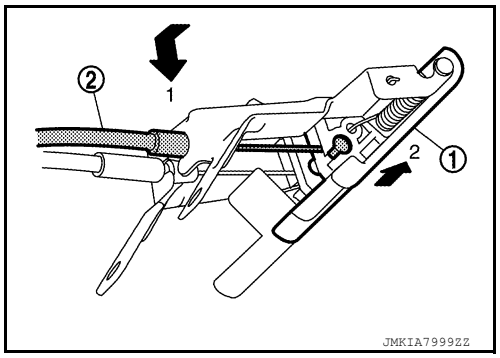
INFOID:0000000008717578

REMOVAL

1. Remove hood and fuel filler handle assembly bolts (A).

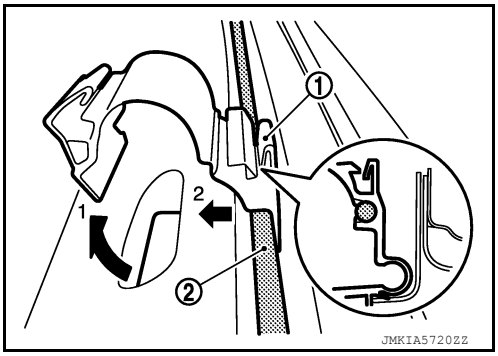


2. Disengage fuel filler lid opener cable (2) by pulling downward and then sliding cable end to the side to remove from hood and fuel filler handle assembly (1).



3. Remove dash side finisher LH. Refer to INT-20, "DASH SIDE FINISHER : Removal and Installation".
4. Remove center pillar lower finisher LH. Refer to INT-23, "CENTER PILLAR LOWER FINISHER : Removal and Installation".
5. Remove rear seat bolster LH. Refer to SE-39, "Removal and Installation - Rear Seat Bolster".

6. Remove trunk side finisher LH. Refer to INT-34, "TRUNK SIDE FINISHER : Removal and Installation".
7. Remove fuel filler lid opener cable from fuel filler lid lock assembly. Refer to DLK-214, "FUEL FILLER LID LOCK : Removal and Installation".
8. Disengage each harness protector (1), and then remove fuel filler lid opener cable (2).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

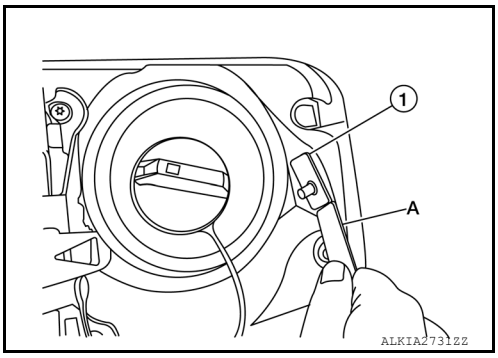
FUEL FILLER LID LOCK

FUEL FILLER LID LOCK : Removal and Installation

INFOID:0000000008717579

REMOVAL

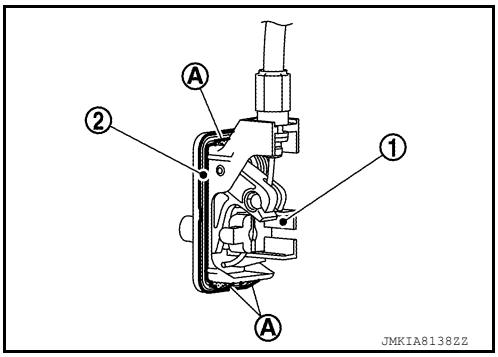
1. Fully open fuel filler lid.
2. Insert a suitable tool (A) as shown into bottom of fuel filler lock assembly(1).



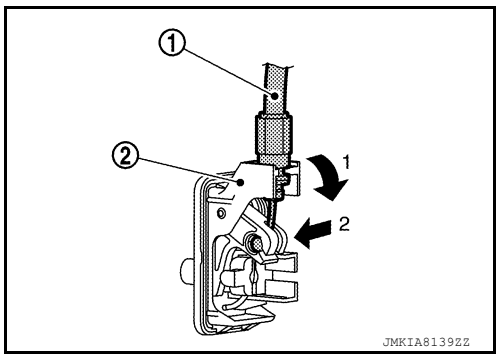
3. Release lower pawls (A) using a suitable tool and remove fuel filler lid lock assembly (1) from opening.

CAUTION:

Be careful not to damage gasket (2) when removing.



4. Disconnect fuel filler lid opener cable (1) by pulling downward and then sliding cable end to the side to remove from fuel filler lid lock assembly (2).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

KEY CYLINDER

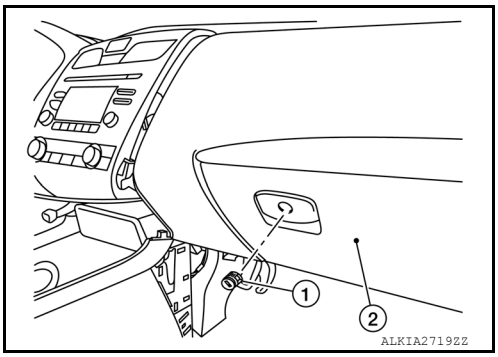
GLOVE BOX LID KEY CYLINDER

GLOVE BOX LID KEY CYLINDER : Removal and Installation

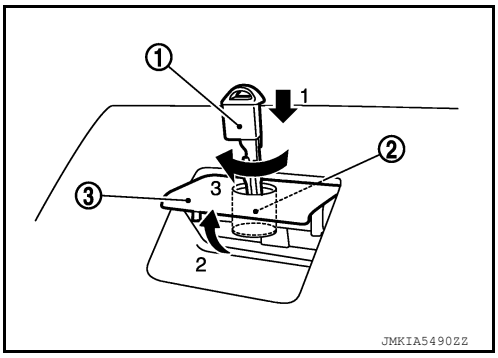
INFOID:0000000008707239

REMOVAL

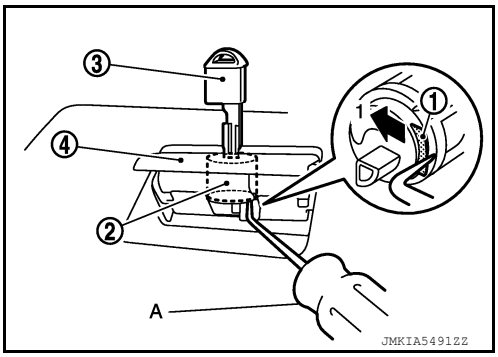
1. Remove glove box assembly (2) to access glove box lid key cylinder (1). Refer to IP-22, "Removal and Installation".



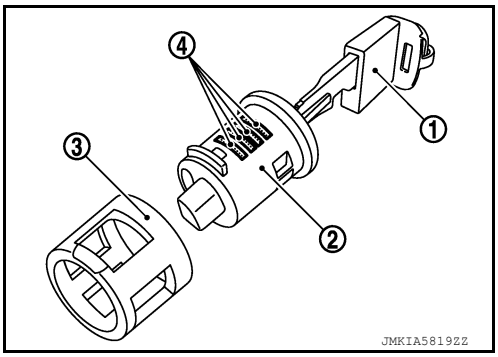
2. Insert key (1) into glove box lid lock cylinder (2).
3. Pull upward on glove box lid release handle (3).
4. Rotate key (1) and turn glove box lid key cylinder (2) to the lock position.



5. Press tumbler stopper (1) into glove box lid lock cylinder (2) using a suitable tool (A), and then remove key (3) and glove box lid lock cylinder together from glove box lid release handle (4).
NOTE:
When removing glove box lid lock cylinder (2) note the position of cylinder to glove box lid release handle (4).



6. Remove sleeve (3) from glove box lid release handle and then install sleeve to glove box lid lock cylinder.
NOTE:
When removing sleeve note the position of sleeve to glove box lid release handle.
CAUTION:
Do not pull out key (1) from glove box lid lock cylinder (2) while sleeve (3) is removed. Otherwise, tumblers (4) may be lost from glove box lid lock cylinder.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:
After installation, check glove box assembly open/close, lock/unlock operation.

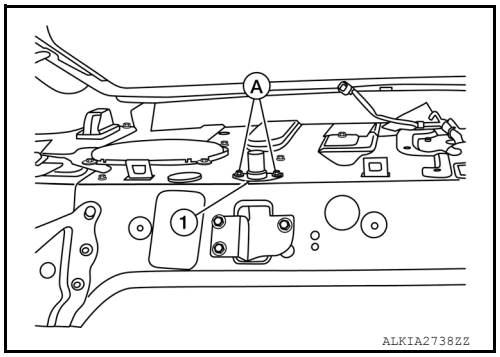
SEATBACK LOCK KEY CYLINDER

SEATBACK LOCK KEY CYLINDER : Removal and Installation

INFOID:0000000008721892

REMOVAL

1. Remove rear parcel shelf finisher. Refer to INT-26, "Removal and Installation".
2. Remove bolts (A) and the setback lock key cylinder (1).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

After installation, rear seatback assembly open/close, lock/unlock operation.

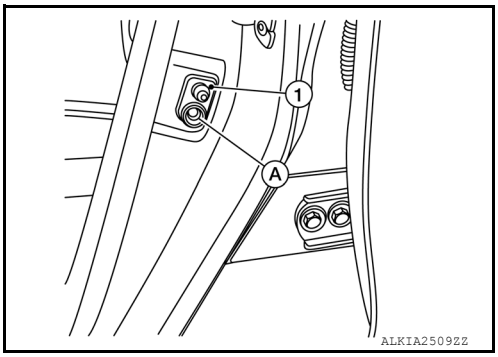
DOOR SWITCH

Removal and Installation

INFOID:0000000008707240

REMOVAL

1. Remove the door switch bolt (A).
2. Disconnect the harness connector from the door switch (1) and remove.



INSTALLATION

Installation is in the reverse order of removal.

INSIDE KEY ANTENNA

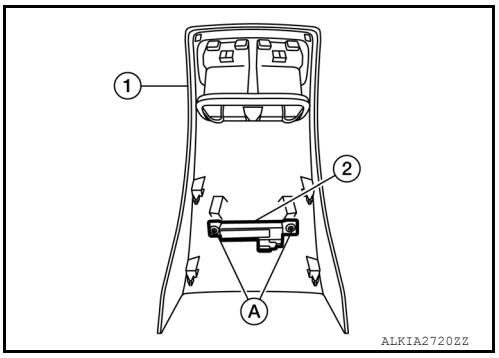
CONSOLE

CONSOLE : Removal and Installation

INFOID:0000000008707247

REMOVAL

1. Remove the center console rear finisher (1). Refer to IP-18, "Removal and Installation".
2. Remove the inside key antenna (console) screws (A) and inside key antenna (console) (2).



INSTALLATION

Installation is in the reverse order of removal.

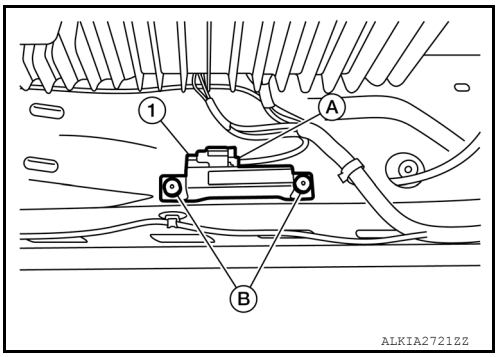
LUGGAGE ROOM

LUGGAGE ROOM : Removal and Installation

INFOID:0000000008707248

REMOVAL

1. Disconnect the harness connector (A) from the inside key antenna (luggage room) (1).
2. Remove the inside key antenna (luggage room) clips (B), and then remove inside key antenna (luggage room) (1).



INSTALLATION

Installation is in the reverse order of removal.

OUTSIDE KEY ANTENNA

DRIVER SIDE

DRIVER SIDE : Removal and Installation

INFOID:0000000008707249

REMOVAL

The driver side outside key antenna and driver side outside handle are serviced as an assembly. Refer to DLK-197, "FRONT DOOR HANDLE : Removal and Installation - Outside Handle".

INSTALLATION

Installation is in the reverse order of removal.

PASSENGER SIDE

PASSENGER SIDE : Removal and Installation

INFOID:0000000008707250

REMOVAL

The passenger side outside key antenna and passenger side outside handle are serviced as an assembly. Refer to DLK-197, "FRONT DOOR HANDLE : Removal and Installation - Outside Handle".

INSTALLATION

Installation is in the reverse order of removal.

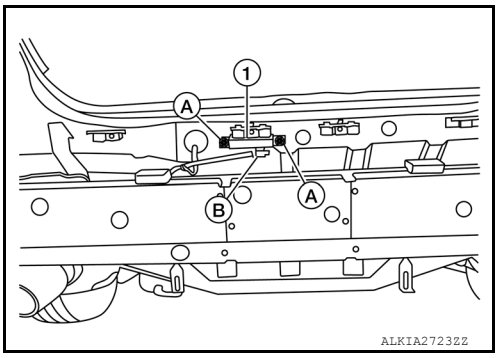
REAR BUMPER

REAR BUMPER : Removal and Installation

INFOID:0000000008707251

REMOVAL

1. Remove rear bumper fascia. Refer to EXT-21, "Removal and Installation".
2. Disconnect the harness connector (B) from the rear bumper key antenna (1).
3. Remove the nuts (A) that retain the rear bumper key antenna (1) to the body.



INSTALLATION

Installation is in the reverse order of removal.

DOOR REQUEST SWITCH

DRIVER SIDE

DRIVER SIDE : Removal and Installation

INFOID:0000000008707241

REMOVAL

The driver side door request switch and driver side outside handle are serviced as an assembly. Refer to DLK-197, "FRONT DOOR HANDLE : Removal and Installation - Outside Handle".

INSTALLATION

Installation is in the reverse order of removal.

PASSENGER SIDE

PASSENGER SIDE : Removal and Installation

INFOID:0000000008707242

REMOVAL

The passenger side door request switch and passenger side outside handle are serviced as an assembly. Refer to DLK-197, "FRONT DOOR HANDLE : Removal and Installation - Outside Handle".

INSTALLATION

Installation is in the reverse order of removal.

INTELLIGENT KEY WARNING BUZZER

Removal and Installation

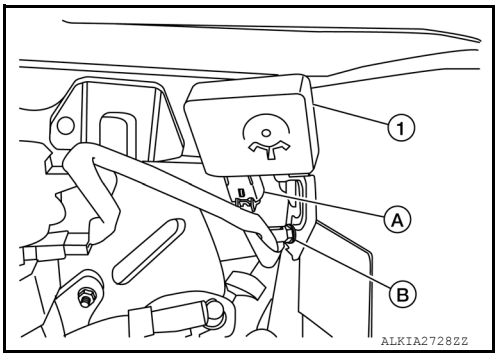
INFOID:0000000008707245

REMOVAL

NOTE:

The Intelligent Key warning buzzer is located in the left front area of the engine compartment.

1. Remove the Intelligent Key warning buzzer harness clip.
2. Remove the nut (B) that retains the Intelligent Key warning buzzer (1) to the body.
3. Disconnect the harness connector (A) from the Intelligent Key warning buzzer (1) and remove.



INSTALLATION

Installation is in the reverse order of removal.

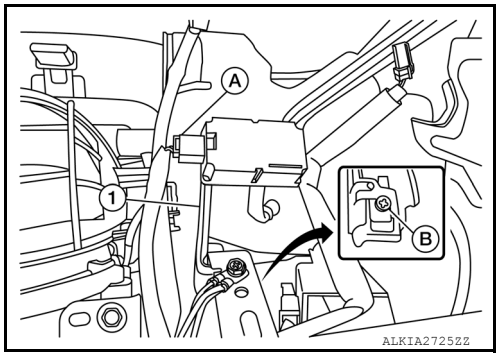
REMOTE KEYLESS ENTRY RECEIVER

Removal and Installation

INFOID:0000000007987406

REMOVAL

1. Remove glove box assembly. Refer to IP-22, "Removal and Installation".
2. Disconnect the harness connector (A) from the remote keyless entry receiver (1).
3. Remove the screw (B) and remote keyless entry receiver (1).



INSTALLATION

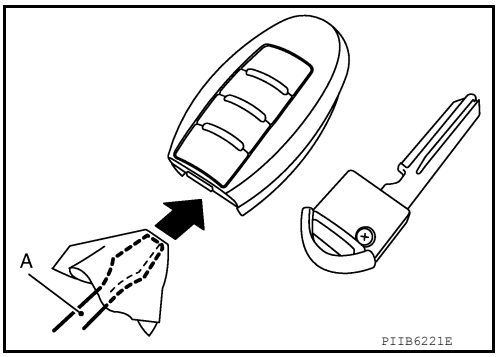
Installation is in the reverse order or removal.

INTELLIGENT KEY BATTERY

Removal and Installation

INFOID:0000000008707244

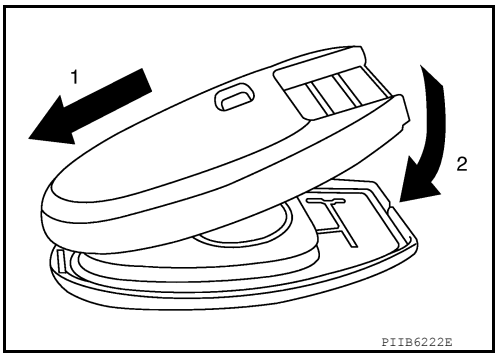
1. Release the lock knob on the back of the Intelligent Key and remove the key.
2. Insert a suitable tool (A) wrapped with a cloth into the slit of the corner and twist it to separate the upper part from the lower part.
   CAUTION:
   - **Do not touch the circuit board or battery terminal.**
   - **The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



3. Replace the battery with a new one.

Battery replacement	**:Coin-type lithium battery (CR2032)**

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



TRUNK LID OPENER CANCEL SWITCH

Removal and Installation

INFOID:0000000008717557

REMOVAL

1. Remove the glove box assembly. Refer to IP-22, "Removal and Installation".
2. Release pawls and remove the trunk cancel switch.

INSTALLATION

Installation is in the reverse order of removal.

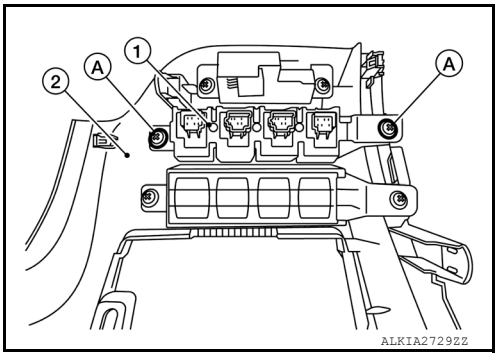
TRUNK LID OPENER SWITCH

Removal and Installation

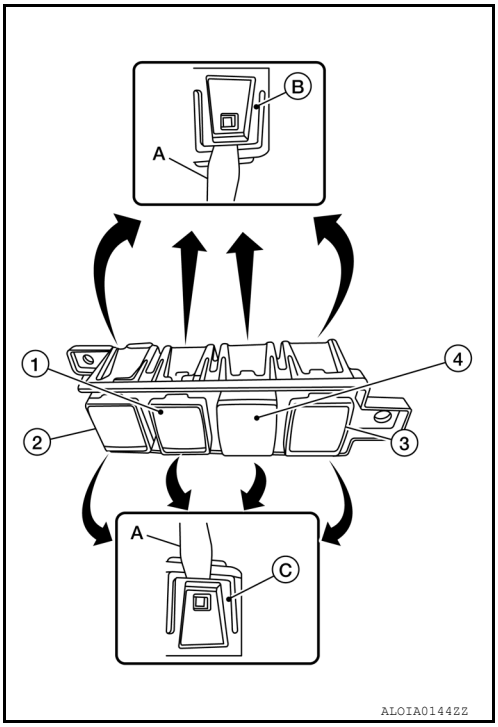
INFOID:0000000008717555

REMOVAL

1. Remove the instrument lower panel LH. Refer to IP-21, "Removal and Installation".
2. Remove screws (A) that retain the upper switch carrier (1) to the instrument lower panel LH (2).



3. Release upper tab (B) and lower tab (C) using a suitable tool (A), then remove the trunk open switch (1) from the upper switch carrier.
   (1) Trunk opener switch
   (2) VDC switch
   (3) Heated steering wheel switch (if equipped)
   (4) Blank



INSTALLATION

Installation is in the reverse order of removal.

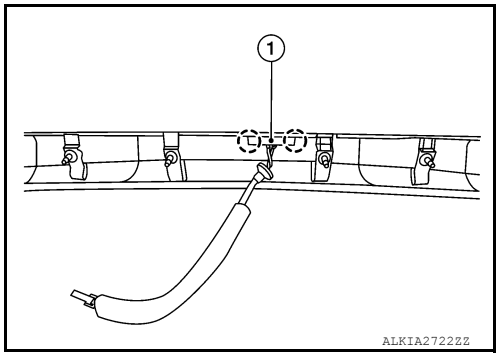
TRUNK OPENER REQUEST SWITCH

Removal and Installation

INFOID:0000000008720383

REMOVAL

1. Remove the license plate lamp finisher. Refer to EXT-37, "Removal and Installation".
2. Release the pawls and remove the trunk opener request switch (1).
   : Pawl



INSTALLATION

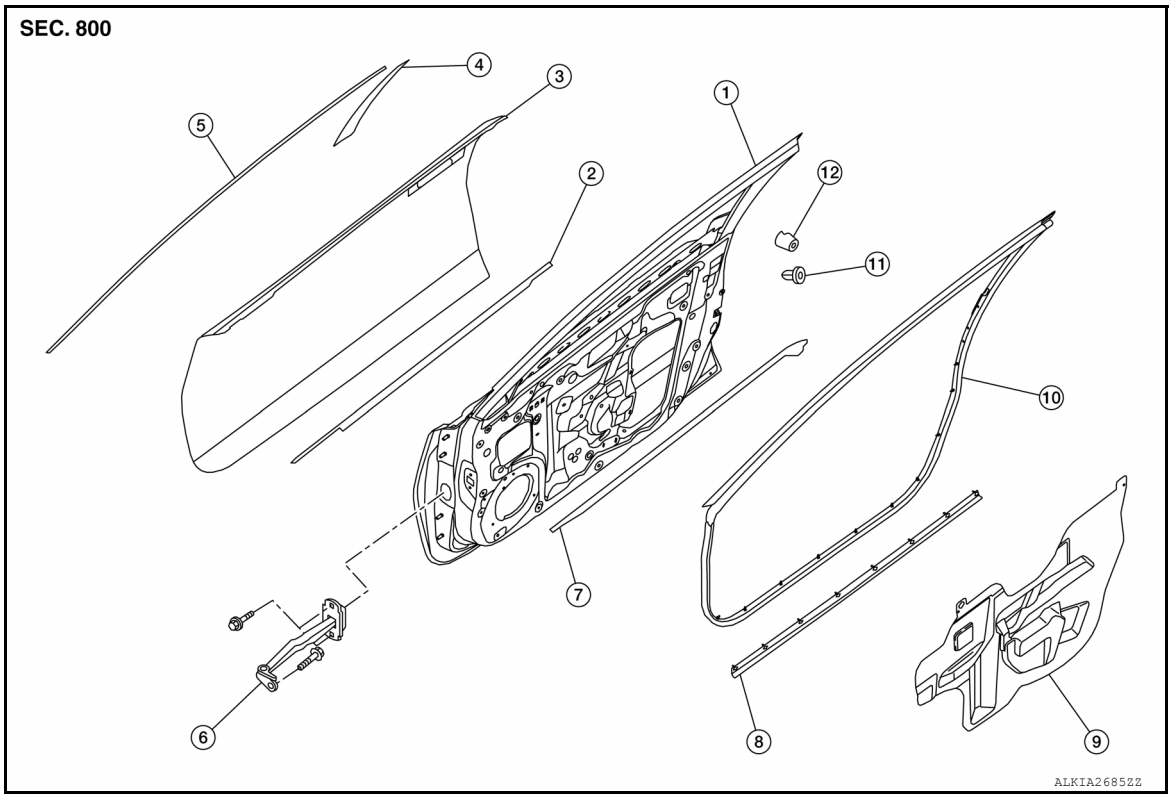
Installation is in the reverse order of removal.

UNIT DISASSEMBLY AND ASSEMBLY

FRONT DOOR

Exploded View

INFOID:0000000008704980



1. Front door panel
2. Front door outside molding
3. Front door outer panel
4. Front door tape
5. Front door sash molding
6. Front door check link
7. Front door inside seal
8. Front door lower seal
9. Front door vapor barrier
10. Front door weatherstrip
11. Front door grommet
12. Front door bumper rubber

Disassembly and Assembly

INFOID:0000000008704981

DISASSEMBLY

NOTE:

RH side shown; LH similar

1. Remove front door. Refer to DLK-183, "DOOR ASSEMBLY : Removal and Installation".
2. Remove front door finisher. Refer to INT-15, "Removal and Installation".
3. Remove front door lower seal.
4. Remove front door bumper rubber.
5. Remove front door sash molding. Refer to EXT-31, "Removal and Installation".
6. Remove front door weatherstrip.
7. Remove front door glass. Refer to GW-14, "Removal and Installation".
8. Remove front door glass regulator. Refer to GW-16, "Removal and Installation - Front Regulator".
9. Remove front door run rubber. Refer to GW-16, "Exploded View".
10. Remove front door outside molding. Refer to EXT-35, "Removal and Installation"
11. Remove front door front and rear glass channel. Refer to GW-16, "Exploded View".
12. Remove front door lock assembly. Refer to DLK-202, "FRONT DOOR LOCK : Removal and Installation".
13. Remove front door check link.

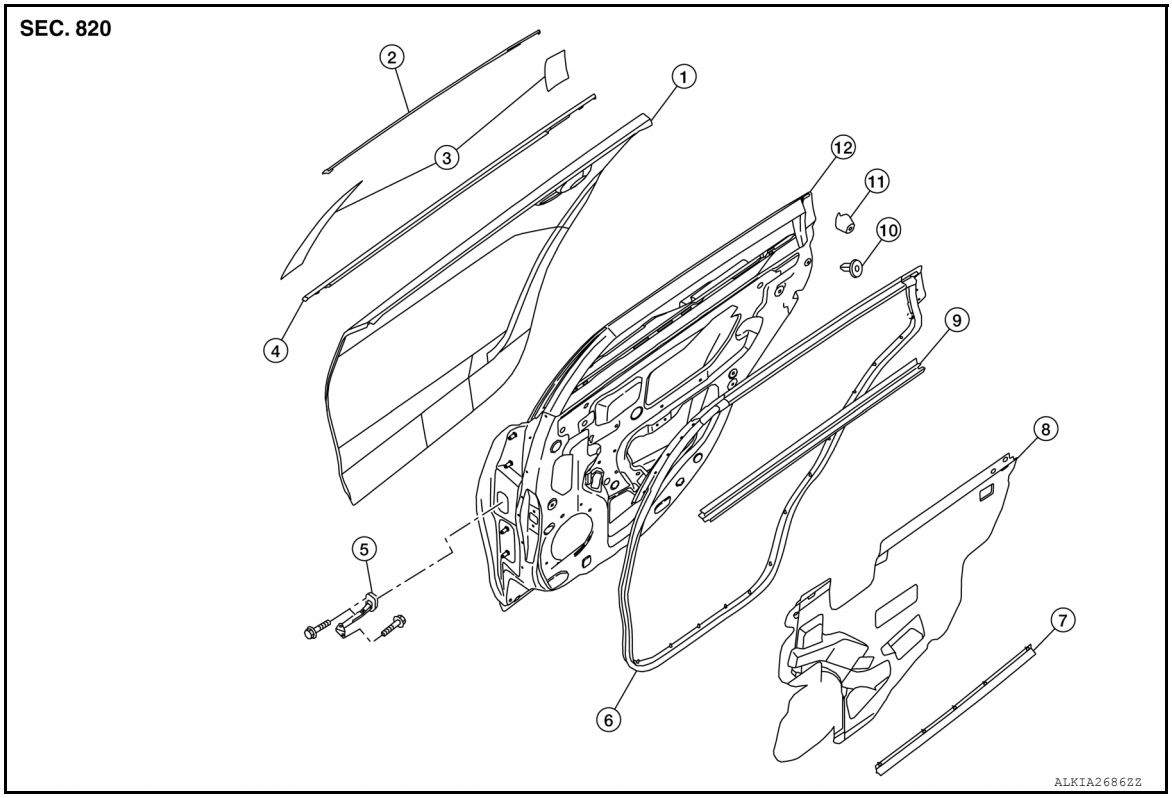
ASSEMBLY

Assembly is in the reverse order of disassembly.

REAR DOOR

Exploded View

INFOID:0000000008704982



1. Rear door outer panel
2. Rear door sash molding
3. Rear door tape
4. Rear door outside molding
5. Rear door check link
6. Rear door weatherstrip
7. Rear door lower seal
8. Front door vapor barrier
9. Rear door inside seal
10. Rear door grommet
11. Rear door bumper rubber
12. Rear door panel

Disassembly and Assembly

INFOID:0000000008704983

DISASSEMBLY

NOTE:
RH side shown; LH similar

1. Remove rear door. Refer to DLK-189, "DOOR ASSEMBLY : Removal and Installation".
2. Remove rear door finisher. Refer to INT-18, "Removal and Installation".
3. Remove rear door lower seal.
4. Remove rear door bumper rubber.
5. Remove rear door sash molding. Refer to EXT-31, "Removal and Installation".
6. Remove rear door weatherstrip.
7. Remove rear door glass. Refer to GW-19, "Removal and Installation".
8. Remove rear door glass regulator. Refer to GW-20, "Removal and Installation - Rear Regulator".
9. Remove rear door run rubber. Refer to GW-20, "Exploded View".
10. Remove rear door outside molding. Refer to EXT-35, "Removal and Installation".
11. Remove rear door glass run. Refer to GW-19, "Removal and Installation".
12. Remove rear door lock. Refer to DLK-204, "REAR DOOR LOCK : Removal and Installation".
13. Remove rear door check link.

ASSEMBLY

Assembly is in the reverse order of disassembly.