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INSIDE HANDLE 869
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DOOR SWITCH 877
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Removal and Installation 877

BACK DOOR OPENER SWITCH 878
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KEYFOB BATTERY 879
Exploded View 879
Removal and Installation 879

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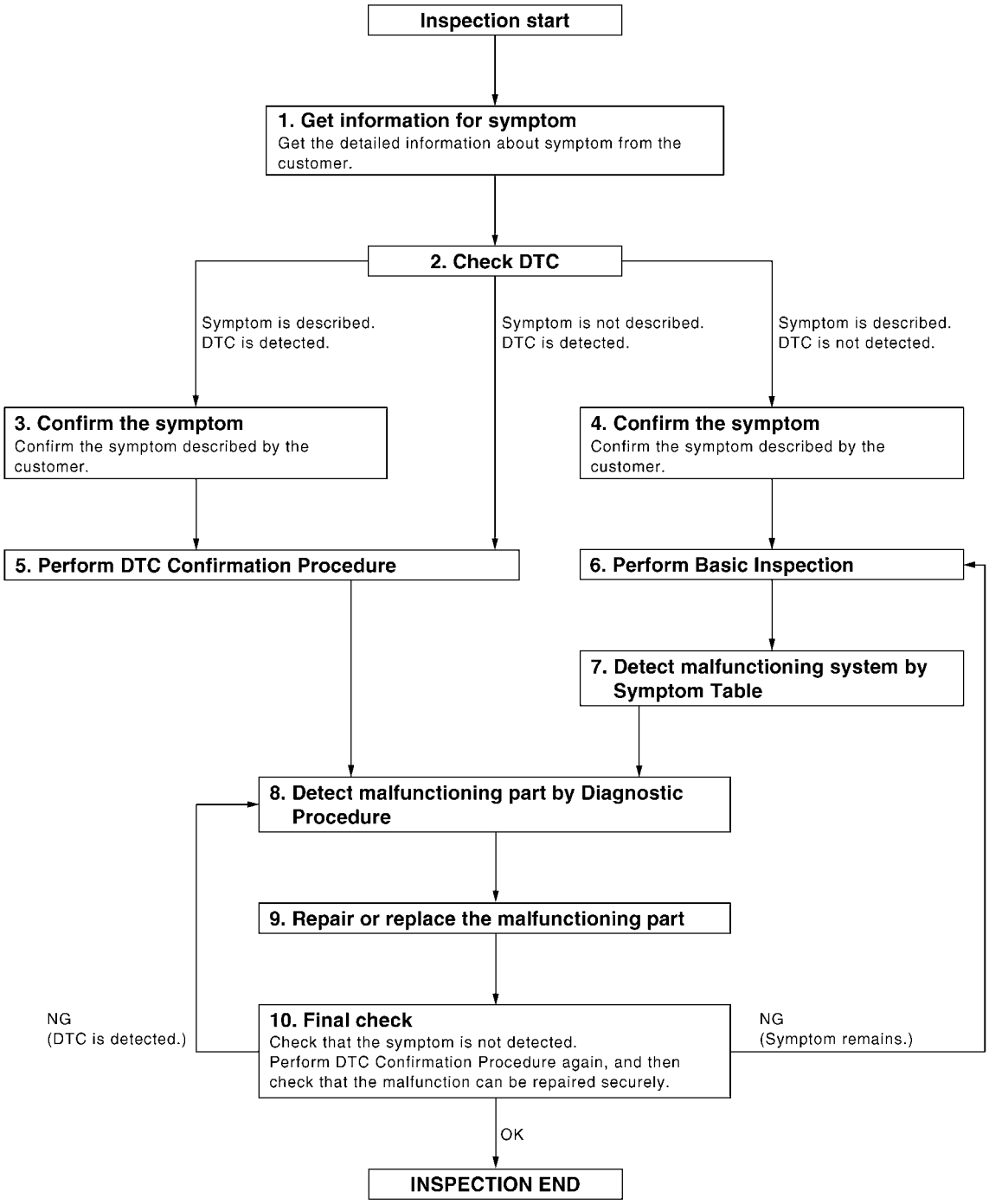
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000000939032

OVERALL SEQUENCE



JMKIA0101GB

DETAILED FLOW

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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 for Intelligent Key unit and BCM.
2. Perform the following procedure if DTC is displayed.

- 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-III 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-III 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.
If two or more DTCs are detected, refer to DLK-163, "DTC Inspection Priority Chart" (Intelligent Key unit), DLK-201, "DTC Inspection Priority Chart" (BCM) and determine trouble diagnosis order.

Is DTC detected?

YES >> GO TO 8.
NO >> Refer to GI-39, "Intermittent Incident".

6.PERFORM BASIC INSPECTION

Perform Basic Inspection. Refer to DLK-221, "Basic Inspection".

>> GO TO 7.

7.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

Detect malfunctioning system according to Symptom Table based on the confirmed symptom in step 4.

>> GO TO 8.

8.DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the system.
NOTE:
The Diagnostic Procedure is described based on open circuit inspection. A short circuit inspection is also required for the circuit check in the Diagnostic Procedure.

>> GO TO 9.

9.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 10.

10.FINAL CHECK

When DTC was detected in step 9, perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunctions have been fully repaired.
When symptom was described by the customer, refer to the confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Does the symptom reappear?

YES (DTC is detected)>>GO TO 8.
YES (Symptom remains)>>GO TO 6.
NO >> **INSPECTION END**

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INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000000939034

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

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:0000000000939035

Refer to the CONSULT-III Operation Manual-NATS.

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FUNCTION DIAGNOSIS

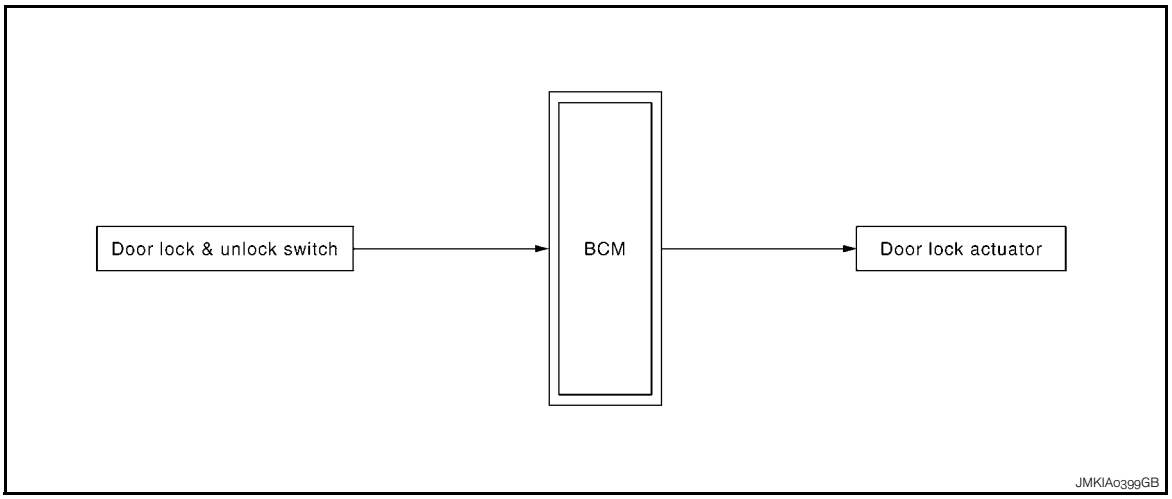
DOOR LOCK FUNCTION

DOOR LOCK AND UNLOCK SWITCH

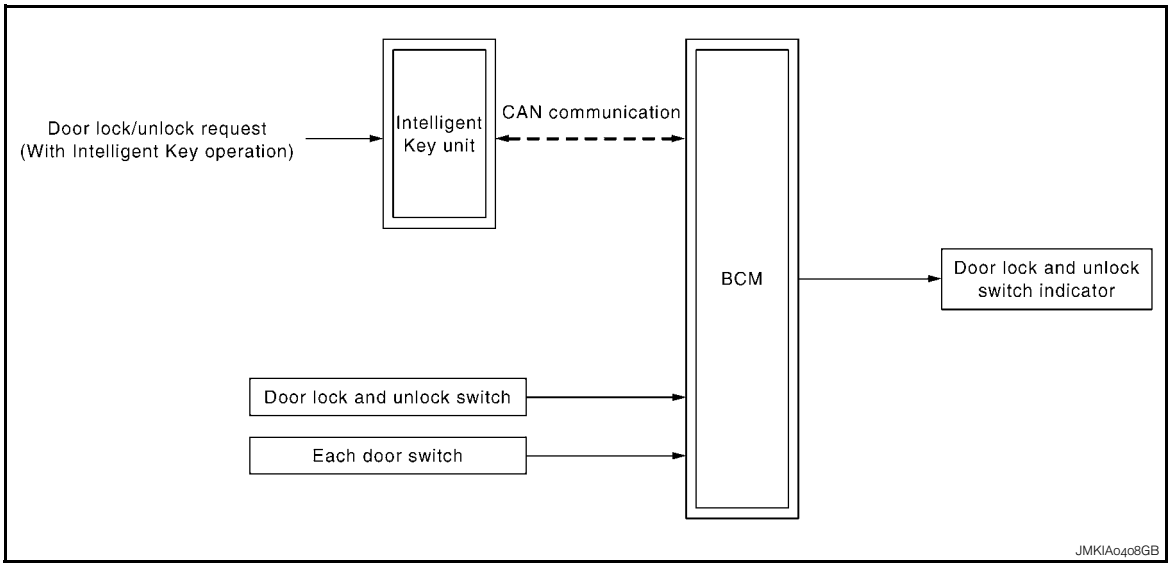
DOOR LOCK AND UNLOCK SWITCH : System Diagram

INFOID:0000000000939036

DOOR LOCK AND UNLOCK SWITCH OPERATION



DOOR LOCK AND UNLOCK SWITCH INDICATOR OPERATION



DOOR LOCK AND UNLOCK SWITCH : System Description

INFOID:0000000000939037

DOOR LOCK AND UNLOCK SWITCH OPERATION

Functions are available by operating the door lock and unlock switch on center console. Interlocked with the lock/unlock operation of door lock and unlock switch, door lock actuators of all doors are locked/unlocked.

Operation Condition

If the following conditions are not satisfied, door lock/unlock operation is not performed even if the door lock and unlock switch is operated.

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Door lock and unlock switch	Operation condition
Lock operation	All of the following conditions are satisfied. • Except driver side doors are closed. • Doors are not locked with Intelligent Key or door request switch.
Unlock operation	All of the following conditions are satisfied. • Doors are not locked with Intelligent Key or door request switch.

NOTE:
When the door lock is locked with Intelligent Key or door request switch, door lock and unlock switch operation will be invalid until either of the following conditions is satisfied.
- Turn ignition switch ON.
- Unlock with Intelligent Key or door request switch.

DOOR LOCK AND UNLOCK SWITCH INDICATOR OPERATION

Door lock and unlock switch indicator indicates door lock status. The indicator turns ON while ignition switch is ON and each door lock is locked. If any door is opened, the indicator will turn OFF.

1 Minute Timer

A timer must be running to turn OFF the indicator. The timer will run for 1 minute after locking with Intelligent Key, door request switch or auto door lock.

30 Minutes Timer

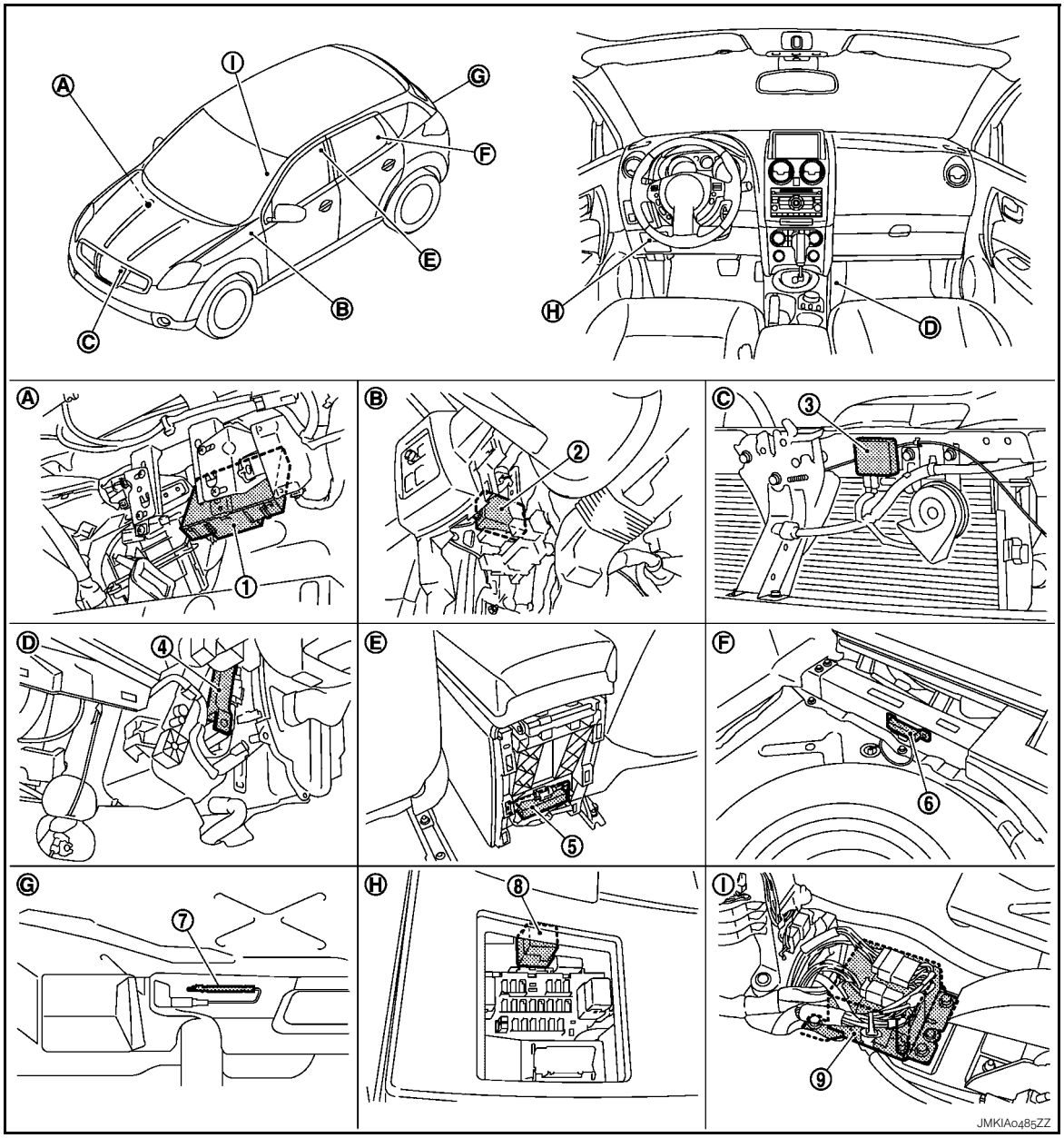
A timer must be running to turn OFF the indicator. The timer will run for 30 minutes after locking with door lock and unlock switch.

NOTE:
1minute timer condition is satisfied while the 30 minutes timer is active, however the 30 minutes timer does not change to 1 minute timer condition.

DOOR LOCK AND UNLOCK SWITCH : Component Parts Location

INFOID:0000000000939038

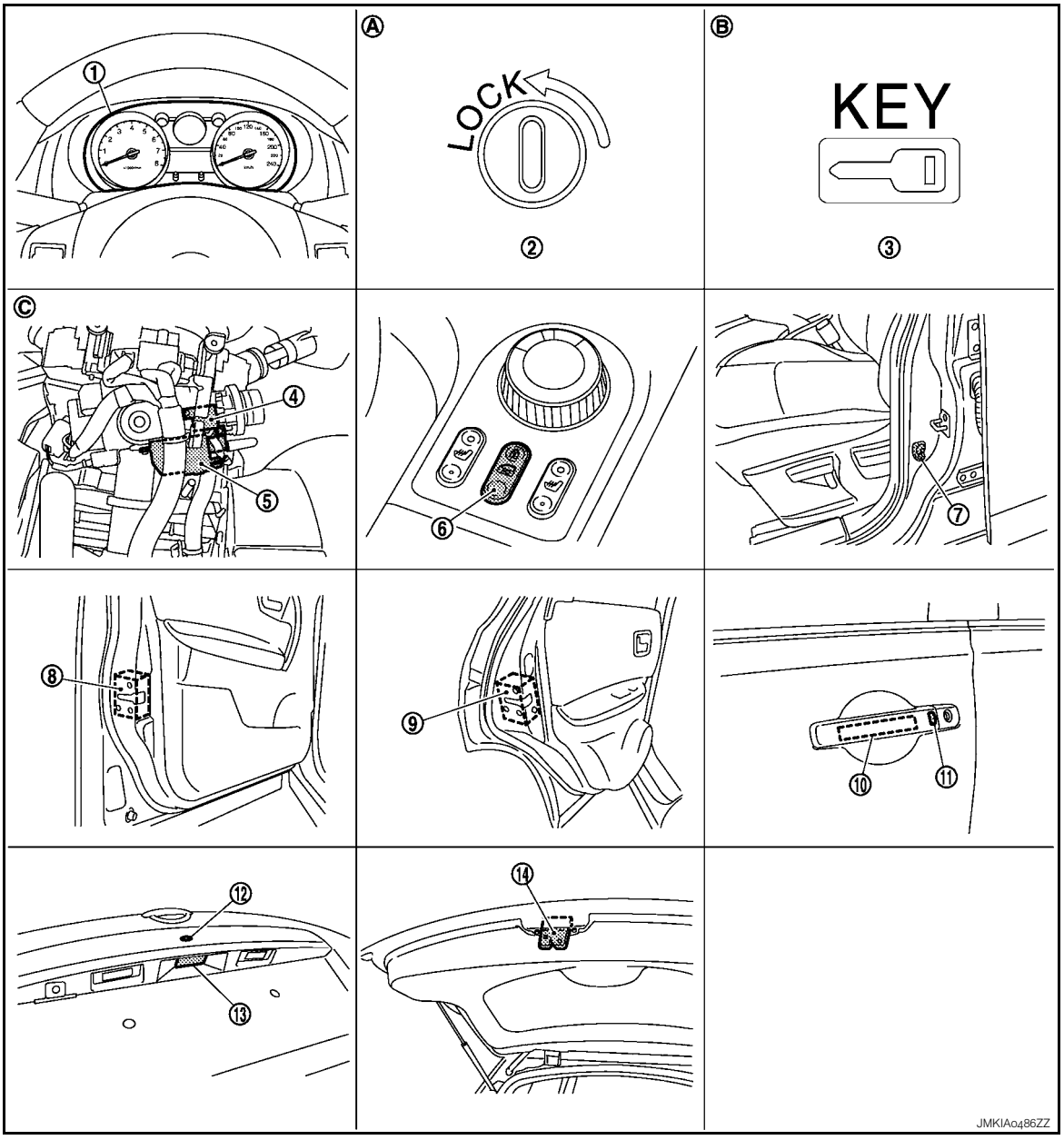
carsdiagn.com



1. BCM
   M65, M66, M67
2. Intelligent Key unit
   M40
3. Intelligent Key warning buzzer
   E25
4. Inside key antenna (instrument center)
   M70
5. Inside key antenna (center console)
   M61
6. Inside key antenna (rear seat)
   B45
7. Inside key antenna (rear bumper)
   B81
8. Passenger side anti-hijack relay
   M90
9. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. Over the instrument lower panel (driver side)
C. View with front bumper removed
D. View with lower instrument cover removed
E. View with center console rear finisher removed
F. View with luggage floor spacer (LH) removed
G. View with rear bumper fascia removed
H. View with fuse box lid removed
I. View with center console removed

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1. Combination meter M34
2. Lock warning lamp M34
3. Key warning lamp M34
4. Ignition knob switch, key switch and key lock solenoid (key switch) M25
5. Ignition knob switch, key switch and key lock solenoid (key lock solenoid) M25
6. Door lock and unlock switch M89
7. Front door switch (driver side) B34
8. Front door lock actuator (driver side) D9
9. Rear door lock actuator LH D85
10. Front door request switch (driver side) D10
11. Outside key antenna (driver side) D11
12. Back door request switch D187
13. Back door opener switch D186
14. Back door lock assembly D152

A. Inside the combination meter
B. Inside the combination meter
C. View with steering column cover removed

DOOR LOCK AND UNLOCK SWITCH : Component Description

INFOID:0000000000939039

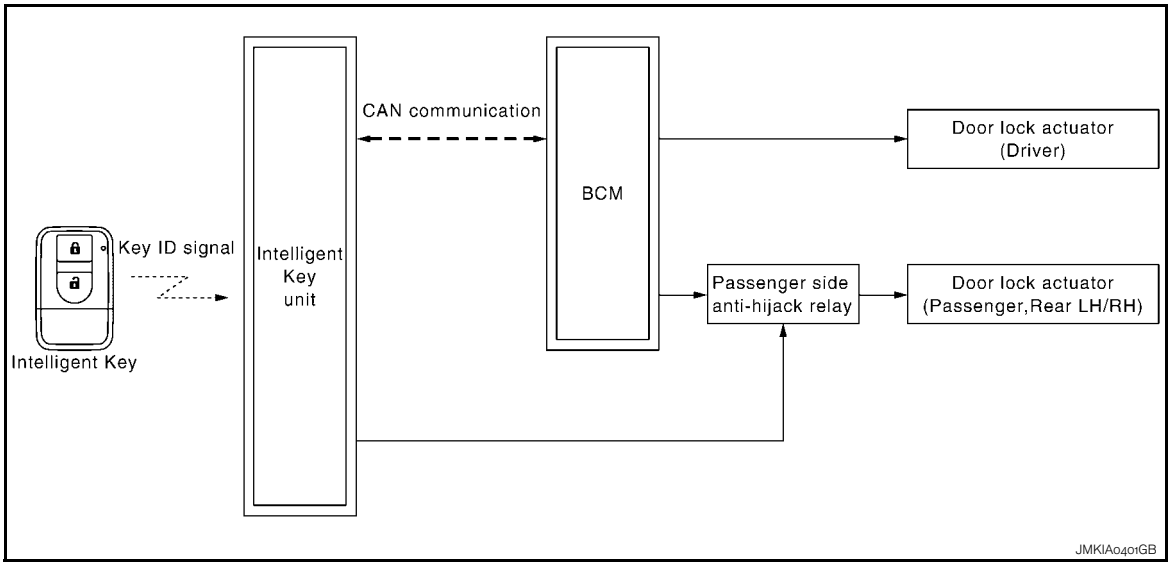
Item	Function
BCM	Controls the door lock function.
Door switch	Detects door state (open or close).
Door lock and unlock switch	Transmits door lock/unlock signal to BCM. Door lock/unlock switch indicator is built-in door lock and unlock switch.
Door lock actuator	Receives door lock/unlock signal from BCM and locks/unlocks each door.

INTELLIGENT KEY

INTELLIGENT KEY : System Diagram

INFOID:0000000000939040

INTELLIGENT KEY OPERATION



INTELLIGENT KEY : System Description

INFOID:0000000000939041

INTELLIGENT KEY OPERATION

The Intelligent Key has the same functions as the multi remote control system. Therefore, it can be used in the same manner as the keyfob by operating the door lock/unlock button.
This function can be set to OFF with CONSULT-III. For the setting information, refer to DLK-65, "CONSULT-III Function (INTELLIGENT KEY)".

OPERATION CONDITION

Remote controller operation	Operation condition
Lock	• All doors are closed • Key switch is OFF (key is removed from ignition key cylinder) • Ignition knob switch is OFF (Ignition switch is not pressed)
Unlock	• Key switch is OFF (key is removed from ignition key cylinder) • Ignition knob switch is OFF (Ignition switch is not pressed)

OPERATION AREA

To ensure that the Intelligent Key works effectively, use within a 100 cm range of each door, however the operable range may differ according to surroundings.

DOOR LOCK AND UNLOCK CONTROL

When door lock and unlock button of the Intelligent Key are pressed, lock signal or unlock signal is transmitted from Intelligent Key to Intelligent Key unit.
When Intelligent Key unit receives the door lock and unlock signal, it operates door lock actuator.

ANTI-HIJACK MODE

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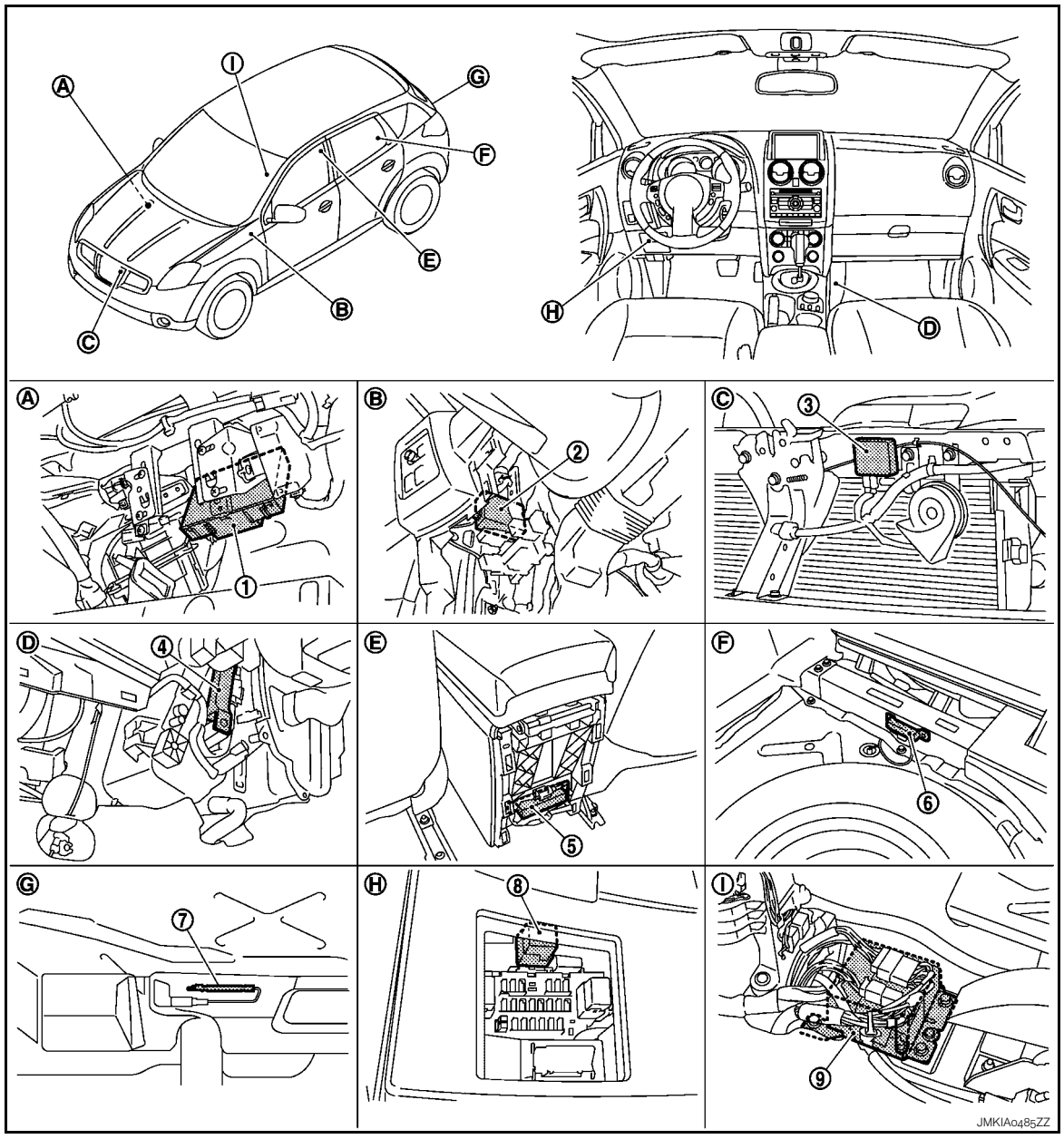
When door lock is unlocked, pressing LOCK button on Intelligent Key once will lock all doors. When door lock is locked, pressing UNLOCK button on Intelligent Key door will unlock driver side door. Pressing UNLOCK button on Intelligent Key a second time within 5 seconds from the first time will unlock all doors and back door can be opened with back door opener switch.

NOTE:

Anti-hijack mode can be set to ON or OFF with CONSULT-III. For the setting information, refer to DLK-65, "CONSULT-III Function (INTELLIGENT KEY)".

INTELLIGENT KEY : Component Parts Location

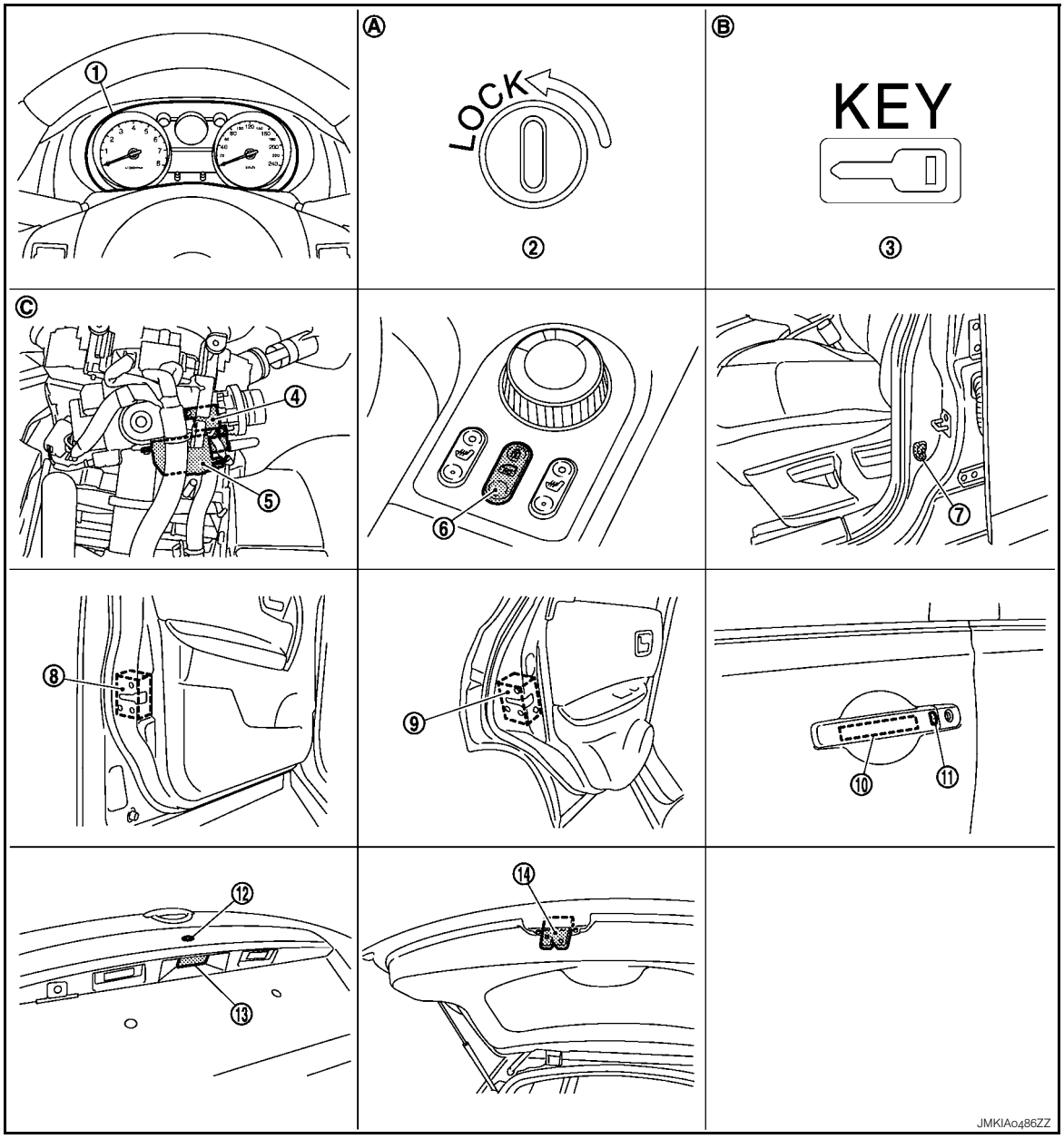
INFOID:0000000001116982



1. BCM M65, M66, M67
2. Intelligent Key unit M40
3. Intelligent Key warning buzzer E25
4. Inside key antenna (instrument center) M70
5. Inside key antenna (center console) M61
6. Inside key antenna (rear seat) B45
7. Inside key antenna (rear bumper) B81
8. Passenger side anti-hijack relay M90
9. Air bag diagnosis sensor unit M59

A. Over the glove box
B. Over the instrument lower panel (driver side)
C. View with front bumper removed

D. View with lower instrument cover removed
E. View with center console rear finisher removed
F. View with luggage floor spacer (LH) removed
G. View with rear bumper fascia removed
H. View with fuse box lid removed
I. View with center console removed



1. Combination meter M34
2. Lock warning lamp M34
3. Key warning lamp M34
4. Ignition knob switch, key switch and key lock solenoid (key switch) M25
5. Ignition knob switch, key switch and key lock solenoid (key lock solenoid) M25
6. Door lock and unlock switch M89
7. Front door switch (driver side) B34
8. Front door lock actuator (driver side) D9
9. Rear door lock actuator LH D85
10. Front door request switch (driver side) D10
11. Outside key antenna (driver side) D11
12. Back door request switch D187
13. Back door opener switch D186
14. Back door lock assembly D152

A. Inside the combination meter
B. Inside the combination meter
C. View with steering column cover removed

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INTELLIGENT KEY : Component Description

INFOID:0000000000939043

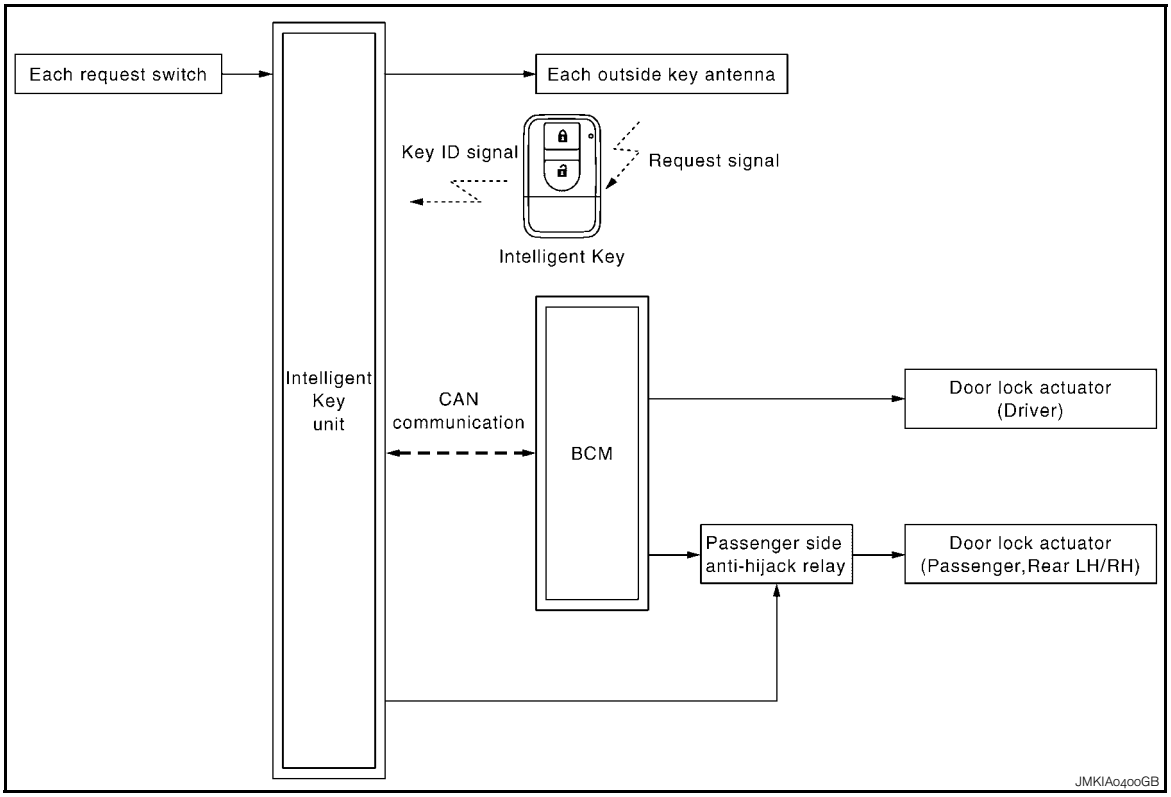
Item	Function
Intelligent Key unit	Controls the door lock/unlock operation with BCM.
BCM	Controls the door lock/unlock operation with Intelligent Key unit.
Door switch	Detects door state (open or closed).
Key switch	Detects that mechanical key is inserted into ignition key cylinder.
Ignition knob switch	Detects ignition knob state (push or release).
Outside key antenna	Detects that Intelligent Key is in detection area of outside key antenna.
Intelligent Key	Transmits key ID to Intelligent Key unit when lock/unlock button is pressed.
Passenger side anti-hijack relay	Controls the circuit of door lock actuator (passenger side, rear LH/RH).
Door lock actuator	Receives lock/unlock signal from BCM and locks and unlocks each door.

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH : System Diagram

INFOID:0000000001078856

DOOR REQUEST SWITCH OPERATION



DOOR REQUEST SWITCH : System Description

INFOID:0000000001078857

DOOR REQUEST SWITCH OPERATION

Only when pressing the request switch, it is possible to lock and unlock the door by carrying the Intelligent Key. The Intelligent Key system is a system that makes it possible to lock and unlock the door 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 (Intelligent Key unit).

This function can be set to OFF with CONSULT-III. For the setting information, refer to DLK-65, "CONSULT-III Function (INTELLIGENT KEY)".

CAUTION:

The driver should always carry the Intelligent Key

OPERATION CONDITION

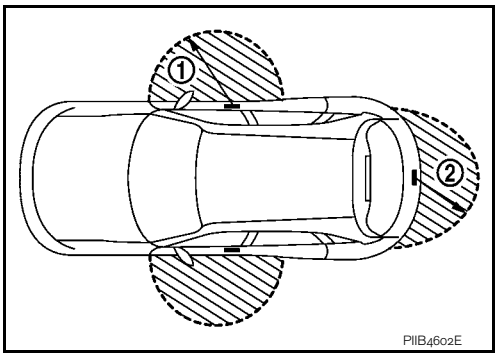
If the following conditions are not satisfied, door lock and unlock operation is not performed even if the request switch is operated.

Each request switch operation	Operation condition
Lock operation	• All doors are closed. • Key switch is OFF. (Key is removed from ignition key cylinder.) • Ignition knob switch is OFF. (Ignition switch is not pushed.) • Any Intelligent Key is not inside the vehicle • Intelligent Key is within outside key antenna detection area
Unlock Operation	• Key switch is OFF. (Key is removed from ignition key cylinder.) • Ignition knob switch is OFF. (Ignition switch is not pushed.) • Intelligent Key is not inside the vehicle.* • Intelligent Key is within outside key antenna detection area.

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

OUTSIDE KEY ANTENNA DETECTION AREA

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



DOOR LOCK AND UNLOCK CONTROL

When the Intelligent Key detects that door request switch is pressed, it starts corresponding with outside key antenna (door of request switch pressed side). Then, the Intelligent Key is checked to be 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 Intelligent Key unit. Intelligent Key unit receives the key ID signal and compares it with the registered key ID. Intelligent Key unit sends the door lock and unlock signal to BCM via CAN communication.

ANTI-HIJACK MODE

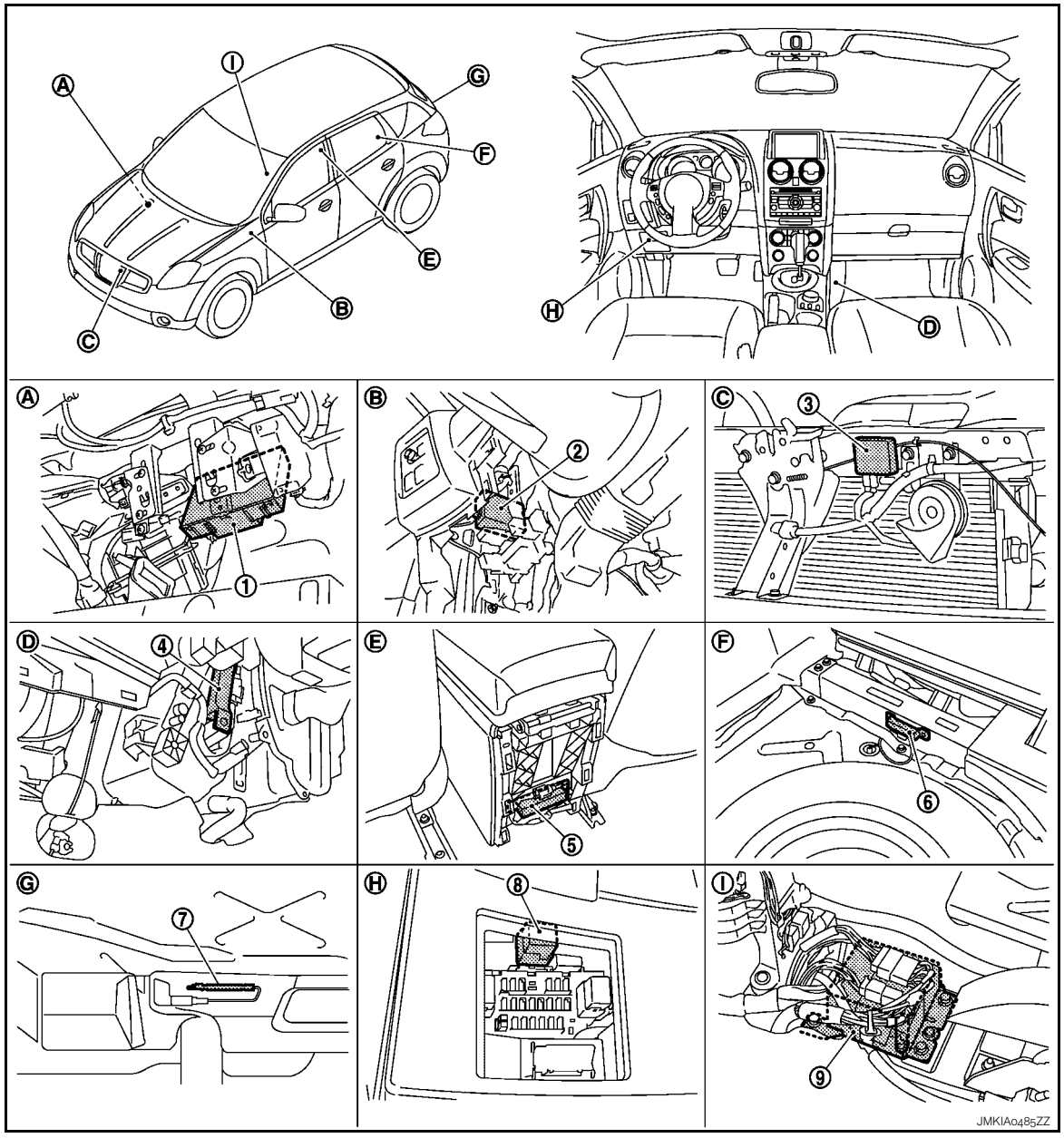
- When door is unlocked, pressing door request switch (driver or passenger) once will lock all doors. When door is locked, pressing door request switch (driver or passenger) once will unlock operated door. Pressing the door request switch door a second time within 5 seconds from the first time will unlock all doors and back door can be opened with back door opener switch.
- When door is unlocked, pressing door request switch (back door) will lock all doors. When door lock is locked, pressing door request switch (back door) will unlock all doors and back door can be opened with back door opener switch.

NOTE:
Anti-hijack mode can be set to OFF with CONSULT-III and Intelligent Key. For the setting information, refer to DLK-65, "CONSULT-III Function (INTELLIGENT KEY)".

DOOR REQUEST SWITCH : Component Parts Location

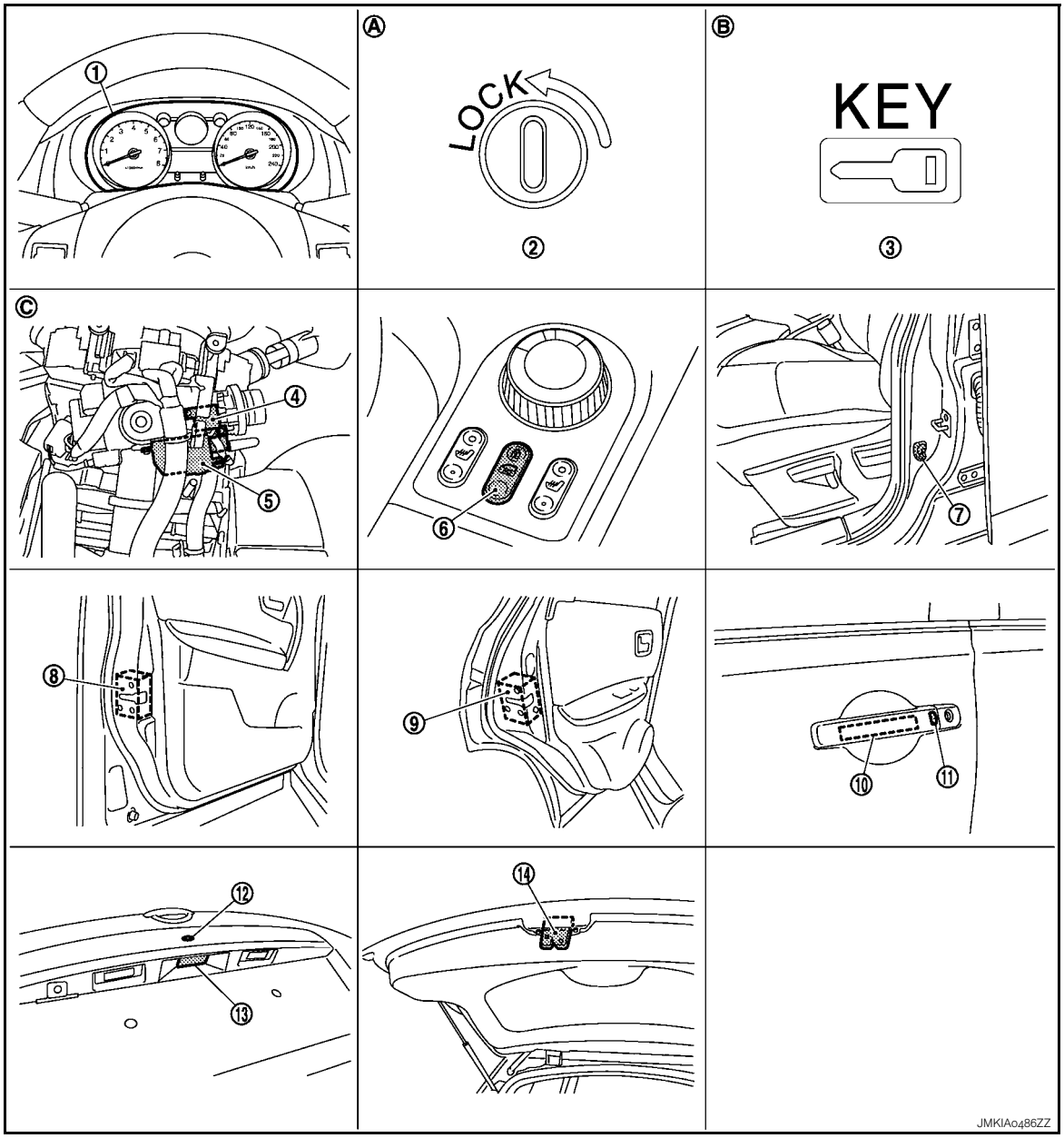
INFOID:0000000001116983

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1. BCM
   M65, M66, M67
2. Intelligent Key unit
   M40
3. Intelligent Key warning buzzer
   E25
4. Inside key antenna (instrument center)
   M70
5. Inside key antenna (center console)
   M61
6. Inside key antenna (rear seat)
   B45
7. Inside key antenna (rear bumper)
   B81
8. Passenger side anti-hijack relay
   M90
9. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. Over the instrument lower panel (driver side)
C. View with front bumper removed
D. View with lower instrument cover removed
E. View with center console rear finisher removed
F. View with luggage floor spacer (LH) removed
G. View with rear bumper fascia removed
H. View with fuse box lid removed
I. View with center console removed



1. Combination meter M34
2. Lock warning lamp M34
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9. Rear door lock actuator LH D85
10. Front door request switch (driver side) D10
11. Outside key antenna (driver side) D11
12. Back door request switch D187
13. Back door opener switch D186
14. Back door lock assembly D152

A. Inside the combination meter
B. Inside the combination meter
C. View with steering column cover removed

DOOR REQUEST SWITCH : Component Description

INFOID:0000000001078859

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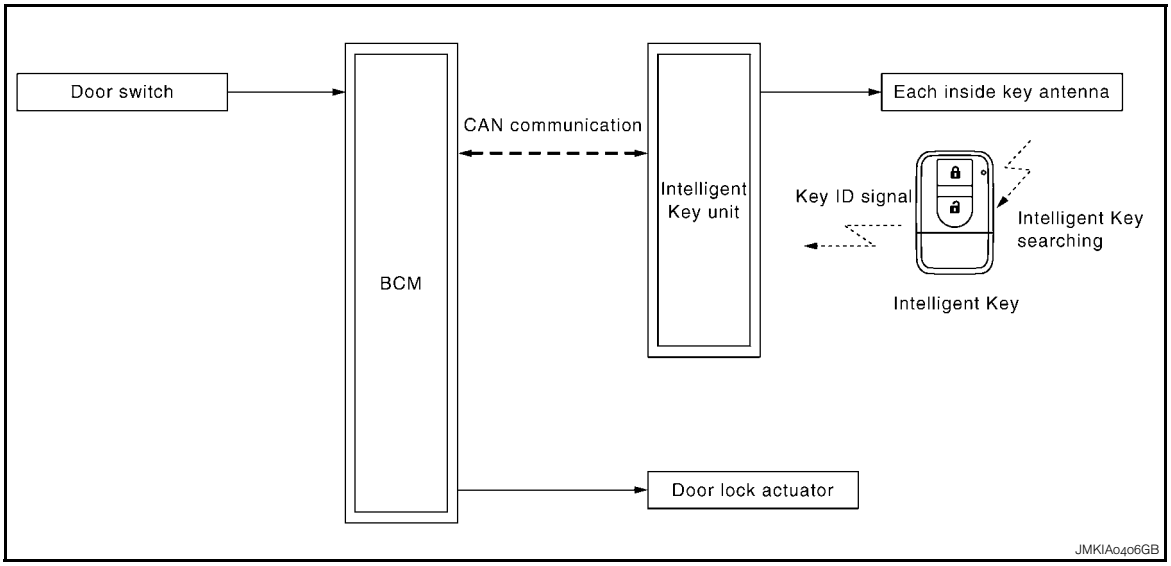
Item	Function
Intelligent Key unit	Controls the door lock function with BCM.
BCM	Controls the door lock/unlock function with Intelligent Key unit.
Door request switch	Transmits opertion signal (lock and unlock) to Intelligent Key unit.
Door switch	Detects door state (open or closed).
Key switch	Detects that mechanical key is inserted into ignition key cylinder.
Ignition knob switch	Detects ignition knob state (push or release).
Outside key antenna	Detects that Intelligent Key is in detection area of outside key antenna.
Inside key antenna	Detects that Intelligent Key is in detection area of inside key antenna.
Intelligent Key	Transmits key ID to Intelligent Key unit when request signal is received from outside key antenna.
Passenger side anti-hijack relay	Controls the circuit of door lock actuator (passenger side, rear LH/RH).
Door lock actuator	Receives lock/unlock signal from BCM and locks/unlocks each door.

KEY REMINDER

KEY REMINDER : System Diagram

INFOID:0000000001080230

KEY REMINDER OPERATION



KEY REMINDER : System Description

INFOID:0000000001080231

KEY REMINDER OPERATION

Key reminder have the following 2 functions.

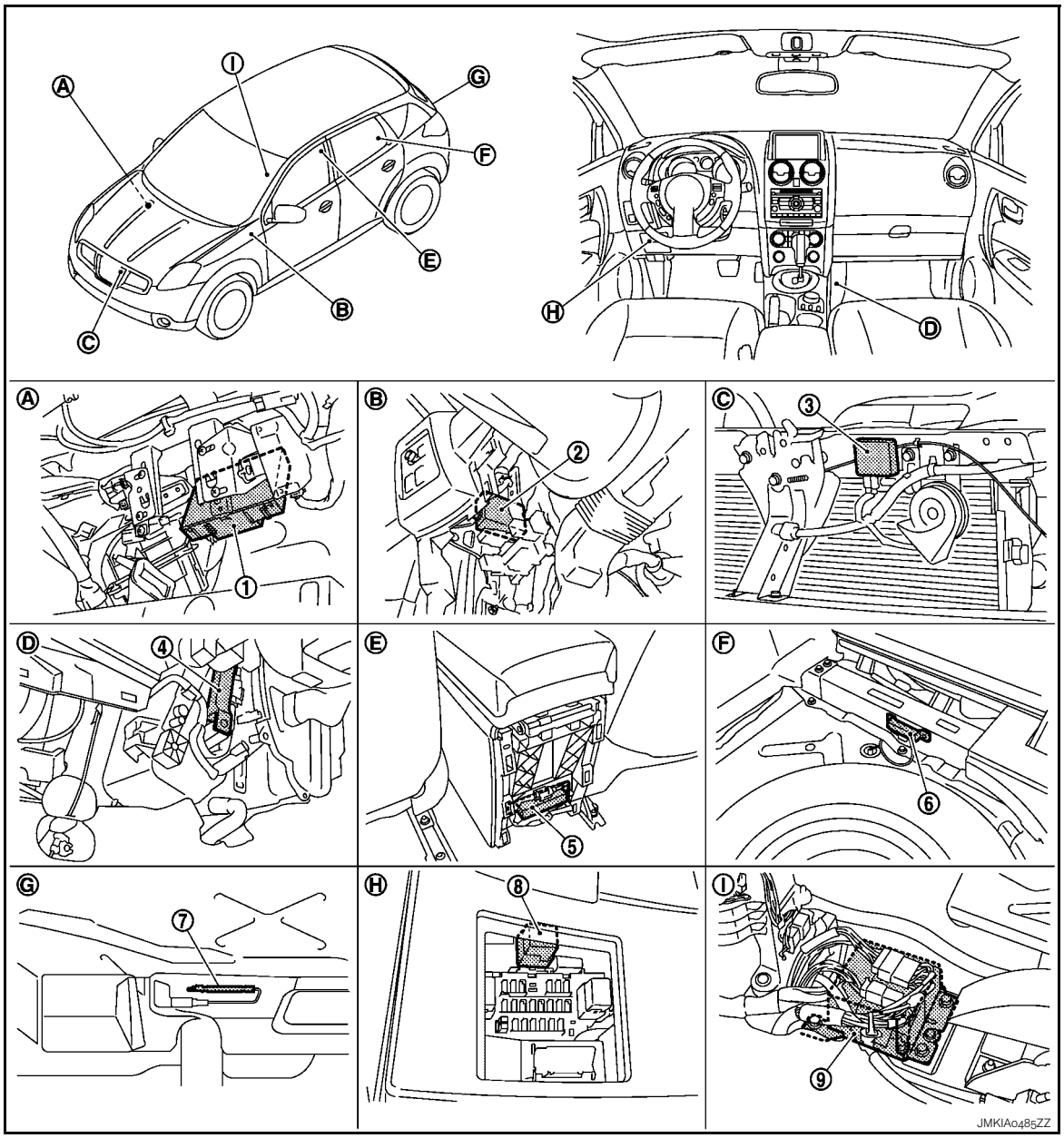
Operation	Operation condition	Operation
Driver door close	Right after driver side door is closed under the following conditions. • Door lock operation. • Driver side door is opened. • Driver side door is in unlock state.	All doors unlock
Any door open to all doors close	Right after all doors are closed under the following conditions. • Intelligent Key is inside the vehicle. • Any door is opened. • All doors are locked by door lock and unlock switch.	• All doors unlock • Active Intelligent Key warning buzzer

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 of an open door.

KEY REMINDER : Component Parts Location

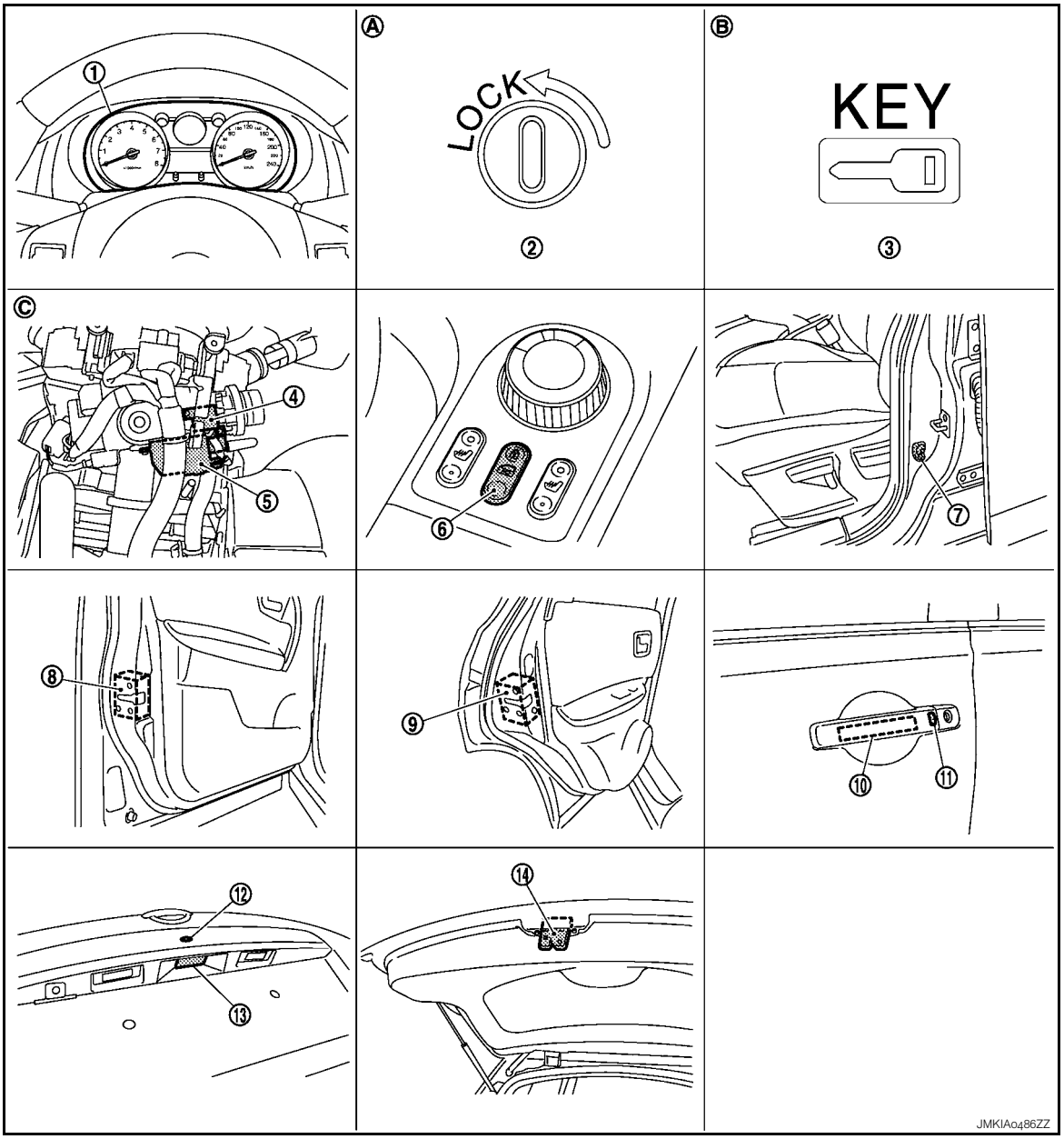
INFOID:0000000001116984



1. BCM
   M65, M66, M67
2. Intelligent Key unit
   M40
3. Intelligent Key warning buzzer
   E25
4. Inside key antenna (instrument center)
   M70
5. Inside key antenna (center console)
   M61
6. Inside key antenna (rear seat)
   B45
7. Inside key antenna (rear bumper)
   B81
8. Passenger side anti-hijack relay
   M90
9. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. Over the instrument lower panel (driver side)
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D. View with lower instrument cover removed
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F. View with luggage floor spacer (LH) removed
G. View with rear bumper fascia removed
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11. Outside key antenna (driver side) D11
12. Back door request switch D187
13. Back door opener switch D186
14. Back door lock assembly D152

A. Inside the combination meter
B. Inside the combination meter
C. View with steering column cover removed

KEY REMINDER : Component Description

INFOID:0000000001080233

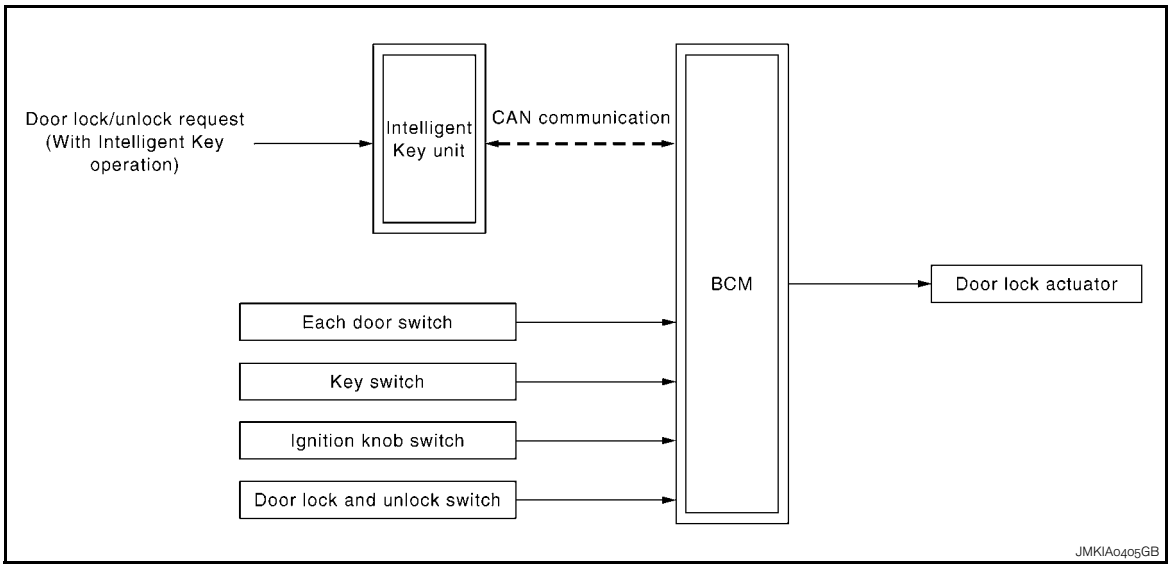
Item	Function
Intelligent Key unit	Controls the door lock function with BCM.
BCM	Controls the door lock and unlock operation with Intelligent Key unit.
Door switch	Detects door state (open or closed).
Inside key antenna	Detects that Intelligent Key is in detection area of inside key antenna.
Intelligent Key	Transmits key ID to Intelligent Key unit when Intelligent Key is searching.
Door lock actuator	Receives lock and unlock signal from BCM and locks/unlocks each door.

AUTO DOOR LOCK

AUTO DOOR LOCK : System Diagram

INFOID:0000000001080185

AUTO DOOR LOCK OPERATION



AUTO DOOR LOCK : System Description

INFOID:0000000001080186

AUTO DOOR LOCK OPERATION

When all doors are locked and then doors are unlocked with Intelligent Key or door request switch, BCM does not receive the following signals within 2 minutes*1, and all doors are automatically locked.

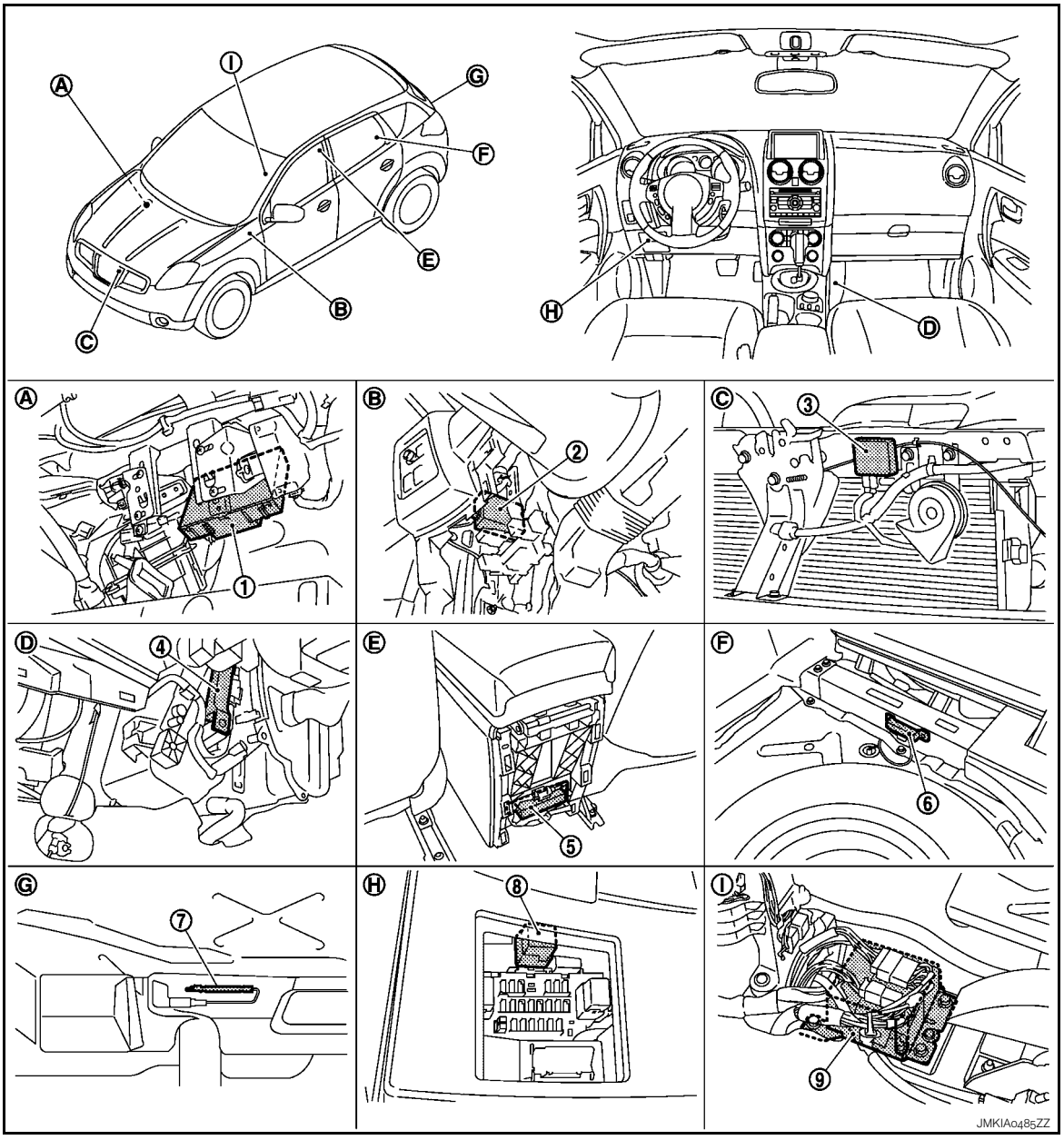
- Any door is opened.
- Ignition knob is pressed.
- Ignition key is inserted into ignition key cylinder.
- Door is locked with Intelligent Key.
- Door is locked/unlocked with door lock and unlock switch.

*1: Auto door lock operation mode can be changed with CONSULT-III. Refer to DLK-65, "CONSULT-III Function (INTELLIGENT KEY)".

AUTO DOOR LOCK : Component Parts Location

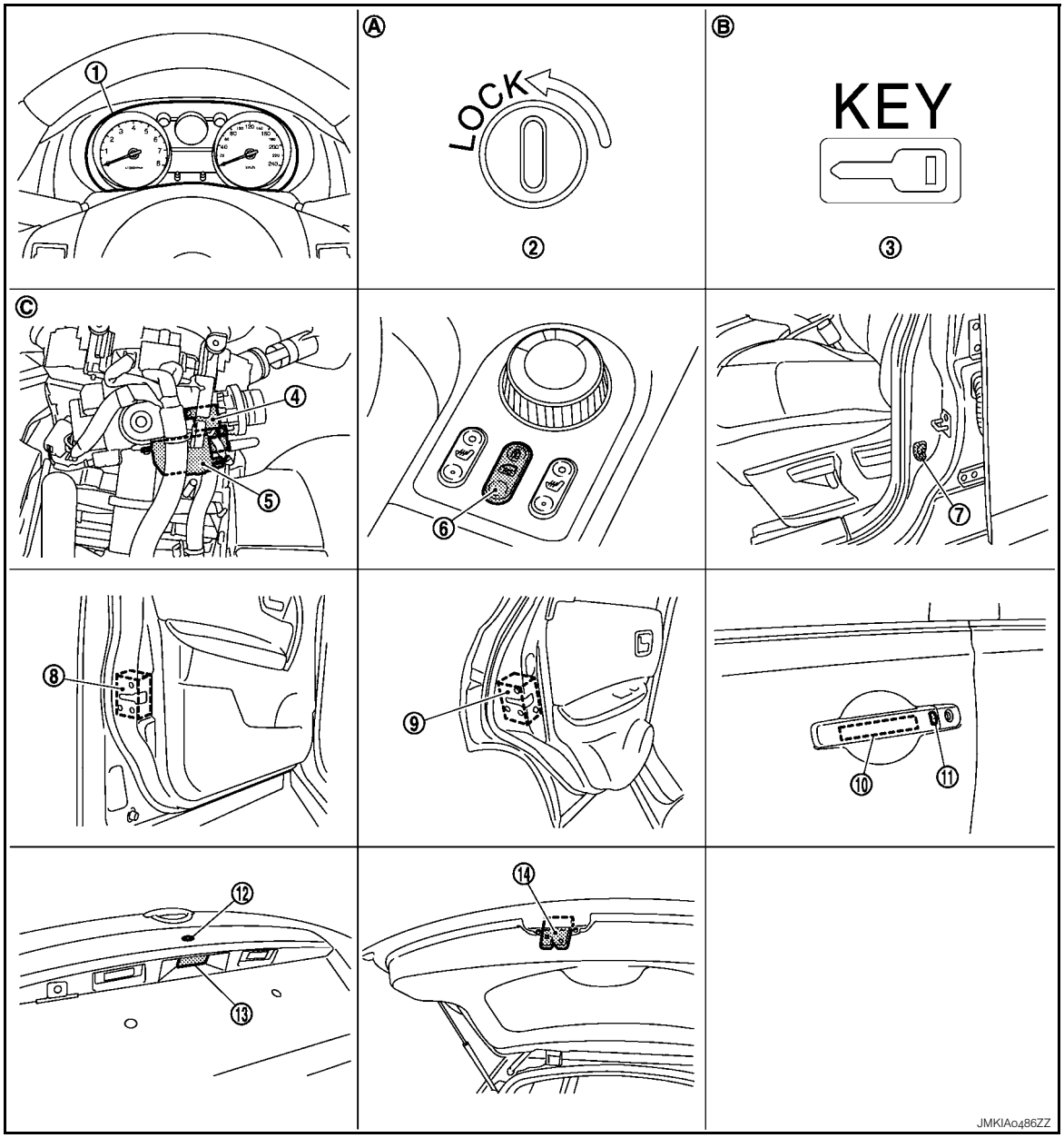
INFOID:0000000001116985

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1. BCM
   M65, M66, M67
2. Intelligent Key unit
   M40
3. Intelligent Key warning buzzer
   E25
4. Inside key antenna (instrument center)
   M70
5. Inside key antenna (center console)
   M61
6. Inside key antenna (rear seat)
   B45
7. Inside key antenna (rear bumper)
   B81
8. Passenger side anti-hijack relay
   M90
9. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. Over the instrument lower panel (driver side)
C. View with front bumper removed
D. View with lower instrument cover removed
E. View with center console rear finisher removed
F. View with luggage floor spacer (LH) removed
G. View with rear bumper fascia removed
H. View with fuse box lid removed
I. View with center console removed



1. Combination meter M34
2. Lock warning lamp M34
3. Key warning lamp M34
4. Ignition knob switch, key switch and key lock solenoid (key switch) M25
5. Ignition knob switch, key switch and key lock solenoid (key lock solenoid) M25
6. Door lock and unlock switch M89
7. Front door switch (driver side) B34
8. Front door lock actuator (driver side) D9
9. Rear door lock actuator LH D85
10. Front door request switch (driver side) D10
11. Outside key antenna (driver side) D11
12. Back door request switch D187
13. Back door opener switch D186
14. Back door lock assembly D152

A. Inside the combination meter
B. Inside the combination meter
C. View with steering column cover removed

AUTO DOOR LOCK : Component Description

INFOID:0000000001080188

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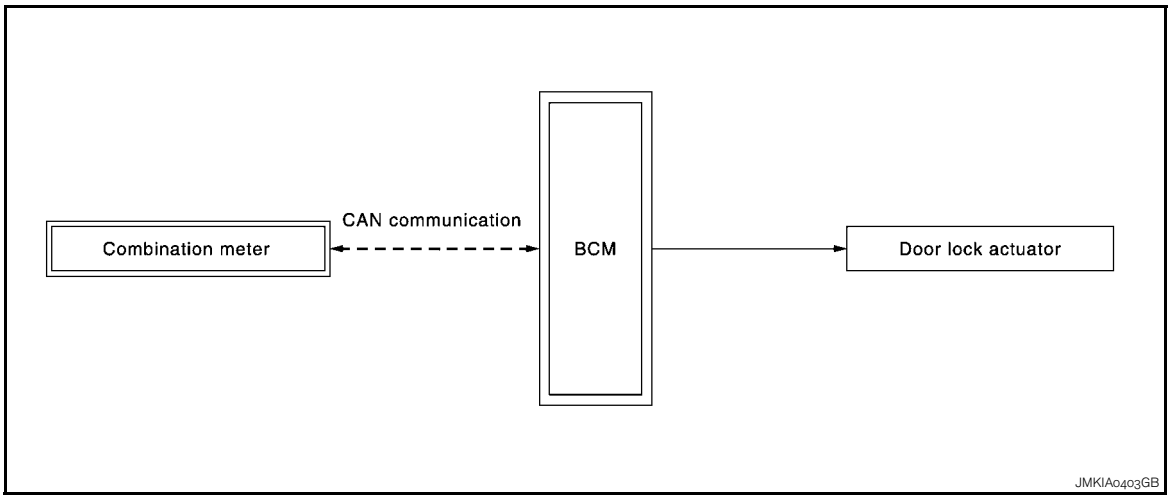
Item	Function
Intelligent Key unit	Controls the door lock function with BCM.
BCM	Controls the door lock function with Intelligent Key unit.
Door switch	Detects door state (open or closed).
Key switch	Detects that mechanical key is inserted into ignition key cylinder.
Ignition knob switch	Detects ignition knob state (push or release).
Door lock and unlock switch	Transmits door lock and unlock signal to BCM.
Door lock actuator	Receives lock and unlock signal from BCM and locks and unlocks each door.

VEHICLE SPEED SENSING AUTO DOOR LOCK

VEHICLE SPEED SENSING AUTO DOOR LOCK : System Diagram

INFOID:0000000001078860

VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION



VEHICLE SPEED SENSING AUTO DOOR LOCK : System Description

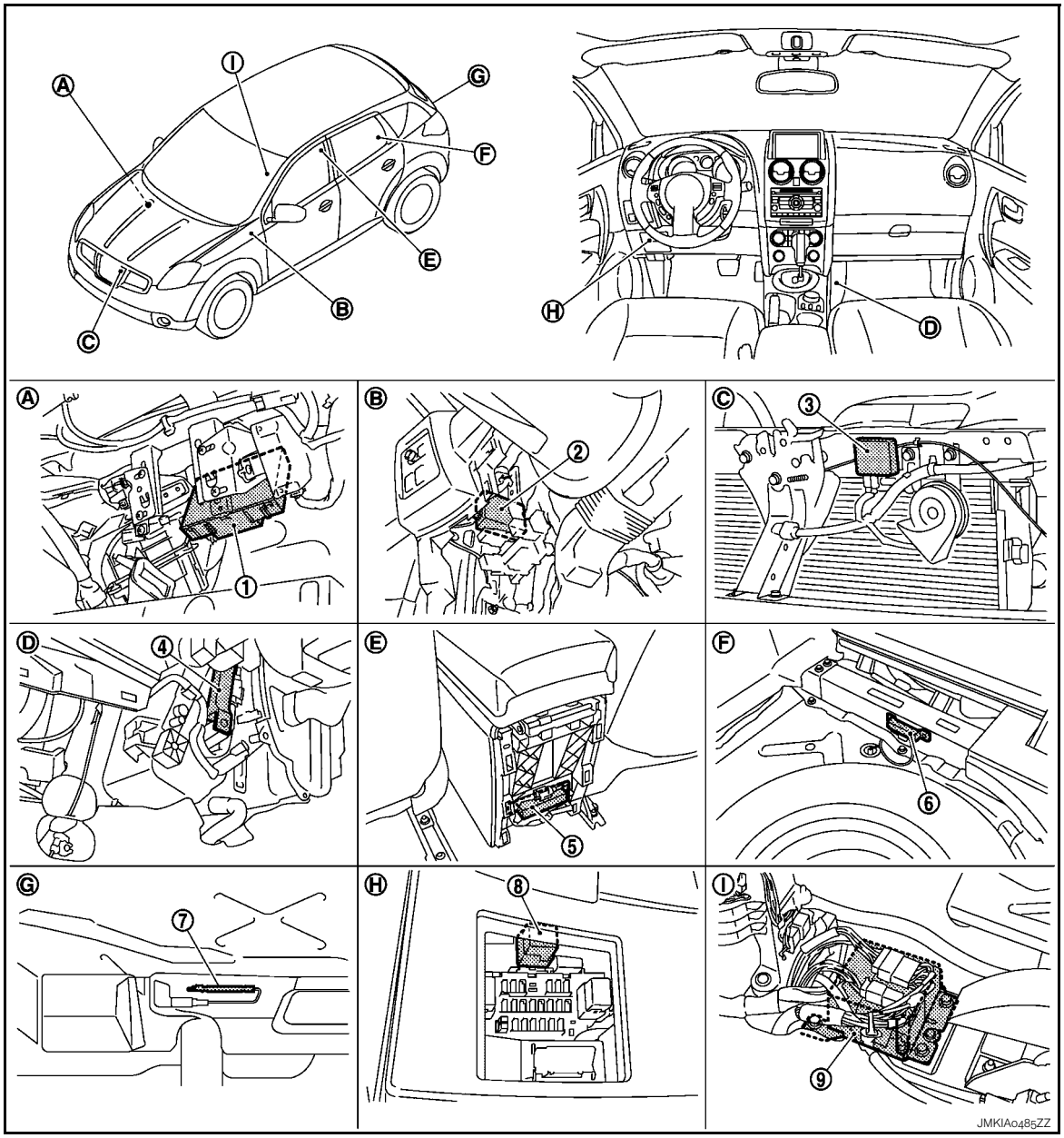
INFOID:0000000001078861

VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION

When the vehicle speed exceeds 12 km/h (7 MPH), all doors are automatically locked. BCM receives vehicle speed signal from combination meter via CAN communication.

VEHICLE SPEED SENSING AUTO DOOR LOCK : Component Parts Location

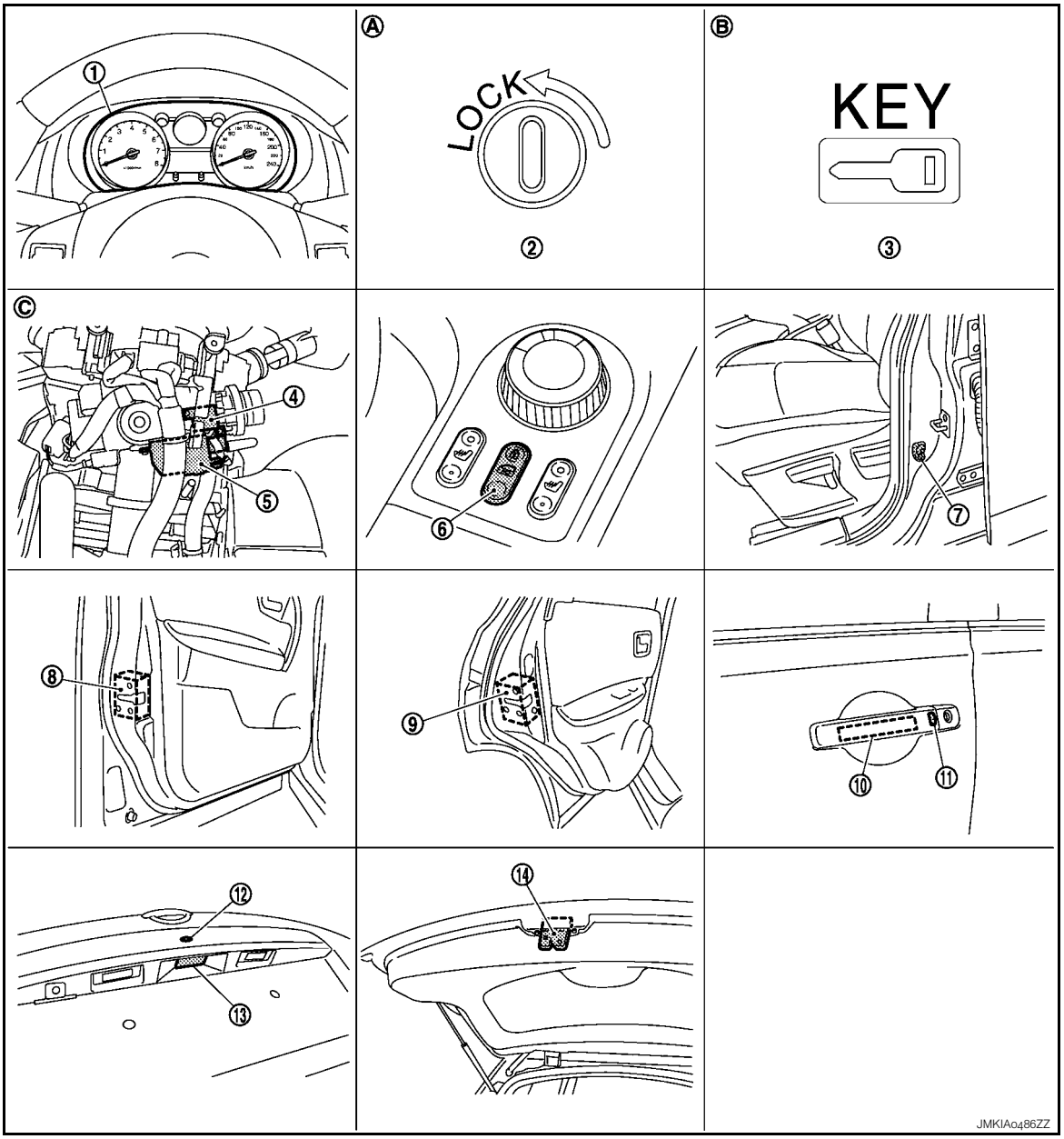
INFOID:0000000001116986



1. BCM
   M65, M66, M67
2. Intelligent Key unit
   M40
3. Intelligent Key warning buzzer
   E25
4. Inside key antenna (instrument center)
   M70
5. Inside key antenna (center console)
   M61
6. Inside key antenna (rear seat)
   B45
7. Inside key antenna (rear bumper)
   B81
8. Passenger side anti-hijack relay
   M90
9. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. Over the instrument lower panel (driver side)
C. View with front bumper removed
D. View with lower instrument cover removed
E. View with center console rear finisher removed
F. View with luggage floor spacer (LH) removed
G. View with rear bumper fascia removed
H. View with fuse box lid removed
I. View with center console removed

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1. Combination meter M34
2. Lock warning lamp M34
3. Key warning lamp M34
4. Ignition knob switch, key switch and key lock solenoid (key switch) M25
5. Ignition knob switch, key switch and key lock solenoid (key lock solenoid) M25
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9. Rear door lock actuator LH D85
10. Front door request switch (driver side) D10
11. Outside key antenna (driver side) D11
12. Back door request switch D187
13. Back door opener switch D186
14. Back door lock assembly D152

A. Inside the combination meter
B. Inside the combination meter
C. View with steering column cover removed

VEHICLE SPEED SENSING AUTO DOOR LOCK : Component Description

INFOID:0000000001078863

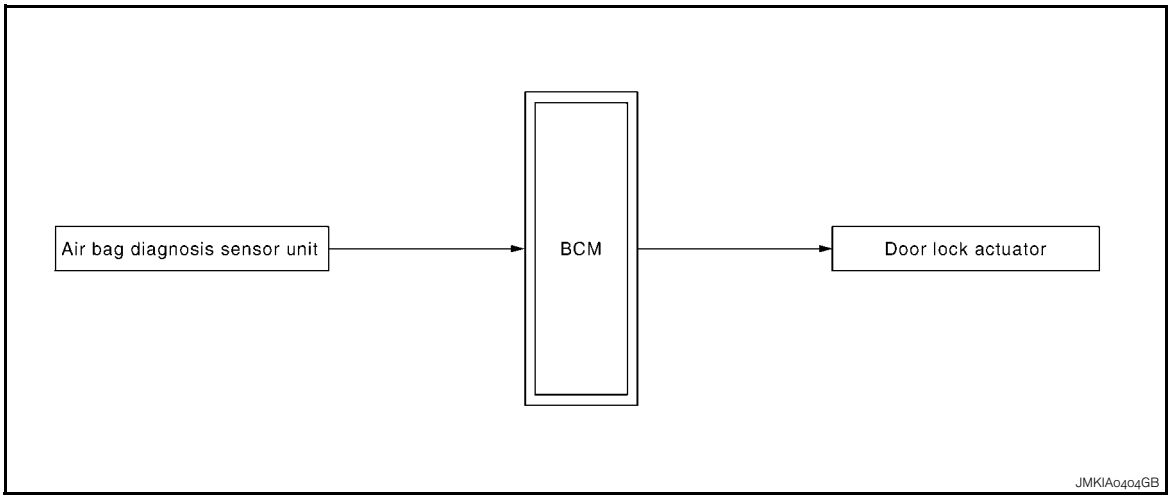
Item	Function
BCM	Controls the door lock/unlock function.
Combination meter	Transmits vehicle speed signal to BCM via CAN communication.
Door lock actuator	Receives door lock and unlock signal from BCM and locks and unlocks each door.

AIR BAG INTERLOCK UNLOCK

AIR BAG INTERLOCK UNLOCK : System Diagram

INFOID:0000000001078864

AIR BAG INTERLOCK UNLOCK OPERATION



AIR BAG INTERLOCK UNLOCK : System Description

INFOID:0000000001078865

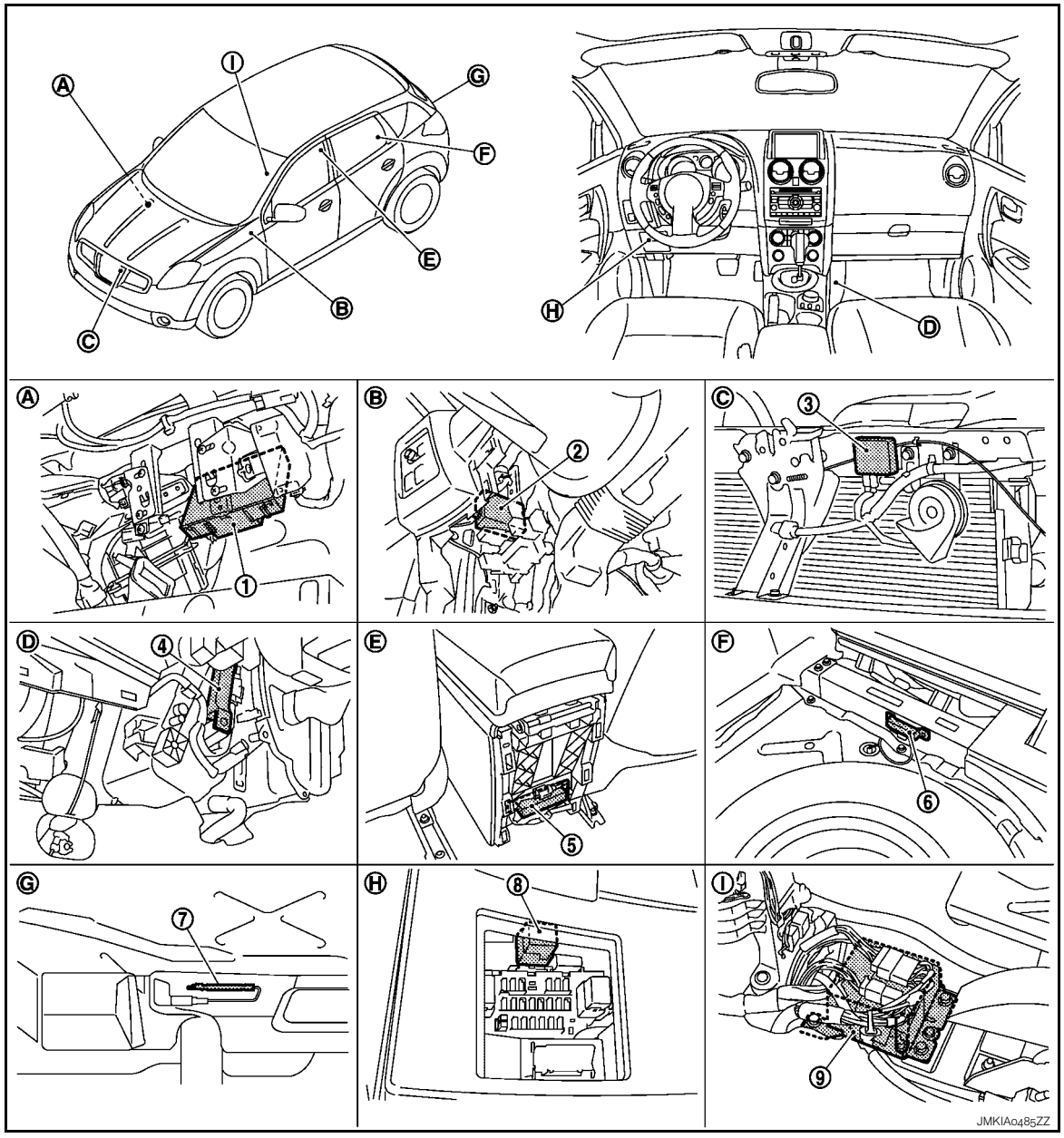
AIR BAG INTERLOCK UNLOCK OPERATION

When ignition switch is ON and BCM receives air bag deployment signal, it operates automatically to unlock all doors. Air bag diagnosis sensor unit sends the air bag deployment signal to BCM.

AIR BAG INTERLOCK UNLOCK : Component Parts Location

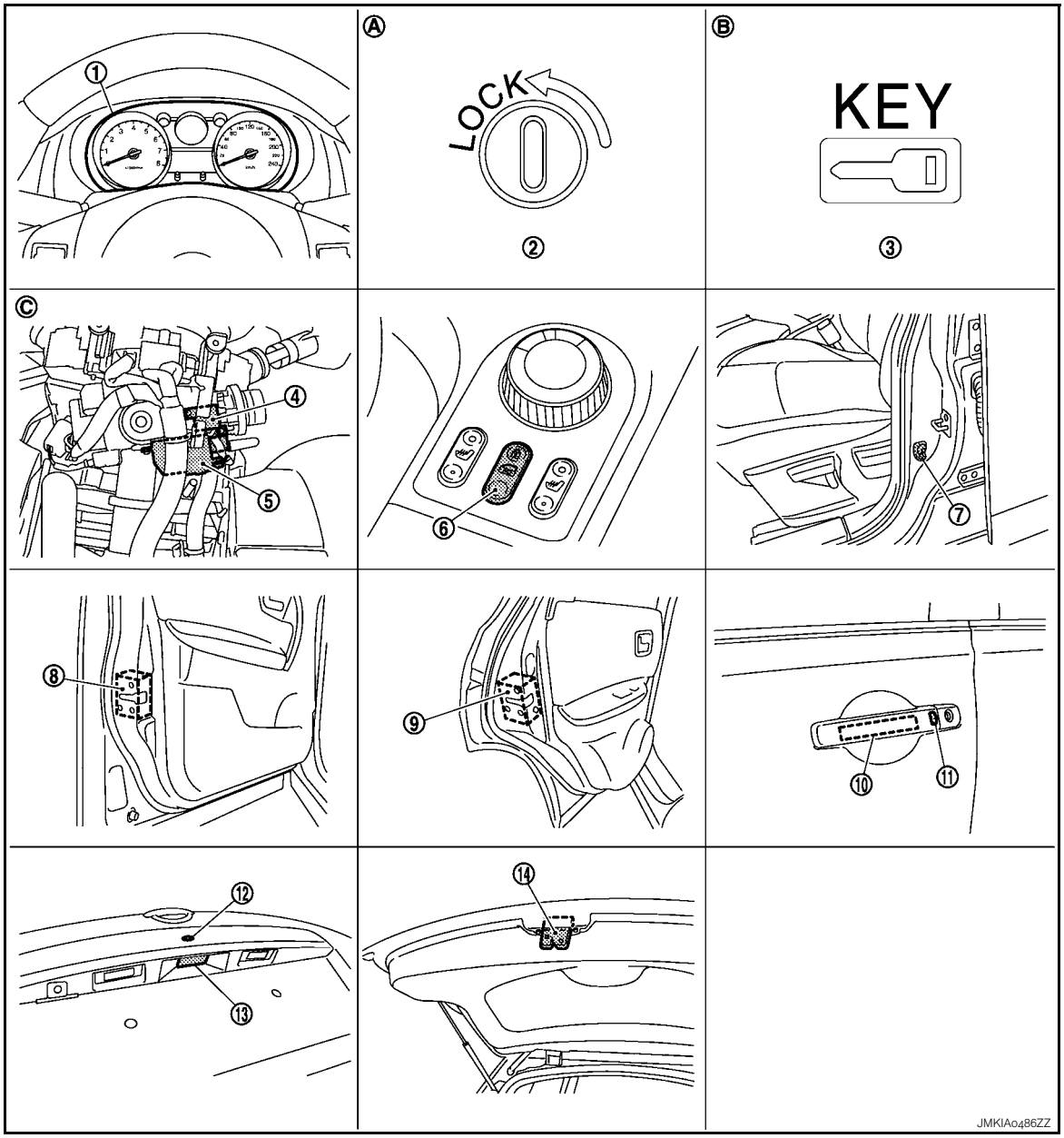
INFOID:0000000001116987

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1. BCM
   M65, M66, M67
2. Intelligent Key unit
   M40
3. Intelligent Key warning buzzer
   E25
4. Inside key antenna (instrument center)
   M70
5. Inside key antenna (center console)
   M61
6. Inside key antenna (rear seat)
   B45
7. Inside key antenna (rear bumper)
   B81
8. Passenger side anti-hijack relay
   M90
9. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. Over the instrument lower panel (driver side)
C. View with front bumper removed
D. View with lower instrument cover removed
E. View with center console rear finisher removed
F. View with luggage floor spacer (LH) removed
G. View with rear bumper fascia removed
H. View with fuse box lid removed
I. View with center console removed



1. Combination meter M34
2. Lock warning lamp M34
3. Key warning lamp M34
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9. Rear door lock actuator LH D85
10. Front door request switch (driver side) D10
11. Outside key antenna (driver side) D11
12. Back door request switch D187
13. Back door opener switch D186
14. Back door lock assembly D152

A. Inside the combination meter
B. Inside the combination meter
C. View with steering column cover removed

AIR BAG INTERLOCK UNLOCK : Component Description

INFOID:0000000001078867

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Item	Function
BCM	Controls the door lock function.
Air bag diagnosis sensor unit	Transmits air bag deployment signal to BCM for shock sensing auto unlock.
Door lock actuator	Receives unlock signal from BCM and unlocks each door.

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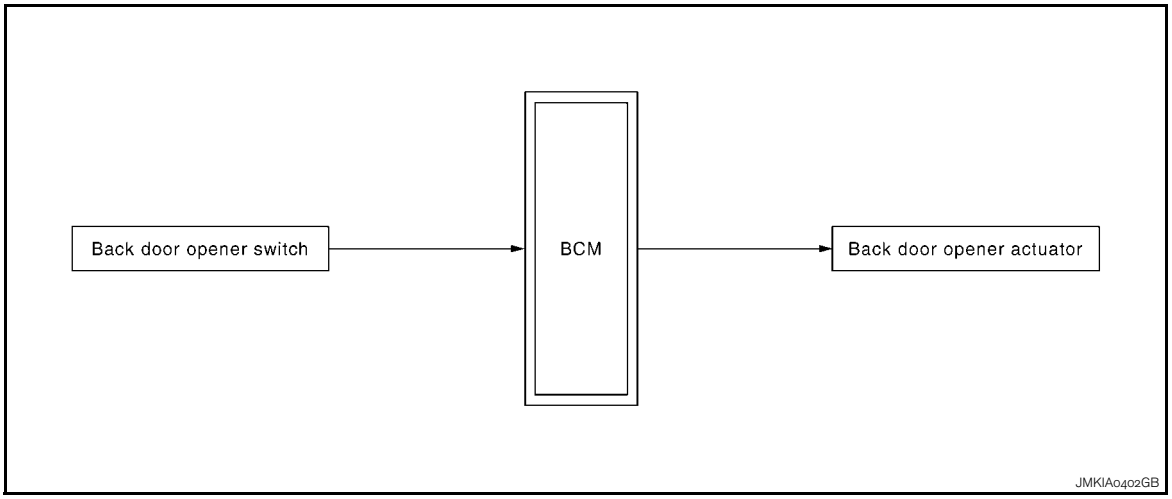
BACK DOOR OPENER FUNCTION

BACK DOOR OPENER SWITCH

BACK DOOR OPENER SWITCH : System Diagram

INFOID:0000000000939048

BACK DOOR OPENER OPERATION



BACK DOOR OPENER SWITCH : System Description

INFOID:0000000000939049

BACK DOOR OPENER OPERATION

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

NOTE:

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

OPERATION CONDITION

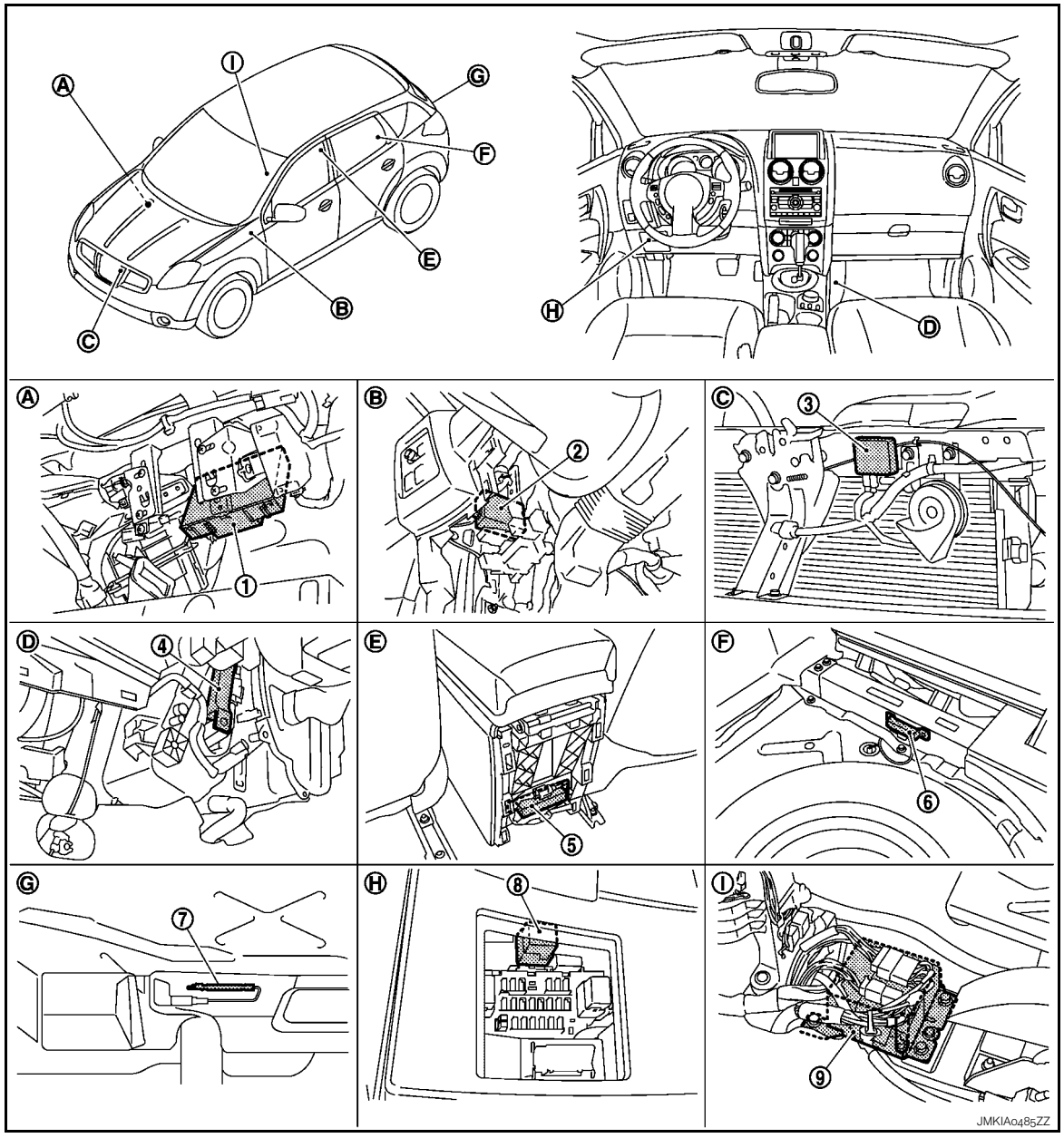
If the following conditions are not satisfied, back door opener operation is not performed.

Back door opener switch operation	Operation condition
Back door open	• Vehicle speed is less than 5 km/h (3 MPH). • All doors are unlocked.

BACK DOOR OPENER SWITCH : Component Parts Location

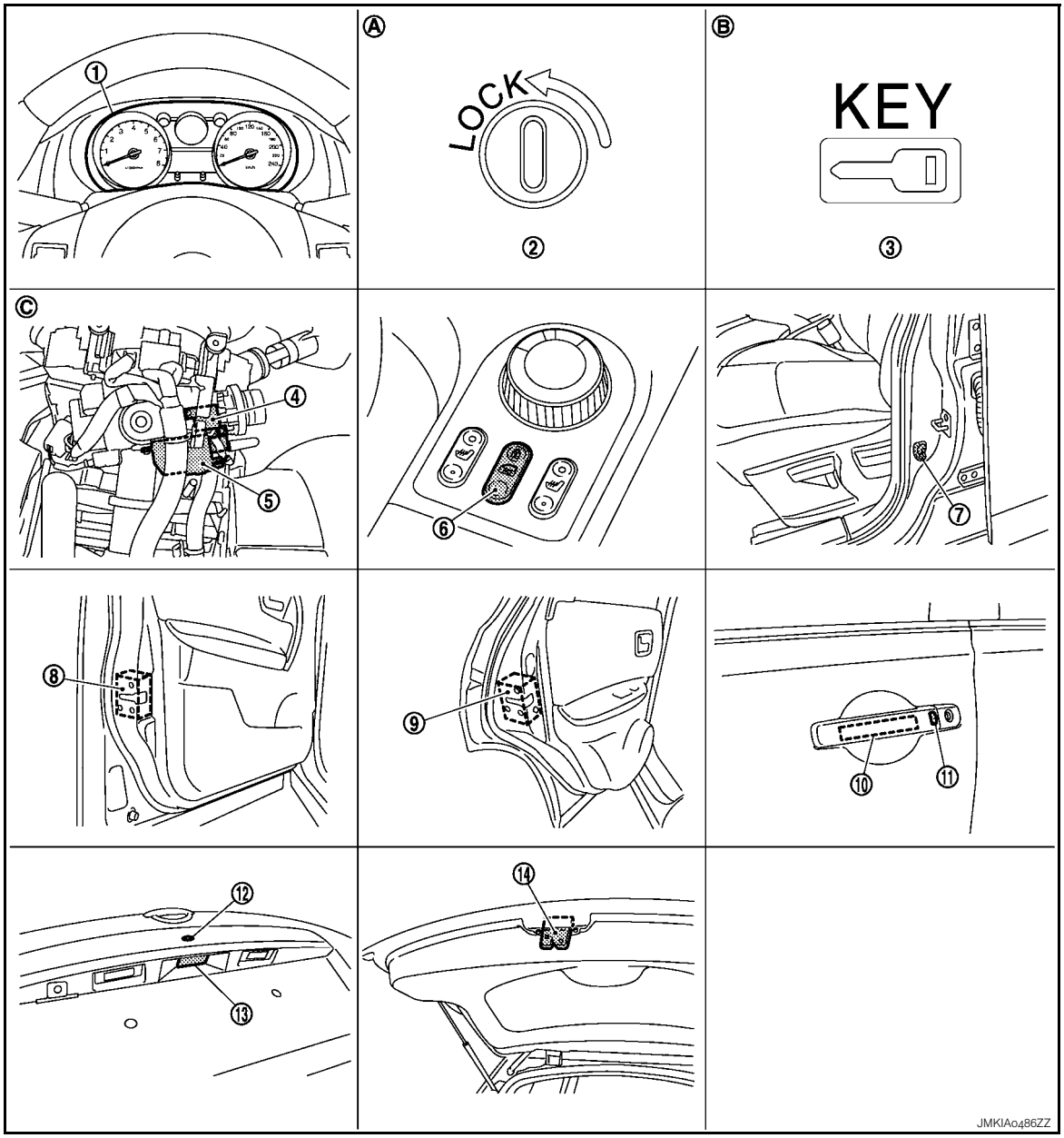
INFOID:0000000001117047

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1. BCM
   M65, M66, M67
2. Intelligent Key unit
   M40
3. Intelligent Key warning buzzer
   E25
4. Inside key antenna (instrument center)
   M70
5. Inside key antenna (center console)
   M61
6. Inside key antenna (rear seat)
   B45
7. Inside key antenna (rear bumper)
   B81
8. Passenger side anti-hijack relay
   M90
9. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. Over the instrument lower panel (driver side)
C. View with front bumper removed
D. View with lower instrument cover removed
E. View with center console rear finisher removed
F. View with luggage floor spacer (LH) removed
G. View with rear bumper fascia removed
H. View with fuse box lid removed
I. View with center console removed



1. Combination meter M34
2. Lock warning lamp M34
3. Key warning lamp M34
4. Ignition knob switch, key switch and key lock solenoid (key switch) M25
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11. Outside key antenna (driver side) D11
12. Back door request switch D187
13. Back door opener switch D186
14. Back door lock assembly D152

A. Inside the combination meter
B. Inside the combination meter
C. View with steering column cover removed

BACK DOOR OPENER SWITCH : Component Description

INFOID:0000000000939051

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Item	Function
BCM	Controls the back door opener function.
Back door opener switch	Transmits back door opener switch operation signal to BCM.
Back door opener actuator	Opens the back door with the back door open signal from BCM.
Combination meter	Transmits vehicle speed signal to BCM via CAN communication.

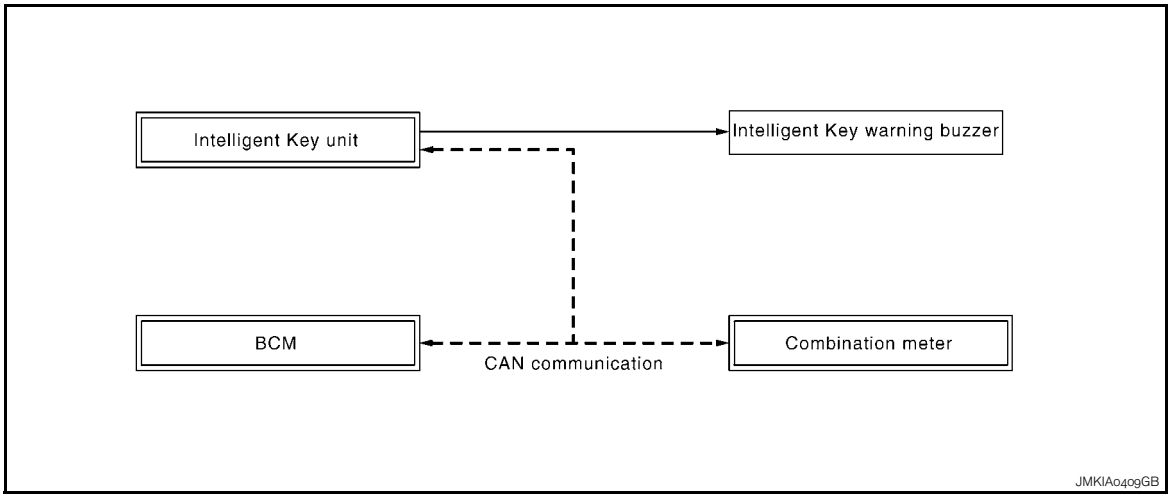
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WARNING FUNCTION

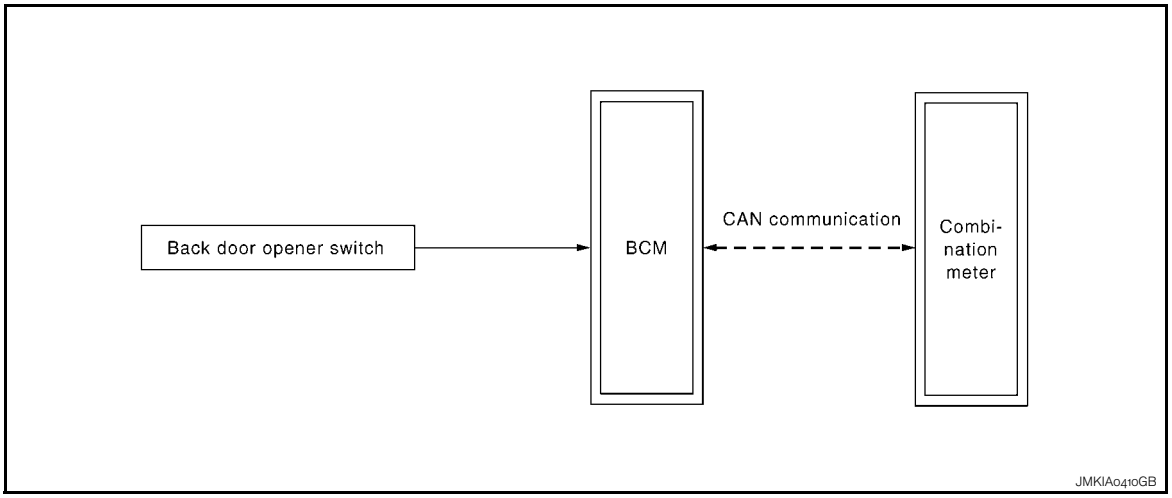
System Diagram

INFOID:0000000001078629

INTELLIGENT KEY WARNING OPERATION



BACK DOOR OPEN WARNING OPERATION



System Description

INFOID:0000000001078630

DESCRIPTION

The warning functions are as follows and are given to the user as warning information and warnings using combinations of Intelligent Key warning buzzer, key warning lamps and buzzer (built in combination meter).

INTELLIGENT KEY WARNING OPERATION

Once one of the following conditions below is established, alert or warning will be executed.

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Warning/Information functions		Operation conditions	Warning lamp	Warning chime	
				Combination meter buzzer	Intelligent Key warning buzzer
Ignition knob return forgotten warning		When all the conditions below are met. • Ignition knob: OFF or LOCK (knob is pressed). • Door switch (driver side): ON (Door is open).	—	Active for 5 seconds (pipipipi, pipipipi···)	—
Ignition key warning (when mechanical key is used)		When all the conditions below are met. • Ignition switch: OFF position. • Key switch: ON (inserted) • Door switch (driver side): ON (Door is open).	—	Active for 5 seconds (pipipipi, pipipipi···)	—
OFF position warning		When all the conditions below are met. • Ignition switch is between ACC and OFF position or ignition knob is pressed in while ignition switch is in LOCK position. • 3 seconds in the above state have pressed.	"LOCK" (RED blinking)	Active for 1 second (pipi, pipi···)	—
Take away warning	Any door open to all doors closed	When all the conditions below are met. • Ignition switch: Except LOCK position. • Door switch: ON to OFF (Door is open to closed). • Intelligent Key cannot be detected inside the vehicle.	"LOCK" (RED blinking)	—	Active (pi, pi, pi)
	Door is open	When all the conditions below are met. • Door switch: ON (Door is open) • Key ID verification every 5 seconds when registered Intelligent Key can not be detected inside the vehicle.	"LOCK" (RED blinking)	—	—
	Take away through window	When all the conditions below are met. • Key ID verification: OK • Every 30 seconds when registered Intelligent Key cannot be detected inside the vehicle or result of vehicle speed verification is NG. (The registered Intelligent Key cannot be detected inside the vehicle when ignition switch is ON.) • Key switch: OFF (Key is removed from ignition key cylinder.)	"LOCK" (RED blinking)	Active for 3 seconds (pipipi···	—

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Warning/Information functions		Operation conditions	Warning lamp	Warning chime	
				Combination meter buzzer	Intelligent Key warning buzzer
Door lock operation warning	Request switch operation	When request switch is pushed (lock operation) under the following conditions. • Door switch: ON (Any door is open). • Ignition switch is in ACC or OFF position or ignition knob is pressed in LOCK position or mechanical key is inserted into ignition key cylinder. • Intelligent Key is inside vehicle.	—	—	Active for 2 seconds (pipipi···)
	Intelligent Key button operation	When Intelligent Key button is pushed (lock operation) under the following conditions. • Door switch: ON (Any door is open). • Ignition switch is in ACC or OFF position or ignition knob is pressed in LOCK position or mechanical key is inserted into ignition key cylinder.	—	—	Active for 2 seconds (pipipi···)
Intelligent Key low battery warning		When Intelligent Key battery voltage is low, Intelligent Key unit is detected after ignition switch is turned ON.	"KEY" (GREEN blinking for 30 seconds)	—	—

KEY WARNING LAMP & LOCK WARNING LAMP

The key indicator and lock indicator indicates Intelligent Key system status.

Operation Condition

Behavior of lamps			Operation condition
KEY	GREEN	Lighting	All the following conditions are satisfied. • Ignition knob is pushed in LOCK position. (Ignition knob switch is ON) • Ignition key is removed from ignition key cylinder. (Key switch is OFF) • Intelligent Key is detected inside of the vehicle. • KEY RED lighting/blinking conditions are not satisfied.
		Blinking	while Intelligent Key low battery warning is operating.
	RED	Lighting	All the following conditions are satisfied. • Ignition knob is pushed. (Ignition knob switch is ON) • Ignition key is removed from ignition key cylinder. (Key switch is OFF) • Intelligent Key is not detected inside of the vehicle.
		Blinking	All the following conditions are satisfied. • Take away warning is operating. • KEY RED lighting condition is not satisfied.
LOCK		Blinking	while OFF position warning is operating.
KEY(RED) and LOCK lighting			All the following conditions are satisfied. • Ignition switch is ON. • Steering lock ID is NG.

BACK DOOR OPEN WARNING OPERATION

When back door opener switch is operated, when door lock is locked with door lock and unlock switch, speed sensing lock or only driver side is unlocked with anti-hijack function, the buzzer (built in combination meter) will sound.

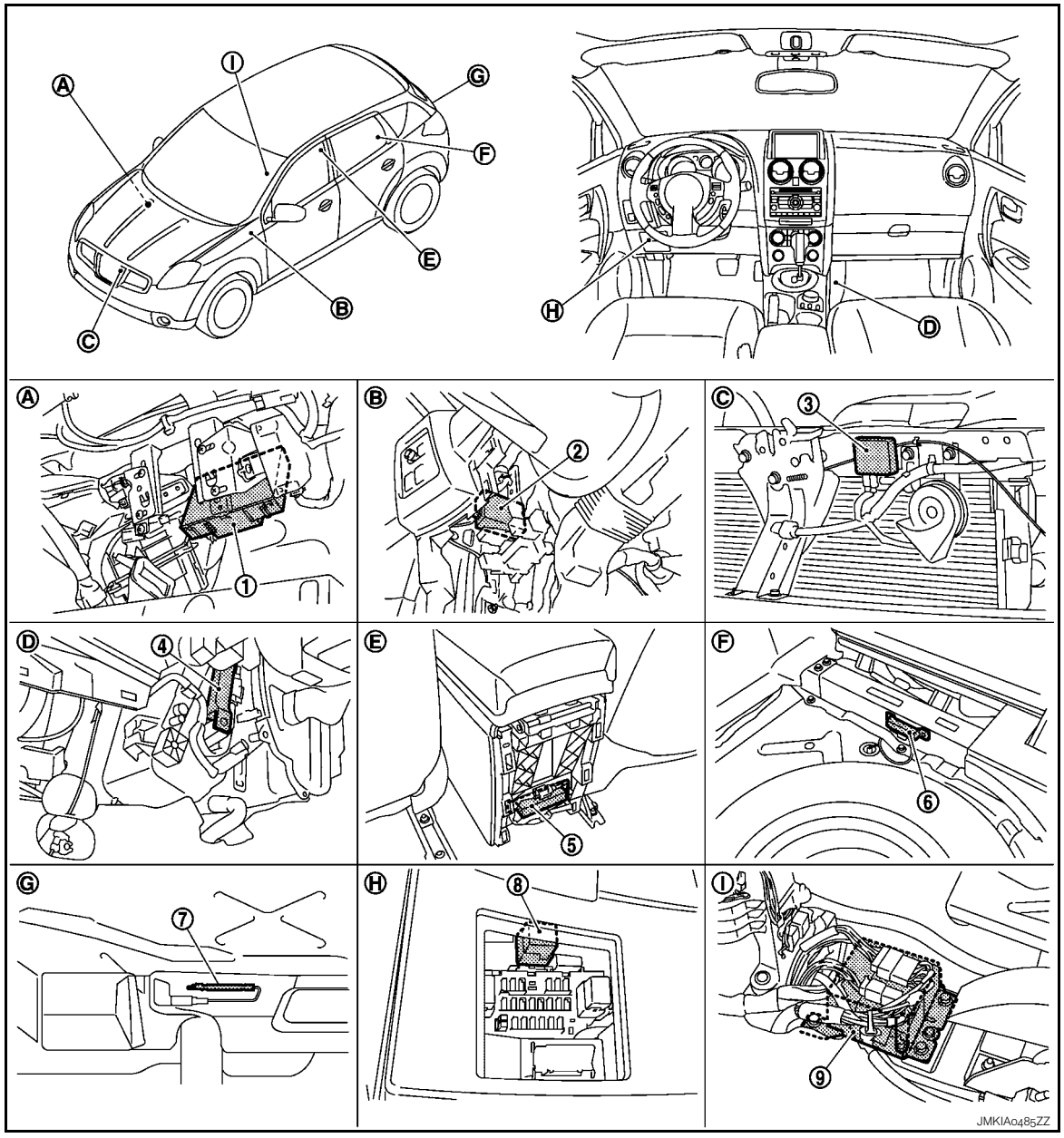
KEY REMINDER OPERATION

- The buzzer (combination meter) will sound and the doors will not lock if the door lock and unlock switch is pressed while the driver door is open and mechanical key is inserted ignition key cylinder.
- The buzzer (combination meter) will sound and the doors will not lock if the door lock and unlock switch is pressed while any door other than the driver door is open.

Component Parts Location

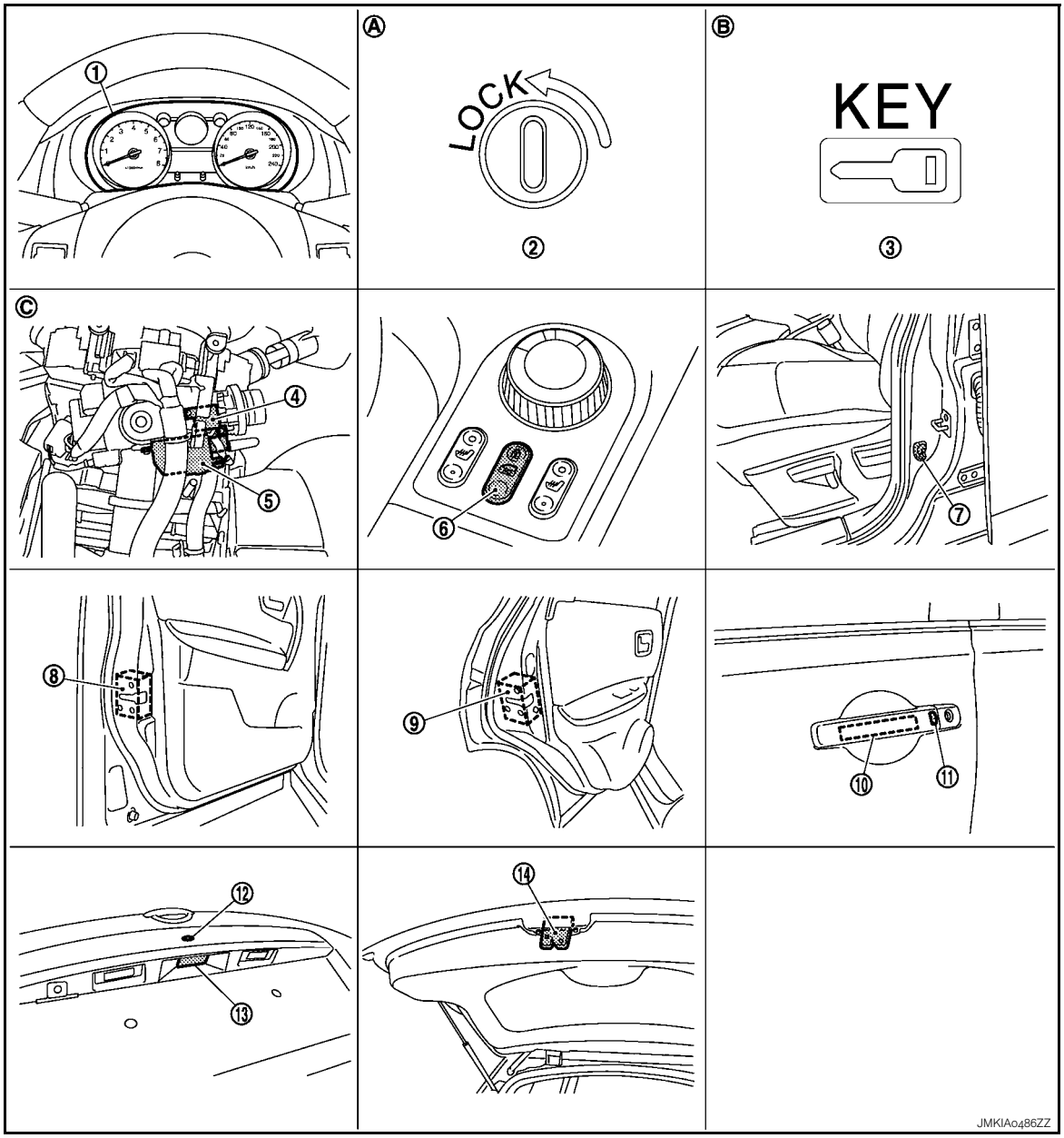
INFOID:0000000001117048

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1. BCM
   M65, M66, M67
2. Intelligent Key unit
   M40
3. Intelligent Key warning buzzer
   E25
4. Inside key antenna (instrument center)
   M70
5. Inside key antenna (center console)
   M61
6. Inside key antenna (rear seat)
   B45
7. Inside key antenna (rear bumper)
   B81
8. Passenger side anti-hijack relay
   M90
9. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. Over the instrument lower panel (driver side)
C. View with front bumper removed
D. View with lower instrument cover removed
E. View with center console rear finisher removed
F. View with luggage floor spacer (LH) removed
G. View with rear bumper fascia removed
H. View with fuse box lid removed
I. View with center console removed



1. Combination meter M34
2. Lock warning lamp M34
3. Key warning lamp M34
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11. Outside key antenna (driver side) D11
12. Back door request switch D187
13. Back door opener switch D186
14. Back door lock assembly D152

A. Inside the combination meter
B. Inside the combination meter
C. View with steering column cover removed

Component Description

INFOID:0000000001078632

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Item	Function
BCM	Controls the warning function with Intelligent Key unit.
Intelligent Key unit	Controls the warning function with BCM.
Key switch	Detects that mechanical key is inserted into ignition key cylinder.
Door switch	Detects door state (open or closed).
Door lock and unlock switch	Transmits door lock and unlock signal to BCM.
Intelligent Key unit	Requests to turn ON hazard warning lamp to BCM and turn signal indicator to combination meter.
Combination meter	Turns ON the LOCK indicator, KEY indicator, turn signal indicator and buzzer (built in combination meter) by the request from Intelligent Key unit via CAN communication.
Intelligent Key warning buzzer	Sounds by the request from Intelligent Key unit.
Back door opener switch	Transmits back door open signal to BCM

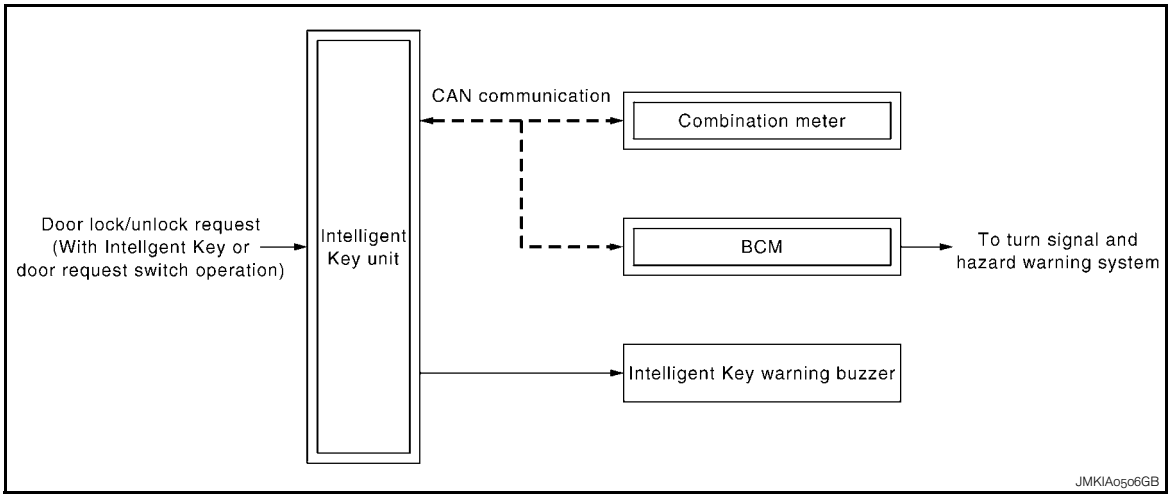
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HAZARD AND BUZZER REMINDER FUNCTION

System Diagram

INFOID:0000000001078875

HAZARD & BUZZER REMINDER FUNCTION



System Description

INFOID:0000000001078876

HAZARD AND BUZZER REMINDER FUNCTION

When door is locked or unlocked by Intelligent Key or door request switch, Intelligent Key unit sounds buzzer and sends hazard request signal to BCM via CAN communication. Then BCM flashes hazard warning lamps as a reminder.

NOTE:

Hazard and buzzer reminder function mode can be changed with CONSULT-III. Refer to DLK-65, "CONSULT-III Function (INTELLIGENT KEY)".

Hazard Operation

Hazard reminder setting (With CONSULT-III)		Door lock operation (with Intelligent Key or door request switch)	Hazard warning lamp flash
HAZARD ANSWER BACK	OFF	Any	—
	LOCK ONLY	Lock	Once
		Unlock	—
		Unlock (Anti-hijack)	—
	UNLK ONLY	Lock	—
		Unlock	Twice
		Unlock (Anti-hijack)	Twice (quick)
	LOCK/UNLK	Lock	Once
		Unlock	Twice
		Unlock (Anti-hijack)	Twice (quick)

Buzzer Operation

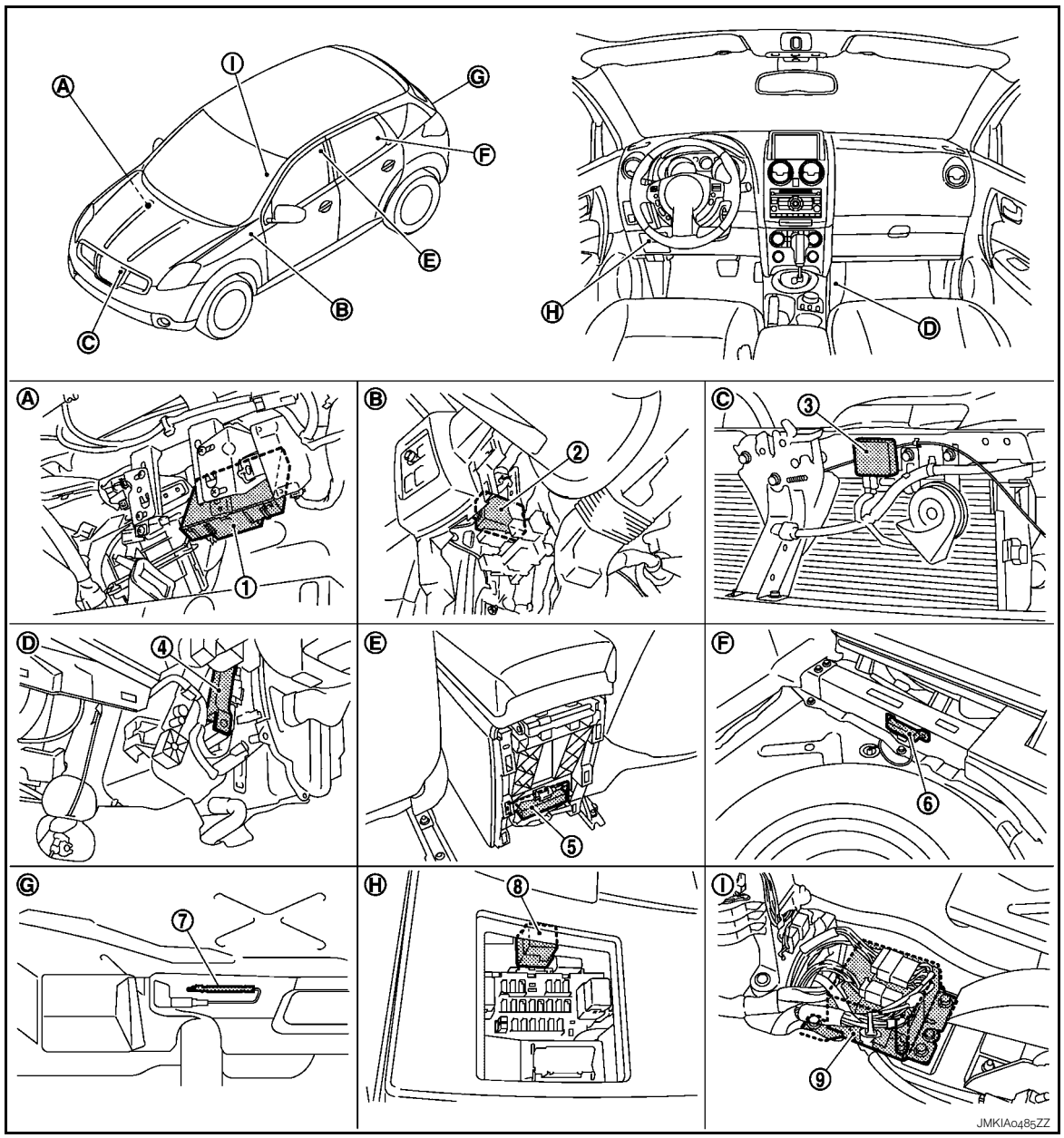
Buzzer reminder setting (With CONSULT-III)		Door lock operation (with Intelligent Key or door request switch)	Buzzer warning sounds
ANSWER BACK WITH I-KEY LOCK	BUZZER	Lock	Once
		Unlock	Depends on other setting
		Unlock (Anti-hijack)	Depends on other setting
	OFF	Any	—

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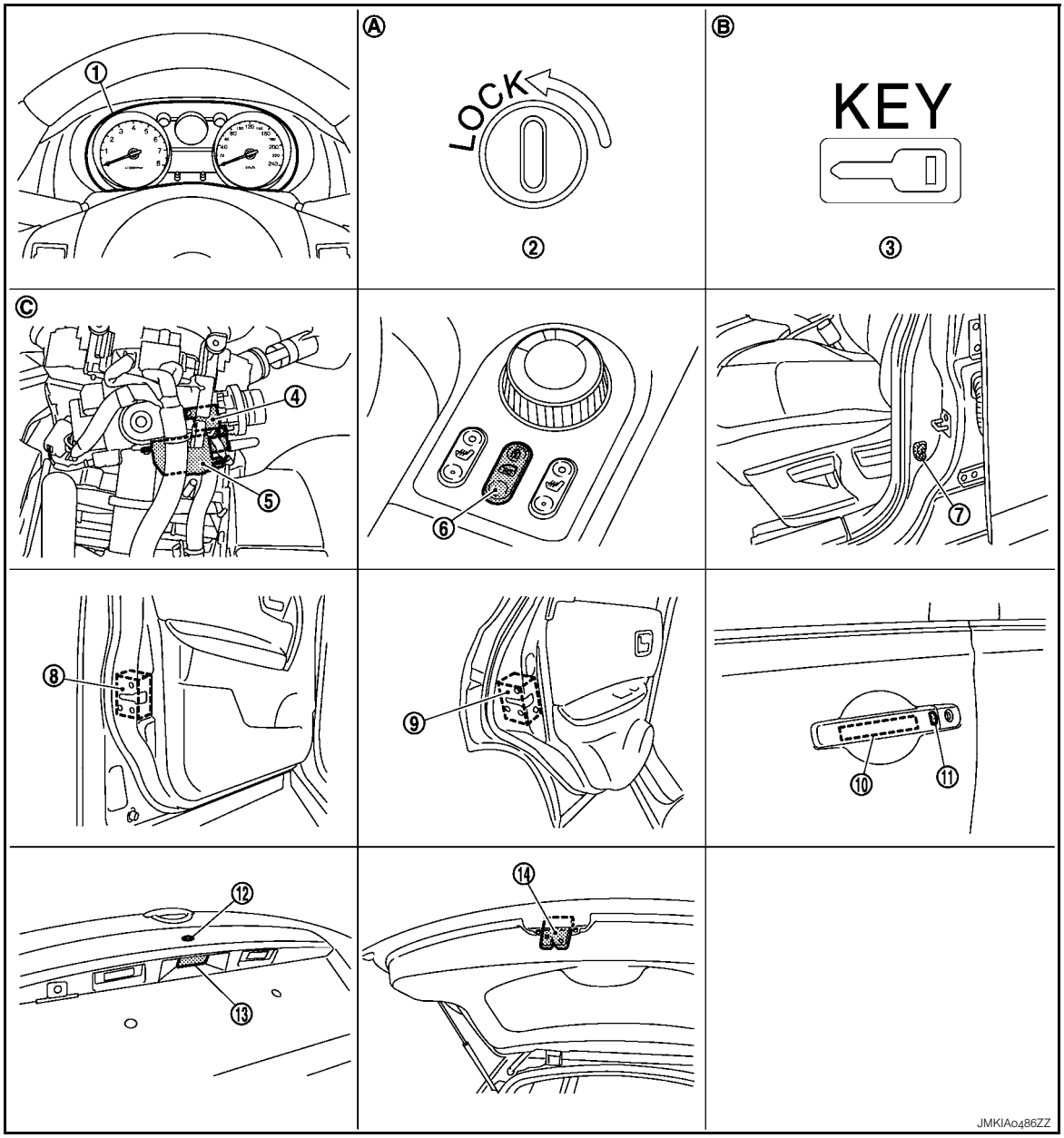
Buzzer reminder setting (With CONSULT-III)		Door lock operation (with Intelligent Key or door request switch)	Buzzer warning sounds
ANSWER BACK WITH I-KEY UNLOCK	BUZZER	Lock	Depends on other setting
		Unlock	Twice
		Unlock (Anti-hijack)	Twice
	OFF	Any	—
ANSWER BACK FUNCTION	ON	Lock	Once
		Unlock	Twice
		Unlock (Anti-hijack)	Twice
	OFF	Any	—

Component Parts Location

INFOID:0000000001117049



1. BCM M65, M66, M67
2. Intelligent Key unit M40
3. Intelligent Key warning buzzer E25
4. Inside key antenna (instrument center) M70
5. Inside key antenna (center console) M61
6. Inside key antenna (rear seat) B45
7. Inside key antenna (rear bumper) B81
8. Passenger side anti-hijack relay M90
9. Air bag diagnosis sensor unit M59
- A. Over the glove box
- B. Over the instrument lower panel (driver side)
- C. View with front bumper removed
- D. View with lower instrument cover removed
- E. View with center console rear finisher removed
- F. View with luggage floor spacer (LH) removed
- G. View with rear bumper fascia removed
- H. View with fuse box lid removed
- I. View with center console removed



1. Combination meter M34
2. Lock warning lamp M34
3. Key warning lamp M34
4. Ignition knob switch, key switch and key lock solenoid (key switch) M25
5. Ignition knob switch, key switch and key lock solenoid (key lock solenoid) M25
6. Door lock and unlock switch M89

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7. Front door switch (driver side) B34
8. Front door lock actuator (driver side) D9
9. Rear door lock actuator LH D85
10. Front door request switch (driver side) D10
11. Outside key antenna (driver side) D11
12. Back door request switch D187
13. Back door opener switch D186
14. Back door lock assembly D152

A. Inside the combination meter
B. Inside the combination meter
C. View with steering column cover removed

Component Description

INFOID:0000000001078878

Item	Function
BCM	Controls the hazard and buzzer reminder function with Intelligent Key unit.
Intelligent Key unit	Controls the hazard and buzzer reminder function with BCM.
Combination meter	Turns ON the LOCK indicator, KEY indicator, turn signal indicator and buzzer (built in combination meter) by the request from Intelligent Key unit via CAN communication.
Intelligent Key warning buzzer	Sounds by the request signal from Intelligent Key unit via CAN communication.

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

INFOID:0000000001096696

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

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF-DIAG RESULTS	Displays the diagnosis results judged by BCM. Refer to BCS-61, "DTC Index".
CAN DIAG SUPPORT MNTR	Monitors the reception status of CAN communication viewed from BCM.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.
ECU IDENTIFICATION	The BCM part number is displayed.
CONFIGURATION	• Enables to read and save the vehicle specification. • Enables to write the vehicle specification when replacing BCM.

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

System	Sub system selection item	Diagnosis mode		
		WORK SUPPORT	DATA MONITOR	ACTIVE TEST
—	BCM	×		
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	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER		×	×
Air conditioner	AIR CONDITONER		×	
Intelligent Key system	INTELLIGENT KEY		×	
Combination switch	COMB SW		×	
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk open	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
Signal buffer system	SIGNAL BUFFER		×	×
PTC heater system	PTC HEATER		×	×

DOOR LOCK
DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)

INFOID:0000000001034253

BCM CONSULT-III FUNCTION
CONSULT-III performs the following functions via CAN communication with BCM.

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Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
ACC ON SW	Indicates [ON/OFF] condition of ignition switch in ACC position.
PUSH SW*1	Indicates [ON/OFF] condition of ignition knob switch.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
CDL LOCK SW	Indicates [ON/OFF] condition of door lock and unlock switch.
CDL UNLOCK SW	Indicates [ON/OFF] condition of door lock and unlock switch.
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS	Indicates [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR	Indicates [ON/OFF] condition of rear door switch RH.
DOOR SW-RL	Indicates [ON/OFF] condition of rear door switch LH.
BACK DOOR SW	Indicates [ON/OFF] condition of back door switch.
KEYLESS LOCK*2	Indicates [ON/OFF] condition of lock signal from key fob.
KEYLESS UNLOCK*2	Indicates [ON/OFF] condition of unlock signal from key fob.
I-KEY LOCK*1	Indicates [ON/OFF] condition of lock signal from Intelligent Key.
I-KEY UNLOCK*1	Indicates [ON/OFF] condition of unlock signal from Intelligent Key.
UNLOCK WITH DR	This item is indicated, but not monitored.
UNLOCK SHOCK	Indicates [ON/OFF] condition of signal from air bag diagnosis unit. • ON: During the unlock operation interlock with air bag. • OFF: Other than above.
SHOCK SENSOR	Indicates [NOMAL/ON/OFF] condition of circuit between BCM and air bag diagnosis sensor unit. • NORMAL: Ignition switch ON. (BCM is receiving normal condition signal from air bag diagnosis sensor unit.) • ON: During the receiving of air bag deployment signal from air bag diagnosis sensor unit. • OFF: After the receiving of air bag deployment signal from air bag diagnosis sensor unit.
VEHICLE SPEED	Displays the vehicle speed signal received from combination meter by numerical value [km/h].

*1: For the Intelligent key equipped vehicle.

*2: For the multi remote control system equipped vehicle.

ACTIVE TEST

Test item	Description
SUPER LOCK*1	This test is able to check super lock operation [LOCK (SET)/UNLOCK (RELEASE)].
DOOR LOCK IND	This test is able to check door lock indicator (built in door lock and unlock switch on center console) operation [ON/OFF].
DOOR LOCK	This test is able to check door lock operation [ALL LOCK/ALL UNLOCK/DR UNLOCK/ OTHER UNLOCK].

:*1 For the super lock equipped vehicle.

WORK SUPPORT

A B C D E F G H I J DLK L M N O P
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Test item	Description
SECURITY DOOR LOCK SET	Anti hijack function mode can be changed in this mode. • ON: Anti hijack mode is active. • OFF: Anti hijack mode is inactive.

INTELLIGENT KEY

INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)

INFOID:0000000001034255

BCM CONSULT-III FUNCTION

CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
DATA MONITOR	The BCM input/output signals are displayed.

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
ACC ON SW	Indicates [ON/OFF] condition of ignition switch in ACC position.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
PUSH SW	Indicates [ON/OFF] condition of ignition knob switch.
I-KEY LOCK	Indicates [ON/OFF] condition of lock signal from Intelligent Key.
I-KEY UNLOCK	Indicates [ON/OFF] condition of unlock signal from Intelligent Key.

TRUNK

TRUNK : CONSULT-III Function (BCM - TRUNK)

INFOID:0000000001034257

APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from Intelligent Key unit.

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
PUSH SW*1	Indicates [ON/OFF] condition of ignition knob switch.
TRNK OPNR SW	Indicates [ON/OFF] condition of back door opener switch.
VEHICLE SPEED	Displays the vehicle speed signal received from combination meter by numerical value [km/h].

*1: For the Intelligent key equipped vehicle.

*2: For the remote keyless entry system equipped vehicle.

ACTIVE TEST

Test item	Description
TRUNK/GLASS HATCH	This test is able to check back door opener operation [ON/OFF].

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DIAGNOSIS SYSTEM (INTELLIGENT KEY UNIT)

CONSULT-III Function (INTELLIGENT KEY)

INFOID:0000000001034251

APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with Intelligent Key unit.

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF-DIAG RESULTS	Displays the diagnosis results judged by Intelligent Key unit.
CAN DIAG SUPPORT MNTR	Monitors the reception status of CAN communication viewed from Intelligent Key unit.
DATA MONITOR	The Intelligent Key unit input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from Intelligent Key unit.
ECU IDENTIFICATION	The Intelligent Key unit part number is displayed.

WORK SUPPORT

Support item	Description	Selection item	Condition
CONFIRM KEY FOB ID	It can check whether Intelligent Key ID code is registered or not.	—	—
TAKE OUT FROM WINDOW WARN	Take away warning chime (from window) mode can be changed.	ON	Active
		OFF	Inactive
LOW BATT OF KEY FOB WARN	Intelligent Key low battery warning mode can be changed.	ON	Active
		OFF	Inactive
KEYLESS FUNCTION	Door lock function with Intelligent Key can be changed.	ON	Active
		OFF	Inactive
ANSWER BACK FUNCTION	Buzzer reminder operation can be changed.	ON	Active
		OFF	Inactive
SELECTIVE UNLOCK FUNCTION	Anti-hijack mode can be changed.	ON	Active
		OFF	Inactive
HAZARD ANSWER BACK	Hazard reminder operation mode can be changed.	Refer to DLK-58.	
ANSWER BACK WITH I-KEY LOCK	Buzzer reminder operation (lock operation) mode by each door request switch can be changed.	BUZZER	Active
		OFF	Inactive
ANSWER BACK WITH I-KEY UNLOCK	Buzzer reminder operation (unlock operation) mode by each door request switch can be changed.	BUZZER	Active
		OFF	Inactive
AUTO RELOCK TIMER	Auto door lock operation mode can be changed.	OFF	Inactive
		2 min	Active
ENGINE START BY I-KEY	Engine start function (by Intelligent Key) mode can be changed.	ON	Active
		OFF	Inactive
LOCK/UNLOCK BY I-KEY	Door lock function by door request switch can be changed.	ON	Active
		OFF	Inactive

SELF-DIAG RESULT

Refer to DLK-163, "DTC Index".

DATA MONITOR

Monitor Item	Condition
PUSH SW	Indicates [ON (pressed)/OFF (released)] condition of ignition knob switch.
KEY SW	Indicates [ON (inserted)/OFF (removed)] condition of key switch.
DR REQ SW	Indicates [ON (pressed)/OFF (released)] condition of door request switch (driver side).
AS REQ SW	Indicates [ON (pressed)/OFF (released)] condition of door request switch (passenger side).
BD/TR REQ SW	Indicates [ON (pressed)/OFF (released)] condition of door request switch (back door).
IGN SW	Indicates [ON (ON or START position)/OFF (other than ON and START position)] condition of ignition switch ON position.
ACC SW	Indicates [ON/OFF] condition of ignition switch ACC position.
STOP LAMP SW	Indicates [ON/OFF] condition of stop lamp switch.
DOOR LOCK SIG	Indicates [ON/OFF] condition of LOCK signal from Intelligent Key.
DOOR UNLOCK SIG	Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key.
DOOR SW DR	Indicates [OPEN/CLOSE] condition of front door switch (driver side) from BCM via CAN communication.
DOOR SW AS	Indicates [OPEN/CLOSE] condition of front door switch (passenger side) from BCM via CAN communication.
DOOR SW RR	Indicates [OPEN/CLOSE] condition of rear door switch (RH) from BCM via CAN communication.
DOOR SW RL	Indicates [OPEN/CLOSE] condition of rear door switch (LH) from BCM via CAN communication.
DOOR BK SW	Indicates [OPEN/CLOSE] condition of back door switch from BCM via CAN communication.
VEHICLE SPEED	Displays the vehicle speed signal received from combination meter by numerical value [km/h].

ACTIVE TEST

Test item	Description
DOOR LOCK/UNLOCK	This test is able to check door lock/unlock operation. • ALL UNLK: All door lock actuators are unlocked. • DR UNLK: Door lock actuator (driver side) is unlocked. • AS UNLK: Door lock actuator (passenger side) is unlocked. • BK UNLK: This item is indicated, but inactive. • LOCK: All door lock actuator is locked.
ANTENNA	This test is able to check Intelligent Key antenna operation. When the following condition are met, hazard warning lamps flash. • ROOM ANT1: Inside key antenna (console) detects Intelligent Key, when “ROOM ANT1” is selected. • ROOM ANT2: Inside key antenna (instrument center/rear seat) detects Intelligent Key, when “ROOM ANT2”is selected. • DRIVER ANT: Outside key antenna (driver side) detects Intelligent Key, when “DRIVER ANT” is selected. • ASSIST ANT: Outside key antenna (passenger side) detects Intelligent Key, when “ASSIST ANT” is selected. • BK DOOR ANT: Outside key antenna (rear bumper) detects Intelligent Key, when “BK DOOR ANT” is selected.
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation. • ON • OFF
INSIDE BUZZER	This test is able to check warning chime in combination meter operation. • TAKE OUT: Take away warning chime sounds. • KNOB: Ignition knob switch warning chime sounds. • KEY: Key warning chime sounds. • OFF

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Test item	Description
INDICATOR	This test is able to check warning lamp operation. • BLUE ON: Key warning lamp (green) illuminates. • RED ON: Key warning lamp (red) illuminates. • KNOB ON: Lock warning lamp illuminates. • BLUE IND: Key warning lamp (green) flashes. • RED IND: Key warning lamp (red) flashes. • KNOB IND: Lock warning lamp flashes. • OFF
KEY LOCK SOLENOID*1	This test is able to check key interlock operation. • LOCK: Key interlock is active. • UNLOCK: Key interlock is inactive.

*1: The item is only for MT model.

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COMPONENT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000001078091

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN-H line, CAN-L line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.
CAN Communication Signal Chart, refer to LAN-59, "CAN Communication Signal Chart".

DTC Logic

INFOID:0000000000939071

DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC Detection Condition	Possible cause
U1000	CAN COMM CIRCUIT	When Intelligent Key unit 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 (BCM) • Receiving (IPDM E/R) • Receiving (ECM) • Receiving (METER/M&A) • Receiving (MULTI AV)

Diagnosis Procedure

INFOID:0000000000939072

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-46, "Trouble Diagnosis Flow Chart".
NO >> Refer to GI-39, "Intermittent Incident".

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U1010 CONTROL UNIT (CAN)

Description

INFOID:0000000001078092

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN-H line, CAN-L line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.
CAN Communication Signal Chart, refer to LAN-59, "CAN Communication Signal Chart".

DTC Logic

INFOID:0000000000939073

DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC Detection Condition	Possible cause
U1010	CONTROL UNIT (CAN)	When detecting error during the initial diagnosis of CAN controller of Intelligent Key unit.	Intelligent Key unit

Diagnosis Procedure

INFOID:0000000000939074

1.REPLACE INTELLIGENT KEY UNIT

When DTC [U1010] is detected, replace Intelligent Key unit.

>> Replace Intelligent Key unit.

Special Repair Requirement

INFOID:0000000000939075

1.REQUIRED WORK WHEN REPLACING INTELLIGENT KEY UNIT

Initialize control unit. Refer to CONSULT-III operation manual NATS-IVIS/NVIS.

>> Work end.

B2552 INTELLIGENT KEY

Description

INFOID:0000000001115364

Intelligent key unit performs engine start operation and steering lock control by crosschecking ID with the Intelligent key.

DTC Logic

INFOID:0000000001115365

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2552	INTELLIGENT KEY UNIT	Malfunction is detected inside Intelligent key unit.	• Intelligent Key unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self diagnostic result” with CONSULT-III.

Is DTC detected?

YES >> Refer to DLK-70, "Diagnosis Procedure".
NO >> INSPECTION END.

Diagnosis Procedure

INFOID:0000000001115366

1.REPLACE INTELLIGENT KEY UNIT

1. Replace Intelligent Key unit.
2. Perform initialization with CONSULT-III. Re-register all mechanical keys. Refer to “CONSULT-III Operation Manual NATS”.
3. Start the engine.

Does the engine start?

YES >> INSPECTION END
NO >> Perform “DTC confirmation procedure”. Refer to DLK-70, "DTC Logic".

Special Repair Requirement

INFOID:0000000001115367

1.REQUIRED WORK WHEN REPLACING INTELLIGENT KEY UNIT

Initialize control unit. Refer to CONSULT-III operation manual NATS-IVIS/NVIS.

>> Work end.

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POWER SUPPLY AND GROUND CIRCUIT
INTELLIGENT KEY UNIT

INTELLIGENT KEY UNIT : Diagnosis Procedure

INFOID:0000000000939085

1.CHECK FUSE AND FUSIBLE LINK

Check that the following fuse is not blown.

Terminal No.	Signal name	Fuse No.
11	Battery power supply	9 (10A)
6	Ignition power supply	4 (10A)

Is the fuse blown?

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

2.CHECK POWER SUPPLY CIRCUIT

1. Disconnect Intelligent Key unit connector.
2. Turn ignition switch ON.
3. Check voltage between Intelligent Key unit harness connector and ground.

Terminal			Voltage (V) (Approx.)
(+)		(–)	
Intelligent Key unit		Ground	
Connector	Terminal		
M40	11		Battery voltage
	6		

Is the measurement value normal?

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

3.CHECK GROUND CIRCUIT

Check continuity between Intelligent Key unit harness connector and ground.

Intelligent Key unit		Ground	Continuity
Connector	Terminal		
M40	12		Exists

Does continuity exist?

YES >> Intelligent Key unit power supply and ground circuit are OK.
NO >> Repair harness or connector.

BCM

BCM : Diagnosis Procedure

INFOID:0000000001034129

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.
41	Battery power supply	9 (10A)
57		J (40A)

Is the fuse fusing?

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

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NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

Terminals			Voltage (Approx.)
(+)		(–)	
BCM		Ground	
Connector	Terminal		
M66	41		Battery voltage
M67	57		

Is the measurement value normal?

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

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M67	55		Existed

Does continuity exist?

YES >> BCM power supply and ground circuit are OK.
NO >> Repair harness or connector.

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DOOR LOCK AND UNLOCK SWITCH

Description

INFOID:0000000000939090

Transmits door lock/unlock operation to BCM.

Component Function Check

INFOID:0000000000939091

1.CHECK FUNCTION

With CONSULT-III

Check “CDL LOCK SW ”and “CDL UNLOCK SW” in Data monitor mode with CONSULT-III.

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

Is the inspection result normal?

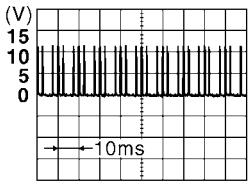
YES >> Door lock and unlock switch is OK.
NO >> Refer to DLK-73, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000000939092

1.CHECK DOOR LOCK AND UNLOCK INPUT SIGNAL

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

Terminal			Signal (Reference value)
(+)		(–)	
Door lock and unlock switch connector	Terminal		
M89	1	Ground	
	6		

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Is the inspection result normal?

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

2.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

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

BCM connector	Terminal	Door lock and unlock switch connector	Terminal	Continuity
M65	7	M89	6	Exists
	9		1	

4. Check continuity between BCM connector and ground.

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BCM connector	Terminal		Continuity
M65	7	Ground	Does not exist
	9		

Is the inspection result normal?

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

3.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

Check continuity between door lock and unlock switch connector and ground.

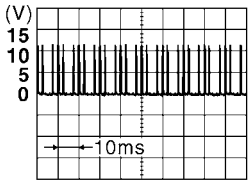
Door lock and unlock switch connector	Terminal	Ground	Continuity
M89	5		Exists

Is the inspection result normal?

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

4.CHECK BCM OUTPUT SIGNAL

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

Terminal			Signal (Reference value)
(+)		(–)	
BCM connector	Terminal		
M65	7	Ground	
	9		

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Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace BCM. Refer to BCS-64, "Exploded View".

5.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch
Refer to DLK-74, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock and unlock switch. Refer to DLK-280, "Exploded View".

Component Inspection

INFOID:0000000001098047

1.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch.

Door lock and unlock switch	Terminal		Condition	Continuity
M89	6	5	LOCK	Exists
	1		UNLOCK	

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.
NO >> Replace door lock and unlock switch. Refer to DLK-280, "Exploded View".

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DOOR LOCK AND UNLOCK SWITCH INDICATOR

Description

INFOID:0000000001102255

The door lock and unlock switch indicates door lock status. The indicator will illuminate when a lock operation is accomplished, and during this status, if any door is opened, the indicator will turn OFF.

Component Function Check

INFOID:0000000001102256

1.CHECK FUNCTION

With CONSULT-III

Check “DOOR LOCK IND” in “Active Test” mode with CONSULT-III.

Test item		Condition
DOOR LOCK IND	:ON	Illuminated
	:OFF	Not illuminated

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.
NO >> Refer to DLK-75, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001102257

1.CHECK DOOR LOCK AND UNLOCK SWITCH INDICATOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between door lock and unlock switch and ground.

Terminal			Condition	Voltage (Approx.)
(+)		(–)		
Door lock and unlock switch connector	Terminal			
M89	4	Ground	Door lock operation is accomplished	Battery voltage
			Any door is OPEN	0

Is the inspection result normal?

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

2.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

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

BCM connector	Terminal	Door lock and unlock switch connector	Terminal	Continuity
M65	24	M89	4	Exists

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	24		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

Check continuity between door lock and unlock switch connector and ground.

Door lock and unlock switch connector	Terminal	Ground	Continuity
M89	5		Exists

Is the inspection result normal?

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

4. CHECK BCM OUTPUT SIGNAL

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

Terminal			Condition	Voltage (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	24	Ground	Door lock operation is accomplished	Battery voltage
			Any door is OPEN	0

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace BCM. Refer to BCS-64, "Exploded View".

5. CHECK DOOR LOCK AND UNLOCK SWITCH INDICATOR

Check door lock and unlock switch
Refer to DLK-76, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock and unlock switch. Refer to DLK-280, "Exploded View".

Component Inspection

INFOID:0000000001102258

1. CHECK DOOR LOCK AND UNLOCK SWITCH INDICATOR

Check continuity door lock and unlock switch.

Door lock and unlock switch	Terminal		Continuity
	(+)	(-)	
M89	5	4	Exists
	4	5	Does not exist

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.
NO >> Replace door lock and unlock switch. Refer to DLK-280, "Exploded View".

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DOOR REQUEST SWITCH
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001109368

Transmits lock/unlock operation to Intelligent Key unit.

DRIVER SIDE : Component Function Check

INFOID:0000000001109369

1.CHECK FUNCTION

With CONSULT-III

Check door request switch “DR REQ SW” in Data monitor mode.

Monitor item	Condition	
DR REQ SW	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-77, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001109370

1.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between Intelligent Key unit harness connector and ground.

Terminal			Door request switch condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M40	5	Ground	Pressed	0
			Released	5

Is the inspection result normal?

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

2.CHECK FRONT DOOR REQUEST SWITCH CIRCUIT

1. Disconnect Intelligent Key unit.
2. Check continuity between Intelligent Key unit connector and door request switch connector.

Intelligent Key unit connector	Terminal	Door request switch connector	Terminal	Continuity
M40	5	D10	1	Exists

3. Check continuity between Intelligent Key unit connector and ground.

Intelligent Key unit connector	Terminal	Ground	Continuity
M40	5		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between door request switch connector and ground.

Door request switch connector	Terminal	Ground	Continuity
D10	2		Exists

Is the inspection result normal?

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

4.CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

1. Connect Intelligent Key unit connector.
2. Check voltage between Intelligent Key unit connector and ground.

Intelligent Key unit connector	Terminal	Ground	Voltage (V) (Approx.)
M40	5		5

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 6.

5.CHECK DOOR REQUEST SWITCH

Check door request switch.
Refer to DLK-78, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace malfunctioning front outside handle. Refer to DLK-258, "OUTSIDE HANDLE : Exploded View" and DLK-259, "OUTSIDE HANDLE : Removal and Installation".

6.REPLACE INTELLIGENT KEY UNIT

Replace Intelligent Key unit.
Refer to DLK-282, "Exploded View".
NOTE:
Perform the system initialization when replacing Intelligent Key unit.
Refer to DLK-23, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

>> INSPECTION END

DRIVER SIDE : Component Inspection

INFOID:0000000001109371

1.CHECK DOOR REQUEST SWITCH

Check door request switch.

Terminal		Door request switch condition	Continuity
Door request switch			
1	2	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door request switch is OK.
NO >> Replace malfunctioning front outside handle. Refer to DLK-258, "OUTSIDE HANDLE : Exploded View" and DLK-259, "OUTSIDE HANDLE : Removal and Installation".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001109372

Transmits lock/unlock operation to Intelligent Key unit.

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PASSENGER SIDE : Component Function Check

INFOID:0000000001109373

1.CHECK FUNCTION

With CONSULT-III

Check door request switch “AS REQ SW” in Data monitor mode.

Monitor item	Condition	
AS REQ SW	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-81, "BACK DOOR : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001109374

1.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between Intelligent Key unit harness connector and ground.

Terminal			Door request switch condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M40	25	Ground	Pressed	0
			Released	5

Is the inspection result normal?

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

2.CHECK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect Intelligent Key unit.
2. Check continuity between Intelligent Key unit connector and door request switch connector.

Intelligent Key unit connector	Terminal	Door request switch connector	Terminal	Continuity
M40	25	D49	1	Exists

3. Check continuity between Intelligent Key unit connector and ground.

Intelligent Key unit connector	Terminal	Ground	Continuity
M40	25		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between front door request switch connector and ground.

Door request switch connector	Terminal	Ground	Continuity
D49	2		Exists

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace front outside handle ground circuit.

4.CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

1. Connect Intelligent Key unit connector.
2. Check voltage between Intelligent Key unit connector and ground.

Intelligent Key unit connector	Terminal	Ground	Voltage (V) (Approx.)
M40	25		5

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 6.

5.CHECK DOOR REQUEST SWITCH

Check door request switch.
Refer to DLK-82, "BACK DOOR : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace malfunctioning front outside handle. Refer to DLK-258, "OUTSIDE HANDLE : Exploded View" and DLK-259, "OUTSIDE HANDLE : Removal and Installation".

6.REPLACE INTELLIGENT KEY UNIT

Replace Intelligent Key unit.
Refer to DLK-282, "Exploded View".
NOTE:
Perform the system initialization when replacing Intelligent Key unit.
Refer to DLK-23, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

>> INSPECTION END

PASSENGER SIDE : Component Inspection

INFOID:0000000001109375

1.CHECK DOOR REQUEST SWITCH

Check door request switch.

Terminal		Door request switch condition	Continuity
Door request switch			
1	2	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door request switch is OK.
NO >> Replace malfunctioning front outside handle. Refer to DLK-258, "OUTSIDE HANDLE : Exploded View" and DLK-259, "OUTSIDE HANDLE : Removal and Installation".

BACK DOOR

BACK DOOR : Description

INFOID:0000000001109376

Transmits lock/unlock operation to Intelligent Key unit.

BACK DOOR : Component Function Check

INFOID:0000000001109377

1.CHECK FUNCTION

With CONSULT-III
Check door request switch “BD/TR REQ SW” in Data monitor mode.

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Monitor item	Condition	
BD/TR REQ SW	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-81, "BACK DOOR : Diagnosis Procedure".

BACK DOOR : Diagnosis Procedure

INFOID:0000000001109378

1.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between Intelligent Key unit harness connector and ground.

Terminal			Door request switch condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M40	29	Ground	Pressed	0
			Released	5

Is the inspection result normal?

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

2.CHECK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect Intelligent Key unit.
2. Check continuity between Intelligent Key unit connector and door request switch connector.

Intelligent Key unit connector	Terminal	Door request switch connector	Terminal	Continuity
M40	29	D187	1	Exists

3. Check continuity between Intelligent Key unit connector and ground.

Intelligent Key unit connector	Terminal	Ground	Continuity
M40	29		Does not exist

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and back door request switch.

3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between front door request switch connector and ground.

Door request switch connector	Terminal	Ground	Continuity
D187	2		Exists

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace back door request switch ground circuit.

4.CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

1. Connect Intelligent Key unit connector.
2. Check voltage between Intelligent Key unit connector and ground.

Intelligent Key unit connector	Terminal	Ground	Voltage (V) (Approx.)
M40	29		5

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 6.

5.CHECK DOOR REQUEST SWITCH

Check door request switch.
Refer to DLK-82, "BACK DOOR : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace back door request switch. Refer to DLK-278, "Exploded View".

6.REPLACE INTELLIGENT KEY UNIT

Replace Intelligent Key unit.
Refer to DLK-282, "Exploded View".
NOTE:
Perform the system initialization when replacing Intelligent Key unit.
Refer to DLK-23, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

>> INSPECTION END

BACK DOOR : Component Inspection

INFOID:0000000001109379

1.CHECK DOOR REQUEST SWITCH

Check door request switch.

Terminal		Door request switch condition	Continuity
Door request switch			
1	2	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door request switch is OK.
NO >> Replace back door request switch. Refer to DLK-278, "Exploded View".

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DOOR SWITCH
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000000939086

Detects door open/closed condition.

DRIVER SIDE : Component Function Check

INFOID:0000000000939087

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-DR” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-DR	OPEN	:ON
	CLOSE	:OFF

Is the inspection result normal?

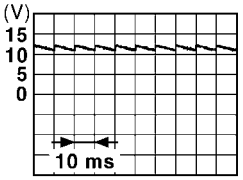
YES >> Door switch is OK.
NO >> Refer to DLK-83, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000000939088

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.)
M65	26	Ground	OPEN	0
			CLOSE	

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Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
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
M65	26	B34	1	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	26		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-84, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

DRIVER SIDE : Component Inspection

INFOID:0000000000939089

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			
1	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001035849

Detects door open/closed condition.

PASSENGER SIDE : Component Function Check

INFOID:0000000001035850

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-AS” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-AS	OPEN	: ON
	CLOSE	: OFF

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Refer to DLK-84, "PASSENGER SIDE : Diagnosis Procedure".

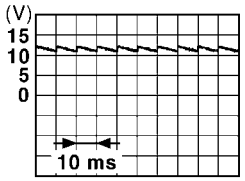
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001098048

1.CHECK DOOR SWITCH INPUT SIGNAL

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

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Terminals			Door condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	27	Ground	OPEN	0
			CLOSE	

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Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
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
M65	27	B27	1	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	27		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-85, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

PASSENGER SIDE : Component Inspection

INFOID:0000000001098049

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			
1	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

REAR LH

REAR LH : Description

INFOID:0000000001035853

Detects door open/closed condition.

REAR LH : Component Function Check

INFOID:0000000001035854

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-RL” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-RL	OPEN	:ON
	CLOSE	:OFF

Is the inspection result normal?

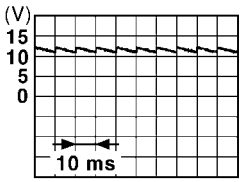
YES >> Door switch is OK.
NO >> Refer to DLK-86, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000001098050

1.CHECK DOOR SWITCH INPUT SIGNAL

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

Terminals			Door condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	25	Ground	OPEN	0
			CLOSE	

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Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
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
M65	25	B71	1	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	25		Does not exist

Is the inspection result normal?

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

3. CHECK DOOR SWITCH

Check door switch.
Refer to DLK-87, "REAR LH : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

REAR LH : Component Inspection

INFOID:0000000001098051

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			
1	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

REAR RH

REAR RH : Description

INFOID:0000000001035857

Detects door open/close condition.

REAR RH : Component Function Check

INFOID:0000000001035858

1. CHECK FUNCTION

With CONSULT-III
Check door switches “DOOR SW-RR” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-RR	OPEN	:ON
	CLOSE	:OFF

Is the inspection result normal?

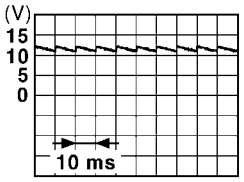
YES >> Door switch is OK.
NO >> Refer to DLK-87, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000001098052

1. CHECK DOOR SWITCH INPUT SIGNAL

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

Terminals			Door condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	29	Ground	OPEN	0
			CLOSE	

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Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
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
M65	29	B53	1	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	29		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-88, "REAR RH : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

REAR RH : Component Inspection

INFOID:0000000001098053

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			
1	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

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BACK DOOR

BACK DOOR : Description

INFOID:0000000000939119

Detects back door open condition.

BACK DOOR : Component Function Check

INFOID:0000000000939120

1.CHECK FUNCTION

With CONSULT-III

Check “BACK DOOR SW” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
BACK DOOR SW	OPEN	: ON
	CLOSE	: OFF

Is the inspection result normal?

YES >> Back door lock assembly (door switch) is OK.
NO >> Refer to DLK-89, "BACK DOOR : Diagnosis Procedure".

BACK DOOR : Diagnosis Procedure

INFOID:0000000000939121

1.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH) INPUT SIGNAL

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

Terminals			Back door condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	28	Ground	OPEN	0
			CLOSE	Battery voltage

Is the inspection result normal?

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

2.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH) CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM connector and back door lock assembly (door switch) connector.

BCM connector	Terminal	Back door lock assembly (door switch) connector	Terminal	Continuity
M65	28	D152	4	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	28		Does not exist

Is the inspection result normal?

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

3.CHECK BACK DOOR LOCK ASSEMBLY GROUND CIRCUIT

Check continuity between back door lock assembly connector and ground.

Back door lock assembly (door switch) connector	Terminal	Ground	Continuity
D152	3		Exists

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace back door lock assembly 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		
M65	28	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace BCM. Refer to BCS-64, "Exploded View".

5.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

Check back door lock assembly (door switch).
Refer to DLK-90, "BACK DOOR : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace back door lock assembly (door switch). Refer to DLK-268, "DOOR LOCK : Exploded View" and DLK-268, "DOOR LOCK : Removal and Installation".

BACK DOOR : Component Inspection

INFOID:0000000000939122

1.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly (door switch) connector.
3. Check back door lock assembly (door switch).

Terminal		Trunk condition	Continuity
Back door lock assembly (door switch)			
4	3	OPEN	Exists
		CLOSE	Does not exist

Is the inspection result normal?

YES >> Back door lock assembly (door switch) is OK.
NO >> Replace back door lock assembly (door switch). Refer to DLK-268, "DOOR LOCK : Exploded View" and DLK-268, "DOOR LOCK : Removal and Installation".

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KEY SWITCH

Description

INFOID:0000000001116292

Key switch detects that mechanical key is inserted into the key cylinder, and then transmits the signal to BCM and Intelligent Key unit.

Component Function Check

INFOID:0000000001116293

1.CHECK KEY SWITCH INPUT SIGNAL

Check key switch (“KEY SW”) in “DATA MONITOR” mode with CONSULT-III. Refer to DLK-62, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Monitor item	Condition	
KEY SW	Insert mechanical key into key cylinder	: ON
	Remove mechanical key from key cylinder	: OFF

Is the inspection result normal?

YES >> Key switch is OK.
NO >> Refer to DLK-91, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001116294

1.CHECK KEY SWITCH INPUT SIGNAL

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

Terminals			Condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M40	7	Ground	Insert mechanical key into key cylinder	Battery voltage
			Remove mechanical key from key cylinder	0

4. Check voltage between BCM harness connector and ground.

Terminals			Condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	36	Ground	Insert mechanical key into key cylinder	Battery voltage
			Remove mechanical key from key cylinder	0

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 2.

2.CHECK KEY SWITCH POWER SUPPLY CIRCUIT

1. Remove mechanical key from key cylinder.
2. Disconnect key switch connector.
3. Check voltage between key switch harness connector and ground.

Terminals			Voltage (V) (Approx.)
(+)		(–)	
Key switch connector	Terminal		
M25	2	Ground	Battery voltage

Is the inspection result normal?

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

3.CHECK KEY SWITCH SIGNAL CIRCUIT

1. Check continuity between Intelligent Key unit harness connector and key switch connector.

Intelligent Key unit connector	Terminal	Key switch connector	Terminal	Continuity
M40	7	M25	1	Exists

2. Check continuity between BCM harness connector and key switch connector.

BCM connector	Terminal	Key switch connector	Terminal	Continuity
M65	36	M25	1	Exists

3. Check continuity between key switch connector and ground.

Key switch connector	Terminal	Ground	Continuity
M25	1	Ground	Does not exist

Is the inspection result normal?

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

4.CHECK KEY SWITCH

Check key switch function.
Refer to DLK-92, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace key switch.

Component Inspection

INFOID:0000000001116295

COMPONENT INSPECTION

1.CHECK KEY SWITCH

Check continuity between key switch terminals.

Terminal		Condition	Continuity
key switch connector			
1	2	Insert mechanical key into key cylinder	Exists
		Remove mechanical key from key cylinder	Does not exist

Is the inspection result normal?

YES >> Key switch is OK.
NO >> Replace key switch.

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IGNITION KNOB SWITCH

Description

INFOID:0000000001116319

Ignition knob switch detects that ignition knob is pressed, and then transmits the signal to Intelligent Key unit.

Component Function Check

INFOID:0000000001116320

1.CHECK IGNITION KNOB SWITCH INPUT SIGNAL

Check ignition knob switch (“PUSH SW”) in “DATA MONITOR” mode with CONSULT-III. Refer to DLK-62, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Monitor item	Condition	
PUSH SW	Ignition knob switch is pressed	: ON
	Ignition knob switch is released	: OFF

Is the inspection result normal?

YES >> Ignition knob switch is OK.
NO >> Refer to SEC-48, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001116321

1.CHECK IGNITION KNOB SWITCH INPUT SIGNAL

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

Terminals			Condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M40	27	Ground	Ignition knob switch is pressed	Battery voltage
			Ignition knob switch is released	0

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 2.

2.CHECK IGNITION KNOB SWITCH POWER SUPPLY CIRCUIT

1. Disconnect ignition knob switch connector.
2. Check voltage between ignition knob switch harness connector and ground.

Terminals			Voltage (V) (Approx.)
(+)		(–)	
Ignition knob switch connector	Terminal		
M25	4	Ground	Battery voltage

Is the inspection result normal?

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

3.CHECK IGNITION KNOB SWITCH SIGNAL CIRCUIT

1. Check continuity between Intelligent Key unit harness connector and ignition knob switch connector.

Intelligent Key unit connector	Terminal	Ignition knob switch connector	Terminal	Continuity
M40	27	M25	3	Exists

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2. Check continuity between ignition knob switch connector and ground.

Ignition knob switch connector	Terminal	Ground	Continuity
M25	3		Does not exist

Is the inspection result normal?

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

4. CHECK IGNITION KNOB SWITCH

Check ignition knob switch function.
Refer to SEC-49, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace ignition knob switch.

Component Inspection

INFOID:0000000001116322

1. CHECK IGNITION KNOB SWITCH

1. Turn ignition switch OFF.
2. Disconnect ignition knob switch harness connector.
3. Check continuity between ignition knob switch terminals under the following conditions.

Ignition knob switch			Condition	Continuity
Connector	Terminal			
M25	3	4	Ignition knob switch is pressed	Exists
			Ignition knob switch is released	Does not exist

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace ignition knob switch.

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DOOR LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000000939131

Locks/unlocks the door with the signal from BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000000939132

1.CHECK FUNCTION

With CONSULT-III
Check “DOOR LOCK/UNLOCK” in “Active Test” mode with CONSULT-III.

Test item		Condition
DOOR LOCK/UNLOCK	:ALL UNLK	The all door lock actuators are unlocked
	:DR UNLK	The door lock actuator (driver side) is unlocked
	:LOCK	The all door lock actuators are locked

Is the inspection result normal?

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

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000000939133

1.CHECK OUTPUT SIGNAL

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

Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M67	56	Ground	Lock	0 → Battery voltage → 0
	60		Unlock	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M67	56	D9	3	Exists
	60		2	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist
	60		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 3.

3.CHECK DOOR LOCK ACTUATOR CIRCUIT 1

1. Disconnect anti-hijack relay connector.
2. Check continuity between BCM connector and anti-hijack relay connector.

BCM connector	Terminal	Anti-hijack relay connector	Terminal	Continuity
M67	56	M90	4	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist

Is the inspection result normal?

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

4.CHECK DOOR LOCK ACTUATOR CIRCUIT 2

Check continuity of anti-hijack relay.

Anti-hijack relay connector	Terminal		Continuity
M90	4	3	Exists

Is the inspection result normal?

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

5.CHECK DOOR LOCK ACTUATOR CIRCUIT 3

1. Check continuity between anti-hijack relay connector and front door lock actuator (driver side) connector.

Anti-hijack relay connector	Terminal	Door lock actuator connector	Terminal	Continuity
M90	3	D9	3	Exists

2. Check continuity between anti-hijack relay connector and ground.

Anti-hijack relay connector	Terminal	Ground	Continuity
M90	3		Does not exist

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace harness.

6.CHECK DOOR LOCK ACTUATOR

Check door lock actuator.
Refer to DLK-96, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-255, "DOOR LOCK : Removal and Installation". After that, DLK-97, "DRIVER SIDE : Special Repair Requirement"

DRIVER SIDE : Component Inspection

INFOID:0000000001098100

1.CHECK FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)

Check the actuator operation by connecting the battery voltage to front door lock actuator (driver side).

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Front door lock actuator (driver side)	Terminal		Door lock actuator condition
	(+)	(-)	
D9	3	2	LOCK
	2	3	UNLOCK

Is the inspection result normal?

YES >> Front door lock actuator (driver side) is OK.
NO >> Replace front door lock actuator (driver side). Refer to DLK-255, "DOOR LOCK : Removal and Installation". After that, PWC-15, "POWER WINDOW MAIN SWITCH : Special Repair Requirement".

DRIVER SIDE : Special Repair Requirement

INFOID:0000000001098101

Refer to PWC-4, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001097240

Locks/unlocks the door with the signal from BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000001102056

1.CHECK FUNCTION

With CONSULT-III
Check “DOOR LOCK/UNLOCK” in “Active Test” mode with CONSULT-III.

Test item		Condition
DOOR LOCK/UNLOCK	:ALL UNLK	The all door lock actuators are unlocked
	:AS UNLK	The door lock actuator (passenger side) is locked
	:LOCK	The all door lock actuators are locked

Is the inspection result normal?

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

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001097242

1.CHECK OUTPUT SIGNAL

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

Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M67	56	Ground	Lock	0 → Battery voltage → 0
	54		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 (passenger side) connector.
2. Check continuity between BCM connector and front door lock actuator (passenger side) connector.

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M67	56	D48	3	Exists
	54		2	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist
	54		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace harness.

3.CHECK DOOR LOCK ACTUATOR

Check door lock actuator.
Refer to DLK-98, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-255, "DOOR LOCK : Removal and Installation".

PASSENGER SIDE : Component Inspection

INFOID:0000000001098102

1.CHECK FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)

Check the actuator operation by connecting the battery voltage directly to front door lock actuator (passenger side).

Front door lock actuator (passenger side) connector	Terminal		Door lock actuator condition
	(+)	(-)	
D48	3	2	LOCK
	2	3	UNLOCK

Is the inspection result normal?

YES >> Front door lock actuator (passenger side) is OK.
NO >> Replace front door lock actuator (passenger side). Refer to DLK-255, "DOOR LOCK : Removal and Installation".

REAR LH

REAR LH : Description

INFOID:0000000001097243

Locks/unlocks the door with the signal from BCM.

REAR LH : Component Function Check

INFOID:0000000001102057

1.CHECK FUNCTION

With CONSULT-III
Check “DOOR LOCK/UNLOCK” in “Active Test” mode with CONSULT-III.

Test item		Condition
DOOR LOCK/UNLOCK	:ALL UNLK	The all door lock actuators are unlocked
	:LOCK	The all door lock actuators are locked

Is the inspection result normal?

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

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REAR LH : Diagnosis Procedure

INFOID:0000000001097245

1.CHECK OUTPUT SIGNAL

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

Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M67	56	Ground	Lock	0 → Battery voltage → 0
	54		Unlock	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M67	56	D85	3	Exists
	54		2	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist
	54		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 3.

3.CHECK DOOR LOCK ACTUATOR CIRCUIT 1

1. Disconnect anti-hijack relay connector.
2. Check continuity between BCM connector and anti-hijack relay connector.

BCM connector	Terminal	Anti-hijack relay connector	Terminal	Continuity
M67	56	M90	4	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist

Is the inspection result normal?

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

4.CHECK DOOR LOCK ACTUATOR CIRCUIT 2

Check continuity anti-hijack relay.

Anti-hijack relay connector	Terminal		Continuity
M90	4	3	Exists

Is the inspection result normal?

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

5.CHECK DOOR LOCK ACTUATOR CIRCUIT 3

1. Check continuity between anti-hijack relay connector and rear door lock actuator (LH) connector.

Anti-hijack relay connector	Terminal	Door lock actuator connector	Terminal	Continuity
M90	3	D85	3	Exists

2. Check continuity between anti-hijack relay connector and ground.

Anti-hijack relay connector	Terminal	Ground	Continuity
M90	3		Does not exist

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace harness.

6.CHECK DOOR LOCK ACTUATOR

Check door lock actuator.
Refer to DLK-100, "REAR LH : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-255, "DOOR LOCK : Removal and Installation".

REAR LH : Component Inspection

INFOID:0000000001098103

1.CHECK REAR DOOR LOCK ACTUATOR (LH)

Check the actuator operation by connecting the battery voltage directly to rear door lock actuator (LH).

Rear door lock actuator (LH)	Terminal		Door lock actuator condition
	(+)	(-)	
D85	3	2	LOCK
	2	3	UNLOCK

Is the inspection result normal?

YES >> Rear door lock actuator (LH) is OK.
NO >> Replace rear door lock actuator (LH). Refer to DLK-255, "DOOR LOCK : Removal and Installation".

REAR RH

REAR RH : Description

INFOID:0000000001097246

Locks/unlocks the door with the signal from BCM.

REAR RH : Component Function Check

INFOID:0000000001102058

1.CHECK FUNCTION

With CONSULT-III
Check “DOOR LOCK/UNLOCK” in “Active Test” mode with CONSULT-III.

Test item		Condition
DOOR LOCK/UNLOCK	:ALL UNLK	The all door lock actuators are unlocked
	:LOCK	The all door lock actuators are locked

Is the inspection result normal?

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YES >> Door lock actuator is OK.
NO >> Refer to DLK-101, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000001097248

1.CHECK OUTPUT SIGNAL

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

Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M67	56	Ground	Lock	0 → Battery voltage → 0
	54		Unlock	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM and rear door lock actuator (RH) connector.
3. Check continuity between BCM connector and rear door lock actuator (RH) connector.

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M67	56	D105	3	Exists
	54		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist
	54		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 3.

3.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect anti-hijack relay.
2. Check continuity between BCM connector and anti-hijack relay connector.

BCM connector	Terminal	Anti-hijack relay connector	Terminal	Continuity
M67	56	M90	4	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist

Is the inspection result normal?

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

4.CHECK DOOR LOCK ACTUATOR CIRCUIT

Check continuity anti-hijack relay.

Anti-hijack relay connector	Terminal		Continuity
M90	4	3	Exists

Is the inspection result normal?

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

5.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Check continuity between anti-hijack relay connector and rear door lock actuator (RH) connector.

Anti-hijack relay connector	Terminal	Door lock actuator connector	Terminal	Continuity
M90	3	D105	3	Exists

2. Check continuity between anti-hijack relay connector and ground.

Anti-hijack relay connector	Terminal	Ground	Continuity
M90	3		Does not exist

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace harness.

6.CHECK DOOR LOCK ACTUATOR

Check door lock actuator.
Refer to DLK-102, "REAR RH : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-255, "DOOR LOCK : Removal and Installation".

REAR RH : Component Inspection

INFOID:0000000001098104

1.CHECK REAR DOOR LOCK ACTUATOR (RH)

Check the actuator operation by connecting the battery voltage directly to rear door lock actuator (RH).

Rear door lock actuator (RH)	Terminal		Door lock actuator condition
	(+)	(-)	
D105	3	2	LOCK
	2	3	UNLOCK

Is the inspection result normal?

YES >> Rear door lock actuator (RH) is OK.
NO >> Replace rear door lock actuator (RH). Refer to DLK-255, "DOOR LOCK : Removal and Installation".

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BACK DOOR OPENER ACTUATOR

Description

INFOID:0000000001097224

Opens the back door with the signal from BCM.

Component Function Check

INFOID:0000000001097225

1.CHECK FUNCTION

With CONSULT-III

Check “TRUNK/GLASS HATCH” in Active test mode with CONSULT-III.

Test item		Condition
TRUNK/GLASS HATCH	:OPEN	Back door lock opener actuator operation

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-103, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001097226

1.CHECK BCM OUTPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			Condition of back door opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M66	45	Ground	Pressed	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK BACK DOOR LOCK ASSEMBLY CIRCUIT

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

BCM connector	Terminal	Back door lock assembly connector	Terminal	Continuity
M66	45	D152	2	Exists

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M66	45		Does not exist

Is the inspection result normal?

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

3.CHECK BACK DOOR LOCK ASSEMBLY GROUND CIRCUIT

Check continuity between back door lock assembly connector and ground.

Back door lock assembly connector	Terminal	Ground	Continuity
D152	1		Exists

Is the inspection result normal?

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

4.CHECK BACK DOOR LOCK ASSEMBLY

Check back door lock assembly connector and ground.
Refer to DLK-104, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace back door lock assembly. Refer to DLK-268, "DOOR LOCK : Exploded View" and DLK-268, "DOOR LOCK : Removal and Installation".

Component Inspection

INFOID:0000000001098113

1.CHECK BACK DOOR LOCK ASSEMBLY

Check the actuator operation by connecting battery voltage to back door lock assembly.

Back door lock assembly connector	Terminal		Back door actuator condition
D152	(+)	(-)	OPEN
	2	1	

Is the inspection result normal?

YES >> Back door lock assembly (back door lock actuator) is OK.
NO >> Replace back door lock assembly (back door lock actuator). Refer to DLK-268, "DOOR LOCK : Exploded View" and DLK-268, "DOOR LOCK : Removal and Installation".

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BACK DOOR OPENER SWITCH

Description

INFOID:0000000001078347

Sends the back door opening signal to BCM.

Component Function Check

INFOID:0000000001078348

1.CHECK FUNCTION

With CONSULT-III

Check “TRNK OPNR SW” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
TRNK OPNR SW	Back door opener switch is pressed	:ON
	Back door opener switch is released	:OFF

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-105, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001078349

1.CHECK BCM INPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			Condition of back door opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	12	Ground	Pressed	0
			Released	Battery voltage

Is the inspection result normal?

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

2.CHECK BACK DOOR OPENER SWITCH CIRCUIT

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

BCM connector	Terminal	Back door opener switch connector	Terminal	Continuity
M65	12	D186	1	Exists

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	12		Does not exist

Is the inspection result normal?

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

3.CHECK BCM OUTPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			Voltage (V) (Approx.)
(+)		(–)	
BCM connector	Terminal		
M65	12	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace BCM. Refer to BCS-64, "Exploded View".

4.CHECK BACK DOOR OPENER SWITCH GROUND CIRCUIT

Check continuity between back door opener switch connector and ground.

Back door opener switch connector	Terminal	Ground	Continuity
D186	2		Exists

Is the inspection result normal?

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

5.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.
Refer to DLK-106, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace back door opener switch. Refer to DLK-279, "Exploded View".

Component Inspection

INFOID:0000000001098114

1.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.

Back door opener switch connector	Terminal		Back door opener switch condition	Continuity
D186	1	2	Pressed	Exists
			Released	Does not exist

Is the inspection result normal?

YES >> Back door opener switch is OK.
NO >> Replace back door opener switch. Refer to DLK-279, "Exploded View".

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OUTSIDE KEY ANTENNA
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001109329

Detects whether Intelligent Key is outside the vehicle.
Integrated in front outside handle (driver side).

DRIVER SIDE : Component Function Check

INFOID:0000000001109330

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL

With CONSULT-III
1. Check “ANTENNA” in “Active Test” mode with CONSULT-III.
2. Touch “DRIVER ANT”.
3. When Intelligent Key is in outside key antenna (driver side) detection area, hazard lamp flashes.

Test Item		Outside Antenna
ANTENNA	:DRIVER ANT	Outside key antenna (driver side)

Is the inspection result normal?

YES >> Outside key antenna is OK.
NO >> Refer to DLK-113, "REAR BUMPER : Diagnosis Procedure".

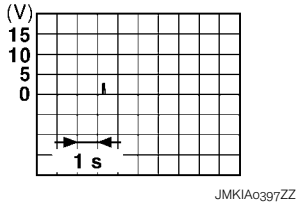
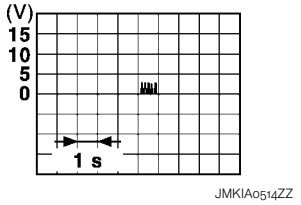
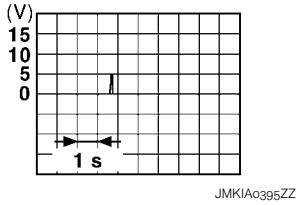
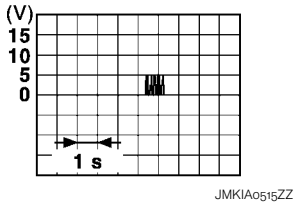
DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001109331

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between Intelligent Key unit connector and ground with oscilloscope.

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Terminals				Condition		Signal (Reference value)
(+)			(–)			
Intelligent Key unit connector		Terminal				
M40	Driver side (+)	19	Ground	Request switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0397ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0514ZZ
	Driver side (-)	20			When Intelligent Key is in the antenna detection area.	 JMKIA0395ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0515ZZ

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and front outside handle connector.
2. Check continuity between Intelligent Key unit connector and outside key antenna connector.

Intelligent Key unit connector	Terminal	Outside key antenna connector	Terminal	Continuity
M40	19	D11	1	Exists
	20		2	

3. Check continuity between Intelligent Key unit connector and ground.

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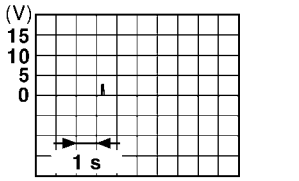
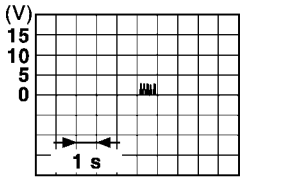
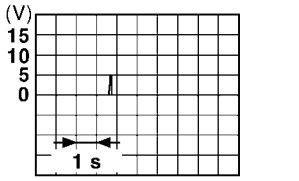
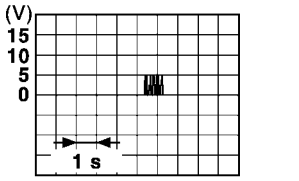
Intelligent Key unit connector	Terminal	Ground	Continuity
M40	19		Does not exist
	20		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and outside key antenna.

3. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace outside key antenna. (New antenna or other antenna)
2. Connect Intelligent Key unit connector and outside key antenna connector.
3. Check signal between Intelligent Key unit connector and ground with oscilloscope.

Terminals (+) Intelligent Key unit connector	Terminals (+) Terminal	Terminals (–)	Condition		Signal (Reference value)
M40	Driver side (+) 19	Ground	Door request switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0397ZZ
				When Intelligent Key is not in the antenna detection area.	 JMKIA0514ZZ
	Driver side (-) 20		Door request switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0395ZZ
				When Intelligent Key is not in the antenna detection area.	 JMKIA0515ZZ

Is the inspection result normal?

YES >> Replace outside key antenna (driver side). Refer to DLK-275, "DRIVER SIDE : Exploded View".
NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001109332

Detects whether Intelligent Key is outside the vehicle.
Integrated in front outside handle (passenger side).

PASSENGER SIDE : Component Function Check

INFOID:0000000001109333

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL

With CONSULT-III

1. Check “ANTENNA” in “Active Test” mode with CONSULT-III.
2. Touch “ASSIST ANT”.
3. When Intelligent Key is in outside key antenna (passenger side) detection area, hazard lamp is flashes.

Test Item		Outside Antenna
ANTENNA	:ASSIST ANT	Outside key antenna (passenger side)

Is the inspection result normal?

YES >> Outside key antenna is OK.
NO >> Refer to DLK-110, "PASSENGER SIDE : Diagnosis Procedure".

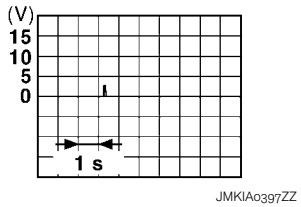
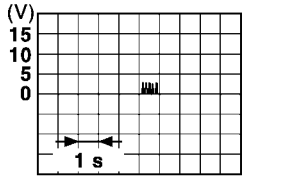
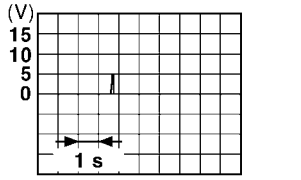
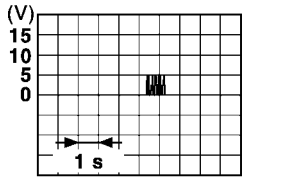
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001109334

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between Intelligent Key unit connector and ground with oscilloscope.

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Terminals				Condition		Signal (Reference value)
(+)			(–)			
Intelligent Key unit connector		Terminal				
M40	Passenger side (+)	37	Ground	Request switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0397ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0514ZZ
	Passenger side (-)	38			When Intelligent Key is in the antenna detection area.	 JMKIA0395ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0515ZZ

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 2.

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and front outside handle connector.
2. Check continuity between Intelligent Key unit connector and outside key antenna connector.

Intelligent Key unit connector	Terminal	Outside key antenna connector	Terminal	Continuity
M40	37	D50	1	Exists
	38		2	

3. Check continuity between Intelligent Key unit connector and ground.

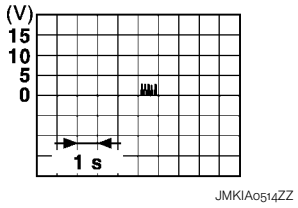
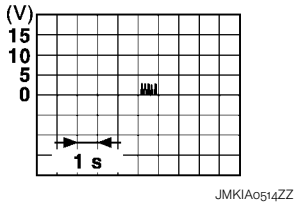
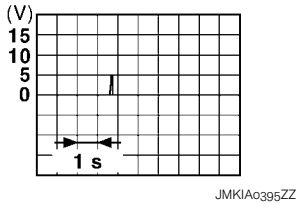
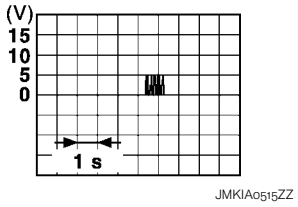
Intelligent Key unit connector	Terminal	Ground	Continuity
M40	37		Does not exist
	38		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and outside key antenna.

3.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace outside key antenna. (New antenna or other antenna)
2. Connect Intelligent Key unit connector and outside key antenna connector.
3. Check signal between Intelligent Key unit connector and ground with oscilloscope.

Terminal (+)			Terminal (–)	Condition		Signal (Reference value)
Intelligent Key unit connector		Terminal				
M40	Passenger side (+)	37	Ground	Door request switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0514ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0514ZZ
	Passenger side (-)	38			When Intelligent Key is in the antenna detection area.	 JMKIA0395ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0515ZZ

Is the inspection result normal?

YES >> Replace outside key antenna. Refer to DLK-275, "PASSENGER SIDE : Exploded View" (passenger side).
NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

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REAR BUMPER

REAR BUMPER : Description

INFOID:0000000001109335

Detects whether Intelligent Key is outside the vehicle.
Installed in rear bumper.

REAR BUMPER : Component Function Check

INFOID:0000000001109336

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL

With CONSULT-III

1. Check “ANTENNA” in “Active Test” mode with CONSULT-III.
2. Touch “BK DOOR ANT”.
3. When Intelligent Key is in outside key antenna (rear bumper) detection area, hazard lamp is flashes.

Test Item		Outside Antenna
ANTENNA	:BK DOOR ANT	Outside key antenna (rear bumper)

Is the inspection result normal?

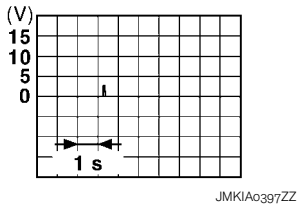
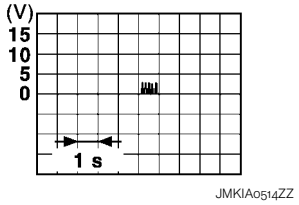
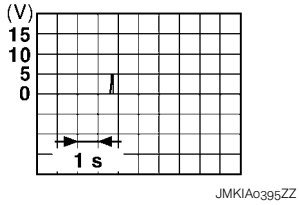
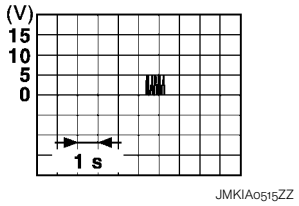
YES >> Outside key antenna is OK.
NO >> Refer to DLK-113, "REAR BUMPER : Diagnosis Procedure".

REAR BUMPER : Diagnosis Procedure

INFOID:0000000001109337

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between Intelligent Key unit connector and ground with oscilloscope.

Terminal				Condition		Signal (Reference value)
(+)			(–)			
Intelligent Key unit connector		Terminal				
M40	Rear bumper (+)	17	Ground	Request switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0397ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0514ZZ
	Rear bumper (-)	18			When Intelligent Key is in the antenna detection area.	 JMKIA0395ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0515ZZ

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 2.

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and front outside handle connector.
2. Check continuity between Intelligent Key unit connector and outside key antenna connector.

Intelligent Key unit connector	Terminal	Outside key antenna connector	Terminal	Continuity
M40	17	B81 (rear bumper)	1	Exists
	18		2	

3. Check continuity between Intelligent Key unit connector and ground.

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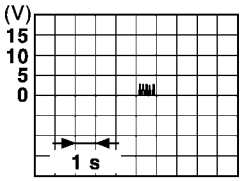
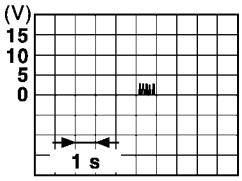
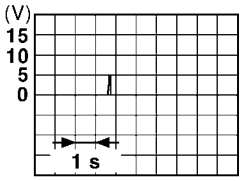
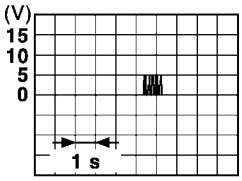
Intelligent Key unit connector	Terminal	Ground	Continuity
M40	17		Does not exist
	18		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and outside key antenna.

3. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace outside key antenna. (New antenna or other antenna)
2. Connect Intelligent Key unit connector and outside key antenna connector.
3. Check signal between Intelligent Key unit connector and ground with oscilloscope.

Terminal (+) Intelligent Key unit connector		Terminal (+) Terminal	Terminal (–)	Condition		Signal (Reference value)
M40	Rear bumper (+)	17	Ground	Door request switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0514ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0514ZZ
	Rear bumper (-)	18			When Intelligent Key is in the antenna detection area.	 JMKIA0395ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0515ZZ

Is the inspection result normal?

YES >> Replace outside key antenna. Refer to DLK-276, "REAR BUMPER : Exploded View" (Rear bumper).
NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

INSIDE KEY ANTENNA
INSTRUMENT CENTER

INSTRUMENT CENTER : Description

INFOID:0000000001109338

Detects whether Intelligent Key is inside the vehicle.

INSTRUMENT CENTER : Component Function Check

INFOID:0000000001109339

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL

With CONSULT-III

1. Check “ANTENNA” in Active test mode with CONSULT-III.
2. Touch “ROOM ANT 2”.
3. When Intelligent Key is in inside key antenna (instrument center) detection area, hazard lamp flashes.

Test Item		Inside Antenna
ANTENNA	:ROOM ANT 2	Inside key antenna (instrument center)

Is the inspection result normal?

YES >> Inside key antenna is OK.
NO >> Refer to DLK-116, "INSTRUMENT CENTER : Diagnosis Procedure".

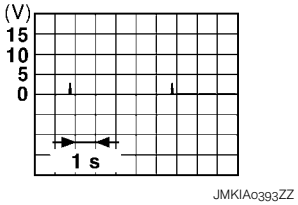
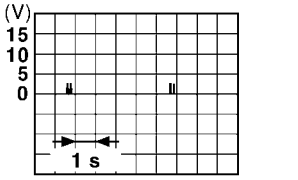
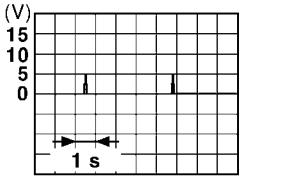
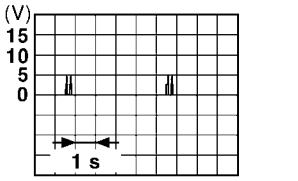
INSTRUMENT CENTER : Diagnosis Procedure

INFOID:0000000001109340

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between Intelligent Key unit connector and ground with oscilloscope.

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Terminals				Condition		Signal (Reference value)
(+)			(–)			
Intelligent Key unit connector		Terminal				
M40	Instrument center (+)	33	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Instrument center (-)	34			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 2.

2. CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and inside key antenna connector.
2. Check continuity between Intelligent Key unit connector and inside key antenna connector.

Intelligent Key unit connector	Terminal	Inside key antenna connector	Terminal	Continuity
M40	33	M70 (instrument center)	1	Exists
	34		2	

3. Check continuity between Intelligent Key unit connector and ground.

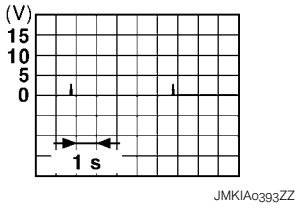
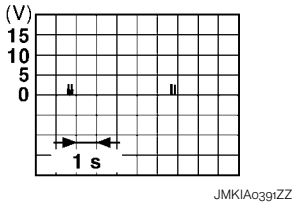
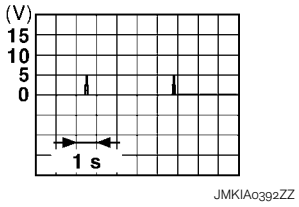
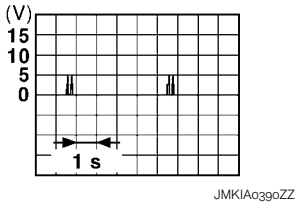
Intelligent Key unit connector	Terminal	Ground	Continuity
M40	33		Does not exist
	34		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and inside key antenna.

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace inside key antenna. (New antenna or other antenna)
2. Connect Intelligent Key unit connector and inside key antenna connector.
3. Check signal between Intelligent Key connector and ground with oscilloscope.

Terminals (+) Intelligent Key unit connector		Terminals (+) Terminal	Terminals (–)	Condition		Signal (Reference value)
M40	Instrument center (+)	33	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Instrument center (-)	34			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

YES >> Replace inside key antenna. Refer to DLK-273, "INSTRUMENT CENTER : Exploded View" (instrument center).
NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

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CONSOLE

CONSOLE : Description

INFOID:0000000001109341

Detects whether Intelligent Key is inside the vehicle.

CONSOLE : Component Function Check

INFOID:0000000001109342

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL

With CONSULT-III

1. Check “ANTENNA” in Active test mode with CONSULT-III.
2. Touch “ROOM ANT 1”.
3. When Intelligent Key is in inside key antenna (console) detection area, hazard lamp flashes.

Test Item		Inside Antenna
ANTENNA	:ROOM ANT 1	Inside key antenna (console)

Is the inspection result normal?

YES >> Inside key antenna is OK.
NO >> Refer to DLK-119, "CONSOLE : Diagnosis Procedure".

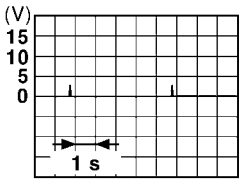
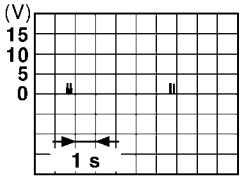
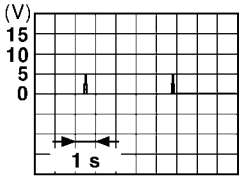
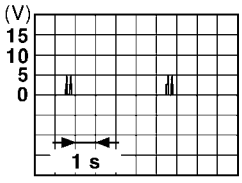
CONSOLE : Diagnosis Procedure

INFOID:0000000001109343

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between Intelligent Key unit connector and ground with oscilloscope.

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Terminal (+) Intelligent Key unit connector	Terminal (+) Terminal	Terminal (–)	Condition		Signal (Reference value)
M40	Console (+) 15	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
				When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Console (-) 16			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
				When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 2.

2. CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and inside key antenna connector.
2. Check continuity between Intelligent Key unit connector and inside key antenna connector.

Intelligent Key unit connector	Terminal	Inside key antenna connector	Terminal	Continuity
M40	15	M61 (console)	1	Exists
	16		2	

3. Check continuity between Intelligent Key unit connector and ground.

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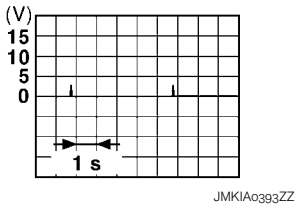
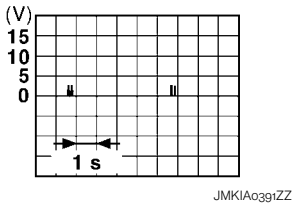
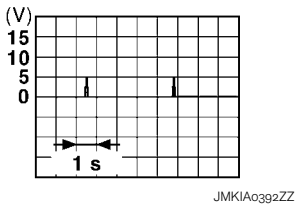
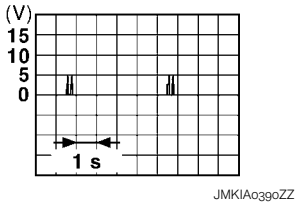
Intelligent Key unit connector	Terminal		Continuity
M40	15	Ground	Does not exist
	16		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and inside key antenna.

3. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace inside key antenna. (New antenna or other antenna)
2. Connect Intelligent Key unit connector and inside key antenna connector.
3. Check signal between Intelligent Key connector and ground with oscilloscope.

Terminal (+)		Terminal (+)	Terminal (–)	Condition		Signal (Reference value)
Intelligent Key unit connector						
M40	Console (+)	15	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Console (-)	16			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

YES >> Replace inside key antenna. Refer to DLK-273, "CONSOLE : Exploded View" (console).
NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

REAR SEAT

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REAR SEAT : Description

INFOID:0000000001109344

Detects whether Intelligent Key is inside the vehicle.

REAR SEAT : Component Function Check

INFOID:0000000001109345

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL

With CONSULT-III

1. Check “ANTENNA” in “Active Test” mode with CONSULT-III.
2. Touch “ROOM ANT 2”.
3. When Intelligent Key is in inside key antenna (rear seat) detection area, hazard lamp flases.

Test Item		Inside Antenna
ANTENNA	:ROOM ANT 2	Inside key antenna (rear seat)

Is the inspection result normal?

YES >> Inside key antenna is OK.
NO >> Refer to DLK-122, "REAR SEAT : Diagnosis Procedure".

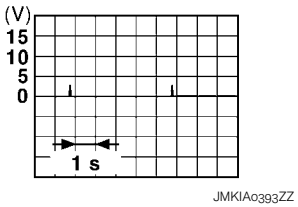
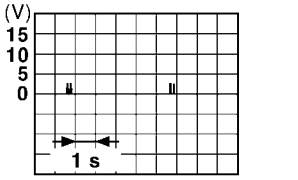
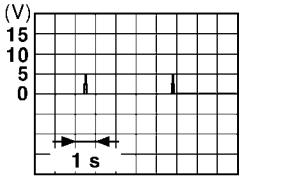
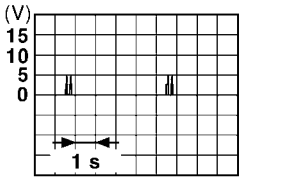
REAR SEAT : Diagnosis Procedure

INFOID:0000000001109346

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between Intelligent Key unit connector and ground with oscilloscope.

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Terminal (+)		Terminal (+)	Terminal (–)	Condition		Signal (Reference value)
Intelligent Key unit connector		Terminal				
M40	Rear seat (+)	13	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Rear seat (-)	14			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 2.

2. CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and inside key antenna connector.
2. Check continuity between Intelligent Key unit connector and inside key antenna connector.

Intelligent Key unit connector	Terminal	Inside key antenna connector	Terminal	Continuity
M40	13	B45 (rear seat)	1	Exists
	14		2	

3. Check continuity between Intelligent Key unit connector and ground.

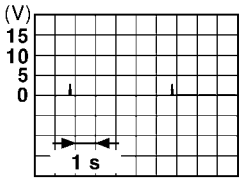
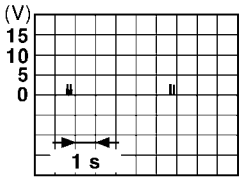
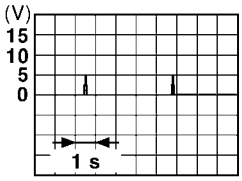
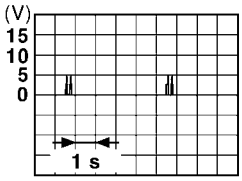
Intelligent Key unit connector	Terminal	Ground	Continuity
M40	13		Does not exist
	14		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and inside key antenna.

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace inside key antenna. (New antenna or other antenna)
2. Connect Intelligent Key unit connector and inside key antenna connector.
3. Check signal between Intelligent Key connector and ground with oscilloscope.

Terminal (+) Intelligent Key unit connector	Terminal (+) Terminal	Terminal (–)	Condition		Signal (Reference value)
M40	Rear seat (+) 13	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
				When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Rear seat (-) 14			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
				When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

YES >> Replace inside key antenna. Refer to DLK-274, "REAR : Exploded View" (rear seat).
NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

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ANTI-HIJACK RELAY
PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001034191

Receives anti-hijack signal from Intelligent Key unit.

PASSENGER SIDE : Component Function Check

INFOID:0000000001034192

1.CHECK FUNCTION

1. All doors are locked using Intelligent Key or door request switch. (Super lock system condition: Set)
2. Press door request switch (passenger side), only passenger side door is UNLOCK.

Is the inspection result normal?

YES >> Anti-hijack relay is OK.
NO >> Refer to DLK-125, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001034193

1.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL 1

1. Check voltage between Intelligent Key unit connector and ground.

Terminal			Condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M40	11	Ground	Ignition switch OFF	Battery voltage

Is the inspection result normal?

YES >> GO TO 2.
NO >> Check condition of harness and connector. If OK, repair or replace harness.

2.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL 2

1. Check voltage between Intelligent Key unit connector and ground.

Terminal			Condition		Voltage (V) (Approx.)
(+)		(–)			
Intelligent Key unit connector	Terminal				
M40	40	Ground	Press front door request switch (passenger side)	Anti-hijack operation	Battery voltage → 0 → Battery voltage
				Other than above	Battery voltage

Is the inspection result normal?

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

3.CHECK INTELLIGENT KEY UNIT GROUND CIRCUIT

Check continuity between Intelligent Key unit connector and ground.

Intelligent Key unit connector	Terminal	Ground	Continuity
M40	12		Exists

Is the inspection result normal?

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

4. CHECK PASSENGER SIDE ANTI-HIJACK RELAY GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect passenger side anti-hijack relay connector and Intelligent Key unit connector.
3. Check voltage between passenger side anti-hijack relay connector and ground.

Terminal			Condition	Voltage (V) (Approx.)
(+)		(–)		
Passenger side anti-hijack relay connector	Terminal			
M90	2	Ground	Ignition switch OFF	Battery voltage

4. Check continuity between passenger side anti-hijack relay connector and Intelligent Key unit connector.

Passenger side anti-hijack relay connector	Terminal	Intelligent Key unit connector	Terminal	Continuity
M90	1	M40	40	Exists

5. Check continuity between passenger side anti-hijack relay connector and ground.

Passenger side anti-hijack relay connector	Terminal	Ground	Continuity
M90	1		Does not exist

Is the inspection result normal?

YES >> GO TO 5.
NO >> Check condition of harness and connector. If OK, repair or replace harness.

5. CHECK ANTI-HIJACK RELAY

Check anti-hijack relay.
Refer to DLK-126, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace anti-hijack relay. Refer to DLK-25, "DOOR LOCK AND UNLOCK SWITCH : Component Parts Location".

PASSENGER SIDE : Component Inspection

INFOID:0000000001034194

1. CHECK ANTI-HIJACK RELAY

1. Turn ignition switch OFF.
2. Disconnect passenger side anti-hijack relay harness connector.
3. Check continuity passenger side anti-hijack relay terminals 3 and 4.

Passenger side anti-hijack relay connector	Terminal		Condition	Continuity
M90	3	4	Battery voltage direct current supply between terminals 1 and 2	Does not exist
			Other than above	Exists

Is the inspection result normal?

YES >> Passenger side anti-hijack relay is OK.
NO >> Replace passenger side anti-hijack relay. Refer to DLK-25, "DOOR LOCK AND UNLOCK SWITCH : Component Parts Location".

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INTELLIGENT KEY WARNING BUZZER

Description

INFOID:0000000000939149

Answers back and warns about an inappropriate operation.

Component Function Check

INFOID:0000000000939150

1.CHECK FUNCTION

With CONSULT-III

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

Is the inspection result normal?

YES >> Intelligent Key warning buzzer is OK.
NO >> Refer to DLK-127, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000000939151

1.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL 1

Check voltage between Intelligent Key unit connector and ground.

Terminal			Warning buzzer operation condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M40	4	Ground	Sounding	0
			Not sounding	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.
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.

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

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace Intelligent Key warning buzzer power supply circuit.

3.CHECK HARNESS CONTINUITY

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

Intelligent Key warning buzzer connector	Terminal	Intelligent Key unit connector	Terminal	Continuity
E25	3	M40	4	Exists

3. Check continuity between Intelligent Key warning buzzer connector and ground.

Intelligent Key warning buzzer connector	Terminal	Ground	Continuity
E25	3		Does not exist

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness between Intelligent Key warning buzzer and Intelligent Key unit.

4.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-128, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace Intelligent Key warning buzzer. Refer to DLK-277, "Exploded View".

5.REPLACE INTELLIGENT KEY UNIT

Replace Intelligent Key unit.
Refer to DLK-282, "Exploded View".
NOTE:
Perform the system initialization when replacing Intelligent Key unit.
Refer to DLK-23, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

>> INSPECTION END

Component Inspection

INFOID:0000000000939152

1.CHECK INTELLIGENT KEY WARNING BUZZER

Connect battery power supply to Intelligent Key warning buzzer terminals 1 and 3, and check the operation.

Intelligent Key warning buzzer connector	Terminal		Operation
	(+)	(-)	Buzzer sounds
E25	1	3	

Is the inspection result normal?

YES >> Intelligent Key warning buzzer is OK. GO TO 2.
NO >> Replace Intelligent Key warning buzzer. Refer to DLK-277, "Exploded View".

2.REPLACE INTELLIGENT KEY UNIT

Replace Intelligent Key unit.
Refer to DLK-282, "Exploded View".
NOTE:
Perform the system initialization when replacing Intelligent Key unit.
Refer to DLK-23, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

>> INSPECTION END

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BUZZER (COMBINATION METER)

Description

INFOID:0000000000939172

Performs operation method guide and warning with buzzer.

Component Function Check

INFOID:0000000000939173

1.CHECK FUNCTION

With CONSULT-III

Check the operation with “INSIDE BUZZER” in the Active test.

Test item	Condition	
INSIDE BUZZER	:TAKE OUT	Take away warning chime sounds
	:KNOB	Ignition knob switch warning chime sounds
	:KEY	Key warning chime sounds

Is the inspection result normal?

Yes >> Warning buzzer in combination meter is OK.
No >> Refer to DLK-129, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000000939174

1.CHECK BUZZER (COMBINATION METER) CIRCUIT

Refer to WCS-20, "Component Function Check".

Is the inspection result normal?

Yes >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
No >> Repair or replace buzzer (combination meter) circuit.

KEY WARNING LAMP

Description

INFOID:0000000001034140

Performs operation method guide and warning together with buzzer.

Component Function Check

INFOID:0000000001034141

1.CHECK FUNCTION

With CONSULT-III

Check the operation with “INDICATOR” in “Active Test”.

Test item	Condition	
INDICATOR	:BLUE ON	Key warning lamp (green) illuminates
	:RED ON	Key warning lamp (red) illuminates
	:BLUE IND	Key warning lamp (green) flashes
	:RED IND	Key warning lamp (red) flashes

Is the inspection result normal?

Yes >> Key warning lamp in combination meter is OK.
No >> Refer to DLK-130, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001034142

1.CHECK KEY WARNING LAMP CIRCUIT

Refer to WCS-20, "Component Function Check".

Is the inspection result normal?

Yes >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
No >> Repair or replace key warning lamp circuit.

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LOCK WARNING LAMP

Description

INFOID:0000000001097590

Performs operation method guide and warning together with buzzer.

Component Function Check

INFOID:0000000001097591

1.CHECK FUNCTION

With CONSULT-III

Check the operation with “INDICATOR” in “Active Test”.

Test item	Condition	
INDICATOR	:KNOB ON	Lock warning lamp illuminates
	:KNOB IND	Lock warning lamp flashes

Is the inspection result normal?

Yes >> Lock warning lamp in combination meter is OK.
No >> Refer to DLK-131, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001097592

1.CHECK LOCK WARNING LAMP CIRCUIT

Refer to WCS-20, "Component Function Check".

Is the inspection result normal?

Yes >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
No >> Repair or replace lock warning lamp circuit.

HAZARD WARNING LAMPS

Description

INFOID:0000000000939175

Performs answer-back for each operation with the number of blinks.

Component Function Check

INFOID:0000000000939176

1.CHECK FUNCTION

With CONSULT-III

Check hazard warning lamp “FLASHER” in “Active test”.

Is the inspection result normal?

YES >> Hazard warning lamp circuit is OK.
NO >> Refer to DLK-132, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000000939177

1.CHECK HAZARD SWITCH CIRCUIT

Check hazard switch circuit.
Refer to EXL-72, "Component Function Check".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace hazard warning switch circuit.

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VEHICLE SPEED SIGNAL CIRCUIT

Description

INFOID:0000000001078356

Displays the vehicle speed signal received from combination meter as a numerical value (km/h).

Component Function Check

INFOID:0000000001078357

1.CHECK FUNCTION

Check that all doors are automatically locked at the vehicle speed of more than 12 km/h (7 MPH).

Is the inspection result normal?

YES >> Vehicle speed signal circuit is OK.
NO >> Refer to DLK-133, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001078358

1.CHECK VEHICLE SPEED SIGNAL CIRCUIT

Check vehicle speed signal “VEHICLE SPEED” in “Data Monitor”.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace vehicle speed signal circuit.

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INTELLIGENT KEY BATTERY

Description

INFOID:0000000000939159

The following functions are available when having and carrying electronic ID.
- Door lock and unlock
- Engine start

Remote control entry function and panic alarm function are available when operating the button.

Component Function Check

INFOID:0000000000939160

1.CHECK INTELLIGENT KEY FUNCTION

Does door lock and unlock operate when operating Intelligent Key switch?

Is the inspection result normal?

YES >> Intelligent Key is OK.
NO >> Refer to DLK-134, "Diagnosis Procedure".

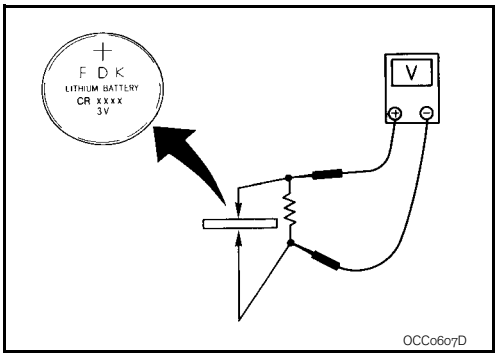
Diagnosis Procedure

INFOID:0000000000939161

1.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 the specification?

YES >> Replace Intelligent Key.
NO >> Replace Intelligent Key battery. Refer to DLK-281, "Exploded View".

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ECU DIAGNOSIS

INTELLIGENT KEY UNIT

Reference Value

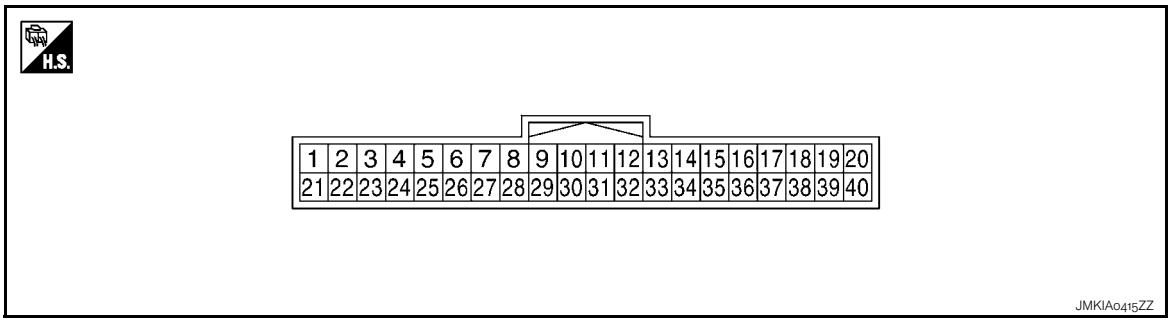
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VALUES ON THE DIAGNOSIS TOOL

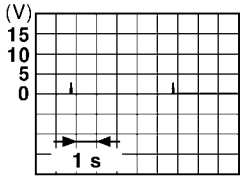
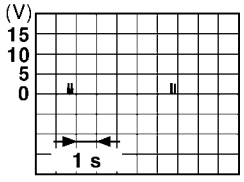
CONSULT-III MONITOR ITEM

Monitor Item	Condition		Value/Status
PUSH SW	Ignition knob	Release	OFF
		Press	ON
KEY ON SW	Mechanical key	Removed	OFF
		Inserted	ON
DR REQ SW	Door request switch (driver)	Release	OFF
		Press	ON
AS REQ SW	Door request switch (passenger)	Release	OFF
		Press	ON
BD/TR REQ SW	Door request switch (back door)	Release	OFF
		Press	ON
IGN SW	Ignition switch	Other than ON position	OFF
		ON position	ON
ACC SW	Ignition switch	Other than ACC or ON position	OFF
		ACC or ON position	ON
STOP LAMP SW	Brake pedal	Press	OFF
		Release	ON
DOOR LOCK SIG	Lock button of Intelligent Key	Release	OFF
		Press	ON
DOOR UNLOCK SIG	Unlock button of Intelligent Key	Release	OFF
		Press	ON
DOOR SW DR	Door (driver side)	Close	OFF
		Open	ON
DOOR SW AS	Door (passenger side)	Close	OFF
		Open	ON
DOOR SW RR	Door (rear RH)	Close	OFF
		Open	ON
DOOR SW RL	Door (rear LH)	Close	OFF
		Open	ON
BACK DOOR SW	Back door	Close	OFF
		Open	ON
VEHICLE SPEED	While driving		Equivalent to speedometer reading

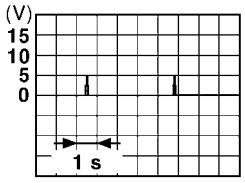
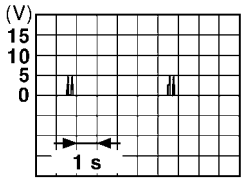
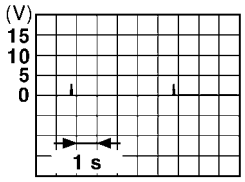
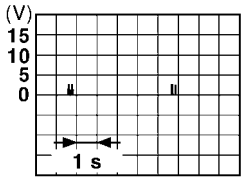
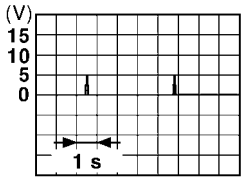
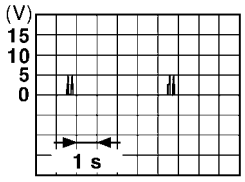
TERMINAL LAYOUT

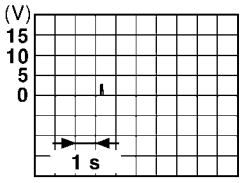
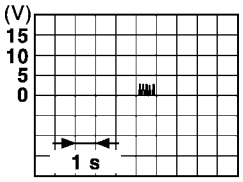
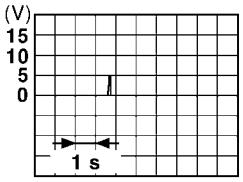
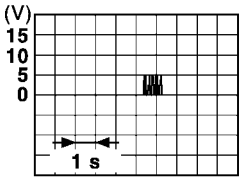
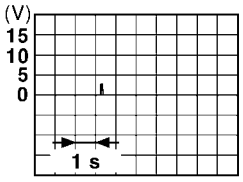
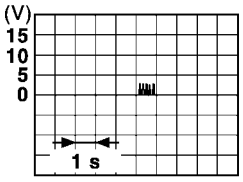


PHYSICAL VALUES

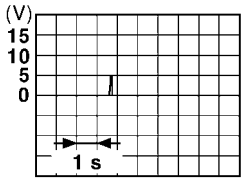
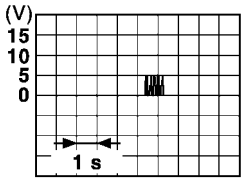
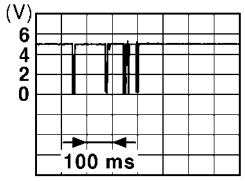
Terminal No.		Wire color	Description		Condition		Value [V] (Approx.)
+	–		Signal name	Input/ Output			
1	Ground	LG	Steering lock unit power supply	Output	Ignition switch	OFF or ACC	5
						ON	0
2	Ground	L	CAN - H	Input/ Output	—		—
3	Ground	P	CAN - L	Input/ Output	—		—
4	Ground	LG	Intelligent Key warning buzzer	Output	Intelligent Key warning buzzer	Sounding	0
						Not sounding	Battery voltage
5	Ground	P	Front door request switch (driver side)	Input	Front door request switch (driver side)	ON (Pressed)	0
						OFF (Released)	5
6	Ground	W	Ignition switch power supply	Input	Ignition switch	OFF or ACC	0
						ON or START	Battery voltage
7	Ground	V	Key switch	Input	When ignition key is inserted into ignition key cylinder		Battery voltage
					When ignition key is not inserted into ignition key cylinder		0
11	Ground	V	Battery power supply	Input	Ignition switch OFF		Battery voltage
12	Ground	B	Ground	—	Ignition switch ON		0
13	Ground	Y	Inside key antenna (+) (rear seat)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0393ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0391ZZ

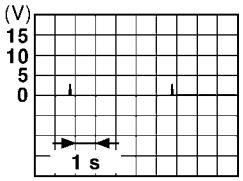
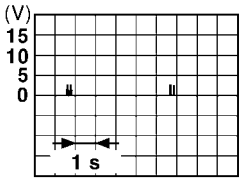
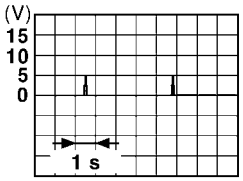
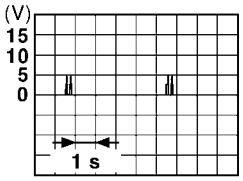
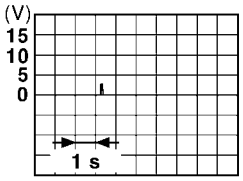
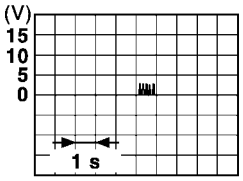
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Terminal No. +	Terminal No. –	Wire color	Description Signal name	Description Input/ Output	Condition		Value [V] (Approx.)
14	Ground	W	Inside key antenna (-) (rear seat)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0392ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0390ZZ
15	Ground	SB	Inside key antenna (+) (console)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0393ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0391ZZ
16	Ground	BR	Inside key antenna (-) (console)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0392ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0390ZZ

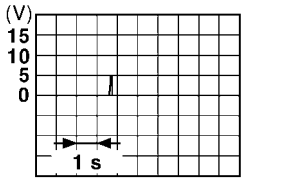
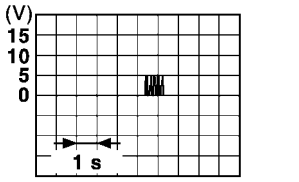
Terminal No.		Wire color	Description		Condition		Value [V] (Approx.)
+	–		Signal name	Input/ Output			
17	Ground	SB	Outside key antenna (+) (rear bumper)	Output	When the back door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0397ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0514ZZ
18	Ground	V	Outside key antenna (-) (rear bumper)	Output	When the back door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0395ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0515ZZ
19	Ground	L	Outside key antenna (+) (driver side)	Output	When the front door request switch (driver side) is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0397ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0514ZZ

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Terminal No. +	Terminal No. –	Wire color	Description Signal name	Description Input/ Output	Condition		Value [V] (Approx.)
20	Ground	BR	Outside key antenna (-) (driver side)	Output	When the front door request switch (driver side) is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0395ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0515ZZ
22*1	Ground	W	Key lock solenoid	Output	Key lock solenoid	LOCK*2	Battery voltage
						UNLOCK*2	0
25	Ground	BR	Front door request switch (passenger side)	Input	Front door request switch (passenger side)	ON (Pressed)	0
						OFF (Released)	5
27	Ground	L	Ignition knob switch	Input	Ignition switch OFF	When ignition knob switch is pressed	Battery voltage
						When ignition knob switch is released	0
29	Ground	GR	Back door request switch	Input	Back door request switch	ON (Pressed)	0
						OFF (Released)	5
31	Ground	GR	Steering lock unit ground	—	—	—	0
32	Ground	P	Steering lock unit communication	Input/ Output	Steering lock	LOCK status	5
						LOCK or UNLOCK	 JMKIA0433ZZ

Terminal No.		Wire color	Description		Condition		Value [V] (Approx.)
+	–		Signal name	Input/ Output			
33	Ground	O	Inside key antenna (+) (instrument center)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0393ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0391ZZ
34	Ground	G	Inside key antenna (-) (instrument center)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0392ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0390ZZ
37	Ground	L	Outside key antenna (+) (passenger side)	Output	When the front door request switch (passenger side) is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0397ZZ
						When Intelligent Key is in the antenna detection area	 JMKIA0514ZZ

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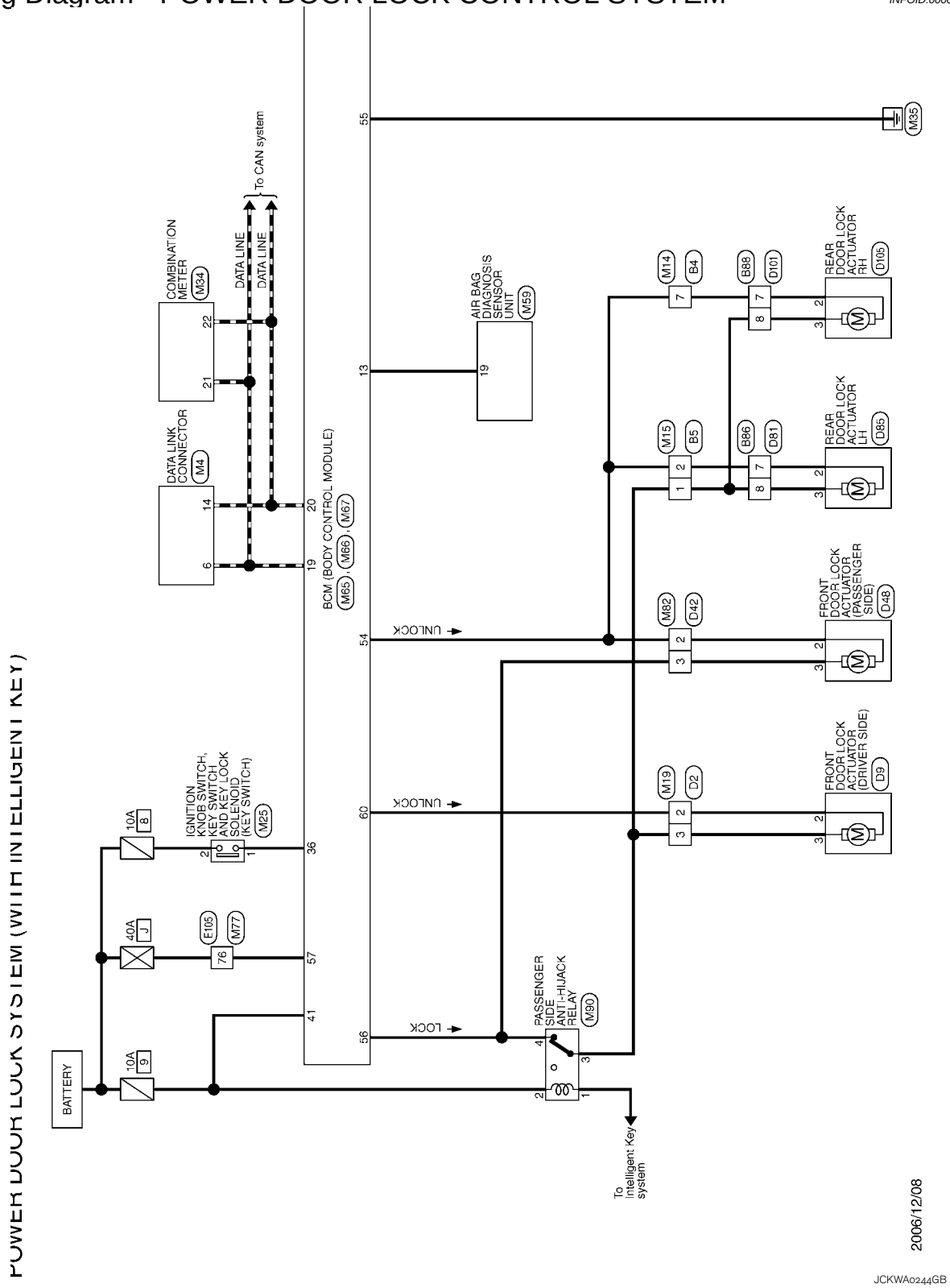
Terminal No. +	Terminal No. –	Wire color	Description Signal name	Description Input/ Output	Condition		Value [V] (Approx.)
38	Ground	O	Outside key antenna (-) (passenger side)	Output	When the front door request switch (passenger side) is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0395ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0515ZZ
40	Ground	Y	Passenger side anti-hijack relay	Input	Press front door request switch (passenger side)	Anti-hijack operation	Battery voltage → 0 → Battery voltage
						Other than above	Battery voltage

*1: Only for MT model.

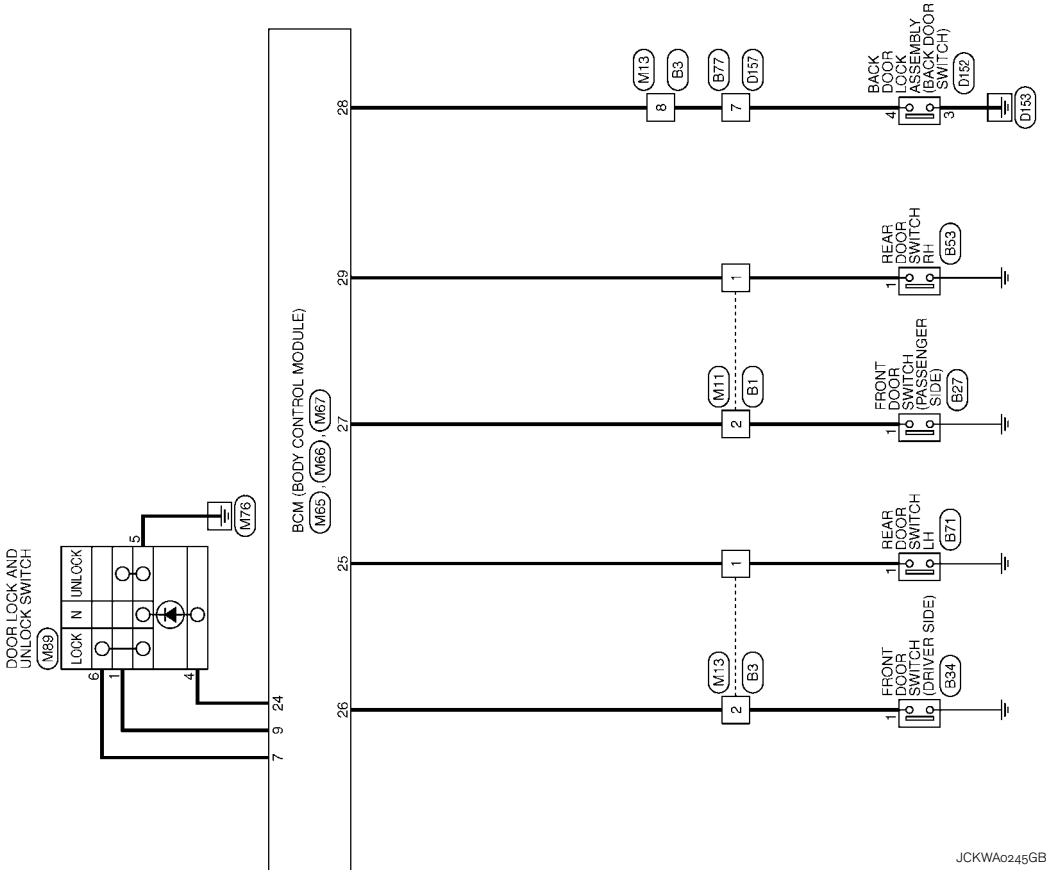
*2: Key interlock operation is only for M/T model for operation condition, refer to SEC-9, "System Description".

Wiring Diagram - POWER DOOR LOCK CONTROL SYSTEM -

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DOOR LOCK AND UNLOCK SWITCH
M89
LOCK
N
UNLOCK
M76
BCM (BODY CONTROL MODULE)
M65, M66, M67
24
9
7
28
29
27
25
26
M13
B3
B77
D157
BACK DOOR LOCK ASSEMBLY (BACK DOOR SWITCH)
D152
D153
REAR DOOR SWITCH RH
B53
M11
B1
FRONT DOOR SWITCH (PASSENGER SIDE)
B27
REAR DOOR SWITCH LH
B71
FRONT DOOR SWITCH (DRIVER SIDE)
B34
JCKWA0245GB

POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

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 [Specification]
1	LG	-
2	BR	-[LHD models]

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

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 [Specification]
1	GR	-
2	R/W	-[LHD models]
8	G	-

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

H.S.

1	2	3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name [Specification]
7	O	-

Connector No.	B5
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

H.S.

1	2	3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	-
2	O	-

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	R/W	-

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-

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POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	TH08FW

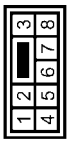
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	G	–

Connector No.	B86
Connector Name	WIRE TO WIRE
Connector Type	NS06MW-CS

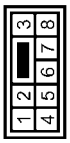
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	O	–
8	SB	–

Connector No.	B88
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

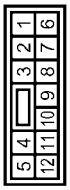
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	O	–
8	SB	–

Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
2	GR	–[With Intelligent Key]
3	SB	–

Connector No.	D9
Connector Name	FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
Connector Type	FEA04FB-FHA2

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	GR	–[With Intelligent Key]
3	R/Y	–[With Intelligent Key]

Connector No.	D42
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	P	–[With Intelligent Key]
3	Y	–[With Intelligent Key]

Connector No.	D48
Connector Name	FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Type	FEA04FB-FHA2

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	P	–[With Intelligent Key]
3	Y	–[With Intelligent Key]

Connector No.	D81
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
7	O	–
8	SB	–

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POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	D85
Connector Name	REAR DOOR LOCK ACTUATOR LH
Connector Type	FEA04FB-FHA2

H.S.

1 2 3 4 5 6

Terminal No.	Color of Wire	Signal Name [Specification]
2	O	–
3	SB	–

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Type	NS06FW-CS

H.S.

3 2 1
8 7 6 5 4

Terminal No.	Color of Wire	Signal Name [Specification]
7	O	–
8	SB	–

Connector No.	D105
Connector Name	REAR DOOR LOCK ACTUATOR RH
Connector Type	FEA04FB-FHA2

H.S.

6 5 4 3 2 1

Terminal No.	Color of Wire	Signal Name [Specification]
2	O	–
3	SB	–

Connector No.	D152
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	CINCH 49309 EV 4M9

H.S.

1 2 3 4

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

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

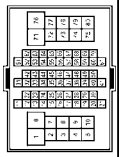
H.S.

1 2 3 4
5 6 7 8

Terminal No.	Color of Wire	Signal Name [Specification]
7	G	–

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-NS16-TM4

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
76	Y	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
6	L	–
14	P	–

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH24FW

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 [Specification]
1	LG	–
2	BR	–[LHD models]

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POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH24FW

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 [Specification]
1	GR	-
2	R	-[LHD models]
8	G	-

Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Type	NS06FW-CS

H.S.

3		2	1
8	7	6	5	4

Terminal No.	Color of Wire	Signal Name [Specification]
7	O	-

Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.

3		2	1
8	7	6	5	4

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	-
2	O	-

Connector No.	M19
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
2	GR	-
3	SB	-

Connector No.	M25
Connector Name	IGNITION KNOB SWITCH, KEY SWITCH AND KEY LOCK SOLENOID
Connector Type	TK06MGY

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	Y	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
21	L	CAN-H
22	P	CAN-L

Connector No.	M59
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	TK28FY-EX-SC

H.S.

20	21	17									24	49	1
22	11	46	48	47	45	13	3	4	6	5
16	12	19	15	14	51	23	50	18	52	2

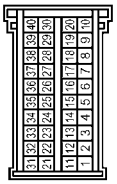
Terminal No.	Color of Wire	Signal Name [Specification]
19	R	UNLOCK

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POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AAB40FB



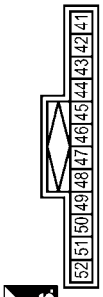
Terminal No.	Color of Wire	Signal Name [Specification]
7	P	LOCK/UNLOCK SW (LOCK)
9	BR	LOCK/UNLOCK SW (UNLOCK)
13	R	SHOCK DETECT SIG
19	L	CAN-H
20	P	CAN-L
24	GR	DOOR LOCK STATUS IND
25	GR	DOOR SW (RL)
26	R	DOOR SW (DR)
27	BR	DOOR SW (AS)
28	G	DOOR SW (BACK)
29	LG	DOOR SW (RR)

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-NS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
76	Y	-

36	V	KEY SW

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FCI 211PC122S1017

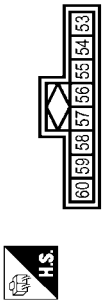


Terminal No.	Color of Wire	Signal Name [Specification]
41	V	BAT(FUSE)

Connector No.	M82
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
2	O	-
3	Y	-[With Intelligent Key]

Connector No.	M87
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FCI 211PC083S0017



Terminal No.	Color of Wire	Signal Name [Specification]
54	O	DOOR UNLOCK OUTPUT (OTHER)
55	B	GND(POWER)
56	Y	DOOR LOCK OUTPUT (ALL)[With Intelligent Key]
57	Y	BAT(F/L)
60	GR	UNLOCK (DR)

Connector No.	M89
Connector Name	DOOR LOCK AND UNLOCK SWITCH
Connector Type	7703197674

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
4	GR	-
5	B	-
6	P	-

Connector No.	M90
Connector Name	PASSENGER SIDE ANTI-HIJACK RELAY
Connector Type	MS03FB-M2



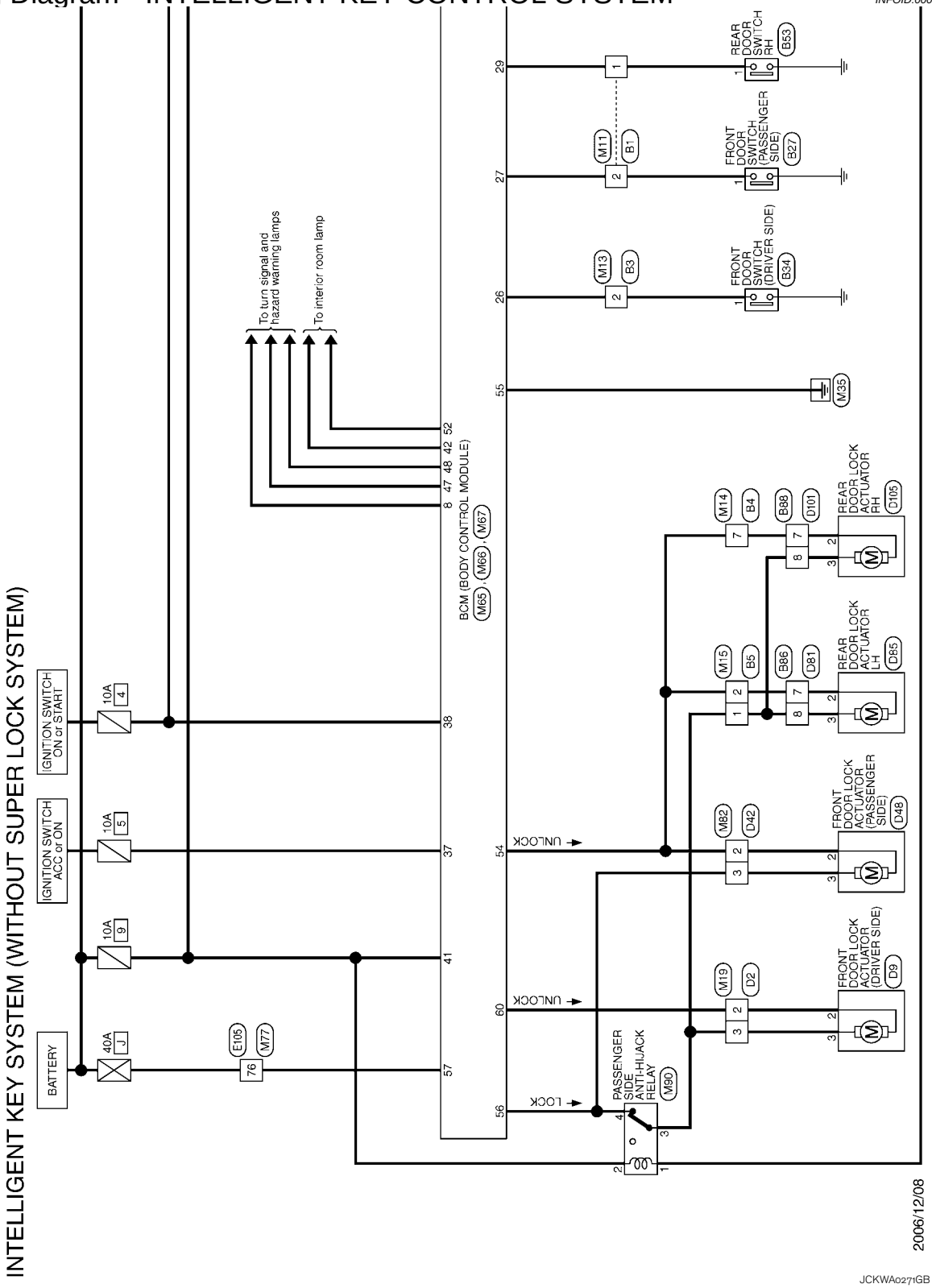
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	V	-
3	SB	-
4	Y	-

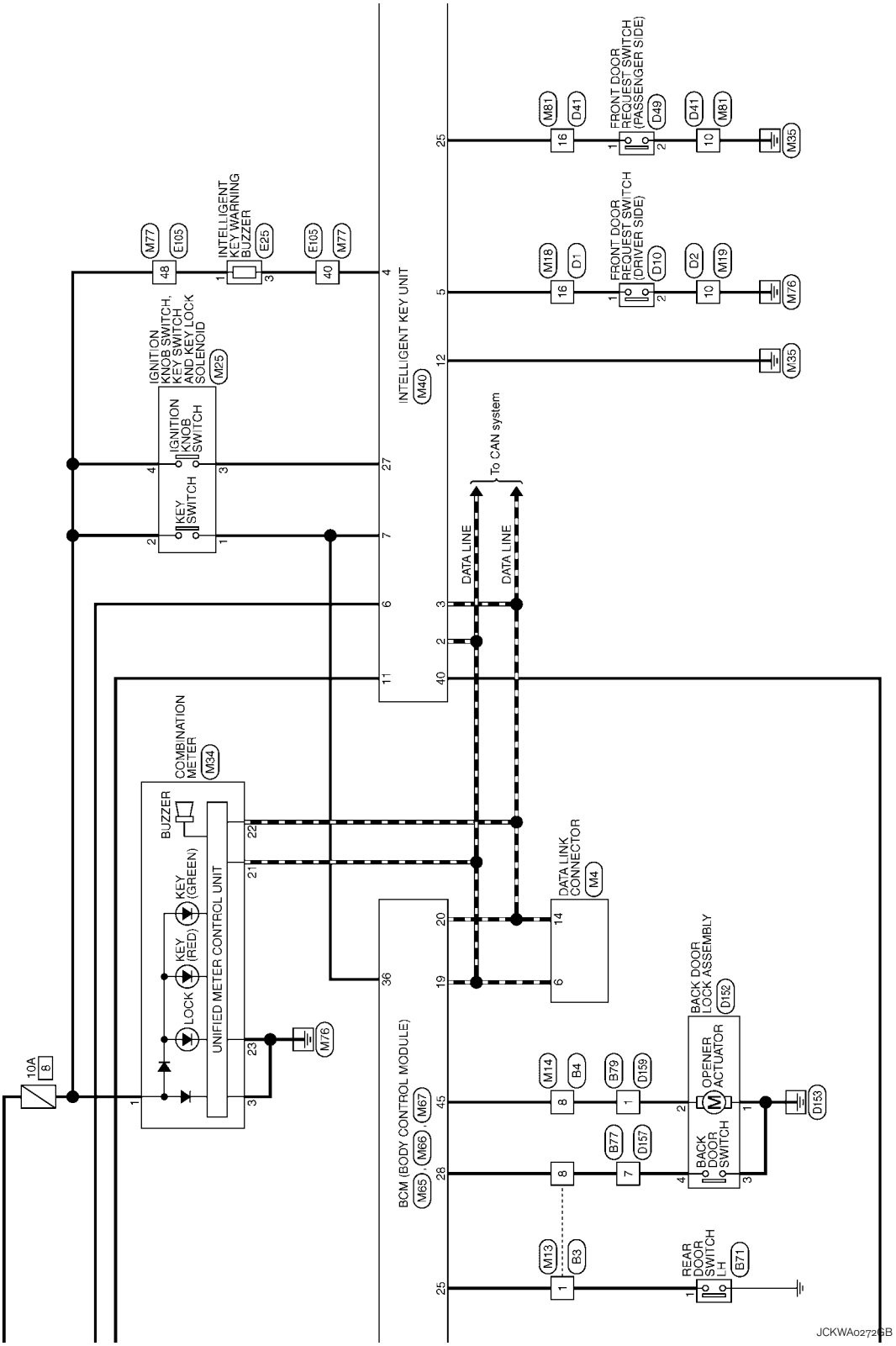
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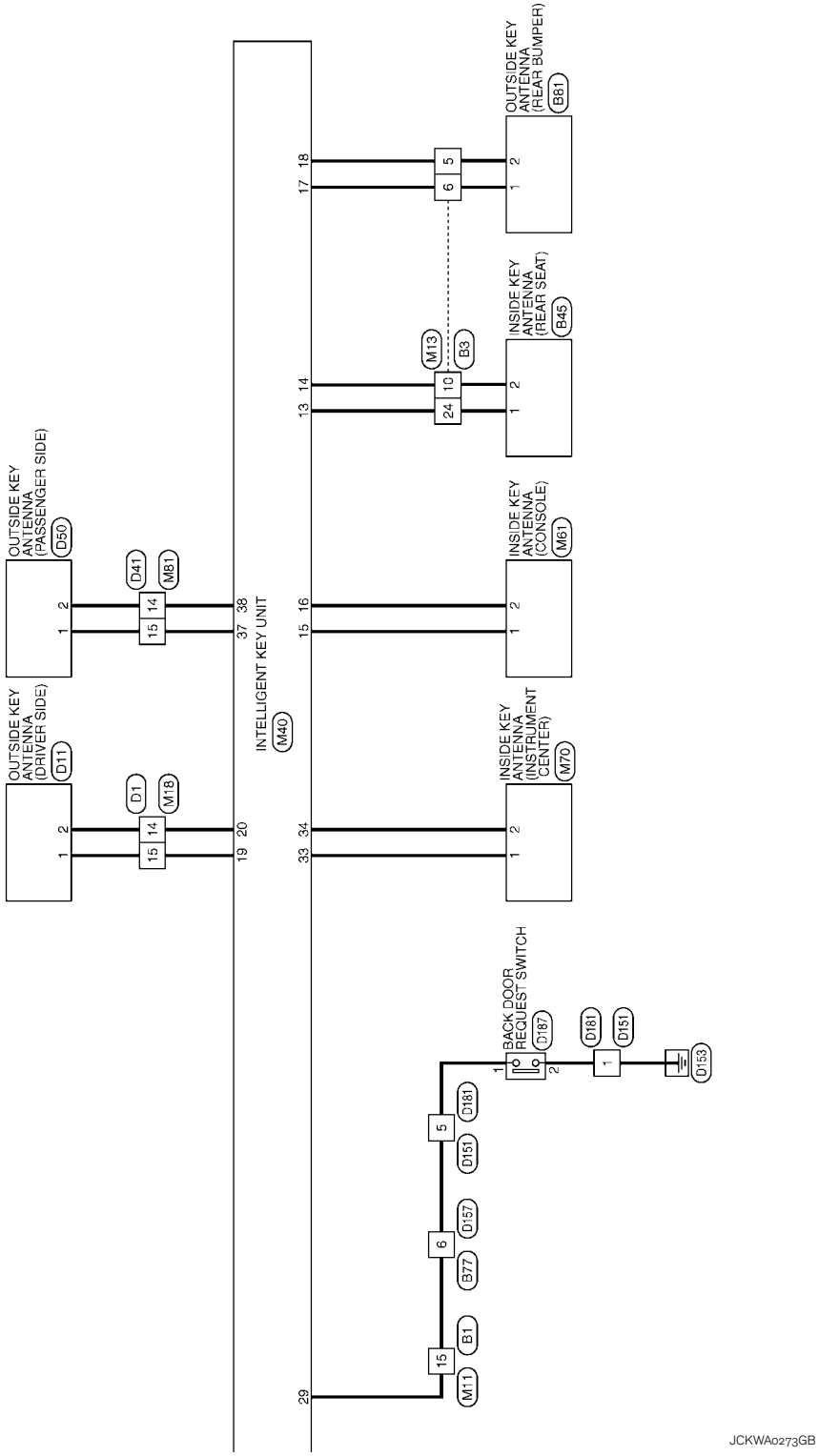
Wiring Diagram - INTELLIGENT KEY CONTROL SYSTEM -

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OUTSIDE KEY ANTENNA (REAR BUMPER)
B81
INSIDE KEY ANTENNA (REAR SEAT)
B45
INSIDE KEY ANTENNA (CONSOLE)
M61
INSIDE KEY ANTENNA (INSTRUMENT CENTER)
M70
OUTSIDE KEY ANTENNA (PASSENGER SIDE)
D50
OUTSIDE KEY ANTENNA (DRIVER SIDE)
D11
INTELLIGENT KEY UNIT
M40
BACK DOOR REQUEST SWITCH
D187
M13
B3
D41
M81
D1
M18
D181
D151
D157
B77
B1
M11
D153
JCKWA0273GB

INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

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 [Specification]
1	LG	-
2	R/W	-[RHD models]
15	GR	-

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

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 [Specification]
1	GR	-
2	BR	-[RHD models]
5	V	-
6	SB	-
8	G	-
10	W/R	-
24	Y	-

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

H.S.

1	2	3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name [Specification]
7	O	-
8	GR	-

Connector No.	B5
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

H.S.

1	2	3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	-
2	O	-

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	R/W	-

Connector No.	B45
Connector Name	INSIDE KEY ANTENNA (REAR SEAT)
Connector Type	RK02FGY

H.S.

1	2

Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	W/R	-

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-

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INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW

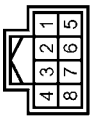
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2		
3		

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	TH08FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
6	GR	-
7	G	-
8		

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	M02FW-LC

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2		

Connector No.	B81
Connector Name	OUTSIDE KEY ANTENNA (REAR BUMPER)
Connector Type	RK02FGY

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	-
2	V	-

Connector No.	B86
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	O	-
8	SB	-

Connector No.	B88
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
7	O	-
8	SB	-

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TK16FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
14	BR/W	-
15	L/Y	-
16	P	-

Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
2	GR	-[With Intelligent Key]
3	SB	-
10	B	-

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INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

Connector No.	D9
Connector Name	FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
Connector Type	FEA04FB-FHA2

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
2	GR	–[With Intelligent Key]
3	R/Y	–[With Intelligent Key]

Connector No.	D10
Connector Name	FRONT DOOR REQUEST SWITCH (DRIVER SIDE)
Connector Type	RK02ML-B

H.S.



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

Connector No.	D11
Connector Name	OUTSIDE KEY ANTENNA (DRIVER SIDE)
Connector Type	RK02MGY

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	L/Y	–
2	BR/W	–

Connector No.	D41
Connector Name	WIRE TO WIRE
Connector Type	TK16FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
10	B	–
14	O	–
15	L	–
16	BR	–

Connector No.	D42
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	P	–[With Intelligent Key]
3	Y	–[With Intelligent Key]

Connector No.	D48
Connector Name	FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Type	FEA04FB-FHA2

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	P	–[With Intelligent Key]
3	Y	–[With Intelligent Key]

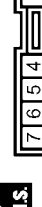
Connector No.	D49
Connector Name	FRONT DOOR REQUEST SWITCH (PASSENGER SIDE)
Connector Type	RK02ML-B

H.S.

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

Connector No.	D50
Connector Name	OUTSIDE KEY ANTENNA (PASSENGER SIDE)
Connector Type	RK02MGY

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	–
2	O	–

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INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

Connector No.	D81
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
7	O	–
8	SB	–

Connector No.	D85
Connector Name	REAR DOOR LOCK ACTUATOR LH
Connector Type	FEA04FB-FHA2

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	O	–
3	SB	–

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
7	O	–
8	SB	–

Connector No.	D105
Connector Name	REAR DOOR LOCK ACTUATOR RH
Connector Type	FEA04FB-FHA2

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	O	–
3	SB	–

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	–
5	GR	–

Connector No.	D152
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	CINCH 49309 EV 4M9

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	–
2	GR	–
3	B	–
4	G	–

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
6	GR	–
7	G	–

Connector No.	D159
Connector Name	WIRE TO WIRE
Connector Type	M02MW-LC

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	–

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INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	TH08FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	–
5	GR	–

Connector No.	D187
Connector Name	BACK DOOR REQUEST SWITCH
Connector Type	RK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	–
2	B	–

Connector No.	E25
Connector Name	INTELLIGENT KEY WARNING BUZZER
Connector Type	RK03FBR-DGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	–
2	–	–
3	LG/B	–

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-NS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
40	LG/B	–
48	Y	–
76	Y	–

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

Terminal No.	Color of Wire	Signal Name [Specification]
6	L	–
14	P	–

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH24FW

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	–
2	R	–[RHD models]
15	GR	–

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH24FW

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	–
2	BR	–[RHD models]
5	V	–
6	SB	–
8	G	–
10	W	–
24	Y	–

Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
7	O	–
8	GR	–

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INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

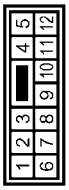
Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	–
2	O	–

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TK16MW



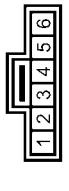
Terminal No.	Color of Wire	Signal Name [Specification]
14	BR	–
15	L	–
16	P	–

Connector No.	M19
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
2	GR	–
3	SB	–
10	B	–

Connector No.	M25
Connector Name	IGNITION KNOB SWITCH, KEY SWITCH AND KEY LOCK SOLENOID
Connector Type	TK06MGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	Y	–
3	L	–
4	Y	–

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW

Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	BAT
3	B	GND
21	L	CAN-H
22	P	CAN-L
23	B	GND

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW

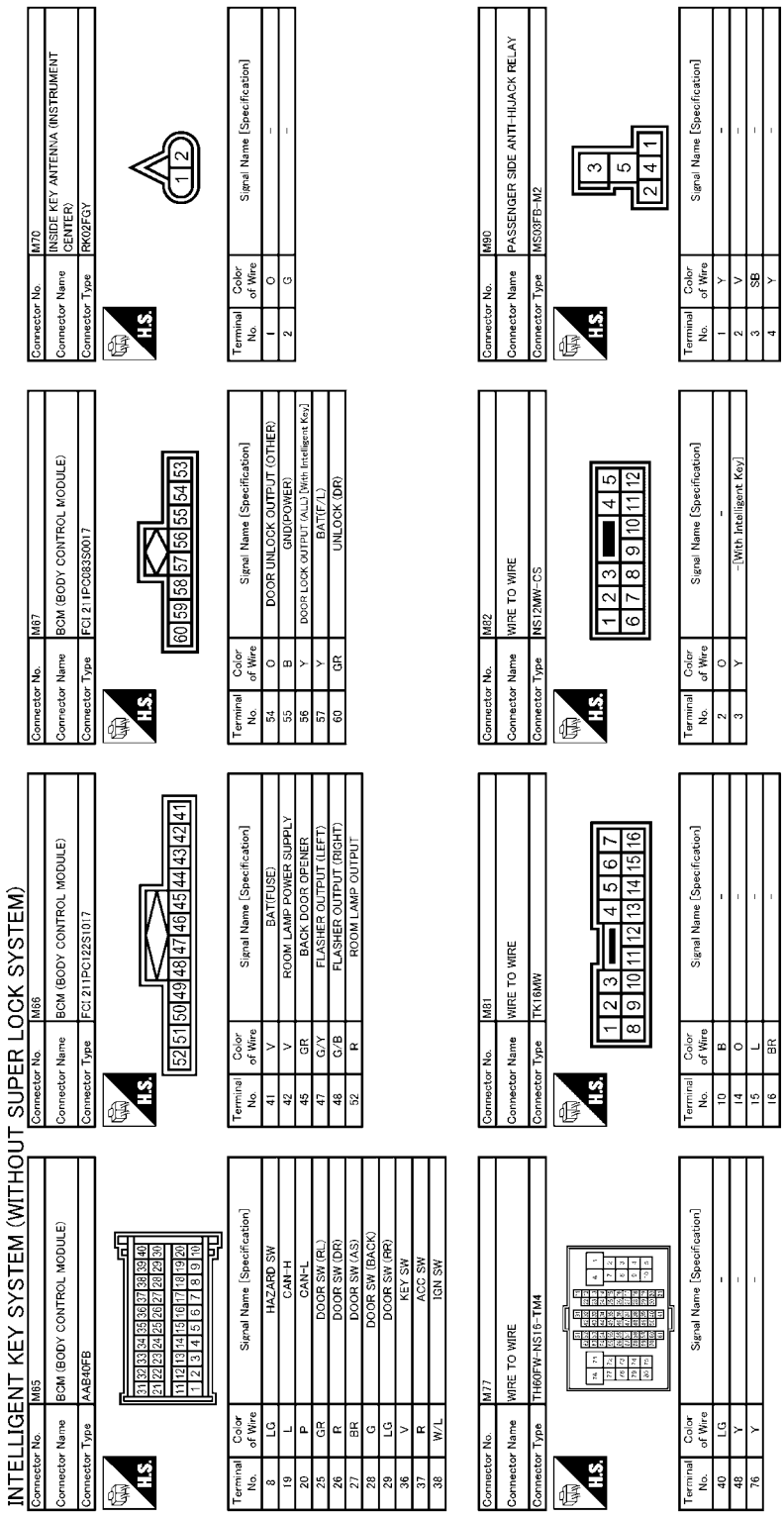
Terminal No.	Color of Wire	Signal Name [Specification]
2	L	CAN-H
3	P	CAN-L
4	LG	BUZZER
5	P	REQUEST SW (DR)
6	W	IGN SW
7	V	KEY SW
11	V	BATT+
12	B	GND
13	Y	REAR SEAT (+)
14	W	REAR SEAT (–)
15	SB	CONSOLE (+)
16	BR	CONSOLE (–)
17	SB	REAR BUMPER (+)
18	V	REAR BUMPER (–)
19	L	DRIVER DOOR (+)
20	BR	DRIVER DOOR (–)
25	BR	REQUEST SW (AS)
27	L	KNOB SW
29	GR	REQUEST SW (BD)
33	O	INSTRUMENT (+)
34	G	INSTRUMENT (–)
37	L	PASSENGER DOOR (+)
38	O	PASSENGER DOOR (–)
40	Y	AS ANTI-HIJACK

Connector No.	M61
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Type	RK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	–
2	BR	–

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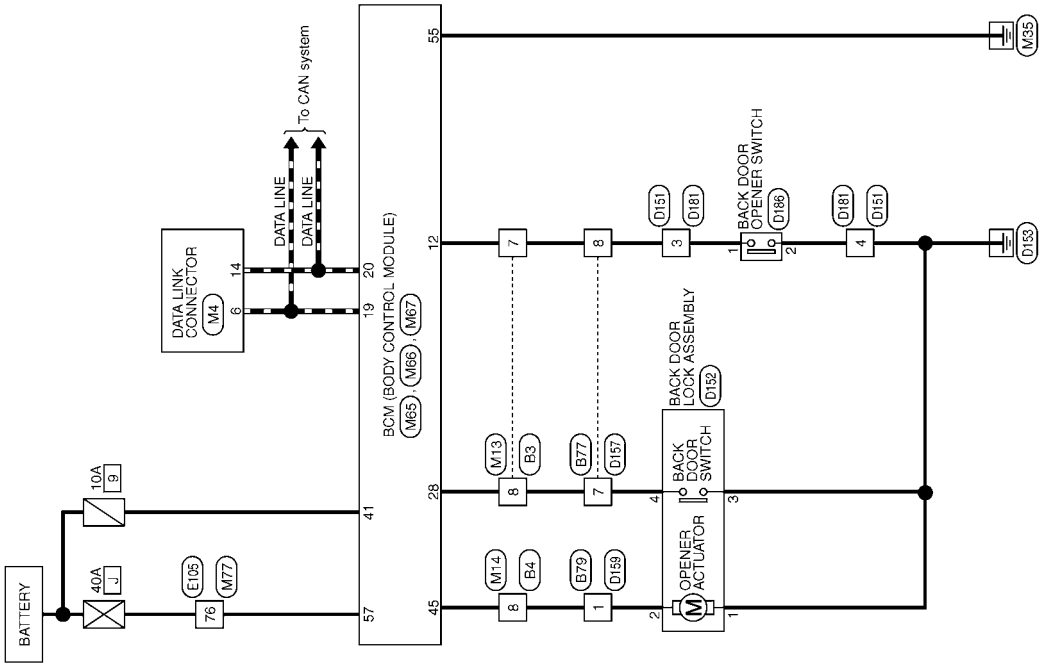
JCKWA0280GB

Wiring Diagram - BACK DOOR OPENER CONTROL SYSTEM -

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BACK DOOR OPENER SYSTEM



2006/12/08

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BACK DOOR OPENER SYSTEM

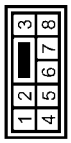
Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
7	P	-
8	G	-

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

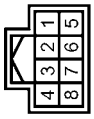
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
8	GR	-

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	TH08FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	G	-
8	P	-

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	M02FW-LC

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-

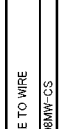
Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
3	P	-
4	B	-

Connector No.	D152
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	CINCH 48309 EV 4M9

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	GR	-
3	B	-
4	G	-

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
7	G	-
8	P	-

Connector No.	D159
Connector Name	WIRE TO WIRE
Connector Type	M02MW-LC

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-

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BACK DOOR OPENER SYSTEM

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	TH08FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
3	P	-
4	B	-

Connector No.	D186
Connector Name	BACK DOOR OPENER SWITCH
Connector Type	RK02MGY

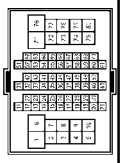
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-
2	B	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-NS16-TM4

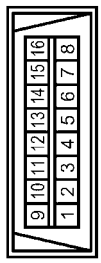
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
76	Y	-

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

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH24FW

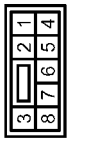
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	P	-
8	G	-

Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

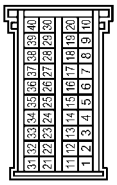
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
8	GR	-

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AAB40FB

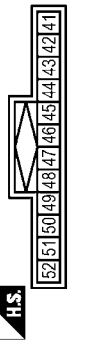
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
12	P	TRUNK/BACK DOOR OPEN SW
19	L	CAN-H
20	P	CAN-L
28	G	DOOR SW (BACK)

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FCI 211PC122S1017

H.S.



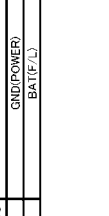
Terminal No.	Color of Wire	Signal Name [Specification]
41	V	BAT(FUSE)
45	GR	BACK DOOR OPENER

JCKWA0297GB

BACK DOOR OPENER SYSTEM

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FCI 211PC083S0017

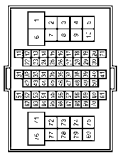
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND(POWER)
57	Y	BAT(F/L)

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-NS16-TM4

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
76	Y	-

JCKWA0298GB

Fail Safe

INFOID:0000000001070418

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Display contents of CONSULT-III	Fail-safe	Cancellation
B2013: STRG COMM 1	• Inhibits steering look unlocking	Erase DTC
B2552: INTELLIGENT KEY	• Inhibits steering look unlocking • Inhibits engine cranking (BCM) • Fuel cut (ECM)	Erase DTC
B2590: NATS MALFUNCTION	• Inhibits steering look unlocking • Inhibits engine cranking (BCM) • Fuel cut (ECM)	Erase DTC

DTC Inspection Priority Chart

INFOID:0000000001070419

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

Priority	DTC
1	• U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN) • B2552: INTELIGENT KEY
2	• B2013: STRG COMM 1 • B2590: NATS MALFUNCTION

DTC Index

INFOID:0000000001070420

NOTE:
Details of time display
- CRNT: Displays when there is a malfunction now or after returning to the normal condition until turning ignition switch OFF → ON again.
- 1 - 39: Displayed if any previous malfunction is present when current condition is normal. It increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The counter remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch OFF → ON after returning to the normal condition if the malfunction is detected again.

CONSULT display	Detection condition	Fail-safe	Diagnosis
No DTC is detected. further testing may be required.	—	—	—
U1000: CAN COMM CIRCUIT	Intelligent Key unit cannot receive CAN communication signal continuously for 2 seconds or more.	—	Check CAN communication system. Refer to DLK-68
U1010: CONTROL UNIT (CAN)	Intelligent Key unit detects internal CAN communication circuit malfunction.	—	Replace Intelligent Key unit.
B2013: STRG COMM 1	The ID verification result between Intelligent key unit and steering lock unit are NG. Or Intelligent Key unit cannot communicate with steering lock unit.	×	Perform steering lock unit ID registration with CONSULT-III
B2552: INTELLIGENT KEY	Intelligent Key unit internal malfunction.	×	Replace Intelligent Key unit.
B2590: NATS MALFUNCTION	The ID verification result between Intelligent key unit and BCM are NG. Or Intelligent Key unit cannot communicate with BCM.	×	Check NATS Refer to SEC-43

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000001097037

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition		Value/Status
ACC ON SW	Ignition switch OFF		OFF
	Ignition switch ACC or ON		ON
AIR COND SW	A/C switch OFF		OFF
	A/C switch ON		ON
AUT LIGHT SYS	Outside of the room is dark		OFF
	Outside of the room is bright		ON
AUTO LIGHT SW	Lighting switch OFF		OFF
	Lighting switch AUTO		ON
BACK DOOR SW	Back door closed		OFF
	Back door opened		ON
BATTERY VOLT **NOTE:** Diesel engine models only	Ignition switch ON		Approximately the same as power supply voltage
BUCKLE SW	Driver's seat belt unfastened		OFF
	Driver's seat belt fastened		ON
CDL LOCK SW	Door lock/unlock switch does not operate		OFF
	Press door lock/unlock switch to the LOCK side		ON
CDL UNLOCK SW	Door lock/unlock switch does not operate		OFF
	Press door lock/unlock switch to the UNLOCK side		ON
DOOR SW-AS	Passenger door closed		OFF
	Passenger door opened		ON
DOOR SW-DR	Driver door closed		OFF
	Driver door opened		ON
DOOR SW-RL	Rear LH door closed		OFF
	Rear LH door opened		ON
DOOR SW-RR	Rear RH door closed		OFF
	Rear RH door opened		ON
ELEC PWR CUT **NOTE:** Diesel engine models only	Engine running	Fan switch ON (when engine coolant is cool) **NOTE:** Depending on the ambient temperature, battery voltage, etc.	OFF
		The current status maintained with the signal from ECM received.	FREEZ
		• Fan switch OFF • Fan switch ON after engine warming UP **NOTE:** Depending on the engine coolant temperature, ambient temperature, battery voltage, etc.	INHBT

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Monitor Item	Condition	Value/Status
ENG COOLNT T **NOTE:** Diesel engine models only	Engine running	Approximately the same as water temperature gauge reading
ENGINE RPM **NOTE:** Diesel engine models only	Engine running	Approximately the same as tachometer reading
ENGINE RUN	Engine stopped	OFF
	Engine running	ON
ENGINE STATUS **NOTE:** Diesel engine models only	Engine stopped	STOP
	While the engine stalls	STALL
	Engine running	RUN
	At engine cranking	CRA
FAN ON SIG	Fan switch OFF	OFF
	Fan switch ON	ON
FR FOG SW	Front fog lamp switch OFF	OFF
	Front fog lamp switch ON	ON
FR WASHER SW	Front washer switch OFF	OFF
	Front washer switch ON	ON
FR WIPER LOW	Front wiper switch OFF	OFF
	Front wiper switch LO	ON
FR WIPER HI	Front wiper switch OFF	OFF
	Front wiper switch HI	ON
FR WIPER INT	Front wiper switch OFF	OFF
	Front wiper switch INT	ON
FR WIPER STOP	Any position other than front wiper stop position	OFF
	Front wiper stop position	ON
HAZARD SW	When hazard switch is not pressed	OFF
	When hazard switch is pressed	ON
HEAD LAMP SW 1	Lighting switch OFF	OFF
	Lighting switch 2ND	ON
HEAD LAMP SW 2	Lighting switch OFF	OFF
	Lighting switch 2ND	ON
HI BEAM SW	Lighting switch OFF	OFF
	Lighting switch HI	ON
HOOD SW	Close the hood **NOTE:** Vehicles without theft warning system are OFF-fixed	OFF
	Open the hood	ON
H/L WASH SW	**NOTE:** The item is indicated, but not monitored	OFF
IGN ON SW	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
IGN SW CAN	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	1 - 7

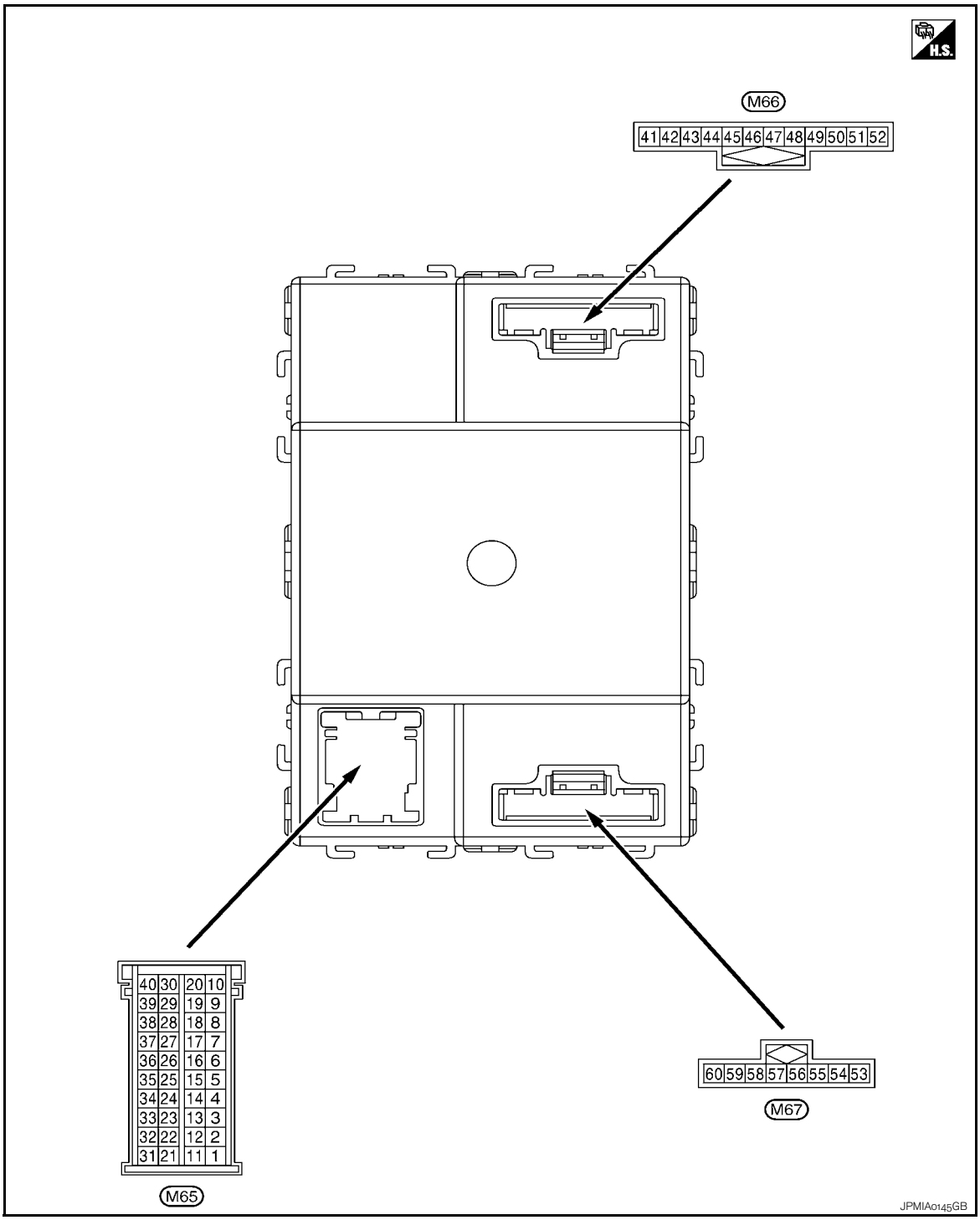
Monitor Item	Condition	Value/Status
I-KEY LOCK	LOCK button of Intelligent Key is not pressed	OFF
	LOCK button of Intelligent Key is pressed	ON
I-KEY UNLOCK	UNLOCK button of Intelligent Key is not pressed	OFF
	UNLOCK button of Intelligent Key is pressed	ON
KEY ON SW	Mechanical key is removed from key cylinder	OFF
	Mechanical key is inserted to key cylinder	ON
KEYLESS LOCK	LOCK button of key fob is not pressed	OFF
	LOCK button of key fob is pressed	ON
KEYLESS UNLOCK	UNLOCK button of key fob is not pressed	OFF
	UNLOCK button of key fob is pressed	ON
LIT-SEN FAIL	Light & rain sensor is in normal condition	OK
	Light & rain sensor is with internal error	NOTOK
OIL PRESS SW	• Ignition switch OFF or ACC • Engine running	OFF
	Ignition switch ON	ON
OUT SIDE TEMP **NOTE:** Diesel engine models	Ignition switch ON	Approximately the same as outside air temperature
PASSING SW	Other than lighting switch PASS	OFF
	Lighting switch PASS	ON
PUSH SW	Return to ignition switch to LOCK position	OFF
	Press ignition switch	ON
REAR DEF SW	Rear window defogger switch OFF	OFF
	Rear window defogger switch ON	ON
RKE LOCK AND UN-LOCK	**NOTE:** The item is indicated, but not monitored	OFF
		ON
RR FOG SW	Rear fog lamp switch OFF	OFF
	Rear fog lamp switch ON	ON
RR WASHER SW	Rear washer switch OFF	OFF
	Rear washer switch ON	ON
RR WIPER INT	Rear wiper switch OFF	OFF
	Rear wiper switch INT	ON
RR WIPER ON	Rear wiper switch OFF	OFF
	Rear wiper switch ON	ON
RR WIPER STOP	Rear wiper stop position	OFF
	Other than rear wiper stop position	ON
SHOCK SENSOR	Ignition switch ON	NOMAL
	After the reception of air bag deployment signal from air bag diagnosis sensor unit	OFF
	During the reception of air bag deployment signal from air bag diagnosis sensor unit	ON
TAIL LAMP SW	Lighting switch OFF	OFF
	Lighting switch 1ST	ON
TRNK OPNR SW	When back door opener switch is not pressed	OFF
	When back door opener switch is pressed	ON

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Monitor Item	Condition	Value/Status
TURN SIGNAL L	Turn signal switch OFF	OFF
	Turn signal switch LH	ON
TURN SIGNAL R	Turn signal switch OFF	OFF
	Turn signal switch RH	ON
UNLOCK WITH DR	**NOTE:** The item is indicated, but not monitored	OFF
		ON
UNLOCK SHOCK	Other than the following	OFF
	During the unlock operation interlocked with air bag	ON
VEHICLE SPEED	While driving	Equivalent to speedometer reading

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TERMINAL LAYOUT

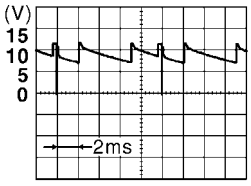
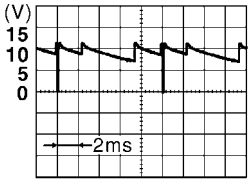
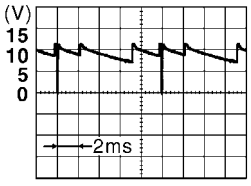
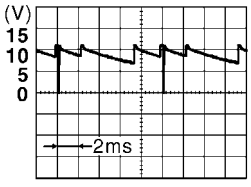


PHYSICAL VALUES

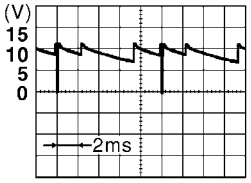
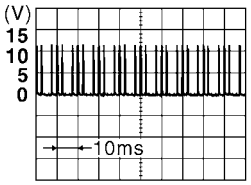
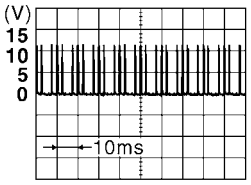
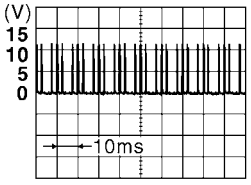
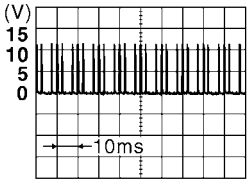
CAUTION:

- **Check combination switch system terminal waveform under the loaded condition with lighting switch, turn signal switch and wiper switch OFF is not to be fluctuated by being overloaded.**
- **Turn wiper intermittent dial position to 4 except when checking waveform or voltage of wiper intermittent dial position. Wiper intermittent dial position can be confirmed on CONSULT -III. Refer to BCS-26, "COMB SW : CONSULT-III Function (BCM - COMB SW)".**
- **BCM reads the status of the combination switch at 10 ms internal normally. Refer to BCS-7, "System Description".**

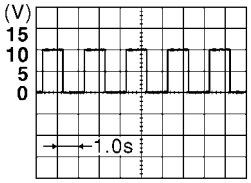
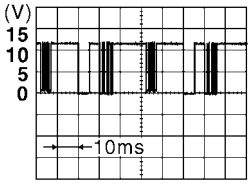
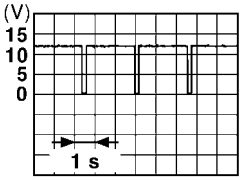
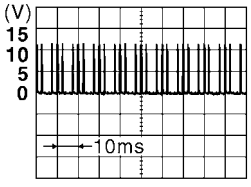
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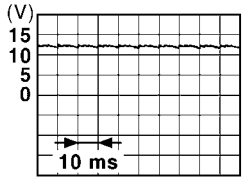
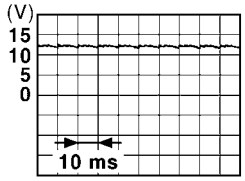
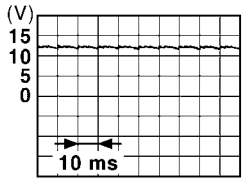
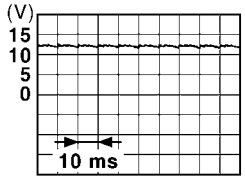
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
1 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4)	 JPMIA0160GB 9.1 V
					Rear wiper switch INT (Wiper intermittent dial 4)	
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	
2 (Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Lighting switch 2ND	 JPMIA0163GB 9.3 V
					Lighting switch PASS	
					Front fog lamp switch ON	
					Turn signal switch LH	
3 (LG)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Lighting switch AUTO	 JPMIA0162GB 9.3 V
					Rear fog lamp switch OFF	
					Front wiper switch MIST	
					Front wiper switch INT	
					Front wiper switch LO	
4 (R)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	 JPMIA0161GB 9.1 V
					Rear wiper switch ON (Wiper intermittent dial 4)	
					Rear washer switch ON (Wiper intermittent dial 4)	
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	

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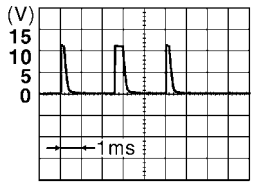
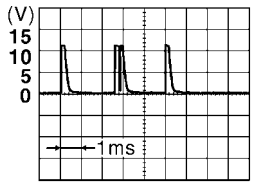
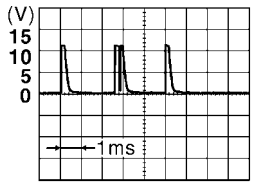
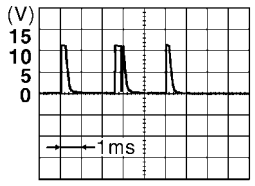
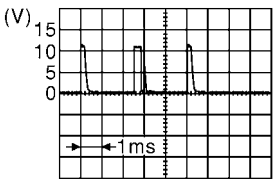
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
5 (W)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Lighting switch 1ST	 JPMIA0164GB 9.1 V
					Lighting switch 2ND	
					Lighting switch HI	
					Turn signal switch RH	
7 (P)	Ground	Door lock/unlock switch (Lock)	Output	Door lock/unlock switch	Not pressed	 JPMIA0154GB 1.2 V
					Pressed to the lock side	0 V
8 (LG)	Ground	Hazard switch	Output	Hazard switch	Not pressed	 JPMIA0154GB 1.3 V
					Pressed	0 V
9 (BR)	Ground	Door lock/unlock switch (Unlock)	Output	Door lock/unlock switch	Not pressed	 JPMIA0154GB 1.2 V
					Pressed to the unlock side	0 V
12 (P)	Ground	Back door opener switch	Output	Back door opener switch	Not pressed	 JPMIA0154GB 1.2 V
					Pressed	0 V

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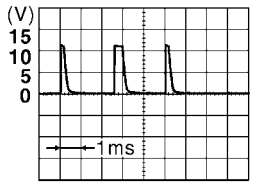
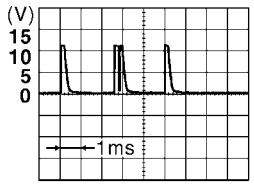
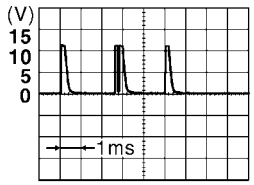
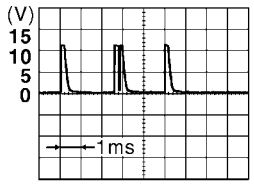
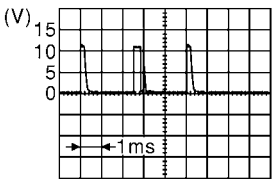
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
13 (R)	Ground	Shock detect sensor	Input	Ignition switch OFF or ACC		0 V
				Ignition switch ON		 JPMIA0155GB 6.0 V
14 (L/R)	Ground	A/C switch	Output	A/C switch	Not pressed	Battery voltage
					Pressed	0 V
15 (LG/B)	Ground	Fan switch	Output	Fan switch	Not pressed	Battery voltage
					Pressed	0 V
16 (GR)	Ground	Alarm link	Input	—		—
17 (BR)	Ground	Light & rain sensor serial link	Output	Ignition switch OFF or ACC		Battery voltage
				Ignition switch ON		 JPMIA0156GB 8.7 V
18 (SB)	Ground	Security indicator	Output	Security indicator	ON	0 V
					Blinking	 JPMIA0014GB 10.3 V
					OFF	Battery voltage
19 (L)	—	CAN-H	Input/ Output	—		—
20 (P)	—	CAN-L	Input/ Output	—		—
21 (SB)	Ground	Rear window defogger switch	Output	Rear window defogger switch	Not pressed	 JPMIA0154GB 1.1 V
					While pressing	0 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
24 (GR)	Ground	Door lock status indicator	Output	Door lock status indicator	ON	Battery voltage
					OFF	0 V
25 (GR)	Ground	Rear door switch LH	Input	Rear door switch LH	OFF (When rear door LH closed)	 PKIB0924E 11.2 V
					ON (When rear door LH opened)	0 V
26 (R)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closed)	 PKIB0924E 11.2 V
					ON (When driver door opened)	0 V
27 (BR)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closed)	 PKIB0924E 11.2 V
					ON (When passenger door opened)	0 V
28 (G)	Ground	Back door switch	Input	Back door switch	OFF (When back door closed)	Battery voltage
					ON (When back door opened)	0 V
29 (LG)	Ground	Rear door switch RH	Input	Rear door switch RH	OFF (When rear door RH closed)	 PKIB0924E 11.2 V
					ON (When rear door RH opened)	0 V
30 (SB)	Ground	Audio link	Output	—	—	—

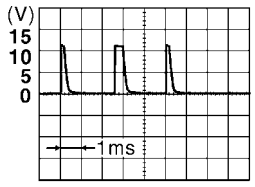
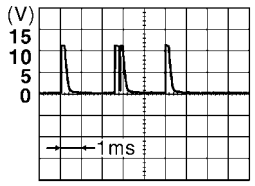
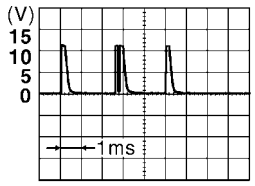
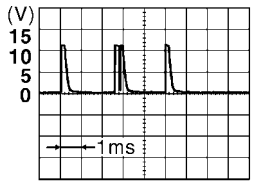
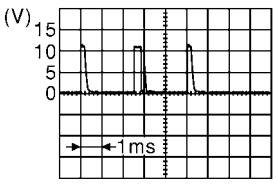
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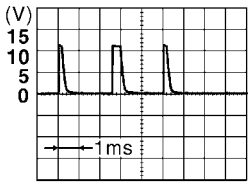
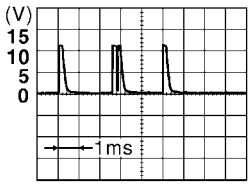
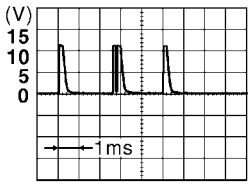
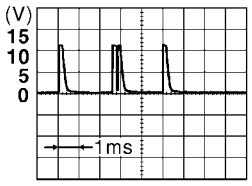
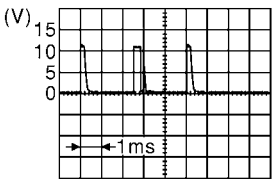
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
31 (BR)	Ground	Combination switch INPUT 5	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0165GB 1.3 V
					Front fog lamp switch ON (Wiper intermittent dial 4)	 JPMIA0167GB 1.3 V
					Rear fog lamp switch ON (Wiper intermittent dial 4)	 JPMIA0168GB 1.3 V
					Rear wiper switch ON (Wiper intermittent dial 4)	 JPMIA0169GB 1.3 V
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	 JPMIA0196GB 1.3 V

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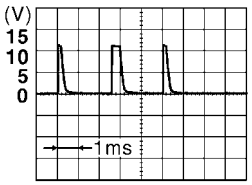
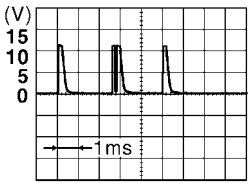
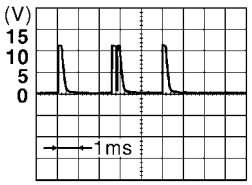
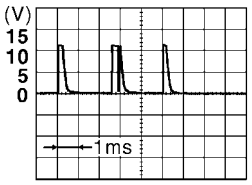
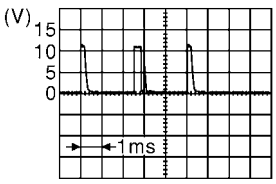
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
32 (G)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	 JPMIA0165GB 1.4 V
					Lighting switch PASS	 JPMIA0167GB 1.3 V
					Lighting switch 2ND	 JPMIA0166GB 1.3 V
					Front wiper switch INT	 JPMIA0168GB 1.3 V
					Front wiper switch HI	 JPMIA0196GB 1.3 V

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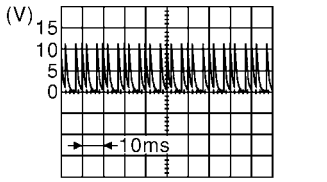
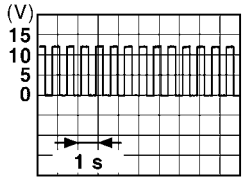
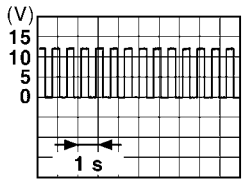
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
33 (V)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	 JPMIA0165GB 1.4 V
					Turn signal switch LH	 JPMIA0167GB 1.3 V
					Turn signal switch RH	 JPMIA0166GB 1.3 V
					Front wiper switch LO	 JPMIA0168GB 1.3 V
					Front washer switch ON	 JPMIA0196GB 1.3 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
34 (GR)	Ground	Combination switch INPUT 4	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0165GB 1.4 V
					Lighting switch AUTO (Wiper intermittent dial 4)	 JPMIA0167GB 1.3 V
					Lighting switch 1ST (Wiper intermittent dial 4)	 JPMIA0166GB 1.3 V
					Rear wiper INT (Wiper intermittent dial 4)	 JPMIA0167GB 1.3 V
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 6	 JPMIA0196GB 1.3 V

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Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
35 (L)	Ground	Combination switch INPUT 3	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0165GB 1.4 V
					Lighting switch HI (Wiper intermittent dial 4)	 JPMIA0166GB 1.3 V
					Lighting switch 2ND (Wiper intermittent dial 4)	 JPMIA0167GB 1.3 V
					Rear wiper switch ON	 JPMIA0169GB 1.3 V
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	 JPMIA0196GB 1.3 V
36 (V)	Ground	Key switch	Output	Insert mechanical key into ignition key cylinder		Battery voltage
				Remove mechanical key from ignition key cylinder		0 V
37 (R)	Ground	ACC power supply	Output	Ignition switch OFF		0 V
				Ignition switch ACC or ON		Battery voltage
38 (W/L)	Ground	Ignition power supply	Output	Ignition switch OFF or ACC		0 V
				Ignition switch ON		Battery voltage

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Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
39 (P)	Ground	NATS antenna amp.	Input/ Output	Insert mechanical key into ignition key cylinder		Just after Insert mechanical key into ignition key cylinder. Pointer of tester should move
40 (LG)	Ground	NATS antenna amp.	Input/ Output	Insert mechanical key into ignition key cylinder		Just after Insert mechanical key into ignition key cylinder. Pointer of tester should move
41 (V)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
42 (V)	Ground	Interior room lamp power supply	Output	After passing the interior room lamp battery saver operation time		0 V
				Any other time after passing the interior room lamp battery saver operation time		Battery voltage
43 (L)	Ground	Rear wiper motor	Output	Rear wiper switch OFF		0 V
				Rear wiper switch ON		Battery voltage
44 (L/W)	Ground	Rear wiper auto stop	Output	Ignition switch ON	Rear wiper stop position	0 V
					Any position other than rear wiper stop position	 JPMIA0197GB
45 (GR)	Ground	Back door lock actuator	Output	Back door opener switch	Pressed	Battery voltage (300ms)
					Not pressed	0 V
47 (G/Y)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 PKIDog26E 6.5 V
48 (G/B)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 PKIDog26E 6.5 V
49 (Y)	Ground	Rear fog lamp	Output	Lighting switch 1ST and front fog lamp switch ON	Rear fog lamp switch OFF	0 V
					Rear fog lamp switch ON	Battery voltage
51 (R/W)*1 (R)*2	Ground	Stop lamp switch	Output	Depress the brake pedal		Battery voltage
				Release the brake pedal		0 V

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Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
52 (R)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	Battery voltage
					ON	0 V
53 (L)	Ground	Power window power supply	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
54 (O)	Ground	Door unlock (All)	Output	Door lock/unlock switch	Pressed to the unlock side	Battery voltage
					Pressed to the lock side	0 V
55 (B)	Ground	Ground	—	Ignition switch ON		0 V
56 (Y)*1 (SB)*2	Ground	Door lock (All)	Output	Door lock/unlock switch	Pressed to the unlock side	0 V
					Pressed to the lock side	Battery voltage
57 (Y)	Ground	Battery power supply	Output	Ignition switch OFF		Battery voltage
58 (P)	Ground	Power window power supply	Output	Ignition switch OFF		Battery voltage
59 (BR)	Ground	Super lock	Output	When lock button of key fob or Intelligent Key is not pressed		0 V
				When lock button of key fob or Intelligent Key is pressed		Battery voltage
60 (GR)	Ground	Driver door unlock	Output	Door lock/unlock switch	Pressed to the unlock side	Battery voltage
					Pressed to the lock side	0 V

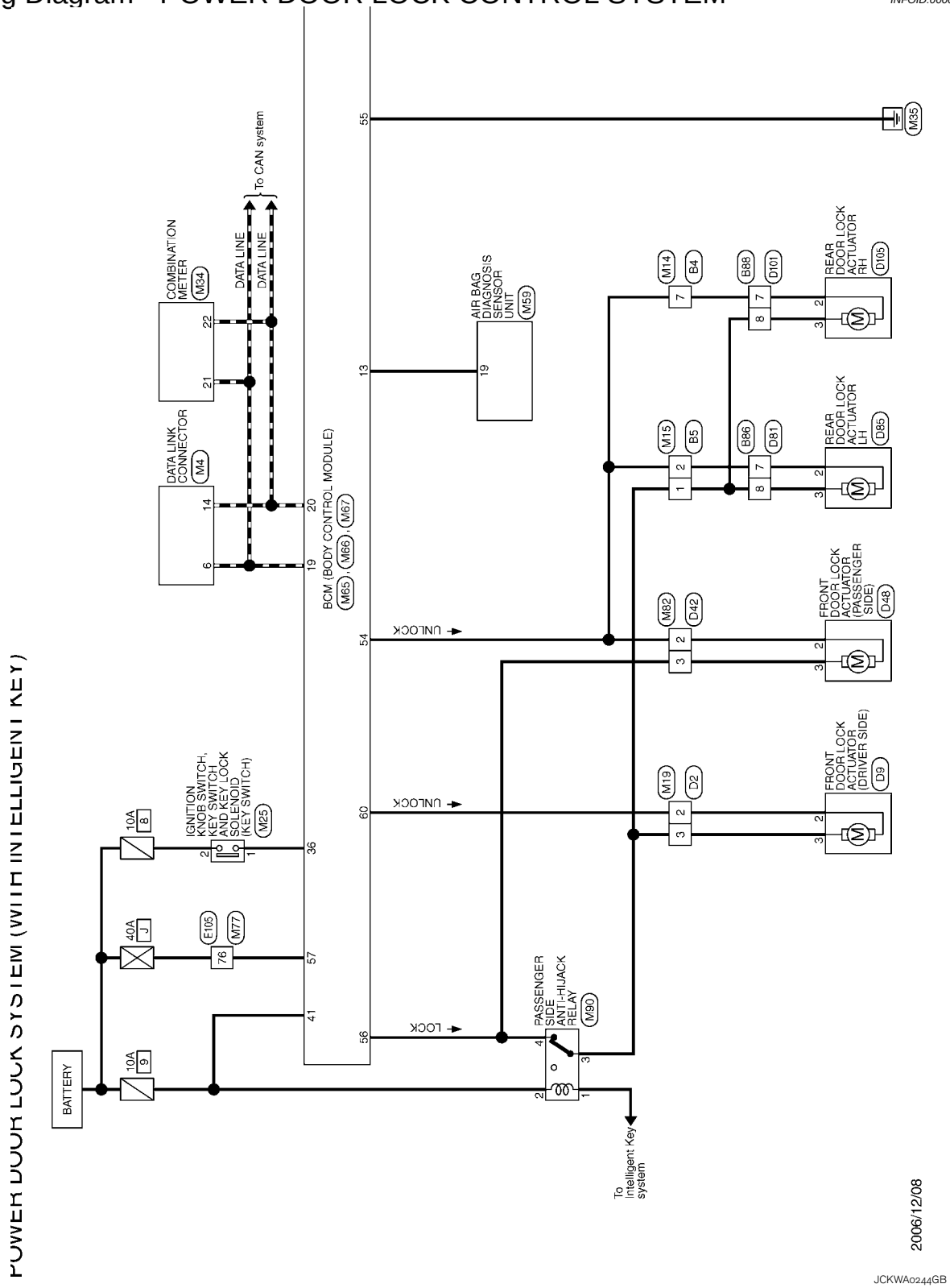
*1: With Intelligent Key system

*2: Without Intelligent Key system

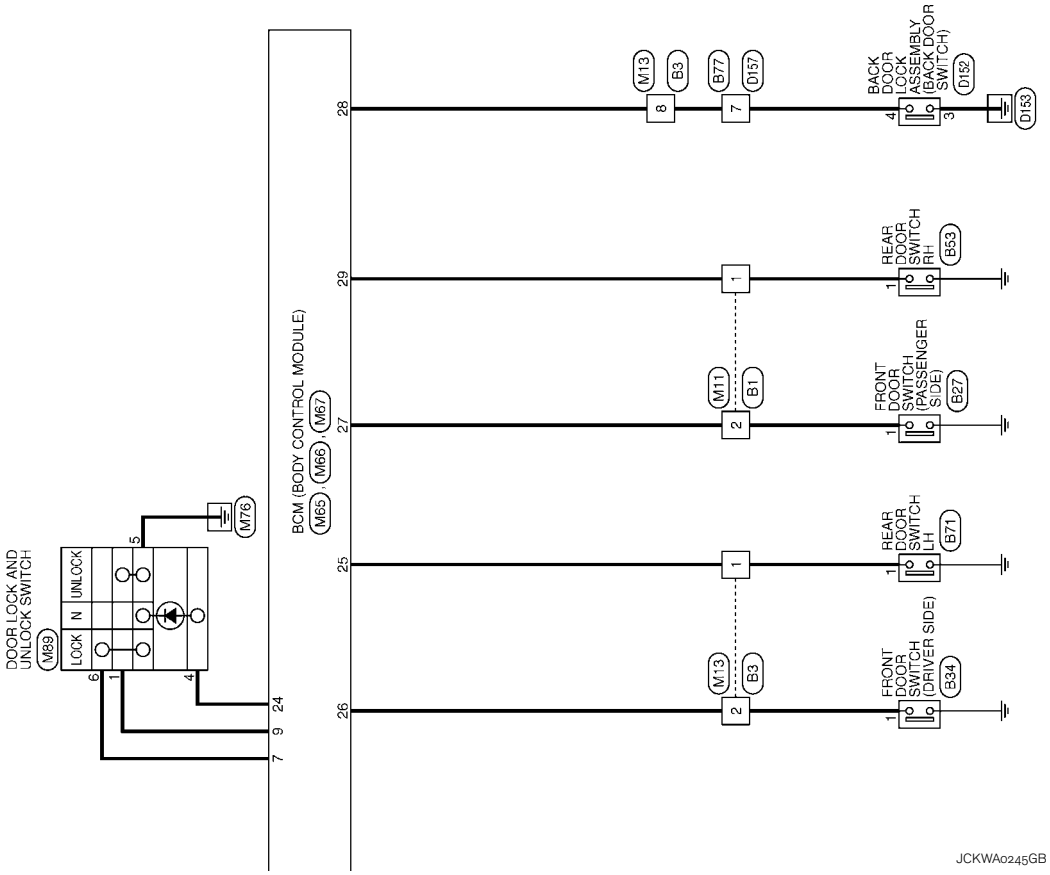
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Wiring Diagram - POWER DOOR LOCK CONTROL SYSTEM -

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POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

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 [Specification]
1	LG	-
2	BR	-[LHD models]

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

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 [Specification]
1	GR	-
2	R/W	-[LHD models]
8	G	-

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

H.S.

1	2	3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name [Specification]
7	O	-

Connector No.	B5
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

H.S.

1	2	3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	-
2	O	-

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	R/W	-

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-

JCKWA0246GB

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POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	TH08FW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
7	G	–

Connector No.	B86
Connector Name	WIRE TO WIRE
Connector Type	NS06MW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
7	O	–
8	SB	–

Connector No.	B88
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
7	O	–
8	SB	–

Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	GR	–[With Intelligent Key]
3	SB	–

Connector No.	D9
Connector Name	FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
Connector Type	FEA04FB-FHA2

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	GR	–[With Intelligent Key]
3	R/Y	–[With Intelligent Key]

Connector No.	D42
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	P	–[With Intelligent Key]
3	Y	–[With Intelligent Key]

Connector No.	D48
Connector Name	FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Type	FEA04FB-FHA2

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	P	–[With Intelligent Key]
3	Y	–[With Intelligent Key]

Connector No.	D81
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
7	O	–
8	SB	–

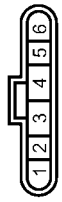
JCKWA0247GB

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POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	D85
Connector Name	REAR DOOR LOCK ACTUATOR LH
Connector Type	FEA04FB-FHA2

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
2	O	–
3	SB	–

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Type	NS06FW-CS

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	O	–
8	SB	–

Connector No.	D105
Connector Name	REAR DOOR LOCK ACTUATOR RH
Connector Type	FEA04FB-FHA2

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
2	O	–
3	SB	–

Connector No.	D152
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	CINCH 49309 EV 4M9

H.S.



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

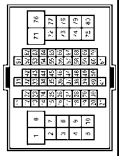
Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
7	G	–

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-NS16-TM4

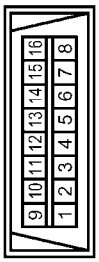
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
76	Y	–

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

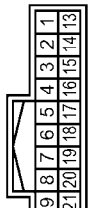
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	–
14	P	–

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH24FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	–
2	BR	–[LHD models]

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POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH24FW

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 [Specification]
1	GR	-
2	R	-[LHD models]
8	G	-

Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Type	NS06FW-CS

H.S.

3		2	1
8	7	6	5	4

Terminal No.	Color of Wire	Signal Name [Specification]
7	O	-

Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.

3		2	1
8	7	6	5	4

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	-
2	O	-

Connector No.	M19
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
2	GR	-
3	SB	-

Connector No.	M25
Connector Name	IGNITION KNOB SWITCH, KEY SWITCH AND KEY LOCK SOLENOID
Connector Type	TK06MGY

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	Y	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
21	L	CAN-H
22	P	CAN-L

Connector No.	M59
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	TK28FY-EX-SC

H.S.

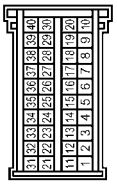
20	21	17									24	49	1
22	11	46	48	47	45	13	3	4	6	5
16	12	19	15	14	51	23	50	18	52	2

Terminal No.	Color of Wire	Signal Name [Specification]
19	R	UNLOCK

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POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AAB40FB



Terminal No.	Color of Wire	Signal Name [Specification]
7	P	LOCK/UNLOCK SW (LOCK)
9	BR	LOCK/UNLOCK SW (UNLOCK)
13	R	SHOCK DETECT SIG
19	L	CAN-H
20	P	CAN-L
24	GR	DOOR LOCK STATUS IND
25	GR	DOOR SW (RL)
26	R	DOOR SW (DR)
27	BR	DOOR SW (AS)
28	G	DOOR SW (BACK)
29	LG	DOOR SW (RR)

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-NS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
76	Y	-

36	V	KEY SW

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FCI 211PC122S1017



Terminal No.	Color of Wire	Signal Name [Specification]
41	V	BAT(FUSE)

Connector No.	M82
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
2	O	-
3	Y	-[With Intelligent Key]

Connector No.	M87
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FCI 211PC083S0017



Terminal No.	Color of Wire	Signal Name [Specification]
54	O	DOOR UNLOCK OUTPUT (OTHER)
55	B	GND(POWER)
56	Y	DOOR LOCK OUTPUT (ALL)[With Intelligent Key]
57	Y	BAT(F/L)
60	GR	UNLOCK (DR)

Connector No.	M89
Connector Name	DOOR LOCK AND UNLOCK SWITCH
Connector Type	7703197674

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
4	GR	-
5	B	-
6	P	-

Connector No.	M90
Connector Name	PASSENGER SIDE ANTI-HIJACK RELAY
Connector Type	MS03FB-M2



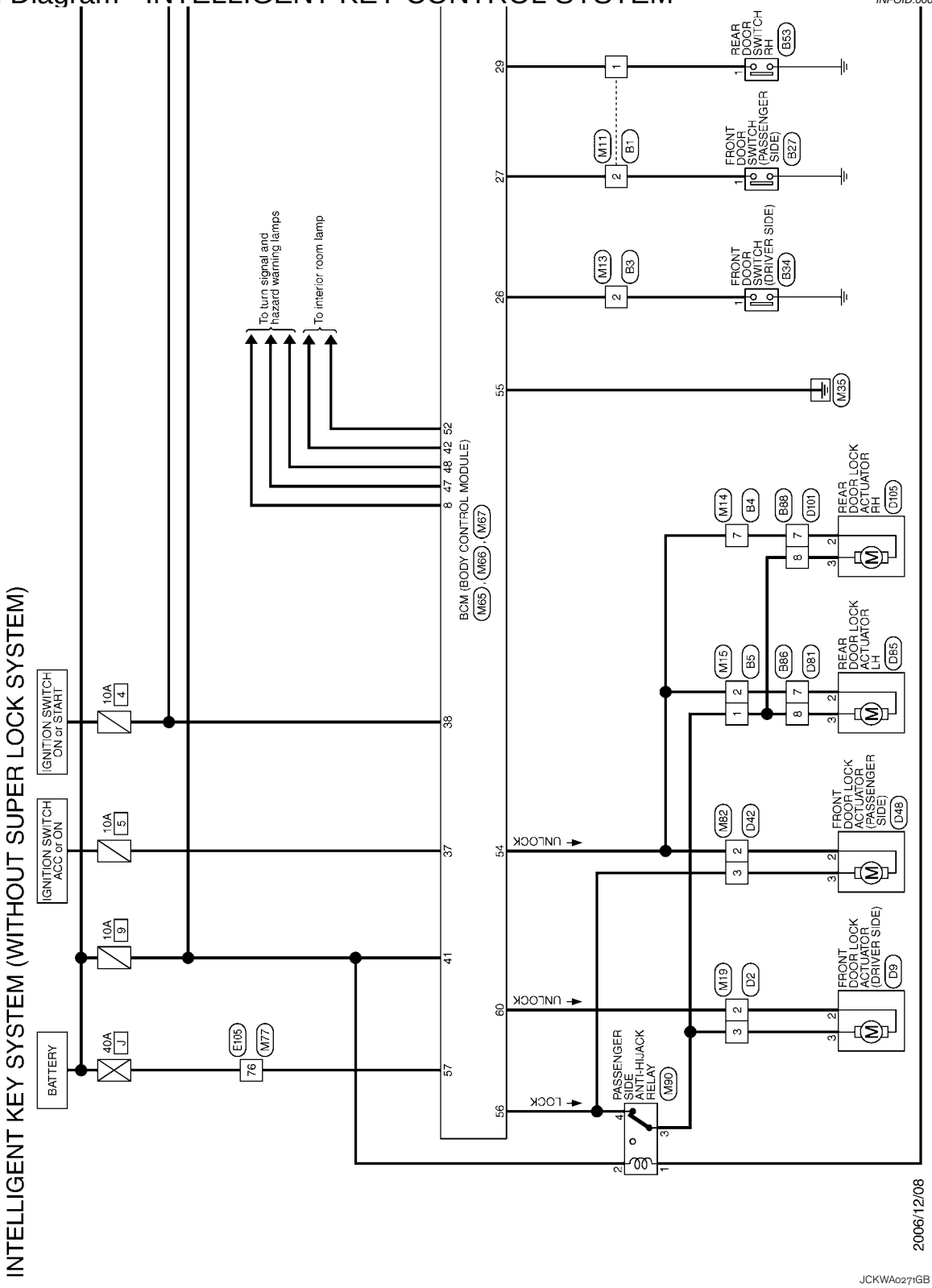
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	V	-
3	SB	-
4	Y	-

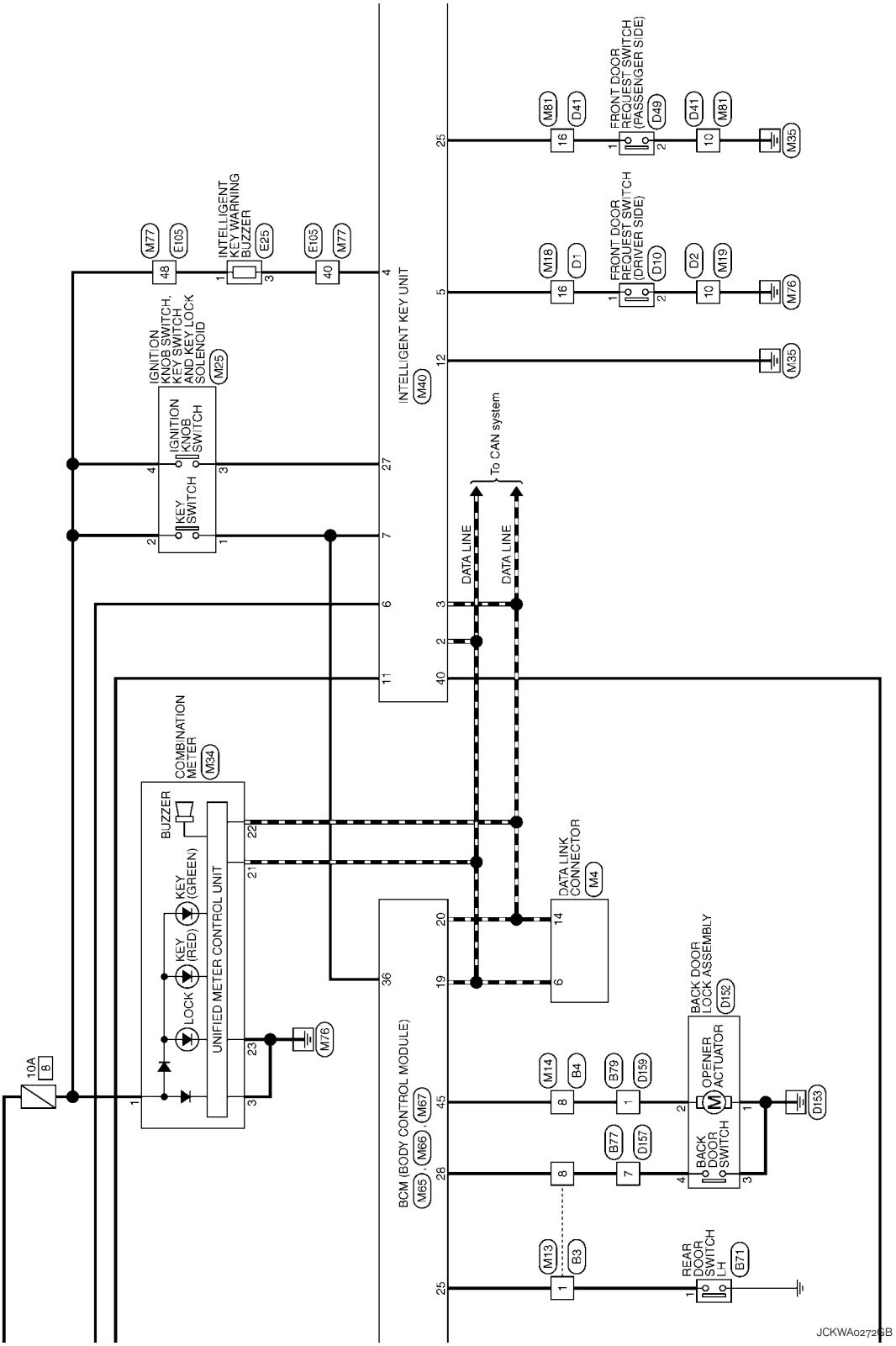
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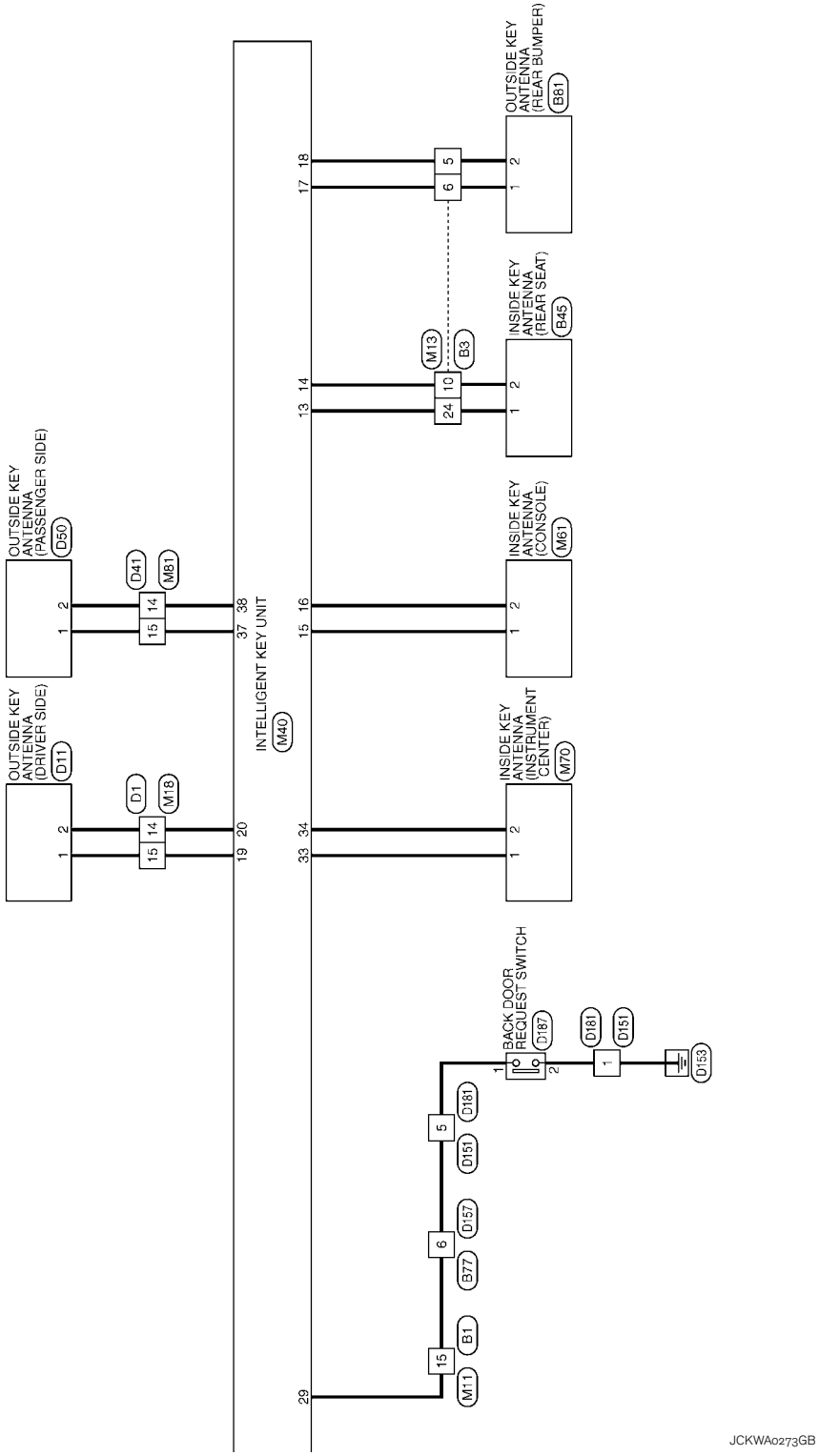
Wiring Diagram - INTELLIGENT KEY CONTROL SYSTEM -

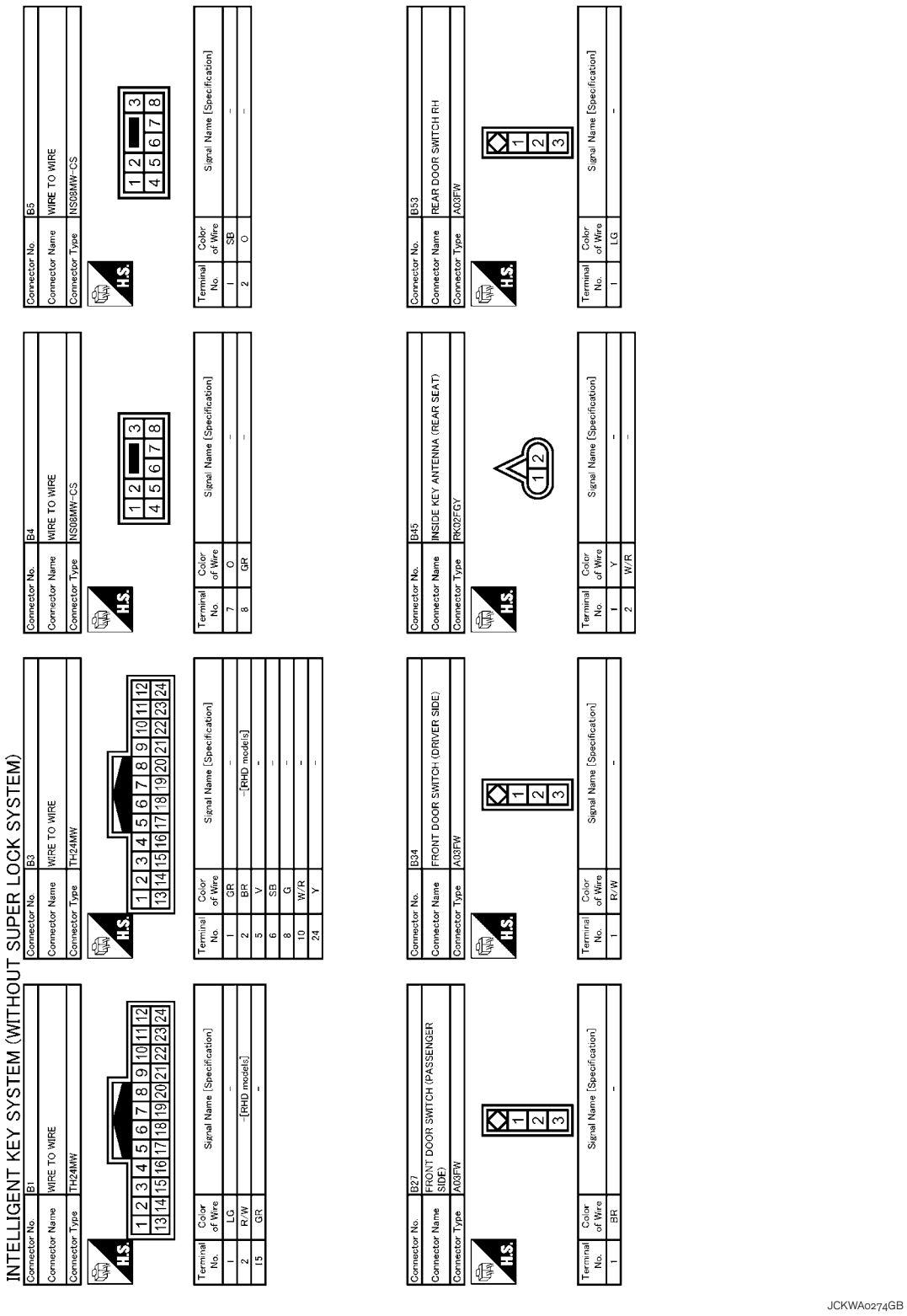
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OUTSIDE KEY ANTENNA (REAR BUMPER)
B81
INSIDE KEY ANTENNA (REAR SEAT)
B45
INSIDE KEY ANTENNA (CONSOLE)
M61
INSIDE KEY ANTENNA (INSTRUMENT CENTER)
M70
OUTSIDE KEY ANTENNA (PASSENGER SIDE)
D50
OUTSIDE KEY ANTENNA (DRIVER SIDE)
D11
INTELLIGENT KEY UNIT
M40
BACK DOOR REQUEST SWITCH
D187
M13
B3
D41
M81
D1
M18
M11
B1
B77
D157
D151
D181
D153
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JCKWA0274GB

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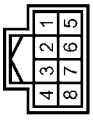
INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	–
2		
3		

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	TH08FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	GR	–
7	G	–
8		

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	M02FW-LC

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	–
2		

Connector No.	B81
Connector Name	OUTSIDE KEY ANTENNA (REAR BUMPER)
Connector Type	RK02FGY

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	–
2	V	–

Connector No.	B86
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
7	O	–
8	SB	–

Connector No.	B88
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
7	O	–
8	SB	–

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TK16FW



Terminal No.	Color of Wire	Signal Name [Specification]
14	BR/W	–
15	L/Y	–
16	P	–

Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
2	GR	–[With Intelligent Key]
3	SB	–
10	B	–

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INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

Connector No.	D9
Connector Name	FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
Connector Type	FEA04FB-FHA2

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
2	GR	–[With Intelligent Key]
3	R/Y	–[With Intelligent Key]

Connector No.	D10
Connector Name	FRONT DOOR REQUEST SWITCH (DRIVER SIDE)
Connector Type	RK02ML-B

H.S.

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

Connector No.	D11
Connector Name	OUTSIDE KEY ANTENNA (DRIVER SIDE)
Connector Type	RK02MGY

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	L/Y	–
2	BR/W	–

Connector No.	D41
Connector Name	WIRE TO WIRE
Connector Type	TK16FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
10	B	–
14	O	–
15	L	–
16	BR	–

Connector No.	D42
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	P	–[With Intelligent Key]
3	Y	–[With Intelligent Key]

Connector No.	D48
Connector Name	FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Type	FEA04FB-FHA2

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	P	–[With Intelligent Key]
3	Y	–[With Intelligent Key]

Connector No.	D49
Connector Name	FRONT DOOR REQUEST SWITCH (PASSENGER SIDE)
Connector Type	RK02ML-B

H.S.

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

Connector No.	D50
Connector Name	OUTSIDE KEY ANTENNA (PASSENGER SIDE)
Connector Type	RK02MGY

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	–
2	O	–

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INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

Connector No.	D81
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	O	-
8	SB	-

Connector No.	D85
Connector Name	REAR DOOR LOCK ACTUATOR LH
Connector Type	FEA04FB-FHA2

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	O	-
3	SB	-

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	O	-
8	SB	-

Connector No.	D105
Connector Name	REAR DOOR LOCK ACTUATOR RH
Connector Type	FEA04FB-FHA2

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
2	O	-
3	SB	-

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
5	GR	-

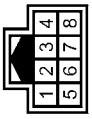
Connector No.	D152
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	CINCH 49309 EV 4M8

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	GR	-
3	B	-
4	G	-

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
6	GR	-
7	G	-

Connector No.	D159
Connector Name	WIRE TO WIRE
Connector Type	M02MW-LC

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-

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INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	TH08FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
5	GR	-

Connector No.	D187
Connector Name	BACK DOOR REQUEST SWITCH
Connector Type	RK02FGY

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	B	-

Connector No.	E25
Connector Name	INTELLIGENT KEY WARNING BUZZER
Connector Type	RK03FBR-DGY

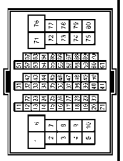
H.S.



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

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-NS16-TM4

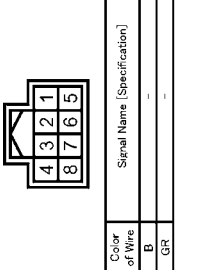
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
40	LG/B	-
48	Y	-
76	Y	-

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

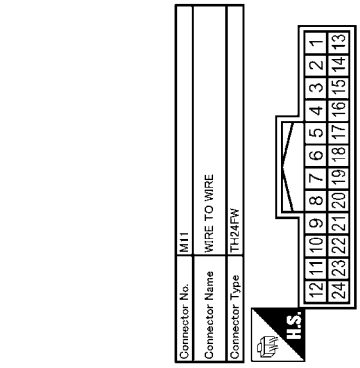
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH24FW

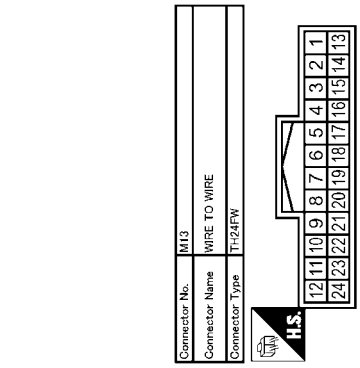
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	R	-[RHD models]
15	GR	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH24FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	BR	-[RHD models]
5	V	-
6	SB	-
8	G	-
10	W	-
24	Y	-

Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	O	-
8	GR	-

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INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	–
2	O	–

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TK16MW

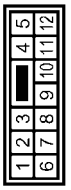
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
14	BR	–
15	L	–
16	P	–

Connector No.	M19
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
2	GR	–
3	SB	–
10	B	–

Connector No.	M25
Connector Name	IGNITION KNOB SWITCH, KEY SWITCH AND KEY LOCK SOLENOID
Connector Type	TK06MGY

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	Y	–
3	L	–
4	Y	–

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	BAT
3	B	GND
21	L	CAN-H
22	P	CAN-L
23	B	GND

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	L	CAN-H
3	P	CAN-L
4	LG	BUZZER
5	P	REQUEST SW (DR)
6	W	IGN SW
7	V	KEY SW
11	V	BATT+
12	B	GND
13	Y	REAR SEAT (+)
14	W	REAR SEAT (–)
15	SB	CONSOLE (+)
16	BR	CONSOLE (–)
17	SB	REAR BUMPER (+)
18	V	REAR BUMPER (–)
19	L	DRIVER DOOR (+)
20	BR	DRIVER DOOR (–)
25	BR	REQUEST SW (AS)
27	L	KNOB SW
29	GR	REQUEST SW (BD)
33	O	INSTRUMENT (+)
34	G	INSTRUMENT (–)
37	L	PASSENGER DOOR (+)
38	O	PASSENGER DOOR (–)
40	Y	AS ANTI-HIJACK

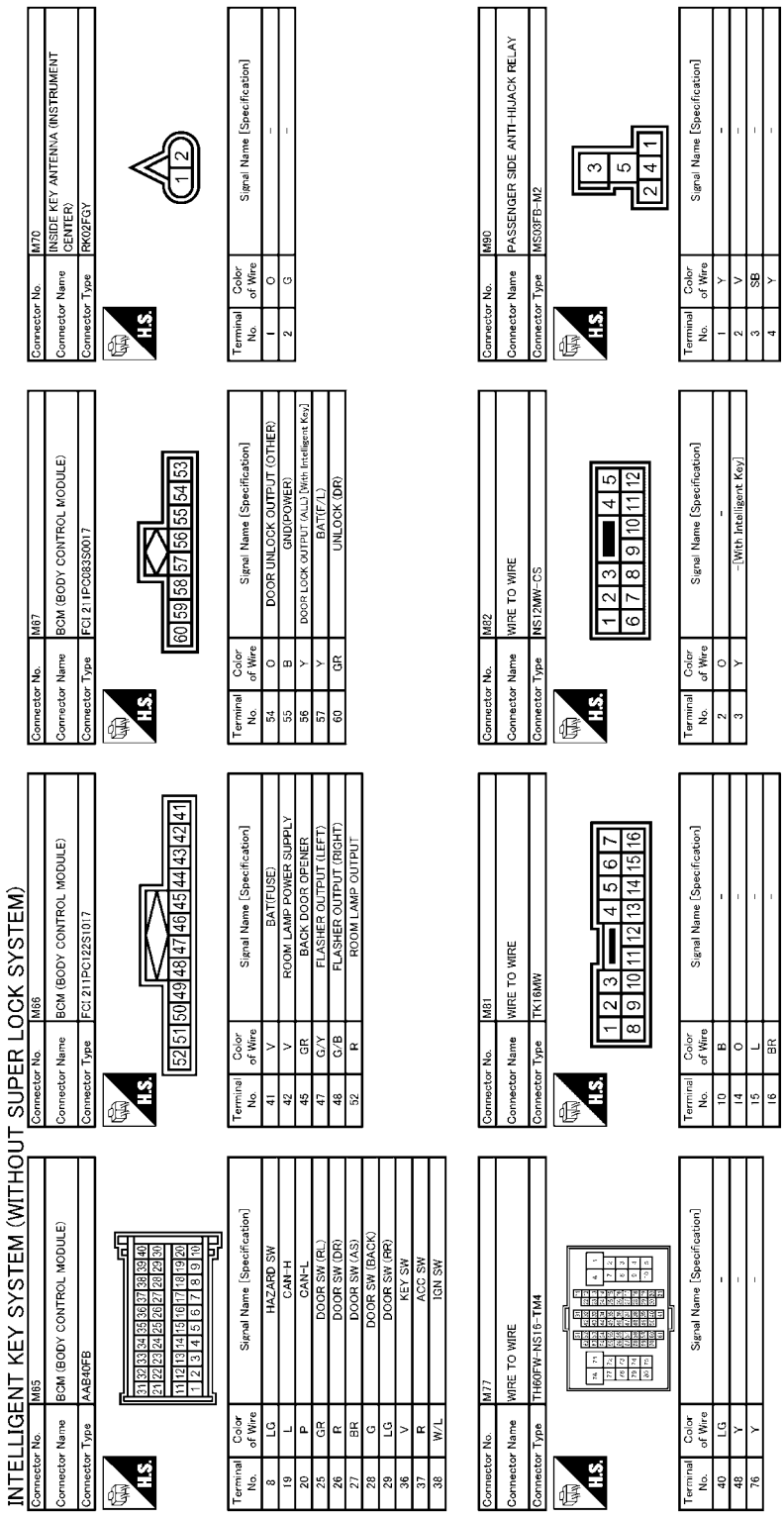
Connector No.	M61
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Type	RK02FGY

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	–
2	BR	–

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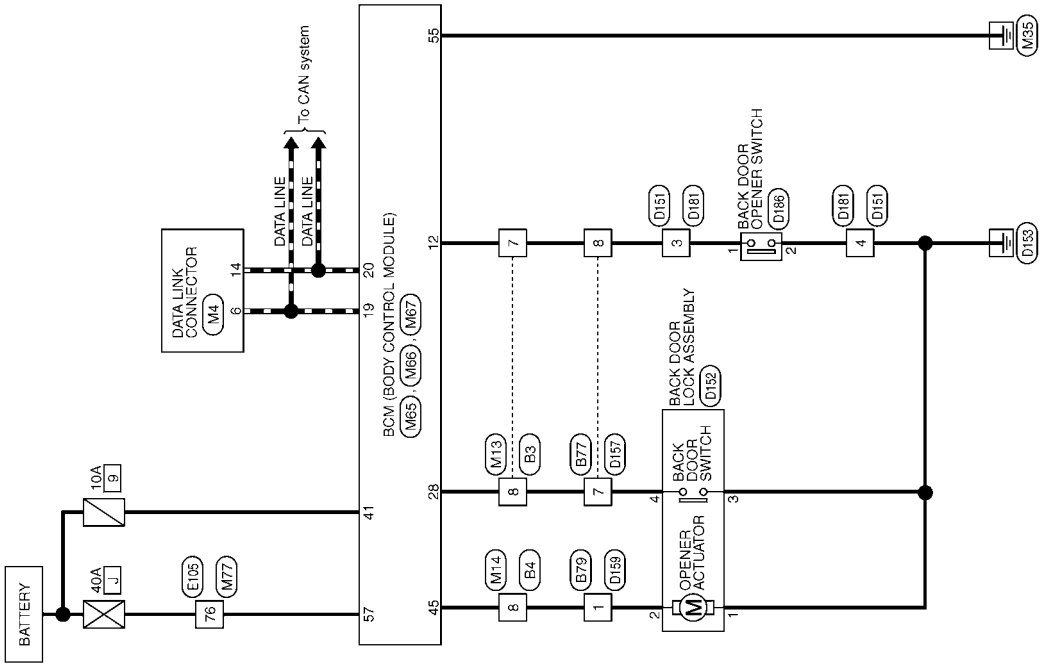
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Wiring Diagram - BACK DOOR OPENER CONTROL SYSTEM -

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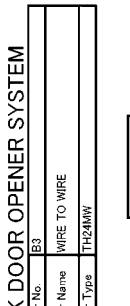
BACK DOOR OPENER SYSTEM



BACK DOOR OPENER SYSTEM

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

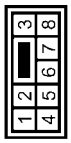
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	P	-
8	G	-

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

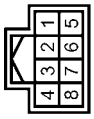
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
8	GR	-

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	TH08FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	G	-
8	P	-

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	M02FW-LC

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
3	P	-
4	B	-

Connector No.	D152
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	CINCH 48309 EV 4M9

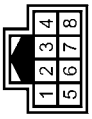
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	GR	-
3	B	-
4	G	-

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	G	-
8	P	-

Connector No.	D159
Connector Name	WIRE TO WIRE
Connector Type	M02MW-LC

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-

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BACK DOOR OPENER SYSTEM

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	TH08FW



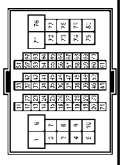
Terminal No.	Color of Wire	Signal Name [Specification]
3	P	-
4	B	-

Connector No.	D186
Connector Name	BACK DOOR OPENER SWITCH
Connector Type	RK02MGY



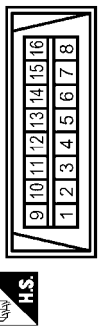
Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-
2	B	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH-60MW-NS16-TM4



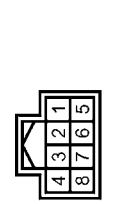
Terminal No.	Color of Wire	Signal Name [Specification]
76	Y	-

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



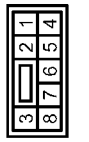
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH24FW



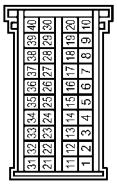
Terminal No.	Color of Wire	Signal Name [Specification]
7	P	-
8	G	-

Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS



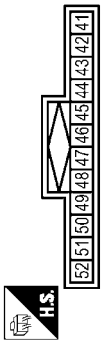
Terminal No.	Color of Wire	Signal Name [Specification]
8	GR	-

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AAB40FB



Terminal No.	Color of Wire	Signal Name [Specification]
12	P	TRUNK/BACK DOOR OPEN SW
19	L	CAN-H
20	P	CAN-L
28	G	DOOR SW (BACK)

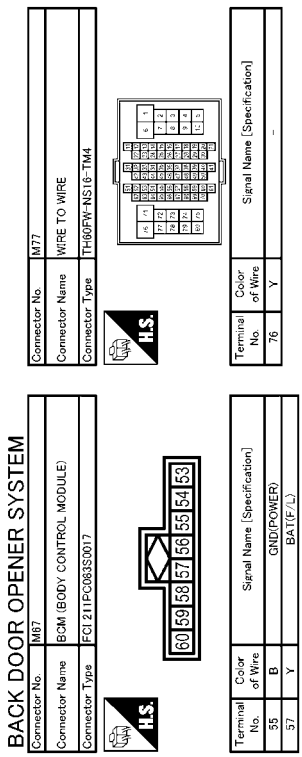
Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FCI 211PC122S1017



Terminal No.	Color of Wire	Signal Name [Specification]
41	V	BAT(FUSE)
45	GR	BACK DOOR OPENER

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JCKWA0298GB

Fail Safe

INFOID:0000000001097039

Fail-safe index

BCM performs fail-safe control when any DTC listed below is detected.

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Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2191: DIFFERENCE OF KEY	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2192: ID DISCORD BCM-ECM	Fuel cut (ECM)	Erase DTC
B2193: CHAIN OF BCM-ECM	Fuel cut (ECM)	Erase DTC
B2194: DISCORD BCM-I-KEY	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2195: ANTI SCANNING	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2196: DONGLE NG	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC

REAR WIPER CONTROL

BCM detects a rear wiper stopping position according to a rear wiper auto stop signal.
When a rear wiper auto stop signal is in the condition listed below, BCM stops power supply to rear wiper after rear wiper is activated for five seconds.

Ignition switch	Rear wiper switch	Auto stop signal
ON	OFF	Rear wiper stop position signal cannot be input 5 seconds.
	ON	The signal does not change for 5 seconds.

NOTE:
The above operation is repeated when operating the rear wiper switch one minute after the stop of the rear wiper caused by Fail-safe.

TURN SIGNAL LAMP CONTROL

BCM detects the turn signal lamp circuit status from the terminal voltage.
BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:
The blinking speed is normal while activating the hazard warning lamp.

LIGHT & RAIN SENSOR MALFUNCTION DETECTION FUNCTION

BCM controls the following items when LIGHT & RAIN sensor has a malfunction.

Auto Light Control
Headlamp is turned ON.

Front Wiper Control
The condition just before the activation of Fail-safe is maintained until the front wiper switch is turned OFF.

DTC Inspection Priority Chart

INFOID:0000000001097040

Priority	DTC
1	• U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN)
2	• B2190: NATS ANTENNA AMP • B2191: DIFFERNCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2194: DISCORD BCM-I-KEY • B2195: ANTI SCANNING • B2196: DONGLE NG

DTC Index

INFOID:0000000001097041

NOTE:

Details of time display

- CRNT: Displays when there is a malfunction now or after returning to the normal condition until turning ignition switch OFF → ON again.
- PAST: Displays when there is a malfunction that is detected in the past and stored.
- 1 - 39: Displayed if any previous malfunction is present when current condition is normal. It increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The counter remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch OFF → ON after returning to the normal condition if the malfunction is detected again.

CONSULT display	TIME		Fail-safe	Refer to
No DTC is detected. further testing may be required.	—	—	—	—
U1000: CAN COMM CIRCUIT	0	1 - 39	—	BCS-32
U1010: CONTROL UNIT (CAN)	0	1 - 39	—	BCS-33
B2190: NATS ANTENNA AMP	CRNT	PAST	×	• With Intelligent Key system SEC-33 • Without Intelligent Key system SEC-174
B2191: DIFFERENCE OF KEY	CRNT	PAST	×	• With Intelligent Key system SEC-35 • Without Intelligent Key system SEC-176
B2192: ID DISCORD BCM-ECM	CRNT	PAST	×	• With Intelligent Key system SEC-36 • Without Intelligent Key system SEC-177
B2193: CHAIN OF BCM-ECM	CRNT	PAST	×	• With Intelligent Key system SEC-38 • Without Intelligent Key system SEC-178
B2194: DISCORD BCM-I-KEY	CRNT	PAST	×	SEC-39
B2195: ANTI SCANNING	CRNT	PAST	×	• With Intelligent Key system SEC-179 • Without Intelligent Key system SEC-179
B2196: DONGLE NG	CRNT	PAST	×	• With Intelligent Key system SEC-41 • Without Intelligent Key system SEC-180

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SYMPTOM DIAGNOSIS

DOOR LOCK FUNCTION SYMPTOMS

DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH : Symptom Table

INFOID:0000000000939191

DOOR LOCK AND UNLOCK SWITCH OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-20, "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)

- Except driver side, doors are closed.
- Passenger side door is not in anti-hijack state.
- Doors are not locked by Intelligent Key or door request switch.

Symptom Table

Symptom	Diagnosis/service procedure		Reference page
Door lock and unlock function does not operate with door lock and unlock switch.	1. Check BCM power supply and ground circuit.		DLK-71
	2. Check door lock and unlock switch.		DLK-73
	3. Check door switch.	Passenger side	DLK-84
		Rear LH	DLK-86
		Rear RH	DLK-87
		Back door	DLK-89
	4. Check intermittent incident.		GI-39
Specific door lock actuator does not operate.	1. Check door lock actuator.	Driver side	DLK-95
		Passenger side	DLK-97
		Rear LH	DLK-98
		Rear RH	DLK-100
	2. Check intermittent incident.		GI-39
Rear LH and RH door lock actuator does not operate.	1. Check anti-hijack relay.		DLK-125
	2. Check intermittent incident.		GI-39

INTELLIGENT KEY

INTELLIGENT KEY : Symptom Table

INFOID:0000000000939193

INTELLIGENT KEY OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-20, "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)

- Door lock and unlock operation are normal.
- Emergency key is removed from ignition key cylinder.
- All doors are closed.
- Ignition knob is not pressed.

- No Intelligent Keys are inside the vehicle.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
All of the Intelligent Key functions do not operate.	1. Check Intelligent Key power supply and ground circuit.	DLK-71
	2. Check driver side door switch.	DLK-83
	3. Check key switch.	DLK-91
	4. Check ignition knob switch.	DLK-93
	5. Check Intelligent Key battery.	DLK-134
	6. Check intermittent incident.	GI-39
Anti-hijack function does not operate by Intelligent Key.	1. Check “SELECTIVE UNLOCK FUNCTION” setting in “WORK SUPPORT”.	DLK-65
	2. Check intermittent incident.	GI-39

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH : Symptom Table

INFOID:0000000000939192

DOOR REQUEST SWITCH OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-20, "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 operation is normal.
- “LOCK/UNLOCK BY I-KEY” is ON when setting on CONSULT-III.
- Emergency key is removed from ignition key cylinder.
- Ignition switch is in OFF position.
- No Intelligent Keys are not inside the vehicle.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Door lock and unlock do not operate by door request switch.	1. Check “LOCK/UNLOCK BY I-KEY” setting in “WORK SUPPORT”.	DLK-65
	2. Check intermittent incident.	GI-39
Door lock/unlock does not operate by request switch (driver side).	1. Check door request switch (driver side).	DLK-77
	2. Check outside key antenna (driver side).	DLK-107
	3. Check intermittent incident.	GI-39
Door lock/unlock does not operate by request switch (passenger side).	1. Check door request switch (passenger side).	DLK-79
	2. Check outside key antenna (passenger side).	DLK-110
	3. Check intermittent incident.	GI-39
Door lock/unlock does not operate by request switch (back door).	1. Check door request switch (back door).	DLK-80
	2. Check outside key antenna (rear bumper).	DLK-113
	3. Check intermittent incident.	GI-39
Anti-hijack function does not operate by driver side door request switch (other door lock functions operate).	1. Check “SELECTIVE UNLOCK FUNCTION” setting in “WORK SUPPORT”.	DLK-65
	2. Check intermittent incident.	GI-39

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Symptom	Diagnosis/service procedure	Reference page
Passenger side anti-hijack function does not operate by passenger side door request switch (other door lock functions operate).	1. Check passenger side anti-hijack relay.	DLK-125
	2. Check intermittent incident.	GI-39

KEY REMINDER

KEY REMINDER : Symptom Table

INFOID:0000000001091244

KEY REMINDER OPERATION MALFUNCTION

NOTE:
- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-20, "Work Flow".
- To understand the operation when it does work, refer to DLK-35, "KEY REMINDER : System Description".
- 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)
- Request switch operation and door lock and unlock switch operation are normal.

Symptom Table

Symptom	Diagnosis/service procedure		Reference page
Key reminder operation does not operate.	1. Check door switch (driver side).		DLK-83
	2. Check inside key antenna.	Instrument center	DLK-116
		Console	DLK-119
		Rear seat	DLK-122
	3. Check intermittent incident.		GI-38

AUTO DOOR LOCK

AUTO DOOR LOCK : Symptom Table

INFOID:0000000001091243

AUTO DOOR LOCK OPERATION MALFUNCTION

NOTE:
- “AUTO RELOCK TIMER” is not OFF when setting on CONSULT-III.
- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-20, "Work Flow".
- To understand the operation when it does work, refer to DLK-38, "AUTO DOOR LOCK : System Description"“
- 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)
- Request switch operation and door lock and unlock switch operation are normal.

Symptom Table

Symptom	Diagnosis/service procedure		Reference page
Auto door lock operation does not operate.	1. Check “AUTO RELOCK TIMER” setting in “WORK SUPPORT”.		DLK-65
	2. Check door switch.	Driver side	DLK-83
		Passenger side	DLK-84
		Rear LH	DLK-86
		Rear RH	DLK-87
		Back door	DLK-89
	3. Check ignition knob switch.		DLK-93
	4. Check key switch.		DLK-91
	5. Check intermittent incident.		GI-39

VEHICLE SPEED SENSING AUTO DOOR LOCK

VEHICLE SPEED SENSING AUTO DOOR LOCK : Symptom Table

INFOID:0000000001091126

VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-20, "Work Flow".
- To understand the operation when it does work, refer to DLK-41, "VEHICLE SPEED SENSING AUTO DOOR LOCK : System Description".
- 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)

- Request switch operation and door lock and unlock switch operation are normal.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Vehicle speed sensing auto door lock operation does not operate.	1. Check vehicle speed signal.	DLK-133
	2. Check intermittent incident.	GI-39

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BACK DOOR OPEN FUNCTION SYMPTOMS

BACK DOOR OPENER SWITCH

BACK DOOR OPENER SWITCH : Symptom Table

INFOID:0000000000939194

BACK DOOR OPENER FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-20, "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)

- Door lock function is normal.
- Vehicle speed is less than 5 km/h (3 MPH).
- All doors are unlocked.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Back door opener function does not operate by back door opener switch.	1. Check back door opener switch.	DLK-105
	2. Check vehicle speed signal.	DLK-133
	3. Check back door opener actuator.	DLK-103
	4. Check intermittent incident.	GI-39

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WARNING FUNCTION SYMPTOMS

BUZZER (COMBINATION METER)

BUZZER (COMBINATION METER) : Symptom Table

INFOID:0000000000939197

BUZZER (COMBINATION METER) OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-20, "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 conditions are extremely complicated. During operation confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-52, "System Description".
- Door lock function is normal.

Symptom Table

Symptom		Diagnosis/service procedure	Reference page
Ignition knob return forgotten warning does not operate properly.		1. Check buzzer (combination meter).	DLK-129
		2. Check intermittent incident.	GI-39
Ignition key warning does not operate properly.		1. Check buzzer (combination meter).	DLK-129
		2. Check intermittent incident.	GI-39
OFF position warning does not operate properly.		1. Check buzzer (combination meter).	DLK-129
		2. Check intermittent incident.	GI-39
Take away warning does not operate properly.	Take away through window	1. Check buzzer (combination meter).	DLK-129
		2. Check intermittent incident.	GI-39

INTELLIGENT KEY WARNING BUZZER

INTELLIGENT KEY WARNING BUZZER : Symptom Table

INFOID:0000000001091534

INTELLIGENT KEY WARNING BUZZER OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-20, "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 conditions are extremely complicated. During operation confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-52, "System Description".

Symptom Table

Symptom		Diagnosis/service procedure	Reference page
Take away warning does not operate properly.	Any door open to all doors closed.	1. Check “TAKE OUT FROM WINDOW WARN” setting in “WORK SUPPORT”.	DLK-65
		2. Check Intelligent Key warning buzzer.	DLK-127
		3. Check intermittent incident.	GI-39

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Symptom		Diagnosis/service procedure	Reference page
Door lock operation warning chime does not operate properly.	Request switch operation	1. Check Intelligent Key warning buzzer.	DLK-127
		2. Check intermittent incident.	GI-39
	Intelligent Key button operation	1. Check Intelligent Key warning buzzer.	DLK-127
		2. Check intermittent incident.	GI-39

WARNING LAMP

WARNING LAMP : Symptom Table

INFOID:0000000001091535

WARNING LAMP OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-20, "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 conditions are extremely complicated. During operation confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-52, "System Description".
- Door lock function is normal.

Symptom Table

Symptom		Diagnosis/service procedure	Reference page
OFF position warning does not operate properly.		1. Check LOCK warning lamp. (RED blinking)	DLK-131
		2. Check intermittent incident.	GI-39
Take away warning does not operate properly.	Any door open to all doors closed.	1. Check LOCK warning lamp. (RED blinking)	DLK-131
		2. Check intermittent incident.	GI-39
	Door is open	1. Check LOCK warning lamp. (RED blinking)	DLK-131
		2. Check intermittent incident.	GI-39
	Take away through window	1. Check LOCK warning lamp. (RED blinking)	DLK-131
		2. Check intermittent incident.	GI-39
Intelligent Key low battery warning does not operate properly.		1. Check “LOW BAT OF KEY FOB WARN” setting in “WORK SUPPORT”.	DLK-65
		2. Check Intelligent Key battery.	DLK-134
		3. Check KEY warning lamp. (GREEN blinking)	DLK-130
		4. Check intermittent incident.	GI-39

BACK DOOR

BACK DOOR : Symptom Table

INFOID:0000000001093277

BACK DOOR OPEN WARNING OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-20, "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)

- Door lock function and back door opener function is normal.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Back door open warning does not operate properly.	1. Check back door opener switch.	DLK-105
	2. Check intermittent incident.	GI-39

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HAZARD AND BUZZER REMINDER FUNCTION SYMPTOMS

HAZARD WARNING LAMP

HAZARD WARNING LAMP : Symptom Table

INFOID:0000000000939198

BUZZER REMINDER OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-20, "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-III.
- “ANSWER BACK WITH I-KEY LOCK”, “ANSWER BACK WITH I-KEY UNLOCK” and “ANSWER BACK FUNCTION” are ON when setting on CONSULT-III.
- Door lock function is normal.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Buzzer reminder operation does not operate properly.	1. Check setting of buzzer reminder with CONSULT-III.	DLK-65
	2. Check intermittent incident.	GI-39

INTELLIGENT KEY WARNING BUZZER

INTELLIGENT KEY WARNING BUZZER : Symptom Table

INFOID:0000000001091545

HAZARD REMINDER OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-20, "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)

- “HAZARD ANSWER BACK” is ON when setting on CONSULT-III.
- Door lock function is normal.

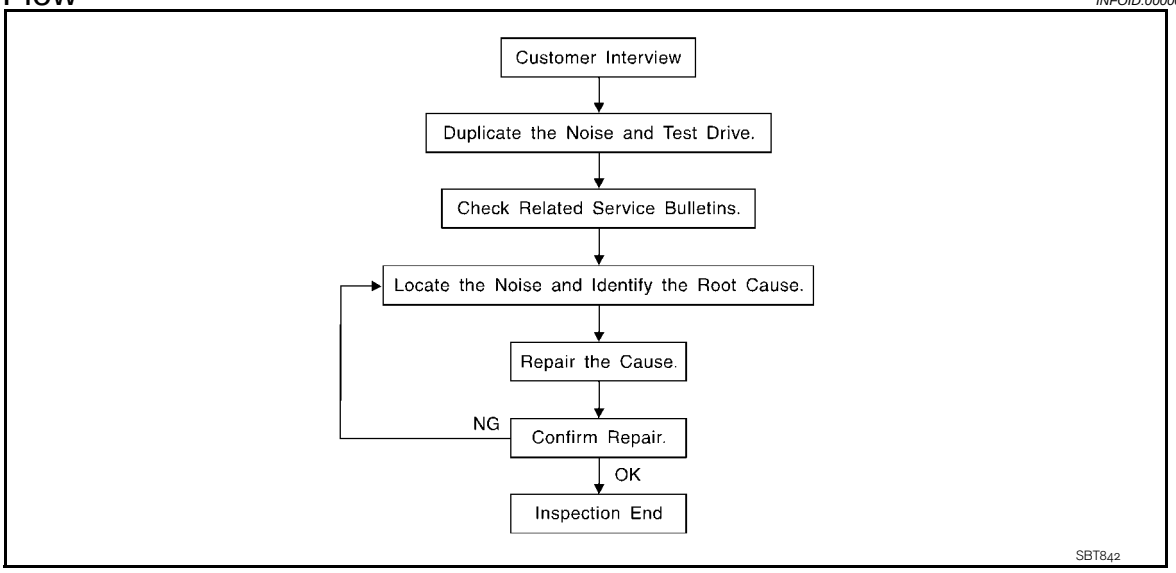
Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Hazard reminder operation does not operate properly.	1. Check setting of hazard reminder with CONSULT-III.	DLK-65
	2. Check intermittent incident.	GI-39

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000001098110



CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of the customer's comments; refer to DLK-216, "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 a test drive 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.

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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 A/T model).
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 (TSB) 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 (Engine Ear or mechanics stethoscope).
2. Narrow down the noise to a more specific area and identify the cause of the noise by:

- removing the components in the area that you suspect the noise is coming from.
  Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
- tapping or pushing/pulling the component that 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-214, "Inspection Procedure".

REPAIR THE CAUSE

- If the cause is a loose component, tighten the component securely.
- If the cause is insufficient clearance between components:
- separate components by repositioning or loosening and retightening the component, if possible.
- insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or urethane tape are available through your authorized Nissan Parts Department.

CAUTION:
Do not use excessive force as many components are constructed of plastic and may be damaged.
NOTE:

- URETHANE PADS
  Insulates connectors, harness, etc.
- INSULATOR (Foam blocks)
  Insulates components from contact. Can be used to fill space behind a panel.
- INSULATOR (Light foam block)
- FELT CLOTHTAPE
  Used to insulate where movement does not occur. Ideal for instrument panel applications.
  The following materials, not available through NISSAN Parts Department, can also be used to repair squeaks and rattles.
- UHMW(TEFLON) TAPE
  Insulates where slight movement is present. Ideal for instrument panel applications.
- SILICONE GREASE
  Used in place of UHMW tape that 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

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Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.

Inspection Procedure

INFOID:0000000001098111

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

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. Cluster lid A and instrument panel
2. Acrylic lens and combination meter housing
3. Instrument panel to front pillar garnish
4. Instrument panel to windshield
5. Instrument panel mounting pins
6. Wiring harnesses behind the combination meter
7. A/C defroster duct and duct joint

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

CAUTION:

Do not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will not be able to recheck the repair.

CENTER CONSOLE

Components to pay attention to include:

1. Shifter assembly cover to finisher
2. A/C control unit and cluster lid C
3. Wiring harnesses behind audio and A/C control unit

The instrument panel repair and isolation procedures also apply to the center console.

DOORS

Pay attention to the:

1. Finisher and inner panel making a slapping noise
2. Inside handle escutcheon to door finisher
3. Wiring harnesses tapping
4. Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks to repair the noise.

TRUNK

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

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

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

SUNROOF/HEADLINING

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

1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
2. Sunvisor shaft shaking in the holder
3. Front or rear windshield touching headlining and squeaking

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Again, pressing on the components to stop the noise while duplicating the conditions can isolate most of these incidents. Repairs usually consist of insulating with felt cloth tape.

SEATS

When isolating seat noise it is important to note the position the seat is in and the load placed on the seat when the noise is present. These conditions should be duplicated when verifying and isolating the cause of the noise.

Cause of seat noise include:

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

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

UNDERHOOD

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

Causes of transmitted underhood noise include:

1. Any component mounted to the engine wall
2. Components that pass through the engine wall
3. Engine wall mounts and connectors
4. Loose radiator mounting pins
5. Hood bumpers out of adjustment
6. Hood striker out of adjustment

These noises can be difficult to isolate since they cannot be reached from the interior of the vehicle. The best method is to secure, move or insulate one component at a time and test drive the vehicle. Also, engine RPM or load can be changed to isolate the noise. Repairs can usually be made by moving, adjusting, securing, or insulating the component causing the noise.

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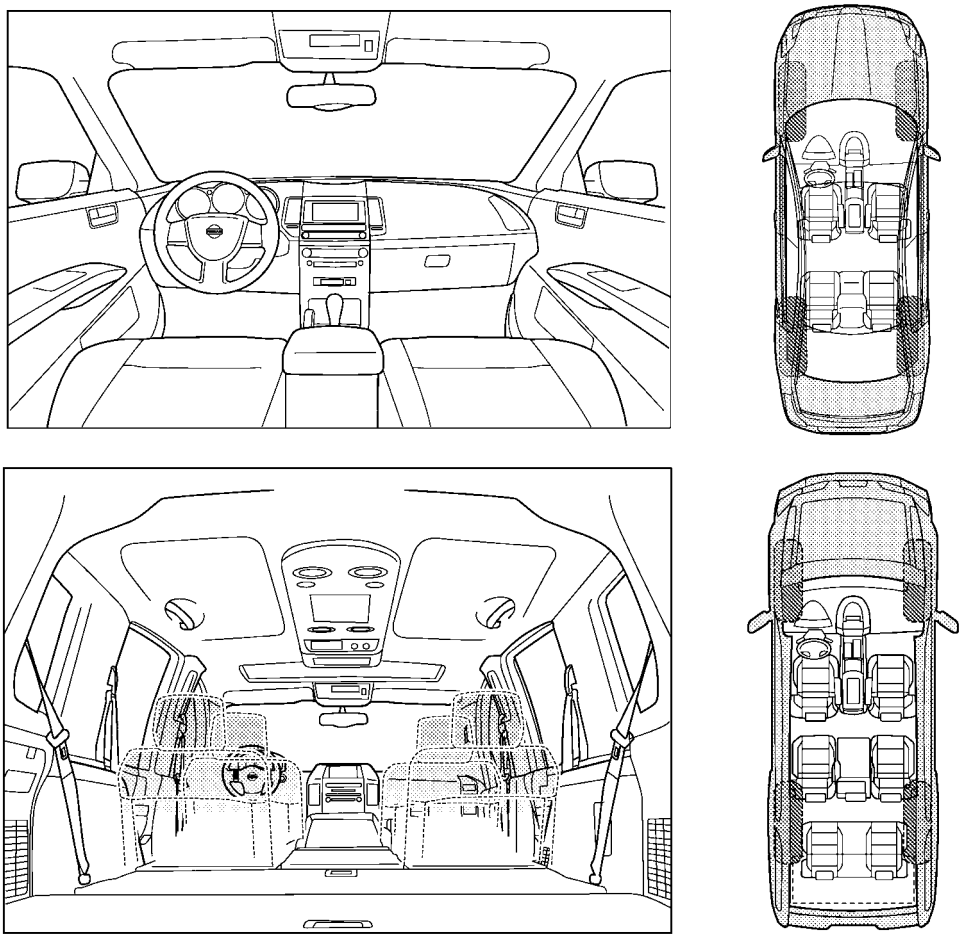
Diagnostic Worksheet

INFOID:0000000001098112

SQUEAK & RATTLE
DIAGNOSTIC WORKSHEET

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

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



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

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SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

_____

_____

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

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

III. WHEN DRIVING:

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

IV. WHAT TYPE OF NOISE

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

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

_____

_____

_____

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

VIN: _____ Customer Name: _____

W.O.# _____ Date: _____

This form must be attached to Work Order

PIIB8742E

PRECAUTION

PRECAUTIONS

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

INFOID:0000000001096525

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

Precaution Necessary for Steering Wheel Rotation After Battery Disconnect

INFOID:0000000001096526

NOTE:

- This Procedure is applied only to models with Intelligent Key system and NATS (NISSAN ANTI-THEFT SYSTEM).
- Remove and install all control units after disconnecting both battery cables with the ignition knob in the ″LOCK″ position.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work. If DTC is detected, perform trouble diagnosis according to self-diagnostic results.

For models equipped with the Intelligent Key system and NATS, an electrically controlled steering lock mechanism is adopted on the key cylinder.
For this reason, if the battery is disconnected or if the battery is discharged, the steering wheel will lock and steering wheel rotation will become impossible.
If steering wheel rotation is required when battery power is interrupted, follow the procedure below before starting the repair operation.

OPERATION PROCEDURE

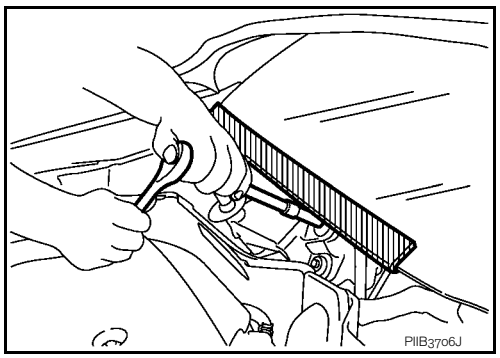
1. Connect both battery cables.
   NOTE:
   Supply power using jumper cables if battery is discharged.
2. Use the Intelligent Key or mechanical key to turn the ignition switch to the ″ACC″ position. At this time, the steering lock will be released.
3. Disconnect both battery cables. The steering lock will remain released and the steering wheel can be rotated.
4. Perform the necessary repair operation.
5. When the repair work is completed, return the ignition switch to the ″LOCK″ position before connecting the battery cables. (At this time, the steering lock mechanism will engage.)
6. Perform a self-diagnosis check of all control units using CONSULT-III.

Precaution for Procedure without Cowl Top Cover

INFOID:0000000001096527

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



Work

INFOID:0000000000939205

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

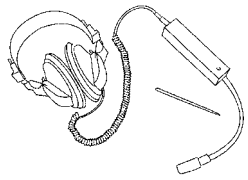
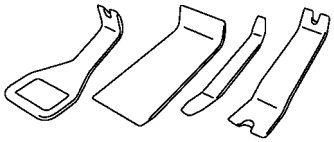
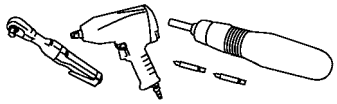
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PREPARATION

PREPARATION

Commercial Service Tools

INFOID:0000000001116408

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

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ON-VEHICLE MAINTENANCE

PRE-INSPECTION FOR DIAGNOSTIC

Basic Inspection

INFOID:0000000001035832

BASIC INSPECTION

1. CHECK POWER DOOR LOCK AND UNLOCK SWITCH OPERATION

Check door lock and unlock operation by operating door lock and unlock switch.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to DLK-203, "DOOR LOCK AND UNLOCK SWITCH : Symptom Table".

2. CHECK INTELLIGENT KEY OPERATION

Check door lock and unlock operation by operating the Intelligent Key remote control button.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Refer to DLK-203, "INTELLIGENT KEY : Symptom Table".

3. CHECK DOOR REQUEST SWITCH OPERATION

Check door lock and unlock operation by operating door request switch.

Is the inspection result normal?

YES >> GO TO 4.
NO >> Refer to DLK-204, "DOOR REQUEST SWITCH : Symptom Table".

4. CHECK KEY REMINDER OPERATION

Check key reminder operation. Refer to DLK-35, "KEY REMINDER : System Description".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Refer to DLK-205, "KEY REMINDER : Symptom Table".

5. CHECK AUTO DOOR LOCK OPERATION

Check auto door lock operation. Refer to DLK-38, "AUTO DOOR LOCK : System Description".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Refer to DLK-205, "AUTO DOOR LOCK : Symptom Table".

6. CHECK VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION

Check vehicle speed sensing auto door lock operation. Refer to DLK-41, "VEHICLE SPEED SENSING AUTO DOOR LOCK : System Description".

Is the inspection result normal?

YES >> GO TO 7.
NO >> Refer to DLK-206, "VEHICLE SPEED SENSING AUTO DOOR LOCK : Symptom Table".

7. CHECK BACK DOOR OPENER OPERATION

Check back door opener operation by operating the back door opener switch.

Is the inspection result normal?

YES >> GO TO 8.
NO >> Refer to DLK-207, "BACK DOOR OPENER SWITCH : Symptom Table".

8. CHECK WARNING FUNCTION

Check warning function. Refer to DLK-52, "System Description".

Is the inspection result normal?

YES >> GO TO 9.

NO [Buzzer (combination meter)]>> Refer to DLK-208, "BUZZER (COMBINATION METER) : Symptom Table".
NO (Intelligent Key warning buzzer)>> Refer to DLK-208, "INTELLIGENT KEY WARNING BUZZER : Symptom Table".
NO (Warning lamp)>> Refer to DLK-209, "WARNING LAMP : Symptom Table".
NO (Back door open warning)>> Refer to DLK-209, "BACK DOOR : Symptom Table".

9. CHECK HAZARD AND BUZZER REMINDER FUNCTION

Check hazard and buzzer reminder function by Intelligent Key or request switch. Refer to DLK-322, "System Description".

Is the inspection result normal?

YES >> GO TO 10.
NO (Hazard warning lamp)>> Refer to DLK-211, "HAZARD WARNING LAMP : Symptom Table".
NO (Intelligent Key warning buzzer)>> Refer to DLK-211, "INTELLIGENT KEY WARNING BUZZER : Symptom Table".

10. CHECK OUT

CHECK OUT.

>> INSPECTION END

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ON-VEHICLE REPAIR

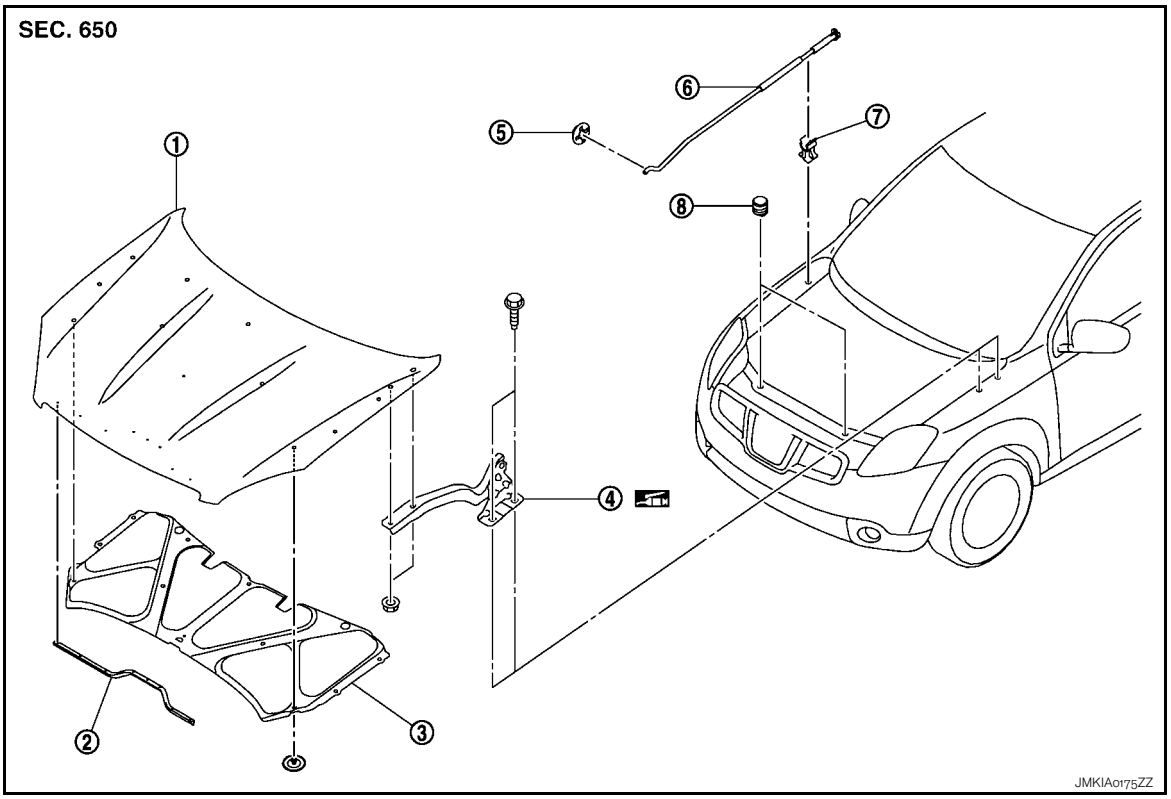
HOOD

HOOD ASSEMBLY

HOOD ASSEMBLY : Exploded View

INFOID:0000000000939208

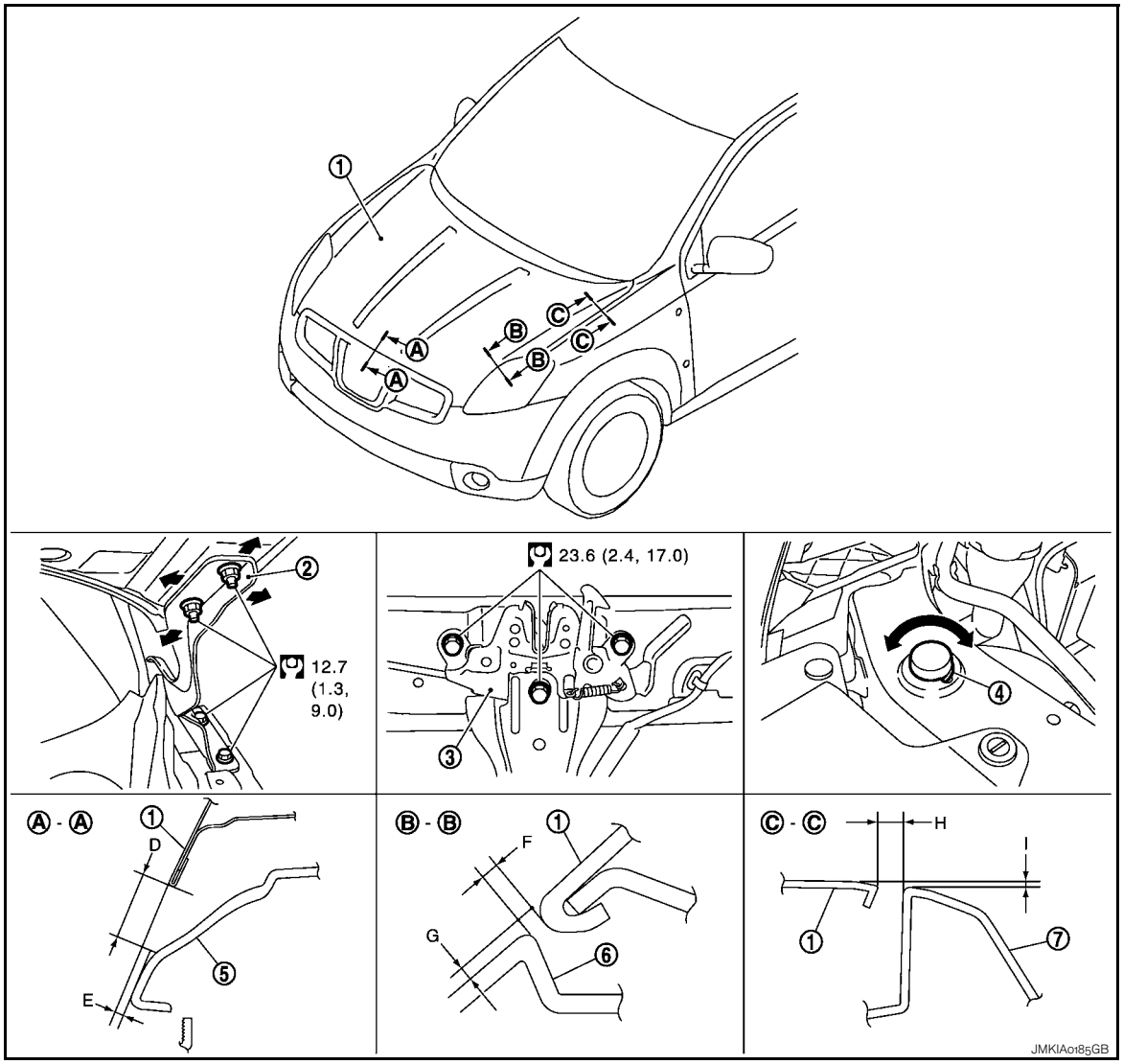
REMOVAL



1. Hood assembly
2. Hood sealing rubber
3. Hood insulator
4. Hood hinge
5. Grommet
6. Hood support rod
7. Clamp
8. Hood bumper rubber

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT



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

Refer to GI-4, "Components" for symbols in the figure.

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000000939209

REMOVAL

1. Support the hood lock assembly with the proper material to prevent it from falling.
   WARNING:
   Bodily injury may occur if no supporting rod is holding the hood open when removing the hood stay.
2. Remove the hood hinge mounting nuts on the hood to remove the hood assembly.
   CAUTION:
   Perform work with 2 workers, because of its heavy weight.
3. Remove the following parts after removing the hood assembly.
   - Hood insulator
   - Hood sealing rubber

INSTALLATION

Install in the reverse order of removal.

CAUTION:

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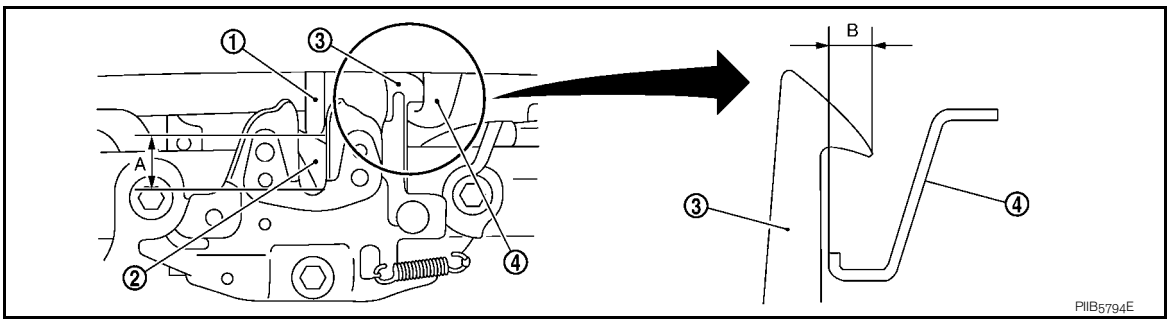
- **Perform work with 2 workers, because of its heavy weight.**
- **Before installing the hood hinge, apply anticorrosive agent onto the mounting surface of the vehicle body.**
- **After installing, perform hood fitting adjustment. Refer to DLK-225, "HOOD ASSEMBLY : Adjustment".**

HOOD ASSEMBLY : Adjustment

INFOID:0000000000939210

Portion				Standard	Right/left Clearance (MAX)
Hood – Front bumper	A – A	D	Clearance	5.2 – 9.2 mm (0.205 – 0.362 in)	2.0 mm (0.079 in)
		E	Surface height	- 0.2 – 3.8 mm (- 0.008 – 0.150 in)	2.0 mm (0.079 in)
Hood – Front combination lamp	B – B	F	Clearance	3.7 – 7.7 mm (0.140 – 0.303 in)	2.0 mm (0.079 in)
		G	Surface height	- 2.3 – 2.3 mm (- 0.091 – 0.091 in)	2.3 mm (0.091 in)
Hood – Front fender	C – C	H	Clearance	3.9 – 5.9 mm (0.154 – 0.232 in)	1.5 mm (0.059 in)
		I	Surface height	- 1.0 – 1.0 mm (- 0.039 – 0.039 in)	1.5 mm (0.059 in)

1. Check the clearance and the surface height between the hood and each part by visualy and touching. (Fitting standard dimension in the table below should be satisfied.)
2. In case any parts are out of specification, adjust them according to the procedures shown below.
3. Remove the hood lock and adjust the height by rotating the bumper rubber until the hood becomes 1 to1.5 mm (0.04 to 0.059 in) lower than the fender.
4. Temporarily tighten the hood lock, and position by engaging it with the hood striker. Check the lock and striker for looseness and adjust the clearance and evenness with the striker to satisfy the specification.
5. Adjust A and B shown in the figure to the following value with hood's own weight by dropping it from approximately. 200 mm (7.87 in) height or by pressing the hood lightly [approximately. 29 N (3 kg)].



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

A : 20.0 mm (0.787 in)
B : 6.8 mm (0.268 in)

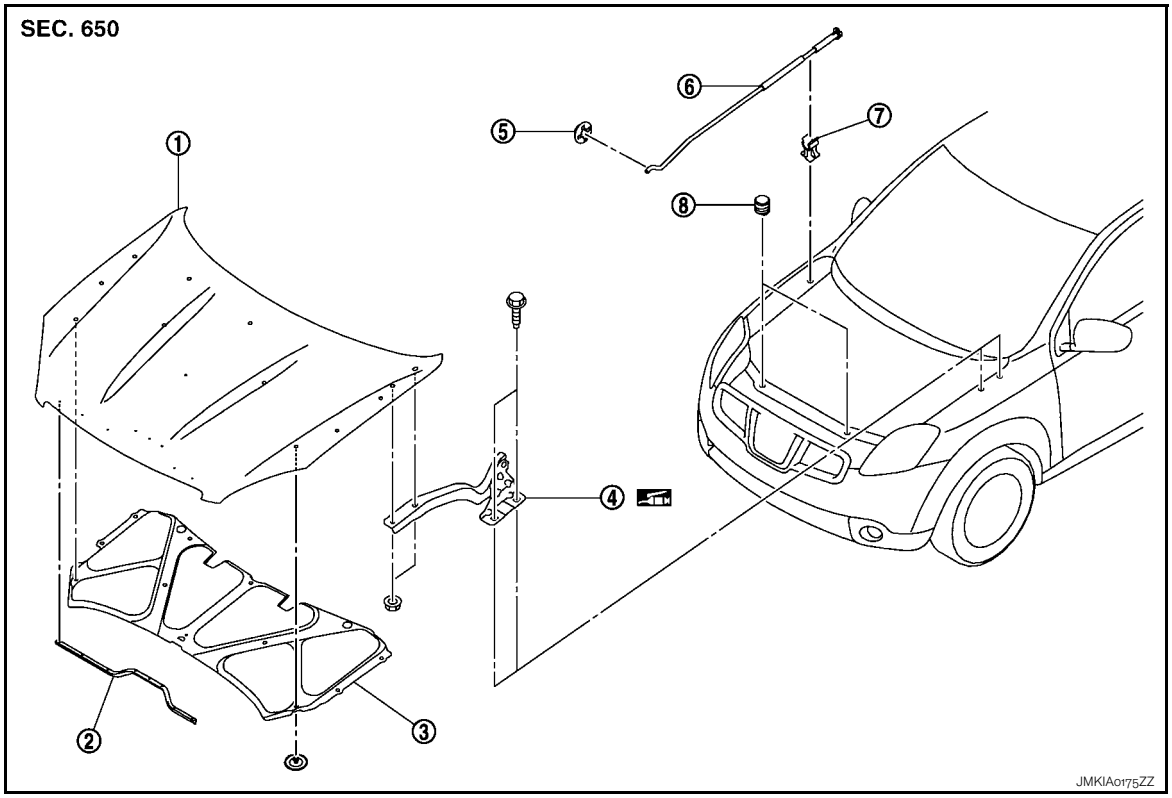
6. After adjustment tighten lock bolts to the specified torque.

HOOD HINGE

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HOOD HINGE : Exploded View

INFOID:0000000001091261



1. Hood assembly
2. Hood sealing rubber
3. Hood insulator
4. Hood hinge
5. Grommet
6. Hood support rod
7. Clamp
8. Hood bumper rubber

Refer to GI-4, "Components" for symbols in the figure.

HOOD HINGE : Removal and Installation

INFOID:0000000001091262

REMOVAL

1. Remove the hood assembly. Refer to DLK-224, "HOOD ASSEMBLY : Removal and Installation".
2. Remove the front fender. Refer to DLK-233, "Removal and Installation".
3. Remove the hood hinge mounting bolts, and then remove the hood hinge.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

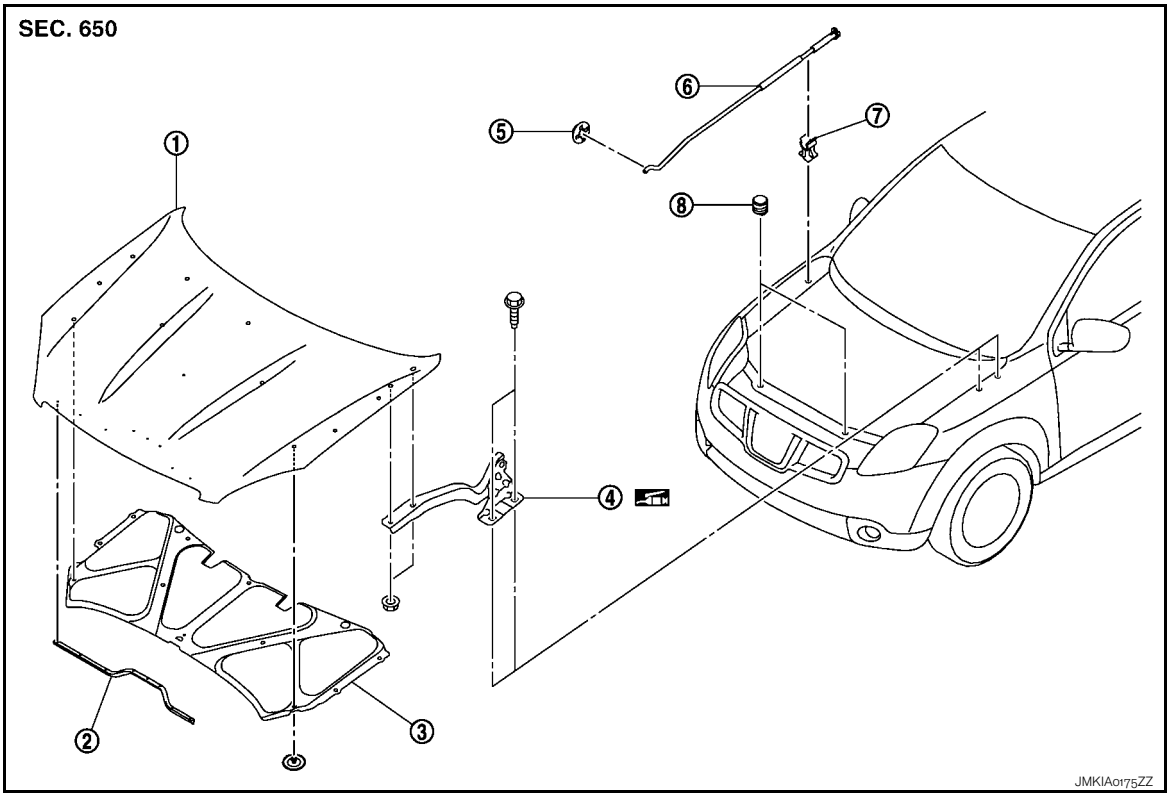
- **After installation, apply touch-up paint (the body color) onto the head of the hinge mounting bolts and nuts.**
- **Before installation of hood hinge, apply anticorrosive agent onto the mounting surface of the vehicle body.**
- **After installation, perform hood fitting adjustment. Refer to DLK-225, "HOOD ASSEMBLY : Adjustment".**

HOOD SUPPORT ROD

HOOD SUPPORT ROD : Exploded View

INFOID:0000000001095093

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1. Hood assembly
2. Hood sealing rubber
3. Hood insulator
4. Hood hinge
5. Grommet
6. Hood support rod
7. Clamp
8. Hood bumper rubber

Refer to GI-4, "Components" for symbols in the figure.

HOOD SUPPORT ROD : Removal and Installation

INFOID:0000000001091264

REMOVAL

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

   WARNING:
   Bodily injury may occur if no supporting rod is holding the hood open when removing the hood stay.
2. Remove the hood support rod from the grommet.

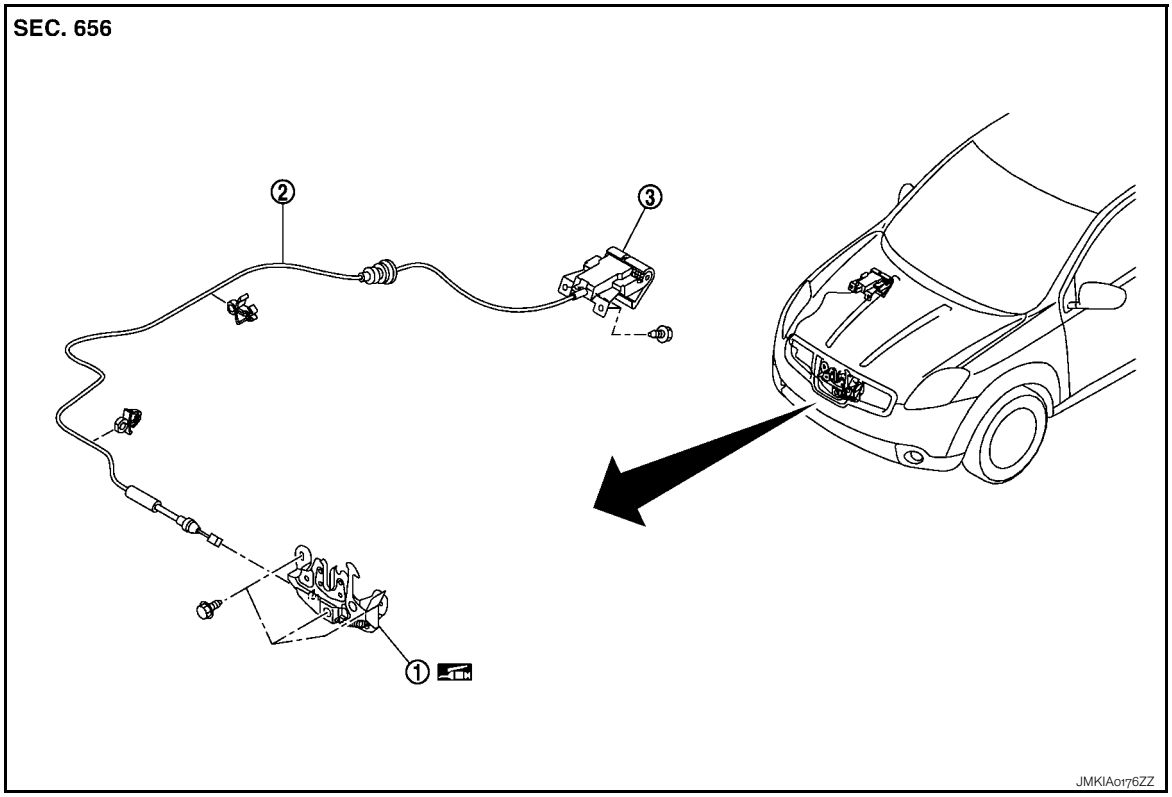
INSTALLATION

Install in the reverse order of removal.

HOOD LOCK CONTROL

HOOD LOCK CONTROL : Exploded View

INFOID:0000000000939211



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

Refer to GI-4, "Components" for symbols in the figure.

HOOD LOCK CONTROL : Removal and Installation

INFOID:0000000000939212

REMOVAL

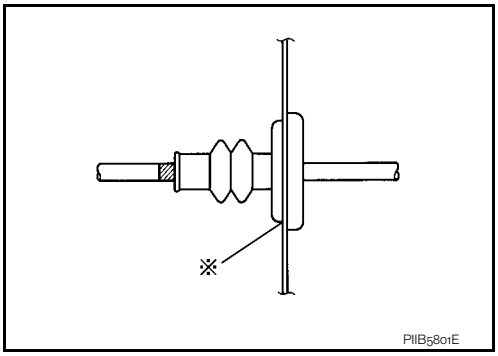
1. Remove the hood lock opener mounting bolts, and then remove the hood lock opener.
2. Remove the front bumper fascia. Refer to EXT-11, "Removal and Installation".
3. Remove the hood lock mounting bolts, and then remove the hood lock.
4. Remove the fender protector. Refer to EXT-22, "Removal and Installation".
5. Disconnect the hood lock cable from hood lock, and clip it from the hoodledge.
6. Remove the grommet on the dash lower panel, and pull the hood lock control cable toward the passenger compartment.
   CAUTION:
   While pulling, do not to damage (peeling) the outside of the hood lock control cable.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **Do not to bend the cable too much, keeping the radius 100 mm (3.94 in) or more.**
- **Check that the cable is not offset from the positioning grommet, and apply the sealant to the grommet (at *mark) properly.**



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- **Check that the hood lock control cable is properly engaged with the hood lock.**
- **After installation, perform hood fitting adjustment. Refer to DLK-225, "HOOD ASSEMBLY : Adjustment".**
- **After installation, perform the hood lock control inspection. Refer to DLK-229, "HOOD LOCK CONTROL : Inspection".**

HOOD LOCK CONTROL : Inspection

INFOID:0000000000939213

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

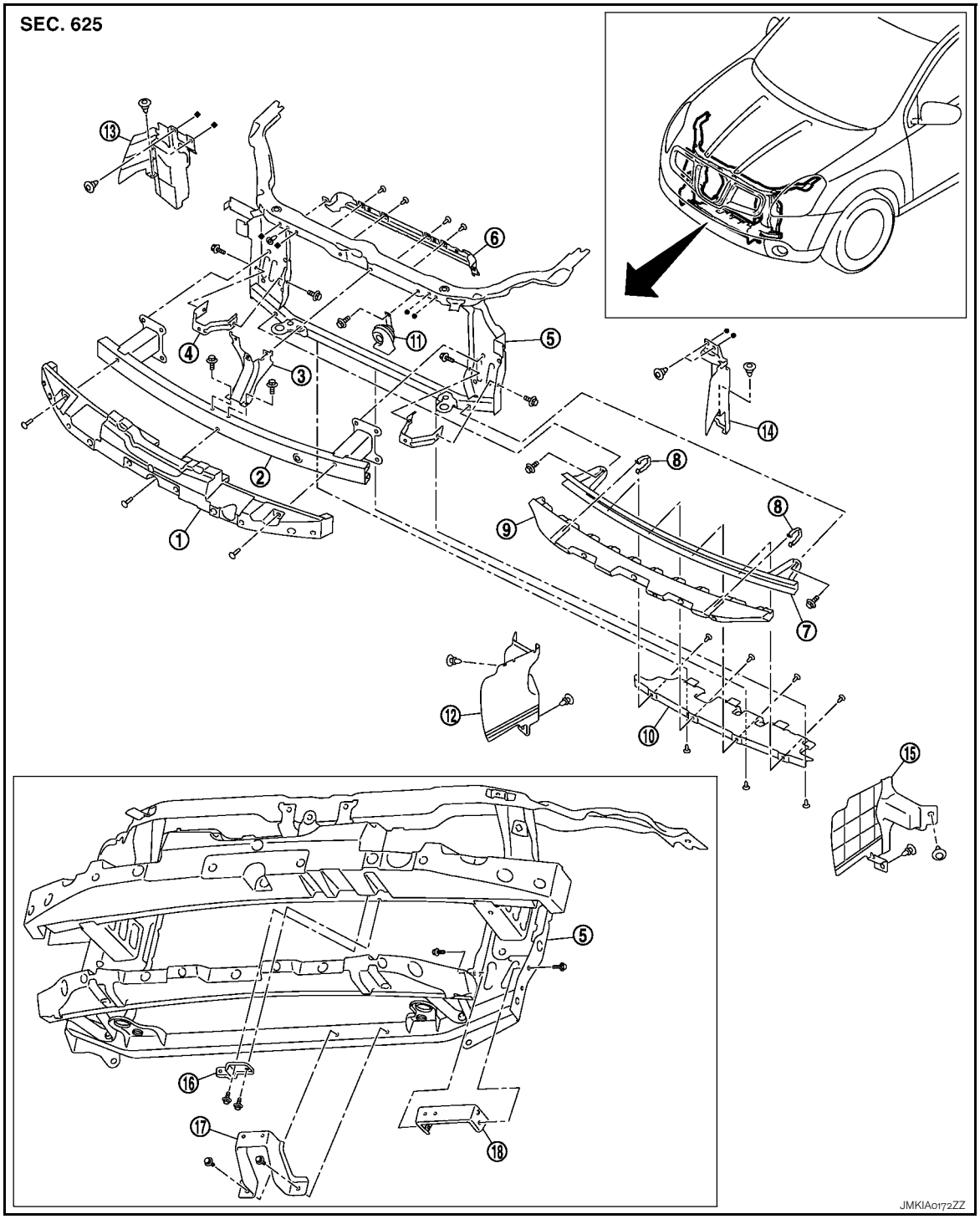
1. Check that the secondary latch is properly engaged with the secondary striker [6.8 mm (0.268 in) shown in the figure] by hood weight.
2. While operating the hood opener, carefully check that the front end of the hood is raised by approximately 20.0 mm (0.787 in). Also check that the hood opener returns to the original position.
3. Check that the hood opener operating is condition 49 N (5.0 kg) or below.
4. Install so that static closing face of hood is 94 – 490 N·m (9.6 – 50.0 kg-m).
   NOTE:
   - Exert vertical force on right side and left side of hood lock.
   - Do not press simultaneously both sides.
5. Check the hood lock lubrication condition. If necessary, apply body grease to the hood lock.

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RADIATOR CORE SUPPORT

Exploded View

INFOID:0000000000939214



1. Energy absorber
2. Bumper reinforcement
3. Hood lock support stay
4. Intercooler bracket (with K9K engine models)
5. Radiator core support assembly
6. Upper air dam
7. Apron bracket assembly
8. Fastener
9. Energy absorber lower
10. Front air guide lower
11. Horn assembly
12. Front air guide side lower RH
13. Front air guide side RH
14. Front air guide side LH
15. Front air guide side lower LH
16. Oil cooler bracket upper
17. Oil cooler bracket lower
18. Oil cooler bracket side

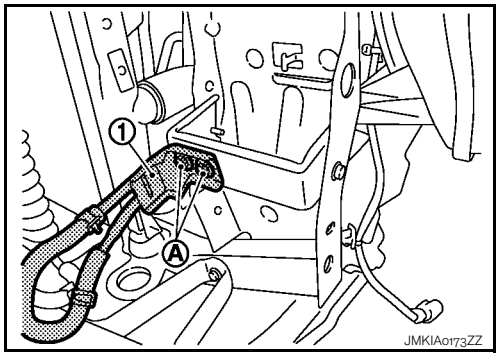
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Removal and Installation

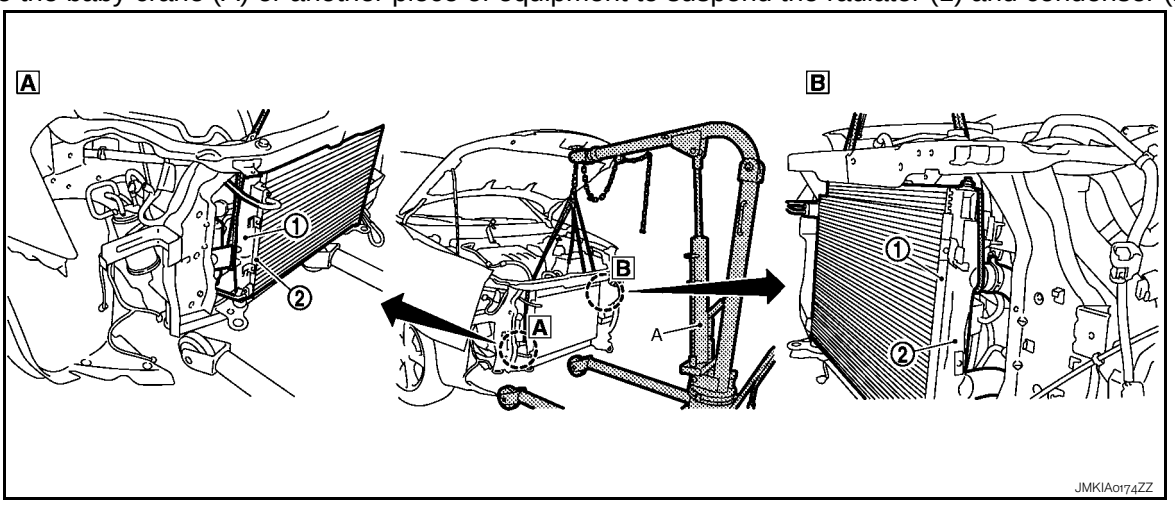
INFOID:0000000000939215

REMOVAL

1. Remove the front fillet molding. Refer to EXT-23, "Removal and Installation".
2. Remove the front bumper fascia and the energy absorber. Refer to EXT-11, "Removal and Installation".
3. Remove the energy absorber (upper and lower). Refer to EXT-11, "Removal and Installation".
4. Remove the air cleaner duct. Refer to EM-27, "Removal and Installation".
5. Remove the front combination lamp (LH/RH). Refer to EXL-171, "Removal and Installation".
6. Remove the bumper reinforcement. Refer to EXT-11, "Removal and Installation".
7. Disconnect the hood lock control cable clamp, and then remove the hood lock assembly. Refer to DLK-228, "HOOD LOCK CONTROL : Removal and Installation".
8. Remove the air guide mounting clips, and then remove the air guide (LH/RH).
9. Remove the hood lock stay mounting bolts, and then remove the hood lock stay.
10. Remove the hood switch (with theft warning systems). Refer to SEC-SEC-156, "Removal and Installation".
11. Remove the crush zone sensor. Refer to SR-14, "Removal and Installation".
12. Remove the horn. Refer to HRN-5, "Removal and Installation".
13. Remove the ambient sensor. Refer to VTL-22, "Removal and Installation".
14. Remove the radiator mounting bracket (LH/RH). Refer to CO-13, "Removal and Installation".
15. Remove the Intelligent Key warning buzzer (with Intelligent Key systems). Refer to DLK-277, "Removal and Installation".
16. Remove the charge air cooler assembly (with K9K engine models). Refer to EM-266, "Removal and Installation".
17. Remove the A/T fluid cooler assembly and the A/T fluid cooler bracket (with A/T models only). Refer to TM-348, "FLUID COOLER : Removal and Installation".
18. Remove the A/T fluid cooler pipe bracket (1) mounting bolts (A) (with A/T models only).



19. Remove the washer tank. Refer to WW-99, "Removal and Installation".
20. Use the baby crane (A) or another piece of equipment to suspend the radiator (1) and condenser (2).



21. Remove the radiator core support assembly mounting bolts, and draw out the radiator core support assembly to the front of the vehicle.
22. Remove the radiator core support assembly.
23. Remove the following parts after removing the radiator core support assembly.
    - Inlet tube bracket (with K9K engine models)
    - Intercooler bracket (with K9K engine models)
    - Apron reinforcement bracket

INSTALLATION

Install in the reverse order of removal.

CAUTION:

After installation, refill the following parts.

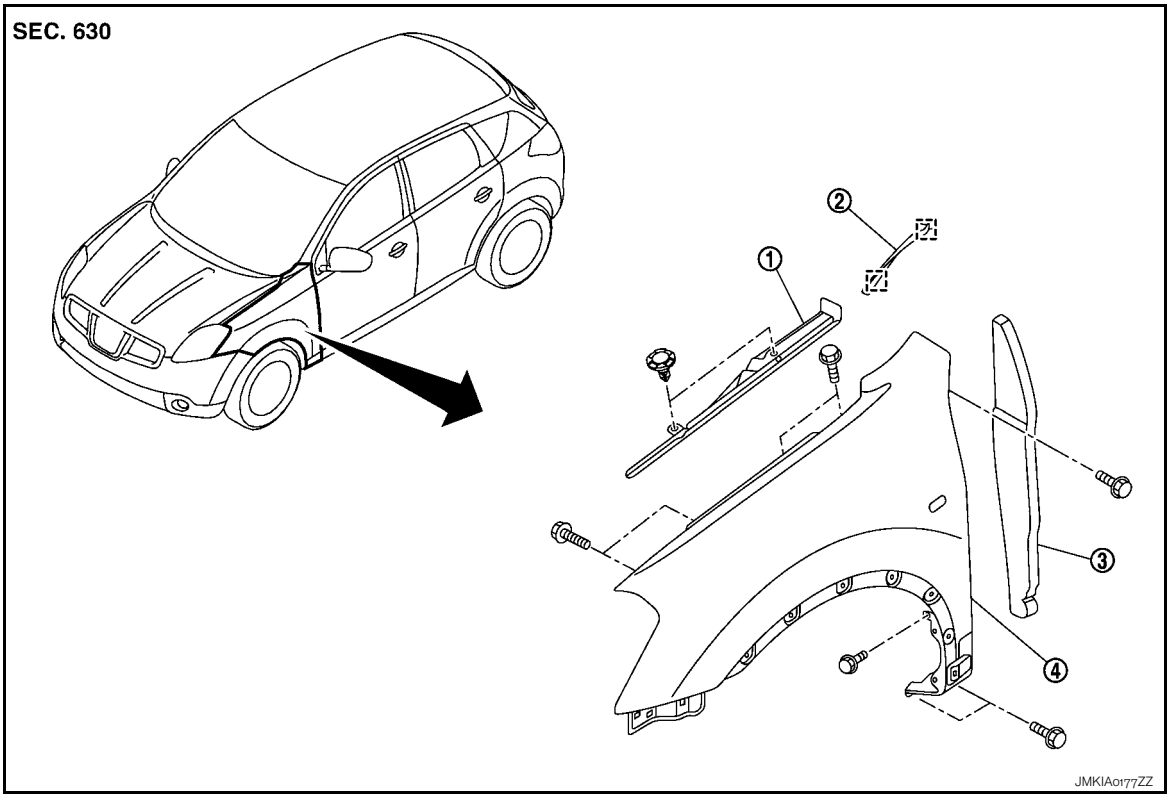
- **A/T fluid. Refer to TM-315, "Changing".**
- **Engine coolant. Refer to CO-9, "Refilling".**

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FRONT FENDER

Exploded View

INFOID:0000000000939216



1. Hood seal assembly (side)
2. Front fender finisher
3. Front fender seal
4. Front fender

: Metal clip

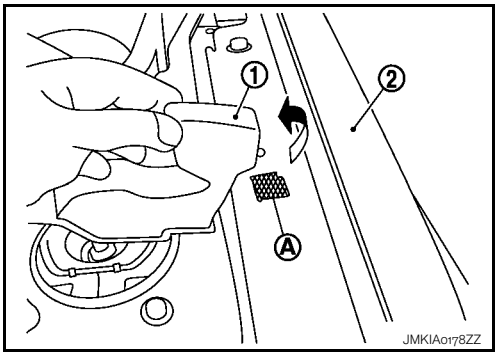
Removal and Installation

INFOID:0000000000939217

REMOVAL

1. Remove the outer fender protector. Refer to EXT-22, "Removal and Installation".
2. Remove the inner fender protector. Refer to EXT-22, "Removal and Installation".
3. Remove the side turn signal lamp. Refer to EXL-178, "Removal and Installation".
4. Remove the front bumper fascia. Refer to EXT-11, "Removal and Installation".
5. Remove the front combination lamp.
   - XENON TYPE: EXL-171, "Removal and Installation".
   - HALOGEN TYPE: EXL-327, "Removal and Installation".
6. Remove the mounting clips and remove hoodledge cover.
7. Remove the center mudguard. Refer to EXT-28, "Removal and Installation".

8. Peel away the double-faced adhesive tape (A) of the front fender seal (1) from the front fender (2).



9. Remove the mounting bolts and remove the front fender.
   CAUTION:
   Use a shop cloth to protect the body from being damaged during removal.
10. Remove the following parts after removing the front fender.
    - Front fender seal.
    - Bumper side bracket. Refer to EXT-11, "Exploded View".

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **Replace the double-faced adhesive tape on the back of the cowl top cover seal with new tape.**
- **Do not wash the vehicle within 24 hours after installation so as to keep adhesive.**
- **After installation, apply the touch-up paint (the body color) onto the head of the front fender mounting bolts.**
- **After installation, check the front fender adjustment. Refer to DLK-225, "HOOD ASSEMBLY : Adjustment" and DLK-237, "DOOR ASSEMBLY : Adjustment".**

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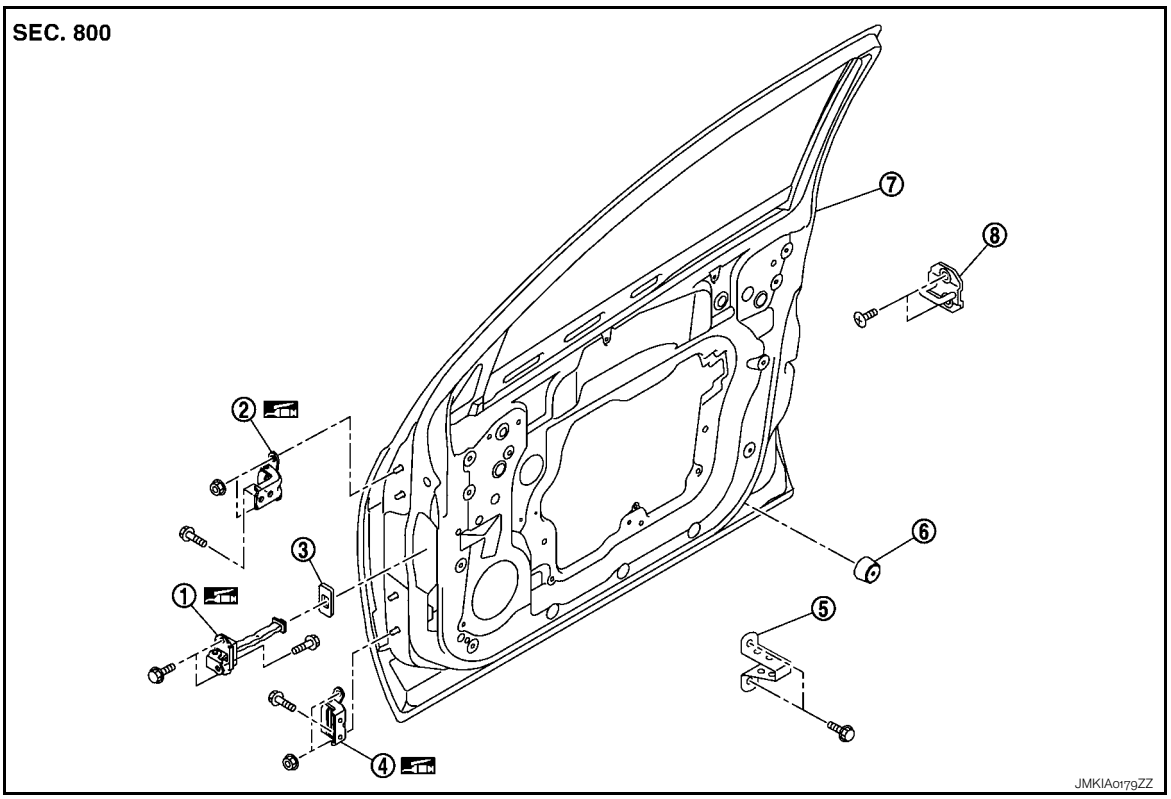
FRONT DOOR

DOOR ASSEMBLY

DOOR ASSEMBLY : Exploded View

INFOID:0000000000939218

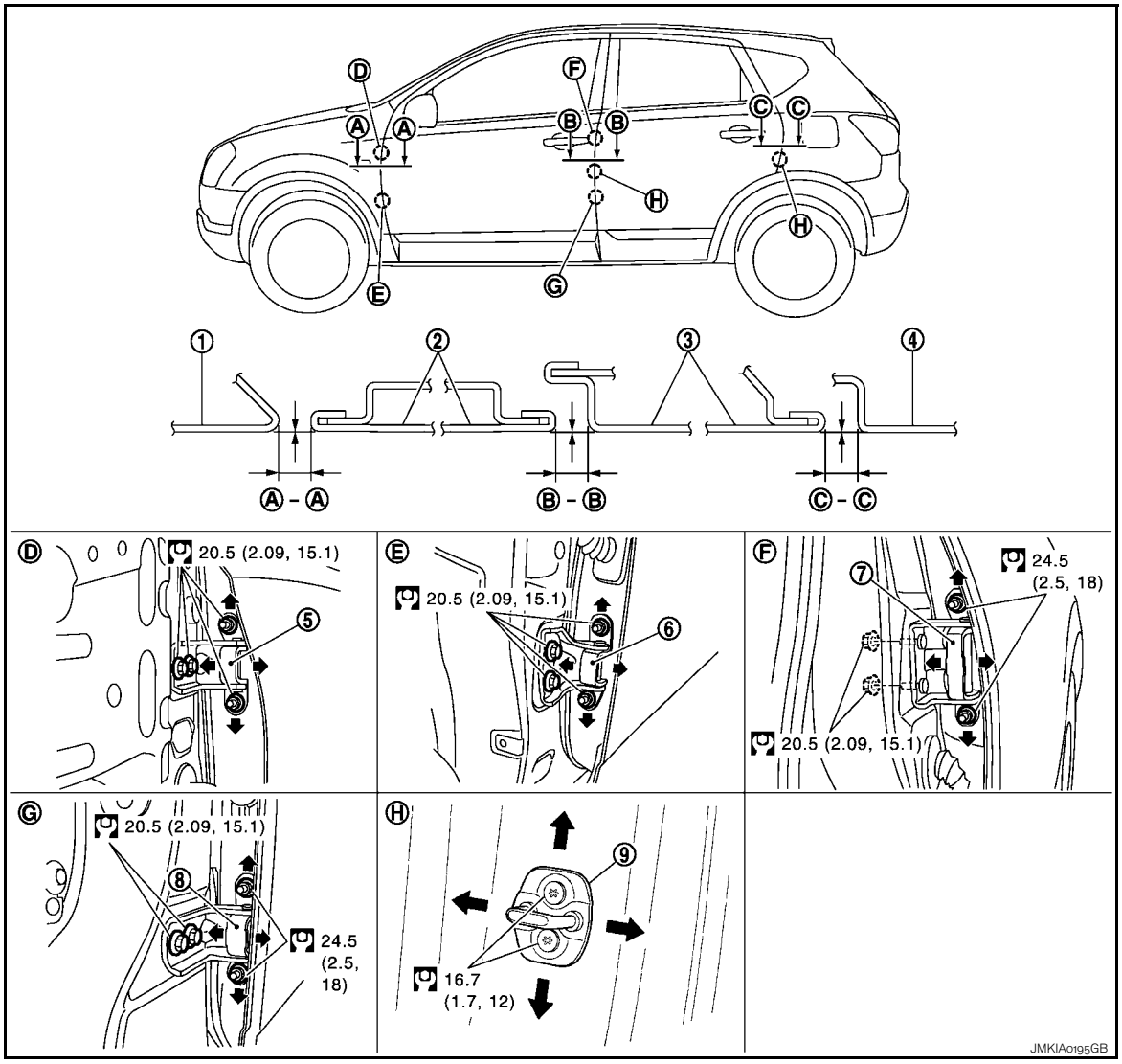
REMOVAL



1. Door check link
2. Door hinge (upper)
3. Door check link cover
4. Door hinge (lower)
5. Bracket
6. Bumper rubber
7. Front door panel
8. Door striker

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT



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

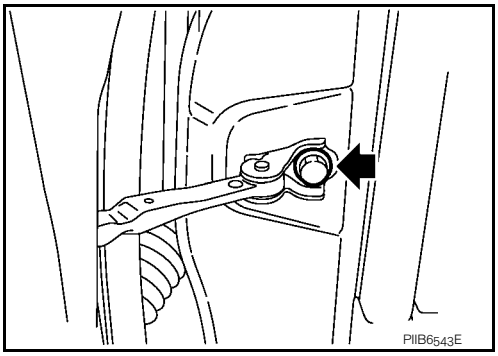
Refer to GI-4, "Components" for symbols in the figure.

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000000939219

REMOVAL

1. Remove the mounting bolts of the door check link on the vehicle.



2. Remove the front door harness grommet, and then pull out the harness from the vehicle.

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3. Disconnect the front door harness connector.
4. Remove the door hinge mounting nuts (door side), and then remove the door assembly.
   CAUTION:
   - **When removing and installing the front door assembly, support the door with a jack and cloth to protect the door and body.**
   - **Perform work with 2 workers, because of its heavy weight.**

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **When removing and installing the front door assembly, perform the fitting adjustment. Refer to DLK-237, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **Check the front door open/close operation after installation.**

DOOR ASSEMBLY : Adjustment

INFOID:0000000000939220

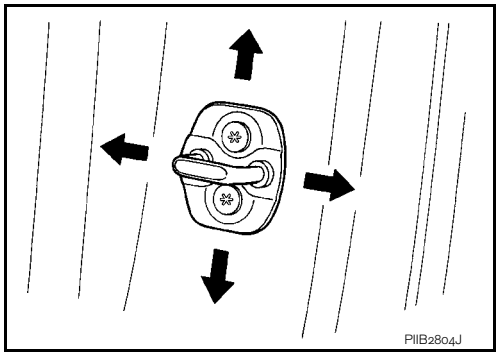
CLEARANCE, SURFACE HEIGHT AND SURFACE MISMATCH ADJUSTMENT

Portion		Clearance	Surface height
Front fender – Front door	A – A	3.5 – 5.0 mm (0.138 – 0.197 in)	- 1.5 – 0.5 mm (- 0.059 – 0.020 in)
Front door – Rear door	B – B	3.5 – 5.0 mm (0.138 – 0.197 in)	- 1.5 – 0.5 mm (- 0.059 – 0.020 in)

1. Check the clearance and surface height and surface mismatch between the front door and each part visually and by touching. (Fitting standard dimension in the table below shall be satisfied.)
2. In case any parts are out of specification, adjust them according to the procedures shown below.
3. Remove the front fender. Refer to refer to DLK-233, "Removal and Installation".
4. Loosen the door hinge mounting nuts on door side.
5. Adjust the surface height and surface mismatch of the front door according to the fitting standard dimension.
6. Temporarily tighten the hinge mounting nuts on door side.
7. Loosen the door hinge mounting bolts on body side.
8. Raise the front door at rear end to adjust clearance of the front door according to the fitting standard dimension.
9. After adjustment tighten bolts and nuts to the specified torque.
10. Install the front fender. Refer to refer to DLK-233, "Removal and Installation".
    CAUTION:
    After installation, check the front fender adjustment. Refer to DLK-225, "HOOD ASSEMBLY : Adjustment".

DOOR STRIKER ADJUSTMENT

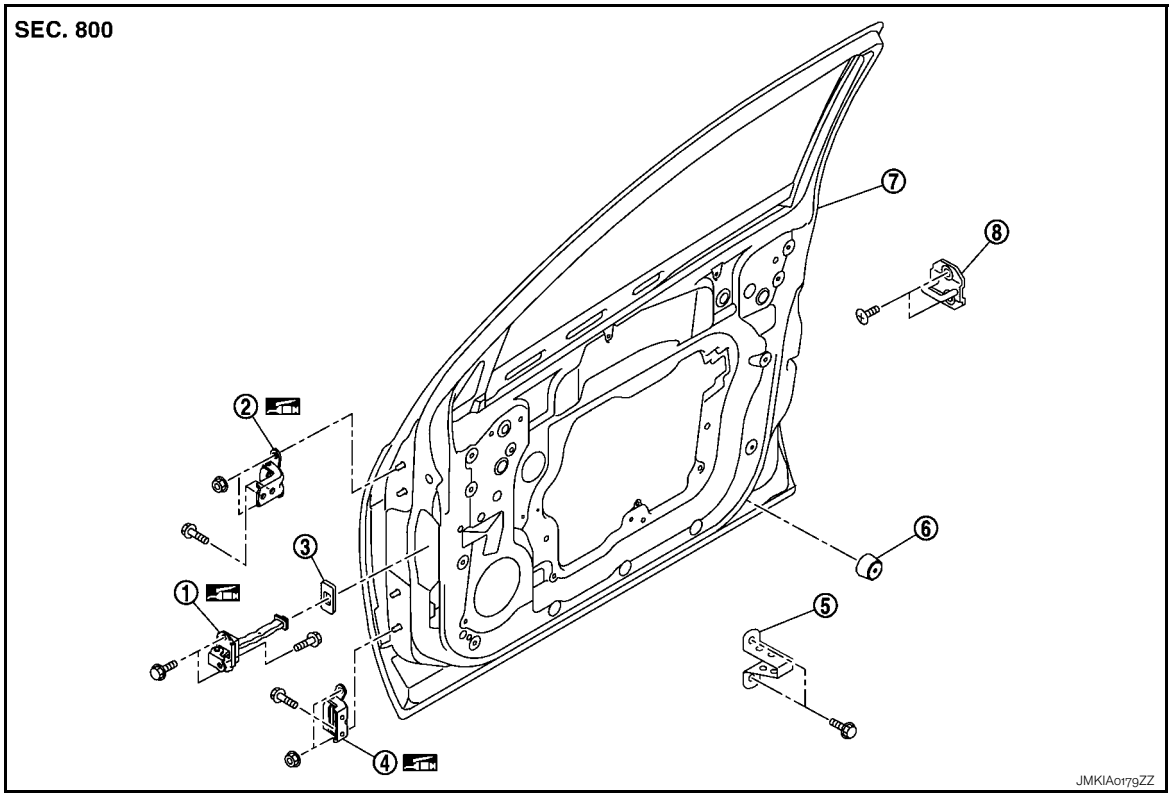
Adjust the door striker so that it becomes parallel with the lock insertion direction.



DOOR STRIKER

DOOR STRIKER : Exploded View

INFOID:0000000001091274



1. Door check link
2. Door hinge (upper)
3. Door check link cover
4. Door hinge (lower)
5. Bracket
6. Bumper rubber
7. Front door panel
8. Door striker

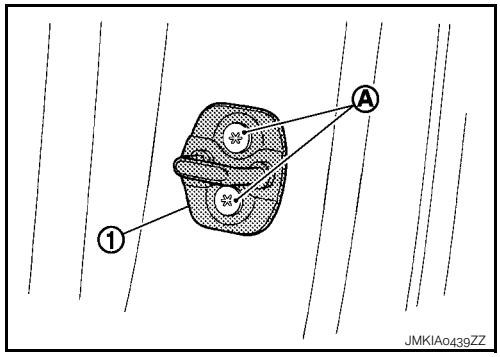
Refer to GI-4, "Components" for symbols in the figure.

DOOR STRIKER : Removal and Installation

INFOID:0000000001096546

REMOVAL

Remove the mounting bolts (A), and then remove the door striker (1).



INSTALLATION

Install in the reverse order of removal.

CAUTION:

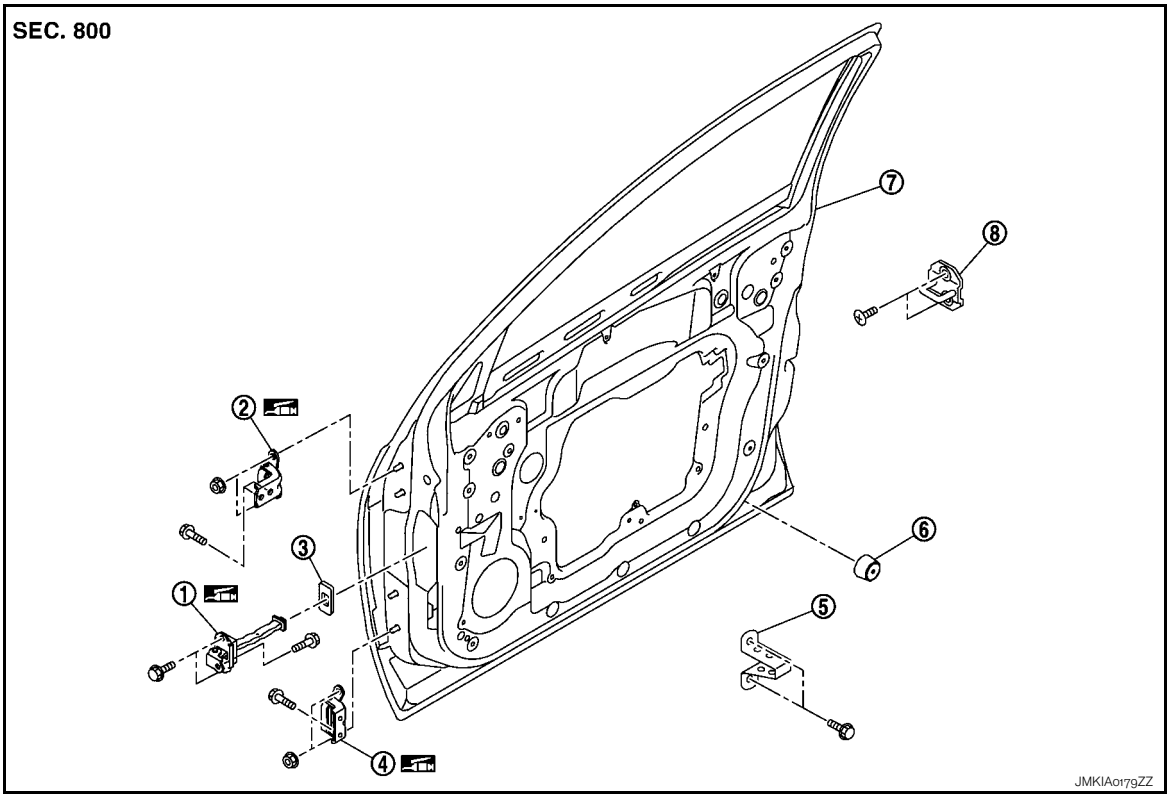
- **Check the front door open/close operation after installation.**
- **When removing and installing the door striker, be sure to perform the fitting adjustment. Refer to DLK-237, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

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DOOR HINGE : Exploded View

INFOID:0000000001095186



1. Door check link
2. Door hinge (upper)
3. Door check link cover
4. Door hinge (lower)
5. Bracket
6. Bumper rubber
7. Front door panel
8. Door striker

Refer to GI-4, "Components" for symbols in the figure.

DOOR HINGE : Removal and Installation

INFOID:0000000001091290

REMOVAL

1. Remove the front door assembly. Refer to DLK-236, "DOOR ASSEMBLY : Removal and Installation".
2. Remove the door hinge mounting bolts, and then remove the front door hinge.

INSTALLATION

Install in the reverse order of removal.

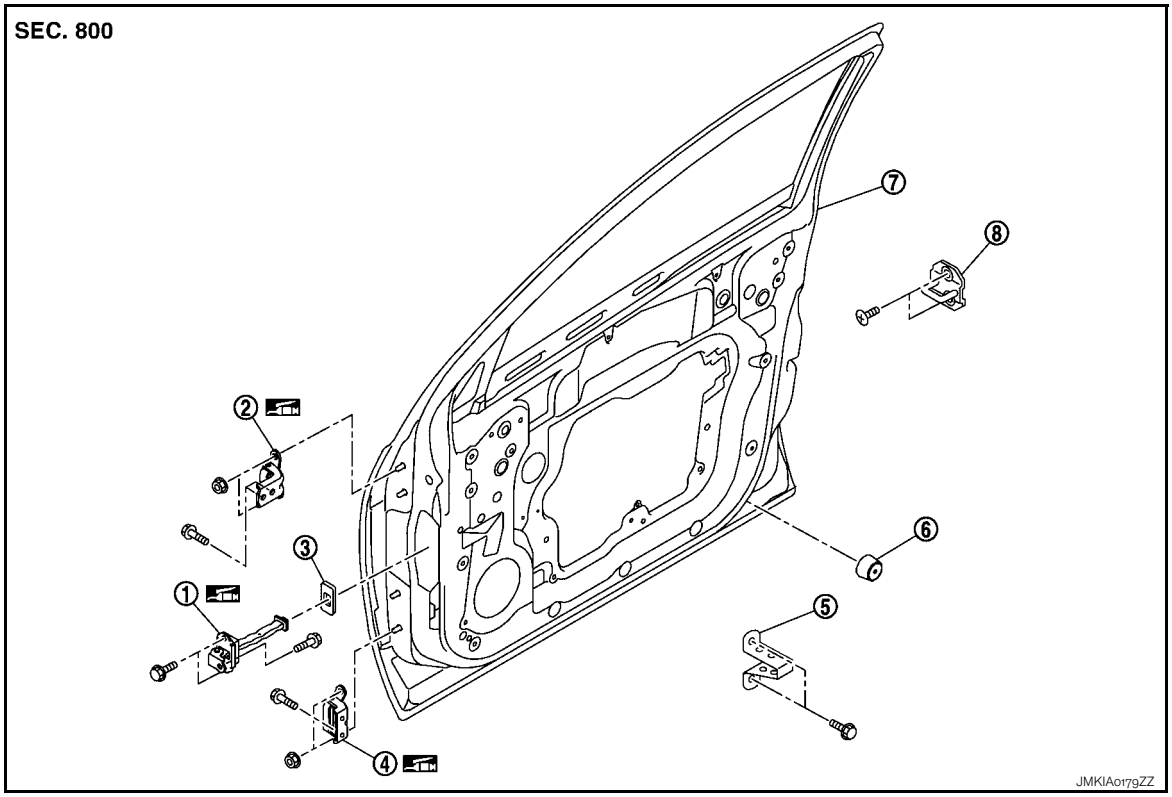
CAUTION:

- **When removing and installing the front door assembly, perform the fitting adjustment. Refer to DLK-237, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **Check the front door open/close operation after installation.**

DOOR CHECK LINK

DOOR CHECK LINK : Exploded View

INFOID:0000000001095191



1. Door check link
2. Door hinge (upper)
3. Door check link cover
4. Door hinge (lower)
5. Bracket
6. Bumper rubber
7. Front door panel
8. Door striker

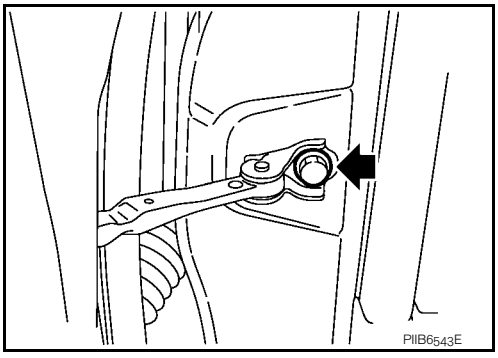
Refer to GI-4, "Components" for symbols in the figure.

DOOR CHECK LINK : Removal and Installation

INFOID:0000000001096548

REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the front door speaker. Refer to AV-34, "Removal and Installation".
3. Remove the mounting bolts of the door check link on the vehicle.



4. Remove the door check link cover, and then remove the door check link mounting bolts.
5. Remove the door check link.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check the front door open/close operation after installation.

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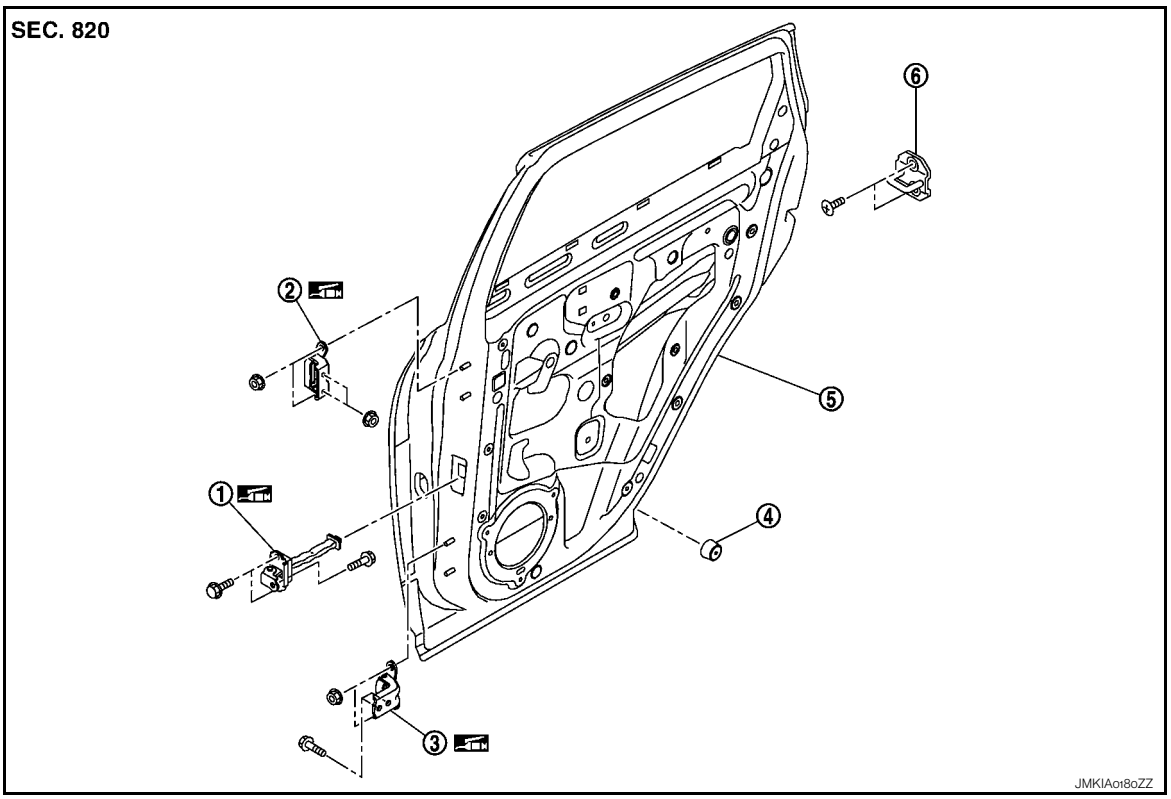
REAR DOOR

DOOR ASSEMBLY

DOOR ASSEMBLY : Exploded View

INFOID:0000000000939221

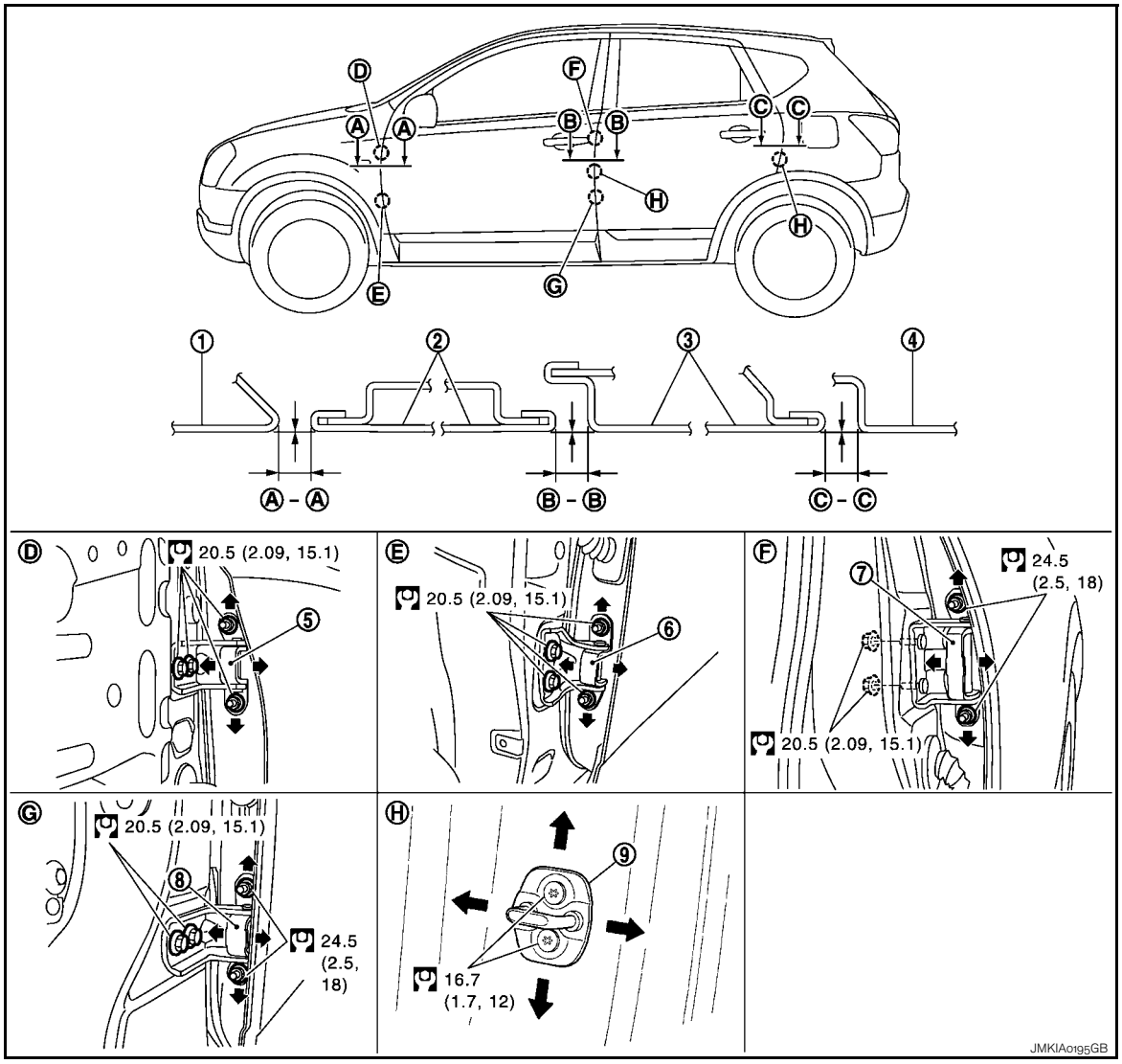
REMOVAL



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

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT



1. Front fender
2. Front door outer
3. Rear door outer
4. Rear fender
5. Front door hinge (upper)
6. Front door hinge (lower)
7. Rear door hinge (upper)
8. Rear door hinge (lower)
9. Striker

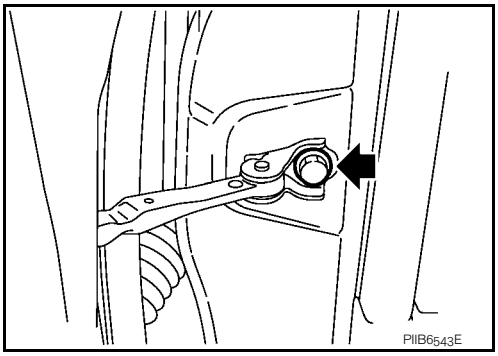
Refer to GI-4, "Components" for symbols in the figure.

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000001097301

REMOVAL

1. Remove the mounting bolts of the door check link on the vehicle.



2. Remove the rear door harness grommet, and then pull out the door harness from the vehicle.

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3. Disconnect the rear door harness connector.
4. Remove the door hinge mounting nuts (door side), and then remove the rear door assembly.

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

INSTALLATION

Install in the reverse order of removal.

CAUTION:
- **When removing and installing the rear door assembly, perform the fitting adjustment. Refer to DLK-243, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **Check the rear door open/close operation after installation.**
- **Check the rear door lock/unlock operation after installation.**

DOOR ASSEMBLY : Adjustment

INFOID:0000000000939223

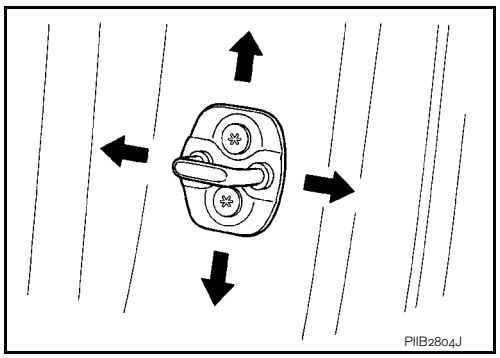
CLEARANCE, SURFACE HEIGHT AND SURFACE MISMATCH ADJUSTMENT

Portion		Clearance	Surface height
Front door – Rear door	B – B	3.5 – 5.0 mm (0.138 – 0.197 in)	- 1.5 – 0.5 mm (- 0.059 – 0.020 in)
Rear door – Rear fender	C – C	3.5 – 5.0 mm (0.138 – 0.197 in)	- 1.5 – 0.5 mm (- 0.059 – 0.020 in)

1. Check the clearance and surface height and surface mismatch between the rear door and each part visually and by touching. (Fitting standard dimension in the table below shall be satisfied.)
2. In case any parts are out of specification, adjust them according to the procedures shown below.
3. Remove the center pillar upper garnish and center pillar lower garnish. Refer to INT-14, "Removal and Installation".
4. Loosen the door hinge mounting nuts on door side.
5. Adjust the surface height and surface mismatch of the rear door according to the fitting standard dimension.
6. Temporarily tighten the hinge mounting nuts on door side.
7. Loosen the door hinge mounting nuts and bolts on body side.
8. Raise the rear door at rear end to adjust clearance of the rear door according to the fitting standard dimension.
9. After adjustment tighten bolts and nuts to the specified torque.
10. Install the center pillar upper garnish and center pillar lower garnish. Refer to INT-14, "Removal and Installation".

DOOR STRIKER ADJUSTMENT

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

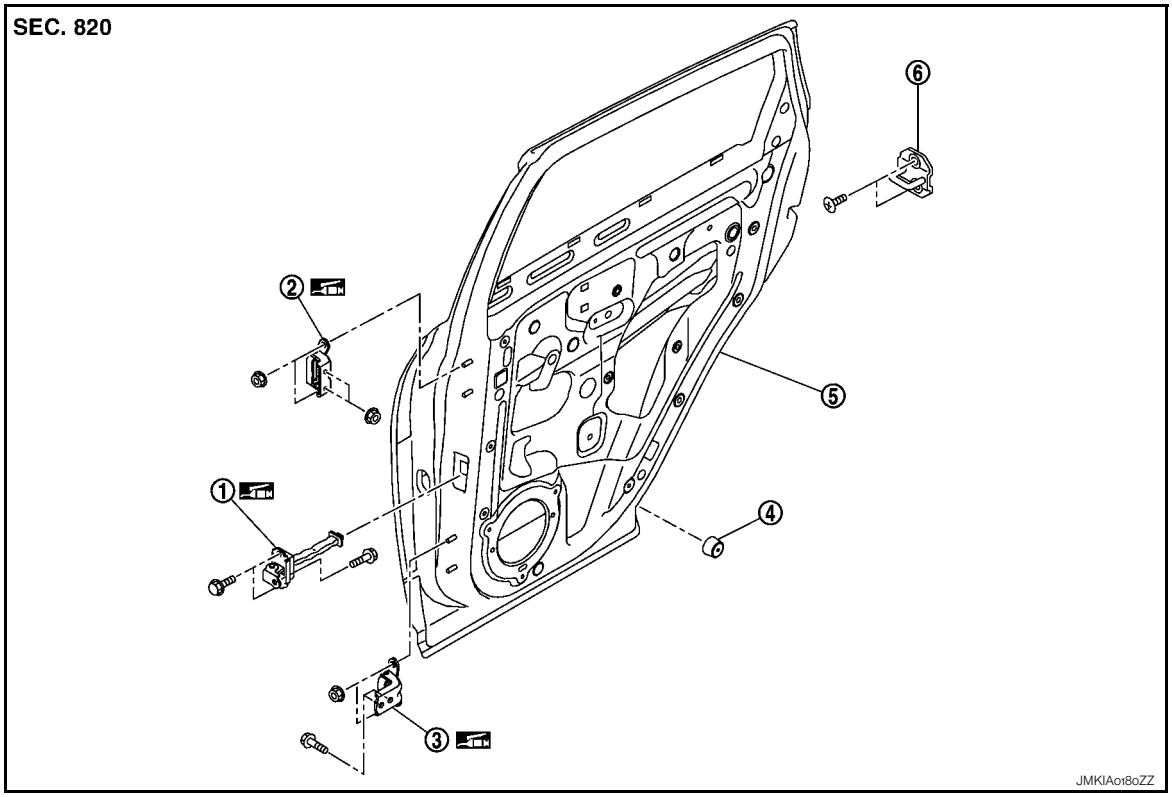


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DOOR STRIKER

DOOR STRIKER : Exploded View

INFOID:0000000001091280



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

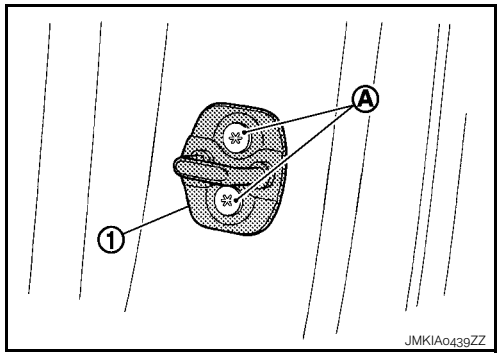
Refer to GI-4, "Components" for symbols in the figure.

DOOR STRIKER : Removal and Installation

INFOID:0000000001096547

REMOVAL

Remove the mounting bolts (A), and then remove the door striker (1).



INSTALLATION

Install in the reverse order of removal.

CAUTION:

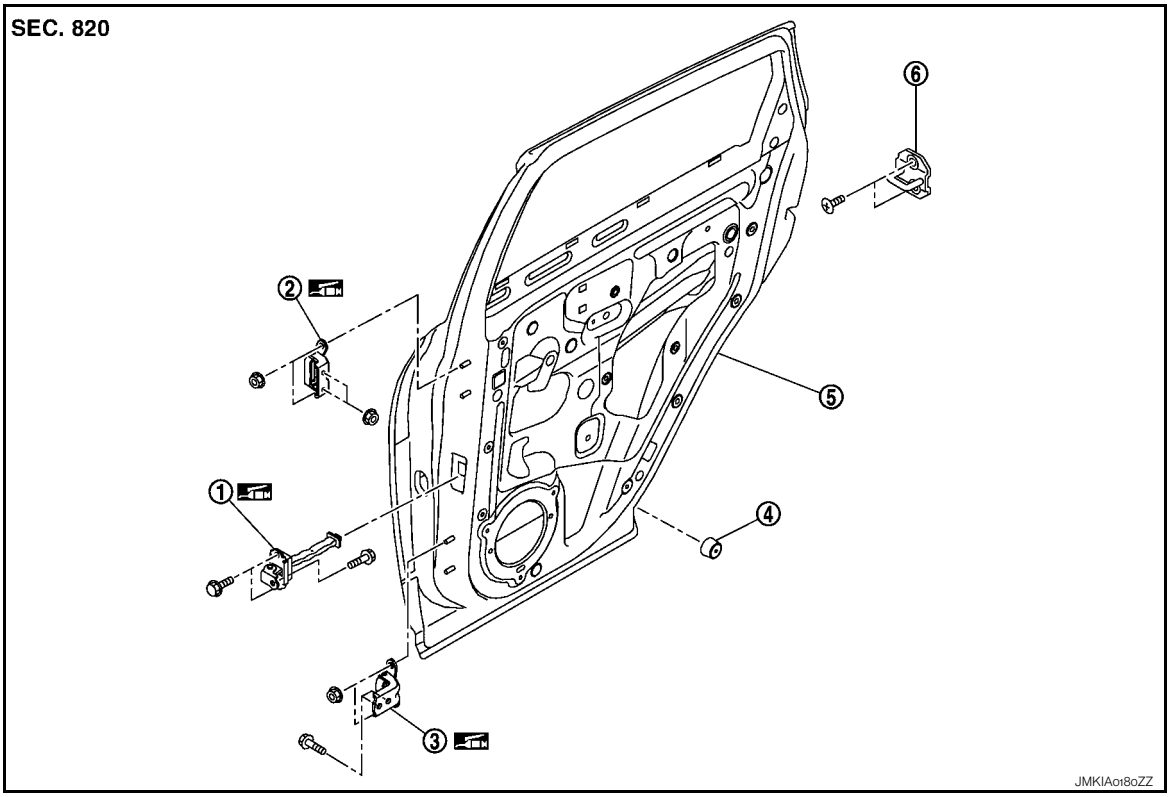
- **Check the rear door open/close operation after installation.**
- **When removing and installing the door striker, be sure to perform the fitting adjustment. Refer to DLK-243, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Exploded View

INFOID:0000000001098045

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR HINGE : Removal and Installation

INFOID:0000000001091284

REMOVAL

1. Remove the center pillar lower garnish and the center pillar upper garnish. Refer to INT-14, "Removal and Installation".
2. Remove the rear door assembly. Refer to DLK-242, "DOOR ASSEMBLY : Removal and Installation".
3. Remove the rear door hinge mounting bolts and nuts (body side), and then remove the door hinge.

INSTALLATION

Install in the reverse order of removal.

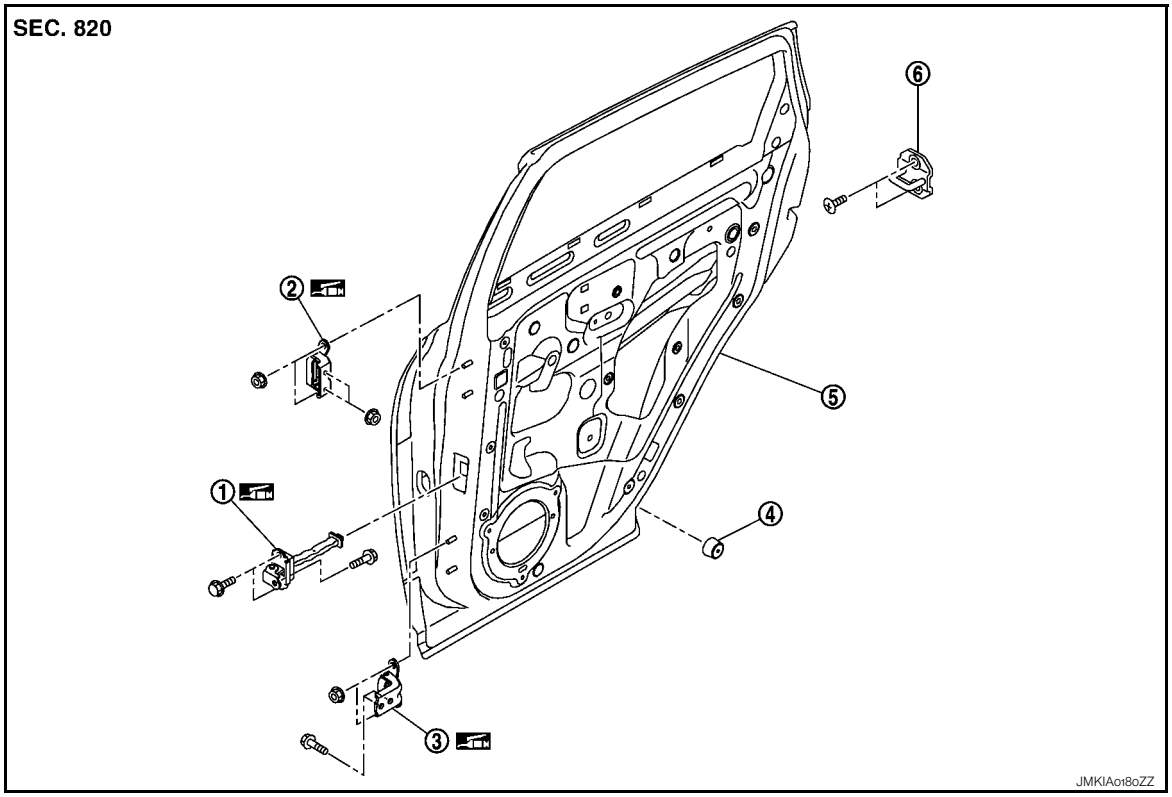
CAUTION:

- **When removing and installing the rear door assembly, perform the fitting adjustment. Refer to DLK-243, "DOOR ASSEMBLY : Adjustment".**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **After installing, apply the touch-up paint (the body color) onto the head of the hinge mounting nuts.**
- **Check the rear door open/close operation after installation.**

DOOR CHECK LINK

DOOR CHECK LINK : Exploded View

INFOID:0000000001098046



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

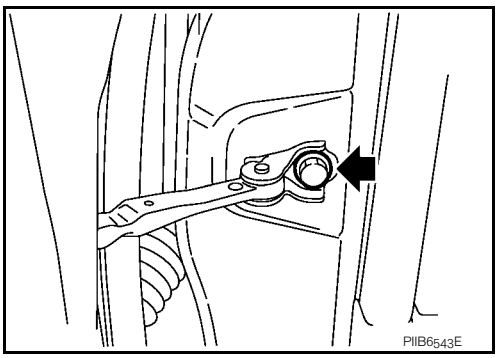
Refer to GI-4, "Components" for symbols in the figure.

DOOR CHECK LINK : Removal and Installation

INFOID:0000000001096661

REMOVAL

1. Remove the rear door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the rear door sealing screen.
3. Remove the mounting bolts of the check link on the vehicle.



4. Remove the door check link cover, and then remove the door check link mounting bolts.
5. Remove the door check link.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check front door open/close operation after installation.

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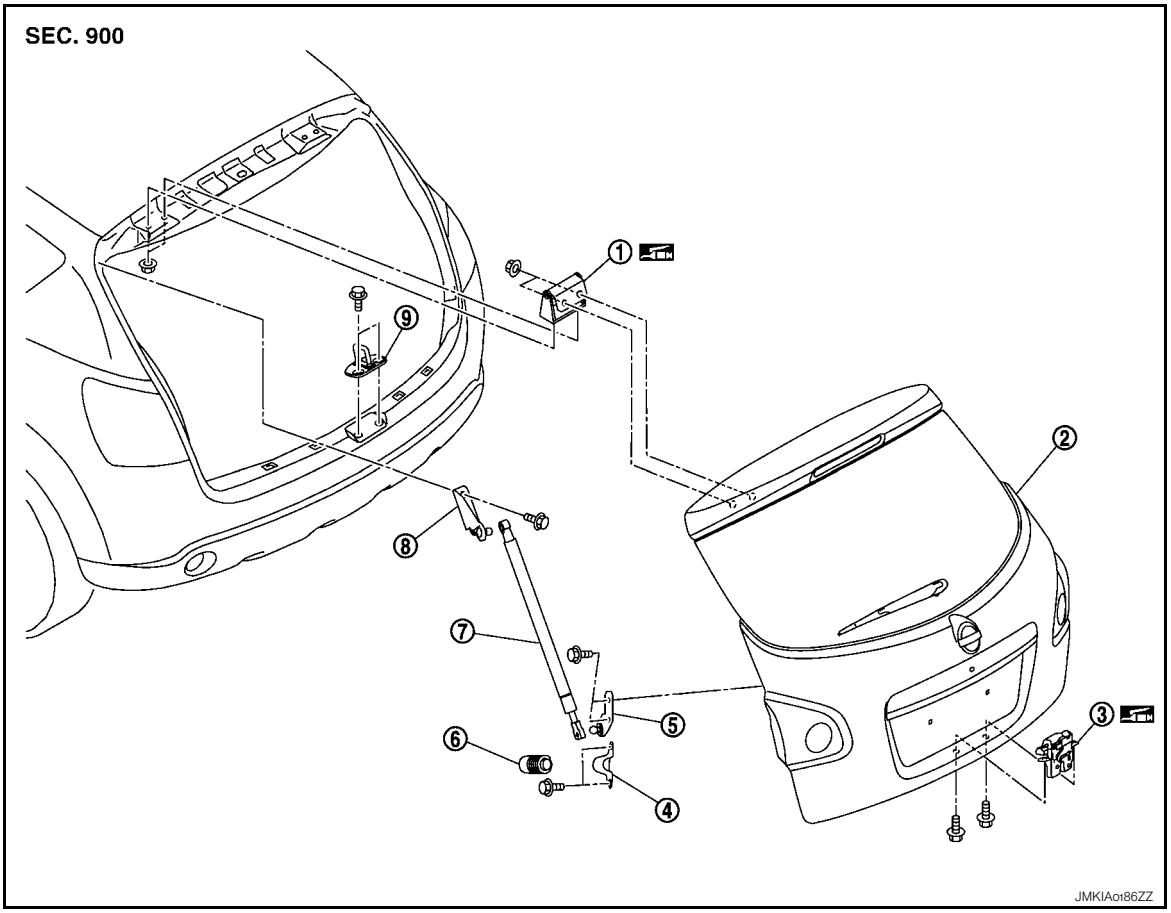
BACK DOOR

BACK DOOR ASSEMBLY

BACK DOOR ASSEMBLY : Exploded View

INFOID:0000000001054832

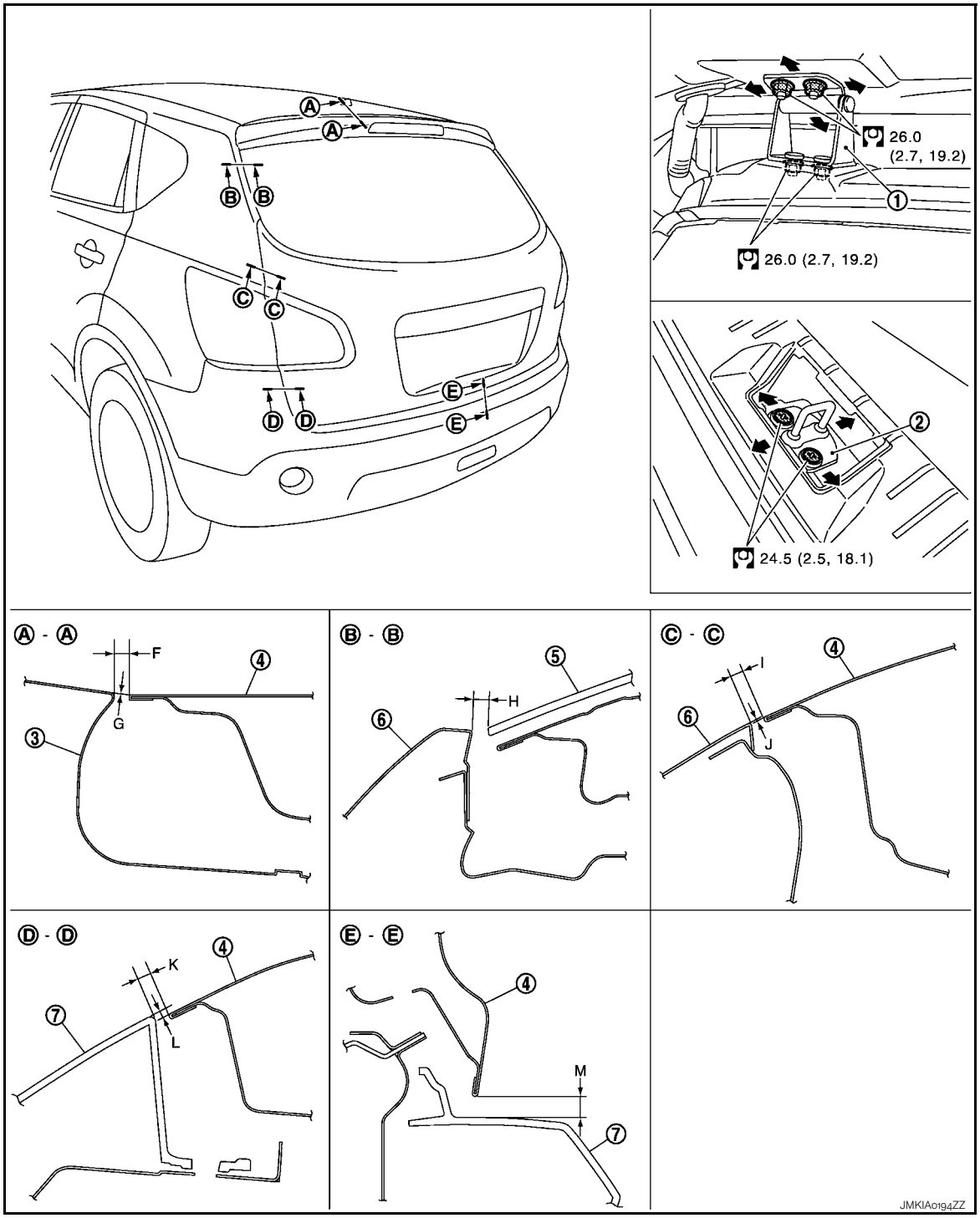
REMOVAL



1. Back door hinge
2. Back door assembly
3. Back door lock assembly
4. Bumper rubber bracket
5. Back door stay bracket (lower)
6. Bumper rubber
7. Back door stay
8. Back door stay bracket (upper)
9. Back door striker

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT



1. Back door hinge
2. Back door striker
3. Roof panel
4. Back door outer
5. Back door glass
6. Body side outer
7. Rear bumper fascia

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR ASSEMBLY : Removal and Installation

INFOID:0000000001054826

REMOVAL

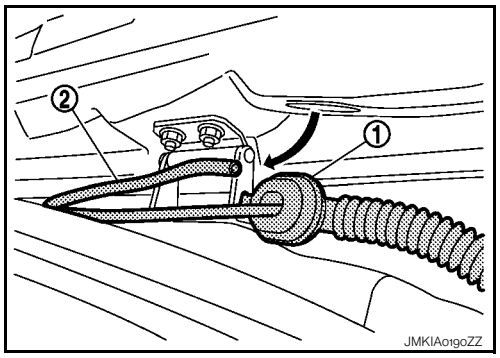
1. Remove the back door finisher inner. Refer to INT-26, "Removal and Installation".
2. Remove the back door window glass. Refer to GW-17, "Removal and Installation".

NOTE:

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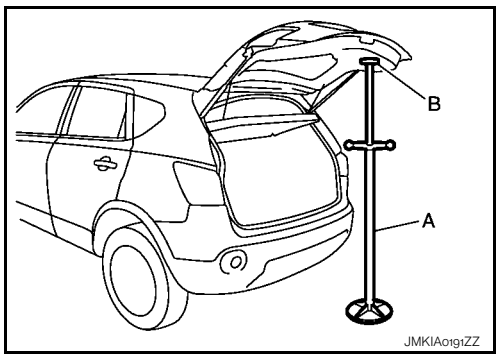
It is necessary to remove back door window glass in order to remove harness, because harness connector interferes with back door window glass pin.

3. Disconnect the connectors in the back door, and then remove the grommet, and pull out hte harness.
4. Remove the parcel shelf. Refer to INT-24, "Removal and Installation".
5. Remove the high-mounted stop lamp. Refer to EXL-183, "Removal and Installation".
6. Remove the grommet (1), and then pull out the washer tube (2) .

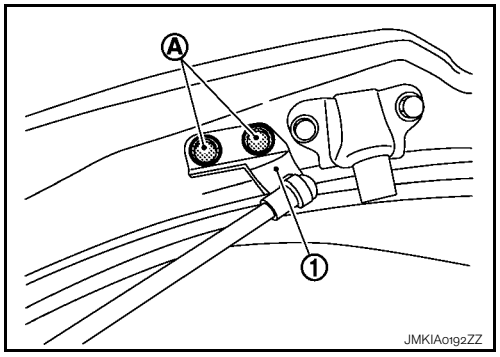


7. Pull the harness out of the back door.
8. Support the back door lock with the proper material to prevent it from falling.

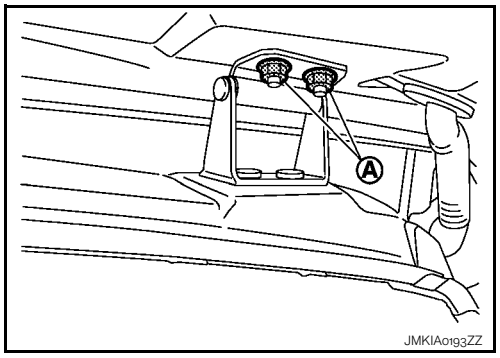
A : Jack
B : Shop cloth



9. Remove the back door stay bracket mounting bolts (A) on the back door.



10. Remove the back door hinge mounting nuts (A) on the back door and remove the back door assembly.
CAUTION:
Perform work with 2 workers, because of its heavy weight.



INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **Perform work with 2 workers, because of its heavy weight.**

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- **After installation, perform fitting adjustment. Refer to DLK-250, "BACK DOOR ASSEMBLY : Adjustment".**
- **Check the back door open/close operation after installation.**
- **Check the back door lock/unlock operation after installation.**

BACK DOOR ASSEMBLY : Adjustment

INFOID:0000000001054856

Portion				Standard	Difference(RH/LH)
Back door panel – Roof panel	A – A	F	Clearance	5.0 – 7.0 mm (0.197 – 0.276 in)	—
		G	Surface height	0.0 – 2.0 mm (0.000 – 0.079 in)	—
Back door glass – Body side outer	B – B	H	Clearance	3.9 – 8.1 mm (0.154 – 0.319 in)	2.1 mm (0.083 in)
		I	Surface height	- 1.0 – 3.1 mm (- 0.039 – 0.122 in)	2.0 mm (0.079 in)
Back door panel – Body side outer	C – C	J	Clearance	3.5 – 6.5 mm (0.138 – 0.256 in)	2.0 mm (0.079 in)
		K	Surface height	- 1.0 – 1.0 mm (- 0.039 – 0.039 in)	—
Back door panel – Rear bumper fascia	D – D	L	Clearance	4.0 – 8.0 mm (0.157 – 0.315 in)	2.0 mm (0.079 in)
		M	Surface height	0.1 – 4.1 mm (0.004 – 0.161 in)	2.1 mm (0.083 in)
Back door panel – Rear bumper fascia	E – E	N	Clearance	5.8 – 10.2 mm (0.228 – 0.402 in)	—

FITTING ADJUSTMENT

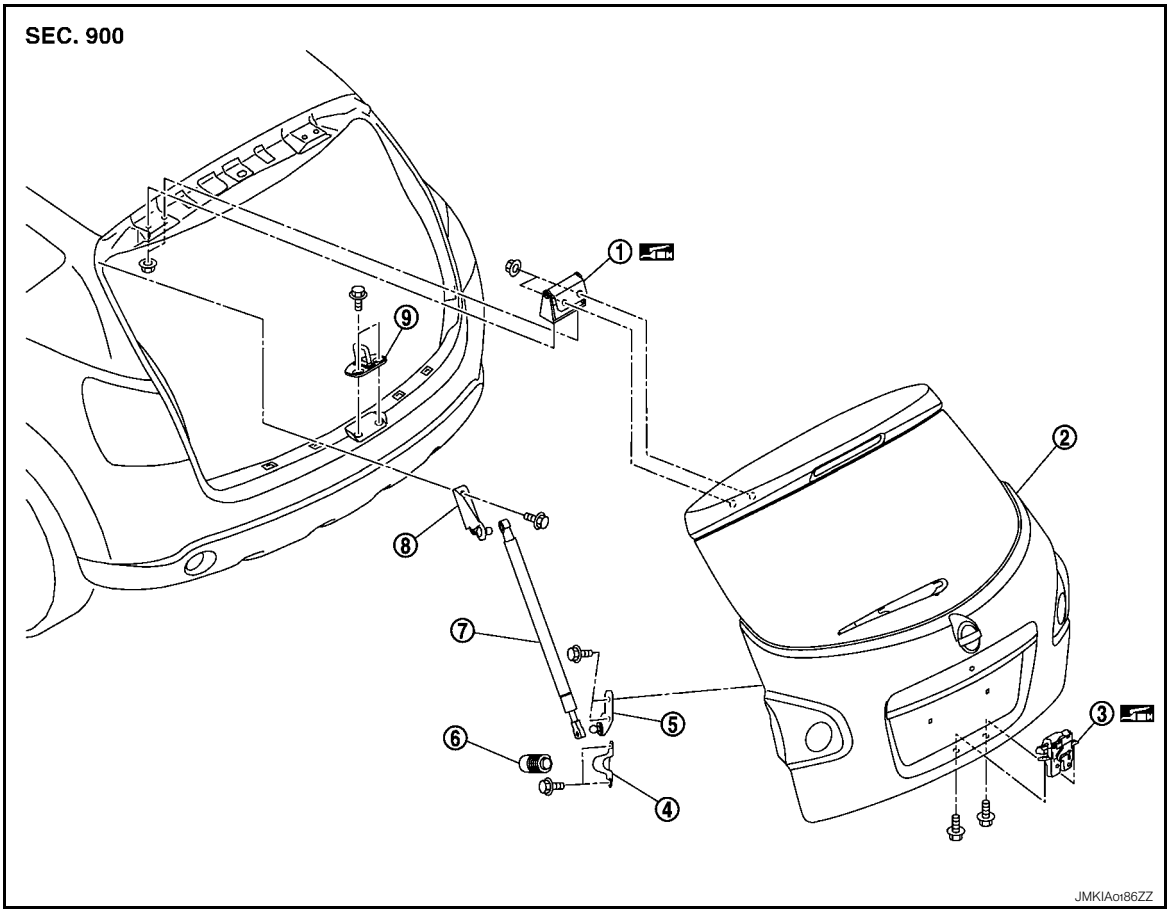
1. Check the clearance and the evenness between the back door and each part visually and by touching. (Fitting standard dimension in the table below shall be satisfied.)
2. In case any parts are out of specification, adjust them according to the procedures shown below.
3. Loosen the bumper rubber.
4. Loosen the back door striker mounting bolts.
5. Lift up the back door approximately 100 – 150 mm (3.937 – 5.906 in) height then close it lightly and check that it is engaged firmly with the back door closed.
6. Check the clearance and evenness.
7. Finally tighten the back door striker.

BACK DOOR STRIKER

BACK DOOR STRIKER : Exploded View

INFOID:0000000001091322

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1. Back door hinge
2. Back door assembly
3. Back door lock assembly
4. Bumper rubber bracket
5. Back door stay bracket (lower)
6. Bumper rubber
7. Back door stay
8. Back door stay bracket (upper)
9. Back door striker

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR STRIKER : Removal and Installation

INFOID:0000000001054863

REMOVAL

1. Remove the luggage rear plate cap. Refer to INT-24, "Removal and Installation".
2. Remove the mounting bolts, and then remove the back door striker.

INSTALLATION

Install in the reverse order of removal.

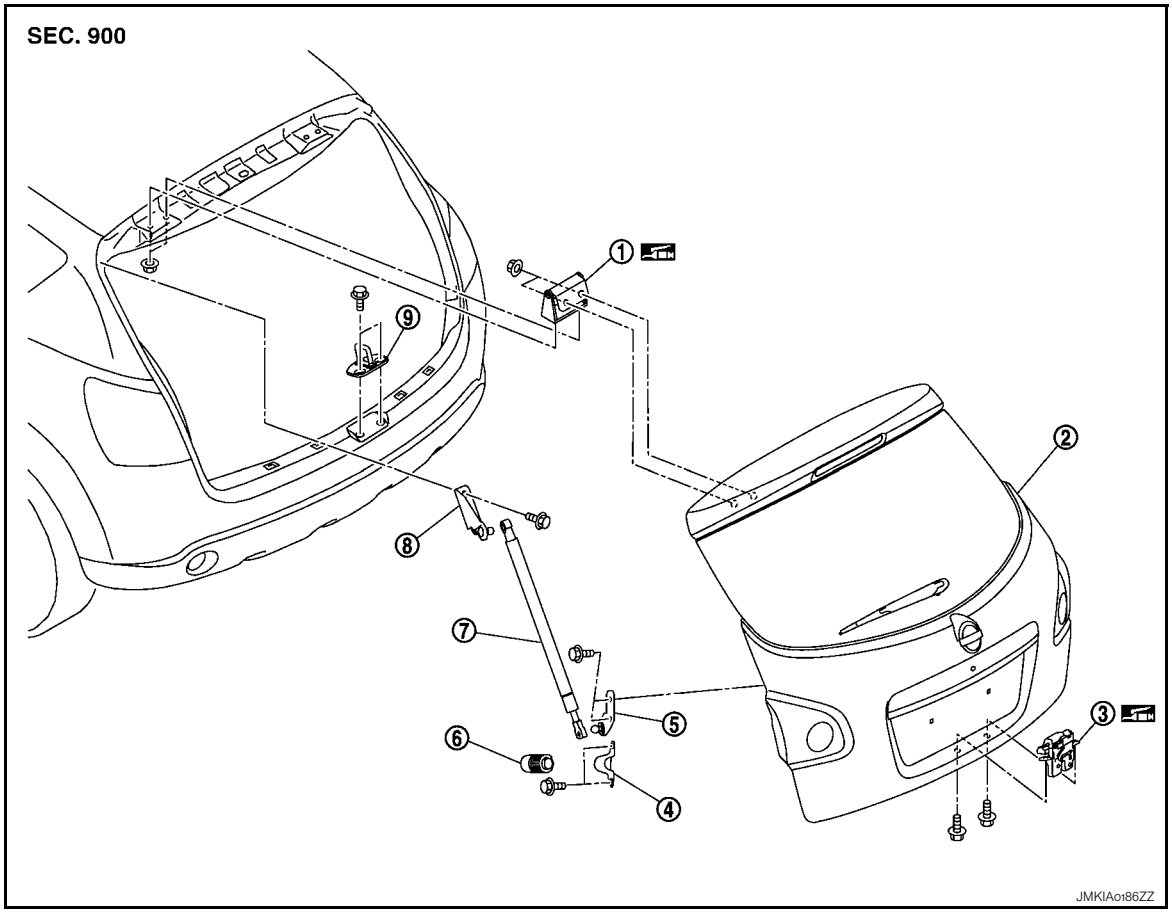
CAUTION:

- **When removing and installing the back door striker, be sure to perform the fitting adjustment. Refer to DLK-250, "BACK DOOR ASSEMBLY : Adjustment".**
- **Check the back door open/close operation after installation.**

BACK DOOR HINGE

BACK DOOR HINGE : Exploded View

INFOID:0000000001116372



1. Back door hinge
2. Back door assembly
3. Back door lock assembly
4. Bumper rubber bracket
5. Back door stay bracket (lower)
6. Bumper rubber
7. Back door stay
8. Back door stay bracket (upper)
9. Back door striker

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR HINGE : Removal and Installation

INFOID:0000000001102355

REMOVAL

1. Remove the back door assembly. Refer to DLK-248, "BACK DOOR ASSEMBLY : Removal and Installation".
2. Remove upper side of the back door weatherstrip. Refer to DLK-254, "BACK DOOR WEATHER-STRIP : Removal and Installation".
3. Remove rear seat belt cover. Refer to INT-21, "Removal and Installation".
4. Using remover tool, remove the headlining clip at the rear side of the headlining. Refer to INT-20, "Exploded View".
5. Remove the rear side of the headlining.
6. Remove the back door hinge mounting nuts (body side), and then remove the back door hinge.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

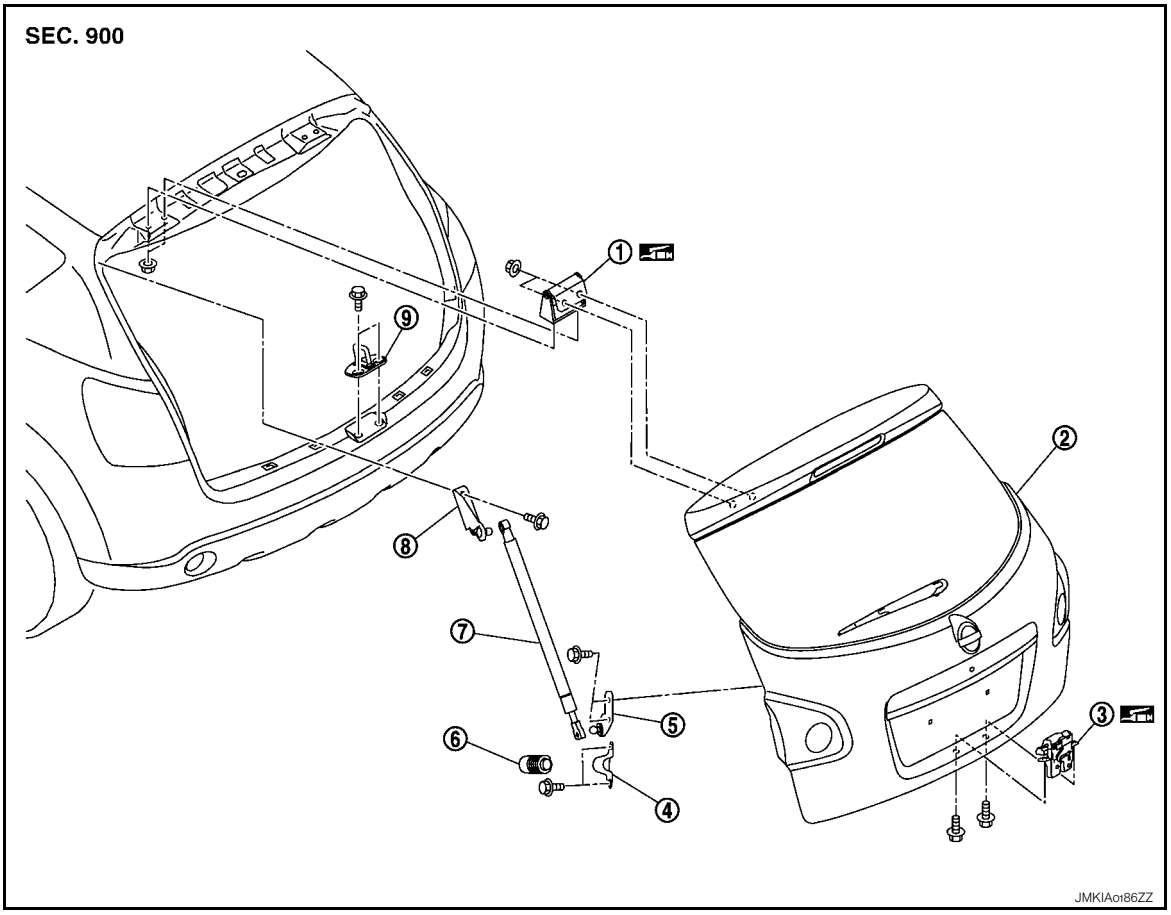
- **When removing and installing the back door assembly, perform the fitting adjustment. Refer to DLK-250, "BACK DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the hinge mounting nuts.**
- **Check the hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **Check the back door open/close operation after installation.**

BACK DOOR STAY

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BACK DOOR STAY : Exploded View

INFOID:0000000001116373



1. Back door hinge
2. Back door assembly
3. Back door lock assembly
4. Bumper rubber bracket
5. Back door stay bracket (lower)
6. Bumper rubber
7. Back door stay
8. Back door stay bracket (upper)
9. Back door striker

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR STAY : Removal and Installation

INFOID:0000000001054862

REMOVAL

1. Remove the stud ball (upper/lower), and then remove the back door stay.
2. Remove the mounting bolts, and then remove the back door stay bracket (upper/lower).

INSTALLATION

Install in the reverse order of removal.

CAUTION:

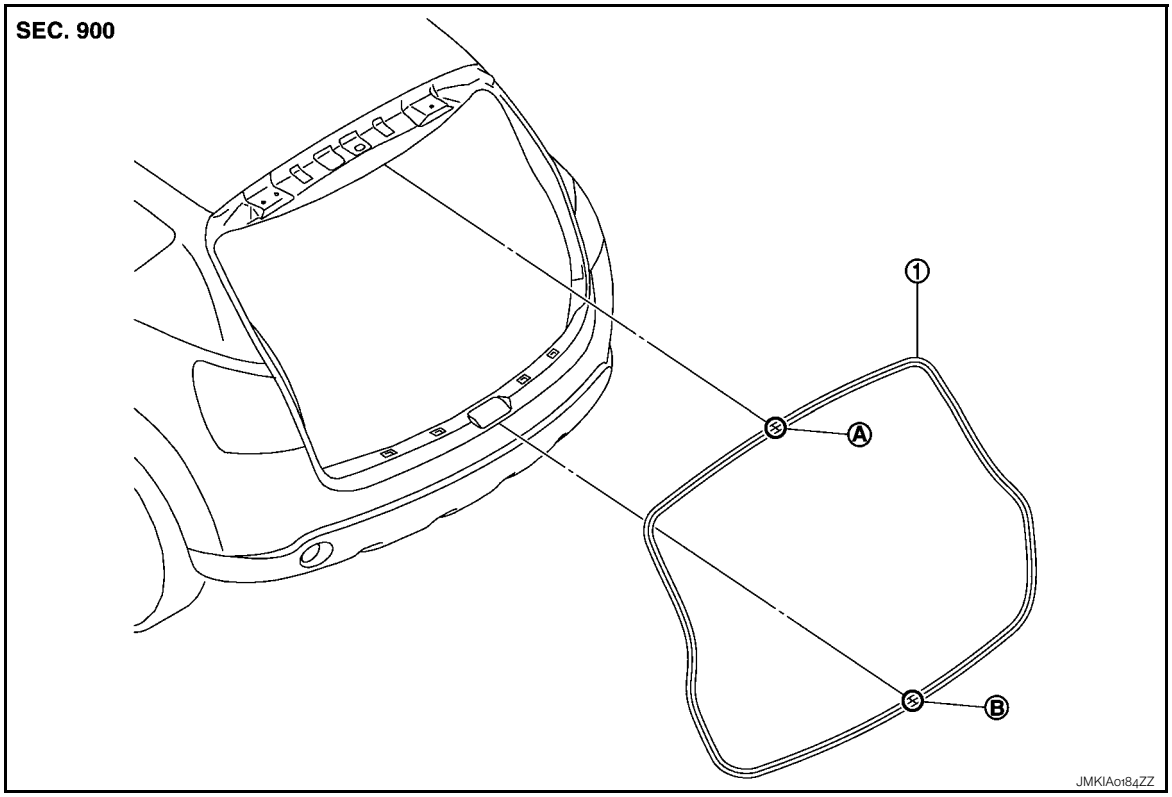
Check the back door open/close operation after installation.

BACK DOOR WEATHER-STRIP

BACK DOOR WEATHER-STRIP : Exploded View

INFOID:0000000001091325

REMOVAL



1. Back door weatherstrip
A. Mark (upper)
B. Mark (lower)

BACK DOOR WEATHER-STRIP : Removal and Installation

INFOID:0000000001054829

REMOVAL

Pull up and remove engagement with body from the weatherstrip joint.

CAUTION:

After removal, do not pull strongly on the weather-strip.

INSTALLATION

1. Working from the upper section, align the weatherstrip mark with vehicle center position mark and install the weatherstrip onto the vehicle.
2. For the lower section, align the weatherstrip seam with center of the back door striker.
3. After installation, pull the weatherstrip gently to ensure that there is no loose section.
   NOTE:
   Make sure that the weatherstrip is fit tlightly at each corner and the luggage rear plate.

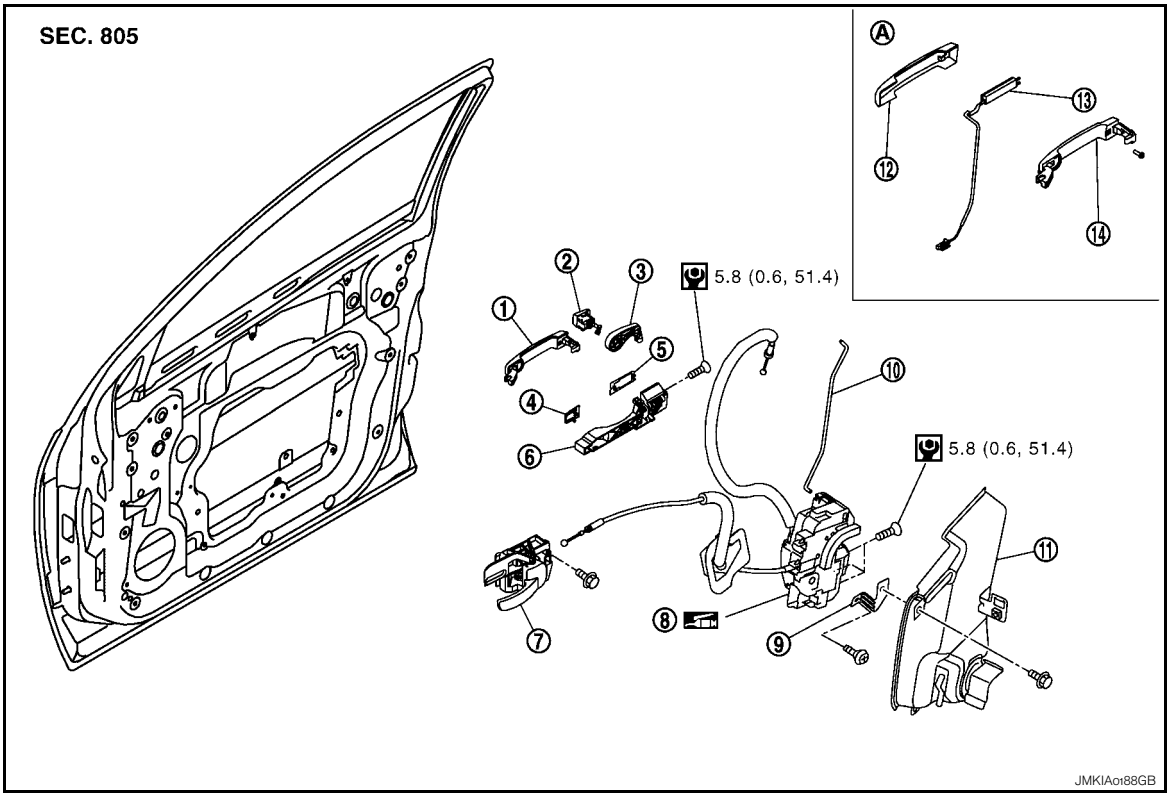
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FRONT DOOR LOCK

DOOR LOCK

DOOR LOCK : Exploded View

INFOID:0000000000939224



1. Outside handle assembly
2. Door key cylinder
3. Key cylinder lever
4. Front gasket
5. Rear gasket
6. Outside handle bracket
7. Inside handle
8. Door lock assembly
9. Key cylinder rod
10. Key rod protector
11. Key rod protector assembly (RH handle only)
12. Outside handle cover
13. Antenna
14. Outside handle base

A: Intelligent Key only

Refer to GI-4, "Components" for symbols in the figure.

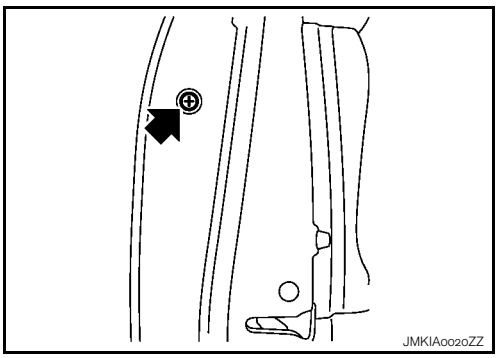
DOOR LOCK : Removal and Installation

INFOID:0000000000939225

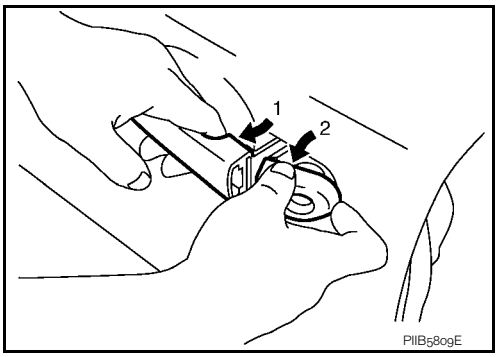
REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the inside handle mounting bolt, and then disconnect the inside handle knob cable and the lock knob cable.
3. Remove the front door glass. Refer to GW-19, "Removal and Installation".
4. Remove the front door module assembly. Refer to GW-22, "Removal and Installation".
5. Disconnect the door antenna and the door request switch connector and remove the harness clamp (models with Intelligent Key system).

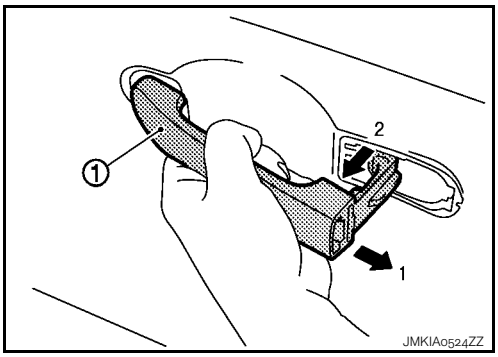
6. Remove the door side grommet, and remove the door key cylinder assembly (driver side) and outside handle escutcheon (passenger side) mounting bolts from grommet hole.
CAUTION:
Do not forcibly remove the bolts (TORX: T10).



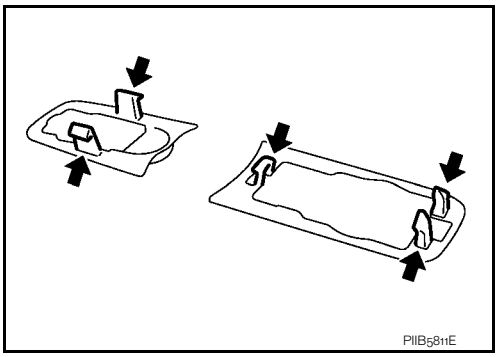
7. Reach in to separate the key cylinder rod connection (on the handle).
8. Disconnect the door key cylinder switch harness connector.
9. Remove the key cylinder lever from the door key cylinder.
10. While pulling the outside handle, remove door key cylinder assembly.



11. Disconnect front door request switch harness connector (models with Intelligent Key system).
12. While pulling outside handle, slide toward rear of vehicle to remove outside handle.

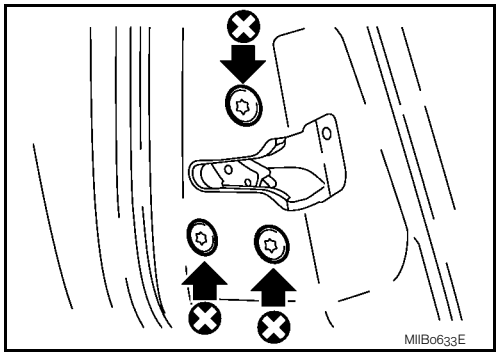


13. Remove the front gasket and the rear gasket.

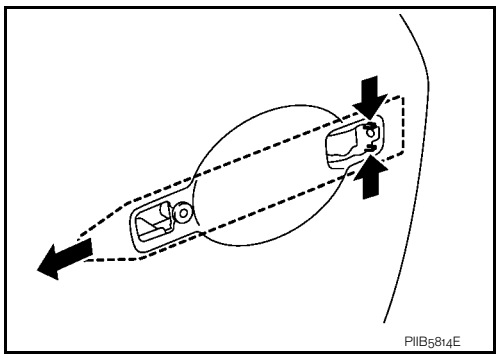


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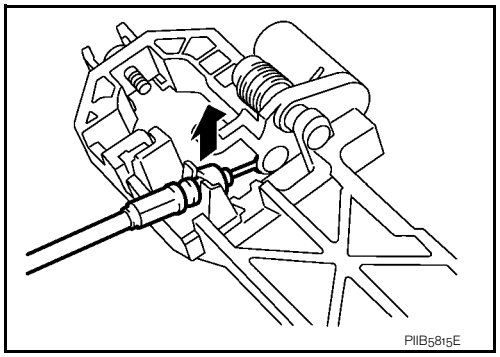
14. Remove the door lock assembly mounting bolts (TORX: T30).
15. Disconnect the door lock actuator connector, and then remove the door lock assembly.



16. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.



17. Reach in to separate the outside handle cable connection.



INSTALLATION

Install in the reverse order of removal.

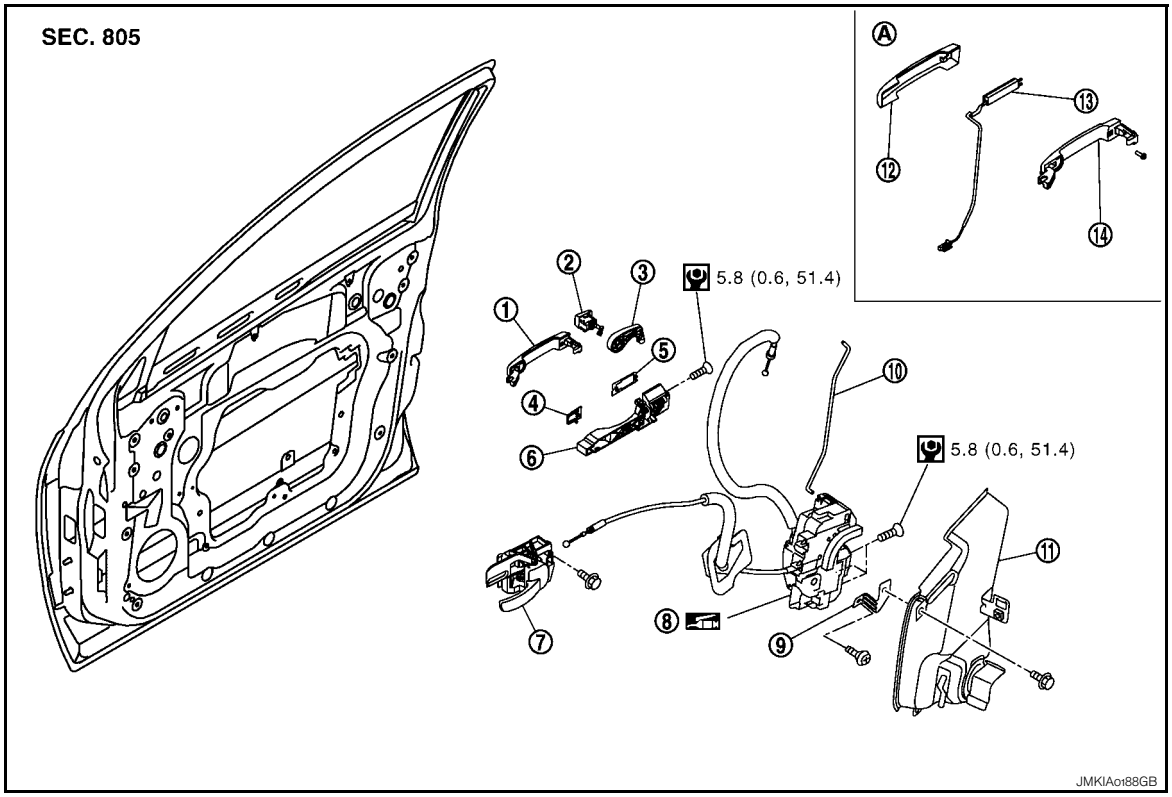
CAUTION:

- **To install each rod, rotate the rod holder until a click is felt.**
- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

INSIDE HANDLE

INSIDE HANDLE : Exploded View

INFOID:0000000001091307



1. Outside handle assembly
2. Door key cylinder
3. Key cylinder lever
4. Front gasket
5. Rear gasket
6. Outside handle bracket
7. Inside handle
8. Door lock assembly
9. Key cylinder rod
10. Key rod protector
11. Key rod protector assembly (RH handle only)
12. Outside handle cover
13. Antenna
14. Outside handle base

A: Intelligent Key only

Refer to GI-4, "Components" for symbols in the figure.

INSIDE HANDLE : Removal and Installation

INFOID:0000000001091308

REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the inside handle mounting bolt.
3. Disconnect the inside handle knob cable and the lock knob cable, and then remove the inside handle.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

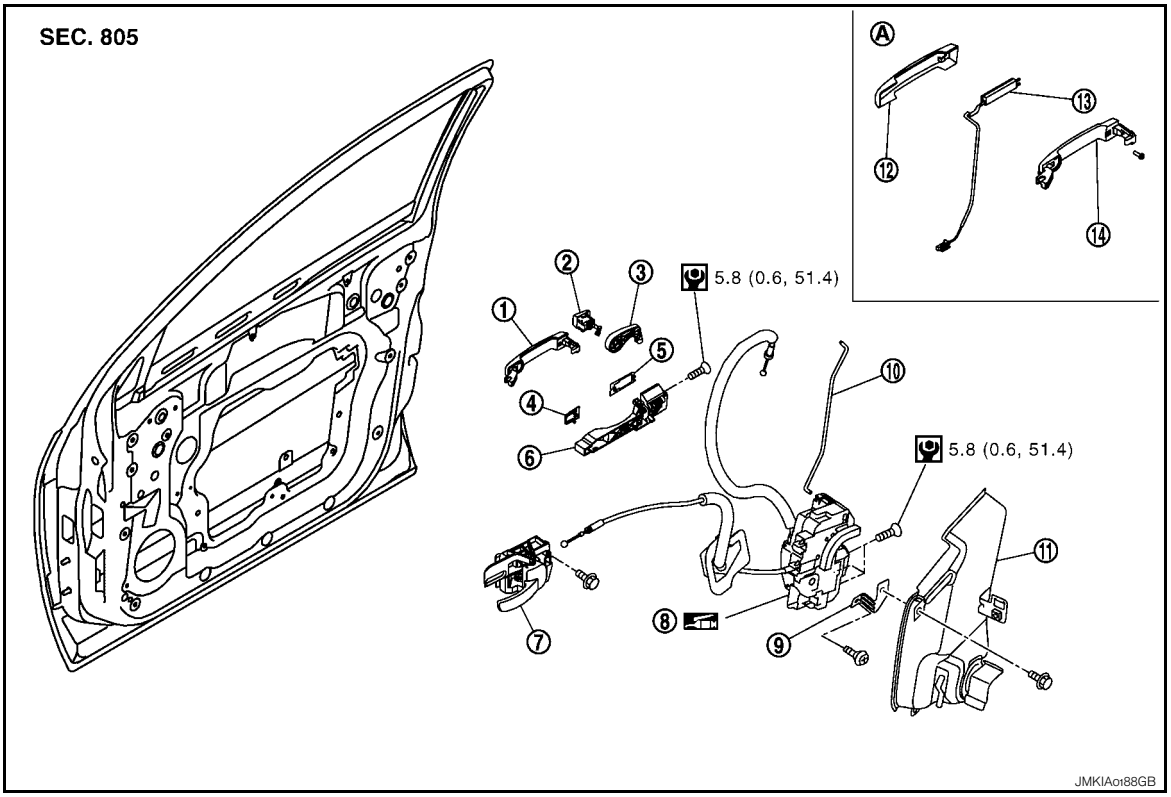
- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

OUTSIDE HANDLE

OUTSIDE HANDLE : Exploded View

INFOID:0000000001091309

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1. Outside handle assembly
2. Door key cylinder
3. Key cylinder lever
4. Front gasket
5. Rear gasket
6. Outside handle bracket
7. Inside handle
8. Door lock assembly
9. Key cylinder rod
10. Key rod protector
11. Key rod protector assembly (RH handle only)
12. Outside handle cover
13. Antenna
14. Outside handle base

A: Intelligent Key only

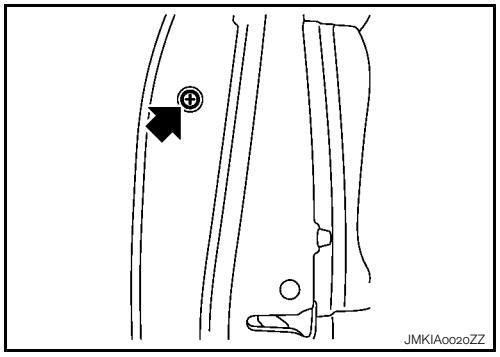
Refer to GI-4, "Components" for symbols in the figure.

OUTSIDE HANDLE : Removal and Installation

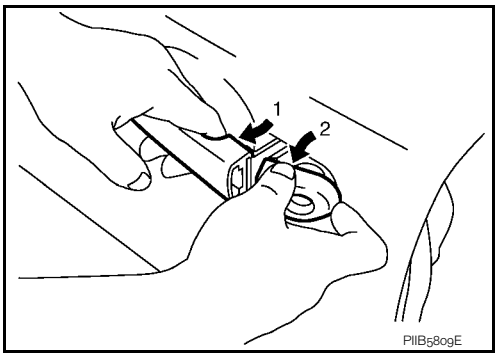
INFOID:0000000001091310

REMOVAL

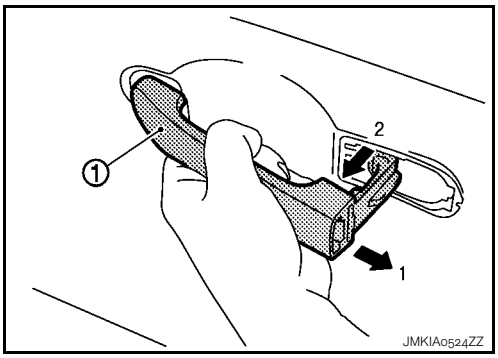
1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the inside handle mounting bolt, and disconnect the inside handle knob cable and the lock knob cable.
3. Remove the front door glass. Refer to GW-19, "Removal and Installation".
4. Remove the front door module assembly. Refer to GW-22, "Removal and Installation".
5. Disconnect the door antenna and the door request switch connector and remove the harness clamp (models with Intelligent Key system).
6. Remove the door side grommet, and remove the door key cylinder assembly (driver side) and the outside handle escutcheon (passenger side) mounting bolts from the grommet hole.
   CAUTION:
   Do not forcibly remove the bolts (TORX: T10).



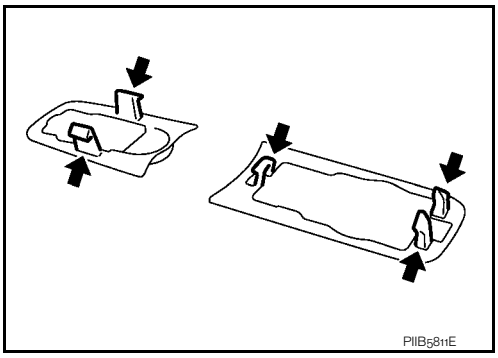
7. Reach in to separate the key cylinder rod connection (on the handle).
8. Disconnect the door key cylinder switch harness connector.
9. Remove the key cylinder lever from the door key cylinder.
10. While pulling the outside handle, remove the door key cylinder assembly.



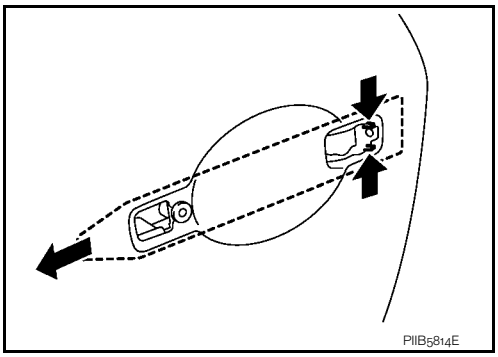
11. Disconnect the front door request switch harness connector (models with Intelligent Key system).
12. While pulling the outside handle, slide toward rear of vehicle to remove the outside handle.



13. Remove the front gasket and rear gasket.

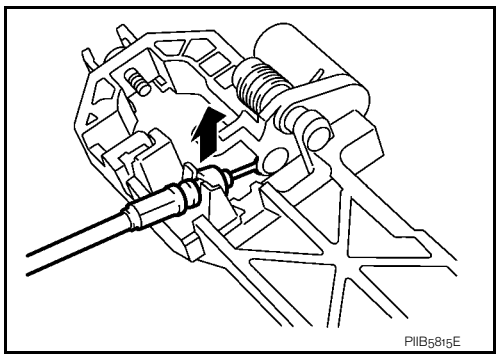


14. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.



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15. Reach in to separate the outside handle cable connection.



INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **To install each rod, rotate the rod holder until a click is felt.**
- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

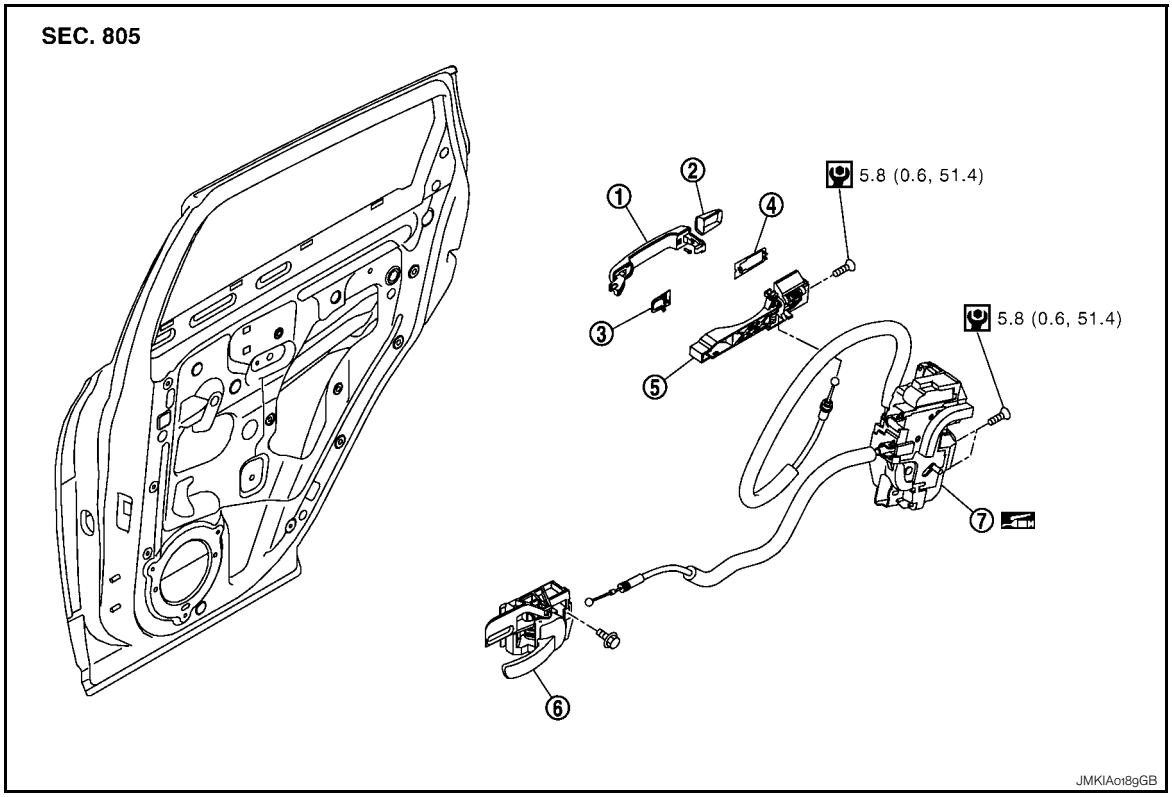
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REAR DOOR LOCK

DOOR LOCK

DOOR LOCK : Exploded View

INFOID:0000000001091297



1. Outside handle
2. Outside handle escutcheon
3. Front gasket
4. Rear gasket
5. Outside handle bracket
6. Inside handle
7. Door lock assembly

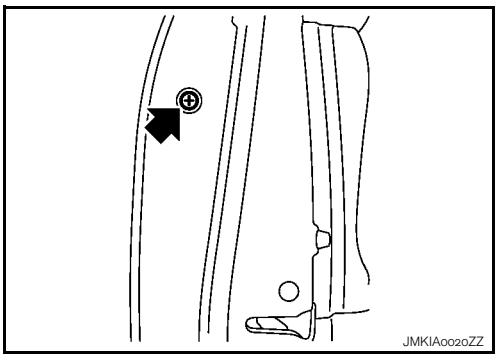
Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK : Removal and Installation

INFOID:0000000001091298

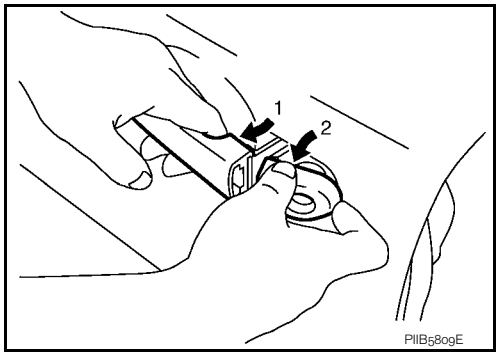
REMOVAL

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Fully close the front door window.
3. Remove the door sealing screen.
4. Remove the inside handle mounting bolt, and then disconnect the inside handle knob cable and the lock knob cable.
5. Remove the door side grommet, and remove the door key cylinder assembly (driver side) and the outside handle escutcheon (passenger side) mounting bolts from the grommet hole.
   CAUTION:
   Do not forcibly remove the bolts (TORX: T10).

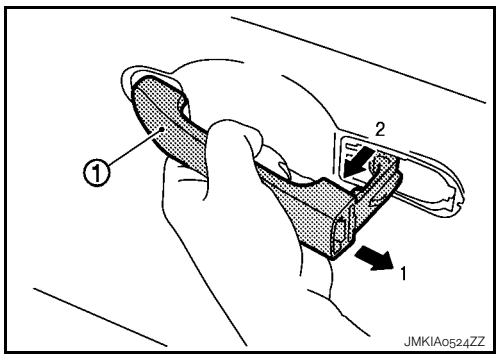


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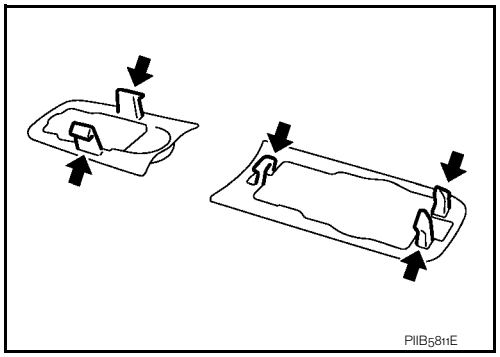
6. While pulling the outside handle, remove the door key cylinder assembly.



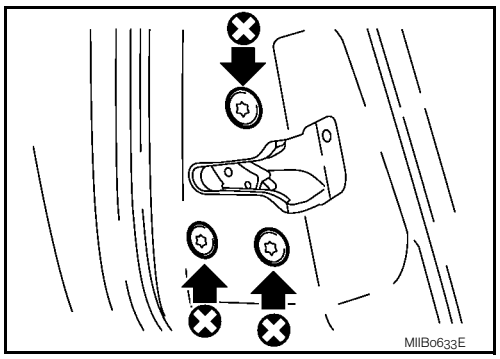
7. While pulling the outside handle, slide toward rear of vehicle to remove the outside handle.



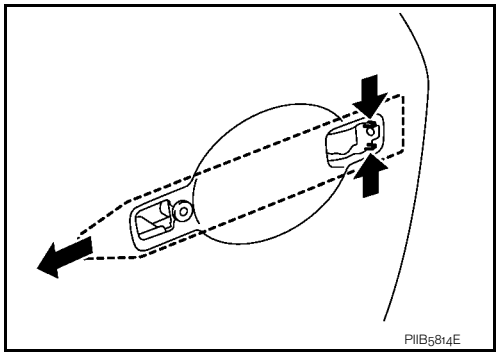
8. Remove the front gasket and the rear gasket.



9. Remove the door lock assembly mounting bolts (TORX: T30).
10. Disconnect the door lock actuator connector, and then remove the door lock assembly.

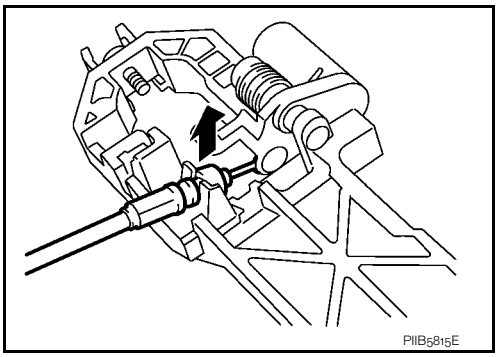


11. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.



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12. Reach in to separate the outside handle cable connection.



INSTALLATION

Install in the reverse order of removal.

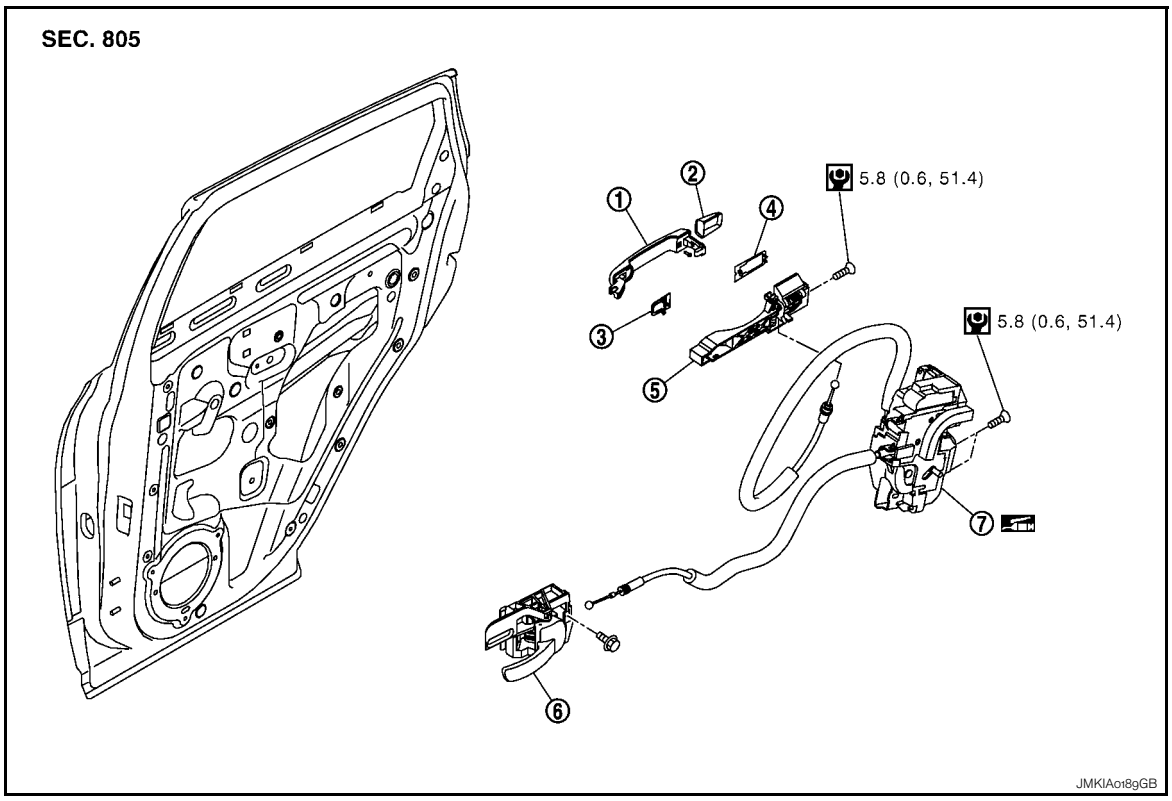
CAUTION:

- **To install each rod, rotate the rod holder until a click is felt.**
- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

INSIDE HANDLE

INSIDE HANDLE : Exploded View

INFOID:0000000001091311



1. Outside handle
2. Outside handle escutcheon
3. Front gasket
4. Rear gasket
5. Outside handle bracket
6. Inside handle
7. Door lock assembly

Refer to GI-4, "Components" for symbols in the figure.

INSIDE HANDLE : Removal and Installation

INFOID:0000000001091312

REMOVAL

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Remove the door sealing screen.

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3. Remove the inside handle mounting bolt, and then disconnect the inside handle knob cable and the lock knob cable.
4. Remove the inside handle.

INSTALLATION

Install in the reverse order of removal.

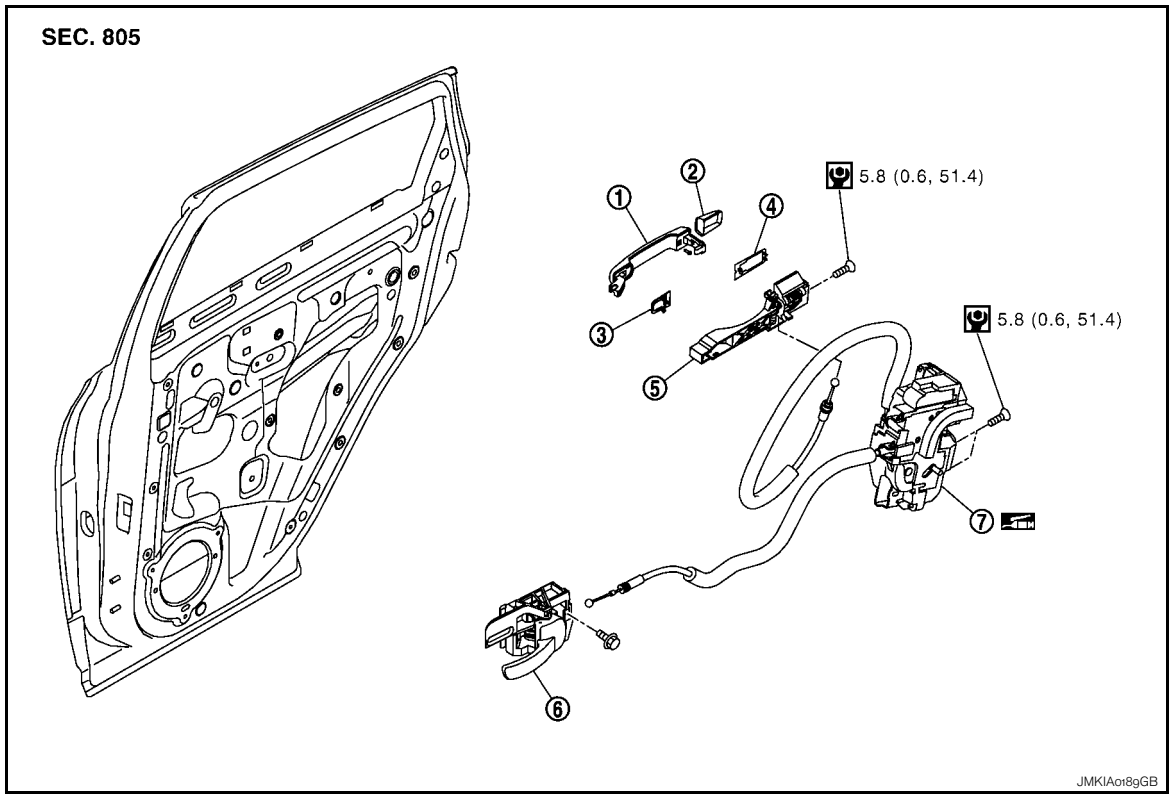
CAUTION:

- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

OUTSIDE HANDLE

OUTSIDE HANDLE : Exploded View

INFOID:0000000001091313



1. Outside handle
2. Outside handle escutcheon
3. Front gasket
4. Rear gasket
5. Outside handle bracket
6. Inside handle
7. Door lock assembly

Refer to GI-4, "Components" for symbols in the figure.

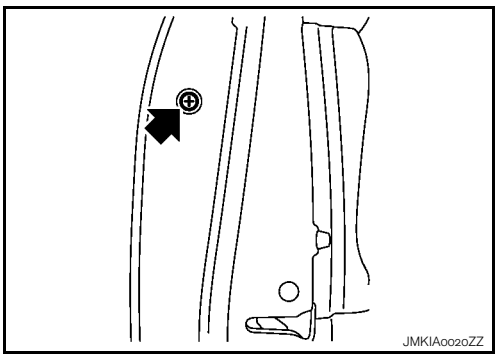
OUTSIDE HANDLE : Removal and Installation

INFOID:0000000001091314

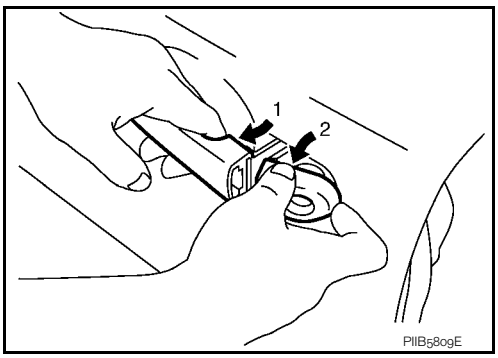
REMOVAL

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Fully close the front door window.
3. Remove the door sealing screen.
4. Remove the inside handle mounting bolt, disconnect the inside handle knob cable and the lock knob cable.

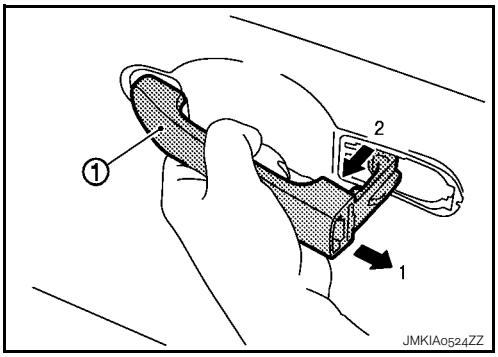
5. Remove the door side grommet, and remove the door key cylinder assembly (driver side) and the outside handle escutcheon (passenger side) mounting bolts from the grommet hole.
CAUTION:
Do not forcibly remove the bolts (TORX: T10).



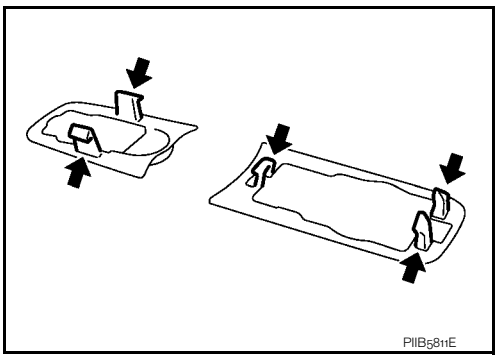
6. While pulling the outside handle, and then remove the door key cylinder assembly.



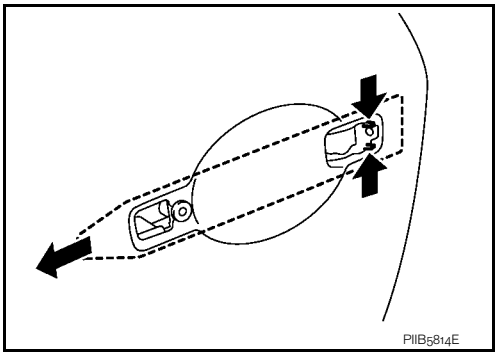
7. While pulling the outside handle, slide toward rear of vehicle to remove the outside handle.



8. Remove the front gasket and the rear gasket.

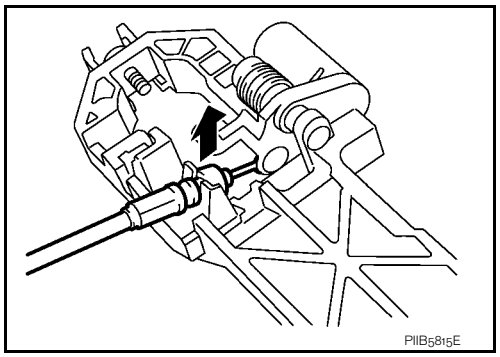


9. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.



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10. Reach in to separate the outside handle cable connection.



INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

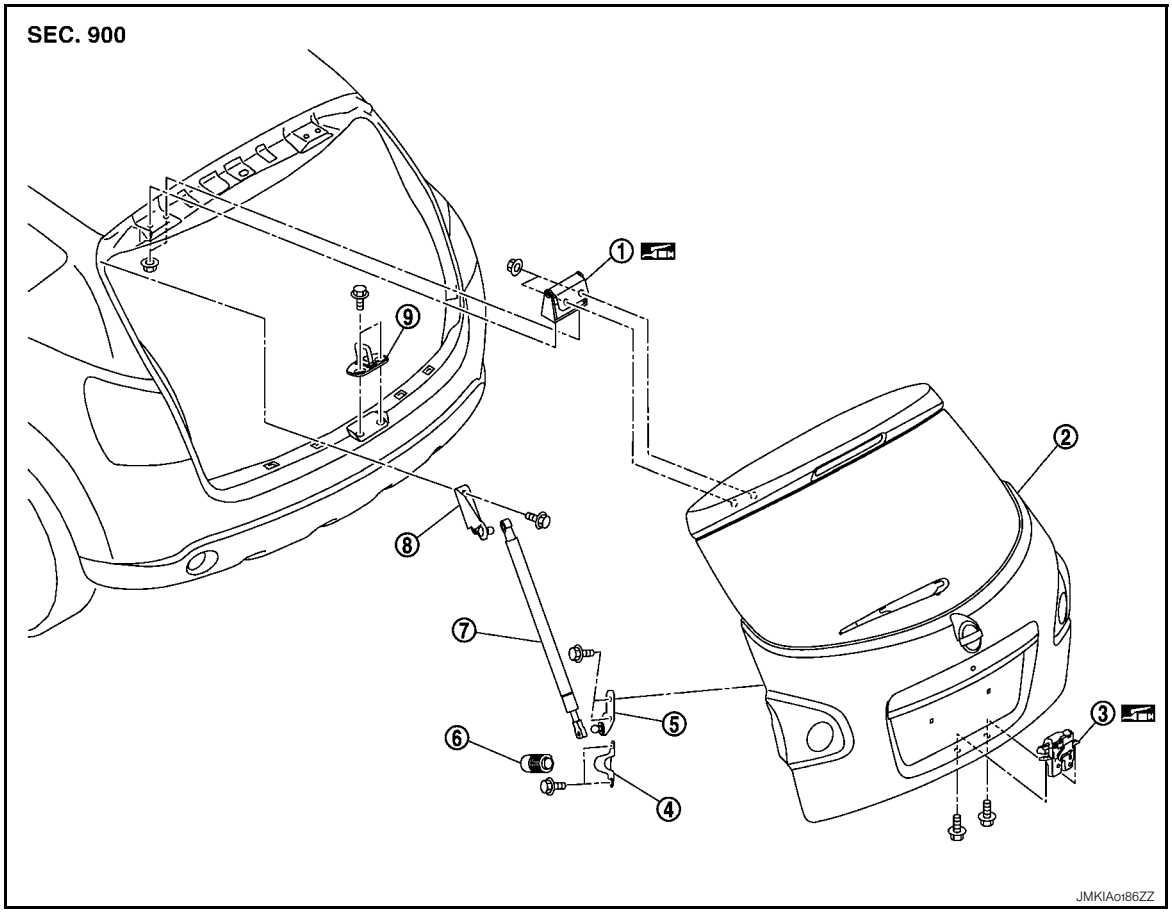
carjdiagn.com

BACK DOOR LOCK

DOOR LOCK

DOOR LOCK : Exploded View

INFOID:0000000001091305



1. Back door hinge
2. Back door assembly
3. Back door lock assembly
4. Bumper rubber bracket
5. Back door stay bracket (lower)
6. Bumper rubber
7. Back door stay
8. Back door stay bracket (upper)
9. Back door striker

Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK : Removal and Installation

INFOID:0000000001091306

REMOVAL

1. Remove the back door trim finisher lower. Refer to INT-26, "Removal and Installation".
2. Disconnect the back door lock assembly and back door opener switch connectors.
3. Remove the back door lock mounting bolts, and then remove the back door lock and actuator.

INSTALLTION

Install in the reverse order of removal.

CAUTION:

Check the back door lock/unlock operation after installation.

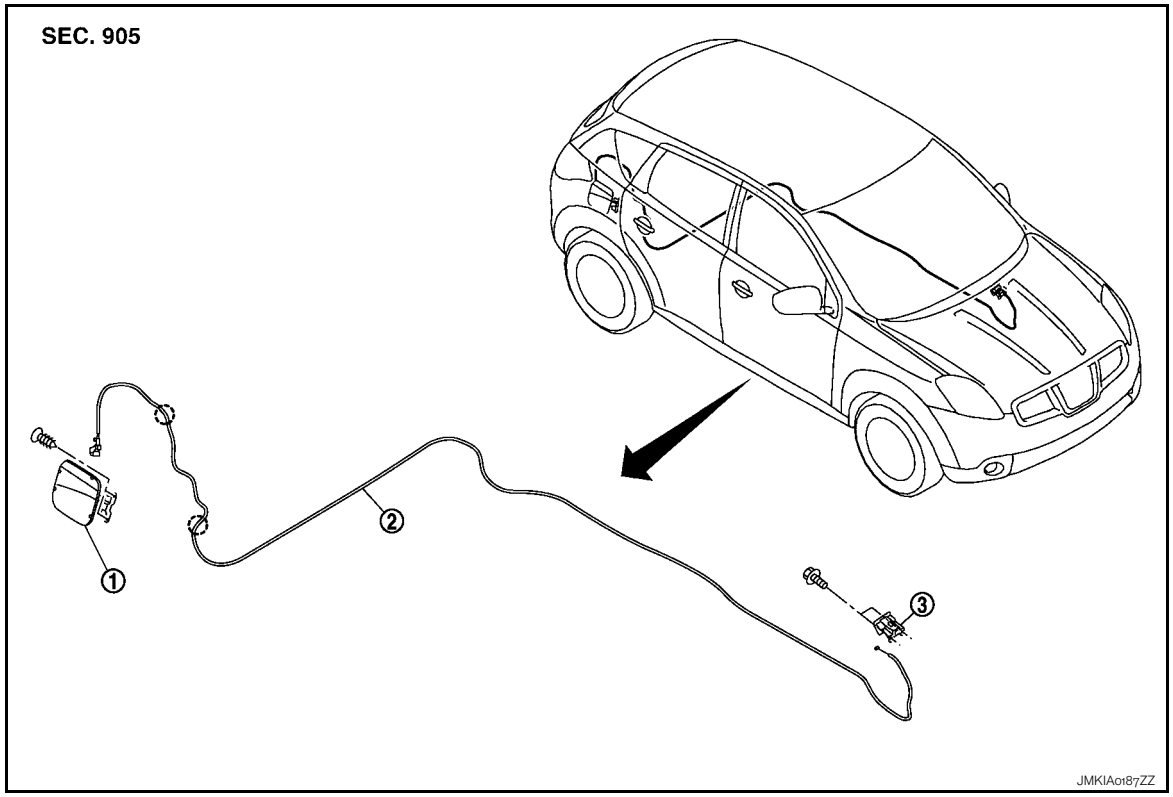
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FUEL FILLER LID OPENER

FUEL FILLER LID

FUEL FILLER LID : Exploded View

INFOID:0000000001054835



1. Fuel filler lid assembly
2. Fuel filler opener cable
3. Fuel opener lever

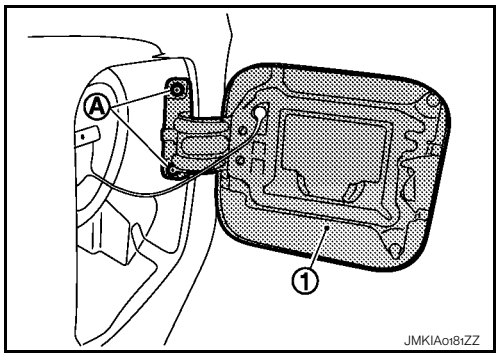
: Clip

FUEL FILLER LID : Removal and Installation

INFOID:0000000001054830

REMOVAL

1. Fully open the fuel filler lid.
2. Remove the filler cap.
3. Remove the mounting screws (A), and then remove the fuel filler lid (1).



INSTALLATION

Install in the reverse order of removal.

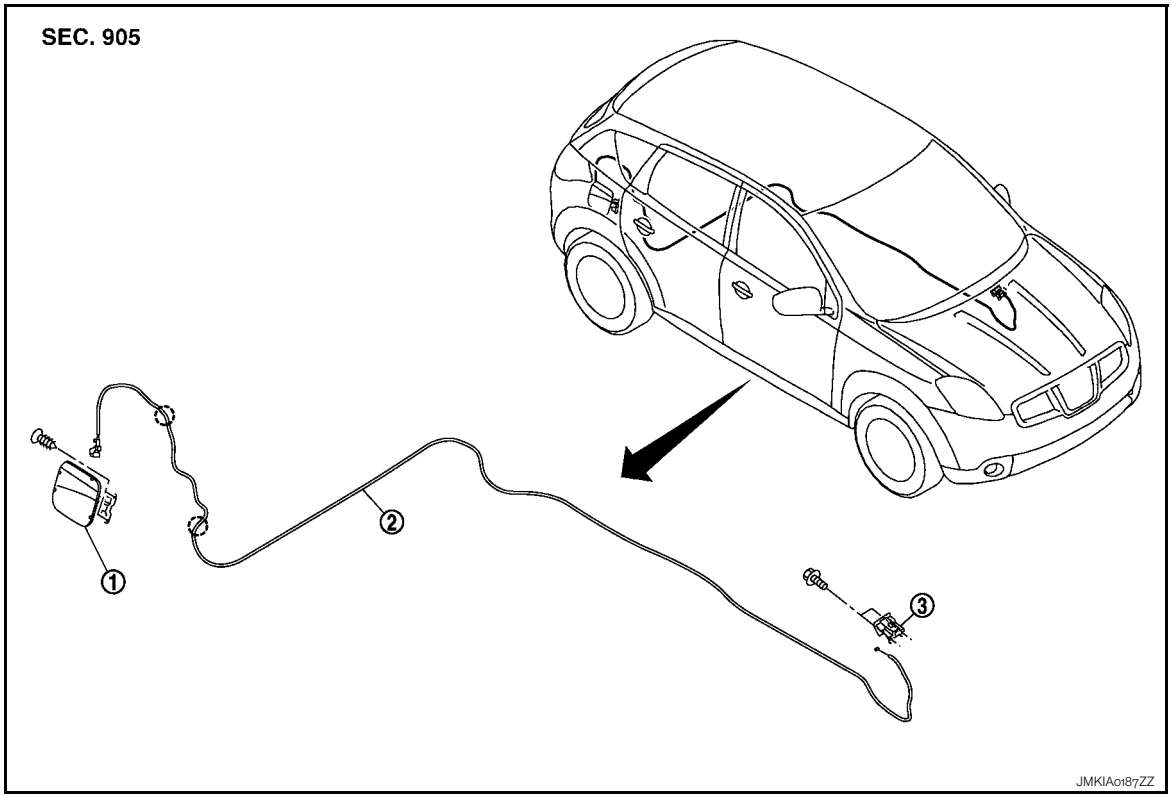
CAUTION:

After installation, apply the touch-up paint (the body color) onto the head of the mounting screws.

FUEL FILLER OPENER CABLE

FUEL FILLER OPENER CABLE : Exploded View

INFOID:0000000001091319



1. Fuel filler lid assembly
2. Fuel filler opener cable
3. Fuel opener lever

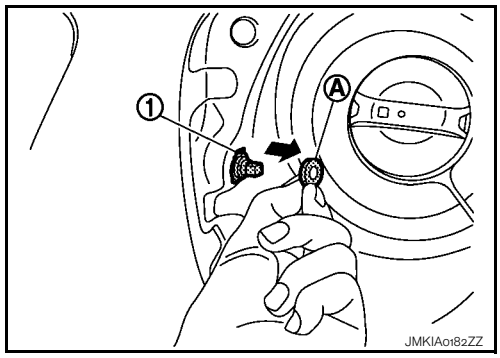
: Clip

FUEL FILLER OPENER CABLE : Removal and Installation

INFOID:0000000001091923

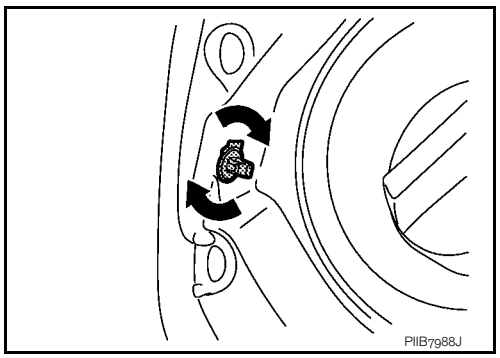
REMOVAL

1. Remove the rear seat cushion, rear seatback, seatback lower support, and seatback mounting outer bracket. Refer to SE-31, "Removal and Installation".
2. Remove the dash side finisher, front kicking plate inner, rear kicking plate inner, center pillar lower garnish, and luggage side lower finisher (front). Refer to INT-14, "Removal and Installation".
3. Remove the parcel shelf, luggage floor carpet, luggage floor spacer, luggage rear plate, luggage side lower finisher, and rear pillar finisher. Refer to INT-24, "Removal and Installation".
4. Remove the fuel filler lock seal (1).

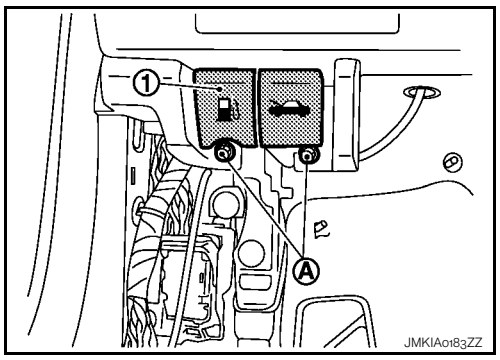


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5. Rotate the fuel filler lock, and then remove the fuel filler lock.



6. Remove the fuel filler opener cable mounting clips and the clamps.
7. Remove the mounting bolts, and then remove the fuel filler lid opener lever.



8. Remove the fuel filler opener cable.

INSTALLATION

Install in the reverse order of removal.

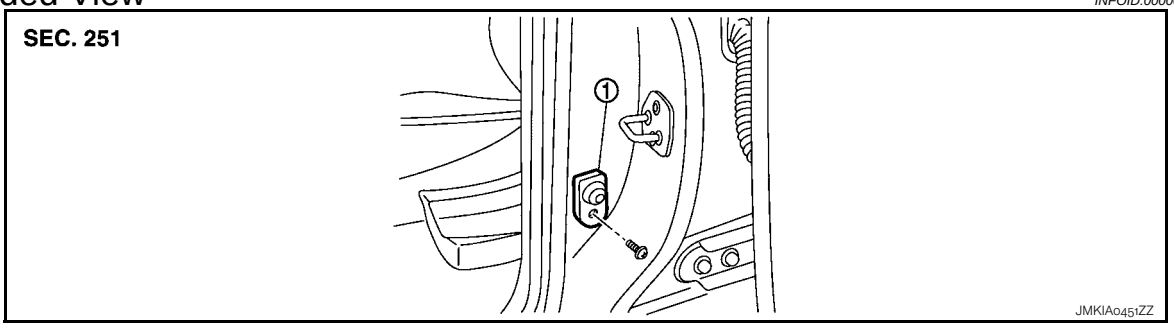
CAUTION:

Check the fuel filler lid open/close operation after installation.

DOOR SWITCH

Exploded View

INFOID:0000000001091512



1. Door switch (driver side)

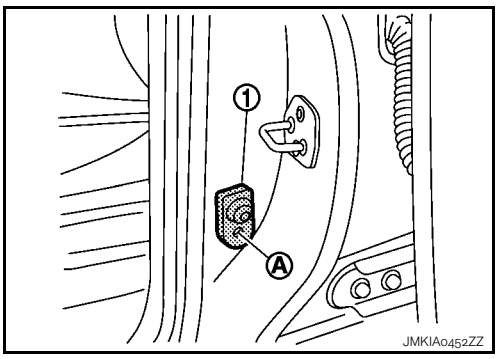
Refer to DLK-272, "Removal and Installation".

Removal and Installation

INFOID:0000000000939235

REMOVAL

1. Remove the door switch mounting bolt (A), and then remove door switch (1).
   NOTE:
   The same procedure is also performed for door switch (passenger side, rear LH and rear RH).



INSTALLATION

Install in the reverse order of removal.

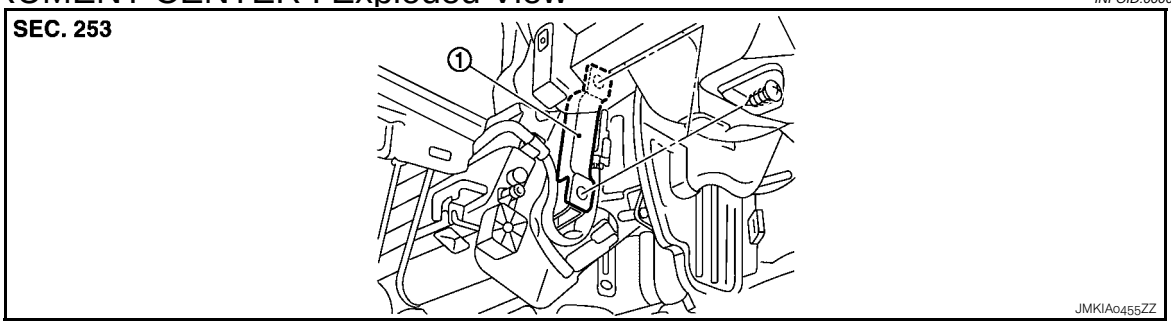
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INSIDE KEY ANTENNA

INSTRUMENT CENTER

INSTRUMENT CENTER : Exploded View

INFOID:0000000000939236



1. Inside key antenna (instrument center)

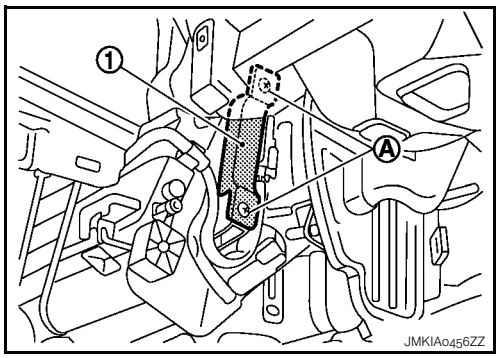
Refer to DLK-273, "INSTRUMENT CENTER : Removal and Installation".

INSTRUMENT CENTER : Removal and Installation

INFOID:0000000000939237

REMOVAL

1. Remove the glove box and instrument lower cover RH. Refer to IP-11, "Exploded View" and IP-12, "Removal and Installation".
2. Remove the key slot mounting screw (A), and then remove inside key antenna (instrument center) (1).



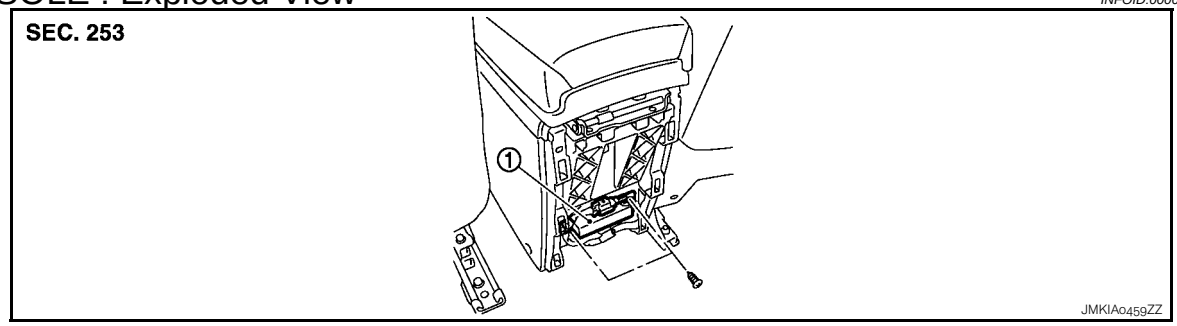
INSTALLATION

Install in the reverse order of removal.

CONSOLE

CONSOLE : Exploded View

INFOID:0000000000939238



1. Inside key antenna (console)

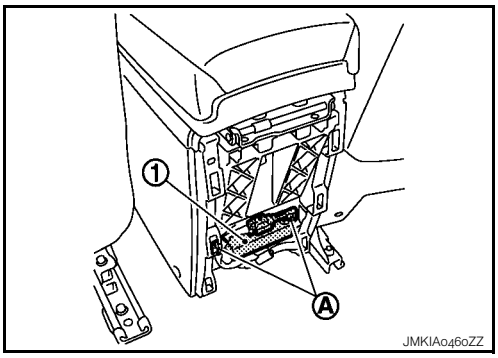
Refer to DLK-273, "CONSOLE : Removal and Installation".

CONSOLE : Removal and Installation

INFOID:0000000000939239

REMOVAL

1. Remove the console rear finisher (2). Refer to IP-18, "Exploded View" and IP-18, "Removal and Installation".
2. Remove the inside key antenna mounting screw (A), and then remove inside key antenna (console) (1).

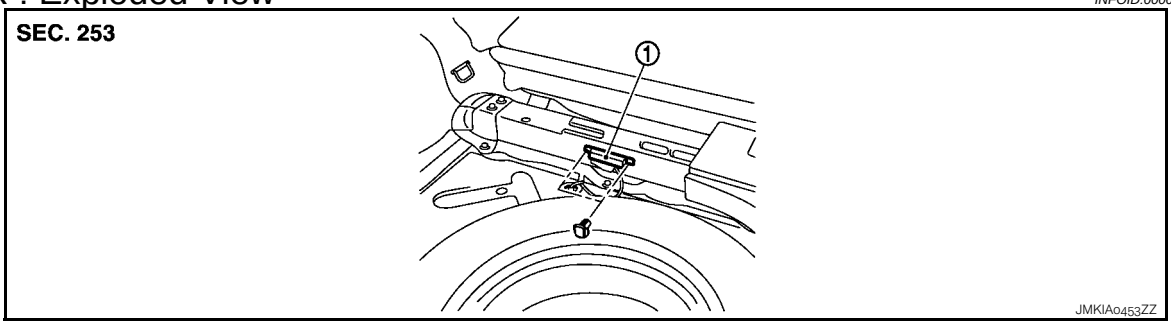


INSTALLATION
Install in the reverse order of removal.

REAR

REAR : Exploded View

INFOID:0000000000939240



1. Inside key antenna (rear seat)

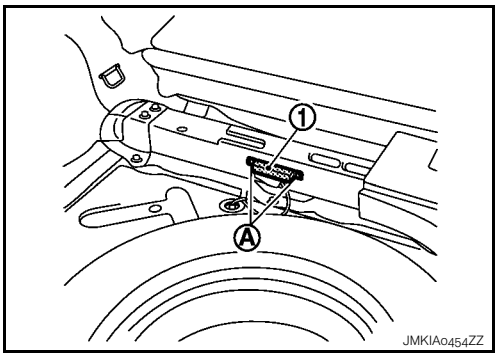
Refer to DLK-274, "REAR : Removal and Installation".

REAR : Removal and Installation

INFOID:0000000000939241

REMOVAL

1. Remove the luggage floor spacer (LH). Refer to INT-24, "Exploded View" and INT-24, "Removal and Installation".
2. Remove the inside key antenna (rear seat) mounting clips (A), and then remove inside key antenna (rear seat) (1).



INSTALLATION
Install in the reverse order of removal.

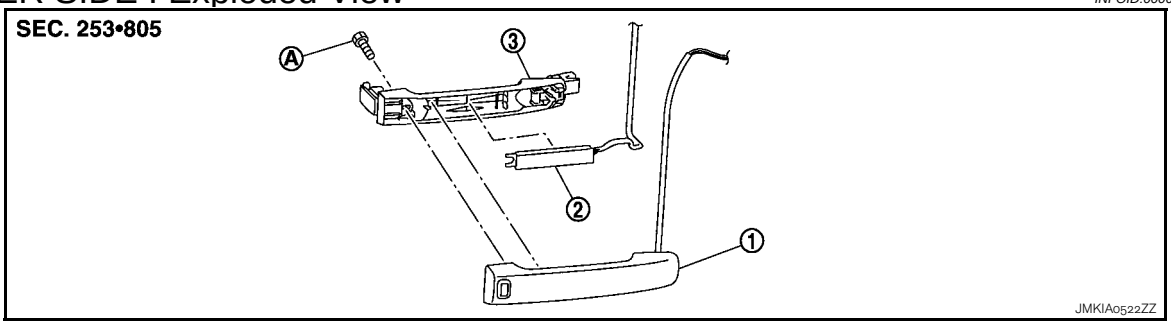
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OUTSIDE KEY ANTENNA

DRIVER SIDE

DRIVER SIDE : Exploded View

INFOID:0000000000939242



1. Outside handle grip
2. Outside key antenna
3. Outside handle bracket

A. Bolt

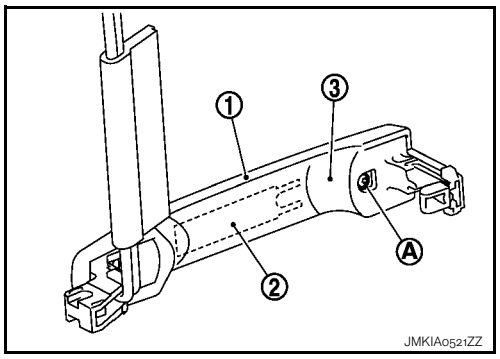
Refer to DLK-275, "DRIVER SIDE : Removal and Installation".

DRIVER SIDE : Removal and Installation

INFOID:0000000000939243

REMOVAL

1. Remove the outside handle. Refer to DLK-258, "OUTSIDE HANDLE : Exploded View" and DLK-259, "OUTSIDE HANDLE : Removal and Installation".
2. Remove the bolt (A) from outside handle grip (1).
3. Remove the outside key antenna (2) from outside handle bracket (3).



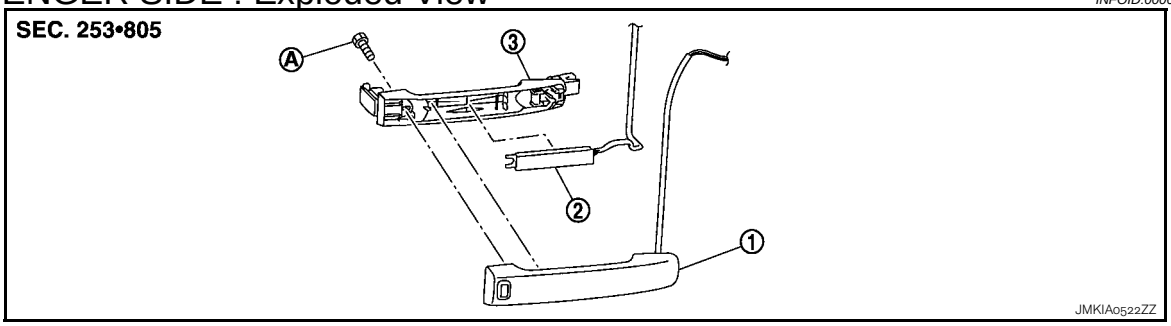
INSTALLATION

Install in the reverse order of removal.

PASSENGER SIDE

PASSENGER SIDE : Exploded View

INFOID:0000000001102421



1. Outside handle grip
2. Outside key antenna
3. Outside handle bracket

A. Bolt

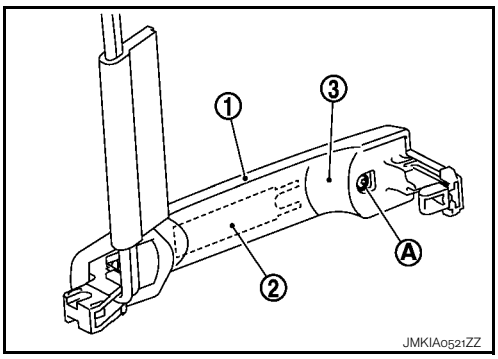
Refer to DLK-275, "PASSENGER SIDE : Removal and Installation".

PASSENGER SIDE : Removal and Installation

INFOID:0000000001102422

REMOVAL

1. Remove the outside handle. Refer to DLK-258, "OUTSIDE HANDLE : Exploded View" and DLK-259, "OUTSIDE HANDLE : Removal and Installation".
2. Remove the bolt (A) from outside handle grip (1).
3. Remove the outside key antenna (2) from outside handle bracket (3).



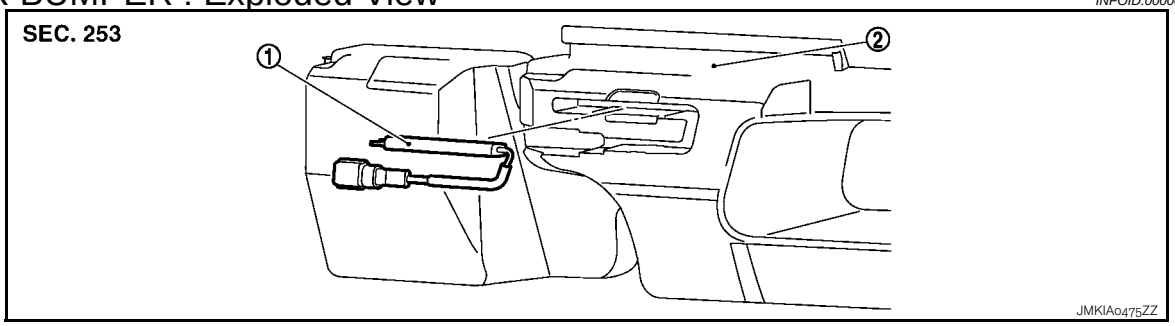
INSTALLATION

Install in the reverse order of removal.

REAR BUMPER

REAR BUMPER : Exploded View

INFOID:0000000000939246



1. Outside key antenna (rear bumper) 2. Rear bumper energy absorber

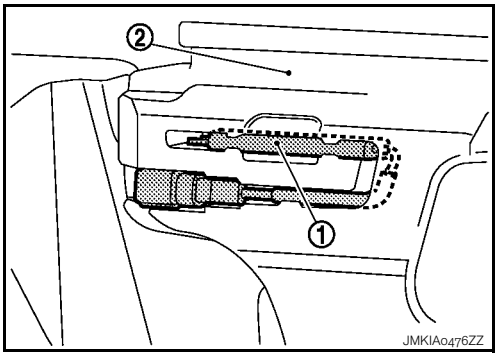
Refer to DLK-276, "REAR BUMPER : Removal and Installation".

REAR BUMPER : Removal and Installation

INFOID:0000000000939247

REMOVAL

1. Remove the rear bumper. Refer to EXT-14, "Exploded View" and EXT-15, "Removal and Installation".
2. Remove the outside key antenna (rear bumper) (1) from rear bumper energy absorber (2).



INSTALLATION

Install in the reverse order of removal.

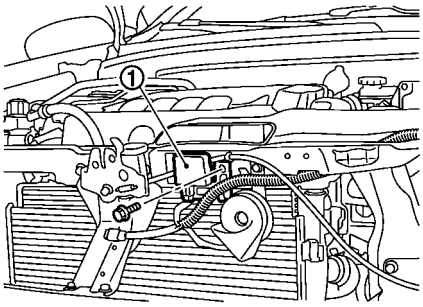
cardiagn.com

INTELLIGENT KEY WARNING BUZZER

Exploded View

INFOID:0000000000939248

SEC. 253



1. Intelligent Key warning buzzer

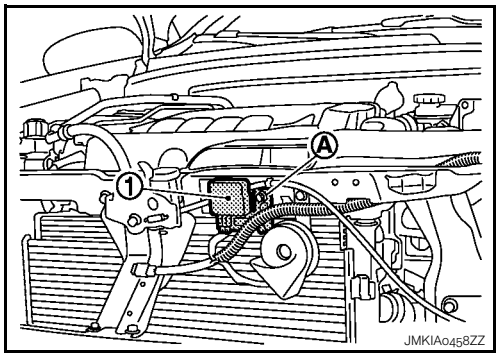
Refer to DLK-277, "Removal and Installation".

Removal and Installation

INFOID:0000000000939249

REMOVAL

1. Remove the front bumper. Refer to EXT-11, "Exploded View" and EXT-11, "Removal and Installation".
2. Remove the Intelligent Key warning buzzer mounting bolt (A), and then remove the Intelligent Key warning buzzer (1).



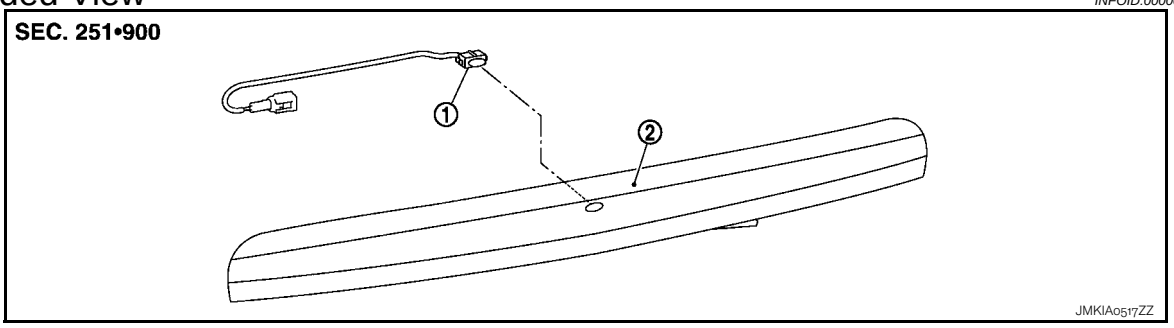
INSTALLATION

Install in the reverse order of removal.

BACK DOOR REQUEST SWITCH

Exploded View

INFOID:0000000000939252



1. Back door request switch
2. Back door finisher

Refer to DLK-278, "Removal and Installation".

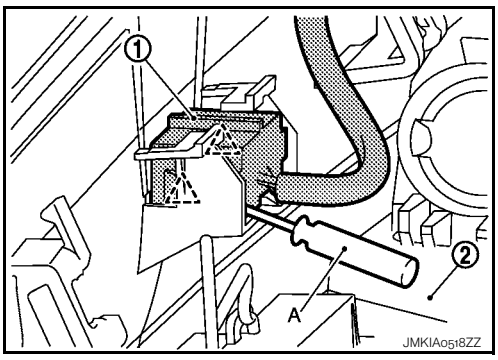
Removal and Installation

INFOID:0000000000939253

REMOVAL

1. Remove the back door finisher.
   Refer to EXT-31, "Exploded View" and EXT-31, "Removal and Installation".
2. Remove the back door request switch (1) from back door finisher (2) using flat-bladed screw driver (A) etc.

   △ : **Pawl**



3. Remove the trunk lid request switch mounting screw (B), and then remove trunk lid request switch (3) from inner bracket (2).

INSTALLATION

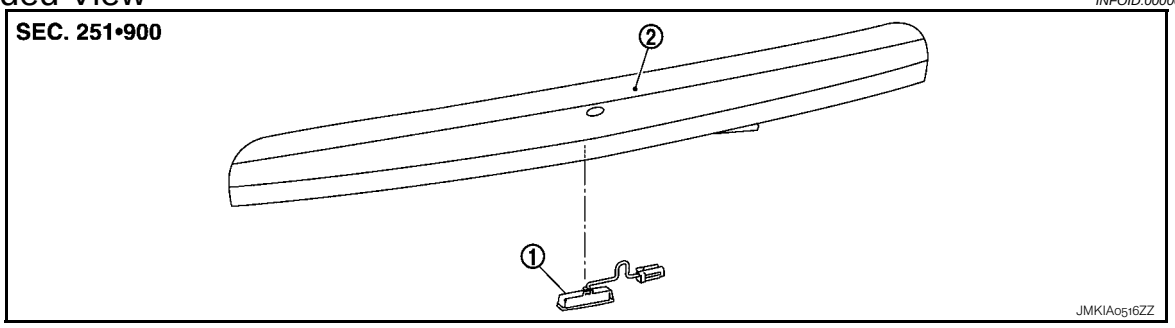
Install in the reverse order of removal.

cardiagn.com

BACK DOOR OPENER SWITCH

Exploded View

INFOID:0000000000939254



1. Back door opener switch
2. Back door finisher

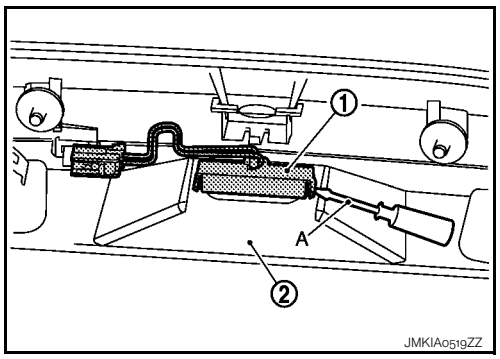
Refer to DLK-279, "Removal and Installation".

Removal and Installation

INFOID:0000000000939255

REMOVAL

1. Remove the back door finisher.
   Refer to EXT-31, "Exploded View" and EXT-31, "Removal and Installation".
2. Remove the back door opener switch (1) from back door finisher (2) using flat-bladed screw driver (A) etc.



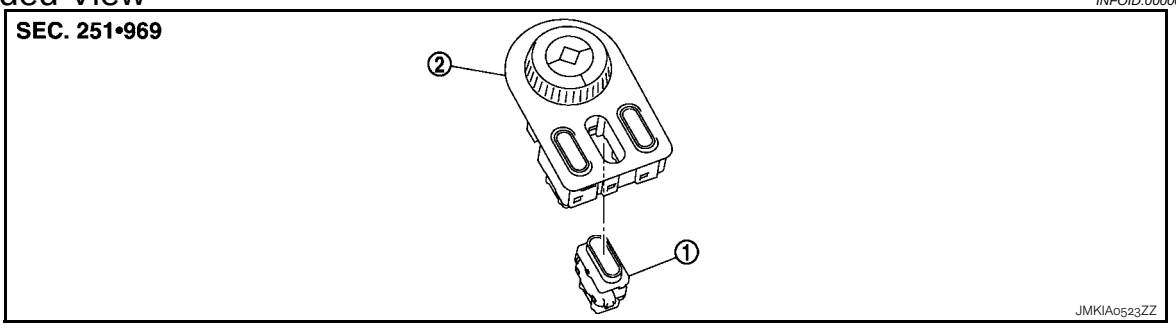
INSTALLATION

Install in the reverse order of removal.

DOOR LOCK AND UNLOCK SWITCH

Exploded View

INFOID:0000000001102429



1. Door lock and unlock switch
2. Center console switch panel

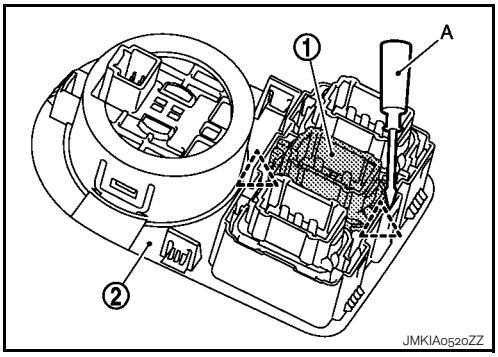
Refer to DLK-280, "Removal and Installation".

Removal and Installation

INFOID:0000000001102430

REMOVAL

1. Remove the center console switch panel. Refer to IP-18, "Exploded View" and IP-18, "Removal and Installation".
2. Remove the door lock and unlock switch (1) from center console switch panel (2) using flat-bladed screwdriver (A), etc.



INSTALLATION

Install in the reverse order of removal.

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INTELLIGENT KEY BATTERY

Exploded View

INFOID:0000000001109238

Refer to DLK-281, "Removal and Installation".

Removal and Installation

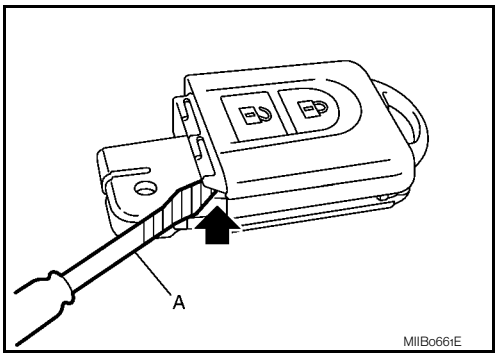
INFOID:0000000001109237

REMOVAL

1. Remove Intelligent Key cover.
2. Insert a flat-bladed screwdriver (A) wrapped with tape as shown in the illustration and then separate lower and upper cases by twisting screwdriver.

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 circuit board assembly from the upper case (1). [Substrate assembly: circuit board (3) + rubber (2)]
4. Gently press the rubber (2) and remove the circuit board (3).

CAUTION:

Do not touch the printed circuits directly.

5. Remove the battery (4) from the lower case (5) and replace it.

Battery replacement : Coin-type lithium battery (CR2032)

CAUTION:

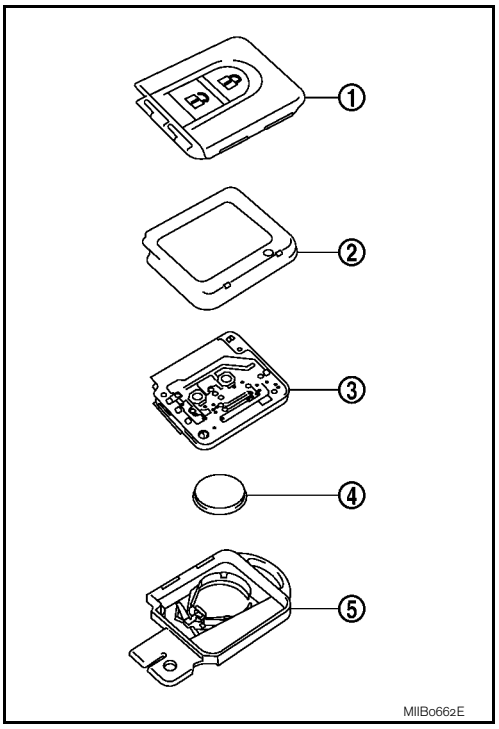
When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.

6. After replacement, assemble the upper and lower cases by engaging the hooks on their circumference while being careful not to pinch the rubber, etc.

CAUTION:

After replacing the battery, check that all Intelligent Key functions work normally.

Refer to DLK-134, "Component Function Check".



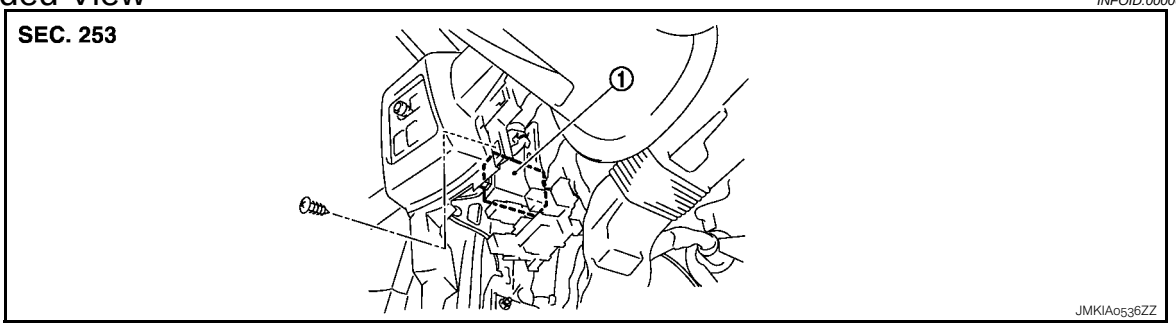
INSTALLATION

Install in the reverse order of removal.

INTELLIGENT KEY UNIT

Exploded View

INFOID:0000000001116299



1. Intelligent Key unit
M40

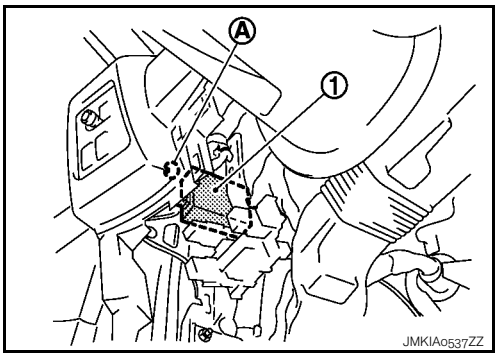
Refer to DLK-282, "Removal and Installation".

Removal and Installation

INFOID:0000000001116300

REMOVAL

1. Remove lower instrument panel (driver side) and mirror switch finisher. Refer to IP-11, "Exploded View" and IP-12, "Removal and Installation".
2. Remove the Intelligent Key unit mounting screw (A), and then remove Intelligent Key unit (1).
NOTE:
Perform the system initialization when replacing Intelligent Key unit. Refer to DLK-23, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".



INSTALLATION

Install in the reverse order of removal.

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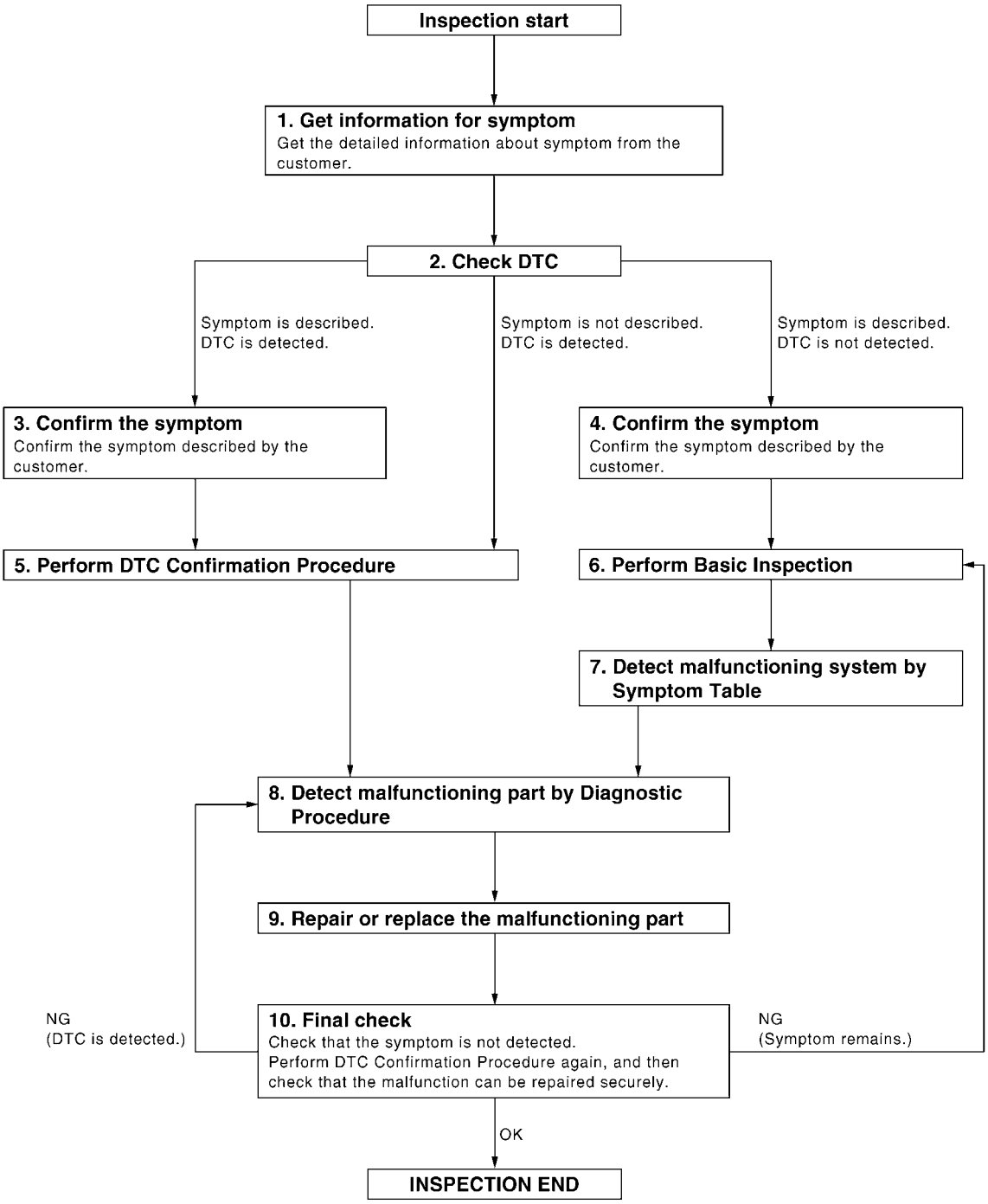
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000001102238

OVERALL SEQUENCE



JMKIA0101GB

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 for Intelligent Key unit and BCM.
2. Perform the following procedure if DTC is displayed.

- 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-III 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-III 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.
If two or more DTCs are detected, refer to DLK-433, "DTC Inspection Priority Chart" (Intelligent Key unit), DLK-471, "DTC Inspection Priority Chart" (BCM) and determine trouble diagnosis order.

Is DTC detected?

YES >> GO TO 8.
NO >> Refer to GI-39, "Intermittent Incident".

6.PERFORM BASIC INSPECTION

Perform Basic Inspection. Refer to DLK-491, "Basic Inspection".

>> GO TO 7.

7.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

Detect malfunctioning system according to Symptom Table based on the confirmed symptom in step 4.

>> GO TO 8.

8.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.

>> GO TO 9.

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9.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 10.

10.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.

Does the symptom reappear?

YES (DTC is detected)>>GO TO 8.
YES (Symptom remains)>>GO TO 6.
NO >> **INSPECTION END**

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INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000001102240

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

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:0000000001102241

Refer to the CONSULT-III Operation Manual-NATS.

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FUNCTION DIAGNOSIS

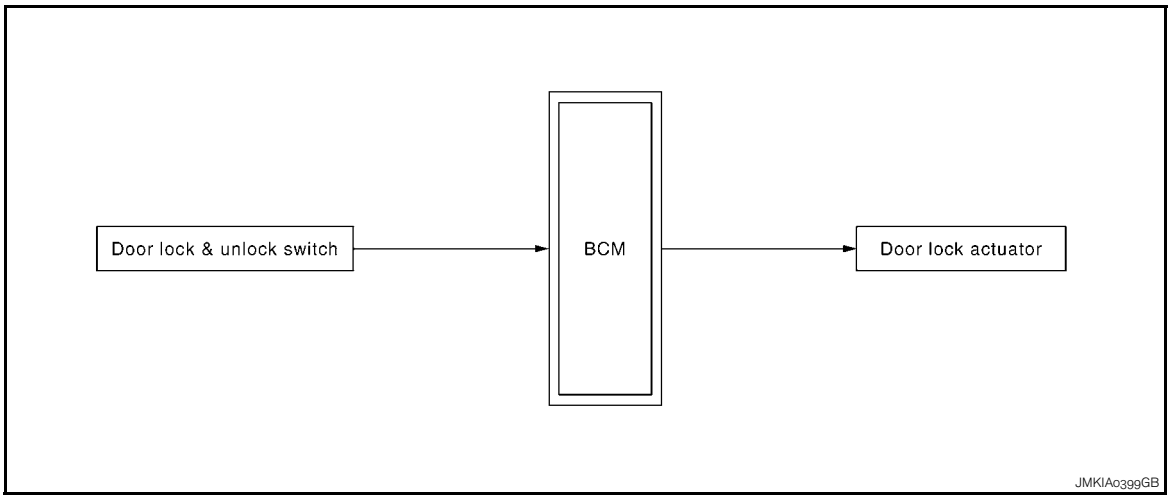
DOOR LOCK FUNCTION

DOOR LOCK AND UNLOCK SWITCH

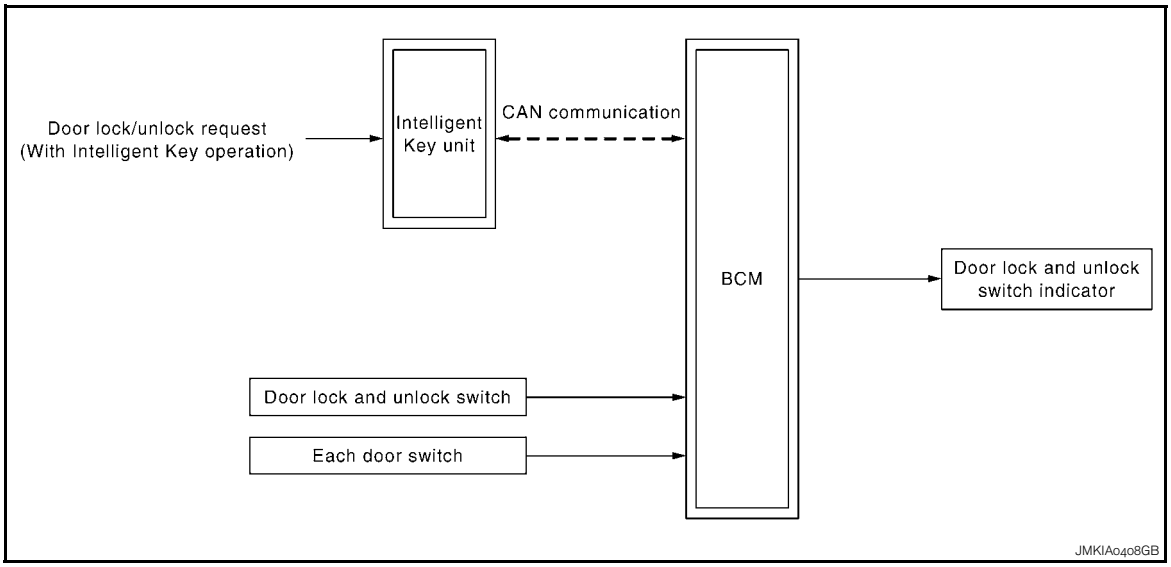
DOOR LOCK AND UNLOCK SWITCH : System Diagram

INFOID:0000000001081194

DOOR LOCK AND UNLOCK SWITCH OPERATION



DOOR LOCK AND UNLOCK SWITCH INDICATOR OPERATION



DOOR LOCK AND UNLOCK SWITCH : System Description

INFOID:0000000001081195

DOOR LOCK AND UNLOCK SWITCH OPERATION

Functions available by operating the door lock and unlock switch on center console. Interlocked with the lock/unlock operation of door lock and unlock switch, door lock actuators of all doors are locked/unlocked.

Operation Condition

If the following conditions are not satisfied, door lock/unlock operation is not performed even if the door lock and unlock switch is operated.

Door lock and unlock switch	Operation condition
Lock operation	Following all conditions are satisfied. • Except driver side doors are closed. • Doors are not locked with Intelligent Key or door request switch.
Unlock operation	Following all conditions are satisfied. • Doors are not locked with Intelligent Key or door request switch.

NOTE:
When the door lock is locked with Intelligent Key or door request switch (in super lock set state), door lock and unlock switch operation will be invalid until either following condition is satisfied.
- Turn ignition switch ON.
- Unlock with Intelligent key or door request switch.

DOOR LOCK AND UNLOCK SWITCH INDICATOR OPERATION

Door lock and unlock switch indicator indicates door lock status. The indicator turn ON while ignition switch is ON and door lock is locked or super lock is set. If any door is opened, the indicator will be turn OFF.

1 Minute Timer

A timer must be running to turn OFF the indicator. The timer will running for 1 minute after super lock set or lock with Intelligent Key, door request switch or auto door lock.

30 Minutes Timer

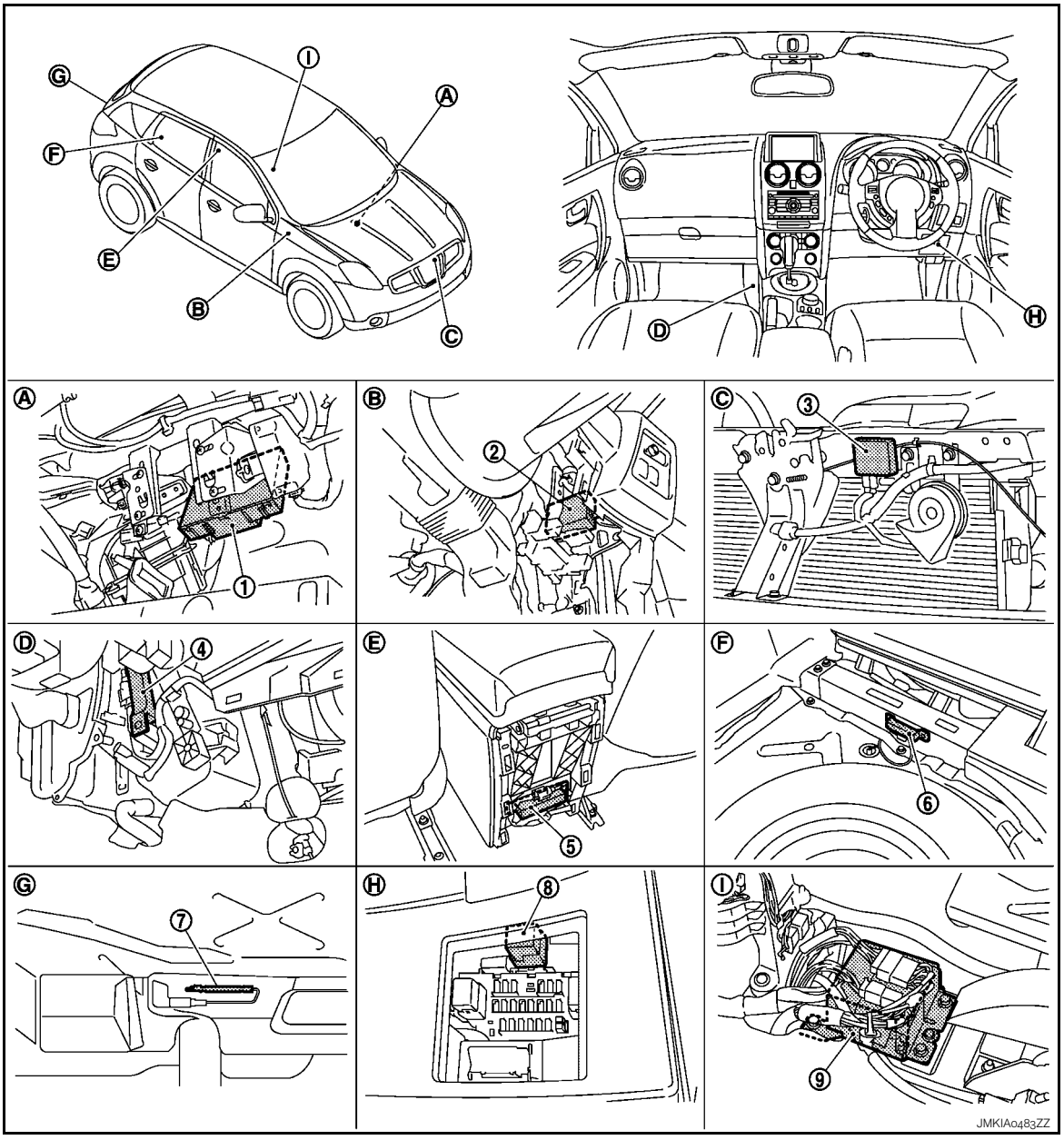
A timer must be running to turn OFF the indicator. The timer will running for 30 minutes after locking with door lock and unlock switch.

NOTE:
1minuite timer condition is satisfied during 30 minutes timer is active, 30 minutes timer is not change to 1 minutes.

DOOR LOCK AND UNLOCK SWITCH : Component Parts Location

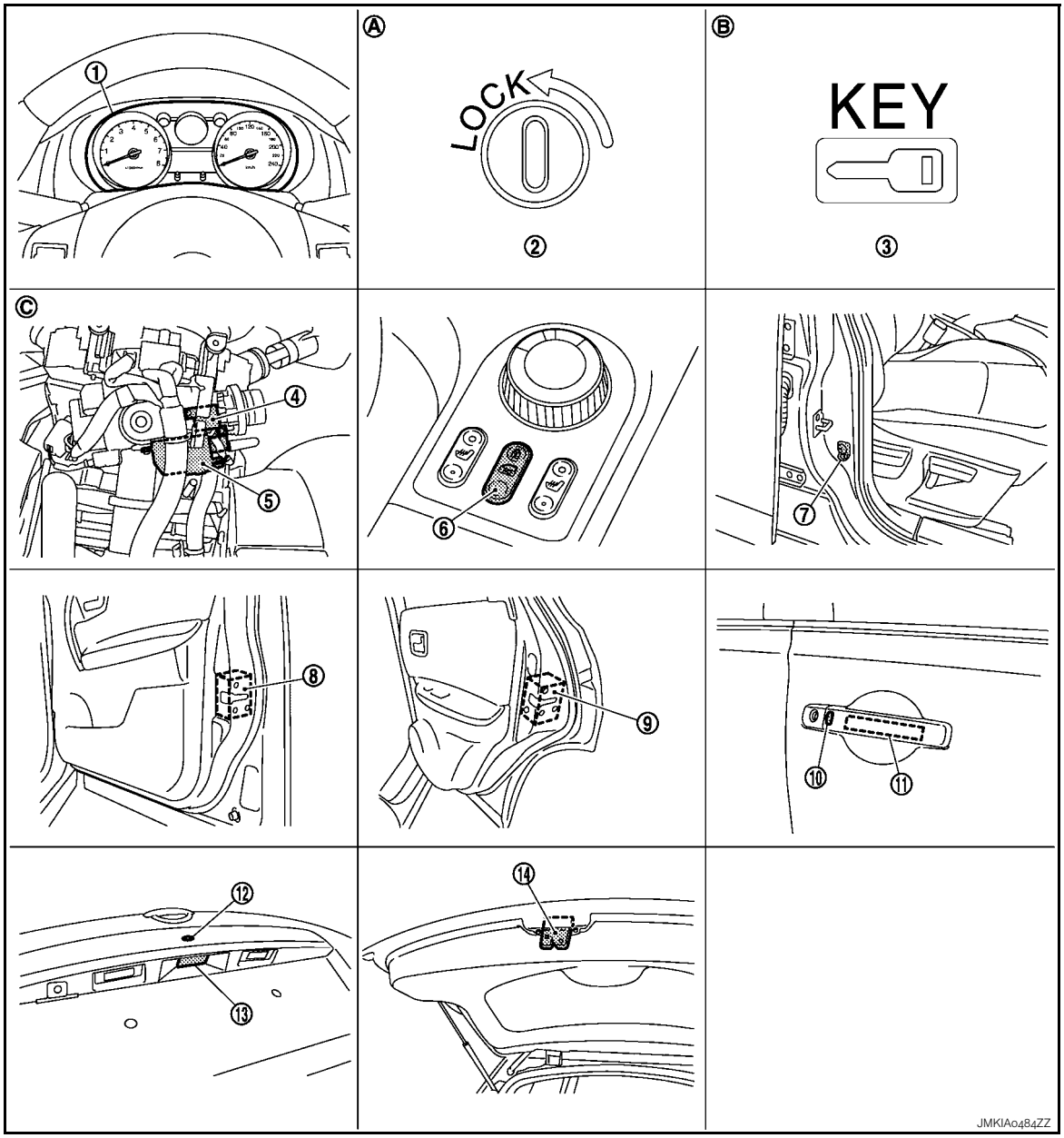
INFOID:0000000001081196

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1. BCM M65, M66, M67
2. Intelligent Key unit M40
3. Intelligent Key warning buzzer E25
4. Inside key antenna (instrument center) M70
5. Inside key antenna (center console) M61
6. Inside key antenna (rear seat) B45
7. Inside key antenna (rear bumper) B81
8. Passenger side anti-hijack relay M90
9. Air bag diagnosis sensor unit M59

A. Over the glove box
B. Over the instrument lower panel (driver side)
C. View with front bumper removed
D. View with lower instrument cover removed
E. View with center console rear finisher removed
F. View with luggage floor spacer (LH) removed
G. View with rear bumper fascia removed
H. View with fuse box lid removed
I. View with center console removed



1. Combination meter M34
2. Lock warning lamp M34
3. Key warning lamp M34
4. Ignition knob switch, key switch and key lock solenoid (key switch) M25
5. Ignition knob switch, key switch and key lock solenoid (key lock solenoid) M25
6. Door lock and unlock switch M89
7. Front door switch (driver side) B34
8. Front door lock actuator (driver side) D29
9. Rear door lock actuator RH D95
10. Front door request switch (driver side) D30
11. Outside key antenna (driver side) D31
12. Back door request switch D187
13. Back door opener switch D186
14. Back door lock assembly D152

A. Inside the combination meter
B. Inside the combination meter
C. View with steering column cover removed

DOOR LOCK AND UNLOCK SWITCH : Component Description

INFOID:0000000001081197

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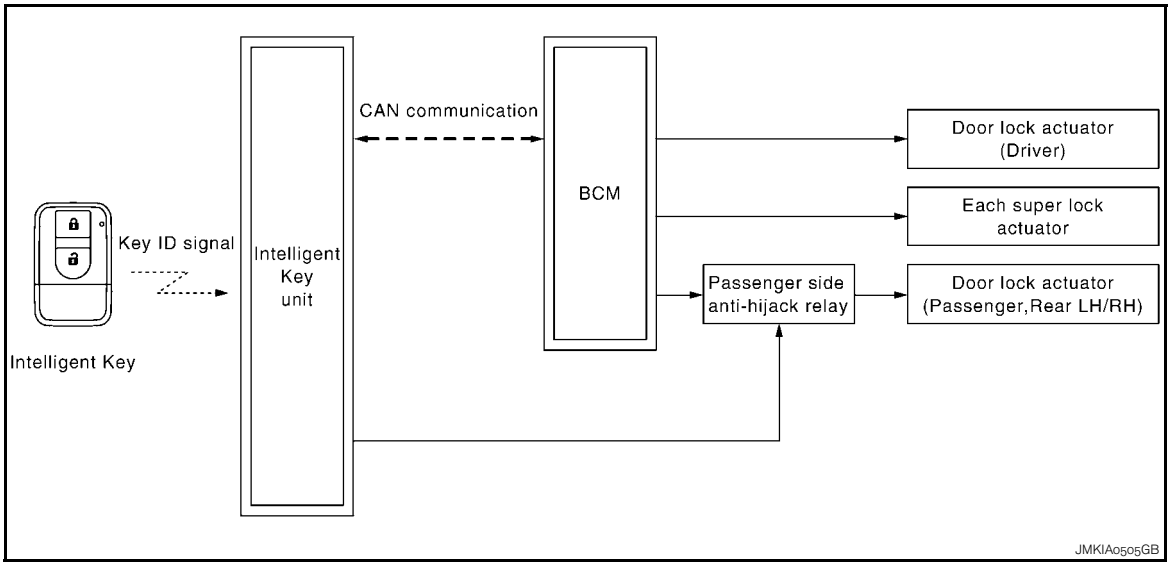
Item	Function
BCM	Controls the door lock function.
Door switch	Detects door state (open or close).
Door lock and unlock switch	Transmits door lock and unlock signal to BCM. Door lock/unlock switch indicator is built-in door lock/unlock switch.
Door lock actuator	Receives door lock/unlock signal from BCM and locks/unlock each door.

INTELLIGENT KEY

INTELLIGENT KEY : System Diagram

INFOID:0000000001081202

INTELLIGENT KEY OPERATION



INTELLIGENT KEY : System Description

INFOID:0000000001081203

INTELLIGENT KEY OPERATION

The Intelligent Key has the same functions as the multi remote control system. Therefore, it can be used in the same manner as the keyfob by operating the door lock/unlock button.
This function can be set to OFF with CONSULT-III. For the setting information, refer to DLK-329, "CONSULT-III Function (INTELLIGENT KEY)".

OPERATION CONDITION

Remote controller operation	Operation condition
Lock	• All doors are closed • Key switch is OFF (key is removed from ignition key cylinder) • Ignition knob switch is OFF (Ignition switch is not pressed) • No Intelligent Keys are inside the vehicle.
Unlock	• Key switch is OFF (key is removed from ignition key cylinder) • Ignition knob switch is OFF (Ignition switch is not pressed)

OPERATION AREA

To ensure that the Intelligent Key works effectively, use within 100 cm range of each door, however the operable range may differ according to surroundings.

LOCK AND UNLOCK CONTROL

When door lock and unlock button of the Intelligent Key is pressed, lock signal or unlock signal is transmitted from Intelligent Key to Intelligent Key unit.
When Intelligent Key unit receives the door lock and unlock signal, it operates door lock actuator.

SUPER LOCK CONTROL WITH ANTI-HIJACK MODE

- Super lock provides a higher anti-theft performance than a conventional power door lock system. The super lock system is controlled by BCM.
- When door lock is unlocked, pressing LOCK button on Intelligent Key once will lock and super lock set all doors. When all doors are set super lock, pressing UNLOCK button on Intelligent Key driver side door will unlock (and super lock release) driver side door and super lock release all other doors. Pressing UNLOCK button on Intelligent Key for a second time within 5 seconds from the first time will unlock all doors and back door can be opened with back door opener switch.

NOTE:
Anti-hijack mode can be set to ON or OFF with CONSULT-III. For the setting information, refer to DLK-329, "CONSULT-III Function (INTELLIGENT KEY)".

SUPER LOCK CONTROL WITHOUT ANTI-HIJACK MODE

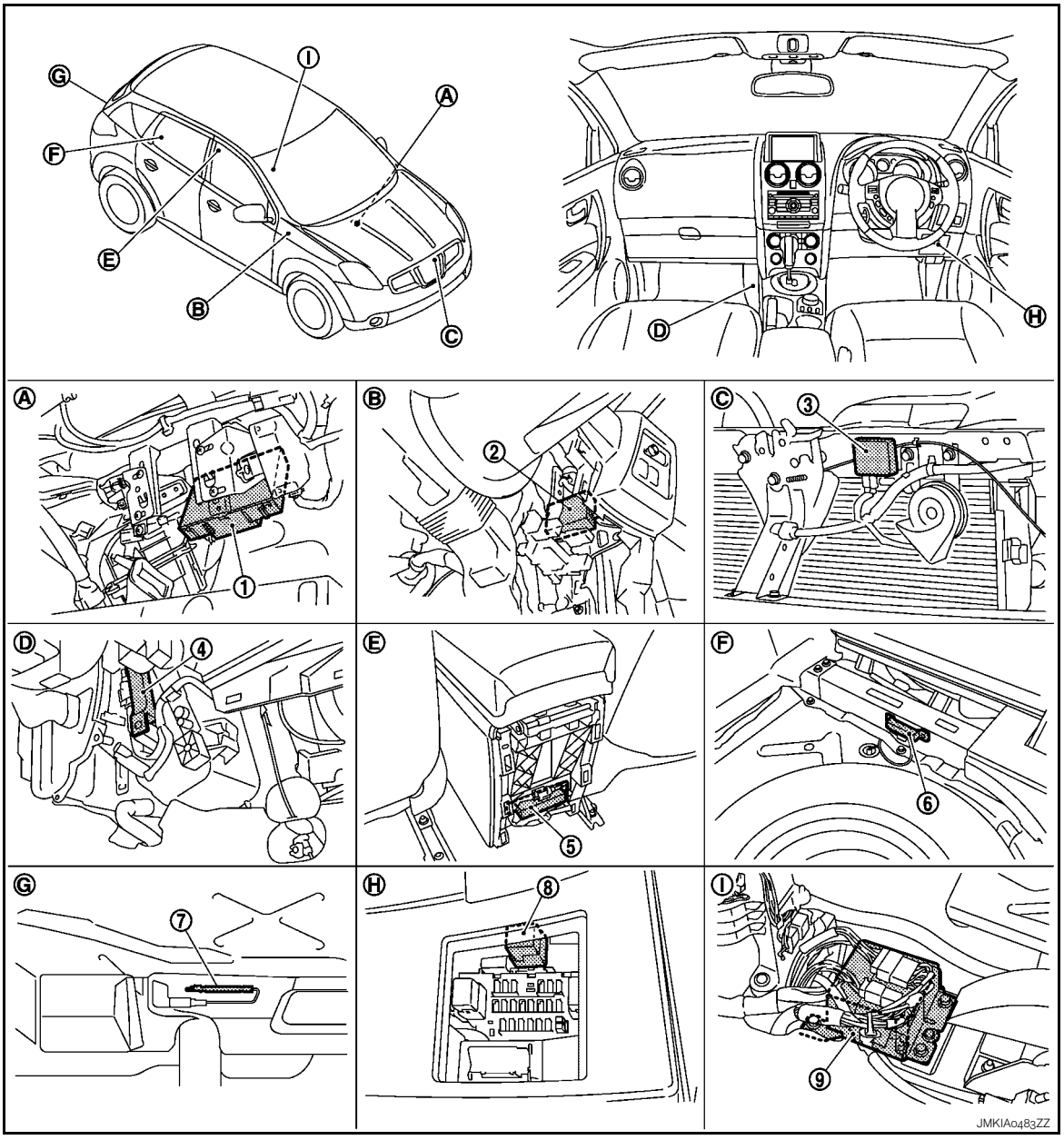
When door lock is unlocked, pressing LOCK button on Intelligent Key once will lock and super lock set all doors. When all doors are set to super lock, pressing UNLOCK button on Intelligent Key will unlock all doors and super lock release all doors and back door can be opened with back door opener switch.

NOTE:
Anti-hijack mode can be set to ON or OFF with CONSULT-III. For the setting information, refer to DLK-329, "CONSULT-III Function (INTELLIGENT KEY)".

INTELLIGENT KEY : Component Parts Location

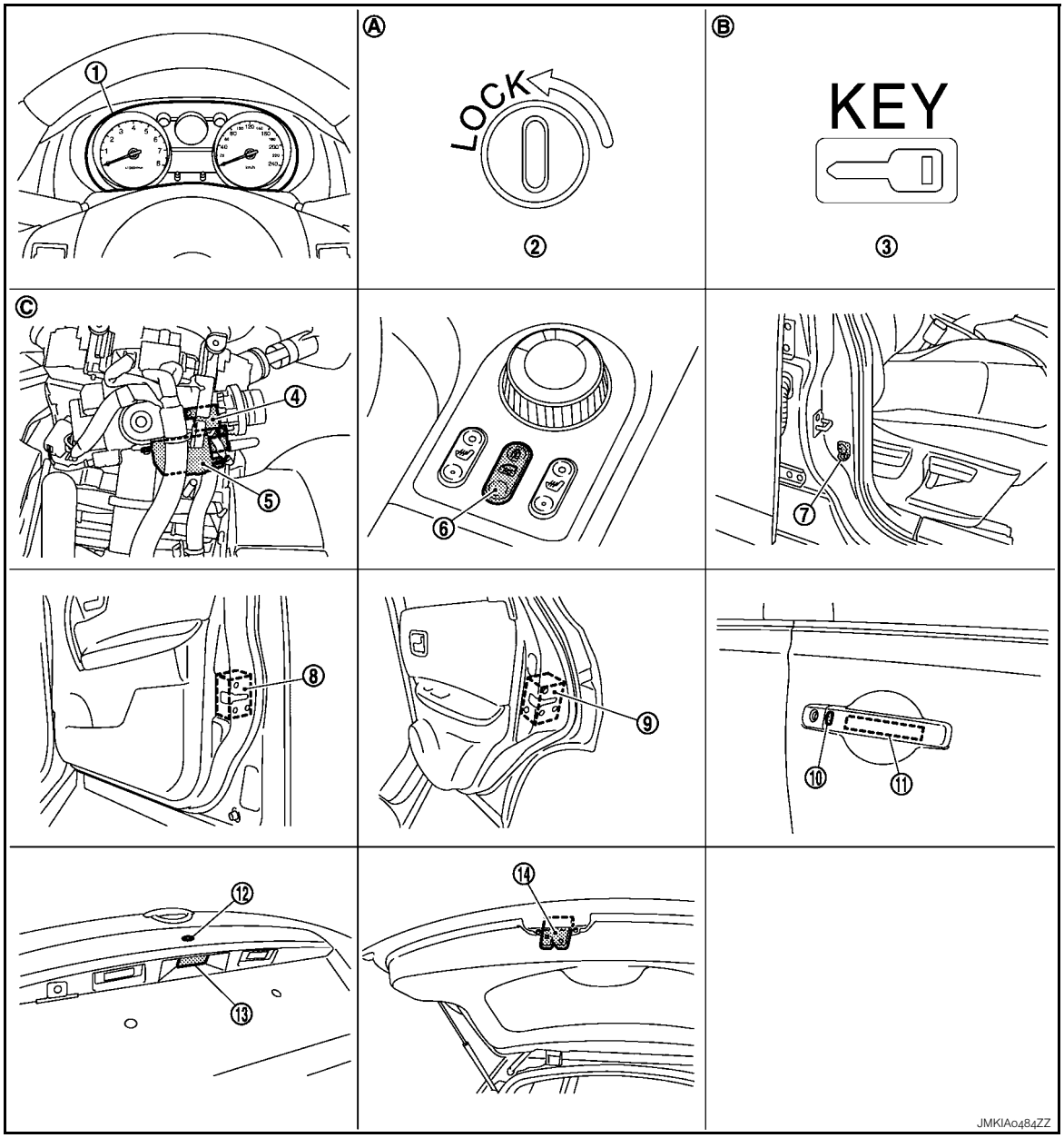
INFOID:0000000001117062

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1. BCM M65, M66, M67
2. Intelligent Key unit M40
3. Intelligent Key warning buzzer E25
4. Inside key antenna (instrument center) M70
5. Inside key antenna (center console) M61
6. Inside key antenna (rear seat) B45
7. Inside key antenna (rear bumper) B81
8. Passenger side anti-hijack relay M90
9. Air bag diagnosis sensor unit M59

A. Over the glove box
B. Over the instrument lower panel (driver side)
C. View with front bumper removed
D. View with lower instrument cover removed
E. View with center console rear finisher removed
F. View with luggage floor spacer (LH) removed
G. View with rear bumper fascia removed
H. View with fuse box lid removed
I. View with center console removed



1. Combination meter M34
2. Lock warning lamp M34
3. Key warning lamp M34
4. Ignition knob switch, key switch and key lock solenoid (key switch) M25
5. Ignition knob switch, key switch and key lock solenoid (key lock solenoid) M25
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11. Outside key antenna (driver side) D31
12. Back door request switch D187
13. Back door opener switch D186
14. Back door lock assembly D152

A. Inside the combination meter
B. Inside the combination meter
C. View with steering column cover removed

INTELLIGENT KEY : Component Description

INFOID:0000000001081205

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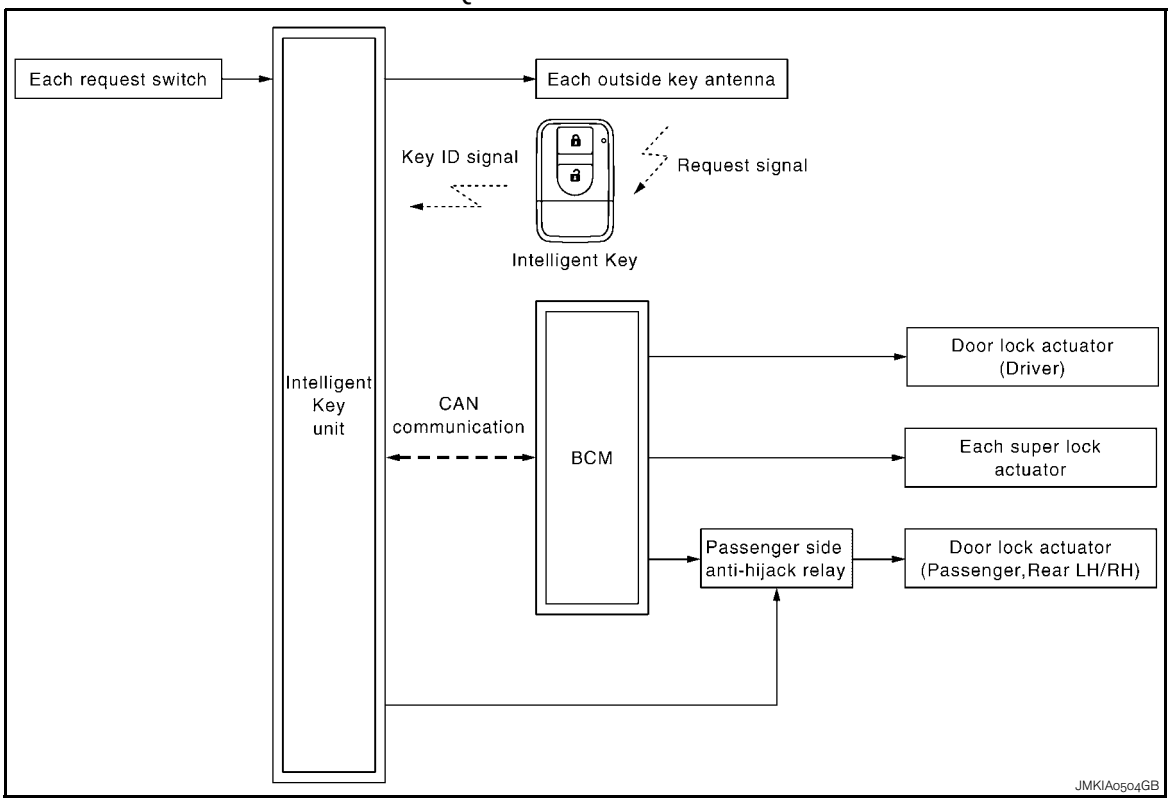
Item	Function
Intelligent Key unit	Controls the door lock/unlock operation with BCM.
BCM	Controls the door lock/unlock operation with Intelligent Key unit.
Door switch	Detects door state (open or close).
Key switch	Detects mechanical key is inserted into ignition key cylinder.
Outside key antenna	Detects Intelligent Key is in detection area of outside key antenna.
Inside key antenna	Detects Intelligent Key is in detection area of inside key antenna.
Intelligent Key	Transmits key ID to Intelligent Key unit when lock/unlock button is pressed.
Passenger side anti-hijack relay	Controls the circuit of door lock actuator (passenger side, rear LH/RH).
Door lock actuator	Receives lock/unlock signal from BCM and lock and unlock each door.
Super lock actuator	Receives super lock set/release signal from BCM and set/release super lock system.

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH : System Diagram

INFOID:0000000001081198

DOOR REQUEST SWITCH OPERATION



DOOR REQUEST SWITCH : System Description

INFOID:0000000001081199

DOOR REQUEST SWITCH OPERATION

Only when pressing the request switch, it is possible to lock and unlock the door by carrying the Intelligent Key. The Intelligent Key system is a system that makes it possible to lock and unlock the door 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 (Intelligent Key unit).

This function can be set to OFF with CONSULT-III. For the setting information, refer to DLK-329, "CONSULT-III Function (INTELLIGENT KEY)".

CAUTION:

The driver should always carry the Intelligent Key

OPERATION CONDITION

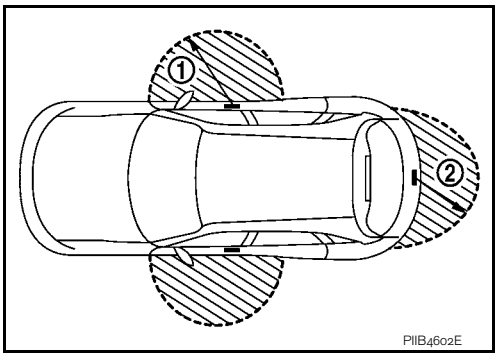
If the following conditions are not satisfied, door lock and unlock operation is not performed even if the request switch is operated.

Each request switch operation	Operation condition
Lock operation	• All doors are closed. • Key switch is OFF. (Key is removed from ignition key cylinder) • Ignition knob switch is OFF. (Ignition switch is not pressed) • No Intelligent Keys are inside the vehicle. • Intelligent Key is within outside key antenna detection area.
Unlock Operation	• Key switch is OFF. (Key is removed from ignition key cylinder) • Ignition knob switch is OFF. (Ignition switch is not pressed) • Intelligent Key is not inside the vehicle.* • Intelligent Key is within outside key antenna detection area.

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

OUTSIDE KEY ANTENNA DETECTION AREA

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



DOOR LOCK AND UNLOCK CONTROL

When the Intelligent Key detects that door request switch is pressed, it starts corresponding with outside key antenna (request switch pressed door). Then, the Intelligent Key is checked to be 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 Intelligent Key unit. Intelligent Key unit receives the key ID signal and compares it with the registered key ID. Intelligent Key unit sends door lock and unlock signal to BCM via CAN communication.

SUPER LOCK CONTROL WITH ANTI-HIJACK MODE

- Super lock provides a higher anti-theft performance than a conventional power door lock system. The super lock system is controlled by BCM and Intelligent Key unit.
- When door is unlocked, pressing door request switch (driver side or passenger side) once will lock all doors and set super lock simultaneously. When super lock is set, all doors cannot be opened from inside.
  When super lock is set, pressing the door request switch once will unlock operated door and super lock is released except operated door. Pressing the door request switch a second time within 5 seconds from the first time will unlock all doors and back door can be opened with back door opener switch.
- When door is unlocked, pressing door request switch (back door) will lock all doors and set super lock simultaneously. When super lock is set, all doors cannot be opened from inside.
  When super lock is set, pressing door request switch (back door) will unlock all doors and release super lock simultaneously and back door can be opened with back door opener switch.

NOTE:
Anti-hijack mode can be set to ON or OFF with CONSULT-III. For the setting information, refer to DLK-329, "CONSULT-III Function (INTELLIGENT KEY)".

SUPER LOCK CONTROL WITHOUT ANTI-HIJACK MODE

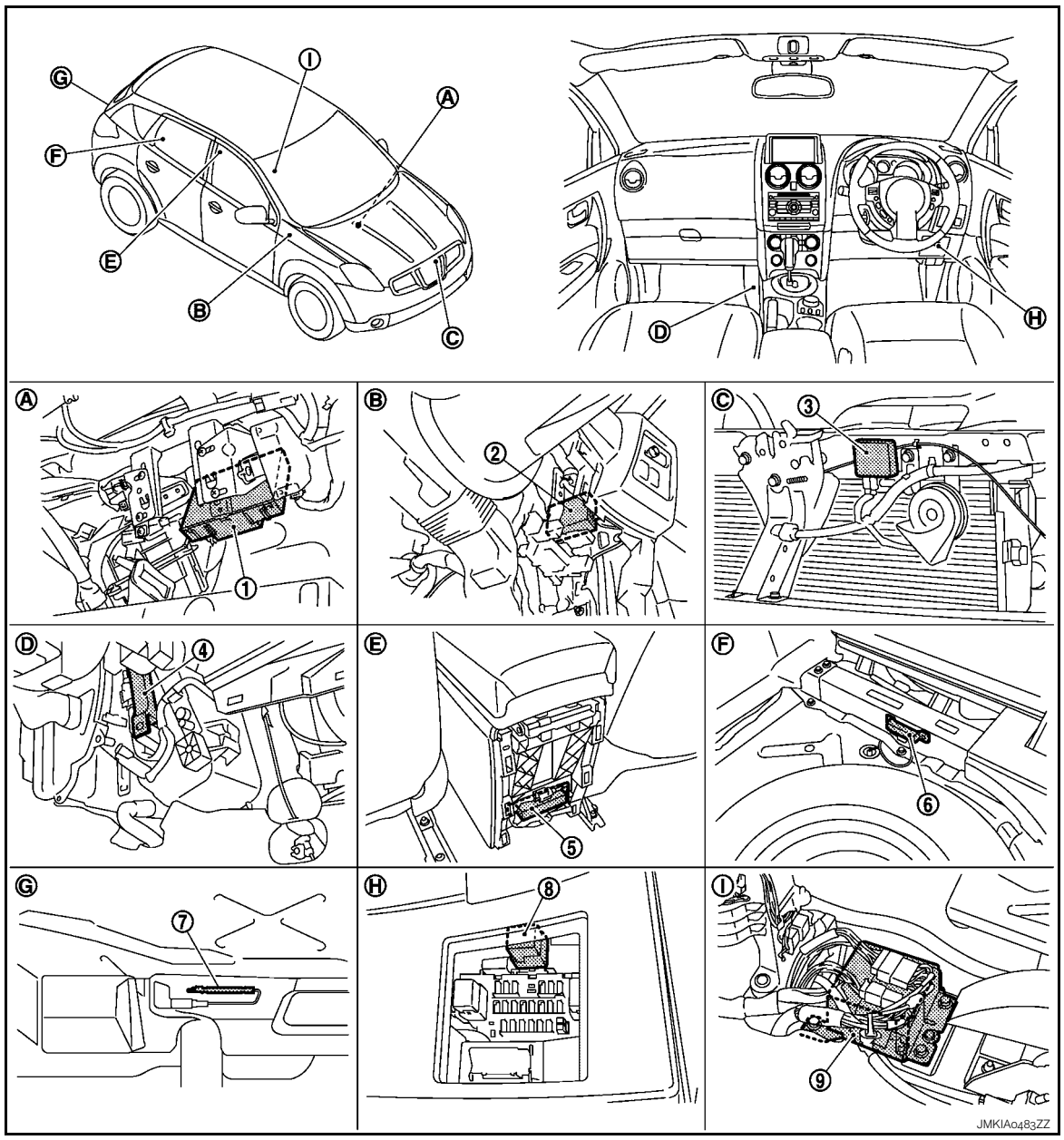
When door is unlocked, pressing door request switch (driver, passenger or back door) will lock all doors and set super lock simultaneously. When super lock is set, all doors can not be opened from inside.
When super lock is set, pressing door request switch (driver side, passenger side or back door) will unlock all doors and release super lock simultaneously and back door is can be opened with back door opener switch.

NOTE:
Anti-hijack mode can be set to ON or OFF with CONSULT-III. For the setting information, refer to DLK-329, "CONSULT-III Function (INTELLIGENT KEY)".

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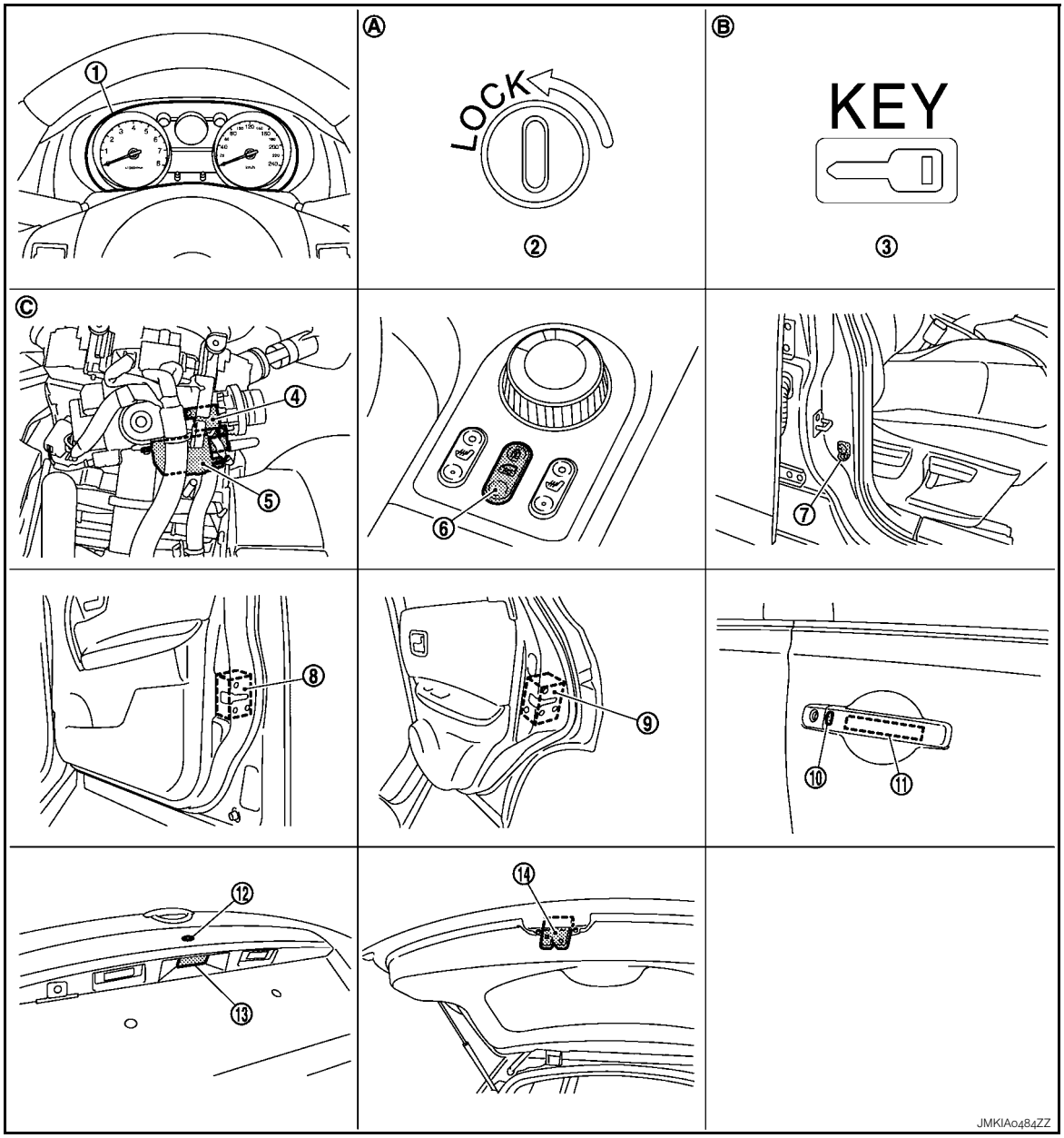
DOOR REQUEST SWITCH : Component Parts Location

INFOID:0000000001117063



1. BCM M65, M66, M67
2. Intelligent Key unit M40
3. Intelligent Key warning buzzer E25
4. Inside key antenna (instrument center) M70
5. Inside key antenna (center console) M61
6. Inside key antenna (rear seat) B45
7. Inside key antenna (rear bumper) B81
8. Passenger side anti-hijack relay M90
9. Air bag diagnosis sensor unit M59

A. Over the glove box
B. Over the instrument lower panel (driver side)
C. View with front bumper removed
D. View with lower instrument cover removed
E. View with center console rear finisher removed
F. View with luggage floor spacer (LH) removed
G. View with rear bumper fascia removed
H. View with fuse box lid removed
I. View with center console removed



1. Combination meter M34
2. Lock warning lamp M34
3. Key warning lamp M34
4. Ignition knob switch, key switch and key lock solenoid (key switch) M25
5. Ignition knob switch, key switch and key lock solenoid (key lock solenoid) M25
6. Door lock and unlock switch M89
7. Front door switch (driver side) B34
8. Front door lock actuator (driver side) D29
9. Rear door lock actuator RH D95
10. Front door request switch (driver side) D30
11. Outside key antenna (driver side) D31
12. Back door request switch D187
13. Back door opener switch D186
14. Back door lock assembly D152

A. Inside the combination meter
B. Inside the combination meter
C. View with steering column cover removed

DOOR REQUEST SWITCH : Component Description

INFOID:0000000001081201

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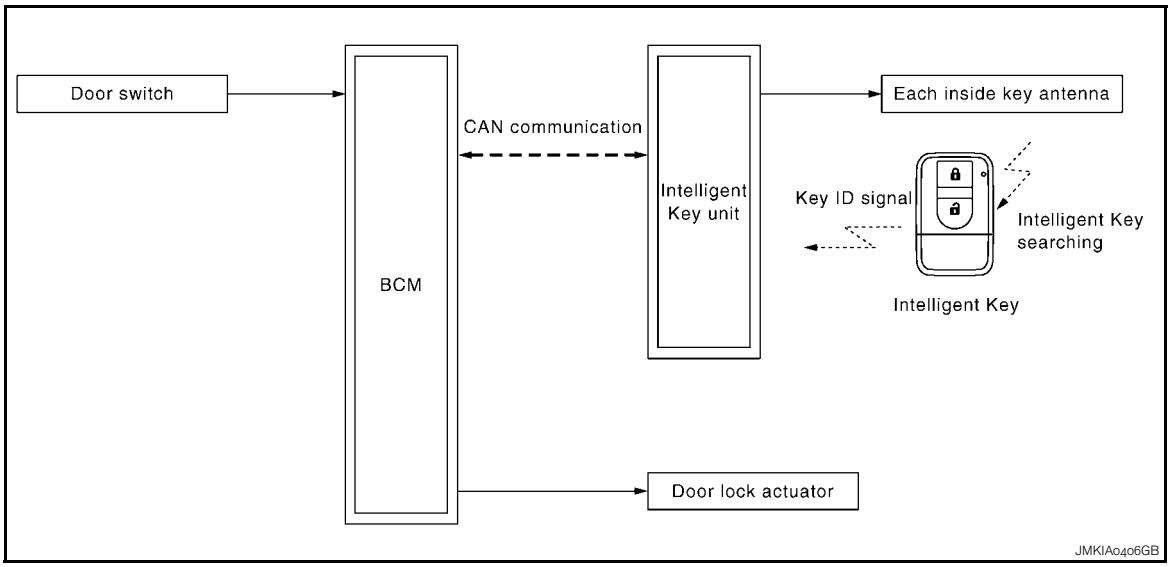
Item	Function
Intelligent Key unit	Controls the door lock function with BCM.
BCM	Controls the door lock function with Intelligent Key unit.
Door request switch	Transmits operation signal (lock and unlock) to Intelligent Key unit.
Door switch	Detects door state (open or close).
Key switch	Detects mechanical key is inserted into ignition key cylinder.
Ignition knob switch	Detects ignition knob state (push or release).
Outside key antenna	Detects Intelligent Key is in detection area of outside key antenna.
Inside key antenna	Detects Intelligent Key is in detection area of inside key antenna.
Intelligent Key	Transmits key ID to Intelligent Key unit when request signal is received from outside key antenna.
Passenger side anti-hijack relay	Controls the circuit of door lock actuator (passenger side, rear LH/RH).
Door lock actuator	Receives lock/unlock signal from BCM and locks/unlocks each door.
Super lock actuator	Receives super lock set/release signal from BCM and sets/releases super lock system.

KEY REMINDER

KEY REMINDER : System Diagram

INFOID:0000000001081222

KEY REMINDER OPERATION



KEY REMINDER : System Description

INFOID:0000000001081223

KEY REMINDER OPERATION

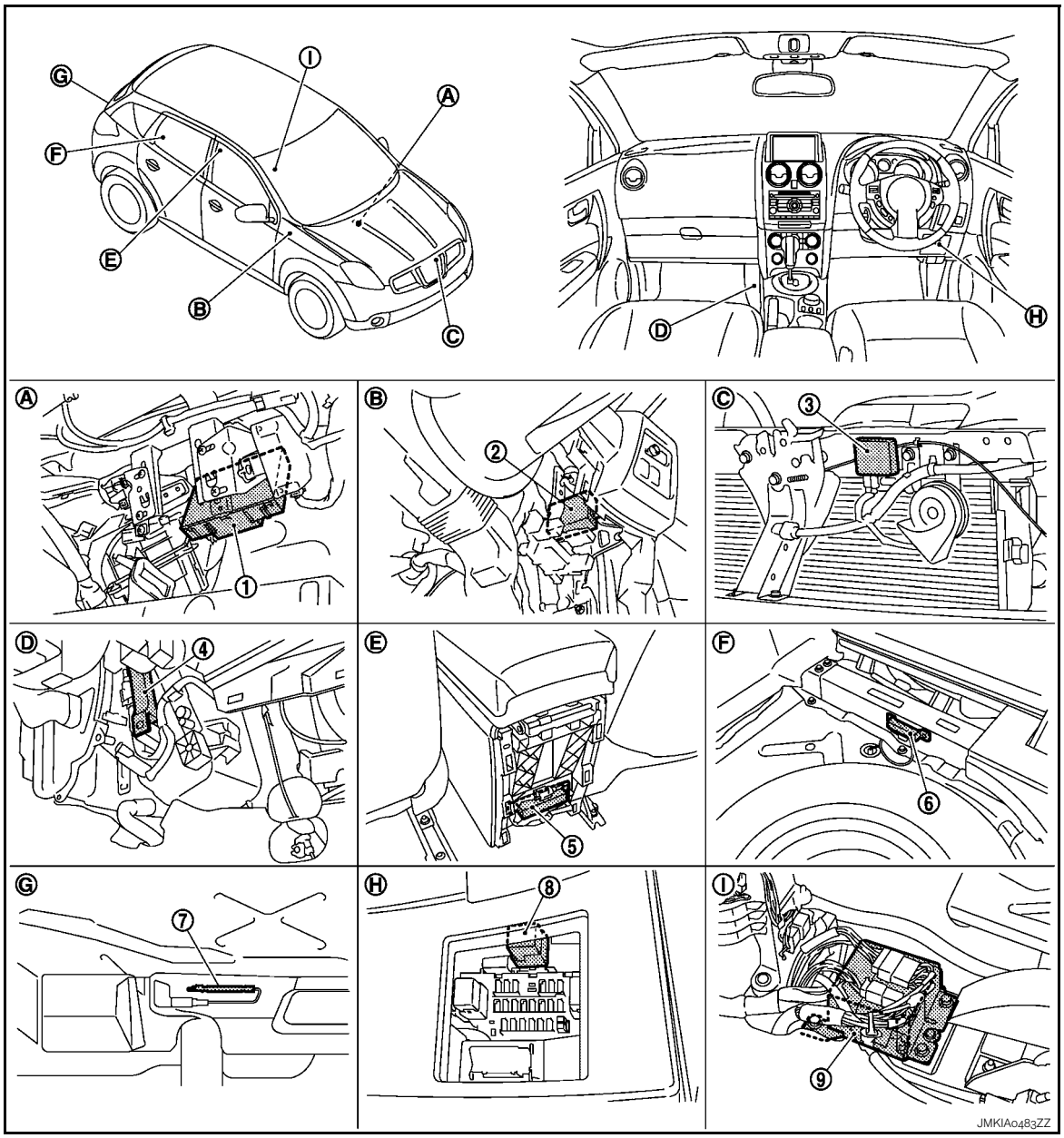
Key reminder have the following 2 functions.

Operation	Operation condition	Operation
Driver door close	Right after driver side door is closed under the following conditions • Door lock operation • Driver side door is opened • Driver side door is in unlock state.	All doors unlock
Any door open to all door close	Right after all doors are closed under the following conditions • Intelligent Key is inside the vehicle • Any door is opened • All doors are locked by door lock and unlock switch.	• All doors unlock • Honk Intelligent Key warning buzzer

CAUTION:
The above function operates when the Intelligent Key is inside the vehicle. However, there may be times when the Intelligent Key can not 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 some times does not operate if the Intelligent Key is in the door pocket for the open door.

KEY REMINDER : Component Parts Location

INFOID:0000000001117064

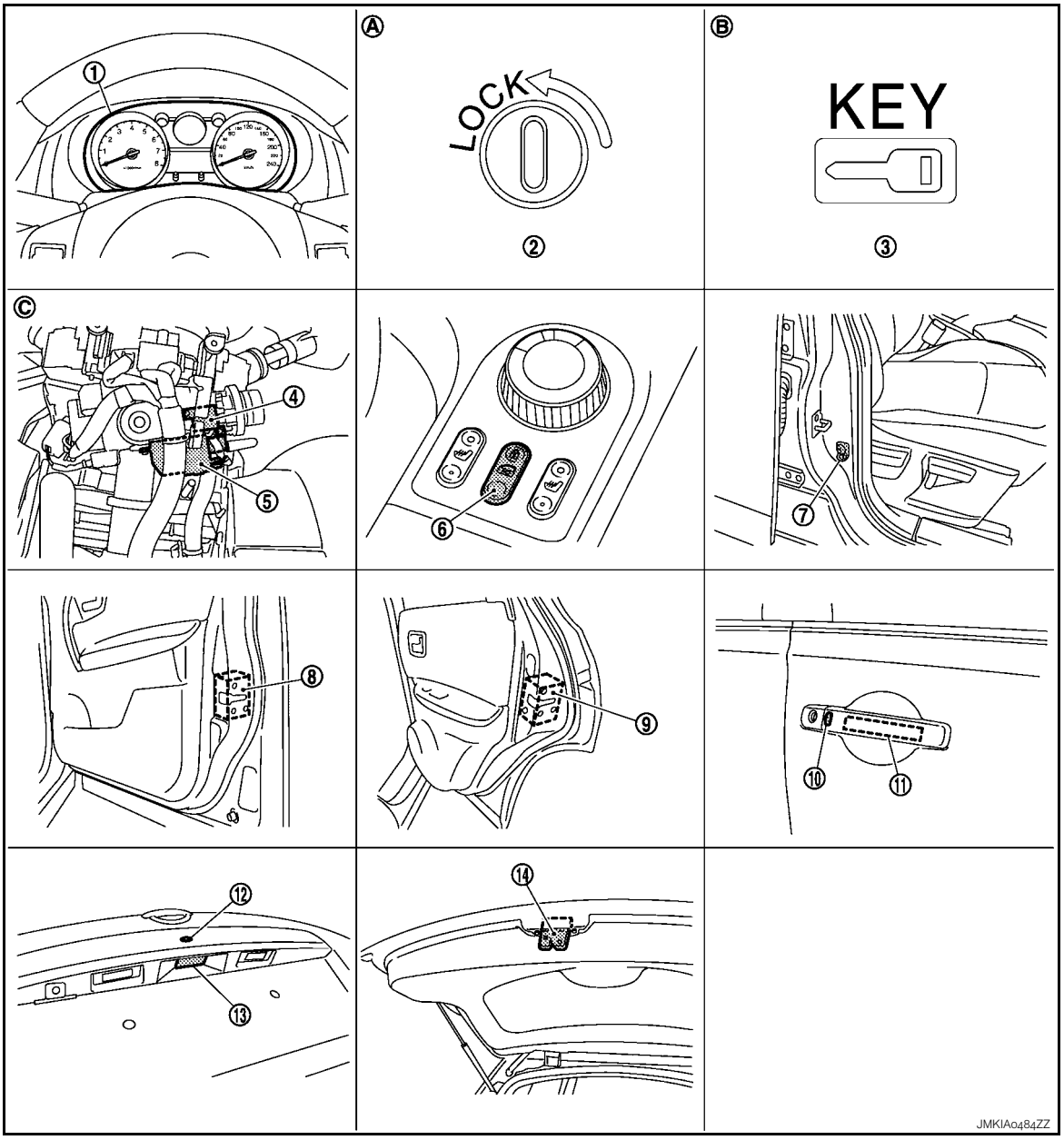


1. BCM
   M65, M66, M67
2. Intelligent Key unit
   M40
3. Intelligent Key warning buzzer
   E25
4. Inside key antenna (instrument center)
   M70
5. Inside key antenna (center console)
   M61
6. Inside key antenna (rear seat)
   B45
7. Inside key antenna (rear bumper)
   B81
8. Passenger side anti-hijack relay
   M90
9. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. Over the instrument lower panel (driver side)
C. View with front bumper removed

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D. View with lower instrument cover removed
E. View with center console rear finisher removed
F. View with luggage floor spacer (LH) removed
G. View with rear bumper fascia removed
H. View with fuse box lid removed
I. View with center console removed



1. Combination meter M34
2. Lock warning lamp M34
3. Key warning lamp M34
4. Ignition knob switch, key switch and key lock solenoid (key switch) M25
5. Ignition knob switch, key switch and key lock solenoid (key lock solenoid) M25
6. Door lock and unlock switch M89
7. Front door switch (driver side) B34
8. Front door lock actuator (driver side) D29
9. Rear door lock actuator RH D95
10. Front door request switch (driver side) D30
11. Outside key antenna (driver side) D31
12. Back door request switch D187
13. Back door opener switch D186
14. Back door lock assembly D152

A. Inside the combination meter
B. Inside the combination meter
C. View with steering column cover removed

KEY REMINDER : Component Description

INFOID:0000000001081225

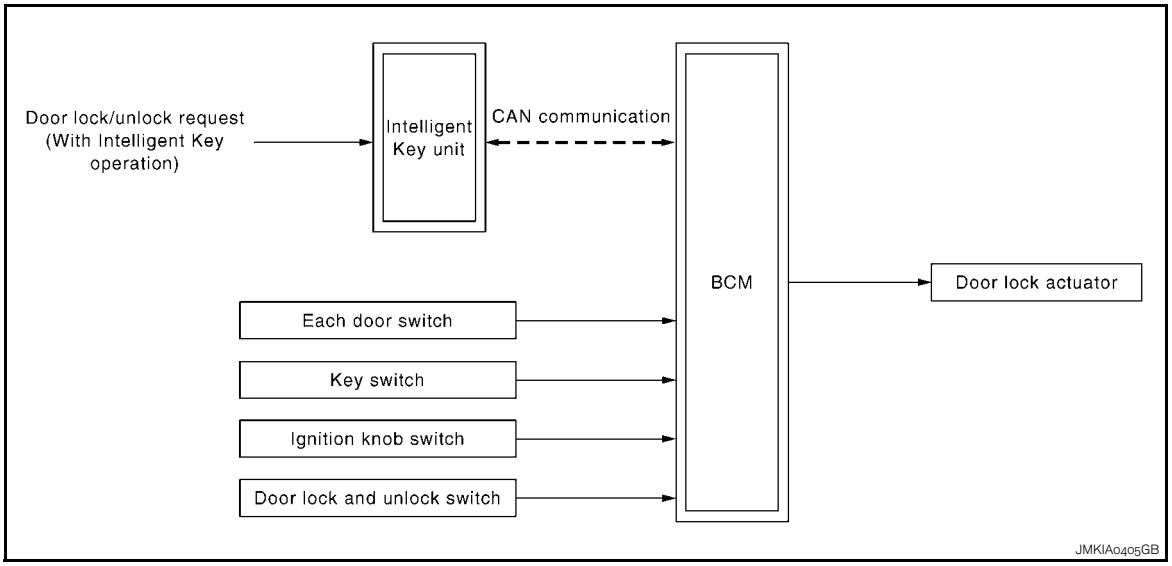
Item	Function
Intelligent Key unit	Controls the door lock function with BCM.
BCM	Controls the door lock and unlock operation with Intelligent Key unit.
Door switch	Detects door state (open or close).
Inside key antenna	Detects Intelligent Key is in detection area of inside key antenna.
Intelligent Key	Transmits key ID to Intelligent Key unit when Intelligent Key searching.
Door lock actuator	Receives lock and unlock signal from BCM and locks/unlocks each door.

AUTO DOOR LOCK

AUTO DOOR LOCK : System Diagram

INFOID:0000000001081226

AUTO DOOR LOCK OPERATION



AUTO DOOR LOCK : System Description

INFOID:0000000001081227

AUTO RELOCK OPERATION

When all door is locked then doors are unlocked with Intelligent Key, door request switch or BCM does not receive the following signal within 2 minutes*1, all doors are automatically locked.

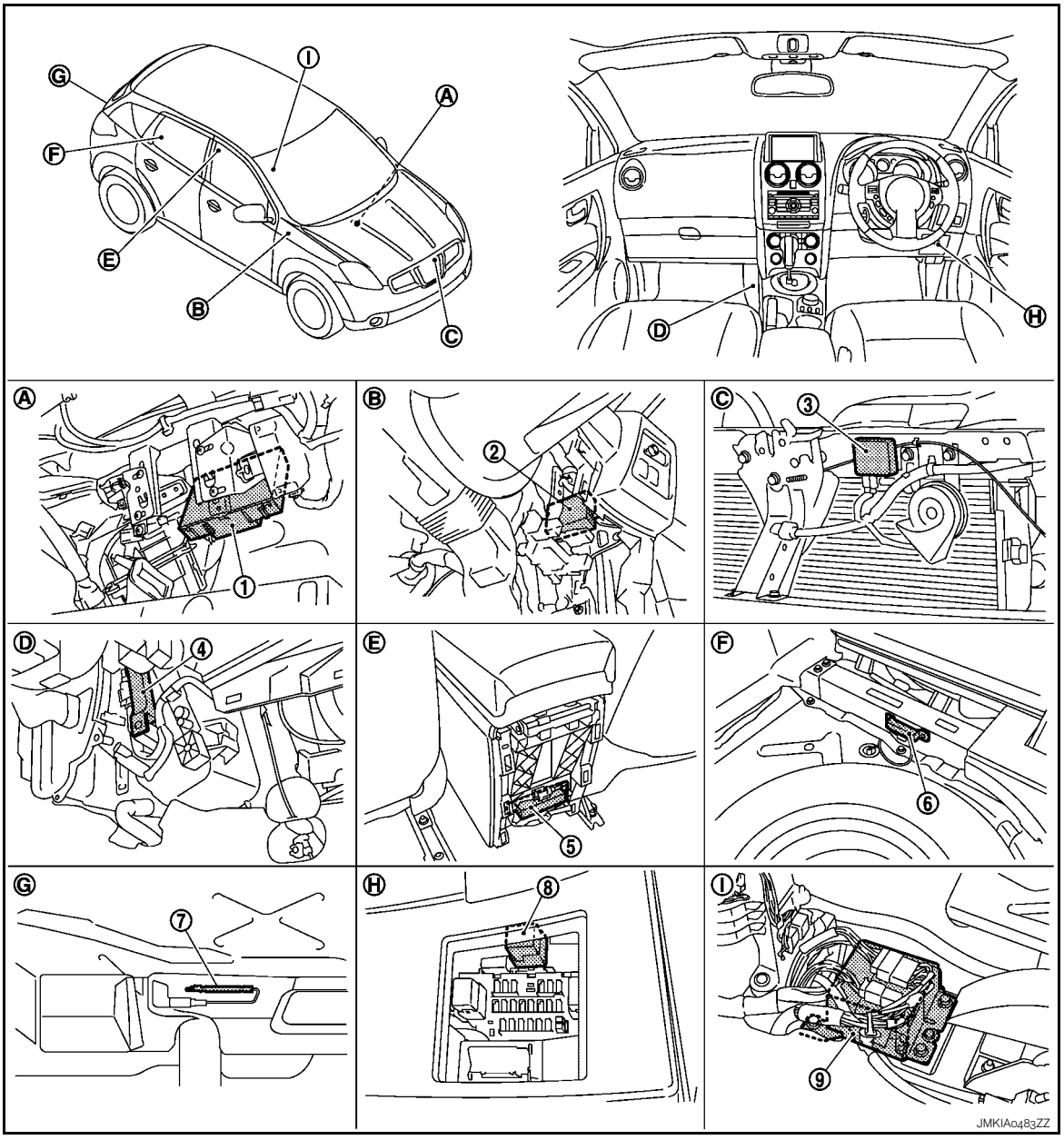
- Any door is opened.
- Ignition knob is pressed.
- Ignition key is inserted into ignition key cylinder.
- Door is locked with Intelligent Key.
- Door is locked/unlocked with door lock and unlock switch.

*1: Auto door lock operation mode can be changed with CONSULT-III. Refer to DLK-329, "CONSULT-III Function (INTELLIGENT KEY)".

AUTO DOOR LOCK : Component Parts Location

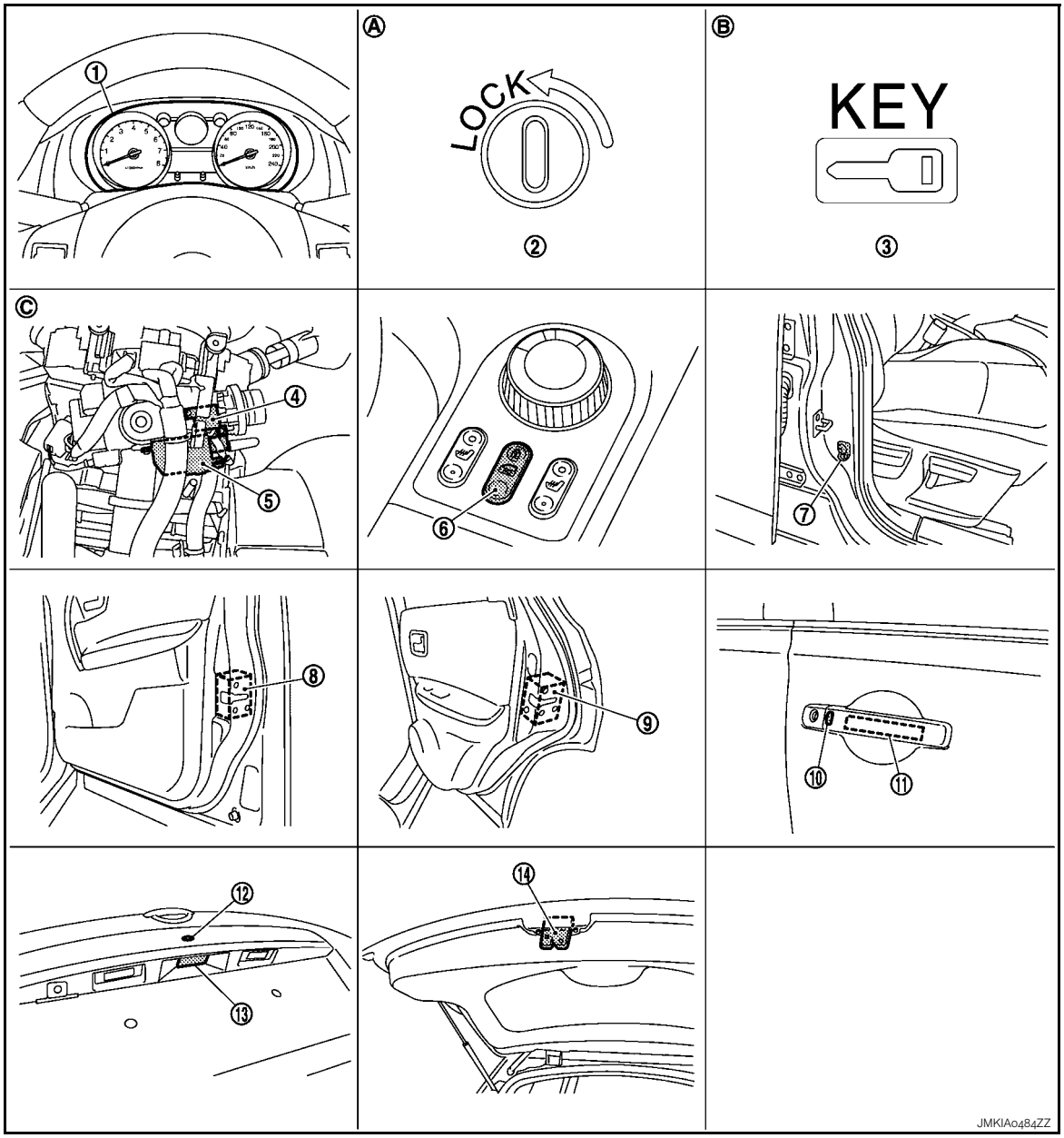
INFOID:0000000001117065

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1. BCM
   M65, M66, M67
2. Intelligent Key unit
   M40
3. Intelligent Key warning buzzer
   E25
4. Inside key antenna (instrument center)
   M70
5. Inside key antenna (center console)
   M61
6. Inside key antenna (rear seat)
   B45
7. Inside key antenna (rear bumper)
   B81
8. Passenger side anti-hijack relay
   M90
9. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. Over the instrument lower panel (driver side)
C. View with front bumper removed
D. View with lower instrument cover removed
E. View with center console rear finisher removed
F. View with luggage floor spacer (LH) removed
G. View with rear bumper fascia removed
H. View with fuse box lid removed
I. View with center console removed



1. Combination meter M34
2. Lock warning lamp M34
3. Key warning lamp M34
4. Ignition knob switch, key switch and key lock solenoid (key switch) M25
5. Ignition knob switch, key switch and key lock solenoid (key lock solenoid) M25
6. Door lock and unlock switch M89
7. Front door switch (driver side) B34
8. Front door lock actuator (driver side) D29
9. Rear door lock actuator RH D95
10. Front door request switch (driver side) D30
11. Outside key antenna (driver side) D31
12. Back door request switch D187
13. Back door opener switch D186
14. Back door lock assembly D152

A. Inside the combination meter
B. Inside the combination meter
C. View with steering column cover removed

AUTO DOOR LOCK : Component Description

INFOID:0000000001081229

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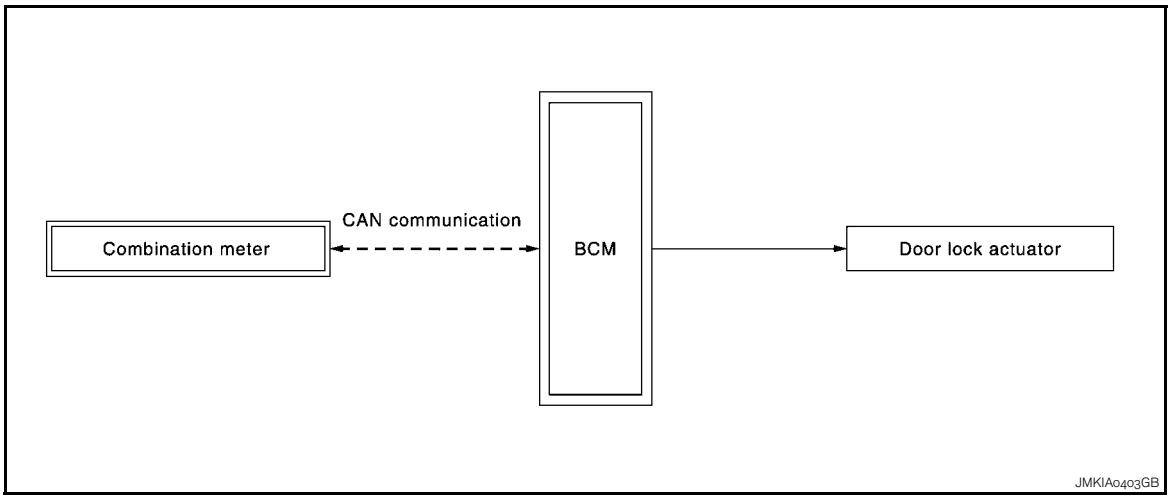
Item	Function
Intelligent Key unit	Controls the door lock function with BCM.
BCM	Controls the door lock function with Intelligent Key unit.
Door switch	Detects door state (open or close).
Key switch	Detects mechanical key is inserted into ignition key cylinder.
Ignition knob switch	Detects ignition knob state (push or release).
Door lock and unlock switch	Transmits door lock and unlock signal to BCM.
Door lock actuator	Receives lock and unlock signal from BCM and lock and unlock each door.

VEHICLE SPEED SENSING AUTO DOOR LOCK

VEHICLE SPEED SENSING AUTO DOOR LOCK : System Diagram

INFOID:0000000001081230

VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION



VEHICLE SPEED SENSING AUTO DOOR LOCK : System Description

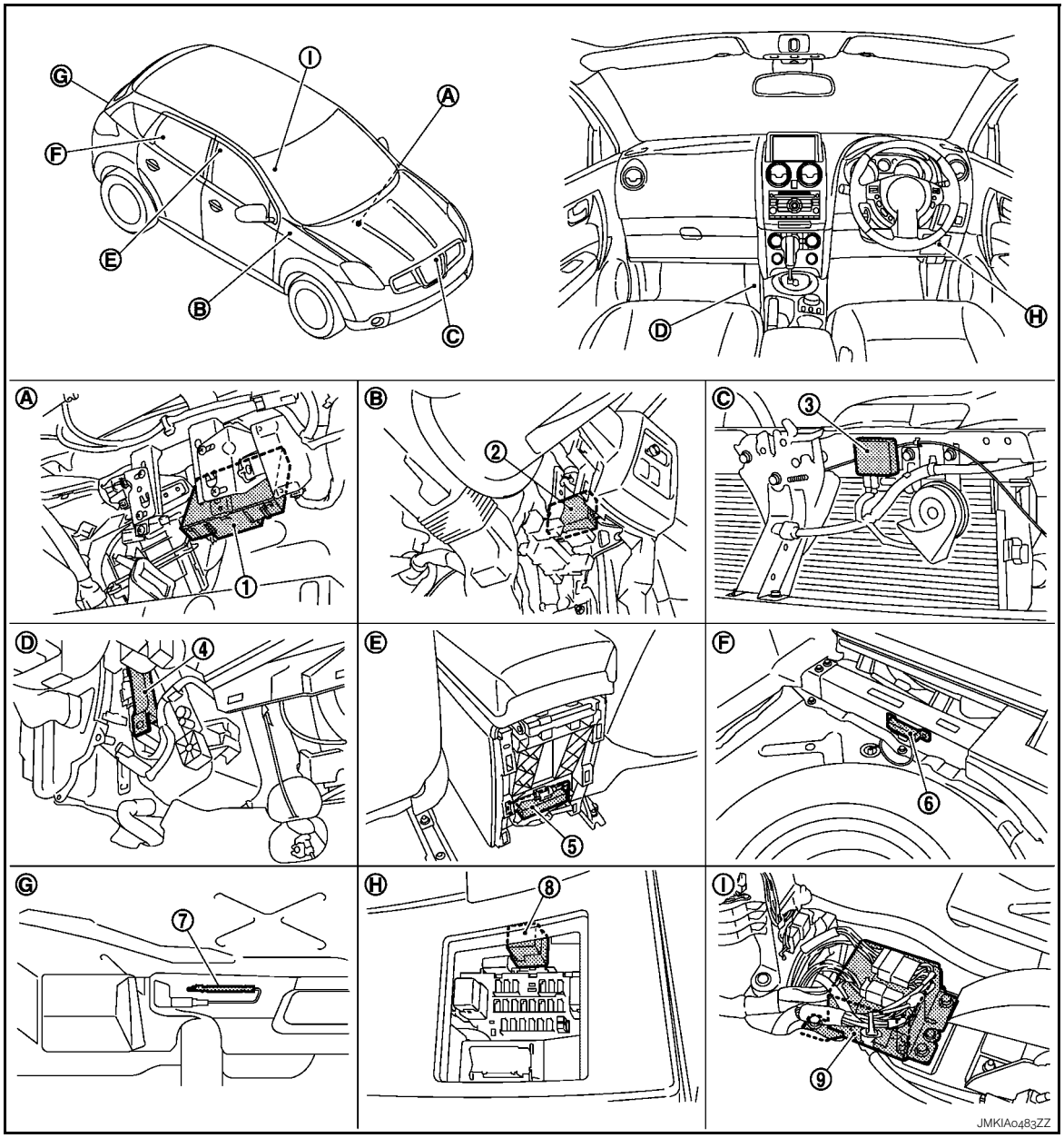
INFOID:0000000001081231

VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION

When the vehicle speed exceeds more than 12km/h (7MPH), all doors are automatically locked. BCM receive the vehicle speed signal from combination meter via CAN communication.

VEHICLE SPEED SENSING AUTO DOOR LOCK : Component Parts Location

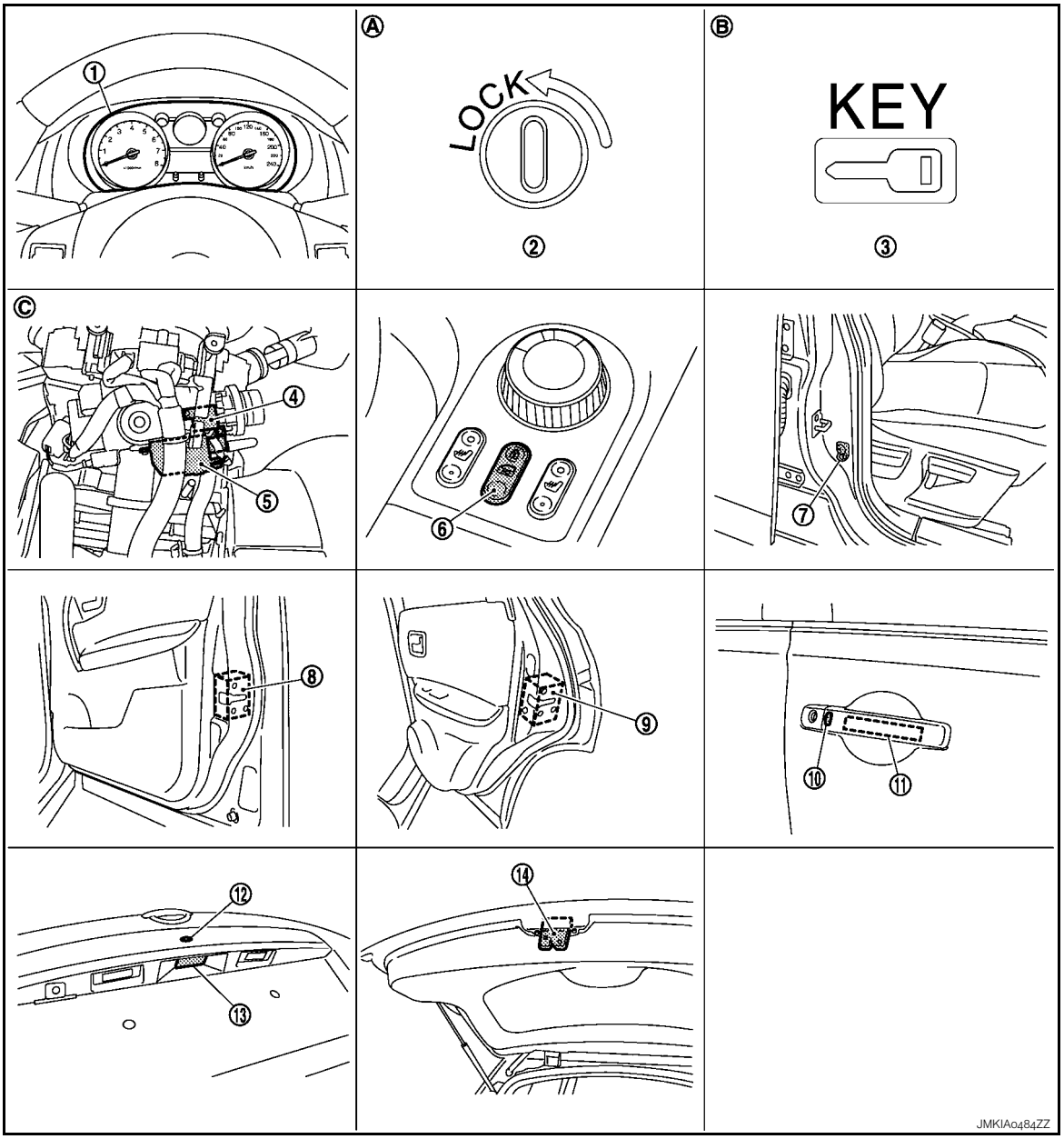
INFOID:0000000001117066



1. BCM
   M65, M66, M67
2. Intelligent Key unit
   M40
3. Intelligent Key warning buzzer
   E25
4. Inside key antenna (instrument center)
   M70
5. Inside key antenna (center console)
   M61
6. Inside key antenna (rear seat)
   B45
7. Inside key antenna (rear bumper)
   B81
8. Passenger side anti-hijack relay
   M90
9. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. Over the instrument lower panel (driver side)
C. View with front bumper removed
D. View with lower instrument cover removed
E. View with center console rear finisher removed
F. View with luggage floor spacer (LH) removed
G. View with rear bumper fascia removed
H. View with fuse box lid removed
I. View with center console removed

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1. Combination meter M34
2. Lock warning lamp M34
3. Key warning lamp M34
4. Ignition knob switch, key switch and key lock solenoid (key switch) M25
5. Ignition knob switch, key switch and key lock solenoid (key lock solenoid) M25
6. Door lock and unlock switch M89
7. Front door switch (driver side) B34
8. Front door lock actuator (driver side) D29
9. Rear door lock actuator RH D95
10. Front door request switch (driver side) D30
11. Outside key antenna (driver side) D31
12. Back door request switch D187
13. Back door opener switch D186
14. Back door lock assembly D152

A. Inside the combination meter
B. Inside the combination meter
C. View with steering column cover removed

VEHICLE SPEED SENSING AUTO DOOR LOCK : Component Description

INFOID:0000000001081233

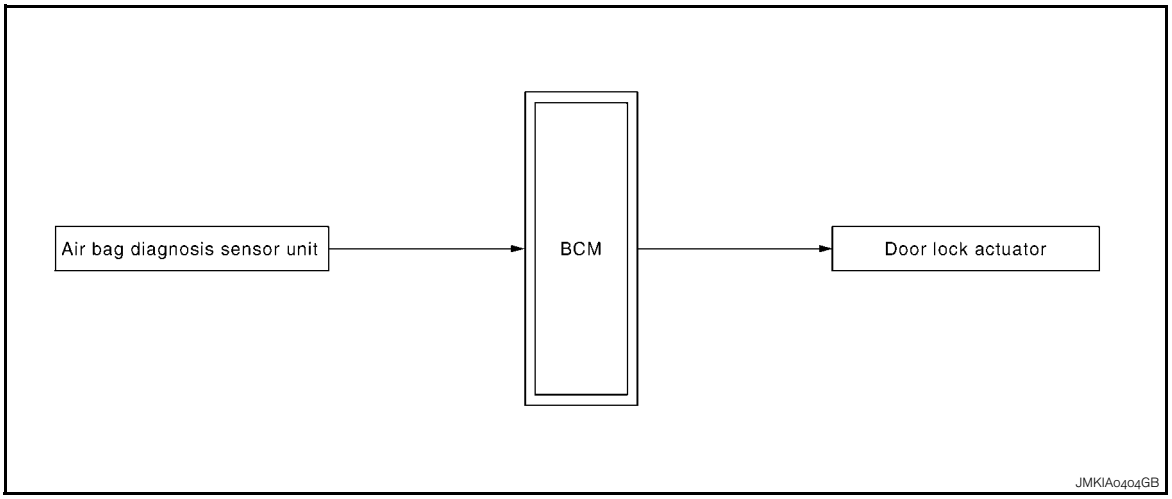
Item	Function
BCM	Controls the door lock function.
Combination meter	Transmits vehicle speed signal to BCM via CAN communication.
Door lock actuator	Receives door lock and unlock signal from BCM and lock and unlock each door.

AIR BAG INTERLOCK UNLOCK

AIR BAG INTERLOCK UNLOCK : System Diagram

INFOID:0000000001081234

AIR BAG INTERLOCK UNLOCK OPERATION



AIR BAG INTERLOCK UNLOCK : System Description

INFOID:0000000001081235

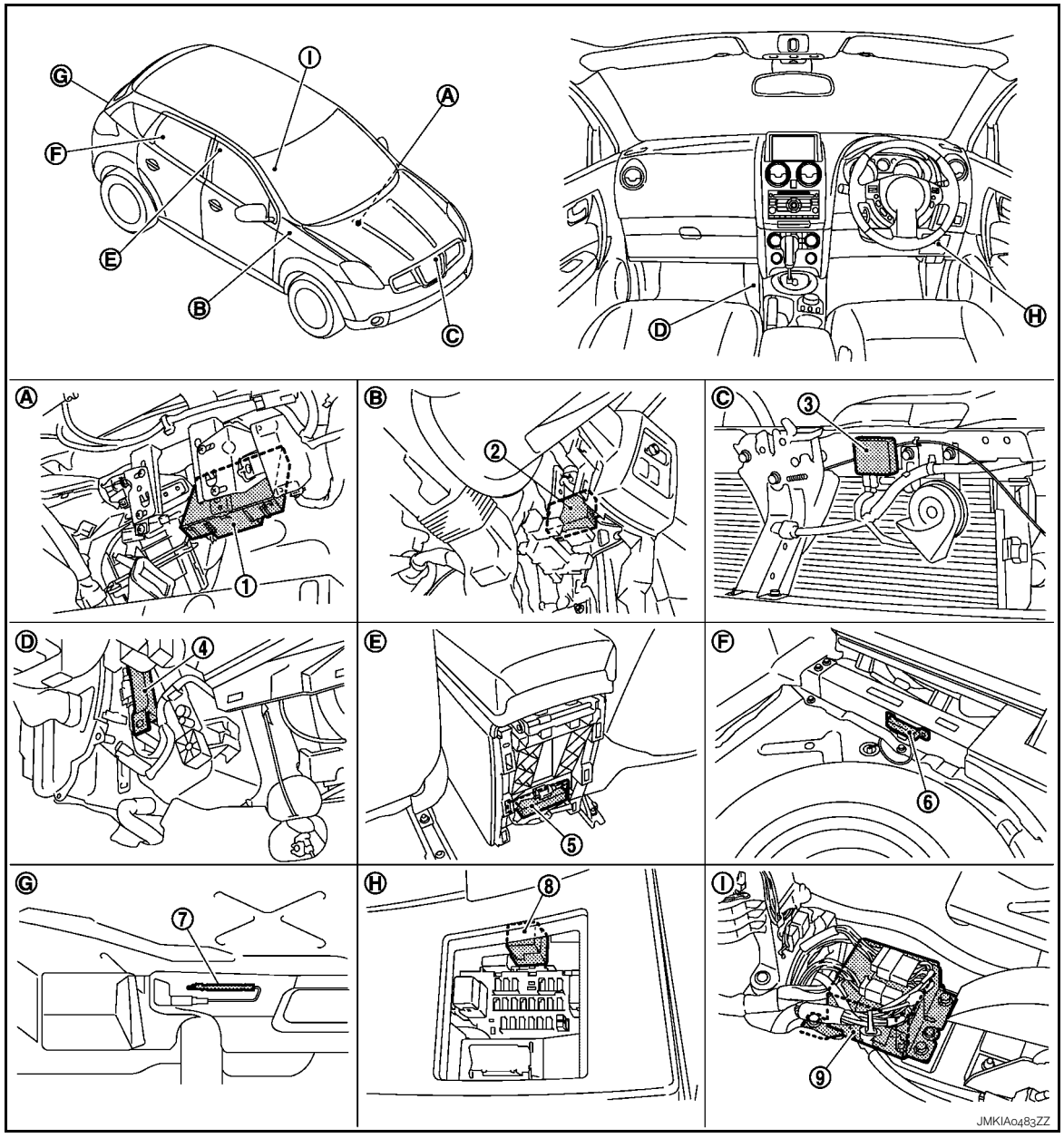
AIR BAG INTERLOCK UNLOCK OPERATION

When ignition switch is ON and BCM receive air bag deployment signal, it operates automatically to unlock all doors. Air bag diagnosis sensor unit sends the air bag deployment signal to BCM.

AIR BAG INTERLOCK UNLOCK : Component Parts Location

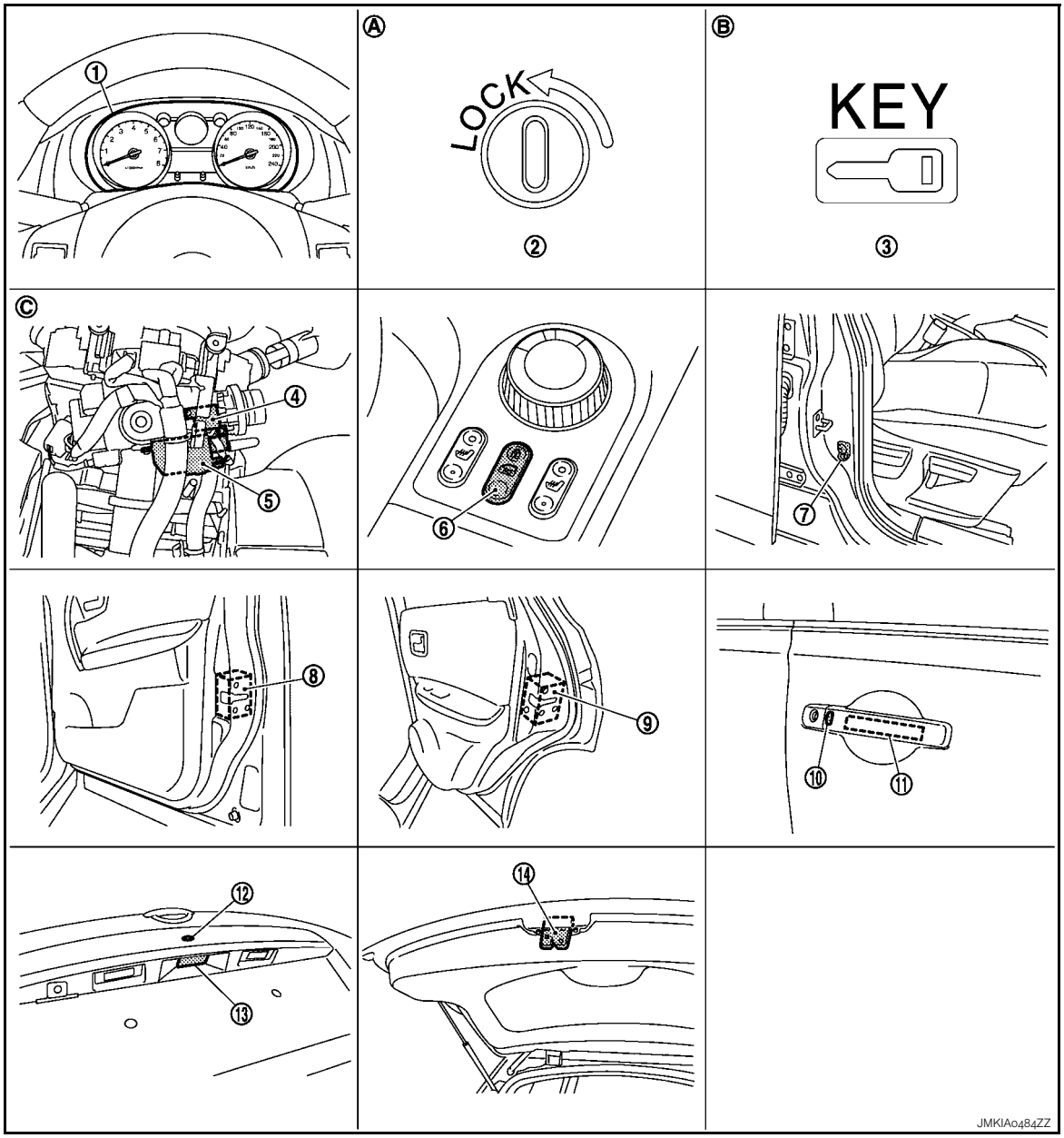
INFOID:0000000001117078

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1. BCM M65, M66, M67
2. Intelligent Key unit M40
3. Intelligent Key warning buzzer E25
4. Inside key antenna (instrument center) M70
5. Inside key antenna (center console) M61
6. Inside key antenna (rear seat) B45
7. Inside key antenna (rear bumper) B81
8. Passenger side anti-hijack relay M90
9. Air bag diagnosis sensor unit M59

A. Over the glove box
B. Over the instrument lower panel (driver side)
C. View with front bumper removed
D. View with lower instrument cover removed
E. View with center console rear finisher removed
F. View with luggage floor spacer (LH) removed
G. View with rear bumper fascia removed
H. View with fuse box lid removed
I. View with center console removed



1. Combination meter M34
2. Lock warning lamp M34
3. Key warning lamp M34
4. Ignition knob switch, key switch and key lock solenoid (key switch) M25
5. Ignition knob switch, key switch and key lock solenoid (key lock solenoid) M25
6. Door lock and unlock switch M89
7. Front door switch (driver side) B34
8. Front door lock actuator (driver side) D29
9. Rear door lock actuator RH D95
10. Front door request switch (driver side) D30
11. Outside key antenna (driver side) D31
12. Back door request switch D187
13. Back door opener switch D186
14. Back door lock assembly D152

A. Inside the combination meter
B. Inside the combination meter
C. View with steering column cover removed

AIR BAG INTERLOCK UNLOCK : Component Description

INFOID:0000000001081237

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Item	Function
BCM	Controls the door lock function.
Air bag diagnosis sensor unit	Transmits air bag deployment signal to BCM.
Door lock actuator	Receives door lock/unlock signal from BCM and lock and unlock each door.

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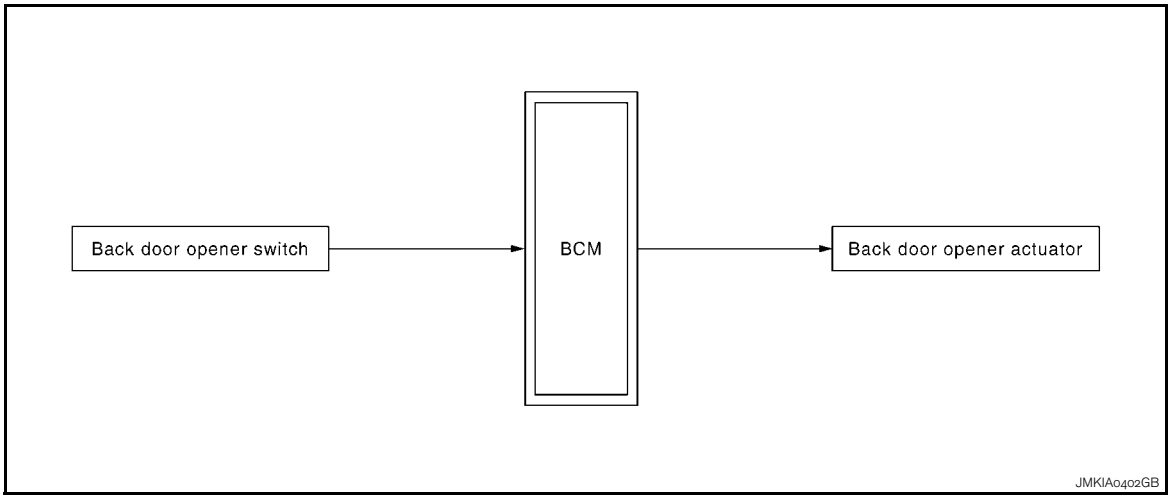
BACK DOOR OPENER FUNCTION

BACK DOOR OPENER SWITCH

BACK DOOR OPENER SWITCH : System Diagram

INFOID:0000000001081238

BACK DOOR OPENER OPERATION



BACK DOOR OPENER SWITCH : System Description

INFOID:0000000001081239

BACK DOOR OPENER OPERATION

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

NOTE:

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

OPERATION CONDITION

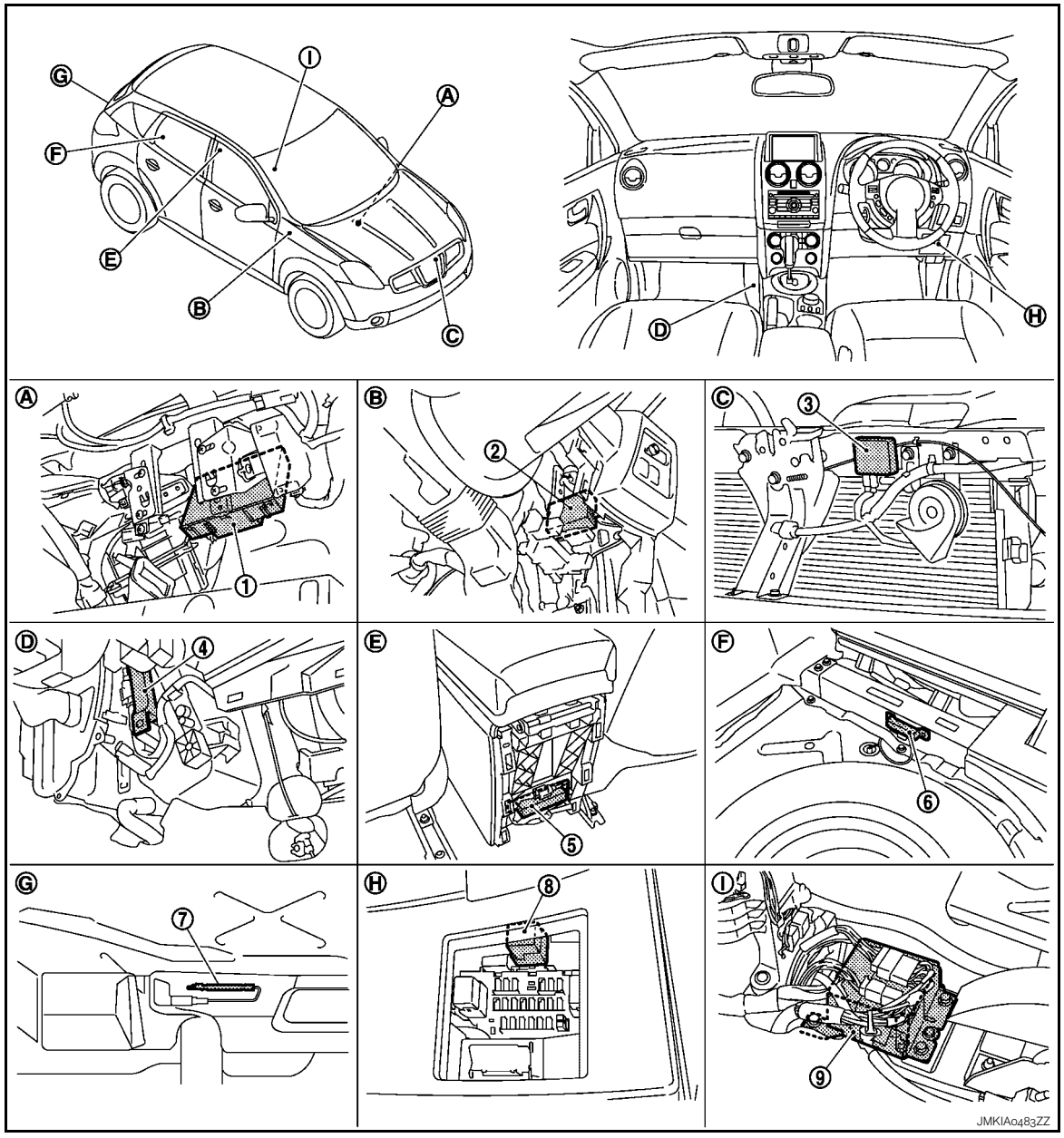
If the following conditions are not satisfied, back door opener operation is not performed.

Back door opener switch operation	Operation condition
Back door open	• Vehicle speed is less than 5 km/h (3 MPH). • All doors are unlocked.

BACK DOOR OPENER SWITCH : Component Parts Location

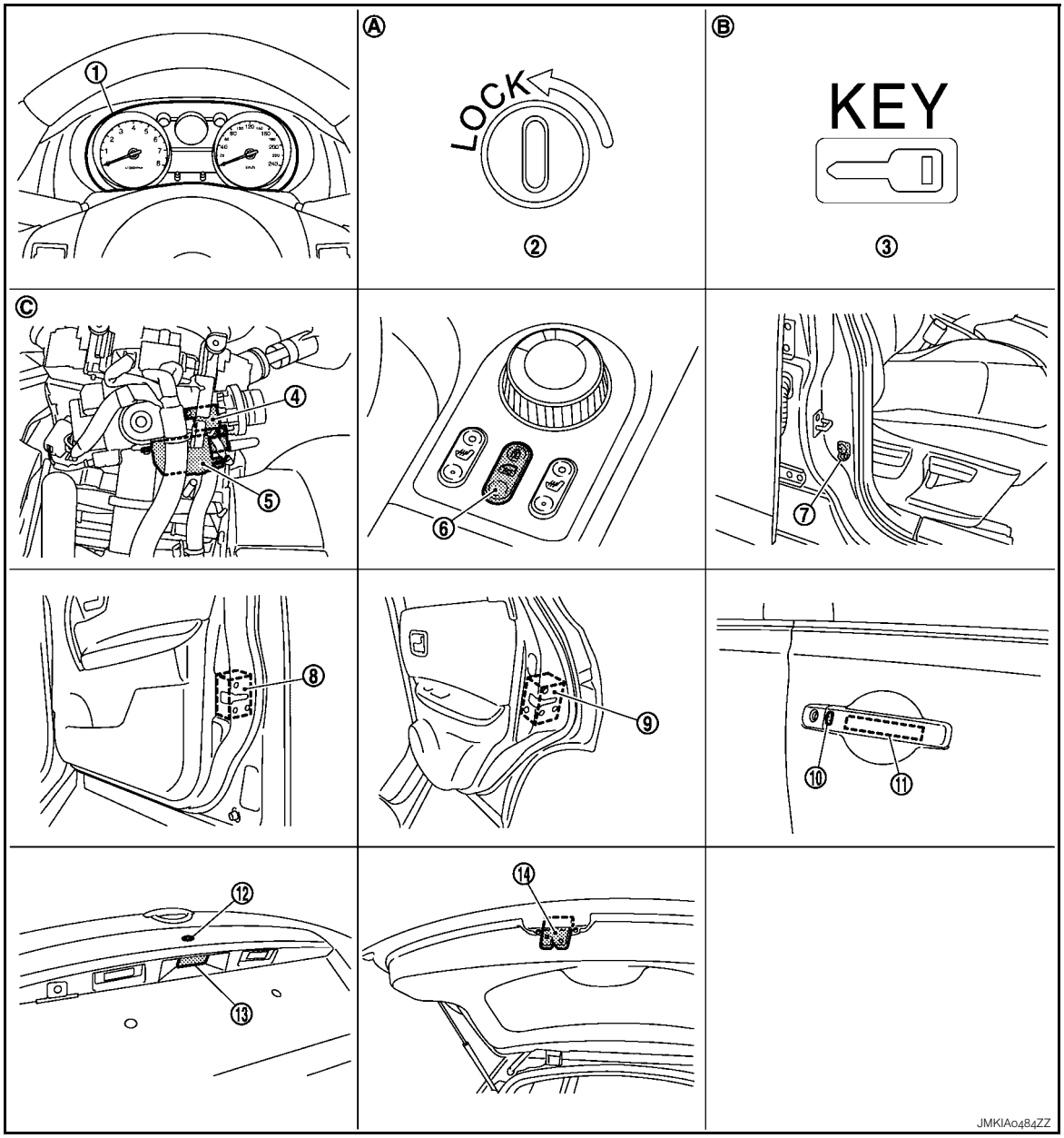
INFOID:0000000001117079

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1. BCM M65, M66, M67
2. Intelligent Key unit M40
3. Intelligent Key warning buzzer E25
4. Inside key antenna (instrument center) M70
5. Inside key antenna (center console) M61
6. Inside key antenna (rear seat) B45
7. Inside key antenna (rear bumper) B81
8. Passenger side anti-hijack relay M90
9. Air bag diagnosis sensor unit M59

A. Over the glove box
B. Over the instrument lower panel (driver side)
C. View with front bumper removed
D. View with lower instrument cover removed
E. View with center console rear finisher removed
F. View with luggage floor spacer (LH) removed
G. View with rear bumper fascia removed
H. View with fuse box lid removed
I. View with center console removed



1. Combination meter M34
2. Lock warning lamp M34
3. Key warning lamp M34
4. Ignition knob switch, key switch and key lock solenoid (key switch) M25
5. Ignition knob switch, key switch and key lock solenoid (key lock solenoid) M25
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7. Front door switch (driver side) B34
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9. Rear door lock actuator RH D95
10. Front door request switch (driver side) D30
11. Outside key antenna (driver side) D31
12. Back door request switch D187
13. Back door opener switch D186
14. Back door lock assembly D152

A. Inside the combination meter
B. Inside the combination meter
C. View with steering column cover removed

BACK DOOR OPENER SWITCH : Component Description

INFOID:0000000001081241

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Item	Function
BCM	Controls the back door opener function.
Back door opener switch	Transmits back door opener switch operation signal to BCM.
Back door opener actuator	Opens the back door with the back door open signal from BCM.
Combination meter	Transmits vehicle speed signal to BCM via CAN communication.

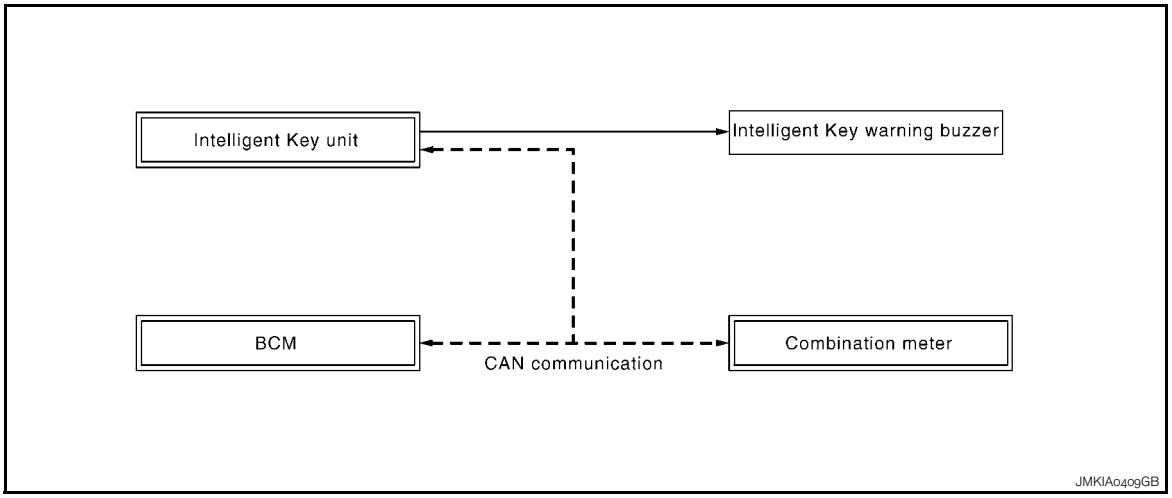
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WARNING FUNCTION

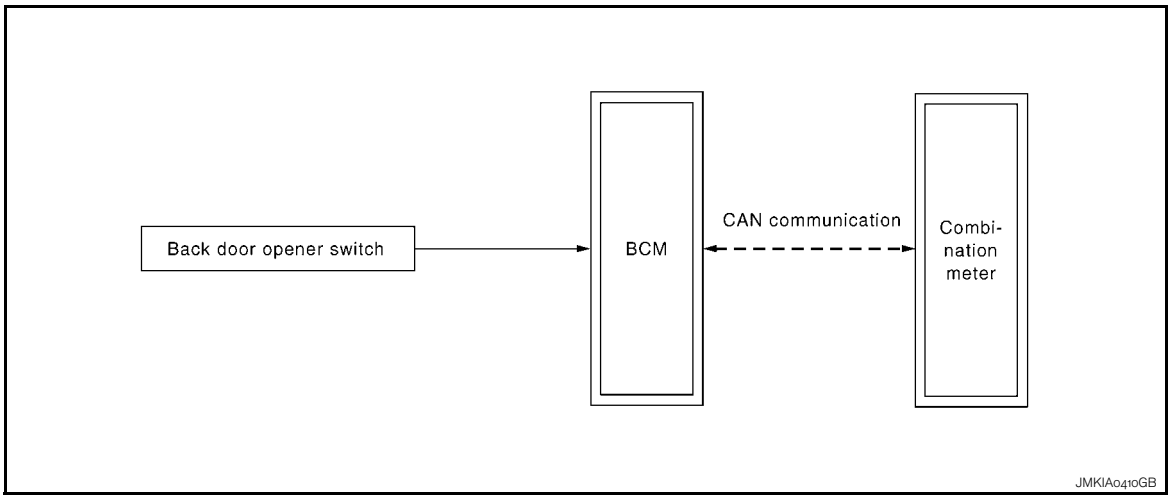
System Diagram

INFOID:0000000001081255

INTELLIGENT KEY WARNING OPERATION



BACK DOOR OPEN WARNING OPERATION



System Description

INFOID:0000000001081256

DESCRIPTION

The warning functions are as follows and are given to the user as warning information and warnings using combinations of Intelligent Key warning buzzer, key warning lamps and buzzer (built in combination meter).

INTELLIGENT KEY WARNING OPERATION

Once one of the following conditions below is established, alert or warning will be executed.

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Warning/Information functions		Operation conditions	Warning lamp	Warning chime	
				Combination meter buzzer	Intelligent Key warning buzzer
Ignition knob return forgotten warning		When all the conditions below are met. • Ignition knob: OFF or LOCK (knob is pressed). • Door switch (driver side): ON (Door is open).	—	Active for 5 seconds (pipipipi, pipipipi···)	—
Ignition key warning (when mechanical key is used)		When all the conditions below are met. • Ignition switch: OFF position. • Key switch: ON (inserted) • Door switch (driver side): ON (Door is open).	—	Active for 5 seconds (pipipipi, pipipipi···)	—
OFF position warning		When all the conditions below are met. • Ignition switch is between ACC and OFF position or ignition knob is pressed in while ignition switch is in LOCK position. • 3 seconds in the above state have pressed.	"LOCK" (RED blinking)	Active for 1 second (pipi, pipi···)	—
Take away warning	Any door open to all doors closed	When all the conditions below are met. • Ignition switch: Except LOCK position. • Door switch: ON to OFF (Door is open to closed). • Intelligent Key cannot be detected inside the vehicle.	"LOCK" (RED blinking)	—	Active (pi, pi, pi)
	Door is open	When all the conditions below are met. • Door switch: ON (Door is open) • Key ID verification every 5 seconds when registered Intelligent Key can not be detected inside the vehicle.	"LOCK" (RED blinking)	—	—
	Take away through window	When all the conditions below are met. • Key ID verification: OK • Every 30 seconds when registered Intelligent Key cannot be detected inside the vehicle or result of vehicle speed verification is NG. (The registered Intelligent Key cannot be detected inside the vehicle when ignition switch is ON.) • Key switch: OFF (Key is removed from ignition key cylinder.)	"LOCK" (RED blinking)	Active for 3 seconds (pipipi···	—

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Warning/Information functions		Operation conditions	Warning lamp	Warning chime	
				Combination meter buzzer	Intelligent Key warning buzzer
Door lock operation warning	Request switch operation	When request switch is pushed (lock operation) under the following conditions. • Door switch: ON (Any door is open). • Ignition switch is in ACC or OFF position or ignition knob is pressed in LOCK position or mechanical key is inserted into ignition key cylinder. • Intelligent Key is inside vehicle.	—	—	Active for 2 seconds (pipipi···)
	Intelligent Key button operation	When Intelligent Key button is pushed (lock operation) under the following conditions. • Door switch: ON (Any door is open). • Ignition switch is in ACC or OFF position or ignition knob is pressed in LOCK position or mechanical key is inserted into ignition key cylinder.	—	—	Active for 2 seconds (pipipi···)
Intelligent Key low battery warning		When Intelligent Key battery voltage is low, Intelligent Key unit is detected after ignition switch is turned ON.	"KEY" (GREEN blinking for 30 seconds)	—	—

KEY WARNING LAMP & LOCK WARNING LAMP

The key indicator and lock indicator indicates Intelligent Key system status.

Operation Condition

Behavior of lamps			Operation condition
KEY	GREEN	Lighting	All the following conditions are satisfied. • Ignition knob is pushed in LOCK position. (Ignition knob switch is ON) • Ignition key is removed from ignition key cylinder. (Key switch is OFF) • Intelligent Key is detected inside of the vehicle. • KEY RED lighting/blinking conditions are not satisfied.
		Blinking	while Intelligent Key low battery warning is operating.
	RED	Lighting	All the following conditions are satisfied. • Ignition knob is pushed. (Ignition knob switch is ON) • Ignition key is removed from ignition key cylinder. (Key switch is OFF) • Intelligent Key is not detected inside of the vehicle.
		Blinking	All the following conditions are satisfied. • Take away warning is operating. • KEY RED lighting condition is not satisfied.
LOCK		Blinking	while OFF position warning is operating.
KEY(RED) and LOCK lighting			All the following conditions are satisfied. • Ignition switch is ON. • Steering lock ID is NG.

BACK DOOR OPEN WARNING OPERATION

When back door opener switch is operated, when door lock is locked with door lock and unlock switch, speed sensing lock or only driver side is unlocked with anti-hijack function, the buzzer (built in combination meter) will sound.

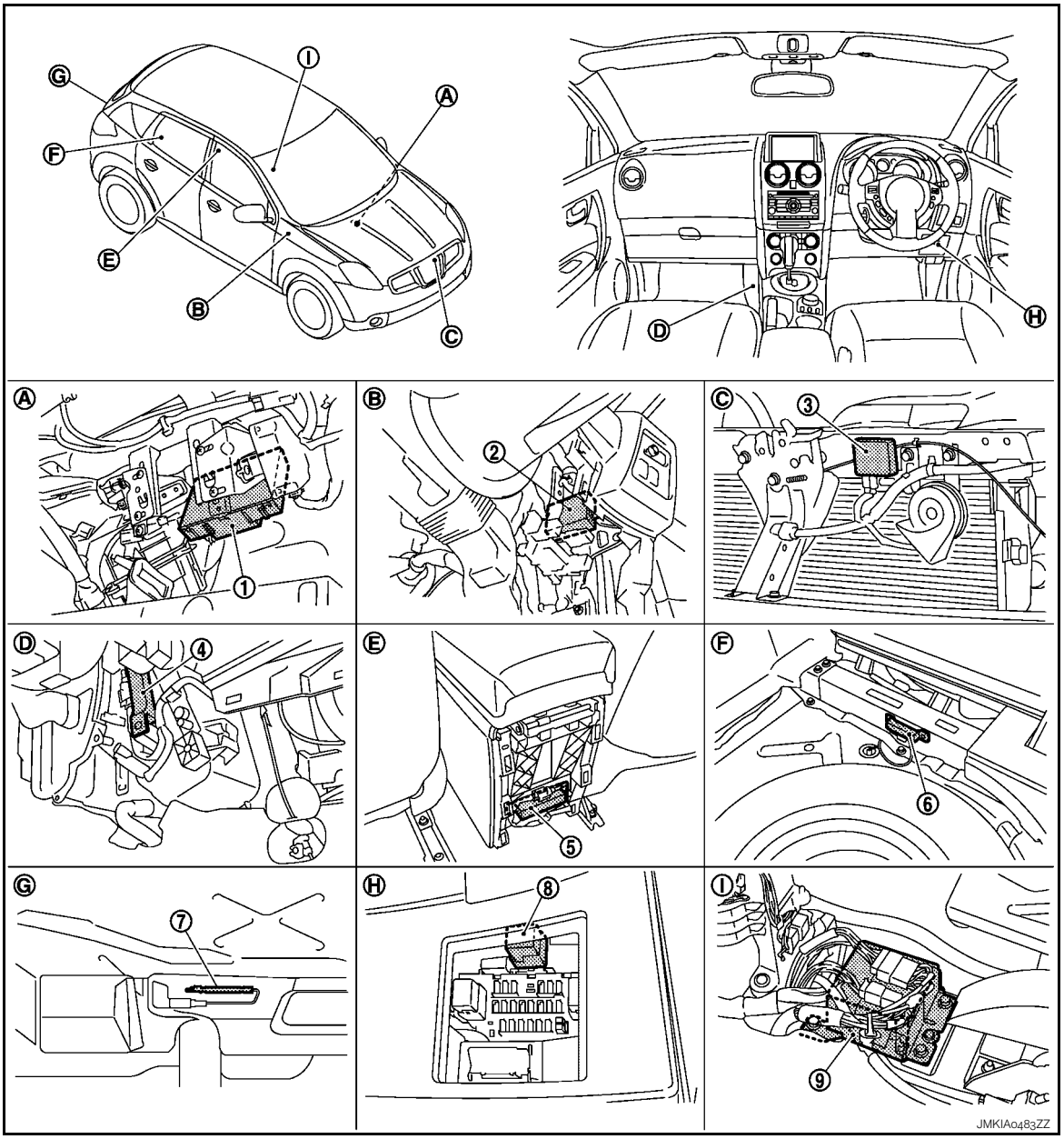
KEY REMINDER OPERATION

- The buzzer (combination meter) will sound and the doors will not lock if the door lock and unlock switch is pressed while the driver door is open and mechanical key is inserted ignition key cylinder.
- The buzzer (combination meter) will sound and the doors will not lock if the door lock and unlock switch is pressed while any door other than the driver door is open.

Component Parts Location

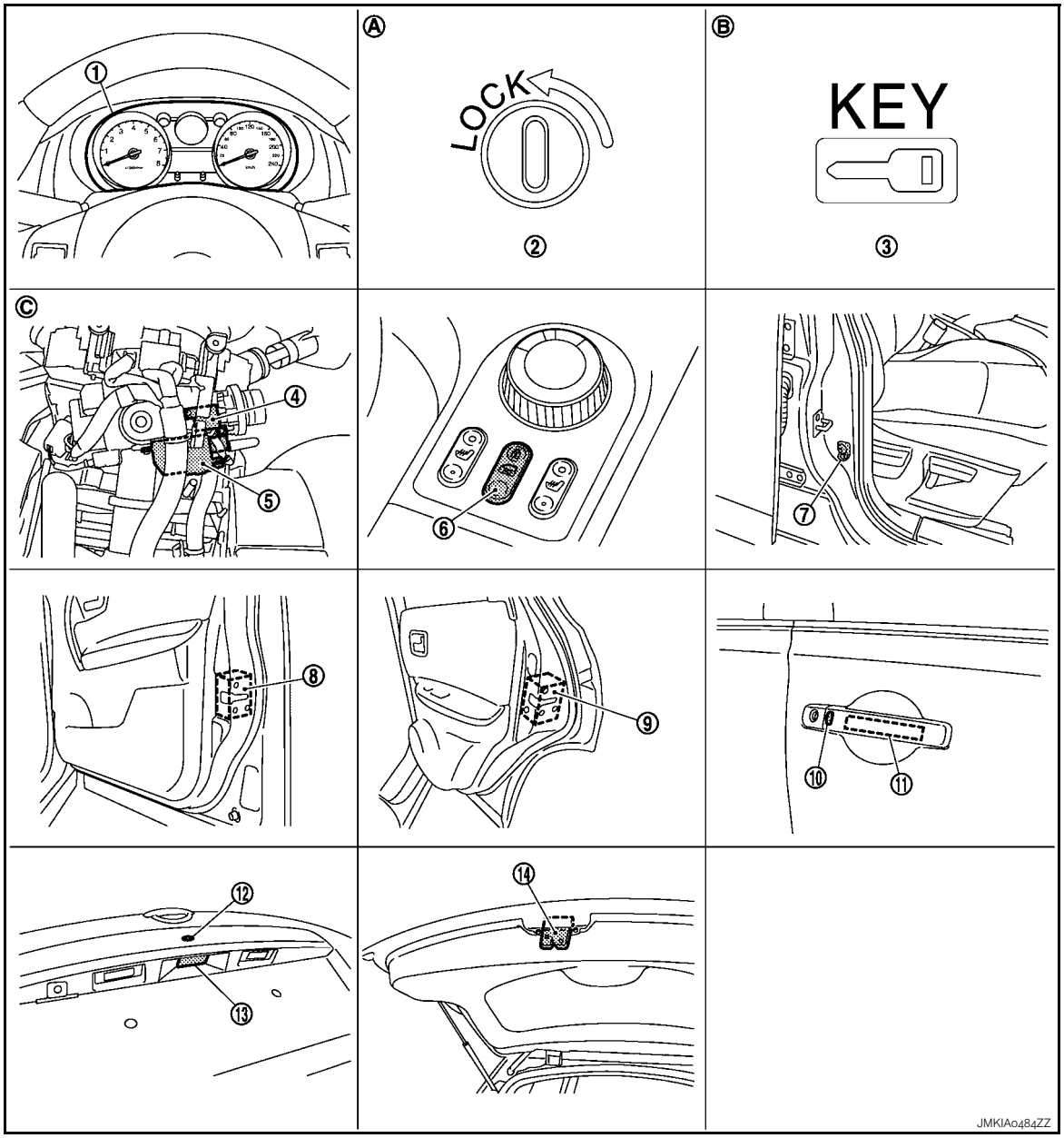
INFOID:0000000001117080

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1. BCM M65, M66, M67
2. Intelligent Key unit M40
3. Intelligent Key warning buzzer E25
4. Inside key antenna (instrument center) M70
5. Inside key antenna (center console) M61
6. Inside key antenna (rear seat) B45
7. Inside key antenna (rear bumper) B81
8. Passenger side anti-hijack relay M90
9. Air bag diagnosis sensor unit M59

A. Over the glove box
B. Over the instrument lower panel (driver side)
C. View with front bumper removed
D. View with lower instrument cover removed
E. View with center console rear finisher removed
F. View with luggage floor spacer (LH) removed
G. View with rear bumper fascia removed
H. View with fuse box lid removed
I. View with center console removed



1. Combination meter M34
2. Lock warning lamp M34
3. Key warning lamp M34
4. Ignition knob switch, key switch and key lock solenoid (key switch) M25
5. Ignition knob switch, key switch and key lock solenoid (key lock solenoid) M25
6. Door lock and unlock switch M89
7. Front door switch (driver side) B34
8. Front door lock actuator (driver side) D29
9. Rear door lock actuator RH D95
10. Front door request switch (driver side) D30
11. Outside key antenna (driver side) D31
12. Back door request switch D187
13. Back door opener switch D186
14. Back door lock assembly D152

A. Inside the combination meter
B. Inside the combination meter
C. View with steering column cover removed

Component Description

INFOID:0000000001081258

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Item	Function
BCM	Controls the warning function with Intelligent Key unit.
Intelligent Key unit	Controls the warning function with BCM.
Key switch	Detects that mechanical key is inserted into ignition key cylinder.
Door switch	Detects door state (open or closed).
Door lock and unlock switch	Transmits door lock and unlock signal to BCM.
Intelligent Key unit	Requests to turn ON hazard warning lamp to BCM and turn signal indicator to combination meter.
Combination meter	Turns ON the LOCK indicator, KEY indicator, turn signal indicator and buzzer (built in combination meter) by the request from Intelligent Key unit via CAN communication.
Intelligent Key warning buzzer	Sounds by the request from Intelligent Key unit.
Back door opener switch	Transmits back door open signal to BCM

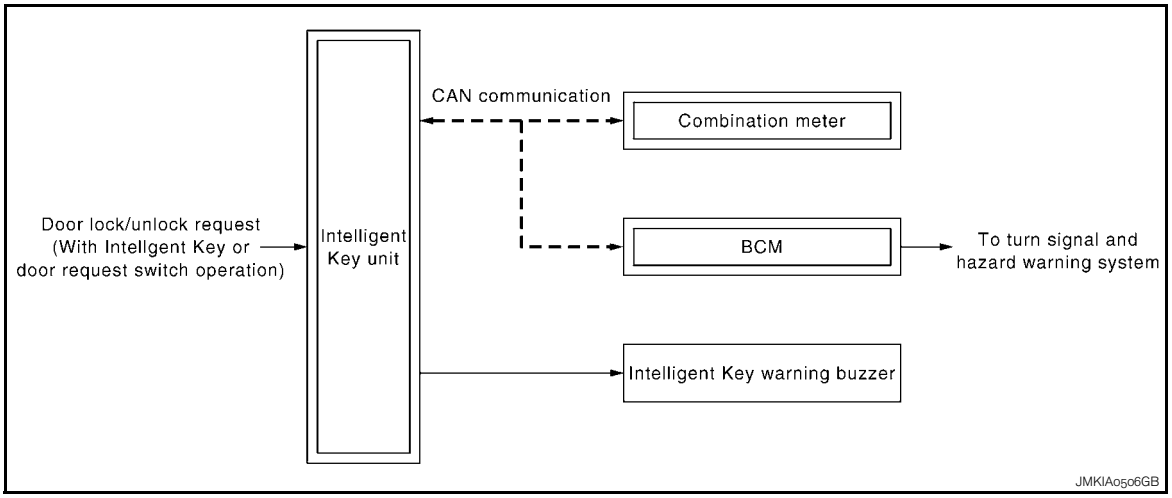
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HAZARD AND BUZZER REMINDER FUNCTION

System Diagram

INFOID:0000000001081322

HAZARD & BUZZER REMINDER FUNCTION



System Description

INFOID:0000000001081323

HAZARD AND BUZZER REMINDER FUNCTION

When door is locked or unlocked by Intelligent Key or door request switch, Intelligent Key unit sounds buzzer and sends hazard request signal to BCM via CAN communication. Then BCM flashes hazard warning lamps as a reminder.

NOTE:

Hazard and buzzer reminder function mode can be changed with CONSULT-III. Refer to DLK-329, "CONSULT-III Function (INTELLIGENT KEY)".

Hazard Operation

Hazard reminder setting (With CONSULT-III)		Door lock operation (with Intelligent Key or door request switch)	Hazard warning lamp flash
HAZARD ANSWER BACK	OFF	Any	—
	LOCK ONLY	Lock	Once
		Unlock	—
		Unlock (Anti-hijack)	—
	UNLK ONLY	Lock	—
		Unlock	Twice
		Unlock (Anti-hijack)	Twice (quick)
	LOCK/UNLK	Lock	Once
		Unlock	Twice
		Unlock (Anti-hijack)	Twice (quick)

Buzzer Operation

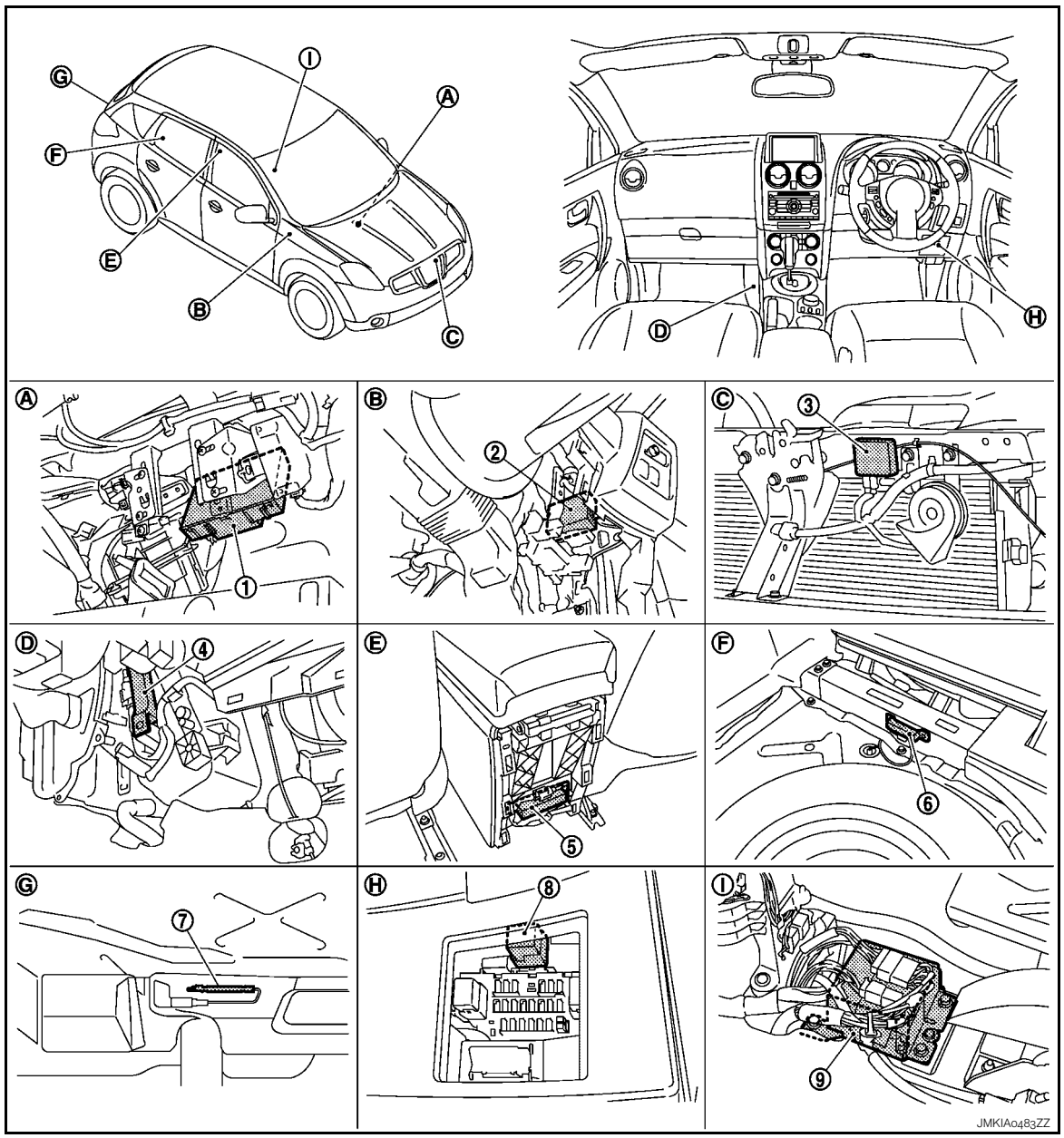
Buzzer reminder setting (With CONSULT-III)		Door lock operation (with Intelligent Key or door request switch)	Buzzer warning sounds
ANSWER BACK WITH I-KEY LOCK	BUZZER	Lock	Once
		Unlock	Depends on other setting
		Unlock (Anti-hijack)	Depends on other setting
	OFF	Any	—

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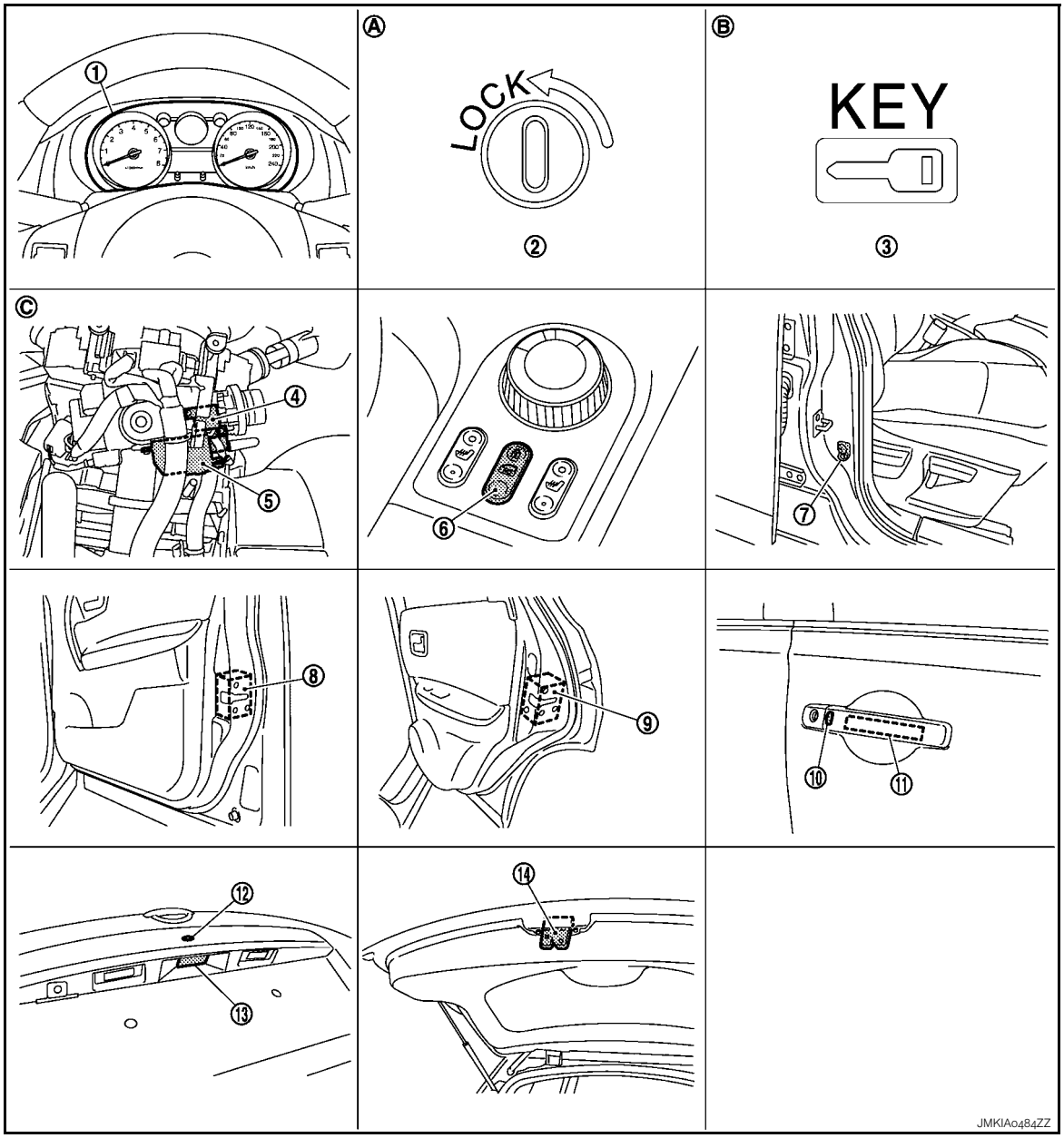
Buzzer reminder setting (With CONSULT-III)		Door lock operation (with Intelligent Key or door request switch)	Buzzer warning sounds
ANSWER BACK WITH I-KEY UNLOCK	BUZZER	Lock	Depends on other setting
		Unlock	Twice
		Unlock (Anti-hijack)	Twice
	OFF	Any	—
ANSWER BACK FUNCTION	ON	Lock	Once
		Unlock	Twice
		Unlock (Anti-hijack)	Twice
	OFF	Any	—

Component Parts Location

INFOID:0000000001117081



1. BCM
M65, M66, M67
2. Intelligent Key unit
M40
3. Intelligent Key warning buzzer
E25
4. Inside key antenna (instrument center)
M70
5. Inside key antenna (center console)
M61
6. Inside key antenna (rear seat)
B45
7. Inside key antenna (rear bumper)
B81
8. Passenger side anti-hijack relay
M90
9. Air bag diagnosis sensor unit
M59
A. Over the glove box
B. Over the instrument lower panel (driver side)
C. View with front bumper removed
D. View with lower instrument cover removed
E. View with center console rear finisher removed
F. View with luggage floor spacer (LH) removed
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H. View with fuse box lid removed
I. View with center console removed



1. Combination meter
M34
2. Lock warning lamp
M34
3. Key warning lamp
M34
4. Ignition knob switch, key switch and key lock solenoid (key switch)
M25
5. Ignition knob switch, key switch and key lock solenoid (key lock solenoid)
M25
6. Door lock and unlock switch
M89

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7. Front door switch (driver side) B34
8. Front door lock actuator (driver side) D29
9. Rear door lock actuator RH D95
10. Front door request switch (driver side) D30
11. Outside key antenna (driver side) D31
12. Back door request switch D187
13. Back door opener switch D186
14. Back door lock assembly D152

A. Inside the combination meter
B. Inside the combination meter
C. View with steering column cover removed

Component Description

INFOID:0000000001081325

Item	Function
BCM	Controls the hazard and buzzer reminder function with Intelligent Key unit.
Intelligent Key unit	Controls the hazard and buzzer reminder function with BCM.
Combination meter	Turns ON the LOCK indicator, KEY indicator, turn signal indicator and buzzer (built in combination meter) by the request from Intelligent Key unit via CAN communication.
Intelligent Key warning buzzer	Sounds by the request signal from Intelligent Key unit via CAN communication.

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

INFOID:0000000001097285

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

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF-DIAG RESULTS	Displays the diagnosis results judged by BCM. Refer to BCS-61, "DTC Index".
CAN DIAG SUPPORT MNTR	Monitors the reception status of CAN communication viewed from BCM.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.
ECU IDENTIFICATION	The BCM part number is displayed.
CONFIGURATION	• Enables to read and save the vehicle specification. • Enables to write the vehicle specification when replacing BCM.

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

System	Sub system selection item	Diagnosis mode		
		WORK SUPPORT	DATA MONITOR	ACTIVE TEST
—	BCM	×		
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	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER		×	×
Air conditioner	AIR CONDITONER		×	
Intelligent Key system	INTELLIGENT KEY		×	
Combination switch	COMB SW		×	
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk open	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
Signal buffer system	SIGNAL BUFFER		×	×
PTC heater system	PTC HEATER		×	×

DOOR LOCK
DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)

INFOID:0000000001097286

BCM CONSULT-III FUNCTION
CONSULT-III performs the following functions via CAN communication with BCM.

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Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
ACC ON SW	Indicates [ON/OFF] condition of ignition switch in ACC position.
PUSH SW*1	Indicates [ON/OFF] condition of ignition knob switch.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
CDL LOCK SW	Indicates [ON/OFF] condition of door lock and unlock switch.
CDL UNLOCK SW	Indicates [ON/OFF] condition of door lock and unlock switch.
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS	Indicates [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR	Indicates [ON/OFF] condition of rear door switch RH.
DOOR SW-RL	Indicates [ON/OFF] condition of rear door switch LH.
BACK DOOR SW	Indicates [ON/OFF] condition of back door switch.
KEYLESS LOCK*2	Indicates [ON/OFF] condition of lock signal from key fob.
KEYLESS UNLOCK*2	Indicates [ON/OFF] condition of unlock signal from key fob.
I-KEY LOCK*1	Indicates [ON/OFF] condition of lock signal from Intelligent Key.
I-KEY UNLOCK*1	Indicates [ON/OFF] condition of unlock signal from Intelligent Key.
UNLOCK WITH DR	This item is indicated, but not monitored.
UNLOCK SHOCK	Indicates [ON/OFF] condition of signal from air bag diagnosis unit. • ON: During the unlock operation interlock with air bag. • OFF: Other than above.
SHOCK SENSOR	Indicates [NOMAL/ON/OFF] condition of circuit between BCM and air bag diagnosis sensor unit. • NORMAL: Ignition switch ON. (BCM is receiving normal condition signal from air bag diagnosis sensor unit.) • ON: During the receiving of air bag deployment signal from air bag diagnosis sensor unit. • OFF: After the receiving of air bag deployment signal from air bag diagnosis sensor unit.
VEHICLE SPEED	Displays the vehicle speed signal received from combination meter by numerical value [km/h].

*1: For the Intelligent key equipped vehicle.

*2: For the multi remote control system equipped vehicle.

ACTIVE TEST

Test item	Description
SUPER LOCK*1	This test is able to check super lock operation [LOCK (SET)/UNLOCK (RELEASE)].
DOOR LOCK IND	This test is able to check door lock indicator (built in door lock and unlock switch on center console) operation [ON/OFF].
DOOR LOCK	This test is able to check door lock operation [ALL LOCK/ALL UNLOCK/DR UNLOCK/ OTHER UNLOCK].

:*1 For the super lock equipped vehicle.

WORK SUPPORT

A B C D E F G H I J DLK L M N O P
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Test item	Description
SECURITY DOOR LOCK SET	Anti hijack function mode can be changed in this mode. • ON: Anti hijack mode is active. • OFF: Anti hijack mode is inactive.

INTELLIGENT KEY

INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)

INFOID:0000000001097287

BCM CONSULT-III FUNCTION

CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
DATA MONITOR	The BCM input/output signals are displayed.

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
ACC ON SW	Indicates [ON/OFF] condition of ignition switch in ACC position.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
PUSH SW	Indicates [ON/OFF] condition of ignition knob switch.
I-KEY LOCK	Indicates [ON/OFF] condition of lock signal from Intelligent Key.
I-KEY UNLOCK	Indicates [ON/OFF] condition of unlock signal from Intelligent Key.

TRUNK

TRUNK : CONSULT-III Function (BCM - TRUNK)

INFOID:0000000001097288

APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from Intelligent Key unit.

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
PUSH SW*1	Indicates [ON/OFF] condition of ignition knob switch.
TRNK OPNR SW	Indicates [ON/OFF] condition of back door opener switch.
VEHICLE SPEED	Displays the vehicle speed signal received from combination meter by numerical value [km/h].

*1: For the Intelligent key equipped vehicle.

*2: For the remote keyless entry system equipped vehicle.

ACTIVE TEST

Test item	Description
TRUNK/GLASS HATCH	This test is able to check back door opener operation [ON/OFF].

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DIAGNOSIS SYSTEM (INTELLIGENT KEY UNIT)

CONSULT-III Function (INTELLIGENT KEY)

INFOID:0000000001097289

APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with Intelligent Key unit.

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF-DIAG RESULTS	Displays the diagnosis results judged by Intelligent Key unit.
CAN DIAG SUPPORT MNTR	Monitors the reception status of CAN communication viewed from Intelligent Key unit.
DATA MONITOR	The Intelligent Key unit input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from Intelligent Key unit.
ECU IDENTIFICATION	The Intelligent Key unit part number is displayed.

WORK SUPPORT

Support item	Description	Selection item	Condition
CONFIRM KEY FOB ID	It can check whether Intelligent Key ID code is registered or not.	—	—
TAKE OUT FROM WINDOW WARN	Take away warning chime (from window) mode can be changed.	ON	Active
		OFF	Inactive
LOW BATT OF KEY FOB WARN	Intelligent Key low battery warning mode can be changed.	ON	Active
		OFF	Inactive
KEYLESS FUNCTION	Door lock function with Intelligent Key can be changed.	ON	Active
		OFF	Inactive
ANSWER BACK FUNCTION	Buzzer reminder operation can be changed.	ON	Active
		OFF	Inactive
SELECTIVE UNLOCK FUNCTION	Anti-hijack mode can be changed.	ON	Active
		OFF	Inactive
HAZARD ANSWER BACK	Hazard reminder operation mode can be changed.	Refer to DLK-322.	
ANSWER BACK WITH I-KEY LOCK	Buzzer reminder operation (lock operation) mode by each door request switch can be changed.	BUZZER	Active
		OFF	Inactive
ANSWER BACK WITH I-KEY UNLOCK	Buzzer reminder operation (unlock operation) mode by each door request switch can be changed.	BUZZER	Active
		OFF	Inactive
AUTO RELOCK TIMER	Auto door lock operation mode can be changed.	OFF	Inactive
		2 min	Active
ENGINE START BY I-KEY	Engine start function (by Intelligent Key) mode can be changed.	ON	Active
		OFF	Inactive
LOCK/UNLOCK BY I-KEY	Door lock function by door request switch can be changed.	ON	Active
		OFF	Inactive

SELF-DIAG RESULT

Refer to DLK-472, "DTC Index".

DATA MONITOR

Monitor Item	Condition
PUSH SW	Indicates [ON (pressed)/OFF (released)] condition of ignition knob switch.
KEY SW	Indicates [ON (inserted)/OFF (removed)] condition of key switch.
DR REQ SW	Indicates [ON (pressed)/OFF (released)] condition of door request switch (driver side).
AS REQ SW	Indicates [ON (pressed)/OFF (released)] condition of door request switch (passenger side).
BD/TR REQ SW	Indicates [ON (pressed)/OFF (released)] condition of door request switch (back door).
IGN SW	Indicates [ON (ON or START position)/OFF (other than ON and START position)] condition of ignition switch ON position.
ACC SW	Indicates [ON/OFF] condition of ignition switch ACC position.
STOP LAMP SW	Indicates [ON/OFF] condition of stop lamp switch.
DOOR LOCK SIG	Indicates [ON/OFF] condition of LOCK signal from Intelligent Key.
DOOR UNLOCK SIG	Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key.
DOOR SW DR	Indicates [OPEN/CLOSE] condition of front door switch (driver side) from BCM via CAN communication.
DOOR SW AS	Indicates [OPEN/CLOSE] condition of front door switch (passenger side) from BCM via CAN communication.
DOOR SW RR	Indicates [OPEN/CLOSE] condition of rear door switch (RH) from BCM via CAN communication.
DOOR SW RL	Indicates [OPEN/CLOSE] condition of rear door switch (LH) from BCM via CAN communication.
DOOR BK SW	Indicates [OPEN/CLOSE] condition of back door switch from BCM via CAN communication.
VEHICLE SPEED	Displays the vehicle speed signal received from combination meter by numerical value [km/h].

ACTIVE TEST

Test item	Description
DOOR LOCK/UNLOCK	This test is able to check door lock/unlock operation. • ALL UNLK: All door lock actuators are unlocked. • DR UNLK: Door lock actuator (driver side) is unlocked. • AS UNLK: Door lock actuator (passenger side) is unlocked. • BK UNLK: This item is indicated, but inactive. • LOCK: All door lock actuator is locked.
ANTENNA	This test is able to check Intelligent Key antenna operation. When the following condition are met, hazard warning lamps flash. • ROOM ANT1: Inside key antenna (console) detects Intelligent Key, when “ROOM ANT1” is selected. • ROOM ANT2: Inside key antenna (instrument center/rear seat) detects Intelligent Key, when “ROOM ANT2”is selected. • DRIVER ANT: Outside key antenna (driver side) detects Intelligent Key, when “DRIVER ANT” is selected. • ASSIST ANT: Outside key antenna (passenger side) detects Intelligent Key, when “ASSIST ANT” is selected. • BK DOOR ANT: Outside key antenna (rear bumper) detects Intelligent Key, when “BK DOOR ANT” is selected.
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation. • ON • OFF
INSIDE BUZZER	This test is able to check warning chime in combination meter operation. • TAKE OUT: Take away warning chime sounds. • KNOB: Ignition knob switch warning chime sounds. • KEY: Key warning chime sounds. • OFF

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Test item	Description
INDICATOR	This test is able to check warning lamp operation. • BLUE ON: Key warning lamp (green) illuminates. • RED ON: Key warning lamp (red) illuminates. • KNOB ON: Lock warning lamp illuminates. • BLUE IND: Key warning lamp (green) flashes. • RED IND: Key warning lamp (red) flashes. • KNOB IND: Lock warning lamp flashes. • OFF
KEY LOCK SOLENOID*1	This test is able to check key interlock operation. • LOCK: Key interlock is active. • UNLOCK: Key interlock is inactive.

*1: The item is only for MT model.

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COMPONENT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000001097045

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN-H line, CAN-L line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.
CAN Communication Signal Chart, refer to LAN-59, "CAN Communication Signal Chart".

DTC Logic

INFOID:0000000001097046

DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC Detection Condition	Possible cause
U1000	CAN COMM CIRCUIT	When Intelligent Key unit 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 (BCM) • Receiving (IPDM E/R) • Receiving (ECM) • Receiving (METER/M&A) • Receiving (MULTI AV)

Diagnosis Procedure

INFOID:0000000001097047

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-46, "Trouble Diagnosis Flow Chart".
NO >> Refer to GI-39, "Intermittent Incident".

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U1010 CONTROL UNIT (CAN)

Description

INFOID:0000000001097048

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN-H line, CAN-L line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.
CAN Communication Signal Chart, refer to LAN-59, "CAN Communication Signal Chart".

DTC Logic

INFOID:0000000001097049

DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC Detection Condition	Possible cause
U1010	CONTROL UNIT (CAN)	When detecting error during the initial diagnosis of CAN controller of Intelligent Key unit.	Intelligent Key unit

Diagnosis Procedure

INFOID:0000000001097050

1.REPLACE INTELLIGENT KEY UNIT

When DTC [U1010] is detected, replace Intelligent Key unit.

>> Replace Intelligent Key unit.

Special Repair Requirement

INFOID:0000000001097051

1.REQUIRED WORK WHEN REPLACING INTELLIGENT KEY UNIT

Initialize control unit. Refer to CONSULT-III operation manual NATS-IVIS/NVIS.

>> Work end.

B2552 INTELLIGENT KEY

Description

INFOID:0000000001115370

Intelligent key unit performs engine start operation and steering lock control by crosschecking ID with the Intelligent key.

DTC Logic

INFOID:0000000001115371

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2552	INTELLIGENT KEY UNIT	Malfunction is detected inside Intelligent key unit.	• Intelligent Key unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self diagnostic result” with CONSULT-III.

Is DTC detected?

YES >> Refer to DLK-334, "Diagnosis Procedure".
NO >> INSPECTION END.

Diagnosis Procedure

INFOID:0000000001115372

1.REPLACE INTELLIGENT KEY UNIT

1. Replace Intelligent Key unit.
2. Perform initialization with CONSULT-III. Re-register all mechanical keys. Refer to “CONSULT-III Operation Manual NATS”.
3. Start the engine.

Does the engine start?

YES >> INSPECTION END
NO >> Perform “DTC confirmation procedure”. Refer to DLK-334, "DTC Logic".

Special Repair Requirement

INFOID:0000000001115373

1.REQUIRED WORK WHEN REPLACING INTELLIGENT KEY UNIT

Initialize control unit. Refer to CONSULT-III operation manual NATS-IVIS/NVIS.

>> Work end.

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POWER SUPPLY AND GROUND CIRCUIT
INTELLIGENT KEY UNIT

INTELLIGENT KEY UNIT : Diagnosis Procedure

INFOID:0000000001099157

1.CHECK FUSE AND FUSIBLE LINK

Check that the following fuse is not blown.

Terminal No.	Signal name	Fuse No.
11	Battery power supply	9 (10A)
6	Ignition power supply	4 (10A)

Is the fuse blown?

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

2.CHECK POWER SUPPLY CIRCUIT

1. Disconnect Intelligent Key unit connector.
2. Turn ignition switch ON.
3. Check voltage between Intelligent Key unit harness connector and ground.

Terminal			Voltage (V) (Approx.)
(+)		(–)	
Intelligent Key unit		Ground	
Connector	Terminal		
M40	11		Battery voltage
	6		

Is the measurement value normal?

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

3.CHECK GROUND CIRCUIT

Check continuity between Intelligent Key unit harness connector and ground.

Intelligent Key unit		Ground	Continuity
Connector	Terminal		
M40	12		Exists

Does continuity exist?

YES >> Intelligent Key unit power supply and ground circuit are OK.
NO >> Repair harness or connector.

BCM

BCM : Diagnosis Procedure

INFOID:0000000001115313

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.
41	Battery power supply	9 (10A)
57		J (40A)

Is the fuse fusing?

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

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NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

Terminals			Voltage (Approx.)
(+)		(–)	
BCM		Ground	
Connector	Terminal		
M66	41		Battery voltage
M67	57		

Is the measurement value normal?

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

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M67	55		Existed

Does continuity exist?

YES >> BCM power supply and ground circuit are OK.
NO >> Repair harness or connector.

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DOOR LOCK AND UNLOCK SWITCH

Description

INFOID:0000000001099158

Transmits door lock/unlock operation to BCM.

Component Function Check

INFOID:0000000001099159

1.CHECK FUNCTION

With CONSULT-III

Check “CDL LOCK SW ”and “CDL UNLOCK SW” in Data monitor mode with CONSULT-III.

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

Is the inspection result normal?

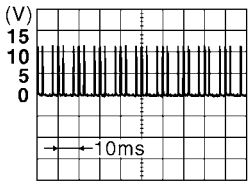
YES >> Door lock and unlock switch is OK.
NO >> Refer to DLK-337, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001099160

1.CHECK DOOR LOCK AND UNLOCK INPUT SIGNAL

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

Terminal			Signal (Reference value)
(+)		(–)	
Door lock and unlock switch connector	Terminal		
M89	1	Ground	
	6		

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Is the inspection result normal?

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

2.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

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

BCM connector	Terminal	Door lock and unlock switch connector	Terminal	Continuity
M65	7	M89	6	Exists
	9		1	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M65	7	Ground	Does not exist
	9		

Is the inspection result normal?

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

3.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

Check continuity between door lock and unlock switch connector and ground.

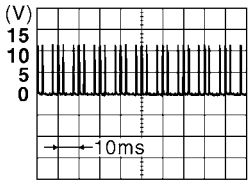
Door lock and unlock switch connector	Terminal	Ground	Continuity
M89	5		Exists

Is the inspection result normal?

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

4.CHECK BCM OUTPUT SIGNAL

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

Terminal			Signal (Reference value)
(+)		(–)	
BCM connector	Terminal		
M65	7	Ground	
	9		

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Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace BCM. Refer to BCS-64, "Exploded View".

5.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch
Refer to DLK-74, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock and unlock switch. Refer to DLK-280, "Exploded View".

Component Inspection

INFOID:0000000001099161

1.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch.

Door lock and unlock switch	Terminal		Condition	Continuity
M89	6	5	LOCK	Exists
	1		UNLOCK	

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.
NO >> Replace door lock and unlock switch. Refer to DLK-280, "Exploded View".

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DOOR LOCK AND UNLOCK SWITCH INDICATOR

Description

INFOID:0000000001102268

The door lock and unlock switch indicates door lock status. The indicator will illuminate when a lock operation is accomplished, and during this status, if any door is opened, the indicator will turn OFF.

Component Function Check

INFOID:0000000001102269

1.CHECK FUNCTION

With CONSULT-III

Check “DOOR LOCK IND” in “Active Test” mode with CONSULT-III.

Test item		Condition
DOOR LOCK IND	:ON	Illuminated
	:OFF	Not illuminated

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.
NO >> Refer to DLK-339, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001102270

1.CHECK DOOR LOCK AND UNLOCK SWITCH INDICATOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between door lock and unlock switch and ground.

Terminal			Condition	Voltage (Approx.)
(+)		(–)		
Door lock and unlock switch connector	Terminal			
M89	4	Ground	Door lock operation is accomplished	Battery voltage
			Any door is OPEN	0

Is the inspection result normal?

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

2.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

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

BCM connector	Terminal	Door lock and unlock switch connector	Terminal	Continuity
M65	24	M89	4	Exists

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	24		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

Check continuity between door lock and unlock switch connector and ground.

Door lock and unlock switch connector	Terminal	Ground	Continuity
M89	5		Exists

Is the inspection result normal?

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

4.CHECK BCM OUTPUT SIGNAL

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

Terminal			Condition	Voltage (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	24	Ground	Door lock operation is accomplished	Battery voltage
			Any door is OPEN	0

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace BCM. Refer to BCS-64, "Exploded View".

5.CHECK DOOR LOCK AND UNLOCK SWITCH INDICATOR

Check door lock and unlock switch
Refer to DLK-340, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock and unlock switch. Refer to DLK-280, "Exploded View".

Component Inspection

INFOID:0000000001102271

1.CHECK DOOR LOCK AND UNLOCK SWITCH INDICATOR

Check continuity door lock and unlock switch.

Door lock and unlock switch	Terminal		Continuity
	(+)	(-)	
M89	5	4	Exists
	4	5	Does not exist

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.
NO >> Replace door lock and unlock switch. Refer to DLK-280, "Exploded View".

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DOOR REQUEST SWITCH
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001109380

Transmits lock/unlock operation to Intelligent Key unit.

DRIVER SIDE : Component Function Check

INFOID:0000000001109381

1.CHECK FUNCTION

With CONSULT-III
Check door request switch “DR REQ SW” in Data monitor mode.

Monitor item	Condition	
DR REQ SW	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-345, "BACK DOOR : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001109382

1.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between Intelligent Key unit harness connector and ground.

Terminal			Door request switch condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M40	5	Ground	Pressed	0
			Released	5

Is the inspection result normal?

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

2.CHECK FRONT DOOR REQUEST SWITCH CIRCUIT

1. Disconnect intelligent key unit.
2. Check continuity between Intelligent Key unit connector and door request switch connector.

Intelligent Key unit connector	Terminal	Door request switch connector	Terminal	Continuity
M40	5	D30	1	Exists

3. Check continuity between Intelligent Key unit connector and ground.

Intelligent Key unit connector	Terminal	Ground	Continuity
M40	5		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between door request switch connector and ground.

Door request switch connector	Terminal	Ground	Continuity
D30	2		Exists

Is the inspection result normal?

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

4.CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

1. Connect Intelligent Key unit connector.
2. Check voltage between Intelligent Key unit connector and ground.

Intelligent Key unit connector	Terminal	Ground	Voltage (V) (Approx.)
M40	5		5

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 6.

5.CHECK DOOR REQUEST SWITCH

Check door request switch.
Refer to DLK-346, "BACK DOOR : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace malfunctioning front outside handle. Refer to DLK-258, "OUTSIDE HANDLE : Exploded View" and DLK-259, "OUTSIDE HANDLE : Removal and Installation".

6.REPLACE INTELLIGENT KEY UNIT

Replace Intelligent Key unit.
Refer to DLK-552, "Exploded View".
NOTE:
Perform the system initialization when replacing Intelligent Key unit.
Refer to DLK-23, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

>> INSPECTION END

DRIVER SIDE : Component Inspection

INFOID:0000000001109383

1.CHECK DOOR REQUEST SWITCH

Check door request switch.

Terminal		Door request switch condition	Continuity
Door request switch			
1	2	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door request switch is OK.
NO >> Replace malfunctioning front outside handle. Refer to DLK-258, "OUTSIDE HANDLE : Exploded View" and DLK-259, "OUTSIDE HANDLE : Removal and Installation".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001109384

Transmits lock/unlock operation to Intelligent Key unit.

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PASSENGER SIDE : Component Function Check

INFOID:0000000001109385

1.CHECK FUNCTION

With CONSULT-III

Check door request switch “AS REQ SW” in Data monitor mode.

Monitor item	Condition	
AS REQ SW	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-345, "BACK DOOR : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001109386

1.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between Intelligent Key unit harness connector and ground.

Terminal			Door request switch Condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M40	25	Ground	Pressed	0
			Released	5

Is the inspection result normal?

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

2.CHECK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect intelligent key unit.
2. Check continuity between Intelligent Key unit connector and door request switch connector.

Intelligent Key unit connector	Terminal	Door request switch connector	Terminal	Continuity
M40	25	D69	1	Exists

3. Check continuity between Intelligent Key unit connector and ground.

Intelligent Key unit connector	Terminal	Ground	Continuity
M40	25		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between front door request switch connector and ground.

Door request switch connector	Terminal	Ground	Continuity
D69	2		Exists

Is the inspection result normal?

YES >> GO TO 4.

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NO >> Repair or replace front outside handle ground circuit.

4.CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

1. Connect Intelligent Key unit connector.
2. Check voltage between Intelligent Key unit connector and ground.

Intelligent Key unit connector	Terminal	Ground	Voltage (V) (Approx.)
M40	25		5

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 6.

5.CHECK DOOR REQUEST SWITCH

Check door request switch.
Refer to DLK-346, "BACK DOOR : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace malfunctioning front outside handle. Refer to DLK-258, "OUTSIDE HANDLE : Exploded View" and DLK-259, "OUTSIDE HANDLE : Removal and Installation".

6.REPLACE INTELLIGENT KEY UNIT

Replace Intelligent Key unit.
Refer to DLK-552, "Exploded View".
NOTE:
Perform the system initialization when replacing Intelligent Key unit.
Refer to DLK-23, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

>> INSPECTION END

PASSENGER SIDE : Component Inspection

INFOID:0000000001109387

1.CHECK DOOR REQUEST SWITCH

Check door request switch.

Terminal		Door request switch condition	Continuity
Door request switch			
1	2	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door request switch is OK.
NO >> Replace malfunctioning front outside handle. Refer to DLK-258, "OUTSIDE HANDLE : Exploded View" and DLK-259, "OUTSIDE HANDLE : Removal and Installation".

BACK DOOR

BACK DOOR : Description

INFOID:0000000001109388

Transmits lock/unlock operation to Intelligent Key unit.

BACK DOOR : Component Function Check

INFOID:0000000001109389

1.CHECK FUNCTION

With CONSULT-III
Check door request switch “BD/TR REQ SW” in Data monitor mode.

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Monitor item	Condition	
BD/TR REQ SW	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-345, "BACK DOOR : Diagnosis Procedure".

BACK DOOR : Diagnosis Procedure

INFOID:0000000001109390

1.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between Intelligent Key unit harness connector and ground.

Terminal			Door request switch condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M40	29	Ground	Pressed	0
			Released	5

Is the inspection result normal?

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

2.CHECK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect Intelligent Key unit.
2. Check continuity between Intelligent Key unit connector and door request switch connector.

Intelligent Key unit connector	Terminal	Door request switch connector	Terminal	Continuity
M40	29	D187	1	Exists

3. Check continuity between Intelligent Key unit connector and ground.

Intelligent Key unit connector	Terminal	Ground	Continuity
M40	29		Does not exist

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and back door request switch.

3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between front door request switch connector and ground.

Door request switch connector	Terminal	Ground	Continuity
D187	2		Exists

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace back door request switch ground circuit.

4.CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

1. Connect Intelligent Key unit connector.
2. Check voltage between Intelligent Key unit connector and ground.

Intelligent Key unit connector	Terminal	Ground	Voltage (V) (Approx.)
M40	29		5

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 6.

5.CHECK DOOR REQUEST SWITCH

Check door request switch.
Refer to DLK-346, "BACK DOOR : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace back door request switch. Refer to DLK-278, "Exploded View".

6.REPLACE INTELLIGENT KEY UNIT

Replace Intelligent Key unit.
Refer to DLK-552, "Exploded View".

NOTE:
Perform the system initialization when replacing Intelligent Key unit.
Refer to DLK-23, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

>> INSPECTION END

BACK DOOR : Component Inspection

INFOID:0000000001109391

1.CHECK DOOR REQUEST SWITCH

Check door request switch.

Terminal		Door request switch condition	Continuity
Door request switch			
1	2	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door request switch is OK.
NO >> Replace back door request switch. Refer to DLK-278, "Exploded View".

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DOOR SWITCH
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001099166

Detects door open/closed condition.

DRIVER SIDE : Component Function Check

INFOID:0000000001099167

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-DR” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-DR	OPEN	:ON
	CLOSE	:OFF

Is the inspection result normal?

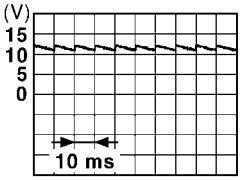
YES >> Door switch is OK.
NO >> Refer to DLK-347, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001099168

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.)
M65	26	Ground	OPEN	0
			CLOSE	

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Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
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
M65	26	B34	1	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	26		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-348, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

DRIVER SIDE : Component Inspection

INFOID:0000000001099169

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			
1	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001099170

Detects door open/closed condition.

PASSENGER SIDE : Component Function Check

INFOID:0000000001099171

1.CHECK FUNCTION

With CONSULT-III
Check door switches “DOOR SW-AS” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-AS	OPEN	: ON
	CLOSE	: OFF

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Refer to DLK-348, "PASSENGER SIDE : Diagnosis Procedure".

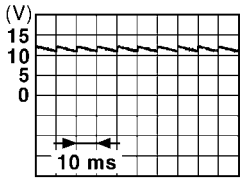
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001099172

1.CHECK DOOR SWITCH INPUT SIGNAL

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

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Terminals			Door condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	27	Ground	OPEN	0
			CLOSE	

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Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
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
M65	27	B27	1	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	27		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-349, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

PASSENGER SIDE : Component Inspection

INFOID:0000000001099173

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			
1	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

REAR LH

REAR LH : Description

INFOID:0000000001099174

Detects door open/closed condition.

REAR LH : Component Function Check

INFOID:0000000001099175

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-RL” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-RL	OPEN	:ON
	CLOSE	:OFF

Is the inspection result normal?

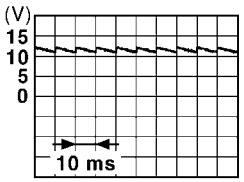
YES >> Door switch is OK.
NO >> Refer to DLK-350, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000001099176

1.CHECK DOOR SWITCH INPUT SIGNAL

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

Terminals			Door condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	25	Ground	OPEN	0
			CLOSE	

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Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
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
M65	25	B71	1	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	25		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-351, "REAR LH : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

REAR LH : Component Inspection

INFOID:0000000001099177

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			
1	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

REAR RH

REAR RH : Description

INFOID:0000000001099178

Detects door open/close condition.

REAR RH : Component Function Check

INFOID:0000000001099179

1.CHECK FUNCTION

With CONSULT-III
Check door switches “DOOR SW-RR” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-RR	OPEN	:ON
	CLOSE	:OFF

Is the inspection result normal?

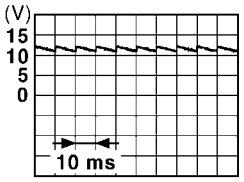
YES >> Door switch is OK.
NO >> Refer to DLK-351, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000001099180

1.CHECK DOOR SWITCH INPUT SIGNAL

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

Terminals			Door condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	29	Ground	OPEN	0
			CLOSE	

JPMIA0011GB

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
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
M65	29	B53	1	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	29		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-352, "REAR RH : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

REAR RH : Component Inspection

INFOID:0000000001099181

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			
1	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

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BACK DOOR

BACK DOOR : Description

INFOID:0000000001099182

Detects back door open condition.

BACK DOOR : Component Function Check

INFOID:0000000001099183

1.CHECK FUNCTION

With CONSULT-III

Check “BACK DOOR SW” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
BACK DOOR SW	OPEN	: ON
	CLOSE	: OFF

Is the inspection result normal?

YES >> Back door lock assembly (door switch) is OK.
NO >> Refer to DLK-353, "BACK DOOR : Diagnosis Procedure".

BACK DOOR : Diagnosis Procedure

INFOID:0000000001099184

1.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH) INPUT SIGNAL

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

Terminals			Back door condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	28	Ground	OPEN	0
			CLOSE	Battery voltage

Is the inspection result normal?

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

2.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH) CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM connector and back door lock assembly (door switch) connector.

BCM connector	Terminal	Back door lock assembly (door switch) connector	Terminal	Continuity
M65	28	D152	4	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	28		Does not exist

Is the inspection result normal?

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

3.CHECK BACK DOOR LOCK ASSEMBLY GROUND CIRCUIT

Check continuity between back door lock assembly connector and ground.

Back door lock assembly (door switch) connector	Terminal	Ground	Continuity
D152	3		Exists

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace back door lock assembly 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		
M65	28	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace BCM. Refer to BCS-64, "Exploded View".

5.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

Check back door lock assembly (door switch).
Refer to DLK-354, "BACK DOOR : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace back door lock assembly (door switch). Refer to DLK-268, "DOOR LOCK : Exploded View" and DLK-268, "DOOR LOCK : Removal and Installation".

BACK DOOR : Component Inspection

INFOID:0000000001099185

1.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly (door switch) connector.
3. Check back door lock assembly (door switch).

Terminal		Trunk condition	Continuity
Back door lock assembly (door switch)			
4	3	OPEN	Exists
		CLOSE	Does not exist

Is the inspection result normal?

YES >> Back door lock assembly (door switch) is OK.
NO >> Replace back door lock assembly (door switch). Refer to DLK-518, "BACK DOOR ASSEMBLY : Exploded View" and DLK-519, "BACK DOOR ASSEMBLY : Removal and Installation".

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KEY SWITCH

Description

INFOID:0000000001116374

Key switch detects that mechanical key is inserted into the key cylinder, and then transmits the signal to BCM and Intelligent Key unit.

Component Function Check

INFOID:0000000001116375

1.CHECK KEY SWITCH INPUT SIGNAL

Check key switch (“KEY SW”) in “DATA MONITOR” mode with CONSULT-III. Refer to DLK-62, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Monitor item	Condition	
KEY SW	Insert mechanical key into key cylinder	: ON
	Remove mechanical key from key cylinder	: OFF

Is the inspection result normal?

YES >> Key switch is OK.
NO >> Refer to DLK-355, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001116376

1.CHECK KEY SWITCH INPUT SIGNAL

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

Terminals			Condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M40	7	Ground	Insert mechanical key into key cylinder	Battery voltage
			Remove mechanical key from key cylinder	0

4. Check voltage between BCM harness connector and ground.

Terminals			Condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	36	Ground	Insert mechanical key into key cylinder	Battery voltage
			Remove mechanical key from key cylinder	0

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 2.

2.CHECK KEY SWITCH POWER SUPPLY CIRCUIT

1. Remove mechanical key from key cylinder.
2. Disconnect key switch connector.
3. Check voltage between key switch harness connector and ground.

Terminals			Voltage (V) (Approx.)
(+)		(–)	
Key switch connector	Terminal		
M25	2	Ground	Battery voltage

Is the inspection result normal?

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

3.CHECK KEY SWITCH SIGNAL CIRCUIT

1. Check continuity between Intelligent Key unit harness connector and key switch connector.

Intelligent Key unit connector	Terminal	Key switch connector	Terminal	Continuity
M40	7	M25	1	Exists

2. Check continuity between BCM harness connector and key switch connector.

BCM connector	Terminal	Key switch connector	Terminal	Continuity
M65	36	M25	1	Exists

3. Check continuity between key switch connector and ground.

Key switch connector	Terminal	Ground	Continuity
M25	1	Ground	Does not exist

Is the inspection result normal?

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

4.CHECK KEY SWITCH

Check key switch function.
Refer to DLK-356, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace key switch.

Component Inspection

INFOID:0000000001116377

COMPONENT INSPECTION

1.CHECK KEY SWITCH

Check continuity between key switch terminals.

Terminal		Condition	Continuity
key switch connector			
1	2	Insert mechanical key into key cylinder	Exists
		Remove mechanical key from key cylinder	Does not exist

Is the inspection result normal?

YES >> Key switch is OK.
NO >> Replace key switch.

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IGNITION KNOB SWITCH

Description

INFOID:0000000001116378

Ignition knob switch detects that ignition knob is pressed, and then transmits the signal to Intelligent Key unit.

Component Function Check

INFOID:0000000001116379

1.CHECK IGNITION KNOB SWITCH INPUT SIGNAL

Check ignition knob switch (“PUSH SW”) in “DATA MONITOR” mode with CONSULT-III. Refer to DLK-62, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Monitor item	Condition	
PUSH SW	Ignition knob switch is pressed	: ON
	Ignition knob switch is released	: OFF

Is the inspection result normal?

YES >> Ignition knob switch is OK.
NO >> Refer to SEC-48, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001116380

1.CHECK IGNITION KNOB SWITCH INPUT SIGNAL

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

Terminals			Condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M40	27	Ground	Ignition knob switch is pressed	Battery voltage
			Ignition knob switch is released	0

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 2.

2.CHECK IGNITION KNOB SWITCH POWER SUPPLY CIRCUIT

1. Disconnect ignition knob switch connector.
2. Check voltage between ignition knob switch harness connector and ground.

Terminals			Voltage (V) (Approx.)
(+)		(–)	
Ignition knob switch connector	Terminal		
M25	4	Ground	Battery voltage

Is the inspection result normal?

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

3.CHECK IGNITION KNOB SWITCH SIGNAL CIRCUIT

1. Check continuity between Intelligent Key unit harness connector and ignition knob switch connector.

Intelligent Key unit connector	Terminal	Ignition knob switch connector	Terminal	Continuity
M40	27	M25	3	Exists

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2. Check continuity between ignition knob switch connector and ground.

Ignition knob switch connector	Terminal	Ground	Continuity
M25	3		Does not exist

Is the inspection result normal?

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

4. CHECK IGNITION KNOB SWITCH

Check ignition knob switch function.
Refer to SEC-49, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace ignition knob switch.

Component Inspection

INFOID:0000000001116381

1. CHECK IGNITION KNOB SWITCH

1. Turn ignition switch OFF.
2. Disconnect ignition knob switch harness connector.
3. Check continuity between ignition knob switch terminals under the following conditions.

Ignition knob switch			Condition	Continuity
Connector	Terminal			
M25	3	4	Ignition knob switch is pressed	Exists
			Ignition knob switch is released	Does not exist

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace ignition knob switch.

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DOOR LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001099187

Locks/unlocks the door with the signal from BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000001099188

1.CHECK FUNCTION

With CONSULT-III
Check “DOOR LOCK/UNLOCK” in “Active Test” mode with CONSULT-III.

Test item		Condition
DOOR LOCK/UNLOCK	:ALL UNLK	The all door lock actuators are unlocked
	:DR UNLK	The door lock actuator (driver side) is unlocked
	:LOCK	The all door lock actuators are locked

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-359, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001099189

1.CHECK OUTPUT SIGNAL

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

Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M67	56	Ground	Lock	0 → Battery voltage → 0
	60		Unlock	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M67	56	D9	3	Exists
	60		2	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist
	60		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 3.

3.CHECK DOOR LOCK ACTUATOR CIRCUIT 1

1. Disconnect anti-hijack relay connector.
2. Check continuity between BCM connector and anti-hijack relay connector.

BCM connector	Terminal	Anti-hijack relay connector	Terminal	Continuity
M67	56	M90	4	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist

Is the inspection result normal?

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

4.CHECK DOOR LOCK ACTUATOR CIRCUIT 2

Check continuity of anti-hijack relay.

Anti-hijack relay connector	Terminal		Continuity
M90	4	3	Exists

Is the inspection result normal?

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

5.CHECK DOOR LOCK ACTUATOR CIRCUIT 3

1. Check continuity between anti-hijack relay connector and front door lock actuator (driver side) connector.

Anti-hijack relay connector	Terminal	Door lock actuator connector	Terminal	Continuity
M90	3	D9	3	Exists

2. Check continuity between anti-hijack relay connector and ground.

Anti-hijack relay connector	Terminal	Ground	Continuity
M90	3		Does not exist

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace harness.

6.CHECK DOOR LOCK ACTUATOR

Check door lock actuator.
Refer to DLK-96, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-255, "DOOR LOCK : Removal and Installation". After that, PWC-15, "POWER WINDOW MAIN SWITCH : Special Repair Requirement"

DRIVER SIDE : Component Inspection

INFOID:0000000001099190

1.CHECK FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)

Check the actuator operation by connecting the battery voltage to front door lock actuator (driver side).

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Front door lock actuator (driver side)	Terminal		Door lock actuator condition
	(+)	(-)	
D9	3	2	LOCK
	2	3	UNLOCK

Is the inspection result normal?

YES >> Front door lock actuator (driver side) is OK.
NO >> Replace front door lock actuator (driver side). Refer to DLK-255, "DOOR LOCK : Removal and Installation". After that, PWC-15, "POWER WINDOW MAIN SWITCH : Special Repair Requirement".

DRIVER SIDE : Special Repair Requirement

INFOID:0000000001099191

Refer to PWC-15, "POWER WINDOW MAIN SWITCH : Special Repair Requirement".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001099192

Locks/unlocks the door with the signal from BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000001099193

1.CHECK FUNCTION

With CONSULT-III
Check “DOOR LOCK/UNLOCK” in “Active Test” mode with CONSULT-III.

Test item		Condition
DOOR LOCK/UNLOCK	:ALL UNLK	The all door lock actuators are unlocked
	:DR UNLK	The door lock actuator (driver side) is unlocked
	:LOCK	The all door lock actuators are locked

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-368, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001099194

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			
M67	56	Ground	Lock	0 → Battery voltage → 0
	54		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 (passenger side) connector.
3. Check continuity between BCM connector and front door lock actuator (passenger side) connector.

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M67	56	D48	3	Exists
	54		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist
	54		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace harness.

3.CHECK DOOR LOCK ACTUATOR

Check door lock actuator.
Refer to DLK-98, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-255, "DOOR LOCK : Removal and Installation".

PASSENGER SIDE : Component Inspection

INFOID:0000000001099195

1.CHECK FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)

Check the actuator operation by connecting the battery voltage directly to front door lock actuator (passenger side).

Front door lock actuator (passenger side) connector	Terminal		Door lock actuator condition
	(+)	(-)	
D48	3	2	LOCK
	2	3	UNLOCK

Is the inspection result normal?

YES >> Front door lock actuator (passenger side) is OK.
NO >> Replace front door lock actuator (passenger side). Refer to DLK-255, "DOOR LOCK : Removal and Installation".

REAR LH

REAR LH : Description

INFOID:0000000001099196

Locks/unlocks the door with the signal from BCM.

REAR LH : Component Function Check

INFOID:0000000001099197

1.CHECK FUNCTION

With CONSULT-III
Check “DOOR LOCK/UNLOCK” in “Active Test” mode with CONSULT-III.

Test item		Condition
DOOR LOCK/UNLOCK	:ALL UNLK	The all door lock actuators are unlocked
	:DR UNLK	The door lock actuator (driver side) is unlocked
	:LOCK	The all door lock actuators are locked

Is the inspection result normal?

YES >> Door lock actuator is OK.

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NO >> Refer to DLK-363, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000001099198

1.CHECK OUTPUT SIGNAL

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

Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M67	56	Ground	Lock	0 → Battery voltage → 0
	54		Unlock	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M67	56	D85	3	Exists
	54		2	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist
	54		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 3.

3.CHECK DOOR LOCK ACTUATOR CIRCUIT 1

1. Disconnect anti-hijack relay connector.
2. Check continuity between BCM connector and anti-hijack relay connector.

BCM connector	Terminal	Anti-hijack relay connector	Terminal	Continuity
M67	56	M90	4	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist

Is the inspection result normal?

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

4.CHECK DOOR LOCK ACTUATOR CIRCUIT 2

Check continuity anti-hijack relay.

Anti-hijack relay connector	Terminal		Continuity
M90	4	3	Exists

Is the inspection result normal?

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

5.CHECK DOOR LOCK ACTUATOR CIRCUIT 3

1. Check continuity between anti-hijack relay connector and rear door lock actuator (LH) connector.

Anti-hijack relay connector	Terminal	Door lock actuator connector	Terminal	Continuity
M90	3	D85	3	Exists

2. Check continuity between anti-hijack relay connector and ground.

Anti-hijack relay connector	Terminal	Ground	Continuity
M90	3		Does not exist

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace harness.

6.CHECK DOOR LOCK ACTUATOR

Check door lock actuator.
Refer to DLK-100, "REAR LH : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-255, "DOOR LOCK : Removal and Installation".

REAR LH : Component Inspection

INFOID:0000000001099199

1.CHECK REAR DOOR LOCK ACTUATOR (LH)

Check the actuator operation by connecting the battery voltage directly to rear door lock actuator (LH).

Rear door lock actuator (LH)	Terminal		Door lock actuator condition
	(+)	(-)	
D85	3	2	LOCK
	2	3	UNLOCK

Is the inspection result normal?

YES >> Rear door lock actuator (LH) is OK.
NO >> Replace rear door lock actuator (LH). Refer to DLK-255, "DOOR LOCK : Removal and Installation".

REAR RH

REAR RH : Description

INFOID:0000000001099200

Locks/unlocks the door with the signal from BCM.

REAR RH : Component Function Check

INFOID:0000000001099201

1.CHECK FUNCTION

With CONSULT-III
Check “DOOR LOCK/UNLOCK” in “Active Test” mode with CONSULT-III.

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Test item		Condition
DOOR LOCK/UNLOCK	:ALL UNLK	The all door lock actuators are unlocked
	:DR UNLK	The door lock actuator (driver side) is unlocked
	:LOCK	The all door lock actuators are locked

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-365, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000001099202

1.CHECK OUTPUT SIGNAL

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

Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M67	56	Ground	Lock	0 → Battery voltage → 0
	54		Unlock	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM and rear door lock actuator (RH) connector.
3. Check continuity between BCM connector and rear door lock actuator (RH) connector.

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M67	56	D105	3	Exists
	54		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist
	54		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 3.

3.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect anti-hijack relay.
2. Check continuity between BCM connector and anti-hijack relay connector.

BCM connector	Terminal	Anti-hijack relay connector	Terminal	Continuity
M67	56	M90	4	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist

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Is the inspection result normal?

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

4. CHECK DOOR LOCK ACTUATOR CIRCUIT

Check continuity anti-hijack relay.

Anti-hijack relay connector	Terminal		Continuity
M90	4	3	Exists

Is the inspection result normal?

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

5. CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Check continuity between anti-hijack relay connector and rear door lock actuator (RH) connector.

Anti-hijack relay connector	Terminal	Door lock actuator connector	Terminal	Continuity
M90	3	D105	3	Exists

2. Check continuity between anti-hijack relay connector and ground.

Anti-hijack relay connector	Terminal	Ground	Continuity
M90	3		Does not exist

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace harness.

6. CHECK DOOR LOCK ACTUATOR

Check door lock actuator.
Refer to DLK-102, "REAR RH : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-255, "DOOR LOCK : Removal and Installation".

REAR RH : Component Inspection

INFOID:0000000001099203

1. CHECK REAR DOOR LOCK ACTUATOR (RH)

Check the actuator operation by connecting the battery voltage directly to rear door lock actuator (RH).

Rear door lock actuator (RH)	Terminal		Door lock actuator condition
	(+)	(-)	
D105	3	2	LOCK
	2	3	UNLOCK

Is the inspection result normal?

YES >> Rear door lock actuator (RH) is OK.
NO >> Replace rear door lock actuator (RH). Refer to DLK-255, "DOOR LOCK : Removal and Installation".

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SUPER LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001097264

The super lock system is controlled by BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000001097265

1.CHECK FUNCTION

With CONSULT-III
Check “SUPER LOCK” in Active test mode with CONSULT-III.

Test item		Condition
SUPER LOCK	:LOCK (SET)	The super lock actuator is locked (SET)
	:UNLOCK (RELEASE)	The super lock actuator is unlocked (RELEASE)

Is the inspection result normal?

YES >> Door lock actuator (super lock actuator) is OK.
NO >> Refer to DLK-367, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001097266

1.CHECK OUTPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			Condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M67	60	Ground	UNLOCK (RELEASE)	0 → Battery voltage → 0
	59		LOCK (SET)	

Is the inspection result normal?

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

2.CHECK SUPER 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
M67	59	D29	1	Exists
	60		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	59		Does not exist
	60		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace harness.

3.CHECK SUPER LOCK ACTUATOR

Check super lock actuator.
Refer to DLK-368, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-255, "DOOR LOCK : Removal and Installation". After that, DLK-368, "DRIVER SIDE : Special Repair Requirement".

DRIVER SIDE : Component Inspection

INFOID:0000000001099306

1.CHECK SUPER LOCK ACTUATOR

Check the actuator operation by connecting the battery voltage to super lock actuator.

Door lock actuator (super lock actuator) connector	Terminal		Actuator condition
	(+)	(-)	
D29	1	2	LOCK (SET)
	2	1	UNLOCK (RELEASE)

Is the inspection result normal?

YES >> Door lock actuator (super lock actuator) is OK.
NO >> Replace door lock actuator (super lock actuator). Refer to DLK-255, "DOOR LOCK : Exploded View" and DLK-255, "DOOR LOCK : Removal and Installation". After that, Refer to DLK-368, "DRIVER SIDE : Special Repair Requirement".

DRIVER SIDE : Special Repair Requirement

INFOID:0000000001099307

Perform initialization procedure. Refer to PWC-15, "POWER WINDOW MAIN SWITCH : Special Repair Requirement".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001099308

The super lock system is controlled by BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000001099309

1.CHECK FUNCTION

With CONSULT-III
Check “SUPER LOCK” in Active test mode with CONSULT-III.

Test item		Condition
SUPER LOCK	:LOCK (SET)	The super lock actuator is locked (SET)
	:UNLOCK (RELEASE)	The super lock actuator is unlocked (RELEASE)

Is the inspection result normal?

YES >> Door lock actuator (super lock actuator) is OK.
NO >> Refer to DLK-368, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001099317

1.CHECK OUTPUT SIGNAL

Check voltage between BCM connector and ground.

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Terminals			Condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M67	54	Ground	UNLOCK (RELEASE)	0 → Battery voltage → 0
	59		LOCK (SET)	

Is the inspection result normal?

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

2.CHECK SUPER LOCK ACTUATOR CIRCUIT

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

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M67	59	D68	1	Exists
	54		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	59		Does not exist
	54		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 3.

3.CHECK SUPER LOCK ACTUATOR

Check super lock actuator.
Refer to DLK-369, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-255, "DOOR LOCK : Removal and Installation".

PASSENGER SIDE : Component Inspection

INFOID:0000000001099314

1.CHECK SUPER LOCK ACTUATOR

Check the actuator operation by connecting the battery voltage to super lock actuator.

Door lock actuator (super lock actuator) connector	Terminal		Actuator condition
	(+)	(-)	
D68	1	2	LOCK (SET)
	2	1	UNLOCK (RELEASE)

Is the inspection result normal?

YES >> Door lock actuator (super lock actuator) is OK.
NO >> Replace door lock actuator (super lock actuator). Refer to DLK-255, "DOOR LOCK : Exploded View" and DLK-255, "DOOR LOCK : Removal and Installation".

REAR LH

REAR LH : Description

INFOID:0000000001099310

The super lock system is controlled by BCM.

REAR LH : Component Function Check

INFOID:0000000001099311

1.CHECK FUNCTION

With CONSULT-III

Check “SUPER LOCK” in Active test mode with CONSULT-III.

Test item		Condition
SUPER LOCK	:LOCK (SET)	The super lock actuator is locked (SET)
	:UNLOCK (RELEASE)	The super lock actuator is unlocked (RELEASE)

Is the inspection result normal?

YES >> Door lock actuator (super lock actuator) is OK.
NO >> Refer to DLK-370, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000001099318

1.CHECK OUTPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			Condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M67	54	Ground	UNLOCK (RELEASE)	0 → Battery voltage → 0
	59		LOCK (SET)	

Is the inspection result normal?

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

2.CHECK SUPER LOCK ACTUATOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM and rear door lock actuator (LH) connector.
3. Check continuity between BCM connector and rear door lock actuator (LH) connector.

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M67	59	D115	1	Exists
	54		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	59		Does not exist
	54		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 3.

3.CHECK SUPER LOCK ACTUATOR

Check super lock actuator.
Refer to DLK-370, "REAR LH : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-255, "DOOR LOCK : Removal and Installation".

REAR LH : Component Inspection

INFOID:0000000001099315

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1.CHECK SUPER LOCK ACTUATOR

Check the actuator operation by connecting the battery voltage to super lock actuator.

Door lock actuator (super lock actuator) connector	Terminal		Actuator condition
	(+)	(-)	
D115	1	2	LOCK (SET)
	2	1	UNLOCK (RELEASE)

Is the inspection result normal?

YES >> Door lock actuator (super lock actuator) is OK.
NO >> Replace door lock actuator (super lock actuator). Refer to DLK-255, "DOOR LOCK : Exploded View" and DLK-255, "DOOR LOCK : Removal and Installation".

REAR RH

REAR RH : Description

INFOID:0000000001099312

The super lock system is controlled by BCM.

REAR RH : Component Function Check

INFOID:0000000001099313

1.CHECK FUNCTION

With CONSULT-III
Check “SUPER LOCK” in Active test mode with CONSULT-III.

Test item		Condition
SUPER LOCK	:LOCK (SET)	The super lock actuator is locked (SET)
	:UNLOCK (RELEASE)	The super lock actuator is unlocked (RELEASE)

Is the inspection result normal?

YES >> Door lock actuator (super lock actuator) is OK.
NO >> Refer to DLK-371, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000001099319

1.CHECK OUTPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			Condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M67	54	Ground	UNLOCK (RELEASE)	0 → Battery voltage → 0
	59		LOCK (SET)	

Is the inspection result normal?

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

2.CHECK SUPER LOCK ACTUATOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM and rear door lock actuator (RH) connector.
3. Check continuity between BCM connector and rear door lock actuator (RH) connector.

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M67	59	D95	1	Exists
	54		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	59		Does not exist
	54		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 3.

3.CHECK SUPER LOCK ACTUATOR

Check super lock actuator.
Refer to DLK-372, "REAR RH : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-255, "DOOR LOCK : Removal and Installation".

REAR RH : Component Inspection

INFOID:0000000001099316

1.CHECK SUPER LOCK ACTUATOR

Check the actuator operate by connecting the battery voltage to super lock actuator.

Door lock actuator (super lock actuator) connector	Terminal		Actuator condition
	(+)	(-)	
D95	1	2	LOCK (SET)
	2	1	UNLOCK (RELEASE)

Is the inspection result normal?

YES >> Door lock actuator (super lock actuator) is OK.
NO >> Replace door lock actuator (super lock actuator). Refer to DLK-255, "DOOR LOCK : Exploded View" and DLK-255, "DOOR LOCK : Removal and Installation".

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BACK DOOR OPENER ACTUATOR

Description

INFOID:0000000001099204

Opens the back door with the signal from BCM.

Component Function Check

INFOID:0000000001099205

1.CHECK FUNCTION

With CONSULT-III

Check “TRUNK/GLASS HATCH” in Active test mode with CONSULT-III.

Test item		Condition
TRUNK/GLASS HATCH	:OPEN	Back door lock opener actuator operation

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-373, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001099206

1.CHECK BCM OUTPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			Condition of back door opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M66	45	Ground	Pressed	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK BACK DOOR LOCK ASSEMBLY CIRCUIT

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

BCM connector	Terminal	Back door lock assembly connector	Terminal	Continuity
M66	45	D152	2	Exists

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M66	45		Does not exist

Is the inspection result normal?

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

3.CHECK BACK DOOR LOCK ASSEMBLY GROUND CIRCUIT

Check continuity between back door lock assembly connector and ground.

Back door lock assembly connector	Terminal	Ground	Continuity
D152	1		Exists

Is the inspection result normal?

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

4. CHECK BACK DOOR LOCK ASSEMBLY

Check back door lock assembly connector and ground.
Refer to DLK-374, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace back door lock assembly. Refer to DLK-268, "DOOR LOCK : Exploded View" and DLK-268, "DOOR LOCK : Removal and Installation".

Component Inspection

INFOID:0000000001099207

1. CHECK BACK DOOR LOCK ASSEMBLY

Check the actuator operation by connecting battery voltage to back door lock assembly.

Back door lock assembly connector	Terminal		Back door actuator condition
D152	(+)	(-)	OPEN
	2	1	

Is the inspection result normal?

YES >> Back door lock assembly (back door lock actuator) is OK.
NO >> Replace back door lock assembly (back door lock actuator). Refer to DLK-268, "DOOR LOCK : Exploded View" and DLK-268, "DOOR LOCK : Removal and Installation".

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BACK DOOR OPENER SWITCH

Description

INFOID:0000000001115816

Sends the back door opening signal to BCM.

Component Function Check

INFOID:0000000001115817

1.CHECK FUNCTION

With CONSULT-III

Check “TRNK OPNR SW” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
TRNK OPNR SW	Back door opener switch is pressed	:ON
	Back door opener switch is released	:OFF

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-375, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001115818

1.CHECK BCM INPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			Condition of back door opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	12	Ground	Pressed	0
			Released	Battery voltage

Is the inspection result normal?

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

2.CHECK BACK DOOR OPENER SWITCH CIRCUIT

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

BCM connector	Terminal	Back door opener switch connector	Terminal	Continuity
M65	12	D186	1	Exists

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	12		Does not exist

Is the inspection result normal?

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

3.CHECK BCM OUTPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			Voltage (V) (Approx.)
(+)		(–)	
BCM connector	Terminal		
M65	12	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace BCM. Refer to BCS-64, "Exploded View".

4. CHECK BACK DOOR OPENER SWITCH GROUND CIRCUIT

Check continuity between back door opener switch connector and ground.

Back door opener switch connector	Terminal	Ground	Continuity
D186	2		Exists

Is the inspection result normal?

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

5. CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.
Refer to DLK-376, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace back door opener switch. Refer to DLK-279, "Exploded View".

Component Inspection

INFOID:0000000001115819

1. CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.

Back door opener switch connector	Terminal		Back door opener switch condition	Continuity
D186	1	2	Pressed	Exists
			Released	Does not exist

Is the inspection result normal?

YES >> Back door opener switch is OK.
NO >> Replace back door opener switch. Refer to DLK-279, "Exploded View".

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OUTSIDE KEY ANTENNA
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001109347

Detects whether Intelligent Key is outside the vehicle.
Integrated in front outside handle (driver side).

DRIVER SIDE : Component Function Check

INFOID:0000000001109348

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL

With CONSULT-III
1. Check “ANTENNA” in “Active Test” mode with CONSULT-III.
2. Touch “DRIVER ANT”.
3. When Intelligent Key is in outside key antenna (driver side) detection area, hazard lamp flashes.

Test Item		Outside Antenna
ANTENNA	:DRIVER ANT	Outside key antenna (driver side)

Is the inspection result normal?

YES >> Outside key antenna is OK.
NO >> Refer to DLK-383, "REAR BUMPER : Diagnosis Procedure".

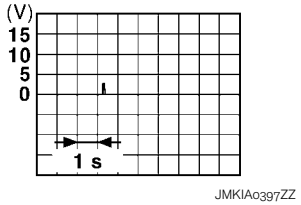
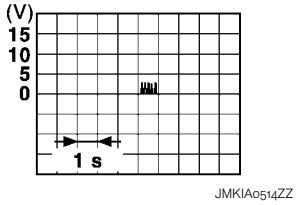
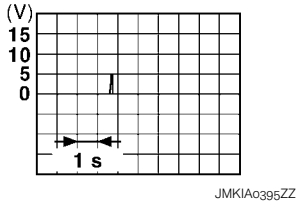
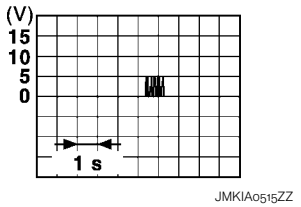
DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001109349

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between Intelligent Key unit connector and ground with oscilloscope.

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Terminals				Condition		Signal (Reference value)
(+)			(–)			
Intelligent Key unit connector		Terminal				
M40	Driver side (+)	19	Ground	Request switch is pushed	When Intelligent Key is in the antenna detection area.	 JMKIA0397ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0514ZZ
	Driver side (-)	20			When Intelligent Key is in the antenna detection area.	 JMKIA0395ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0515ZZ

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 2.

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and front outside handle connector.
2. Check continuity between Intelligent Key unit connector and outside key antenna connector.

Intelligent Key unit connector	Terminal	Outside key antenna connector	Terminal	Continuity
M40	19	D31	1	Existed
	20		2	

3. Check continuity between Intelligent Key unit connector and ground.

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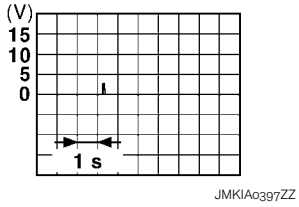
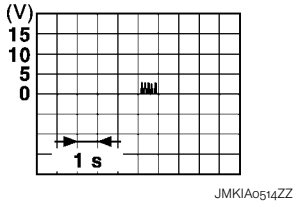
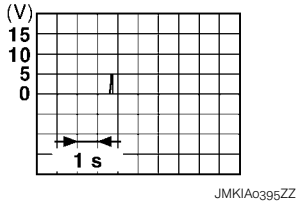
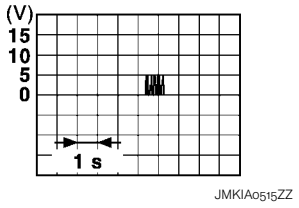
Intelligent Key unit connector	Terminal	Ground	Continuity
M40	19		Not existed
	20		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and outside key antenna.

3. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace outside key antenna. (New antenna or other antenna)
2. Connect Intelligent Key unit connector and outside key antenna connector.
3. Check signal between Intelligent Key unit connector and ground with oscilloscope.

Terminals (+) Intelligent Key unit connector	(+) Terminal	(–)	Condition		Signal (Reference value)
M40	Driver side (+) 19	Ground	Door request switch is pushed	When Intelligent Key is in the antenna detection area.	 JMKIA0397ZZ
				When Intelligent Key is not in the antenna detection area.	 JMKIA0514ZZ
	Driver side (-) 20		Door request switch is pushed	When Intelligent Key is in the antenna detection area.	 JMKIA0395ZZ
				When Intelligent Key is not in the antenna detection area.	 JMKIA0515ZZ

Is the inspection result normal?

YES >> Replace outside key antenna (driver side). Refer to DLK-275, "DRIVER SIDE : Exploded View".
NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001109350

Detects whether Intelligent Key is outside the vehicle.
Integrated in front outside handle (passenger side).

PASSENGER SIDE : Component Function Check

INFOID:0000000001109351

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL

With CONSULT-III

1. Check “ANTENNA” in “Active Test” mode with CONSULT-III.
2. Touch “ASSIST ANT”.
3. When Intelligent Key is in outside key antenna (passenger side) detection area, hazard lamp is flashes.

Test Item		Outside Antenna
ANTENNA	:ASSIST ANT	Outside key antenna (passenger side)

Is the inspection result normal?

YES >> Outside key antenna is OK.
NO >> Refer to DLK-383, "REAR BUMPER : Diagnosis Procedure".

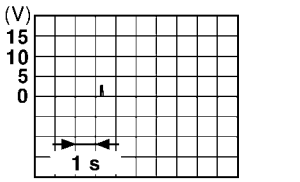
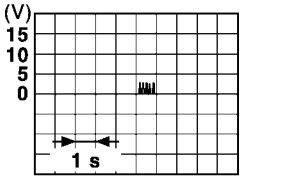
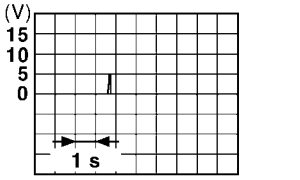
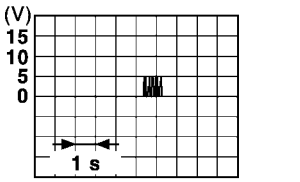
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001109352

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between Intelligent Key unit connector and ground with oscilloscope.

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Terminal (+) Intelligent Key unit connector	Terminal (+) Terminal	Terminal (–)	Condition		Signal (Reference value)
M40	Passenger side (+)	37	Ground	Request switch is pushed	When Intelligent Key is in the antenna detection area.	 JMKIA0397ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0514ZZ
	Passenger side (-)	38			When Intelligent Key is in the antenna detection area.	 JMKIA0395ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0515ZZ

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 2.

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and front outside handle connector.
2. Check continuity between Intelligent Key unit connector and outside key antenna connector.

Intelligent Key unit connector	Terminal	Outside key antenna connector	Terminal	Continuity
M40	37	D70	1	Existed
	38		2	

3. Check continuity between Intelligent Key unit connector and ground.

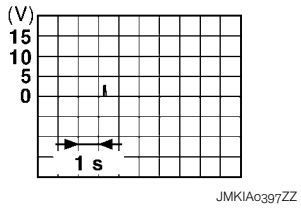
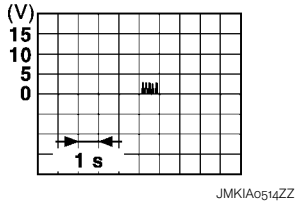
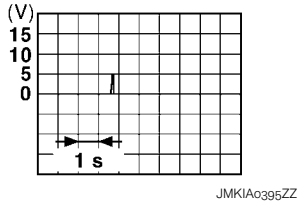
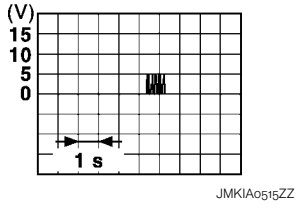
Intelligent Key unit connector	Terminal		Continuity
M40	37	Ground	Not existed
	38		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and outside key antenna.

3. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace outside key antenna. (New antenna or other antenna)
2. Connect Intelligent Key unit connector and outside key antenna connector.
3. Check signal between Intelligent Key unit connector and ground with oscilloscope.

Terminal (+)			Terminal (–)	Condition		Signal (Reference value)
Intelligent Key unit connector		Terminal				
M40	Passenger side (+)	37	Ground	Door request switch is pushed	When Intelligent Key is in the antenna detection area.	 JMKIA0397ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0514ZZ
	Passenger side (-)	38			When Intelligent Key is in the antenna detection area.	 JMKIA0395ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0515ZZ

Is the inspection result normal?

YES >> Replace outside key antenna. Refer to DLK-275, "PASSENGER SIDE : Exploded View" (passenger side).
NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

REAR BUMPER

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REAR BUMPER : Description

INFOID:0000000001109353

Detects whether Intelligent Key is outside the vehicle.
Installed in rear bumper.

REAR BUMPER : Component Function Check

INFOID:0000000001109354

1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL

With CONSULT-III

1. Check “ANTENNA” in “Active Test” mode with CONSULT-III.
2. Touch “BK DOOR ANT”.
3. When Intelligent Key is in outside key antenna (rear bumper) detection area, hazard lamp is flashes.

Test Item		Outside Antenna
ANTENNA	:BK DOOR ANT	Outside key antenna (rear bumper)

Is the inspection result normal?

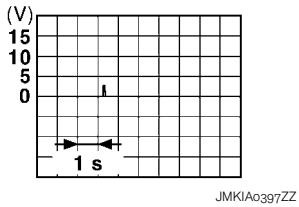
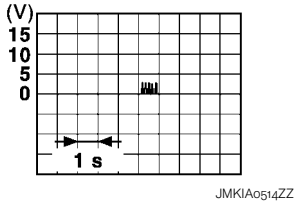
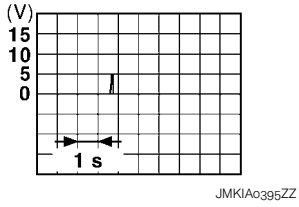
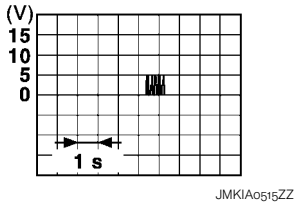
YES >> Outside key antenna is OK.
NO >> Refer to DLK-383, "REAR BUMPER : Diagnosis Procedure".

REAR BUMPER : Diagnosis Procedure

INFOID:0000000001109355

1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between Intelligent Key unit connector and ground with oscilloscope.

Terminal (+) Intelligent Key unit connector	Terminal (+) Terminal	Terminal (–)	Condition		Signal (Reference value)
M40	Rear bumper (+)	17	Ground	Request switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0397ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0514ZZ
	Rear bumper (-)	18			When Intelligent Key is in the antenna detection area.	 JMKIA0395ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0515ZZ

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 2.

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and front outside handle connector.
2. Check continuity between Intelligent Key unit connector and outside key antenna connector.

Intelligent Key unit connector	Terminal	Outside key antenna connector	Terminal	Continuity
M40	17	B81 (rear bumper)	1	Exists
	18		2	

3. Check continuity between Intelligent Key unit connector and ground.

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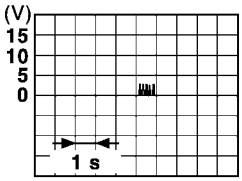
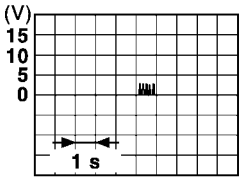
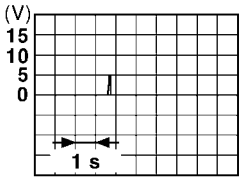
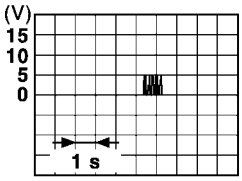
Intelligent Key unit connector	Terminal	Ground	Continuity
M40	17		Does not exist
	18		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and outside key antenna.

3. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace outside key antenna. (New antenna or other antenna)
2. Connect Intelligent Key unit connector and outside key antenna connector.
3. Check signal between Intelligent Key unit connector and ground with oscilloscope.

Terminal (+)		Terminal (+)	Terminal (–)	Condition		Signal (Reference value)
Intelligent Key unit connector		Terminal				
M40	Rear bumper (+)	17	Ground	Door request switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0514ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0514ZZ
	Rear bumper (-)	18			When Intelligent Key is in the antenna detection area.	 JMKIA0395ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0515ZZ

Is the inspection result normal?

YES >> Replace outside key antenna. Refer to DLK-276, "REAR BUMPER : Exploded View" (Rear bumper).
NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

INSIDE KEY ANTENNA
INSTRUMENT CENTER

INSTRUMENT CENTER : Description

INFOID:0000000001109356

Detects whether Intelligent Key is inside the vehicle.

INSTRUMENT CENTER : Component Function Check

INFOID:0000000001109357

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL

With CONSULT-III

1. Check “ANTENNA” in Active test mode with CONSULT-III.
2. Touch “ROOM ANT 2”.
3. When Intelligent Key is in inside key antenna (instrument center) detection area, hazard lamp flashes.

Test Item		Inside Antenna
ANTENNA	:ROOM ANT 2	Inside key antenna (instrument center)

Is the inspection result normal?

YES >> Inside key antenna is OK.
NO >> Refer to DLK-386, "INSTRUMENT CENTER : Diagnosis Procedure".

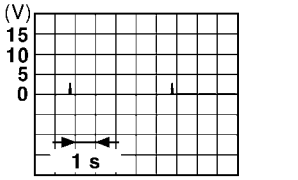
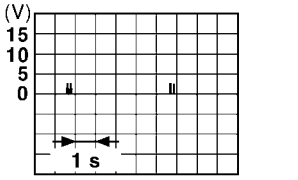
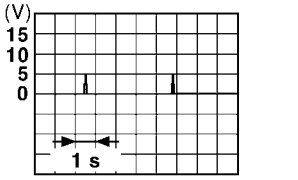
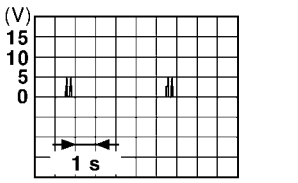
INSTRUMENT CENTER : Diagnosis Procedure

INFOID:0000000001109358

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between Intelligent Key unit connector and ground with oscilloscope.

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Terminals (+) Intelligent Key unit connector		Terminals (+) Terminal	Terminals (–)	Condition		Signal (Reference value)
M40	Instrument center (+)	33	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Instrument center (-)	34			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 2.

2. CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and inside key antenna connector.
2. Check continuity between Intelligent Key unit connector and inside key antenna connector.

Intelligent Key unit connector	Terminal	Inside key antenna connector	Terminal	Continuity
M40	33	M70 (instrument center)	1	Exists
	34		2	

3. Check continuity between Intelligent Key unit connector and ground.

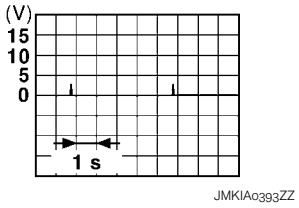
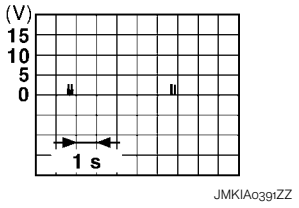
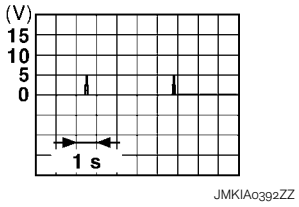
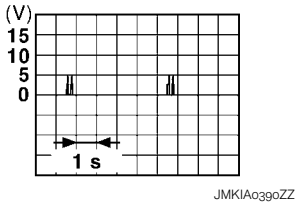
Intelligent Key unit connector	Terminal	Ground	Continuity
M40	33		Does not exist
	34		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and inside key antenna.

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace inside key antenna. (New antenna or other antenna)
2. Connect Intelligent Key unit connector and inside key antenna connector.
3. Check signal between Intelligent Key connector and ground with oscilloscope.

Terminals (+) Intelligent Key unit connector		Terminal	(–)	Condition		Signal (Reference value)
M40	Instrument center (+)	33	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Instrument center (-)	34			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

YES >> Replace inside key antenna. Refer to DLK-273, "INSTRUMENT CENTER : Exploded View" (instrument center).
NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

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CONSOLE

CONSOLE : Description

INFOID:0000000001109359

Detects whether Intelligent Key is inside the vehicle.

CONSOLE : Component Function Check

INFOID:0000000001109360

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL

With CONSULT-III

1. Check “ANTENNA” in Active test mode with CONSULT-III.
2. Touch “ROOM ANT 1”.
3. When Intelligent Key is in inside key antenna (console) detection area, hazard lamp flashes.

Test Item		Inside Antenna
ANTENNA	:ROOM ANT 1	Inside key antenna (console)

Is the inspection result normal?

YES >> Inside key antenna is OK.
NO >> Refer to DLK-389, "CONSOLE : Diagnosis Procedure".

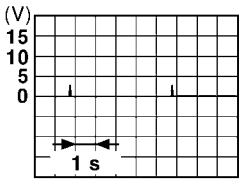
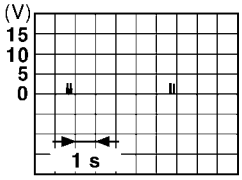
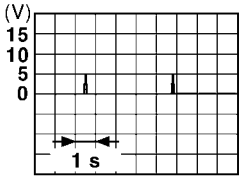
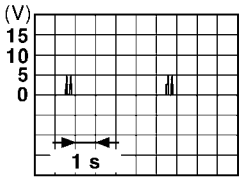
CONSOLE : Diagnosis Procedure

INFOID:0000000001109361

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between Intelligent Key unit connector and ground with oscilloscope.

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Terminal (+) Intelligent Key unit connector	Terminal (+) Terminal	Terminal (–)	Condition		Signal (Reference value)
M40	Console (+) 15	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
				When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Console (-) 16			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
				When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 2.

2. CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and inside key antenna connector.
2. Check continuity between Intelligent Key unit connector and inside key antenna connector.

Intelligent Key unit connector	Terminal	Inside key antenna connector	Terminal	Continuity
M40	15	M61 (console)	1	Exists
	16		2	

3. Check continuity between Intelligent Key unit connector and ground.

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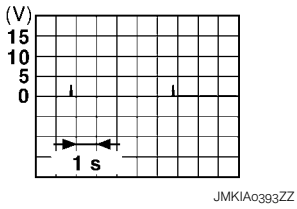
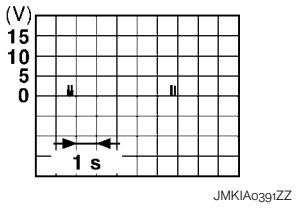
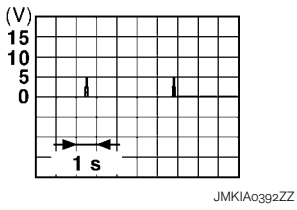
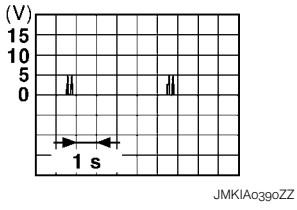
Intelligent Key unit connector	Terminal	Ground	Continuity
M40	15		Does not exist
	16		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and inside key antenna.

3. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace inside key antenna. (New antenna or other antenna)
2. Connect Intelligent Key unit connector and inside key antenna connector.
3. Check signal between Intelligent Key connector and ground with oscilloscope.

Terminal (+)		Terminal (+)	Terminal (–)	Condition		Signal (Reference value)
Intelligent Key unit connector						
M40	Console (+)	15	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Console (-)	16			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

YES >> Replace inside key antenna. Refer to DLK-273, "CONSOLE : Exploded View" (console).
NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

REAR SEAT

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REAR SEAT : Description

INFOID:0000000001109362

Detects whether Intelligent Key is inside the vehicle.

REAR SEAT : Component Function Check

INFOID:0000000001109363

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL

With CONSULT-III

1. Check “ANTENNA” in “Active Test” mode with CONSULT-III.
2. Touch “ROOM ANT 2”.
3. When Intelligent Key is in inside key antenna (rear seat) detection area, hazard lamp flases.

Test Item		Inside Antenna
ANTENNA	:ROOM ANT 2	Inside key antenna (rear seat)

Is the inspection result normal?

YES >> Inside key antenna is OK.
NO >> Refer to DLK-392, "REAR SEAT : Diagnosis Procedure".

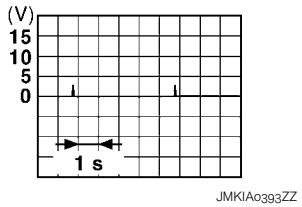
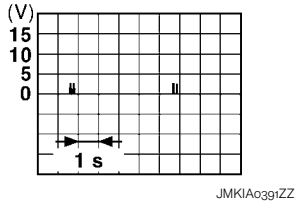
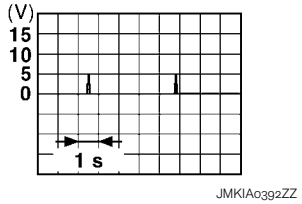
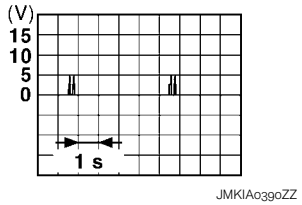
REAR SEAT : Diagnosis Procedure

INFOID:0000000001109364

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between Intelligent Key unit connector and ground with oscilloscope.

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Terminal (+) Intelligent Key unit connector	Terminal (+) Terminal	Terminal (–)	Condition		Signal (Reference value)
M40	Rear seat (+)	13	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Rear seat (-)	14			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 2.

2. CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and inside key antenna connector.
2. Check continuity between Intelligent Key unit connector and inside key antenna connector.

Intelligent Key unit connector	Terminal	Inside key antenna connector	Terminal	Continuity
M40	13	B45 (rear seat)	1	Exists
	14		2	

3. Check continuity between Intelligent Key unit connector and ground.

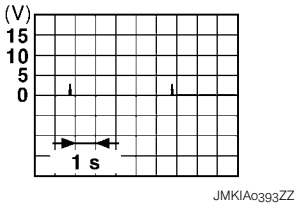
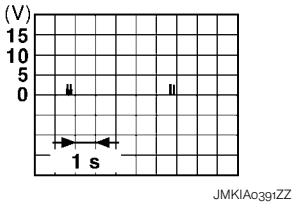
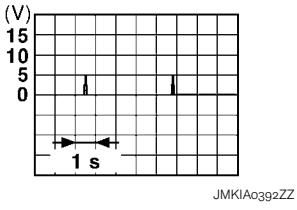
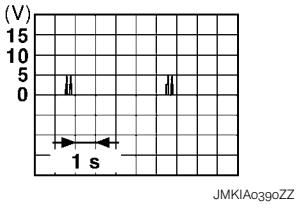
Intelligent Key unit connector	Terminal	Ground	Continuity
M40	13		Does not exist
	14		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and inside key antenna.

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace inside key antenna. (New antenna or other antenna)
2. Connect Intelligent Key unit connector and inside key antenna connector.
3. Check signal between Intelligent Key connector and ground with oscilloscope.

Terminal (+) Intelligent Key unit connector	Terminal (+) Terminal	Terminal (–)	Condition		Signal (Reference value)
M40	Rear seat (+) 13	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
				When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Rear seat (-) 14			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
				When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

YES >> Replace inside key antenna. Refer to DLK-274, "REAR : Exploded View" (rear seat).
NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

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ANTI-HIJACK RELAY
PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001115302

Receives anti-hijack signal from Intelligent Key unit.

PASSENGER SIDE : Component Function Check

INFOID:0000000001115303

1.CHECK FUNCTION

1. All doors are locked using Intelligent Key or door request switch. (Super lock system condition: Set)
2. Press door request switch (passenger side), only passenger side door is UNLOCK.

Is the inspection result normal?

YES >> Anti-hijack relay is OK.
NO >> Refer to DLK-395, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001115304

1.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL 1

1. Check voltage between Intelligent Key unit connector and ground.

Terminal			Condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M40	11	Ground	Ignition switch OFF	Battery voltage

Is the inspection result normal?

YES >> GO TO 2.
NO >> Check condition of harness and connector. If OK, repair or replace harness.

2.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL 2

1. Check voltage between Intelligent Key unit connector and ground.

Terminal			Condition		Voltage (V) (Approx.)
(+)		(–)			
Intelligent Key unit connector	Terminal				
M40	40	Ground	Press front door request switch (passenger side)	Anti-hijack operation	Battery voltage → 0 → Battery voltage
				Other than above	Battery voltage

Is the inspection result normal?

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

3.CHECK INTELLIGENT KEY UNIT GROUND CIRCUIT

Check continuity between Intelligent Key unit connector and ground.

Intelligent Key unit connector	Terminal	Ground	Continuity
M40	12		Exists

Is the inspection result normal?

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

4. CHECK PASSENGER SIDE ANTI-HIJACK RELAY GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect passenger side anti-hijack relay connector and Intelligent Key unit connector.
3. Check voltage between passenger side anti-hijack relay connector and ground.

Terminal			Condition	Voltage (V) (Approx.)
(+)		(–)		
Passenger side anti-hijack relay connector	Terminal			
M90	2	Ground	Ignition switch OFF	Battery voltage

4. Check continuity between passenger side anti-hijack relay connector and Intelligent Key unit connector.

Passenger side anti-hijack relay connector	Terminal	Intelligent Key unit connector	Terminal	Continuity
M90	1	M40	40	Exists

5. Check continuity between passenger side anti-hijack relay connector and ground.

Passenger side anti-hijack relay connector	Terminal	Ground	Continuity
M90	1		Does not exist

Is the inspection result normal?

YES >> GO TO 5.
NO >> Check condition of harness and connector. If OK, repair or replace harness.

5. CHECK ANTI-HIJACK RELAY

Check anti-hijack relay.
Refer to DLK-396, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace anti-hijack relay. Refer to DLK-288, "DOOR LOCK AND UNLOCK SWITCH : Component Parts Location".

PASSENGER SIDE : Component Inspection

INFOID:0000000001115305

1. CHECK ANTI-HIJACK RELAY

1. Turn ignition switch OFF.
2. Disconnect passenger side anti-hijack relay harness connector.
3. Check continuity passenger side anti-hijack relay terminals 3 and 4.

Passenger side anti-hijack relay connector	Terminal		Condition	Continuity
M90	3	4	Battery voltage direct current supply between terminals 1 and 2	Does not exist
			Other than above	Exists

Is the inspection result normal?

YES >> Passenger side anti-hijack relay is OK.
NO >> Replace passenger side anti-hijack relay. Refer to DLK-288, "DOOR LOCK AND UNLOCK SWITCH : Component Parts Location".

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INTELLIGENT KEY WARNING BUZZER

Description

INFOID:0000000001116071

Answers back and warns about an inappropriate operation.

Component Function Check

INFOID:0000000001116072

1.CHECK FUNCTION

With CONSULT-III

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

Is the inspection result normal?

YES >> Intelligent Key warning buzzer is OK.
NO >> Refer to DLK-397, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001116073

1.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL 1

Check voltage between Intelligent Key unit connector and ground.

Terminal			Warning buzzer operation condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M40	4	Ground	Sounding	0
			Not sounding	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.
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.

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

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace Intelligent Key warning buzzer power supply circuit.

3.CHECK HARNESS CONTINUITY

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

Intelligent Key warning buzzer connector	Terminal	Intelligent Key unit connector	Terminal	Continuity
E25	3	M40	4	Exists

3. Check continuity between Intelligent Key warning buzzer connector and ground.

Intelligent Key warning buzzer connector	Terminal	Ground	Continuity
E25	3		Does not exist

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness between Intelligent Key warning buzzer and Intelligent Key unit.

4.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-398, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace Intelligent Key warning buzzer. Refer to DLK-277, "Exploded View".

5.REPLACE INTELLIGENT KEY UNIT

Replace Intelligent Key unit.
Refer to DLK-552, "Exploded View".
NOTE:
Perform the system initialization when replacing Intelligent Key unit.
Refer to DLK-23, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

>> INSPECTION END

Component Inspection

INFOID:0000000001116074

1.CHECK INTELLIGENT KEY WARNING BUZZER

Connect battery power supply to Intelligent Key warning buzzer terminals 1 and 3, and check the operation.

Intelligent Key warning buzzer connector	Terminal		Operation
	(+)	(-)	Buzzer sounds
E25	1	3	

Is the inspection result normal?

YES >> Intelligent Key warning buzzer is OK. GO TO 2.
NO >> Replace Intelligent Key warning buzzer. Refer to DLK-277, "Exploded View".

2.REPLACE INTELLIGENT KEY UNIT

Replace Intelligent Key unit.
Refer to DLK-552, "Exploded View".
NOTE:
Perform the system initialization when replacing Intelligent Key unit.
Refer to DLK-23, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

>> INSPECTION END

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BUZZER (COMBINATION METER)

Description

INFOID:0000000001115727

Performs operation method guide and warning with buzzer.

Component Function Check

INFOID:0000000001115728

1.CHECK FUNCTION

With CONSULT-III

Check the operation with “INSIDE BUZZER” in the Active test.

Test item	Condition	
INSIDE BUZZER	:TAKE OUT	Take away warning chime sounds
	:KNOB	Ignition knob switch warning chime sounds
	:KEY	Key warning chime sounds

Is the inspection result normal?

Yes >> Warning buzzer in combination meter is OK.
No >> Refer to DLK-399, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001115729

1.CHECK BUZZER (COMBINATION METER) CIRCUIT

Refer to WCS-20, "Component Function Check".

Is the inspection result normal?

Yes >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
No >> Repair or replace buzzer (combination meter) circuit.

KEY WARNING LAMP

Description

INFOID:0000000001115730

Performs operation method guide and warning together with buzzer.

Component Function Check

INFOID:0000000001115731

1.CHECK FUNCTION

With CONSULT-III

Check the operation with “INDICATOR” in “Active Test”.

Test item	Condition	
INDICATOR	:BLUE ON	Key warning lamp (green) illuminates
	:RED ON	Key warning lamp (red) illuminates
	:BLUE IND	Key warning lamp (green) flashes
	:RED IND	Key warning lamp (red) flashes

Is the inspection result normal?

Yes >> Key warning lamp in combination meter is OK.
No >> Refer to DLK-400, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001115732

1.CHECK KEY WARNING LAMP CIRCUIT

Refer to WCS-20, "Component Function Check".

Is the inspection result normal?

Yes >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
No >> Repair or replace key warning lamp circuit.

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LOCK WARNING LAMP

Description

INFOID:0000000001115733

Performs operation method guide and warning together with buzzer.

Component Function Check

INFOID:0000000001115734

1.CHECK FUNCTION

With CONSULT-III

Check the operation with “INDICATOR” in “Active Test”.

Test item	Condition	
INDICATOR	:KNOB ON	Lock warning lamp illuminates
	:KNOB IND	Lock warning lamp flashes

Is the inspection result normal?

Yes >> Lock warning lamp in combination meter is OK.
No >> Refer to DLK-401, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001115735

1.CHECK LOCK WARNING LAMP CIRCUIT

Refer to WCS-20, "Component Function Check".

Is the inspection result normal?

Yes >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
No >> Repair or replace lock warning lamp circuit.

HAZARD WARNING LAMPS

Description

INFOID:0000000001115736

Performs answer-back for each operation with the number of blinks.

Component Function Check

INFOID:0000000001115737

1.CHECK FUNCTION

With CONSULT-III

Check hazard warning lamp “FLASHER” in “Active test”.

Is the inspection result normal?

YES >> Hazard warning lamp circuit is OK.
NO >> Refer to DLK-402, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001115738

1.CHECK HAZARD SWITCH CIRCUIT

Check hazard switch circuit.
Refer to EXL-72, "Component Function Check".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace hazard warning switch circuit.

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VEHICLE SPEED SIGNAL CIRCUIT

Description

INFOID:0000000001115718

Displays the vehicle speed signal received from combination meter as a numerical value (km/h).

Component Function Check

INFOID:0000000001115719

1.CHECK FUNCTION

Check that all doors are automatically locked at the vehicle speed of more than 12 km/h (7 MPH).

Is the inspection result normal?

YES >> Vehicle speed signal circuit is OK.
NO >> Refer to DLK-403, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001115720

1.CHECK VEHICLE SPEED SIGNAL CIRCUIT

Check vehicle speed signal “VEHICLE SPEED” in “Data Monitor”.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace vehicle speed signal circuit.

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INTELLIGENT KEY BATTERY

Description

INFOID:0000000001099239

The following functions are available when having and carrying electronic ID.
- Door lock and unlock
- Engine start

Remote control entry function and panic alarm function are available when operating the button.

Component Function Check

INFOID:0000000001099240

1.CHECK INTELLIGENT KEY FUNCTION

Does door lock and unlock operate when operating Intelligent Key switch?

Is the inspection result normal?

YES >> Intelligent Key is OK.
NO >> Refer to DLK-404, "Diagnosis Procedure".

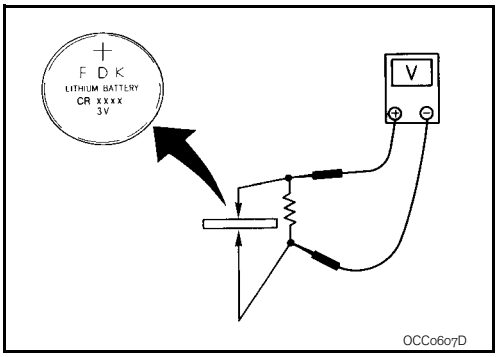
Diagnosis Procedure

INFOID:0000000001099241

1.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 the specification?

YES >> Replace Intelligent Key.
NO >> Replace Intelligent Key battery. Refer to DLK-551, "Exploded View".

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ECU DIAGNOSIS

INTELLIGENT KEY UNIT

Reference Value

INFOID:0000000001081541

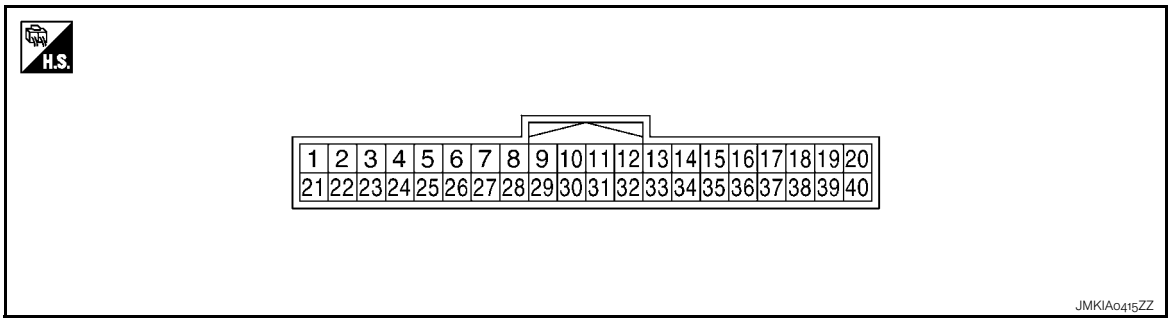
VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

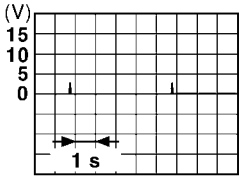
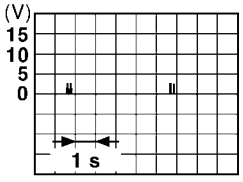
Monitor Item	Condition		Value/Status
PUSH SW	Ignition knob	Release	OFF
		Press	ON
KEY ON SW	Mechanical key	Removed	OFF
		Inserted	ON
DR REQ SW	Door request switch (driver)	Release	OFF
		Press	ON
AS REQ SW	Door request switch (passenger)	Release	OFF
		Press	ON
BD/TR REQ SW	Door request switch (back door)	Release	OFF
		Press	ON
IGN SW	Ignition switch	Other than ON position	OFF
		ON position	ON
ACC SW	Ignition switch	Other than ACC or ON position	OFF
		ACC or ON position	ON
STOP LAMP SW	Brake pedal	Press	OFF
		Release	ON
DOOR LOCK SIG	Lock button of Intelligent Key	Release	OFF
		Press	ON
DOOR UNLOCK SIG	Unlock button of Intelligent Key	Release	OFF
		Press	ON
DOOR SW DR	Door (driver side)	Close	OFF
		Open	ON
DOOR SW AS	Door (passenger side)	Close	OFF
		Open	ON
DOOR SW RR	Door (rear RH)	Close	OFF
		Open	ON
DOOR SW RL	Door (rear LH)	Close	OFF
		Open	ON
BACK DOOR SW	Back door	Close	OFF
		Open	ON
VEHICLE SPEED	While driving		Equivalent to speedometer reading

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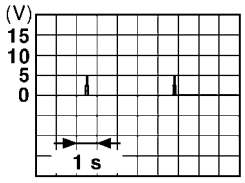
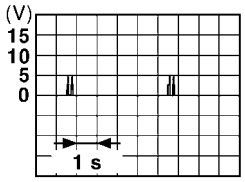
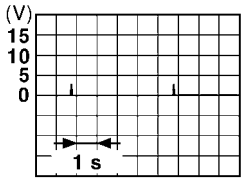
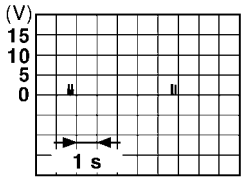
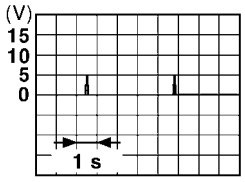
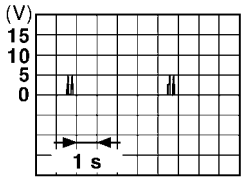
TERMINAL LAYOUT

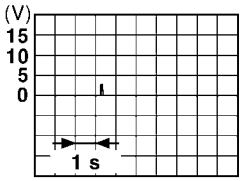
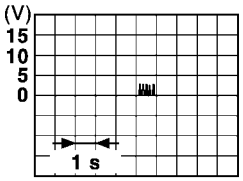
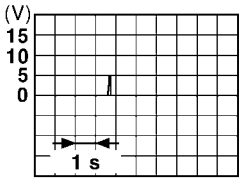
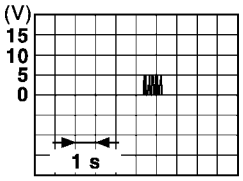
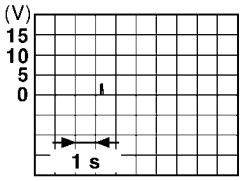
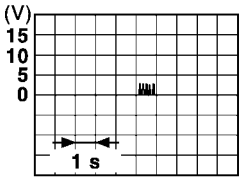


PHYSICAL VALUES

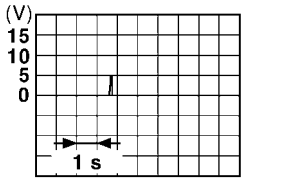
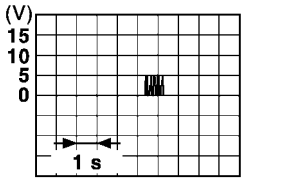
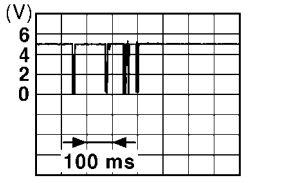
Terminal No. +	Terminal No. –	Wire color	Description: Signal name	Description: Input/ Output	Condition		Value [V] (Approx.)
1	Ground	LG	Steering lock unit power supply	Output	Ignition switch	OFF or ACC	5
						ON	0
2	Ground	L	CAN - H	Input/ Output	—		—
3	Ground	P	CAN - L	Input/ Output	—		—
4	Ground	LG	Intelligent Key warning buzzer	Output	Intelligent Key warning buzzer	Sounding	0
						Not sounding	Battery voltage
5	Ground	P	Front door request switch (driver side)	Input	Front door request switch (driver side)	ON (Pressed)	0
						OFF (Released)	5
6	Ground	W	Ignition switch power supply	Input	Ignition switch	OFF or ACC	0
						ON or START	Battery voltage
7	Ground	V	Key switch	Input	When ignition key is inserted into ignition key cylinder		Battery voltage
					When ignition key is not inserted into ignition key cylinder		0
11	Ground	V	Battery power supply	Input	Ignition switch OFF		Battery voltage
12	Ground	B	Ground	—	Ignition switch ON		0
13	Ground	Y	Inside key antenna (+) (rear seat)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0393ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0391ZZ

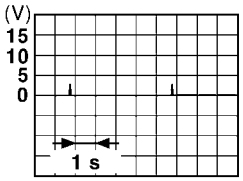
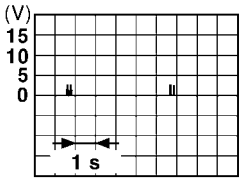
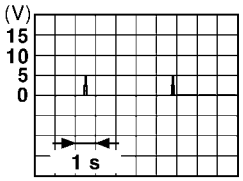
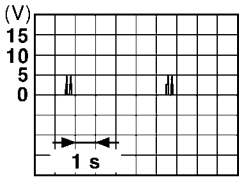
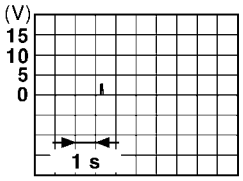
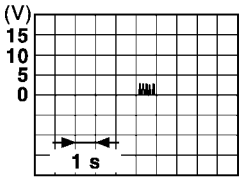
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Terminal No. +	Terminal No. –	Wire color	Description Signal name	Description Input/ Output	Condition		Value [V] (Approx.)
14	Ground	W	Inside key antenna (-) (rear seat)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0392ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0390ZZ
15	Ground	SB	Inside key antenna (+) (console)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0393ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0391ZZ
16	Ground	BR	Inside key antenna (-) (console)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0392ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0390ZZ

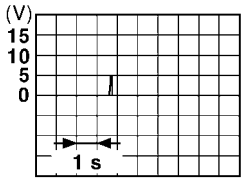
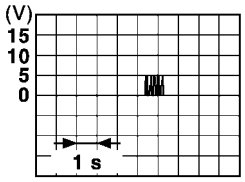
Terminal No. +	Terminal No. –	Wire color	Description Signal name	Description Input/ Output	Condition		Value [V] (Approx.)
17	Ground	SB	Outside key antenna (+) (rear bumper)	Output	When the back door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0397ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0514ZZ
18	Ground	V	Outside key antenna (-) (rear bumper)	Output	When the back door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0395ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0515ZZ
19	Ground	L	Outside key antenna (+) (driver side)	Output	When the front door request switch (driver side) is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0397ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0514ZZ

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Terminal No. +	Terminal No. –	Wire color	Description Signal name	Description Input/ Output	Condition		Value [V] (Approx.)
20	Ground	BR	Outside key antenna (-) (driver side)	Output	When the front door request switch (driver side) is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0395ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0515ZZ
22*1	Ground	W	Key lock solenoid	Output	Key lock solenoid	LOCK*2	Battery voltage
						UNLOCK*2	0
25	Ground	BR	Front door request switch (passenger side)	Input	Front door request switch (passenger side)	ON (Pressed)	0
						OFF (Released)	5
27	Ground	L	Ignition knob switch	Input	Ignition switch OFF	When ignition knob switch is pressed	Battery voltage
						When ignition knob switch is released	0
29	Ground	GR	Back door request switch	Input	Back door request switch	ON (Pressed)	0
						OFF (Released)	5
31	Ground	GR	Steering lock unit ground	—	—	—	0
32	Ground	P	Steering lock unit communication	Input/ Output	Steering lock	LOCK status	5
						LOCK or UNLOCK	 JMKIA0433ZZ

Terminal No.		Wire color	Description		Condition		Value [V] (Approx.)
+	–		Signal name	Input/ Output			
33	Ground	O	Inside key antenna (+) (instrument center)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0393ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0391ZZ
34	Ground	G	Inside key antenna (-) (instrument center)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0392ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0390ZZ
37	Ground	L	Outside key antenna (+) (passenger side)	Output	When the front door request switch (passenger side) is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0397ZZ
						When Intelligent Key is in the antenna detection area	 JMKIA0514ZZ

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Terminal No.		Wire color	Description		Condition		Value [V] (Approx.)
+	–		Signal name	Input/ Output			
38	Ground	O	Outside key antenna (-) (passenger side)	Output	When the front door request switch (passenger side) is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0395ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0515ZZ
40	Ground	Y	Passenger side anti-hijack relay	Input	Press front door request switch (passenger side)	Anti-hijack operation	Battery voltage → 0 → Battery voltage
						Other than above	Battery voltage

*1: Only for MT model.

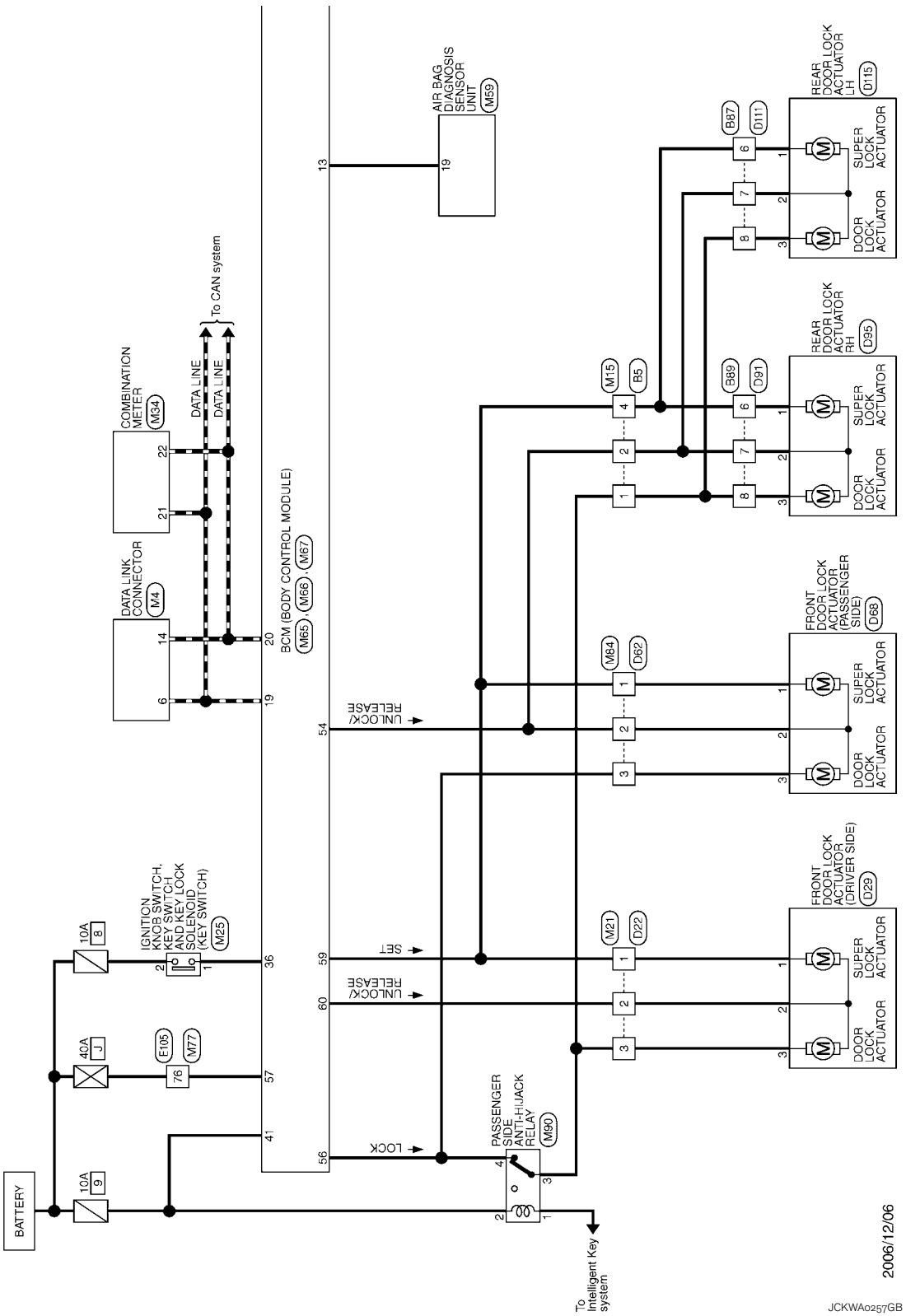
*2: Key interlock operation is only for M/T model for operation condition, refer to SEC-9, "System Description".

Wiring Diagram - SUPER LOCK CONTROL SYSTEM -

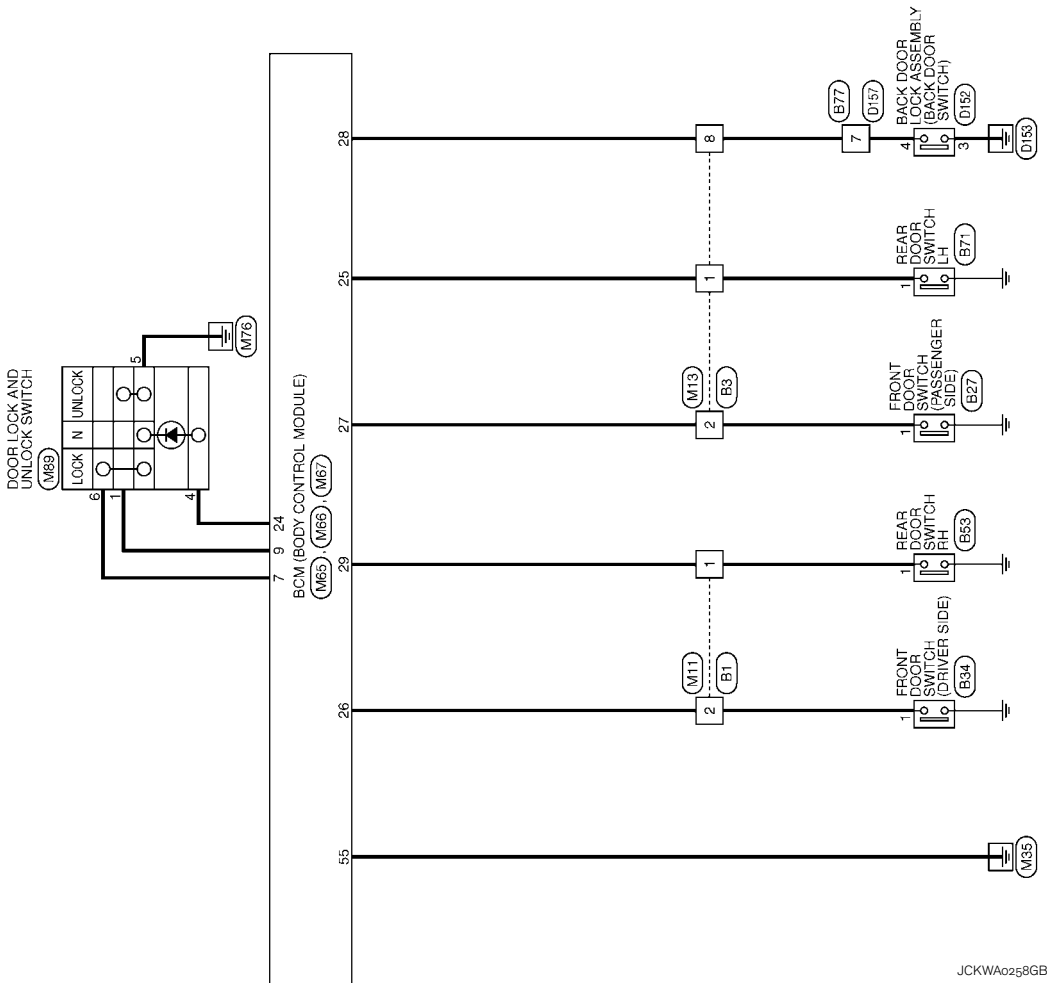
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SUPER LOCK SYSTEM (WITH INTELLIGENT KEY)



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SUPER LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

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 [Specification]
1	LG	-
2	R/W	-[RHD models]

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

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 [Specification]
1	GR	-
2	BR	-[RHD models]
8	G	-

Connector No.	B5
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

H.S.

1	2	3	4	5	6	7	8

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	-
2	O	-
4	BR	-

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	R/W	-

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	TH08FW

H.S.

4	3	2	1
8	7	6	5

Terminal No.	Color of Wire	Signal Name [Specification]
7	G	-

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SUPER LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	B87
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	-
7	O	-
8	SB	-

Connector No.	B89
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	-
7	O	-
8	SB	-

Connector No.	D22
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	SB	-

Connector No.	D29
Connector Name	FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
Connector Type	FEA04FB-FHA2

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	SB	-

Connector No.	D62
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	Y	-[With Intelligent Key]

Connector No.	D68
Connector Name	FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Type	FEA04FB-FHA2

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	Y	-[With Intelligent Key]

Connector No.	D91
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	-
7	O	-
8	SB	-

Connector No.	D95
Connector Name	REAR DOOR LOCK ACTUATOR RH
Connector Type	FEA04FB-FHA2

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	SB	-

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SUPER LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	D111
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	-
7	O	-
8	SB	-

Connector No.	D115
Connector Name	REAR DOOR LOCK ACTUATOR LH
Connector Type	FEA04FB-FHA2

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	SB	-

Connector No.	D152
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	GINCH 4930I EV 4M9

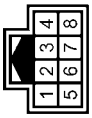
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
3	B	-
4	G	-

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	G	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-NS16-TM4

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
76	Y	-

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

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH24FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	R	-[RHD models]

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH24FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	BR	-[RHD models]
8	G	-

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SUPER LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	–
2	O	–
4	BR	–

Connector No.	M21
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	–
2	GR	–
3	SB	–

Connector No.	M25
Connector Name	IGNITION KNOB SWITCH, KEY SWITCH AND KEY LOCK SOLENOID
Connector Type	TK06MGY

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	Y	–

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW

Terminal No.	Color of Wire	Signal Name [Specification]
21	L	CAN-H
22	P	CAN-L

Connector No.	M59
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	TK28FY-EX-SC

Terminal No.	Color of Wire	Signal Name [Specification]
19	R	UNLOCK

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AAB40FB

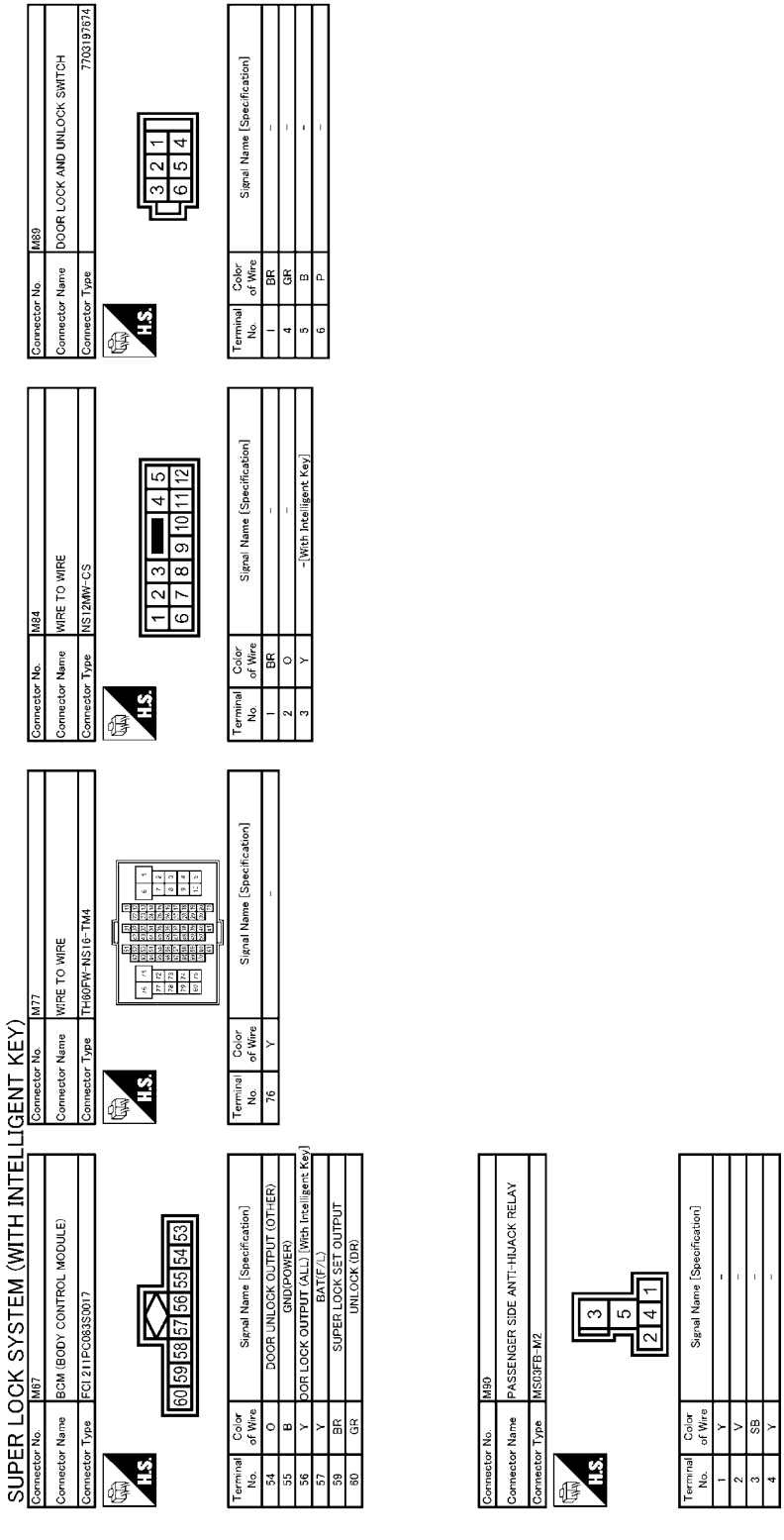
Terminal No.	Color of Wire	Signal Name [Specification]
7	P	LOCK/UNLOCK SW (LOCK)
9	BR	LOCK/UNLOCK SW (UNLOCK)
13	R	SHOCK DETECT SIG
19	L	CAN-H
20	P	CAN-L
24	GR	DOOR LOCK STATUS IND
25	GR	DOOR SW (RL)
26	R	DOOR SW (DR)
27	BR	DOOR SW (AS)
28	G	DOOR SW (BACK)
29	LG	DOOR SW (RR)

36	V	KEY SW

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FCI 211PC122S1017

Terminal No.	Color of Wire	Signal Name [Specification]
41	V	BATTFUSE)

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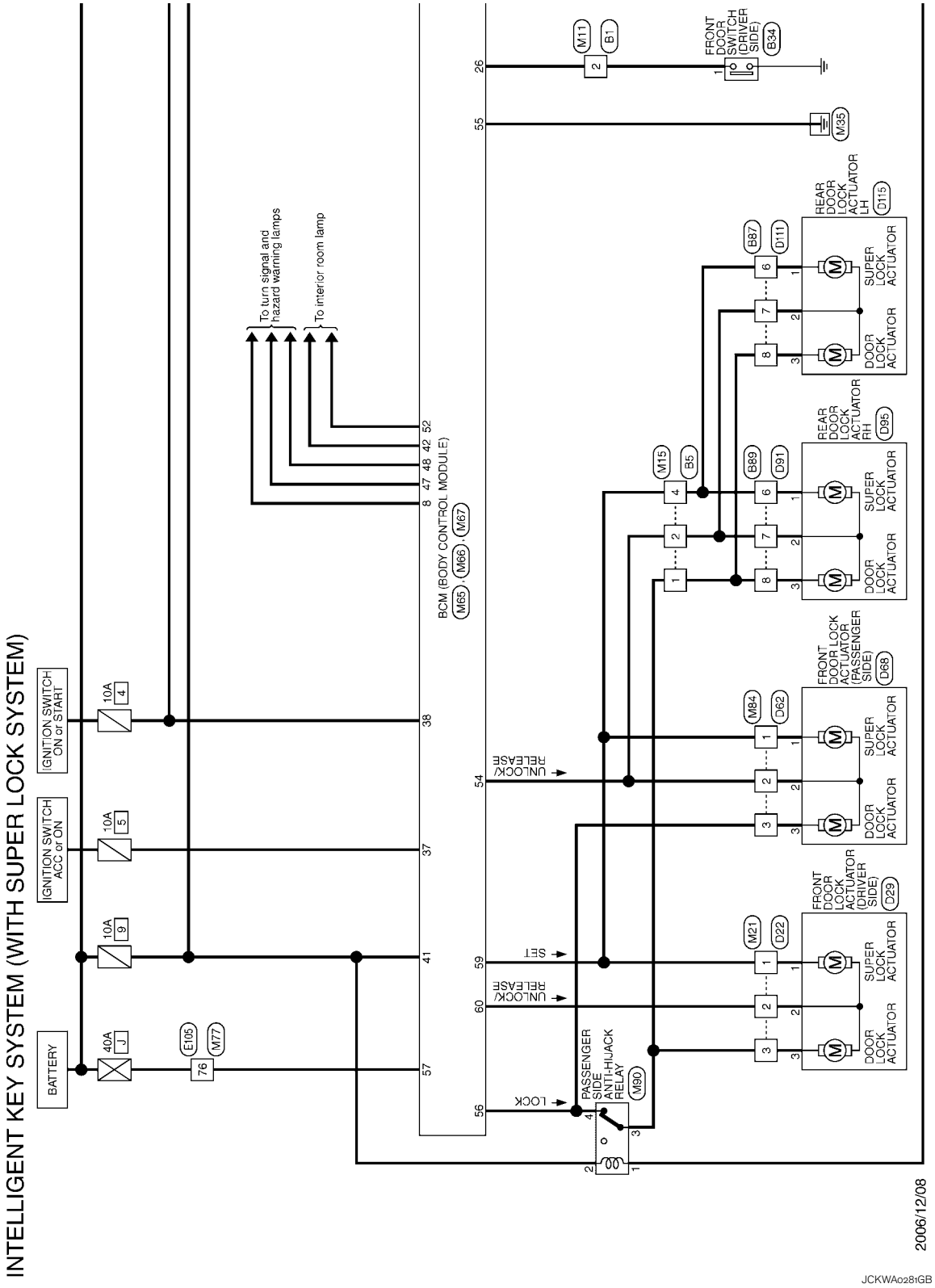


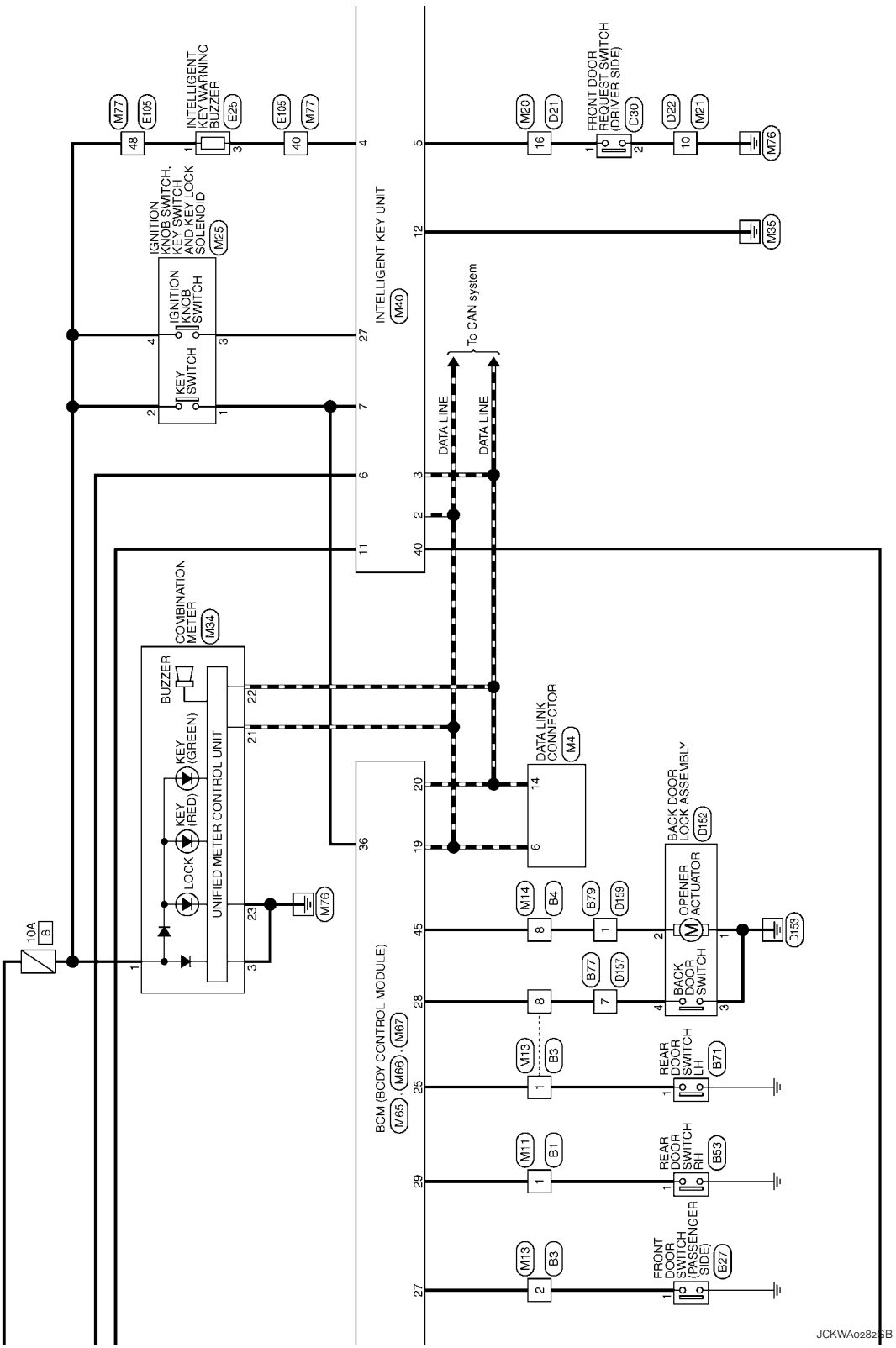
JCKWA0263GB

Wiring Diagram - INTELLIGENT KEY CONTROL SYSTEM -

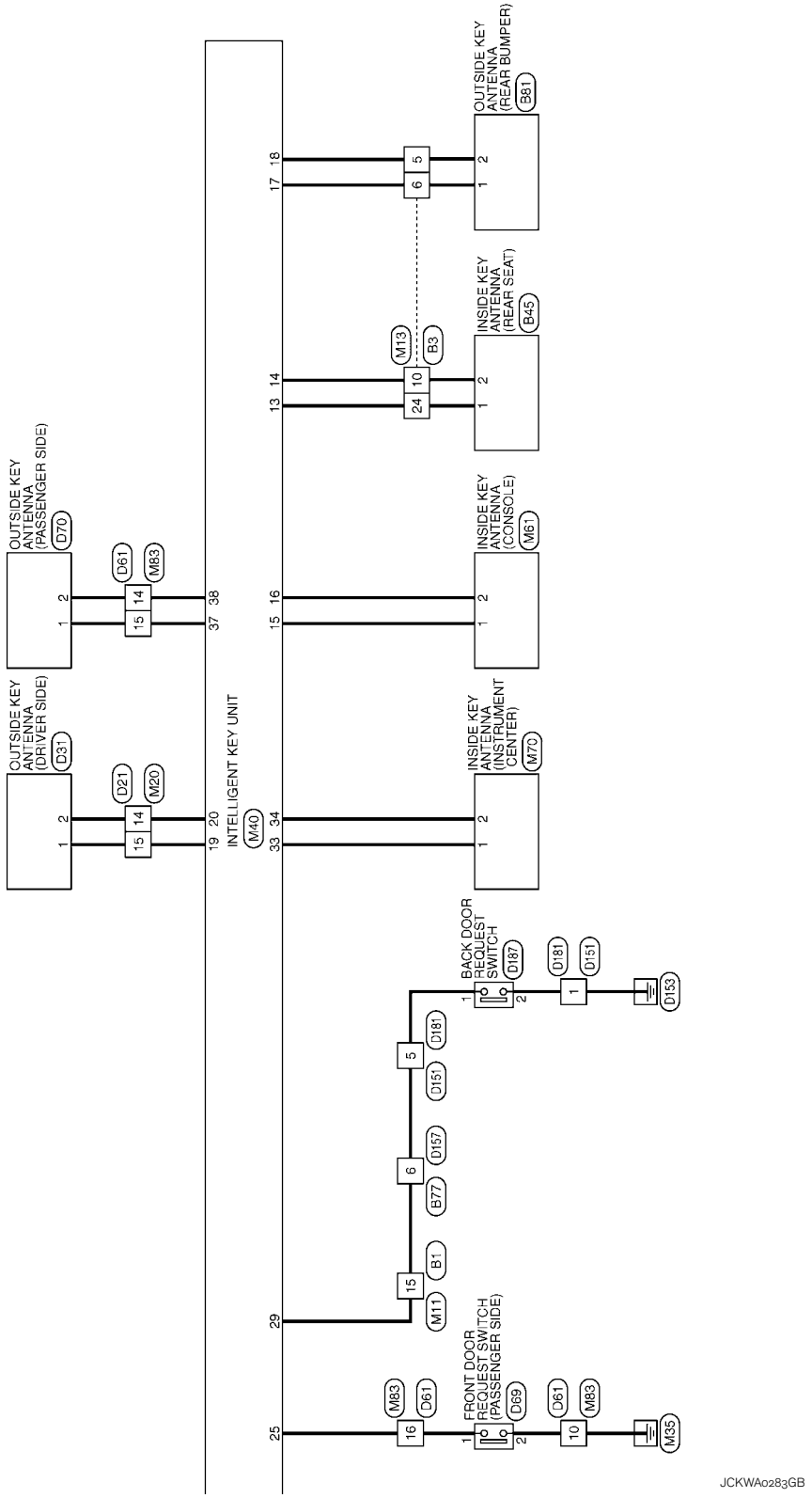
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INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)
BATTERY
IGNITION SWITCH ON or START
IGNITION SWITCH ACC or ON
40A J
10A 4
10A 5
10A 9
E105
M77
76
BCM (BODY CONTROL MODULE)
M65 M66 M67
To turn signal and hazard warning lamps
To interior room lamp
PASSENGER SIDE ANTI-HIJACK RELAY M90
LOCK
UNLOCK RELEASE
SET
UNLOCK RELEASE
FRONT DOOR SWITCH (DRIVER SIDE) B34
FRONT DOOR LOCK ACTUATOR (DRIVER SIDE) D29
FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE) D68
REAR DOOR LOCK ACTUATOR RH D95
REAR DOOR LOCK ACTUATOR LH D115
DOOR LOCK ACTUATOR
SUPER LOCK ACTUATOR
2006/12/08
JCKWA0281GB



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OUTSIDE KEY ANTENNA (REAR BUMPER)
B81
INSIDE KEY ANTENNA (REAR SEAT)
B45
INSIDE KEY ANTENNA (CONSOLE)
M61
INSIDE KEY ANTENNA (INSTRUMENT CENTER)
M70
OUTSIDE KEY ANTENNA (PASSENGER SIDE)
D70
OUTSIDE KEY ANTENNA (DRIVER SIDE)
D31
INTELLIGENT KEY UNIT
M40
BACK DOOR REQUEST SWITCH
D187
FRONT DOOR REQUEST SWITCH (PASSENGER SIDE)
D69
JCKWA0283GB

INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

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 [Specification]
1	LG	-
2	R/W	-[RHD models]
15	GR	-

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

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 [Specification]
1	GR	-
2	R/W	-[LHD models]
2	BR	-[RHD models]
5	V	-
6	SB	-
8	G	-
10	W/R	-
24	Y	-

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

H.S.

1	2	3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name [Specification]
8	GR	-

Connector No.	B5
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

H.S.

1	2	3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	-
2	O	-
4	BR	-

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	R/W	-

Connector No.	B45
Connector Name	INSIDE KEY ANTENNA (REAR SEAT)
Connector Type	RK02FGY

H.S.

1	2

Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	W/R	-

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-

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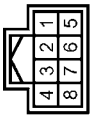
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INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2		
3		

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	TH08FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	GR	-
7	G	-
8		

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	M02FW-LC

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2		

Connector No.	B81
Connector Name	OUTSIDE KEY ANTENNA (REAR BUMPER)
Connector Type	RK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	-
2	V	-

Connector No.	B87
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	-
7	O	-
8	SB	-

Connector No.	B89
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	-
7	O	-
8	SB	-

Connector No.	D21
Connector Name	WIRE TO WIRE
Connector Type	TK16FW



Terminal No.	Color of Wire	Signal Name [Specification]
14	BR/W	-
15	L/Y	-
16	P	-

Connector No.	D22
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	SB	-
10	B	-

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INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

Connector No.	D29
Connector Name	FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
Connector Type	FEA04FB-FHA2

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	SB	-

Connector No.	D30
Connector Name	FRONT DOOR REQUEST SWITCH (DRIVER SIDE)
Connector Type	RK02ML-B

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-
2	B	-

Connector No.	D31
Connector Name	OUTSIDE KEY ANTENNA (DRIVER SIDE)
Connector Type	RK02MGY

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	L/Y	-
2	BR/W	-

Connector No.	D61
Connector Name	WIRE TO WIRE
Connector Type	TK16FW

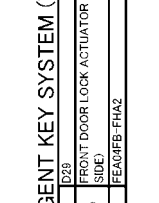
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
10	B	-
14	O	-
15	L	-
16	B/R	-

Connector No.	D62
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	Y	-[With Intelligent Key]

Connector No.	D68
Connector Name	FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Type	FEA04FB-FHA2

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	Y	-[With Intelligent Key]

Connector No.	D69
Connector Name	FRONT DOOR REQUEST SWITCH (PASSENGER SIDE)
Connector Type	RK02ML-B

H.S.

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

Connector No.	D70
Connector Name	OUTSIDE KEY ANTENNA (PASSENGER SIDE)
Connector Type	RK02MGY

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	O	-

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INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

Connector No.	D91
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	–
7	O	–
8	SB	–

Connector No.	D95
Connector Name	REAR DOOR LOCK ACTUATOR RH
Connector Type	FEA04FB-FHA2

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	–
2	O	–
3	SB	–

Connector No.	D111
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	–
7	O	–
8	SB	–

Connector No.	D115
Connector Name	REAR DOOR LOCK ACTUATOR LH
Connector Type	FEA04FB-FHA2

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	–
2	O	–
3	SB	–

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	–
5	GR	–

Connector No.	D152
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	CINCH 49309-EV-4M9

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	–
2	GR	–
3	B	–
4	G	–

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
6	GR	–
7	G	–

Connector No.	D159
Connector Name	WIRE TO WIRE
Connector Type	M02MW-LC

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	–

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INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	TH08FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
5	GR	-

Connector No.	D187
Connector Name	BACK DOOR REQUEST SWITCH
Connector Type	RK02FGY

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	B	-

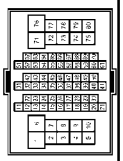
Connector No.	E25
Connector Name	INTELLIGENT KEY WARNING BUZZER
Connector Type	RK03FBR-DGY

H.S.

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

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-NS16-TM4

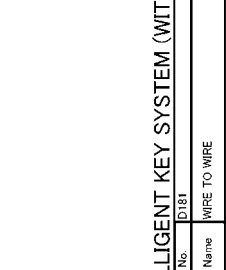
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
40	LG/B	-
48	Y	-
76	Y	-

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

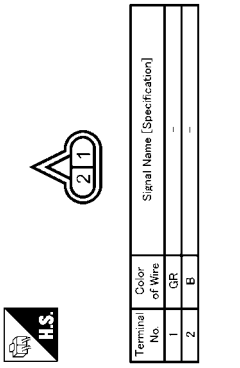
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH24FW

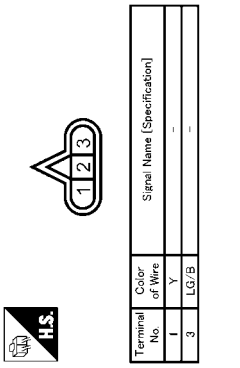
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	R	-[RHD models]
15	GR	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH24FW

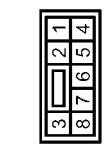
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	BR	-[RHD models]
5	V	-
6	SB	-
8	G	-
10	W	-
24	Y	-

Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
8	GR	-

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INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	–
2	O	–
4	BR	–

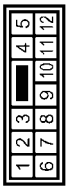
Connector No.	M20
Connector Name	WIRE TO WIRE
Connector Type	TK16MW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
14	BR	–
15	L	–
16	P	–

Connector No.	M21
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	–
2	GR	–
3	SB	–
10	B	–

Connector No.	M25
Connector Name	IGNITION KNOB SWITCH, KEY SWITCH AND KEY LOCK SOLENOID
Connector Type	TK06MGY

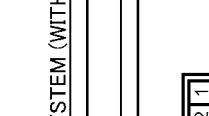
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	Y	–
3	L	–
4	Y	–

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW

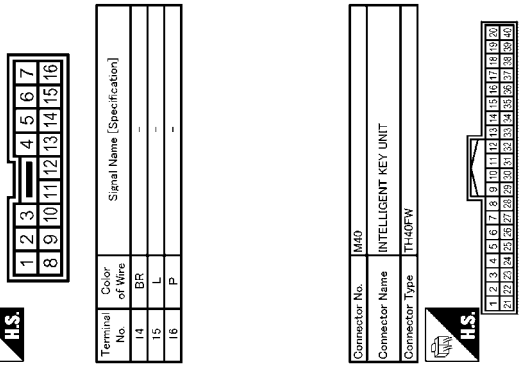
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	BAT
3	B	GND
21	L	CAN-H
22	P	CAN-L
23	B	GND

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	CAN-H
3	P	CAN-L
4	LG	BUZZER
5	P	REQUEST SW (DR)
6	W	IGN SW
7	V	KEY SW
11	V	BATT+
12	B	GND
13	Y	REAR SEAT (+)
14	W	REAR SEAT (–)
15	SB	CONSOLE (+)
16	BR	CONSOLE (–)
17	SB	REAR BUMPER (+)
18	V	REAR BUMPER (–)
19	L	DRIVER DOOR (+)
20	BR	DRIVER DOOR (–)
25	BR	REQUEST SW (AS)
27	L	KNOB SW
29	GR	REQUEST SW (BD)
33	O	INSTRUMENT (+)
34	G	INSTRUMENT (–)
37	L	PASSENGER DOOR (+)
38	O	PASSENGER DOOR (–)
40	Y	AS ANTI-HIJACK

Connector No.	M61
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Type	RK02FGY

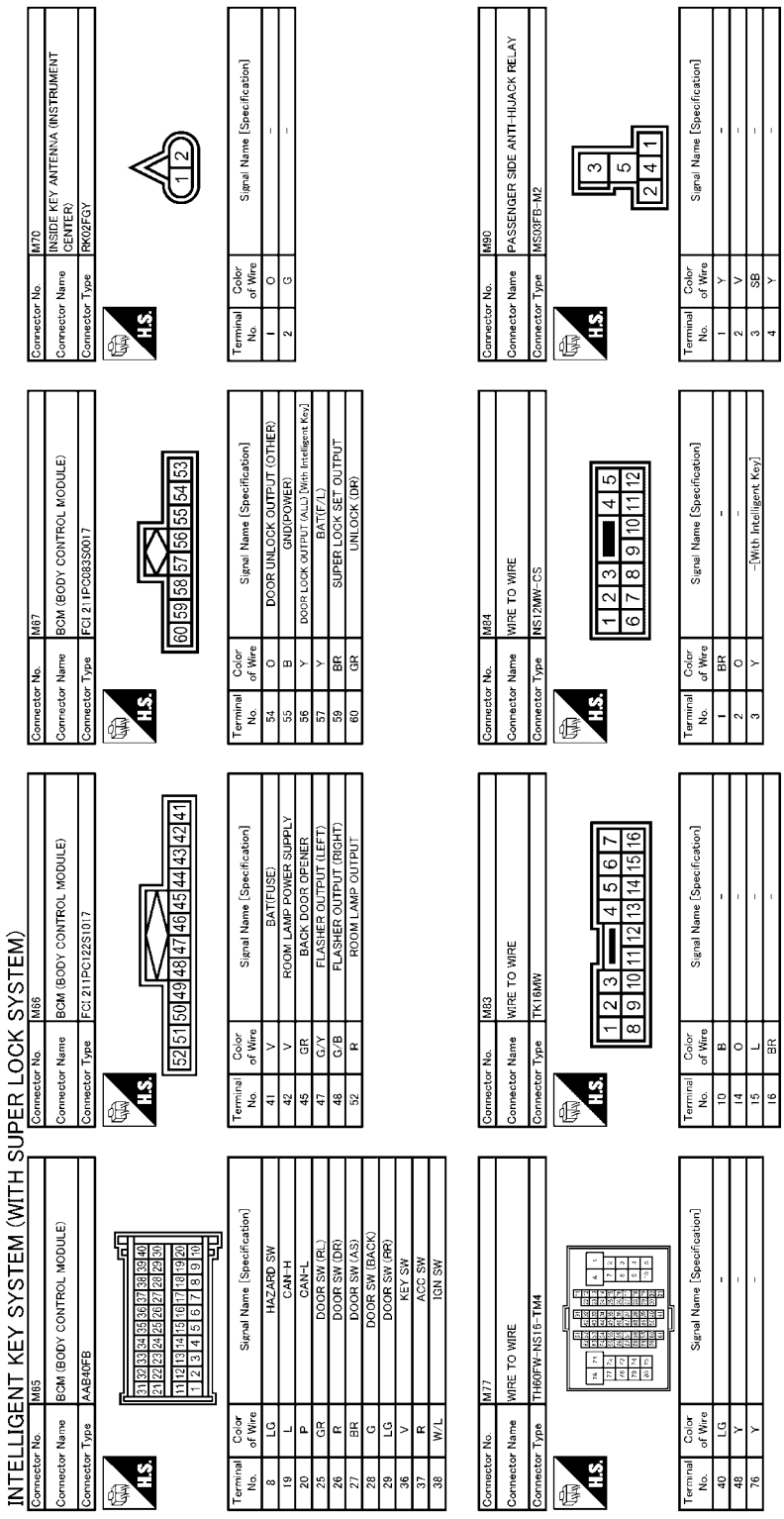
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	–
2	BR	–

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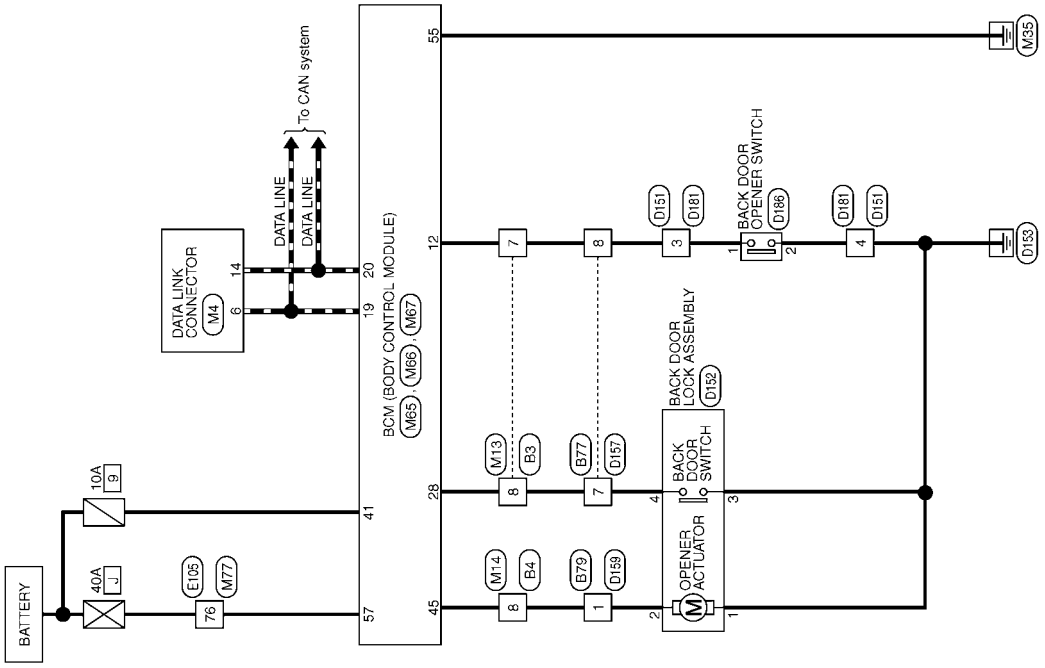
JCKWA0290GB

Wiring Diagram - BACK DOOR OPENER CONTROL SYSTEM -

INFOID:0000000001125426

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BACK DOOR OPENER SYSTEM



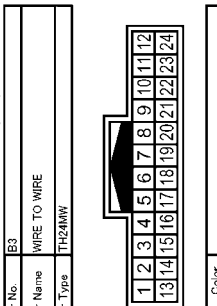
2006/12/08

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BACK DOOR OPENER SYSTEM

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

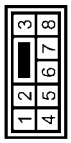
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	P	-
8	G	-

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

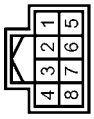
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
8	GR	-

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	TH08FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	G	-
8	P	-

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	M02FW-LC

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
3	P	-
4	B	-

Connector No.	D152
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	CINCH 48309 EV 4M9

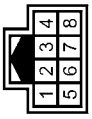
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	GR	-
3	B	-
4	G	-

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	G	-
8	P	-

Connector No.	D159
Connector Name	WIRE TO WIRE
Connector Type	M02MW-LC

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-

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BACK DOOR OPENER SYSTEM

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	TH08FW



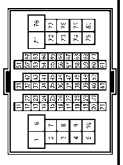
Terminal No.	Color of Wire	Signal Name [Specification]
3	P	–
4	B	–

Connector No.	D186
Connector Name	BACK DOOR OPENER SWITCH
Connector Type	RK02MGY



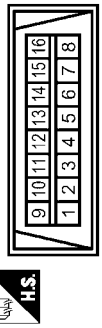
Terminal No.	Color of Wire	Signal Name [Specification]
1	P	–
2	B	–

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-NS16-TM4



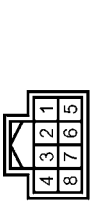
Terminal No.	Color of Wire	Signal Name [Specification]
76	Y	–

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



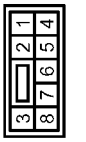
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	–
14	P	–

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH24FW



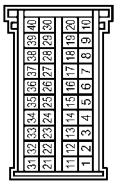
Terminal No.	Color of Wire	Signal Name [Specification]
7	P	–
8	G	–

Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS



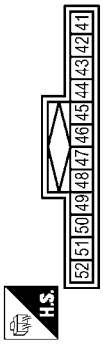
Terminal No.	Color of Wire	Signal Name [Specification]
8	GR	–

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AAB40FB



Terminal No.	Color of Wire	Signal Name [Specification]
12	P	TRUNK/BACK DOOR OPEN SW
19	L	CAN-H
20	P	CAN-L
28	G	DOOR SW (BACK)

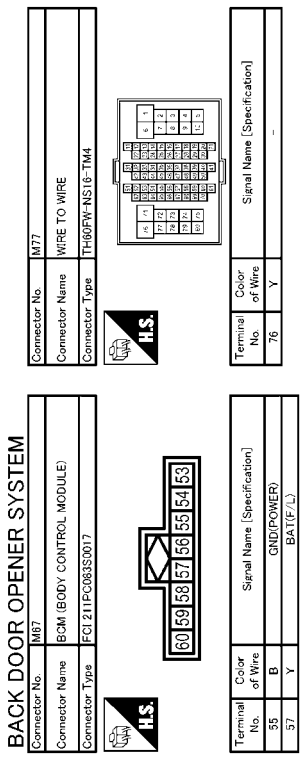
Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FCI 211PC122S1017



Terminal No.	Color of Wire	Signal Name [Specification]
41	V	BAT(FUSE)
45	GR	BACK DOOR OPENER

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Fail Safe

INFOID:0000000001081545

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Display contents of CONSULT-III	Fail-safe	Cancellation
B2013: STRG COMM 1	• Inhibits steering look unlocking	Erase DTC
B2552: INTELLIGENT KEY	• Inhibits steering look unlocking • Inhibits engine cranking (BCM) • Fuel cut (ECM)	Erase DTC
B2590: NATS MALFUNCTION	• Inhibits steering look unlocking • Inhibits engine cranking (BCM) • Fuel cut (ECM)	Erase DTC

DTC Inspection Priority Chart

INFOID:0000000001081546

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

Priority	DTC
1	• U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN) • B2552: INTELIGENT KEY
2	• B2013: STRG COMM 1 • B2590: NATS MALFUNCTION

DTC Index

INFOID:0000000001081547

NOTE:
Details of time display
- CRNT: Displays when there is a malfunction now or after returning to the normal condition until turning ignition switch OFF → ON again.
- 1 - 39: Displayed if any previous malfunction is present when current condition is normal. It increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The counter remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch OFF → ON after returning to the normal condition if the malfunction is detected again.

CONSULT display	Detection condition	Fail-safe	Diagnosis
No DTC is detected. further testing may be required.	—	—	—
U1000: CAN COMM CIRCUIT	Intelligent Key unit cannot receive CAN communication signal continuously for 2 seconds or more.	—	Check CAN communication system. Refer to DLK-68
U1010: CONTROL UNIT (CAN)	Intelligent Key unit detects internal CAN communication circuit malfunction.	—	Replace Intelligent Key unit.
B2013: STRG COMM 1	The ID verification result between Intelligent key unit and steering lock unit are NG. Or Intelligent Key unit cannot communicate with steering lock unit.	×	Perform steering lock unit ID registration with CONSULT-III
B2552: INTELLIGENT KEY	Intelligent Key unit internal malfunction.	×	Replace Intelligent Key unit.
B2590: NATS MALFUNCTION	The ID verification result between Intelligent key unit and BCM are NG. Or Intelligent Key unit cannot communicate with BCM.	×	Check NATS Refer to SEC-43

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000001097293

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition		Value/Status
ACC ON SW	Ignition switch OFF		OFF
	Ignition switch ACC or ON		ON
AIR COND SW	A/C switch OFF		OFF
	A/C switch ON		ON
AUT LIGHT SYS	Outside of the room is dark		OFF
	Outside of the room is bright		ON
AUTO LIGHT SW	Lighting switch OFF		OFF
	Lighting switch AUTO		ON
BACK DOOR SW	Back door closed		OFF
	Back door opened		ON
BATTERY VOLT **NOTE:** Diesel engine models only	Ignition switch ON		Approximately the same as power supply voltage
BUCKLE SW	Driver's seat belt unfastened		OFF
	Driver's seat belt fastened		ON
CDL LOCK SW	Door lock/unlock switch does not operate		OFF
	Press door lock/unlock switch to the LOCK side		ON
CDL UNLOCK SW	Door lock/unlock switch does not operate		OFF
	Press door lock/unlock switch to the UNLOCK side		ON
DOOR SW-AS	Passenger door closed		OFF
	Passenger door opened		ON
DOOR SW-DR	Driver door closed		OFF
	Driver door opened		ON
DOOR SW-RL	Rear LH door closed		OFF
	Rear LH door opened		ON
DOOR SW-RR	Rear RH door closed		OFF
	Rear RH door opened		ON
ELEC PWR CUT **NOTE:** Diesel engine models only	Engine running	Fan switch ON (when engine coolant is cool) **NOTE:** Depending on the ambient temperature, battery voltage, etc.	OFF
		The current status maintained with the signal from ECM received.	FREEZ
		• Fan switch OFF • Fan switch ON after engine warming UP **NOTE:** Depending on the engine coolant temperature, ambient temperature, battery voltage, etc.	INHBT

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Monitor Item	Condition	Value/Status
ENG COOLNT T **NOTE:** Diesel engine models only	Engine running	Approximately the same as water temperature gauge reading
ENGINE RPM **NOTE:** Diesel engine models only	Engine running	Approximately the same as tachometer reading
ENGINE RUN	Engine stopped	OFF
	Engine running	ON
ENGINE STATUS **NOTE:** Diesel engine models only	Engine stopped	STOP
	While the engine stalls	STALL
	Engine running	RUN
	At engine cranking	CRA
FAN ON SIG	Fan switch OFF	OFF
	Fan switch ON	ON
FR FOG SW	Front fog lamp switch OFF	OFF
	Front fog lamp switch ON	ON
FR WASHER SW	Front washer switch OFF	OFF
	Front washer switch ON	ON
FR WIPER LOW	Front wiper switch OFF	OFF
	Front wiper switch LO	ON
FR WIPER HI	Front wiper switch OFF	OFF
	Front wiper switch HI	ON
FR WIPER INT	Front wiper switch OFF	OFF
	Front wiper switch INT	ON
FR WIPER STOP	Any position other than front wiper stop position	OFF
	Front wiper stop position	ON
HAZARD SW	When hazard switch is not pressed	OFF
	When hazard switch is pressed	ON
HEAD LAMP SW 1	Lighting switch OFF	OFF
	Lighting switch 2ND	ON
HEAD LAMP SW 2	Lighting switch OFF	OFF
	Lighting switch 2ND	ON
HI BEAM SW	Lighting switch OFF	OFF
	Lighting switch HI	ON
HOOD SW	Close the hood **NOTE:** Vehicles without theft warning system are OFF-fixed	OFF
	Open the hood	ON
H/L WASH SW	**NOTE:** The item is indicated, but not monitored	OFF
IGN ON SW	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
IGN SW CAN	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	1 - 7

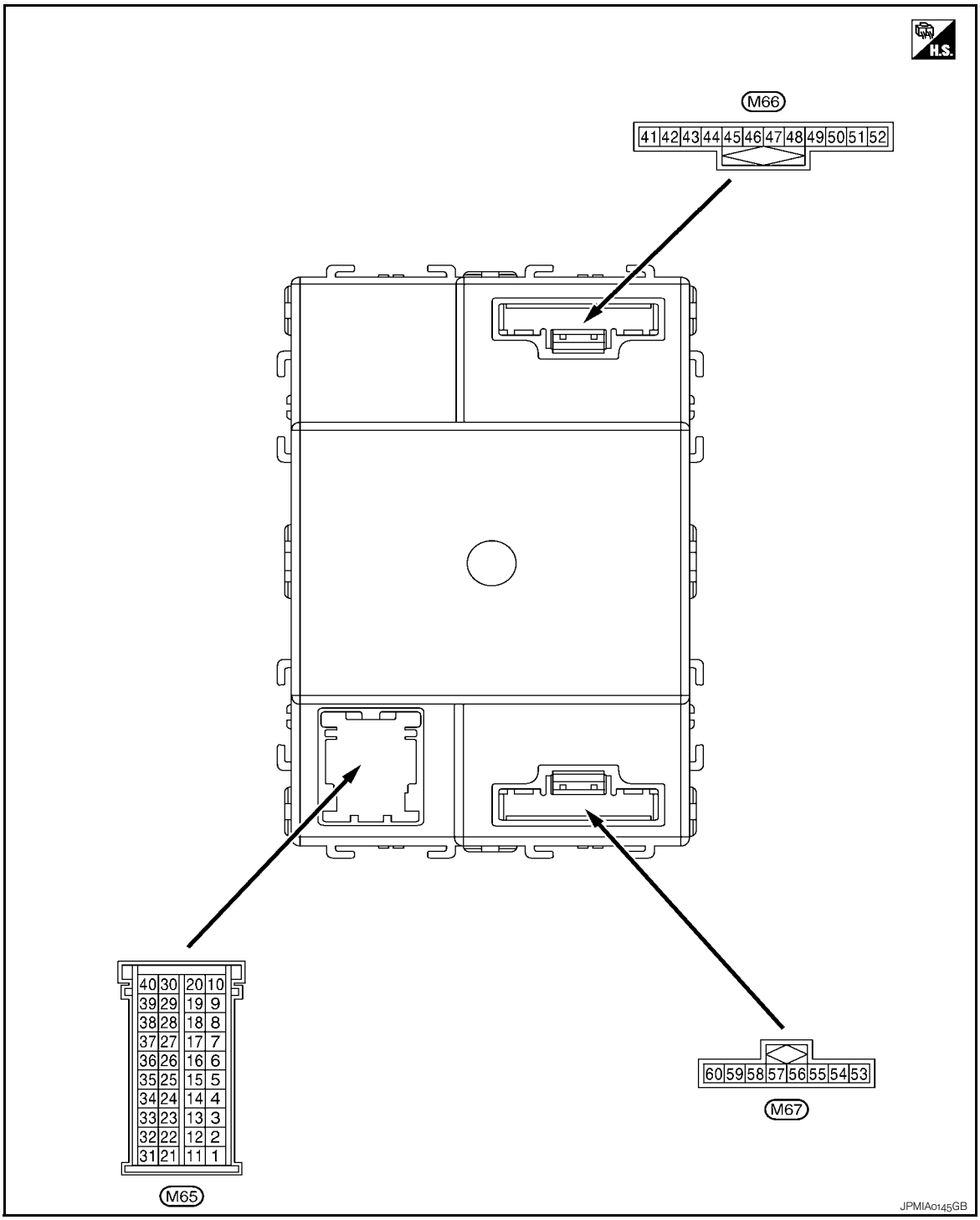
Monitor Item	Condition	Value/Status
I-KEY LOCK	LOCK button of Intelligent Key is not pressed	OFF
	LOCK button of Intelligent Key is pressed	ON
I-KEY UNLOCK	UNLOCK button of Intelligent Key is not pressed	OFF
	UNLOCK button of Intelligent Key is pressed	ON
KEY ON SW	Mechanical key is removed from key cylinder	OFF
	Mechanical key is inserted to key cylinder	ON
KEYLESS LOCK	LOCK button of key fob is not pressed	OFF
	LOCK button of key fob is pressed	ON
KEYLESS UNLOCK	UNLOCK button of key fob is not pressed	OFF
	UNLOCK button of key fob is pressed	ON
LIT-SEN FAIL	Light & rain sensor is in normal condition	OK
	Light & rain sensor is with internal error	NOTOK
OIL PRESS SW	• Ignition switch OFF or ACC • Engine running	OFF
	Ignition switch ON	ON
OUT SIDE TEMP **NOTE:** Diesel engine models	Ignition switch ON	Approximately the same as outside air temperature
PASSING SW	Other than lighting switch PASS	OFF
	Lighting switch PASS	ON
PUSH SW	Return to ignition switch to LOCK position	OFF
	Press ignition switch	ON
REAR DEF SW	Rear window defogger switch OFF	OFF
	Rear window defogger switch ON	ON
RKE LOCK AND UN-LOCK	**NOTE:** The item is indicated, but not monitored	OFF
		ON
RR FOG SW	Rear fog lamp switch OFF	OFF
	Rear fog lamp switch ON	ON
RR WASHER SW	Rear washer switch OFF	OFF
	Rear washer switch ON	ON
RR WIPER INT	Rear wiper switch OFF	OFF
	Rear wiper switch INT	ON
RR WIPER ON	Rear wiper switch OFF	OFF
	Rear wiper switch ON	ON
RR WIPER STOP	Rear wiper stop position	OFF
	Other than rear wiper stop position	ON
SHOCK SENSOR	Ignition switch ON	NOMAL
	After the reception of air bag deployment signal from air bag diagnosis sensor unit	OFF
	During the reception of air bag deployment signal from air bag diagnosis sensor unit	ON
TAIL LAMP SW	Lighting switch OFF	OFF
	Lighting switch 1ST	ON
TRNK OPNR SW	When back door opener switch is not pressed	OFF
	When back door opener switch is pressed	ON

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Monitor Item	Condition	Value/Status
TURN SIGNAL L	Turn signal switch OFF	OFF
	Turn signal switch LH	ON
TURN SIGNAL R	Turn signal switch OFF	OFF
	Turn signal switch RH	ON
UNLOCK WITH DR	**NOTE:** The item is indicated, but not monitored	OFF
		ON
UNLOCK SHOCK	Other than the following	OFF
	During the unlock operation interlocked with air bag	ON
VEHICLE SPEED	While driving	Equivalent to speedometer reading

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TERMINAL LAYOUT

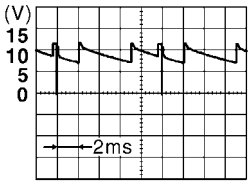
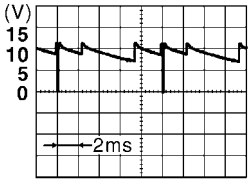
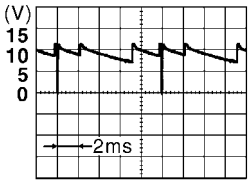
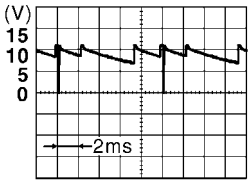


PHYSICAL VALUES

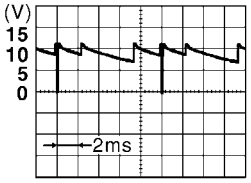
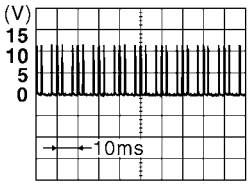
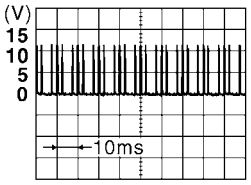
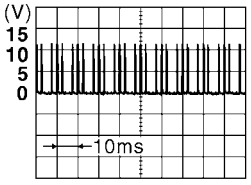
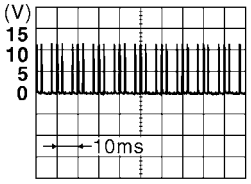
CAUTION:

- **Check combination switch system terminal waveform under the loaded condition with lighting switch, turn signal switch and wiper switch OFF is not to be fluctuated by being overloaded.**
- **Turn wiper intermittent dial position to 4 except when checking waveform or voltage of wiper intermittent dial position. Wiper intermittent dial position can be confirmed on CONSULT -III. Refer to BCS-26, "COMB SW : CONSULT-III Function (BCM - COMB SW)".**
- **BCM reads the status of the combination switch at 10 ms internal normally. Refer to BCS-7, "System Description".**

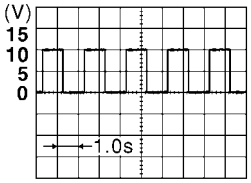
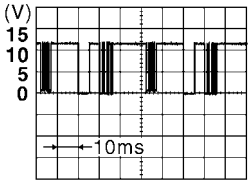
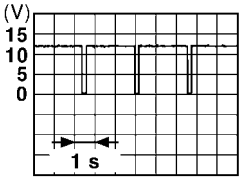
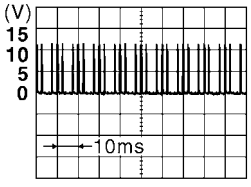
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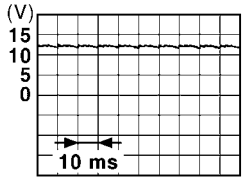
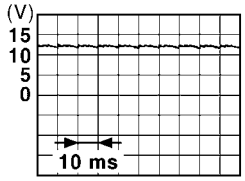
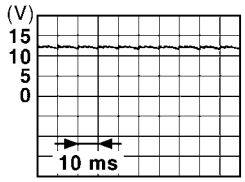
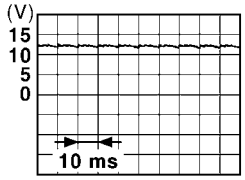
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
1 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4)	 JPMIA0160GB 9.1 V
					Rear wiper switch INT (Wiper intermittent dial 4)	
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	
2 (Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Lighting switch 2ND	 JPMIA0163GB 9.3 V
					Lighting switch PASS	
					Front fog lamp switch ON	
					Turn signal switch LH	
3 (LG)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Lighting switch AUTO	 JPMIA0162GB 9.3 V
					Rear fog lamp switch OFF	
					Front wiper switch MIST	
					Front wiper switch INT	
					Front wiper switch LO	
4 (R)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	 JPMIA0161GB 9.1 V
					Rear wiper switch ON (Wiper intermittent dial 4)	
					Rear washer switch ON (Wiper intermittent dial 4)	
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	

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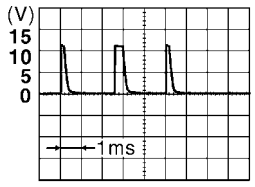
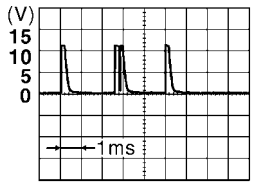
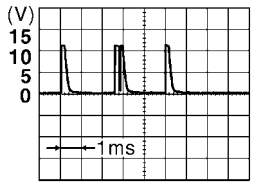
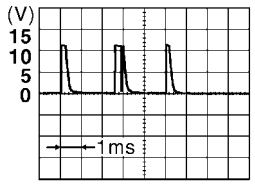
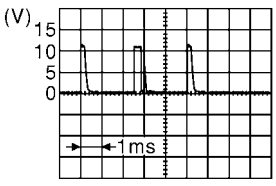
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
5 (W)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Lighting switch 1ST	 JPMIA0164GB 9.1 V
					Lighting switch 2ND	
					Lighting switch HI	
					Turn signal switch RH	
7 (P)	Ground	Door lock/unlock switch (Lock)	Output	Door lock/unlock switch	Not pressed	 JPMIA0154GB 1.2 V
					Pressed to the lock side	0 V
8 (LG)	Ground	Hazard switch	Output	Hazard switch	Not pressed	 JPMIA0154GB 1.3 V
					Pressed	0 V
9 (BR)	Ground	Door lock/unlock switch (Unlock)	Output	Door lock/unlock switch	Not pressed	 JPMIA0154GB 1.2 V
					Pressed to the unlock side	0 V
12 (P)	Ground	Back door opener switch	Output	Back door opener switch	Not pressed	 JPMIA0154GB 1.2 V
					Pressed	0 V

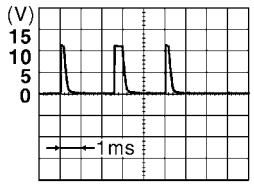
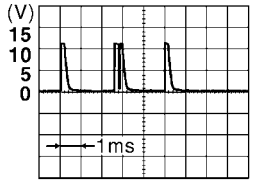
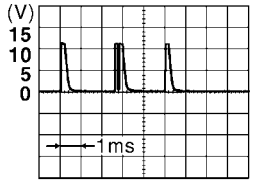
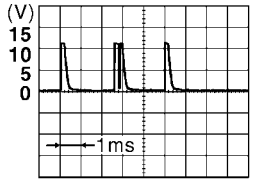
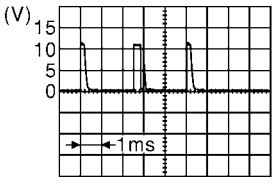
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Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
13 (R)	Ground	Shock detect sensor	Input	Ignition switch OFF or ACC		0 V
				Ignition switch ON		 JPMIA0155GB 6.0 V
14 (L/R)	Ground	A/C switch	Output	A/C switch	Not pressed	Battery voltage
					Pressed	0 V
15 (LG/B)	Ground	Fan switch	Output	Fan switch	Not pressed	Battery voltage
					Pressed	0 V
16 (GR)	Ground	Alarm link	Input	—		—
17 (BR)	Ground	Light & rain sensor serial link	Output	Ignition switch OFF or ACC		Battery voltage
				Ignition switch ON		 JPMIA0156GB 8.7 V
18 (SB)	Ground	Security indicator	Output	Security indicator	ON	0 V
					Blinking	 JPMIA0014GB 10.3 V
					OFF	Battery voltage
19 (L)	—	CAN-H	Input/ Output	—		—
20 (P)	—	CAN-L	Input/ Output	—		—
21 (SB)	Ground	Rear window defogger switch	Output	Rear window defogger switch	Not pressed	 JPMIA0154GB 1.1 V
					While pressing	0 V

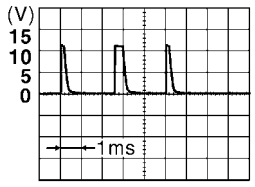
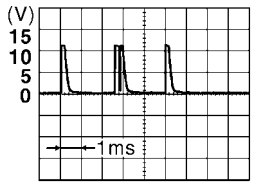
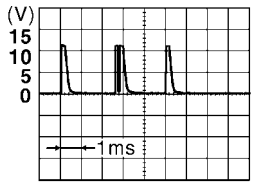
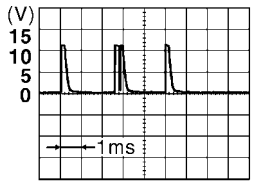
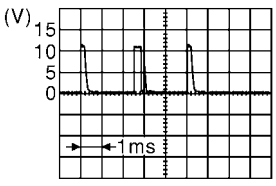
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
24 (GR)	Ground	Door lock status indicator	Output	Door lock status indicator	ON	Battery voltage
					OFF	0 V
25 (GR)	Ground	Rear door switch LH	Input	Rear door switch LH	OFF (When rear door LH closed)	 PKIDo924E 11.2 V
					ON (When rear door LH opened)	0 V
26 (R)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closed)	 PKIDo924E 11.2 V
					ON (When driver door opened)	0 V
27 (BR)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closed)	 PKIDo924E 11.2 V
					ON (When passenger door opened)	0 V
28 (G)	Ground	Back door switch	Input	Back door switch	OFF (When back door closed)	Battery voltage
					ON (When back door opened)	0 V
29 (LG)	Ground	Rear door switch RH	Input	Rear door switch RH	OFF (When rear door RH closed)	 PKIDo924E 11.2 V
					ON (When rear door RH opened)	0 V
30 (SB)	Ground	Audio link	Output	—	—	—

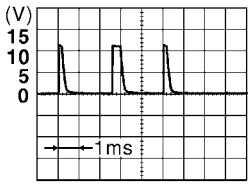
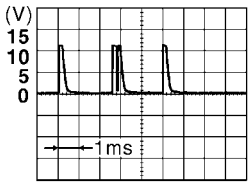
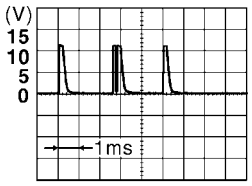
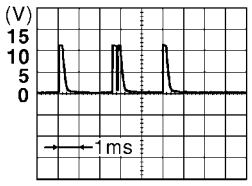
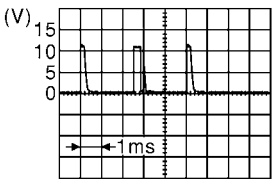
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Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
31 (BR)	Ground	Combination switch INPUT 5	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0165GB 1.3 V
					Front fog lamp switch ON (Wiper intermittent dial 4)	 JPMIA0167GB 1.3 V
					Rear fog lamp switch ON (Wiper intermittent dial 4)	 JPMIA0168GB 1.3 V
					Rear wiper switch ON (Wiper intermittent dial 4)	 JPMIA0169GB 1.3 V
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	 JPMIA0196GB 1.3 V

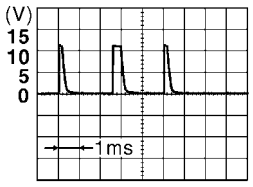
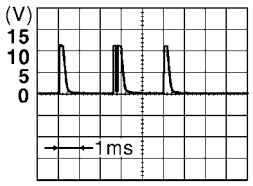
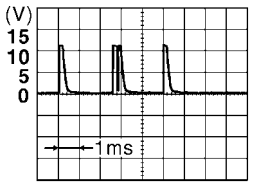
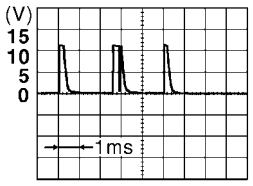
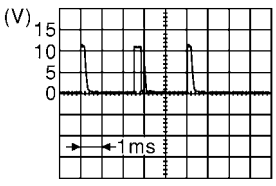
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
32 (G)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	 JPMIA0165GB 1.4 V
					Lighting switch PASS	 JPMIA0167GB 1.3 V
					Lighting switch 2ND	 JPMIA0166GB 1.3 V
					Front wiper switch INT	 JPMIA0168GB 1.3 V
					Front wiper switch HI	 JPMIA0196GB 1.3 V

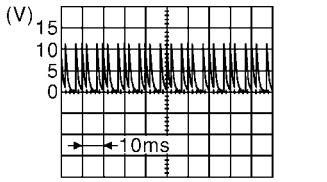
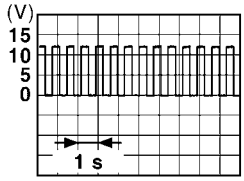
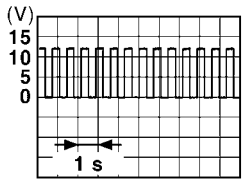
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Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
33 (V)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	 JPMIA0165GB 1.4 V
					Turn signal switch LH	 JPMIA0167GB 1.3 V
					Turn signal switch RH	 JPMIA0166GB 1.3 V
					Front wiper switch LO	 JPMIA0168GB 1.3 V
					Front washer switch ON	 JPMIA0196GB 1.3 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
34 (GR)	Ground	Combination switch INPUT 4	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0165GB 1.4 V
					Lighting switch AUTO (Wiper intermittent dial 4)	 JPMIA0167GB 1.3 V
					Lighting switch 1ST (Wiper intermittent dial 4)	 JPMIA0166GB 1.3 V
					Rear wiper INT (Wiper intermittent dial 4)	 JPMIA0167GB 1.3 V
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 6	 JPMIA0196GB 1.3 V

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Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
35 (L)	Ground	Combination switch INPUT 3	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0165GB 1.4 V
					Lighting switch HI (Wiper intermittent dial 4)	 JPMIA0166GB 1.3 V
					Lighting switch 2ND (Wiper intermittent dial 4)	 JPMIA0167GB 1.3 V
					Rear wiper switch ON	 JPMIA0169GB 1.3 V
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	 JPMIA0196GB 1.3 V
36 (V)	Ground	Key switch	Output	Insert mechanical key into ignition key cylinder		Battery voltage
				Remove mechanical key from ignition key cylinder		0 V
37 (R)	Ground	ACC power supply	Output	Ignition switch OFF		0 V
				Ignition switch ACC or ON		Battery voltage
38 (W/L)	Ground	Ignition power supply	Output	Ignition switch OFF or ACC		0 V
				Ignition switch ON		Battery voltage

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
39 (P)	Ground	NATS antenna amp.	Input/ Output	Insert mechanical key into ignition key cylinder		Just after Insert mechanical key into ignition key cylinder. Pointer of tester should move
40 (LG)	Ground	NATS antenna amp.	Input/ Output	Insert mechanical key into ignition key cylinder		Just after Insert mechanical key into ignition key cylinder. Pointer of tester should move
41 (V)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
42 (V)	Ground	Interior room lamp power supply	Output	After passing the interior room lamp battery saver operation time		0 V
				Any other time after passing the interior room lamp battery saver operation time		Battery voltage
43 (L)	Ground	Rear wiper motor	Output	Rear wiper switch OFF		0 V
				Rear wiper switch ON		Battery voltage
44 (L/W)	Ground	Rear wiper auto stop	Output	Ignition switch ON	Rear wiper stop position	0 V
					Any position other than rear wiper stop position	 JPMIA0197GB
45 (GR)	Ground	Back door lock actuator	Output	Back door opener switch	Pressed	Battery voltage (300ms)
					Not pressed	0 V
47 (G/Y)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 PKIDog26E 6.5 V
48 (G/B)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 PKIDog26E 6.5 V
49 (Y)	Ground	Rear fog lamp	Output	Lighting switch 1ST and front fog lamp switch ON	Rear fog lamp switch OFF	0 V
					Rear fog lamp switch ON	Battery voltage
51 (R/W)*1 (R)*2	Ground	Stop lamp switch	Output	Depress the brake pedal		Battery voltage
				Release the brake pedal		0 V

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Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
52 (R)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	Battery voltage
					ON	0 V
53 (L)	Ground	Power window power supply	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
54 (O)	Ground	Door unlock (All)	Output	Door lock/unlock switch	Pressed to the unlock side	Battery voltage
					Pressed to the lock side	0 V
55 (B)	Ground	Ground	—	Ignition switch ON		0 V
56 (Y)*1 (SB)*2	Ground	Door lock (All)	Output	Door lock/unlock switch	Pressed to the unlock side	0 V
					Pressed to the lock side	Battery voltage
57 (Y)	Ground	Battery power supply	Output	Ignition switch OFF		Battery voltage
58 (P)	Ground	Power window power supply	Output	Ignition switch OFF		Battery voltage
59 (BR)	Ground	Super lock	Output	When lock button of key fob or Intelligent Key is not pressed		0 V
				When lock button of key fob or Intelligent Key is pressed		Battery voltage
60 (GR)	Ground	Driver door unlock	Output	Door lock/unlock switch	Pressed to the unlock side	Battery voltage
					Pressed to the lock side	0 V

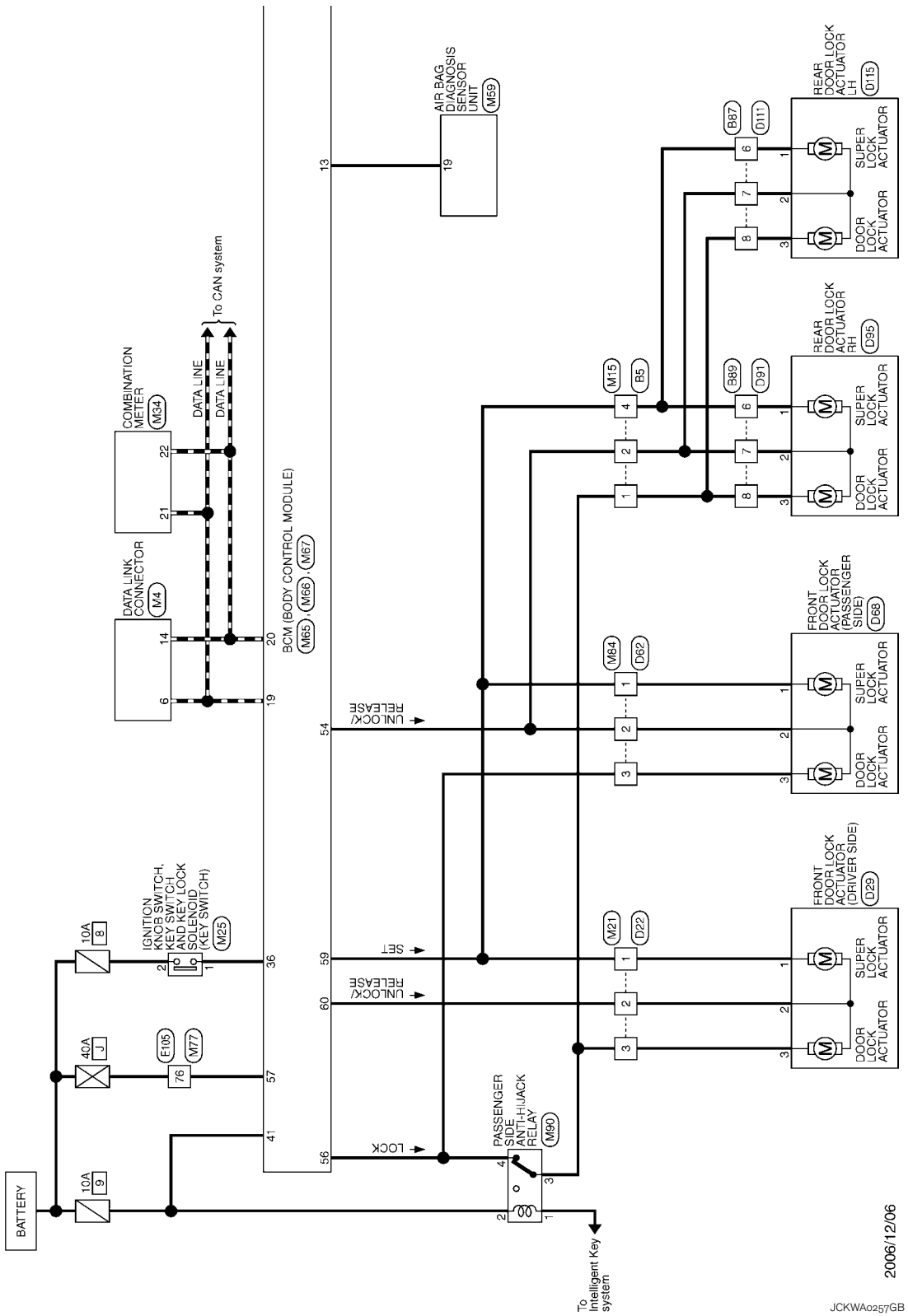
*1: With Intelligent Key system

*2: Without Intelligent Key system

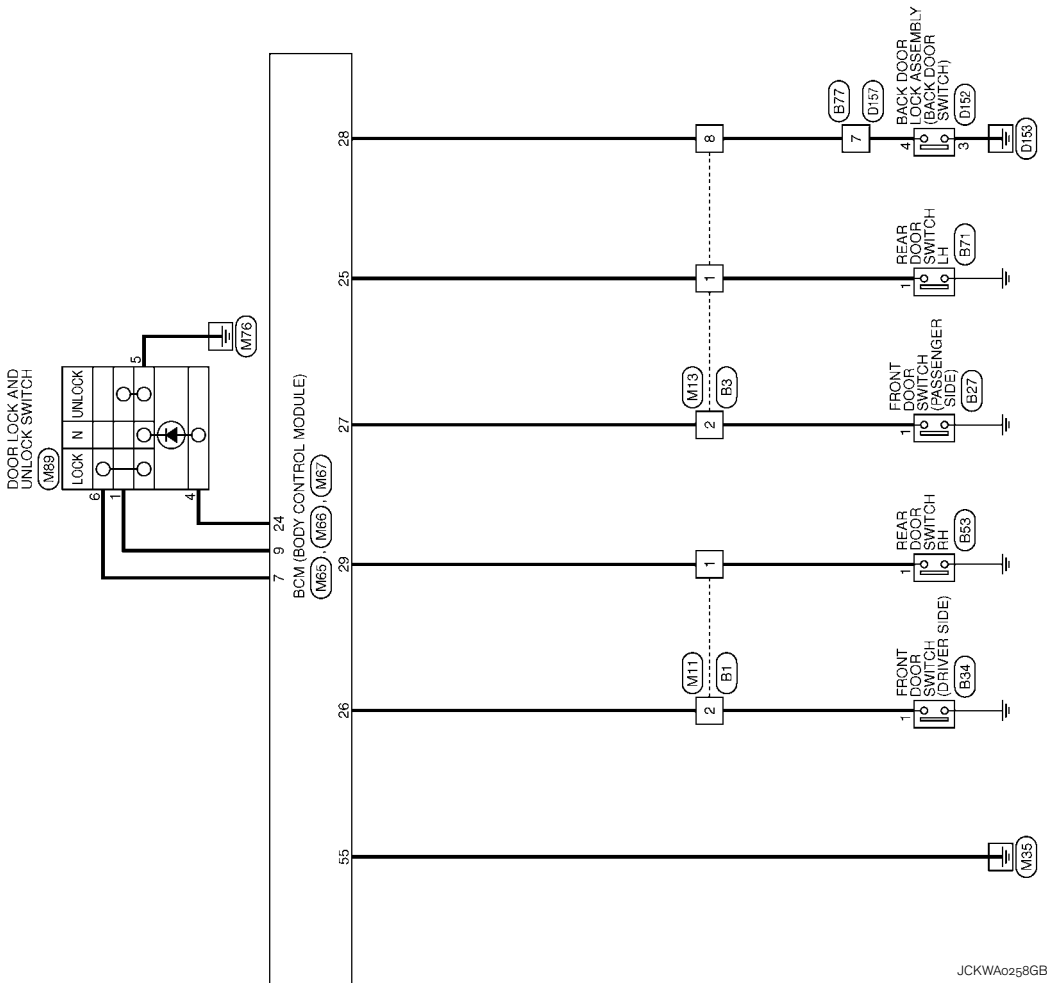
Wiring Diagram - SUPER LOCK CONTROL SYSTEM -

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SUPER LOCK SYSTEM (WITH INTELLIGENT KEY)



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DOOR LOCK AND UNLOCK SWITCH
M69
LOCK
N
UNLOCK
6
1
4
5
M76
BCM (BODY CONTROL MODULE)
M65, M66, M67
24
9
7
28
25
27
29
26
55
8
1
2
1
2
M13
B3
M11
B1
B77
7
D157
BACK DOOR LOCK ASSEMBLY (BACK DOOR SWITCH)
4
3
D152
D153
REAR DOOR SWITCH LH
B71
FRONT DOOR SWITCH (PASSENGER SIDE)
B27
REAR DOOR SWITCH RH
B53
FRONT DOOR SWITCH (DRIVER SIDE)
B34
M35
JCKWA0258GB

SUPER LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

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 [Specification]
1	LG	-
2	R/W	-[RHD models]

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

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 [Specification]
1	GR	-
2	BR	-[RHD models]
8	G	-

Connector No.	B5
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

H.S.

1	2	3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	-
2	O	-
4	BR	-

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	R/W	-

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	TH08FW

H.S.

4	3	2	1
8	7	6	5

Terminal No.	Color of Wire	Signal Name [Specification]
7	G	-

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SUPER LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	B87
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	-
7	O	-
8	SB	-

Connector No.	B89
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

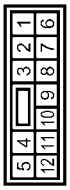
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	-
7	O	-
8	SB	-

Connector No.	D22
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	SB	-

Connector No.	D29
Connector Name	FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
Connector Type	FEA04FB-FHA2

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	SB	-

Connector No.	D62
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	Y	-[With Intelligent Key]

Connector No.	D68
Connector Name	FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Type	FEA04FB-FHA2

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	Y	-[With Intelligent Key]

Connector No.	D91
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	-
7	O	-
8	SB	-

Connector No.	D95
Connector Name	REAR DOOR LOCK ACTUATOR RH
Connector Type	FEA04FB-FHA2

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	SB	-

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SUPER LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	D111
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	-
7	O	-
8	SB	-

Connector No.	D115
Connector Name	REAR DOOR LOCK ACTUATOR LH
Connector Type	FEA04FB-FHA2

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	SB	-

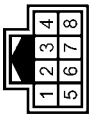
Connector No.	D152
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	GINCH 49309 EV 4M9

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
3	B	-
4	G	-

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	G	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-NS16-TM4

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
76	Y	-

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

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH24FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	R	-[RHD models]

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH24FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	BR	-[RHD models]
8	G	-

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SUPER LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.

3		2	1
8	7	6	5	4

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	–
2	O	–
4	BR	–

Connector No.	M21
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	–
2	GR	–
3	SB	–

Connector No.	M25
Connector Name	IGNITION KNOB SWITCH, KEY SWITCH AND KEY LOCK SOLENOID
Connector Type	TK06MGY

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	Y	–

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
21	L	CAN-H
22	P	CAN-L

Connector No.	M59
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	TK28FY-EX-SC

H.S.

20	21	17						24	49	1
22	11	46	48	47	45	13	3	4	6	5
16	12	19	15	14	51	23	50	18	52	2

Terminal No.	Color of Wire	Signal Name [Specification]
19	R	UNLOCK

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AAB40FB

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
7	P	LOCK/UNLOCK SW (LOCK)
9	BR	LOCK/UNLOCK SW (UNLOCK)
13	R	SHOCK DETECT SIG
19	L	CAN-H
20	P	CAN-L
24	GR	DOOR LOCK STATUS IND
25	GR	DOOR SW (RL)
26	R	DOOR SW (DR)
27	BR	DOOR SW (AS)
28	G	DOOR SW (BACK)
29	LG	DOOR SW (RR)

36	V	KEY SW

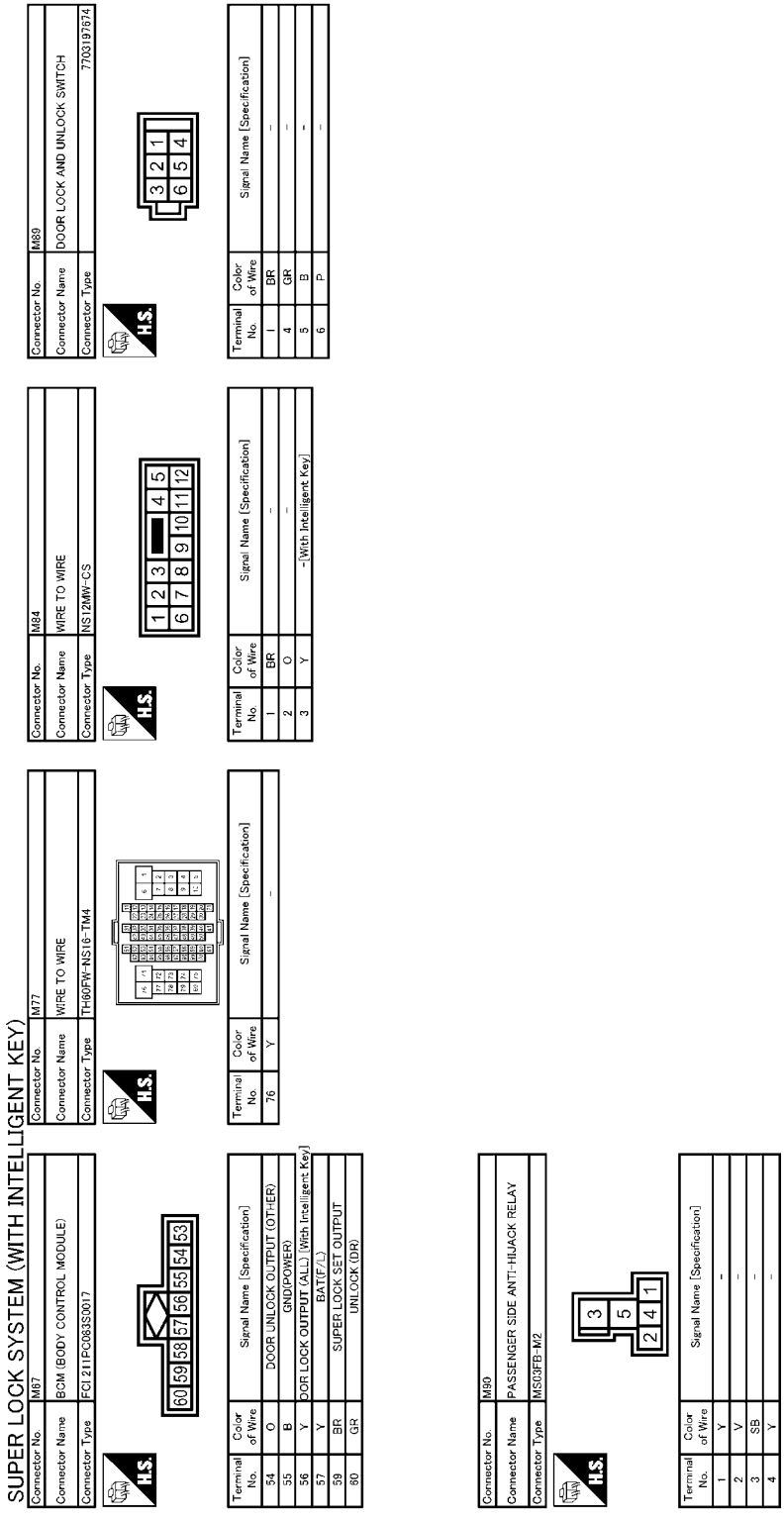
Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FCI 211PC122S1017

H.S.

52	51	50	49	48	47	46	45	44	43	42	41

Terminal No.	Color of Wire	Signal Name [Specification]
41	V	BATTFUSE)

JCKWA0262GB

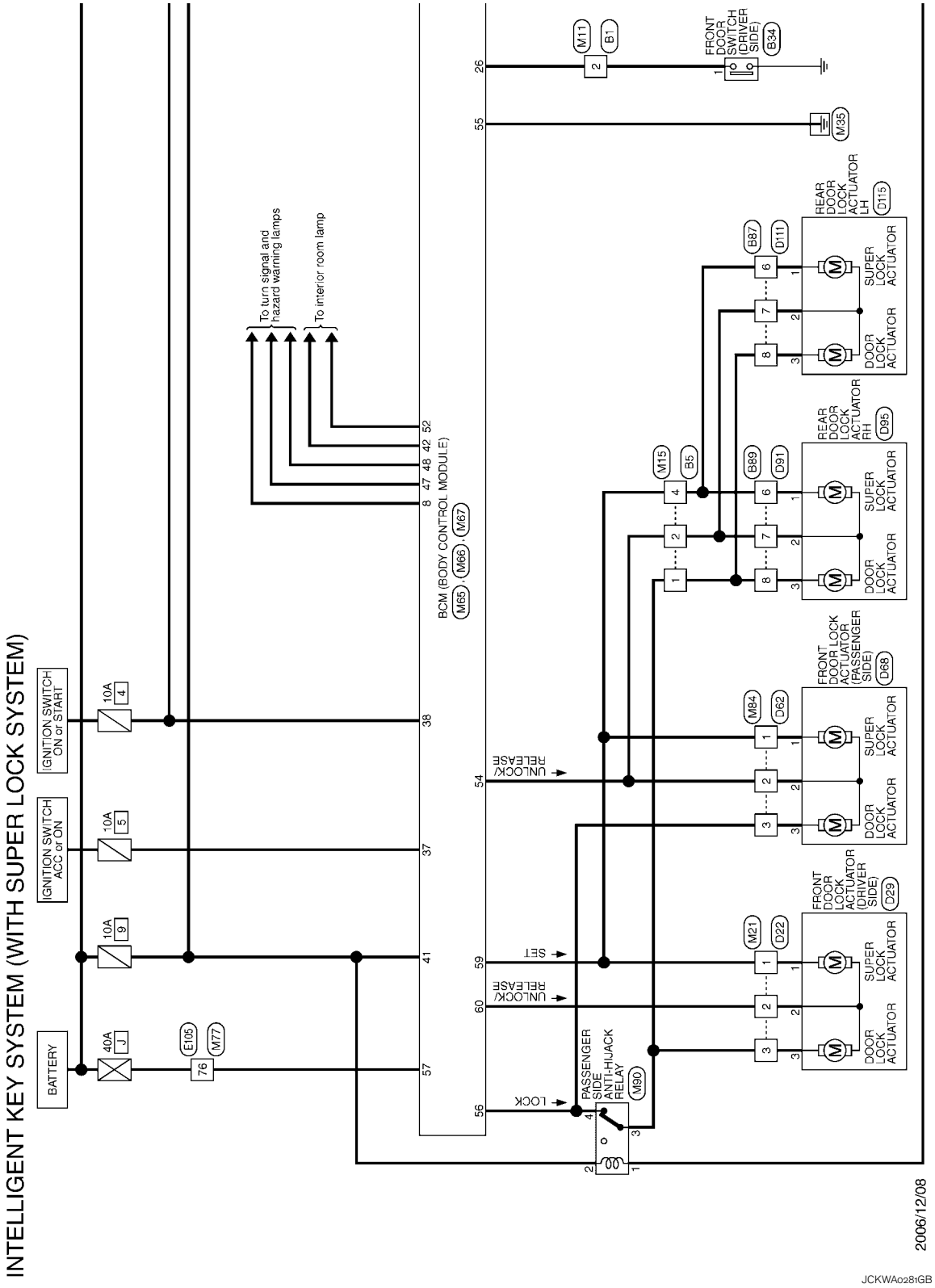


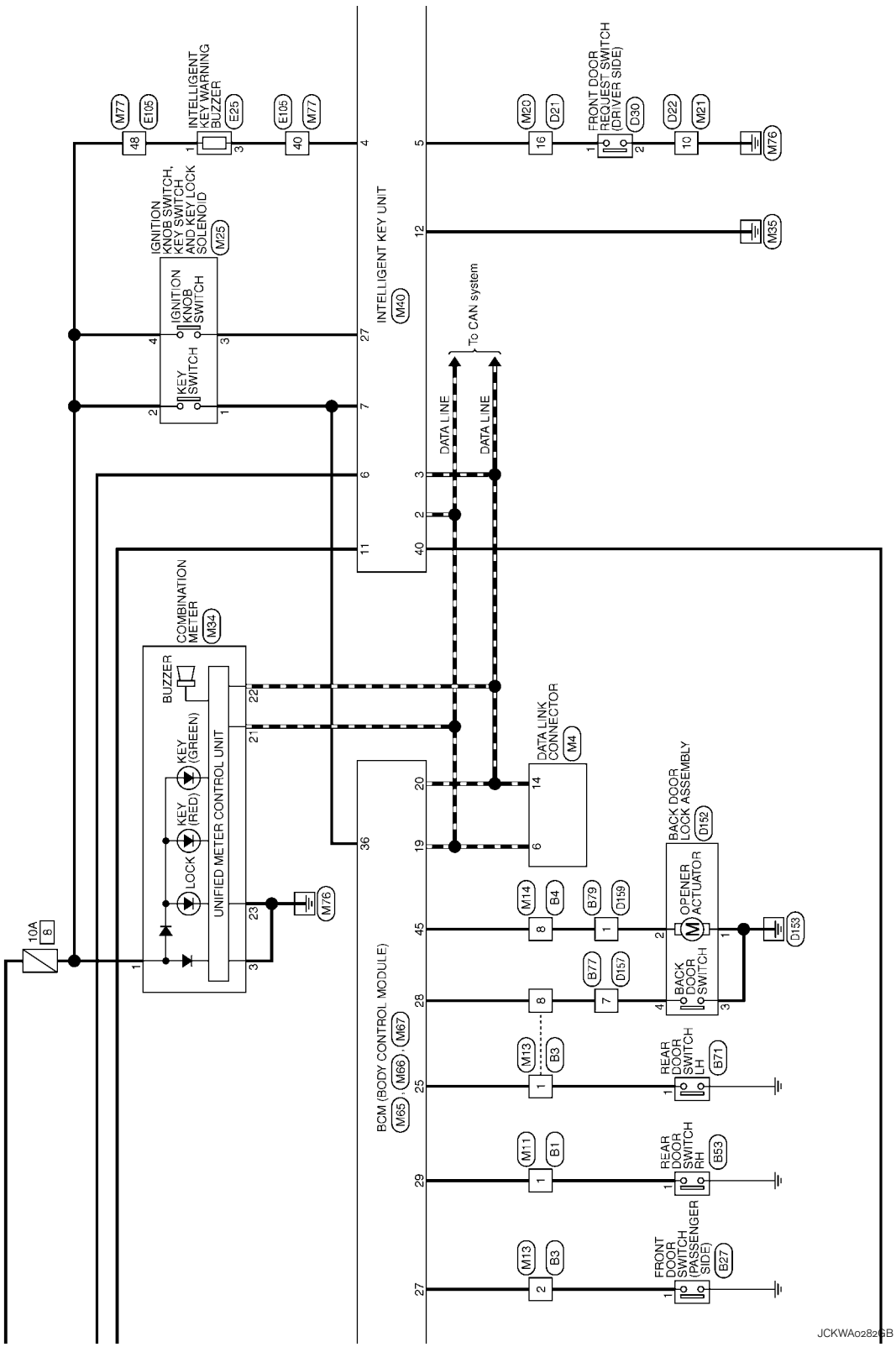
JCKWA0263GB

Wiring Diagram - INTELLIGENT KEY CONTROL SYSTEM -

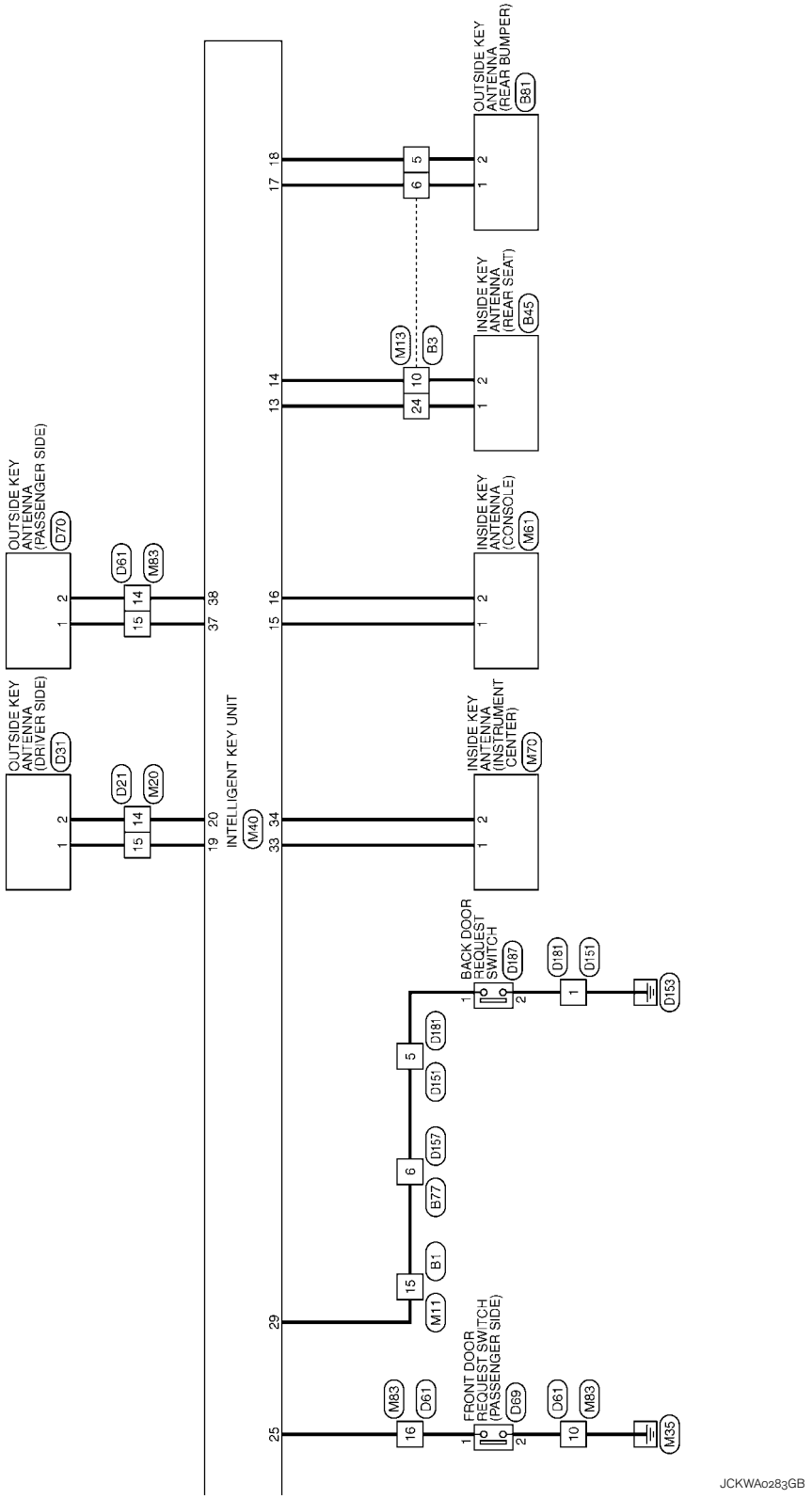
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INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)
BATTERY
IGNITION SWITCH ON or START
IGNITION SWITCH ACC or ON
40A J
10A 4
10A 5
10A 9
E105
M77
76
BCM (BODY CONTROL MODULE)
M65 M66 M67
To turn signal and hazard warning lamps
To interior room lamp
UNLOCK RELEASE
SET
LOCK
PASSENGER SIDE ANTI-HIJACK RELAY
M90
FRONT DOOR SWITCH (DRIVER SIDE)
B34
M11
B1
M35
REAR DOOR LOCK ACTUATOR LH
D115
REAR DOOR LOCK ACTUATOR RH
D95
FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)
D68
FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
D29
SUPER LOCK ACTUATOR
DOOR LOCK ACTUATOR
2006/12/08
JCKWA0281GB



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OUTSIDE KEY ANTENNA (REAR BUMPER)
B81
INSIDE KEY ANTENNA (REAR SEAT)
B45
INSIDE KEY ANTENNA (CONSOLE)
M61
INSIDE KEY ANTENNA (INSTRUMENT CENTER)
M70
OUTSIDE KEY ANTENNA (PASSENGER SIDE)
D70
OUTSIDE KEY ANTENNA (DRIVER SIDE)
D31
INTELLIGENT KEY UNIT
M40
BACK DOOR REQUEST SWITCH
D187
FRONT DOOR REQUEST SWITCH (PASSENGER SIDE)
D69
JCKWA0283GB

INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

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 [Specification]
1	LG	-
2	R/W	-[RHD models]
15	GR	-

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

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 [Specification]
1	GR	-
2	R/W	-[LHD models]
2	BR	-[RHD models]
5	V	-
6	SB	-
8	G	-
10	W/R	-
24	Y	-

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

H.S.

1	2	3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name [Specification]
8	GR	-

Connector No.	B5
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

H.S.

1	2	3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	-
2	O	-
4	BR	-

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	R/W	-

Connector No.	B45
Connector Name	INSIDE KEY ANTENNA (REAR SEAT)
Connector Type	RK02FGY

H.S.

1	2

Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	W/R	-

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-

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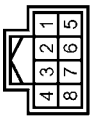
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INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2		
3		

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	TH08FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	GR	-
7	G	-
8		

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	M02FW-LC

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2		

Connector No.	B81
Connector Name	OUTSIDE KEY ANTENNA (REAR BUMPER)
Connector Type	RK02FGY

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	-
2	V	-

Connector No.	B87
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	-
7	O	-
8	SB	-

Connector No.	B89
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	-
7	O	-
8	SB	-

Connector No.	D21
Connector Name	WIRE TO WIRE
Connector Type	TK16FW



Terminal No.	Color of Wire	Signal Name [Specification]
14	BR/W	-
15	L/Y	-
16	P	-

Connector No.	D22
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	SB	-
10	B	-

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INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

Connector No.	D29
Connector Name	FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
Connector Type	FEA04FB-FHA2



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	SB	-

Connector No.	D30
Connector Name	FRONT DOOR REQUEST SWITCH (DRIVER SIDE)
Connector Type	RK02ML-B

Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-
2	B	-

Connector No.	D31
Connector Name	OUTSIDE KEY ANTENNA (DRIVER SIDE)
Connector Type	RK02MGY

Terminal No.	Color of Wire	Signal Name [Specification]
1	L/Y	-
2	BR/W	-

Connector No.	D61
Connector Name	WIRE TO WIRE
Connector Type	TK16FW

Terminal No.	Color of Wire	Signal Name [Specification]
10	B	-
14	O	-
15	L	-
16	B/R	-

Connector No.	D62
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	Y	-[With Intelligent Key]

Connector No.	D68
Connector Name	FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Type	FEA04FB-FHA2

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	Y	-[With Intelligent Key]

Connector No.	D69
Connector Name	FRONT DOOR REQUEST SWITCH (PASSENGER SIDE)
Connector Type	RK02ML-B

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

Connector No.	D70
Connector Name	OUTSIDE KEY ANTENNA (PASSENGER SIDE)
Connector Type	RK02MGY

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	O	-

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INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

Connector No.	D91
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	-
7	O	-
8	SB	-

Connector No.	D95
Connector Name	REAR DOOR LOCK ACTUATOR RH
Connector Type	FEA04FB-FHA2

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	SB	-

Connector No.	D111
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	-
7	O	-
8	SB	-

Connector No.	D115
Connector Name	REAR DOOR LOCK ACTUATOR LH
Connector Type	FEA04FB-FHA2

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	SB	-

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
5	GR	-

Connector No.	D152
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	CINCH 49309-EV-4M8

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	GR	-
3	B	-
4	G	-

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
6	GR	-
7	G	-

Connector No.	D159
Connector Name	WIRE TO WIRE
Connector Type	M02MW-LC

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-

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INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	TH08FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
5	GR	-

Connector No.	D187
Connector Name	BACK DOOR REQUEST SWITCH
Connector Type	RK02FGY

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	B	-

Connector No.	E25
Connector Name	INTELLIGENT KEY WARNING BUZZER
Connector Type	RK03FBR-DGY

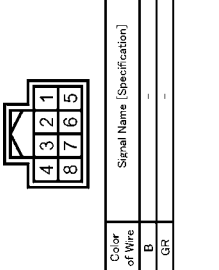
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	-	-
3	LG/B	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-NS16-TM4



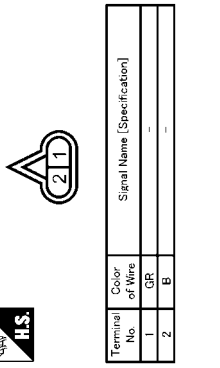
Terminal No.	Color of Wire	Signal Name [Specification]
40	LG/B	-
48	Y	-
76	Y	-

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



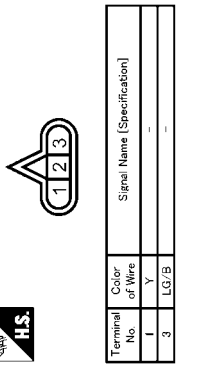
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH24FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	R	-[RHD models]
15	GR	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH24FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	BR	-[RHD models]
5	V	-
6	SB	-
8	G	-
10	W	-
24	Y	-

Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
8	GR	-

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INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	–
2	O	–
4	BR	–

Connector No.	M20
Connector Name	WIRE TO WIRE
Connector Type	TK16MW

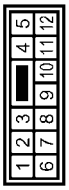
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
14	BR	–
15	L	–
16	P	–

Connector No.	M21
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	–
2	GR	–
3	SB	–
10	B	–

Connector No.	M25
Connector Name	IGNITION KNOB SWITCH, KEY SWITCH AND KEY LOCK SOLENOID
Connector Type	TK06MGY

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	Y	–
3	L	–
4	Y	–

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	BAT
3	B	GND
21	L	CAN-H
22	P	CAN-L
23	B	GND

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	CAN-H
3	P	CAN-L
4	LG	BUZZER
5	P	REQUEST SW (DR)
6	W	IGN SW
7	V	KEY SW
11	V	BATT+
12	B	GND
13	Y	REAR SEAT (+)
14	W	REAR SEAT (–)
15	SB	CONSOLE (+)
16	BR	CONSOLE (–)
17	SB	REAR BUMPER (+)
18	V	REAR BUMPER (–)
19	L	DRIVER DOOR (+)
20	BR	DRIVER DOOR (–)
25	BR	REQUEST SW (AS)
27	L	KNOB SW
29	GR	REQUEST SW (BD)
33	O	INSTRUMENT (+)
34	G	INSTRUMENT (–)
37	L	PASSENGER DOOR (+)
38	O	PASSENGER DOOR (–)
40	Y	AS ANTI-HIJACK

Connector No.	M61
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Type	RK02FGY

H.S.

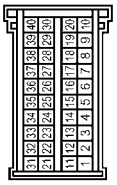


Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	–
2	BR	–

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INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AAB40FB



Terminal No.	Color of Wire	Signal Name [Specification]
8	LG	HAZARD SW
19	L	CAN-H
20	P	CAN-L
25	GR	DOOR SW (RL)
26	R	DOOR SW (DR)
27	BR	DOOR SW (AS)
28	G	DOOR SW (BACK)
29	LG	DOOR SW (RR)
36	V	KEY SW
37	R	ACC SW
38	W/L	IGN SW

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FCI 211PC122S1017



Terminal No.	Color of Wire	Signal Name [Specification]
41	V	BAT(FUSE)
42	V	ROOM LAMP POWER SUPPLY
45	GR	BACK DOOR OPENER
47	G/Y	FLASHER OUTPUT (LEFT)
48	G/B	FLASHER OUTPUT (RIGHT)
52	R	ROOM LAMP OUTPUT

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FCI 211PC083S0017



Terminal No.	Color of Wire	Signal Name [Specification]
54	O	DOOR UNLOCK OUTPUT (OTHER)
55	B	GND(POWER)
56	Y	DOOR LOCK OUTPUT (ALL) [With Intelligent Key]
57	V	BAT(F/L)
59	BR	SUPER LOCK SET OUTPUT
60	GR	UNLOCK (DR)

Connector No.	M70
Connector Name	INSIDE KEY ANTENNA (INSTRUMENT CENTER)
Connector Type	RK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-
2	G	-

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH60FW-NS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
40	LG	-
48	Y	-
76	Y	-

Connector No.	M83
Connector Name	WIRE TO WIRE
Connector Type	TK16MW

Terminal No.	Color of Wire	Signal Name [Specification]
10	B	-
14	O	-
15	L	-
16	BR	-

Connector No.	M84
Connector Name	WIRE TO WIRE
Connector Type	MS12MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	Y	-[With Intelligent Key]

Connector No.	M90
Connector Name	PASSENGER SIDE ANTI-HIJACK RELAY
Connector Type	MS03FB-M2

Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	V	-
3	SB	-
4	Y	-

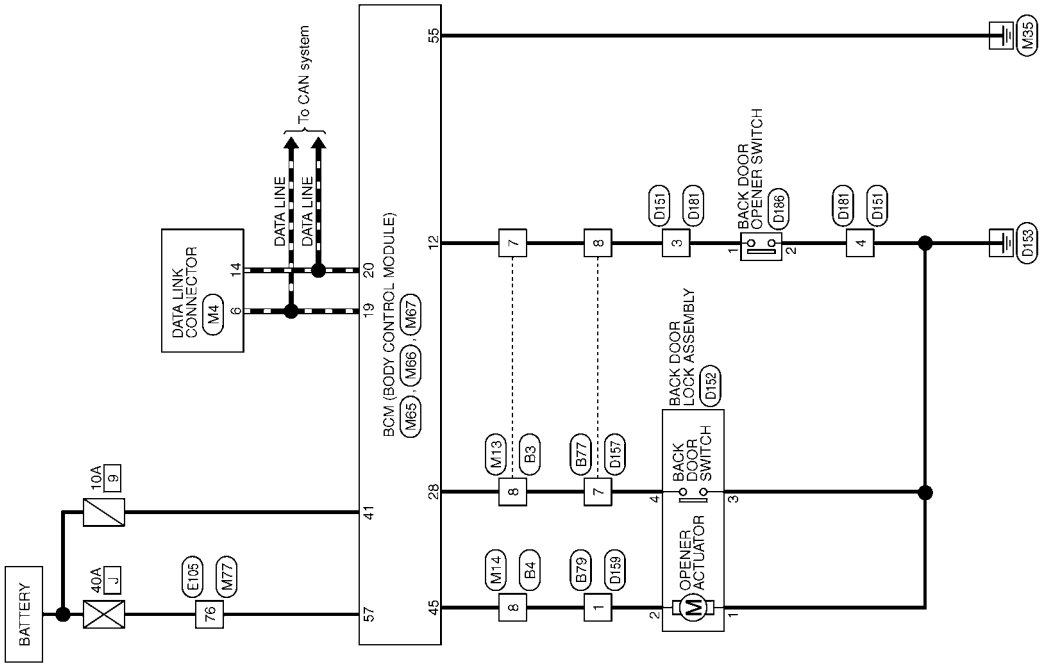
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Wiring Diagram - BACK DOOR OPENER CONTROL SYSTEM -

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BACK DOOR OPENER SYSTEM



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BACK DOOR OPENER SYSTEM

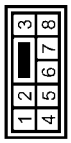
Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
7	P	-
8	G	-

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

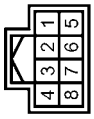
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
8	GR	-

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	TH08FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	G	-
8	P	-

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	M02FW-LC

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-

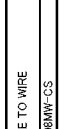
Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
3	P	-
4	B	-

Connector No.	D152
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	CINCH 48309 EV 4M9

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	GR	-
3	B	-
4	G	-

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
7	G	-
8	P	-

Connector No.	D159
Connector Name	WIRE TO WIRE
Connector Type	M02MW-LC

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-

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BACK DOOR OPENER SYSTEM

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	TH08FW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
3	P	-
4	B	-

Connector No.	D186
Connector Name	BACK DOOR OPENER SWITCH
Connector Type	RK02MGY

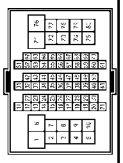
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-
2	B	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-NS16-TM4

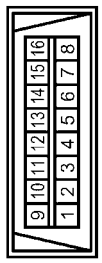
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
76	Y	-

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

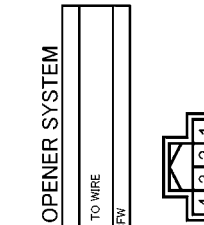
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH24FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	P	-
8	G	-

Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
8	GR	-

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AAB40FB

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
12	P	TRUNK/BACK DOOR OPEN SW
19	L	CAN-H
20	P	CAN-L
28	G	DOOR SW (BACK)

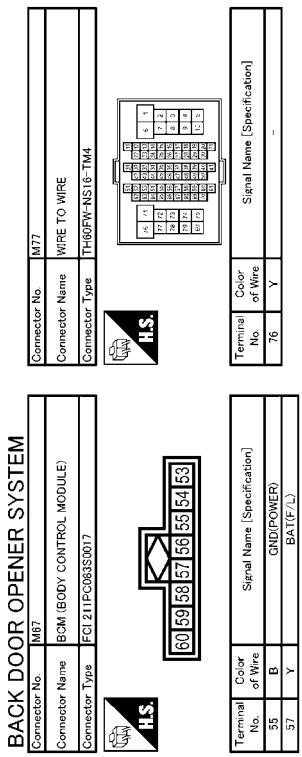
Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FCI 211PC122S1017

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
41	V	BAT(FUSE)
45	GR	BACK DOOR OPENER

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Fail Safe

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Fail-safe index

BCM performs fail-safe control when any DTC listed below is detected.

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Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2191: DIFFERENCE OF KEY	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2192: ID DISCORD BCM-ECM	Fuel cut (ECM)	Erase DTC
B2193: CHAIN OF BCM-ECM	Fuel cut (ECM)	Erase DTC
B2194: DISCORD BCM-I-KEY	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2195: ANTI SCANNING	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2196: DONGLE NG	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC

REAR WIPER CONTROL

BCM detects a rear wiper stopping position according to a rear wiper auto stop signal.
When a rear wiper auto stop signal is in the condition listed below, BCM stops power supply to rear wiper after rear wiper is activated for five seconds.

Ignition switch	Rear wiper switch	Auto stop signal
ON	OFF	Rear wiper stop position signal cannot be input 5 seconds.
	ON	The signal does not change for 5 seconds.

NOTE:
The above operation is repeated when operating the rear wiper switch one minute after the stop of the rear wiper caused by Fail-safe.

TURN SIGNAL LAMP CONTROL

BCM detects the turn signal lamp circuit status from the terminal voltage.
BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:
The blinking speed is normal while activating the hazard warning lamp.

LIGHT & RAIN SENSOR MALFUNCTION DETECTION FUNCTION

BCM controls the following items when LIGHT & RAIN sensor has a malfunction.

Auto Light Control
Headlamp is turned ON.

Front Wiper Control
The condition just before the activation of Fail-safe is maintained until the front wiper switch is turned OFF.

DTC Inspection Priority Chart

INFOID:0000000001097296

Priority	DTC
1	• U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN)
2	• B2190: NATS ANTENNA AMP • B2191: DIFFERNCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2194: DISCORD BCM-I-KEY • B2195: ANTI SCANNING • B2196: DONGLE NG

DTC Index

INFOID:0000000001097297

NOTE:

Details of time display

- CRNT: Displays when there is a malfunction now or after returning to the normal condition until turning ignition switch OFF → ON again.
- PAST: Displays when there is a malfunction that is detected in the past and stored.
- 1 - 39: Displayed if any previous malfunction is present when current condition is normal. It increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The counter remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch OFF → ON after returning to the normal condition if the malfunction is detected again.

CONSULT display	TIME		Fail-safe	Refer to
No DTC is detected. further testing may be required.	—	—	—	—
U1000: CAN COMM CIRCUIT	0	1 - 39	—	BCS-32
U1010: CONTROL UNIT (CAN)	0	1 - 39	—	BCS-33
B2190: NATS ANTENNA AMP	CRNT	PAST	×	• With Intelligent Key system SEC-33 • Without Intelligent Key system SEC-174
B2191: DIFFERENCE OF KEY	CRNT	PAST	×	• With Intelligent Key system SEC-35 • Without Intelligent Key system SEC-176
B2192: ID DISCORD BCM-ECM	CRNT	PAST	×	• With Intelligent Key system SEC-36 • Without Intelligent Key system SEC-177
B2193: CHAIN OF BCM-ECM	CRNT	PAST	×	• With Intelligent Key system SEC-38 • Without Intelligent Key system SEC-178
B2194: DISCORD BCM-I-KEY	CRNT	PAST	×	SEC-39
B2195: ANTI SCANNING	CRNT	PAST	×	• With Intelligent Key system SEC-179 • Without Intelligent Key system SEC-179
B2196: DONGLE NG	CRNT	PAST	×	• With Intelligent Key system SEC-41 • Without Intelligent Key system SEC-180

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SYMPTOM DIAGNOSIS

DOOR LOCK FUNCTION SYMPTOMS

DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH : Symptom Table

INFOID:0000000001109309

DOOR LOCK AND UNLOCK SWITCH OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-283, "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)

- Except driver side, doors are closed.
- Super lock is not in set state.
- Passenger side door is not in anti-hijack state.
- Doors are not locked by Intelligent Key or door request switch.

Symptom Table

Symptom	Diagnosis/service procedure		Reference page
Door lock and unlock function does not operate with door lock and unlock switch.	1. Check BCM power supply and ground circuit.		DLK-335
	2. Check door lock and unlock switch.		DLK-337
	3. Check door switch.	Passenger side	DLK-348
		Rear LH	DLK-350
		Rear RH	DLK-351
		Back door	DLK-353
	4. Check intermittent incident.		GI-39
Specific door lock does not operate properly.	1. Check door lock actuator.	Driver side	DLK-359
		Passenger side	DLK-361
		Rear LH	DLK-362
		Rear RH	DLK-364
	2. Check intermittent incident.		GI-39
Specific door does not open from inside the vehicle.	1. Check super lock actuator.	Driver side	DLK-367
		Passenger side	DLK-368
		Rear LH	DLK-370
		Rear RH	DLK-371
	2. Check intermittent incident.		GI-39
Rear LH and RH door lock actuator does not operate.	1. Check passenger side anti-hijack relay.		DLK-395
	2. Check intermittent incident.		GI-39

INTELLIGENT KEY

INTELLIGENT KEY : Symptom Table

INFOID:0000000001109310

INTELLIGENT KEY OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-283, "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)
- Door lock and unlock switch operations are normal.
- Emergency key is removed from ignition key cylinder.
- All doors are closed.
- Ignition knob is not pressed.
- No Intelligent keys are inside the vehicle.

Symptom Table

Symptom	Diagnosis/service procedure		Reference page
All of the Intelligent Key functions do not operate.	1. Check Intelligent Key unit power supply and ground circuit.		DLK-335
	2. Check driver side door switch.		DLK-353
	3. Check key switch.		DLK-355
	4. Check ignition knob switch.		DLK-357
	5. Check Intelligent Key battery.		DLK-404
	6. Check intermittent incident.		GI-39
Specific door does not operate properly.	1. Check door lock actuator.	Driver side	DLK-359
		Passenger side	DLK-361
		Rear LH	DLK-362
		Rear RH	DLK-364
	2. Check intermittent incident.		GI-39
Anti-hijack function does not operate by Intelligent Key.	1. Check “SELECTIVE UNLOCK FUNCTION” setting in “WORK SUPPORT”.		DLK-329
	2. Check intermittent incident.		GI-39

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH : Symptom Table

INFOID:0000000001109311

DOOR REQUEST SWITCH OPERATION MALFUNCTION

NOTE:
- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-283, "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 operation is normal.
- “LOCK/UNLOCK BY I-KEY” is ON when setting on CONSULT-III.
- Emergency key is removed from ignition key cylinder.
- Ignition switch is in OFF position.
- No Intelligent Keys are inside the vehicle.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Door lock and unlock do not operate by door request switch.	1. Check “LOCK/UNLOCK BY I-KEY” setting in “WORK SUPPORT”.	DLK-329
	2. Check intermittent incident.	GI-39

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Symptom	Diagnosis/service procedure	Reference page
Door lock/unlock does not operate by request switch (driver side).	1. Check door request switch (driver side).	DLK-341
	2. Check outside key antenna (driver side).	DLK-377
	3. Check intermittent incident.	GI-39
Door lock/unlock does not operate by request switch (passenger side).	1. Check door request switch (passenger side).	DLK-343
	2. Check outside key antenna (passenger side).	DLK-380
	3. Check intermittent incident.	GI-39
Door lock/unlock does not operate by request switch (back door).	1. Check door request switch (back door).	DLK-344
	2. Check outside key antenna (rear bumper).	DLK-383
	3. Check intermittent incident.	GI-39
Anti-hijack function does not operate by driver side door request switch (other door lock functions operate).	1. Check “SELECTIVE UNLOCK FUNCTION” setting in “WORK SUPPORT”.	DLK-329
	2. Check intermittent incident.	GI-39
Passenger side anti-hijack function does not operate by passenger side door request switch (other door lock functions operate).	1. Check passenger side anti-hijack relay.	DLK-395
	2. Check intermittent incident.	GI-39

KEY REMINDER

KEY REMINDER : Symptom Table

INFOID:0000000001109312

KEY REMINDER OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer toDLK-283, "Work Flow".
- Understand the operation when does it work, refer to DLK-299, "KEY REMINDER : System Description".
- 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)

- Request switch operation and door lock and unlock switch operation are normal.

Symptom Table

Symptom	Diagnosis/service procedure		Reference page
Key reminder operation does not operate properly.	1. Check door switch.	Driver side	DLK-347
		Passenger side	DLK-348
		Rear LH	DLK-350
		Rear RH	DLK-351
		Back door	DLK-353
	2. Check inside key antenna.	Instrument center	DLK-386
		Console	DLK-389
		Rear seat	DLK-392
	3. Check Intermittent Incident.		GI-39

AUTO DOOR LOCK

AUTO DOOR LOCK : Symptom Table

INFOID:0000000001109313

AUTO DOOR LOCK OPERATION MALFUNCTION

NOTE:

- “AUTO RELOCK TIMER” is not OFF when setting on CONSULT-III.
- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-283, "Work Flow".
- Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.
- Understand the operation when does it work, refer to DLK-302, "AUTO DOOR LOCK : System Description".
- If the following symptoms are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)

- Request switch operation and door lock and unlock switch operation are normal.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Auto door lock operation does not operate properly.	1. Check “AUTO RELOCK TIMER” setting in “WORK SUPPORT”.	DLK-329
	2. Check ignition knob switch.	DLK-357
	3. Check key switch.	DLK-355
	4. Check Intermittent Incident.	GI-39

VEHICLE SPEED SENSING AUTO DOOR LOCK

VEHICLE SPEED SENSING AUTO DOOR LOCK : Symptom Table

INFOID:0000000001109314

VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-283, "Work Flow".
- Understand the operation when does it work, refer to DLK-305, "VEHICLE SPEED SENSING AUTO DOOR LOCK : System Description".
- 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)

- Request switch operation and door lock and unlock switch operation are normal.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Vehicle speed sensing auto door lock operation does not operate.	1. Check vehicle speed signal.	DLK-403
	2. Check Intermittent Incident.	GI-39

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BACK DOOR OPEN FUNCTION SYMPTOMS
BACK DOOR OPENER SWITCH
BACK DOOR OPENER SWITCH : Symptom Table

INFOID:0000000001109315

BACK DOOR OPENER FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-283, "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)

- Door lock function is normal.
- Vehicle speed is less than 5 km/h (3MPH).
- All doors are unlocked.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Back door opener function does not operate by back door opener switch.	1. Check back door opener switch.	DLK-375
	2. Check vehicle speed signal.	DLK-403
	3. Check back door opener actuator.	DLK-373
	4. Check Intermittent Incident.	GI-39

WARNING FUNCTION SYMPTOMS

BUZZER (COMBINATION METER)

BUZZER (COMBINATION METER) : Symptom Table

INFOID:0000000001109316

BUZZER (COMBINATION METER) OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-283, "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. Refer to DLK-316, "System Description".
- Door lock function is normal.

Symptom Table

Symptom		Diagnosis/service procedure	Reference page
Ignition knob return forgotten warning.does not operate properly.		1. Check buzzer (combination meter).	DLK-399
		2. Check Intermittent Incident.	GI-39
Ignition key warning does not operate properly.		1. Check buzzer (combination meter).	DLK-399
		2. Check Intermittent Incident.	GI-39
OFF position warning does not operate properly.		1. Check buzzer (combination meter).	DLK-399
		2. Check Intermittent Incident.	GI-39
Take away warning does not operate properly.	Take away through window	1. Check buzzer (combination meter).	DLK-399
		2. Check Intermittent Incident.	GI-39

INTELLIGENT KEY WARNING BUZZER

INTELLIGENT KEY WARNING BUZZER : Symptom Table

INFOID:0000000001109317

INTELLIGENT KEY WARNING BUZZER OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-283, "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. Refer to DLK-316, "System Description".
- Door lock function is normal.

Symptom Table

Symptom		Diagnosis/service procedure	Reference page
Take away warning does not operate properly.	Any door open to all door close.	1. Check “TAKE OUT FROM WINDOW WARN” setting in “WORK SUPPORT”.	DLK-329
		2. Check Intelligent Key warning buzzer.	DLK-397
		3. Check Intermittent Incident.	GI-39

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Symptom		Diagnosis/service procedure	Reference page
Door lock operation warning chime does not operate properly.	Request switch operation	1. Check Intelligent Key warning buzzer.	DLK-397
		2. Check Intermittent Incident.	GI-39
	Intelligent Key button operation	1. Check Intelligent Key warning buzzer.	DLK-397
		2. Check Intermittent Incident.	GI-39

WARNING LAMP

WARNING LAMP : Symptom Table

INFOID:0000000001109318

WARNING LAMP OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-283, "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. Refer to DLK-316, "System Description".
- Door lock function is normal.

Symptom Table

Symptom		Diagnosis/service procedure	Reference page
OFF position warning does not operate properly.		1. Check LOCK warning lamp. (RED blinking)	DLK-401
		2. Check Intermittent Incident.	GI-39
Take away warning does not operate properly.	Any door open to all door close.	1. Check LOCK warning lamp. (RED blinking)	DLK-401
		2. Check Intermittent Incident.	GI-39
	Door is open	1. Check LOCK warning lamp. (RED blinking)	DLK-401
		2. Check Intermittent Incident.	GI-39
	Take away through window	1. Check LOCK warning lamp. (RED blinking)	DLK-401
		2. Check Intermittent Incident.	GI-39
Intelligent Key low battery warning dose not operate properly.		1. Check “LOW BAT OF KEY FOB WARN” setting in “WARK SUPPORT”.	DLK-329
		2. Check Intelligent Key battery.	DLK-404
		3. Check KEY warning lamp. (GREEN blinking)	DLK-400
		4. Check Intermittent Incident.	GI-39

BACK DOOR

BACK DOOR : Symptom Table

INFOID:0000000001109319

BACK DOOR OPEN WARNING OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-283, "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)

- Door lock function and back door opener function is normal.

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Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Back door open warning does not operate properly.	1. Check buzzer (combination meter).	DLK-399
	2. Check intermittent incident.	GI-39

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HAZARD AND BUZZER REMINDER FUNCTION SYMPTOMS

HAZARD WARNING LAMP

HAZARD WARNING LAMP : Symptom Table

INFOID:0000000001109320

BUZZER REMINDER OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work flow”. Refer to DLK-283, "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-III.
- “ANSWER BACK WITH I-KEY LOCK”, “ANSWER BACK WITH I-KEY UNLOCK” and “ANSWER BACK FUNCTION” are ON when setting on CONSULT-III.
- Door lock function is normal.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Buzzer reminder operation dose not operate properly.	1. Check setting of buzzer reminder with CONSULT-III.	DLK-329
	2. Check intermittent incident.	GI-39

INTELLIGENT KEY WARNING BUZZER

INTELLIGENT KEY WARNING BUZZER : Symptom Table

INFOID:0000000001109321

HAZARD REMINDER OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work flow”. Refer to DLK-283, "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)

- “HAZARD ANSWER BACK” is ON when setting on CONSULT-III.
- Door lock function is normal.

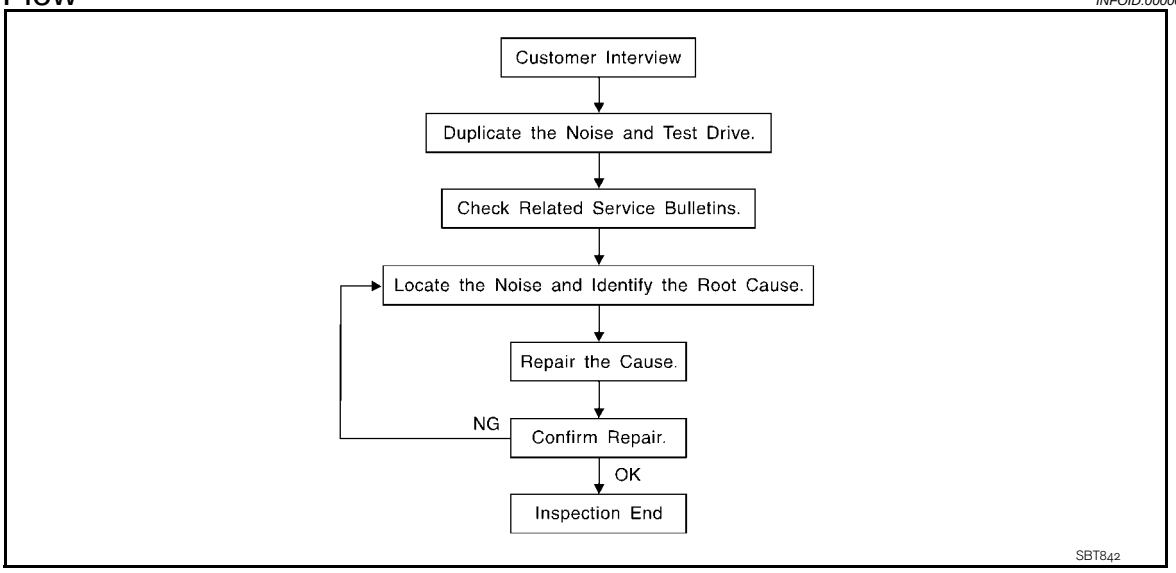
Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Hazard reminder operation does not operate properly.	1. Check setting of hazard reminder with CONSULT-III.	DLK-329
	2. Check intermittent incident.	GI-39

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000001098118



CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of the customer's comments; refer to DLK-216, "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 a test drive 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.

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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 A/T model).
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 (TSB) 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 (Engine Ear or mechanics stethoscope).
2. Narrow down the noise to a more specific area and identify the cause of the noise by:

- removing the components in the area that you suspect the noise is coming from.
  Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
- tapping or pushing/pulling the component that 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-214, "Inspection Procedure".

REPAIR THE CAUSE

- If the cause is a loose component, tighten the component securely.
- If the cause is insufficient clearance between components:
- separate components by repositioning or loosening and retightening the component, if possible.
- insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or urethane tape are available through your authorized Nissan Parts Department.

CAUTION:
Do not use excessive force as many components are constructed of plastic and may be damaged.
NOTE:

- URETHANE PADS
  Insulates connectors, harness, etc.
- INSULATOR (Foam blocks)
  Insulates components from contact. Can be used to fill space behind a panel.
- INSULATOR (Light foam block)
- FELT CLOTHTAPE
  Used to insulate where movement does not occur. Ideal for instrument panel applications.
  The following materials, not available through NISSAN Parts Department, can also be used to repair squeaks and rattles.
- UHMW(TEFLON) TAPE
  Insulates where slight movement is present. Ideal for instrument panel applications.
- SILICONE GREASE
  Used in place of UHMW tape that 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

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Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.

Inspection Procedure

INFOID:0000000001098119

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

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. Cluster lid A and instrument panel
2. Acrylic lens and combination meter housing
3. Instrument panel to front pillar garnish
4. Instrument panel to windshield
5. Instrument panel mounting pins
6. Wiring harnesses behind the combination meter
7. A/C defroster duct and duct joint

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

CAUTION:

Do not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will not be able to recheck the repair.

CENTER CONSOLE

Components to pay attention to include:

1. Shifter assembly cover to finisher
2. A/C control unit and cluster lid C
3. Wiring harnesses behind audio and A/C control unit

The instrument panel repair and isolation procedures also apply to the center console.

DOORS

Pay attention to the:

1. Finisher and inner panel making a slapping noise
2. Inside handle escutcheon to door finisher
3. Wiring harnesses tapping
4. Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks to repair the noise.

TRUNK

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

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

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

SUNROOF/HEADLINING

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

1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
2. Sunvisor shaft shaking in the holder
3. Front or rear windshield touching headlining and squeaking

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Again, pressing on the components to stop the noise while duplicating the conditions can isolate most of these incidents. Repairs usually consist of insulating with felt cloth tape.

SEATS

When isolating seat noise it is important to note the position the seat is in and the load placed on the seat when the noise is present. These conditions should be duplicated when verifying and isolating the cause of the noise.

Cause of seat noise include:

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

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

UNDERHOOD

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

Causes of transmitted underhood noise include:

1. Any component mounted to the engine wall
2. Components that pass through the engine wall
3. Engine wall mounts and connectors
4. Loose radiator mounting pins
5. Hood bumpers out of adjustment
6. Hood striker out of adjustment

These noises can be difficult to isolate since they cannot be reached from the interior of the vehicle. The best method is to secure, move or insulate one component at a time and test drive the vehicle. Also, engine RPM or load can be changed to isolate the noise. Repairs can usually be made by moving, adjusting, securing, or insulating the component causing the noise.

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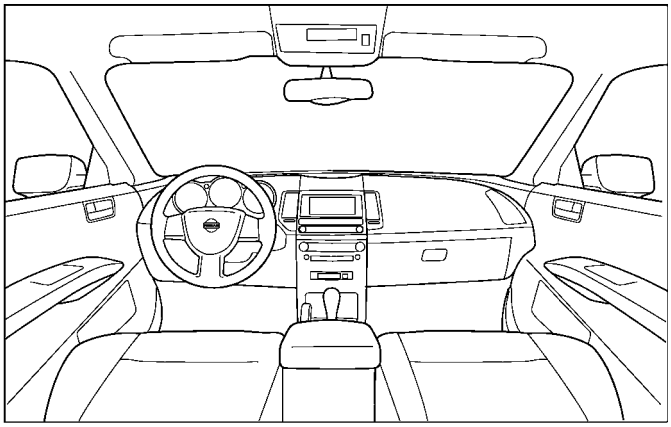
Diagnostic Worksheet

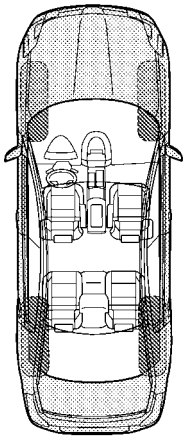
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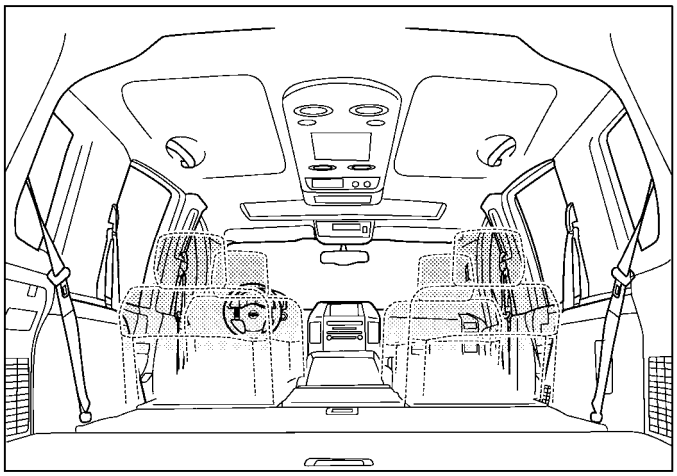
SQUEAK & RATTLE
DIAGNOSTIC WORKSHEET

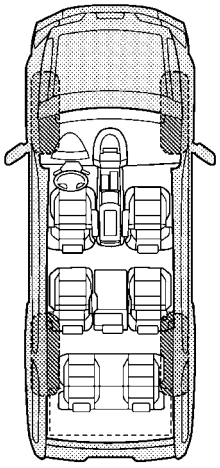
Dear Nissan Customer:
We are concerned about your satisfaction with your Nissan vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Nissan right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what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

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









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

PIIB8740E

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SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

_____

_____

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

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

III. WHEN DRIVING:

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

IV. WHAT TYPE OF NOISE

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

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

_____

_____

_____

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

VIN: _____ Customer Name: _____

W.O.# _____ Date: _____

This form must be attached to Work Order

PIIB8742E

PRECAUTION

PRECAUTIONS

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

INFOID:0000000001081560

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

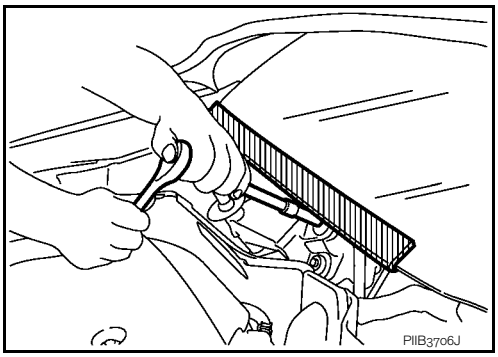
WARNING:

- **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 SRS 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.**

Procedure without Cowl Top Cover

INFOID:0000000001081561

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



Steering Wheel Rotation after Battery Disconnect

INFOID:0000000001081562

NOTE:

- Before removing and installing any control units, first turn the push-button ignition switch to the LOCK position, then disconnect both battery cables.
- After finishing work, confirm that all control unit connectors are connected properly, then re-connect both battery cables.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work. If a DTC is detected, perform trouble diagnosis according to self-diagnosis results.

This vehicle is equipped with a push-button ignition switch and a steering lock unit.
If the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.
If turning the steering wheel is required with the battery disconnected or discharged, follow the procedure below before starting the repair operation.

OPERATION PROCEDURE

1. Connect both battery cables.
   NOTE:
   Supply power using jumper cables if battery is discharged.
2. Carry the Intelligent Key or insert it to the key slot and turn the push-button ignition switch to ACC position. (At this time, the steering lock will be released.)

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3. Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.
4. Perform the necessary repair operation.
5. When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the push-button ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the push-button ignition switch is turned to LOCK position.)
6. Perform self-diagnosis check of all control units using CONSULT-III.

Work

INFOID:0000000001081563

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

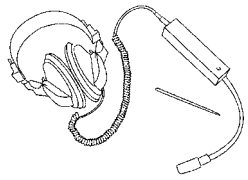
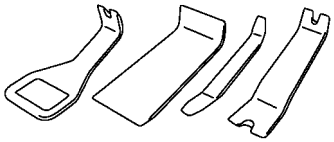
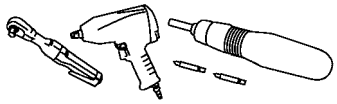
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PREPARATION

PREPARATION

Commercial Service Tools

INFOID:0000000001116409

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

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ON-VEHICLE MAINTENANCE

PRE-INSPECTION FOR DIAGNOSTIC

Basic Inspection

INFOID:0000000001090922

BASIC INSPECTION

1. CHECK POWER DOOR LOCK AND UNLOCK SWITCH OPERATION

Check door lock and unlock operation by operating door lock and unlock switch.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to DLK-473, "DOOR LOCK AND UNLOCK SWITCH : Symptom Table".

2. CHECK INTELLIGENT KEY OPERATION

Check door lock and unlock operation by operating the Intelligent Key remote control button.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Refer to DLK-473, "INTELLIGENT KEY : Symptom Table".

3. CHECK DOOR REQUEST SWITCH OPERATION

Check door lock and unlock operation by operating door request switch.

Is the inspection result normal?

YES >> GO TO 4.
NO >> Refer to DLK-474, "DOOR REQUEST SWITCH : Symptom Table".

4. CHECK KEY REMINDER OPERATION

Check key reminder operation. Refer to DLK-299, "KEY REMINDER : System Description".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Refer to DLK-475, "KEY REMINDER : Symptom Table".

5. CHECK AUTO DOOR LOCK OPERATION

Check auto door lock operation. Refer to DLK-302, "AUTO DOOR LOCK : System Description".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Refer to DLK-475, "AUTO DOOR LOCK : Symptom Table".

6. CHECK VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION

Check vehicle speed sensing auto door lock operation. Refer to DLK-305, "VEHICLE SPEED SENSING AUTO DOOR LOCK : System Description".

Is the inspection result normal?

YES >> GO TO 7.
NO >> Refer to DLK-476, "VEHICLE SPEED SENSING AUTO DOOR LOCK : Symptom Table".

7. CHECK BACK DOOR OPENER OPERATION

Check back door opener operation by operating the back door opener switch.

Is the inspection result normal?

YES >> GO TO 8.
NO >> Refer to DLK-477, "BACK DOOR OPENER SWITCH : Symptom Table".

8. CHECK WARNING FUNCTION

Check warning function. Refer to DLK-316, "System Description".

Is the inspection result normal?

YES >> GO TO 9.

NO [Buzzer (combination meter)]>> Refer to DLK-478, "BUZZER (COMBINATION METER) : Symptom Table".
NO (Intelligent Key warning buzzer)>> Refer to DLK-478, "INTELLIGENT KEY WARNING BUZZER : Symptom Table".
NO (Warning lamp)>> Refer to DLK-479, "WARNING LAMP : Symptom Table".
NO (Back door open warning)>> Refer to DLK-479, "BACK DOOR : Symptom Table".

9. CHECK HAZARD AND BUZZER REMINDER FUNCTION

Check hazard and buzzer reminder function by Intelligent Key or request switch. Refer to DLK-322, "System Description".

Is the inspection result normal?

YES >> GO TO 10.
NO (Hazard warning lamp)>> Refer to DLK-481, "HAZARD WARNING LAMP : Symptom Table".
NO (Intelligent Key warning buzzer)>> Refer to DLK-481, "INTELLIGENT KEY WARNING BUZZER : Symptom Table".

10. CHECK OUT

CHECK OUT.

>> INSPECTION END

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ON-VEHICLE REPAIR

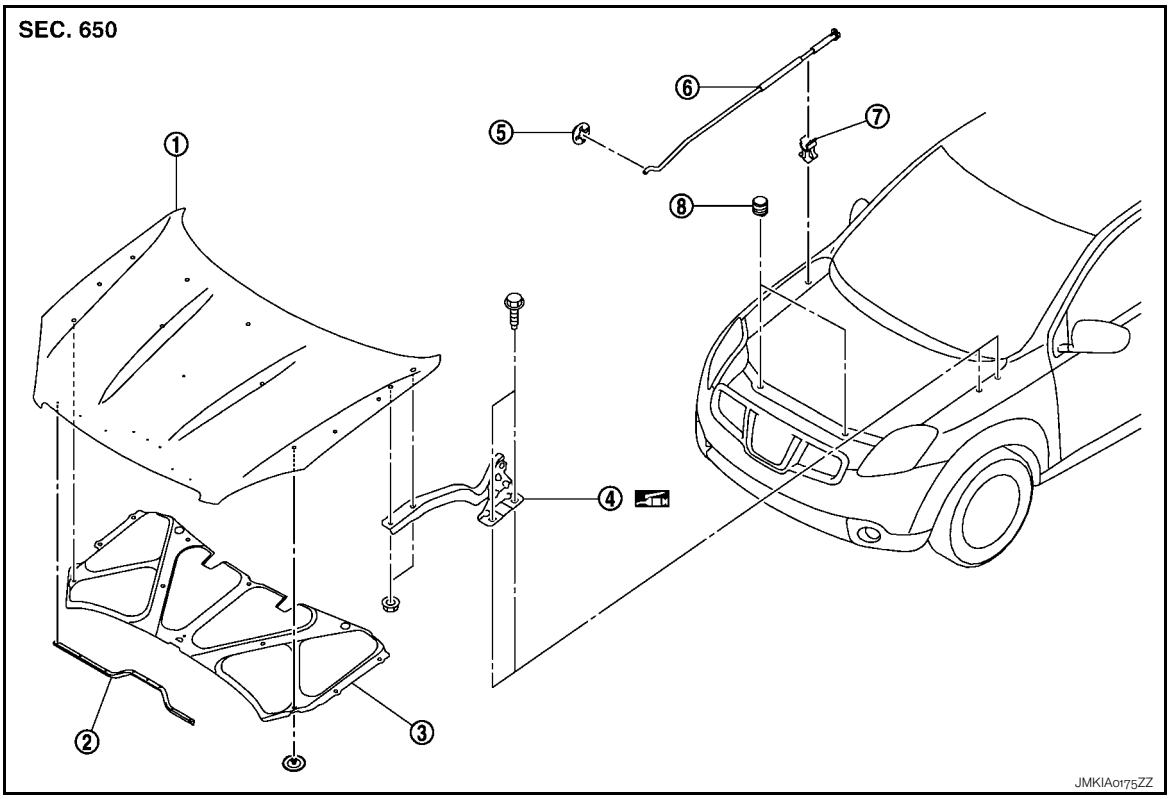
HOOD

HOOD ASSEMBLY

HOOD ASSEMBLY : Exploded View

INFOID:0000000001098453

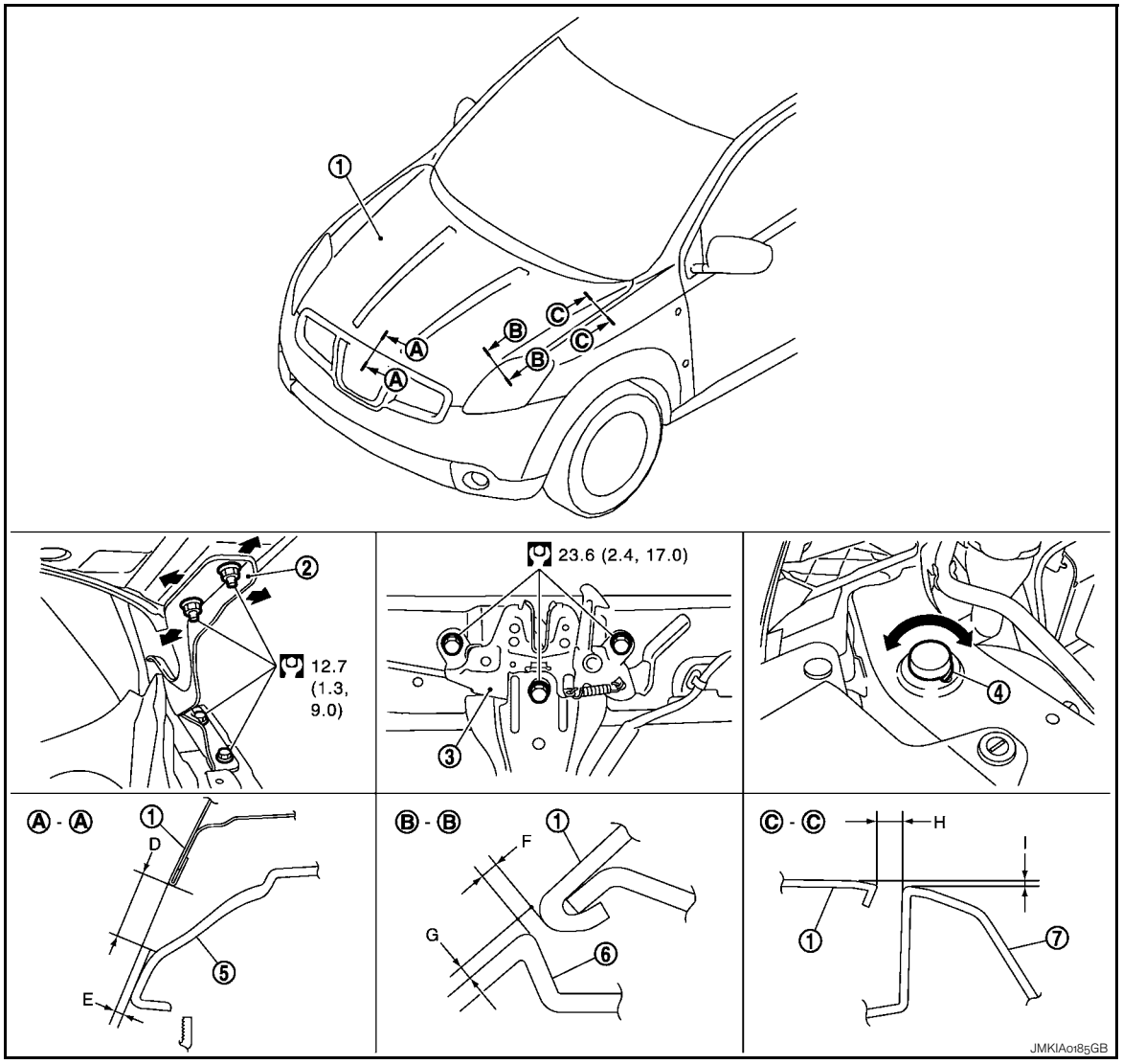
REMOVAL



1. Hood assembly
2. Hood sealing rubber
3. Hood insulator
4. Hood hinge
5. Grommet
6. Hood support rod
7. Clamp
8. Hood bumper rubber

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT



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

Refer to GI-4, "Components" for symbols in the figure.

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000001098454

REMOVAL

1. Support the hood lock assembly with the proper material to prevent it from falling.
   WARNING:
   Bodily injury may occur if no supporting rod is holding the hood open when removing the hood stay.
2. Remove the hood hinge mounting nuts on the hood to remove the hood assembly.
   CAUTION:
   Perform work with 2 workers, because of its heavy weight.
3. Remove the following parts after removing the hood assembly.
   - Hood insulator
   - Hood sealing rubber

INSTALLATION

Install in the reverse order of removal.

CAUTION:

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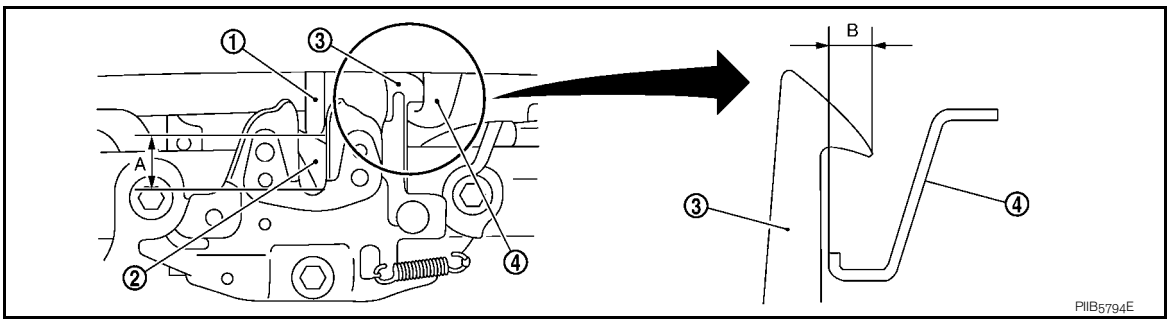
- **Perform work with 2 workers, because of its heavy weight.**
- **Before installing the hood hinge, apply anticorrosive agent onto the mounting surface of the vehicle body.**
- **After installing, perform hood fitting adjustment. Refer to DLK-830, "HOOD ASSEMBLY : Adjustment".**

HOOD ASSEMBLY : Adjustment

INFOID:0000000001098455

Portion				Standard	Right/left Clearance (MAX)
Hood – Front bumper	A – A	D	Clearance	5.2 – 9.2 mm (0.205 – 0.362 in)	2.0 mm (0.079 in)
		E	Surface height	- 0.2 – 3.8 mm (- 0.008 – 0.150 in)	2.0 mm (0.079 in)
Hood – Front combination lamp	B – B	F	Clearance	3.7 – 7.7 mm (0.140 – 0.303 in)	2.0 mm (0.079 in)
		G	Surface height	- 2.3 – 2.3 mm (- 0.091 – 0.091 in)	2.3 mm (0.091 in)
Hood – Front fender	C – C	H	Clearance	3.9 – 5.9 mm (0.154 – 0.232 in)	1.5 mm (0.059 in)
		I	Surface height	- 1.0 – 1.0 mm (- 0.039 – 0.039 in)	1.5 mm (0.059 in)

1. Check the clearance and the surface height between the hood and each part by visualy and touching. (Fitting standard dimension in the table below should be satisfied.)
2. In case any parts are out of specification, adjust them according to the procedures shown below.
3. Remove the hood lock and adjust the height by rotating the bumper rubber until the hood becomes 1 to1.5 mm (0.04 to 0.059 in) lower than the fender.
4. Temporarily tighten the hood lock, and position by engaging it with the hood striker. Check the lock and striker for looseness and adjust the clearance and evenness with the striker to satisfy the specification.
5. Adjust A and B shown in the figure to the following value with hood's own weight by dropping it from approximately. 200 mm (7.87 in) height or by pressing the hood lightly [approximately. 29 N (3 kg)].



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

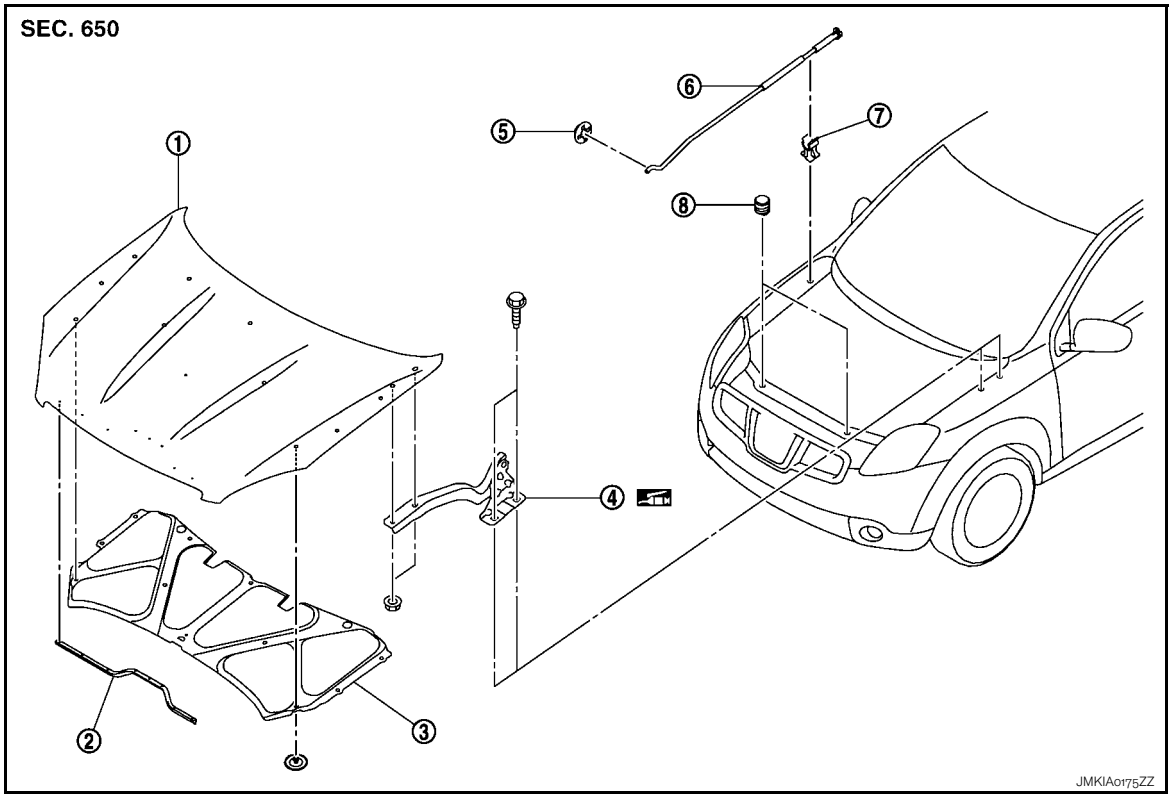
A : 20.0 mm (0.787 in)
B : 6.8 mm (0.268 in)

6. After adjustment tighten lock bolts to the specified torque.

HOOD HINGE

HOOD HINGE : Exploded View

INFOID:0000000001098461



1. Hood assembly
2. Hood sealing rubber
3. Hood insulator
4. Hood hinge
5. Grommet
6. Hood support rod
7. Clamp
8. Hood bumper rubber

Refer to GI-4, "Components" for symbols in the figure.

HOOD HINGE : Removal and Installation

INFOID:0000000001098462

REMOVAL

1. Remove the hood assembly. Refer to DLK-829, "HOOD ASSEMBLY : Removal and Installation".
2. Remove the front fender. Refer to DLK-838, "Removal and Installation".
3. Remove the hood hinge mounting bolts, and then remove the hood hinge.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

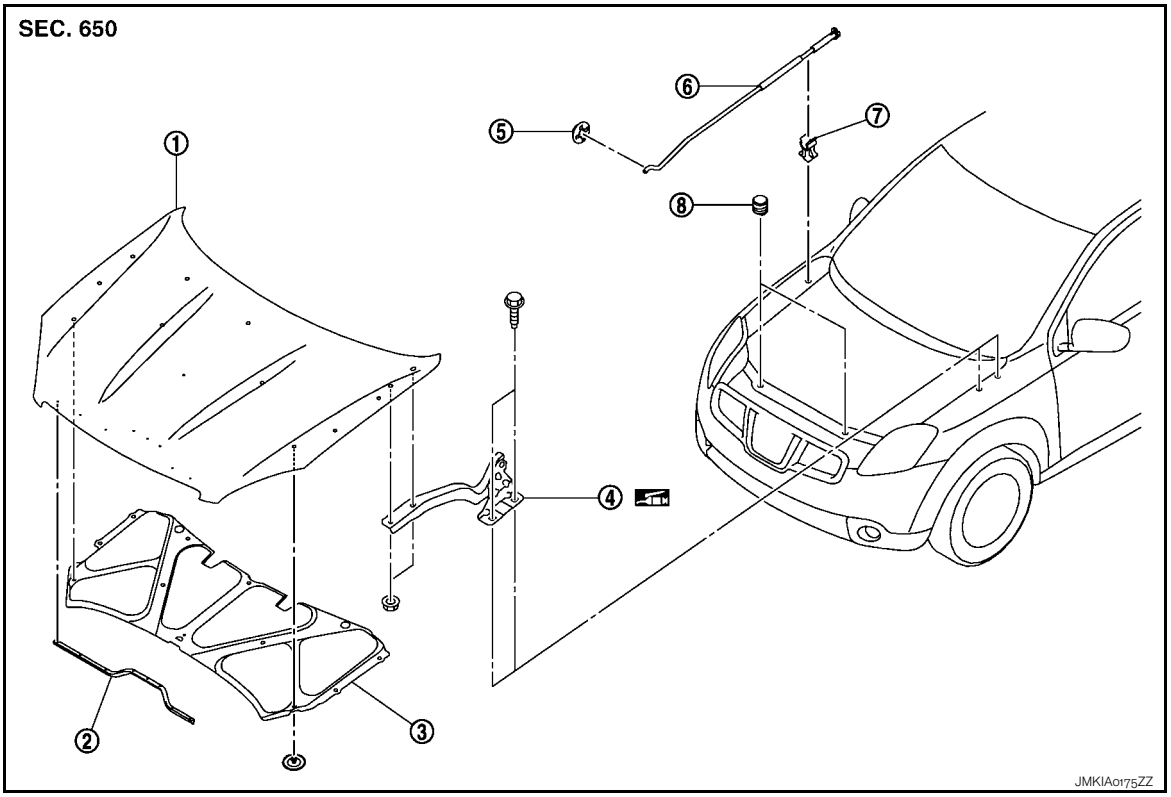
- **After installation, apply touch-up paint (the body color) onto the head of the hinge mounting bolts and nuts.**
- **Before installation of hood hinge, apply anticorrosive agent onto the mounting surface of the vehicle body.**
- **After installation, perform hood fitting adjustment. Refer to DLK-830, "HOOD ASSEMBLY : Adjustment".**

HOOD SUPPORT ROD

HOOD SUPPORT ROD : Exploded View

INFOID:0000000001098464

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1. Hood assembly
2. Hood sealing rubber
3. Hood insulator
4. Hood hinge
5. Grommet
6. Hood support rod
7. Clamp
8. Hood bumper rubber

Refer to GI-4, "Components" for symbols in the figure.

HOOD SUPPORT ROD : Removal and Installation

INFOID:0000000001098466

REMOVAL

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

   WARNING:
   Bodily injury may occur if no supporting rod is holding the hood open when removing the hood stay.
2. Remove the hood support rod from the grommet.

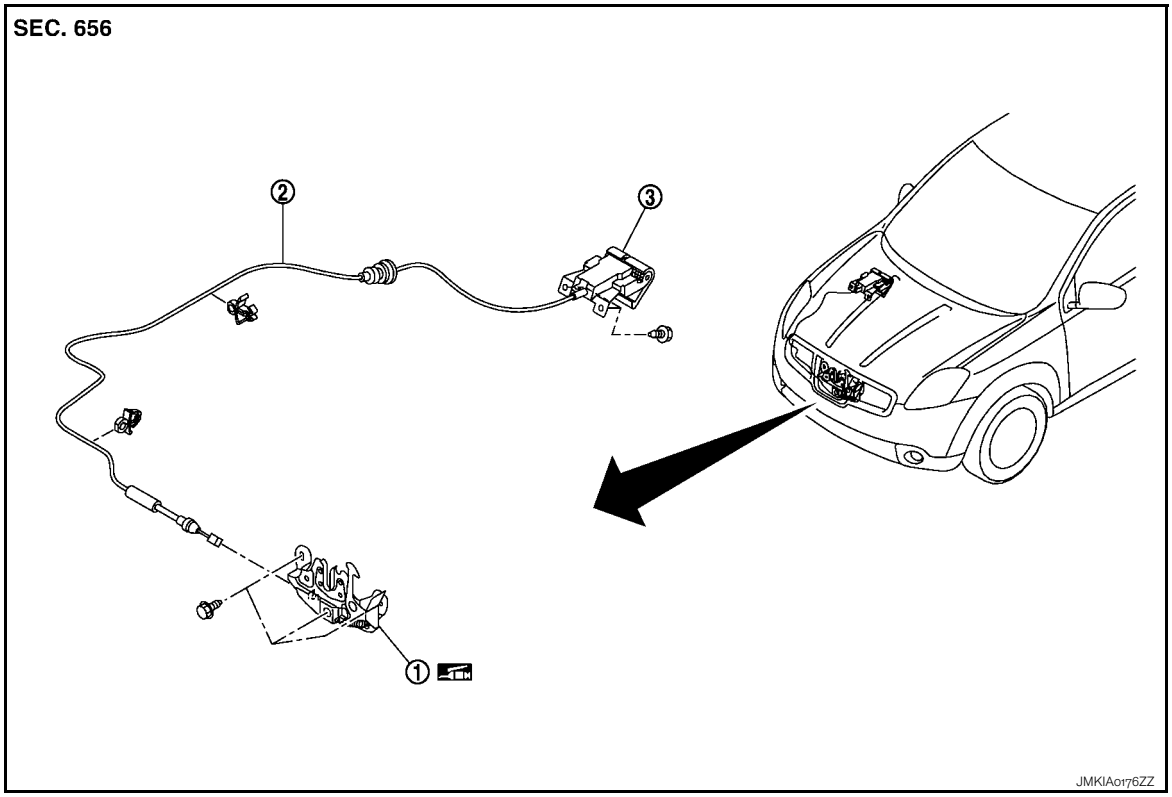
INSTALLATION

Install in the reverse order of removal.

HOOD LOCK CONTROL

HOOD LOCK CONTROL : Exploded View

INFOID:0000000001098468



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

Refer to GI-4, "Components" for symbols in the figure.

HOOD LOCK CONTROL : Removal and Installation

INFOID:0000000001098469

REMOVAL

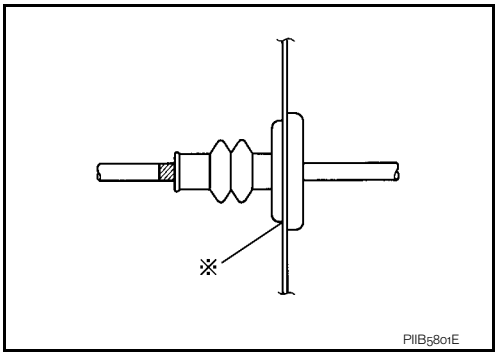
1. Remove the hood lock opener mounting bolts, and then remove the hood lock opener.
2. Remove the front bumper fascia. Refer to EXT-11, "Removal and Installation".
3. Remove the hood lock mounting bolts, and then remove the hood lock.
4. Remove the fender protector. Refer to EXT-22, "Removal and Installation".
5. Disconnect the hood lock cable from hood lock, and clip it from the hoodledge.
6. Remove the grommet on the dash lower panel, and pull the hood lock control cable toward the passenger compartment.
   CAUTION:
   While pulling, do not to damage (peeling) the outside of the hood lock control cable.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **Do not to bend the cable too much, keeping the radius 100 mm (3.94 in) or more.**
- **Check that the cable is not offset from the positioning grommet, and apply the sealant to the grommet (at *mark) properly.**



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- **Check that the hood lock control cable is properly engaged with the hood lock.**
- **After installation, perform hood fitting adjustment. Refer to DLK-830, "HOOD ASSEMBLY : Adjustment".**
- **After installation, perform the hood lock control inspection. Refer to DLK-834, "HOOD LOCK CONTROL : Inspection".**

HOOD LOCK CONTROL : Inspection

INFOID:0000000001098470

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

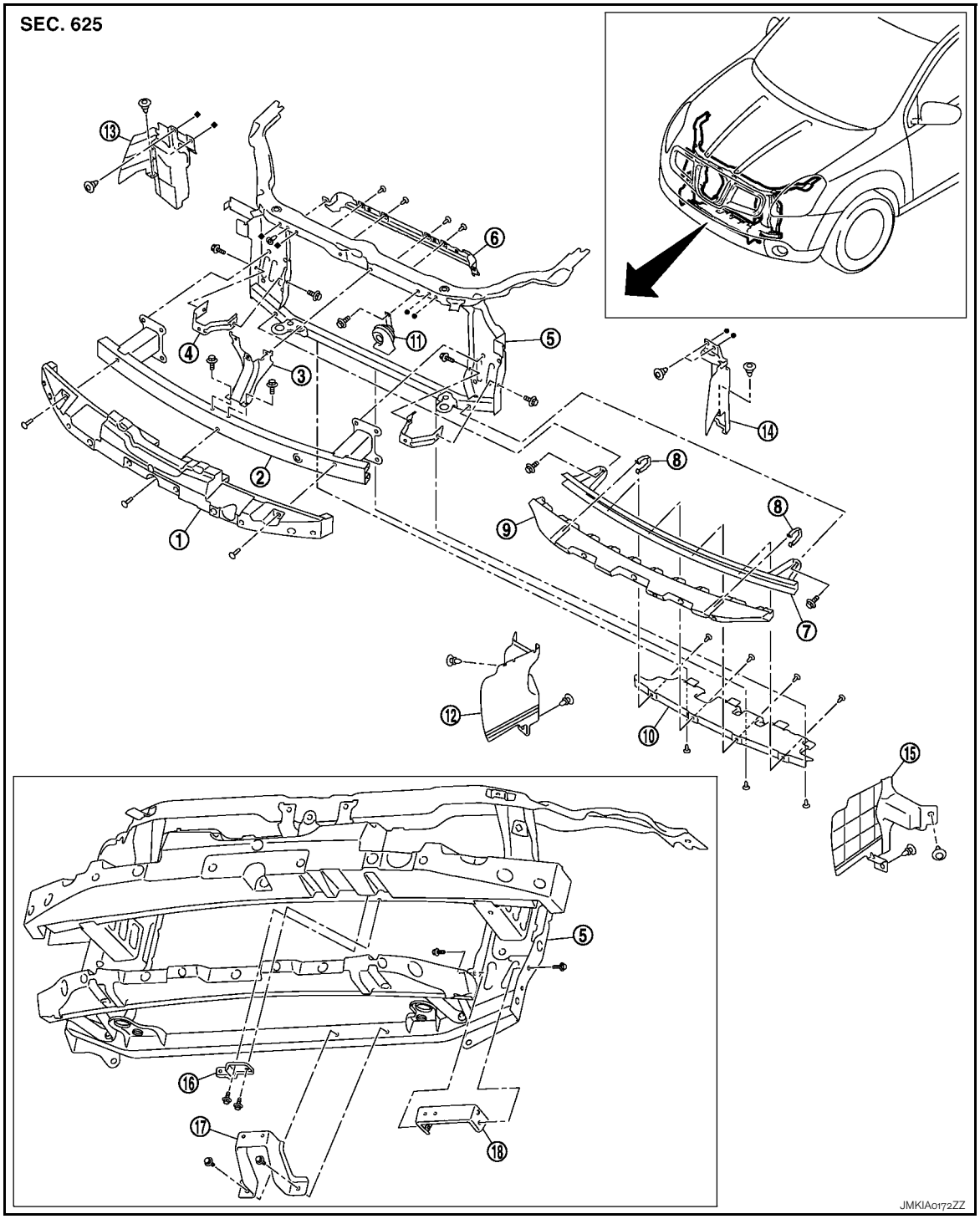
1. Check that the secondary latch is properly engaged with the secondary striker [6.8 mm (0.268 in) shown in the figure] by hood weight.
2. While operating the hood opener, carefully check that the front end of the hood is raised by approximately 20.0 mm (0.787 in). Also check that the hood opener returns to the original position.
3. Check that the hood opener operating is condition 49 N (5.0 kg) or below.
4. Install so that static closing face of hood is 94 – 490 N·m (9.6 – 50.0 kg-m).
   NOTE:
   - Exert vertical force on right side and left side of hood lock.
   - Do not press simultaneously both sides.
5. Check the hood lock lubrication condition. If necessary, apply body grease to the hood lock.

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RADIATOR CORE SUPPORT

Exploded View

INFOID:0000000001098475



1. Energy absorber
2. Bumper reinforcement
3. Hood lock support stay
4. Intercooler bracket (with K9K engine models)
5. Radiator core support assembly
6. Upper air dam
7. Apron bracket assembly
8. Fastener
9. Energy absorber lower
10. Front air guide lower
11. Horn assembly
12. Front air guide side lower RH
13. Front air guide side RH
14. Front air guide side LH
15. Front air guide side lower LH
16. Oil cooler bracket upper
17. Oil cooler bracket lower
18. Oil cooler bracket side

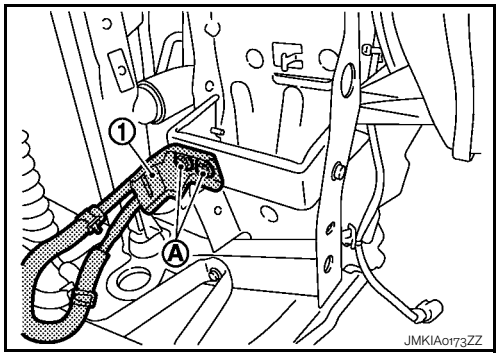
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Removal and Installation

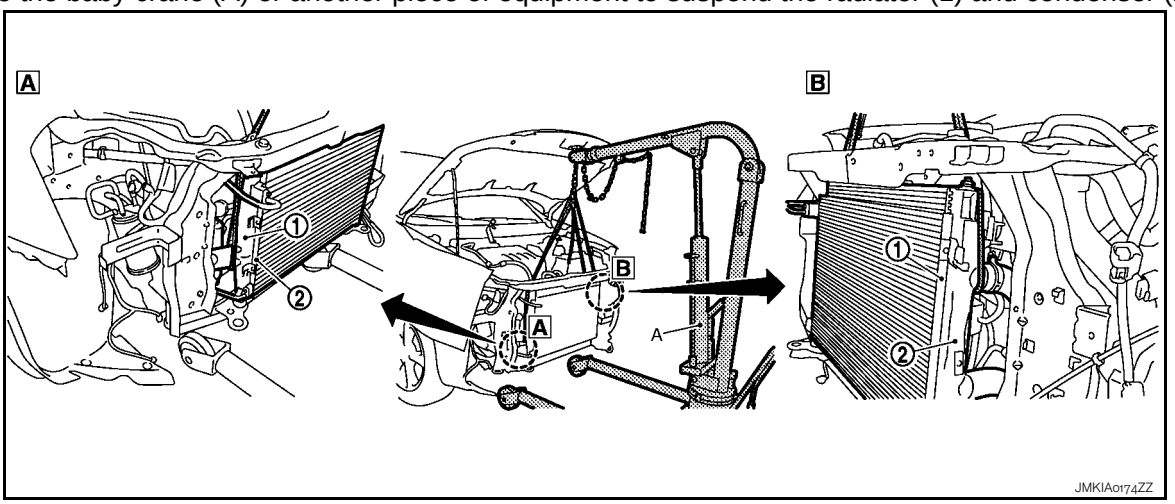
INFOID:0000000001098476

REMOVAL

1. Remove the front fillet molding. Refer to EXT-23, "Removal and Installation".
2. Remove the front bumper fascia and the energy absorber. Refer to EXT-11, "Removal and Installation".
3. Remove the energy absorber (upper and lower). Refer to EXT-11, "Removal and Installation".
4. Remove the air cleaner duct. Refer to EM-27, "Removal and Installation".
5. Remove the front combination lamp (LH/RH). Refer to EXL-171, "Removal and Installation".
6. Remove the bumper reinforcement. Refer to EXT-11, "Removal and Installation".
7. Disconnect the hood lock control cable clamp, and then remove the hood lock assembly. Refer to DLK-833, "HOOD LOCK CONTROL : Removal and Installation".
8. Remove the air guide mounting clips, and then remove the air guide (LH/RH).
9. Remove the hood lock stay mounting bolts, and then remove the hood lock stay.
10. Remove the hood switch (with theft warning systems). Refer to SEC-SEC-156, "Removal and Installation".
11. Remove the crush zone sensor. Refer to SR-14, "Removal and Installation".
12. Remove the horn. Refer to HRN-5, "Removal and Installation".
13. Remove the ambient sensor. Refer to VTL-22, "Removal and Installation".
14. Remove the radiator mounting bracket (LH/RH). Refer to CO-13, "Removal and Installation".
15. Remove the Intelligent Key warning buzzer (with Intelligent Key systems). Refer to DLK-277, "Removal and Installation".
16. Remove the charge air cooler assembly (with K9K engine models). Refer to EM-266, "Removal and Installation".
17. Remove the A/T fluid cooler assembly and the A/T fluid cooler bracket (with A/T models only). Refer to TM-348, "FLUID COOLER : Removal and Installation".
18. Remove the A/T fluid cooler pipe bracket (1) mounting bolts (A) (with A/T models only).



19. Remove the washer tank. Refer to WW-99, "Removal and Installation".
20. Use the baby crane (A) or another piece of equipment to suspend the radiator (1) and condenser (2).



21. Remove the radiator core support assembly mounting bolts, and draw out the radiator core support assembly to the front of the vehicle.
22. Remove the radiator core support assembly.
23. Remove the following parts after removing the radiator core support assembly.
    - Inlet tube bracket (with K9K engine models)
    - Intercooler bracket (with K9K engine models)
    - Apron reinforcement bracket

INSTALLATION

Install in the reverse order of removal.

CAUTION:

After installation, refill the following parts.

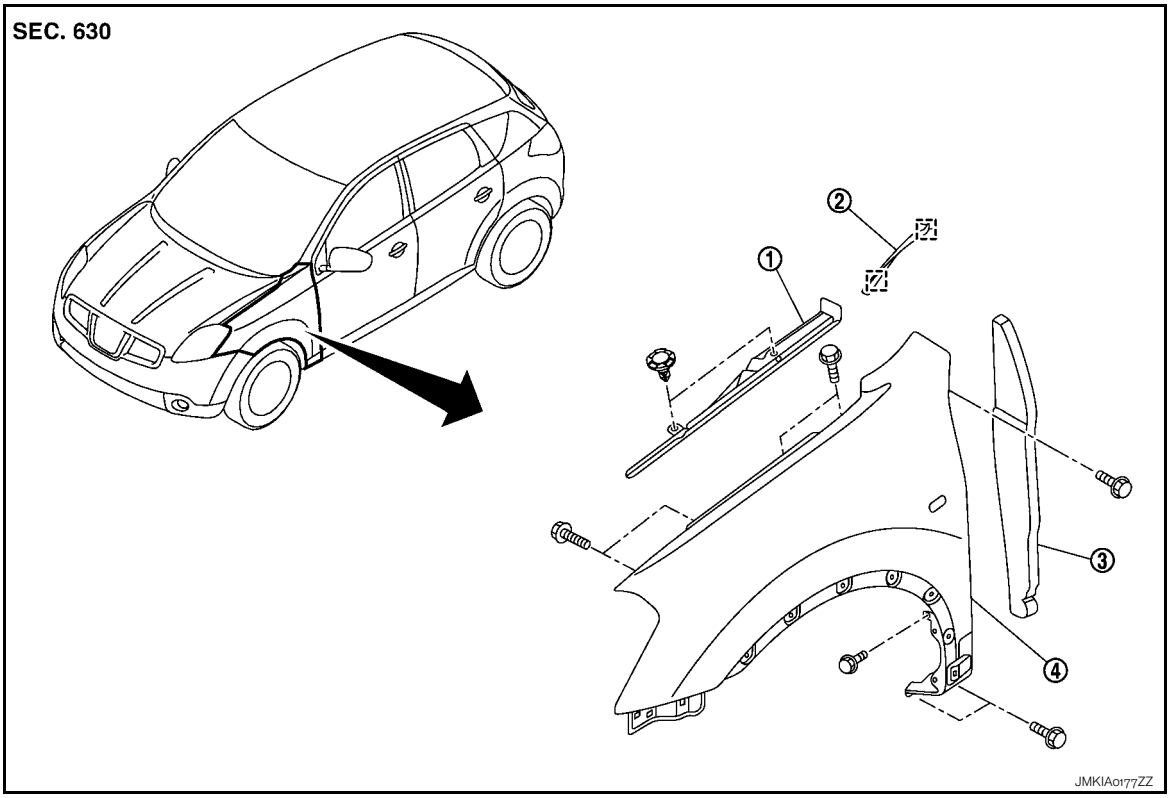
- **A/T fluid. Refer to TM-315, "Changing".**
- **Engine coolant. Refer to CO-9, "Refilling".**

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FRONT FENDER

Exploded View

INFOID:0000000001098477



1. Hood seal assembly (side)
2. Front fender finisher
3. Front fender seal
4. Front fender

: Metal clip

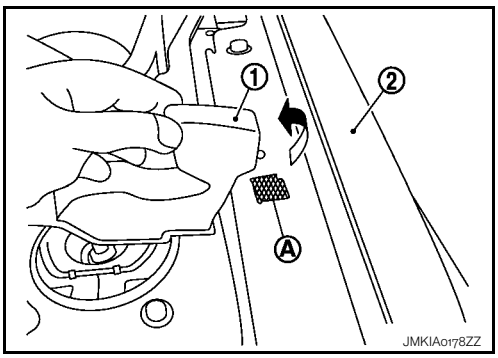
Removal and Installation

INFOID:0000000001098478

REMOVAL

1. Remove the outer fender protector. Refer to EXT-22, "Removal and Installation".
2. Remove the inner fender protector. Refer to EXT-22, "Removal and Installation".
3. Remove the side turn signal lamp. Refer to EXL-178, "Removal and Installation".
4. Remove the front bumper fascia. Refer to EXT-11, "Removal and Installation".
5. Remove the front combination lamp.
   - XENON TYPE: EXL-171, "Removal and Installation".
   - HALOGEN TYPE: EXL-327, "Removal and Installation".
6. Remove the mounting clips and remove hoodledge cover.
7. Remove the center mudguard. Refer to EXT-28, "Removal and Installation".

8. Peel away the double-faced adhesive tape (A) of the front fender seal (1) from the front fender (2).



9. Remove the mounting bolts and remove the front fender.
   CAUTION:
   Use a shop cloth to protect the body from being damaged during removal.
10. Remove the following parts after removing the front fender.
    - Front fender seal.
    - Bumper side bracket. Refer to EXT-11, "Exploded View".

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **Replace the double-faced adhesive tape on the back of the cowl top cover seal with new tape.**
- **Do not wash the vehicle within 24 hours after installation so as to keep adhesive.**
- **After installation, apply the touch-up paint (the body color) onto the head of the front fender mounting bolts.**
- **After installation, check the front fender adjustment. Refer to DLK-830, "HOOD ASSEMBLY : Adjustment" and DLK-842, "DOOR ASSEMBLY : Adjustment".**

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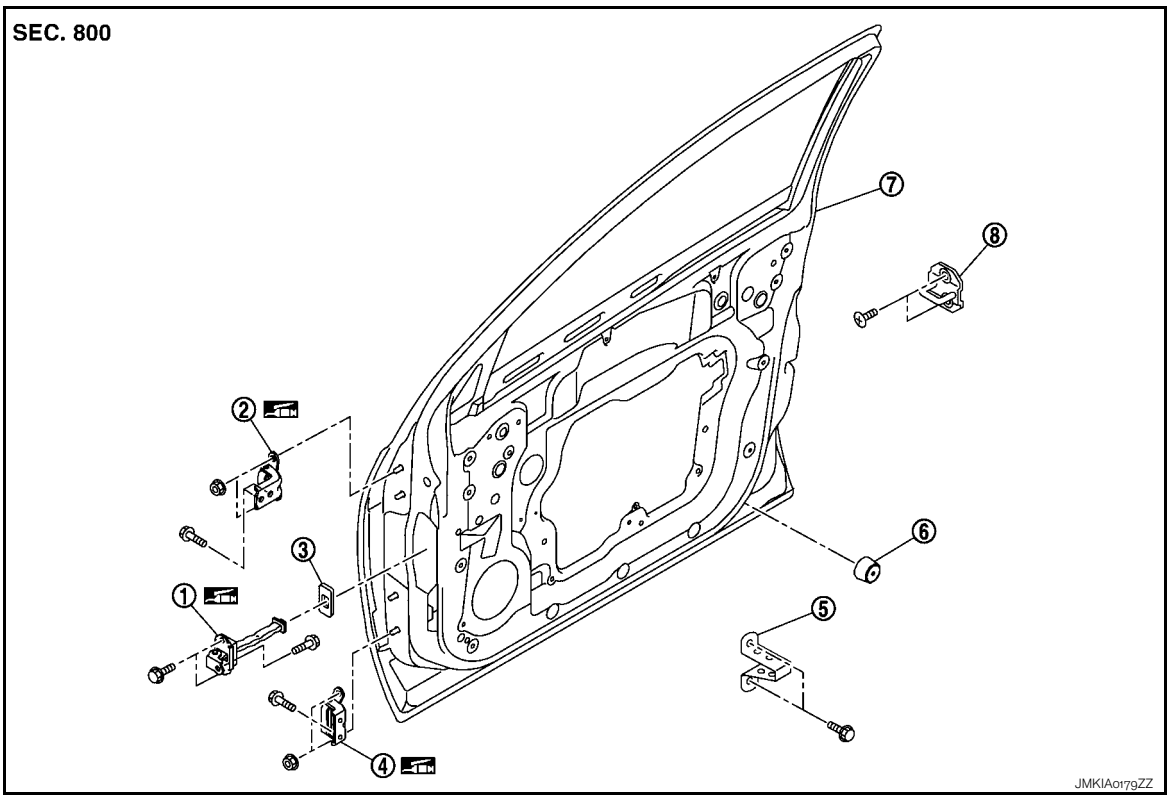
FRONT DOOR

DOOR ASSEMBLY

DOOR ASSEMBLY : Exploded View

INFOID:0000000001098479

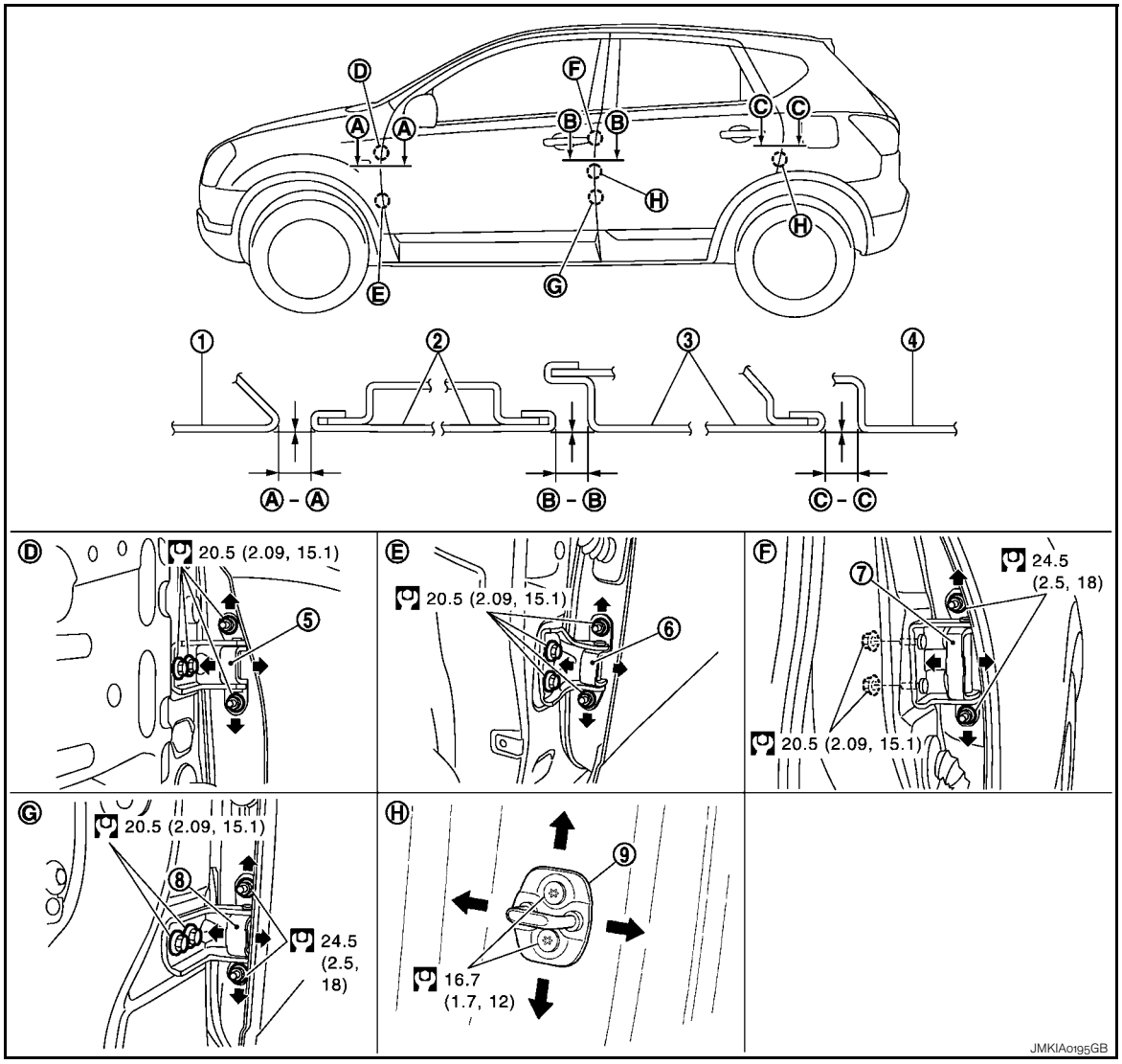
REMOVAL



1. Door check link
2. Door hinge (upper)
3. Door check link cover
4. Door hinge (lower)
5. Bracket
6. Bumper rubber
7. Front door panel
8. Door striker

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT



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

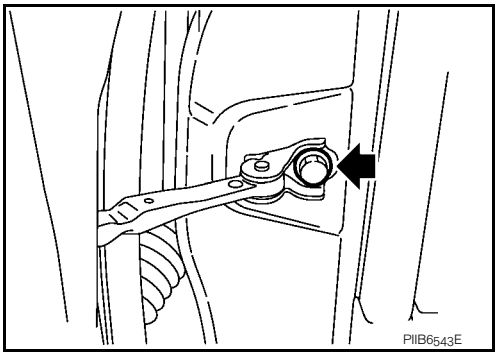
Refer to GI-4, "Components" for symbols in the figure.

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000001098480

REMOVAL

1. Remove the mounting bolts of the door check link on the vehicle.



2. Remove the front door harness grommet, and then pull out the harness from the vehicle.

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3. Disconnect the front door harness connector.
4. Remove the door hinge mounting nuts (door side), and then remove the door assembly.
   CAUTION:
   - **When removing and installing the front door assembly, support the door with a jack and cloth to protect the door and body.**
   - **Perform work with 2 workers, because of its heavy weight.**

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **When removing and installing the front door assembly, perform the fitting adjustment. Refer to DLK-842, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **Check the front door open/close operation after installation.**

DOOR ASSEMBLY : Adjustment

INFOID:0000000001098481

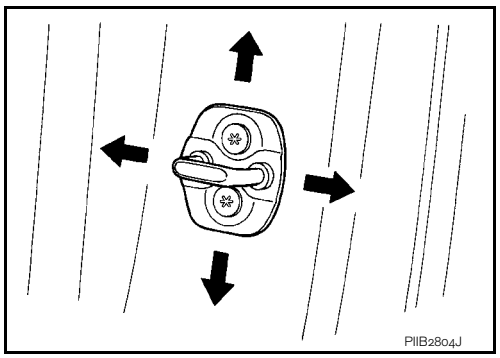
CLEARANCE, SURFACE HEIGHT AND SURFACE MISMATCH ADJUSTMENT

Portion		Clearance	Surface height
Front fender – Front door	A – A	3.5 – 5.0 mm (0.138 – 0.197 in)	- 1.5 – 0.5 mm (- 0.059 – 0.020 in)
Front door – Rear door	B – B	3.5 – 5.0 mm (0.138 – 0.197 in)	- 1.5 – 0.5 mm (- 0.059 – 0.020 in)

1. Check the clearance and surface height and surface mismatch between the front door and each part visually and by touching. (Fitting standard dimension in the table below shall be satisfied.)
2. In case any parts are out of specification, adjust them according to the procedures shown below.
3. Remove the front fender. Refer to refer to DLK-838, "Removal and Installation".
4. Loosen the door hinge mounting nuts on door side.
5. Adjust the surface height and surface mismatch of the front door according to the fitting standard dimension.
6. Temporarily tighten the hinge mounting nuts on door side.
7. Loosen the door hinge mounting bolts on body side.
8. Raise the front door at rear end to adjust clearance of the front door according to the fitting standard dimension.
9. After adjustment tighten bolts and nuts to the specified torque.
10. Install the front fender. Refer to refer to DLK-838, "Removal and Installation".
    CAUTION:
    After installation, check the front fender adjustment. Refer to DLK-225, "HOOD ASSEMBLY : Adjustment".

DOOR STRIKER ADJUSTMENT

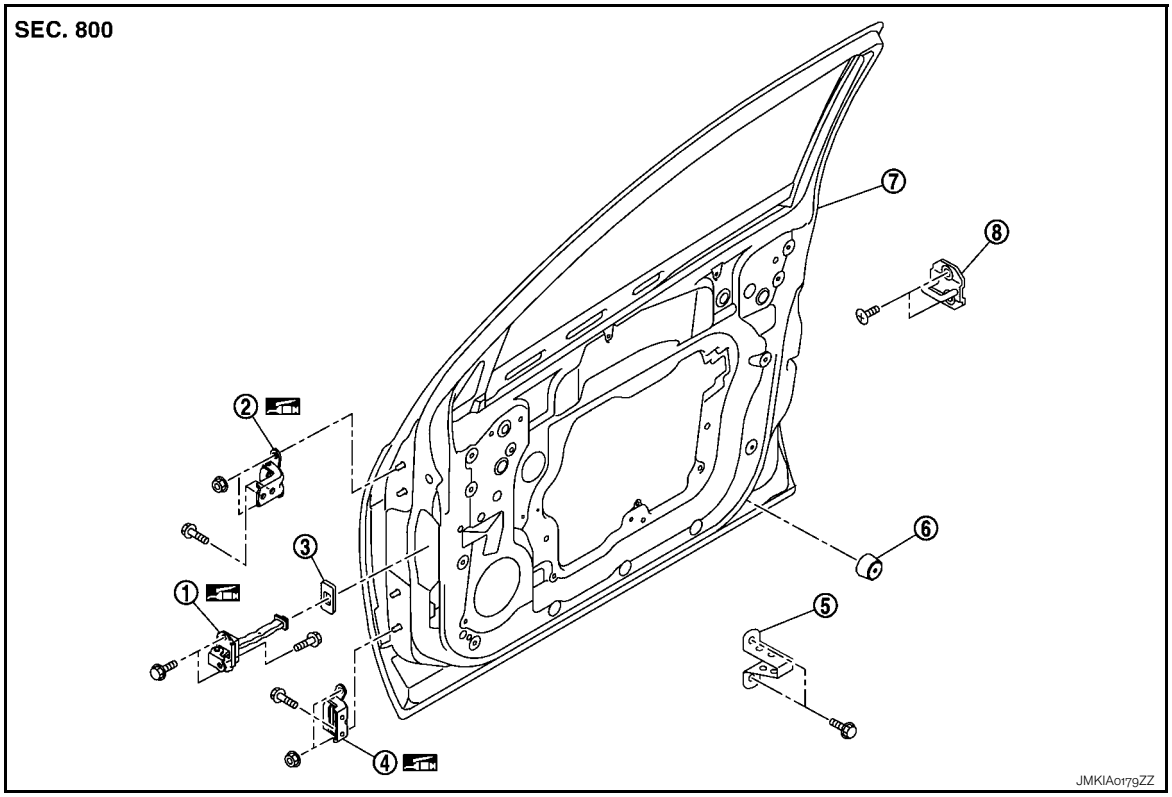
Adjust the door striker so that it becomes parallel with the lock insertion direction.



DOOR STRIKER

DOOR STRIKER : Exploded View

INFOID:0000000001098484



1. Door check link
2. Door hinge (upper)
3. Door check link cover
4. Door hinge (lower)
5. Bracket
6. Bumper rubber
7. Front door panel
8. Door striker

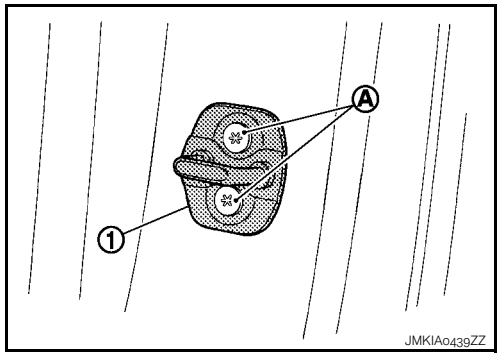
Refer to GI-4, "Components" for symbols in the figure.

DOOR STRIKER : Removal and Installation

INFOID:0000000001098485

REMOVAL

Remove the mounting bolts (A), and then remove the door striker (1).



INSTALLATION

Install in the reverse order of removal.

CAUTION:

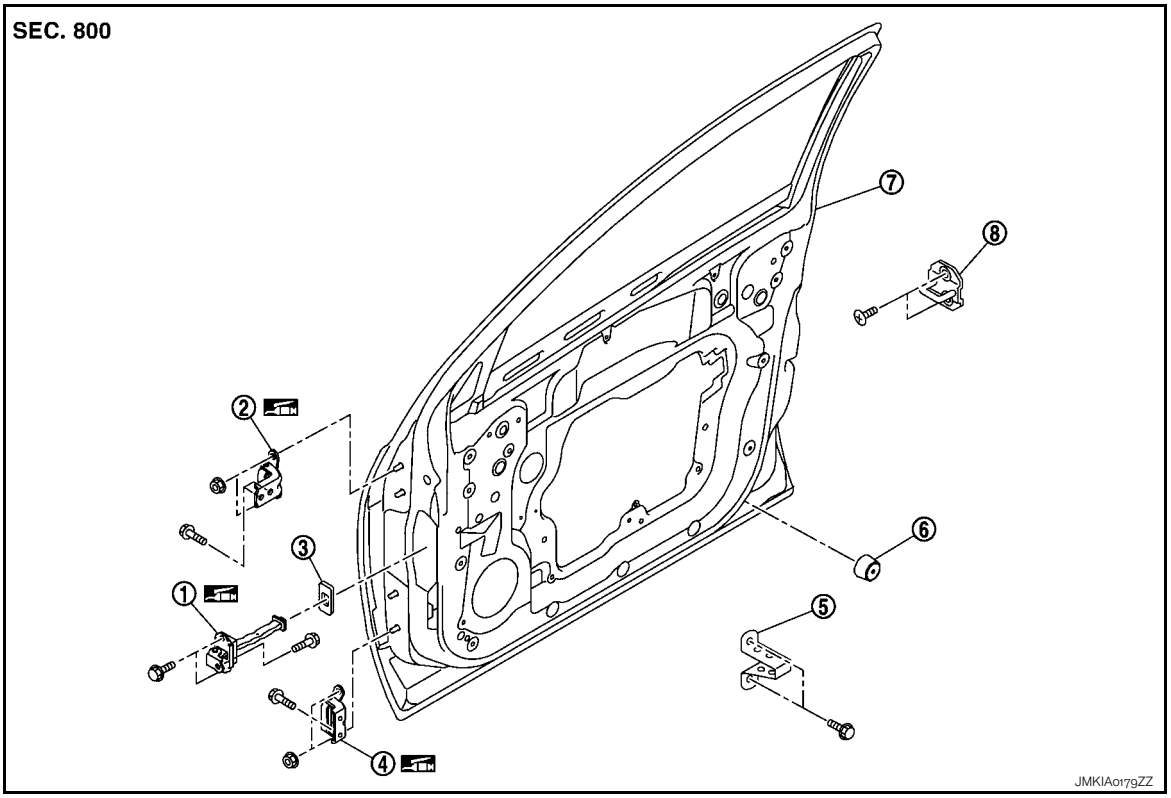
- **Check the front door open/close operation after installation.**
- **When removing and installing the door striker, be sure to perform the fitting adjustment. Refer to DLK-842, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

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DOOR HINGE : Exploded View

INFOID:0000000001098488



1. Door check link
2. Door hinge (upper)
3. Door check link cover
4. Door hinge (lower)
5. Bracket
6. Bumper rubber
7. Front door panel
8. Door striker

Refer to GI-4, "Components" for symbols in the figure.

DOOR HINGE : Removal and Installation

INFOID:0000000001098490

REMOVAL

1. Remove the front door assembly. Refer to DLK-841, "DOOR ASSEMBLY : Removal and Installation".
2. Remove the door hinge mounting bolts, and then remove the front door hinge.

INSTALLATION

Install in the reverse order of removal.

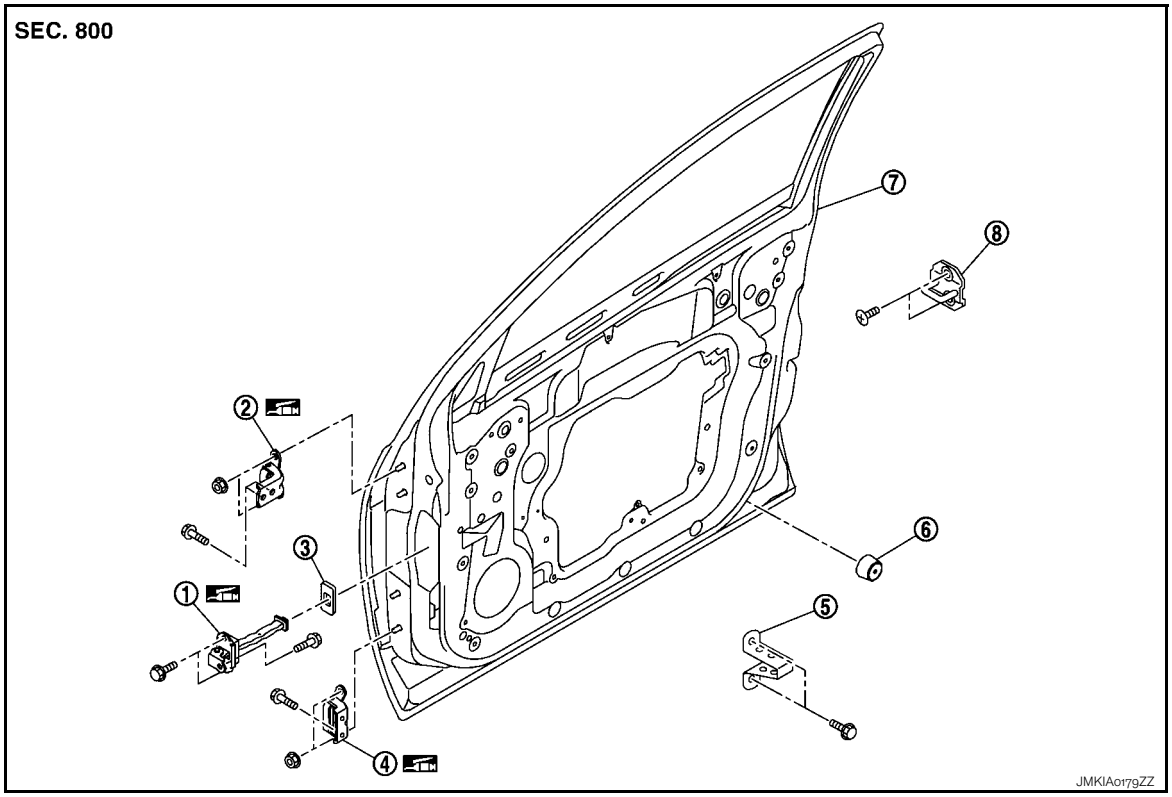
CAUTION:

- **When removing and installing the front door assembly, perform the fitting adjustment. Refer to DLK-842, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **Check the front door open/close operation after installation.**

DOOR CHECK LINK

DOOR CHECK LINK : Exploded View

INFOID:0000000001098493



1. Door check link
2. Door hinge (upper)
3. Door check link cover
4. Door hinge (lower)
5. Bracket
6. Bumper rubber
7. Front door panel
8. Door striker

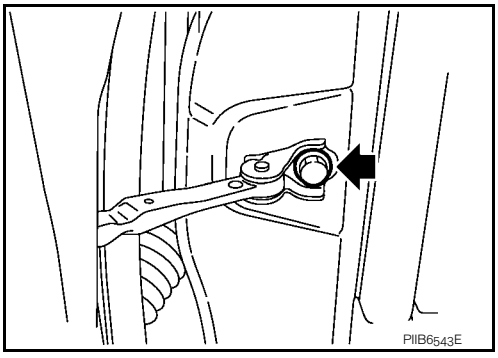
Refer to GI-4, "Components" for symbols in the figure.

DOOR CHECK LINK : Removal and Installation

INFOID:0000000001098495

REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the front door speaker. Refer to AV-34, "Removal and Installation".
3. Remove the mounting bolts of the door check link on the vehicle.



4. Remove the door check link cover, and then remove the door check link mounting bolts.
5. Remove the door check link.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check the front door open/close operation after installation.

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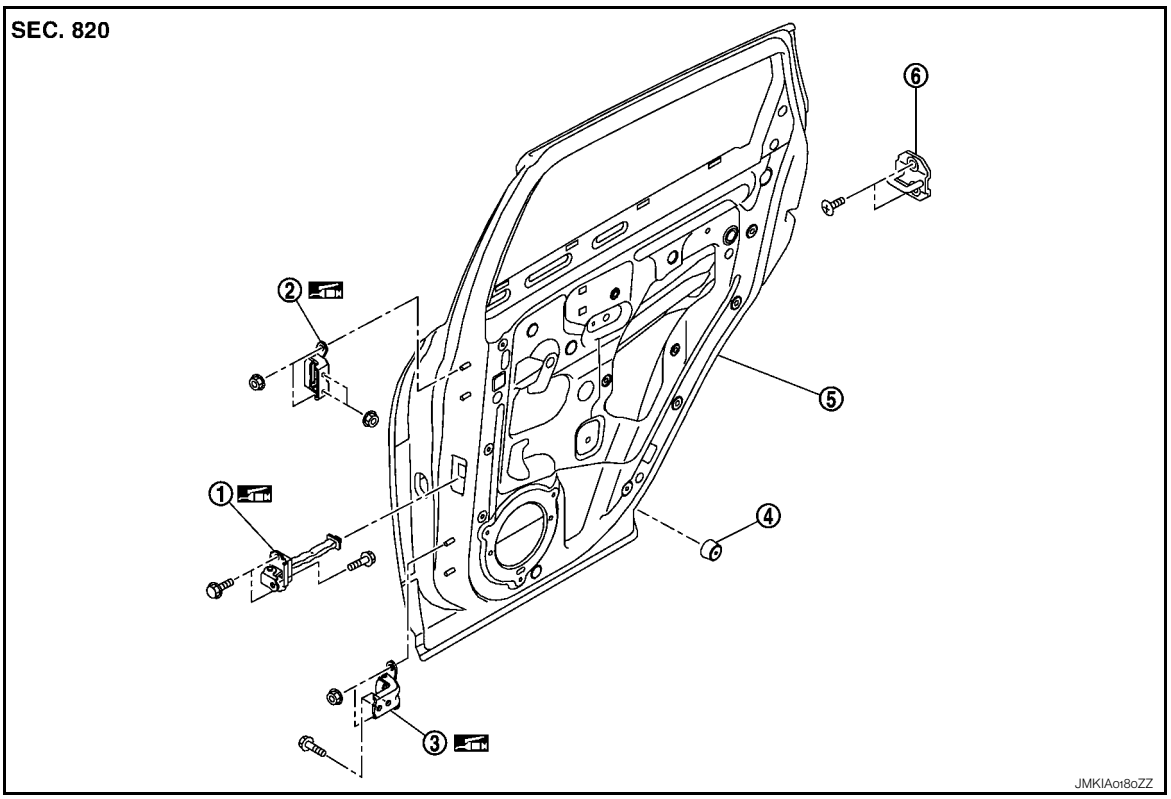
REAR DOOR

DOOR ASSEMBLY

DOOR ASSEMBLY : Exploded View

INFOID:0000000001098497

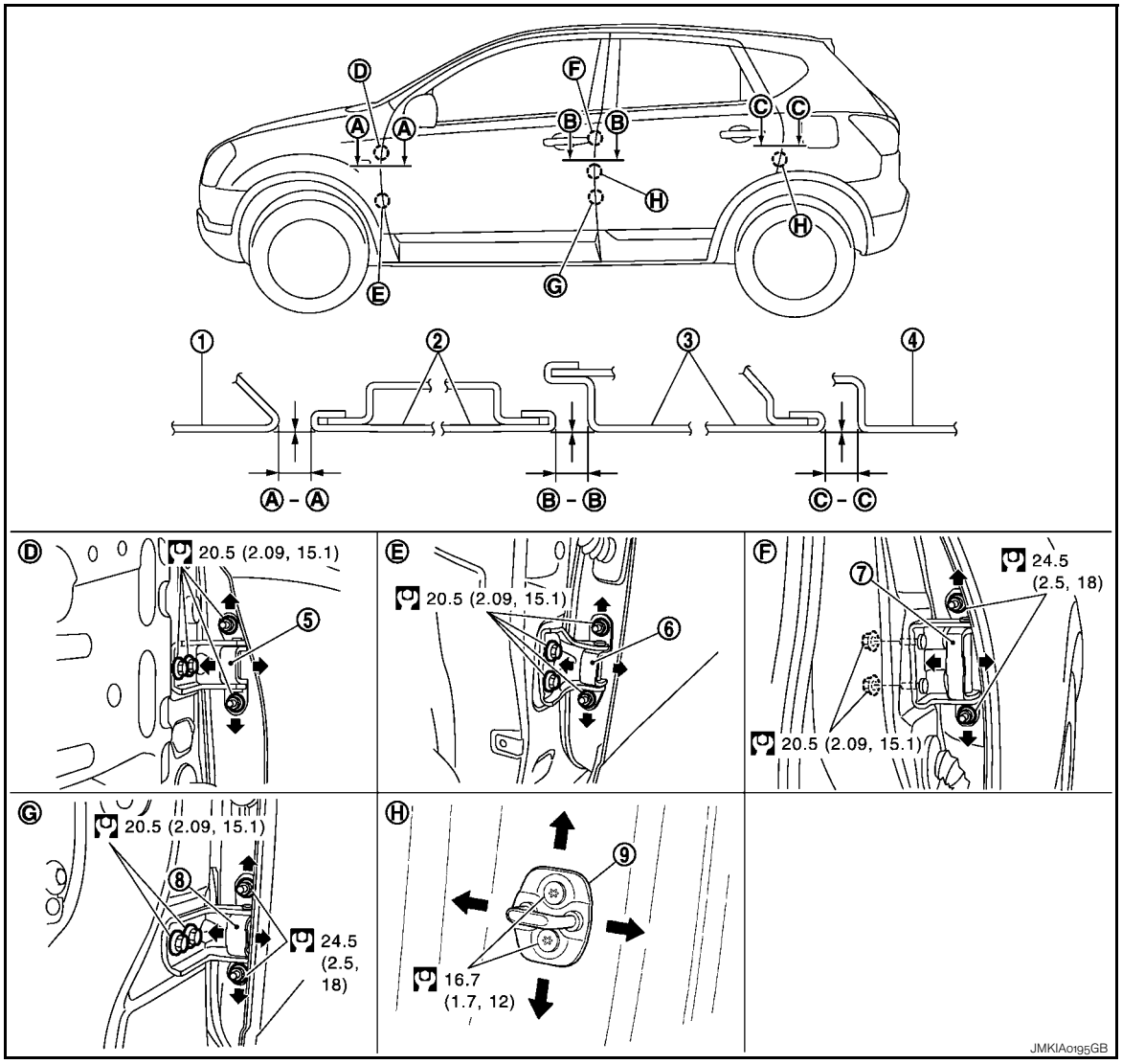
REMOVAL



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

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT



1. Front fender
2. Front door outer
3. Rear door outer
4. Rear fender
5. Front door hinge (upper)
6. Front door hinge (lower)
7. Rear door hinge (upper)
8. Rear door hinge (lower)
9. Striker

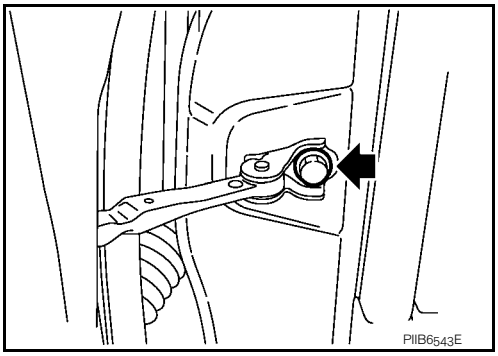
Refer to GI-4, "Components" for symbols in the figure.

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000001098498

REMOVAL

1. Remove the mounting bolts of the door check link on the vehicle.



2. Remove the rear door harness grommet, and then pull out the door harness from the vehicle.

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3. Disconnect the rear door harness connector.
4. Remove the door hinge mounting nuts (door side), and then remove the rear door assembly.
   CAUTION:
   - **When removing and installing the front door assembly, support the door with a jack and cloth to protect the door and body.**
   - **Perform work with 2 workers, because of it's heavy weight.**

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **When removing and installing the rear door assembly, perform the fitting adjustment. Refer to DLK-848, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **Check the rear door open/close operation after installation.**
- **Check the rear door lock/unlock operation after installation.**

DOOR ASSEMBLY : Adjustment

INFOID:0000000001098500

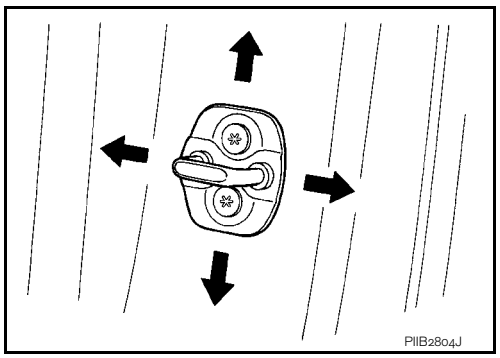
CLEARANCE, SURFACE HEIGHT AND SURFACE MISMATCH ADJUSTMENT

Portion		Clearance	Surface height
Front door – Rear door	B – B	3.5 – 5.0 mm (0.138 – 0.197 in)	- 1.5 – 0.5 mm (- 0.059 – 0.020 in)
Rear door – Rear fender	C – C	3.5 – 5.0 mm (0.138 – 0.197 in)	- 1.5 – 0.5 mm (- 0.059 – 0.020 in)

1. Check the clearance and surface height and surface mismatch between the rear door and each part visually and by touching. (Fitting standard dimension in the table below shall be satisfied.)
2. In case any parts are out of specification, adjust them according to the procedures shown below.
3. Remove the center pillar upper garnish and center pillar lower garnish. Refer to INT-14, "Removal and Installation".
4. Loosen the door hinge mounting nuts on door side.
5. Adjust the surface height and surface mismatch of the rear door according to the fitting standard dimension.
6. Temporarily tighten the hinge mounting nuts on door side.
7. Loosen the door hinge mounting nuts and bolts on body side.
8. Raise the rear door at rear end to adjust clearance of the rear door according to the fitting standard dimension.
9. After adjustment tighten bolts and nuts to the specified torque.
10. Install the center pillar upper garnish and center pillar lower garnish. Refer to INT-14, "Removal and Installation".

DOOR STRIKER ADJUSTMENT

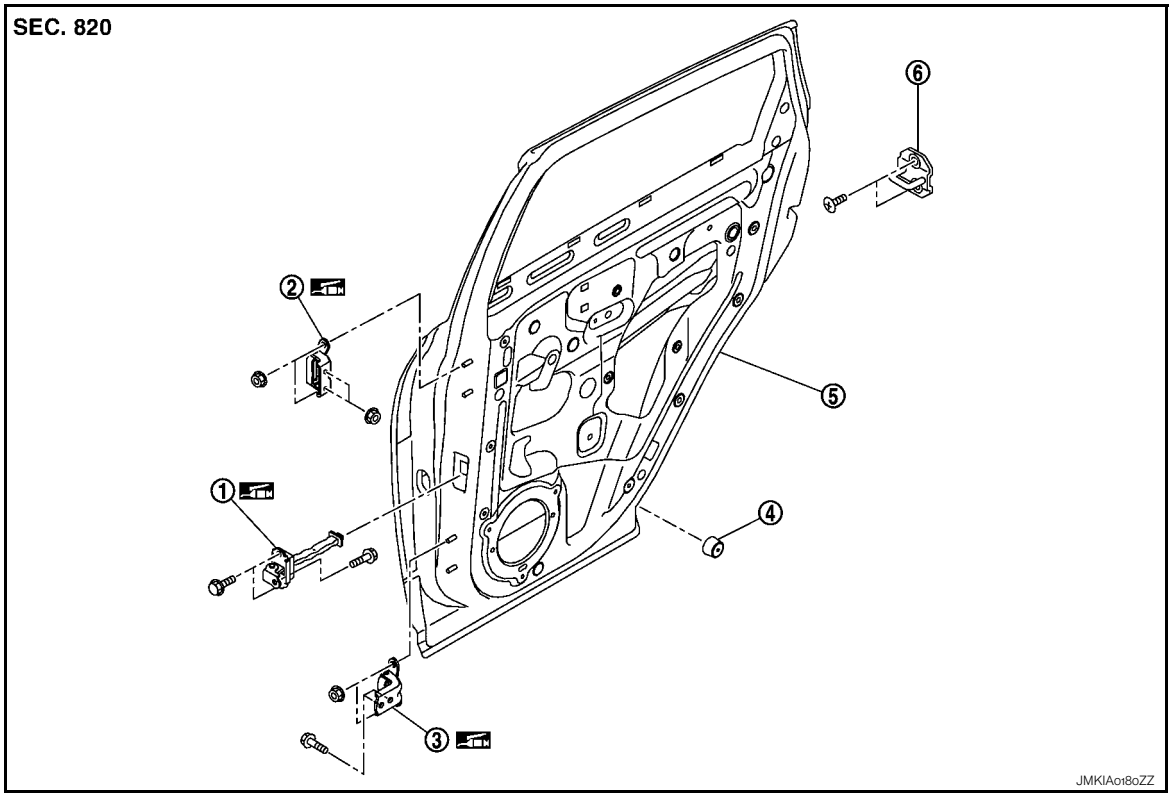
Adjust the door striker so that it becomes parallel with the lock insertion direction.



DOOR STRIKER

DOOR STRIKER : Exploded View

INFOID:0000000001098509



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

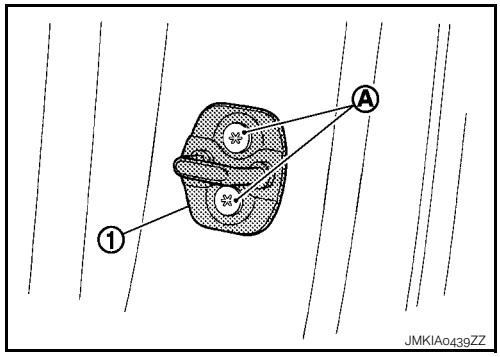
Refer to GI-4, "Components" for symbols in the figure.

DOOR STRIKER : Removal and Installation

INFOID:0000000001098510

REMOVAL

Remove the mounting bolts (A), and then remove the door striker (1).



INSTALLATION

Install in the reverse order of removal.

CAUTION:

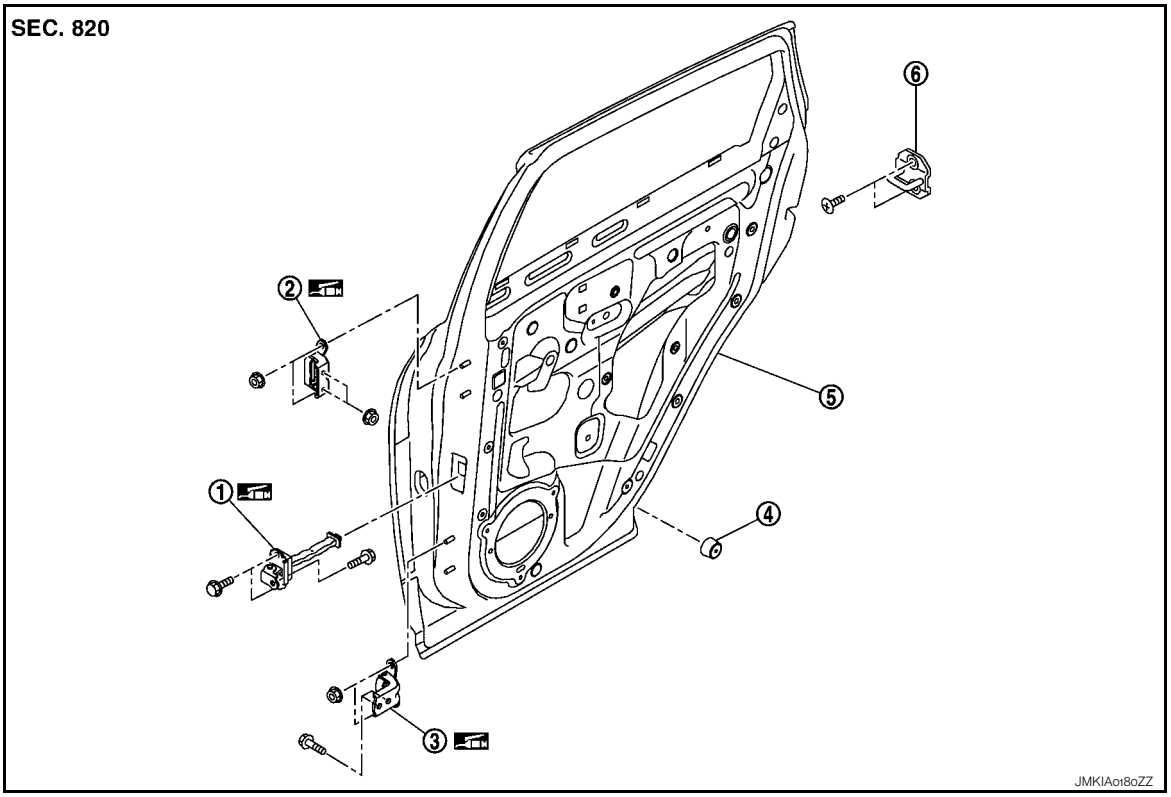
- **Check the rear door open/close operation after installation.**
- **When removing and installing the door striker, be sure to perform the fitting adjustment. Refer to DLK-848, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Exploded View

INFOID:0000000001098513

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR HINGE : Removal and Installation

INFOID:0000000001098516

REMOVAL

1. Remove the center pillar lower garnish and the center pillar upper garnish. Refer to INT-14, "Removal and Installation".
2. Remove the rear door assembly. Refer to DLK-242, "DOOR ASSEMBLY : Removal and Installation".
3. Remove the rear door hinge mounting bolts and nuts (body side), and then remove the door hinge.

INSTALLATION

Install in the reverse order of removal.

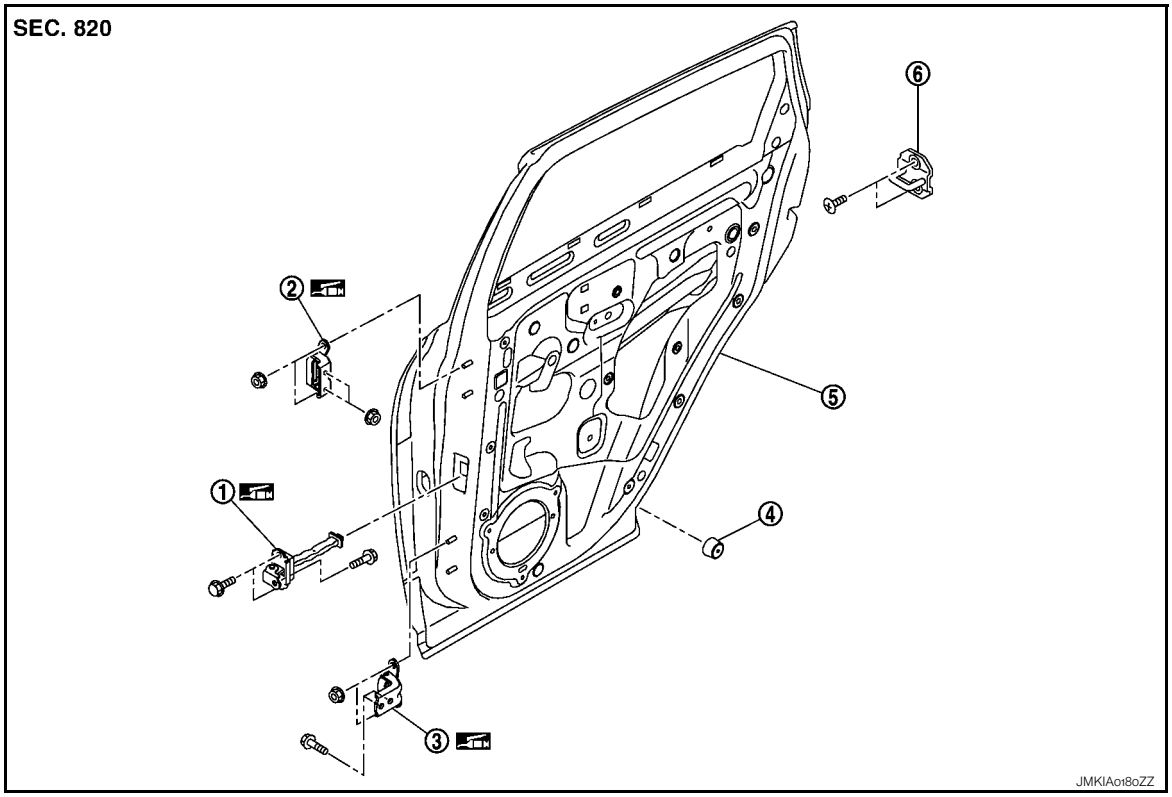
CAUTION:

- **When removing and installing the rear door assembly, perform the fitting adjustment. Refer to DLK-848, "DOOR ASSEMBLY : Adjustment".**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **After installing, apply the touch-up paint (the body color) onto the head of the hinge mounting nuts.**
- **Check the rear door open/close operation after installation.**

DOOR CHECK LINK

DOOR CHECK LINK : Exploded View

INFOID:0000000001098518



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

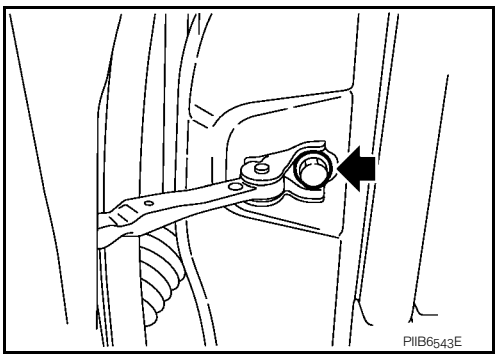
Refer to GI-4, "Components" for symbols in the figure.

DOOR CHECK LINK : Removal and Installation

INFOID:0000000001098520

REMOVAL

1. Remove the rear door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the rear door sealing screen.
3. Remove the mounting bolts of the check link on the vehicle.



4. Remove the door check link cover, and then remove the door check link mounting bolts.
5. Remove the door check link.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check front door open/close operation after installation.

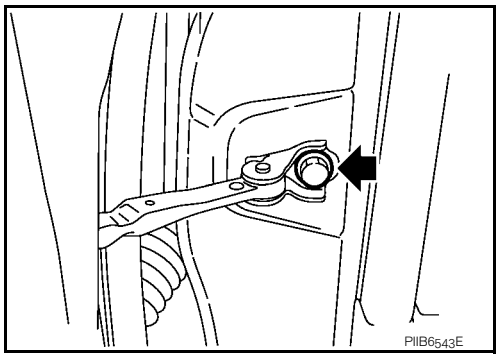
DOOR CHECK LINK : Removal and Installation

INFOID:0000000001098521

REMOVAL

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1. Remove the rear door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the rear door sealing screen.
3. Remove the mounting bolts of the check link on the vehicle.



4. Remove the door check link cover, and then remove the door check link mounting bolts.
5. Remove the door check link.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check front door open/close operation after installation.

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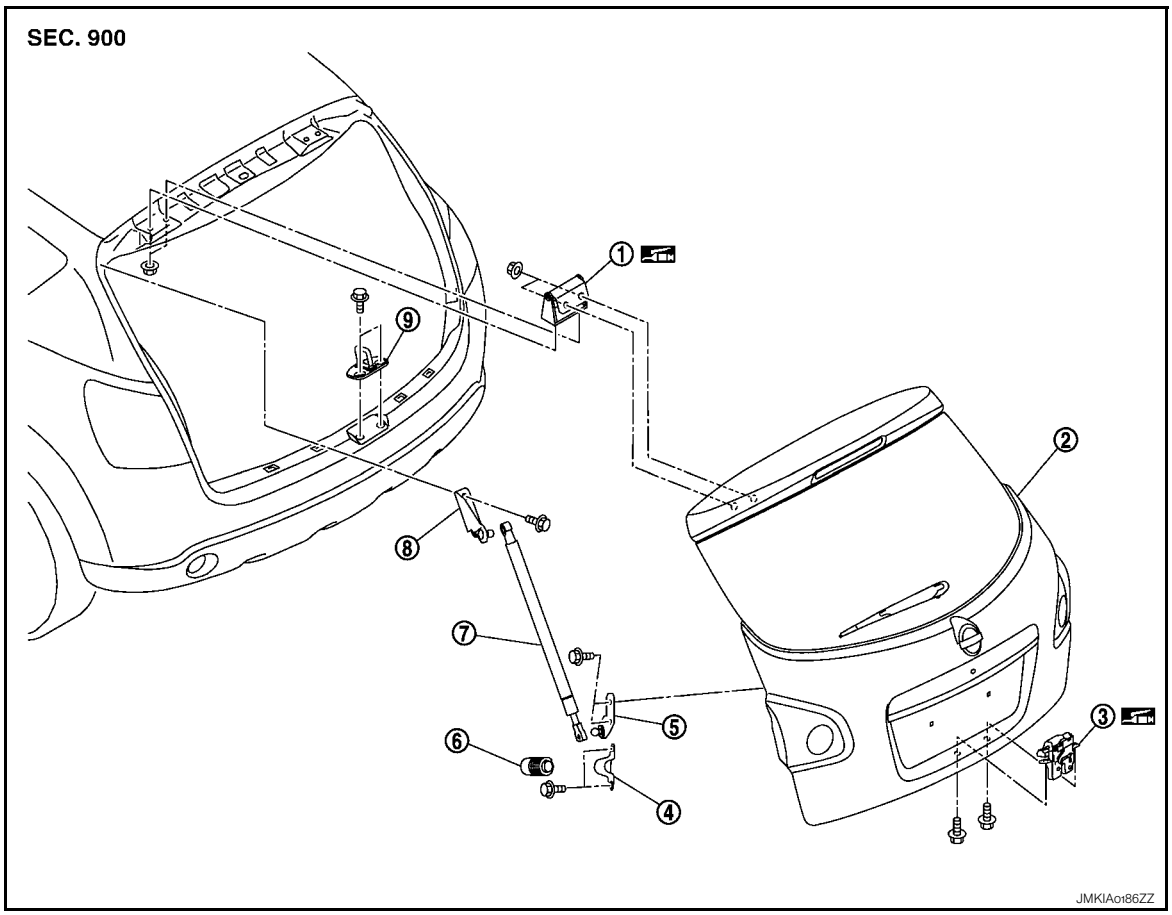
BACK DOOR

BACK DOOR ASSEMBLY

BACK DOOR ASSEMBLY : Exploded View

INFOID:0000000001098525

REMOVAL

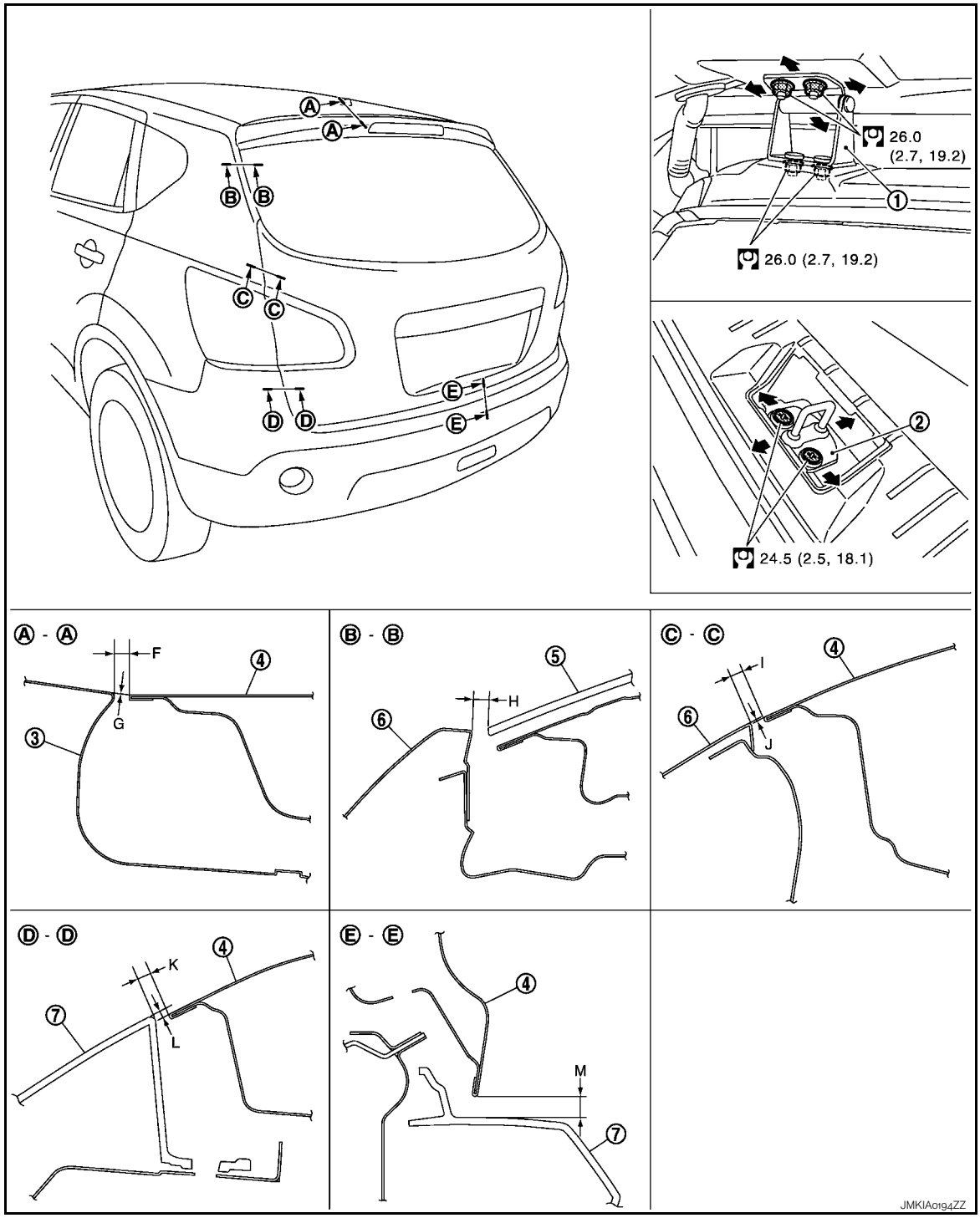


1. Back door hinge
2. Back door assembly
3. Back door lock assembly
4. Bumper rubber bracket
5. Back door stay bracket (lower)
6. Bumper rubber
7. Back door stay
8. Back door stay bracket (upper)
9. Back door striker

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT

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1. Back door hinge
2. Back door striker
3. Roof panel
4. Back door outer
5. Back door glass
6. Body side outer
7. Rear bumper fascia

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR ASSEMBLY : Removal and Installation

INFOID:0000000001098526

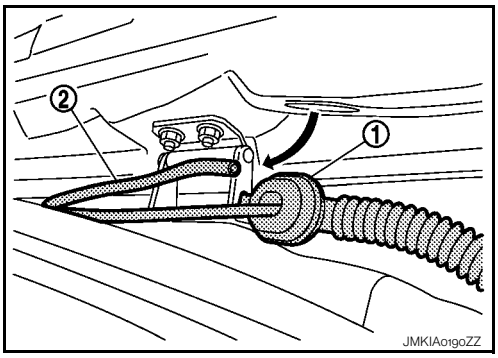
REMOVAL

1. Remove the back door finisher inner. Refer to INT-26, "Removal and Installation".
2. Remove the back door window glass. Refer to GW-17, "Removal and Installation".

NOTE:

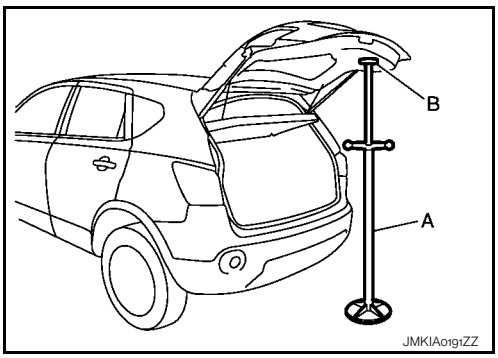
It is necessary to remove back door window glass in order to remove harness, because harness connector interferes with back door window glass pin.

3. Disconnect the connectors in the back door, and then remove the grommet, and pull out hte harness.
4. Remove the parcel shelf. Refer to INT-24, "Removal and Installation".
5. Remove the high-mounted stop lamp. Refer to EXL-183, "Removal and Installation".
6. Remove the grommet (1), and then pull out the washer tube (2) .

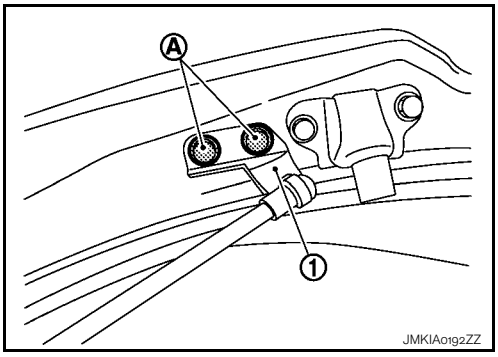


7. Pull the harness out of the back door.
8. Support the back door lock with the proper material to prevent it from falling.

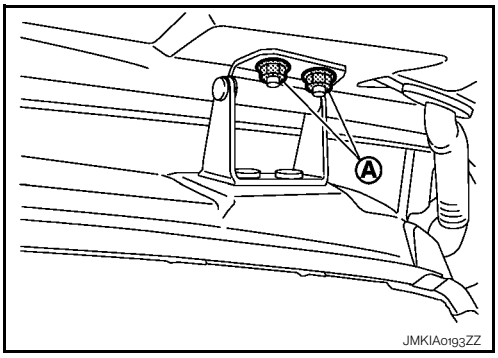
A : Jack
B : Shop cloth



9. Remove the back door stay bracket mounting bolts (A) on the back door.



10. Remove the back door hinge mounting nuts (A) on the back door and remove the back door assembly.
CAUTION:
Perform work with 2 workers, because of its heavy weight.



INSTALLATION
Install in the reverse order of removal.
CAUTION:
- **Perform work with 2 workers, because of its heavy weight.**

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- **After installation, perform fitting adjustment. Refer to DLK-855, "BACK DOOR ASSEMBLY : Adjustment".**
- **Check the back door open/close operation after installation.**
- **Check the back door lock/unlock operation after installation.**

BACK DOOR ASSEMBLY : Adjustment

INFOID:0000000001098527

Portion				Standard	Difference(RH/LH)
Back door panel – Roof panel	A – A	F	Clearance	5.0 – 7.0 mm (0.197 – 0.276 in)	—
		G	Surface height	0.0 – 2.0 mm (0.000 – 0.079 in)	—
Back door glass – Body side outer	B – B	H	Clearance	3.9 – 8.1 mm (0.154 – 0.319 in)	2.1 mm (0.083 in)
		I	Surface height	- 1.0 – 3.1 mm (- 0.039 – 0.122 in)	2.0 mm (0.079 in)
Back door panel – Body side outer	C – C	J	Clearance	3.5 – 6.5 mm (0.138 – 0.256 in)	2.0 mm (0.079 in)
		K	Surface height	- 1.0 – 1.0 mm (- 0.039 – 0.039 in)	—
Back door panel – Rear bumper fascia	D – D	L	Clearance	4.0 – 8.0 mm (0.157 – 0.315 in)	2.0 mm (0.079 in)
		M	Surface height	0.1 – 4.1 mm (0.004 – 0.161 in)	2.1 mm (0.083 in)
Back door panel – Rear bumper fascia	E – E	N	Clearance	5.8 – 10.2 mm (0.228 – 0.402 in)	—

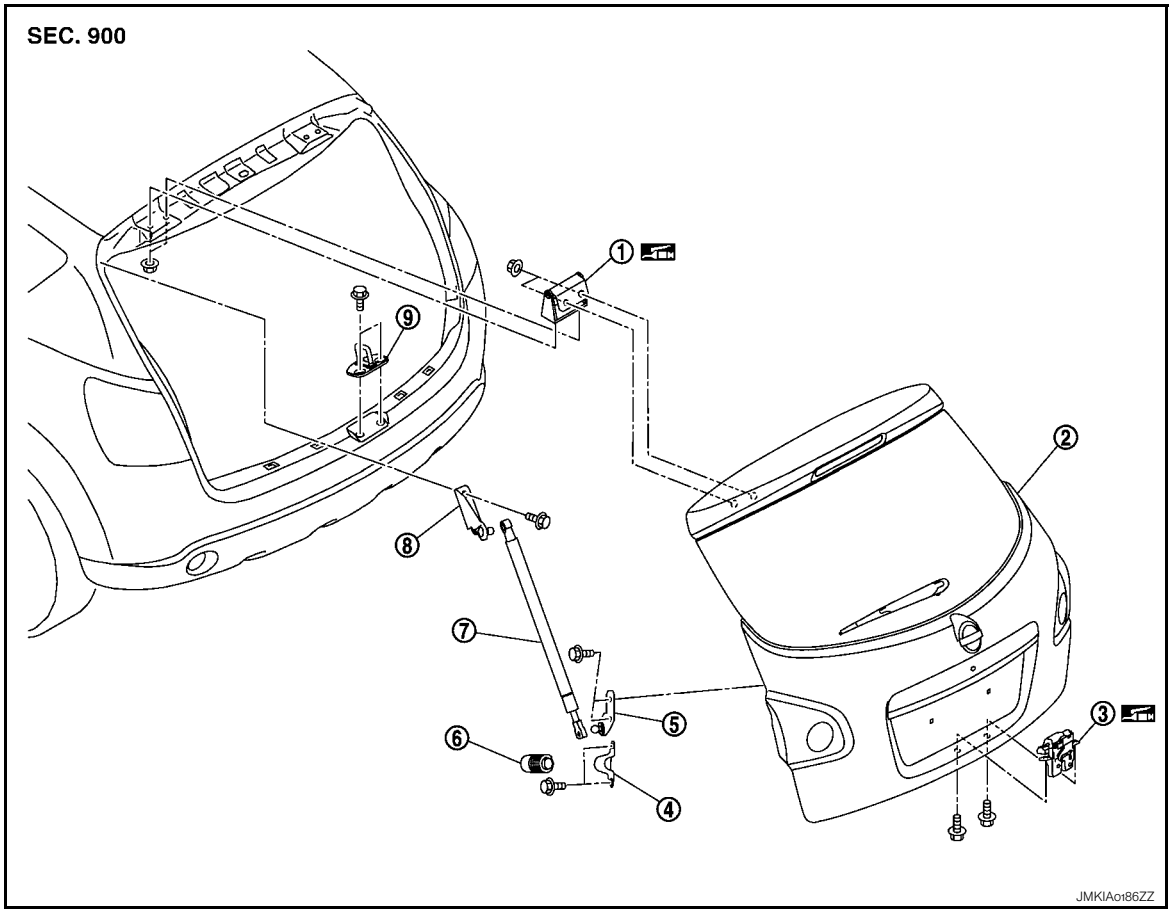
FITTING ADJUSTMENT

1. Check the clearance and the evenness between the back door and each part visually and by touching. (Fitting standard dimension in the table below shall be satisfied.)
2. In case any parts are out of specification, adjust them according to the procedures shown below.
3. Loosen the bumper rubber.
4. Loosen the back door striker mounting bolts.
5. Lift up the back door approximately 100 – 150 mm (3.937 – 5.906 in) height then close it lightly and check that it is engaged firmly with the back door closed.
6. Check the clearance and evenness.
7. Finally tighten the back door striker.

BACK DOOR STRIKER

BACK DOOR STRIKER : Exploded View

INFOID:0000000001098529



1. Back door hinge
2. Back door assembly
3. Back door lock assembly
4. Bumper rubber bracket
5. Back door stay bracket (lower)
6. Bumper rubber
7. Back door stay
8. Back door stay bracket (upper)
9. Back door striker

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR STRIKER : Removal and Installation

INFOID:0000000001098531

REMOVAL

1. Remove the luggage rear plate cap. Refer to INT-24, "Removal and Installation".
2. Remove the mounting bolts, and then remove the back door striker.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

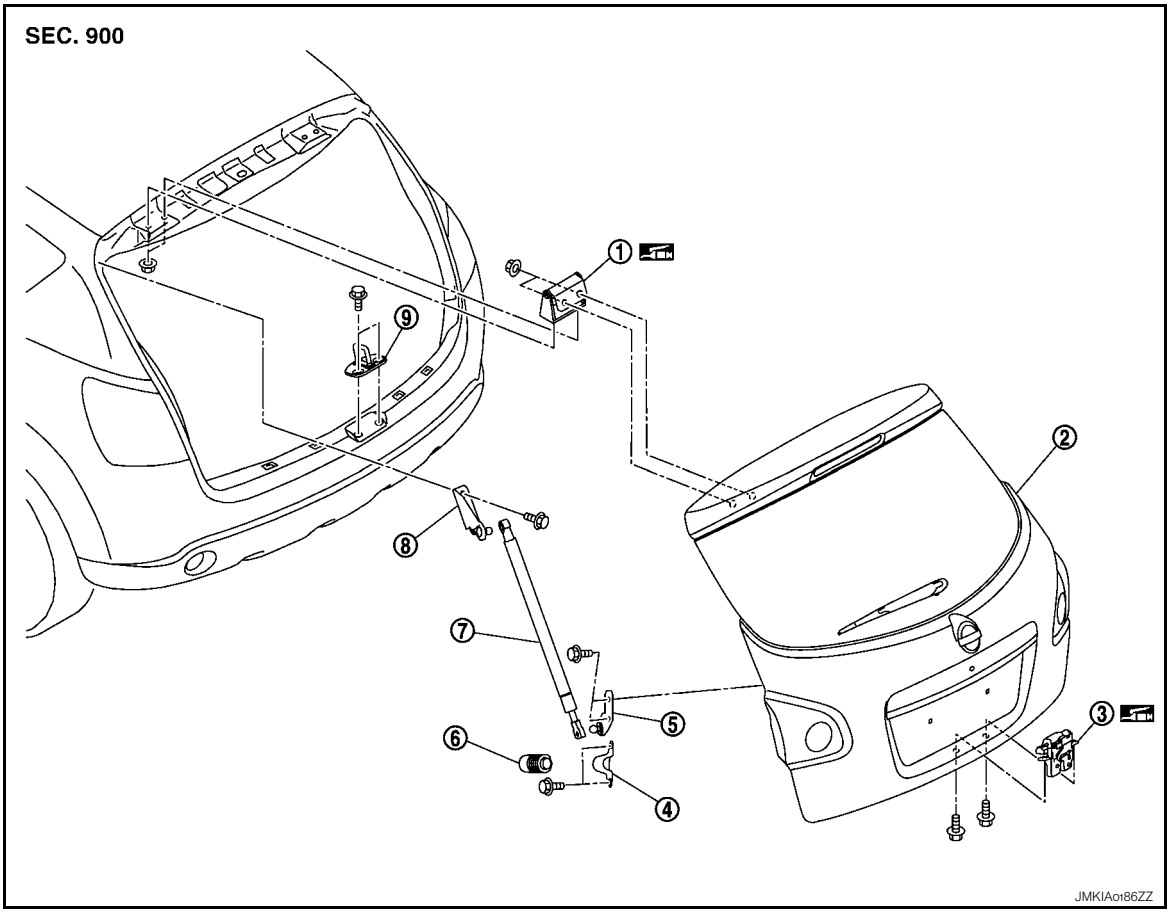
- **When removing and installing the back door striker, be sure to perform the fitting adjustment. Refer to DLK-855, "BACK DOOR ASSEMBLY : Adjustment".**
- **Check the back door open/close operation after installation.**

BACK DOOR HINGE

BACK DOOR HINGE : Exploded View

INFOID:0000000001102423

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1. Back door hinge
2. Back door assembly
3. Back door lock assembly
4. Bumper rubber bracket
5. Back door stay bracket (lower)
6. Bumper rubber
7. Back door stay
8. Back door stay bracket (upper)
9. Back door striker

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR HINGE : Removal and Installation

INFOID:0000000001102424

REMOVAL

1. Remove the back door assembly. Refer to DLK-248, "BACK DOOR ASSEMBLY : Removal and Installation".
2. Remove upper side of the back door weatherstrip. Refer to DLK-254, "BACK DOOR WEATHER-STRIP : Removal and Installation".
3. Remove rear seat belt cover. Refer to INT-21, "Removal and Installation".
4. Using remover tool, remove the headlining clip at the rear side of the headlining. Refer to INT-20, "Exploded View".
5. Remove the rear side of the headlining.
6. Remove the back door hinge mounting nuts (body side), and then remove the back door hinge.

INSTALLATION

Install in the reverse order of removal.

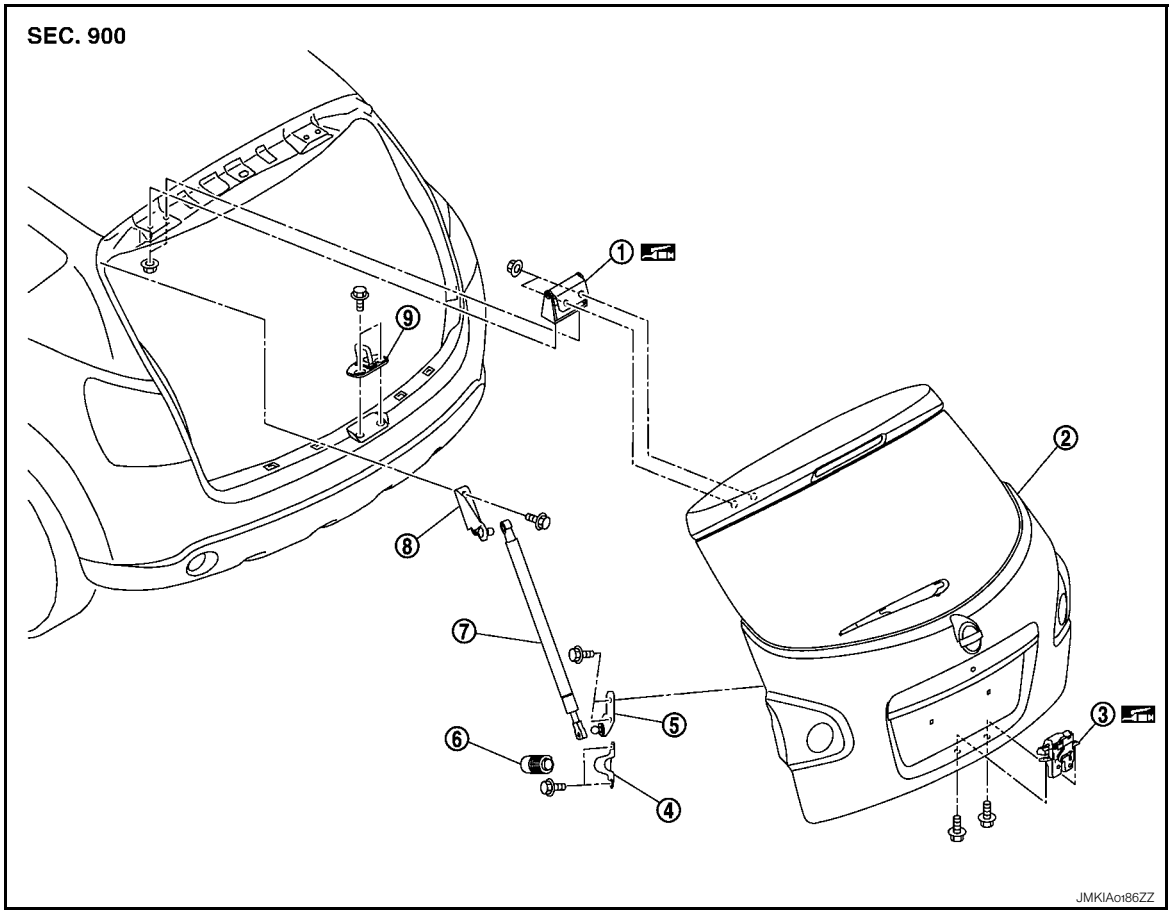
CAUTION:

- **When removing and installing the back door assembly, perform the fitting adjustment. Refer to DLK-250, "BACK DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the hinge mounting nuts.**
- **Check the hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **Check the back door open/close operation after installation.**

BACK DOOR STAY

BACK DOOR STAY : Exploded View

INFOID:0000000001098532



1. Back door hinge
2. Back door assembly
3. Back door lock assembly
4. Bumper rubber bracket
5. Back door stay bracket (lower)
6. Bumper rubber
7. Back door stay
8. Back door stay bracket (upper)
9. Back door striker

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR STAY : Removal and Installation

INFOID:0000000001098535

REMOVAL

1. Remove the stud ball (upper/lower), and then remove the back door stay.
2. Remove the mounting bolts, and then remove the back door stay bracket (upper/lower).

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check the back door open/close operation after installation.

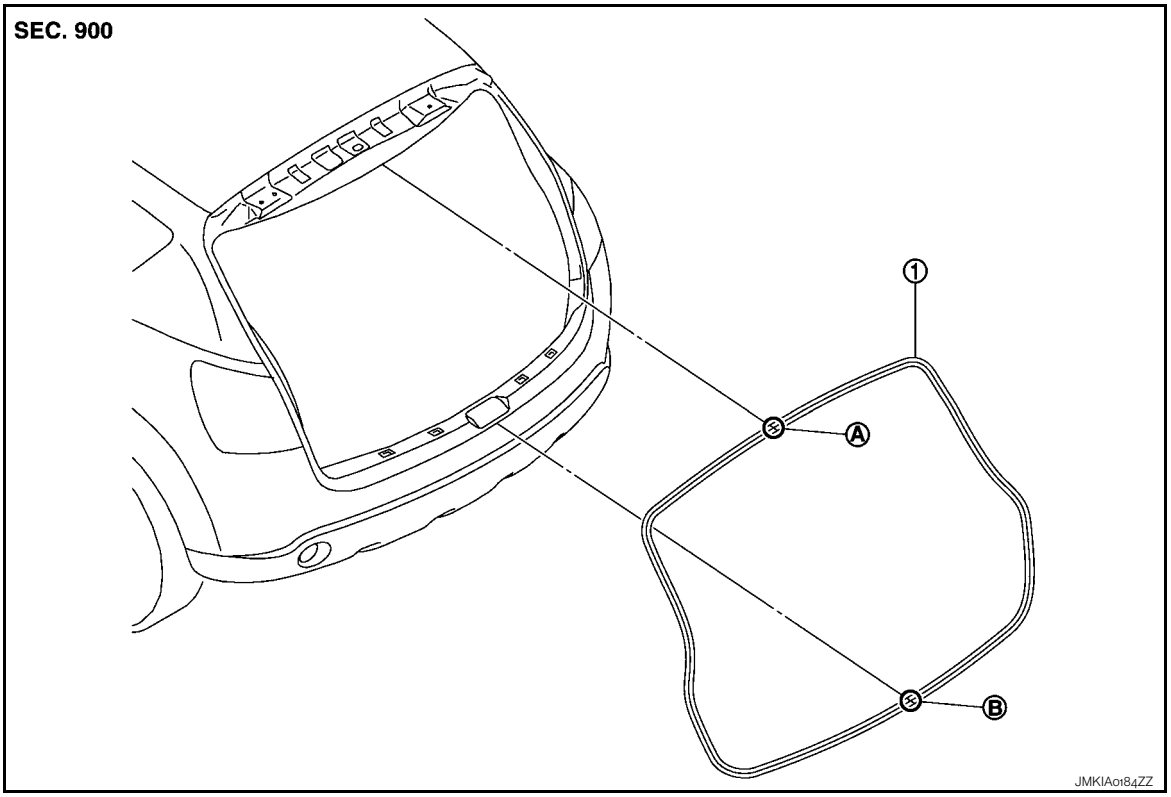
BACK DOOR WEATHER-STRIP

BACK DOOR WEATHER-STRIP : Exploded View

INFOID:0000000001098536

REMOVAL

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1. Back door weatherstrip
A. Mark (upper)
B. Mark (lower)

BACK DOOR WEATHER-STRIP : Removal and Installation

INFOID:0000000001098538

REMOVAL

Pull up and remove engagement with body from the weatherstrip joint.

CAUTION:

After removal, do not pull strongly on the weather-strip.

INSTALLATION

1. Working from the upper section, align the weatherstrip mark with vehicle center position mark and install the weatherstrip onto the vehicle.
2. For the lower section, align the weatherstrip seam with center of the back door striker.
3. After installation, pull the weatherstrip gently to ensure that there is no loose section.
   NOTE:
   Make sure that the weatherstrip is fit tlightly at each corner and the luggage rear plate.

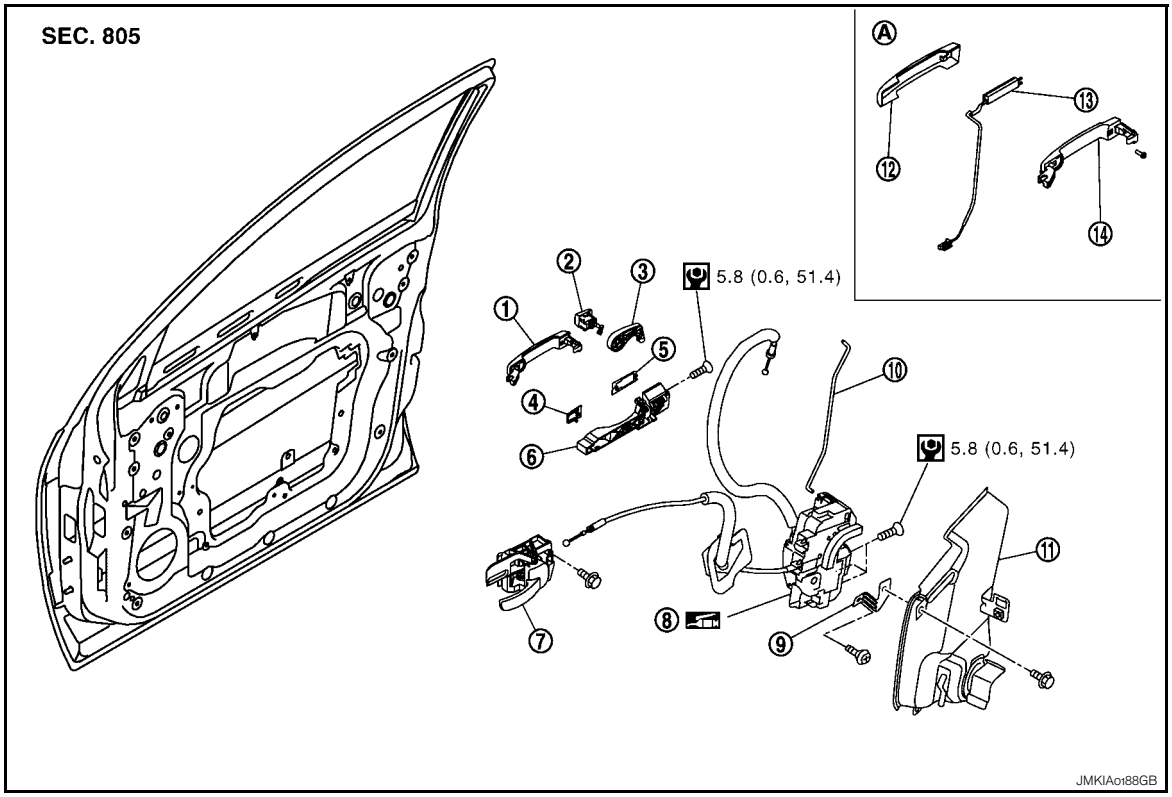
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FRONT DOOR LOCK

DOOR LOCK

DOOR LOCK : Exploded View

INFOID:0000000001098539



1. Outside handle assembly
2. Door key cylinder
3. Key cylinder lever
4. Front gasket
5. Rear gasket
6. Outside handle bracket
7. Inside handle
8. Door lock assembly
9. Key cylinder rod
10. Key rod protector
11. Key rod protector assembly (RH handle only)
12. Outside handle cover
13. Antenna
14. Outside handle base

A: Intelligent Key only

Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK : Removal and Installation

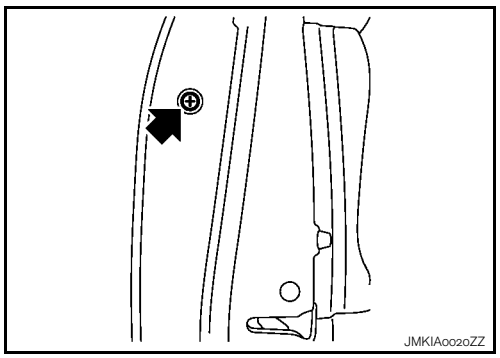
INFOID:0000000001098540

REMOVAL

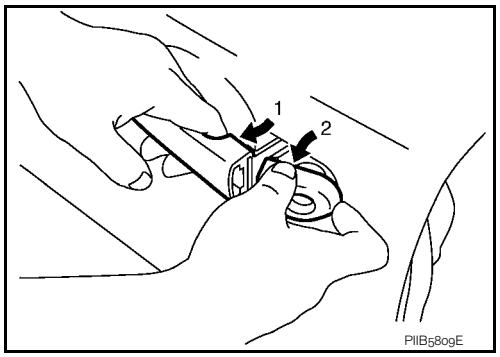
1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the inside handle mounting bolt, and then disconnect the inside handle knob cable and the lock knob cable.
3. Remove the front door glass. Refer to GW-19, "Removal and Installation".
4. Remove the front door module assembly. Refer to GW-22, "Removal and Installation".
5. Disconnect the door antenna and the door request switch connector and remove the harness clamp (models with Intelligent Key system).

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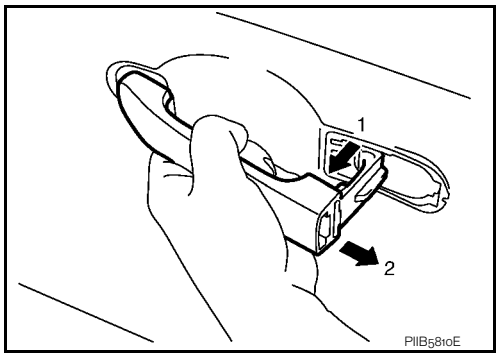
6. Remove the door side grommet, and remove the door key cylinder assembly (driver side) and outside handle escutcheon (passenger side) mounting bolts from grommet hole.
CAUTION:
Do not forcibly remove the bolts (TORX: T10).



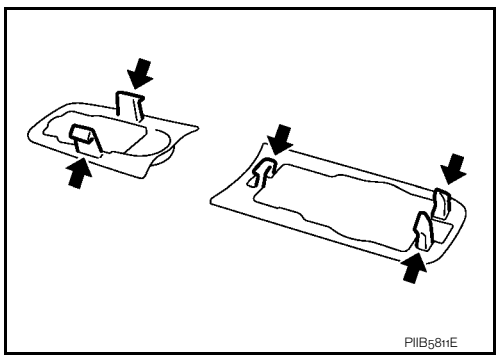
7. Reach in to separate the key cylinder rod connection (on the handle).
8. Disconnect the door key cylinder switch harness connector.
9. Remove the key cylinder lever from the door key cylinder.
10. While pulling the outside handle, remove door key cylinder assembly.



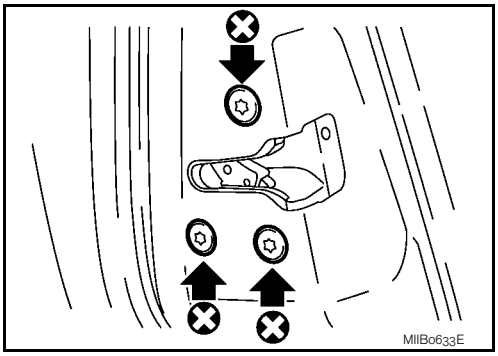
11. Disconnect front door request switch harness connector (models with Intelligent Key system).
12. While pulling outside handle, slide toward rear of vehicle to remove outside handle.



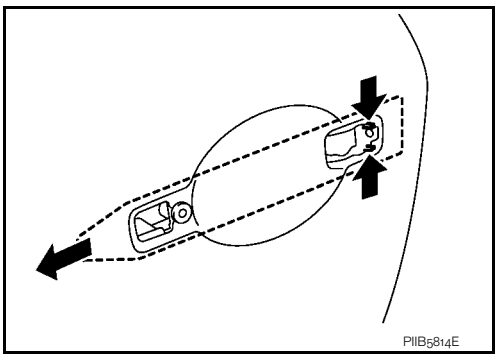
13. Remove the front gasket and the rear gasket.



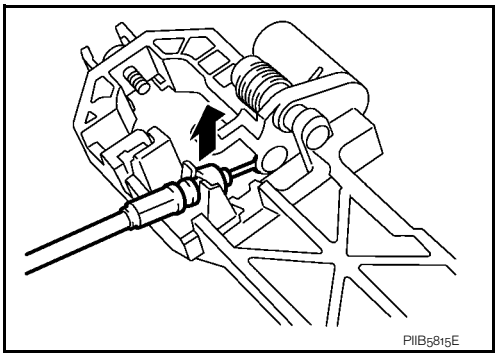
14. Remove the door lock assembly mounting bolts (TORX: T30).
15. Disconnect the door lock actuator connector, and then remove the door lock assembly.



16. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.



17. Reach in to separate the outside handle cable connection.



INSTALLATION

Install in the reverse order of removal.

CAUTION:

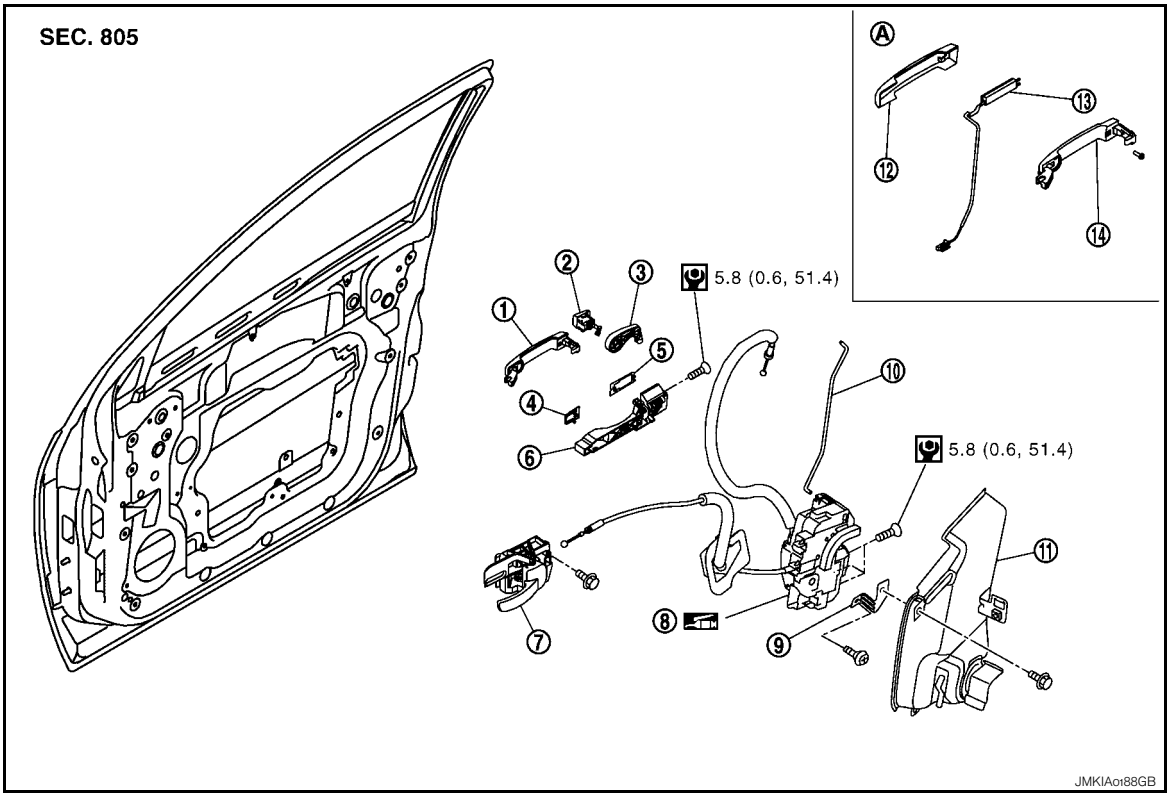
- **To install each rod, rotate the rod holder until a click is felt.**
- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

INSIDE HANDLE

INSIDE HANDLE : Exploded View

INFOID:0000000001098545

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1. Outside handle assembly
2. Door key cylinder
3. Key cylinder lever
4. Front gasket
5. Rear gasket
6. Outside handle bracket
7. Inside handle
8. Door lock assembly
9. Key cylinder rod
10. Key rod protector
11. Key rod protector assembly (RH handle only)
12. Outside handle cover
13. Antenna
14. Outside handle base

A: Intelligent Key only

Refer to GI-4, "Components" for symbols in the figure.

INSIDE HANDLE : Removal and Installation

INFOID:0000000001098546

REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the inside handle mounting bolt.
3. Disconnect the inside handle knob cable and the lock knob cable, and then remove the inside handle.

INSTALLATION

Install in the reverse order of removal.

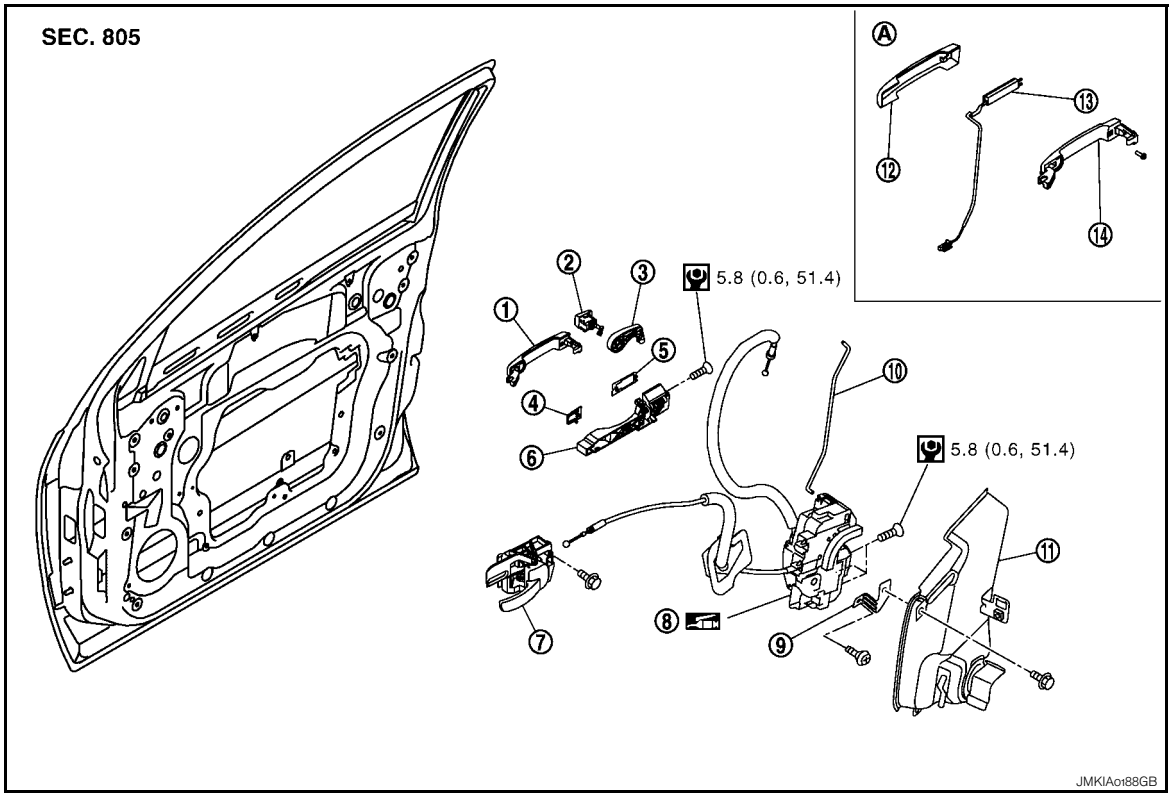
CAUTION:

- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

OUTSIDE HANDLE

OUTSIDE HANDLE : Exploded View

INFOID:0000000001098547



1. Outside handle assembly
2. Door key cylinder
3. Key cylinder lever
4. Front gasket
5. Rear gasket
6. Outside handle bracket
7. Inside handle
8. Door lock assembly
9. Key cylinder rod
10. Key rod protector
11. Key rod protector assembly (RH handle only)
12. Outside handle cover
13. Antenna
14. Outside handle base

A: Intelligent Key only

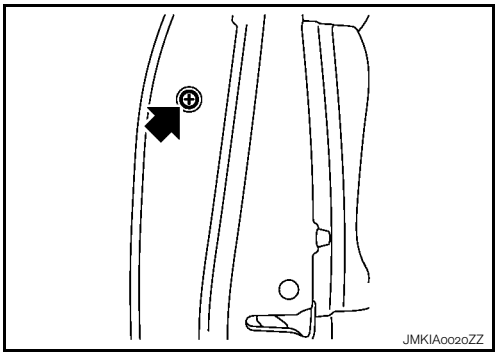
Refer to GI-4, "Components" for symbols in the figure.

OUTSIDE HANDLE : Removal and Installation

INFOID:0000000001098548

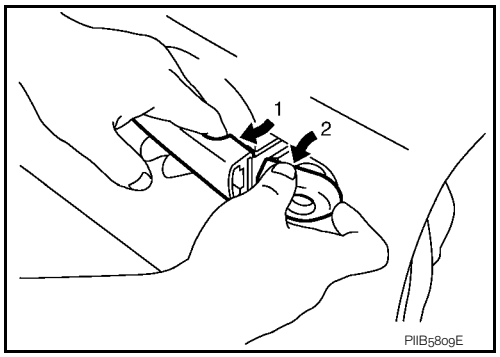
REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the inside handle mounting bolt, and disconnect the inside handle knob cable and the lock knob cable.
3. Remove the front door glass. Refer to GW-19, "Removal and Installation".
4. Remove the front door module assembly. Refer to GW-22, "Removal and Installation".
5. Disconnect the door antenna and the door request switch connector and remove the harness clamp (models with Intelligent Key system).
6. Remove the door side grommet, and remove the door key cylinder assembly (driver side) and the outside handle escutcheon (passenger side) mounting bolts from the grommet hole.
   CAUTION:
   Do not forcibly remove the bolts (TORX: T10).

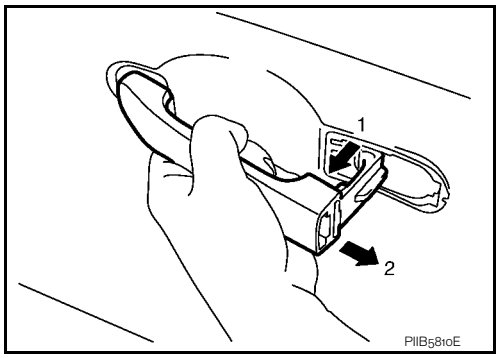


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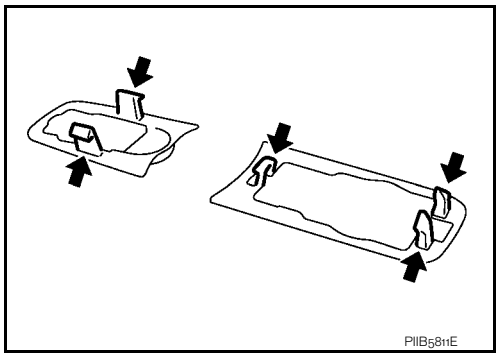
7. Reach in to separate the key cylinder rod connection (on the handle).
8. Disconnect the door key cylinder switch harness connector.
9. Remove the key cylinder lever from the door key cylinder.
10. While pulling the outside handle, remove the door key cylinder assembly.



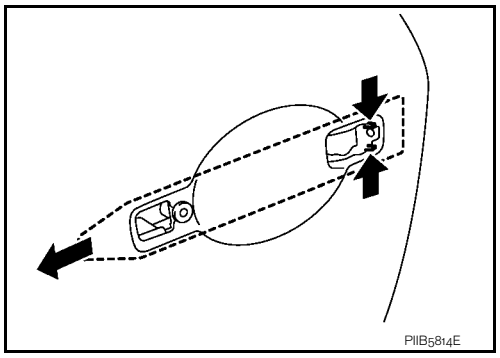
11. Disconnect the front door request switch harness connector (models with Intelligent Key system).
12. While pulling the outside handle, slide toward rear of vehicle to remove the outside handle.



13. Remove the front gasket and rear gasket.

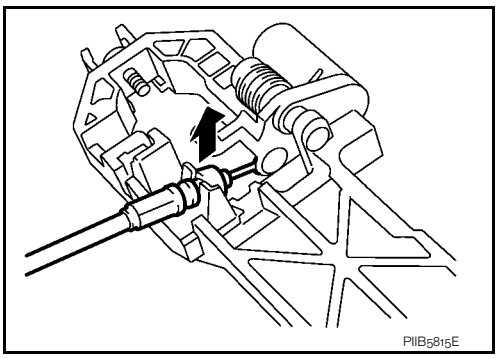


14. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.



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15. Reach in to separate the outside handle cable connection.



INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **To install each rod, rotate the rod holder until a click is felt.**
- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

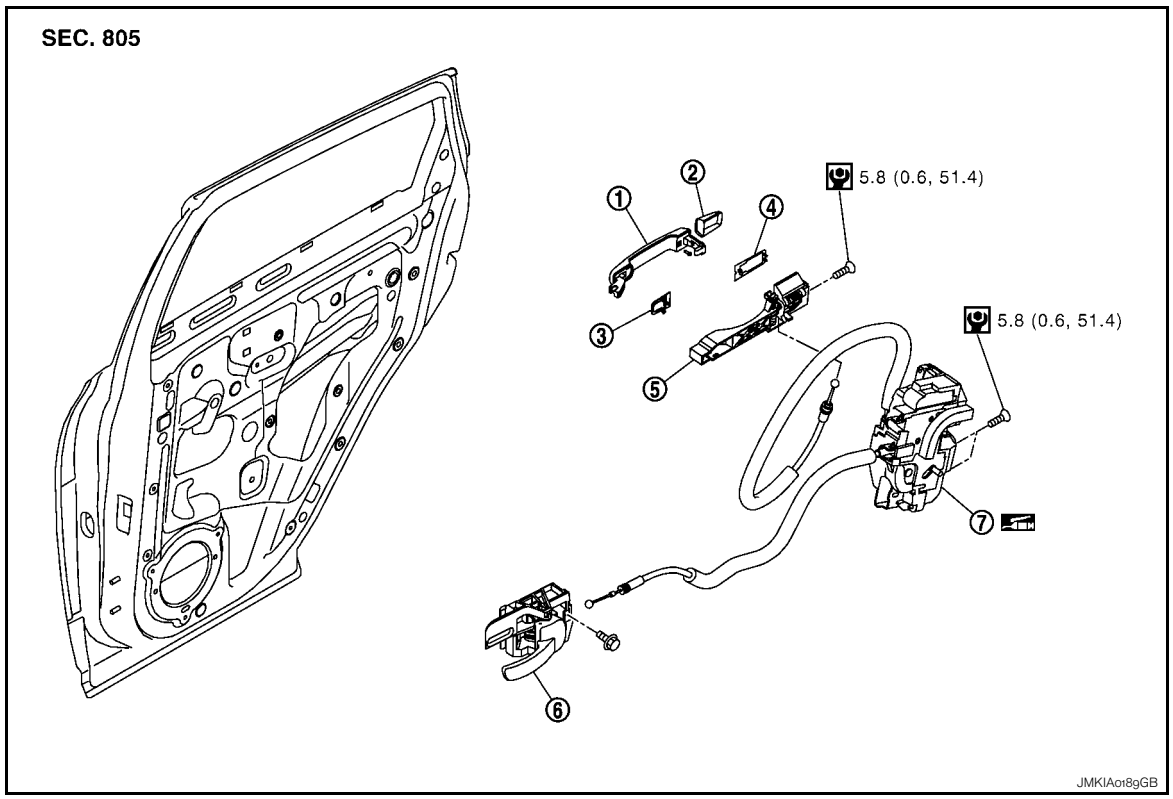
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REAR DOOR LOCK

DOOR LOCK

DOOR LOCK : Exploded View

INFOID:0000000001098551



1. Outside handle
2. Outside handle escutcheon
3. Front gasket
4. Rear gasket
5. Outside handle bracket
6. Inside handle
7. Door lock assembly

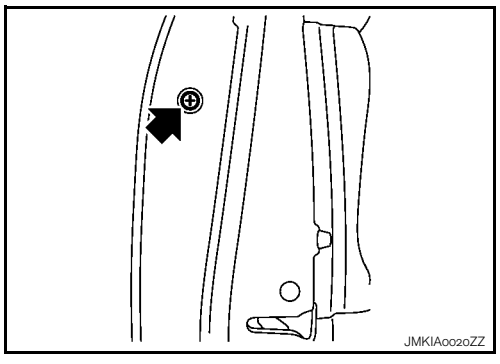
Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK : Removal and Installation

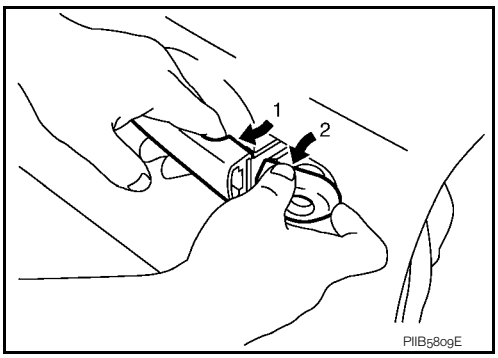
INFOID:0000000001098552

REMOVAL

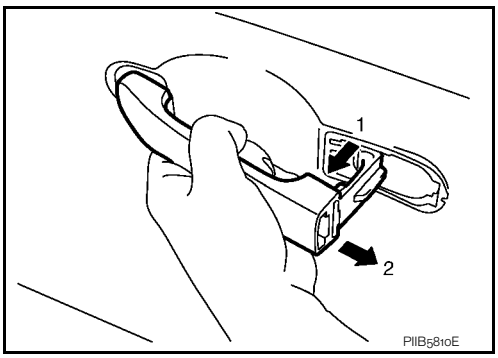
1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Fully close the front door window.
3. Remove the door sealing screen.
4. Remove the inside handle mounting bolt, and then disconnect the inside handle knob cable and the lock knob cable.
5. Remove the door side grommet, and remove the door key cylinder assembly (driver side) and the outside handle escutcheon (passenger side) mounting bolts from the grommet hole.
   CAUTION:
   Do not forcibly remove the bolts (TORX: T10).



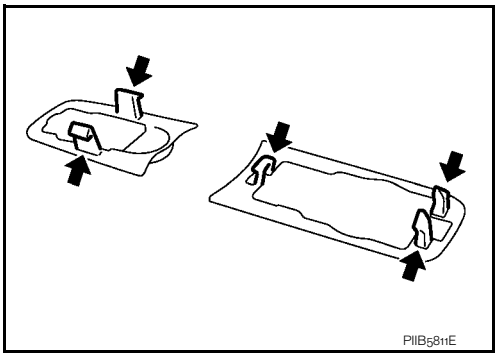
6. While pulling the outside handle, remove the door key cylinder assembly.



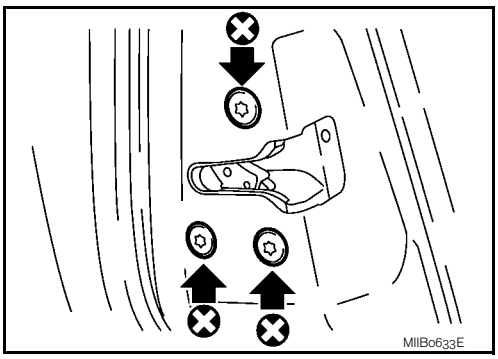
7. While pulling the outside handle, slide toward rear of vehicle to remove the outside handle.



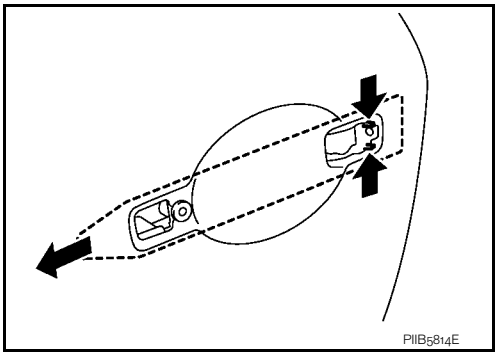
8. Remove the front gasket and the rear gasket.



9. Remove the door lock assembly mounting bolts (TORX: T30).
10. Disconnect the door lock actuator connector, and then remove the door lock assembly.

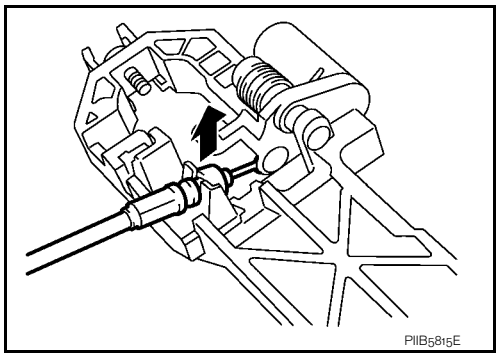


11. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.



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12. Reach in to separate the outside handle cable connection.



INSTALLATION

Install in the reverse order of removal.

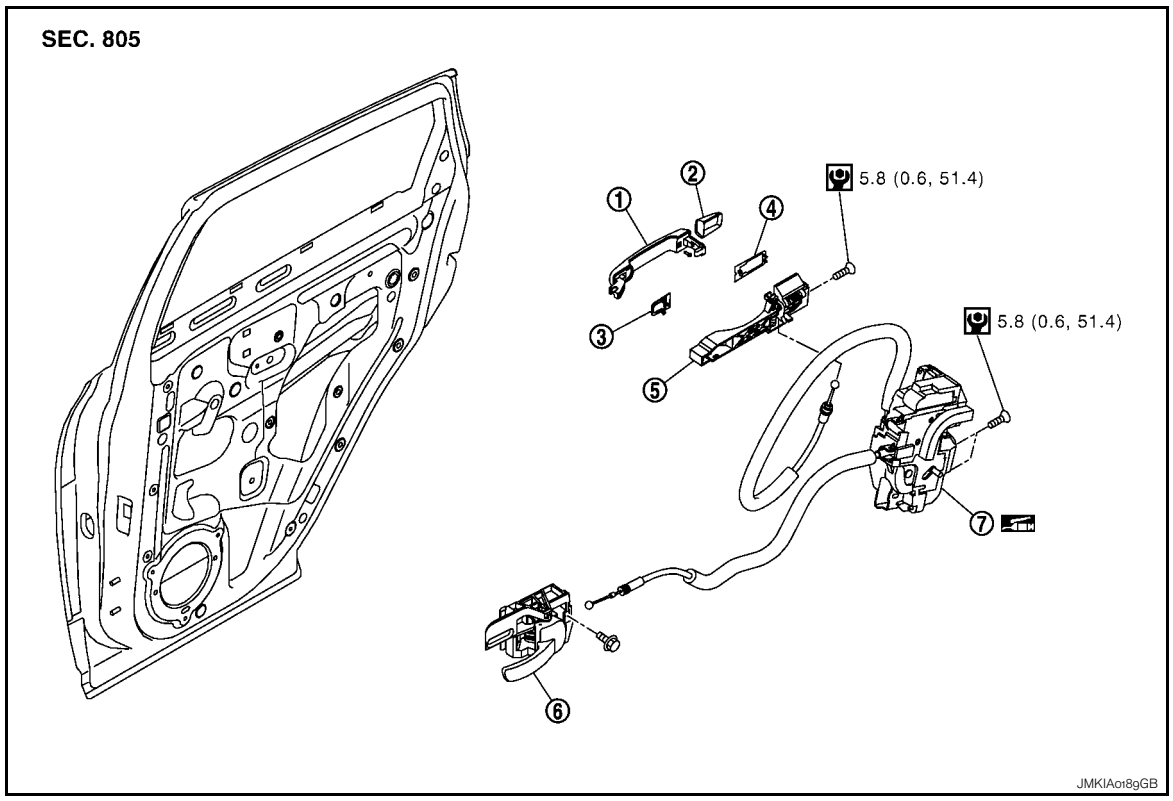
CAUTION:

- **To install each rod, rotate the rod holder until a click is felt.**
- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

INSIDE HANDLE

INSIDE HANDLE : Exploded View

INFOID:0000000001098555



1. Outside handle
2. Outside handle escutcheon
3. Front gasket
4. Rear gasket
5. Outside handle bracket
6. Inside handle
7. Door lock assembly

Refer to GI-4, "Components" for symbols in the figure.

INSIDE HANDLE : Removal and Installation

INFOID:0000000001098556

REMOVAL

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Remove the door sealing screen.

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3. Remove the inside handle mounting bolt, and then disconnect the inside handle knob cable and the lock knob cable.
4. Remove the inside handle.

INSTALLATION

Install in the reverse order of removal.

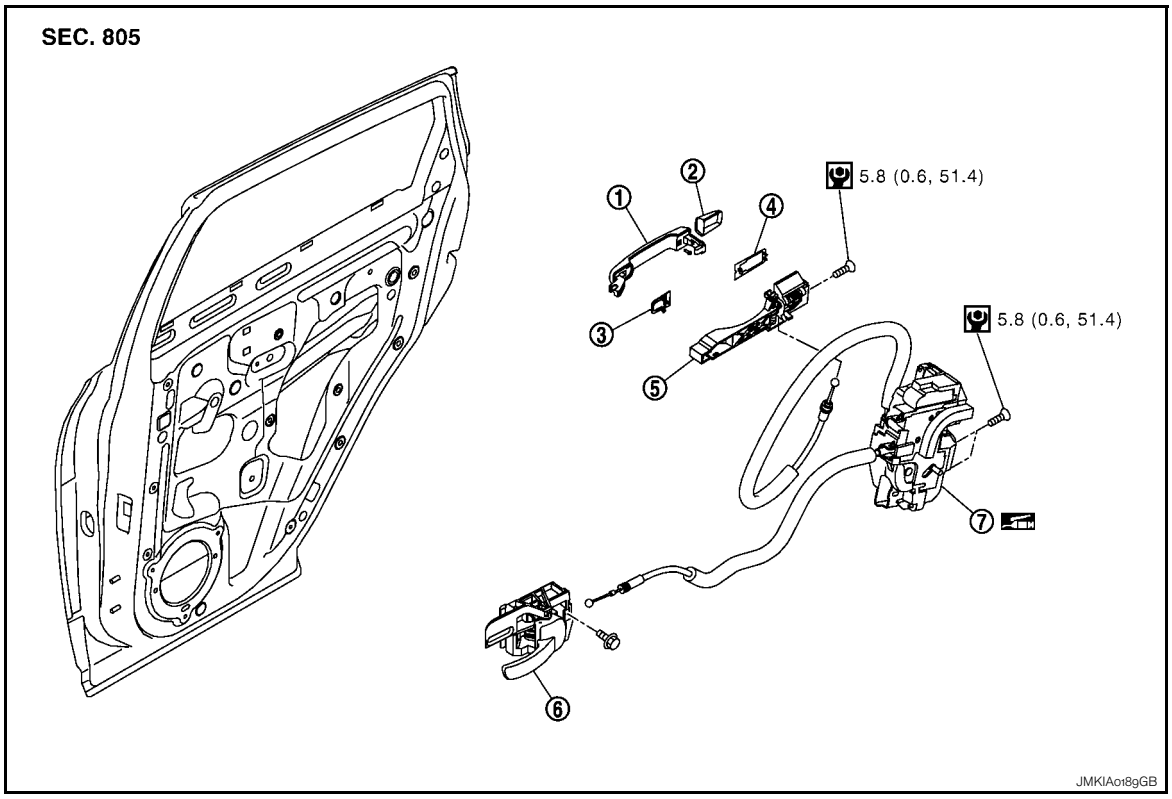
CAUTION:

- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

OUTSIDE HANDLE

OUTSIDE HANDLE : Exploded View

INFOID:0000000001098557



1. Outside handle
2. Outside handle escutcheon
3. Front gasket
4. Rear gasket
5. Outside handle bracket
6. Inside handle
7. Door lock assembly

Refer to GI-4, "Components" for symbols in the figure.

OUTSIDE HANDLE : Removal and Installation

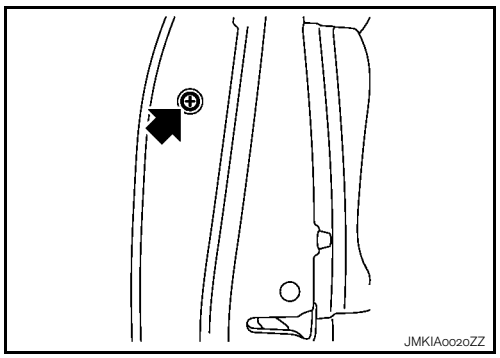
INFOID:0000000001098558

REMOVAL

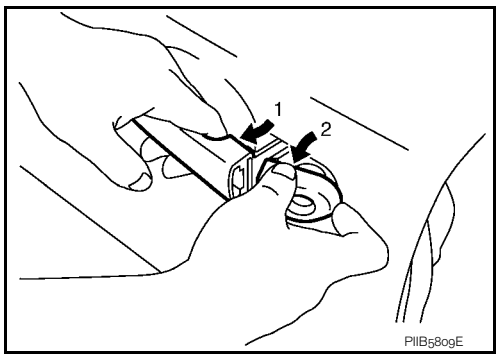
1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Fully close the front door window.
3. Remove the door sealing screen.
4. Remove the inside handle mounting bolt, disconnect the inside handle knob cable and the lock knob cable.

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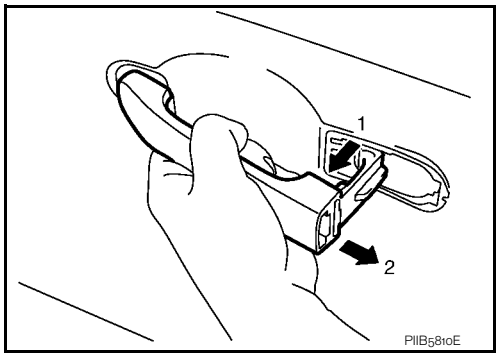
5. Remove the door side grommet, and remove the door key cylinder assembly (driver side) and the outside handle escutcheon (passenger side) mounting bolts from the grommet hole.
CAUTION:
Do not forcibly remove the bolts (TORX: T10).



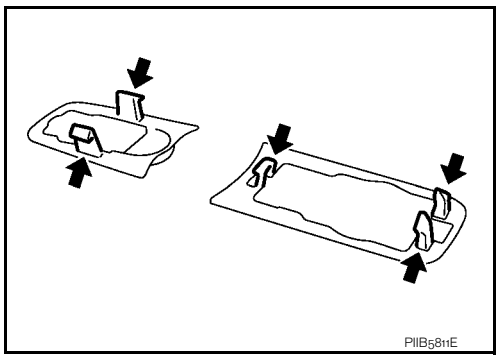
6. While pulling the outside handle, and then remove the door key cylinder assembly.



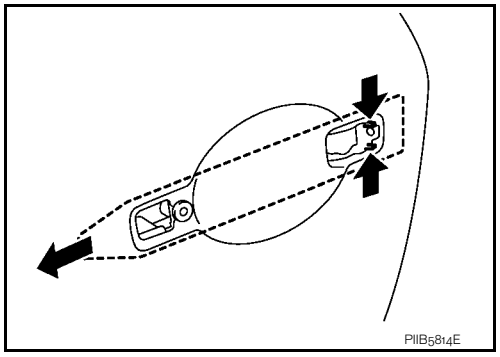
7. While pulling the outside handle, slide toward rear of vehicle to remove the outside handle.



8. Remove the front gasket and the rear gasket.

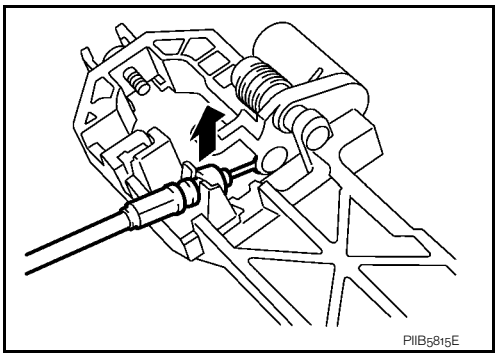


9. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.



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10. Reach in to separate the outside handle cable connection.



INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

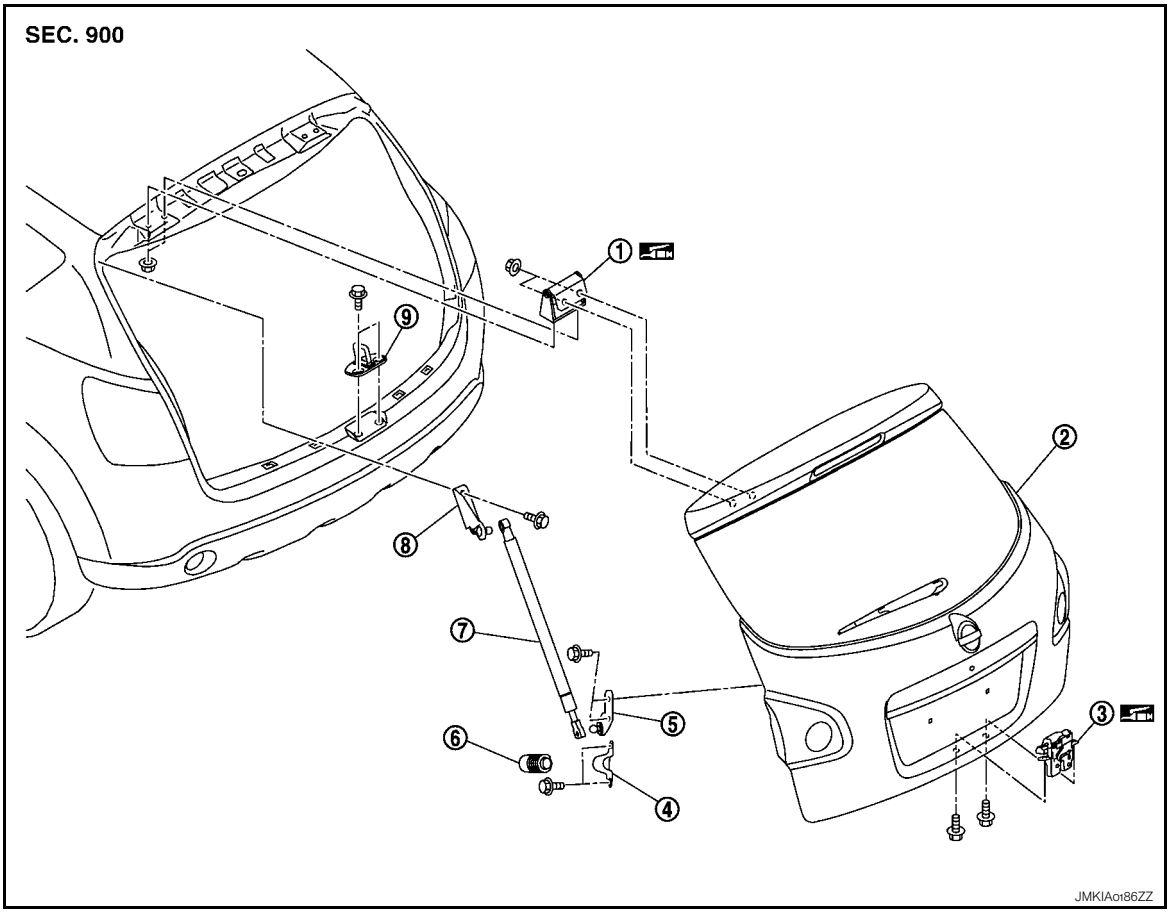
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BACK DOOR LOCK

DOOR LOCK

DOOR LOCK : Exploded View

INFOID:0000000001098563



1. Back door hinge
2. Back door assembly
3. Back door lock assembly
4. Bumper rubber bracket
5. Back door stay bracket (lower)
6. Bumper rubber
7. Back door stay
8. Back door stay bracket (upper)
9. Back door striker

Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK : Removal and Installation

INFOID:0000000001098564

REMOVAL

1. Remove the back door trim finisher lower. Refer to INT-26, "Removal and Installation".
2. Disconnect the back door lock assembly and back door opener switch connectors.
3. Remove the back door lock mounting bolts, and then remove the back door lock and actuator.

INSTALLTION

Install in the reverse order of removal.

CAUTION:

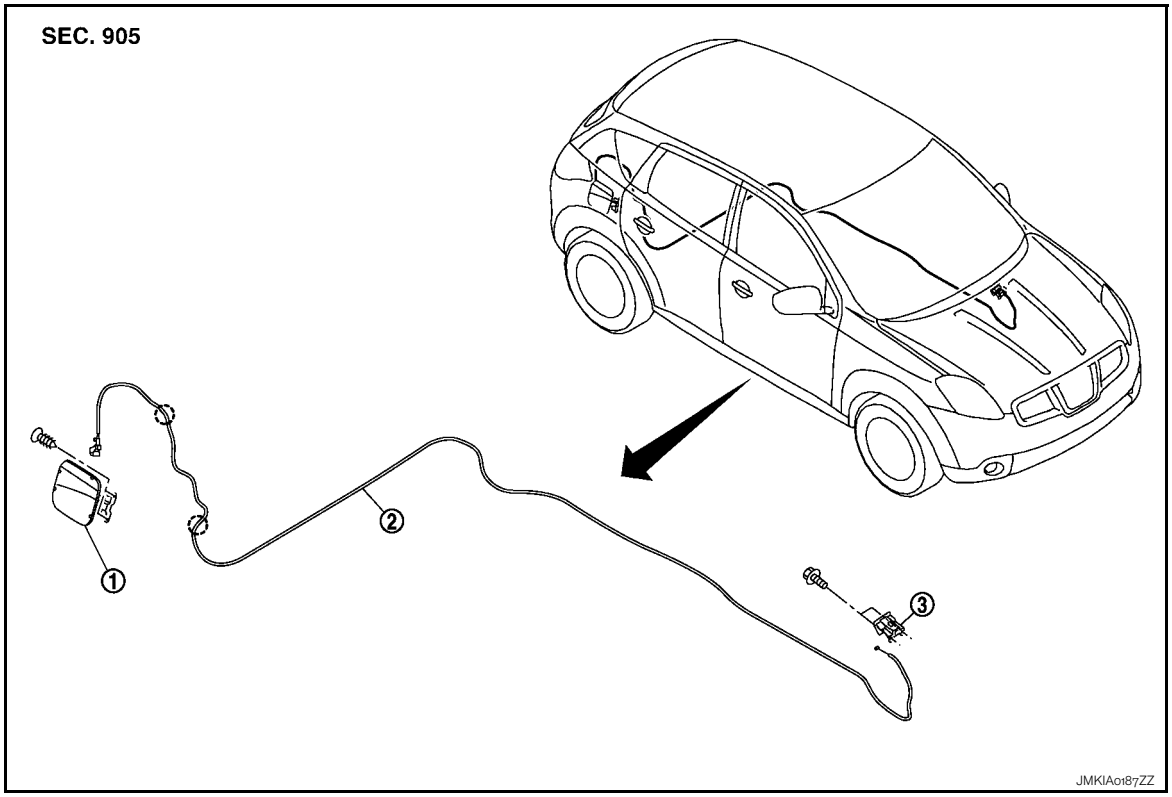
Check the back door lock/unlock operation after installation.

FUEL FILLER LID OPENER

FUEL FILLER LID

FUEL FILLER LID : Exploded View

INFOID:0000000001098569



1. Fuel filler lid assembly
2. Fuel filler opener cable
3. Fuel opener lever

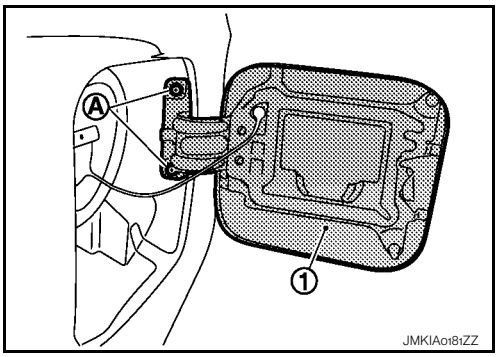
: Clip

FUEL FILLER LID : Removal and Installation

INFOID:0000000001098570

REMOVAL

1. Fully open the fuel filler lid.
2. Remove the filler cap.
3. Remove the mounting screws (A), and then remove the fuel filler lid (1).



INSTALLATION

Install in the reverse order of removal.

CAUTION:

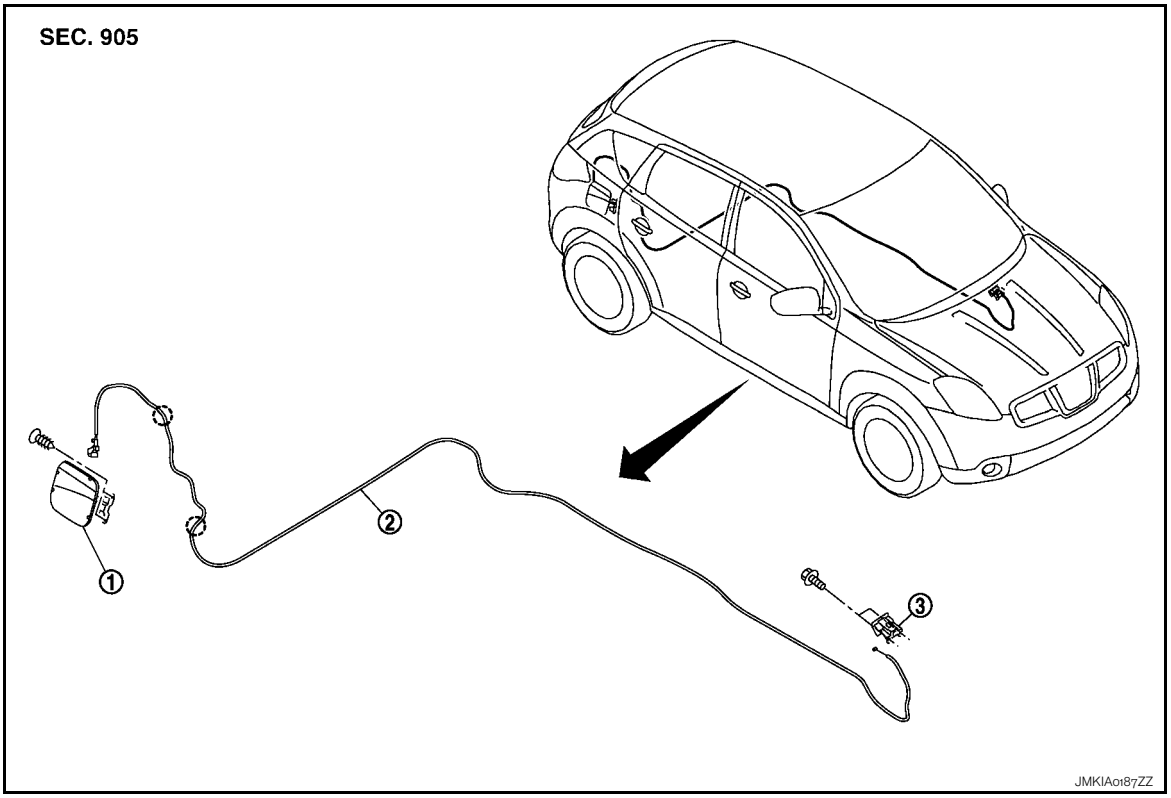
After installation, apply the touch-up paint (the body color) onto the head of the mounting screws.

FUEL FILLER OPENER CABLE

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FUEL FILLER OPENER CABLE : Exploded View

INFOID:0000000001098571



1. Fuel filler lid assembly
2. Fuel filler opener cable
3. Fuel opener lever

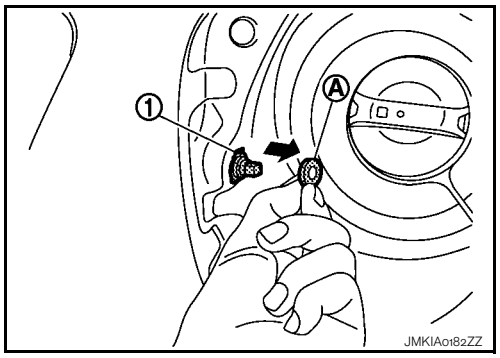
: Clip

FUEL FILLER OPENER CABLE : Removal and Installation

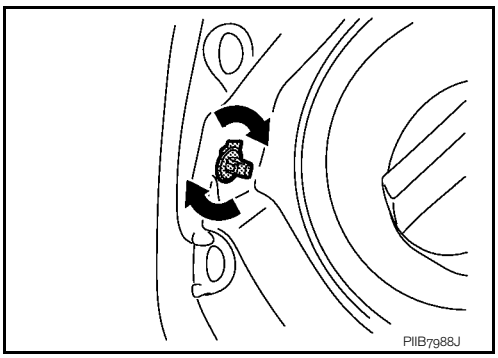
INFOID:0000000001098572

REMOVAL

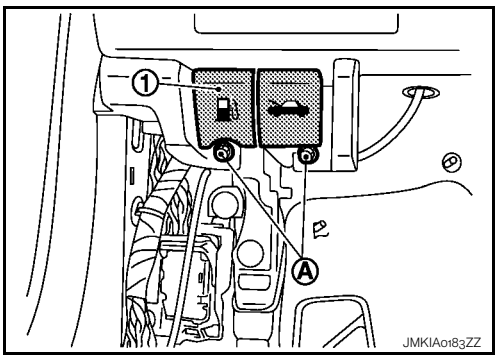
1. Remove the rear seat cushion, rear seatback, seatback lower support, and seatback mounting outer bracket. Refer to SE-31, "Removal and Installation".
2. Remove the dash side finisher, front kicking plate inner, rear kicking plate inner, center pillar lower garnish, and luggage side lower finisher (front). Refer to INT-14, "Removal and Installation".
3. Remove the parcel shelf, luggage floor carpet, luggage floor spacer, luggage rear plate, luggage side lower finisher, and rear pillar finisher. Refer to INT-24, "Removal and Installation".
4. Remove the fuel filler lock seal (1).



5. Rotate the fuel filler lock, and then remove the fuel filler lock.



6. Remove the fuel filler opener cable mounting clips and the clamps.
7. Remove the mounting bolts, and then remove the fuel filler lid opener lever.



8. Remove the fuel filler opener cable.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

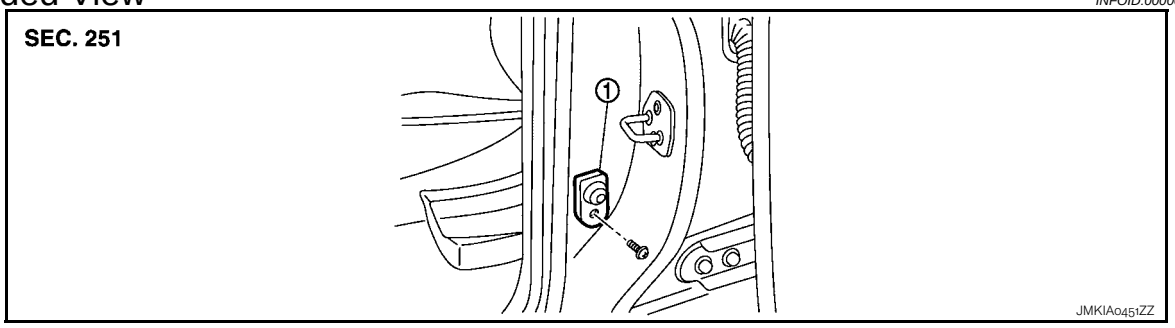
Check the fuel filler lid open/close operation after installation.

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DOOR SWITCH

Exploded View

INFOID:0000000001095347



1. Door switch (driver side)

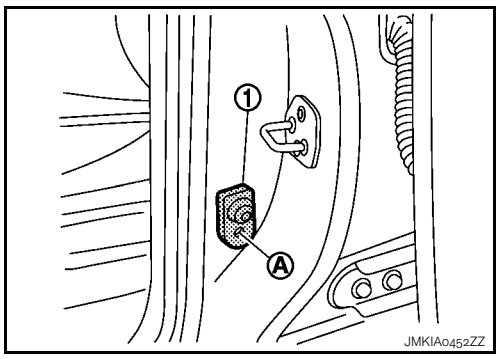
Refer to DLK-877, "Removal and Installation".

Removal and Installation

INFOID:0000000001095348

REMOVAL

1. Remove the door switch mounting bolt (A), and then remove door switch (1).
   NOTE:
   The same procedure is also performed for door switch (passenger side, rear LH and rear RH).



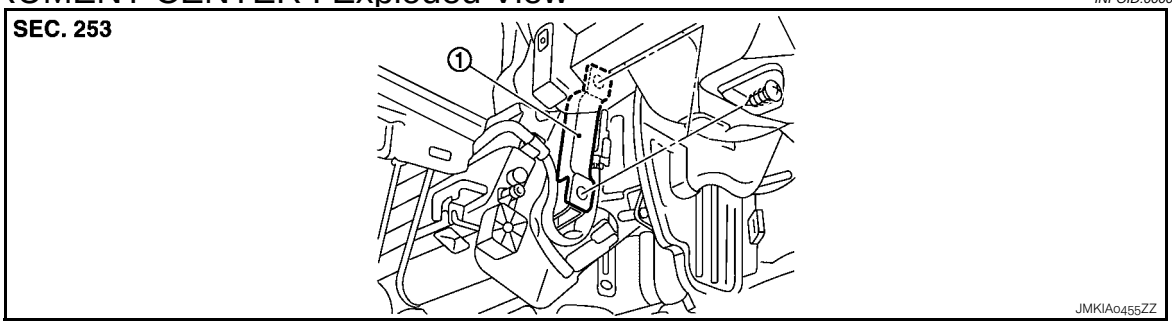
INSTALLATION

Install in the reverse order of removal.

INSIDE KEY ANTENNA
INSTRUMENT CENTER

INSTRUMENT CENTER : Exploded View

INFOID:0000000001095349



1. Inside key antenna (instrument center)

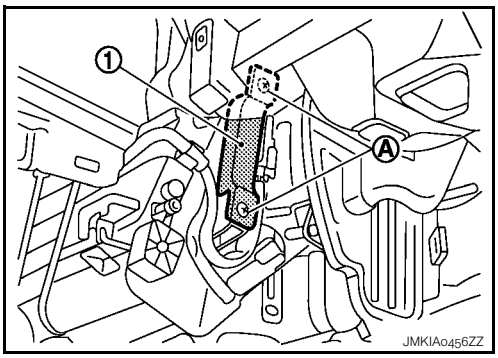
Refer to DLK-544, "INSTRUMENT CENTER : Removal and Installation".

INSTRUMENT CENTER : Removal and Installation

INFOID:0000000001095350

REMOVAL

1. Remove the glove box and instrument lower cover RH. Refer to IP-11, "Exploded View" and IP-12, "Removal and Installation".
2. Remove the key slot mounting screw (A), and then remove inside key antenna (instrument center) (1).



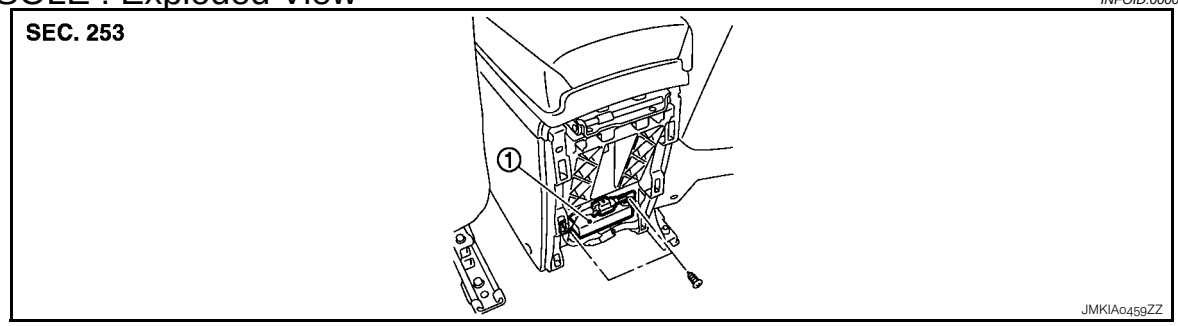
INSTALLATION

Install in the reverse order of removal.

CONSOLE

CONSOLE : Exploded View

INFOID:0000000001095351



1. Inside key antenna (console)

Refer to DLK-544, "CONSOLE : Removal and Installation".

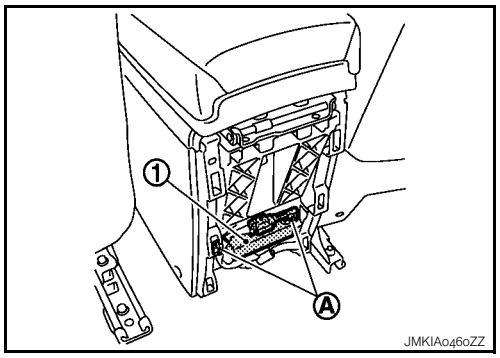
CONSOLE : Removal and Installation

INFOID:0000000001095352

REMOVAL

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1. Remove the console rear finisher (2). Refer to IP-18, "Exploded View" and IP-18, "Removal and Installation".
2. Remove the inside key antenna mounting screw (A), and then remove inside key antenna (console) (1).

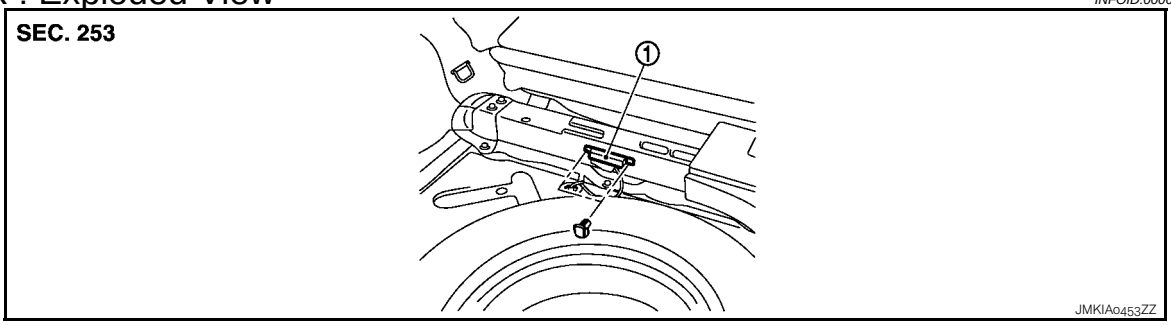


INSTALLATION
Install in the reverse order of removal.

REAR

REAR : Exploded View

INFOID:0000000001095353



1. Inside key antenna (rear seat)

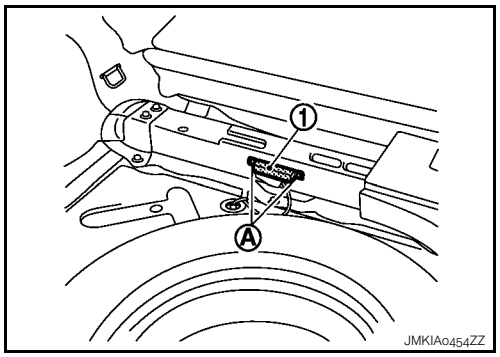
Refer to DLK-545, "REAR : Removal and Installation".

REAR : Removal and Installation

INFOID:0000000001095354

REMOVAL

1. Remove the luggage floor spacer (LH). Refer to INT-24, "Exploded View" and INT-24, "Removal and Installation".
2. Remove the inside key antenna (rear seat) mounting clips (A), and then remove inside key antenna (rear seat) (1).



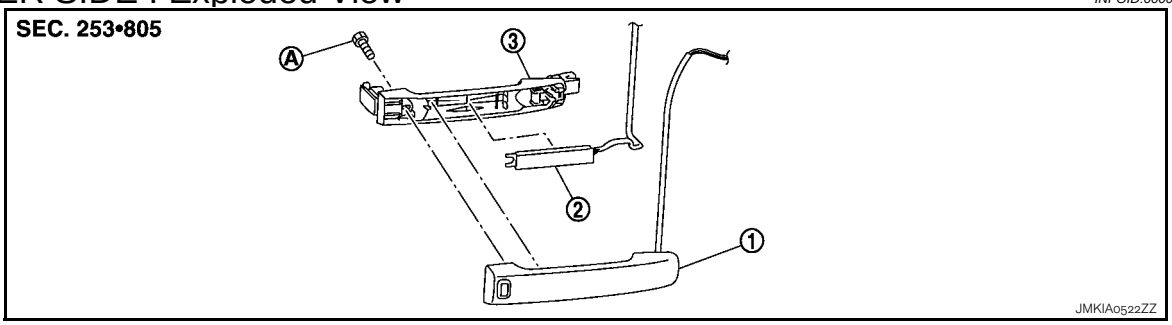
INSTALLATION
Install in the reverse order of removal.

OUTSIDE KEY ANTENNA

DRIVER SIDE

DRIVER SIDE : Exploded View

INFOID:0000000001095355



1. Outside handle grip
2. Outside key antenna
3. Outside handle bracket

A. Bolt

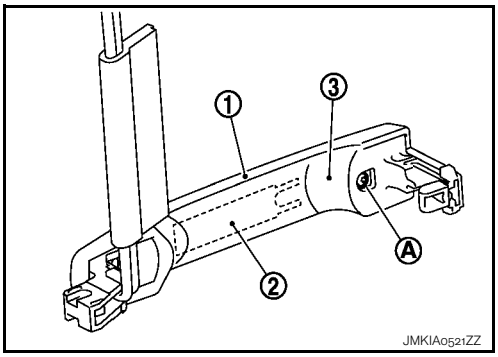
Refer to DLK-275, "DRIVER SIDE : Removal and Installation".

DRIVER SIDE : Removal and Installation

INFOID:0000000001095356

REMOVAL

1. Remove the outside handle. Refer to DLK-258, "OUTSIDE HANDLE : Exploded View" and DLK-259, "OUTSIDE HANDLE : Removal and Installation".
2. Remove the bolt (A) from outside handle grip (1).
3. Remove the outside key antenna (2) from outside handle bracket (3).



INSTALLATION

Install in the reverse order of removal.

PASSENGER SIDE

PASSENGER SIDE : Exploded View

INFOID:0000000001095357

Refer to DLK-275, "DRIVER SIDE : Exploded View".

PASSENGER SIDE : Removal and Installation

INFOID:0000000001095358

REMOVAL

Refer to DLK-275, "DRIVER SIDE : Removal and Installation".

INSTALLATION

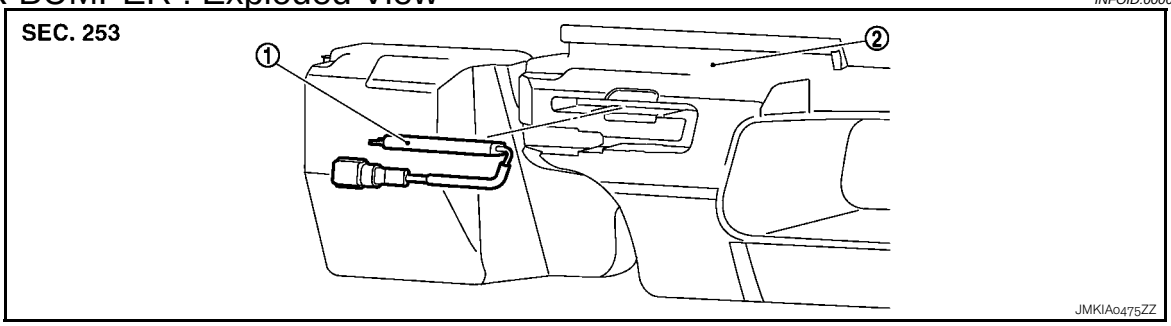
Install in the reverse order of removal.

REAR BUMPER

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REAR BUMPER : Exploded View

INFOID:0000000001095359



1. Outside key antenna (rear bumper) 2. Rear bumper energy absorber

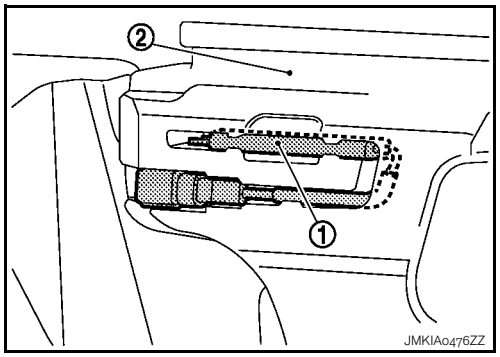
Refer to DLK-547, "REAR BUMPER : Removal and Installation".

REAR BUMPER : Removal and Installation

INFOID:0000000001095360

REMOVAL

1. Remove the rear bumper. Refer to EXT-14, "Exploded View" and EXT-15, "Removal and Installation".
2. Remove the outside key antenna (rear bumper) (1) from rear bumper energy absorber (2).



INSTALLATION

Install in the reverse order of removal.

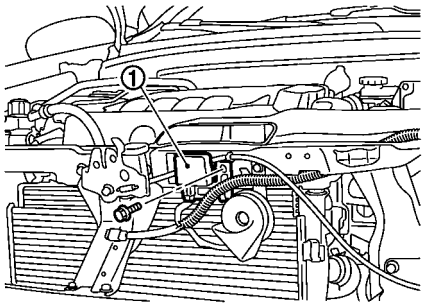
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INTELLIGENT KEY WARNING BUZZER

Exploded View

INFOID:0000000001095361

SEC. 253



1. Intelligent Key warning buzzer

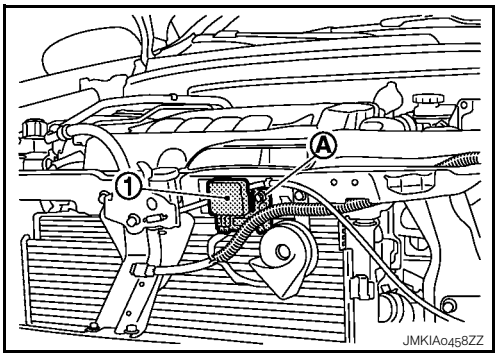
Refer to DLK-548, "Removal and Installation".

Removal and Installation

INFOID:0000000001095362

REMOVAL

1. Remove the front bumper. Refer to EXT-11, "Exploded View" and EXT-11, "Removal and Installation".
2. Remove the Intelligent Key warning buzzer mounting bolt (A), and then remove the Intelligent Key warning buzzer (1).



INSTALLATION

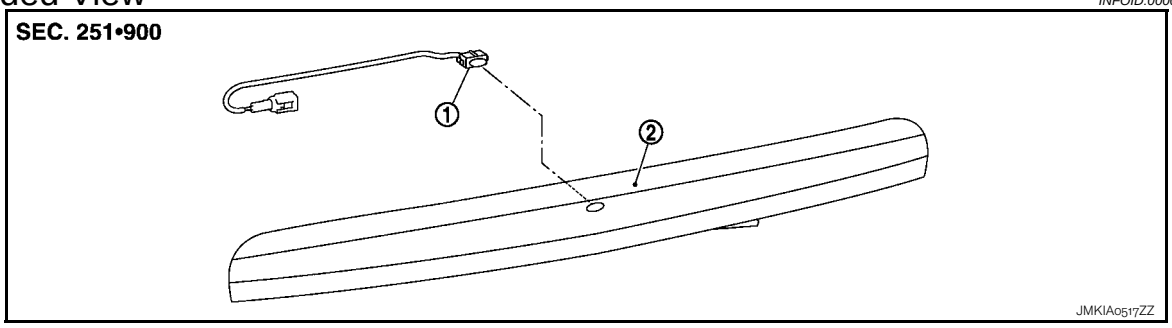
Install in the reverse order of removal.

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BACK DOOR REQUEST SWITCH

Exploded View

INFOID:0000000001115311



1. Back door request switch
2. Back door finisher

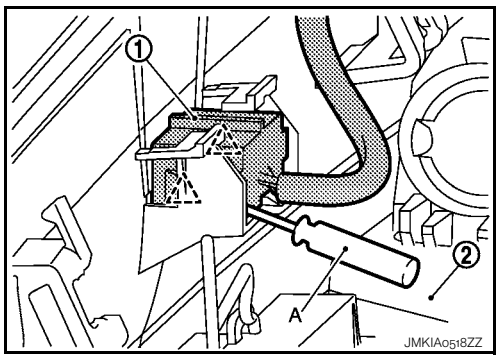
Refer to DLK-549, "Removal and Installation".

Removal and Installation

INFOID:0000000001115312

REMOVAL

1. Remove the back door finisher.
   Refer to EXT-31, "Exploded View" and EXT-31, "Removal and Installation".
2. Remove the back door request switch (1) from back door finisher (2) using flat-bladed screw driver (A) etc.



△ : Pawl

3. Remove the trunk lid request switch mounting screw (B), and then remove trunk lid request switch (3) from inner bracket (2).

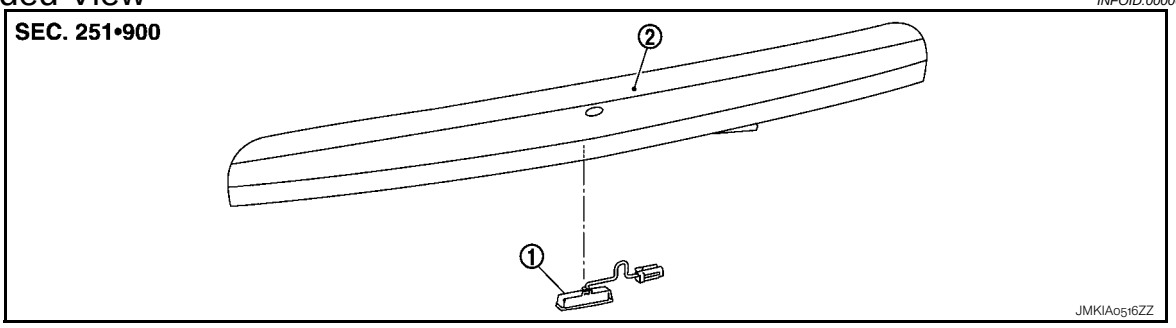
INSTALLATION

Install in the reverse order of removal.

BACK DOOR OPENER SWITCH

Exploded View

INFOID:0000000001116790



1. Back door opener switch
2. Back door finisher

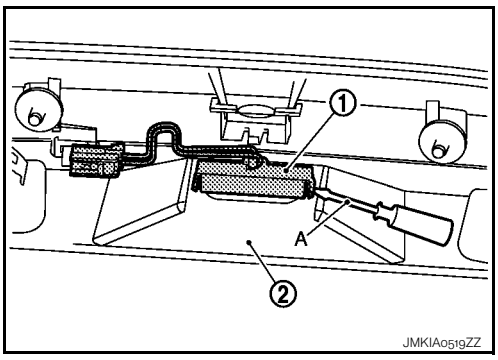
Refer to DLK-550, "Removal and Installation".

Removal and Installation

INFOID:0000000001116791

REMOVAL

1. Remove the back door finisher.
   Refer to EXT-31, "Exploded View" and EXT-31, "Removal and Installation".
2. Remove the back door opener switch (1) from back door finisher (2) using flat-bladed screw driver (A) etc.



INSTALLATION

Install in the reverse order of removal.

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INTELLIGENT KEY BATTERY

Exploded View

INFOID:0000000001109246

Refer to DLK-281, "Removal and Installation".

Removal and Installation

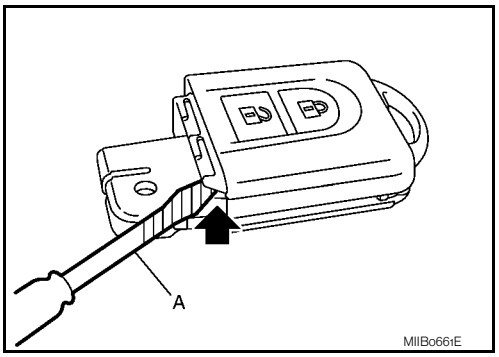
INFOID:0000000001109247

REMOVAL

1. Remove Intelligent Key cover.
2. Insert a flat-bladed screwdriver (A) wrapped with tape as shown in the illustration and then separate lower and upper cases by twisting screwdriver.

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 circuit board assembly from the upper case (1). [Substrate assembly: circuit board (3) + rubber (2)]
4. Gently press the rubber (2) and remove the circuit board (3).

CAUTION:

Do not touch the printed circuits directly.

5. Remove the battery (4) from the lower case (5) and replace it.

Battery replacement : Coin-type lithium battery (CR2032)

CAUTION:

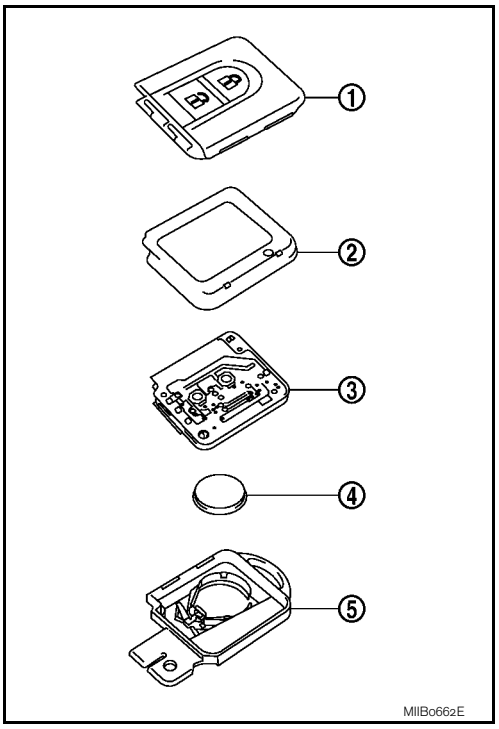
When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.

6. After replacement, assemble the upper and lower cases by engaging the hooks on their circumference while being careful not to pinch the rubber, etc.

CAUTION:

After replacing the battery, check that all Intelligent Key functions work normally.

Refer to DLK-134, "Component Function Check".



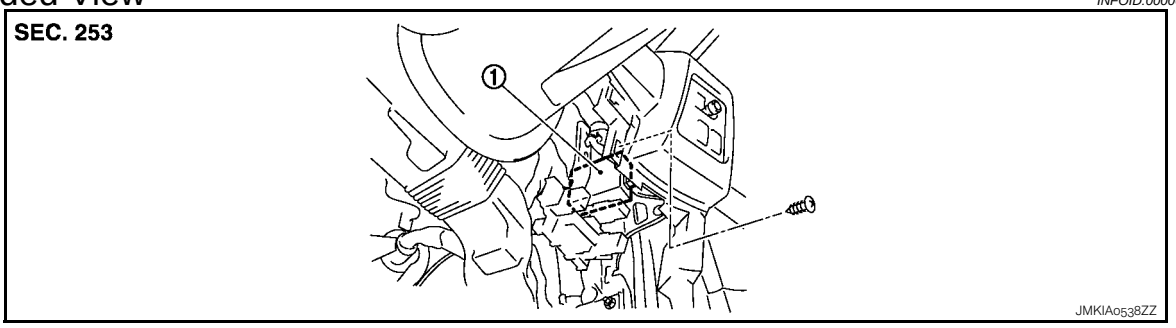
INSTALLATION

Install in the reverse order of removal.

INTELLIGENT KEY UNIT

Exploded View

INFOID:0000000001116437



1. Intelligent Key unit
M40

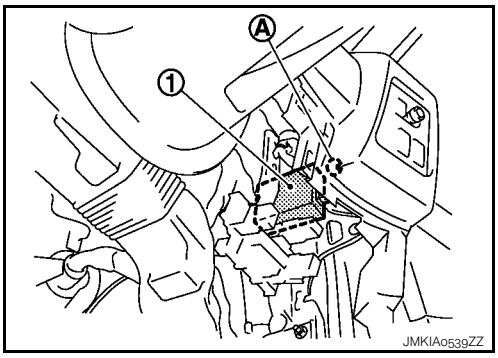
Refer to DLK-551, "Removal and Installation".

Removal and Installation

INFOID:0000000001116438

REMOVAL

1. Remove lower instrument panel (driver side) and mirror switch finisher. Refer to IP-11, "Exploded View" and IP-12, "Removal and Installation".
2. Remove the Intelligent Key unit mounting screw (A), and then remove Intelligent Key unit (1).
NOTE:
Perform the system initialization when replacing Intelligent Key unit. Refer to DLK-23, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".



INSTALLATION

Install in the reverse order of removal.

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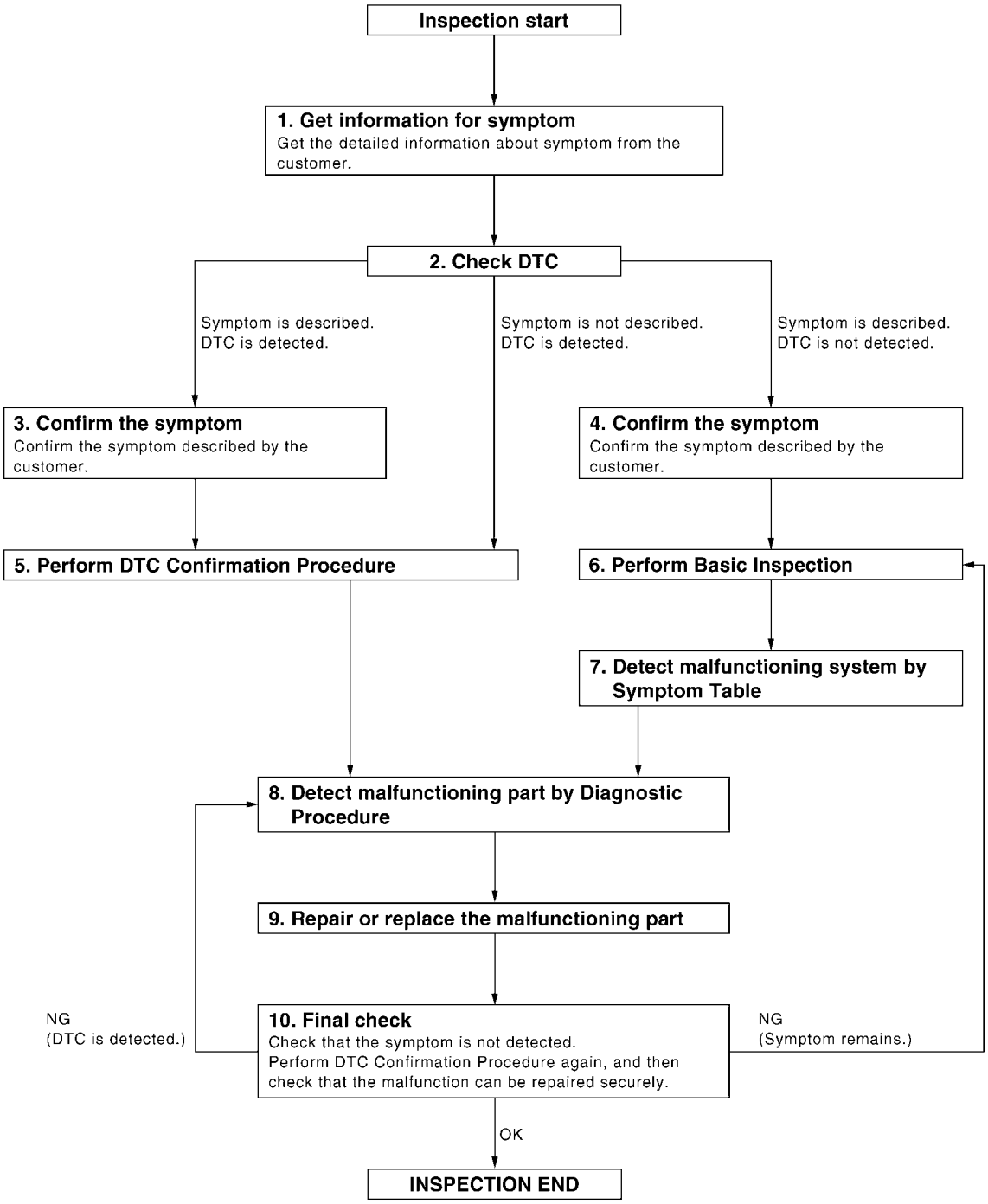
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000001102242

OVERALL SEQUENCE



JMKIA0101GB

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 for BCM.
2. Perform the following procedure if DTC is displayed.

- 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-III 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-III 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.
If two or more DTCs are detected, refer to DLK-643, "DTC Inspection Priority Chart" and determine trouble diagnosis order.

Is DTC detected?

YES >> GO TO 8.
NO >> Refer to GI-39, "Intermittent Incident".

6.PERFORM BASIC INSPECTION

Perform Basic Inspection, refer to DLK-660, "Basic Inspection".

Inspection End>>GO TO 7.

7.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

Detect malfunctioning system according to Symptom Table based on the confirmed symptom in step 4.

>> GO TO 8.

8.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.

>> GO TO 9.

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9.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 10.

10.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.

Does the symptom reappear?

YES (DTC is detected)>>GO TO 8.
YES (Symptom remains)>>GO TO 6.
NO >> **INSPECTION END**

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INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000001102244

Perform the system initialization when replacing or registering Keyfob and ignition key.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:0000000001102245

Refer to the CONSULT-III Operation Manual-NATS.

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FUNCTION DIAGNOSIS

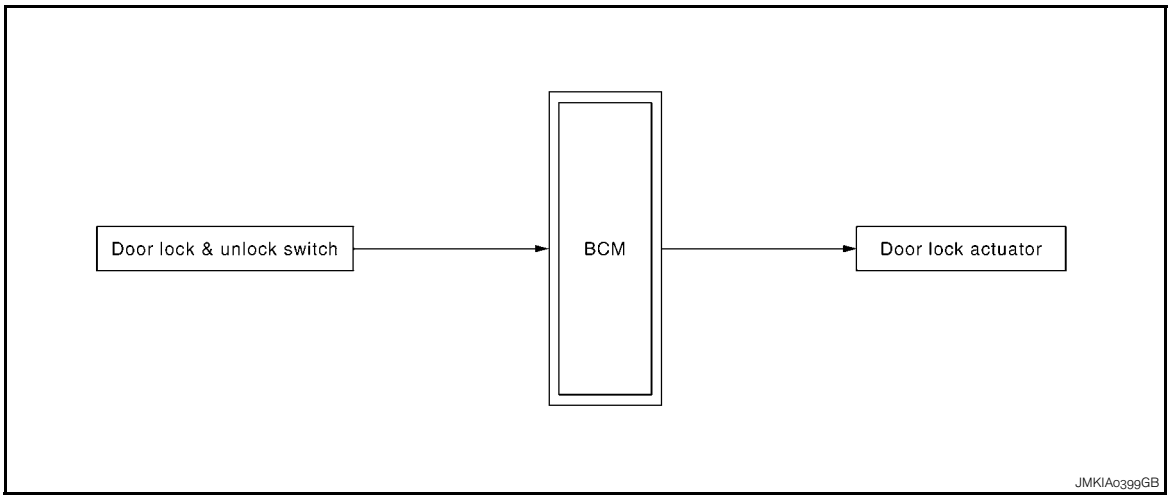
DOOR LOCK FUNCTION

DOOR LOCK AND UNLOCK SWITCH

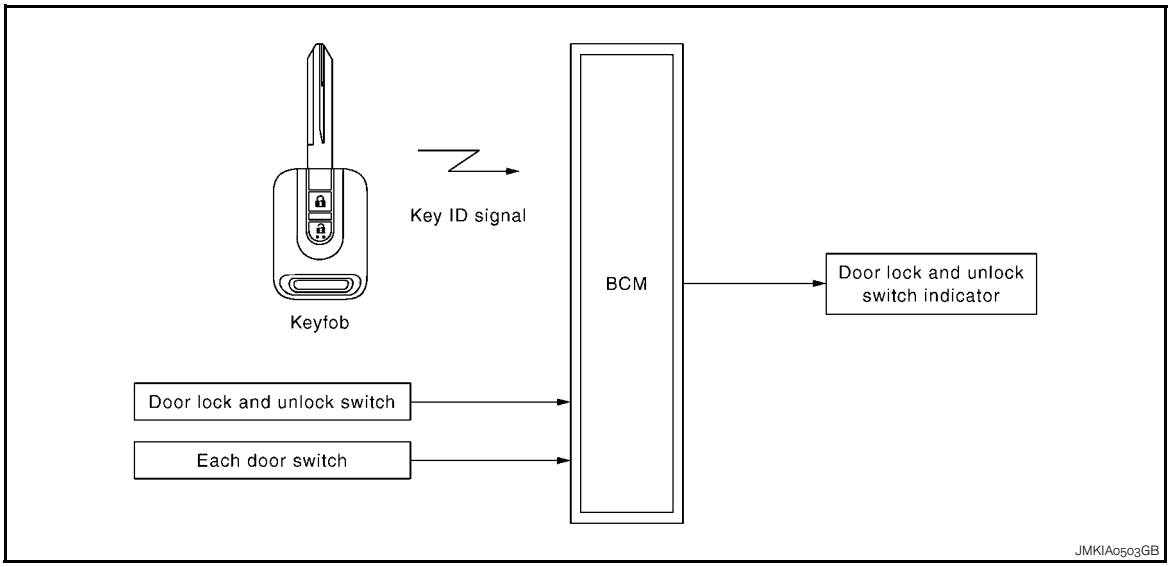
DOOR LOCK AND UNLOCK SWITCH : System Diagram

INFOID:0000000001081575

DOOR LOCK AND UNLOCK SWITCH OPERATION



DOOR LOCK AND UNLOCK SWITCH INDICATOR OPERATION



DOOR LOCK AND UNLOCK SWITCH : System Description

INFOID:0000000001081576

DOOR LOCK AND UNLOCK SWITCH OPERATION

Functions are available by operating the door lock and unlock switch on center console. Interlocked with the lock/unlock operation of door lock and unlock switch, door lock actuators of all doors are locked/unlocked.

Operation Condition

If the following conditions are not satisfied, door lock/unlock operation is not performed even if the door lock and unlock switch is operated.

Door lock and unlock switch	Operation condition
Lock operation	All the following conditions are satisfied. • Except driver side, doors are closed. • Doors are not locked with keyfob.
Unlock operation	All the following all conditions are satisfied. • Doors are not locked with keyfob.

NOTE:
When the door lock is locked with keyfob, door lock and unlock switch operation will be invalid until either of the following conditions is satisfied.
- Turn ignition switch ON.
- Unlock operation by keyfob.

DOOR LOCK AND UNLOCK SWITCH INDICATOR OPERATION

Door lock and unlock switch indicator indicates door lock status. The indicator turn ON while ignition switch is ON and door lock is locked. If any door is opened, the indicator will turn OFF.

1 Minute Timer

A timer must be running to turn OFF the indicator. The timer will run for 1 minute after locking with keyfob or auto door lock.

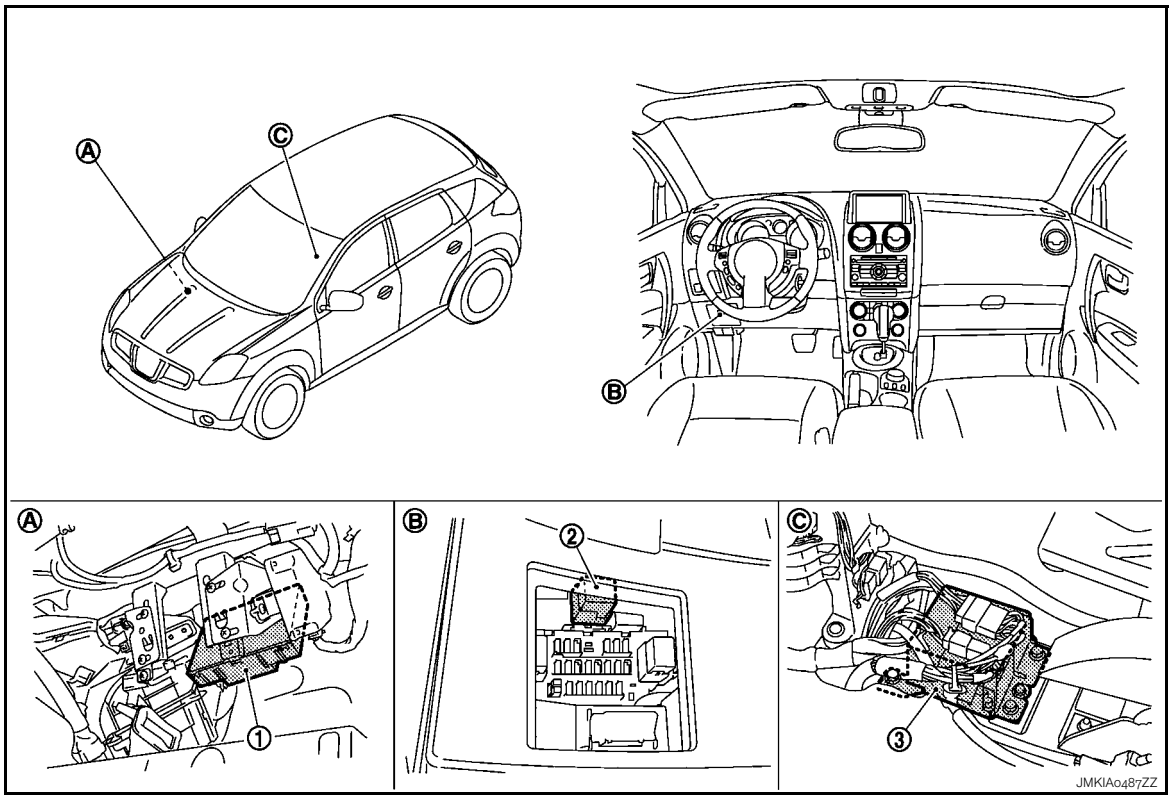
30 Minutes Timer

A timer must be running to turn OFF the indicator. The timer will run for 30 minutes after locking with door lock and unlock switch.

NOTE:
1minute timer condition is satisfied while 30 minutes timer is active, however 30 minutes timer does not change when 1 minutes timer is active.

DOOR LOCK AND UNLOCK SWITCH : Component Parts Location

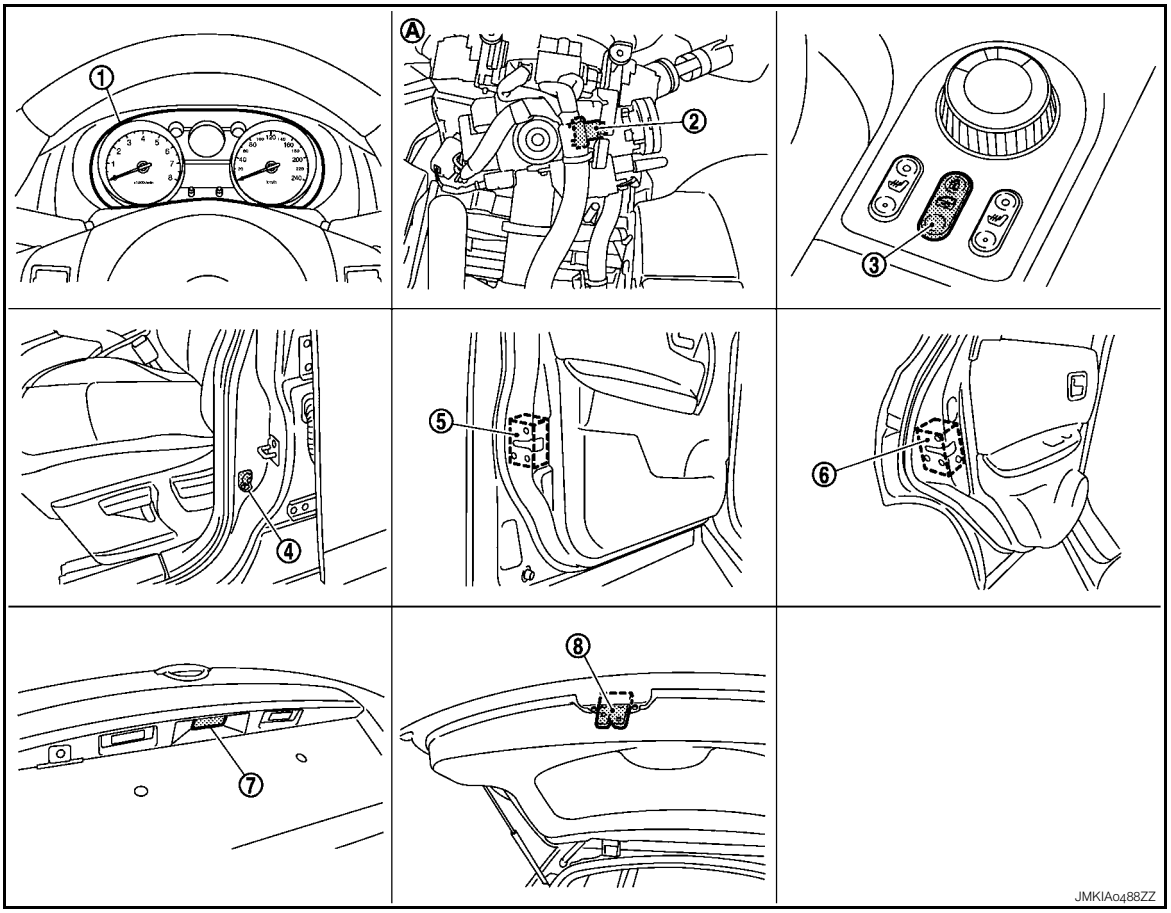
INFOID:0000000001081577



1. BCM
   M65, M66, M67
2. Passenger side anti-hijack relay
   M90
3. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. View with fuse box lid removed
C. View with center console removed

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1. Combination meter M34
2. Key switch M24
3. Door lock and unlock switch M89
4. Front door switch (driver side) B34
5. Front door lock actuator (driver side) D9
6. Rear door lock actuator LH D85
7. Back door opener switch D186
8. Back door lock assembly D152

A. View with steering column cover removed

DOOR LOCK AND UNLOCK SWITCH : Component Description

INFOID:0000000001081578

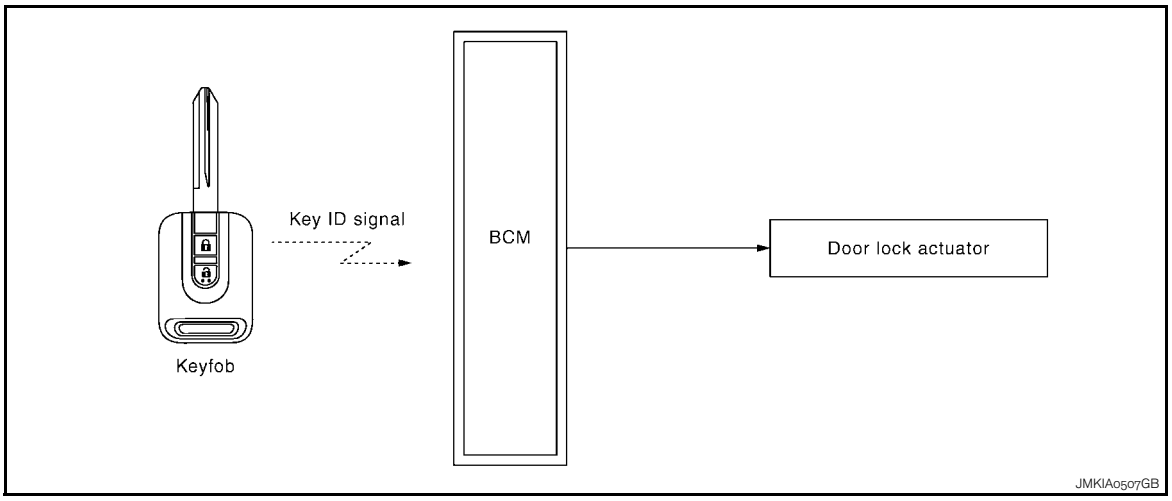
Item	Function
BCM	Controls the door lock and unlock function.
Door switch	Detects door state (open or closed).
Door lock and unlock switch	Transmits door lock and unlock signal to BCM. Door lock and unlock switch indicator is built in door lock and unlock switch.
Door lock actuator	Receives door lock and unlock signal from BCM and locks and unlocks each door.

KEYFOB

KEYFOB : System Diagram

INFOID:0000000001081583

KEYFOB OPERATION



KEYFOB : System Description

INFOID:0000000001081584

KEYFOB OPERATION

The multi remote control system can be locked and unlocked by pressing door lock and unlock button of key-fob.

DOOR LOCK AND UNLOCK OPERATION

When door lock and unlock button of keyfob is pressed, door lock and unlock signal transmits from keyfob to BCM. When BCM receives the door lock and unlock signal, it operates door lock actuator.

OPERATION CONDITION

Remote controller operation	Operation condition
Lock/unlock	Key switch is OFF (key is removed from ignition key cylinder).

OPERATION AREA

To ensure that the keyfob works effectively, use within 100 cm range of each door, however the operable range may differ according to surroundings.

ANTI-HIJACK MODE

When door lock is unlocked, pressing LOCK button on keyfob once will lock all doors. When door lock is locked, pressing UNLOCK button on keyfob will unlock driver side door. Pressing UNLOCK button on keyfob second time within 5 seconds from the first time will unlock all doors and back door can be opened with back door opener switch.

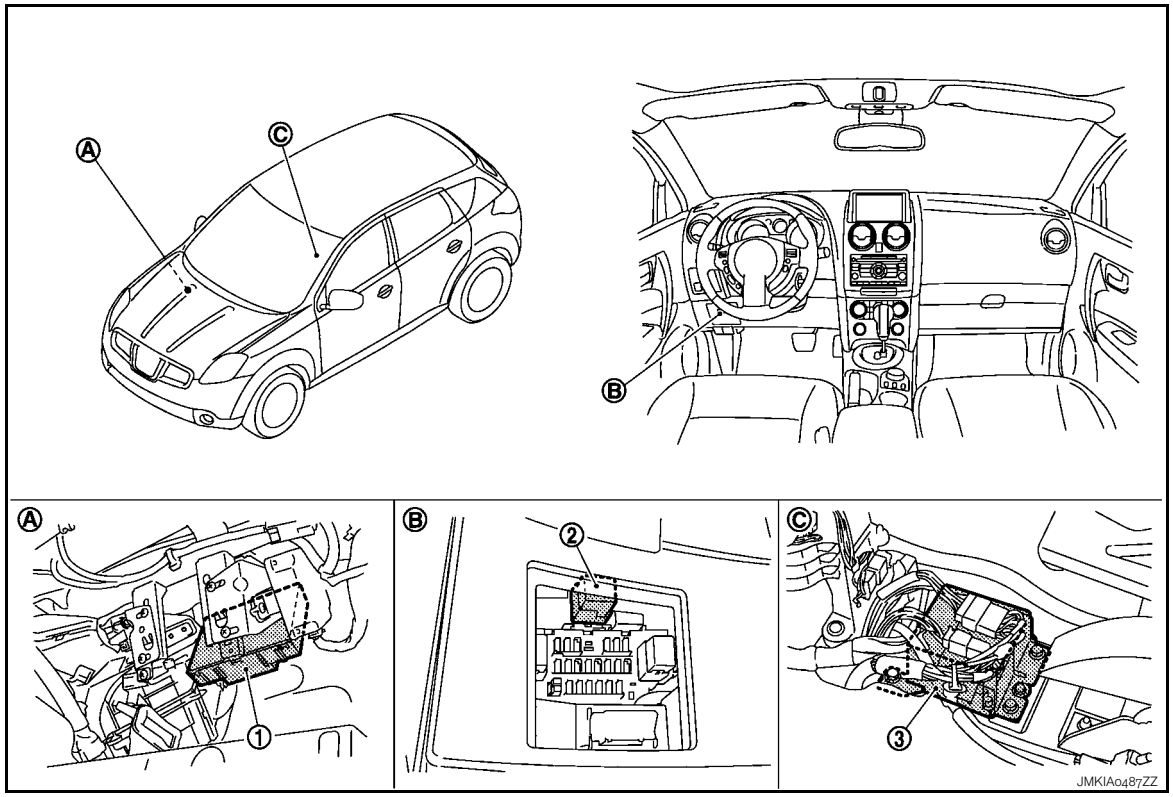
NOTE:

Anti-hijack mode can be set to ON or OFF with CONSULT-III. For the setting information, refer to DLK-580, "MULTIREMOTE ENT : CONSULT-III Function (BCM - MULTIREMOTE ENT)".

KEYFOB : Component Parts Location

INFOID:0000000001117091

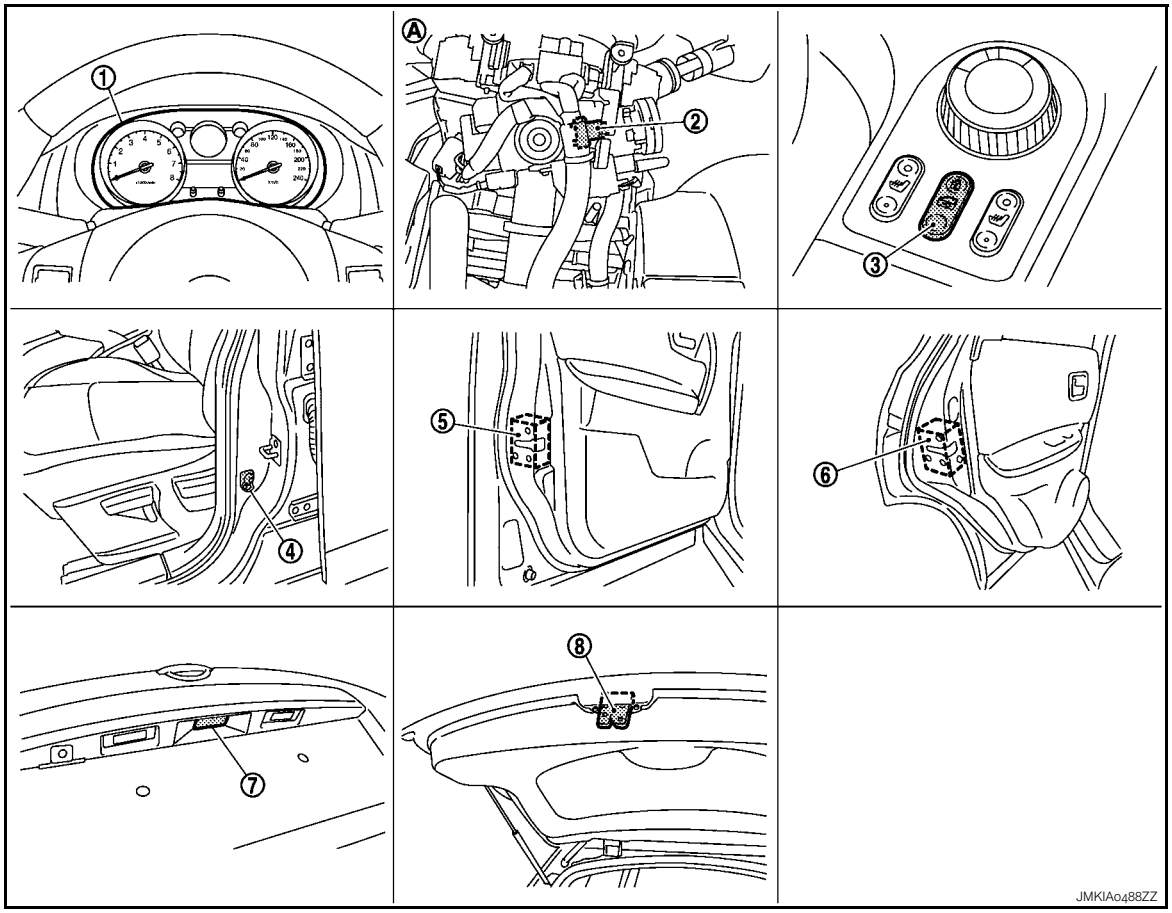
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1. BCM
   M65, M66, M67
2. Passenger side anti-hijack relay
   M90
3. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. View with fuse box lid removed
C. View with center console removed

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1. Combination meter M34
2. Key switch M24
3. Door lock and unlock switch M89
4. Front door switch (driver side) B34
5. Front door lock actuator (driver side) D9
6. Rear door lock actuator LH D85
7. Back door opener switch D186
8. Back door lock assembly D152

A. View with steering column cover removed

KEYFOB : Component Description

INFOID:0000000001081586

Item	Function
BCM	Controls the door lock function.
Key switch	Detects that ignition key is inserted into ignition key cylinder.
Door lock actuator	Receives lock and unlock signal from BCM and locks and unlocks each door.

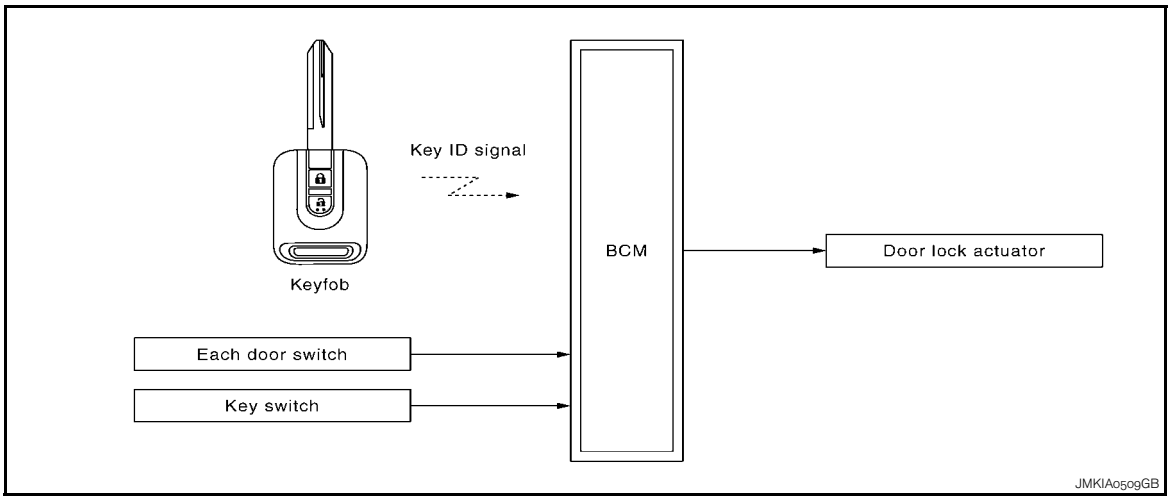
AUTO DOOR LOCK

AUTO DOOR LOCK : System Diagram

INFOID:0000000001081607

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AUTO DOOR LOCK OPERATION



AUTO DOOR LOCK : System Description

INFOID:0000000001081608

AUTO RELOCK OPERATION

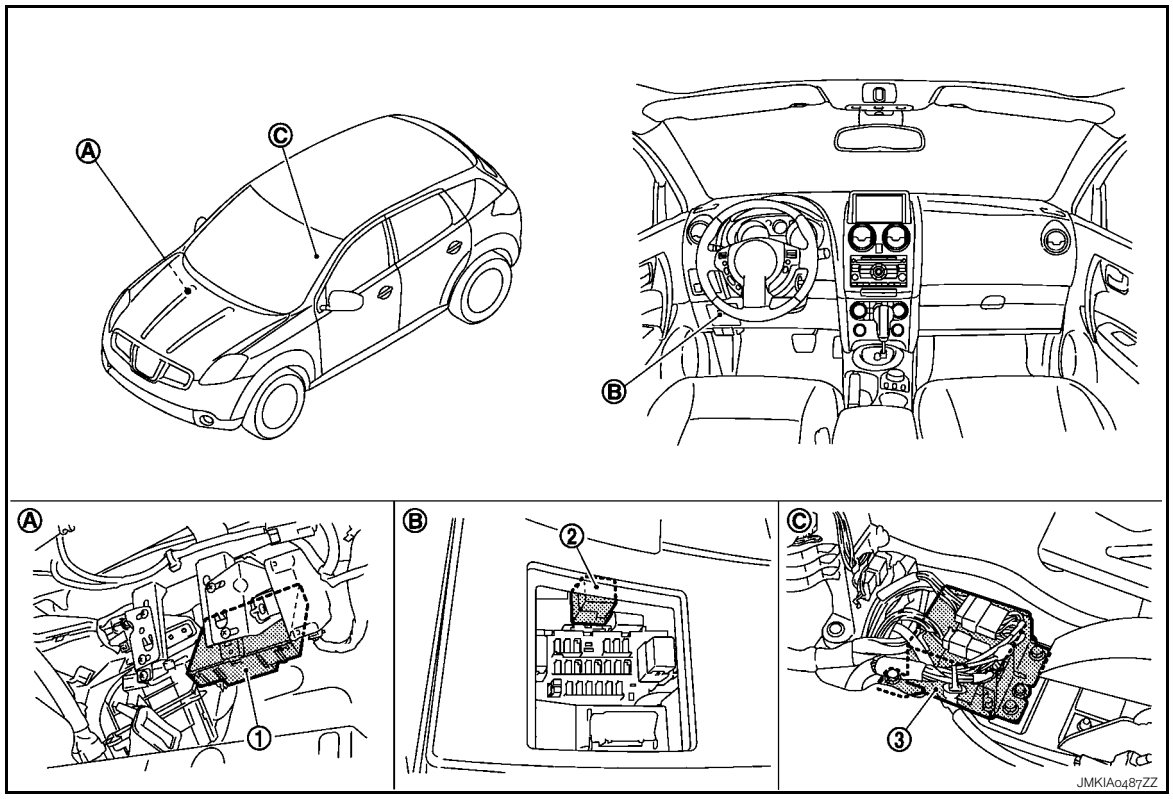
When all doors are locked and then doors are unlocked with keyfob, if BCM does not receive the following signal within 2 minutes*1, all doors are automatically locked.

- Any door is opened.
- Ignition key is inserted into ignition key cylinder.
- Door is locked with keyfob.
- Door is locked/unlocked with door lock and unlock switch.

*1: The time can be changed with CONSULT-III. Refer to DLK-580, "MULTIREMOTE ENT : CONSULT-III Function (BCM - MULTIREMOTE ENT)".

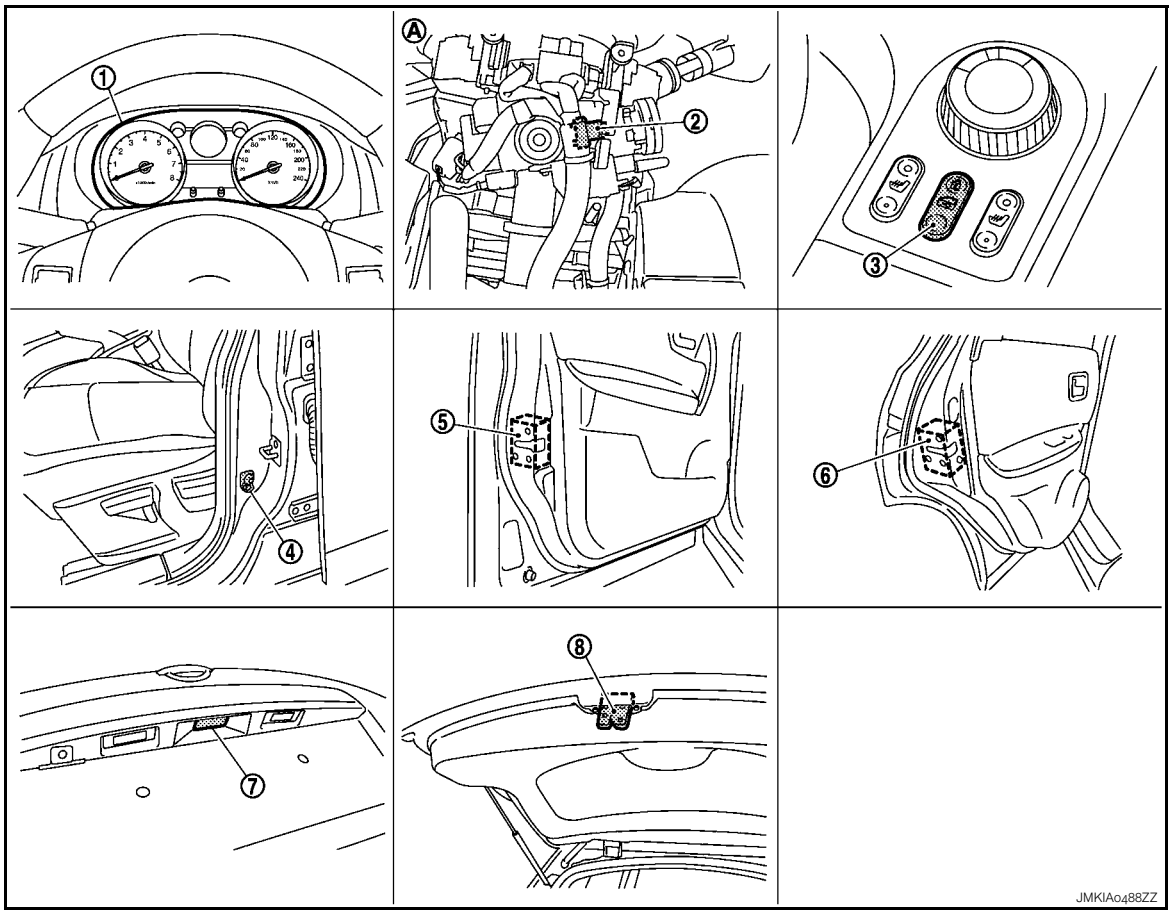
AUTO DOOR LOCK : Component Parts Location

INFOID:0000000001117092



1. BCM
   M65, M66, M67
2. Passenger side anti-hijack relay
   M90
3. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. View with fuse box lid removed
C. View with center console removed



1. Combination meter
   M34
2. Key switch
   M24
3. Door lock and unlock switch
   M89
4. Front door switch (driver side)
   B34
5. Front door lock actuator (driver side)
   D9
6. Rear door lock actuator LH
   D85
7. Back door opener switch
   D186
8. Back door lock assembly
   D152

A. View with steering column cover removed

AUTO DOOR LOCK : Component Description

INFOID:0000000001081610

Item	Function
BCM	Controls the door lock function.
Door switch	Detects door state (open or closed).
Key switch	Detects that ignition key is inserted into ignition key cylinder.
Door lock/unlock switch	Transmits door lock/unlock signal to BCM.
Keyfob	Transmits key ID to BCM when lock and unlock button is pressed.
Door lock actuator	Receives lock/unlock signal from BCM and locks/unlocks each door.

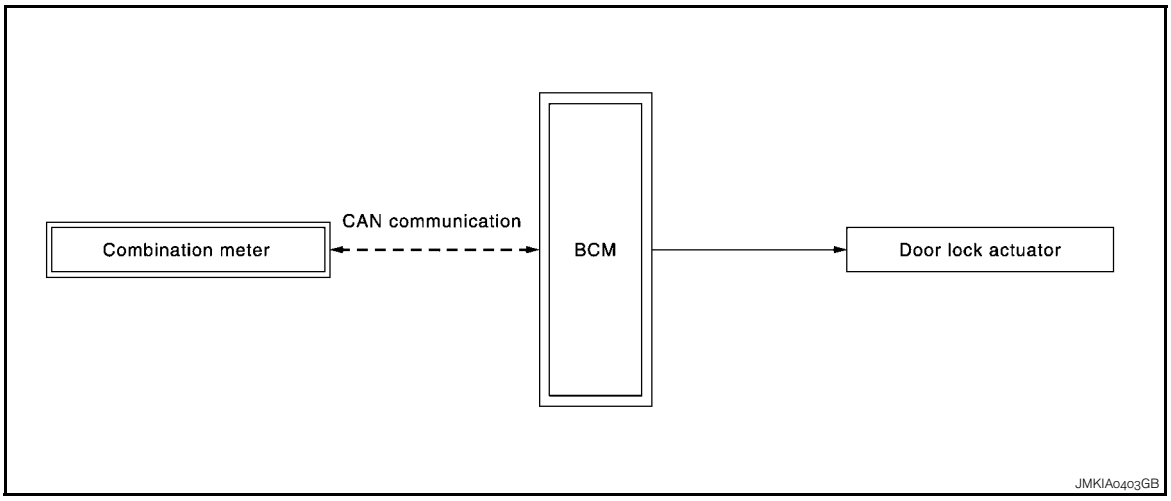
VEHICLE SPEED SENSING AUTO DOOR LOCK

VEHICLE SPEED SENSING AUTO DOOR LOCK : System Diagram

INFOID:0000000001081611

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VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION



VEHICLE SPEED SENSING AUTO DOOR LOCK : System Description

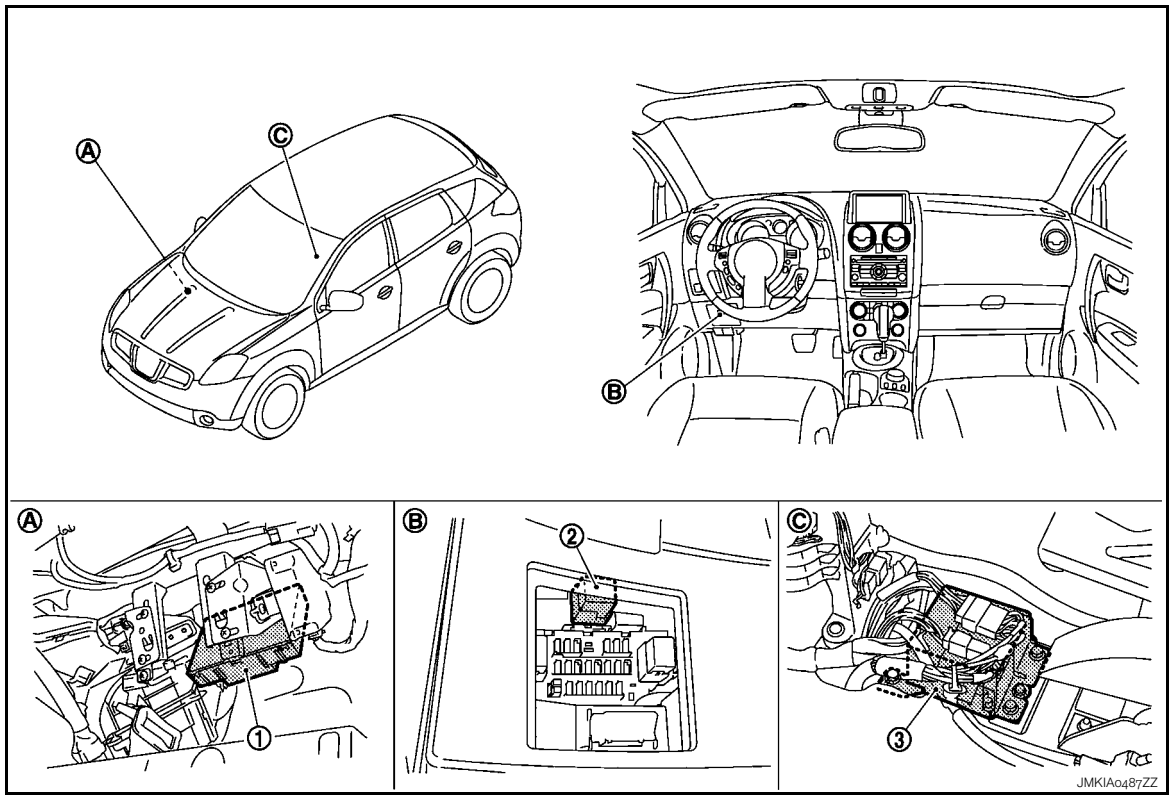
INFOID:0000000001081612

VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION

When the vehicle speed exceeds more than 12 km/h (7 MPH), all doors are automatically locked. The vehicle speed signal is received from combination meter via CAN communication.

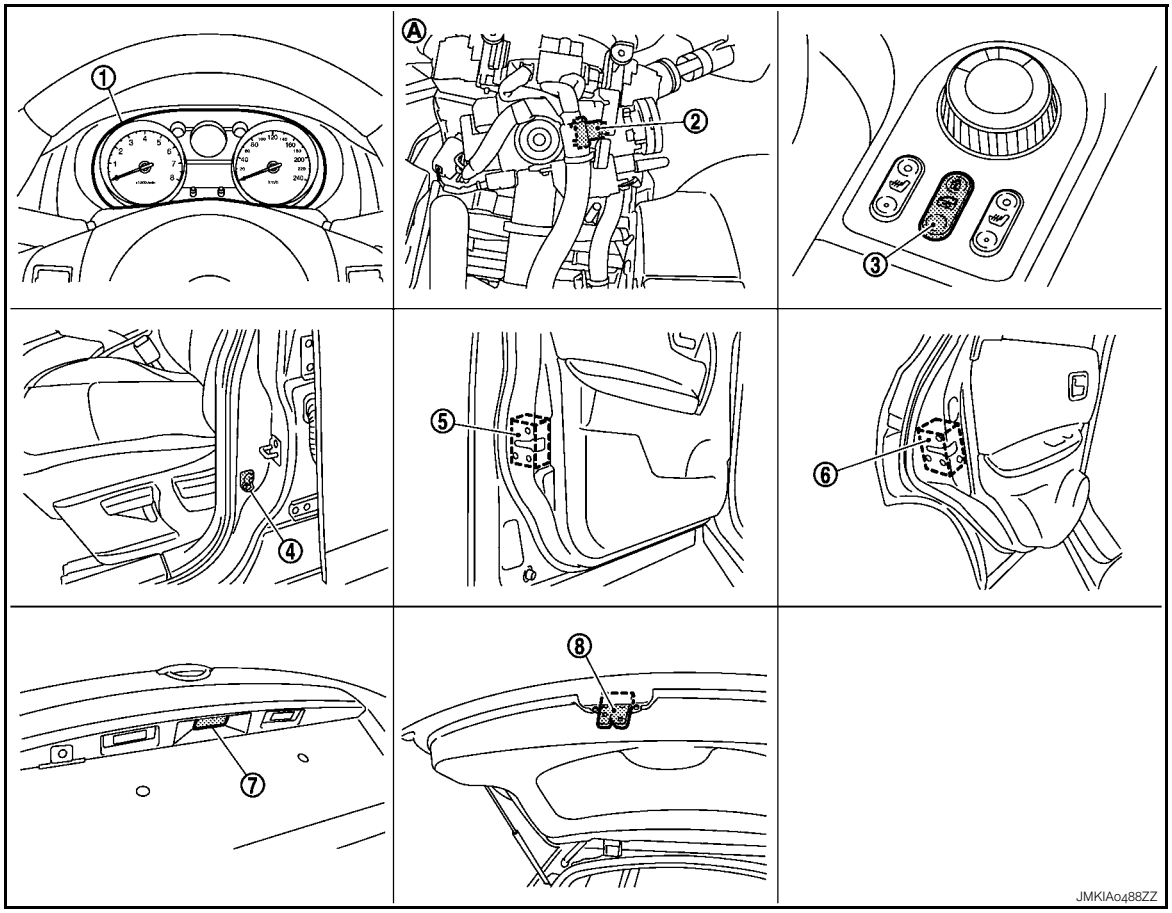
VEHICLE SPEED SENSING AUTO DOOR LOCK : Component Parts Location

INFOID:0000000001117093



1. BCM M65, M66, M67
2. Passenger side anti-hijack relay M90
3. Air bag diagnosis sensor unit M59

A. Over the glove box
B. View with fuse box lid removed
C. View with center console removed



1. Combination meter M34
2. Key switch M24
3. Door lock and unlock switch M89
4. Front door switch (driver side) B34
5. Front door lock actuator (driver side) D9
6. Rear door lock actuator LH D85
7. Back door opener switch D186
8. Back door lock assembly D152

A. View with steering column cover removed

VEHICLE SPEED SENSING AUTO DOOR LOCK : Component Description

INFOID:0000000001081614

Item	Function
BCM	Controls the door lock function.
Combination meter	Transmits vehicle speed signal to BCM via CAN communication.
Door lock actuator	Receives door lock and unlock signal from BCM and locks and unlocks each door.

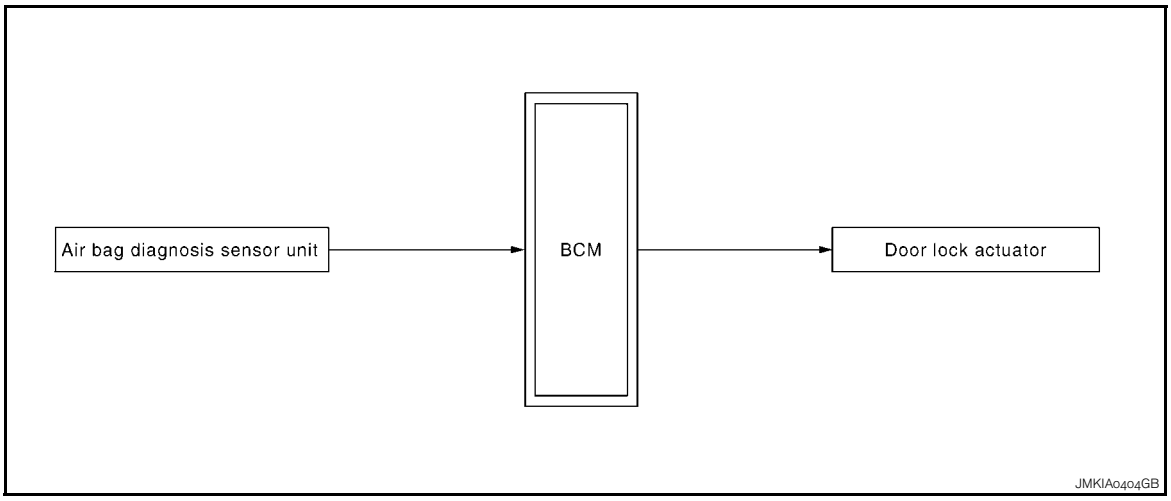
AIR BAG INTERLOCK UNLOCK

AIR BAG INTERLOCK UNLOCK : System Diagram

INFOID:0000000001081615

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AIR BAG INTERLOCK UNLOCK OPERATION



AIR BAG INTERLOCK UNLOCK : System Description

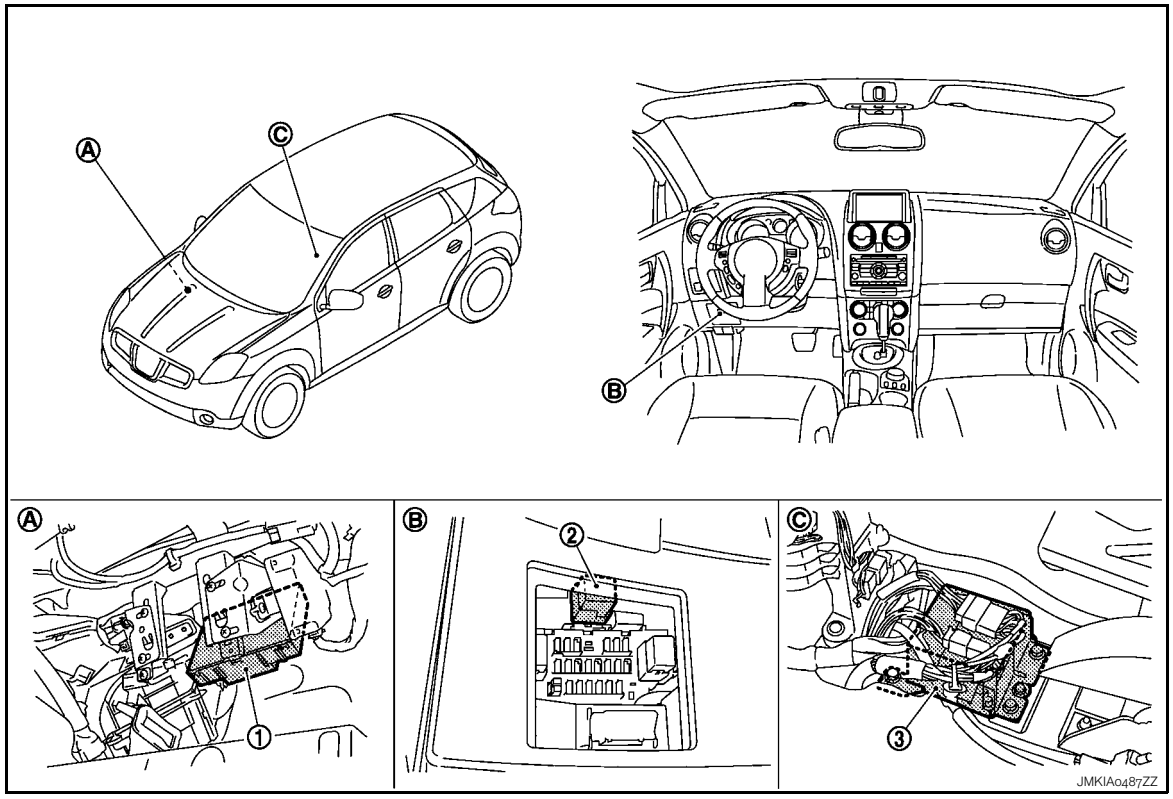
INFOID:0000000001081616

AIR BAG INTERLOCK UNLOCK OPERATION

When ignition switch is ON and BCM receive air bag deployment signal, it operates automatically to unlock all doors. Air bag diagnosis sensor unit sends the air bag deployment signal to BCM.

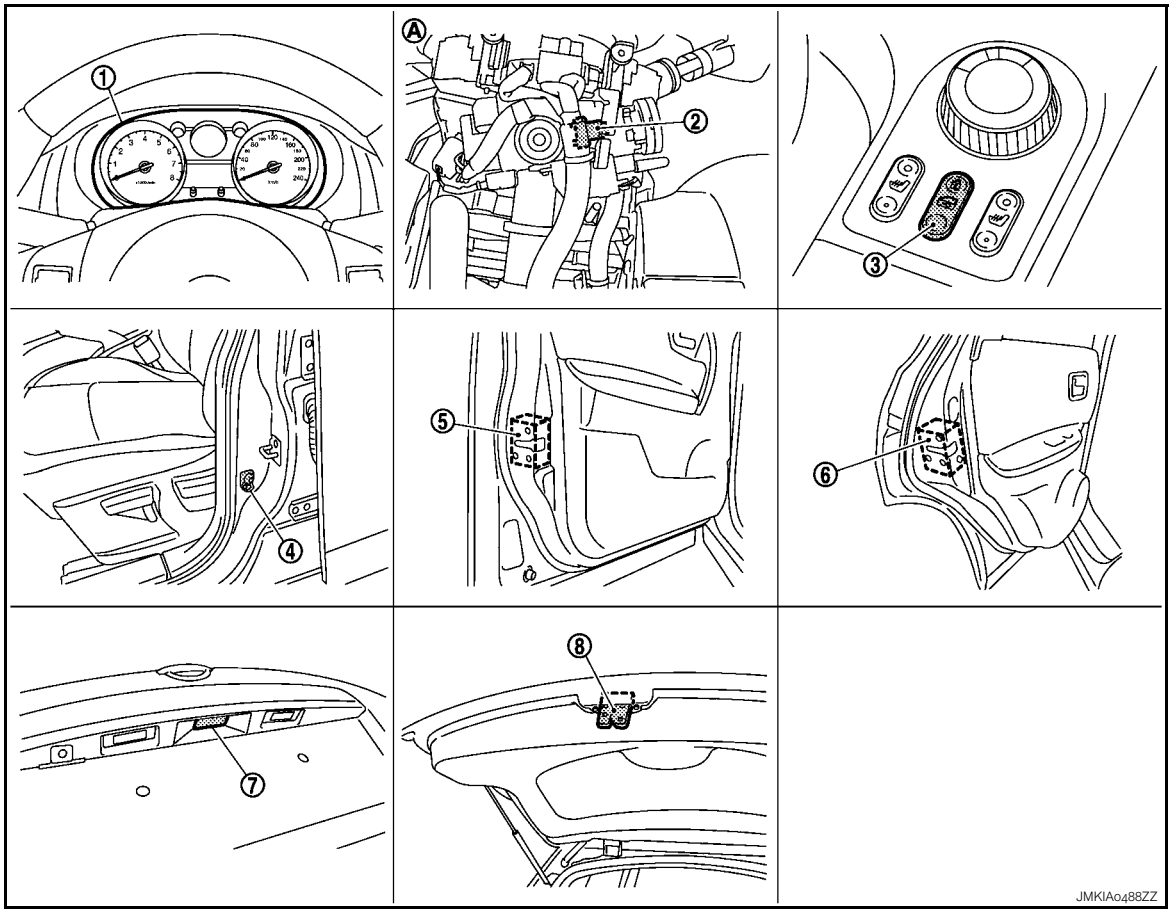
AIR BAG INTERLOCK UNLOCK : Component Parts Location

INFOID:0000000001117094



1. BCM
   M65, M66, M67
2. Passenger side anti-hijack relay
   M90
3. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. View with fuse box lid removed
C. View with center console removed



1. Combination meter M34
2. Key switch M24
3. Door lock and unlock switch M89
4. Front door switch (driver side) B34
5. Front door lock actuator (driver side) D9
6. Rear door lock actuator LH D85
7. Back door opener switch D186
8. Back door lock assembly D152

A. View with steering column cover removed

AIR BAG INTERLOCK UNLOCK : Component Description

INFOID:0000000001081618

Item	Function
BCM	Controls the door lock function.
Air bag diagnosis sensor unit	Transmits air bag deployment signal to BCM.
Door lock actuator	Receives door lock and unlock signal from BCM and lock and unlock each door.

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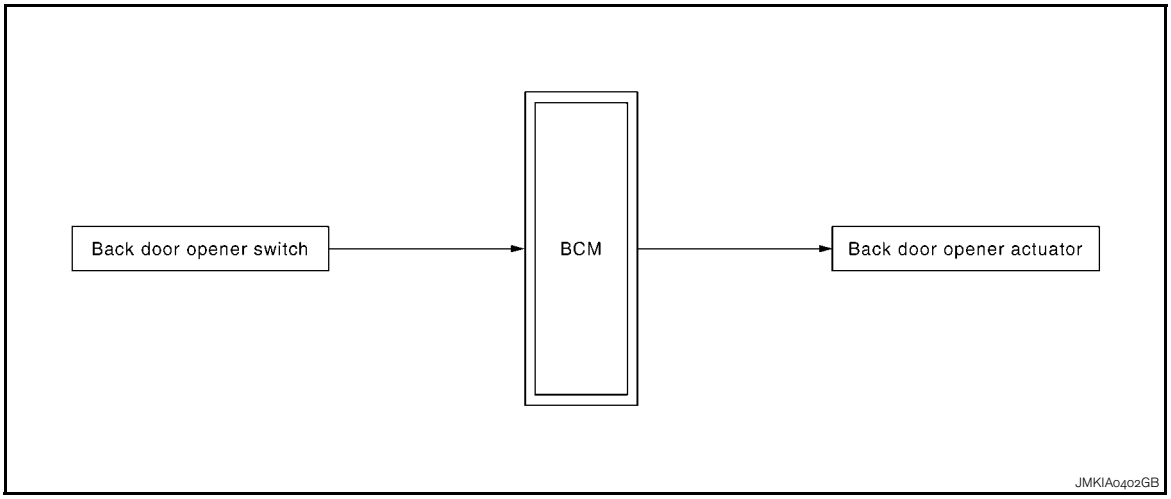
BACK DOOR OPENER FUNCTION

BACK DOOR OPENER SWITCH

BACK DOOR OPENER SWITCH : System Diagram

INFOID:0000000001081619

BACK DOOR OPENER OPERATION



BACK DOOR OPENER SWITCH : System Description

INFOID:0000000001081620

BACK DOOR OPENER OPERATION

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

NOTE:

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

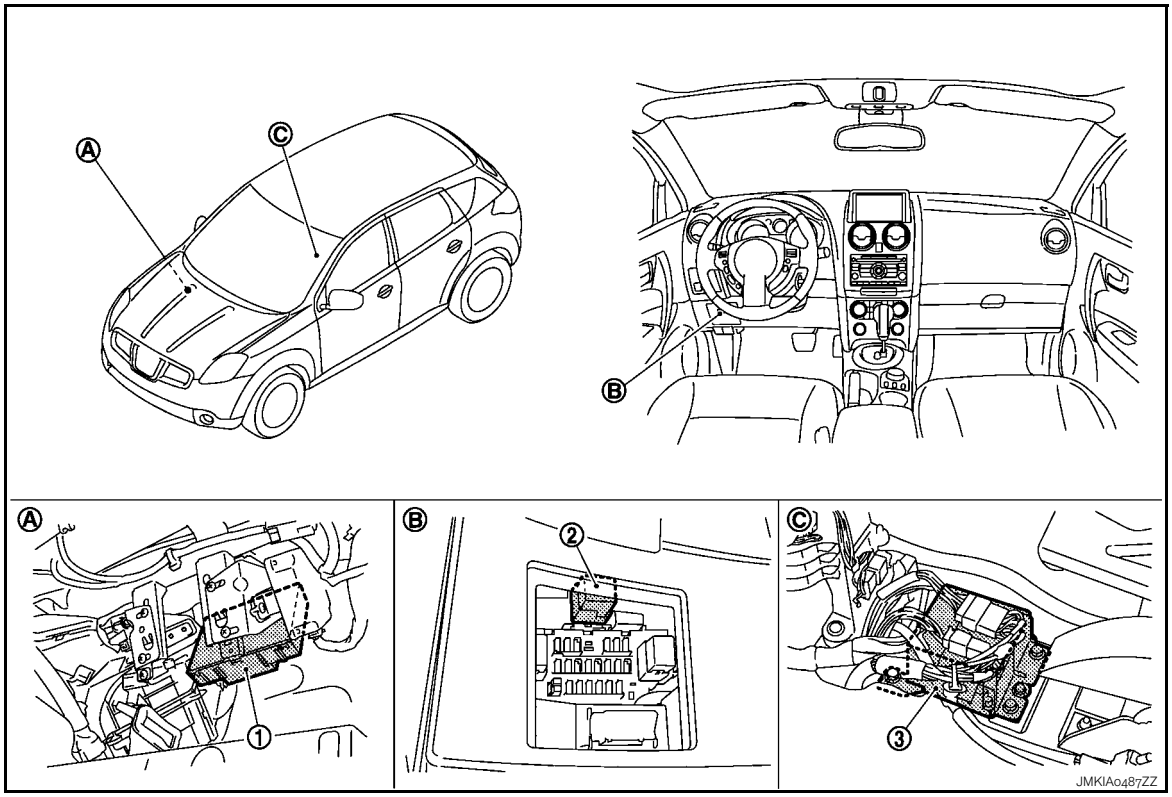
OPERATION CONDITION

If the following conditions are not satisfied, back door opener operation is not performed.

Back door opener switch operation	Operation condition
Back door open	• Vehicle speed is less than 5 km/h (3 MPH). • All doors are unlocked.

BACK DOOR OPENER SWITCH : Component Parts Location

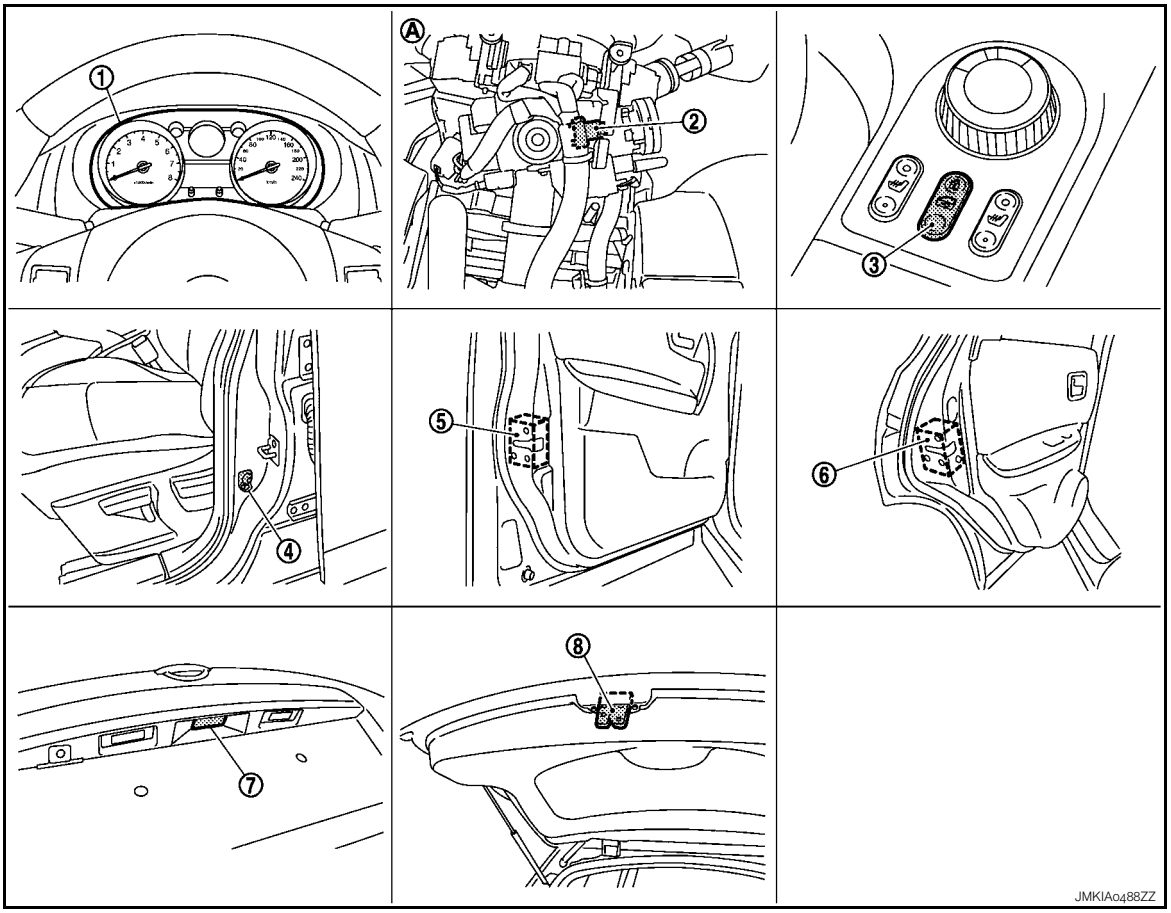
INFOID:0000000001117095



1. BCM
   M65, M66, M67
2. Passenger side anti-hijack relay
   M90
3. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. View with fuse box lid removed
C. View with center console removed

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1. Combination meter M34
2. Key switch M24
3. Door lock and unlock switch M89
4. Front door switch (driver side) B34
5. Front door lock actuator (driver side) D9
6. Rear door lock actuator LH D85
7. Back door opener switch D186
8. Back door lock assembly D152

A. View with steering column cover removed

BACK DOOR OPENER SWITCH : Component Description

INFOID:0000000001081622

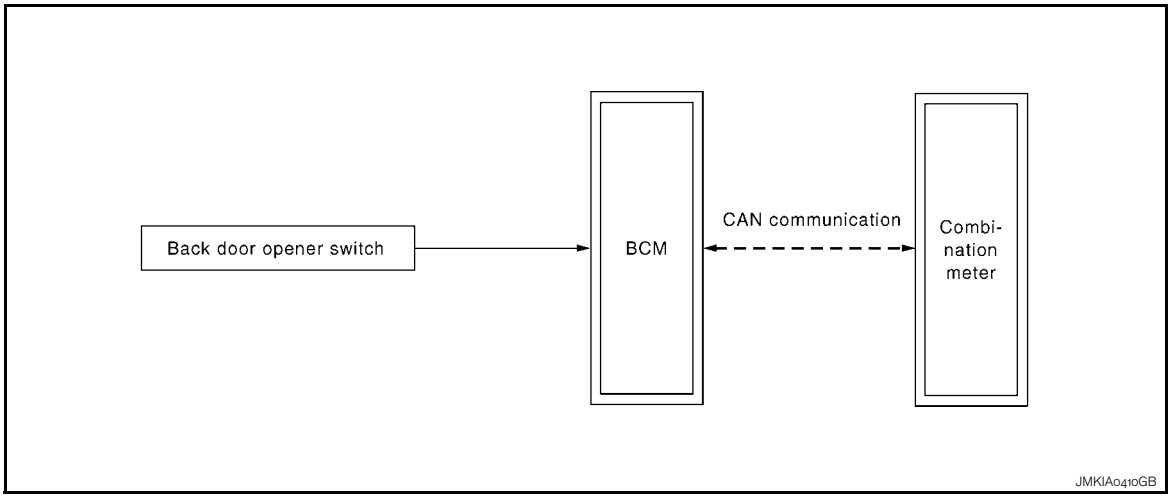
Item	Function
BCM	Controls the back door opener function.
Back door opener switch	Transmits back door opener switch operation signal to BCM.
Back door opener actuator	Opens the back door with the back door open signal from BCM.
Combination meter	Transmits vehicle speed signal to BCM via CAN communication.

WARNING FUNCTION

System Diagram

INFOID:0000000001081636

BACK DOOR OPEN WARNING



System Description

INFOID:0000000001081637

BACK DOOR OPEN WARNING OPERATION

Back door opener switch is operated, when door lock is locked with door lock and unlock switch, by speed sensing lock or when only the driver side is unlocked by the anti-hijack function, the buzzer (built in combination meter) will sound.

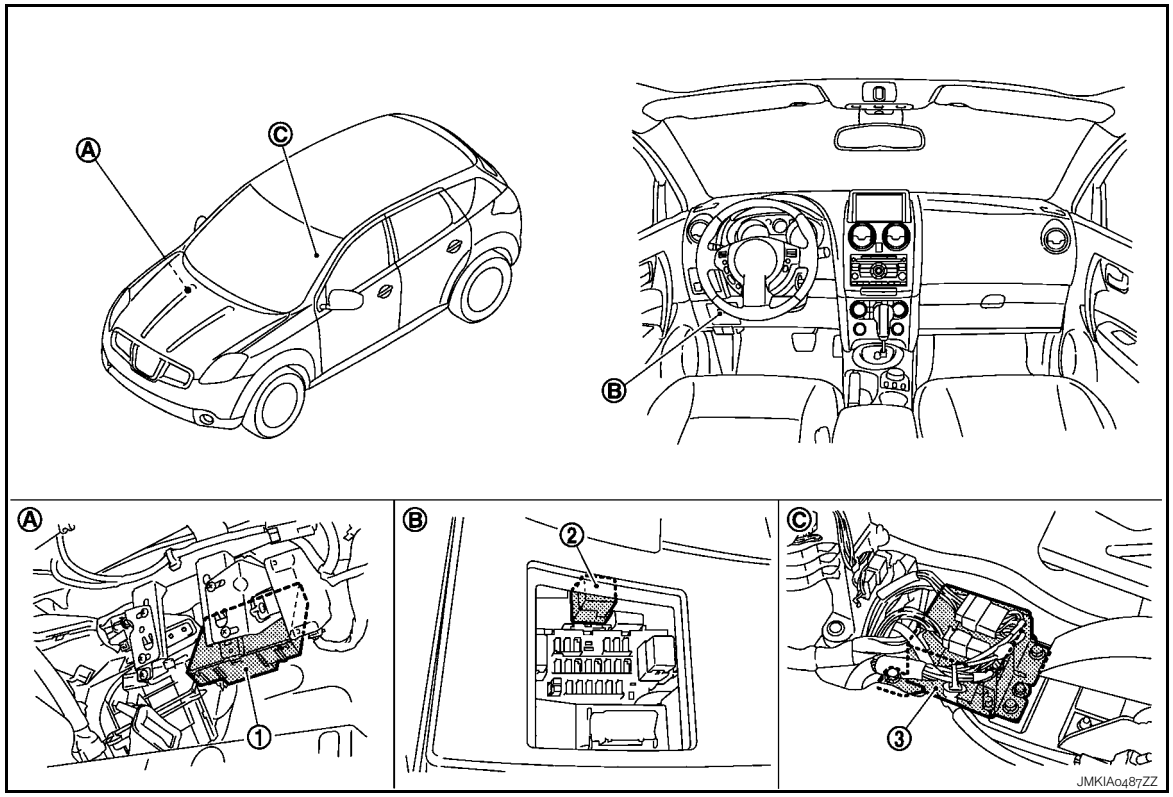
KEY REMINDER OPERATION

- The buzzer (combination meter) will sound and the doors will not lock if the door lock and unlock switch is pressed while the driver door is open and mechanical key is inserted ignition key cylinder.
- The buzzer (combination meter) will sound and the doors will not lock if the door lock and unlock switch is pressed while any door other than the driver door is open.

Component Parts Location

INFOID:0000000001117096

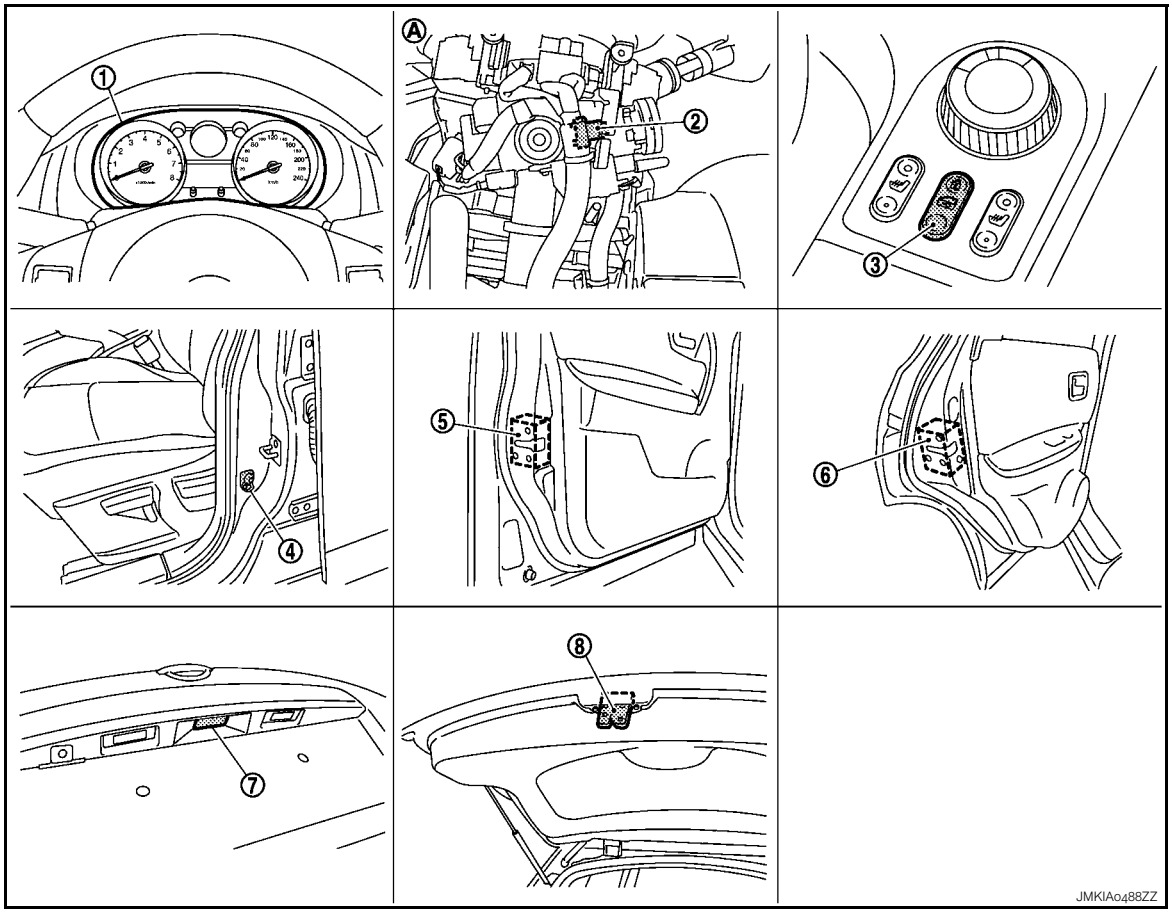
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1. BCM
   M65, M66, M67
2. Passenger side anti-hijack relay
   M90
3. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. View with fuse box lid removed
C. View with center console removed

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1. Combination meter M34
2. Key switch M24
3. Door lock and unlock switch M89
4. Front door switch (driver side) B34
5. Front door lock actuator (driver side) D9
6. Rear door lock actuator LH D85
7. Back door opener switch D186
8. Back door lock assembly D152

A. View with steering column cover removed

Component Description

INFOID:0000000001081639

Item	Function
BCM	Controls the warning function.
Combination meter	Sounds the buzzer by the request signal from BCM via CAN communication.
Back door opener switch	Transmit back door open signal to BCM

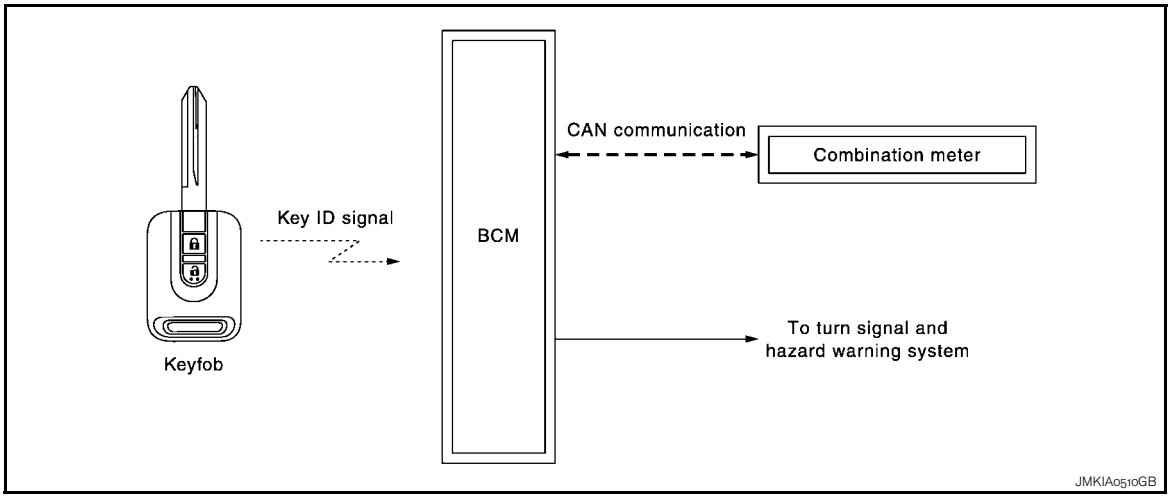
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HAZARD REMINDER FUNCTION

System Diagram

INFOID:0000000001081703

HAZARD REMINDER FUNCTION



System Description

INFOID:0000000001081704

HAZARD REMINDER OPERATION

When door is locked or unlocked by keyfob, then BCM flashes hazard warning lamp as a reminder.

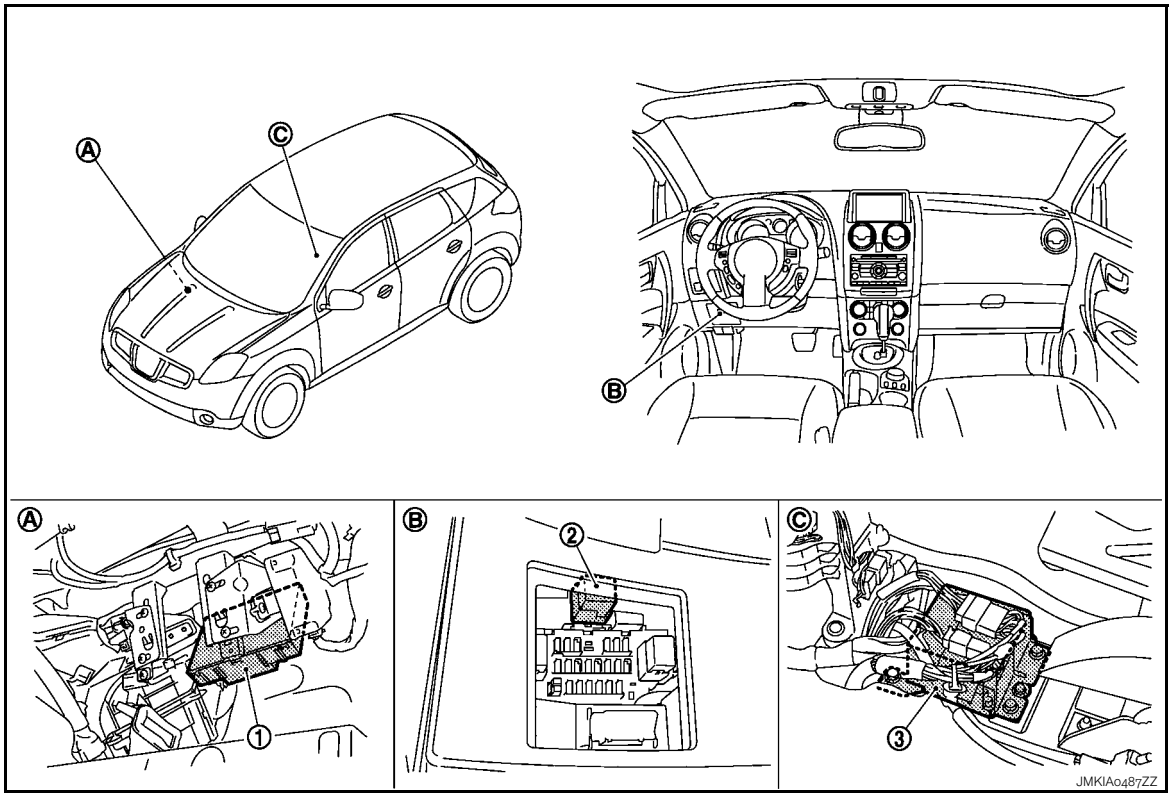
NOTE:

Hazard reminder mode can be changed with CONSULT-III. Refer to DLK-580, "MULTIREMOTE ENT : CONSULT-III Function (BCM - MULTIREMOTE ENT)".

Hazard reminder setting (With CONSULT-III)		Door lock operation (with keyfob)	Hazard warning lamp flash
HAZARD LAMP SET	MODE 1	—	—
	MODE 2	Lock	Once
		Unlock	—
	MODE 3	Lock	—
		Unlock	Twice
	MODE 4	Lock	Once
		Unlock	Twice

Component Parts Location

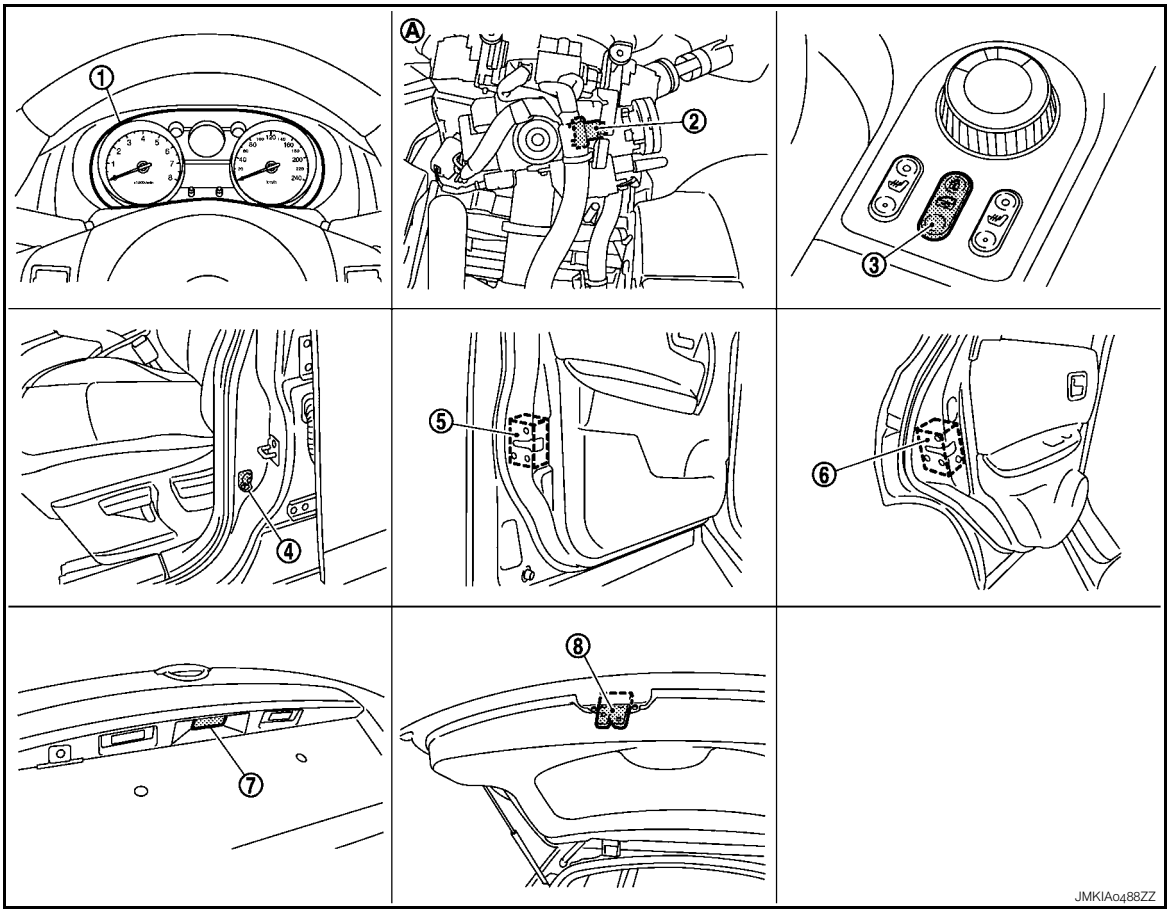
INFOID:0000000001117097



1. BCM
   M65, M66, M67
2. Passenger side anti-hijack relay
   M90
3. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. View with fuse box lid removed
C. View with center console removed

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1. Combination meter M34
2. Key switch M24
3. Door lock and unlock switch M89
4. Front door switch (driver side) B34
5. Front door lock actuator (driver side) D9
6. Rear door lock actuator LH D85
7. Back door opener switch D186
8. Back door lock assembly D152

A. View with steering column cover removed

Component Description

INFOID:0000000001081706

Item	Function
BCM	Controls the hazard reminder system.
Combination meter	Turns ON the turn signal indicator (built in combination meter) by the request from BCM via CAN communication.
Keyfob	Transmits key ID to BCM when lock and unlock button is pressed.

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

INFOID:0000000001096702

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

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF-DIAG RESULTS	Displays the diagnosis results judged by BCM. Refer to BCS-61, "DTC Index".
CAN DIAG SUPPORT MNTR	Monitors the reception status of CAN communication viewed from BCM.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.
ECU IDENTIFICATION	The BCM part number is displayed.
CONFIGURATION	• Enables to read and save the vehicle specification. • Enables to write the vehicle specification when replacing BCM.

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

System	Sub system selection item	Diagnosis mode		
		WORK SUPPORT	DATA MONITOR	ACTIVE TEST
—	BCM	×		
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	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER		×	×
Air conditioner	AIR CONDITONER		×	
Intelligent Key system	INTELLIGENT KEY		×	
Combination switch	COMB SW		×	
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk open	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
Signal buffer system	SIGNAL BUFFER		×	×
PTC heater system	PTC HEATER		×	×

DOOR LOCK
DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)

INFOID:0000000001097316

BCM CONSULT-III FUNCTION
CONSULT-III performs the following functions via CAN communication with BCM.

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Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
ACC ON SW	Indicates [ON/OFF] condition of ignition switch in ACC position.
PUSH SW*1	Indicates [ON/OFF] condition of ignition knob switch.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
CDL LOCK SW	Indicates [ON/OFF] condition of door lock and unlock switch.
CDL UNLOCK SW	Indicates [ON/OFF] condition of door lock and unlock switch.
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS	Indicates [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR	Indicates [ON/OFF] condition of rear door switch RH.
DOOR SW-RL	Indicates [ON/OFF] condition of rear door switch LH.
BACK DOOR SW	Indicates [ON/OFF] condition of back door switch.
KEYLESS LOCK*2	Indicates [ON/OFF] condition of lock signal from key fob.
KEYLESS UNLOCK*2	Indicates [ON/OFF] condition of unlock signal from key fob.
I-KEY LOCK*1	Indicates [ON/OFF] condition of lock signal from Intelligent Key.
I-KEY UNLOCK*1	Indicates [ON/OFF] condition of unlock signal from Intelligent Key.
UNLOCK WITH DR	This item is indicated, but not monitored.
UNLOCK SHOCK	Indicates [ON/OFF] condition of signal from air bag diagnosis unit. • ON: During the unlock operation interlock with air bag. • OFF: Other than above.
SHOCK SENSOR	Indicates [NOMAL/ON/OFF] condition of circuit between BCM and air bag diagnosis sensor unit. • NORMAL: Ignition switch ON. (BCM is receiving normal condition signal from air bag diagnosis sensor unit.) • ON: During the receiving of air bag deployment signal from air bag diagnosis sensor unit. • OFF: After the receiving of air bag deployment signal from air bag diagnosis sensor unit.
VEHICLE SPEED	Displays the vehicle speed signal received from combination meter by numerical value [km/h].

*1: For the Intelligent key equipped vehicle.

*2: For the multi remote control system equipped vehicle.

ACTIVE TEST

Test item	Description
SUPER LOCK*1	This test is able to check super lock operation [LOCK (SET)/UNLOCK (RELEASE)].
DOOR LOCK IND	This test is able to check door lock indicator (built in door lock and unlock switch on center console) operation [ON/OFF].
DOOR LOCK	This test is able to check door lock operation [ALL LOCK/ALL UNLOCK/DR UNLOCK/ OTHER UNLOCK].

:*1 For the super lock equipped vehicle.

WORK SUPPORT

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Test item	Description
SECURITY DOOR LOCK SET	Anti hijack function mode can be changed in this mode. • ON: Anti hijack mode is active. • OFF: Anti hijack mode is inactive.

MULTIREMOTE ENT

MULTIREMOTE ENT : CONSULT-III Function (BCM - MULTIREMOTE ENT)

INFOID:0000000001096699

BCM CONSULT-III FUNCTION

CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
ACC ON SW	Indicates [ON/OFF] condition of ignition switch in ACC position.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
KEYKESS LOCK	Indicates [ON/OFF] condition of lock signal from key fob.
KEYLESS UNLOCK	Indicates [ON/OFF] condition of unlock signal from key fob.
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS	Indicates [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR	Indicates [ON/OFF] condition of rear door switch RH.
DOOR SW-RL	Indicates [ON/OFF] condition of rear door switch LH.
BACK DOOR SW	Indicates [ON/OFF] condition of back door switch.
CDL LOCK SW	Indicates [ON/OFF] condition of door lock and unlock switch.
CDL UNLOCK SW	Indicates [ON/OFF] condition of door lock and unlock switch.
RKE LOCK AND UNLOCK	This item is indicated, but not monitored.

ACTIVE TEST

Test item	Description
DOOR LOCK	This test is able to check warning chime in combination meter operation. [ALL LOCK/ALL UNLOCK/DR UNLOCK/OTHER UNLOCK]
INT LAMP	This test is able to check interior lamp operation [ON/OFF].
FLASHER	This test is able to check flasher operation [LH/RH/OFF].

WORK SUPPORT

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Test item	Description
HAZARD LAMP SET	Answer back function (hazard) mode can be changed in this mode. For the detail of the setting, refer to DLK-575, "System Description".
AUTO LOCK SET	Auto door lock time can be changed in this mode. • MODE 1: 1 minute • MODE 2: 2 minutes • MODE 3: 3 minutes • MODE 4: 4 minutes • MODE 5: 5 minutes

TRUNK

TRUNK : CONSULT-III Function (BCM - TRUNK)

INFOID:0000000001097315

APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from Intelligent Key unit.

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
PUSH SW*1	Indicates [ON/OFF] condition of ignition knob switch.
TRNK OPNR SW	Indicates [ON/OFF] condition of back door opener switch.
VEHICLE SPEED	Displays the vehicle speed signal received from combination meter by numerical value [km/h].

*1: For the Intelligent key equipped vehicle.

*2: For the remote keyless entry system equipped vehicle.

ACTIVE TEST

Test item	Description
TRUNK/GLASS HATCH	This test is able to check back door opener operation [ON/OFF].

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COMPONENT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000001097215

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN-H line, CAN-L line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.
CAN Communication Signal Chart. Refer to LAN-59, "CAN Communication Signal Chart".

DTC Logic

INFOID:0000000001097216

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:0000000001097217

1.PERFORM SELF DIAGNOSTIC

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

Is “CAN COMM CIRCUIT” displayed?

YES >> Refer to LAN-46, "Trouble Diagnosis Flow Chart".
NO >> Refer to GI-39, "Intermittent Incident".

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U1010 CONTROL UNIT (CAN)

DTC Logic

INFOID:0000000001097218

DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC Detection Condition	Possible cause
U1010	CONTROL UNIT (CAN)	When detecting error during the initial diagnosis of CAN controller of BCM.	BCM

Diagnosis Procedure

INFOID:0000000001097219

1.REPLACE BCM

When “DTC:U1010” is detected, replace BCM.

>> Replace BCM. Refer to BCS-64, "Exploded View".

Special Repair Requirement

INFOID:0000000001097220

1.ADDITIONAL SERVICE WHEN REPLACING BCM

>> Refer to BCS-3, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description".

A B C D E F G H I J DLK L M N O P
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POWER SUPPLY AND GROUND CIRCUIT
BCM

BCM : Diagnosis Procedure

INFOID:0000000001115315

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.
41	Battery power supply	9 (10A)
57		J (40A)

Is the fuse fusing?

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

2.CHECK POWER SUPPLY CIRCUIT

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

Terminals			Voltage (Approx.)
(+)		(–)	
BCM		Ground	
Connector	Terminal		
M66	41		Battery voltage
M67	57		

Is the measurement value normal?

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

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M67	55		Existed

Does continuity exist?

YES >> BCM power supply and ground circuit are OK.
NO >> Repair harness or connector.

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DOOR LOCK AND UNLOCK SWITCH

Description

INFOID:0000000001099004

Transmits door lock/unlock operation to BCM.

Component Function Check

INFOID:0000000001099005

1.CHECK FUNCTION

With CONSULT-III

Check “CDL LOCK SW ”and “CDL UNLOCK SW” in Data monitor mode with CONSULT-III.

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

Is the inspection result normal?

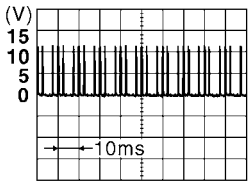
YES >> Door lock and unlock switch is OK.
NO >> Refer to DLK-585, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001099006

1.CHECK DOOR LOCK AND UNLOCK INPUT SIGNAL

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

Terminal			Signal (Reference value)
(+)		(–)	
Door lock and unlock switch connector	Terminal		
M89	1	Ground	
	6		

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Is the inspection result normal?

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

2.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

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

BCM connector	Terminal	Door lock and unlock switch connector	Terminal	Continuity
M65	7	M89	6	Exists
	9		1	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M65	7	Ground	Does not exist
	9		

Is the inspection result normal?

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

3.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

Check continuity between door lock and unlock switch connector and ground.

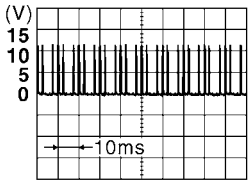
Door lock and unlock switch connector	Terminal	Ground	Continuity
M89	5		Exists

Is the inspection result normal?

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

4.CHECK BCM OUTPUT SIGNAL

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

Terminal			Signal (Reference value)
(+)		(–)	
BCM connector	Terminal		
M65	7	Ground	
	9		

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Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace BCM. Refer to BCS-64, "Exploded View".

5.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch
Refer to DLK-74, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock and unlock switch. Refer to DLK-280, "Exploded View".

Component Inspection

INFOID:0000000001099007

1.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch.

Door lock and unlock switch	Terminal		Condition	Continuity
M89	6	5	LOCK	Exists
	1		UNLOCK	

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.
NO >> Replace door lock and unlock switch. Refer to DLK-280, "Exploded View".

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DOOR LOCK AND UNLOCK SWITCH INDICATOR

Description

INFOID:0000000001102272

The door lock and unlock switch indicates door lock status. The indicator will illuminate when a lock operation is accomplished, and during this status, if any door is opened, the indicator will turn OFF.

Component Function Check

INFOID:0000000001102273

1.CHECK FUNCTION

With CONSULT-III

Check “DOOR LOCK IND” in “Active Test” mode with CONSULT-III.

Test item		Condition
DOOR LOCK IND	:ON	Illuminated
	:OFF	Not illuminated

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.
NO >> Refer to DLK-587, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001102274

1.CHECK DOOR LOCK AND UNLOCK SWITCH INDICATOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between door lock and unlock switch and ground.

Terminal			Condition	Voltage (Approx.)
(+)		(–)		
Door lock and unlock switch connector	Terminal			
M89	4	Ground	Door lock operation is accomplished	Battery voltage
			Any door is OPEN	0

Is the inspection result normal?

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

2.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

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

BCM connector	Terminal	Door lock and unlock switch connector	Terminal	Continuity
M65	24	M89	4	Exists

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	24		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

Check continuity between door lock and unlock switch connector and ground.

Door lock and unlock switch connector	Terminal	Ground	Continuity
M89	5		Exists

Is the inspection result normal?

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

4.CHECK BCM OUTPUT SIGNAL

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

Terminal			Condition	Voltage (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	24	Ground	Door lock operation is accomplished	Battery voltage
			Any door is OPEN	0

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace BCM. Refer to BCS-64, "Exploded View".

5.CHECK DOOR LOCK AND UNLOCK SWITCH INDICATOR

Check door lock and unlock switch
Refer to DLK-588, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock and unlock switch. Refer to DLK-280, "Exploded View".

Component Inspection

INFOID:0000000001102275

1.CHECK DOOR LOCK AND UNLOCK SWITCH INDICATOR

Check continuity door lock and unlock switch.

Door lock and unlock switch	Terminal		Continuity
	(+)	(-)	
M89	5	4	Exists
	4	5	Does not exist

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.
NO >> Replace door lock and unlock switch. Refer to DLK-280, "Exploded View".

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DOOR SWITCH
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001099008

Detects door open/closed condition.

DRIVER SIDE : Component Function Check

INFOID:0000000001099009

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-DR” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-DR	OPEN	:ON
	CLOSE	:OFF

Is the inspection result normal?

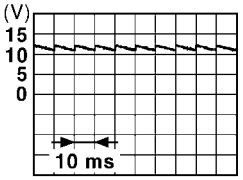
YES >> Door switch is OK.
NO >> Refer to DLK-589, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001099010

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.)
M65	26	Ground	OPEN	0
			CLOSE	

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Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
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
M65	26	B34	1	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	26		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-590, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

DRIVER SIDE : Component Inspection

INFOID:0000000001099011

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			
1	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001099012

Detects door open/closed condition.

PASSENGER SIDE : Component Function Check

INFOID:0000000001099013

1.CHECK FUNCTION

With CONSULT-III
Check door switches “DOOR SW-AS” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-AS	OPEN	: ON
	CLOSE	: OFF

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Refer to DLK-590, "PASSENGER SIDE : Diagnosis Procedure".

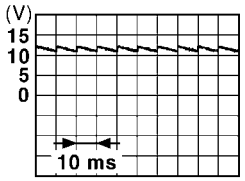
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001099014

1.CHECK DOOR SWITCH INPUT SIGNAL

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

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Terminals			Door condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	27	Ground	OPEN	0
			CLOSE	

JPMIA0011GB

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
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
M65	27	B27	1	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	27		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-591, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

PASSENGER SIDE : Component Inspection

INFOID:0000000001099015

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			
1	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

REAR LH

REAR LH : Description

INFOID:0000000001099016

Detects door open/closed condition.

REAR LH : Component Function Check

INFOID:0000000001099017

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-RL” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-RL	OPEN	:ON
	CLOSE	:OFF

Is the inspection result normal?

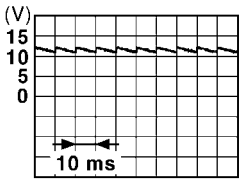
YES >> Door switch is OK.
NO >> Refer to DLK-592, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000001099018

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.)
M65	25	Ground	OPEN	0
			CLOSE	

JPMIA0011GB

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
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
M65	25	B71	1	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	25		Does not exist

Is the inspection result normal?

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

3. CHECK DOOR SWITCH

Check door switch.
Refer to DLK-593, "REAR LH : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

REAR LH : Component Inspection

INFOID:0000000001099019

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			
1	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

REAR RH

REAR RH : Description

INFOID:0000000001099020

Detects door open/close condition.

REAR RH : Component Function Check

INFOID:0000000001099021

1. CHECK FUNCTION

With CONSULT-III
Check door switches “DOOR SW-RR” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-RR	OPEN	:ON
	CLOSE	:OFF

Is the inspection result normal?

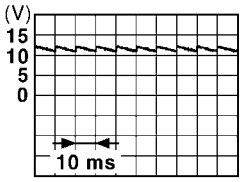
YES >> Door switch is OK.
NO >> Refer to DLK-593, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000001099022

1. CHECK DOOR SWITCH INPUT SIGNAL

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

Terminals			Door condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	29	Ground	OPEN	0
			CLOSE	

JPMIA0011GB

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
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
M65	29	B53	1	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	29		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-594, "REAR RH : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

REAR RH : Component Inspection

INFOID:0000000001099023

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			
1	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

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BACK DOOR

BACK DOOR : Description

INFOID:0000000001099024

Detects back door open condition.

BACK DOOR : Component Function Check

INFOID:0000000001099025

1.CHECK FUNCTION

With CONSULT-III

Check “BACK DOOR SW” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
BACK DOOR SW	OPEN	: ON
	CLOSE	: OFF

Is the inspection result normal?

YES >> Back door lock assembly (door switch) is OK.
NO >> Refer to DLK-595, "BACK DOOR : Diagnosis Procedure".

BACK DOOR : Diagnosis Procedure

INFOID:0000000001099026

1.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH) INPUT SIGNAL

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

Terminals			Back door condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	28	Ground	OPEN	0
			CLOSE	Battery voltage

Is the inspection result normal?

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

2.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH) CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM connector and back door lock assembly (door switch) connector.

BCM connector	Terminal	Back door lock assembly (door switch) connector	Terminal	Continuity
M65	28	D152	4	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	28		Does not exist

Is the inspection result normal?

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

3.CHECK BACK DOOR LOCK ASSEMBLY GROUND CIRCUIT

Check continuity between back door lock assembly connector and ground.

Back door lock assembly (door switch) connector	Terminal	Ground	Continuity
D152	3		Exists

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace back door lock assembly 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		
M65	28	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace BCM. Refer to BCS-64, "Exploded View".

5.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

Check back door lock assembly (door switch).
Refer to DLK-596, "BACK DOOR : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace back door lock assembly (door switch). Refer to DLK-268, "DOOR LOCK : Exploded View" and DLK-268, "DOOR LOCK : Removal and Installation".

BACK DOOR : Component Inspection

INFOID:0000000001099027

1.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly (door switch) connector.
3. Check back door lock assembly (door switch).

Terminal		Trunk condition	Continuity
Back door lock assembly (door switch)			
4	3	OPEN	Exists
		CLOSE	Does not exist

Is the inspection result normal?

YES >> Back door lock assembly (door switch) is OK.
NO >> Replace back door lock assembly (door switch). Refer to DLK-706, "DOOR LOCK : Exploded View" and DLK-706, "DOOR LOCK : Removal and Installation".

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KEY SWITCH

Description

INFOID:0000000001116382

Key switch detects that ignition key is inserted into the key cylinder, and then transmits the signal to BCM.

Component Function Check

INFOID:0000000001116383

1.CHECK KEY SWITCH INPUT SIGNAL

Check key switch (“KEY SW”) in “DATA MONITOR” mode with CONSULT-III. Refer to DLK-62, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Monitor item	Condition	
KEY SW	Insert mechanical key into key cylinder	: ON
	Remove mechanical key from key cylinder	: OFF

Is the inspection result normal?

YES >> Key switch is OK.
NO >> Refer to DLK-597, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001116384

1.CHECK KEY SWITCH INPUT SIGNAL

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

Terminals			Condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	36	Ground	Insert ignition key into key cylinder	Battery voltage
			Remove ignition key from key cylinder	0

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 2.

2.CHECK KEY SWITCH POWER SUPPLY CIRCUIT

1. Remove ignition key from key cylinder.
2. Disconnect key switch connector.
3. Check voltage between key switch harness connector and ground.

Terminals			Voltage (V) (Approx.)
(+)		(–)	
Key switch connector	Terminal		
M25	2	Ground	Battery voltage

Is the inspection result normal?

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

3.CHECK KEY SWITCH SIGNAL CIRCUIT

1. Check continuity between BCM harness connector and key switch connector.

BCM connector	Terminal	Key switch connector	Terminal	Continuity
M65	36	M25	1	Existed

2. Check continuity between key switch connector and ground.

Key switch connector	Terminal	Ground	Continuity
M25	1	Ground	Not existed

Is the inspection result normal?

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

4.CHECK KEY SWITCH

Check key switch function.
Refer to DLK-598, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace key switch.

Component Inspection

INFOID:0000000001116385

COMPONENT INSPECTION

1.CHECK KEY SWITCH

Check continuity between key switch terminals.

Terminal		Condition	Continuity
key switch connector			
1	2	Insert ignition key into key cylinder	Existed
		Remove ignition key from key cylinder	Not existed

Is the inspection result normal?

YES >> Key switch is OK.
NO >> Replace key switch.

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DOOR LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001099028

Locks/unlocks the door with the signal from BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000001099029

1.CHECK FUNCTION

With CONSULT-III
Check “DOOR LOCK” in Active test mode with CONSULT-III.

Test item		Condition
DOOR LOCK	ALL LOCK	The all door lock actuator are locked
	ALL UNLOCK	The all door lock actuator are unlocked
	DR UNLOCK	The door lock actuator (driver side) is unlocked

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-599, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001099030

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			
M67	56	Ground	Lock	0 → Battery voltage → 0
	60		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
M67	56	D9	3	Exists
	60		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist
	60		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace harness.

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3.CHECK DOOR LOCK ACTUATOR

Check door lock actuator.
Refer to DLK-600, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-255, "DOOR LOCK : Exploded View" and DLK-255, "DOOR LOCK : Removal and Installation". After that, PWC-15, "POWER WINDOW MAIN SWITCH : Special Repair Requirement"

DRIVER SIDE : Component Inspection

INFOID:0000000001099031

1.CHECK FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)

Check the actuator operation by connecting the battery voltage to front door lock actuator (driver side).

Front door lock actuator (driver side)	Terminal		Door lock actuator condition
	(+)	(-)	
D9	3	2	LOCK
	2	3	UNLOCK

Is the inspection result normal?

YES >> Front door lock actuator (driver side) is OK.
NO >> Replace front door lock actuator (driver side). Refer to DLK-255, "DOOR LOCK : Removal and Installation". After that, PWC-15, "POWER WINDOW MAIN SWITCH : Special Repair Requirement".

DRIVER SIDE : Special Repair Requirement

INFOID:0000000001099032

Refer to PWC-15, "POWER WINDOW MAIN SWITCH : Special Repair Requirement".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001099033

Locks/unlocks the door with the signal from BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000001099034

1.CHECK FUNCTION

With CONSULT-III
Check “DOOR LOCK” in Active test mode with CONSULT-III.

Test item		Condition
DOOR LOCK	:ALL LOCK	The all door lock actuator are locked
	:ALL UNLOCK	The all door lock actuator are unlocked
	:OTHER UNLOCK	The door lock actuator (front passenger side, rear LH and rear RH) are unlocked

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-600, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001099035

1.CHECK BCM OUTPUT SIGNAL

Check voltage between BCM connector and ground.

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Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M67	56	Ground	Lock	0 → Battery voltage → 0
	54		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 (passenger side) connector.
3. Check continuity between BCM connector and front door lock actuator (passenger side) connector.

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M67	56	D48	3	Exists
	54		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist
	54		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace harness.

3.CHECK DOOR LOCK ACTUATOR

Check door lock actuator.
Refer to DLK-601, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-255, "DOOR LOCK : Exploded View" and DLK-255, "DOOR LOCK : Removal and Installation".

PASSENGER SIDE : Component Inspection

INFOID:0000000001099036

1.CHECK FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)

Check the actuator operation by connecting the battery voltage directly to front door lock actuator (passenger side).

Front door lock actuator (passenger side) connector	Terminal		Door lock actuator condition
	(+)	(-)	
D48	3	2	LOCK
	2	3	UNLOCK

Is the inspection result normal?

YES >> Front door lock actuator (passenger side) is OK.
NO >> Replace front door lock actuator (passenger side). Refer to DLK-601, "PASSENGER SIDE : Component Inspection".

REAR LH

REAR LH : Description

INFOID:0000000001099037

Locks/unlocks the door with the signal from BCM.

REAR LH : Component Function Check

INFOID:0000000001099038

1.CHECK FUNCTION

With CONSULT-III

Check “DOOR LOCK” in Active test mode with CONSULT-III.

Test item		Condition
DOOR LOCK	:ALL LOCK	The all door lock actuator are locked
	:ALL UNLOCK	The all door lock actuator are unlocked
	:OTHER UNLOCK	The door lock actuator (front passenger side, rear LH and rear RH) are unlocked

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-602, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000001099039

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			
M67	56	Ground	Lock	0 → Battery voltage → 0
	54		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 rear door lock actuator (LH) connector.
3. Check continuity between BCM connector and rear door lock actuator (LH) connector.

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M67	56	D85	3	Exists
	54		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist
	54		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace harness.

3.CHECK DOOR LOCK ACTUATOR

Check door lock actuator.
Refer to DLK-603, "REAR LH : Component Inspection".

Is the inspection result normal?

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YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-700, "DOOR LOCK : Exploded View" and DLK-700, "DOOR LOCK : Removal and Installation".

REAR LH : Component Inspection

INFOID:0000000001099040

1.CHECK REAR DOOR LOCK ACTUATOR (LH)

Check the actuator operation by connecting the battery voltage directly to rear door lock actuator (LH).

Rear door lock actuator (LH)	Terminal		Door lock actuator condition
	(+)	(-)	
D85	3	2	LOCK
	2	3	UNLOCK

Is the inspection result normal?

YES >> Rear door lock actuator (LH) is OK.
NO >> Replace rear door lock actuator (LH). Refer to DLK-262, "DOOR LOCK : Removal and Installation".

REAR RH

REAR RH : Description

INFOID:0000000001099041

Locks/unlocks the door with the signal from BCM.

REAR RH : Component Function Check

INFOID:0000000001099042

1.CHECK FUNCTION

With CONSULT-III
Check “DOOR LOCK” in Active test mode with CONSULT-III.

Test item		Condition
DOOR LOCK	:ALL LOCK	The all door lock actuator are locked
	:ALL UNLOCK	The all door lock actuator are unlocked
	:OTHER UNLOCK	The door lock actuator (front passenger side, rear LH and rear RH) are unlocked

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-603, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000001099043

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			
M67	56	Ground	Lock	0 → Battery voltage → 0
	54		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 rear door lock actuator (RH) connector.

3. Check continuity between BCM connector and rear door lock actuator (RH) connector.

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M67	56	D105	3	Exists
	54		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist
	54		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace harness.

3.CHECK DOOR LOCK ACTUATOR

Check door lock actuator.
Refer to DLK-604, "REAR RH : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-255, "DOOR LOCK : Removal and Installation".

REAR RH : Component Inspection

INFOID:0000000001099044

1.CHECK REAR DOOR LOCK ACTUATOR (RH)

Check the actuator operation by connecting the battery voltage directly to rear door lock actuator (RH).

Rear door lock actuator (RH)	Terminal		Door lock actuator condition
	(+)	(-)	
D105	3	2	LOCK
	2	3	UNLOCK

Is the inspection result normal?

YES >> Rear door lock actuator (RH) is OK.
NO >> Replace rear door lock actuator (RH). Refer to DLK-255, "DOOR LOCK : Removal and Installation".

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BACK DOOR OPENER ACTUATOR

Description

INFOID:0000000001116447

Opens the back door with the signal from BCM.

Component Function Check

INFOID:0000000001116448

1.CHECK FUNCTION

With CONSULT-III

Check “TRUNK/GLASS HATCH” in Active test mode with CONSULT-III.

Test item		Condition
TRUNK/GLASS HATCH	:OPEN	Back door lock opener actuator operation

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-605, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001116449

1.CHECK BCM OUTPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			Condition of back door opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M66	45	Ground	Pressed	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK BACK DOOR LOCK ASSEMBLY CIRCUIT

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

BCM connector	Terminal	Back door lock assembly connector	Terminal	Continuity
M66	45	D152	2	Exists

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M66	45		Does not exist

Is the inspection result normal?

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

3.CHECK BACK DOOR LOCK ASSEMBLY GROUND CIRCUIT

Check continuity between back door lock assembly connector and ground.

Back door lock assembly connector	Terminal	Ground	Continuity
D152	1		Exists

Is the inspection result normal?

A B C D E F G H I J DLK L M N O P
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YES >> GO TO 4.
NO >> Repair or replace harness.

4. CHECK BACK DOOR LOCK ASSEMBLY

Check back door lock assembly connector and ground.
Refer to DLK-606, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace back door lock assembly. Refer to DLK-268, "DOOR LOCK : Exploded View" and DLK-268, "DOOR LOCK : Removal and Installation".

Component Inspection

INFOID:0000000001116450

1. CHECK BACK DOOR LOCK ASSEMBLY

Check the actuator operation by connecting battery voltage to back door lock assembly.

Back door lock assembly connector	Terminal		Back door actuator condition
D152	(+)	(-)	OPEN
	2	1	

Is the inspection result normal?

YES >> Back door lock assembly (back door lock actuator) is OK.
NO >> Replace back door lock assembly (back door lock actuator). Refer to DLK-268, "DOOR LOCK : Exploded View" and DLK-268, "DOOR LOCK : Removal and Installation".

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BACK DOOR OPENER SWITCH

Description

INFOID:0000000001115824

Sends the back door opening signal to BCM.

Component Function Check

INFOID:0000000001115825

1.CHECK FUNCTION

With CONSULT-III

Check “TRNK OPNR SW” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
TRNK OPNR SW	Back door opener switch is pressed	:ON
	Back door opener switch is released	:OFF

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-607, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001115826

1.CHECK BCM INPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			Condition of back door opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	12	Ground	Pressed	0
			Released	Battery voltage

Is the inspection result normal?

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

2.CHECK BACK DOOR OPENER SWITCH CIRCUIT

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

BCM connector	Terminal	Back door opener switch connector	Terminal	Continuity
M65	12	D186	1	Exists

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	12		Does not exist

Is the inspection result normal?

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

3.CHECK BCM OUTPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			Voltage (V) (Approx.)
(+)		(–)	
BCM connector	Terminal		
M65	12	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace BCM. Refer to BCS-64, "Exploded View".

4. CHECK BACK DOOR OPENER SWITCH GROUND CIRCUIT

Check continuity between back door opener switch connector and ground.

Back door opener switch connector	Terminal	Ground	Continuity
D186	2		Exists

Is the inspection result normal?

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

5. CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.
Refer to DLK-608, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace back door opener switch. Refer to DLK-279, "Exploded View".

Component Inspection

INFOID:0000000001115827

1. CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.

Back door opener switch connector	Terminal		Back door opener switch condition	Continuity
D186	1	2	Pressed	Exists
			Released	Does not exist

Is the inspection result normal?

YES >> Back door opener switch is OK.
NO >> Replace back door opener switch. Refer to DLK-279, "Exploded View".

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BUZZER (COMBINATION METER)

Description

INFOID:0000000001099053

Performs operation method guide and warning with buzzer.

Component Function Check

INFOID:0000000001099054

1.CHECK FUNCTION

With CONSULT-III

1. Check the operation with “WARNING BUZZER” in the Active Test.
2. Touch “KEY REMINDER WARN” on screen.

Is the inspection result normal?

Yes >> Warning buzzer into combination meter is OK.
No >> Refer to DLK-609, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001099055

1.CHECK METER BUZZER CIRCUIT

Refer to WCS-20, "Component Function Check".

Is the inspection result normal?

Yes >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
No >> Repair or replace meter buzzer circuit.

HAZARD WARNING LAMPS

Description

INFOID:0000000001099056

Perform answer-back for each operation with number of blinks.

Component Function Check

INFOID:0000000001099057

1.CHECK FUNCTION

With CONSULT-III

Check hazard warning lamp “FLASHER” in Active test.

Is the inspection result normal?

YES >> Hazard warning lamp circuit is OK.
NO >> Refer to DLK-610, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001099058

1.CHECK HAZARD SWITCH CIRCUIT

Check hazard switch circuit.
Refer to EXL-72, "Component Function Check".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace hazard warning switch circuit.

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VEHICLE SPEED SIGNAL CIRCUIT

Description

INFOID:0000000001115721

Display the vehicle speed signal received from combination meter by numerical value (km/h).

Component Function Check

INFOID:0000000001115722

1.CHECK FUNCTION

Check the vehicle speed more than 12km/h (7MPH), all doors are automatically locked.

Is the inspection result normal?

YES >> Vehicle speed signal circuit is OK.
NO >> Refer to DLK-611, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001115723

1.CHECK VEHICLE SPEED SIGNAL CIRCUIT

Check vehicle speed signal “VEHICLE SPEED” in Data monitor.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace hazard warning switch circuit.

KEYFOB BATTERY

Description

INFOID:0000000001099062

Remote door lock and unlock control entry function available when operating on button.
- Door lock and unlock

Component Function Check

INFOID:0000000001099063

1.CHECK KEYFOB FUNCTION

Does door lock and unlock operate with operating keyfob switch?

Is the inspection result normal?

YES >> Keyfob is OK.
NO >> Refer to DLK-612, "Diagnosis Procedure".

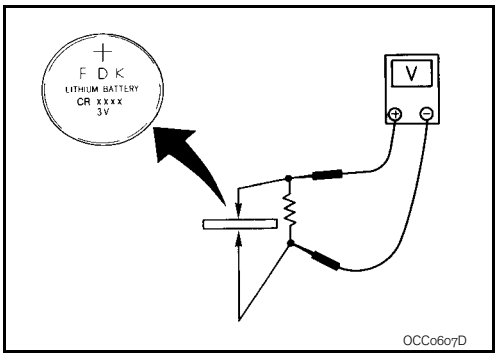
Diagnosis Procedure

INFOID:0000000001099064

1.CHECK KEYFOB 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 the specification?

YES >> Replace keyfob.
NO >> Replace keyfob battery. Refer to DLK-712, "Exploded View".

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ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000001116443

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition		Value/Status
ACC ON SW	Ignition switch OFF		OFF
	Ignition switch ACC or ON		ON
AIR COND SW	A/C switch OFF		OFF
	A/C switch ON		ON
AUT LIGHT SYS	Outside of the room is dark		OFF
	Outside of the room is bright		ON
AUTO LIGHT SW	Lighting switch OFF		OFF
	Lighting switch AUTO		ON
BACK DOOR SW	Back door closed		OFF
	Back door opened		ON
BATTERY VOLT **NOTE:** Diesel engine models only	Ignition switch ON		Approximately the same as power supply voltage
BUCKLE SW	Driver's seat belt unfastened		OFF
	Driver's seat belt fastened		ON
CDL LOCK SW	Door lock/unlock switch does not operate		OFF
	Press door lock/unlock switch to the LOCK side		ON
CDL UNLOCK SW	Door lock/unlock switch does not operate		OFF
	Press door lock/unlock switch to the UNLOCK side		ON
DOOR SW-AS	Passenger door closed		OFF
	Passenger door opened		ON
DOOR SW-DR	Driver door closed		OFF
	Driver door opened		ON
DOOR SW-RL	Rear LH door closed		OFF
	Rear LH door opened		ON
DOOR SW-RR	Rear RH door closed		OFF
	Rear RH door opened		ON
ELEC PWR CUT **NOTE:** Diesel engine models only	Engine running	Fan switch ON (when engine coolant is cool) **NOTE:** Depending on the ambient temperature, battery voltage, etc.	OFF
		The current status maintained with the signal from ECM received.	FREEZ
		• Fan switch OFF • Fan switch ON after engine warming UP **NOTE:** Depending on the engine coolant temperature, ambient temperature, battery voltage, etc.	INHBT

Monitor Item	Condition	Value/Status
ENG COOLNT T **NOTE:** Diesel engine models only	Engine running	Approximately the same as water temperature gauge reading
ENGINE RPM **NOTE:** Diesel engine models only	Engine running	Approximately the same as tachometer reading
ENGINE RUN	Engine stopped	OFF
	Engine running	ON
ENGINE STATUS **NOTE:** Diesel engine models only	Engine stopped	STOP
	While the engine stalls	STALL
	Engine running	RUN
	At engine cranking	CRA
FAN ON SIG	Fan switch OFF	OFF
	Fan switch ON	ON
FR FOG SW	Front fog lamp switch OFF	OFF
	Front fog lamp switch ON	ON
FR WASHER SW	Front washer switch OFF	OFF
	Front washer switch ON	ON
FR WIPER LOW	Front wiper switch OFF	OFF
	Front wiper switch LO	ON
FR WIPER HI	Front wiper switch OFF	OFF
	Front wiper switch HI	ON
FR WIPER INT	Front wiper switch OFF	OFF
	Front wiper switch INT	ON
FR WIPER STOP	Any position other than front wiper stop position	OFF
	Front wiper stop position	ON
HAZARD SW	When hazard switch is not pressed	OFF
	When hazard switch is pressed	ON
HEAD LAMP SW 1	Lighting switch OFF	OFF
	Lighting switch 2ND	ON
HEAD LAMP SW 2	Lighting switch OFF	OFF
	Lighting switch 2ND	ON
HI BEAM SW	Lighting switch OFF	OFF
	Lighting switch HI	ON
HOOD SW	Close the hood **NOTE:** Vehicles without theft warning system are OFF-fixed	OFF
	Open the hood	ON
H/L WASH SW	**NOTE:** The item is indicated, but not monitored	OFF
IGN ON SW	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
IGN SW CAN	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	1 - 7

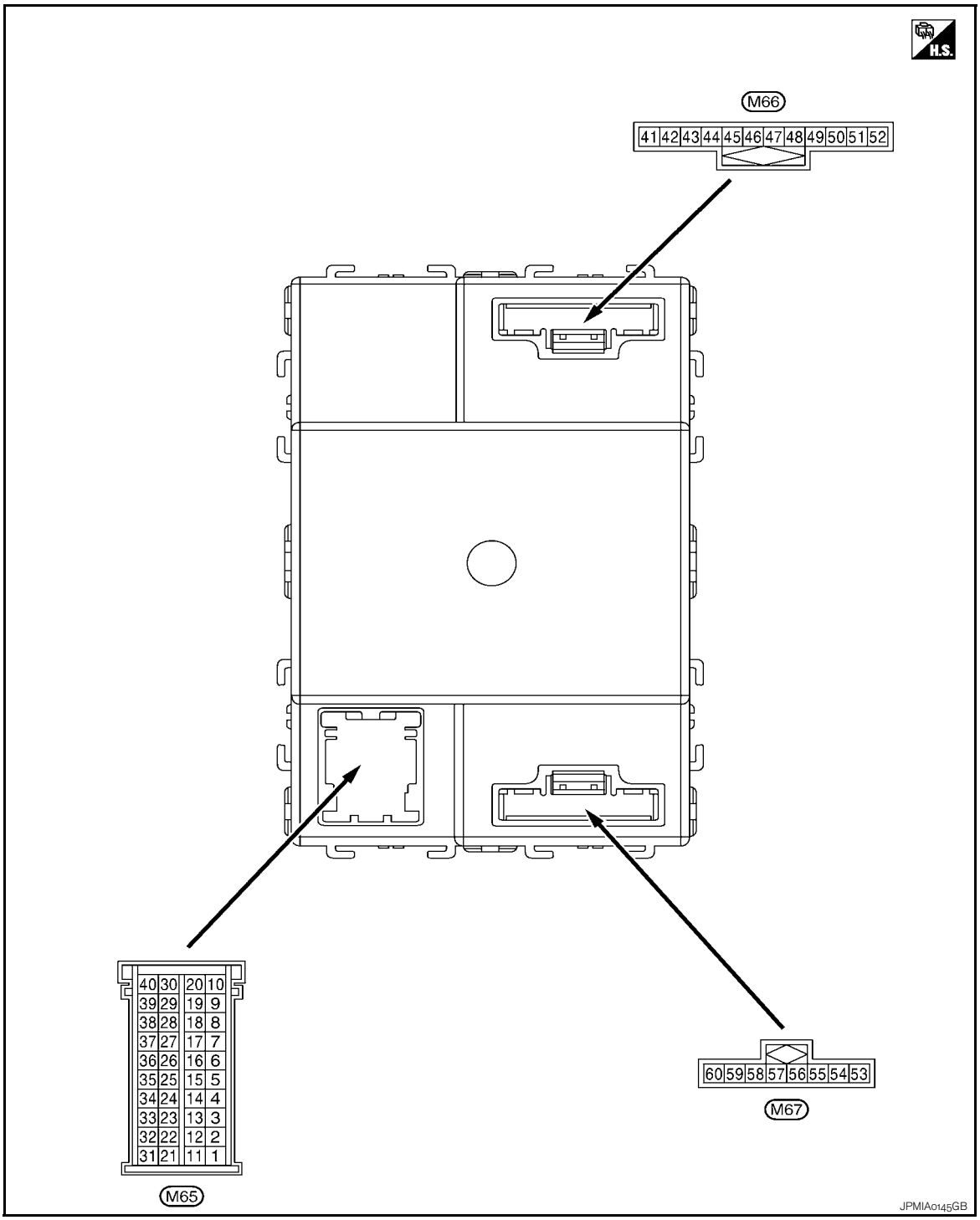
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Monitor Item	Condition	Value/Status
I-KEY LOCK	LOCK button of Intelligent Key is not pressed	OFF
	LOCK button of Intelligent Key is pressed	ON
I-KEY UNLOCK	UNLOCK button of Intelligent Key is not pressed	OFF
	UNLOCK button of Intelligent Key is pressed	ON
KEY ON SW	Mechanical key is removed from key cylinder	OFF
	Mechanical key is inserted to key cylinder	ON
KEYLESS LOCK	LOCK button of key fob is not pressed	OFF
	LOCK button of key fob is pressed	ON
KEYLESS UNLOCK	UNLOCK button of key fob is not pressed	OFF
	UNLOCK button of key fob is pressed	ON
LIT-SEN FAIL	Light & rain sensor is in normal condition	OK
	Light & rain sensor is with internal error	NOTOK
OIL PRESS SW	• Ignition switch OFF or ACC • Engine running	OFF
	Ignition switch ON	ON
OUT SIDE TEMP **NOTE:** Diesel engine models	Ignition switch ON	Approximately the same as outside air temperature
PASSING SW	Other than lighting switch PASS	OFF
	Lighting switch PASS	ON
PUSH SW	Return to ignition switch to LOCK position	OFF
	Press ignition switch	ON
REAR DEF SW	Rear window defogger switch OFF	OFF
	Rear window defogger switch ON	ON
RKE LOCK AND UN-LOCK	**NOTE:** The item is indicated, but not monitored	OFF
		ON
RR FOG SW	Rear fog lamp switch OFF	OFF
	Rear fog lamp switch ON	ON
RR WASHER SW	Rear washer switch OFF	OFF
	Rear washer switch ON	ON
RR WIPER INT	Rear wiper switch OFF	OFF
	Rear wiper switch INT	ON
RR WIPER ON	Rear wiper switch OFF	OFF
	Rear wiper switch ON	ON
RR WIPER STOP	Rear wiper stop position	OFF
	Other than rear wiper stop position	ON
SHOCK SENSOR	Ignition switch ON	NOMAL
	After the reception of air bag deployment signal from air bag diagnosis sensor unit	OFF
	During the reception of air bag deployment signal from air bag diagnosis sensor unit	ON
TAIL LAMP SW	Lighting switch OFF	OFF
	Lighting switch 1ST	ON
TRNK OPNR SW	When back door opener switch is not pressed	OFF
	When back door opener switch is pressed	ON

Monitor Item	Condition	Value/Status
TURN SIGNAL L	Turn signal switch OFF	OFF
	Turn signal switch LH	ON
TURN SIGNAL R	Turn signal switch OFF	OFF
	Turn signal switch RH	ON
UNLOCK WITH DR	**NOTE:** The item is indicated, but not monitored	OFF
		ON
UNLOCK SHOCK	Other than the following	OFF
	During the unlock operation interlocked with air bag	ON
VEHICLE SPEED	While driving	Equivalent to speedometer reading

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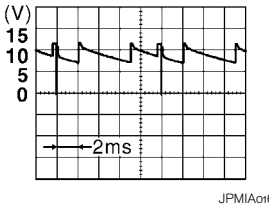
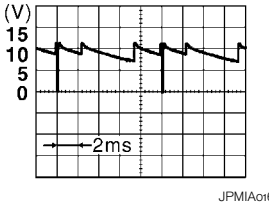
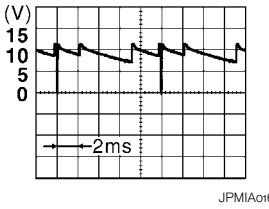
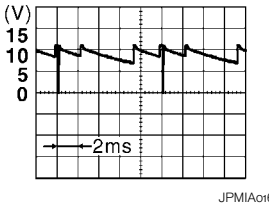
TERMINAL LAYOUT



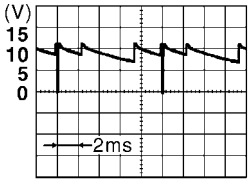
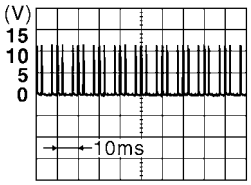
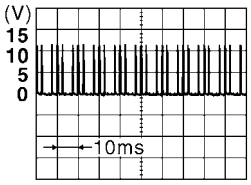
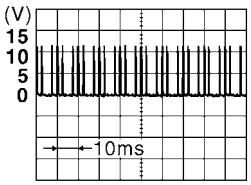
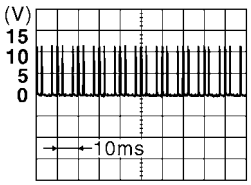
PHYSICAL VALUES

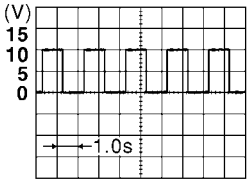
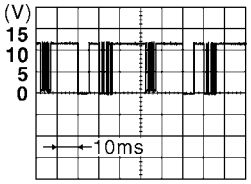
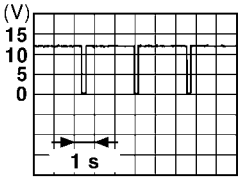
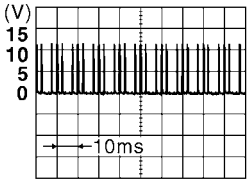
CAUTION:

- **Check combination switch system terminal waveform under the loaded condition with lighting switch, turn signal switch and wiper switch OFF is not to be fluctuated by being overloaded.**
- **Turn wiper intermittent dial position to 4 except when checking waveform or voltage of wiper intermittent dial position. Wiper intermittent dial position can be confirmed on CONSULT -III. Refer to BCS-26, "COMB SW : CONSULT-III Function (BCM - COMB SW)".**
- **BCM reads the status of the combination switch at 10 ms internal normally. Refer to BCS-7, "System Description".**

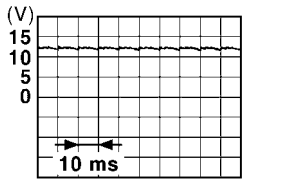
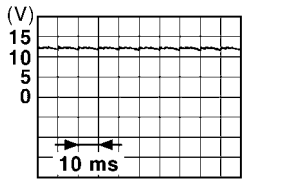
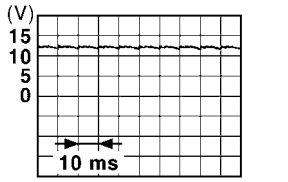
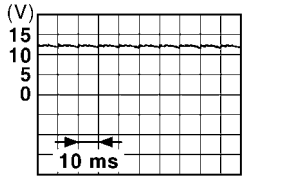
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
1 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4)	 JPMIA0160GB 9.1 V
					Rear wiper switch INT (Wiper intermittent dial 4)	
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	
2 (Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Lighting switch 2ND	 JPMIA0163GB 9.3 V
					Lighting switch PASS	
					Front fog lamp switch ON	
					Turn signal switch LH	
3 (LG)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Lighting switch AUTO	 JPMIA0162GB 9.3 V
					Rear fog lamp switch OFF	
					Front wiper switch MIST	
					Front wiper switch INT	
					Front wiper switch LO	
4 (R)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	 JPMIA0161GB 9.1 V
					Rear wiper switch ON (Wiper intermittent dial 4)	
					Rear washer switch ON (Wiper intermittent dial 4)	
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	

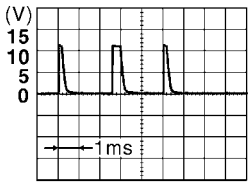
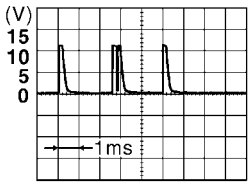
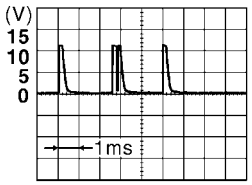
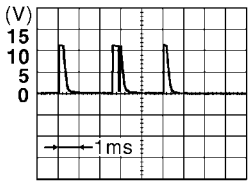
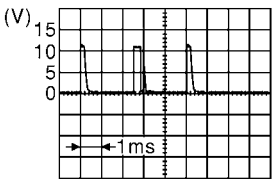
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Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
5 (W)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Lighting switch 1ST	 JPMIA0164GB 9.1 V
					Lighting switch 2ND	
					Lighting switch HI	
					Turn signal switch RH	
7 (P)	Ground	Door lock/unlock switch (Lock)	Output	Door lock/unlock switch	Not pressed	 JPMIA0154GB 1.2 V
					Pressed to the lock side	0 V
8 (LG)	Ground	Hazard switch	Output	Hazard switch	Not pressed	 JPMIA0154GB 1.3 V
					Pressed	0 V
9 (BR)	Ground	Door lock/unlock switch (Unlock)	Output	Door lock/unlock switch	Not pressed	 JPMIA0154GB 1.2 V
					Pressed to the unlock side	0 V
12 (P)	Ground	Back door opener switch	Output	Back door opener switch	Not pressed	 JPMIA0154GB 1.2 V
					Pressed	0 V

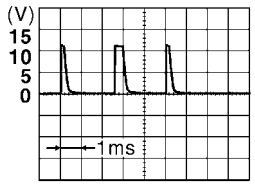
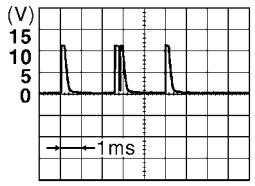
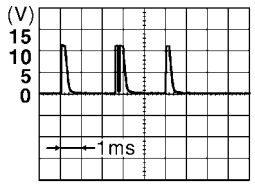
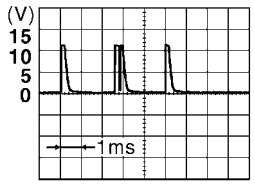
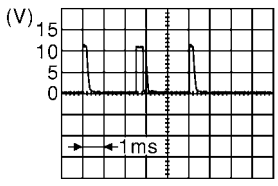
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
13 (R)	Ground	Shock detect sensor	Input	Ignition switch OFF or ACC		0 V
				Ignition switch ON		 JPMIA0155GB 6.0 V
14 (L/R)	Ground	A/C switch	Output	A/C switch	Not pressed	Battery voltage
					Pressed	0 V
15 (LG/B)	Ground	Fan switch	Output	Fan switch	Not pressed	Battery voltage
					Pressed	0 V
16 (GR)	Ground	Alarm link	Input	—		—
17 (BR)	Ground	Light & rain sensor serial link	Output	Ignition switch OFF or ACC		Battery voltage
				Ignition switch ON		 JPMIA0156GB 8.7 V
18 (SB)	Ground	Security indicator	Output	Security indicator	ON	0 V
					Blinking	 JPMIA0014GB 10.3 V
					OFF	Battery voltage
19 (L)	—	CAN-H	Input/ Output	—		—
20 (P)	—	CAN-L	Input/ Output	—		—
21 (SB)	Ground	Rear window defogger switch	Output	Rear window defogger switch	Not pressed	 JPMIA0154GB 1.1 V
					While pressing	0 V

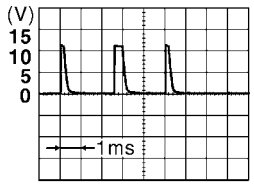
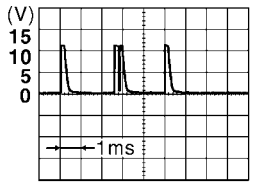
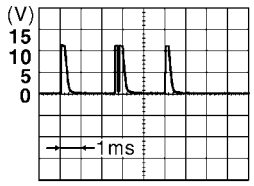
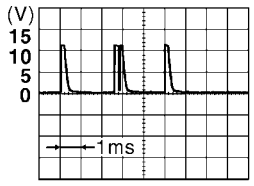
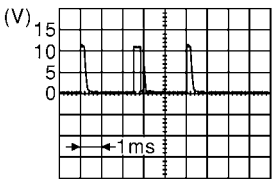
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Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
24 (GR)	Ground	Door lock status indicator	Output	Door lock status indicator	ON	Battery voltage
					OFF	0 V
25 (GR)	Ground	Rear door switch LH	Input	Rear door switch LH	OFF (When rear door LH closed)	 PKIDo924E 11.2 V
					ON (When rear door LH opened)	0 V
26 (R)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closed)	 PKIDo924E 11.2 V
					ON (When driver door opened)	0 V
27 (BR)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closed)	 PKIDo924E 11.2 V
					ON (When passenger door opened)	0 V
28 (G)	Ground	Back door switch	Input	Back door switch	OFF (When back door closed)	Battery voltage
					ON (When back door opened)	0 V
29 (LG)	Ground	Rear door switch RH	Input	Rear door switch RH	OFF (When rear door RH closed)	 PKIDo924E 11.2 V
					ON (When rear door RH opened)	0 V
30 (SB)	Ground	Audio link	Output	—	—	—

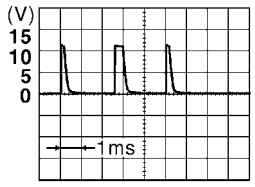
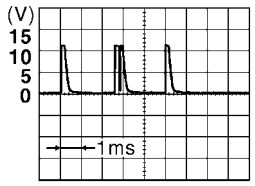
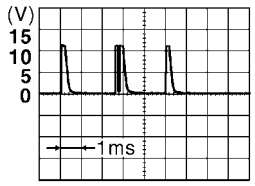
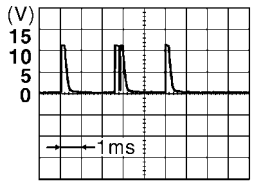
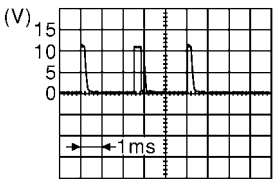
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
31 (BR)	Ground	Combination switch INPUT 5	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0165GB 1.3 V
					Front fog lamp switch ON (Wiper intermittent dial 4)	 JPMIA0167GB 1.3 V
					Rear fog lamp switch ON (Wiper intermittent dial 4)	 JPMIA0168GB 1.3 V
					Rear wiper switch ON (Wiper intermittent dial 4)	 JPMIA0169GB 1.3 V
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	 JPMIA0196GB 1.3 V

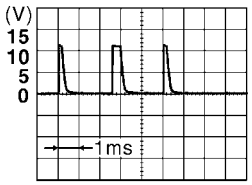
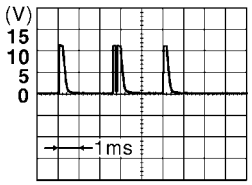
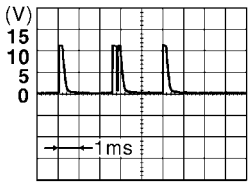
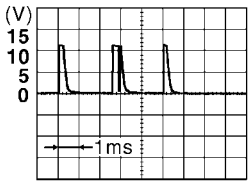
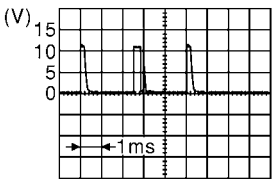
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Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
32 (G)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	 JPMIA0165GB 1.4 V
					Lighting switch PASS	 JPMIA0167GB 1.3 V
					Lighting switch 2ND	 JPMIA0166GB 1.3 V
					Front wiper switch INT	 JPMIA0168GB 1.3 V
					Front wiper switch HI	 JPMIA0196GB 1.3 V

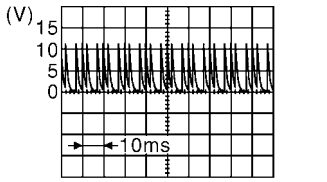
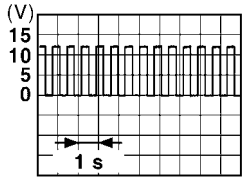
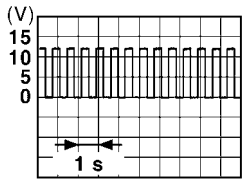
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
33 (V)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	 JPMIA0165GB 1.4 V
					Turn signal switch LH	 JPMIA0167GB 1.3 V
					Turn signal switch RH	 JPMIA0166GB 1.3 V
					Front wiper switch LO	 JPMIA0168GB 1.3 V
					Front washer switch ON	 JPMIA0196GB 1.3 V

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Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
34 (GR)	Ground	Combination switch INPUT 4	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0165GB 1.4 V
					Lighting switch AUTO (Wiper intermittent dial 4)	 JPMIA0167GB 1.3 V
					Lighting switch 1ST (Wiper intermittent dial 4)	 JPMIA0166GB 1.3 V
					Rear wiper INT (Wiper intermittent dial 4)	 JPMIA0167GB 1.3 V
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 6	 JPMIA0196GB 1.3 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
35 (L)	Ground	Combination switch INPUT 3	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0165GB 1.4 V
					Lighting switch HI (Wiper intermittent dial 4)	 JPMIA0166GB 1.3 V
					Lighting switch 2ND (Wiper intermittent dial 4)	 JPMIA0167GB 1.3 V
					Rear wiper switch ON	 JPMIA0169GB 1.3 V
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	 JPMIA0196GB 1.3 V
36 (V)	Ground	Key switch	Output	Insert mechanical key into ignition key cylinder		Battery voltage
				Remove mechanical key from ignition key cylinder		0 V
37 (R)	Ground	ACC power supply	Output	Ignition switch OFF		0 V
				Ignition switch ACC or ON		Battery voltage
38 (W/L)	Ground	Ignition power supply	Output	Ignition switch OFF or ACC		0 V
				Ignition switch ON		Battery voltage

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Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
39 (P)	Ground	NATS antenna amp.	Input/ Output	Insert mechanical key into ignition key cylinder		Just after Insert mechanical key into ignition key cylinder. Pointer of tester should move
40 (LG)	Ground	NATS antenna amp.	Input/ Output	Insert mechanical key into ignition key cylinder		Just after Insert mechanical key into ignition key cylinder. Pointer of tester should move
41 (V)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
42 (V)	Ground	Interior room lamp power supply	Output	After passing the interior room lamp battery saver operation time		0 V
				Any other time after passing the interior room lamp battery saver operation time		Battery voltage
43 (L)	Ground	Rear wiper motor	Output	Rear wiper switch OFF		0 V
				Rear wiper switch ON		Battery voltage
44 (L/W)	Ground	Rear wiper auto stop	Output	Ignition switch ON	Rear wiper stop position	0 V
					Any position other than rear wiper stop position	 JPMIA0197GB
45 (GR)	Ground	Back door lock actuator	Output	Back door opener switch	Pressed	Battery voltage (300ms)
					Not pressed	0 V
47 (G/Y)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 PKIDog26E 6.5 V
48 (G/B)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 PKIDog26E 6.5 V
49 (Y)	Ground	Rear fog lamp	Output	Lighting switch 1ST and front fog lamp switch ON	Rear fog lamp switch OFF	0 V
					Rear fog lamp switch ON	Battery voltage
51 (R/W)*1 (R)*2	Ground	Stop lamp switch	Output	Depress the brake pedal		Battery voltage
				Release the brake pedal		0 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
52 (R)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	Battery voltage
					ON	0 V
53 (L)	Ground	Power window power supply	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
54 (O)	Ground	Door unlock (All)	Output	Door lock/unlock switch	Pressed to the unlock side	Battery voltage
					Pressed to the lock side	0 V
55 (B)	Ground	Ground	—	Ignition switch ON		0 V
56 (Y)*1 (SB)*2	Ground	Door lock (All)	Output	Door lock/unlock switch	Pressed to the unlock side	0 V
					Pressed to the lock side	Battery voltage
57 (Y)	Ground	Battery power supply	Output	Ignition switch OFF		Battery voltage
58 (P)	Ground	Power window power supply	Output	Ignition switch OFF		Battery voltage
59 (BR)	Ground	Super lock	Output	When lock button of key fob or Intelligent Key is not pressed		0 V
				When lock button of key fob or Intelligent Key is pressed		Battery voltage
60 (GR)	Ground	Driver door unlock	Output	Door lock/unlock switch	Pressed to the unlock side	Battery voltage
					Pressed to the lock side	0 V

*1: With Intelligent Key system

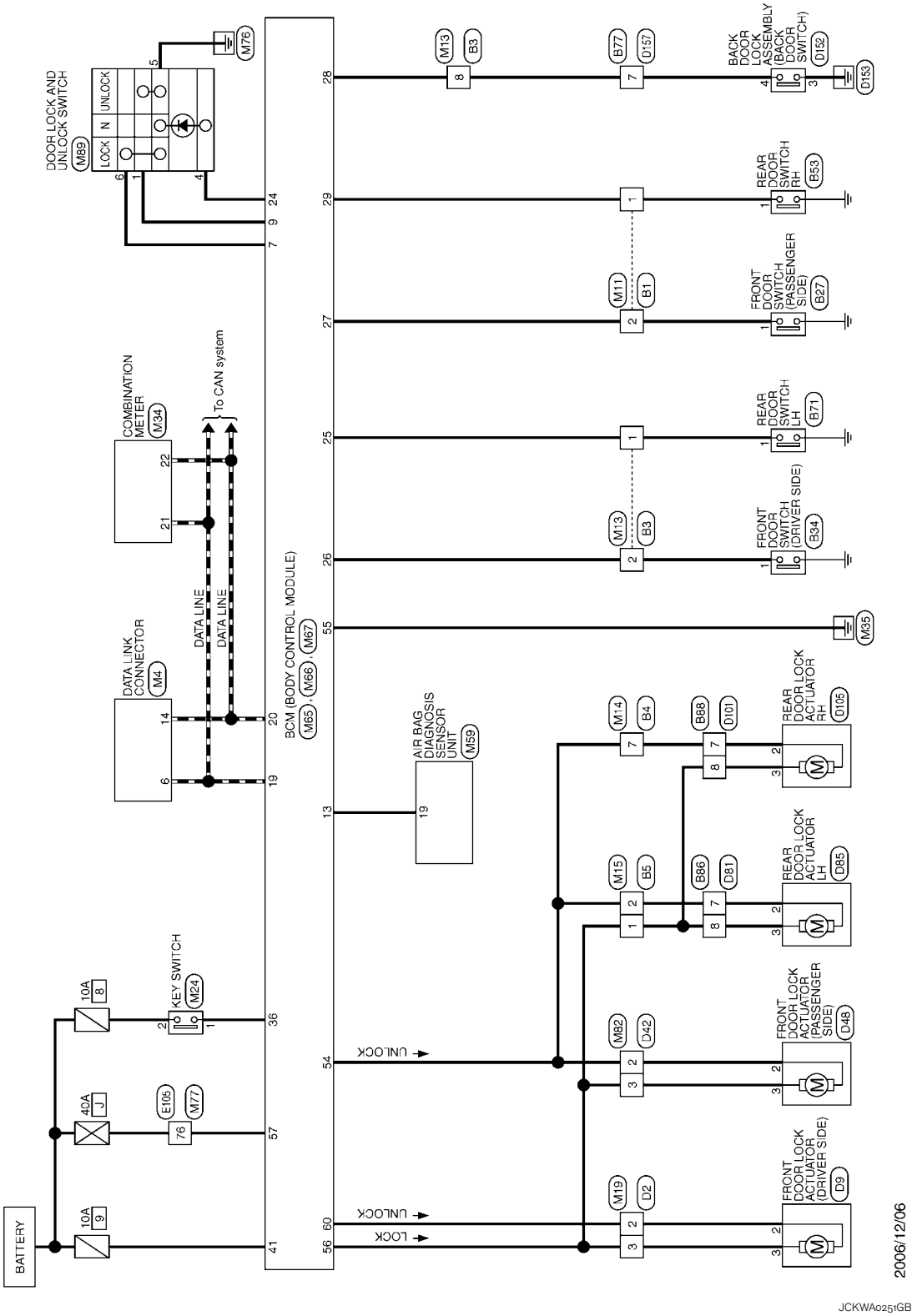
*2: Without Intelligent Key system

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Wiring Diagram - POWER DOOR LOCK CONTROL SYSTEM -

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POWER DOOR LOCK SYSTEM (WITHOUT INTELLIGENT KEY)



POWER DOOR LOCK SYSTEM (WITHOUT INTELLIGENT KEY)

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

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 [Specification]
1	LG	-
2	BR	-[LHD models]

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

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 [Specification]
1	GR	-
2	R/W	-[LHD models]
8	G	-

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

H.S.

1	2	3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name [Specification]
7	O	-

Connector No.	B5
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

H.S.

1	2	3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	-
2	O	-

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	R/W	-

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-

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POWER DOOR LOCK SYSTEM (WITHOUT INTELLIGENT KEY)

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	TH08FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	G	–

Connector No.	B86
Connector Name	WIRE TO WIRE
Connector Type	NS06MW-CS

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	O	–
8	SB	–

Connector No.	B88
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	O	–
8	SB	–

Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
2	O	–[Without Intelligent Key]
3	SB	–

Connector No.	D9
Connector Name	FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
Connector Type	FEA04FB-FHA2

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	O	–[Without Intelligent Key]
3	SB	–[Without Intelligent Key]

Connector No.	D42
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	O	–[Without Intelligent Key]
3	SB	–[Without Intelligent Key]

Connector No.	D48
Connector Name	FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Type	FEA04FB-FHA2

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	O	–[Without Intelligent Key]
3	SB	–[Without Intelligent Key]

Connector No.	D81
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
7	O	–
8	SB	–

JCKWA0253GB

POWER DOOR LOCK SYSTEM (WITHOUT INTELLIGENT KEY)

Connector No.	D85
Connector Name	REAR DOOR LOCK ACTUATOR LH
Connector Type	FEA04FB-FHA2

H.S.

1 2 3 4 5 6

Terminal No.	Color of Wire	Signal Name [Specification]
2	O	–
3	SB	–

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Type	NS06FW-CS

H.S.

3 2 1
8 7 6 5 4

Terminal No.	Color of Wire	Signal Name [Specification]
7	O	–
8	SB	–

Connector No.	D105
Connector Name	REAR DOOR LOCK ACTUATOR RH
Connector Type	FEA04FB-FHA2

H.S.

6 5 4 3 2 1

Terminal No.	Color of Wire	Signal Name [Specification]
2	O	–
3	SB	–

Connector No.	D152
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	CINCH 49309 EV 4M9

H.S.

1 2 3 4

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

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

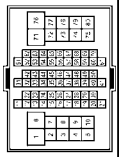
H.S.

1 2 3 4
5 6 7 8

Terminal No.	Color of Wire	Signal Name [Specification]
7	G	–

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-NS16-TM4

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
76	Y	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
6	L	–
14	P	–

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH24FW

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 [Specification]
1	LG	–
2	BR	–[LHD models]

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POWER DOOR LOCK SYSTEM (WITHOUT INTELLIGENT KEY)

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH24FW

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 [Specification]
1	GR	-
2	R	-[LHD models]
8	G	-

Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Type	NS06FW-CS

H.S.

3		2	1
8	7	6	5	4

Terminal No.	Color of Wire	Signal Name [Specification]
7	O	-

Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.

3		2	1
8	7	6	5	4

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	-
2	O	-

Connector No.	M19
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
2	GR	-
3	SB	-

Connector No.	M24
Connector Name	KEY SWITCH
Connector Type	A02MW

H.S.

2	1

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	Y	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
21	L	CAN-H
22	P	CAN-L

Connector No.	M59
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	TK28FY-EX-SC

H.S.

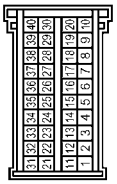
20	21	17									24	49	1
22	11	46	48	47	45	13	3	4	6	5
16	12	19	15	14	51	23	50	18	52	2

Terminal No.	Color of Wire	Signal Name [Specification]
19	R	UNLOCK

JCKWA0255GB

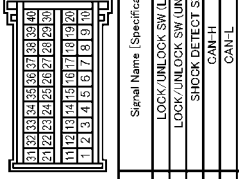
POWER DOOR LOCK SYSTEM (WITHOUT INTELLIGENT KEY)

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AAB40FB



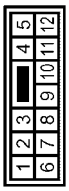
Terminal No.	Color of Wire	Signal Name [Specification]
7	P	LOCK/UNLOCK SW (LOCK)
9	BR	LOCK/UNLOCK SW (UNLOCK)
13	R	SHOCK DETECT SIG
19	L	CAN-H
20	P	CAN-L
24	GR	DOOR LOCK STATUS IND
25	GR	DOOR SW (RL)
26	R	DOOR SW (DR)
27	BR	DOOR SW (AS)
28	G	DOOR SW (BACK)
29	LG	DOOR SW (RR)

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH60FW-NS16-TM4



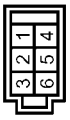
Terminal No.	Color of Wire	Signal Name [Specification]
76	Y	-

Connector No.	M82
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS



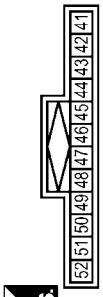
Terminal No.	Color of Wire	Signal Name [Specification]
2	O	-
3	SB	-[Without Intelligent Key]

Connector No.	M89
Connector Name	DOOR LOCK AND UNLOCK SWITCH
Connector Type	7703197674



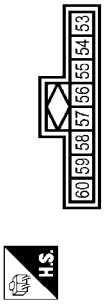
Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
4	GR	-
5	B	-
6	P	-

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FCI 211PC122S1017



Terminal No.	Color of Wire	Signal Name [Specification]
41	V	BAT(FUSE)

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FCI 211PC083S0017



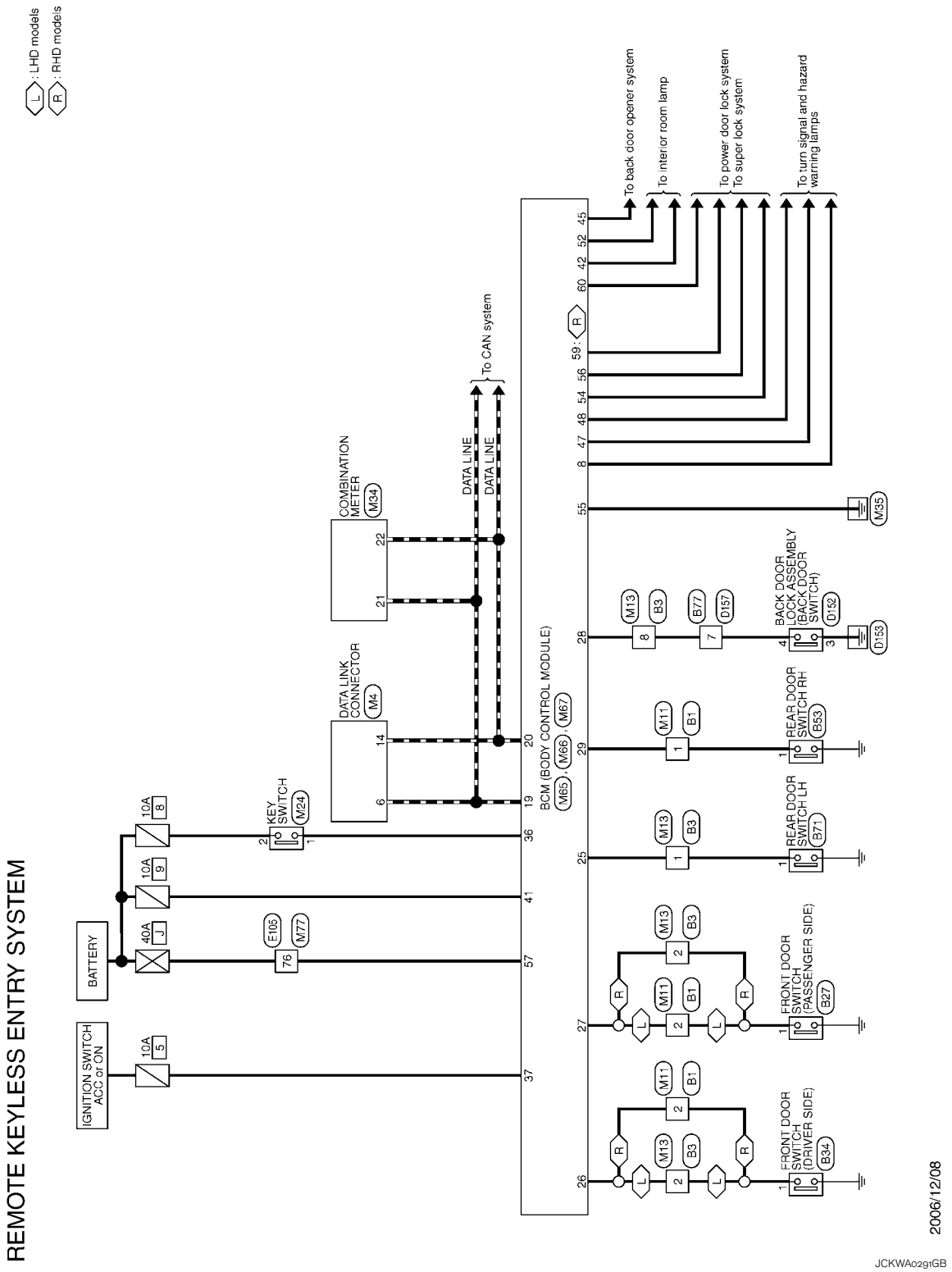
Terminal No.	Color of Wire	Signal Name [Specification]
54	O	DOOR UNLOCK OUTPUT (OTHER)
55	B	GND(POWER)
56	SB	DOOR LOCK OUTPUT (ALL) [Without Intelligent Key]
57	Y	BAT(F/L)
60	GR	UNLOCK (DR)

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Wiring Diagram - REMOTE KEYLESS ENTRY CONTROL SYSTEM -

INFOID:0000000001081924



REMOTE KEYLESS ENTRY SYSTEM

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

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 [Specification]
1	LG	-
2	BR	-[LHD models]
2	R/W	-[RHD models]

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

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 [Specification]
1	GR	-
2	R/W	-[LHD models]
2	BR	-[RHD models]
8	G	-

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	R/W	-

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	TH08FW

H.S.

4	3	2	1
8	7	6	5

Terminal No.	Color of Wire	Signal Name [Specification]
7	G	-

Connector No.	D152
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	CINCH 49309 EV 4M9

H.S.

1	2	3	4

Terminal No.	Color of Wire	Signal Name [Specification]
3	B	-
4	G	-

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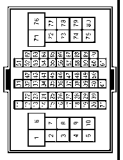
REMOTE KEYLESS ENTRY SYSTEM

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	TH08MW



Terminal No.	Color of Wire	Signal Name [Specification]
7	G	–

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-NS16-TM4



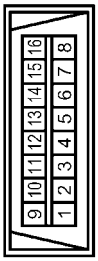
Terminal No.	Color of Wire	Signal Name [Specification]
76	Y	–

Connector No.	M24
Connector Name	KEY SWITCH
Connector Type	A02MW



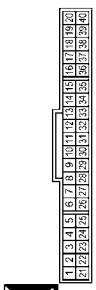
Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	Y	–

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



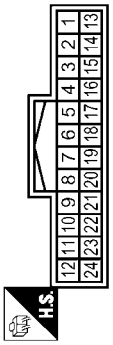
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	–
14	P	–

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



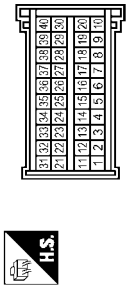
Terminal No.	Color of Wire	Signal Name [Specification]
21	L	CAN-H
22	P	CAN-L

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH24FW



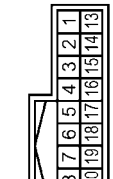
Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	–
2	BR	–[LHD models]
2	R	–[RHD models]

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AAB40FB



Terminal No.	Color of Wire	Signal Name [Specification]
8	LG	HAZARD SW
19	L	CAN-H
20	P	CAN-L
25	GR	DOOR SW (RL)
26	R	DOOR SW (DR)
27	BR	DOOR SW (AS)
28	G	DOOR SW (BACK)
29	LG	DOOR SW (RR)
36	V	KEY SW
37	R	ACC SW

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH24FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	–
2	R	–[LHD models]
2	BR	–[RHD models]
8	G	–

JCKWA0293GB

REMOTE KEYLESS ENTRY SYSTEM

Connector No.	M86
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FCI 211PC122S1017

H.S.

52 51 50 49 48 47 46 45 44 43 42 41

Terminal No.	Color of Wire	Signal Name [Specification]
41	V	BAT(FUSE)
42	V	ROOM LAMP POWER SUPPLY
45	GR	BACK DOOR OPENER
47	G/Y	FLASHER OUTPUT (LEFT)
48	G/B	FLASHER OUTPUT (RIGHT)
52	R	ROOM LAMP OUTPUT

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FCI 211PC083S0017

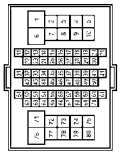
H.S.

60 59 58 57 56 55 54 53

Terminal No.	Color of Wire	Signal Name [Specification]
54	O	DOOR UNLOCK OUTPUT (OTHER)
55	B	GND(POWER)
56	SB	DOOR LOCK OUTPUT (ALL) [Without Intelligent Key]
57	Y	BAT(F/L)
59	BR	SUPER LOCK SET OUTPUT
80	GR	UNLOCK (DR)

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH60FW-NS16-TM4

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
76	Y	–

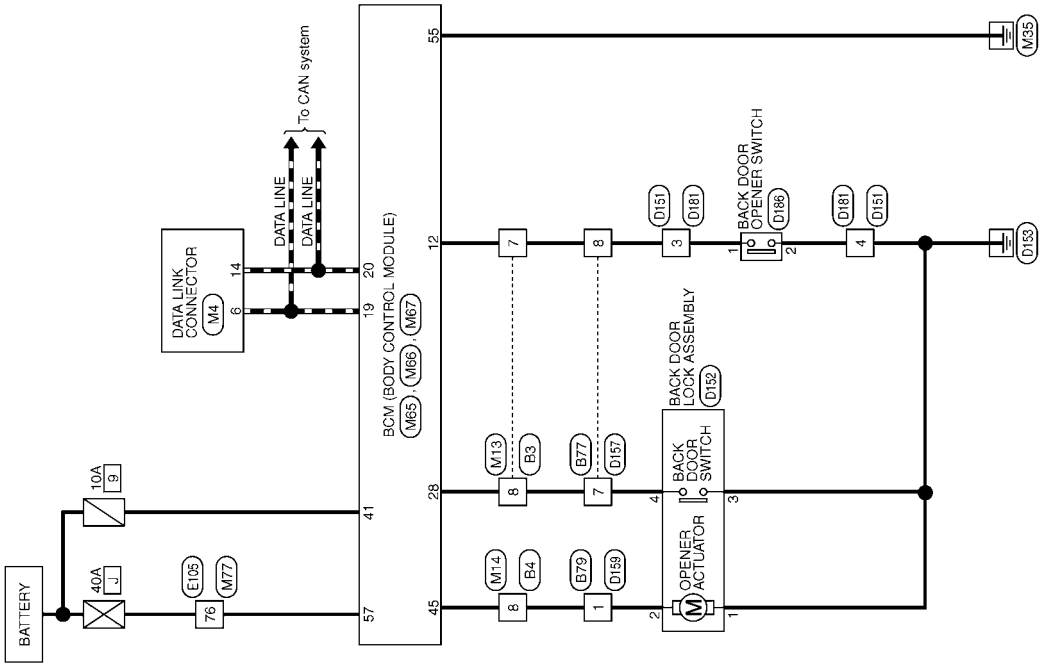
JCKWA0294GB

Wiring Diagram - BACK DOOR OPENER CONTROL SYSTEM -

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BACK DOOR OPENER SYSTEM



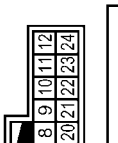
2006/12/08

JCKWA0295GB

BACK DOOR OPENER SYSTEM

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

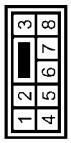
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	P	-
8	G	-

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

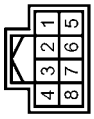
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
8	GR	-

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	TH08FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	G	-
8	P	-

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	M02FW-LC

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
3	P	-
4	B	-

Connector No.	D152
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	CINCH 48309 EV 4M9

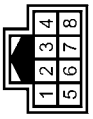
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	GR	-
3	B	-
4	G	-

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	G	-
8	P	-

Connector No.	D159
Connector Name	WIRE TO WIRE
Connector Type	M02MW-LC

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-

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BACK DOOR OPENER SYSTEM

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	TH08FW

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
3	P	-
4	B	-

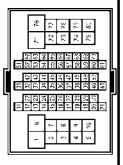
Connector No.	D186
Connector Name	BACK DOOR OPENER SWITCH
Connector Type	RK02MGY

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-
2	B	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-NS16-TM4

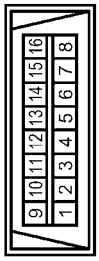
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
76	Y	-

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

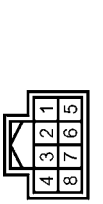
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH24FW

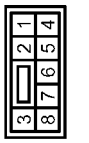
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
7	P	-
8	G	-

Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

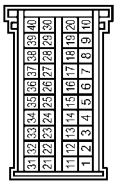
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
8	GR	-

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AAB40FB

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
12	P	TRUNK/BACK DOOR OPEN SW
19	L	CAN-H
20	P	CAN-L
28	G	DOOR SW (BACK)

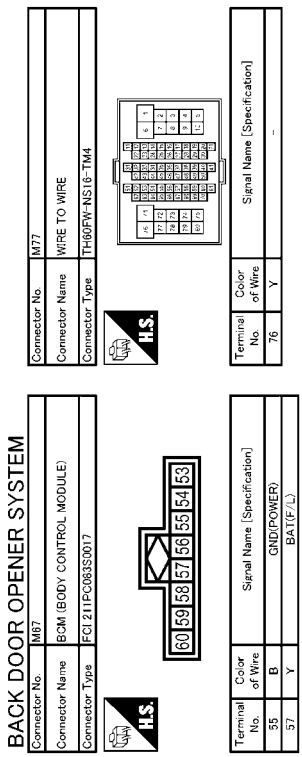
Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FCI 211PC122S1017

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
41	V	BAT(FUSE)
45	GR	BACK DOOR OPENER

JCKWA0297GB



JCKWA0298GB

Fail Safe

INFOID:0000000001116444

Fail-safe index

BCM performs fail-safe control when any DTC listed below is detected.

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Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2191: DIFFERENCE OF KEY	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2192: ID DISCORD BCM-ECM	Fuel cut (ECM)	Erase DTC
B2193: CHAIN OF BCM-ECM	Fuel cut (ECM)	Erase DTC
B2194: DISCORD BCM-I-KEY	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2195: ANTI SCANNING	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2196: DONGLE NG	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC

REAR WIPER CONTROL

BCM detects a rear wiper stopping position according to a rear wiper auto stop signal.
When a rear wiper auto stop signal is in the condition listed below, BCM stops power supply to rear wiper after rear wiper is activated for five seconds.

Ignition switch	Rear wiper switch	Auto stop signal
ON	OFF	Rear wiper stop position signal cannot be input 5 seconds.
	ON	The signal does not change for 5 seconds.

NOTE:
The above operation is repeated when operating the rear wiper switch one minute after the stop of the rear wiper caused by Fail-safe.

TURN SIGNAL LAMP CONTROL

BCM detects the turn signal lamp circuit status from the terminal voltage.
BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:
The blinking speed is normal while activating the hazard warning lamp.

LIGHT & RAIN SENSOR MALFUNCTION DETECTION FUNCTION

BCM controls the following items when LIGHT & RAIN sensor has a malfunction.

Auto Light Control
Headlamp is turned ON.

Front Wiper Control
The condition just before the activation of Fail-safe is maintained until the front wiper switch is turned OFF.

DTC Inspection Priority Chart

INFOID:0000000001116445

Priority	DTC
1	• U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN)
2	• B2190: NATS ANTENNA AMP • B2191: DIFFERNCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2194: DISCORD BCM-I-KEY • B2195: ANTI SCANNING • B2196: DONGLE NG

DTC Index

INFOID:0000000001116446

NOTE:

Details of time display

- CRNT: Displays when there is a malfunction now or after returning to the normal condition until turning ignition switch OFF → ON again.
- PAST: Displays when there is a malfunction that is detected in the past and stored.
- 1 - 39: Displayed if any previous malfunction is present when current condition is normal. It increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The counter remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch OFF → ON after returning to the normal condition if the malfunction is detected again.

CONSULT display	TIME		Fail-safe	Refer to
No DTC is detected. further testing may be required.	—	—	—	—
U1000: CAN COMM CIRCUIT	0	1 - 39	—	BCS-32
U1010: CONTROL UNIT (CAN)	0	1 - 39	—	BCS-33
B2190: NATS ANTENNA AMP	CRNT	PAST	×	• With Intelligent Key system SEC-33 • Without Intelligent Key system SEC-174
B2191: DIFFERENCE OF KEY	CRNT	PAST	×	• With Intelligent Key system SEC-35 • Without Intelligent Key system SEC-176
B2192: ID DISCORD BCM-ECM	CRNT	PAST	×	• With Intelligent Key system SEC-36 • Without Intelligent Key system SEC-177
B2193: CHAIN OF BCM-ECM	CRNT	PAST	×	• With Intelligent Key system SEC-38 • Without Intelligent Key system SEC-178
B2194: DISCORD BCM-I-KEY	CRNT	PAST	×	SEC-39
B2195: ANTI SCANNING	CRNT	PAST	×	• With Intelligent Key system SEC-179 • Without Intelligent Key system SEC-179
B2196: DONGLE NG	CRNT	PAST	×	• With Intelligent Key system SEC-41 • Without Intelligent Key system SEC-180

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SYMPTOM DIAGNOSIS

DOOR LOCK FUNCTION SYMPTOMS

DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH : Symptom Table

INFOID:0000000001093366

DOOR LOCK AND UNLOCK SWITCH OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-553, "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)

- Except driver side, doors are closed.
- Doors are not locked by keyfob.

Symptom Table

Symptom	Diagnosis/service procedure		Reference page
Door lock and unlock function does not operate with door lock and unlock switch.	1. Check BCM power supply and ground circuit.		DLK-584
	2. Check door lock and unlock switch.		DLK-585
	3. Check door switch.	Passenger side	DLK-590
		Rear LH	DLK-592
		Rear RH	DLK-593
		Back door	DLK-595
	4. Check intermittent incident.		GI-39
Specific door lock actuator does not operate.	1. Check door lock actuator.	Driver side	DLK-599
		Passenger side	DLK-600
		Rear LH	DLK-602
		Rear RH	DLK-603
	2. Check intermittent incident.		GI-39

KEYFOB

KEYFOB : Symptom Table

INFOID:0000000001093368

KEYFOB OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-553, "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)

- Mechanical key is removed from ignition key cylinder.
- Door lock and unlock operation is normal.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
All of the keyfob operations do not operate.	1. Check keyfob battery inspection.	DLK-612
	2. Check key switch	DLK-597
	3. Check intermittent incident.	GI-39
Anti-hijack operation does not operate.	1. Check “SECURITY DOOR LOCK SET” setting in “WORK SUPPORT”.	DLK-578
	2. Check intermittent incident.	GI-39

AUTO DOOR LOCK

AUTO DOOR LOCK : Symptom Table

INFOID:0000000001093370

AUTO DOOR LOCK OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-553, "Work Flow".
- To understand the operation when it does work, refer to DLK-563, "AUTO DOOR LOCK : System Description".
- 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)

- “AUTO LOCK SET” is ON when setting on CONSULT-III.
- Door lock and unlock function is normal.

Symptom Table

Symptom	Diagnosis/service procedure		Reference page
Auto door lock operation does not operate.	1. Check “AUTO LOCK SET” setting in “WORK SUPPORT”.		DLK-580
	2. Check door switch.	Driver side	DLK-589
		Passenger side	DLK-590
		Rear LH	DLK-592
		Rear RH	DLK-593
		Back door	DLK-595
	3. Check key switch.		DLK-597
	4. Check intermittent incident.		GI-39

VEHICLE SPEED SENSING AUTO DOOR LOCK

VEHICLE SPEED SENSING AUTO DOOR LOCK : Symptom Table

INFOID:0000000001093372

VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-553, "Work Flow".
- To understand the operation when it does work, refer to DLK-565, "VEHICLE SPEED SENSING AUTO DOOR LOCK : System Description".
- 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)

- Door lock and unlock switch operation is normal.

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Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Vehicle speed sensing auto door lock operation does not operate.	1. Check vehicle speed signal.	DLK-611
	2. Check intermittent incident.	GI-39

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BACK DOOR OPEN FUNCTION SYMPTOMS
BACK DOOR OPENER SWITCH
BACK DOOR OPENER SWITCH : Symptom Table

INFOID:0000000001093374

BACK DOOR OPENER FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-553, "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)

- Door lock function is normal.
- Vehicle speed is less than 5 km/h (3 MPH).
- All doors are unlocked.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Back door opener function does not operate by back door opener switch.	1. Check back door opener switch.	DLK-607
	2. Check vehicle speed signal.	DLK-611
	3. Check back door opener actuator.	DLK-605
	4. Check intermittent incident.	GI-39

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WARNING FUNCTION SYMPTOMS
BACK DOOR

BACK DOOR : Symptom Table

INFOID:0000000001093380

BACK DOOR OPEN WARNING OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-553, "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)

- Door lock function and back door opener function are normal.

Symptom	Diagnosis/service procedure	Reference page
Back door open warning does not operate properly.	1. Check back door opener switch.	DLK-607
	2. Check intermittent incident.	GI-39

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HAZARD REMINDER FUNCTION
HAZARD WARNING LAMP
HAZARD WARNING LAMP : Symptom Table

INFOID:0000000001093381

HAZARD REMINDER OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-553, "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)

- Door lock function is normal.
- “HAZARD LAMP SET” is active when setting on CONSULT-III.

Symptom Table

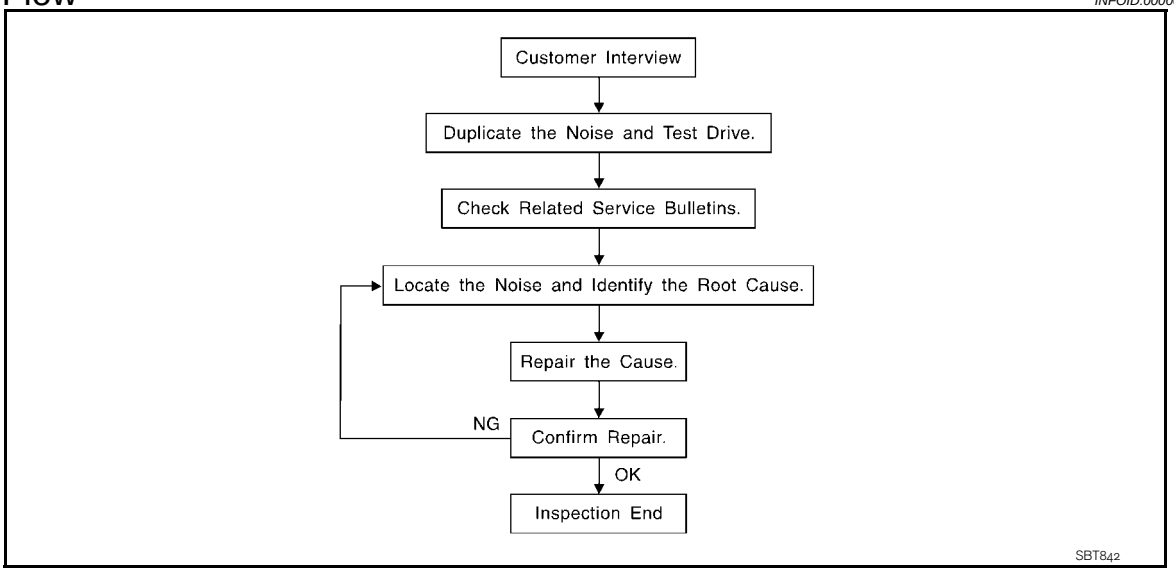
Symptom	Diagnosis/service procedure	Reference page
Hazard reminder operation does not operate properly.	1. Check setting of “HAZARD LAMP SET” with CONSULT-III.	DLK-580
	2. Check intermittent incident.	GI-39

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SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000001098121



CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of the customer's comments; refer to DLK-216, "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 a test drive 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 A/T model).
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 (TSB) 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 (Engine Ear or mechanics stethoscope).
2. Narrow down the noise to a more specific area and identify the cause of the noise by:

- removing the components in the area that you suspect the noise is coming from.
  Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
- tapping or pushing/pulling the component that 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-214, "Inspection Procedure".

REPAIR THE CAUSE

- If the cause is a loose component, tighten the component securely.
- If the cause is insufficient clearance between components:

- separate components by repositioning or loosening and retightening the component, if possible.
- insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or urethane tape are available through your authorized Nissan Parts Department.

CAUTION:
Do not use excessive force as many components are constructed of plastic and may be damaged.
NOTE:

- URETHANE PADS
  Insulates connectors, harness, etc.
- INSULATOR (Foam blocks)
  Insulates components from contact. Can be used to fill space behind a panel.
- INSULATOR (Light foam block)
- FELT CLOTHTAPE
  Used to insulate where movement does not occur. Ideal for instrument panel applications.
  The following materials, not available through NISSAN Parts Department, can also be used to repair squeaks and rattles.
- UHMW(TEFLON) TAPE
  Insulates where slight movement is present. Ideal for instrument panel applications.
- SILICONE GREASE
  Used in place of UHMW tape that 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

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Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.

Inspection Procedure

INFOID:0000000001098122

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

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. Cluster lid A and instrument panel
2. Acrylic lens and combination meter housing
3. Instrument panel to front pillar garnish
4. Instrument panel to windshield
5. Instrument panel mounting pins
6. Wiring harnesses behind the combination meter
7. A/C defroster duct and duct joint

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

CAUTION:

Do not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will not be able to recheck the repair.

CENTER CONSOLE

Components to pay attention to include:

1. Shifter assembly cover to finisher
2. A/C control unit and cluster lid C
3. Wiring harnesses behind audio and A/C control unit

The instrument panel repair and isolation procedures also apply to the center console.

DOORS

Pay attention to the:

1. Finisher and inner panel making a slapping noise
2. Inside handle escutcheon to door finisher
3. Wiring harnesses tapping
4. Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks to repair the noise.

TRUNK

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

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

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

SUNROOF/HEADLINING

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

1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
2. Sunvisor shaft shaking in the holder
3. Front or rear windshield touching headlining and squeaking

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Again, pressing on the components to stop the noise while duplicating the conditions can isolate most of these incidents. Repairs usually consist of insulating with felt cloth tape.

SEATS

When isolating seat noise it is important to note the position the seat is in and the load placed on the seat when the noise is present. These conditions should be duplicated when verifying and isolating the cause of the noise.

Cause of seat noise include:

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

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

UNDERHOOD

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

Causes of transmitted underhood noise include:

1. Any component mounted to the engine wall
2. Components that pass through the engine wall
3. Engine wall mounts and connectors
4. Loose radiator mounting pins
5. Hood bumpers out of adjustment
6. Hood striker out of adjustment

These noises can be difficult to isolate since they cannot be reached from the interior of the vehicle. The best method is to secure, move or insulate one component at a time and test drive the vehicle. Also, engine RPM or load can be changed to isolate the noise. Repairs can usually be made by moving, adjusting, securing, or insulating the component causing the noise.

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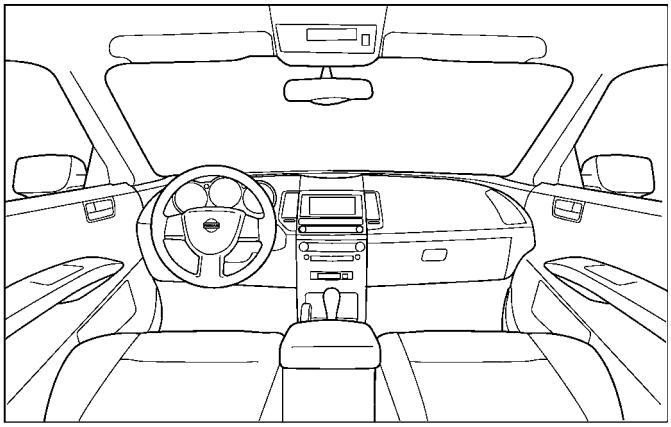
Diagnostic Worksheet

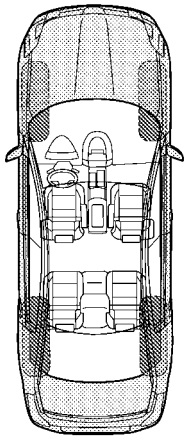
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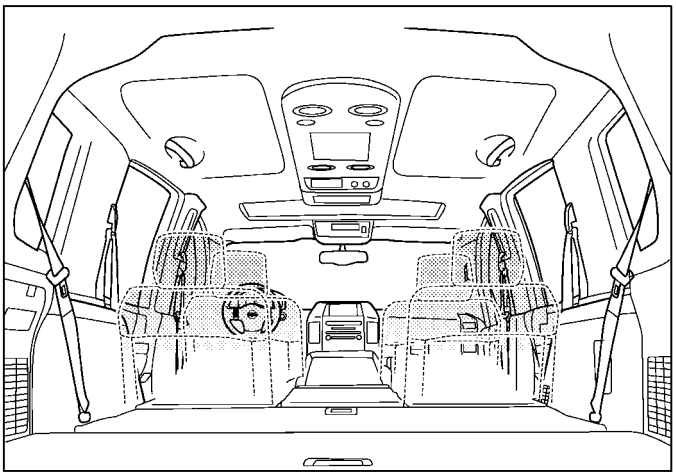
SQUEAK & RATTLE
DIAGNOSTIC WORKSHEET

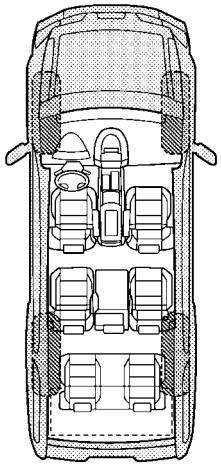
Dear Nissan Customer:
We are concerned about your satisfaction with your Nissan vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Nissan right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what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

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









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

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SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

_____

_____

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

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

III. WHEN DRIVING:

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

IV. WHAT TYPE OF NOISE

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

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

_____

_____

_____

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

VIN: _____ Customer Name: _____

W.O.# _____ Date: _____

This form must be attached to Work Order

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PRECAUTION

PRECAUTIONS

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

INFOID:0000000001081941

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

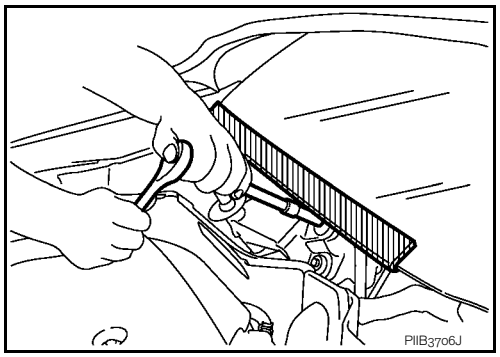
WARNING:

- **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 SRS 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.**

Procedure without Cowl Top Cover

INFOID:0000000001081942

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



Steering Wheel Rotation after Battery Disconnect

INFOID:0000000001081943

NOTE:

- Before removing and installing any control units, first turn the push-button ignition switch to the LOCK position, then disconnect both battery cables.
- After finishing work, confirm that all control unit connectors are connected properly, then re-connect both battery cables.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work. If a DTC is detected, perform trouble diagnosis according to self-diagnosis results.

This vehicle is equipped with a push-button ignition switch and a steering lock unit.
If the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.
If turning the steering wheel is required with the battery disconnected or discharged, follow the procedure below before starting the repair operation.

OPERATION PROCEDURE

1. Connect both battery cables.
   NOTE:
   Supply power using jumper cables if battery is discharged.
2. Carry the Intelligent Key or insert it to the key slot and turn the push-button ignition switch to ACC position. (At this time, the steering lock will be released.)

3. Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.
4. Perform the necessary repair operation.
5. When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the push-button ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the push-button ignition switch is turned to LOCK position.)
6. Perform self-diagnosis check of all control units using CONSULT-III.

Work

INFOID:0000000001081944

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

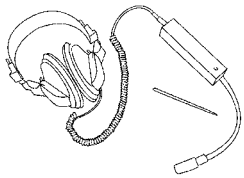
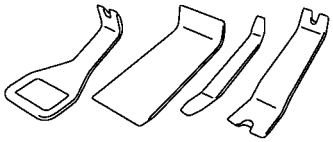
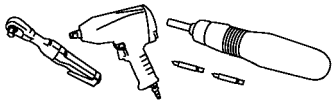
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PREPARATION

PREPARATION

Commercial Service Tools

INFOID:0000000001116410

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

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ON-VEHICLE MAINTENANCE

PRE-INSPECTION FOR DIAGNOSTIC

Basic Inspection

INFOID:0000000001090923

BASIC INSPECTION

1.CHECK DOOR LOCK AND UNLOCK SWITCH OPERATION

Check door lock and unlock operation by operating door lock and unlock switch.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to DLK-645, "DOOR LOCK AND UNLOCK SWITCH : Symptom Table".

2.CHECK KEYFOB OPERATION

Check door lock and unlock operation by operationg lock and unlock button of keyfob.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Refer to DLK-645, "KEYFOB : Symptom Table".

3.CHECK AUTO DOOR LOCK OPERATION

Check auto door lock operation. Refer to DLK-563, "AUTO DOOR LOCK : System Description".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Refer to DLK-646, "AUTO DOOR LOCK : Symptom Table".

4.CHECK VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION

Check vehicle speed sensing auto door lock. Refer to DLK-565, "VEHICLE SPEED SENSING AUTO DOOR LOCK : System Description"

Is the inspection result normal?

YES >> GO TO 5.
NO >> Refer to DLK-646, "VEHICLE SPEED SENSING AUTO DOOR LOCK : Symptom Table".

5.CHECK BACK DOOR OPENER SWITCH OPERATION

Check back door opener operation by operating back door opener switch.

Is the inspection result normal?

YES >> GO TO 6.
NO >> Refer to DLK-648, "BACK DOOR OPENER SWITCH : Symptom Table".

6.CHECK HAZARD REMINDER FUNCTION

Check hazard reminder function by operating the following switches.
- Lock and unlock button of keyfob.

Is the inspection result normal?

YES >> GO TO 7.
NO >> Refer to DLK-650, "HAZARD WARNING LAMP : Symptom Table".

7.CHECK WARNING FUNCTION

Check that warning function operate properly. Refer to DLK-572, "System Description".

Is the inspection result normal?

YES >> GO TO 8.
NO >> Refer to DLK-649, "BACK DOOR : Symptom Table".

8.CHECK OUT

CHECK OUT.

>> INSPECTION END

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ON-VEHICLE REPAIR

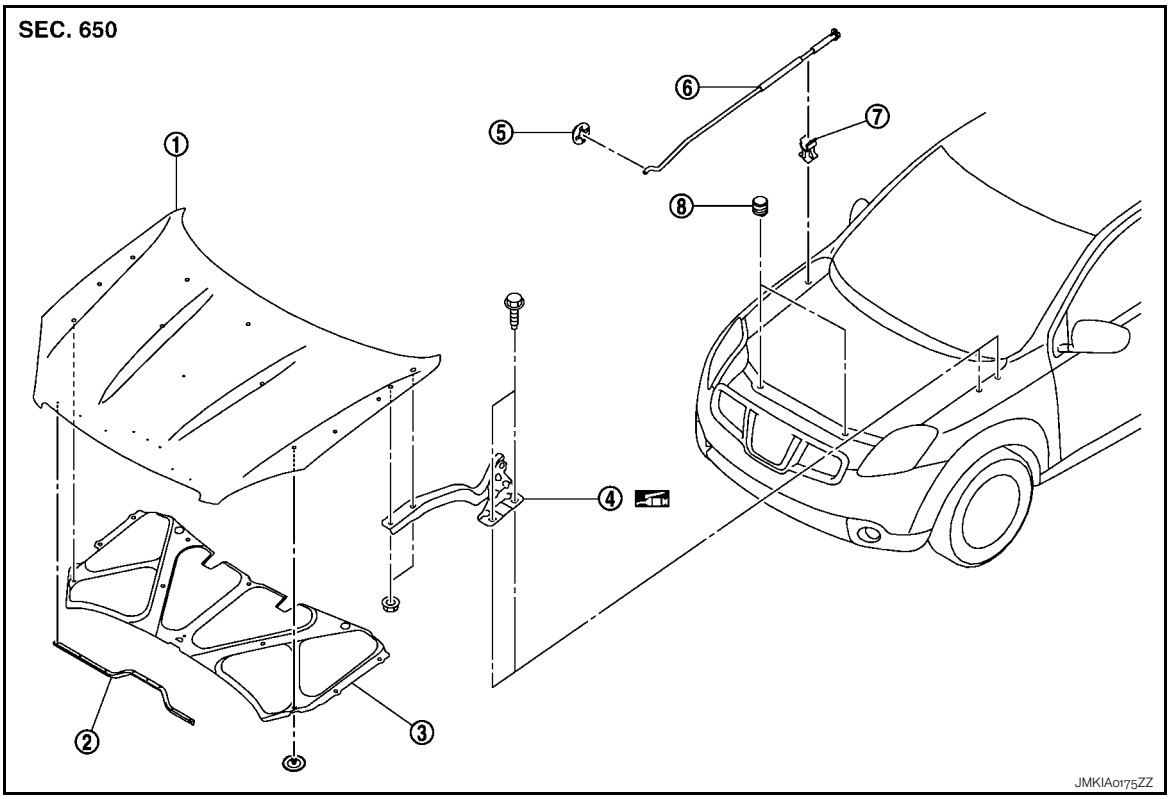
HOOD

HOOD ASSEMBLY

HOOD ASSEMBLY : Exploded View

INFOID:0000000001098574

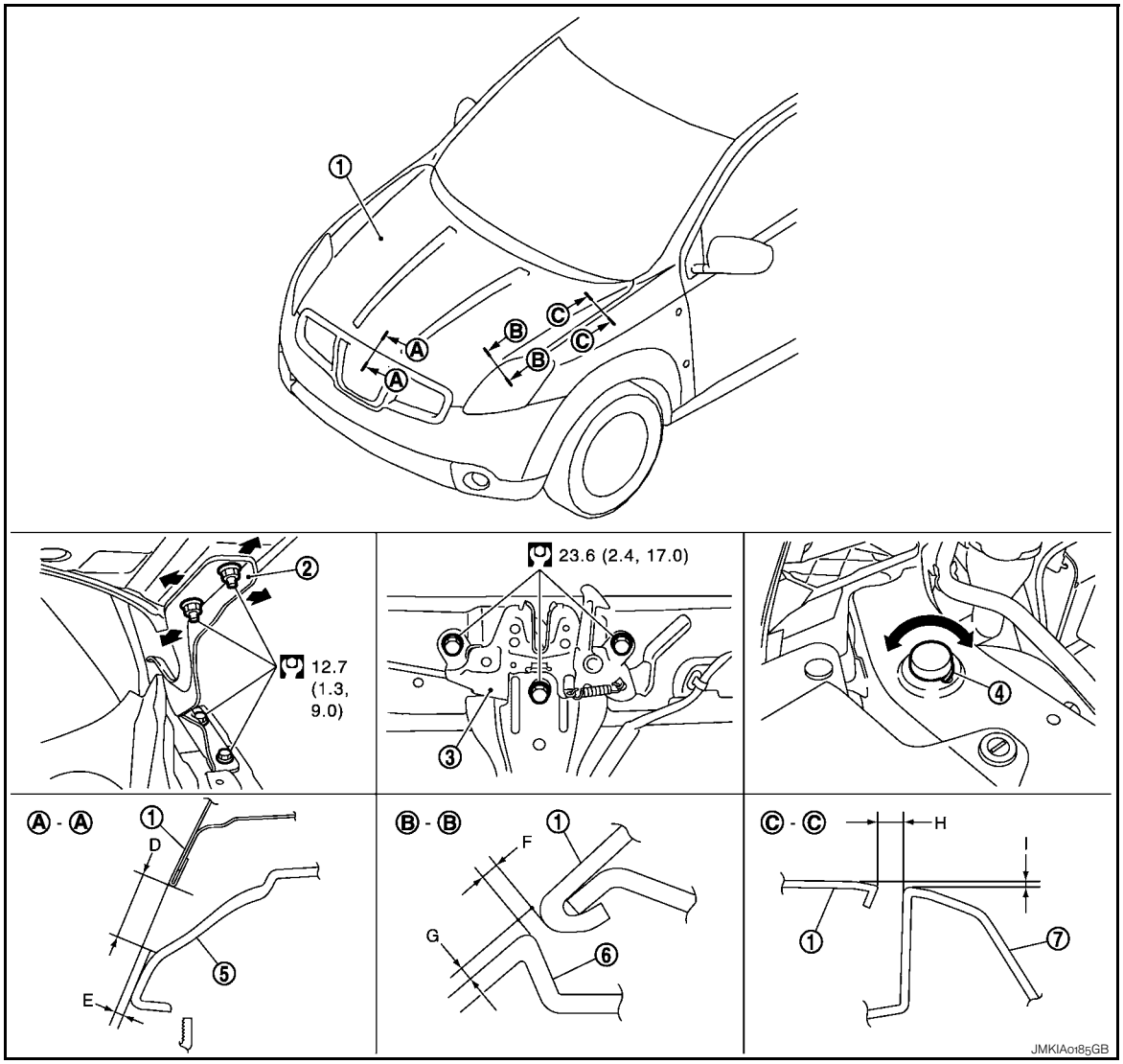
REMOVAL



1. Hood assembly
2. Hood sealing rubber
3. Hood insulator
4. Hood hinge
5. Grommet
6. Hood support rod
7. Clamp
8. Hood bumper rubber

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT



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

Refer to GI-4, "Components" for symbols in the figure.

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000001098575

REMOVAL

1. Support the hood lock assembly with the proper material to prevent it from falling.
   WARNING:
   Bodily injury may occur if no supporting rod is holding the hood open when removing the hood stay.
2. Remove the hood hinge mounting nuts on the hood to remove the hood assembly.
   CAUTION:
   Perform work with 2 workers, because of its heavy weight.
3. Remove the following parts after removing the hood assembly.
   - Hood insulator
   - Hood sealing rubber

INSTALLATION

Install in the reverse order of removal.

CAUTION:

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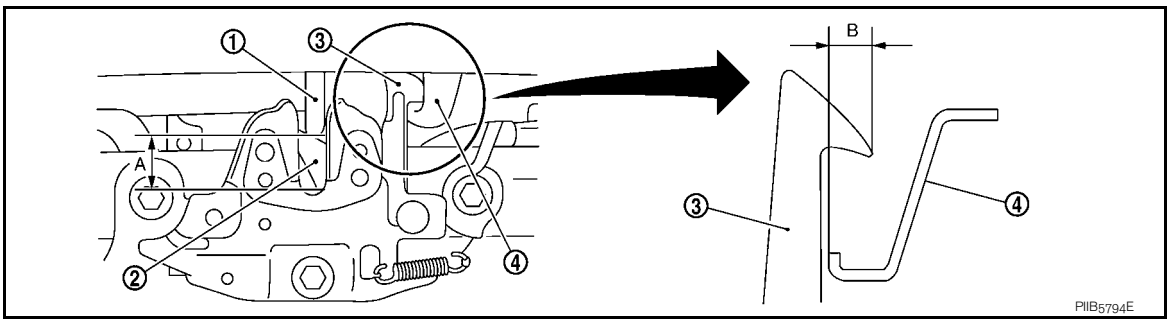
- **Perform work with 2 workers, because of its heavy weight.**
- **Before installing the hood hinge, apply anticorrosive agent onto the mounting surface of the vehicle body.**
- **After installing, perform hood fitting adjustment. Refer to DLK-830, "HOOD ASSEMBLY : Adjustment".**

HOOD ASSEMBLY : Adjustment

INFOID:0000000001098576

Portion				Standard	Right/left Clearance (MAX)
Hood – Front bumper	A – A	D	Clearance	5.2 – 9.2 mm (0.205 – 0.362 in)	2.0 mm (0.079 in)
		E	Surface height	- 0.2 – 3.8 mm (- 0.008 – 0.150 in)	2.0 mm (0.079 in)
Hood – Front combination lamp	B – B	F	Clearance	3.7 – 7.7 mm (0.140 – 0.303 in)	2.0 mm (0.079 in)
		G	Surface height	- 2.3 – 2.3 mm (- 0.091 – 0.091 in)	2.3 mm (0.091 in)
Hood – Front fender	C – C	H	Clearance	3.9 – 5.9 mm (0.154 – 0.232 in)	1.5 mm (0.059 in)
		I	Surface height	- 1.0 – 1.0 mm (- 0.039 – 0.039 in)	1.5 mm (0.059 in)

1. Check the clearance and the surface height between the hood and each part by visualy and touching. (Fitting standard dimension in the table below should be satisfied.)
2. In case any parts are out of specification, adjust them according to the procedures shown below.
3. Remove the hood lock and adjust the height by rotating the bumper rubber until the hood becomes 1 to1.5 mm (0.04 to 0.059 in) lower than the fender.
4. Temporarily tighten the hood lock, and position by engaging it with the hood striker. Check the lock and striker for looseness and adjust the clearance and evenness with the striker to satisfy the specification.
5. Adjust A and B shown in the figure to the following value with hood's own weight by dropping it from approximately. 200 mm (7.87 in) height or by pressing the hood lightly [approximately. 29 N (3 kg)].



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

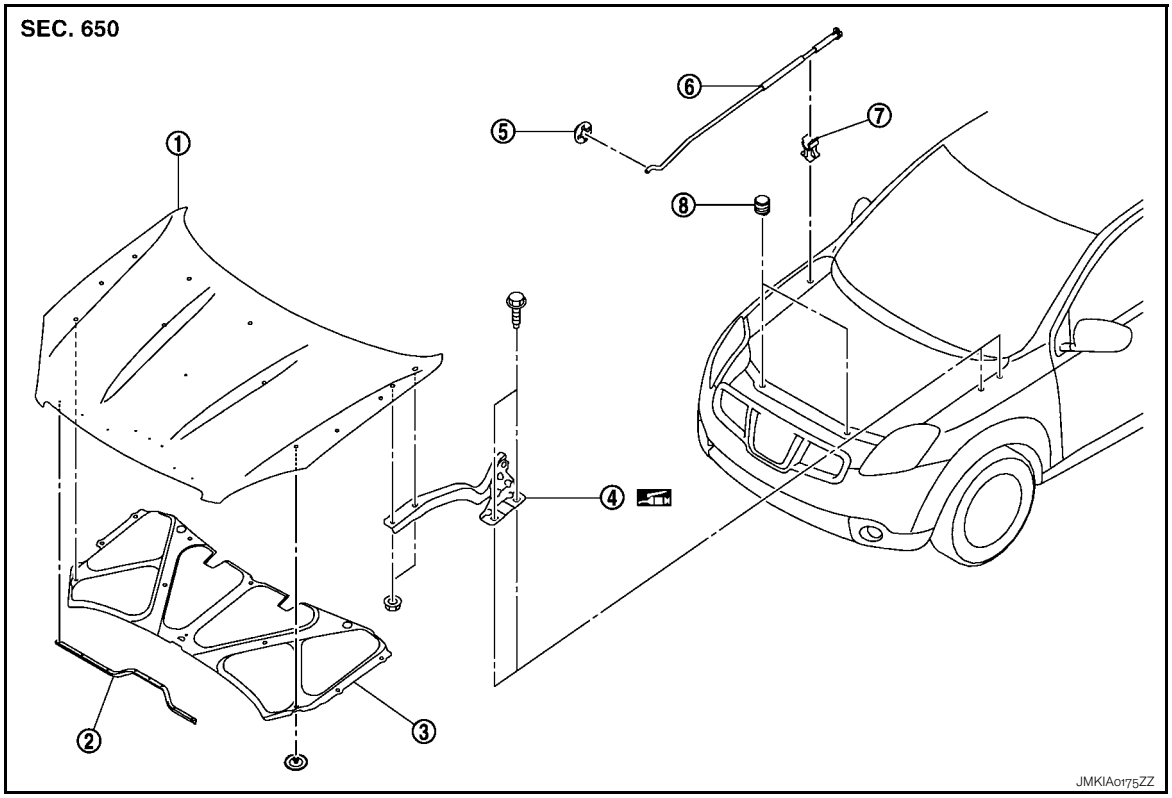
A : 20.0 mm (0.787 in)
B : 6.8 mm (0.268 in)

6. After adjustment tighten lock bolts to the specified torque.

HOOD HINGE

HOOD HINGE : Exploded View

INFOID:0000000001098582



1. Hood assembly
2. Hood sealing rubber
3. Hood insulator
4. Hood hinge
5. Grommet
6. Hood support rod
7. Clamp
8. Hood bumper rubber

Refer to GI-4, "Components" for symbols in the figure.

HOOD HINGE : Removal and Installation

INFOID:0000000001098583

REMOVAL

1. Remove the hood assembly. Refer to DLK-829, "HOOD ASSEMBLY : Removal and Installation".
2. Remove the front fender. Refer to DLK-838, "Removal and Installation".
3. Remove the hood hinge mounting bolts, and then remove the hood hinge.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

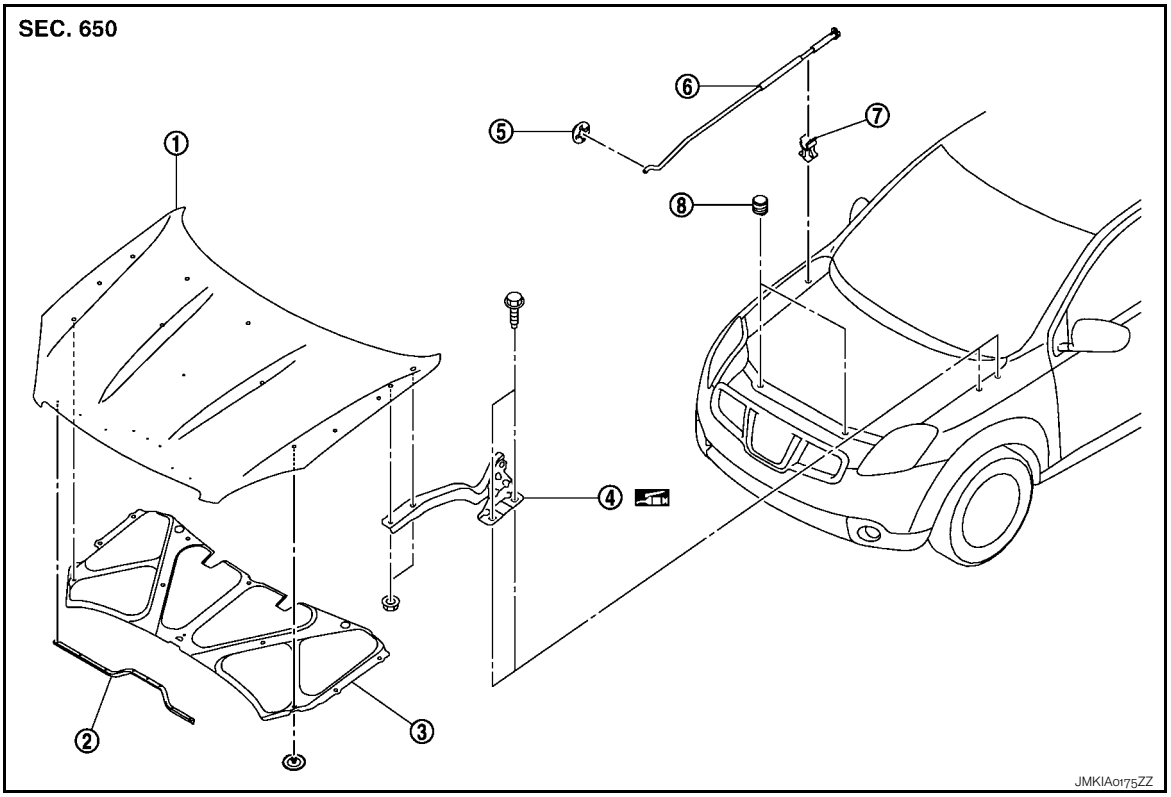
- **After installation, apply touch-up paint (the body color) onto the head of the hinge mounting bolts and nuts.**
- **Before installation of hood hinge, apply anticorrosive agent onto the mounting surface of the vehicle body.**
- **After installation, perform hood fitting adjustment. Refer to DLK-830, "HOOD ASSEMBLY : Adjustment".**

HOOD SUPPORT ROD

HOOD SUPPORT ROD : Exploded View

INFOID:0000000001098585

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1. Hood assembly
2. Hood sealing rubber
3. Hood insulator
4. Hood hinge
5. Grommet
6. Hood support rod
7. Clamp
8. Hood bumper rubber

Refer to GI-4, "Components" for symbols in the figure.

HOOD SUPPORT ROD : Removal and Installation

INFOID:0000000001098587

REMOVAL

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

   WARNING:
   Bodily injury may occur if no supporting rod is holding the hood open when removing the hood stay.
2. Remove the hood support rod from the grommet.

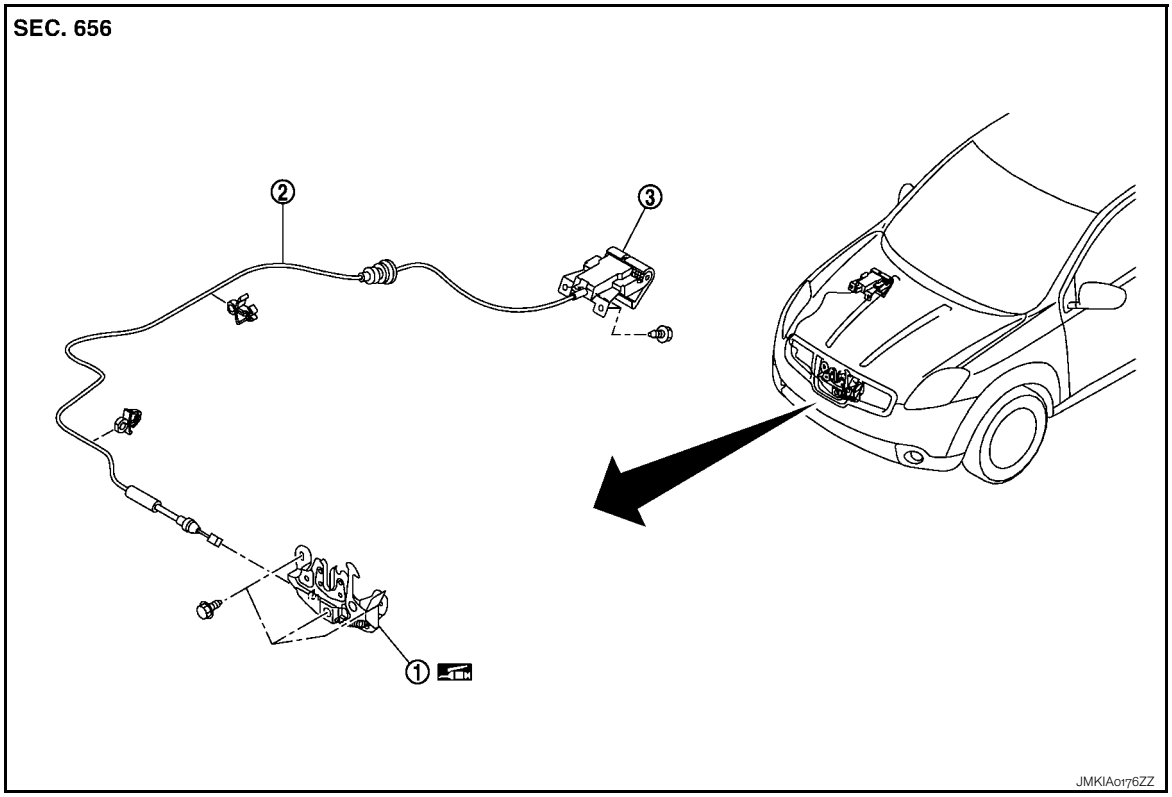
INSTALLATION

Install in the reverse order of removal.

HOOD LOCK CONTROL

HOOD LOCK CONTROL : Exploded View

INFOID:0000000001098589



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

Refer to GI-4, "Components" for symbols in the figure.

HOOD LOCK CONTROL : Removal and Installation

INFOID:0000000001098590

REMOVAL

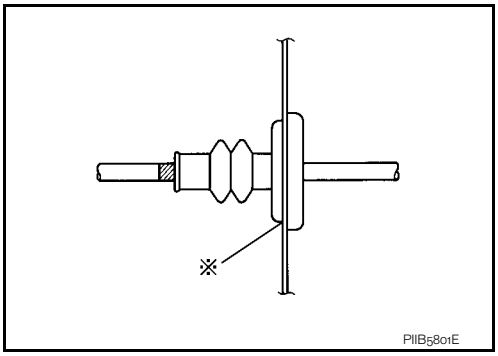
1. Remove the hood lock opener mounting bolts, and then remove the hood lock opener.
2. Remove the front bumper fascia. Refer to EXT-11, "Removal and Installation".
3. Remove the hood lock mounting bolts, and then remove the hood lock.
4. Remove the fender protector. Refer to EXT-22, "Removal and Installation".
5. Disconnect the hood lock cable from hood lock, and clip it from the hoodledge.
6. Remove the grommet on the dash lower panel, and pull the hood lock control cable toward the passenger compartment.
   CAUTION:
   While pulling, do not to damage (peeling) the outside of the hood lock control cable.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **Do not to bend the cable too much, keeping the radius 100 mm (3.94 in) or more.**
- **Check that the cable is not offset from the positioning grommet, and apply the sealant to the grommet (at *mark) properly.**



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- **Check that the hood lock control cable is properly engaged with the hood lock.**
- **After installation, perform hood fitting adjustment. Refer to DLK-830, "HOOD ASSEMBLY : Adjustment".**
- **After installation, perform the hood lock control inspection. Refer to DLK-834, "HOOD LOCK CONTROL : Inspection".**

HOOD LOCK CONTROL : Inspection

INFOID:0000000001098591

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

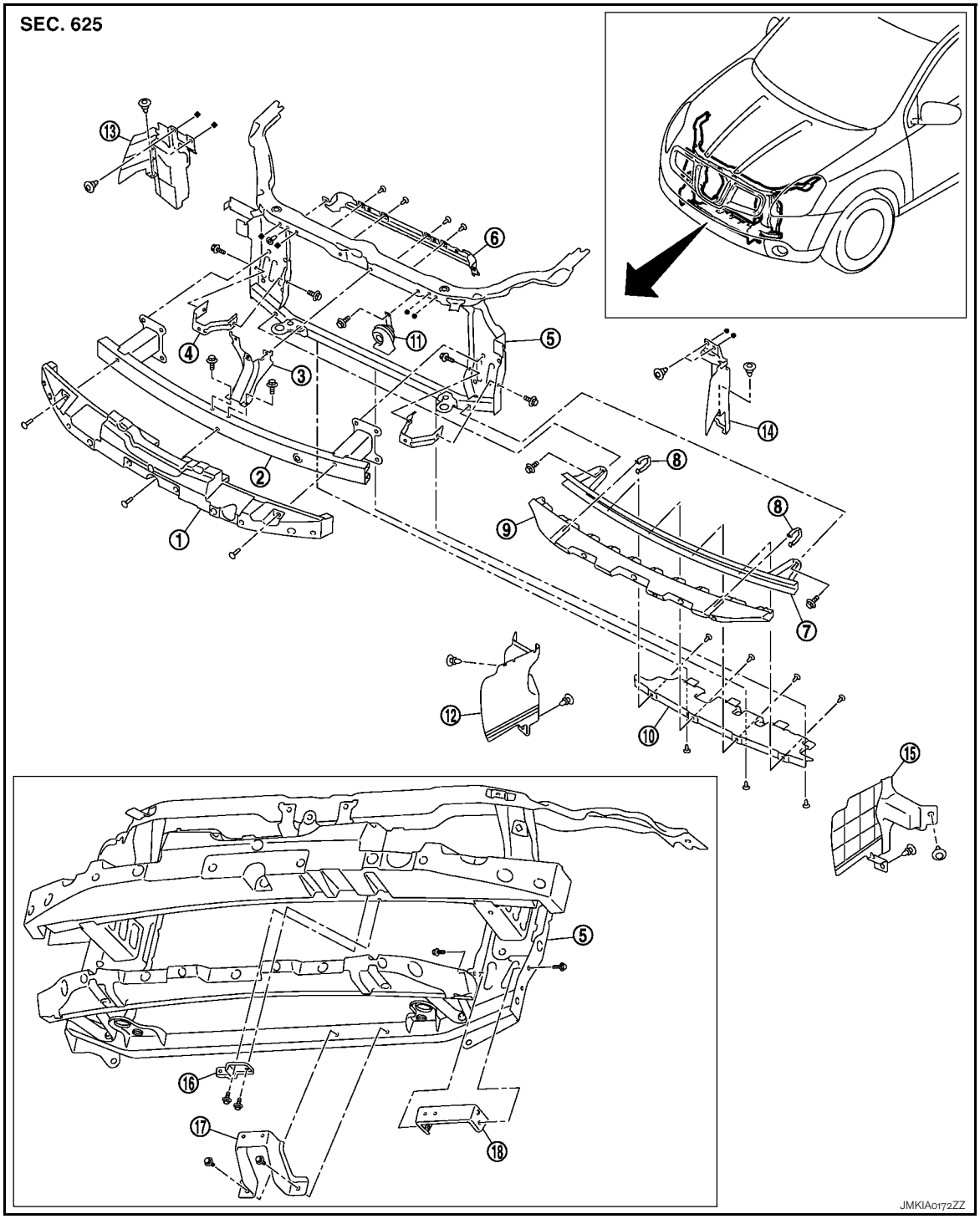
1. Check that the secondary latch is properly engaged with the secondary striker [6.8 mm (0.268 in) shown in the figure] by hood weight.
2. While operating the hood opener, carefully check that the front end of the hood is raised by approximately 20.0 mm (0.787 in). Also check that the hood opener returns to the original position.
3. Check that the hood opener operating is condition 49 N (5.0 kg) or below.
4. Install so that static closing face of hood is 94 – 490 N·m (9.6 – 50.0 kg-m).
   NOTE:
   - Exert vertical force on right side and left side of hood lock.
   - Do not press simultaneously both sides.
5. Check the hood lock lubrication condition. If necessary, apply body grease to the hood lock.

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RADIATOR CORE SUPPORT

Exploded View

INFOID:0000000001098596



1. Energy absorber
2. Bumper reinforcement
3. Hood lock support stay
4. Intercooler bracket (with K9K engine models)
5. Radiator core support assembly
6. Upper air dam
7. Apron bracket assembly
8. Fastener
9. Energy absorber lower
10. Front air guide lower
11. Horn assembly
12. Front air guide side lower RH
13. Front air guide side RH
14. Front air guide side LH
15. Front air guide side lower LH
16. Oil cooler bracket upper
17. Oil cooler bracket lower
18. Oil cooler bracket side

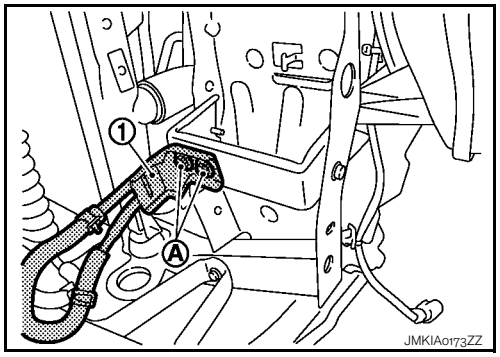
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Removal and Installation

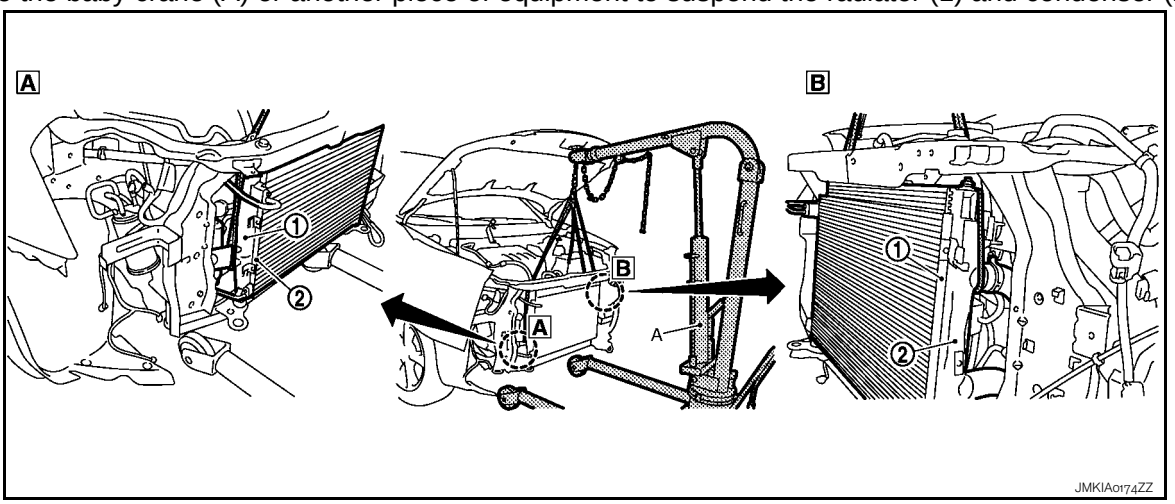
INFOID:0000000001098597

REMOVAL

1. Remove the front fillet molding. Refer to EXT-23, "Removal and Installation".
2. Remove the front bumper fascia and the energy absorber. Refer to EXT-11, "Removal and Installation".
3. Remove the energy absorber (upper and lower). Refer to EXT-11, "Removal and Installation".
4. Remove the air cleaner duct. Refer to EM-27, "Removal and Installation".
5. Remove the front combination lamp (LH/RH). Refer to EXL-171, "Removal and Installation".
6. Remove the bumper reinforcement. Refer to EXT-11, "Removal and Installation".
7. Disconnect the hood lock control cable clamp, and then remove the hood lock assembly. Refer to DLK-833, "HOOD LOCK CONTROL : Removal and Installation".
8. Remove the air guide mounting clips, and then remove the air guide (LH/RH).
9. Remove the hood lock stay mounting bolts, and then remove the hood lock stay.
10. Remove the hood switch (with theft warning systems). Refer to SEC-SEC-156, "Removal and Installation".
11. Remove the crush zone sensor. Refer to SR-14, "Removal and Installation".
12. Remove the horn. Refer to HRN-5, "Removal and Installation".
13. Remove the ambient sensor. Refer to VTL-22, "Removal and Installation".
14. Remove the radiator mounting bracket (LH/RH). Refer to CO-13, "Removal and Installation".
15. Remove the Intelligent Key warning buzzer (with Intelligent Key systems). Refer to DLK-277, "Removal and Installation".
16. Remove the charge air cooler assembly (with K9K engine models). Refer to EM-266, "Removal and Installation".
17. Remove the A/T fluid cooler assembly and the A/T fluid cooler bracket (with A/T models only). Refer to TM-348, "FLUID COOLER : Removal and Installation".
18. Remove the A/T fluid cooler pipe bracket (1) mounting bolts (A) (with A/T models only).



19. Remove the washer tank. Refer to WW-99, "Removal and Installation".
20. Use the baby crane (A) or another piece of equipment to suspend the radiator (1) and condenser (2).



21. Remove the radiator core support assembly mounting bolts, and draw out the radiator core support assembly to the front of the vehicle.
22. Remove the radiator core support assembly.
23. Remove the following parts after removing the radiator core support assembly.
    - Inlet tube bracket (with K9K engine models)
    - Intercooler bracket (with K9K engine models)
    - Apron reinforcement bracket

INSTALLATION

Install in the reverse order of removal.

CAUTION:

After installation, refill the following parts.

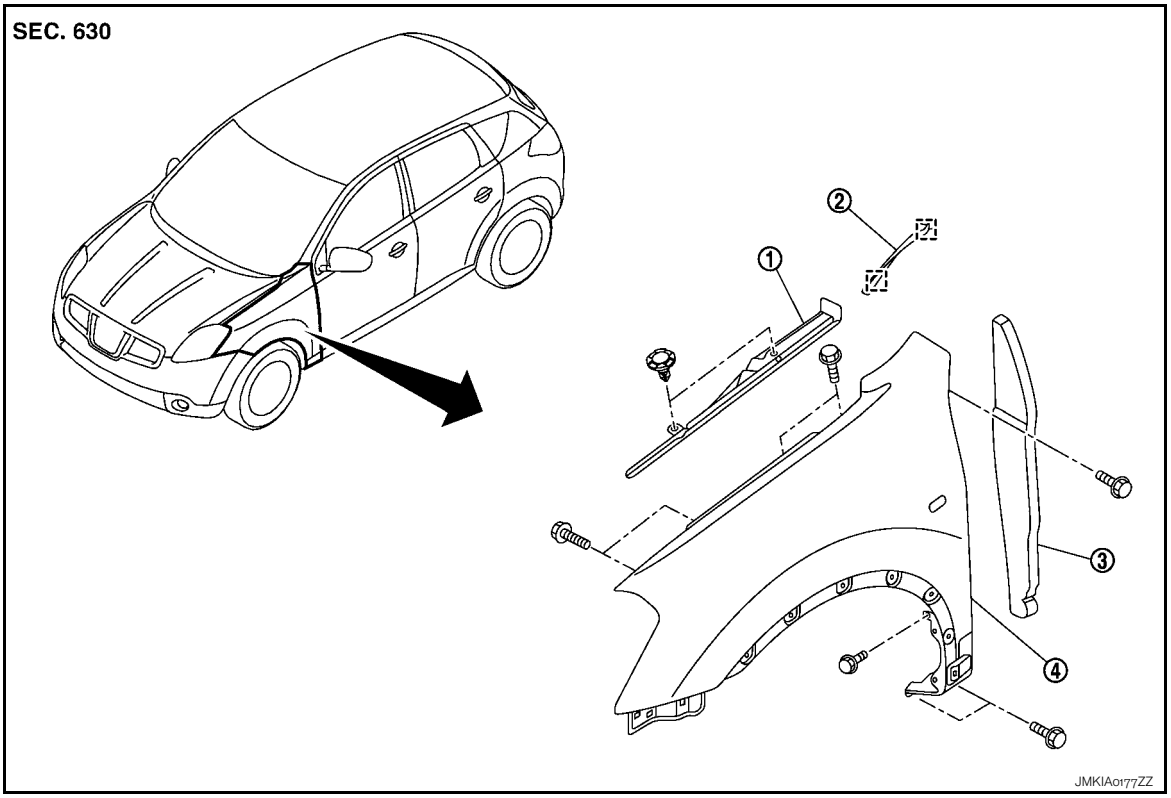
- **A/T fluid. Refer to TM-315, "Changing".**
- **Engine coolant. Refer to CO-9, "Refilling".**

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FRONT FENDER

Exploded View

INFOID:0000000001098598



1. Hood seal assembly (side)
2. Front fender finisher
3. Front fender seal
4. Front fender

: Metal clip

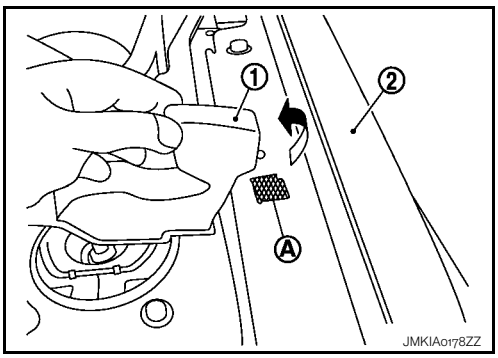
Removal and Installation

INFOID:0000000001098599

REMOVAL

1. Remove the outer fender protector. Refer to EXT-22, "Removal and Installation".
2. Remove the inner fender protector. Refer to EXT-22, "Removal and Installation".
3. Remove the side turn signal lamp. Refer to EXL-178, "Removal and Installation".
4. Remove the front bumper fascia. Refer to EXT-11, "Removal and Installation".
5. Remove the front combination lamp.
   - XENON TYPE: EXL-171, "Removal and Installation".
   - HALOGEN TYPE: EXL-327, "Removal and Installation".
6. Remove the mounting clips and remove hoodledge cover.
7. Remove the center mudguard. Refer to EXT-28, "Removal and Installation".

8. Peel away the double-faced adhesive tape (A) of the front fender seal (1) from the front fender (2).



9. Remove the mounting bolts and remove the front fender.
   CAUTION:
   Use a shop cloth to protect the body from being damaged during removal.
10. Remove the following parts after removing the front fender.
    - Front fender seal.
    - Bumper side bracket. Refer to EXT-11, "Exploded View".

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **Replace the double-faced adhesive tape on the back of the cowl top cover seal with new tape.**
- **Do not wash the vehicle within 24 hours after installation so as to keep adhesive.**
- **After installation, apply the touch-up paint (the body color) onto the head of the front fender mounting bolts.**
- **After installation, check the front fender adjustment. Refer to DLK-830, "HOOD ASSEMBLY : Adjustment" and DLK-842, "DOOR ASSEMBLY : Adjustment".**

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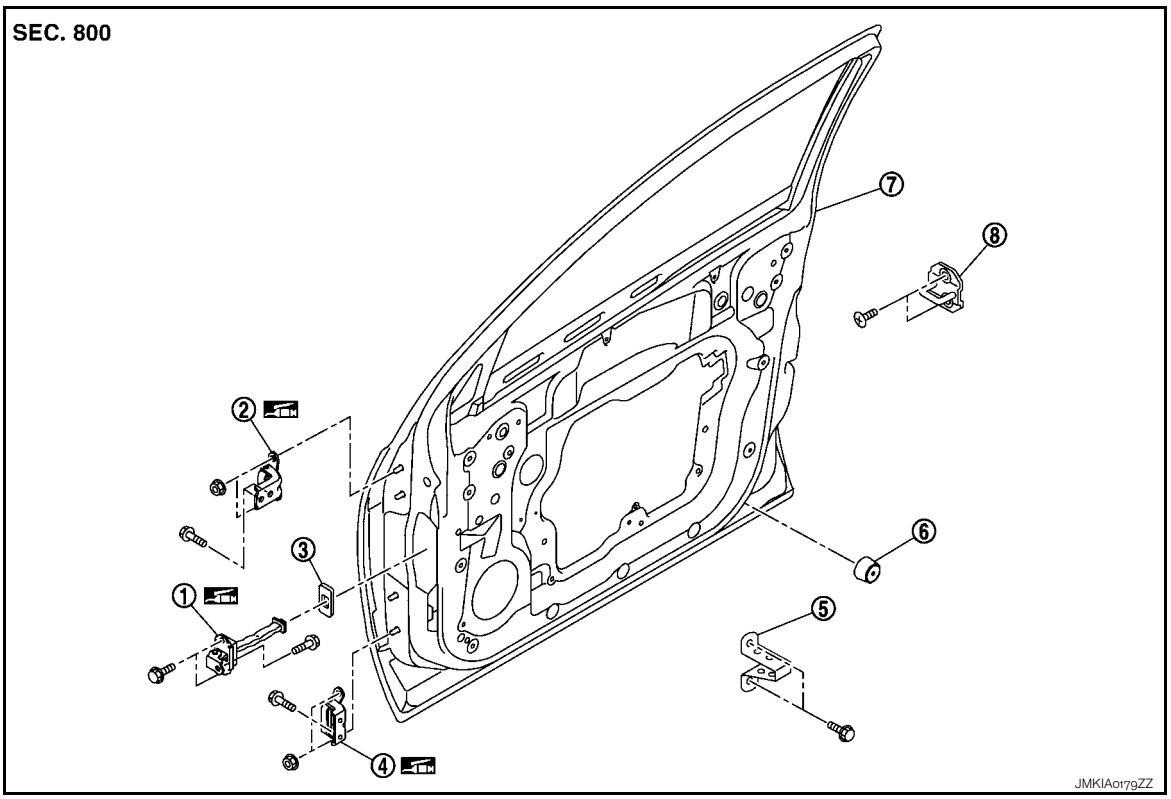
FRONT DOOR

DOOR ASSEMBLY

DOOR ASSEMBLY : Exploded View

INFOID:0000000001098600

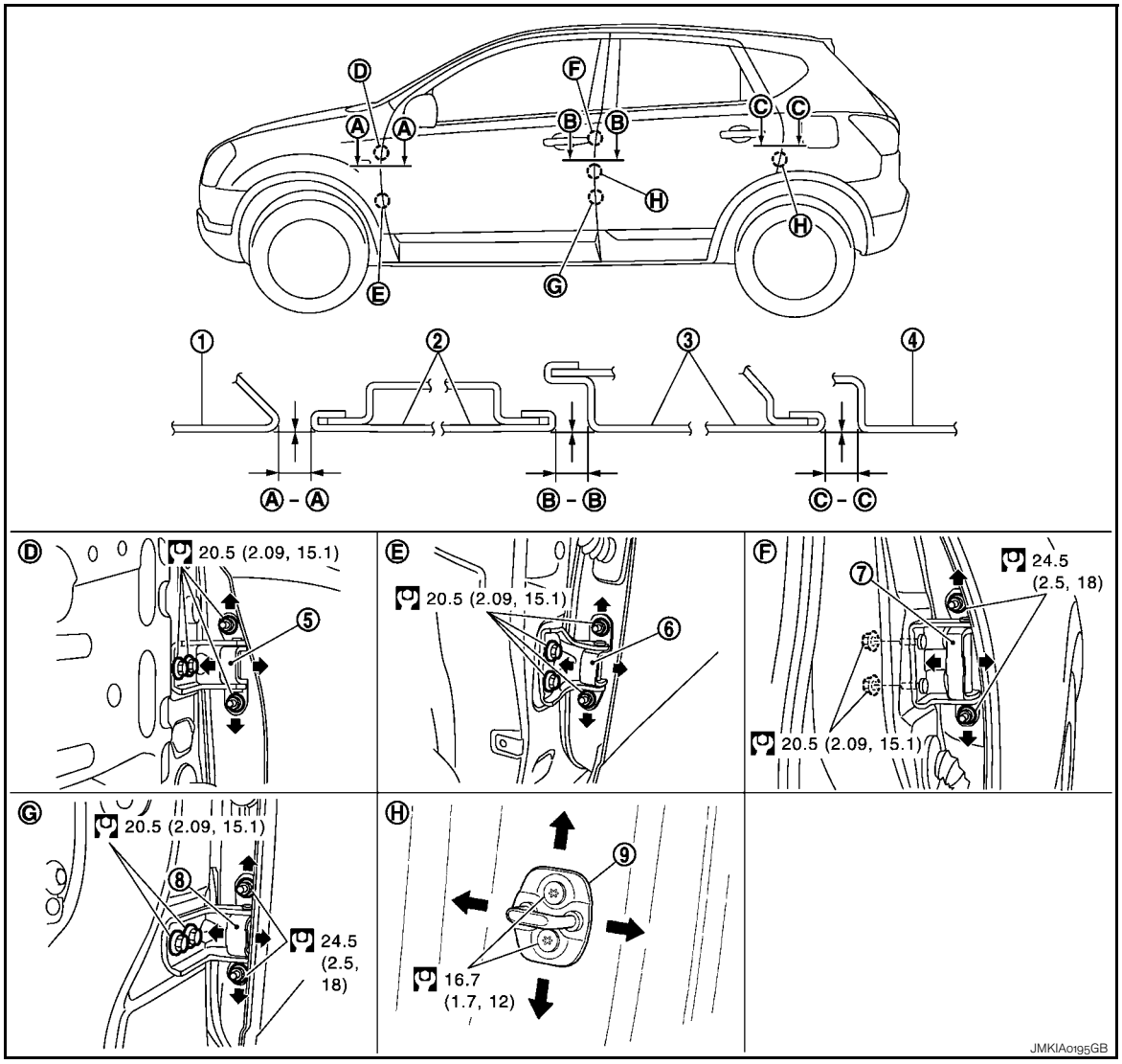
REMOVAL



1. Door check link
2. Door hinge (upper)
3. Door check link cover
4. Door hinge (lower)
5. Bracket
6. Bumper rubber
7. Front door panel
8. Door striker

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT



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

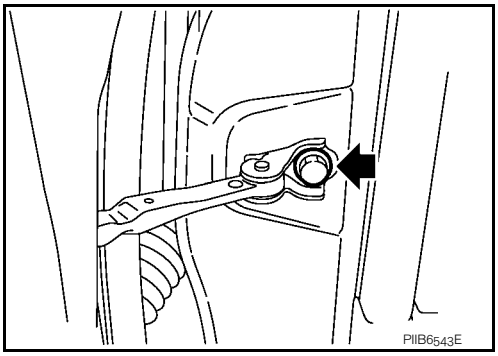
Refer to GI-4, "Components" for symbols in the figure.

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000001098601

REMOVAL

1. Remove the mounting bolts of the door check link on the vehicle.



2. Remove the front door harness grommet, and then pull out the harness from the vehicle.

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3. Disconnect the front door harness connector.
4. Remove the door hinge mounting nuts (door side), and then remove the door assembly.
   CAUTION:
   - **When removing and installing the front door assembly, support the door with a jack and cloth to protect the door and body.**
   - **Perform work with 2 workers, because of its heavy weight.**

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **When removing and installing the front door assembly, perform the fitting adjustment. Refer to DLK-842, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **Check the front door open/close operation after installation.**

DOOR ASSEMBLY : Adjustment

INFOID:0000000001098602

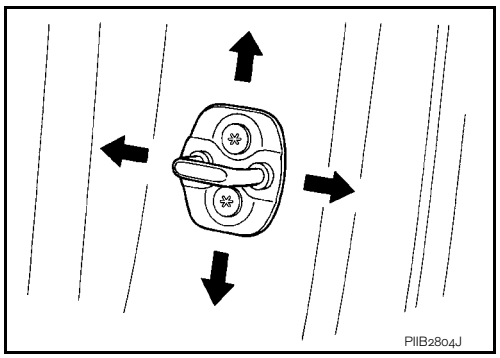
CLEARANCE, SURFACE HEIGHT AND SURFACE MISMATCH ADJUSTMENT

Portion		Clearance	Surface height
Front fender – Front door	A – A	3.5 – 5.0 mm (0.138 – 0.197 in)	- 1.5 – 0.5 mm (- 0.059 – 0.020 in)
Front door – Rear door	B – B	3.5 – 5.0 mm (0.138 – 0.197 in)	- 1.5 – 0.5 mm (- 0.059 – 0.020 in)

1. Check the clearance and surface height and surface mismatch between the front door and each part visually and by touching. (Fitting standard dimension in the table below shall be satisfied.)
2. In case any parts are out of specification, adjust them according to the procedures shown below.
3. Remove the front fender. Refer to refer to DLK-838, "Removal and Installation".
4. Loosen the door hinge mounting nuts on door side.
5. Adjust the surface height and surface mismatch of the front door according to the fitting standard dimension.
6. Temporarily tighten the hinge mounting nuts on door side.
7. Loosen the door hinge mounting bolts on body side.
8. Raise the front door at rear end to adjust clearance of the front door according to the fitting standard dimension.
9. After adjustment tighten bolts and nuts to the specified torque.
10. Install the front fender. Refer to refer to DLK-838, "Removal and Installation".
    CAUTION:
    After installation, check the front fender adjustment. Refer to DLK-225, "HOOD ASSEMBLY : Adjustment".

DOOR STRIKER ADJUSTMENT

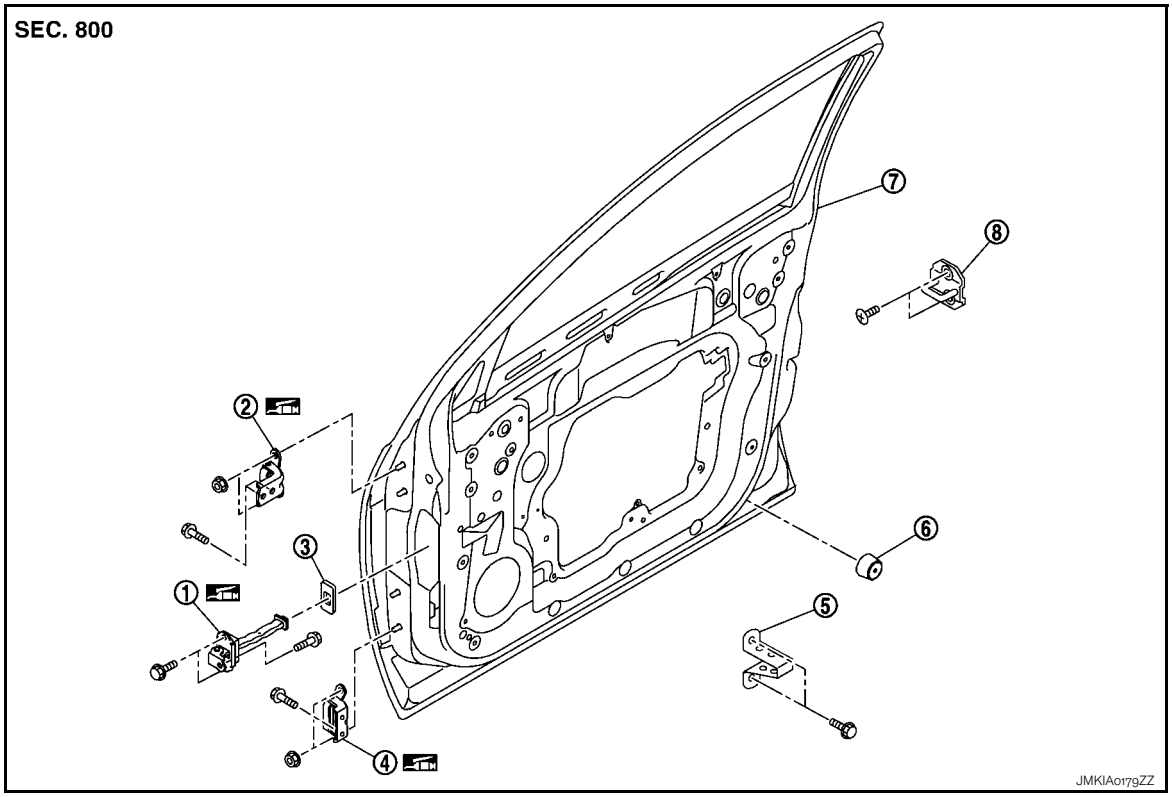
Adjust the door striker so that it becomes parallel with the lock insertion direction.



DOOR STRIKER

DOOR STRIKER : Exploded View

INFOID:0000000001098605



1. Door check link
2. Door hinge (upper)
3. Door check link cover
4. Door hinge (lower)
5. Bracket
6. Bumper rubber
7. Front door panel
8. Door striker

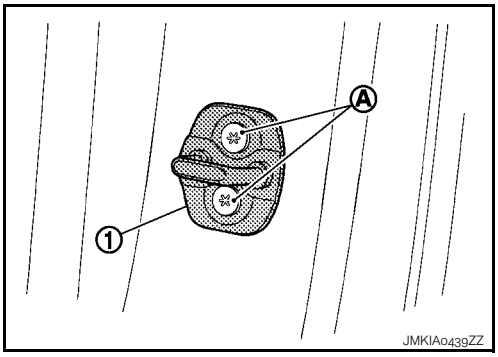
Refer to GI-4, "Components" for symbols in the figure.

DOOR STRIKER : Removal and Installation

INFOID:0000000001098606

REMOVAL

Remove the mounting bolts (A), and then remove the door striker (1).



INSTALLATION

Install in the reverse order of removal.

CAUTION:

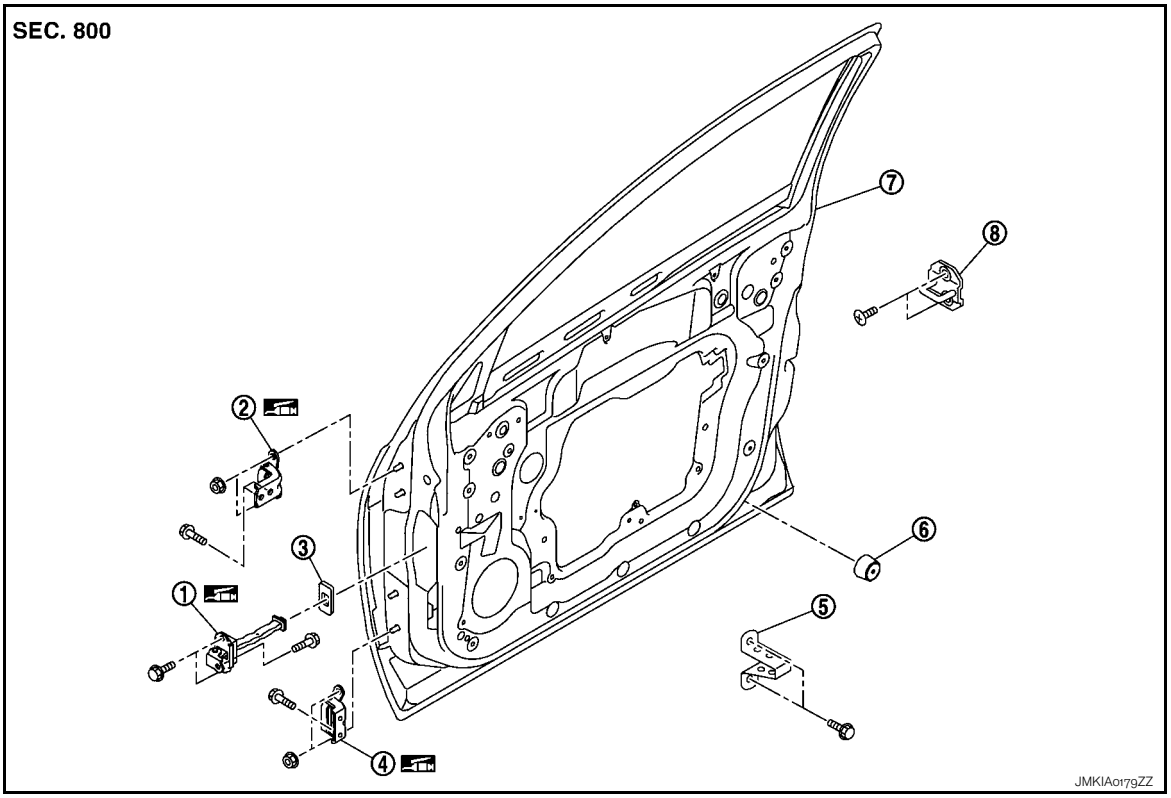
- **Check the front door open/close operation after installation.**
- **When removing and installing the door striker, be sure to perform the fitting adjustment. Refer to DLK-842, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

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DOOR HINGE : Exploded View

INFOID:0000000001098609



1. Door check link
2. Door hinge (upper)
3. Door check link cover
4. Door hinge (lower)
5. Bracket
6. Bumper rubber
7. Front door panel
8. Door striker

Refer to GI-4, "Components" for symbols in the figure.

DOOR HINGE : Removal and Installation

INFOID:0000000001098611

REMOVAL

1. Remove the front door assembly. Refer to DLK-841, "DOOR ASSEMBLY : Removal and Installation".
2. Remove the door hinge mounting bolts, and then remove the front door hinge.

INSTALLATION

Install in the reverse order of removal.

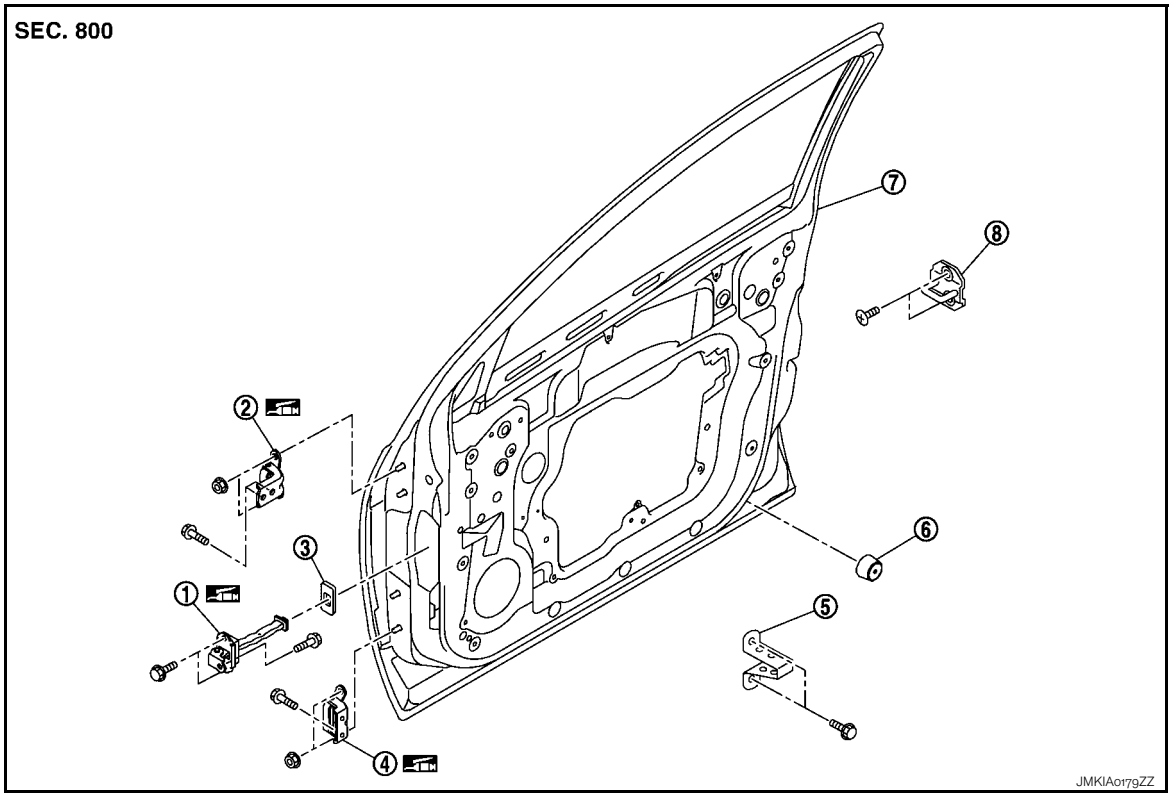
CAUTION:

- **When removing and installing the front door assembly, perform the fitting adjustment. Refer to DLK-842, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **Check the front door open/close operation after installation.**

DOOR CHECK LINK

DOOR CHECK LINK : Exploded View

INFOID:0000000001098614



1. Door check link
2. Door hinge (upper)
3. Door check link cover
4. Door hinge (lower)
5. Bracket
6. Bumper rubber
7. Front door panel
8. Door striker

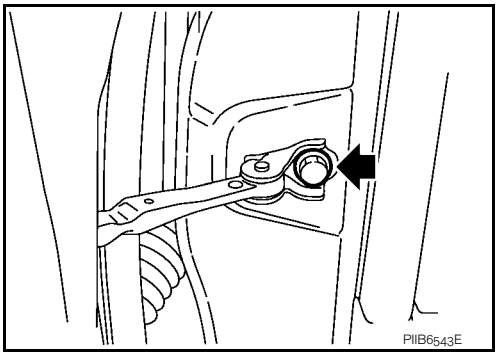
Refer to GI-4, "Components" for symbols in the figure.

DOOR CHECK LINK : Removal and Installation

INFOID:0000000001098616

REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the front door speaker. Refer to AV-34, "Removal and Installation".
3. Remove the mounting bolts of the door check link on the vehicle.



4. Remove the door check link cover, and then remove the door check link mounting bolts.
5. Remove the door check link.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check the front door open/close operation after installation.

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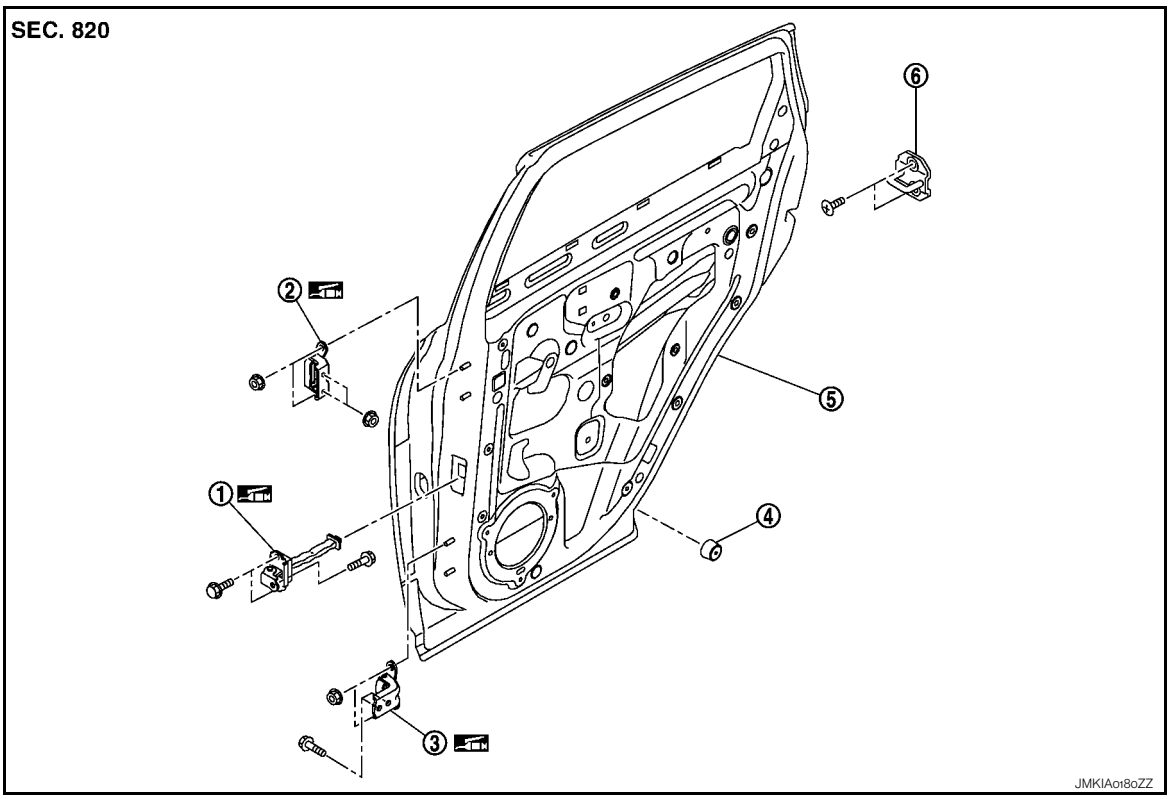
REAR DOOR

DOOR ASSEMBLY

DOOR ASSEMBLY : Exploded View

INFOID:0000000001098618

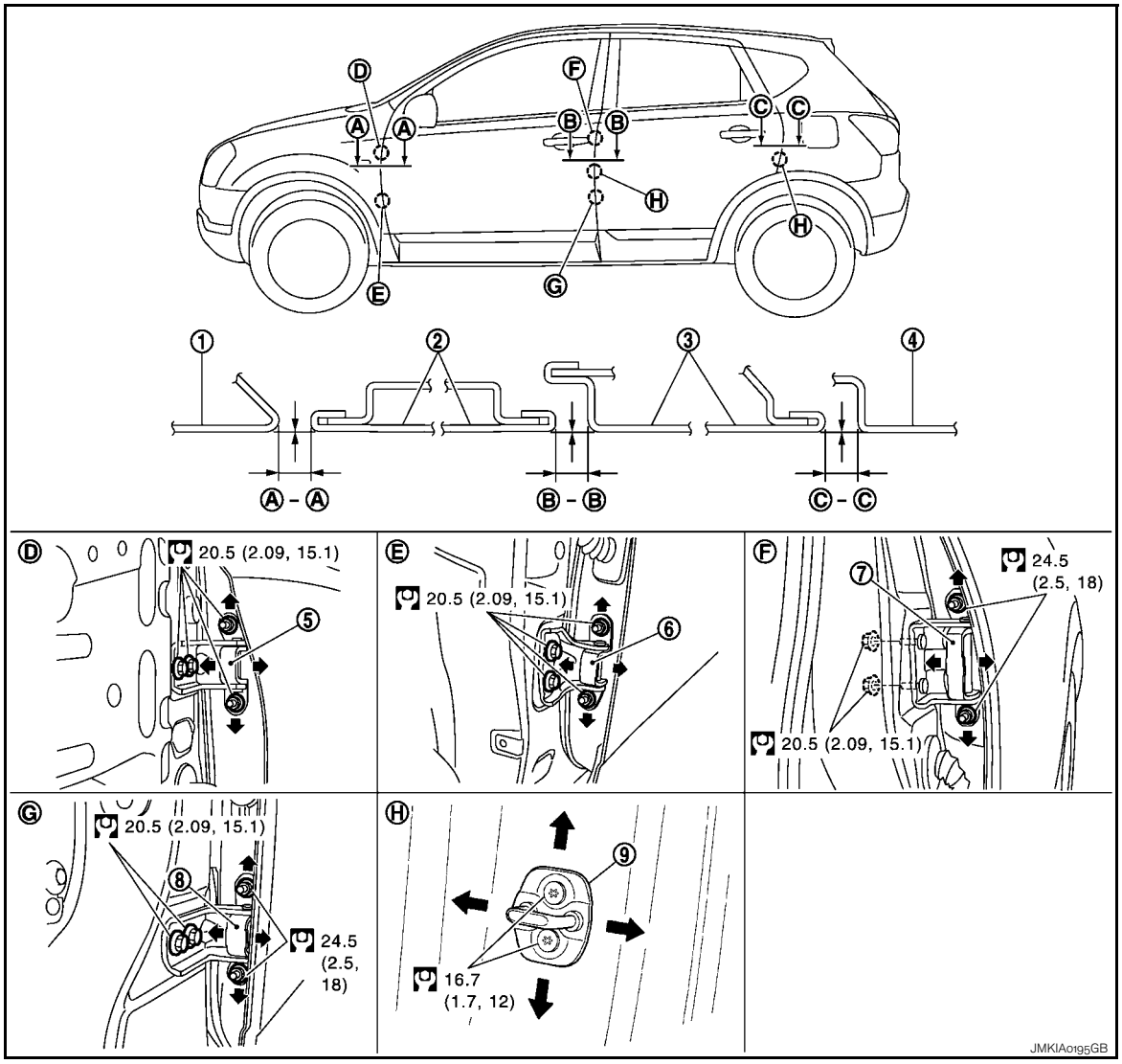
REMOVAL



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

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT



1. Front fender
2. Front door outer
3. Rear door outer
4. Rear fender
5. Front door hinge (upper)
6. Front door hinge (lower)
7. Rear door hinge (upper)
8. Rear door hinge (lower)
9. Striker

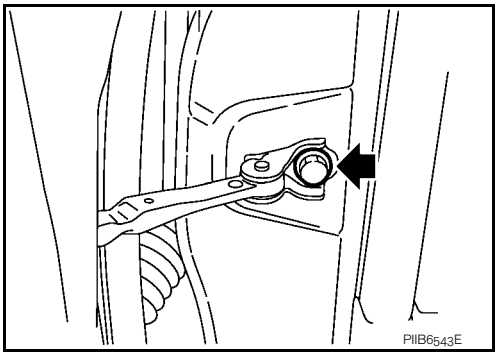
Refer to GI-4, "Components" for symbols in the figure.

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000001098619

REMOVAL

1. Remove the mounting bolts of the door check link on the vehicle.



2. Remove the rear door harness grommet, and then pull out the door harness from the vehicle.

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3. Disconnect the rear door harness connector.
4. Remove the door hinge mounting nuts (door side), and then remove the rear door assembly.

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

INSTALLATION

Install in the reverse order of removal.

CAUTION:
- **When removing and installing the rear door assembly, perform the fitting adjustment. Refer to DLK-848, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **Check the rear door open/close operation after installation.**
- **Check the rear door lock/unlock operation after installation.**

DOOR ASSEMBLY : Adjustment

INFOID:0000000001098621

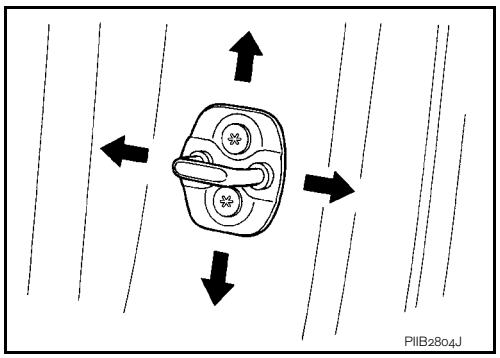
CLEARANCE, SURFACE HEIGHT AND SURFACE MISMATCH ADJUSTMENT

Portion		Clearance	Surface height
Front door – Rear door	B – B	3.5 – 5.0 mm (0.138 – 0.197 in)	- 1.5 – 0.5 mm (- 0.059 – 0.020 in)
Rear door – Rear fender	C – C	3.5 – 5.0 mm (0.138 – 0.197 in)	- 1.5 – 0.5 mm (- 0.059 – 0.020 in)

1. Check the clearance and surface height and surface mismatch between the rear door and each part visually and by touching. (Fitting standard dimension in the table below shall be satisfied.)
2. In case any parts are out of specification, adjust them according to the procedures shown below.
3. Remove the center pillar upper garnish and center pillar lower garnish. Refer to INT-14, "Removal and Installation".
4. Loosen the door hinge mounting nuts on door side.
5. Adjust the surface height and surface mismatch of the rear door according to the fitting standard dimension.
6. Temporarily tighten the hinge mounting nuts on door side.
7. Loosen the door hinge mounting nuts and bolts on body side.
8. Raise the rear door at rear end to adjust clearance of the rear door according to the fitting standard dimension.
9. After adjustment tighten bolts and nuts to the specified torque.
10. Install the center pillar upper garnish and center pillar lower garnish. Refer to INT-14, "Removal and Installation".

DOOR STRIKER ADJUSTMENT

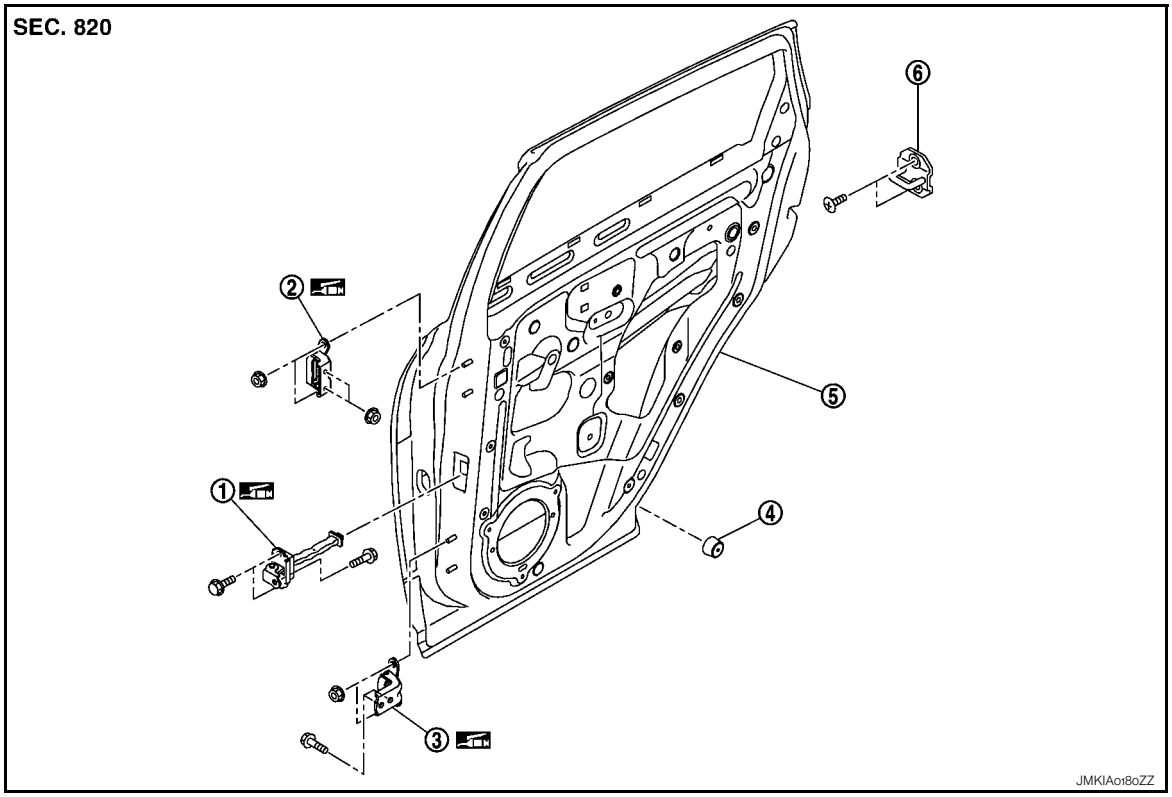
Adjust the door striker so that it becomes parallel with the lock insertion direction.



DOOR STRIKER

DOOR STRIKER : Exploded View

INFOID:0000000001098630



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

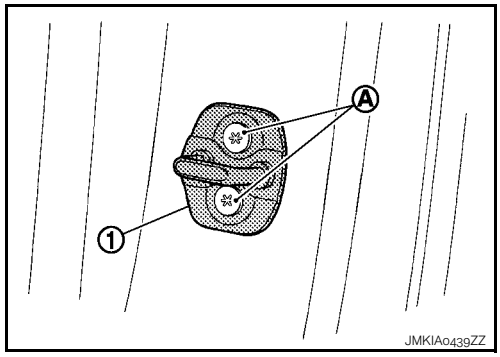
Refer to GI-4, "Components" for symbols in the figure.

DOOR STRIKER : Removal and Installation

INFOID:0000000001098631

REMOVAL

Remove the mounting bolts (A), and then remove the door striker (1).



INSTALLATION

Install in the reverse order of removal.

CAUTION:

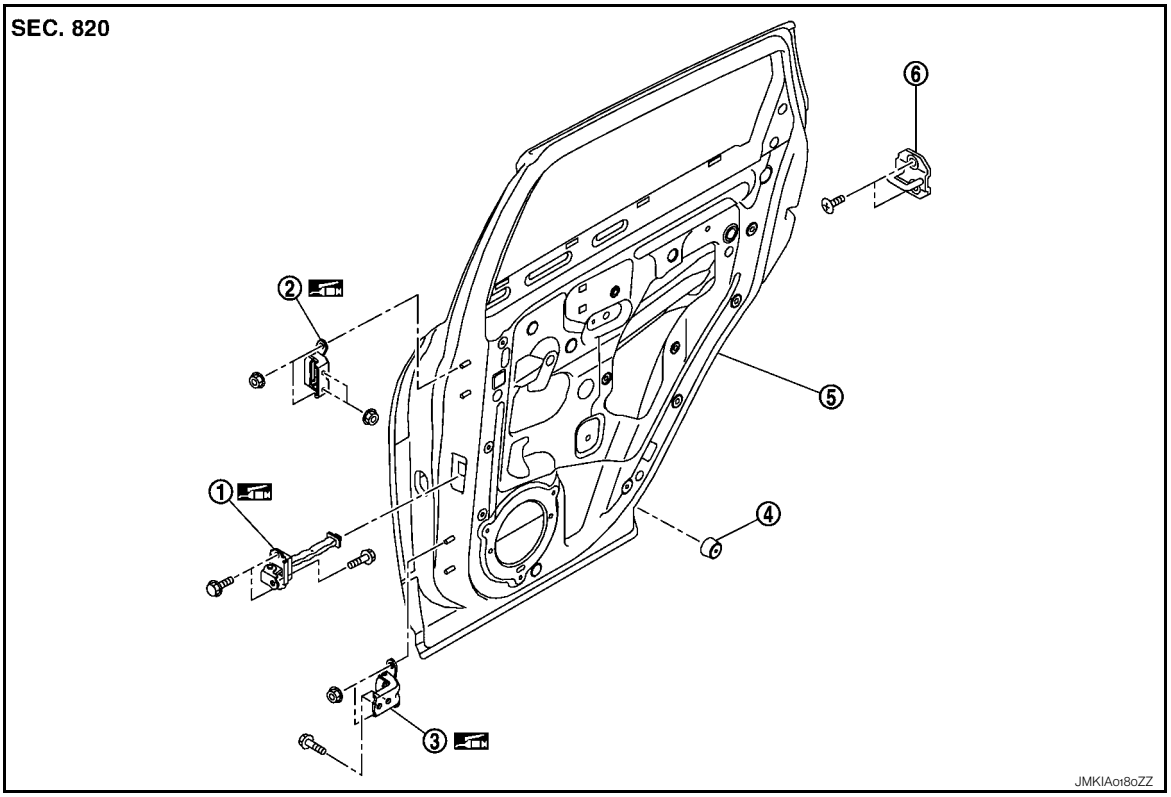
- **Check the rear door open/close operation after installation.**
- **When removing and installing the door striker, be sure to perform the fitting adjustment. Refer to DLK-848, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Exploded View

INFOID:0000000001098634

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR HINGE : Removal and Installation

INFOID:0000000001098637

REMOVAL

1. Remove the center pillar lower garnish and the center pillar upper garnish. Refer to INT-14, "Removal and Installation".
2. Remove the rear door assembly. Refer to DLK-242, "DOOR ASSEMBLY : Removal and Installation".
3. Remove the rear door hinge mounting bolts and nuts (body side), and then remove the door hinge.

INSTALLATION

Install in the reverse order of removal.

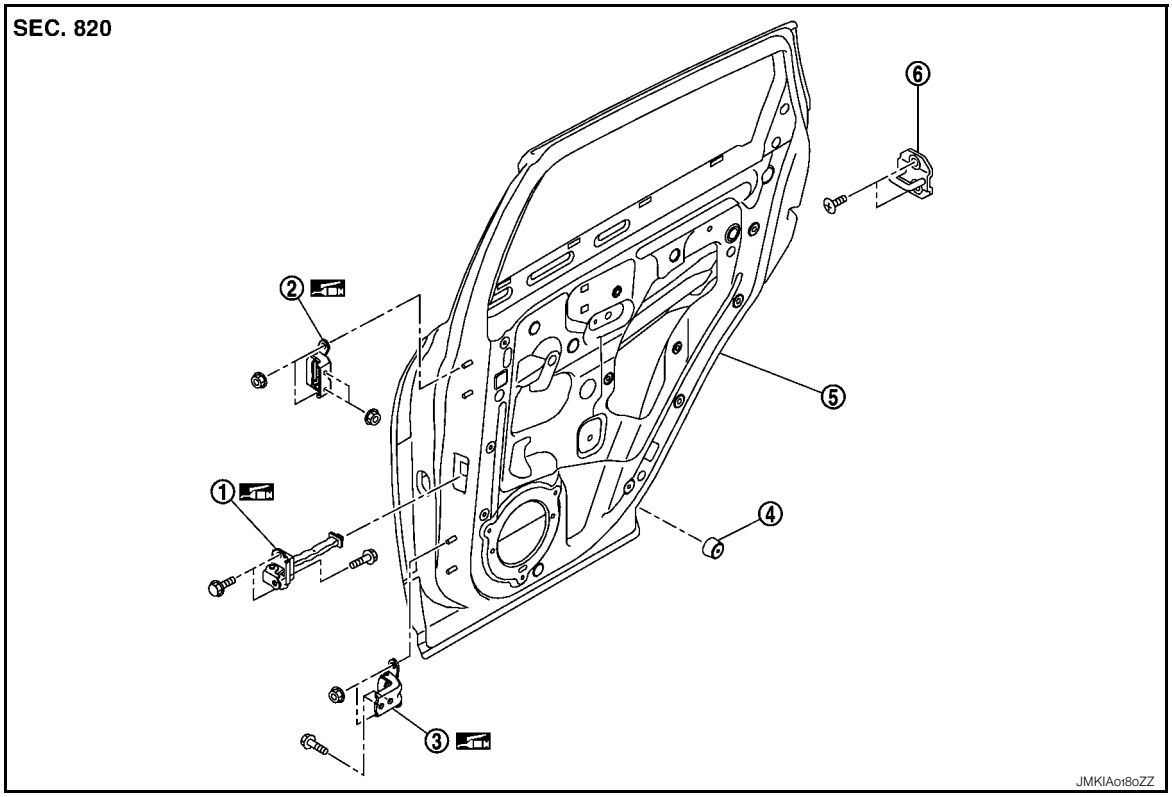
CAUTION:

- **When removing and installing the rear door assembly, perform the fitting adjustment. Refer to DLK-848, "DOOR ASSEMBLY : Adjustment".**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **After installing, apply the touch-up paint (the body color) onto the head of the hinge mounting nuts.**
- **Check the rear door open/close operation after installation.**

DOOR CHECK LINK

DOOR CHECK LINK : Exploded View

INFOID:0000000001098639



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

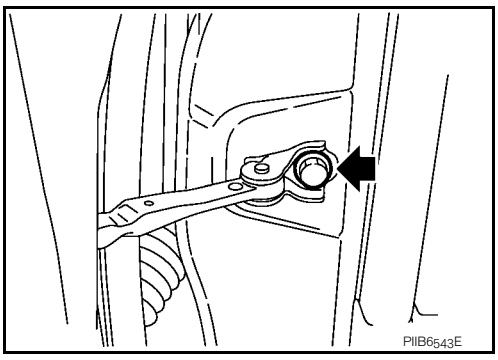
Refer to GI-4, "Components" for symbols in the figure.

DOOR CHECK LINK : Removal and Installation

INFOID:0000000001098641

REMOVAL

1. Remove the rear door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the rear door sealing screen.
3. Remove the mounting bolts of the check link on the vehicle.



4. Remove the door check link cover, and then remove the door check link mounting bolts.
5. Remove the door check link.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check front door open/close operation after installation.

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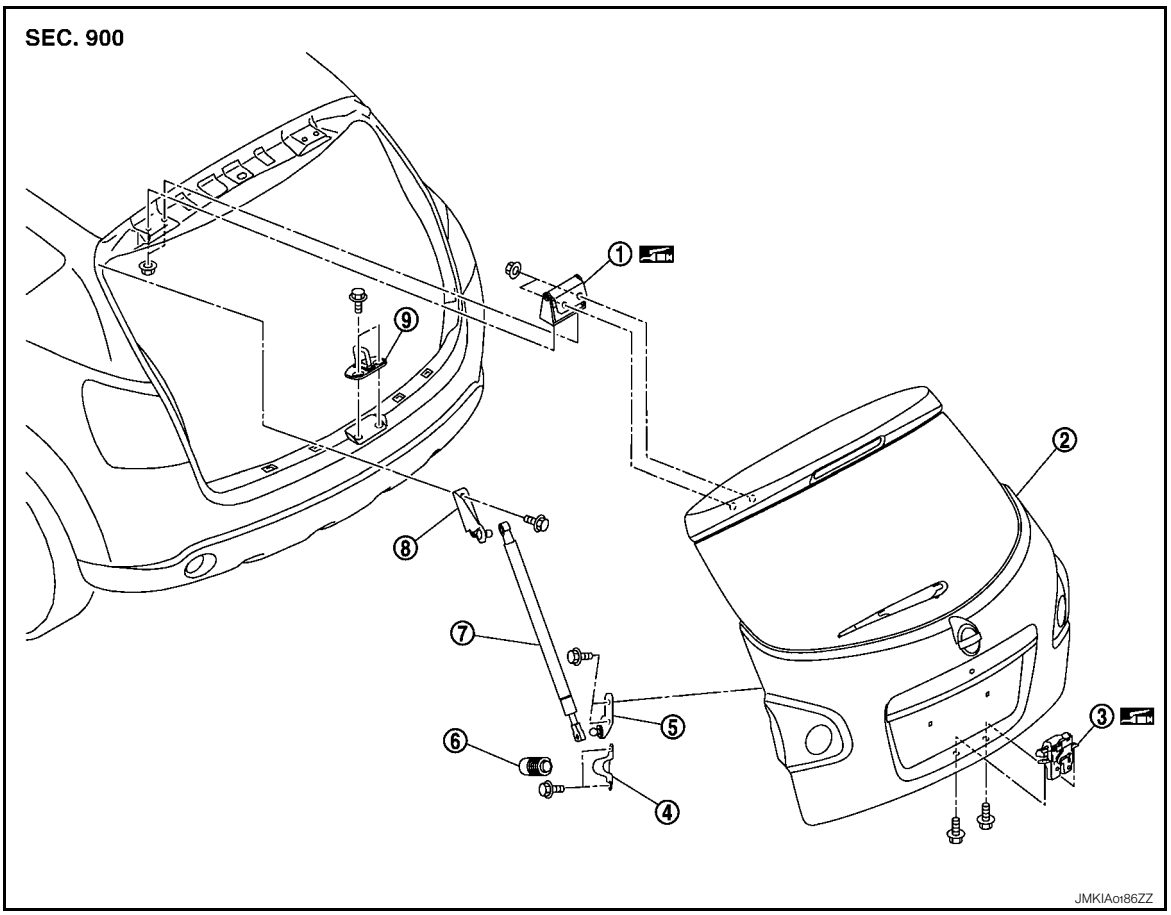
BACK DOOR

BACK DOOR ASSEMBLY

BACK DOOR ASSEMBLY : Exploded View

INFOID:0000000001098646

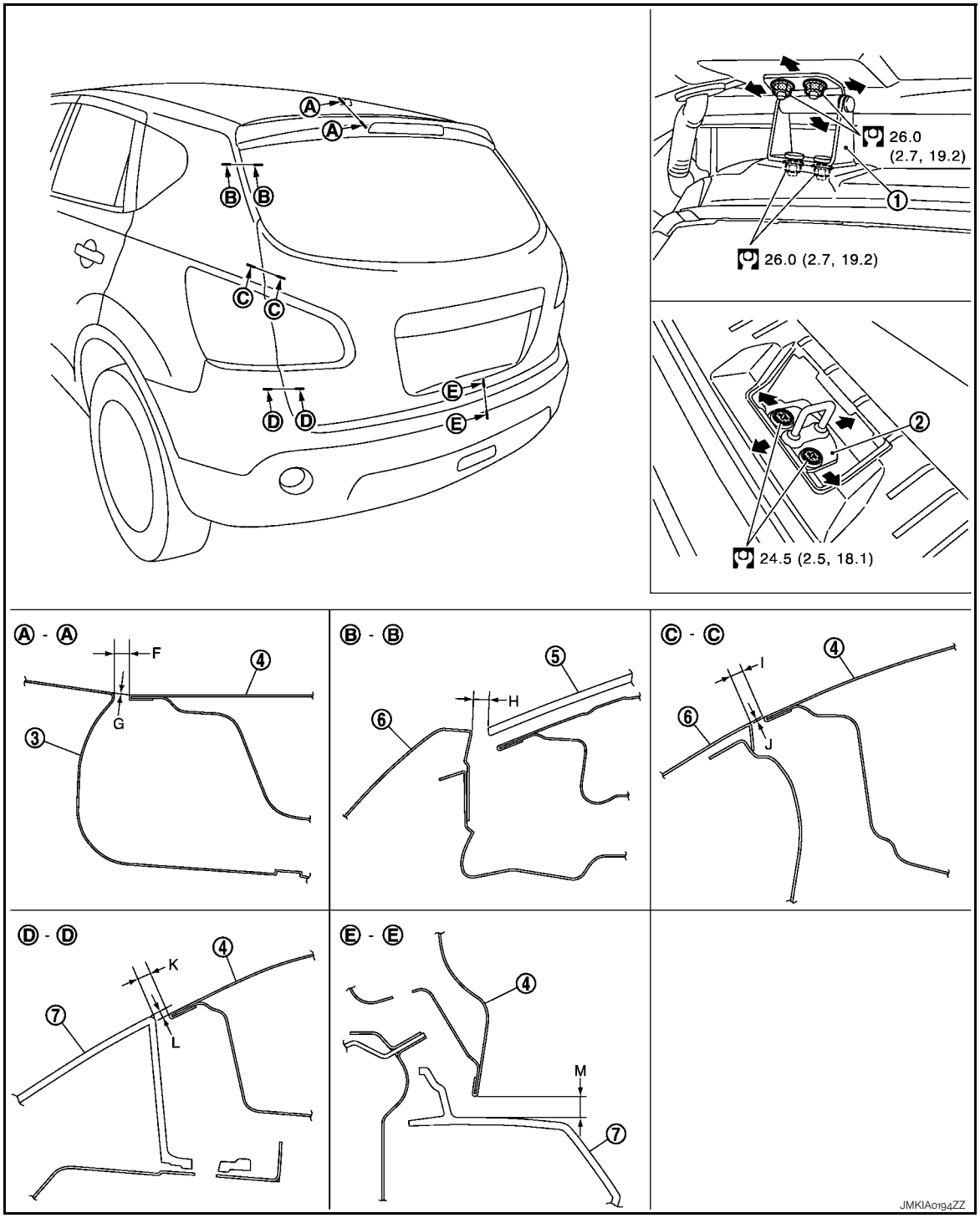
REMOVAL



1. Back door hinge
2. Back door assembly
3. Back door lock assembly
4. Bumper rubber bracket
5. Back door stay bracket (lower)
6. Bumper rubber
7. Back door stay
8. Back door stay bracket (upper)
9. Back door striker

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT



1. Back door hinge
2. Back door striker
3. Roof panel
4. Back door outer
5. Back door glass
6. Body side outer
7. Rear bumper fascia

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR ASSEMBLY : Removal and Installation

INFOID:0000000001098647

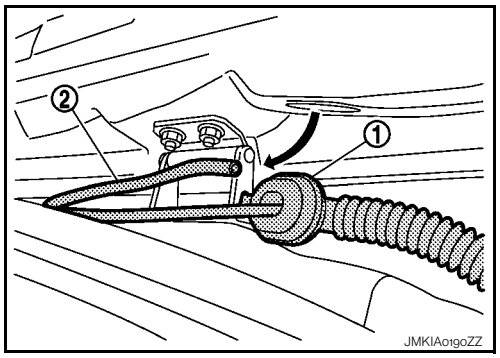
REMOVAL

1. Remove the back door finisher inner. Refer to INT-26, "Removal and Installation".
2. Remove the back door window glass. Refer to GW-17, "Removal and Installation".
   NOTE:

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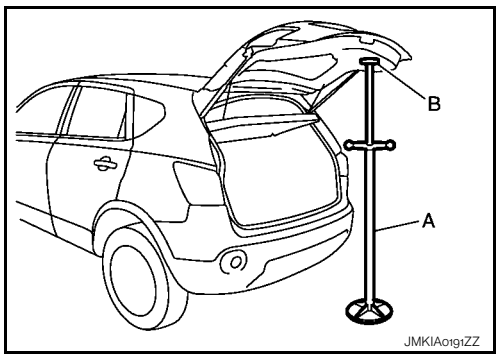
It is necessary to remove back door window glass in order to remove harness, because harness connector interferes with back door window glass pin.

3. Disconnect the connectors in the back door, and then remove the grommet, and pull out hte harness.
4. Remove the parcel shelf. Refer to INT-24, "Removal and Installation".
5. Remove the high-mounted stop lamp. Refer to EXL-183, "Removal and Installation".
6. Remove the grommet (1), and then pull out the washer tube (2) .

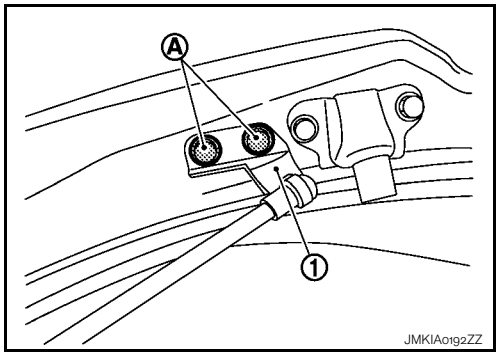


7. Pull the harness out of the back door.
8. Support the back door lock with the proper material to prevent it from falling.

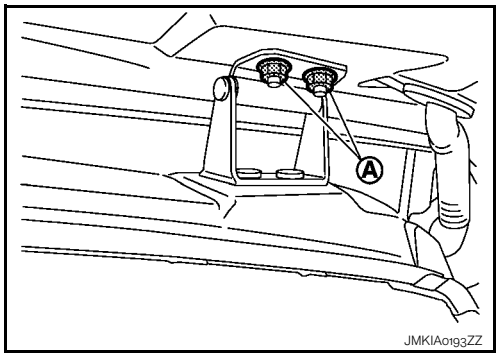
A : Jack
B : Shop cloth



9. Remove the back door stay bracket mounting bolts (A) on the back door.



10. Remove the back door hinge mounting nuts (A) on the back door and remove the back door assembly.
CAUTION:
Perform work with 2 workers, because of its heavy weight.



INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **Perform work with 2 workers, because of its heavy weight.**

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- **After installation, perform fitting adjustment. Refer to DLK-855, "BACK DOOR ASSEMBLY : Adjustment".**
- **Check the back door open/close operation after installation.**
- **Check the back door lock/unlock operation after installation.**

BACK DOOR ASSEMBLY : Adjustment

INFOID:0000000001098648

Portion				Standard	Difference(RH/LH)
Back door panel – Roof panel	A – A	F	Clearance	5.0 – 7.0 mm (0.197 – 0.276 in)	—
		G	Surface height	0.0 – 2.0 mm (0.000 – 0.079 in)	—
Back door glass – Body side outer	B – B	H	Clearance	3.9 – 8.1 mm (0.154 – 0.319 in)	2.1 mm (0.083 in)
		I	Surface height	- 1.0 – 3.1 mm (- 0.039 – 0.122 in)	2.0 mm (0.079 in)
Back door panel – Body side outer	C – C	J	Clearance	3.5 – 6.5 mm (0.138 – 0.256 in)	2.0 mm (0.079 in)
		K	Surface height	- 1.0 – 1.0 mm (- 0.039 – 0.039 in)	—
Back door panel – Rear bumper fascia	D – D	L	Clearance	4.0 – 8.0 mm (0.157 – 0.315 in)	2.0 mm (0.079 in)
		M	Surface height	0.1 – 4.1 mm (0.004 – 0.161 in)	2.1 mm (0.083 in)
Back door panel – Rear bumper fascia	E – E	N	Clearance	5.8 – 10.2 mm (0.228 – 0.402 in)	—

FITTING ADJUSTMENT

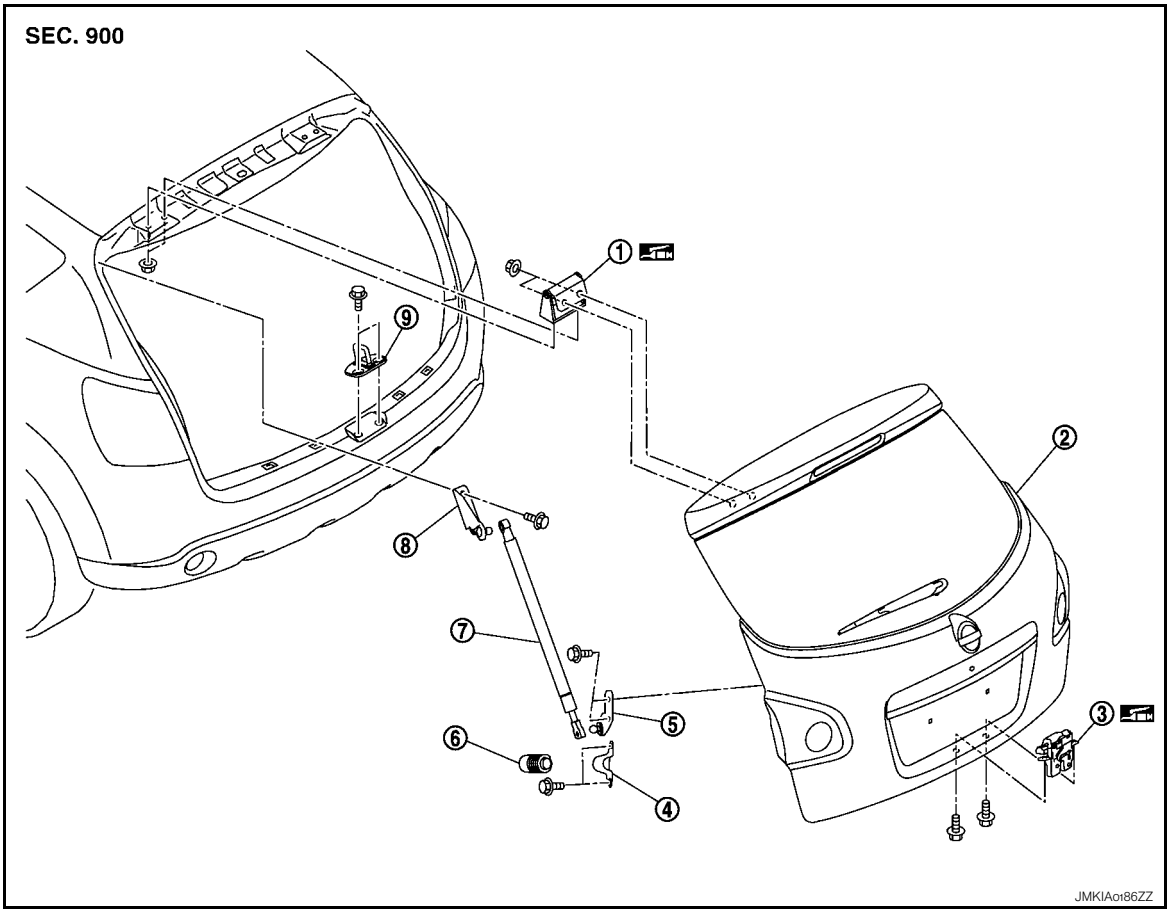
1. Check the clearance and the evenness between the back door and each part visually and by touching. (Fitting standard dimension in the table below shall be satisfied.)
2. In case any parts are out of specification, adjust them according to the procedures shown below.
3. Loosen the bumper rubber.
4. Loosen the back door striker mounting bolts.
5. Lift up the back door approximately 100 – 150 mm (3.937 – 5.906 in) height then close it lightly and check that it is engaged firmly with the back door closed.
6. Check the clearance and evenness.
7. Finally tighten the back door striker.

BACK DOOR STRIKER

BACK DOOR STRIKER : Exploded View

INFOID:0000000001098650

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1. Back door hinge
2. Back door assembly
3. Back door lock assembly
4. Bumper rubber bracket
5. Back door stay bracket (lower)
6. Bumper rubber
7. Back door stay
8. Back door stay bracket (upper)
9. Back door striker

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR STRIKER : Removal and Installation

INFOID:0000000001098652

REMOVAL

1. Remove the luggage rear plate cap. Refer to INT-24, "Removal and Installation".
2. Remove the mounting bolts, and then remove the back door striker.

INSTALLATION

Install in the reverse order of removal.

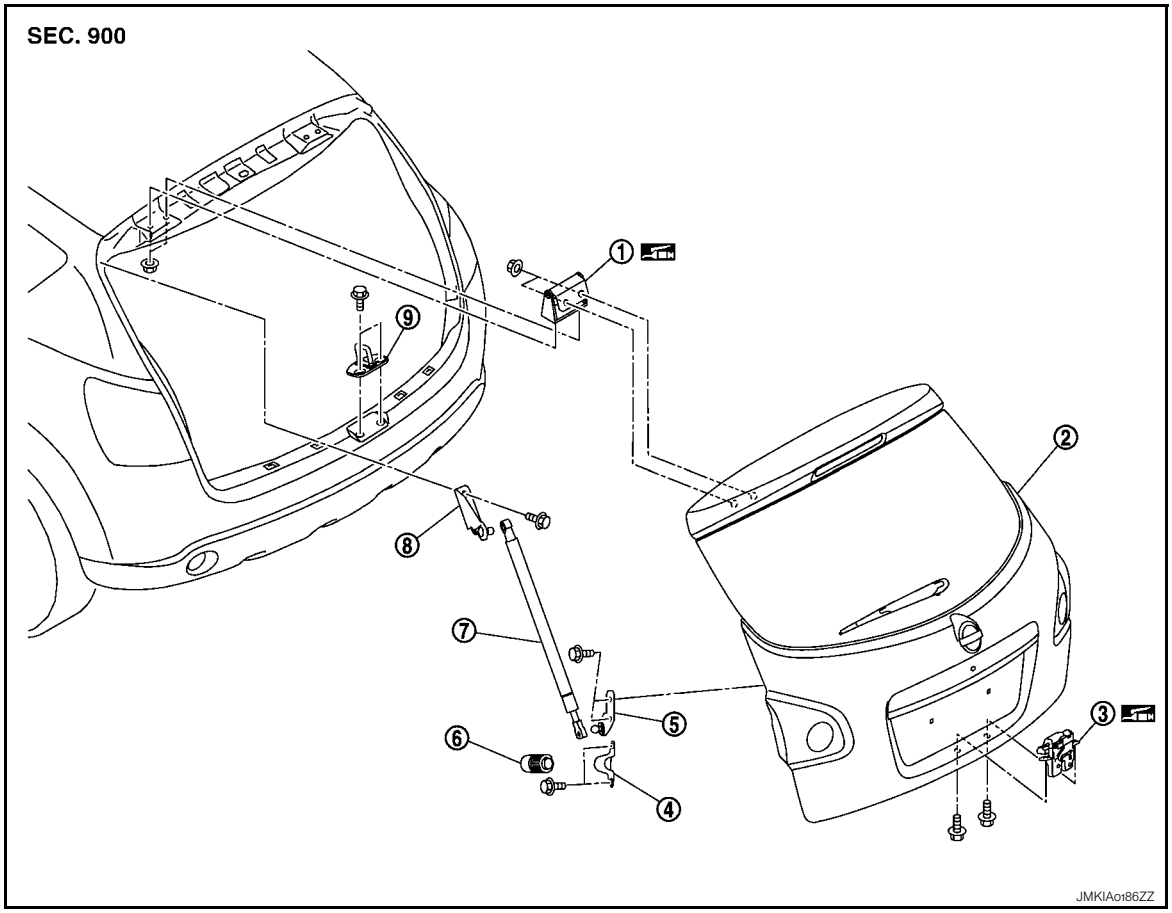
CAUTION:

- **When removing and installing the back door striker, be sure to perform the fitting adjustment. Refer to DLK-855, "BACK DOOR ASSEMBLY : Adjustment".**
- **Check the back door open/close operation after installation.**

BACK DOOR HINGE

BACK DOOR HINGE : Exploded View

INFOID:0000000001102425



1. Back door hinge
2. Back door assembly
3. Back door lock assembly
4. Bumper rubber bracket
5. Back door stay bracket (lower)
6. Bumper rubber
7. Back door stay
8. Back door stay bracket (upper)
9. Back door striker

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR HINGE : Removal and Installation

INFOID:0000000001102426

REMOVAL

1. Remove the back door assembly. Refer to DLK-248, "BACK DOOR ASSEMBLY : Removal and Installation".
2. Remove upper side of the back door weatherstrip. Refer to DLK-254, "BACK DOOR WEATHER-STRIP : Removal and Installation".
3. Remove rear seat belt cover. Refer to INT-21, "Removal and Installation".
4. Using remover tool, remove the headlining clip at the rear side of the headlining. Refer to INT-20, "Exploded View".
5. Remove the rear side of the headlining.
6. Remove the back door hinge mounting nuts (body side), and then remove the back door hinge.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

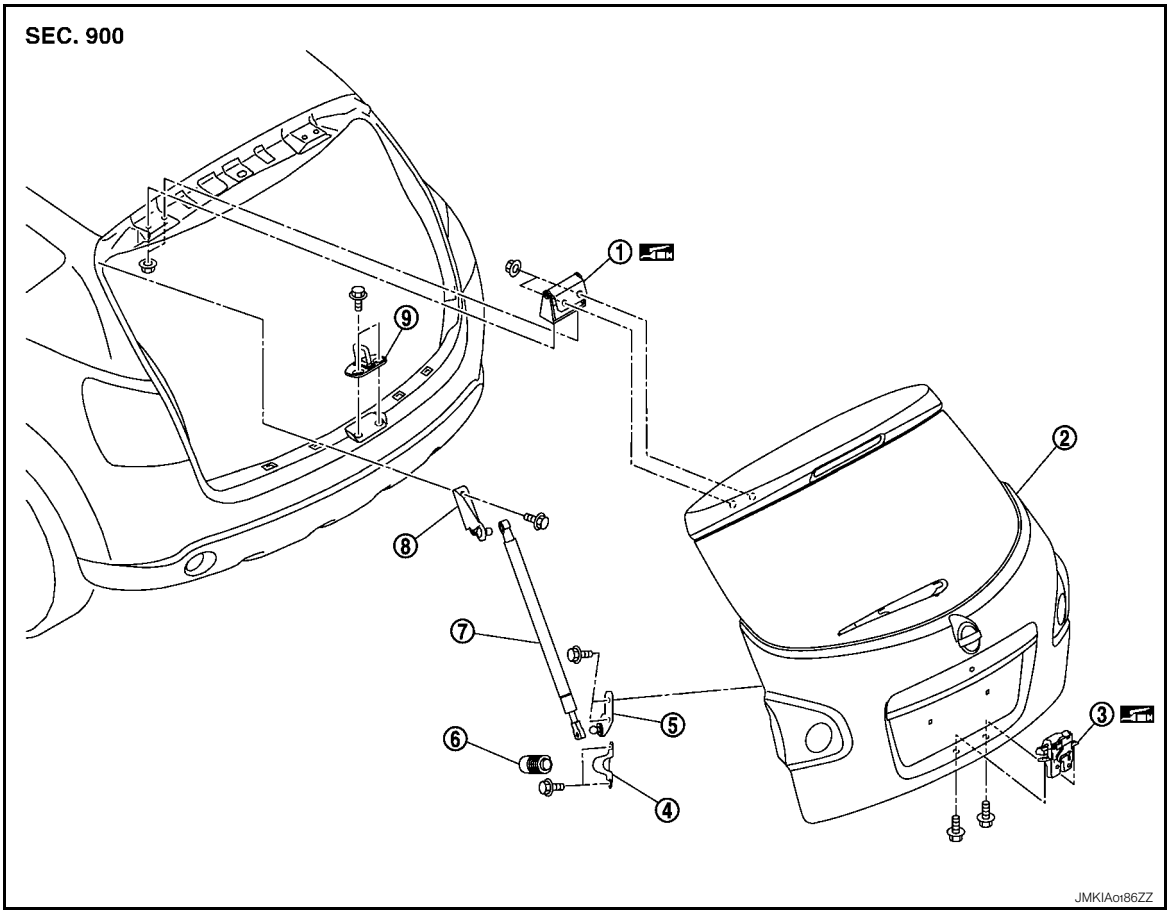
- **When removing and installing the back door assembly, perform the fitting adjustment. Refer to DLK-250, "BACK DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the hinge mounting nuts.**
- **Check the hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **Check the back door open/close operation after installation.**

BACK DOOR STAY

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BACK DOOR STAY : Exploded View

INFOID:0000000001098653



1. Back door hinge
2. Back door assembly
3. Back door lock assembly
4. Bumper rubber bracket
5. Back door stay bracket (lower)
6. Bumper rubber
7. Back door stay
8. Back door stay bracket (upper)
9. Back door striker

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR STAY : Removal and Installation

INFOID:0000000001098656

REMOVAL

1. Remove the stud ball (upper/lower), and then remove the back door stay.
2. Remove the mounting bolts, and then remove the back door stay bracket (upper/lower).

INSTALLATION

Install in the reverse order of removal.

CAUTION:

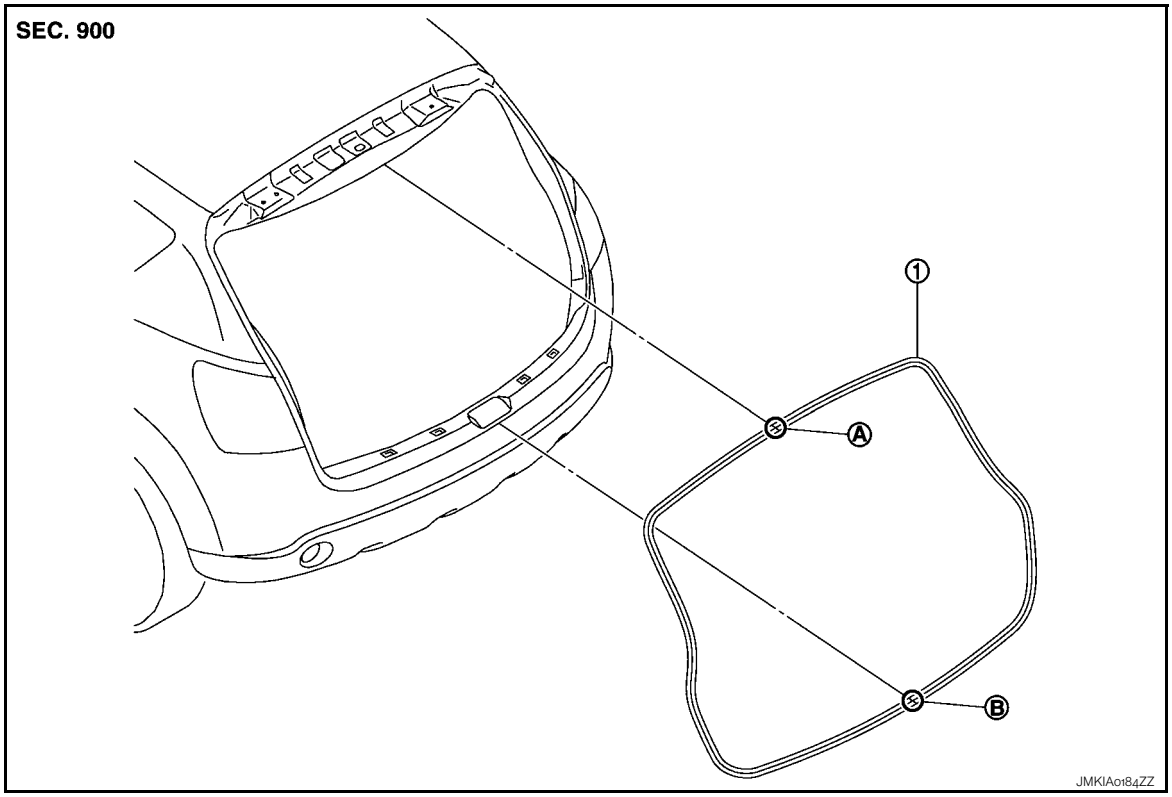
Check the back door open/close operation after installation.

BACK DOOR WEATHER-STRIP

BACK DOOR WEATHER-STRIP : Exploded View

INFOID:0000000001098657

REMOVAL



1. Back door weatherstrip
A. Mark (upper)
B. Mark (lower)

BACK DOOR WEATHER-STRIP : Removal and Installation

INFOID:0000000001098659

REMOVAL

Pull up and remove engagement with body from the weatherstrip joint.

CAUTION:

After removal, do not pull strongly on the weather-strip.

INSTALLATION

1. Working from the upper section, align the weatherstrip mark with vehicle center position mark and install the weatherstrip onto the vehicle.
2. For the lower section, align the weatherstrip seam with center of the back door striker.
3. After installation, pull the weatherstrip gently to ensure that there is no loose section.
   NOTE:
   Make sure that the weatherstrip is fit tlightly at each corner and the luggage rear plate.

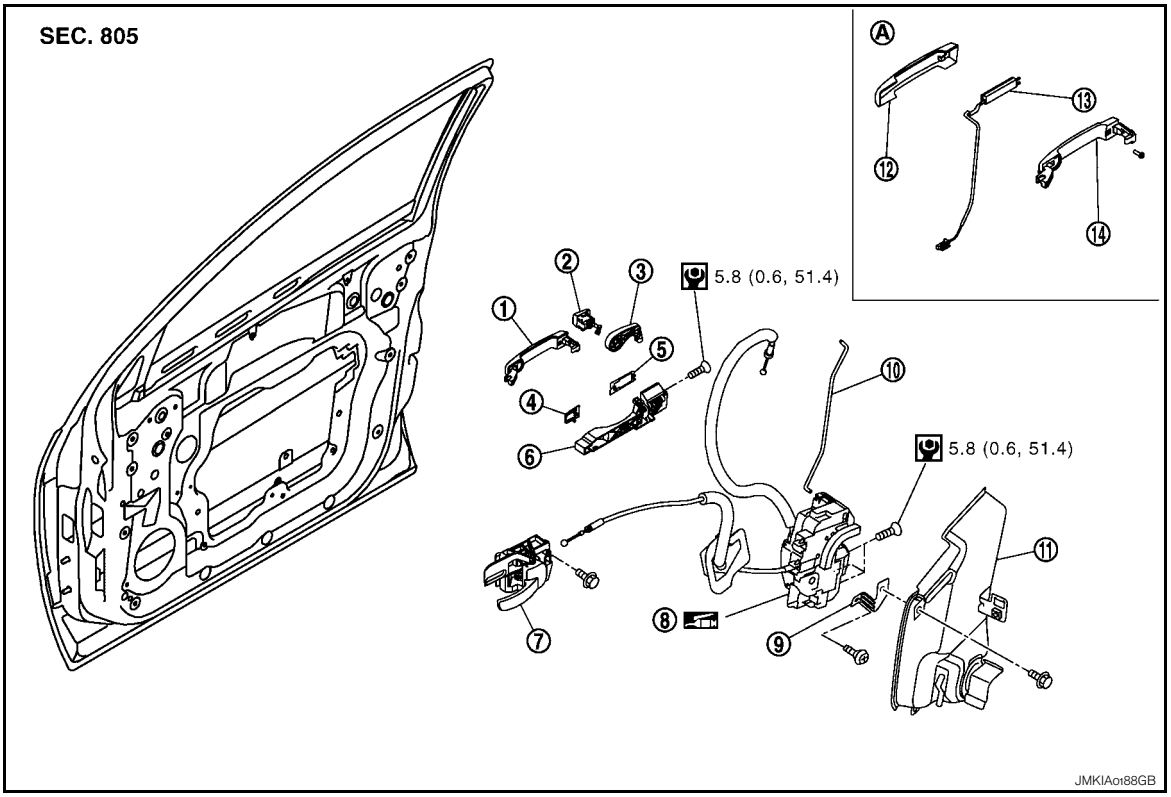
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FRONT DOOR LOCK

DOOR LOCK

DOOR LOCK : Exploded View

INFOID:0000000001098660



1. Outside handle assembly
2. Door key cylinder
3. Key cylinder lever
4. Front gasket
5. Rear gasket
6. Outside handle bracket
7. Inside handle
8. Door lock assembly
9. Key cylinder rod
10. Key rod protector
11. Key rod protector assembly (RH handle only)
12. Outside handle cover
13. Antenna
14. Outside handle base

A: Intelligent Key only

Refer to GI-4, "Components" for symbols in the figure.

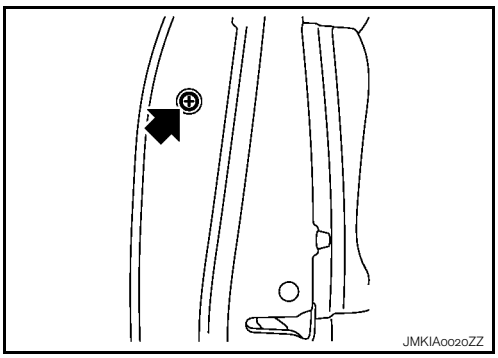
DOOR LOCK : Removal and Installation

INFOID:0000000001098661

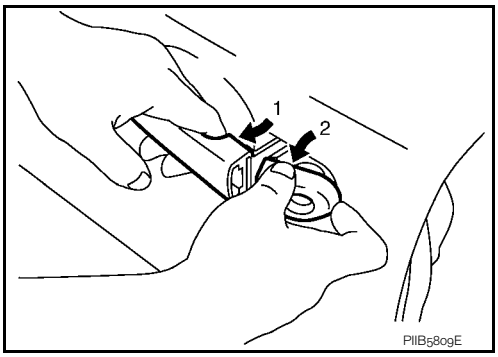
REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the inside handle mounting bolt, and then disconnect the inside handle knob cable and the lock knob cable.
3. Remove the front door glass. Refer to GW-19, "Removal and Installation".
4. Remove the front door module assembly. Refer to GW-22, "Removal and Installation".
5. Disconnect the door antenna and the door request switch connector and remove the harness clamp (models with Intelligent Key system).

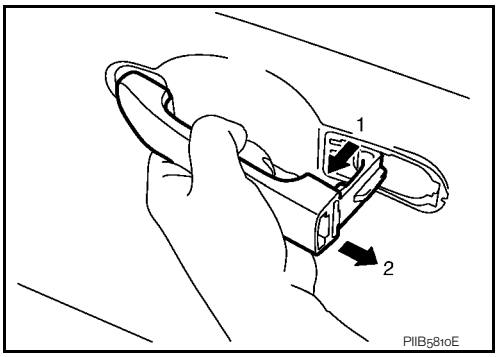
6. Remove the door side grommet, and remove the door key cylinder assembly (driver side) and outside handle escutcheon (passenger side) mounting bolts from grommet hole.
   CAUTION:
   Do not forcibly remove the bolts (TORX: T10).



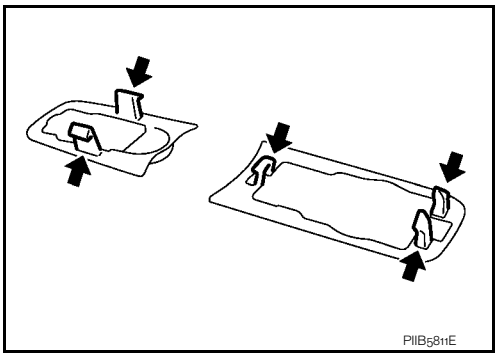
7. Reach in to separate the key cylinder rod connection (on the handle).
8. Disconnect the door key cylinder switch harness connector.
9. Remove the key cylinder lever from the door key cylinder.
10. While pulling the outside handle, remove door key cylinder assembly.



11. Disconnect front door request switch harness connector (models with Intelligent Key system).
12. While pulling outside handle, slide toward rear of vehicle to remove outside handle.

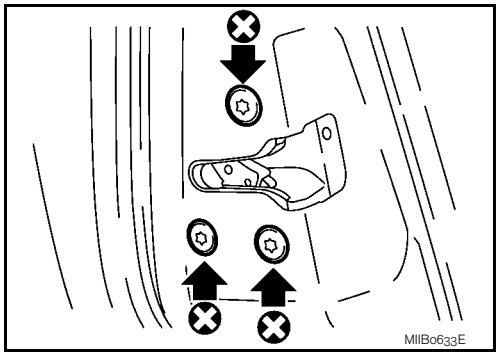


13. Remove the front gasket and the rear gasket.

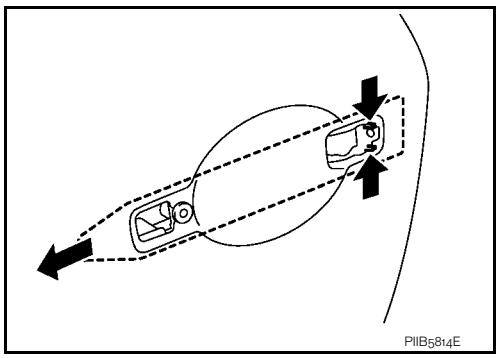


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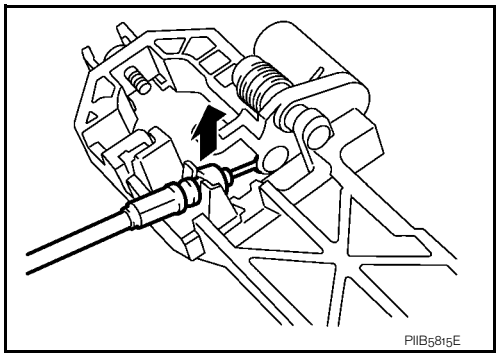
14. Remove the door lock assembly mounting bolts (TORX: T30).
15. Disconnect the door lock actuator connector, and then remove the door lock assembly.



16. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.



17. Reach in to separate the outside handle cable connection.



INSTALLATION

Install in the reverse order of removal.

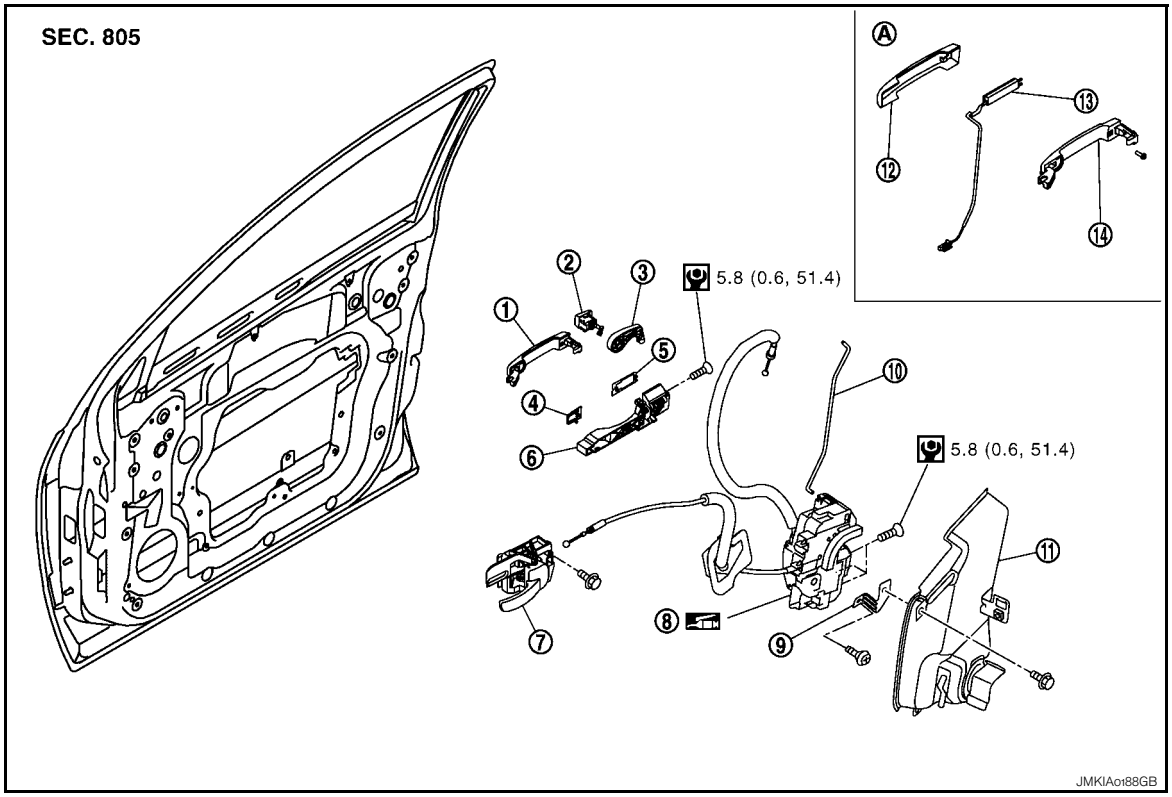
CAUTION:

- **To install each rod, rotate the rod holder until a click is felt.**
- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

INSIDE HANDLE

INSIDE HANDLE : Exploded View

INFOID:0000000001098666



1. Outside handle assembly
2. Door key cylinder
3. Key cylinder lever
4. Front gasket
5. Rear gasket
6. Outside handle bracket
7. Inside handle
8. Door lock assembly
9. Key cylinder rod
10. Key rod protector
11. Key rod protector assembly (RH handle only)
12. Outside handle cover
13. Antenna
14. Outside handle base

A: Intelligent Key only

Refer to GI-4, "Components" for symbols in the figure.

INSIDE HANDLE : Removal and Installation

INFOID:0000000001098667

REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the inside handle mounting bolt.
3. Disconnect the inside handle knob cable and the lock knob cable, and then remove the inside handle.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

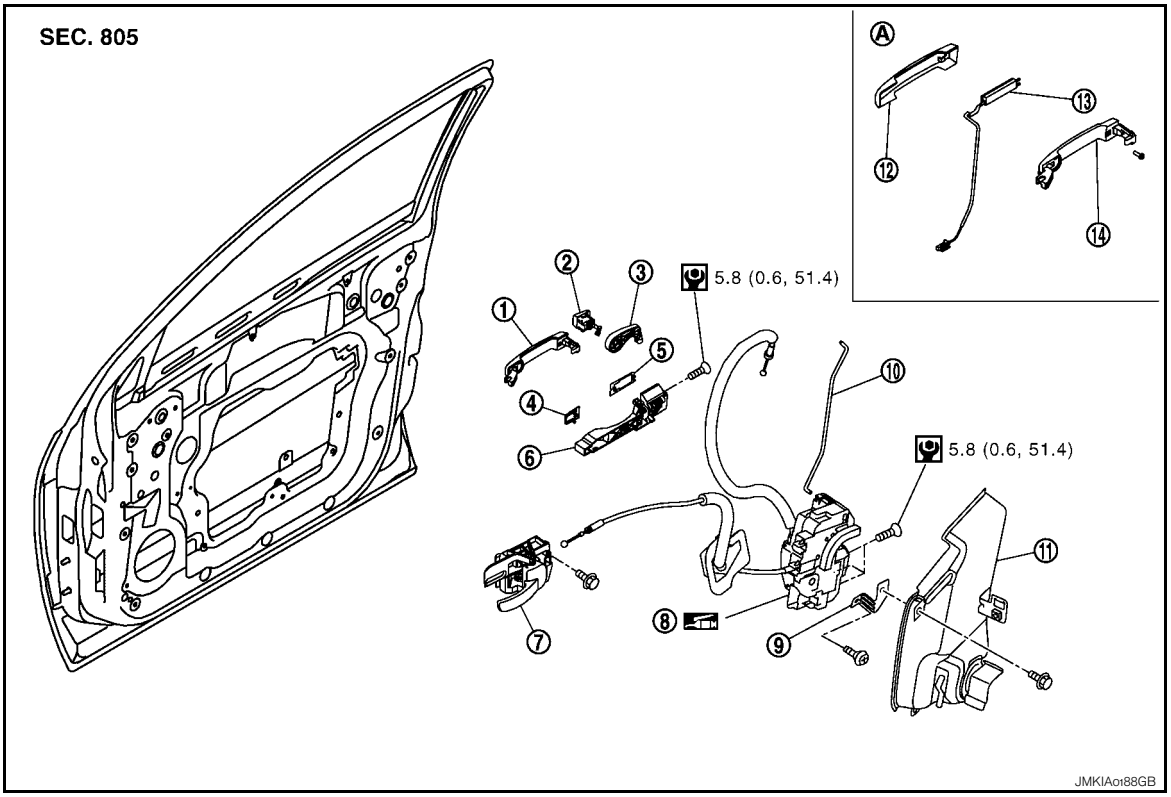
- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

OUTSIDE HANDLE

OUTSIDE HANDLE : Exploded View

INFOID:0000000001098668

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1. Outside handle assembly
2. Door key cylinder
3. Key cylinder lever
4. Front gasket
5. Rear gasket
6. Outside handle bracket
7. Inside handle
8. Door lock assembly
9. Key cylinder rod
10. Key rod protector
11. Key rod protector assembly (RH handle only)
12. Outside handle cover
13. Antenna
14. Outside handle base

A: Intelligent Key only

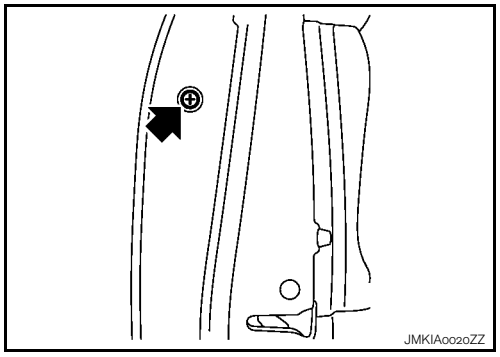
Refer to GI-4, "Components" for symbols in the figure.

OUTSIDE HANDLE : Removal and Installation

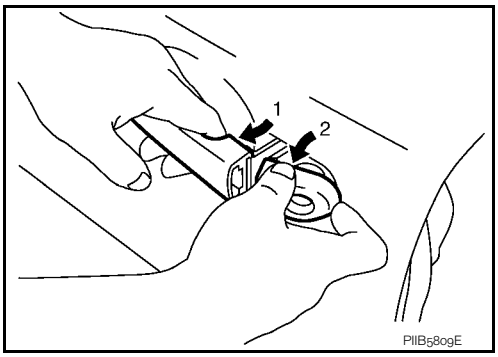
INFOID:0000000001098669

REMOVAL

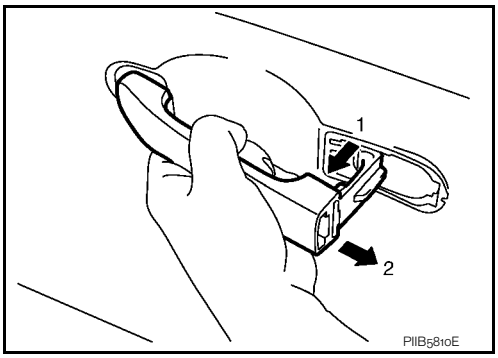
1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the inside handle mounting bolt, and disconnect the inside handle knob cable and the lock knob cable.
3. Remove the front door glass. Refer to GW-19, "Removal and Installation".
4. Remove the front door module assembly. Refer to GW-22, "Removal and Installation".
5. Disconnect the door antenna and the door request switch connector and remove the harness clamp (models with Intelligent Key system).
6. Remove the door side grommet, and remove the door key cylinder assembly (driver side) and the outside handle escutcheon (passenger side) mounting bolts from the grommet hole.
   CAUTION:
   Do not forcibly remove the bolts (TORX: T10).



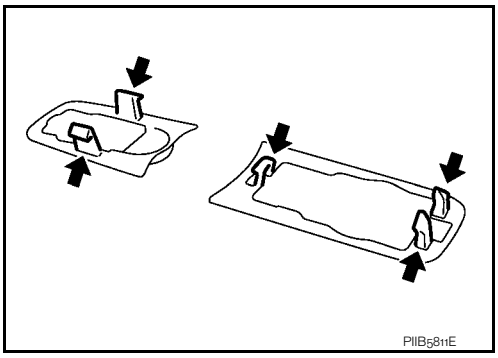
7. Reach in to separate the key cylinder rod connection (on the handle).
8. Disconnect the door key cylinder switch harness connector.
9. Remove the key cylinder lever from the door key cylinder.
10. While pulling the outside handle, remove the door key cylinder assembly.



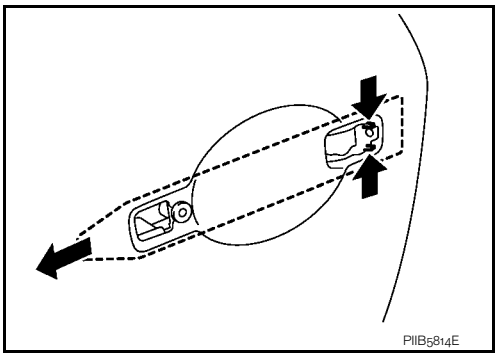
11. Disconnect the front door request switch harness connector (models with Intelligent Key system).
12. While pulling the outside handle, slide toward rear of vehicle to remove the outside handle.



13. Remove the front gasket and rear gasket.

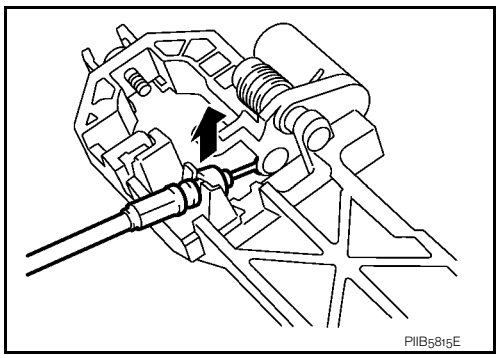


14. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.



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15. Reach in to separate the outside handle cable connection.



INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **To install each rod, rotate the rod holder until a click is felt.**
- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

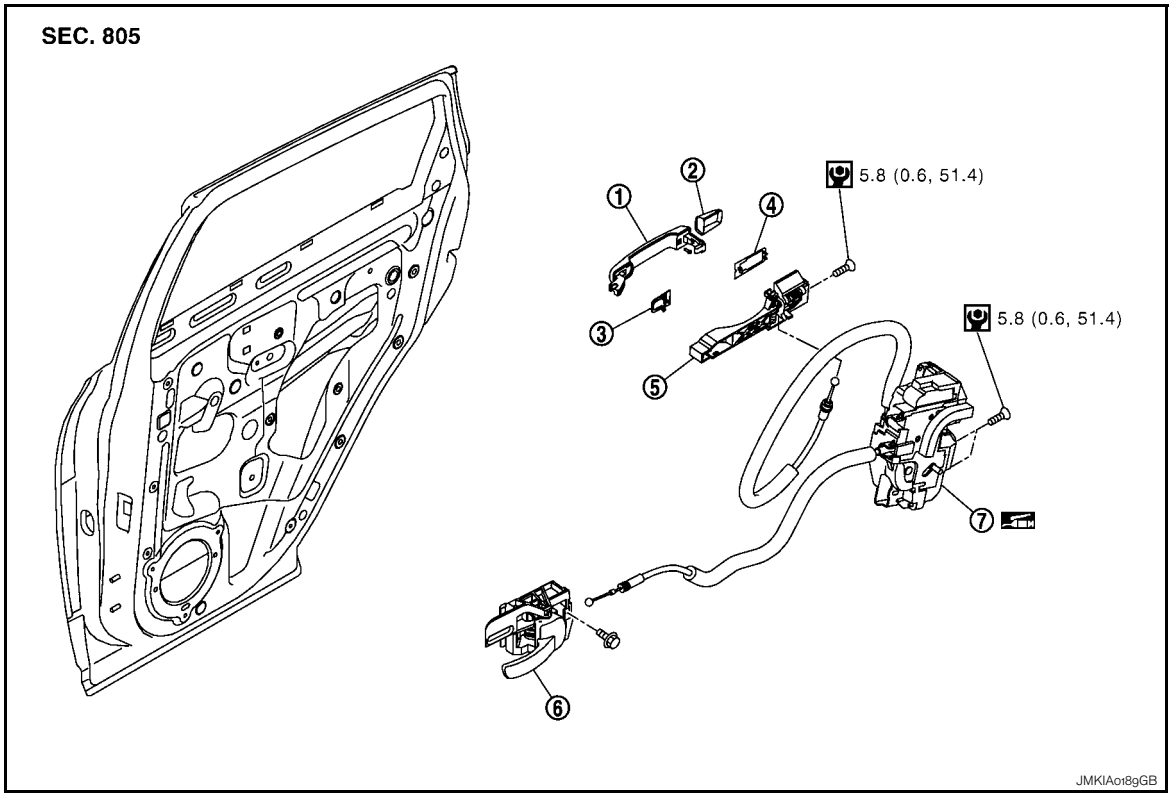
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REAR DOOR LOCK

DOOR LOCK

DOOR LOCK : Exploded View

INFOID:0000000001098672



1. Outside handle
2. Outside handle escutcheon
3. Front gasket
4. Rear gasket
5. Outside handle bracket
6. Inside handle
7. Door lock assembly

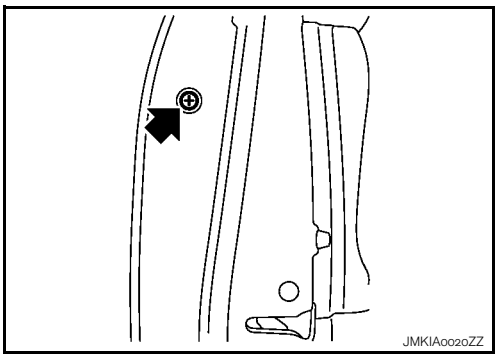
Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK : Removal and Installation

INFOID:0000000001098673

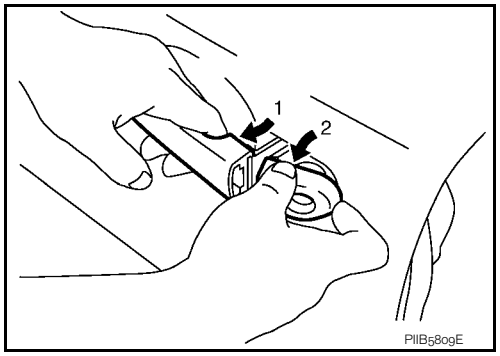
REMOVAL

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Fully close the front door window.
3. Remove the door sealing screen.
4. Remove the inside handle mounting bolt, and then disconnect the inside handle knob cable and the lock knob cable.
5. Remove the door side grommet, and remove the door key cylinder assembly (driver side) and the outside handle escutcheon (passenger side) mounting bolts from the grommet hole.
   CAUTION:
   Do not forcibly remove the bolts (TORX: T10).

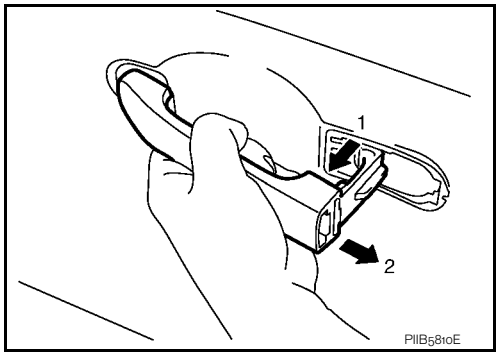


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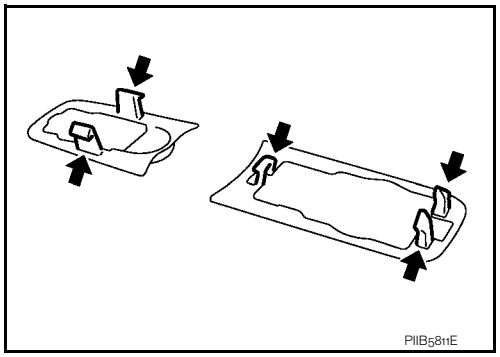
6. While pulling the outside handle, remove the door key cylinder assembly.



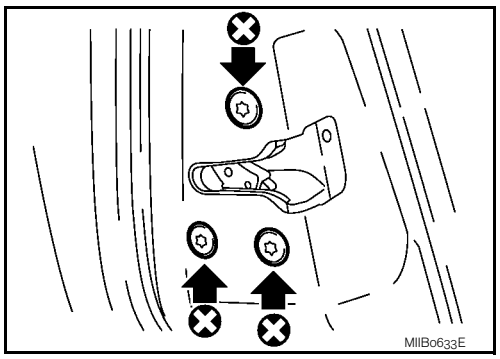
7. While pulling the outside handle, slide toward rear of vehicle to remove the outside handle.



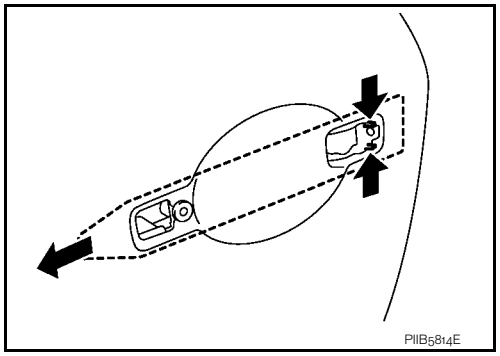
8. Remove the front gasket and the rear gasket.



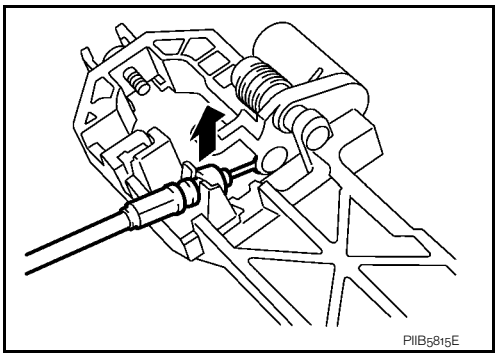
9. Remove the door lock assembly mounting bolts (TORX: T30).
10. Disconnect the door lock actuator connector, and then remove the door lock assembly.



11. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.



12. Reach in to separate the outside handle cable connection.



INSTALLATION

Install in the reverse order of removal.

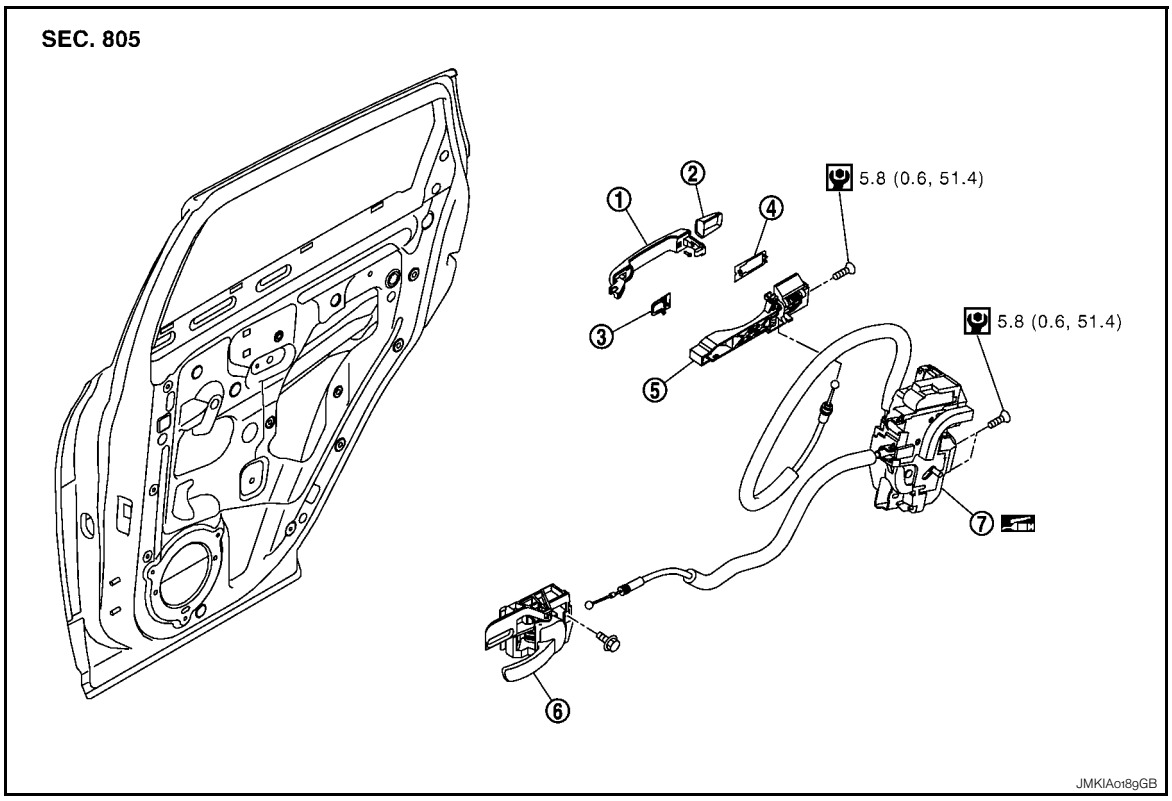
CAUTION:

- **To install each rod, rotate the rod holder until a click is felt.**
- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

INSIDE HANDLE

INSIDE HANDLE : Exploded View

INFOID:0000000001098676



1. Outside handle
2. Outside handle escutcheon
3. Front gasket
4. Rear gasket
5. Outside handle bracket
6. Inside handle
7. Door lock assembly

Refer to GI-4, "Components" for symbols in the figure.

INSIDE HANDLE : Removal and Installation

INFOID:0000000001098677

REMOVAL

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Remove the door sealing screen.

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3. Remove the inside handle mounting bolt, and then disconnect the inside handle knob cable and the lock knob cable.
4. Remove the inside handle.

INSTALLATION

Install in the reverse order of removal.

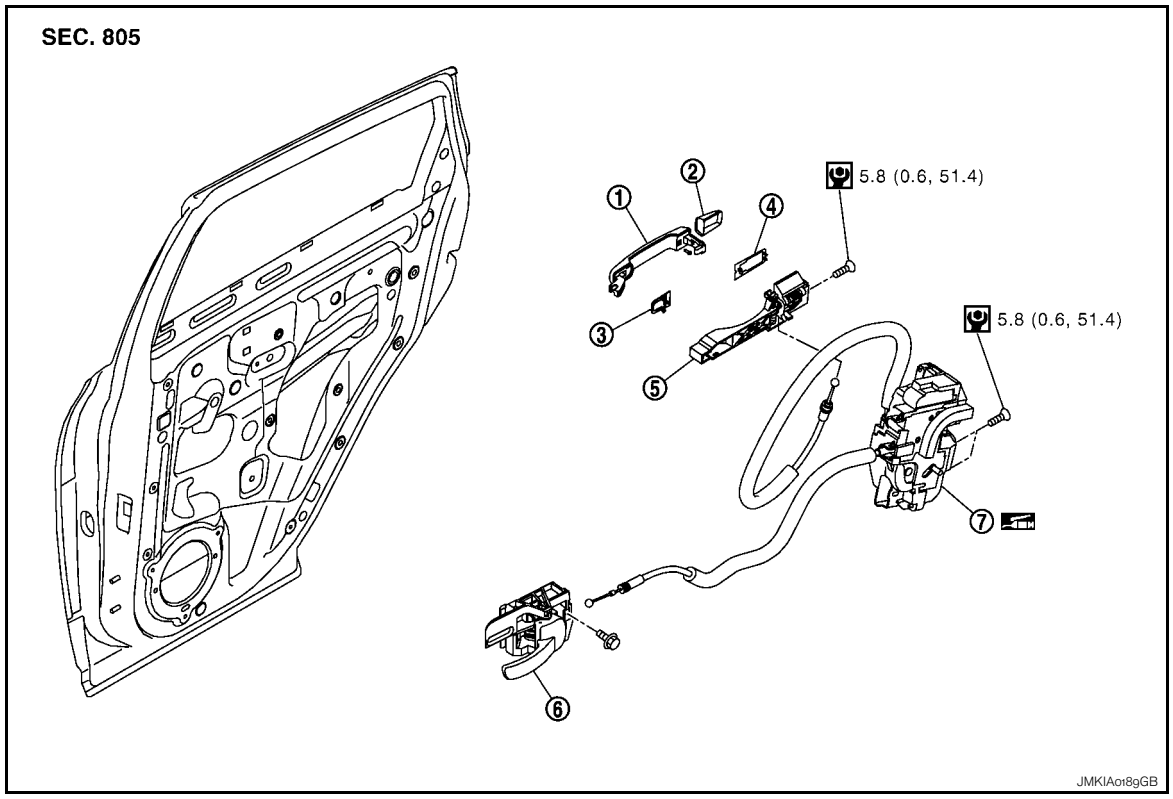
CAUTION:

- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

OUTSIDE HANDLE

OUTSIDE HANDLE : Exploded View

INFOID:0000000001098678



1. Outside handle
2. Outside handle escutcheon
3. Front gasket
4. Rear gasket
5. Outside handle bracket
6. Inside handle
7. Door lock assembly

Refer to GI-4, "Components" for symbols in the figure.

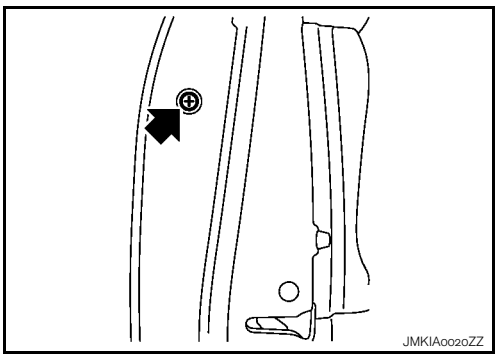
OUTSIDE HANDLE : Removal and Installation

INFOID:0000000001098679

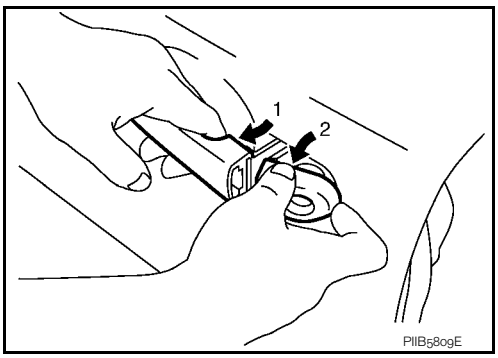
REMOVAL

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Fully close the front door window.
3. Remove the door sealing screen.
4. Remove the inside handle mounting bolt, disconnect the inside handle knob cable and the lock knob cable.

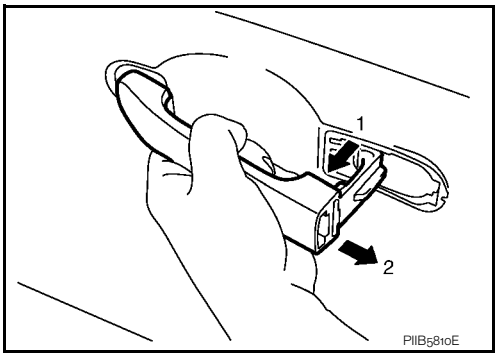
5. Remove the door side grommet, and remove the door key cylinder assembly (driver side) and the outside handle escutcheon (passenger side) mounting bolts from the grommet hole.
CAUTION:
Do not forcibly remove the bolts (TORX: T10).



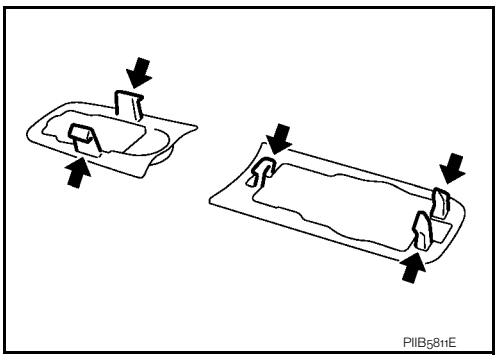
6. While pulling the outside handle, and then remove the door key cylinder assembly.



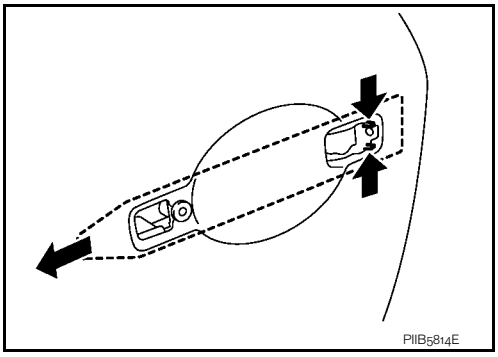
7. While pulling the outside handle, slide toward rear of vehicle to remove the outside handle.



8. Remove the front gasket and the rear gasket.

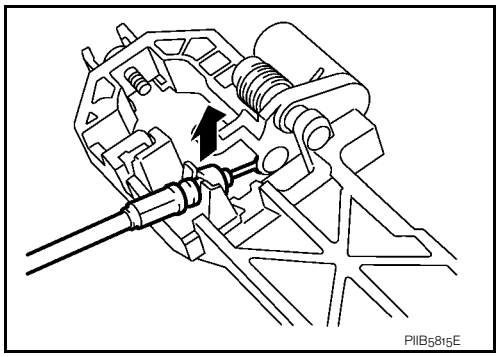


9. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.



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10. Reach in to separate the outside handle cable connection.



INSTALLATION

Install in the reverse order of removal.

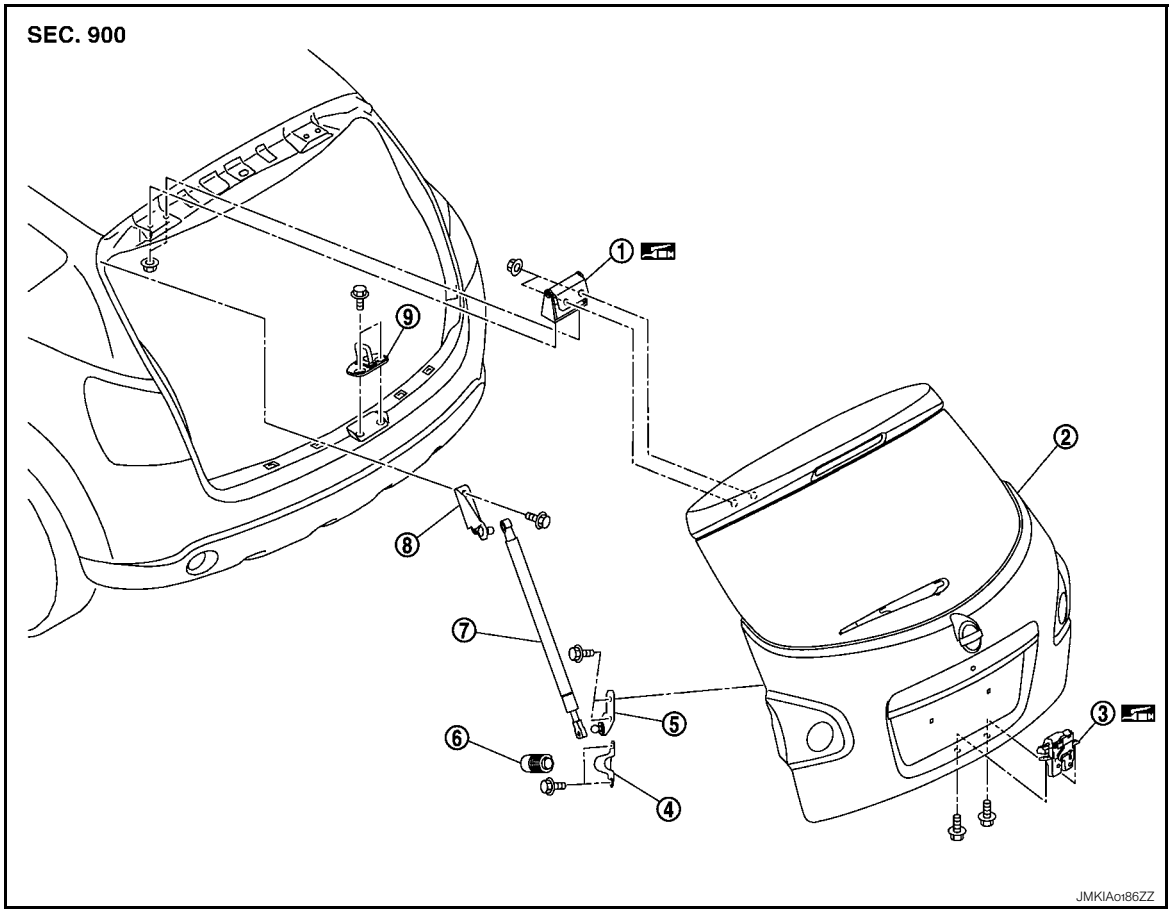
CAUTION:

- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

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BACK DOOR LOCK
DOOR LOCK
DOOR LOCK : Exploded View

INFOID:0000000001098684



1. Back door hinge
2. Back door assembly
3. Back door lock assembly
4. Bumper rubber bracket
5. Back door stay bracket (lower)
6. Bumper rubber
7. Back door stay
8. Back door stay bracket (upper)
9. Back door striker

Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK : Removal and Installation

INFOID:0000000001098685

REMOVAL

1. Remove the back door trim finisher lower. Refer to INT-26, "Removal and Installation".
2. Disconnect the back door lock assembly and back door opener switch connectors.
3. Remove the back door lock mounting bolts, and then remove the back door lock and actuator.

INSTALLTION

Install in the reverse order of removal.

CAUTION:

Check the back door lock/unlock operation after installation.

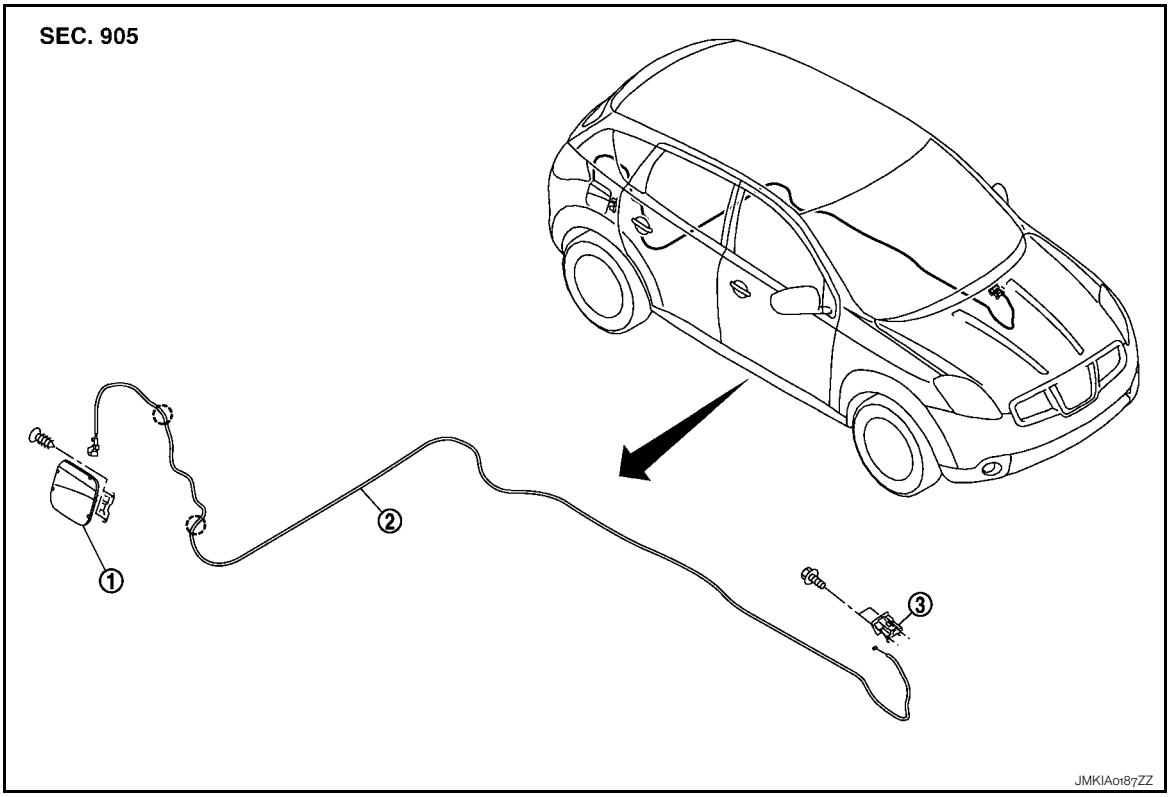
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FUEL FILLER LID OPENER

FUEL FILLER LID

FUEL FILLER LID : Exploded View

INFOID:0000000001098690



1. Fuel filler lid assembly
2. Fuel filler opener cable
3. Fuel opener lever

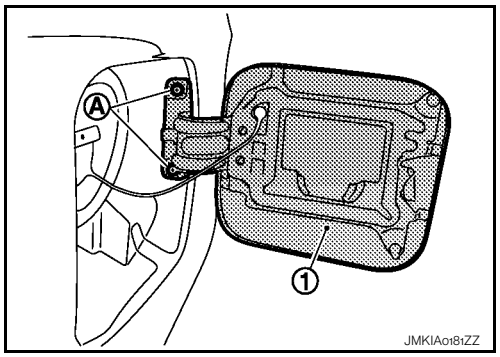
: Clip

FUEL FILLER LID : Removal and Installation

INFOID:0000000001098691

REMOVAL

1. Fully open the fuel filler lid.
2. Remove the filler cap.
3. Remove the mounting screws (A), and then remove the fuel filler lid (1).



INSTALLATION

Install in the reverse order of removal.

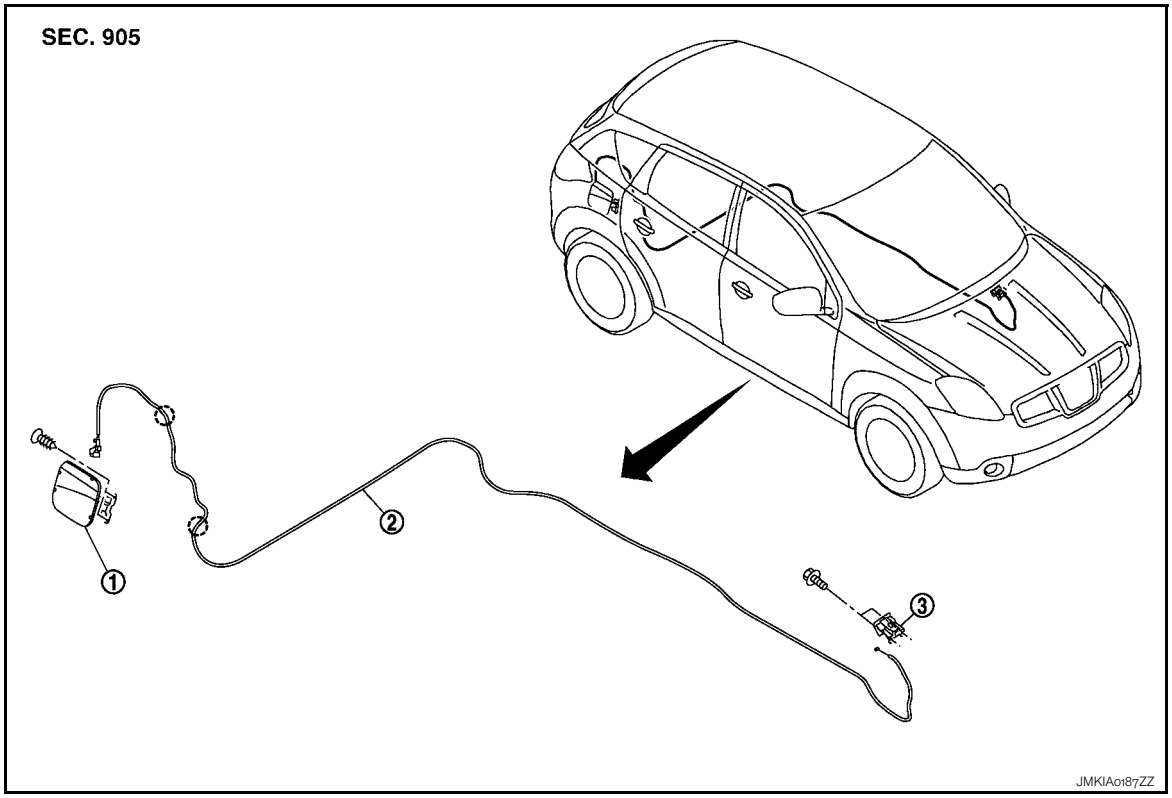
CAUTION:

After installation, apply the touch-up paint (the body color) onto the head of the mounting screws.

FUEL FILLER OPENER CABLE

FUEL FILLER OPENER CABLE : Exploded View

INFOID:0000000001098692



1. Fuel filler lid assembly
2. Fuel filler opener cable
3. Fuel opener lever

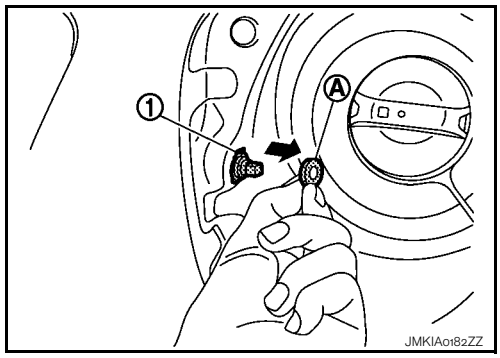
( ) : Clip

FUEL FILLER OPENER CABLE : Removal and Installation

INFOID:0000000001098693

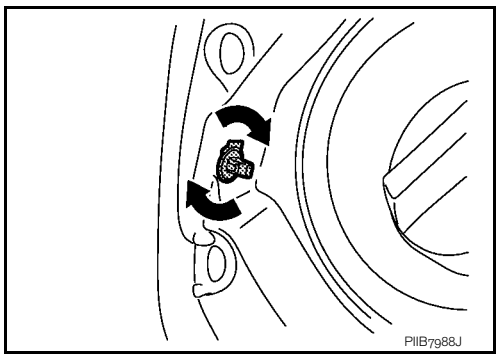
REMOVAL

1. Remove the rear seat cushion, rear seatback, seatback lower support, and seatback mounting outer bracket. Refer to SE-31, "Removal and Installation".
2. Remove the dash side finisher, front kicking plate inner, rear kicking plate inner, center pillar lower garnish, and luggage side lower finisher (front). Refer to INT-14, "Removal and Installation".
3. Remove the parcel shelf, luggage floor carpet, luggage floor spacer, luggage rear plate, luggage side lower finisher, and rear pillar finisher. Refer to INT-24, "Removal and Installation".
4. Remove the fuel filler lock seal (1).

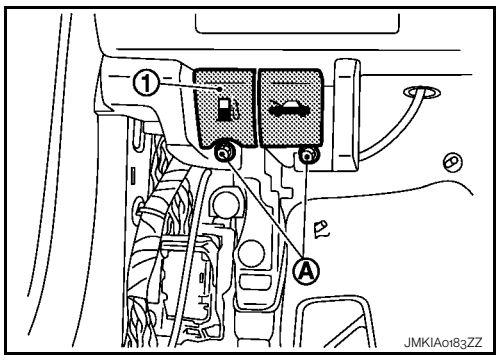


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5. Rotate the fuel filler lock, and then remove the fuel filler lock.



6. Remove the fuel filler opener cable mounting clips and the clamps.
7. Remove the mounting bolts, and then remove the fuel filler lid opener lever.



8. Remove the fuel filler opener cable.

INSTALLATION

Install in the reverse order of removal.

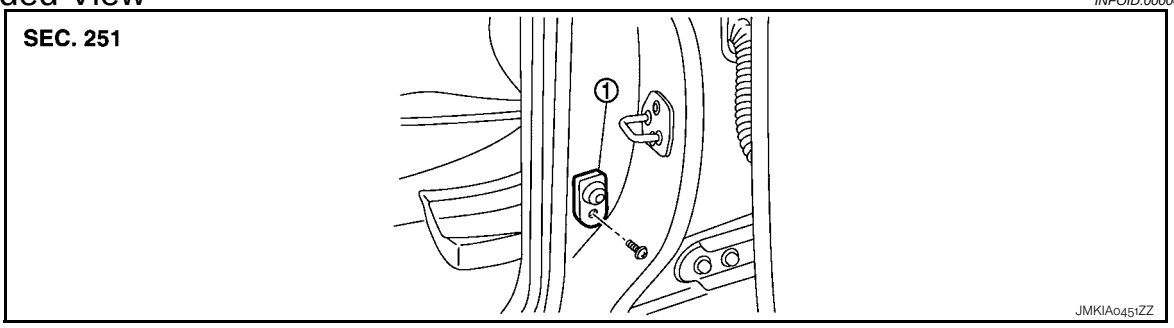
CAUTION:

Check the fuel filler lid open/close operation after installation.

DOOR SWITCH

Exploded View

INFOID:0000000001095473



1. Door switch (driver side)

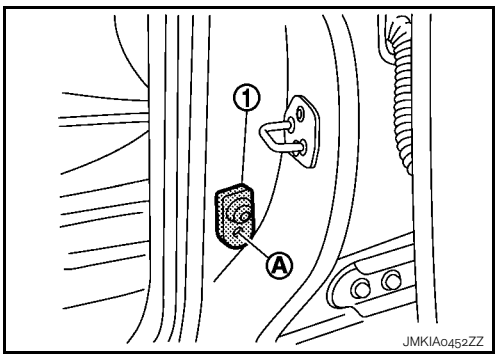
Refer to DLK-877, "Removal and Installation".

Removal and Installation

INFOID:0000000001095474

REMOVAL

1. Remove the door switch mounting bolt (A), and then remove door switch (1).
   NOTE:
   The same procedure is also performed for door switch (passenger side, rear LH and rear RH).



INSTALLATION

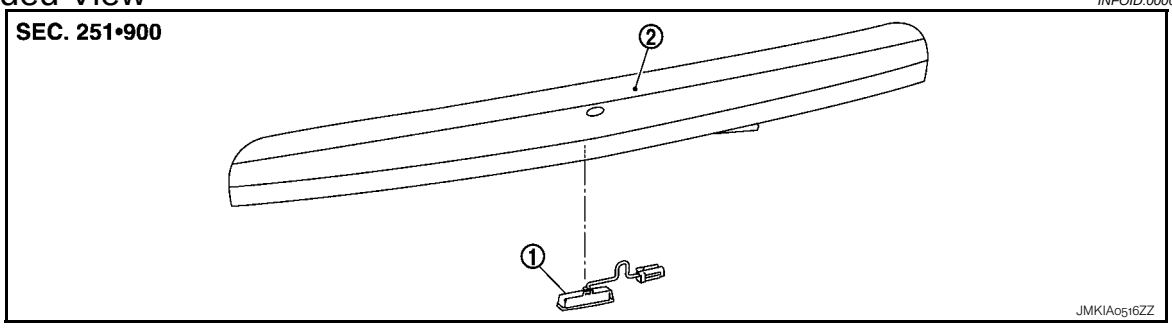
Install in the reverse order of removal.

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BACK DOOR OPENER SWITCH

Exploded View

INFOID:0000000001116792



1. Back door opener switch
2. Back door finisher

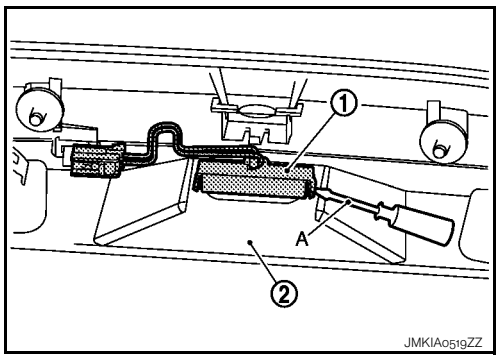
Refer to DLK-711, "Removal and Installation".

Removal and Installation

INFOID:0000000001116793

REMOVAL

1. Remove the back door finisher.
   Refer to EXT-31, "Exploded View" and EXT-31, "Removal and Installation".
2. Remove the back door opener switch (1) from back door finisher (2) using flat-bladed screw driver (A) etc.



INSTALLATION

Install in the reverse order of removal.

KEYFOB

Exploded View

INFOID:0000000001109243

Refer to DLK-712, "Removal and Installation".

Removal and Installation

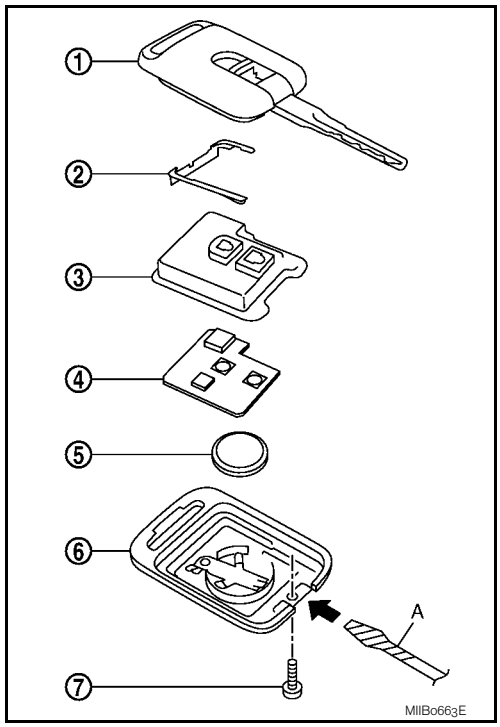
INFOID:0000000001109244

REMOVAL

1. Remove installation screw (7) on the rear of keyfob.
2. Place the key with the lower case (6) facing up. Set a screwdriver (A) wrapped with tape into illustration of the lower case (6) and separate the lower case (6) from the upper case (1).
   CAUTION:
   - **Do not touch the circuit board or battery terminal.**
   - **The keyfob is water-resistant. However, if it does get wet, immediately wipe it dry.**
3. When replacing the circuit board assembly, remove circuit board assembly from the upper case (1).
   [Circuit board assembly: Switch rubber (3) + Board surface (4)]
   CAUTION:
   Do not touch the printed circuits directly.
4. Remove the battery (5) from the lower case (6) and replace it.

   Battery replacement : Coin-type lithium battery (CR2032)

   CAUTION:
   When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.
5. After replacement, fit the lower and upper cases together, part (2), (3) and tighten with the screw.
   CAUTION:
   After replacing the battery, Be sure to check that door locking operates normally using the keyfob.
   Refer to DLK-612, "Component Function Check".



INSTALLATION

Install in the reverse order of removal.

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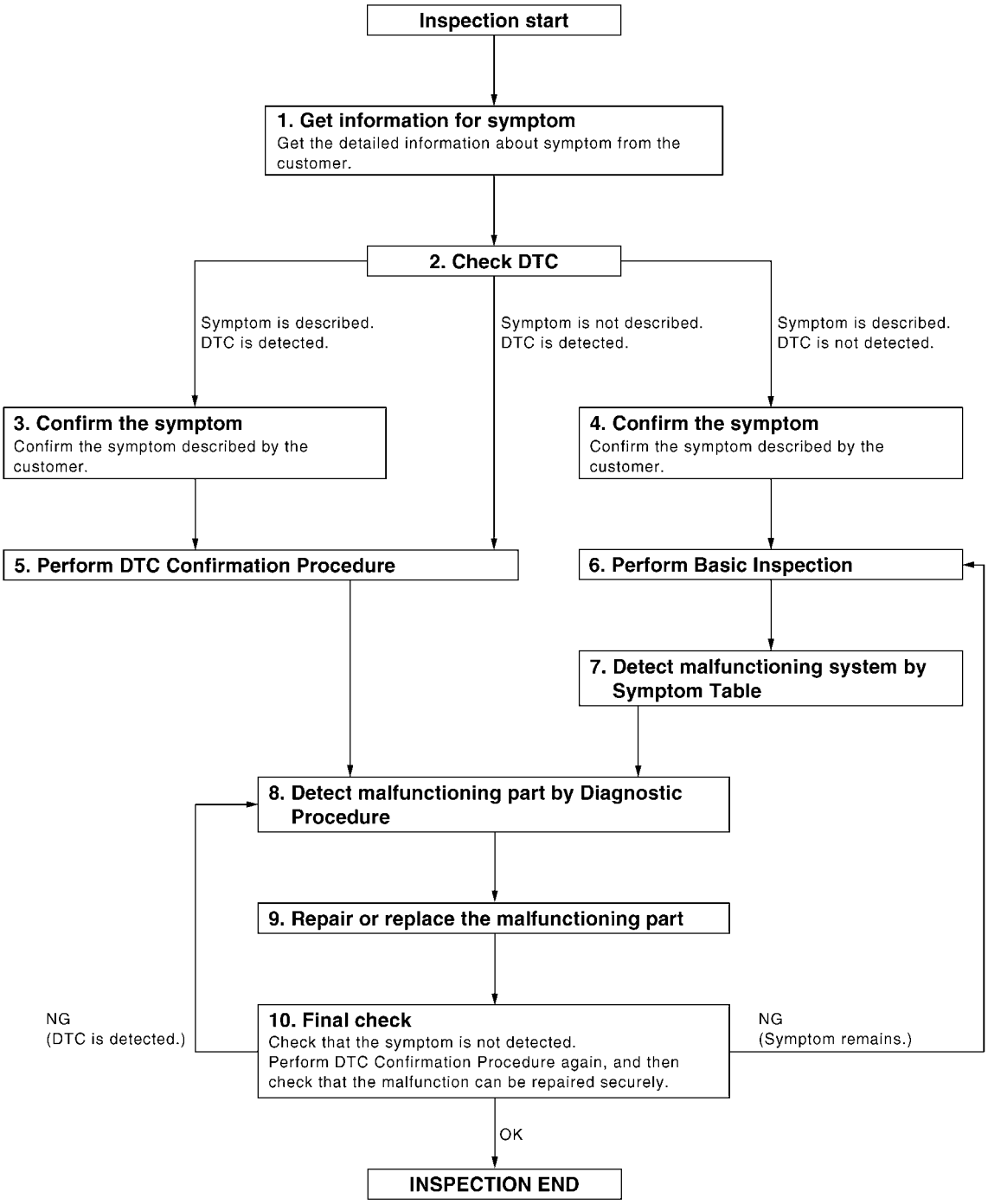
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000001102250

OVERALL SEQUENCE



JMKIA0101GB

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 for BCM.
2. Perform the following procedure if DTC is displayed.

- 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-III 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-III 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.
If two or more DTCs are detected, refer to DLK-810, "DTC Inspection Priority Chart" and determine trouble diagnosis order.

Is DTC detected?

YES >> GO TO 8.
NO >> Refer to GI-39, "Intermittent Incident".

6.PERFORM BASIC INSPECTION

Perform Basic Inspection, refer to DLK-827, "Basic Inspection".

Inspection End>>GO TO 7.

7.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

Detect malfunctioning system according to Symptom Table based on the confirmed symptom in step 4.

>> GO TO 8.

8.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.

>> GO TO 9.

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9.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 10.

10.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.

Does the symptom reappear?

YES (DTC is detected)>>GO TO 8.
YES (Symptom remains)>>GO TO 6.
NO >> **INSPECTION END**

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INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000001102252

Perform the system initialization when replacing or registering Keyfob and ignition key.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:0000000001102253

Refer to the CONSULT-III Operation Manual-NATS.

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FUNCTION DIAGNOSIS

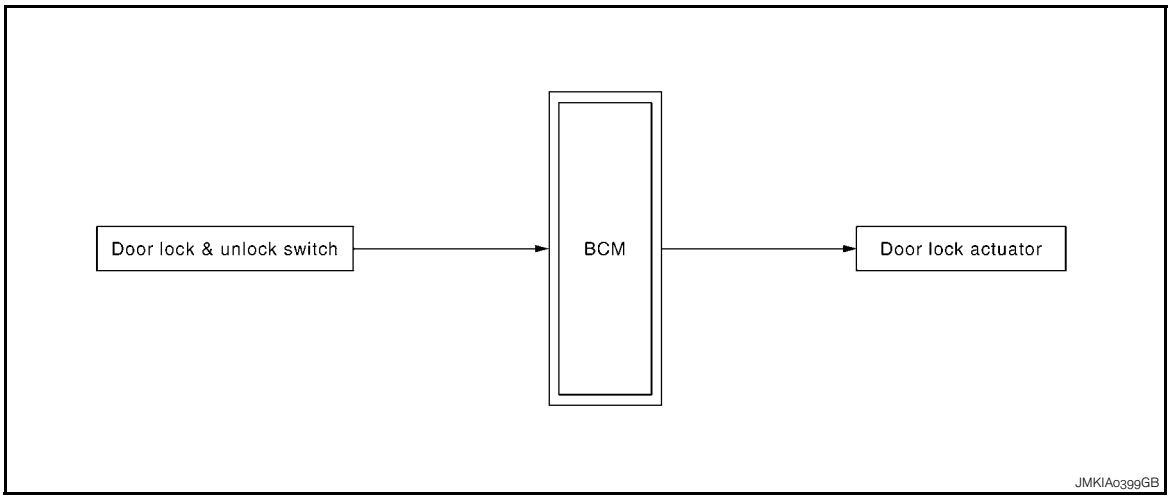
DOOR LOCK FUNCTION

DOOR LOCK AND UNLOCK SWITCH

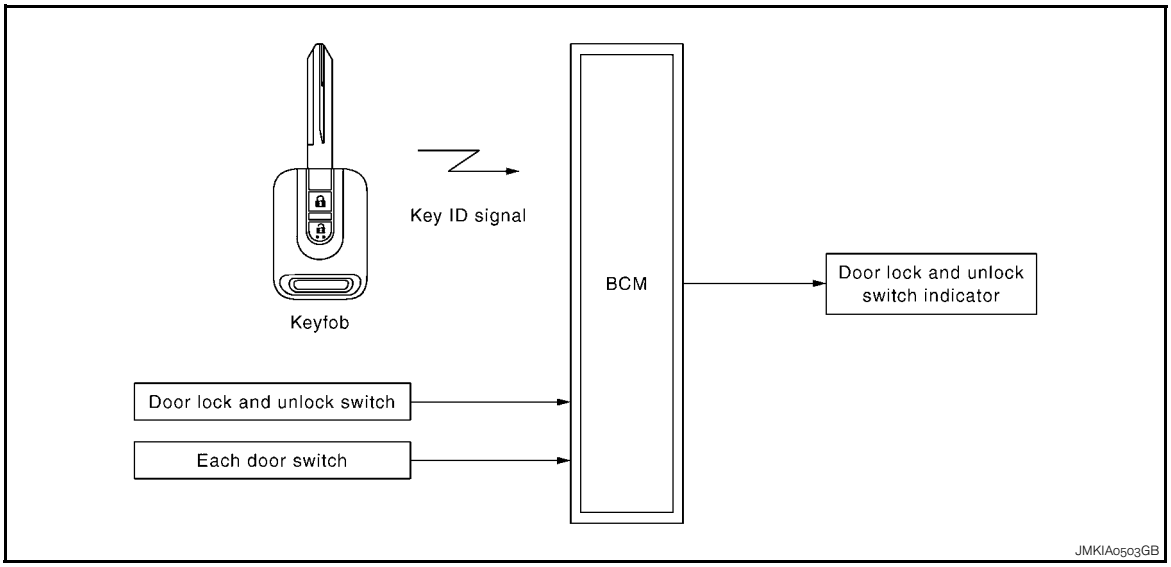
DOOR LOCK AND UNLOCK SWITCH : System Diagram

INFOID:0000000001088464

DOOR LOCK AND UNLOCK SWITCH OPERATION



DOOR LOCK AND UNLOCK SWITCH INDICATOR OPERATION



DOOR LOCK AND UNLOCK SWITCH : System Description

INFOID:0000000001088465

DOOR LOCK AND UNLOCK SWITCH OPERATION

Functions are available by operating the door lock and unlock switch on center console. Interlocked with the lock/unlock operation of door lock and unlock switch, door lock actuators of all doors are locked/unlocked.

Operation Condition

If the following conditions are not satisfied, door lock/unlock operation is not performed even if the door lock and unlock switch is operated.

Door lock and unlock switch	Operation condition
Lock operation	All the following conditions are satisfied. • Except driver side, doors are closed. • Doors are not locked with keyfob.
Unlock operation	All the following all conditions are satisfied. • Doors are not locked with keyfob.

NOTE:
When the door lock is locked with keyfob, door lock and unlock switch operation will be invalid until either of the following conditions is satisfied.
- Turn ignition switch ON.
- Unlock operation by keyfob.

DOOR LOCK AND UNLOCK SWITCH INDICATOR OPERATION

Door lock and unlock switch indicator indicates door lock status. The indicator turn ON while ignition switch is ON and door lock is locked. If any door is opened, the indicator will turn OFF.

1 Minute Timer

A timer must be running to turn OFF the indicator. The timer will run for 1 minute after locking with keyfob or auto door lock.

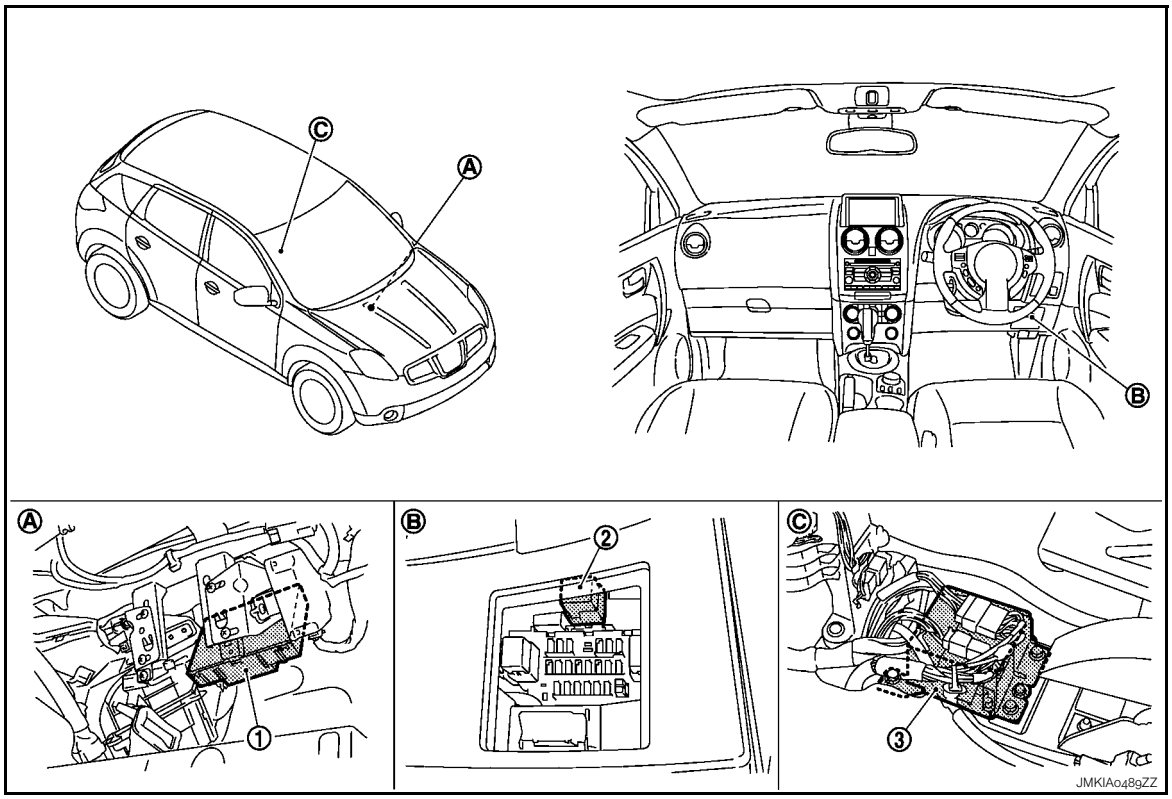
30 Minutes Timer

A timer must be running to turn OFF the indicator. The timer will run for 30 minutes after locking with door lock and unlock switch.

NOTE:
1minute timer condition is satisfied while 30 minutes timer is active, however 30 minutes timer does not change when 1 minutes timer is active.

DOOR LOCK AND UNLOCK SWITCH : Component Parts Location

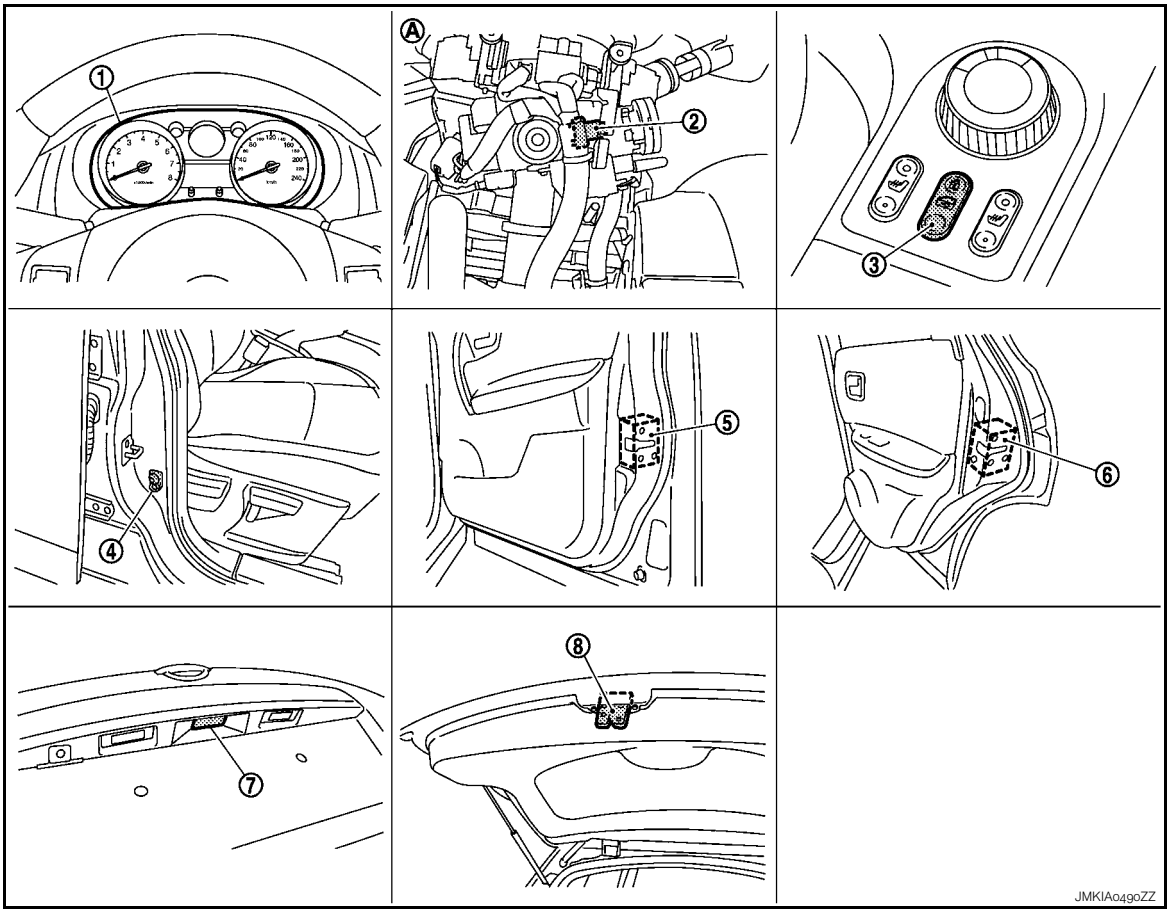
INFOID:0000000001088466



1. BCM
   M65, M66, M67
2. Passenger side anti-hijack relay
   M90
3. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. View with fuse box lid removed
C. View with center console removed

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1. Combination meter M34
2. Key switch M24
3. Door lock and unlock awitch M89
4. Front door switch (driver side) B34
5. Front door lock actuator (driver side) D29
6. Rear door lock actuator RH D95
7. Back door opener switch D186
8. Back door lock assembly D152

A. View with steering column cover removed

DOOR LOCK AND UNLOCK SWITCH : Component Description

INFOID:0000000001088467

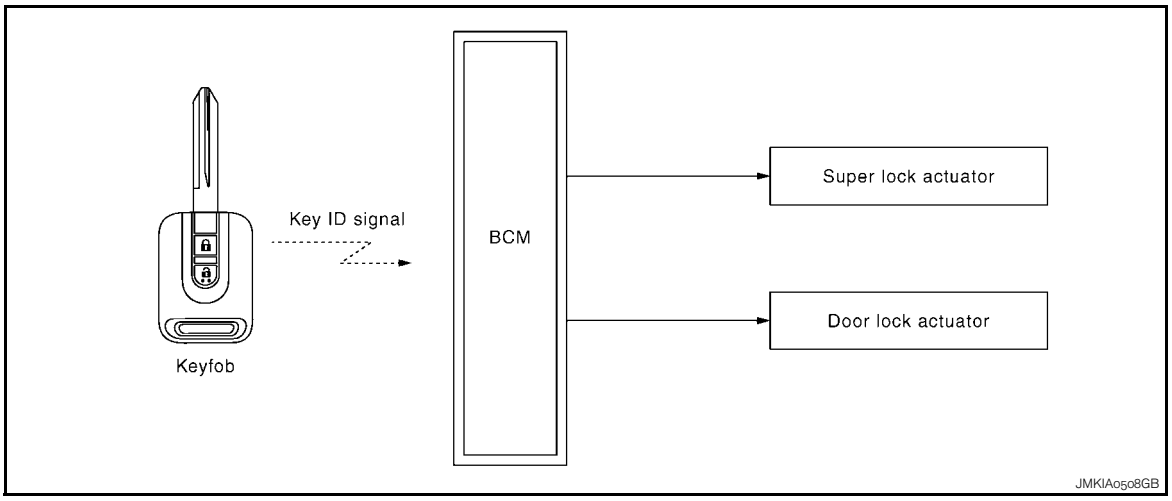
Item	Function
BCM	Controls the door lock and unlock function.
Door switch	Detects door state (open or closed).
Door lock and unlock switch	Transmits door lock and unlock signal to BCM. Door lock and unlock switch indicator is built in door lock and unlock switch.
Door lock actuator	Receives door lock and unlock signal from BCM and locks and unlocks each door.

KEYFOB

KEYFOB : System Diagram

INFOID:0000000001088020

KEYFOB OPERATION



KEYFOB : System Description

INFOID:0000000001088021

KEYFOB OPERATION

The the multi remote control system can be locked and unlocked pressing door lock and unlock button of key-fob.

OPERATION CONDITION

Remote controller operation	Operation condition
Lock/unlock	Key switch is OFF (key is removed from ignition key cylinder).

OPERATION AREA

To ensure that the keyfob works effectively, use within 100 cm range of each door, however the operable range may differ according to surroundings.

DOOR LOCK AND UNLOCK CONTROL

When door lock and unlock button of keyfob is pressed, door lock and unlock signal transmits from keyfob to BCM. When BCM receives the door lock and unlock signal, it operates door lock actuator.

SUPER LOCK CONTROL WITH ANTI-HIJACK MODE

- Super lock provides a higher anti-theft performance than a conventional power door lock system. The super lock system is controlled by BCM.
- When door lock is unlocked, pressing LOCK button on keyfob once will lock and super lock set all doors. When super lock is set, pressing UNLOCK button on keyfob once will unlock (and super lock release) driver side door and super lock release all other doors. Pressing UNLOCK button on keyfob within 5 seconds from the first time will unlock all doors and back door can be opened with back door opener switch.

NOTE:

Anti-hijack mode can be set to ON or OFF with CONSULT-III. For the setting information, refer to DLK-738, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

SUPER LOCK CONTROL WITHOUT ANTI-HIJACK MODE

When door lock is unlocked, pressing LOCK button on keyfob once will lock and super lock set all doors. When all doors are set to super lock, pressing UNLOCK button on keyfob will unlock all doors and super lock release all doors and back door can be opened with back door opener switch.

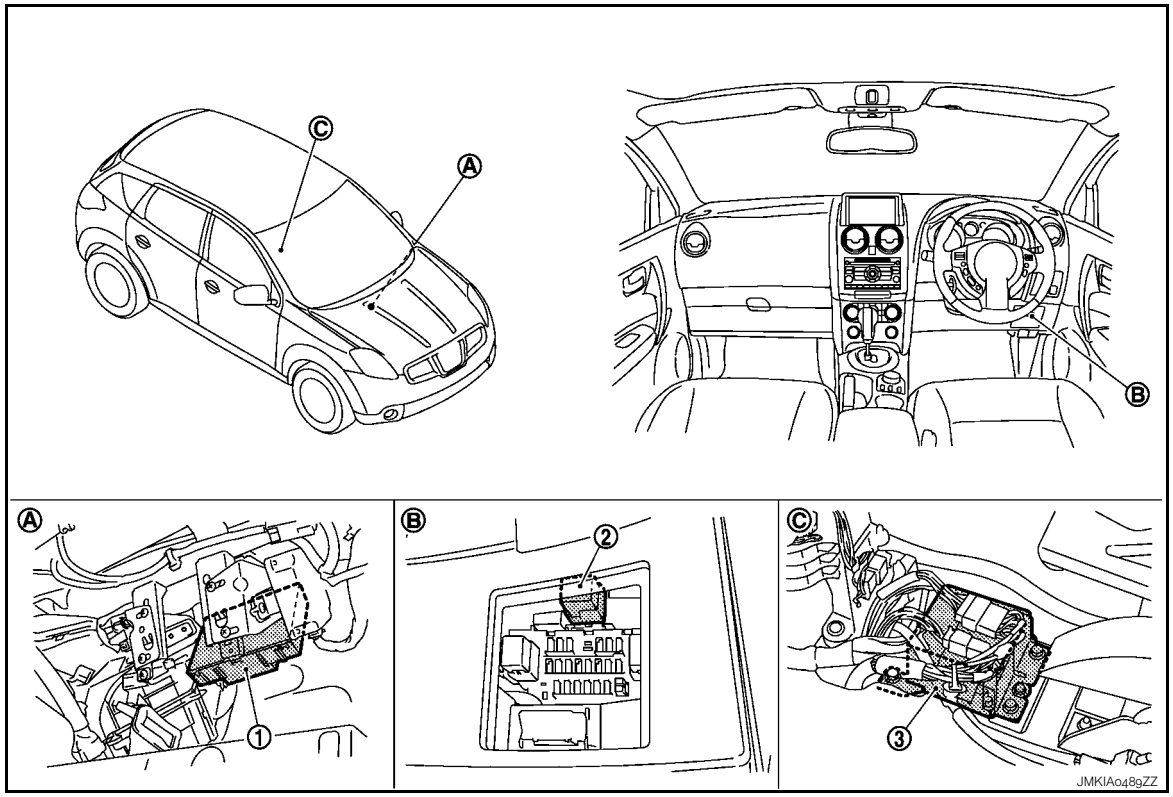
NOTE:

Anti-hijack mode can be set to ON or OFF with CONSULT-III. For the setting information, refer to DLK-738, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

KEYFOB : Component Parts Location

INFOID:0000000001117084

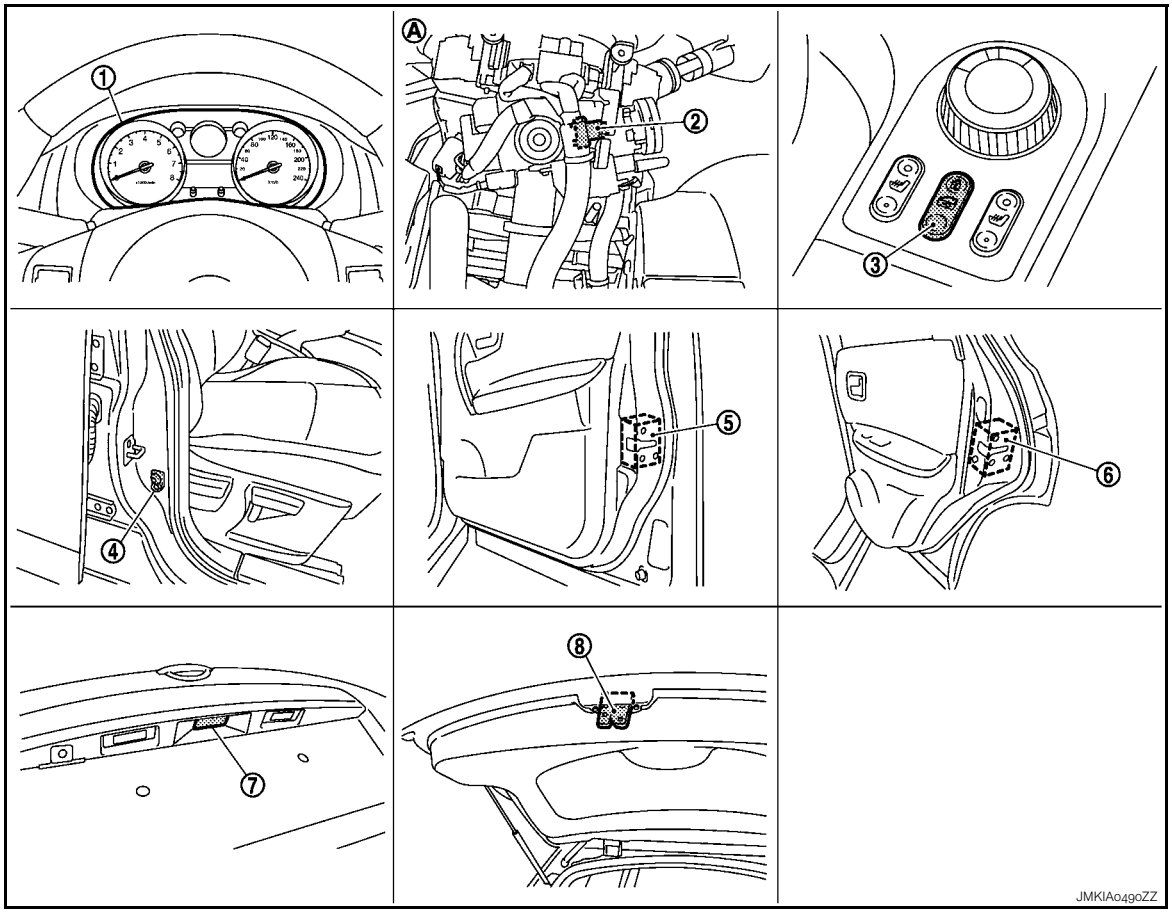
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1. BCM
   M65, M66, M67
2. Passenger side anti-hijack relay
   M90
3. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. View with fuse box lid removed
C. View with center console removed

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1. Combination meter M34
2. Key switch M24
3. Door lock and unlock awitch M89
4. Front door switch (driver side) B34
5. Front door lock actuator (driver side) D29
6. Rear door lock actuator RH D95
7. Back door opener switch D186
8. Back door lock assembly D152

A. View with steering column cover removed

KEYFOB : Component Description

INFOID:0000000001088023

Item	Function
BCM	Controls the door lock function.
Key switch	Detect that ignition key is inserted into ignition key cylinder.
Door lock actuator	Receives lock and unlock signal from BCM and locks and unlocks each door.

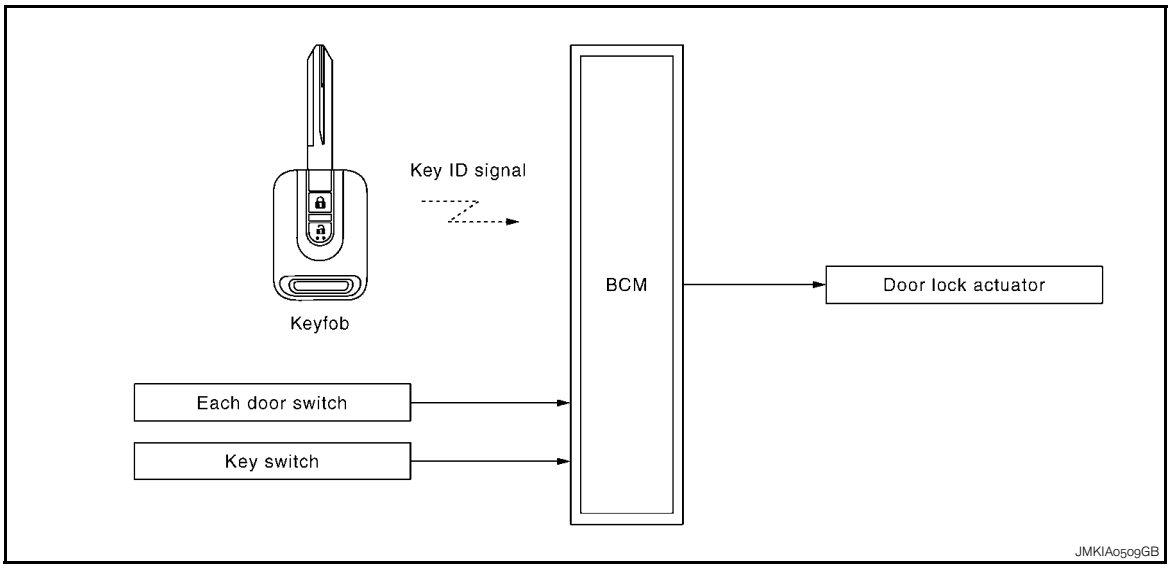
AUTO DOOR LOCK

AUTO DOOR LOCK : System Diagram

INFOID:0000000001088452

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AUTO RELOCK OPERATION



AUTO DOOR LOCK : System Description

INFOID:0000000001088453

AUTO RELOCK OPERATION

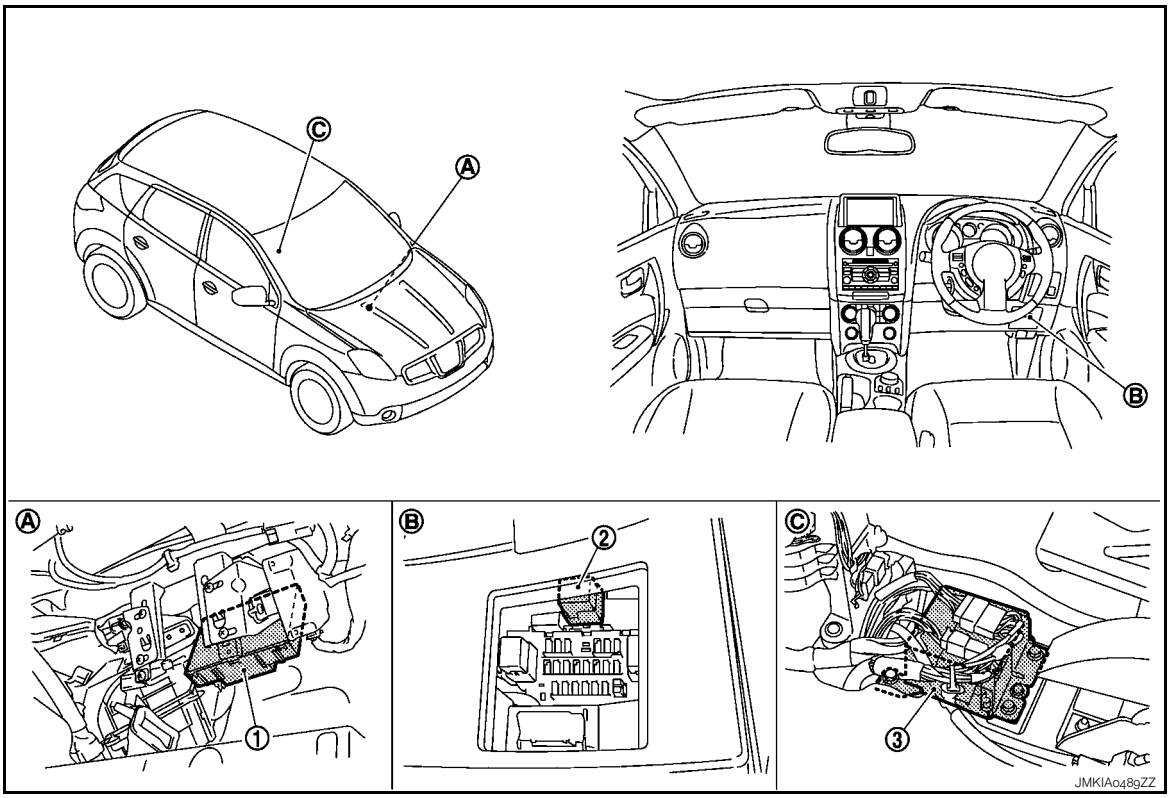
When all doors are locked and then doors are unlocked with keyfob, if BCM does not receive the following signal within 2 minutes[*1], all doors are automatically locked.

- Any door is opened.
- Ignition key is inserted into ignition key cylinder.
- Door is locked with keyfob.
- Door is locked/unlocked with door lock and unlock switch.

[*1]: The time can be changed with CONSULT-III. Refer to DLK-740, "MULTIREMOTE ENT : CONSULT-III Function (BCM - MULTIREMOTE ENT)".

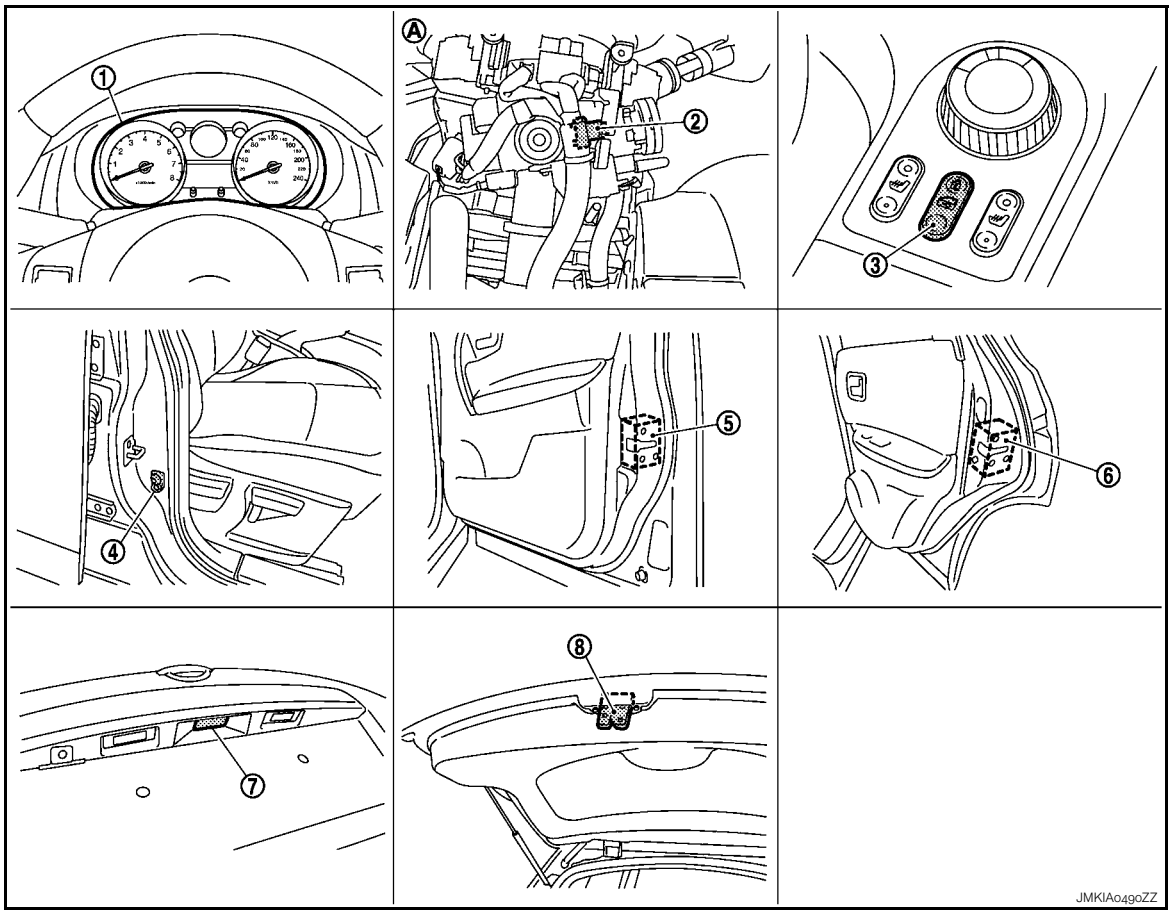
AUTO DOOR LOCK : Component Parts Location

INFOID:0000000001117085



1. BCM
   M65, M66, M67
2. Passenger side anti-hijack relay
   M90
3. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. View with fuse box lid removed
C. View with center console removed



1. Combination meter
   M34
2. Key switch
   M24
3. Door lock and unlock awitch
   M89
4. Front door switch (driver side)
   B34
5. Front door lock actuator (driver side)
   D29
6. Rear door lock actuator RH
   D95
7. Back door opener switch
   D186
8. Back door lock assembly
   D152

A. View with steering column cover removed

AUTO DOOR LOCK : Component Description

INFOID:0000000001088455

Item	Function
BCM	Controls the door lock function.
Door switch	Detects door state (open or closed).
Key switch	Detects that ignition key is inserted into ignition key cylinder.
Door lock/unlock switch	Transmits door lock/unlock signal to BCM.
Keyfob	Transmits key ID to BCM when lock and unlock button is pressed.
Door lock actuator	Receives lock/unlock signal from BCM and locks/unlocks each door.

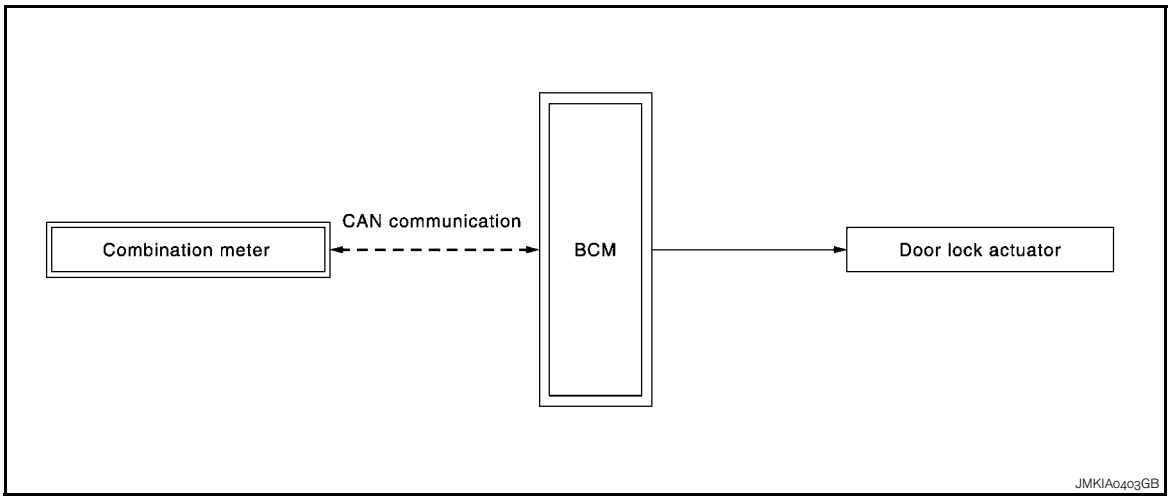
VEHICLE SPEED SENSING AUTO DOOR LOCK

VEHICLE SPEED SENSING AUTO DOOR LOCK : System Diagram

INFOID:0000000001088456

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VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION



VEHICLE SPEED SENSING AUTO DOOR LOCK : System Description

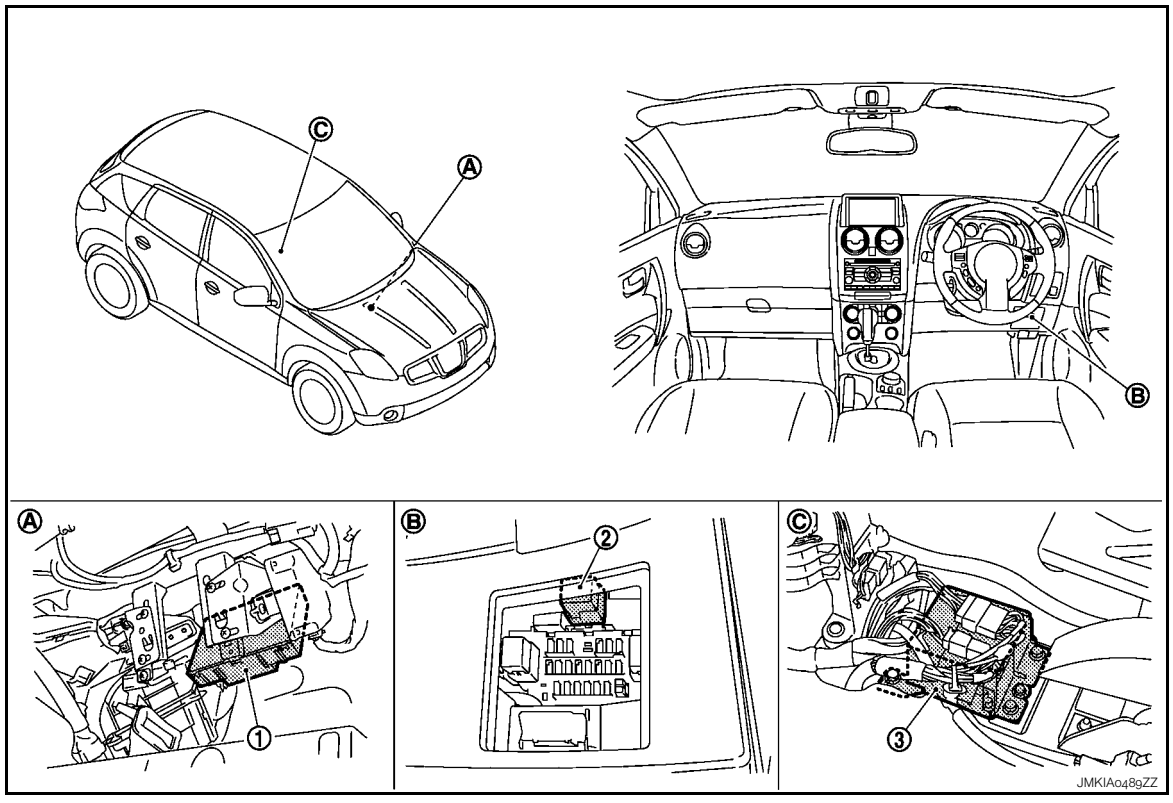
INFOID:0000000001088457

VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION

When the vehicle speed exceeds more than 12 km/h (7 MPH), all doors are automatically locked. The vehicle speed signal is received from combination meter via CAN communication.

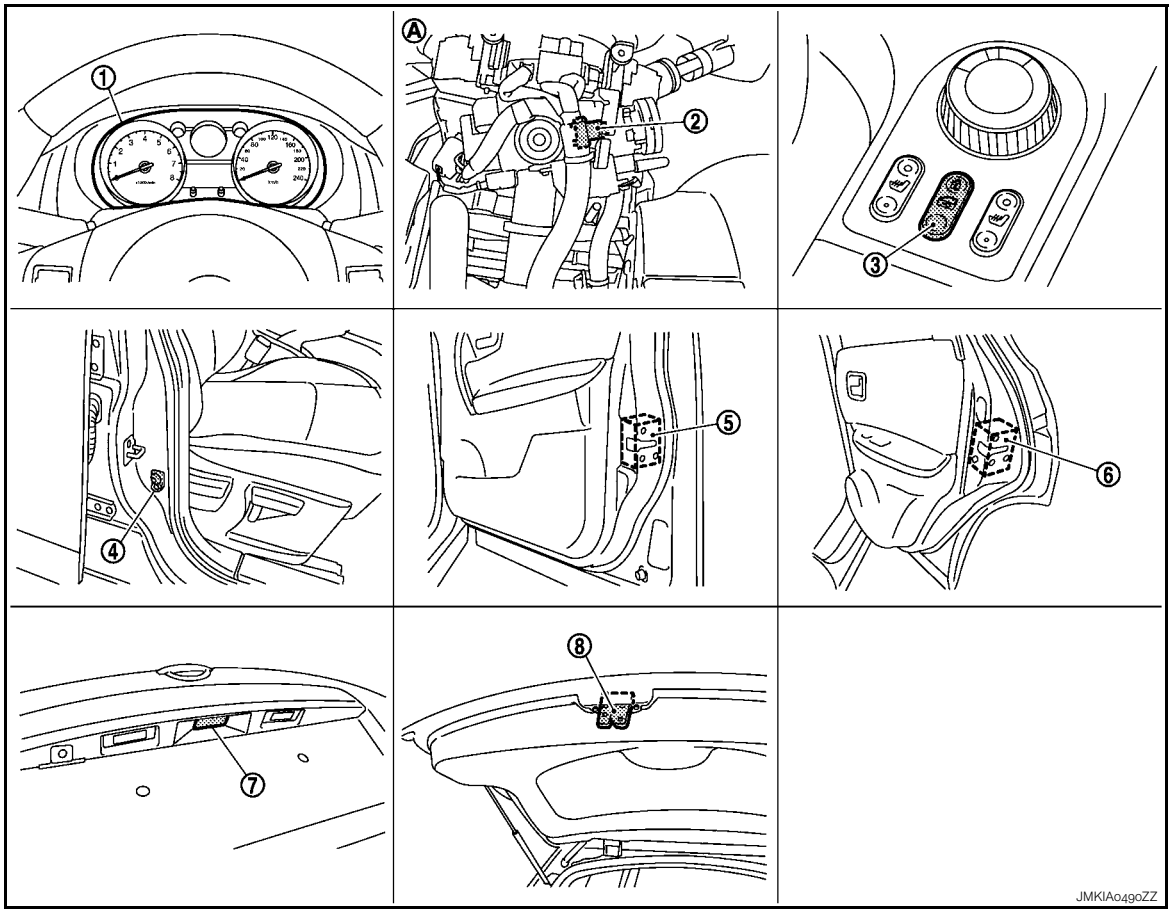
VEHICLE SPEED SENSING AUTO DOOR LOCK : Component Parts Location

INFOID:0000000001117086



1. BCM M65, M66, M67
2. Passenger side anti-hijack relay M90
3. Air bag diagnosis sensor unit M59

A. Over the glove box
B. View with fuse box lid removed
C. View with center console removed



1. Combination meter M34
2. Key switch M24
3. Door lock and unlock awitch M89
4. Front door switch (driver side) B34
5. Front door lock actuator (driver side) D29
6. Rear door lock actuator RH D95
7. Back door opener switch D186
8. Back door lock assembly D152

A. View with steering column cover removed

VEHICLE SPEED SENSING AUTO DOOR LOCK : Component Description

INFOID:0000000001088459

Item	Function
BCM	Controls the door lock function.
Combination meter	Transmits vehicle speed signal to BCM via CAN communication.
Door lock actuator	Receives door lock and unlock signal from BCM and locks and unlocks each door.

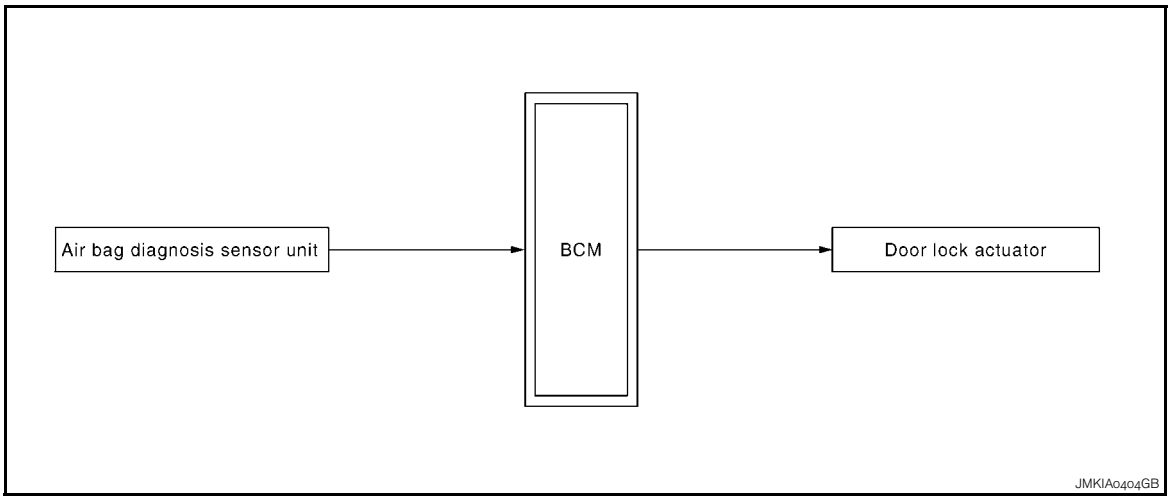
AIR BAG INTERLOCK UNLOCK

AIR BAG INTERLOCK UNLOCK : System Diagram

INFOID:0000000001088460

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AIR BAG INTERLOCK UNLOCK OPERATION



AIR BAG INTERLOCK UNLOCK : System Description

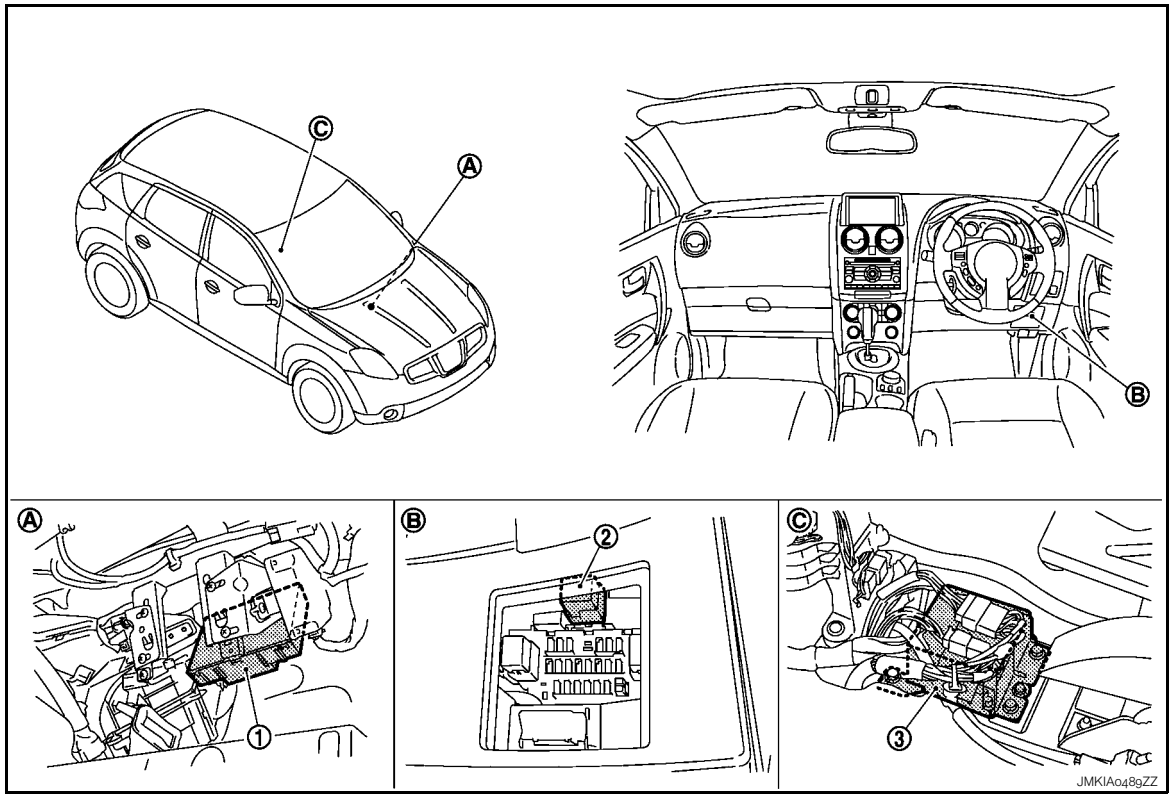
INFOID:0000000001088461

AIR BAG INTERLOCK UNLOCK OPERATION

When ignition switch is ON and BCM receive air bag deployment signal, it operates automatically to unlock all doors. Air bag diagnosis sensor unit sends the air bag deployment signal to BCM.

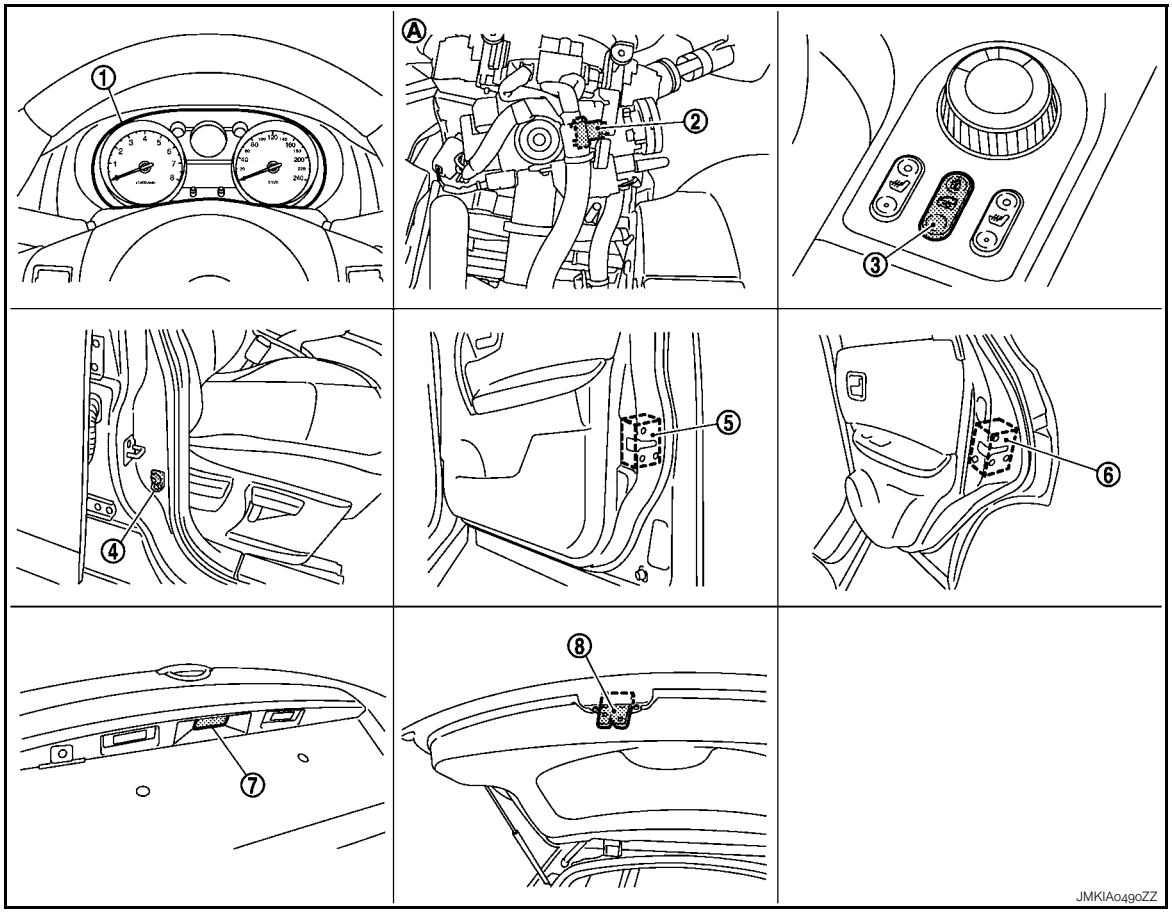
AIR BAG INTERLOCK UNLOCK : Component Parts Location

INFOID:0000000001117087



1. BCM
   M65, M66, M67
2. Passenger side anti-hijack relay
   M90
3. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. View with fuse box lid removed
C. View with center console removed



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7. Back door opener switch D186
8. Back door lock assembly D152

A. View with steering column cover removed

AIR BAG INTERLOCK UNLOCK : Component Description

INFOID:0000000001088463

Item	Function
BCM	Controls the door lock function.
Air bag diagnosis sensor unit	Transmits air bag deployment signal to BCM.
Door lock actuator	Receives door lock and unlock signal from BCM and lock and unlock each door.

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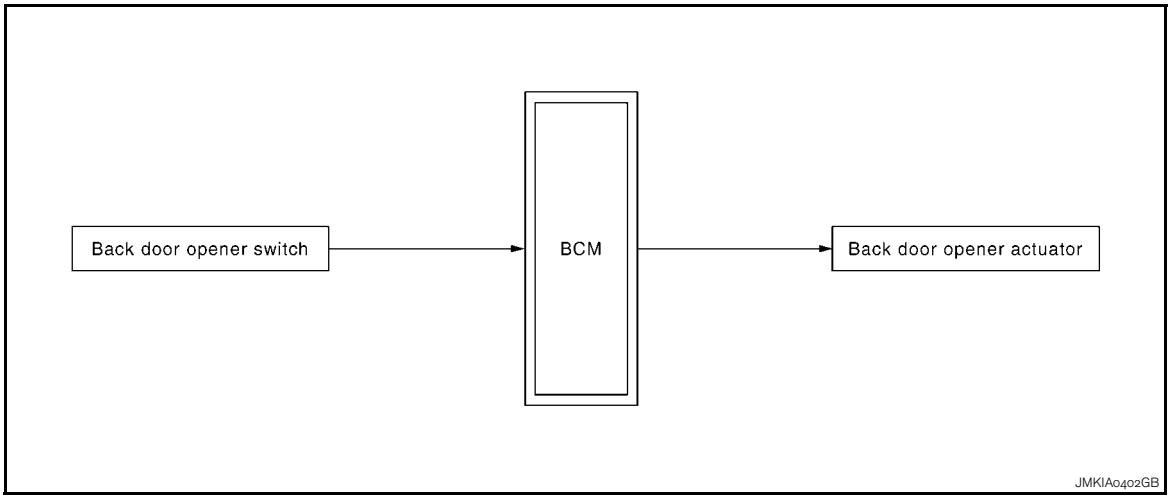
BACK DOOR OPENER FUNCTION

BACK DOOR OPENER SWITCH

BACK DOOR OPENER SWITCH : System Diagram

INFOID:0000000001088056

BACK DOOR OPENER OPERATION



BACK DOOR OPENER SWITCH : System Description

INFOID:0000000001088057

BACK DOOR OPENER OPERATION

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

NOTE:

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

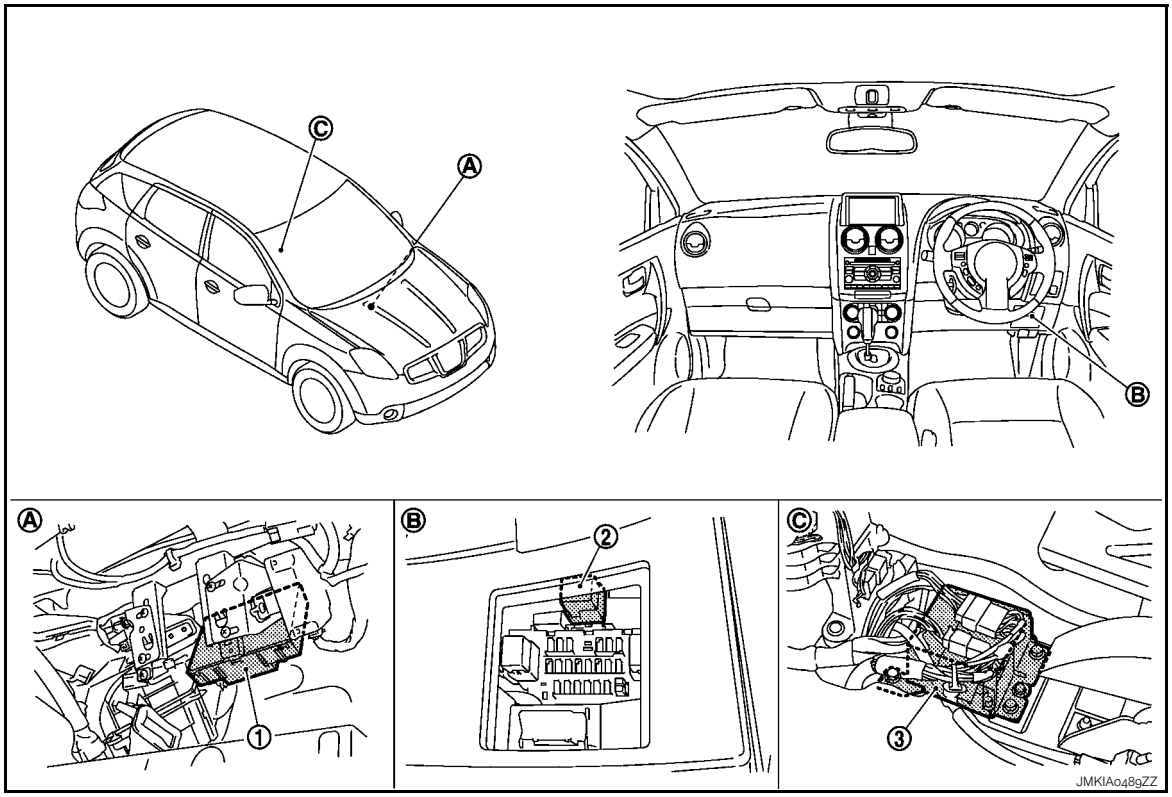
OPERATION CONDITION

If the following conditions are not satisfied, back door opener operation is not performed.

Back door opener switch operation	Operation condition
Back door open	• Vehicle speed is less than 5 km/h (3 MPH). • All doors are unlocked.

BACK DOOR OPENER SWITCH : Component Parts Location

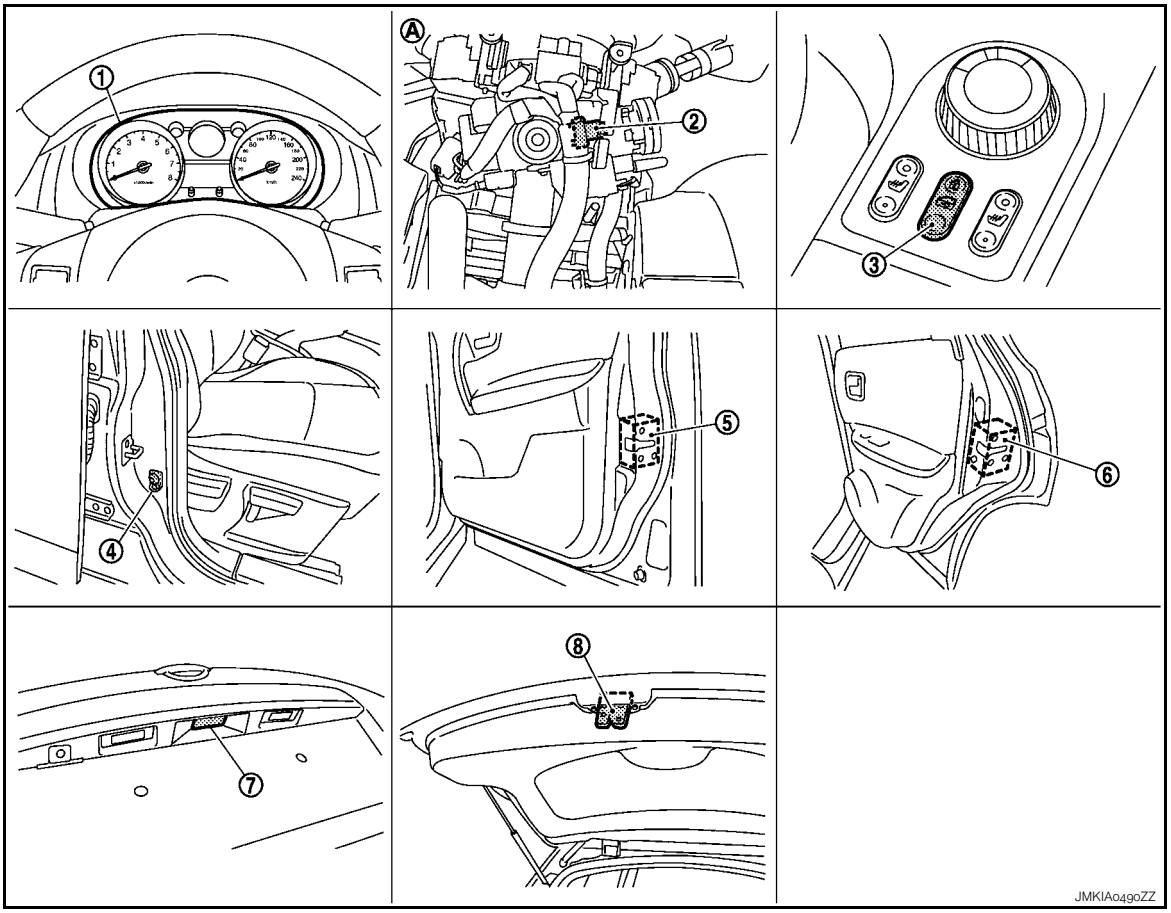
INFOID:0000000001117088



1. BCM
   M65, M66, M67
2. Passenger side anti-hijack relay
   M90
3. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. View with fuse box lid removed
C. View with center console removed

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1. Combination meter M34
2. Key switch M24
3. Door lock and unlock awitch M89
4. Front door switch (driver side) B34
5. Front door lock actuator (driver side) D29
6. Rear door lock actuator RH D95
7. Back door opener switch D186
8. Back door lock assembly D152

A. View with steering column cover removed

BACK DOOR OPENER SWITCH : Component Description

INFOID:0000000001088059

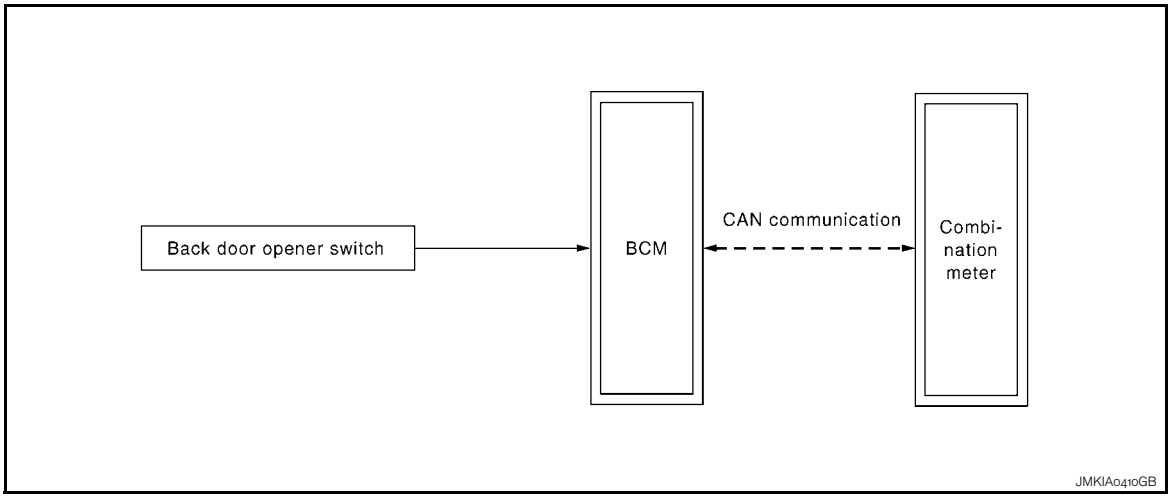
Item	Function
BCM	Controls the back door opener function.
Back door opener switch	Transmits back door opener switch operation signal to BCM.
Back door opener actuator	Opens the back door with the back door open signal from BCM.
Combination meter	Transmits vehicle speed signal to BCM via CAN communication.

WARNING FUNCTION

System Diagram

INFOID:0000000001088073

BACK DOOR OPEN WARNING



System Description

INFOID:0000000001088074

BACK DOOR OPEN WARNING OPERATION

Back door opener switch is operated, when door lock is locked with door lock and unlock switch, by speed sensing lock or when only the driver side is unlocked by the anti-hijack function, the buzzer (built in combination meter) will sound.

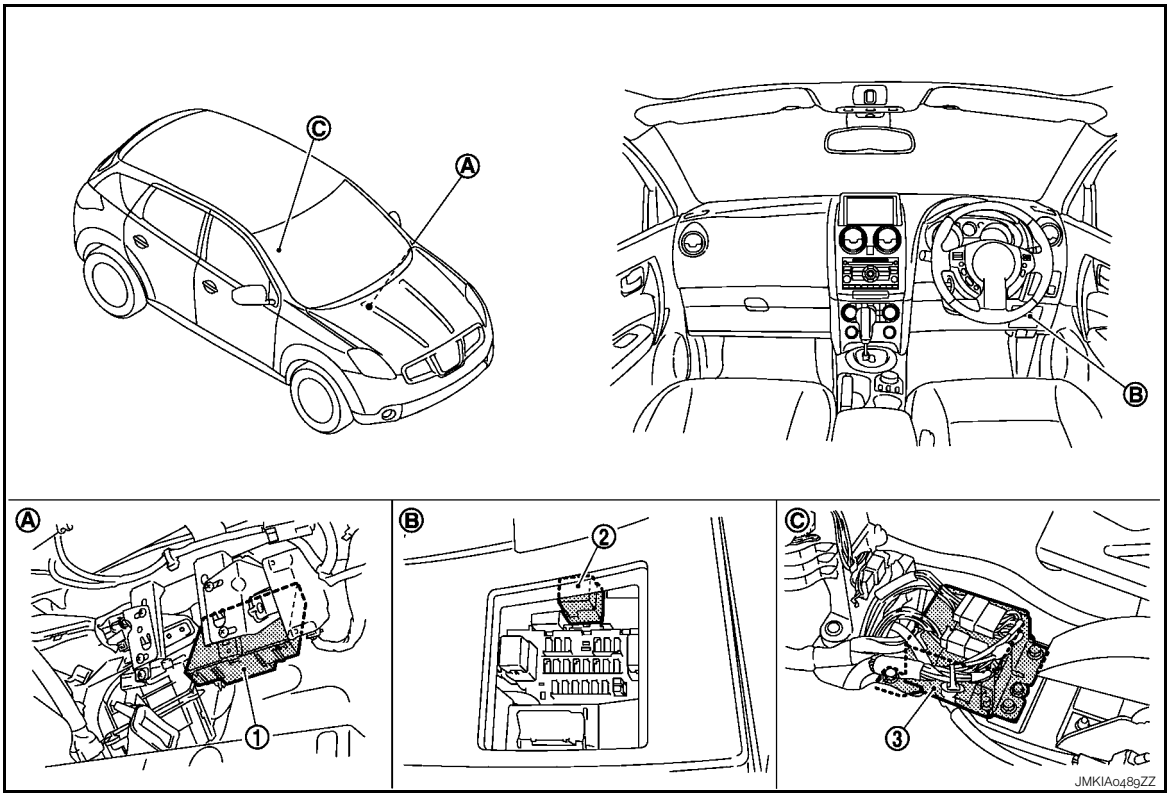
KEY REMINDER OPERATION

- The buzzer (combination meter) will sound and the doors will not lock if the door lock and unlock switch is pressed while the driver door is open and mechanical key is inserted ignition key cylinder.
- The buzzer (combination meter) will sound and the doors will not lock if the door lock and unlock switch is pressed while any door other than the driver door is open.

Component Parts Location

INFOID:0000000001117089

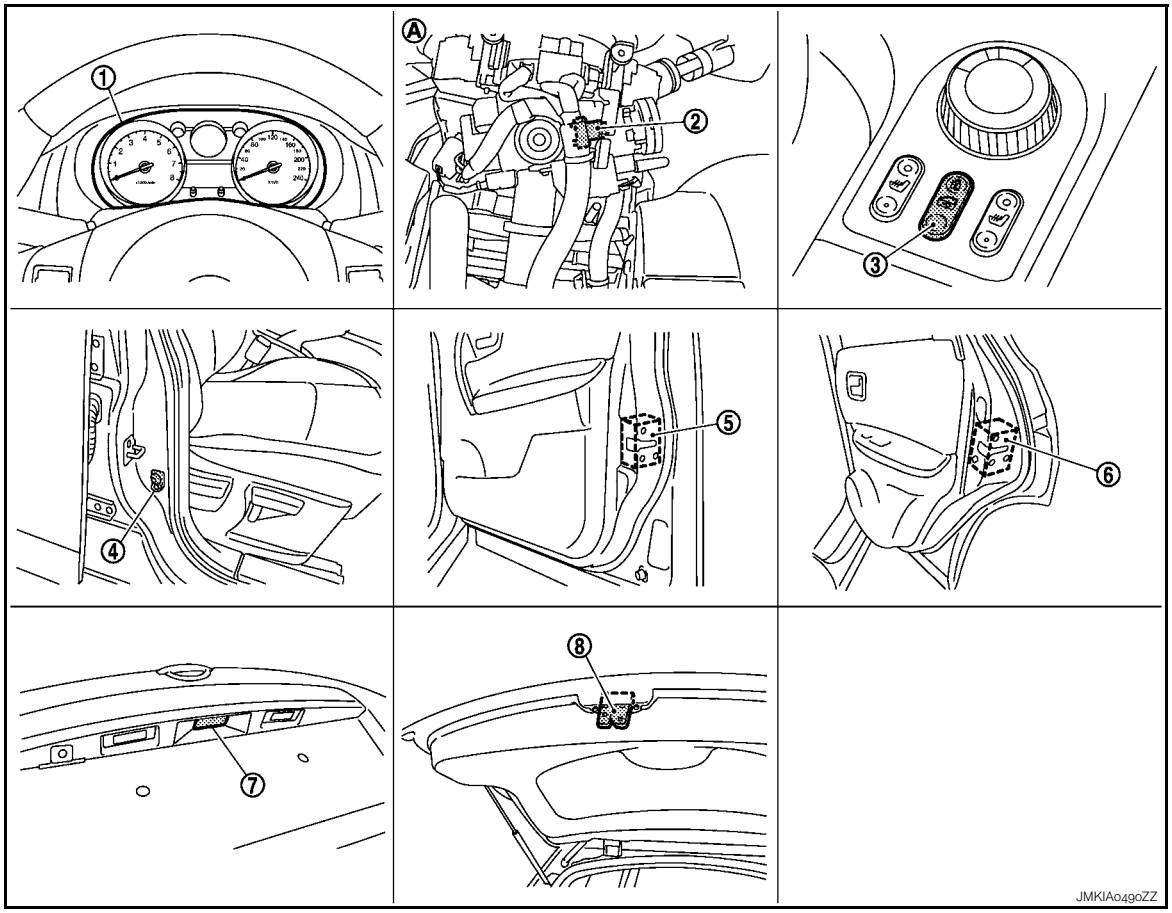
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1. BCM
   M65, M66, M67
2. Passenger side anti-hijack relay
   M90
3. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. View with fuse box lid removed
C. View with center console removed

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1. Combination meter M34
2. Key switch M24
3. Door lock and unlock awitch M89
4. Front door switch (driver side) B34
5. Front door lock actuator (driver side) D29
6. Rear door lock actuator RH D95
7. Back door opener switch D186
8. Back door lock assembly D152

A. View with steering column cover removed

Component Description

INFOID:0000000001088076

Item	Function
BCM	Controls the warning function.
Combination meter	Sounds the buzzer by the request signal from BCM via CAN communication.
Back door opener switch	Transmit back door open signal to BCM

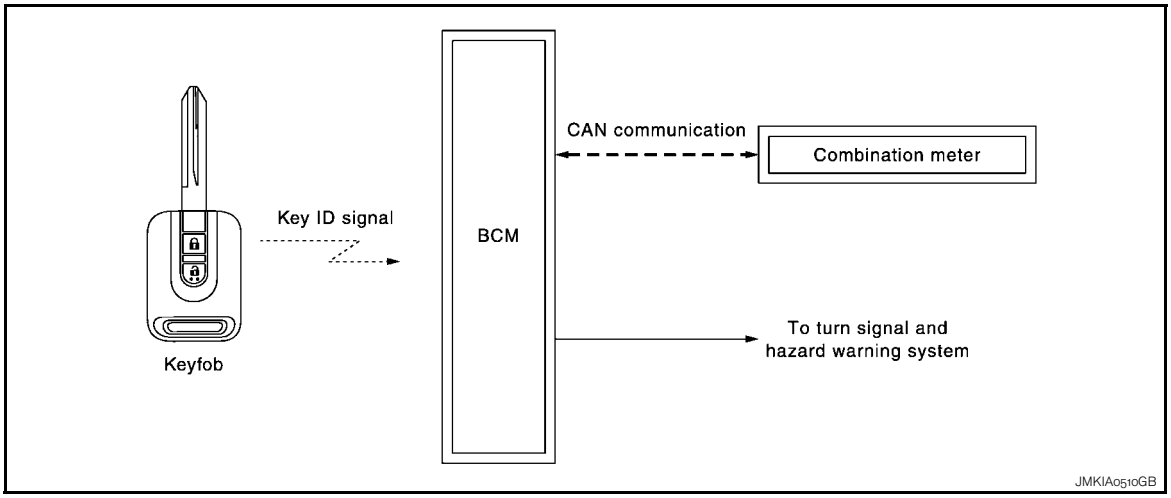
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HAZARD REMINDER FUNCTION

System Diagram

INFOID:0000000001088140

HAZARD REMINDER FUNCTION



System Description

INFOID:0000000001088141

HAZARD REMINDER OPERATION

When door is locked or unlocked by keyfob, then BCM flashes hazard warning lamp as a reminder.

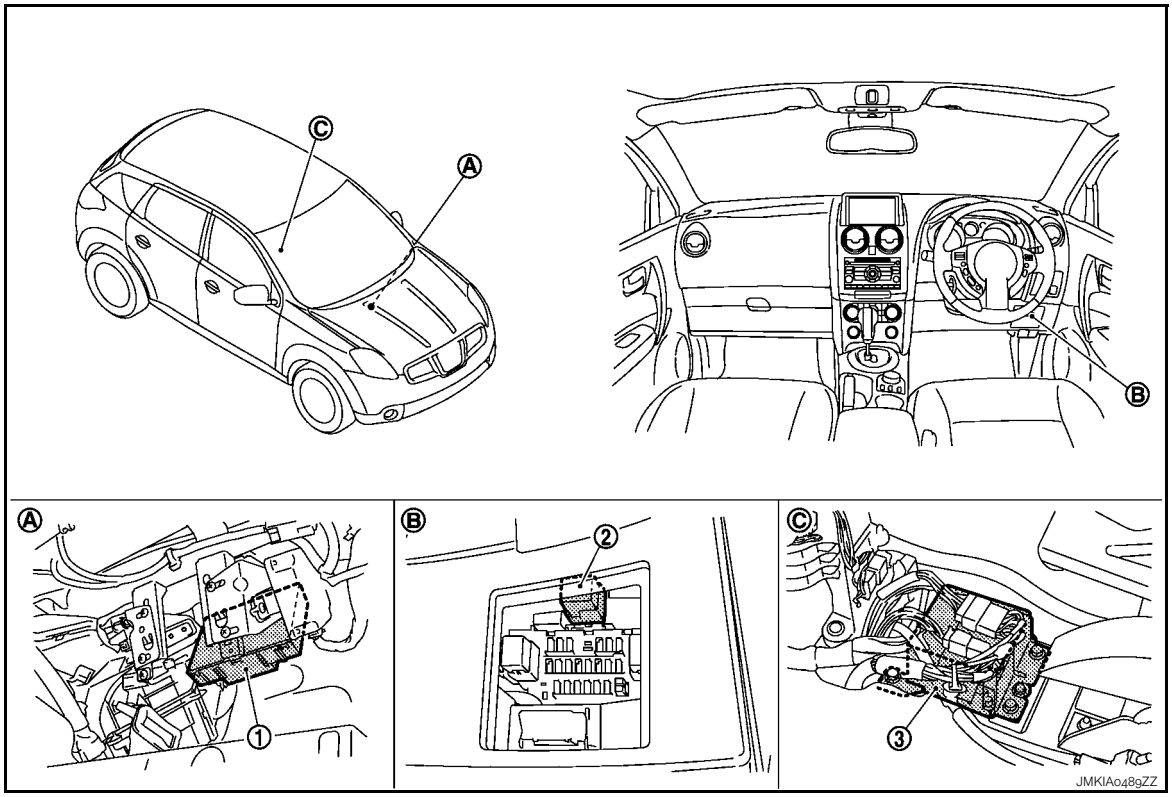
NOTE:

Hazard reminder mode can be changed with CONSULT-III. Refer to DLK-738, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Hazard reminder setting (With CONSULT-III)		Door lock operation (with keyfob)	Hazard warning lamp flash
HAZARD LAMP SET	MODE 1	—	—
	MODE 2	Lock	Once
		Unlock	—
	MODE 3	Lock	—
		Unlock	Twice
	MODE 4	Lock	Once
		Unlock	Twice

Component Parts Location

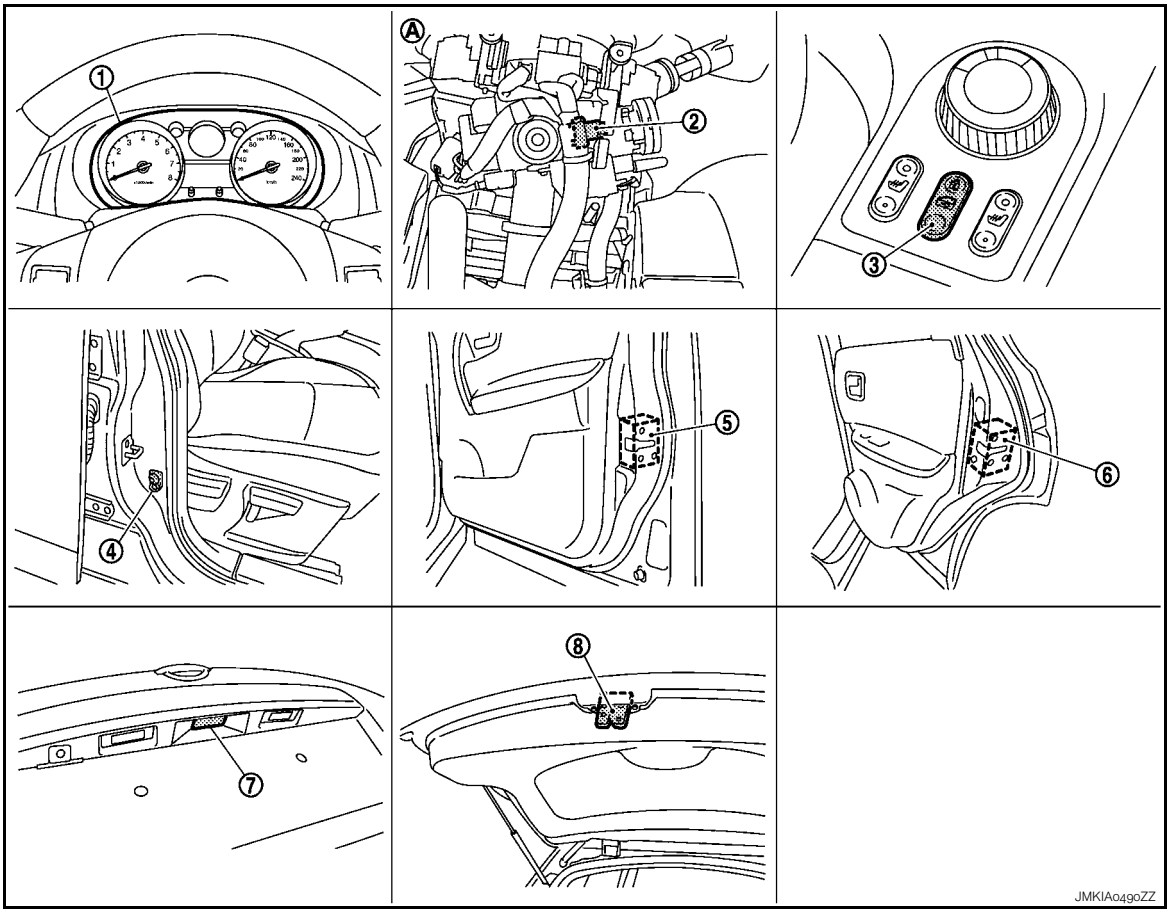
INFOID:0000000001117090



1. BCM
   M65, M66, M67
2. Passenger side anti-hijack relay
   M90
3. Air bag diagnosis sensor unit
   M59

A. Over the glove box
B. View with fuse box lid removed
C. View with center console removed

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1. Combination meter M34
2. Key switch M24
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4. Front door switch (driver side) B34
5. Front door lock actuator (driver side) D29
6. Rear door lock actuator RH D95
7. Back door opener switch D186
8. Back door lock assembly D152

A. View with steering column cover removed

Component Description

INFOID:0000000001088143

Item	Function
BCM	Controls the hazard reminder system.
Combination meter	Turns ON the turn signal indicator (built in combination meter) by the request from BCM via CAN communication.
Keyfob	Transmits key ID to BCM when lock and unlock button is pressed.

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM)

INFOID:0000000001097510

APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF-DIAG RESULTS	Displays the diagnosis results judged by BCM. Refer to BCS-61, "DTC Index".
CAN DIAG SUPPORT MNTR	Monitors the reception status of CAN communication viewed from BCM.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.
ECU IDENTIFICATION	The BCM part number is displayed.
CONFIGURATION	• Enables to read and save the vehicle specification. • Enables to write the vehicle specification when replacing BCM.

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

It can perform the diagnosis modes except the following for all sub system selection items.

System	Sub system selection item	Diagnosis mode		
		WORK SUPPORT	DATA MONITOR	ACTIVE TEST
—	BCM	×		
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	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER		×	×
Air conditioner	AIR CONDITONER		×	
Intelligent Key system	INTELLIGENT KEY		×	
Combination switch	COMB SW		×	
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk open	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
Signal buffer system	SIGNAL BUFFER		×	×
PTC heater system	PTC HEATER		×	×

DOOR LOCK

DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)

INFOID:0000000001097507

BCM CONSULT-III FUNCTION

CONSULT-III performs the following functions via CAN communication with BCM.

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Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
ACC ON SW	Indicates [ON/OFF] condition of ignition switch in ACC position.
PUSH SW*1	Indicates [ON/OFF] condition of ignition knob switch.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
CDL LOCK SW	Indicates [ON/OFF] condition of door lock and unlock switch.
CDL UNLOCK SW	Indicates [ON/OFF] condition of door lock and unlock switch.
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS	Indicates [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR	Indicates [ON/OFF] condition of rear door switch RH.
DOOR SW-RL	Indicates [ON/OFF] condition of rear door switch LH.
BACK DOOR SW	Indicates [ON/OFF] condition of back door switch.
KEYLESS LOCK*2	Indicates [ON/OFF] condition of lock signal from key fob.
KEYLESS UNLOCK*2	Indicates [ON/OFF] condition of unlock signal from key fob.
I-KEY LOCK*1	Indicates [ON/OFF] condition of lock signal from Intelligent Key.
I-KEY UNLOCK*1	Indicates [ON/OFF] condition of unlock signal from Intelligent Key.
UNLOCK WITH DR	This item is indicated, but not monitored.
UNLOCK SHOCK	Indicates [ON/OFF] condition of signal from air bag diagnosis unit. • ON: During the unlock operation interlock with air bag. • OFF: Other than above.
SHOCK SENSOR	Indicates [NOMAL/ON/OFF] condition of circuit between BCM and air bag diagnosis sensor unit. • NORMAL: Ignition switch ON. (BCM is receiving normal condition signal from air bag diagnosis sensor unit.) • ON: During the receiving of air bag deployment signal from air bag diagnosis sensor unit. • OFF: After the receiving of air bag deployment signal from air bag diagnosis sensor unit.
VEHICLE SPEED	Displays the vehicle speed signal received from combination meter by numerical value [km/h].

*1: For the Intelligent key equipped vehicle.

*2: For the multi remote control system equipped vehicle.

ACTIVE TEST

Test item	Description
SUPER LOCK*1	This test is able to check super lock operation [LOCK (SET)/UNLOCK (RELEASE)].
DOOR LOCK IND	This test is able to check door lock indicator (built in door lock and unlock switch on center console) operation [ON/OFF].
DOOR LOCK	This test is able to check door lock operation [ALL LOCK/ALL UNLOCK/DR UNLOCK/ OTHER UNLOCK].

:*1 For the super lock equipped vehicle.

WORK SUPPORT

A B C D E F G H I J DLK L M N O P
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Test item	Description
SECURITY DOOR LOCK SET	Anti hijack function mode can be changed in this mode. • ON: Anti hijack mode is active. • OFF: Anti hijack mode is inactive.

MULTIREMOTE ENT

MULTIREMOTE ENT : CONSULT-III Function (BCM - MULTIREMOTE ENT)

INFOID:0000000001097508

BCM CONSULT-III FUNCTION

CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
ACC ON SW	Indicates [ON/OFF] condition of ignition switch in ACC position.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
KEYKESS LOCK	Indicates [ON/OFF] condition of lock signal from key fob.
KEYLESS UNLOCK	Indicates [ON/OFF] condition of unlock signal from key fob.
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS	Indicates [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR	Indicates [ON/OFF] condition of rear door switch RH.
DOOR SW-RL	Indicates [ON/OFF] condition of rear door switch LH.
BACK DOOR SW	Indicates [ON/OFF] condition of back door switch.
CDL LOCK SW	Indicates [ON/OFF] condition of door lock and unlock switch.
CDL UNLOCK SW	Indicates [ON/OFF] condition of door lock and unlock switch.
RKE LOCK AND UNLOCK	This item is indicated, but not monitored.

ACTIVE TEST

Test item	Description
DOOR LOCK	This test is able to check warning chime in combination meter operation. [ALL LOCK/ALL UNLOCK/DR UNLOCK/OTHER UNLOCK]
INT LAMP	This test is able to check interior lamp operation [ON/OFF].
FLASHER	This test is able to check flasher operation [LH/RH/OFF].

WORK SUPPORT

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Test item	Description
HAZARD LAMP SET	Answer back function (hazard) mode can be changed in this mode. For the detail of the setting, refer to DLK-735, "System Description".
AUTO LOCK SET	Auto door lock time can be changed in this mode. • MODE 1: 1 minute • MODE 2: 2 minutes • MODE 3: 3 minutes • MODE 4: 4 minutes • MODE 5: 5 minutes

TRUNK

TRUNK : CONSULT-III Function (BCM - TRUNK)

INFOID:0000000001097509

APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from Intelligent Key unit.

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
PUSH SW*1	Indicates [ON/OFF] condition of ignition knob switch.
TRNK OPNR SW	Indicates [ON/OFF] condition of back door opener switch.
VEHICLE SPEED	Displays the vehicle speed signal received from combination meter by numerical value [km/h].

*1: For the Intelligent key equipped vehicle.

*2: For the remote keyless entry system equipped vehicle.

ACTIVE TEST

Test item	Description
TRUNK/GLASS HATCH	This test is able to check back door opener operation [ON/OFF].

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COMPONENT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000001097495

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN-H line, CAN-L line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.
CAN Communication Signal Chart. Refer to LAN-59, "CAN Communication Signal Chart".

DTC Logic

INFOID:0000000001097496

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:0000000001097497

1.PERFORM SELF DIAGNOSTIC

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

Is “CAN COMM CIRCUIT” displayed?

YES >> Refer to LAN-46, "Trouble Diagnosis Flow Chart".
NO >> Refer to GI-39, "Intermittent Incident".

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U1010 CONTROL UNIT (CAN)

DTC Logic

INFOID:0000000001097498

DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC Detection Condition	Possible cause
U1010	CONTROL UNIT (CAN)	When detecting error during the initial diagnosis of CAN controller of BCM.	BCM

Diagnosis Procedure

INFOID:0000000001097499

1.REPLACE BCM

When “DTC:U1010” is detected, replace BCM.

>> Replace BCM. Refer to BCS-64, "Exploded View".

Special Repair Requirement

INFOID:0000000001097500

1.ADDITIONAL SERVICE WHEN REPLACING BCM

>> Refer to BCS-3, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description".

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POWER SUPPLY AND GROUND CIRCUIT
BCM

BCM : Diagnosis Procedure

INFOID:0000000001115314

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.
41	Battery power supply	9 (10A)
57		J (40A)

Is the fuse fusing?

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

2.CHECK POWER SUPPLY CIRCUIT

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

Terminals			Voltage (Approx.)
(+)		(–)	
BCM		Ground	
Connector	Terminal		
M66	41		Battery voltage
M67	57		

Is the measurement value normal?

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

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M67	55		Existed

Does continuity exist?

YES >> BCM power supply and ground circuit are OK.
NO >> Repair harness or connector.

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DOOR LOCK AND UNLOCK SWITCH

Description

INFOID:0000000001099066

Transmits door lock/unlock operation to BCM.

Component Function Check

INFOID:0000000001099067

1.CHECK FUNCTION

With CONSULT-III

Check “CDL LOCK SW ”and “CDL UNLOCK SW” in Data monitor mode with CONSULT-III.

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

Is the inspection result normal?

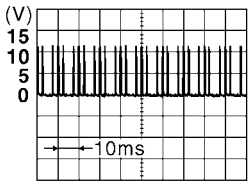
YES >> Door lock and unlock switch is OK.
NO >> Refer to DLK-745, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001099068

1.CHECK DOOR LOCK AND UNLOCK INPUT SIGNAL

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

Terminal			Signal (Reference value)
(+)		(–)	
Door lock and unlock switch connector	Terminal		
M89	1	Ground	
	6		

JPMIA0154GB

Is the inspection result normal?

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

2.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

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

BCM connector	Terminal	Door lock and unlock switch connector	Terminal	Continuity
M65	7	M89	6	Exists
	9		1	

4. Check continuity between BCM connector and ground.

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BCM connector	Terminal		Continuity
M65	7	Ground	Does not exist
	9		

Is the inspection result normal?

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

3.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

Check continuity between door lock and unlock switch connector and ground.

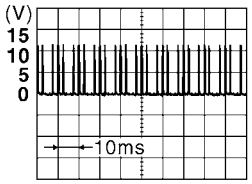
Door lock and unlock switch connector	Terminal	Ground	Continuity
M89	5		Exists

Is the inspection result normal?

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

4.CHECK BCM OUTPUT SIGNAL

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

Terminal			Signal (Reference value)
(+)		(–)	
BCM connector	Terminal		
M65	7	Ground	
	9		

JPMIA0154GB

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace BCM. Refer to BCS-64, "Exploded View".

5.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch
Refer to DLK-74, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock and unlock switch. Refer to DLK-280, "Exploded View".

Component Inspection

INFOID:0000000001099069

1.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch.

Door lock and unlock switch	Terminal		Condition	Continuity
M89	6	5	LOCK	Exists
	1		UNLOCK	

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.
NO >> Replace door lock and unlock switch. Refer to DLK-280, "Exploded View".

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DOOR LOCK AND UNLOCK SWITCH INDICATOR

Description

INFOID:0000000001102276

The door lock and unlock switch indicates door lock status. The indicator will illuminate when a lock operation is accomplished, and during this status, if any door is opened, the indicator will turn OFF.

Component Function Check

INFOID:0000000001102277

1.CHECK FUNCTION

With CONSULT-III

Check “DOOR LOCK IND” in “Active Test” mode with CONSULT-III.

Test item		Condition
DOOR LOCK IND	:ON	Illuminated
	:OFF	Not illuminated

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.
NO >> Refer to DLK-747, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001102278

1.CHECK DOOR LOCK AND UNLOCK SWITCH INDICATOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between door lock and unlock switch and ground.

Terminal			Condition	Voltage (Approx.)
(+)		(–)		
Door lock and unlock switch connector	Terminal			
M89	4	Ground	Door lock operation is accomplished	Battery voltage
			Any door is OPEN	0

Is the inspection result normal?

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

2.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

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

BCM connector	Terminal	Door lock and unlock switch connector	Terminal	Continuity
M65	24	M89	4	Exists

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	24		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

Check continuity between door lock and unlock switch connector and ground.

Door lock and unlock switch connector	Terminal	Ground	Continuity
M89	5		Exists

Is the inspection result normal?

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

4. CHECK BCM OUTPUT SIGNAL

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

Terminal			Condition	Voltage (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	24	Ground	Door lock operation is accomplished	Battery voltage
			Any door is OPEN	0

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace BCM. Refer to BCS-64, "Exploded View".

5. CHECK DOOR LOCK AND UNLOCK SWITCH INDICATOR

Check door lock and unlock switch
Refer to DLK-748, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock and unlock switch. Refer to DLK-280, "Exploded View".

Component Inspection

INFOID:0000000001102279

1. CHECK DOOR LOCK AND UNLOCK SWITCH INDICATOR

Check continuity door lock and unlock switch.

Door lock and unlock switch	Terminal		Continuity
	(+)	(-)	
M89	5	4	Exists
	4	5	Does not exist

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.
NO >> Replace door lock and unlock switch. Refer to DLK-280, "Exploded View".

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DOOR SWITCH
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001099070

Detects door open/closed condition.

DRIVER SIDE : Component Function Check

INFOID:0000000001099071

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-DR” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-DR	OPEN	:ON
	CLOSE	:OFF

Is the inspection result normal?

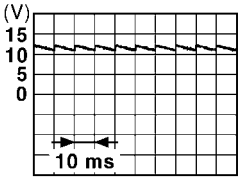
YES >> Door switch is OK.
NO >> Refer to DLK-749, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001099072

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.)
M65	26	Ground	OPEN	0
			CLOSE	

JPMIA0011GB

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
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
M65	26	B34	1	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	26		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-750, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

DRIVER SIDE : Component Inspection

INFOID:0000000001099073

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			
1	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001099074

Detects door open/closed condition.

PASSENGER SIDE : Component Function Check

INFOID:0000000001099075

1.CHECK FUNCTION

With CONSULT-III
Check door switches “DOOR SW-AS” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-AS	OPEN	: ON
	CLOSE	: OFF

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Refer to DLK-750, "PASSENGER SIDE : Diagnosis Procedure".

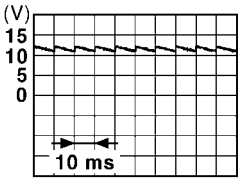
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001099076

1.CHECK DOOR SWITCH INPUT SIGNAL

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

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Terminals			Door condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	27	Ground	OPEN	0
			CLOSE	

JPMIA0011GB

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
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
M65	27	B27	1	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	27		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-751, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

PASSENGER SIDE : Component Inspection

INFOID:0000000001099077

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			
1	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

REAR LH

REAR LH : Description

INFOID:0000000001099078

Detects door open/closed condition.

REAR LH : Component Function Check

INFOID:0000000001099079

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-RL” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-RL	OPEN	:ON
	CLOSE	:OFF

Is the inspection result normal?

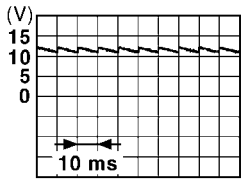
YES >> Door switch is OK.
NO >> Refer to DLK-752, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000001099080

1.CHECK DOOR SWITCH INPUT SIGNAL

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

Terminals			Door condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	25	Ground	OPEN	0
			CLOSE	

JPMIA0011GB

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
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
M65	25	B71	1	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	25		Does not exist

Is the inspection result normal?

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

3. CHECK DOOR SWITCH

Check door switch.
Refer to DLK-753, "REAR LH : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

REAR LH : Component Inspection

INFOID:0000000001099081

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			
1	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

REAR RH

REAR RH : Description

INFOID:0000000001099082

Detects door open/close condition.

REAR RH : Component Function Check

INFOID:0000000001099083

1. CHECK FUNCTION

With CONSULT-III
Check door switches “DOOR SW-RR” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-RR	OPEN	:ON
	CLOSE	:OFF

Is the inspection result normal?

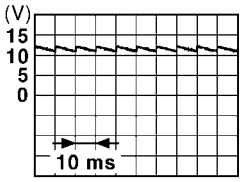
YES >> Door switch is OK.
NO >> Refer to DLK-753, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000001099084

1. CHECK DOOR SWITCH INPUT SIGNAL

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

Terminals			Door condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	29	Ground	OPEN	0
			CLOSE	

JPMIA0011GB

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
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
M65	29	B53	1	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	29		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-754, "REAR RH : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace malfunctioning door switch. Refer to DLK-877, "Exploded View".

REAR RH : Component Inspection

INFOID:0000000001099085

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			
1	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace malfunctioning door switch. Refer to DLK-272, "Exploded View".

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BACK DOOR

BACK DOOR : Description

INFOID:0000000001099086

Detects back door open condition.

BACK DOOR : Component Function Check

INFOID:0000000001099087

1.CHECK FUNCTION

With CONSULT-III

Check “BACK DOOR SW” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
BACK DOOR SW	OPEN	: ON
	CLOSE	: OFF

Is the inspection result normal?

YES >> Back door lock assembly (door switch) is OK.
NO >> Refer to DLK-755, "BACK DOOR : Diagnosis Procedure".

BACK DOOR : Diagnosis Procedure

INFOID:0000000001099088

1.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH) INPUT SIGNAL

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

Terminals			Back door condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	28	Ground	OPEN	0
			CLOSE	Battery voltage

Is the inspection result normal?

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

2.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH) CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM connector and back door lock assembly (door switch) connector.

BCM connector	Terminal	Back door lock assembly (door switch) connector	Terminal	Continuity
M65	28	D152	4	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	28		Does not exist

Is the inspection result normal?

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

3.CHECK BACK DOOR LOCK ASSEMBLY GROUND CIRCUIT

Check continuity between back door lock assembly connector and ground.

Back door lock assembly (door switch) connector	Terminal	Ground	Continuity
D152	3		Exists

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace back door lock assembly 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		
M65	28	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace BCM. Refer to BCS-64, "Exploded View".

5.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

Check back door lock assembly (door switch).
Refer to DLK-756, "BACK DOOR : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace back door lock assembly (door switch). Refer to DLK-268, "DOOR LOCK : Exploded View" and DLK-268, "DOOR LOCK : Removal and Installation".

BACK DOOR : Component Inspection

INFOID:0000000001099089

1.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly (door switch) connector.
3. Check back door lock assembly (door switch).

Terminal		Trunk condition	Continuity
Back door lock assembly (door switch)			
4	3	OPEN	Exists
		CLOSE	Does not exist

Is the inspection result normal?

YES >> Back door lock assembly (door switch) is OK.
NO >> Replace back door lock assembly (door switch). Refer to DLK-873, "DOOR LOCK : Exploded View" and DLK-873, "DOOR LOCK : Removal and Installation".

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KEY SWITCH

Description

INFOID:0000000001116386

Key switch detects that ignition key is inserted into the key cylinder, and then transmits the signal to BCM.

Component Function Check

INFOID:0000000001116387

1.CHECK KEY SWITCH INPUT SIGNAL

Check key switch (“KEY SW”) in “DATA MONITOR” mode with CONSULT-III. Refer to DLK-62, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Monitor item	Condition	
KEY SW	Insert mechanical key into key cylinder	: ON
	Remove mechanical key from key cylinder	: OFF

Is the inspection result normal?

YES >> Key switch is OK.
NO >> Refer to DLK-757, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001116388

1.CHECK KEY SWITCH INPUT SIGNAL

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

Terminals			Condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	36	Ground	Insert ignition key into key cylinder	Battery voltage
			Remove ignition key from key cylinder	0

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 2.

2.CHECK KEY SWITCH POWER SUPPLY CIRCUIT

1. Remove ignition key from key cylinder.
2. Disconnect key switch connector.
3. Check voltage between key switch harness connector and ground.

Terminals			Voltage (V) (Approx.)
(+)		(–)	
Key switch connector	Terminal		
M25	2	Ground	Battery voltage

Is the inspection result normal?

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

3.CHECK KEY SWITCH SIGNAL CIRCUIT

1. Check continuity between BCM harness connector and key switch connector.

BCM connector	Terminal	Key switch connector	Terminal	Continuity
M65	36	M25	1	Existed

2. Check continuity between key switch connector and ground.

Key switch connector	Terminal	Ground	Continuity
M25	1	Ground	Not existed

Is the inspection result normal?

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

4.CHECK KEY SWITCH

Check key switch function.
Refer to DLK-758, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace key switch.

Component Inspection

INFOID:0000000001116389

COMPONENT INSPECTION

1.CHECK KEY SWITCH

Check continuity between key switch terminals.

Terminal		Condition	Continuity
key switch connector			
1	2	Insert ignition key into key cylinder	Existed
		Remove ignition key from key cylinder	Not existed

Is the inspection result normal?

YES >> Key switch is OK.
NO >> Replace key switch.

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DOOR LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001116391

Locks/unlocks the door with the signal from BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000001116392

1.CHECK FUNCTION

With CONSULT-III
Check “DOOR LOCK” in Active test mode with CONSULT-III.

Test item		Condition
DOOR LOCK	ALL LOCK	The all door lock actuator are locked
	ALL UNLOCK	The all door lock actuator are unlocked
	DR UNLOCK	The door lock actuator (driver side) is unlocked

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-759, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001116393

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			
M67	56	Ground	Lock	0 → Battery voltage → 0
	60		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
M67	56	D9	3	Exists
	60		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist
	60		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace harness.

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3.CHECK DOOR LOCK ACTUATOR

Check door lock actuator.
Refer to DLK-760, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-255, "DOOR LOCK : Exploded View" and DLK-255, "DOOR LOCK : Removal and Installation". After that, PWC-15, "POWER WINDOW MAIN SWITCH : Special Repair Requirement"

DRIVER SIDE : Component Inspection

INFOID:0000000001116394

1.CHECK FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)

Check the actuator operation by connecting the battery voltage to front door lock actuator (driver side).

Front door lock actuator (driver side)	Terminal		Door lock actuator condition
	(+)	(-)	
D9	3	2	LOCK
	2	3	UNLOCK

Is the inspection result normal?

YES >> Front door lock actuator (driver side) is OK.
NO >> Replace front door lock actuator (driver side). Refer to DLK-255, "DOOR LOCK : Removal and Installation". After that, PWC-15, "POWER WINDOW MAIN SWITCH : Special Repair Requirement".

DRIVER SIDE : Special Repair Requirement

INFOID:0000000001116395

Refer to PWC-15, "POWER WINDOW MAIN SWITCH : Special Repair Requirement".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001116396

Locks/unlocks the door with the signal from BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000001116397

1.CHECK FUNCTION

With CONSULT-III
Check “DOOR LOCK” in Active test mode with CONSULT-III.

Test item		Condition
DOOR LOCK	:ALL LOCK	The all door lock actuator are locked
	:ALL UNLOCK	The all door lock actuator are unlocked
	:OTHER UNLOCK	The door lock actuator (front passenger side, rear LH and rear RH) are unlocked

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-760, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001116398

1.CHECK BCM OUTPUT SIGNAL

Check voltage between BCM connector and ground.

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Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M67	56	Ground	Lock	0 → Battery voltage → 0
	54		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 (passenger side) connector.
3. Check continuity between BCM connector and front door lock actuator (passenger side) connector.

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M67	56	D48	3	Exists
	54		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist
	54		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace harness.

3.CHECK DOOR LOCK ACTUATOR

Check door lock actuator.
Refer to DLK-761, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-255, "DOOR LOCK : Exploded View" and DLK-255, "DOOR LOCK : Removal and Installation".

PASSENGER SIDE : Component Inspection

INFOID:0000000001116399

1.CHECK FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)

Check the actuator operation by connecting the battery voltage directly to front door lock actuator (passenger side).

Front door lock actuator (passenger side) connector	Terminal		Door lock actuator condition
	(+)	(-)	
D48	3	2	LOCK
	2	3	UNLOCK

Is the inspection result normal?

YES >> Front door lock actuator (passenger side) is OK.
NO >> Replace front door lock actuator (passenger side). Refer to DLK-761, "PASSENGER SIDE : Component Inspection".

REAR LH

REAR LH : Description

INFOID:0000000001116400

Locks/unlocks the door with the signal from BCM.

REAR LH : Component Function Check

INFOID:0000000001116401

1.CHECK FUNCTION

With CONSULT-III

Check “DOOR LOCK” in Active test mode with CONSULT-III.

Test item		Condition
DOOR LOCK	:ALL LOCK	The all door lock actuator are locked
	:ALL UNLOCK	The all door lock actuator are unlocked
	:OTHER UNLOCK	The door lock actuator (front passenger side, rear LH and rear RH) are unlocked

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-762, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000001116402

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			
M67	56	Ground	Lock	0 → Battery voltage → 0
	54		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 rear door lock actuator (LH) connector.
3. Check continuity between BCM connector and rear door lock actuator (LH) connector.

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M67	56	D85	3	Exists
	54		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist
	54		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace harness.

3.CHECK DOOR LOCK ACTUATOR

Check door lock actuator.
Refer to DLK-763, "REAR LH : Component Inspection".

Is the inspection result normal?

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YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-700, "DOOR LOCK : Exploded View" and DLK-700, "DOOR LOCK : Removal and Installation".

REAR LH : Component Inspection

INFOID:0000000001116403

1.CHECK REAR DOOR LOCK ACTUATOR (LH)

Check the actuator operation by connecting the battery voltage directly to rear door lock actuator (LH).

Rear door lock actuator (LH)	Terminal		Door lock actuator condition
	(+)	(-)	
D85	3	2	LOCK
	2	3	UNLOCK

Is the inspection result normal?

YES >> Rear door lock actuator (LH) is OK.
NO >> Replace rear door lock actuator (LH). Refer to DLK-262, "DOOR LOCK : Removal and Installation".

REAR RH

REAR RH : Description

INFOID:0000000001116404

Locks/unlocks the door with the signal from BCM.

REAR RH : Component Function Check

INFOID:0000000001116405

1.CHECK FUNCTION

With CONSULT-III
Check “DOOR LOCK” in Active test mode with CONSULT-III.

Test item		Condition
DOOR LOCK	:ALL LOCK	The all door lock actuator are locked
	:ALL UNLOCK	The all door lock actuator are unlocked
	:OTHER UNLOCK	The door lock actuator (front passenger side, rear LH and rear RH) are unlocked

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-763, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000001116406

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			
M67	56	Ground	Lock	0 → Battery voltage → 0
	54		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 rear door lock actuator (RH) connector.

3. Check continuity between BCM connector and rear door lock actuator (RH) connector.

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M67	56	D105	3	Exists
	54		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist
	54		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace harness.

3.CHECK DOOR LOCK ACTUATOR

Check door lock actuator.
Refer to DLK-764, "REAR RH : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-255, "DOOR LOCK : Removal and Installation".

REAR RH : Component Inspection

INFOID:0000000001116407

1.CHECK REAR DOOR LOCK ACTUATOR (RH)

Check the actuator operation by connecting the battery voltage directly to rear door lock actuator (RH).

Rear door lock actuator (RH)	Terminal		Door lock actuator condition
	(+)	(-)	
D105	3	2	LOCK
	2	3	UNLOCK

Is the inspection result normal?

YES >> Rear door lock actuator (RH) is OK.
NO >> Replace rear door lock actuator (RH). Refer to DLK-255, "DOOR LOCK : Removal and Installation".

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SUPER LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001102147

The super lock system is controlled by BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000001102148

1.CHECK FUNCTION

With CONSULT-III
Check “SUPER LOCK” in Active test mode with CONSULT-III.

Test item		Condition
SUPER LOCK	:LOCK (SET)	The super lock actuator is locked (SET)
	:UNLOCK (RELEASE)	The super lock actuator is unlocked (RELEASE)

Is the inspection result normal?

YES >> Door lock actuator (super lock actuator) is OK.
NO >> Refer to DLK-367, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001102149

1.CHECK OUTPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			Condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M67	60	Ground	UNLOCK (RELEASE)	0 → Battery voltage → 0
	59		LOCK (SET)	

Is the inspection result normal?

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

2.CHECK SUPER 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
M67	59	D29	1	Exists
	60		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	59		Does not exist
	60		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace harness.

3.CHECK SUPER LOCK ACTUATOR

Check super lock actuator.
Refer to DLK-368, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-255, "DOOR LOCK : Removal and Installation". After that, PWC-15, "POWER WINDOW MAIN SWITCH : Special Repair Requirement".

DRIVER SIDE : Component Inspection

INFOID:0000000001102150

1.CHECK SUPER LOCK ACTUATOR

Check the actuator operation by connecting the battery voltage to super lock actuator.

Door lock actuator (super lock actuator) connector	Terminal		Actuator condition
	(+)	(-)	
D29	1	2	LOCK (SET)
	2	1	UNLOCK (RELEASE)

Is the inspection result normal?

YES >> Door lock actuator (super lock actuator) is OK.
NO >> Replace door lock actuator (super lock actuator). Refer to DLK-255, "DOOR LOCK : Exploded View" and DLK-255, "DOOR LOCK : Removal and Installation". After that, Refer to PWC-15, "POWER WINDOW MAIN SWITCH : Special Repair Requirement".

DRIVER SIDE : Special Repair Requirement

INFOID:0000000001102151

Perform initialization procedure. Refer to PWC-15, "POWER WINDOW MAIN SWITCH : Special Repair Requirement".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001102152

The super lock system is controlled by BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000001102153

1.CHECK FUNCTION

With CONSULT-III
Check “SUPER LOCK” in Active test mode with CONSULT-III.

Test item		Condition
SUPER LOCK	:LOCK (SET)	The super lock actuator is locked (SET)
	:UNLOCK (RELEASE)	The super lock actuator is unlocked (RELEASE)

Is the inspection result normal?

YES >> Door lock actuator (super lock actuator) is OK.
NO >> Refer to DLK-766, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001102154

1.CHECK OUTPUT SIGNAL

Check voltage between BCM connector and ground.

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Terminals			Condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M67	54	Ground	UNLOCK (RELEASE)	0 → Battery voltage → 0
	59		LOCK (SET)	

Is the inspection result normal?

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

2.CHECK SUPER LOCK ACTUATOR CIRCUIT

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

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M67	59	D68	1	Exists
	54		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	59		Does not exist
	54		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 3.

3.CHECK SUPER LOCK ACTUATOR

Check super lock actuator.
Refer to DLK-767, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-255, "DOOR LOCK : Removal and Installation".

PASSENGER SIDE : Component Inspection

INFOID:0000000001102155

1.CHECK SUPER LOCK ACTUATOR

Check the actuator operation by connecting the battery voltage to super lock actuator.

Door lock actuator (super lock actuator) connector	Terminal		Actuator condition
	(+)	(-)	
D68	1	2	LOCK (SET)
	2	1	UNLOCK (RELEASE)

Is the inspection result normal?

YES >> Door lock actuator (super lock actuator) is OK.
NO >> Replace door lock actuator (super lock actuator). Refer to DLK-255, "DOOR LOCK : Exploded View" and DLK-255, "DOOR LOCK : Removal and Installation".

REAR LH

REAR LH : Description

INFOID:0000000001102156

The super lock system is controlled by BCM.

REAR LH : Component Function Check

INFOID:0000000001102157

1.CHECK FUNCTION

With CONSULT-III

Check “SUPER LOCK” in Active test mode with CONSULT-III.

Test item		Condition
SUPER LOCK	:LOCK (SET)	The super lock actuator is locked (SET)
	:UNLOCK (RELEASE)	The super lock actuator is unlocked (RELEASE)

Is the inspection result normal?

YES >> Door lock actuator (super lock actuator) is OK.
NO >> Refer to DLK-768, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000001102158

1.CHECK OUTPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			Condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M67	54	Ground	UNLOCK (RELEASE)	0 → Battery voltage → 0
	59		LOCK (SET)	

Is the inspection result normal?

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

2.CHECK SUPER LOCK ACTUATOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM and rear door lock actuator (LH) connector.
3. Check continuity between BCM connector and rear door lock actuator (LH) connector.

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M67	59	D115	1	Exists
	54		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	59		Does not exist
	54		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 3.

3.CHECK SUPER LOCK ACTUATOR

Check super lock actuator.
Refer to DLK-768, "REAR LH : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-255, "DOOR LOCK : Removal and Installation".

REAR LH : Component Inspection

INFOID:0000000001102159

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1.CHECK SUPER LOCK ACTUATOR

Check the actuator operation by connecting the battery voltage to super lock actuator.

Door lock actuator (super lock actuator) connector	Terminal		Actuator condition
	(+)	(-)	
D115	1	2	LOCK (SET)
	2	1	UNLOCK (RELEASE)

Is the inspection result normal?

YES >> Door lock actuator (super lock actuator) is OK.
NO >> Replace door lock actuator (super lock actuator). Refer to DLK-255, "DOOR LOCK : Exploded View" and DLK-255, "DOOR LOCK : Removal and Installation".

REAR RH

REAR RH : Description

INFOID:0000000001102160

The super lock system is controlled by BCM.

REAR RH : Component Function Check

INFOID:0000000001102161

1.CHECK FUNCTION

With CONSULT-III
Check “SUPER LOCK” in Active test mode with CONSULT-III.

Test item		Condition
SUPER LOCK	:LOCK (SET)	The super lock actuator is locked (SET)
	:UNLOCK (RELEASE)	The super lock actuator is unlocked (RELEASE)

Is the inspection result normal?

YES >> Door lock actuator (super lock actuator) is OK.
NO >> Refer to DLK-769, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000001102162

1.CHECK OUTPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			Condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M67	54	Ground	UNLOCK (RELEASE)	0 → Battery voltage → 0
	59		LOCK (SET)	

Is the inspection result normal?

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

2.CHECK SUPER LOCK ACTUATOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM and rear door lock actuator (RH) connector.
3. Check continuity between BCM connector and rear door lock actuator (RH) connector.

BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
M67	59	D95	1	Exists
	54		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M67	59		Does not exist
	54		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 3.

3.CHECK SUPER LOCK ACTUATOR

Check super lock actuator.
Refer to DLK-770, "REAR RH : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace door lock actuator. Refer to DLK-255, "DOOR LOCK : Removal and Installation".

REAR RH : Component Inspection

INFOID:0000000001102163

1.CHECK SUPER LOCK ACTUATOR

Check the actuator operate by connecting the battery voltage to super lock actuator.

Door lock actuator (super lock actuator) connector	Terminal		Actuator condition
	(+)	(-)	
D95	1	2	LOCK (SET)
	2	1	UNLOCK (RELEASE)

Is the inspection result normal?

YES >> Door lock actuator (super lock actuator) is OK.
NO >> Replace door lock actuator (super lock actuator). Refer to DLK-255, "DOOR LOCK : Exploded View" and DLK-255, "DOOR LOCK : Removal and Installation".

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BACK DOOR OPENER ACTUATOR

Description

INFOID:0000000001099114

Opens the back door with the signal from BCM.

Component Function Check

INFOID:0000000001099115

1.CHECK FUNCTION

With CONSULT-III

Check “TRUNK/GLASS HATCH” in Active test mode with CONSULT-III.

Test item		Condition
TRUNK/GLASS HATCH	:OPEN	Back door lock opener actuator operation

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-771, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001099116

1.CHECK BCM OUTPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			Condition of back door opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M66	45	Ground	Pressed	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK BACK DOOR LOCK ASSEMBLY CIRCUIT

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

BCM connector	Terminal	Back door lock assembly connector	Terminal	Continuity
M66	45	D152	2	Exists

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M66	45		Does not exist

Is the inspection result normal?

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

3.CHECK BACK DOOR LOCK ASSEMBLY GROUND CIRCUIT

Check continuity between back door lock assembly connector and ground.

Back door lock assembly connector	Terminal	Ground	Continuity
D152	1		Exists

Is the inspection result normal?

A B C D E F G H I J DLK L M N O P
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YES >> GO TO 4.
NO >> Repair or replace harness.

4. CHECK BACK DOOR LOCK ASSEMBLY

Check back door lock assembly connector and ground.
Refer to DLK-772, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace back door lock assembly. Refer to DLK-268, "DOOR LOCK : Exploded View" and DLK-268, "DOOR LOCK : Removal and Installation".

Component Inspection

INFOID:0000000001099117

1. CHECK BACK DOOR LOCK ASSEMBLY

Check the actuator operation by connecting battery voltage to back door lock assembly.

Back door lock assembly connector	Terminal		Back door actuator condition
D152	(+)	(-)	OPEN
	2	1	

Is the inspection result normal?

YES >> Back door lock assembly (back door lock actuator) is OK.
NO >> Replace back door lock assembly (back door lock actuator). Refer to DLK-268, "DOOR LOCK : Exploded View" and DLK-268, "DOOR LOCK : Removal and Installation".

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BACK DOOR OPENER SWITCH

Description

INFOID:0000000001115838

Sends the back door opening signal to BCM.

Component Function Check

INFOID:0000000001115839

1.CHECK FUNCTION

With CONSULT-III

Check “TRNK OPNR SW” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
TRNK OPNR SW	Back door opener switch is pressed	:ON
	Back door opener switch is released	:OFF

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-773, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001115840

1.CHECK BCM INPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			Condition of back door opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M65	12	Ground	Pressed	0
			Released	Battery voltage

Is the inspection result normal?

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

2.CHECK BACK DOOR OPENER SWITCH CIRCUIT

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

BCM connector	Terminal	Back door opener switch connector	Terminal	Continuity
M65	12	D186	1	Exists

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	12		Does not exist

Is the inspection result normal?

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

3.CHECK BCM OUTPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			Voltage (V) (Approx.)
(+)		(–)	
BCM connector	Terminal		
M65	12	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace BCM. Refer to BCS-64, "Exploded View".

4.CHECK BACK DOOR OPENER SWITCH GROUND CIRCUIT

Check continuity between back door opener switch connector and ground.

Back door opener switch connector	Terminal	Ground	Continuity
D186	2		Exists

Is the inspection result normal?

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

5.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.
Refer to DLK-774, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace back door opener switch. Refer to DLK-279, "Exploded View".

Component Inspection

INFOID:0000000001115841

1.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.

Back door opener switch connector	Terminal		Back door opener switch condition	Continuity
D186	1	2	Pressed	Exists
			Released	Does not exist

Is the inspection result normal?

YES >> Back door opener switch is OK.
NO >> Replace back door opener switch. Refer to DLK-279, "Exploded View".

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BUZZER (COMBINATION METER)

Description

INFOID:0000000001116451

Performs operation method guide and warning with buzzer.

Component Function Check

INFOID:0000000001116452

1.CHECK FUNCTION

With CONSULT-III

1. Check the operation with “WARNING BUZZER” in the Active Test.
2. Touch “KEY REMINDER WARN” on screen.

Is the inspection result normal?

Yes >> Warning buzzer into combination meter is OK.
No >> Refer to DLK-775, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001116453

1.CHECK METER BUZZER CIRCUIT

Refer to WCS-20, "Component Function Check".

Is the inspection result normal?

Yes >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
No >> Repair or replace meter buzzer circuit.

HAZARD WARNING LAMPS

Description

INFOID:0000000001115760

Perform answer-back for each operation with number of blinks.

Component Function Check

INFOID:0000000001115761

1.CHECK FUNCTION

With CONSULT-III

Check hazard warning lamp “FLASHER” in Active test.

Is the inspection result normal?

YES >> Hazard warning lamp circuit is OK.
NO >> Refer to DLK-776, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001115762

1.CHECK HAZARD SWITCH CIRCUIT

Check hazard switch circuit.
Refer to EXL-72, "Component Function Check".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace hazard warning switch circuit.

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VEHICLE SPEED SIGNAL CIRCUIT

Description

INFOID:0000000001115763

Display the vehicle speed signal received from combination meter by numerical value (km/h).

Component Function Check

INFOID:0000000001115764

1.CHECK FUNCTION

Check the vehicle speed more than 12km/h (7MPH), all doors are automatically locked.

Is the inspection result normal?

YES >> Vehicle speed signal circuit is OK.
NO >> Refer to DLK-778, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001115765

1.CHECK VEHICLE SPEED SIGNAL CIRCUIT

Check vehicle speed signal “VEHICLE SPEED” in Data monitor.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace hazard warning switch circuit.

KEYFOB BATTERY

Description

INFOID:0000000001102464

Remote door lock and unlock control entry function available when operating on button.
- Door lock and unlock

Component Function Check

INFOID:0000000001102465

1.CHECK KEYFOB FUNCTION

Does door lock and unlock operate with operating keyfob switch?

Is the inspection result normal?

YES >> Keyfob is OK.
NO >> Refer to DLK-778, "Diagnosis Procedure".

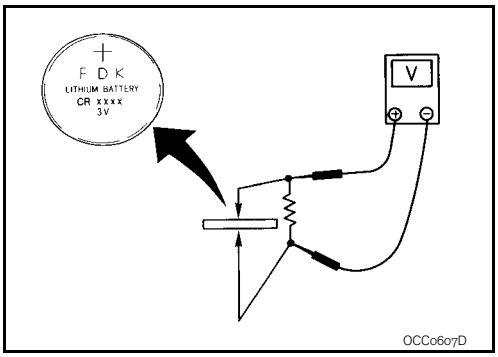
Diagnosis Procedure

INFOID:0000000001102466

1.CHECK KEYFOB 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 the specification?

YES >> Replace keyfob.
NO >> Replace keyfob battery. Refer to DLK-879, "Exploded View".

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ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000001097501

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition		Value/Status
ACC ON SW	Ignition switch OFF		OFF
	Ignition switch ACC or ON		ON
AIR COND SW	A/C switch OFF		OFF
	A/C switch ON		ON
AUT LIGHT SYS	Outside of the room is dark		OFF
	Outside of the room is bright		ON
AUTO LIGHT SW	Lighting switch OFF		OFF
	Lighting switch AUTO		ON
BACK DOOR SW	Back door closed		OFF
	Back door opened		ON
BATTERY VOLT **NOTE:** Diesel engine models only	Ignition switch ON		Approximately the same as power supply voltage
BUCKLE SW	Driver's seat belt unfastened		OFF
	Driver's seat belt fastened		ON
CDL LOCK SW	Door lock/unlock switch does not operate		OFF
	Press door lock/unlock switch to the LOCK side		ON
CDL UNLOCK SW	Door lock/unlock switch does not operate		OFF
	Press door lock/unlock switch to the UNLOCK side		ON
DOOR SW-AS	Passenger door closed		OFF
	Passenger door opened		ON
DOOR SW-DR	Driver door closed		OFF
	Driver door opened		ON
DOOR SW-RL	Rear LH door closed		OFF
	Rear LH door opened		ON
DOOR SW-RR	Rear RH door closed		OFF
	Rear RH door opened		ON
ELEC PWR CUT **NOTE:** Diesel engine models only	Engine running	Fan switch ON (when engine coolant is cool) **NOTE:** Depending on the ambient temperature, battery voltage, etc.	OFF
		The current status maintained with the signal from ECM received.	FREEZ
		• Fan switch OFF • Fan switch ON after engine warming UP **NOTE:** Depending on the engine coolant temperature, ambient temperature, battery voltage, etc.	INHBT

Monitor Item	Condition	Value/Status
ENG COOLNT T **NOTE:** Diesel engine models only	Engine running	Approximately the same as water temperature gauge reading
ENGINE RPM **NOTE:** Diesel engine models only	Engine running	Approximately the same as tachometer reading
ENGINE RUN	Engine stopped	OFF
	Engine running	ON
ENGINE STATUS **NOTE:** Diesel engine models only	Engine stopped	STOP
	While the engine stalls	STALL
	Engine running	RUN
	At engine cranking	CRA
FAN ON SIG	Fan switch OFF	OFF
	Fan switch ON	ON
FR FOG SW	Front fog lamp switch OFF	OFF
	Front fog lamp switch ON	ON
FR WASHER SW	Front washer switch OFF	OFF
	Front washer switch ON	ON
FR WIPER LOW	Front wiper switch OFF	OFF
	Front wiper switch LO	ON
FR WIPER HI	Front wiper switch OFF	OFF
	Front wiper switch HI	ON
FR WIPER INT	Front wiper switch OFF	OFF
	Front wiper switch INT	ON
FR WIPER STOP	Any position other than front wiper stop position	OFF
	Front wiper stop position	ON
HAZARD SW	When hazard switch is not pressed	OFF
	When hazard switch is pressed	ON
HEAD LAMP SW 1	Lighting switch OFF	OFF
	Lighting switch 2ND	ON
HEAD LAMP SW 2	Lighting switch OFF	OFF
	Lighting switch 2ND	ON
HI BEAM SW	Lighting switch OFF	OFF
	Lighting switch HI	ON
HOOD SW	Close the hood **NOTE:** Vehicles without theft warning system are OFF-fixed	OFF
	Open the hood	ON
H/L WASH SW	**NOTE:** The item is indicated, but not monitored	OFF
IGN ON SW	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
IGN SW CAN	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	1 - 7

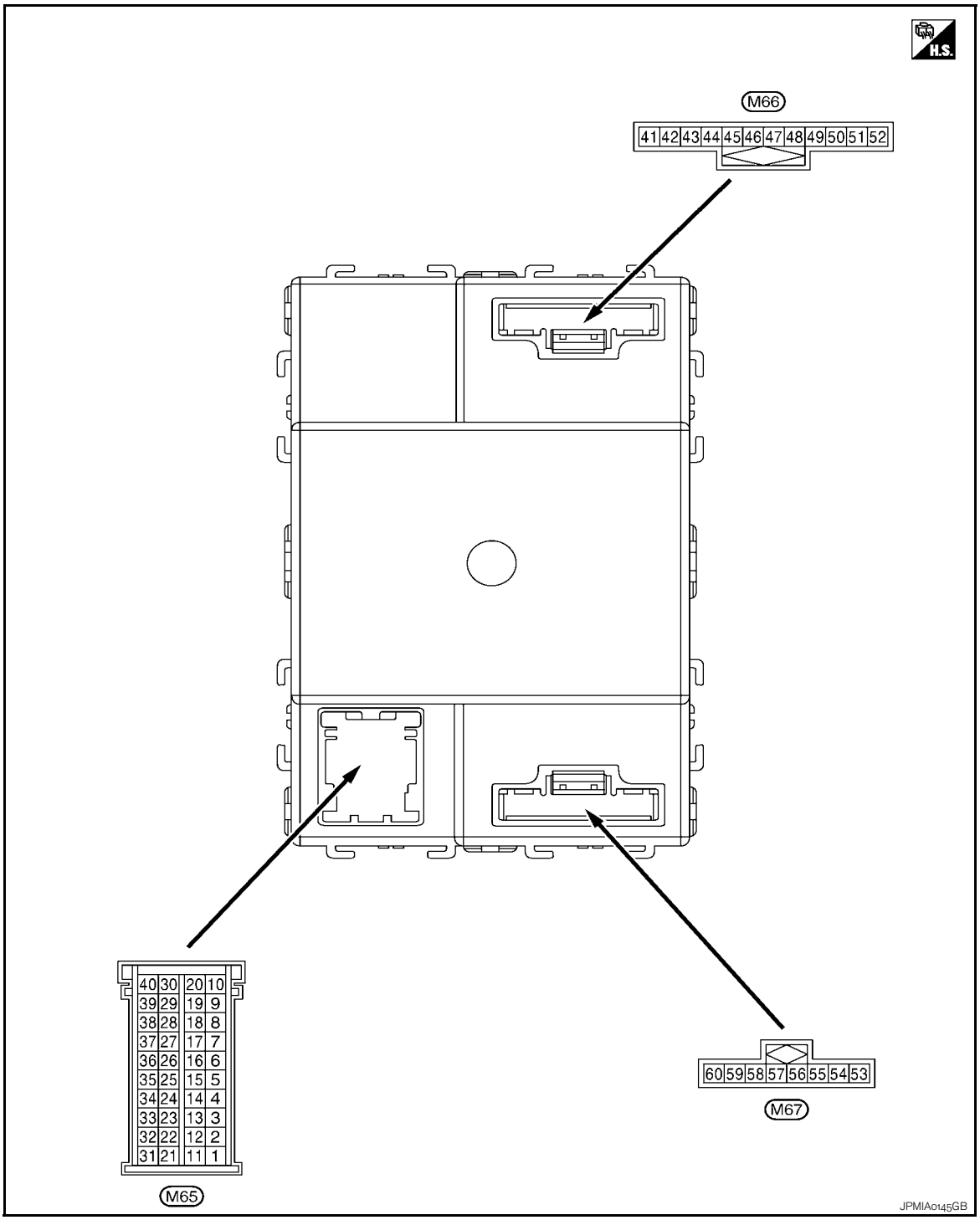
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Monitor Item	Condition	Value/Status
I-KEY LOCK	LOCK button of Intelligent Key is not pressed	OFF
	LOCK button of Intelligent Key is pressed	ON
I-KEY UNLOCK	UNLOCK button of Intelligent Key is not pressed	OFF
	UNLOCK button of Intelligent Key is pressed	ON
KEY ON SW	Mechanical key is removed from key cylinder	OFF
	Mechanical key is inserted to key cylinder	ON
KEYLESS LOCK	LOCK button of key fob is not pressed	OFF
	LOCK button of key fob is pressed	ON
KEYLESS UNLOCK	UNLOCK button of key fob is not pressed	OFF
	UNLOCK button of key fob is pressed	ON
LIT-SEN FAIL	Light & rain sensor is in normal condition	OK
	Light & rain sensor is with internal error	NOTOK
OIL PRESS SW	• Ignition switch OFF or ACC • Engine running	OFF
	Ignition switch ON	ON
OUT SIDE TEMP **NOTE:** Diesel engine models	Ignition switch ON	Approximately the same as outside air temperature
PASSING SW	Other than lighting switch PASS	OFF
	Lighting switch PASS	ON
PUSH SW	Return to ignition switch to LOCK position	OFF
	Press ignition switch	ON
REAR DEF SW	Rear window defogger switch OFF	OFF
	Rear window defogger switch ON	ON
RKE LOCK AND UN-LOCK	**NOTE:** The item is indicated, but not monitored	OFF
		ON
RR FOG SW	Rear fog lamp switch OFF	OFF
	Rear fog lamp switch ON	ON
RR WASHER SW	Rear washer switch OFF	OFF
	Rear washer switch ON	ON
RR WIPER INT	Rear wiper switch OFF	OFF
	Rear wiper switch INT	ON
RR WIPER ON	Rear wiper switch OFF	OFF
	Rear wiper switch ON	ON
RR WIPER STOP	Rear wiper stop position	OFF
	Other than rear wiper stop position	ON
SHOCK SENSOR	Ignition switch ON	NOMAL
	After the reception of air bag deployment signal from air bag diagnosis sensor unit	OFF
	During the reception of air bag deployment signal from air bag diagnosis sensor unit	ON
TAIL LAMP SW	Lighting switch OFF	OFF
	Lighting switch 1ST	ON
TRNK OPNR SW	When back door opener switch is not pressed	OFF
	When back door opener switch is pressed	ON

Monitor Item	Condition	Value/Status
TURN SIGNAL L	Turn signal switch OFF	OFF
	Turn signal switch LH	ON
TURN SIGNAL R	Turn signal switch OFF	OFF
	Turn signal switch RH	ON
UNLOCK WITH DR	**NOTE:** The item is indicated, but not monitored	OFF
		ON
UNLOCK SHOCK	Other than the following	OFF
	During the unlock operation interlocked with air bag	ON
VEHICLE SPEED	While driving	Equivalent to speedometer reading

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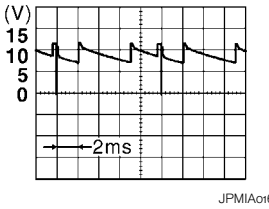
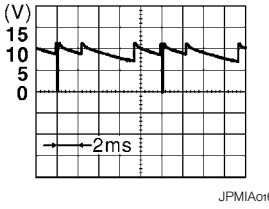
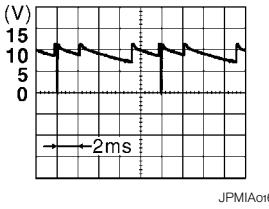
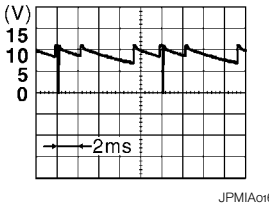
TERMINAL LAYOUT



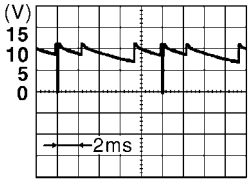
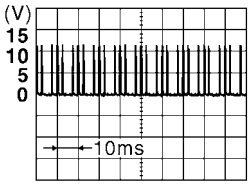
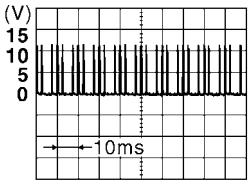
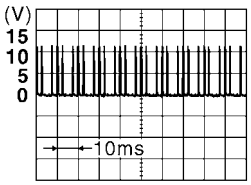
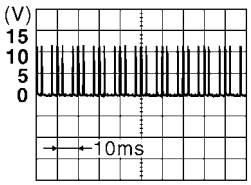
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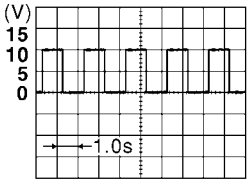
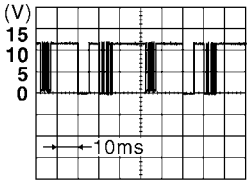
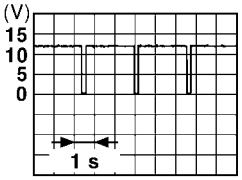
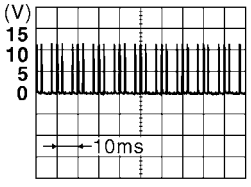
CAUTION:

- **Check combination switch system terminal waveform under the loaded condition with lighting switch, turn signal switch and wiper switch OFF is not to be fluctuated by being overloaded.**
- **Turn wiper intermittent dial position to 4 except when checking waveform or voltage of wiper intermittent dial position. Wiper intermittent dial position can be confirmed on CONSULT -III. Refer to BCS-26, "COMB SW : CONSULT-III Function (BCM - COMB SW)".**
- **BCM reads the status of the combination switch at 10 ms internal normally. Refer to BCS-7, "System Description".**

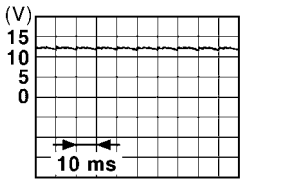
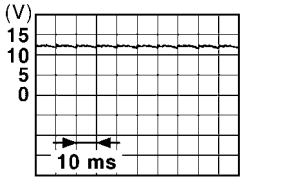
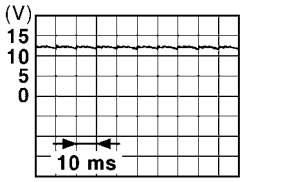
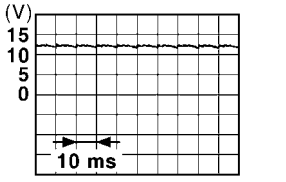
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
1 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4)	 JPMIA0160GB 9.1 V
					Rear wiper switch INT (Wiper intermittent dial 4)	
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	
2 (Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Lighting switch 2ND	 JPMIA0163GB 9.3 V
					Lighting switch PASS	
					Front fog lamp switch ON	
					Turn signal switch LH	
3 (LG)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Lighting switch AUTO	 JPMIA0162GB 9.3 V
					Rear fog lamp switch OFF	
					Front wiper switch MIST	
					Front wiper switch INT	
					Front wiper switch LO	
4 (R)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	 JPMIA0161GB 9.1 V
					Rear wiper switch ON (Wiper intermittent dial 4)	
					Rear washer switch ON (Wiper intermittent dial 4)	
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	

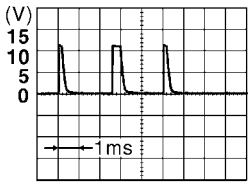
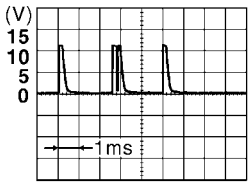
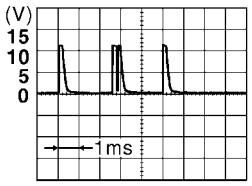
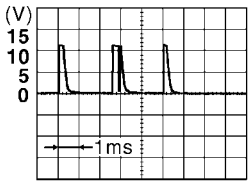
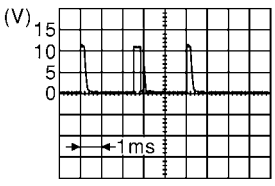
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Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
5 (W)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Lighting switch 1ST	 JPMIA0164GB 9.1 V
					Lighting switch 2ND	
					Lighting switch HI	
					Turn signal switch RH	
7 (P)	Ground	Door lock/unlock switch (Lock)	Output	Door lock/unlock switch	Not pressed	 JPMIA0154GB 1.2 V
					Pressed to the lock side	0 V
8 (LG)	Ground	Hazard switch	Output	Hazard switch	Not pressed	 JPMIA0154GB 1.3 V
					Pressed	0 V
9 (BR)	Ground	Door lock/unlock switch (Unlock)	Output	Door lock/unlock switch	Not pressed	 JPMIA0154GB 1.2 V
					Pressed to the unlock side	0 V
12 (P)	Ground	Back door opener switch	Output	Back door opener switch	Not pressed	 JPMIA0154GB 1.2 V
					Pressed	0 V

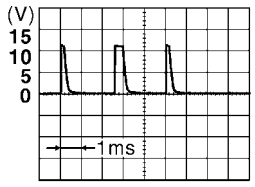
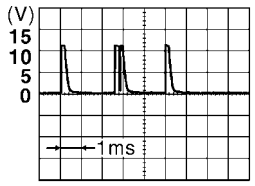
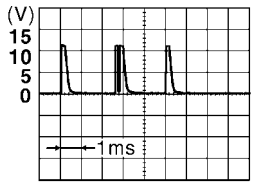
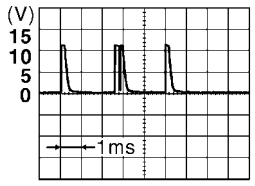
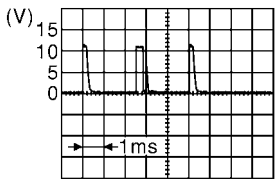
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
13 (R)	Ground	Shock detect sensor	Input	Ignition switch OFF or ACC		0 V
				Ignition switch ON		 JPMIA0155GB 6.0 V
14 (L/R)	Ground	A/C switch	Output	A/C switch	Not pressed	Battery voltage
					Pressed	0 V
15 (LG/B)	Ground	Fan switch	Output	Fan switch	Not pressed	Battery voltage
					Pressed	0 V
16 (GR)	Ground	Alarm link	Input	—		—
17 (BR)	Ground	Light & rain sensor serial link	Output	Ignition switch OFF or ACC		Battery voltage
				Ignition switch ON		 JPMIA0156GB 8.7 V
18 (SB)	Ground	Security indicator	Output	Security indicator	ON	0 V
					Blinking	 JPMIA0014GB 10.3 V
					OFF	Battery voltage
19 (L)	—	CAN-H	Input/ Output	—		—
20 (P)	—	CAN-L	Input/ Output	—		—
21 (SB)	Ground	Rear window defogger switch	Output	Rear window defogger switch	Not pressed	 JPMIA0154GB 1.1 V
					While pressing	0 V

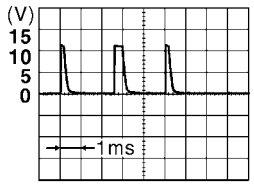
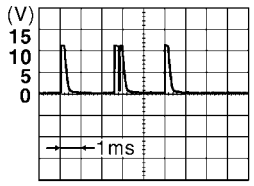
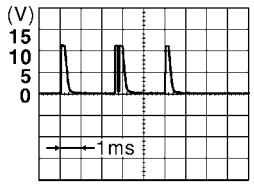
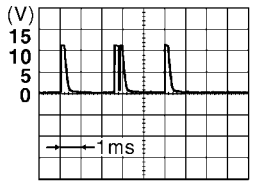
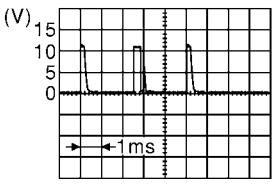
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Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
24 (GR)	Ground	Door lock status indicator	Output	Door lock status indicator	ON	Battery voltage
					OFF	0 V
25 (GR)	Ground	Rear door switch LH	Input	Rear door switch LH	OFF (When rear door LH closed)	 PKIDo924E 11.2 V
					ON (When rear door LH opened)	0 V
26 (R)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closed)	 PKIDo924E 11.2 V
					ON (When driver door opened)	0 V
27 (BR)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closed)	 PKIDo924E 11.2 V
					ON (When passenger door opened)	0 V
28 (G)	Ground	Back door switch	Input	Back door switch	OFF (When back door closed)	Battery voltage
					ON (When back door opened)	0 V
29 (LG)	Ground	Rear door switch RH	Input	Rear door switch RH	OFF (When rear door RH closed)	 PKIDo924E 11.2 V
					ON (When rear door RH opened)	0 V
30 (SB)	Ground	Audio link	Output	—	—	—

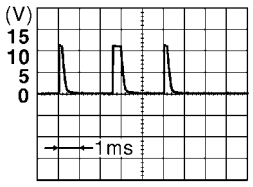
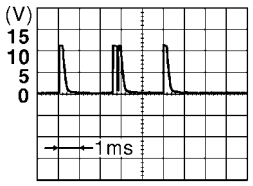
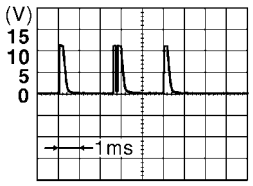
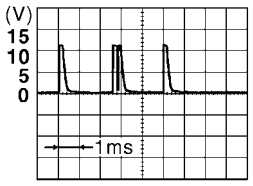
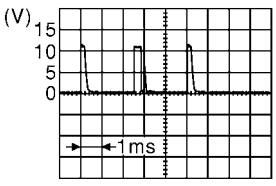
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
31 (BR)	Ground	Combination switch INPUT 5	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0165GB 1.3 V
					Front fog lamp switch ON (Wiper intermittent dial 4)	 JPMIA0167GB 1.3 V
					Rear fog lamp switch ON (Wiper intermittent dial 4)	 JPMIA0168GB 1.3 V
					Rear wiper switch ON (Wiper intermittent dial 4)	 JPMIA0169GB 1.3 V
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	 JPMIA0196GB 1.3 V

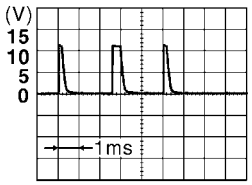
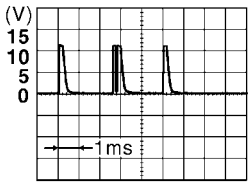
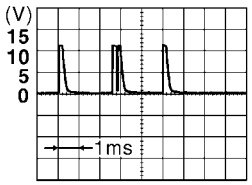
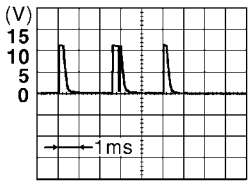
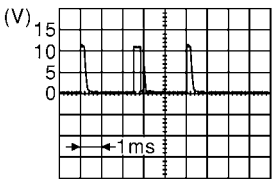
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Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
32 (G)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	 JPMIA0165GB 1.4 V
					Lighting switch PASS	 JPMIA0167GB 1.3 V
					Lighting switch 2ND	 JPMIA0166GB 1.3 V
					Front wiper switch INT	 JPMIA0168GB 1.3 V
					Front wiper switch HI	 JPMIA0196GB 1.3 V

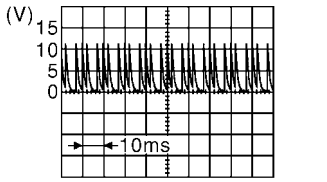
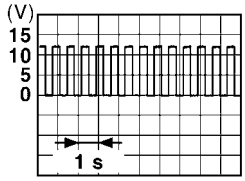
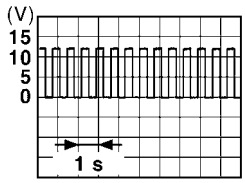
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
33 (V)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	 JPMIA0165GB 1.4 V
					Turn signal switch LH	 JPMIA0167GB 1.3 V
					Turn signal switch RH	 JPMIA0166GB 1.3 V
					Front wiper switch LO	 JPMIA0168GB 1.3 V
					Front washer switch ON	 JPMIA0196GB 1.3 V

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Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
34 (GR)	Ground	Combination switch INPUT 4	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0165GB 1.4 V
					Lighting switch AUTO (Wiper intermittent dial 4)	 JPMIA0167GB 1.3 V
					Lighting switch 1ST (Wiper intermittent dial 4)	 JPMIA0166GB 1.3 V
					Rear wiper INT (Wiper intermittent dial 4)	 JPMIA0167GB 1.3 V
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 6	 JPMIA0196GB 1.3 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
35 (L)	Ground	Combination switch INPUT 3	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0165GB 1.4 V
					Lighting switch HI (Wiper intermittent dial 4)	 JPMIA0166GB 1.3 V
					Lighting switch 2ND (Wiper intermittent dial 4)	 JPMIA0167GB 1.3 V
					Rear wiper switch ON	 JPMIA0169GB 1.3 V
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	 JPMIA0196GB 1.3 V
36 (V)	Ground	Key switch	Output	Insert mechanical key into ignition key cylinder		Battery voltage
				Remove mechanical key from ignition key cylinder		0 V
37 (R)	Ground	ACC power supply	Output	Ignition switch OFF		0 V
				Ignition switch ACC or ON		Battery voltage
38 (W/L)	Ground	Ignition power supply	Output	Ignition switch OFF or ACC		0 V
				Ignition switch ON		Battery voltage

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Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
39 (P)	Ground	NATS antenna amp.	Input/ Output	Insert mechanical key into ignition key cylinder		Just after Insert mechanical key into ignition key cylinder. Pointer of tester should move
40 (LG)	Ground	NATS antenna amp.	Input/ Output	Insert mechanical key into ignition key cylinder		Just after Insert mechanical key into ignition key cylinder. Pointer of tester should move
41 (V)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
42 (V)	Ground	Interior room lamp power supply	Output	After passing the interior room lamp battery saver operation time		0 V
				Any other time after passing the interior room lamp battery saver operation time		Battery voltage
43 (L)	Ground	Rear wiper motor	Output	Rear wiper switch OFF		0 V
				Rear wiper switch ON		Battery voltage
44 (L/W)	Ground	Rear wiper auto stop	Output	Ignition switch ON	Rear wiper stop position	0 V
					Any position other than rear wiper stop position	 JPMIA0197GB
45 (GR)	Ground	Back door lock actuator	Output	Back door opener switch	Pressed	Battery voltage (300ms)
					Not pressed	0 V
47 (G/Y)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 PKIDog26E 6.5 V
48 (G/B)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 PKIDog26E 6.5 V
49 (Y)	Ground	Rear fog lamp	Output	Lighting switch 1ST and front fog lamp switch ON	Rear fog lamp switch OFF	0 V
					Rear fog lamp switch ON	Battery voltage
51 (R/W)*1 (R)*2	Ground	Stop lamp switch	Output	Depress the brake pedal		Battery voltage
				Release the brake pedal		0 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
52 (R)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	Battery voltage
					ON	0 V
53 (L)	Ground	Power window power supply	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
54 (O)	Ground	Door unlock (All)	Output	Door lock/unlock switch	Pressed to the unlock side	Battery voltage
					Pressed to the lock side	0 V
55 (B)	Ground	Ground	—	Ignition switch ON		0 V
56 (Y)*1 (SB)*2	Ground	Door lock (All)	Output	Door lock/unlock switch	Pressed to the unlock side	0 V
					Pressed to the lock side	Battery voltage
57 (Y)	Ground	Battery power supply	Output	Ignition switch OFF		Battery voltage
58 (P)	Ground	Power window power supply	Output	Ignition switch OFF		Battery voltage
59 (BR)	Ground	Super lock	Output	When lock button of key fob or Intelligent Key is not pressed		0 V
				When lock button of key fob or Intelligent Key is pressed		Battery voltage
60 (GR)	Ground	Driver door unlock	Output	Door lock/unlock switch	Pressed to the unlock side	Battery voltage
					Pressed to the lock side	0 V

*1: With Intelligent Key system

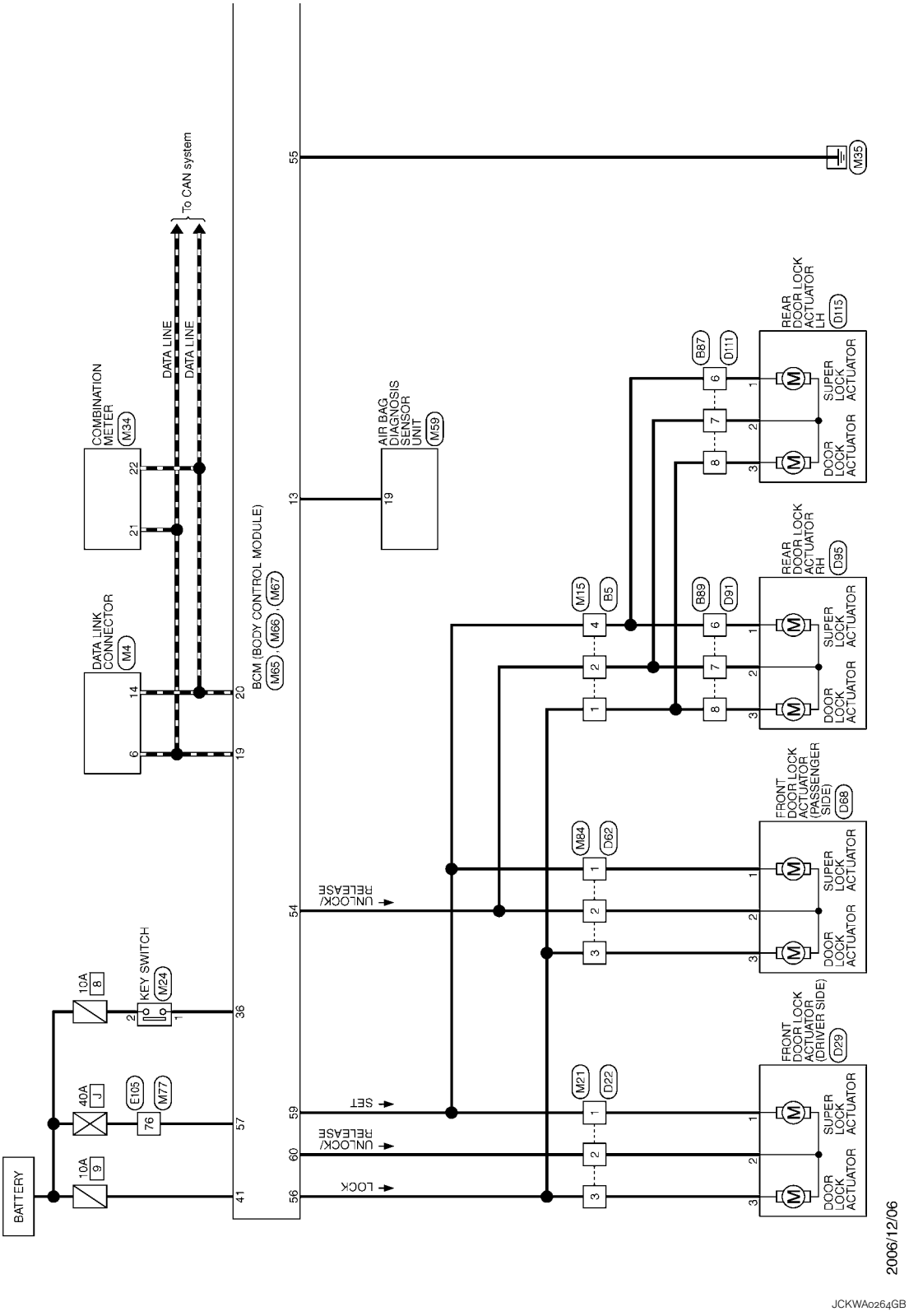
*2: Without Intelligent Key system

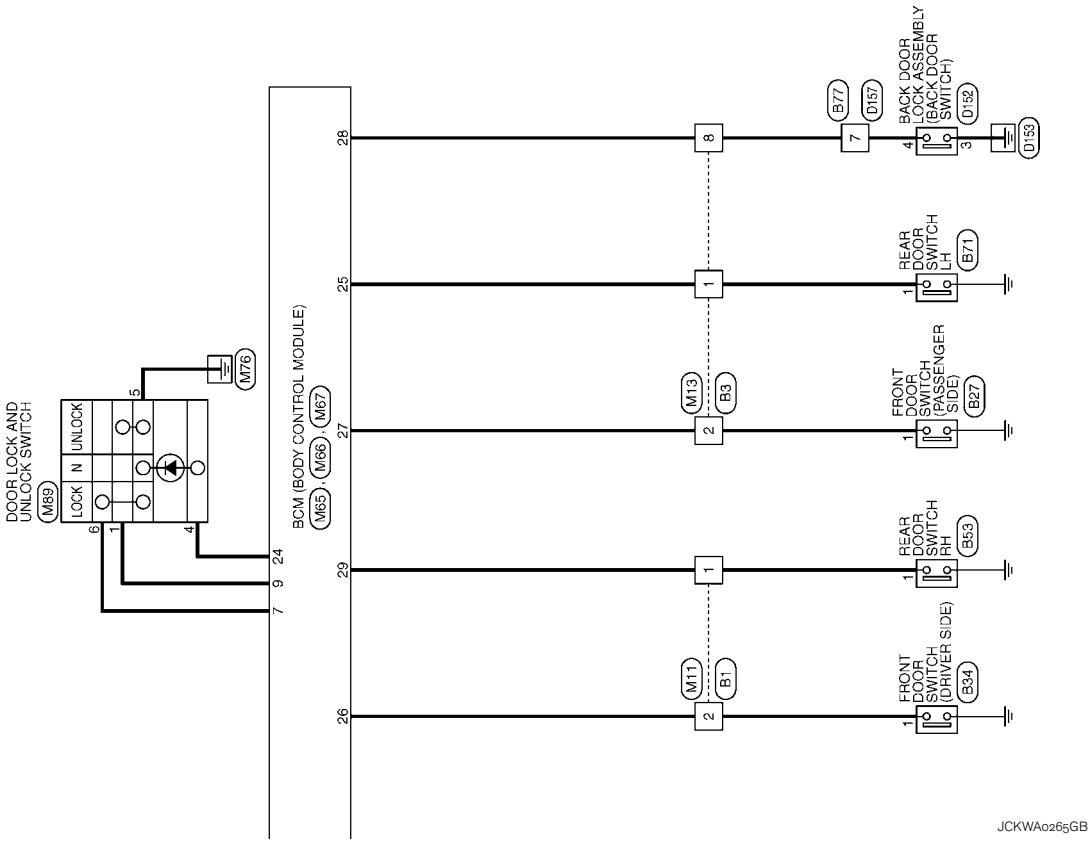
Wiring Diagram - SUPER LOCK CONTROL SYSTEM -

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SUPER LOCK SYSTEM (WITHOUT INTELLIGENT KEY)





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SUPER LOCK SYSTEM (WITHOUT INTELLIGENT KEY)

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

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 [Specification]
1	LG	-
2	R/W	- [RHD models]

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

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 [Specification]
1	GR	-
2	BR	- [RHD models]
8	G	-

Connector No.	B5
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

H.S.

1	2	3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	-
2	O	-
4	BR	-

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	R/W	-

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	TH08FW

H.S.

4	3	2	1
8	7	6	5

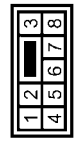
Terminal No.	Color of Wire	Signal Name [Specification]
7	G	-

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SUPER LOCK SYSTEM (WITHOUT INTELLIGENT KEY)

Connector No.	B87
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

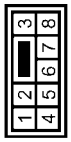
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	–
7	O	–
8	SB	–

Connector No.	B89
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

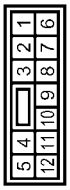
H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	–
7	O	–
8	SB	–

Connector No.	D22
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	–
2	O	–
3	SB	–

Connector No.	D29
Connector Name	FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
Connector Type	FEA04FB-FHA2

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	–
2	O	–
3	SB	–

Connector No.	D62
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	–
2	O	–
3	SB	–[Without Intelligent Key]

Connector No.	D68
Connector Name	FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Type	FEA04FB-FHA2

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	–
2	O	–
3	SB	–[Without Intelligent Key]

Connector No.	D91
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	–
7	O	–
8	SB	–

Connector No.	D95
Connector Name	REAR DOOR LOCK ACTUATOR RH
Connector Type	FEA04FB-FHA2

H.S.

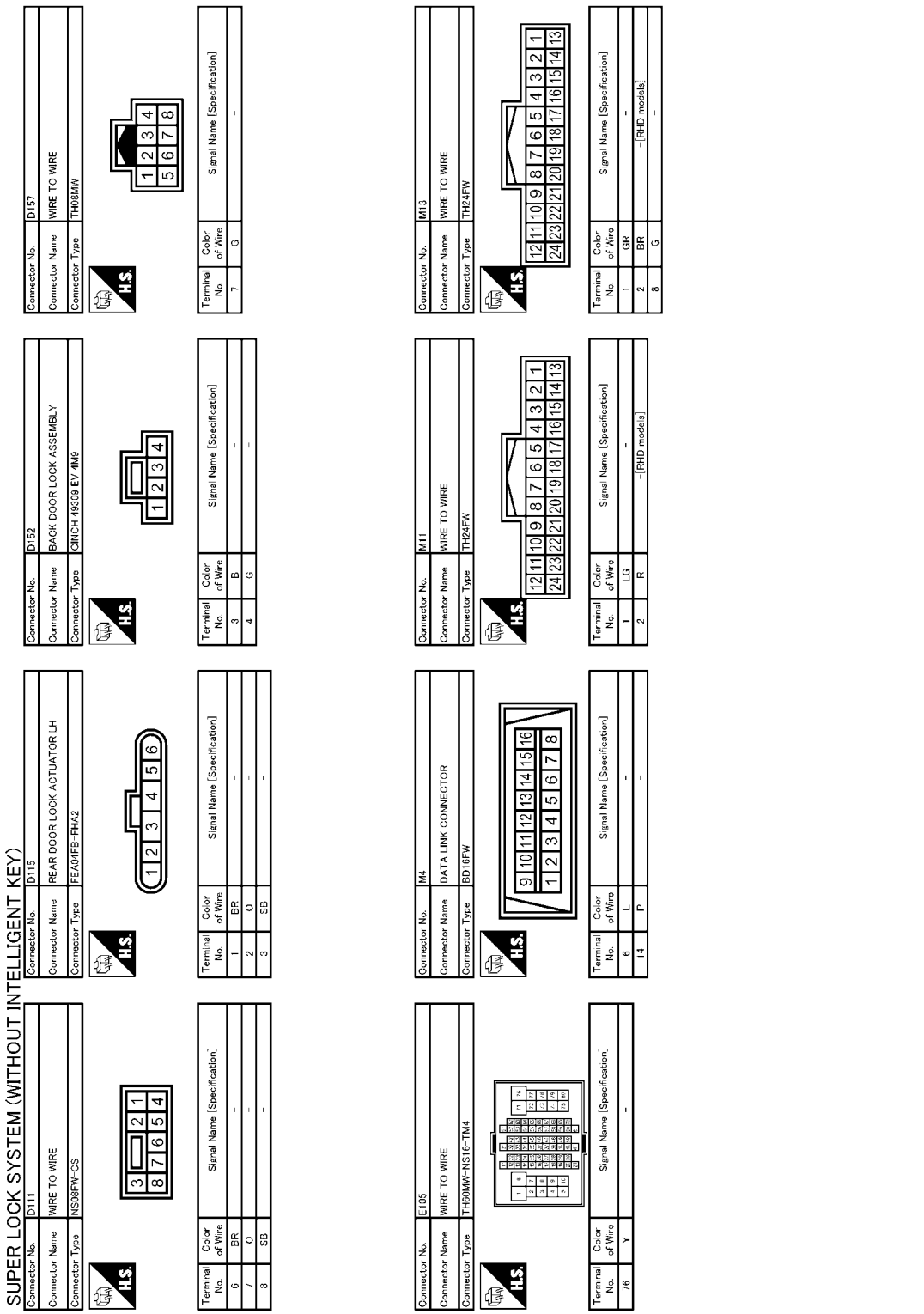


Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	–
2	O	–
3	SB	–

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SUPER LOCK SYSTEM (WITHOUT INTELLIGENT KEY)



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SUPER LOCK SYSTEM (WITHOUT INTELLIGENT KEY)

Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	-
2	O	-
4	BR	-

Connector No.	M21
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS



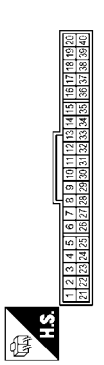
Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	GR	-
3	SB	-

Connector No.	M24
Connector Name	KEY SWITCH
Connector Type	A02MW



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

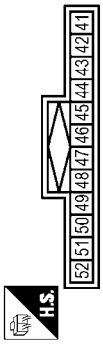
Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
21	L	CAN-H
22	P	CAN-L

36	V	KEY SW

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FCI 211PC122S1017

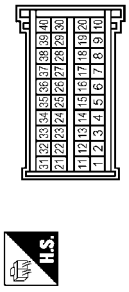


Terminal No.	Color of Wire	Signal Name [Specification]
41	V	BAT(FUSE)

Connector No.	M59
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	TK28FY-EX-SC

Terminal No.	Color of Wire	Signal Name [Specification]
19	R	UNLOCK

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AABA40FB



Terminal No.	Color of Wire	Signal Name [Specification]
7	P	LOCK/UNLOCK SW (LOCK)
9	BR	LOCK/UNLOCK SW (UNLOCK)
13	R	SHOCK DETECT SIG
19	L	CAN-H
20	P	CAN-L
24	GR	DOOR LOCK STATUS IND
25	GR	DOOR SW (RL)
26	R	DOOR SW (DR)
27	BR	DOOR SW (AS)
28	G	DOOR SW (BACK)
29	LG	DOOR SW (RR)

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SUPER LOCK SYSTEM (WITHOUT INTELLIGENT KEY)

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FCI 211PC083S0017

H.S.

60 59 58 57 56 55 54 53

Terminal No.	Color of Wire	Signal Name [Specification]
54	O	DOOR UNLOCK OUTPUT (OTHER)
55	B	GND(POWER)
56	SB	DOOR LOCK OUTPUT (ALL) [Without Intelligent Key]
57	Y	BAT(F/L)
59	BR	SUPER LOCK SET OUTPUT
60	GR	UNLOCK (DR)

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH160FW-NS16-TM4

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
76	Y	-

Connector No.	M84
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	SB	-[Without Intelligent Key]

Connector No.	M89
Connector Name	DOOR LOCK AND UNLOCK SWITCH
Connector Type	77003197674

H.S.

3 2 1
6 5 4

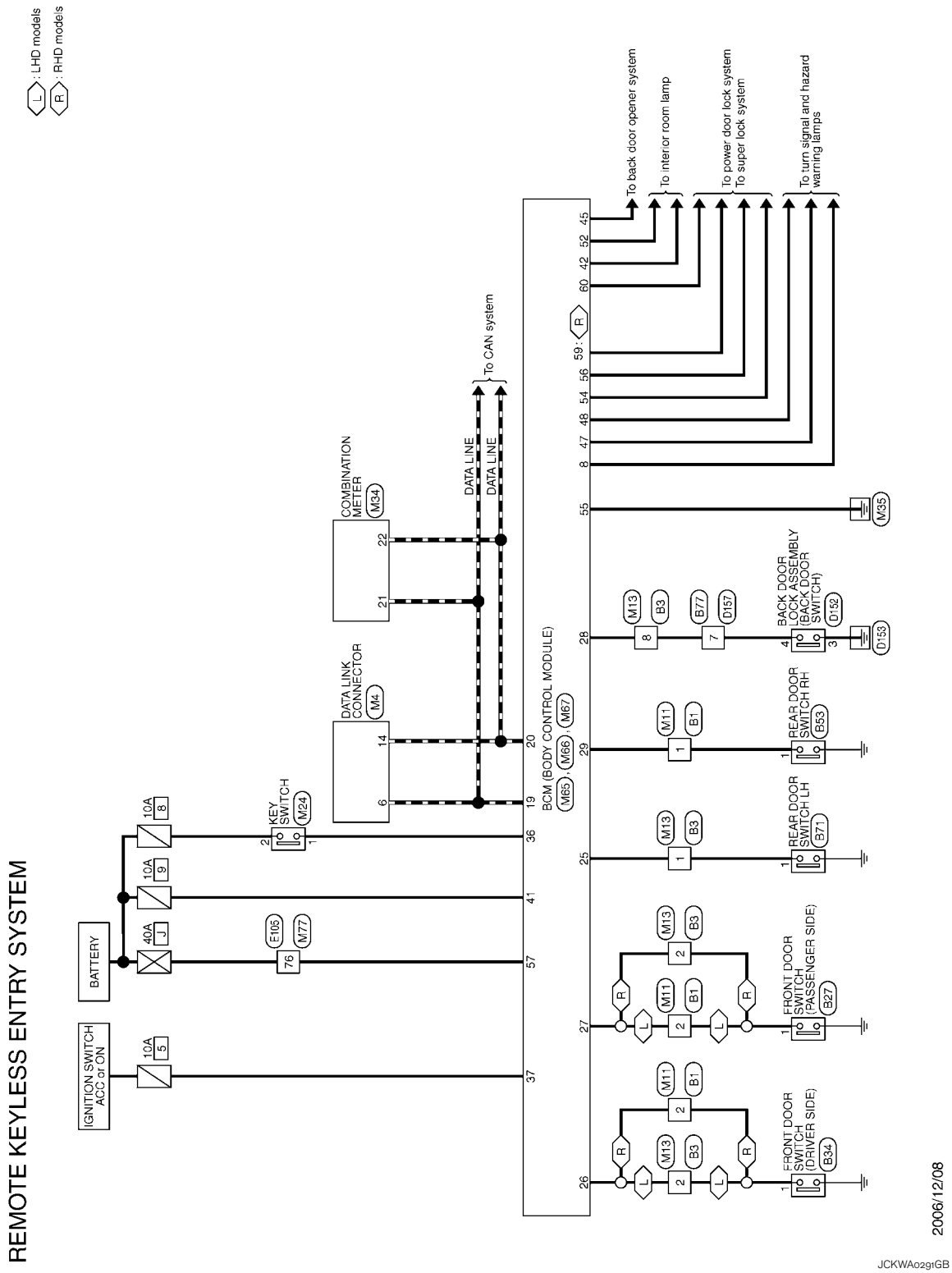
Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
4	GR	-
5	B	-
6	P	-

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Wiring Diagram - REMOTE KEYLESS ENTRY CONTROL SYSTEM -

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REMOTE KEYLESS ENTRY SYSTEM

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	–
2	BR	–[LHD models]
2	R/W	–[RHD models]

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	–
2	R/W	–[LHD models]
2	BR	–[RHD models]
8	G	–

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	–

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW

Terminal No.	Color of Wire	Signal Name [Specification]
1	R/W	–

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	–

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	–

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	TH08FW

Terminal No.	Color of Wire	Signal Name [Specification]
7	G	–

Connector No.	D152
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	CINCH 49309 EV 4M9

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

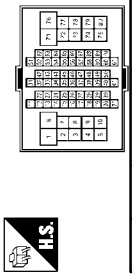
JCKWA0292GB

REMOTE KEYLESS ENTRY SYSTEM

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

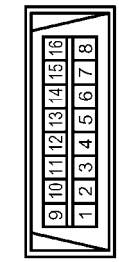
Terminal No.	Color of Wire	Signal Name [Specification]
7	G	–

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-NS16-TM4



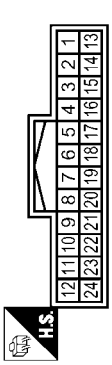
Terminal No.	Color of Wire	Signal Name [Specification]
76	Y	–

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



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	–
14	P	–

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH24FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	–
2	BR	–[LHD models]
2	R	–[RHD models]

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH24FW

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	–
2	R	–[LHD models]
2	BR	–[RHD models]
8	G	–

Connector No.	M24
Connector Name	KEY SWITCH
Connector Type	A02NW

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	Y	–

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW

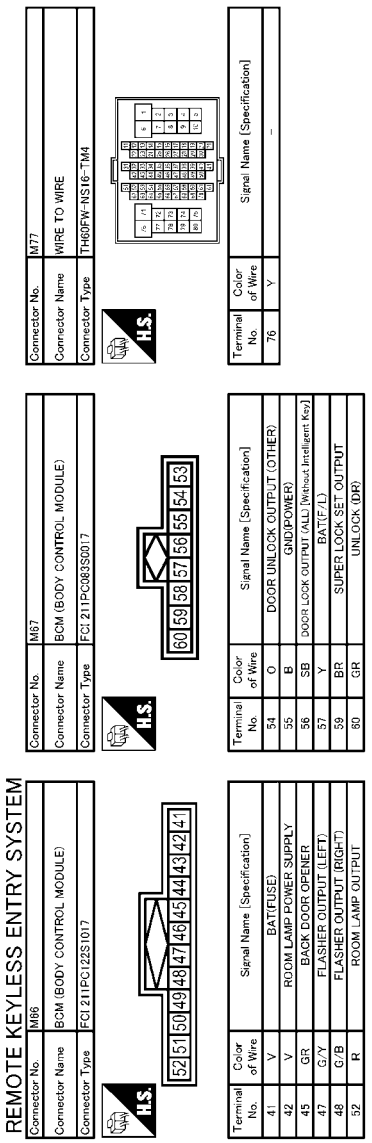
Terminal No.	Color of Wire	Signal Name [Specification]
21	L	CAN-H
22	P	CAN-L

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AAB40FB

Terminal No.	Color of Wire	Signal Name [Specification]
8	LG	HAZARD SW
19	L	CAN-H
20	P	CAN-L
25	GR	DOOR SW (RL)
26	R	DOOR SW (DR)
27	BR	DOOR SW (AS)
28	G	DOOR SW (BACK)
29	LG	DOOR SW (RR)
36	V	KEY SW
37	R	ACC SW

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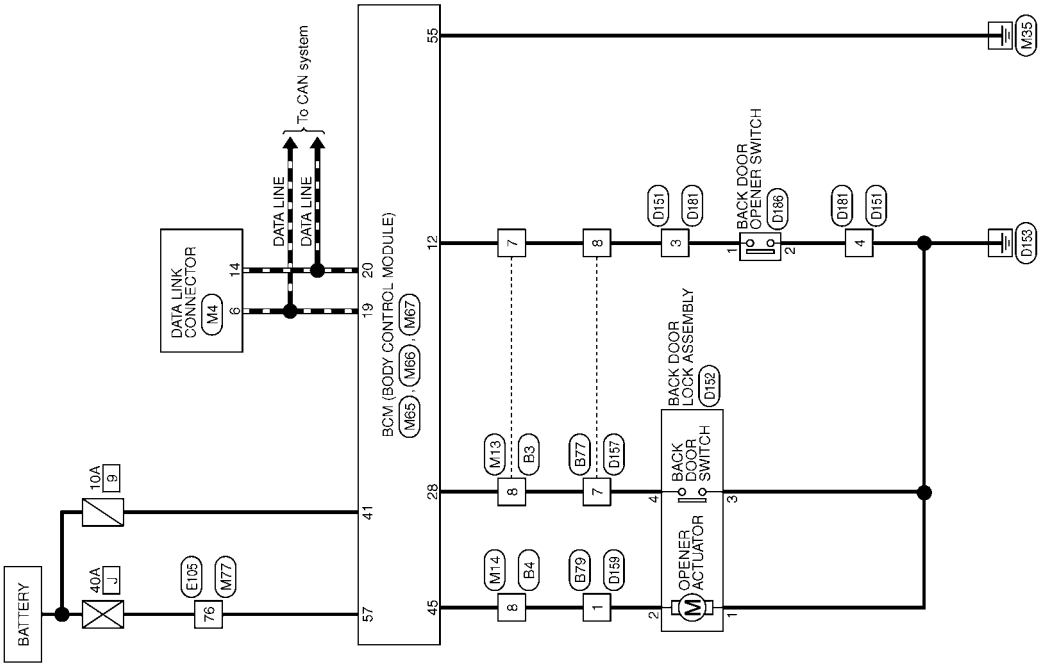


JCKWA0294GB

Wiring Diagram - BACK DOOR OPENER CONTROL SYSTEM -

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BACK DOOR OPENER SYSTEM



2006/12/08

JCKWA0295GB

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BACK DOOR OPENER SYSTEM

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH24MW

Terminal No.	Color of Wire	Signal Name [Specification]
7	P	-
8	G	-

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
8	GR	-

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	TH08FW

Terminal No.	Color of Wire	Signal Name [Specification]
7	G	-
8	P	-

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	M02FW-LC

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

Terminal No.	Color of Wire	Signal Name [Specification]
3	P	-
4	B	-

Connector No.	D152
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	CINCH 49309 EV 4M9

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	GR	-
3	B	-
4	G	-

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	TH08MW

Terminal No.	Color of Wire	Signal Name [Specification]
7	G	-
8	P	-

Connector No.	D159
Connector Name	WIRE TO WIRE
Connector Type	M02MW-LC

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-

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BACK DOOR OPENER SYSTEM

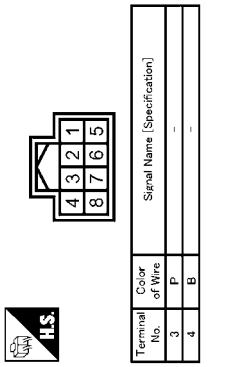
Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	TH08FW

Terminal No.	Color of Wire	Signal Name [Specification]
3	P	–
4	B	–

Connector No.	D186
Connector Name	BACK DOOR OPENER SWITCH
Connector Type	RK02MGY

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

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH24FW

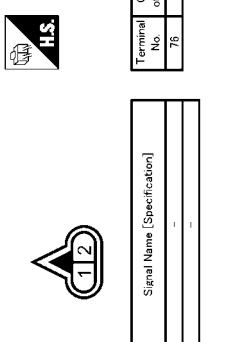


Terminal No.	Color of Wire	Signal Name [Specification]
7	P	–
8	G	–

Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS

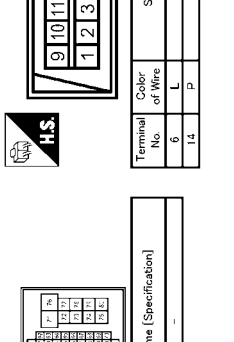
Terminal No.	Color of Wire	Signal Name [Specification]
8	GR	–

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-NS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
76	Y	–

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



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	–
14	P	–

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AAB40FB

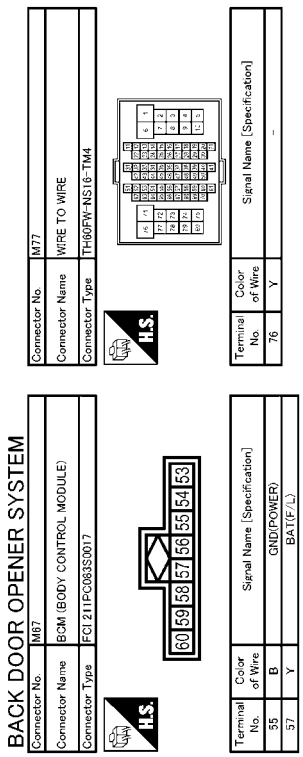
Terminal No.	Color of Wire	Signal Name [Specification]
12	P	TRUNK/BACK DOOR OPEN SW
19	L	CAN-H
20	P	CAN-L
28	G	DOOR SW (BACK)

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FCI 211PC122S1017

Terminal No.	Color of Wire	Signal Name [Specification]
41	V	BAT(FUSE)
45	GR	BACK DOOR OPENER

JCKWA0297GB

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JCKWA0298GB

Fail Safe

INFOID:0000000001097503

Fail-safe index

BCM performs fail-safe control when any DTC listed below is detected.

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2191: DIFFERENCE OF KEY	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2192: ID DISCORD BCM-ECM	Fuel cut (ECM)	Erase DTC
B2193: CHAIN OF BCM-ECM	Fuel cut (ECM)	Erase DTC
B2194: DISCORD BCM-I-KEY	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2195: ANTI SCANNING	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2196: DONGLE NG	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC

REAR WIPER CONTROL

BCM detects a rear wiper stopping position according to a rear wiper auto stop signal.
When a rear wiper auto stop signal is in the condition listed below, BCM stops power supply to rear wiper after rear wiper is activated for five seconds.

Ignition switch	Rear wiper switch	Auto stop signal
ON	OFF	Rear wiper stop position signal cannot be input 5 seconds.
	ON	The signal does not change for 5 seconds.

NOTE:
The above operation is repeated when operating the rear wiper switch one minute after the stop of the rear wiper caused by Fail-safe.

TURN SIGNAL LAMP CONTROL

BCM detects the turn signal lamp circuit status from the terminal voltage.
BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:
The blinking speed is normal while activating the hazard warning lamp.

LIGHT & RAIN SENSOR MALFUNCTION DETECTION FUNCTION

BCM controls the following items when LIGHT & RAIN sensor has a malfunction.

Auto Light Control
Headlamp is turned ON.

Front Wiper Control
The condition just before the activation of Fail-safe is maintained until the front wiper switch is turned OFF.

DTC Inspection Priority Chart

INFOID:0000000001097504

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Priority	DTC
1	• U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN)
2	• B2190: NATS ANTENNA AMP • B2191: DIFFERNCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2194: DISCORD BCM-I-KEY • B2195: ANTI SCANNING • B2196: DONGLE NG

DTC Index

INFOID:0000000001097505

NOTE:

Details of time display

- CRNT: Displays when there is a malfunction now or after returning to the normal condition until turning ignition switch OFF → ON again.
- PAST: Displays when there is a malfunction that is detected in the past and stored.
- 1 - 39: Displayed if any previous malfunction is present when current condition is normal. It increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The counter remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch OFF → ON after returning to the normal condition if the malfunction is detected again.

CONSULT display	TIME		Fail-safe	Refer to
No DTC is detected. further testing may be required.	—	—	—	—
U1000: CAN COMM CIRCUIT	0	1 - 39	—	BCS-32
U1010: CONTROL UNIT (CAN)	0	1 - 39	—	BCS-33
B2190: NATS ANTENNA AMP	CRNT	PAST	×	• With Intelligent Key system SEC-33 • Without Intelligent Key system SEC-174
B2191: DIFFERENCE OF KEY	CRNT	PAST	×	• With Intelligent Key system SEC-35 • Without Intelligent Key system SEC-176
B2192: ID DISCORD BCM-ECM	CRNT	PAST	×	• With Intelligent Key system SEC-36 • Without Intelligent Key system SEC-177
B2193: CHAIN OF BCM-ECM	CRNT	PAST	×	• With Intelligent Key system SEC-38 • Without Intelligent Key system SEC-178
B2194: DISCORD BCM-I-KEY	CRNT	PAST	×	SEC-39
B2195: ANTI SCANNING	CRNT	PAST	×	• With Intelligent Key system SEC-179 • Without Intelligent Key system SEC-179
B2196: DONGLE NG	CRNT	PAST	×	• With Intelligent Key system SEC-41 • Without Intelligent Key system SEC-180

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SYMPTOM DIAGNOSIS

DOOR LOCK FUNCTION SYMPTOMS

DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH : Symptom Table

INFOID:0000000001094360

DOOR LOCK AND UNLOCK SWITCH OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-713, "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)

- Except driver side, doors are closed.
- Doors are not locked by keyfob.

Symptom Table

Symptom	Diagnosis/service procedure		Reference page
Door lock and unlock function does not operate with door lock and unlock switch.	1. Check BCM power supply and ground circuit.		DLK-744
	2. Check door lock and unlock switch.		DLK-745
	3. Check door switch.	Passenger side	DLK-750
		Rear LH	DLK-752
		Rear RH	DLK-753
		Back door	DLK-755
	4. Check intermittent incident.		GI-39
Specific door lock actuator does not operate.	1. Check door lock actuator.	Driver side	DLK-759
		Passenger side	DLK-760
		Rear LH	DLK-762
		Rear RH	DLK-763
	2. Check intermittent incident.		GI-39

KEYFOB

KEYFOB : Symptom Table

INFOID:0000000001094362

KEYFOB OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-713, "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)

- Mechanical key is removed from ignition key cylinder.
- Door lock and unlock operation is normal.

Symptom Table

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Symptom	Diagnosis/service procedure	Reference page
All of the keyfob operations do not operate.	1. Check keyfob battery inspection.	DLK-778
	2. Check intermittent incident.	GI-39
Anti-hijack operation does not operate.	1. Check “SECURITY DOOR LOCK SET” setting in “WORK SUPPORT”.	DLK-740
	2. Check Intermittent Incident.	GI-39

AUTO DOOR LOCK

AUTO DOOR LOCK : Symptom Table

INFOID:0000000001094364

AUTO DOOR LOCK OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-713, "Work Flow".
- Understand the operation when does it work, refer to DLK-723, "AUTO DOOR LOCK : System Description".
- 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)

- “SECURITY DOOR LOCK SET” is ON when setting on CONSULT-III.
- Door lock and unlock function is normal.

Symptom Table

Symptom	Diagnosis/service procedure		Reference page
Auto door lock operation does not operate.	1. Check “SECURITY DOOR LOCK SET” setting in “WORK SUPPORT”.		DLK-740
	2. Check door switch.	Driver side	DLK-749
		Passenger side	DLK-750
		Rear LH	DLK-752
		Rear RH	DLK-753
		Back door	DLK-755
	3. Check key switch.		DLK-757
	4. Check Intermittent Incident.		GI-39

VEHICLE SPEED SENSING AUTO DOOR LOCK

VEHICLE SPEED SENSING AUTO DOOR LOCK : Symptom Table

INFOID:0000000001094366

VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-713, "Work Flow".
- Understand the operation when does it work, refer to DLK-725, "VEHICLE SPEED SENSING AUTO DOOR LOCK : System Description".
- 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)

- Door lock and unlock switch operation is normal.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Vehicle speed sensing auto door lock operation does not operate.	1. Check vehicle speed signal.	DLK-777
	2. Check Intermittent Incident.	GI-39

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BACK DOOR OPEN FUNCTION SYMPTOMS
BACK DOOR OPENER SWITCH
BACK DOOR OPENER SWITCH : Symptom Table

INFOID:0000000001094368

BACK DOOR OPENER FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-713, "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)

- Door lock function is normal.
- Vehicle speed is less than 5 km/h (3MPH).
- All doors are unlocked.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Back door opener function does not operate by back door opener switch.	1. Check back door opener switch.	DLK-755
	2. Check vehicle speed signal.	DLK-777
	3. Check back door opener actuator.	DLK-771
	4. Check Intermittent Incident.	GI-39

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WARNING FUNCTION SYMPTOMS
BACK DOOR

BACK DOOR : Symptom Table

INFOID:0000000001094374

BACK DOOR OPEN WARNING OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-713, "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)

- Door lock function and back door opener function is normal.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Back door open warning does not operate properly.	1. Check back door opener switch.	DLK-773
	2. Check intermittent incident.	GI-39

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HAZARD REMINDER FUNCTION
HAZARD WARNING LAMP
HAZARD WARNING LAMP : Symptom Table

INFOID:0000000001094375

HAZARD REMINDER OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-713, "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)

- “HAZARD LAMP SET” is ON when setting on CONSULT-III.
- Door lock function is normal.

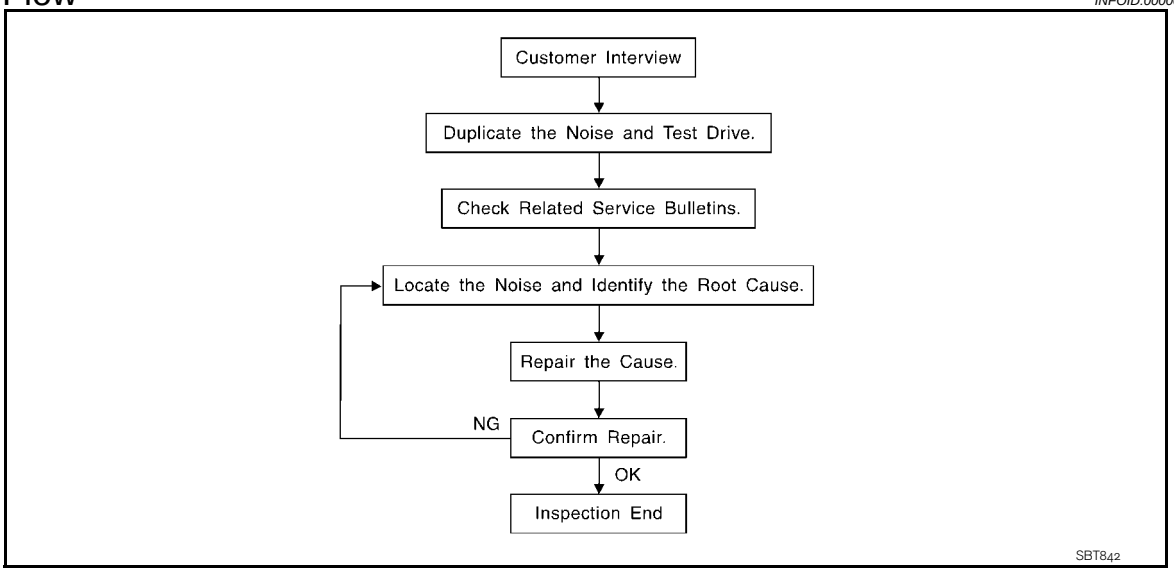
Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Buzzer reminder operation dose not operate properly.	1. Check setting of “HAZARD LAMP SET” with CONSULT-III.	DLK-740
	2. Check intermittent incident.	GI-39

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000001098124



CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of the customer's comments; refer to DLK-216, "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 a test drive 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.

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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 A/T model).
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 (TSB) 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 (Engine Ear or mechanics stethoscope).
2. Narrow down the noise to a more specific area and identify the cause of the noise by:

- removing the components in the area that you suspect the noise is coming from.
  Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
- tapping or pushing/pulling the component that 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-214, "Inspection Procedure".

REPAIR THE CAUSE

- If the cause is a loose component, tighten the component securely.
- If the cause is insufficient clearance between components:
- separate components by repositioning or loosening and retightening the component, if possible.
- insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or urethane tape are available through your authorized Nissan Parts Department.

CAUTION:
Do not use excessive force as many components are constructed of plastic and may be damaged.
NOTE:

- URETHANE PADS
  Insulates connectors, harness, etc.
- INSULATOR (Foam blocks)
  Insulates components from contact. Can be used to fill space behind a panel.
- INSULATOR (Light foam block)
- FELT CLOTHTAPE
  Used to insulate where movement does not occur. Ideal for instrument panel applications.
  The following materials, not available through NISSAN Parts Department, can also be used to repair squeaks and rattles.
- UHMW(TEFLON) TAPE
  Insulates where slight movement is present. Ideal for instrument panel applications.
- SILICONE GREASE
  Used in place of UHMW tape that 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

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Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.

Inspection Procedure

INFOID:0000000001098125

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

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. Cluster lid A and instrument panel
2. Acrylic lens and combination meter housing
3. Instrument panel to front pillar garnish
4. Instrument panel to windshield
5. Instrument panel mounting pins
6. Wiring harnesses behind the combination meter
7. A/C defroster duct and duct joint

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

CAUTION:

Do not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will not be able to recheck the repair.

CENTER CONSOLE

Components to pay attention to include:

1. Shifter assembly cover to finisher
2. A/C control unit and cluster lid C
3. Wiring harnesses behind audio and A/C control unit

The instrument panel repair and isolation procedures also apply to the center console.

DOORS

Pay attention to the:

1. Finisher and inner panel making a slapping noise
2. Inside handle escutcheon to door finisher
3. Wiring harnesses tapping
4. Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks to repair the noise.

TRUNK

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

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

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

SUNROOF/HEADLINING

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

1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
2. Sunvisor shaft shaking in the holder
3. Front or rear windshield touching headlining and squeaking

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Again, pressing on the components to stop the noise while duplicating the conditions can isolate most of these incidents. Repairs usually consist of insulating with felt cloth tape.

SEATS

When isolating seat noise it is important to note the position the seat is in and the load placed on the seat when the noise is present. These conditions should be duplicated when verifying and isolating the cause of the noise.

Cause of seat noise include:

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

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

UNDERHOOD

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

Causes of transmitted underhood noise include:

1. Any component mounted to the engine wall
2. Components that pass through the engine wall
3. Engine wall mounts and connectors
4. Loose radiator mounting pins
5. Hood bumpers out of adjustment
6. Hood striker out of adjustment

These noises can be difficult to isolate since they cannot be reached from the interior of the vehicle. The best method is to secure, move or insulate one component at a time and test drive the vehicle. Also, engine RPM or load can be changed to isolate the noise. Repairs can usually be made by moving, adjusting, securing, or insulating the component causing the noise.

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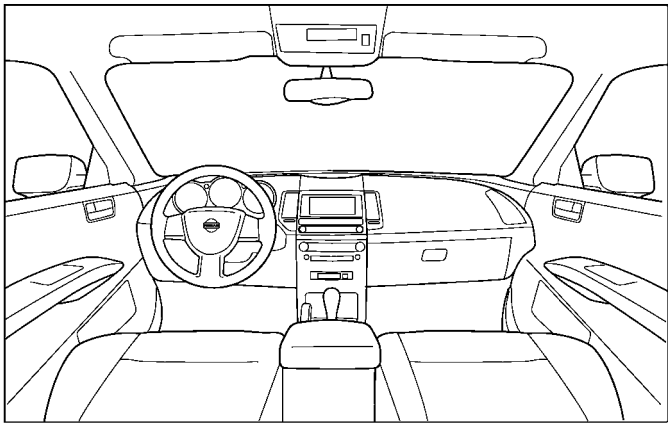
Diagnostic Worksheet

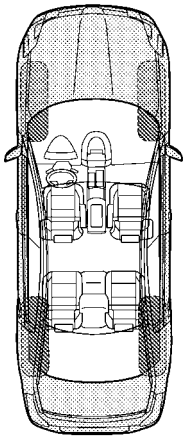
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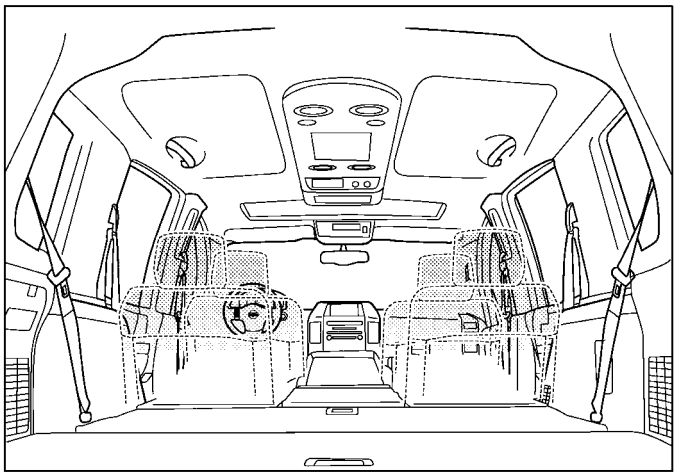
SQUEAK & RATTLE
DIAGNOSTIC WORKSHEET

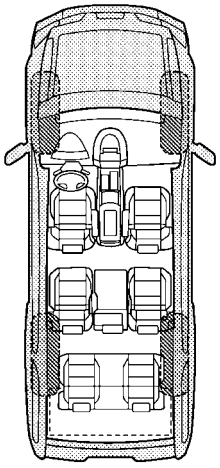
Dear Nissan Customer:
We are concerned about your satisfaction with your Nissan vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Nissan right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what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

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









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

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SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

_____

_____

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

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

III. WHEN DRIVING:

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

IV. WHAT TYPE OF NOISE

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

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

_____

_____

_____

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

VIN: _____ Customer Name: _____

W.O.# _____ Date: _____

This form must be attached to Work Order

PIIB8742E

PRECAUTION

PRECAUTIONS

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

INFOID:0000000001088378

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

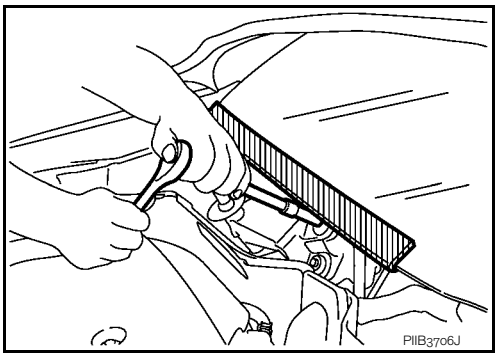
WARNING:

- **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 SRS 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.**

Procedure without Cowl Top Cover

INFOID:0000000001088379

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



Steering Wheel Rotation after Battery Disconnect

INFOID:0000000001088380

NOTE:

- Before removing and installing any control units, first turn the push-button ignition switch to the LOCK position, then disconnect both battery cables.
- After finishing work, confirm that all control unit connectors are connected properly, then re-connect both battery cables.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work. If a DTC is detected, perform trouble diagnosis according to self-diagnosis results.

This vehicle is equipped with a push-button ignition switch and a steering lock unit.
If the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.
If turning the steering wheel is required with the battery disconnected or discharged, follow the procedure below before starting the repair operation.

OPERATION PROCEDURE

1. Connect both battery cables.
   NOTE:
   Supply power using jumper cables if battery is discharged.
2. Carry the Intelligent Key or insert it to the key slot and turn the push-button ignition switch to ACC position. (At this time, the steering lock will be released.)

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3. Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.
4. Perform the necessary repair operation.
5. When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the push-button ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the push-button ignition switch is turned to LOCK position.)
6. Perform self-diagnosis check of all control units using CONSULT-III.

Work

INFOID:0000000001088381

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

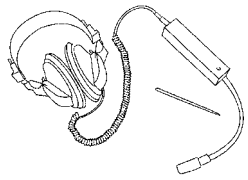
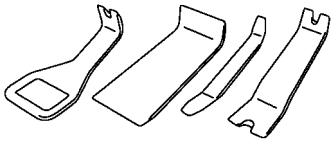
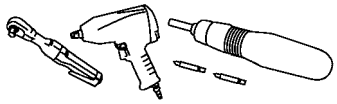
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PREPARATION

PREPARATION

Commercial Service Tools

INFOID:0000000001116411

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

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ON-VEHICLE MAINTENANCE

PRE-INSPECTION FOR DIAGNOSTIC

Basic Inspection

INFOID:0000000001090935

BASIC INSPECTION

1. CHECK DOOR LOCK AND UNLOCK SWITCH OPERATION

Check door lock and unlock operation by operating door lock and unlock switch.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to DLK-812, "DOOR LOCK AND UNLOCK SWITCH : Symptom Table".

2. CHECK KEYFOB OPERATION

Check door lock and unlock operation by operationg lock and unlock button of keyfob.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Refer to DLK-812, "KEYFOB : Symptom Table".

3. CHECK AUTO DOOR LOCK OPERATION

Check auto door lock operation. Refer to DLK-723, "AUTO DOOR LOCK : System Description".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Refer to DLK-813, "AUTO DOOR LOCK : Symptom Table".

4. CHECK VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION

Check vehicle speed sensing auto door lock. Refer to DLK-725, "VEHICLE SPEED SENSING AUTO DOOR LOCK : System Description"

Is the inspection result normal?

YES >> GO TO 5.
NO >> Refer to DLK-813, "VEHICLE SPEED SENSING AUTO DOOR LOCK : Symptom Table".

5. CHECK BACK DOOR OPENER SWITCH OPERATION

Check back door opener operation by operating back door opener switch.

Is the inspection result normal?

YES >> GO TO 6.
NO >> Refer to DLK-815, "BACK DOOR OPENER SWITCH : Symptom Table".

6. CHECK HAZARD REMINDER FUNCTION

Check hazard reminder function by operating the following switches.
- Lock and unlock button of keyfob.

Is the inspection result normal?

YES >> GO TO 7.
NO >> Refer to DLK-817, "HAZARD WARNING LAMP : Symptom Table".

7. CHECK WARNING FUNCTION

Check that warning function operate properly. Refer to DLK-732, "System Description".

Is the inspection result normal?

YES >> GO TO 8.
NO >> Refer to DLK-817, "HAZARD WARNING LAMP : Symptom Table".

8. CHECK OUT

CHECK OUT.

>> INSPECTION END

ON-VEHICLE REPAIR

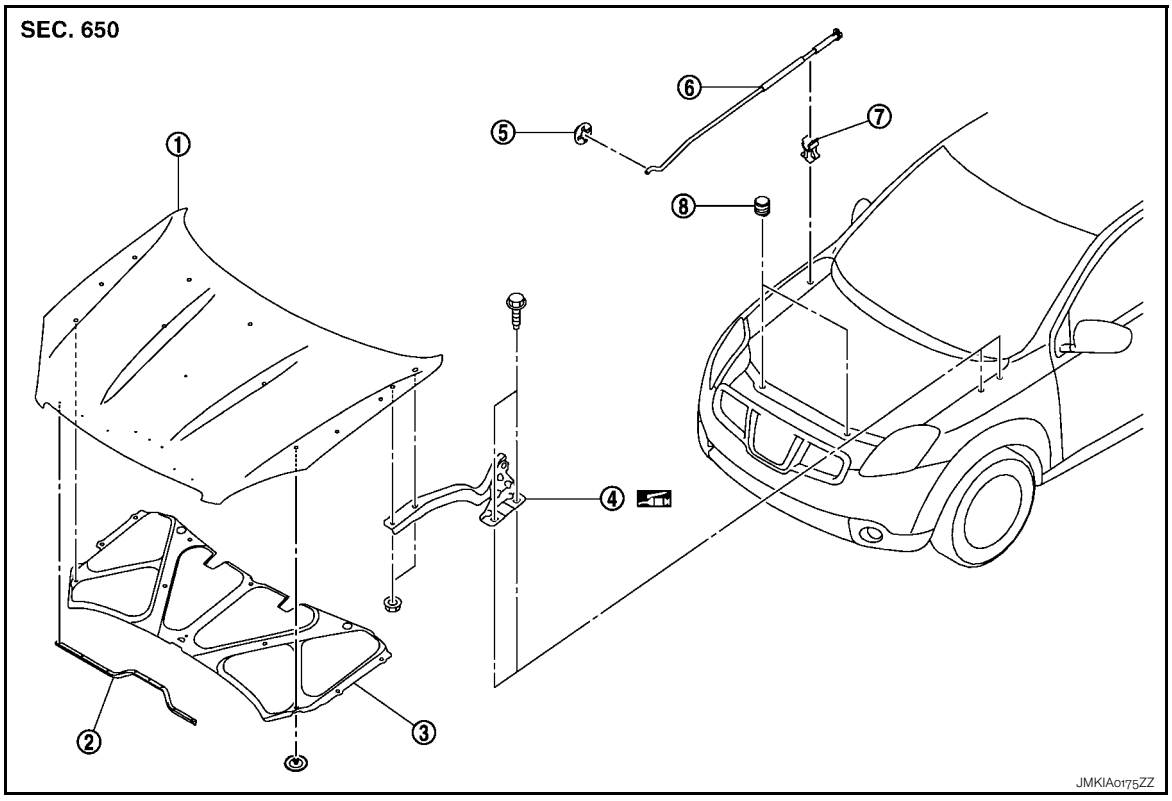
HOOD

HOOD ASSEMBLY

HOOD ASSEMBLY : Exploded View

INFOID:0000000001098695

REMOVAL

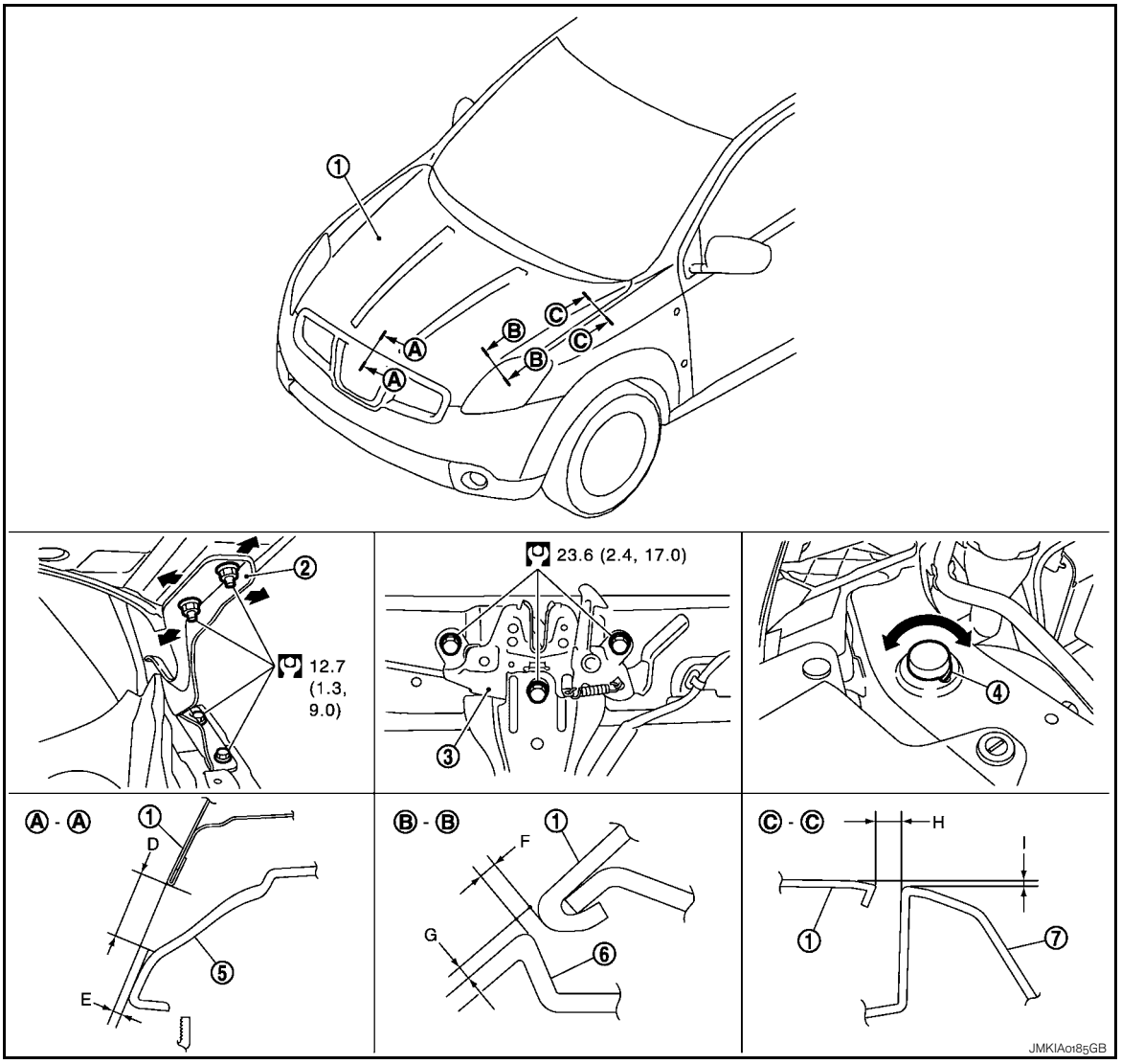


1. Hood assembly
2. Hood sealing rubber
3. Hood insulator
4. Hood hinge
5. Grommet
6. Hood support rod
7. Clamp
8. Hood bumper rubber

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT

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

Refer to GI-4, "Components" for symbols in the figure.

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000001098696

REMOVAL

1. Support the hood lock assembly with the proper material to prevent it from falling.
   WARNING:
   Bodily injury may occur if no supporting rod is holding the hood open when removing the hood stay.
2. Remove the hood hinge mounting nuts on the hood to remove the hood assembly.
   CAUTION:
   Perform work with 2 workers, because of its heavy weight.
3. Remove the following parts after removing the hood assembly.
   - Hood insulator
   - Hood sealing rubber

INSTALLATION

Install in the reverse order of removal.

CAUTION:

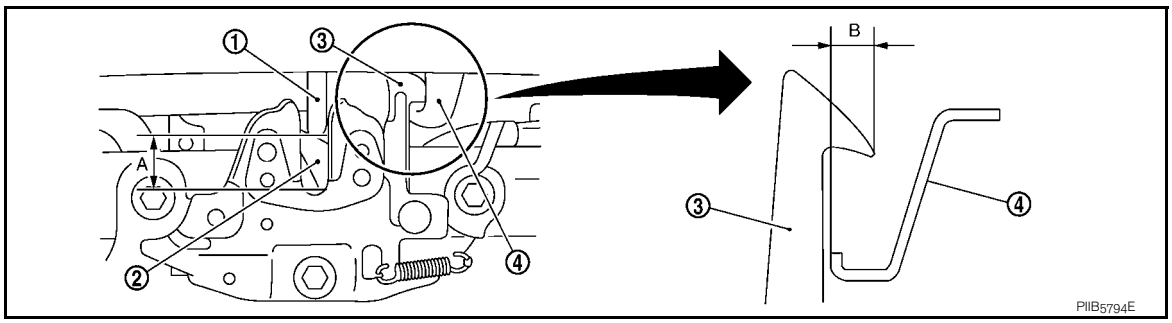
- **Perform work with 2 workers, because of its heavy weight.**
- **Before installing the hood hinge, apply anticorrosive agent onto the mounting surface of the vehicle body.**
- **After installing, perform hood fitting adjustment. Refer to DLK-830, "HOOD ASSEMBLY : Adjustment".**

HOOD ASSEMBLY : Adjustment

INFOID:0000000001098697

Portion				Standard	Right/left Clearance (MAX)
Hood – Front bumper	A – A	D	Clearance	5.2 – 9.2 mm (0.205 – 0.362 in)	2.0 mm (0.079 in)
		E	Surface height	- 0.2 – 3.8 mm (- 0.008 – 0.150 in)	2.0 mm (0.079 in)
Hood – Front combination lamp	B – B	F	Clearance	3.7 – 7.7 mm (0.140 – 0.303 in)	2.0 mm (0.079 in)
		G	Surface height	- 2.3 – 2.3 mm (- 0.091 – 0.091 in)	2.3 mm (0.091 in)
Hood – Front fender	C – C	H	Clearance	3.9 – 5.9 mm (0.154 – 0.232 in)	1.5 mm (0.059 in)
		I	Surface height	- 1.0 – 1.0 mm (- 0.039 – 0.039 in)	1.5 mm (0.059 in)

1. Check the clearance and the surface height between the hood and each part by visualy and touching. (Fitting standard dimension in the table below should be satisfied.)
2. In case any parts are out of specification, adjust them according to the procedures shown below.
3. Remove the hood lock and adjust the height by rotating the bumper rubber until the hood becomes 1 to1.5 mm (0.04 to 0.059 in) lower than the fender.
4. Temporarily tighten the hood lock, and position by engaging it with the hood striker. Check the lock and striker for looseness and adjust the clearance and evenness with the striker to satisfy the specification.
5. Adjust A and B shown in the figure to the following value with hood's own weight by dropping it from approximately. 200 mm (7.87 in) height or by pressing the hood lightly [approximately. 29 N (3 kg)].



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

A : 20.0 mm (0.787 in)
B : 6.8 mm (0.268 in)

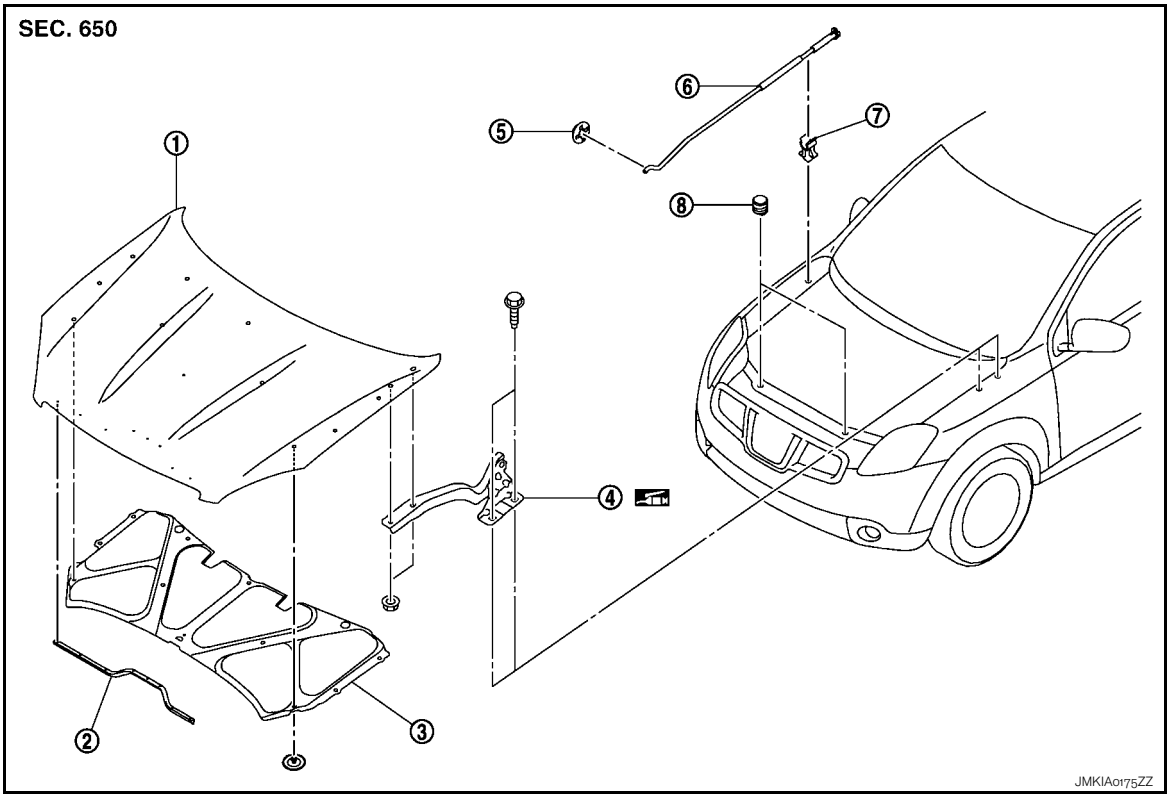
6. After adjustment tighten lock bolts to the specified torque.

HOOD HINGE

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HOOD HINGE : Exploded View

INFOID:0000000001098703



1. Hood assembly
2. Hood sealing rubber
3. Hood insulator
4. Hood hinge
5. Grommet
6. Hood support rod
7. Clamp
8. Hood bumper rubber

Refer to GI-4, "Components" for symbols in the figure.

HOOD HINGE : Removal and Installation

INFOID:0000000001098704

REMOVAL

1. Remove the hood assembly. Refer to DLK-829, "HOOD ASSEMBLY : Removal and Installation".
2. Remove the front fender. Refer to DLK-838, "Removal and Installation".
3. Remove the hood hinge mounting bolts, and then remove the hood hinge.

INSTALLATION

Install in the reverse order of removal.

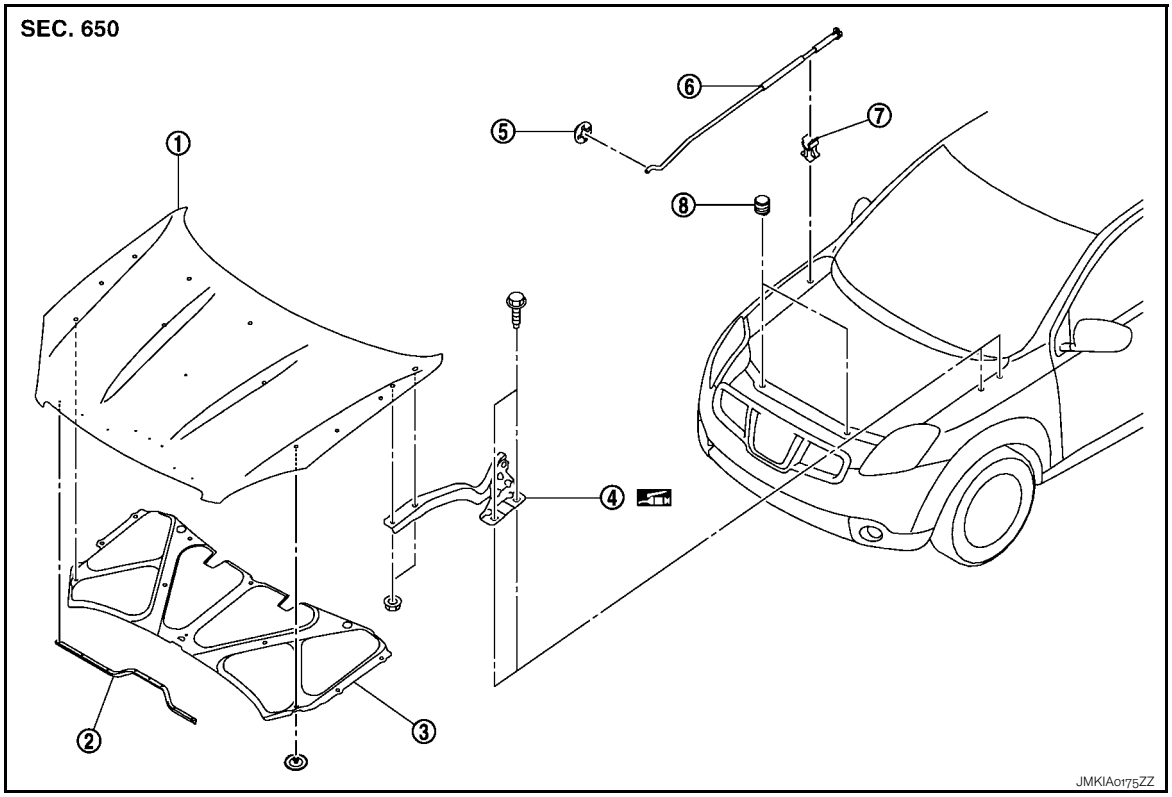
CAUTION:

- **After installation, apply touch-up paint (the body color) onto the head of the hinge mounting bolts and nuts.**
- **Before installation of hood hinge, apply anticorrosive agent onto the mounting surface of the vehicle body.**
- **After installation, perform hood fitting adjustment. Refer to DLK-830, "HOOD ASSEMBLY : Adjustment".**

HOOD SUPPORT ROD

HOOD SUPPORT ROD : Exploded View

INFOID:0000000001098706



1. Hood assembly
2. Hood sealing rubber
3. Hood insulator
4. Hood hinge
5. Grommet
6. Hood support rod
7. Clamp
8. Hood bumper rubber

Refer to GI-4, "Components" for symbols in the figure.

HOOD SUPPORT ROD : Removal and Installation

INFOID:0000000001098708

REMOVAL

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

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

2. Remove the hood support rod from the grommet.

INSTALLATION

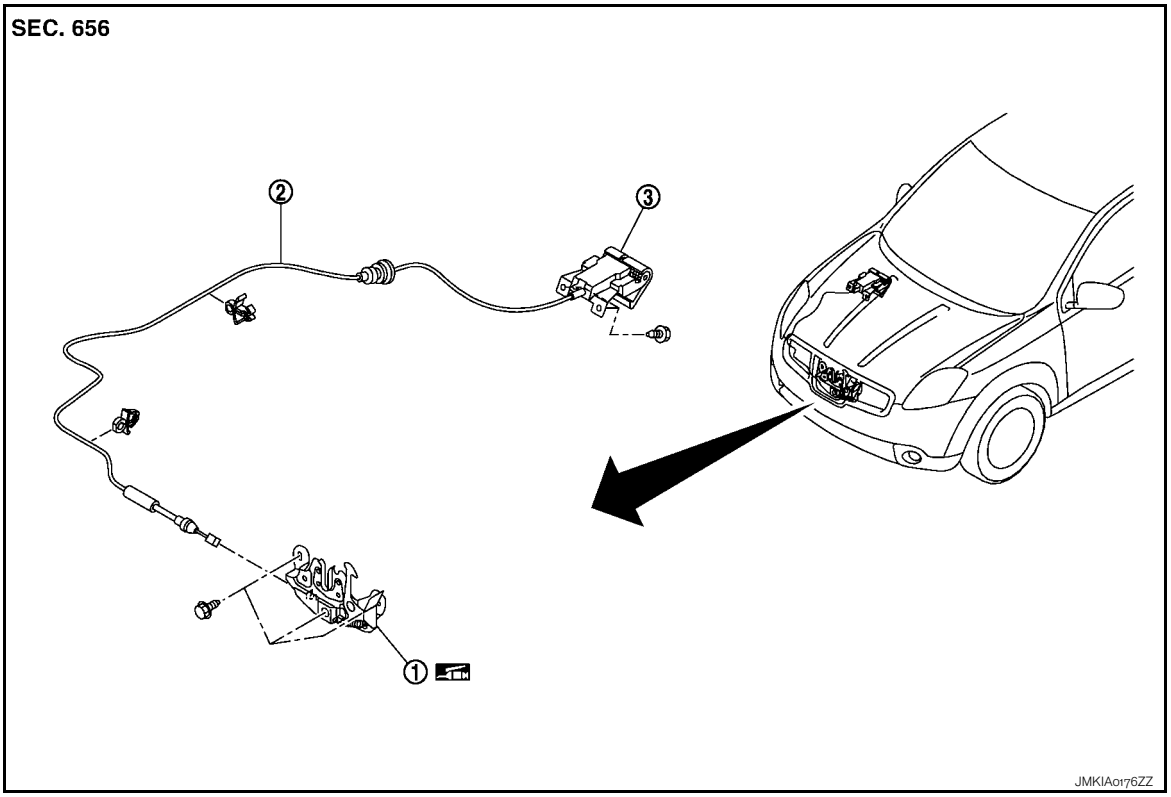
Install in the reverse order of removal.

HOOD LOCK CONTROL

HOOD LOCK CONTROL : Exploded View

INFOID:0000000001098710

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

Refer to GI-4, "Components" for symbols in the figure.

HOOD LOCK CONTROL : Removal and Installation

INFOID:0000000001098711

REMOVAL

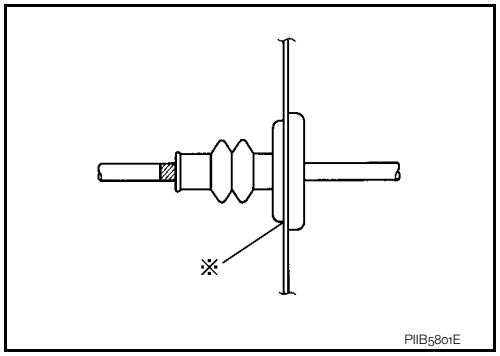
1. Remove the hood lock opener mounting bolts, and then remove the hood lock opener.
2. Remove the front bumper fascia. Refer to EXT-11, "Removal and Installation".
3. Remove the hood lock mounting bolts, and then remove the hood lock.
4. Remove the fender protector. Refer to EXT-22, "Removal and Installation".
5. Disconnect the hood lock cable from hood lock, and clip it from the hoodledge.
6. Remove the grommet on the dash lower panel, and pull the hood lock control cable toward the passenger compartment.
   CAUTION:
   While pulling, do not to damage (peeling) the outside of the hood lock control cable.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **Do not to bend the cable too much, keeping the radius 100 mm (3.94 in) or more.**
- **Check that the cable is not offset from the positioning grommet, and apply the sealant to the grommet (at *mark) properly.**



- **Check that the hood lock control cable is properly engaged with the hood lock.**
- **After installation, perform hood fitting adjustment. Refer to DLK-830, "HOOD ASSEMBLY : Adjustment".**
- **After installation, perform the hood lock control inspection. Refer to DLK-834, "HOOD LOCK CONTROL : Inspection".**

HOOD LOCK CONTROL : Inspection

INFOID:0000000001098712

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

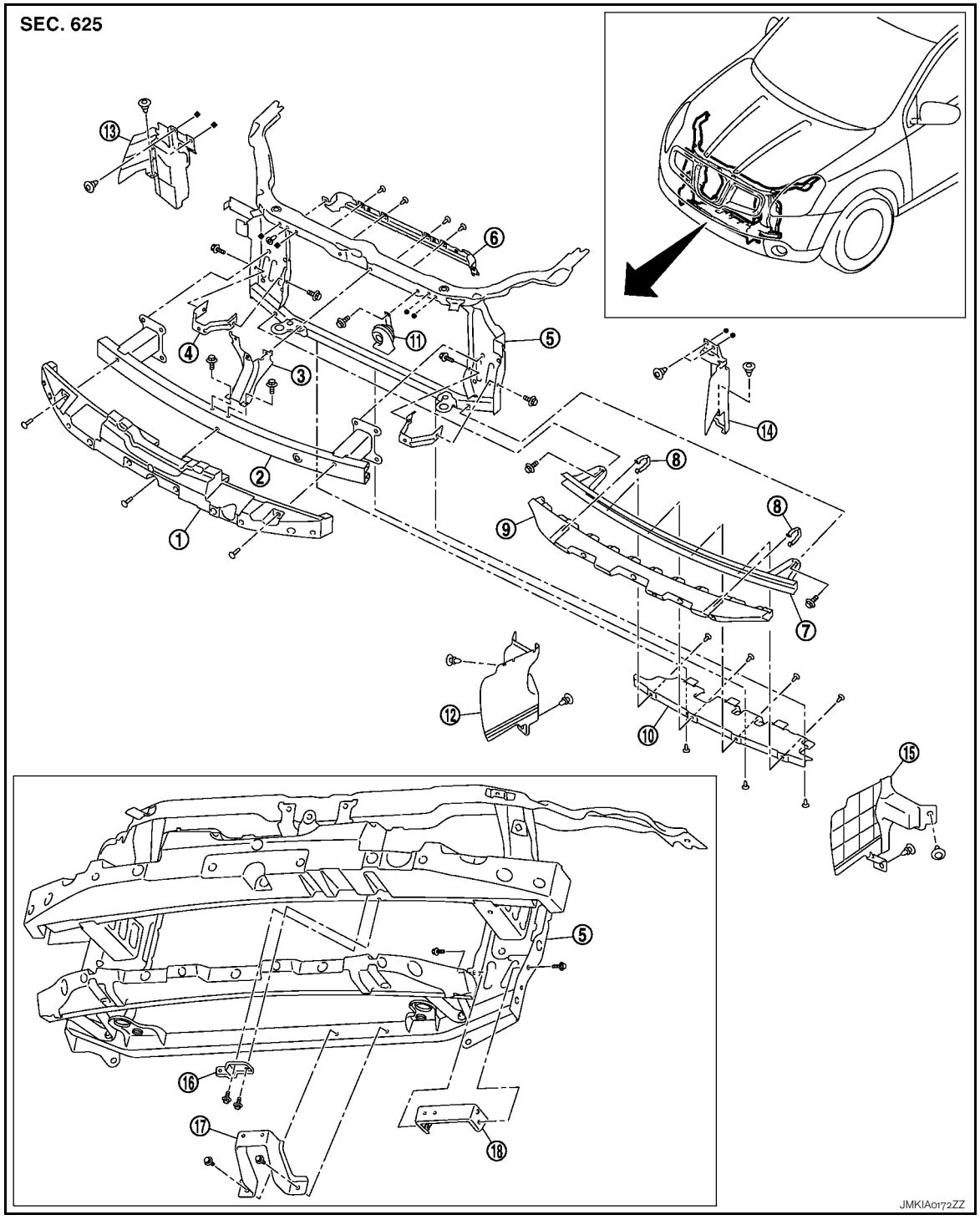
1. Check that the secondary latch is properly engaged with the secondary striker [6.8 mm (0.268 in) shown in the figure] by hood weight.
2. While operating the hood opener, carefully check that the front end of the hood is raised by approximately 20.0 mm (0.787 in). Also check that the hood opener returns to the original position.
3. Check that the hood opener operating is condition 49 N (5.0 kg) or below.
4. Install so that static closing face of hood is 94 – 490 N·m (9.6 – 50.0 kg-m).
   NOTE:
   - Exert vertical force on right side and left side of hood lock.
   - Do not press simultaneously both sides.
5. Check the hood lock lubrication condition. If necessary, apply body grease to the hood lock.

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RADIATOR CORE SUPPORT

Exploded View

INFOID:0000000001098717



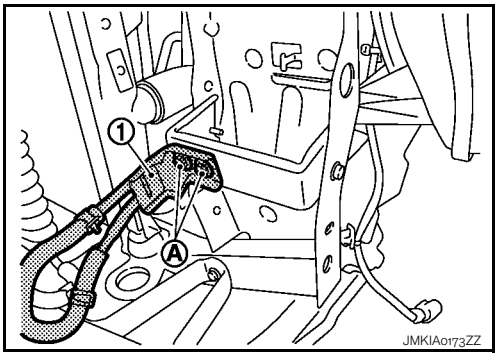
1. Energy absorber
2. Bumper reinforcement
3. Hood lock support stay
4. Intercooler bracket (with K9K engine models)
5. Radiator core support assembly
6. Upper air dam
7. Apron bracket assembly
8. Fastener
9. Energy absorber lower
10. Front air guide lower
11. Horn assembly
12. Front air guide side lower RH
13. Front air guide side RH
14. Front air guide side LH
15. Front air guide side lower LH
16. Oil cooler bracket upper
17. Oil cooler bracket lower
18. Oil cooler bracket side

Removal and Installation

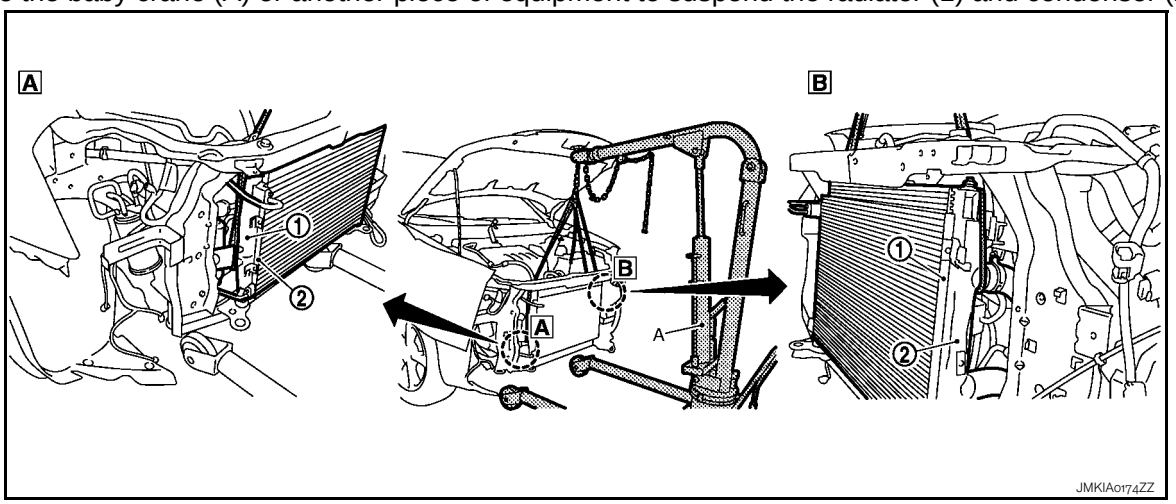
INFOID:0000000001098718

REMOVAL

1. Remove the front fillet molding. Refer to EXT-23, "Removal and Installation".
2. Remove the front bumper fascia and the energy absorber. Refer to EXT-11, "Removal and Installation".
3. Remove the energy absorber (upper and lower). Refer to EXT-11, "Removal and Installation".
4. Remove the air cleaner duct. Refer to EM-27, "Removal and Installation".
5. Remove the front combination lamp (LH/RH). Refer to EXL-171, "Removal and Installation".
6. Remove the bumper reinforcement. Refer to EXT-11, "Removal and Installation".
7. Disconnect the hood lock control cable clamp, and then remove the hood lock assembly. Refer to DLK-833, "HOOD LOCK CONTROL : Removal and Installation".
8. Remove the air guide mounting clips, and then remove the air guide (LH/RH).
9. Remove the hood lock stay mounting bolts, and then remove the hood lock stay.
10. Remove the hood switch (with theft warning systems). Refer to SEC-SEC-156, "Removal and Installation".
11. Remove the crush zone sensor. Refer to SR-14, "Removal and Installation".
12. Remove the horn. Refer to HRN-5, "Removal and Installation".
13. Remove the ambient sensor. Refer to VTL-22, "Removal and Installation".
14. Remove the radiator mounting bracket (LH/RH). Refer to CO-13, "Removal and Installation".
15. Remove the Intelligent Key warning buzzer (with Intelligent Key systems). Refer to DLK-277, "Removal and Installation".
16. Remove the charge air cooler assembly (with K9K engine models). Refer to EM-266, "Removal and Installation".
17. Remove the A/T fluid cooler assembly and the A/T fluid cooler bracket (with A/T models only). Refer to TM-348, "FLUID COOLER : Removal and Installation".
18. Remove the A/T fluid cooler pipe bracket (1) mounting bolts (A) (with A/T models only).



19. Remove the washer tank. Refer to WW-99, "Removal and Installation".
20. Use the baby crane (A) or another piece of equipment to suspend the radiator (1) and condenser (2).



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21. Remove the radiator core support assembly mounting bolts, and draw out the radiator core support assembly to the front of the vehicle.
22. Remove the radiator core support assembly.
23. Remove the following parts after removing the radiator core support assembly.
    - Inlet tube bracket (with K9K engine models)
    - Intercooler bracket (with K9K engine models)
    - Apron reinforcement bracket

INSTALLATION

Install in the reverse order of removal.

CAUTION:

After installation, refill the following parts.

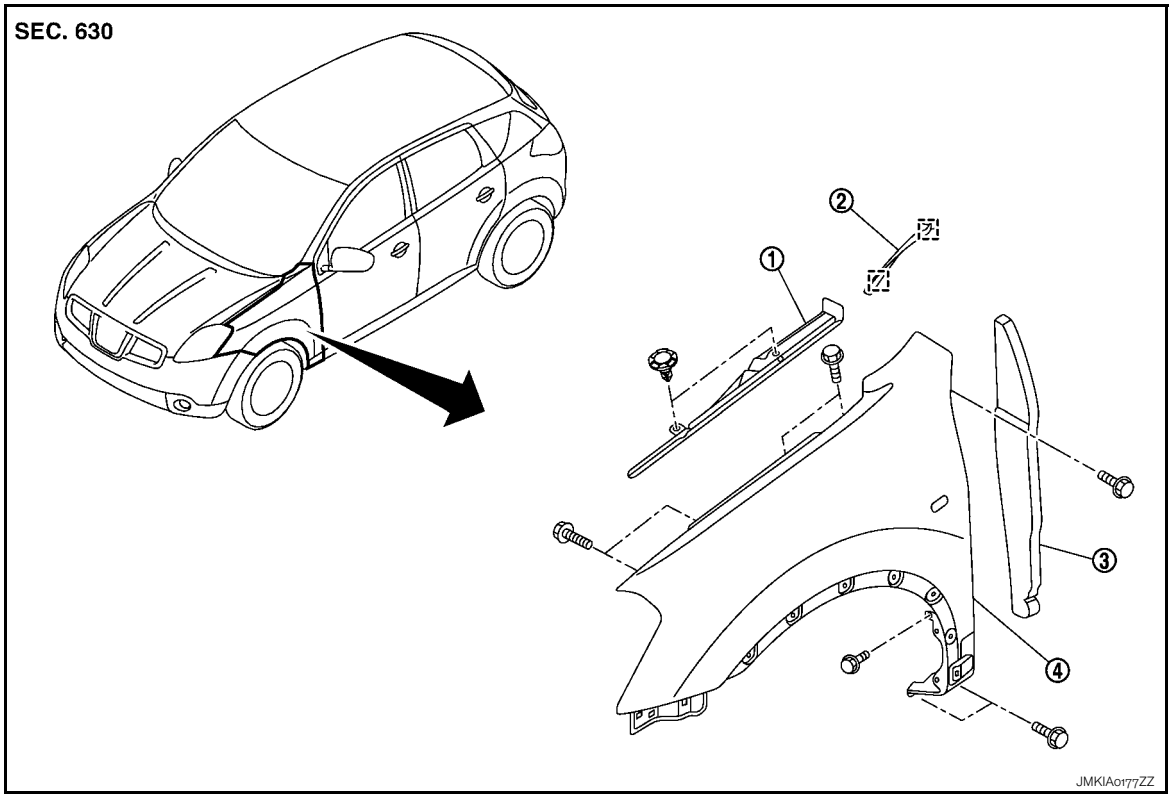
- **A/T fluid. Refer to TM-315, "Changing".**
- **Engine coolant. Refer to CO-9, "Refilling".**

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FRONT FENDER

Exploded View

INFOID:0000000001098719



1. Hood seal assembly (side)
2. Front fender finisher
3. Front fender seal
4. Front fender

: Metal clip

Removal and Installation

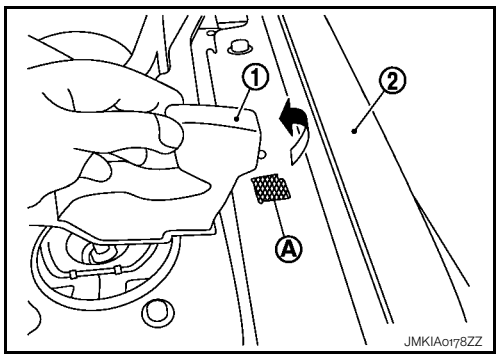
INFOID:0000000001098720

REMOVAL

1. Remove the outer fender protector. Refer to EXT-22, "Removal and Installation".
2. Remove the inner fender protector. Refer to EXT-22, "Removal and Installation".
3. Remove the side turn signal lamp. Refer to EXL-178, "Removal and Installation".
4. Remove the front bumper fascia. Refer to EXT-11, "Removal and Installation".
5. Remove the front combination lamp.
   - XENON TYPE: EXL-171, "Removal and Installation".
   - HALOGEN TYPE: EXL-327, "Removal and Installation".
6. Remove the mounting clips and remove hoodledge cover.
7. Remove the center mudguard. Refer to EXT-28, "Removal and Installation".

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8. Peel away the double-faced adhesive tape (A) of the front fender seal (1) from the front fender (2).



9. Remove the mounting bolts and remove the front fender.
   CAUTION:
   Use a shop cloth to protect the body from being damaged during removal.
10. Remove the following parts after removing the front fender.
    - Front fender seal.
    - Bumper side bracket. Refer to EXT-11, "Exploded View".

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **Replace the double-faced adhesive tape on the back of the cowl top cover seal with new tape.**
- **Do not wash the vehicle within 24 hours after installation so as to keep adhesive.**
- **After installation, apply the touch-up paint (the body color) onto the head of the front fender mounting bolts.**
- **After installation, check the front fender adjustment. Refer to DLK-830, "HOOD ASSEMBLY : Adjustment" and DLK-842, "DOOR ASSEMBLY : Adjustment".**

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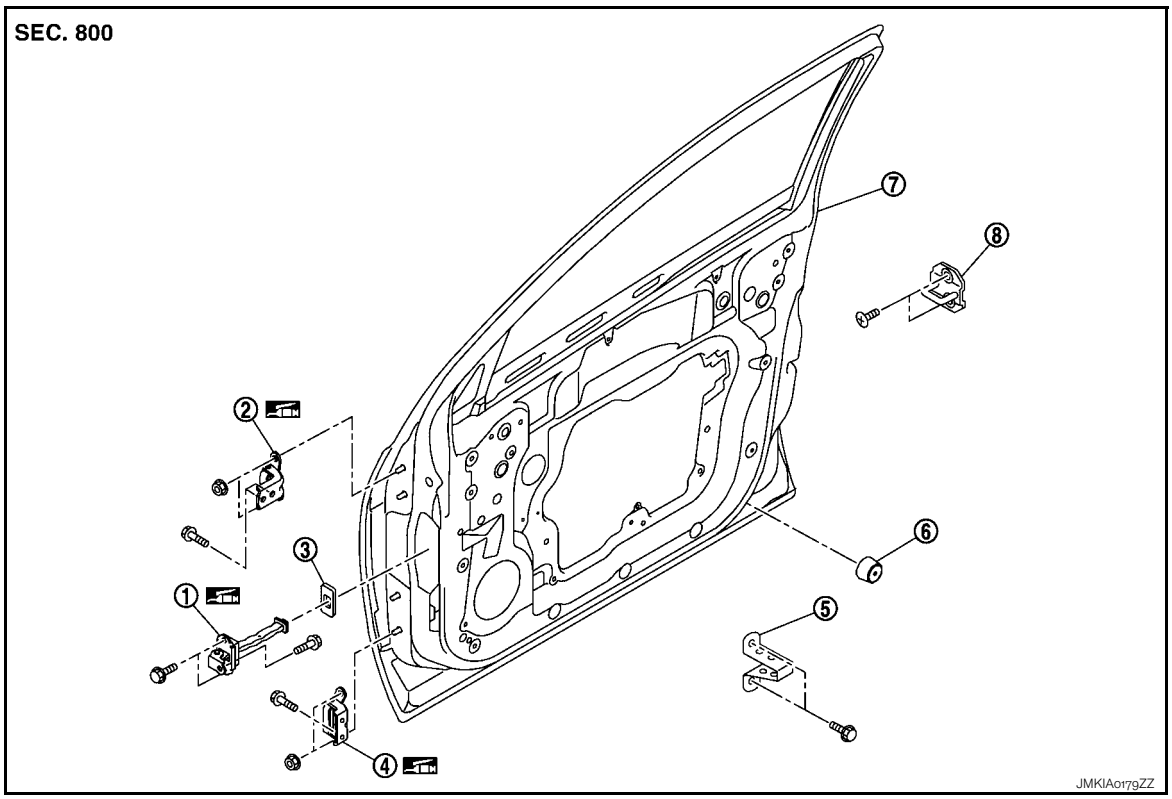
FRONT DOOR

DOOR ASSEMBLY

DOOR ASSEMBLY : Exploded View

INFOID:0000000001098721

REMOVAL

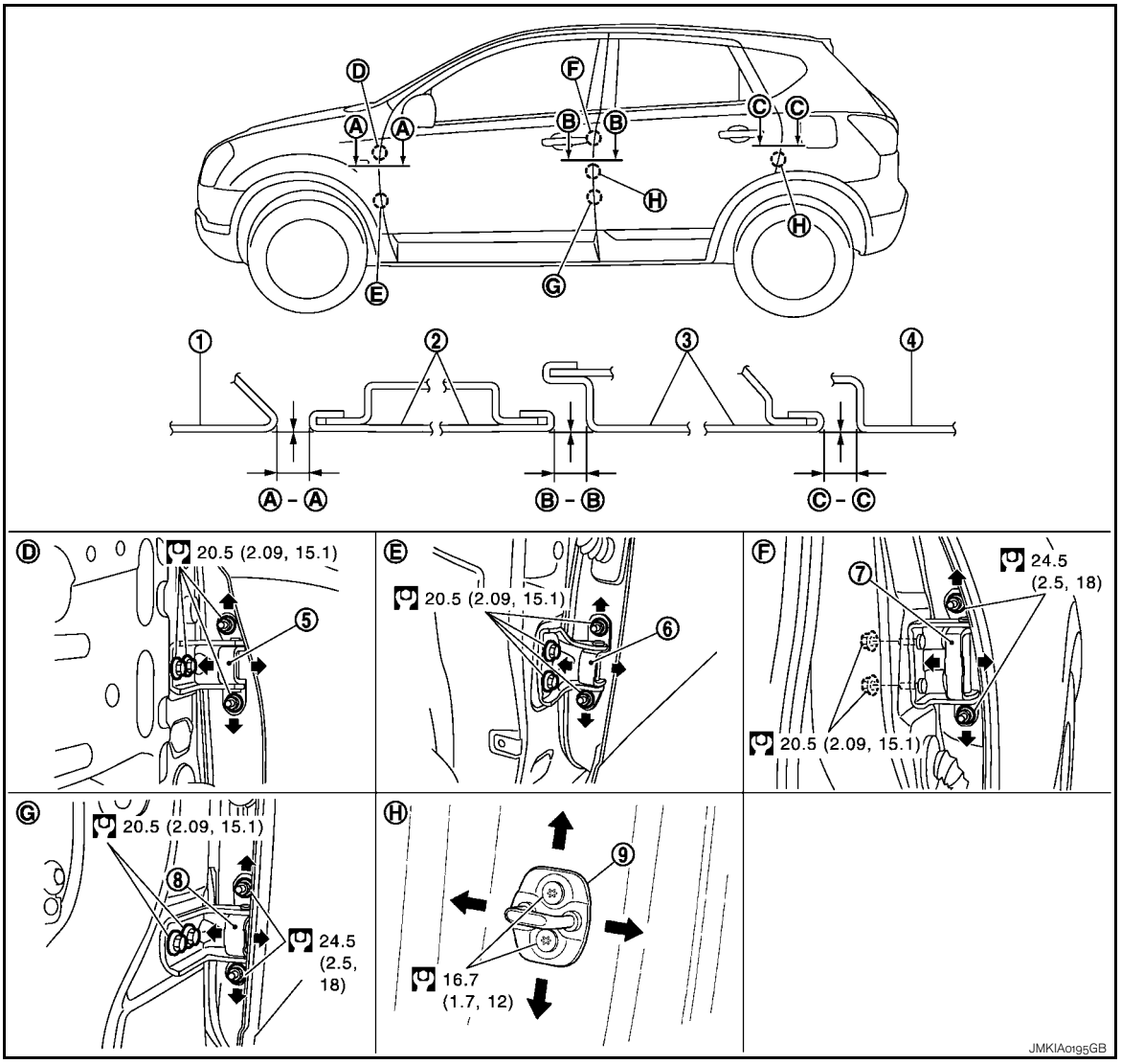


1. Door check link
2. Door hinge (upper)
3. Door check link cover
4. Door hinge (lower)
5. Bracket
6. Bumper rubber
7. Front door panel
8. Door striker

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT

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

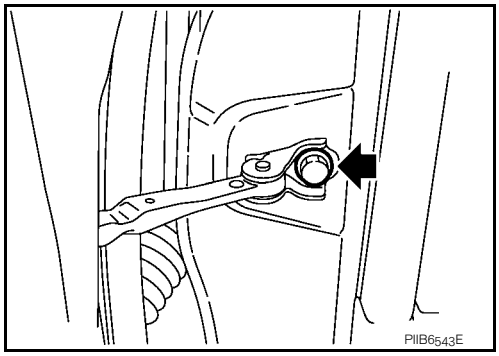
Refer to GI-4, "Components" for symbols in the figure.

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000001098722

REMOVAL

1. Remove the mounting bolts of the door check link on the vehicle.



2. Remove the front door harness grommet, and then pull out the harness from the vehicle.

3. Disconnect the front door harness connector.
4. Remove the door hinge mounting nuts (door side), and then remove the door assembly.
   CAUTION:
   - **When removing and installing the front door assembly, support the door with a jack and cloth to protect the door and body.**
   - **Perform work with 2 workers, because of its heavy weight.**

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **When removing and installing the front door assembly, perform the fitting adjustment. Refer to DLK-842, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **Check the front door open/close operation after installation.**

DOOR ASSEMBLY : Adjustment

INFOID:0000000001098723

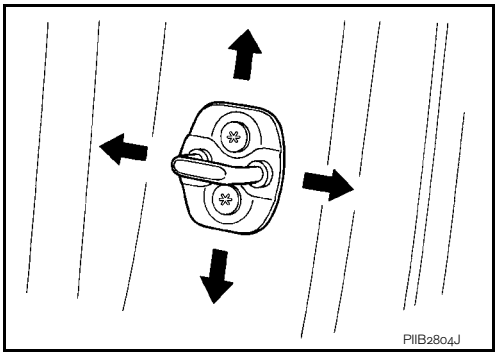
CLEARANCE, SURFACE HEIGHT AND SURFACE MISMATCH ADJUSTMENT

Portion		Clearance	Surface height
Front fender – Front door	A – A	3.5 – 5.0 mm (0.138 – 0.197 in)	- 1.5 – 0.5 mm (- 0.059 – 0.020 in)
Front door – Rear door	B – B	3.5 – 5.0 mm (0.138 – 0.197 in)	- 1.5 – 0.5 mm (- 0.059 – 0.020 in)

1. Check the clearance and surface height and surface mismatch between the front door and each part visually and by touching. (Fitting standard dimension in the table below shall be satisfied.)
2. In case any parts are out of specification, adjust them according to the procedures shown below.
3. Remove the front fender. Refer to refer to DLK-838, "Removal and Installation".
4. Loosen the door hinge mounting nuts on door side.
5. Adjust the surface height and surface mismatch of the front door according to the fitting standard dimension.
6. Temporarily tighten the hinge mounting nuts on door side.
7. Loosen the door hinge mounting bolts on body side.
8. Raise the front door at rear end to adjust clearance of the front door according to the fitting standard dimension.
9. After adjustment tighten bolts and nuts to the specified torque.
10. Install the front fender. Refer to refer to DLK-838, "Removal and Installation".
    CAUTION:
    After installation, check the front fender adjustment. Refer to DLK-225, "HOOD ASSEMBLY : Adjustment".

DOOR STRIKER ADJUSTMENT

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

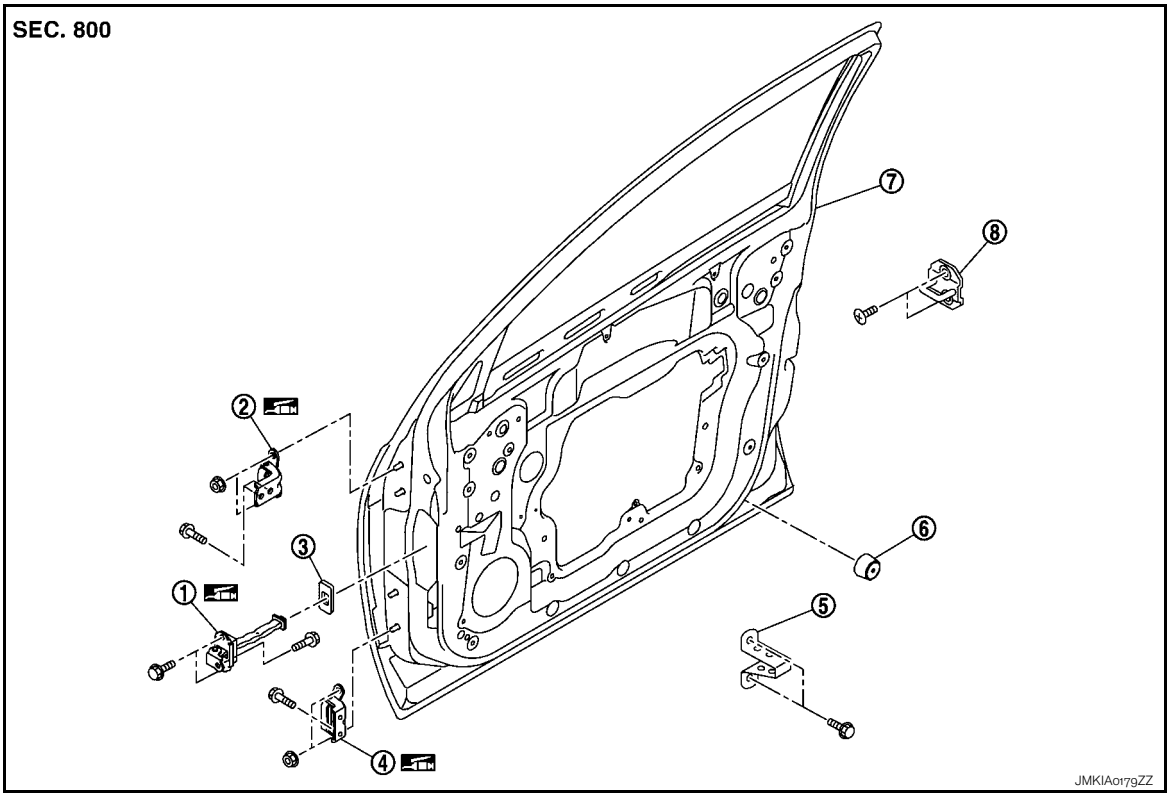


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DOOR STRIKER

DOOR STRIKER : Exploded View

INFOID:0000000001098726



1. Door check link
2. Door hinge (upper)
3. Door check link cover
4. Door hinge (lower)
5. Bracket
6. Bumper rubber
7. Front door panel
8. Door striker

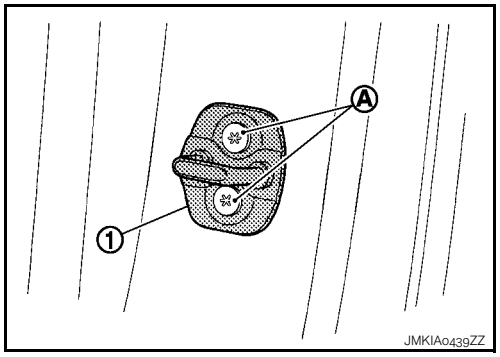
Refer to GI-4, "Components" for symbols in the figure.

DOOR STRIKER : Removal and Installation

INFOID:0000000001098727

REMOVAL

Remove the mounting bolts (A), and then remove the door striker (1).



INSTALLATION

Install in the reverse order of removal.

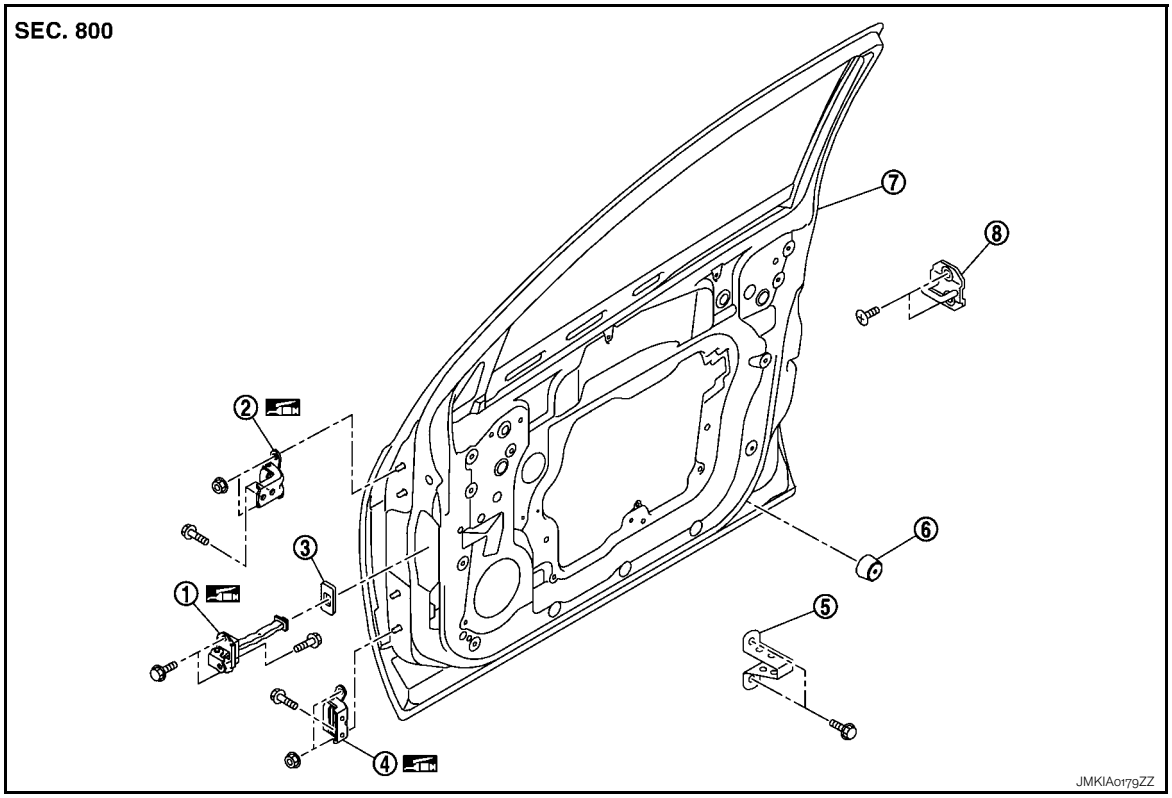
CAUTION:

- **Check the front door open/close operation after installation.**
- **When removing and installing the door striker, be sure to perform the fitting adjustment. Refer to DLK-842, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Exploded View

INFOID:0000000001098730



1. Door check link
2. Door hinge (upper)
3. Door check link cover
4. Door hinge (lower)
5. Bracket
6. Bumper rubber
7. Front door panel
8. Door striker

Refer to GI-4, "Components" for symbols in the figure.

DOOR HINGE : Removal and Installation

INFOID:0000000001098732

REMOVAL

1. Remove the front door assembly. Refer to DLK-841, "DOOR ASSEMBLY : Removal and Installation".
2. Remove the door hinge mounting bolts, and then remove the front door hinge.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

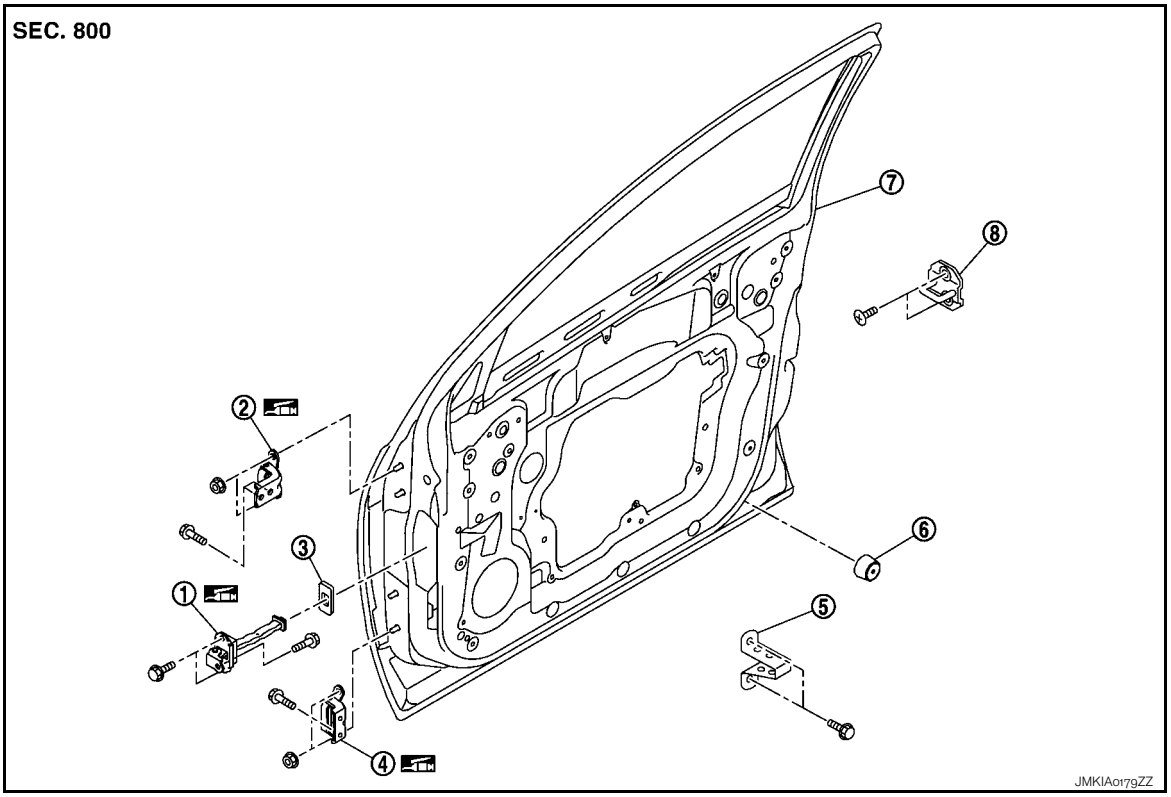
- **When removing and installing the front door assembly, perform the fitting adjustment. Refer to DLK-842, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **Check the front door open/close operation after installation.**

DOOR CHECK LINK

DOOR CHECK LINK : Exploded View

INFOID:0000000001098735

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1. Door check link
2. Door hinge (upper)
3. Door check link cover
4. Door hinge (lower)
5. Bracket
6. Bumper rubber
7. Front door panel
8. Door striker

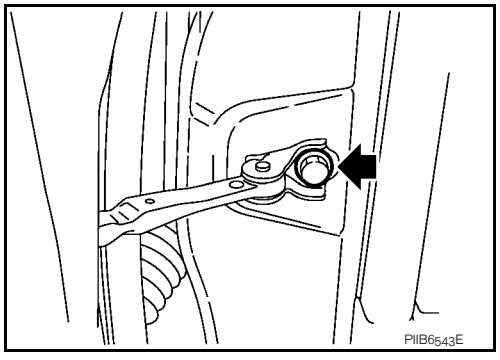
Refer to GI-4, "Components" for symbols in the figure.

DOOR CHECK LINK : Removal and Installation

INFOID:0000000001098737

REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the front door speaker. Refer to AV-34, "Removal and Installation".
3. Remove the mounting bolts of the door check link on the vehicle.



4. Remove the door check link cover, and then remove the door check link mounting bolts.
5. Remove the door check link.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check the front door open/close operation after installation.

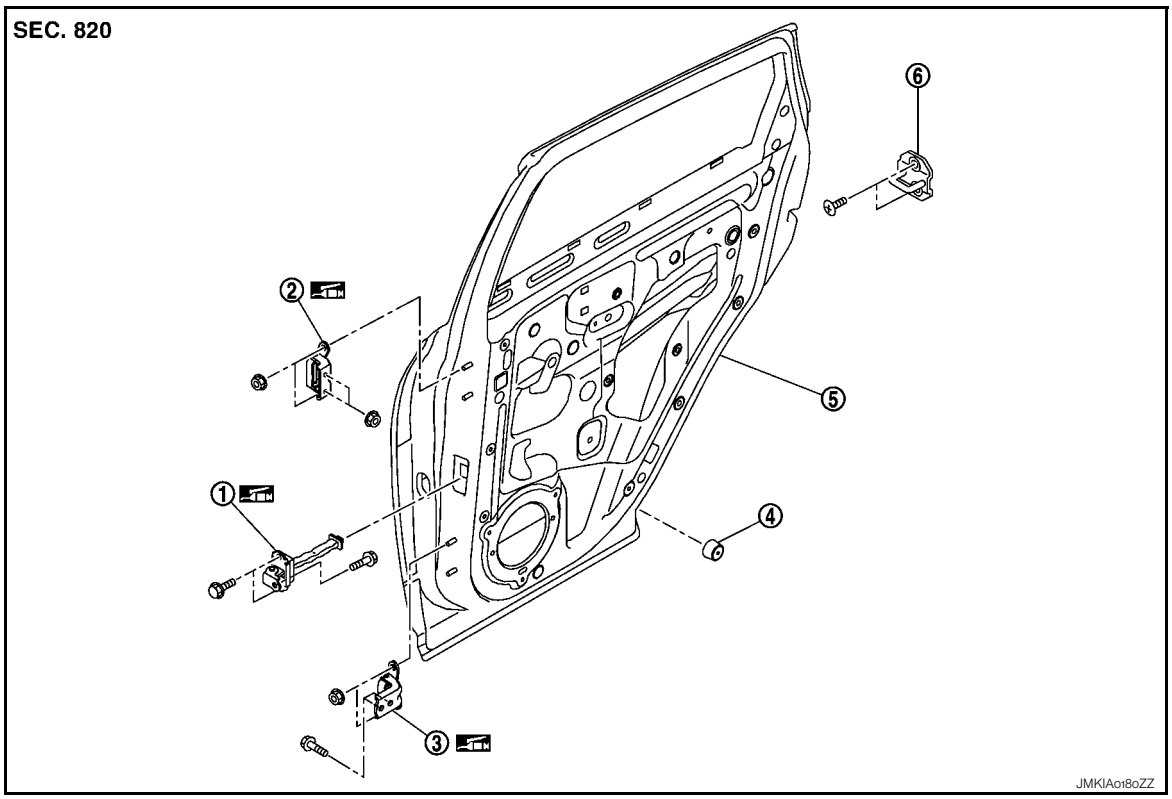
REAR DOOR

DOOR ASSEMBLY

DOOR ASSEMBLY : Exploded View

INFOID:0000000001098739

REMOVAL

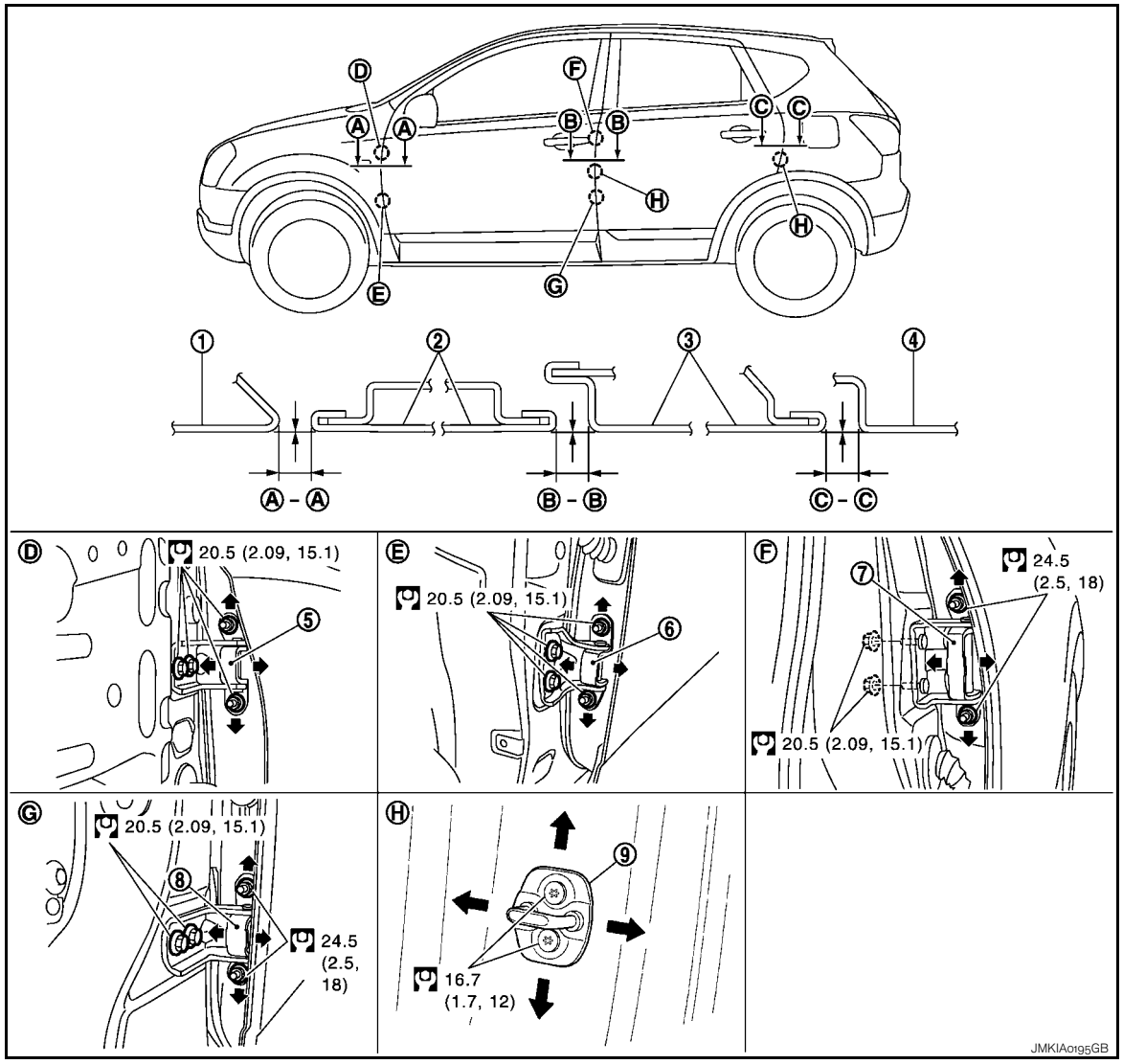


1. Door check link
2. Door hinge (upper)
3. Door hinge (lower)
4. Bumper rubber
5. Rear door panel
6. Door striker

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT

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1. Front fender
2. Front door outer
3. Rear door outer
4. Rear fender
5. Front door hinge (upper)
6. Front door hinge (lower)
7. Rear door hinge (upper)
8. Rear door hinge (lower)
9. Striker

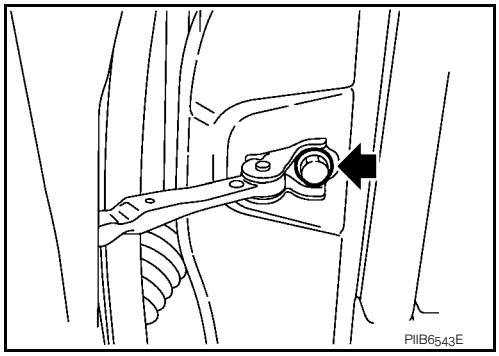
Refer to GI-4, "Components" for symbols in the figure.

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000001098740

REMOVAL

1. Remove the mounting bolts of the door check link on the vehicle.



2. Remove the rear door harness grommet, and then pull out the door harness from the vehicle.

3. Disconnect the rear door harness connector.
4. Remove the door hinge mounting nuts (door side), and then remove the rear door assembly.
   CAUTION:
   - **When removing and installing the front door assembly, support the door with a jack and cloth to protect the door and body.**
   - **Perform work with 2 workers, because of it's heavy weight.**

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **When removing and installing the rear door assembly, perform the fitting adjustment. Refer to DLK-848, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **Check the rear door open/close operation after installation.**
- **Check the rear door lock/unlock operation after installation.**

DOOR ASSEMBLY : Adjustment

INFOID:0000000001098742

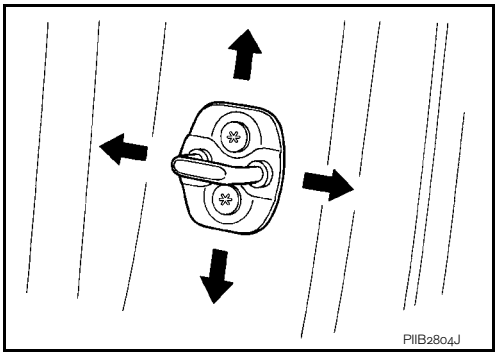
CLEARANCE, SURFACE HEIGHT AND SURFACE MISMATCH ADJUSTMENT

Portion		Clearance	Surface height
Front door – Rear door	B – B	3.5 – 5.0 mm (0.138 – 0.197 in)	- 1.5 – 0.5 mm (- 0.059 – 0.020 in)
Rear door – Rear fender	C – C	3.5 – 5.0 mm (0.138 – 0.197 in)	- 1.5 – 0.5 mm (- 0.059 – 0.020 in)

1. Check the clearance and surface height and surface mismatch between the rear door and each part visually and by touching. (Fitting standard dimension in the table below shall be satisfied.)
2. In case any parts are out of specification, adjust them according to the procedures shown below.
3. Remove the center pillar upper garnish and center pillar lower garnish. Refer to INT-14, "Removal and Installation".
4. Loosen the door hinge mounting nuts on door side.
5. Adjust the surface height and surface mismatch of the rear door according to the fitting standard dimension.
6. Temporarily tighten the hinge mounting nuts on door side.
7. Loosen the door hinge mounting nuts and bolts on body side.
8. Raise the rear door at rear end to adjust clearance of the rear door according to the fitting standard dimension.
9. After adjustment tighten bolts and nuts to the specified torque.
10. Install the center pillar upper garnish and center pillar lower garnish. Refer to INT-14, "Removal and Installation".

DOOR STRIKER ADJUSTMENT

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

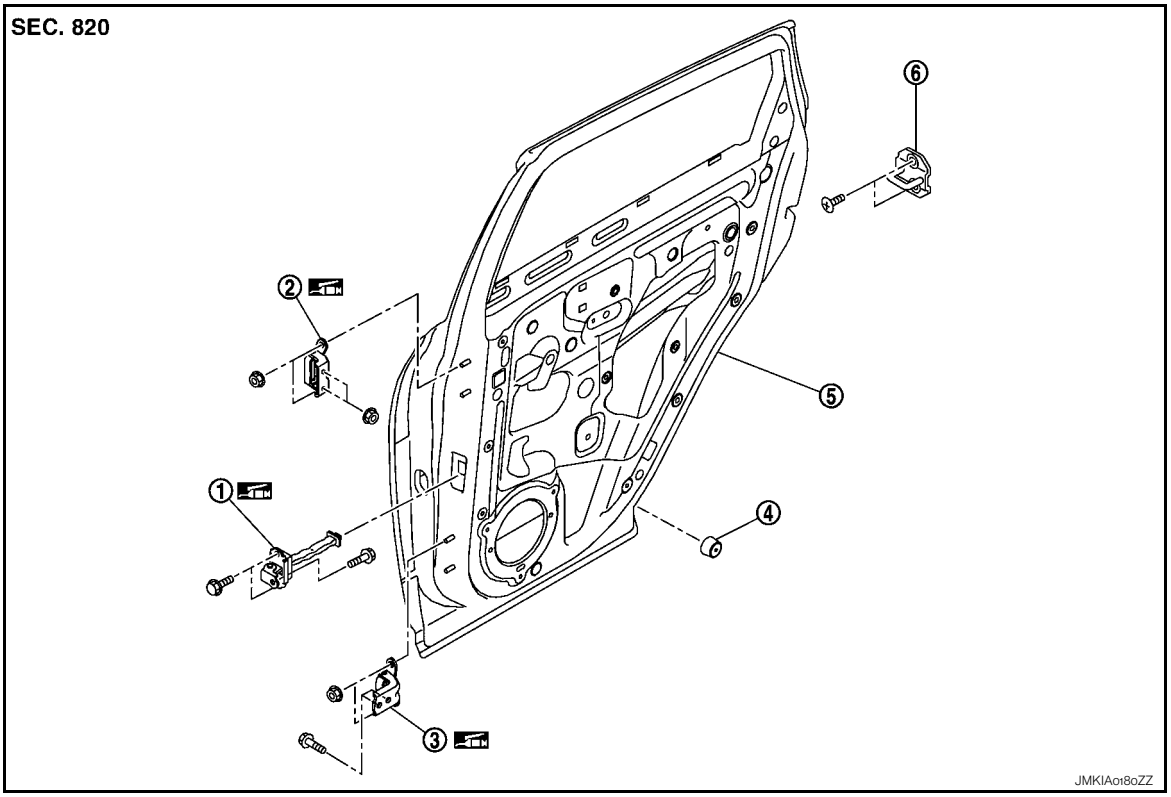


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DOOR STRIKER

DOOR STRIKER : Exploded View

INFOID:0000000001098751



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

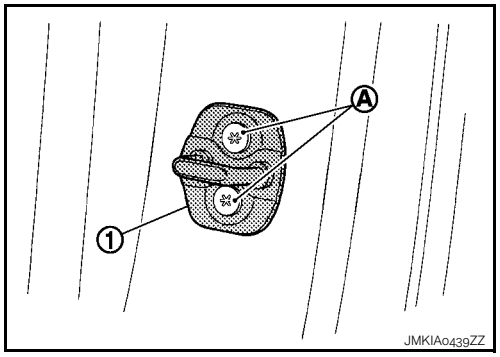
Refer to GI-4, "Components" for symbols in the figure.

DOOR STRIKER : Removal and Installation

INFOID:0000000001098752

REMOVAL

Remove the mounting bolts (A), and then remove the door striker (1).



INSTALLATION

Install in the reverse order of removal.

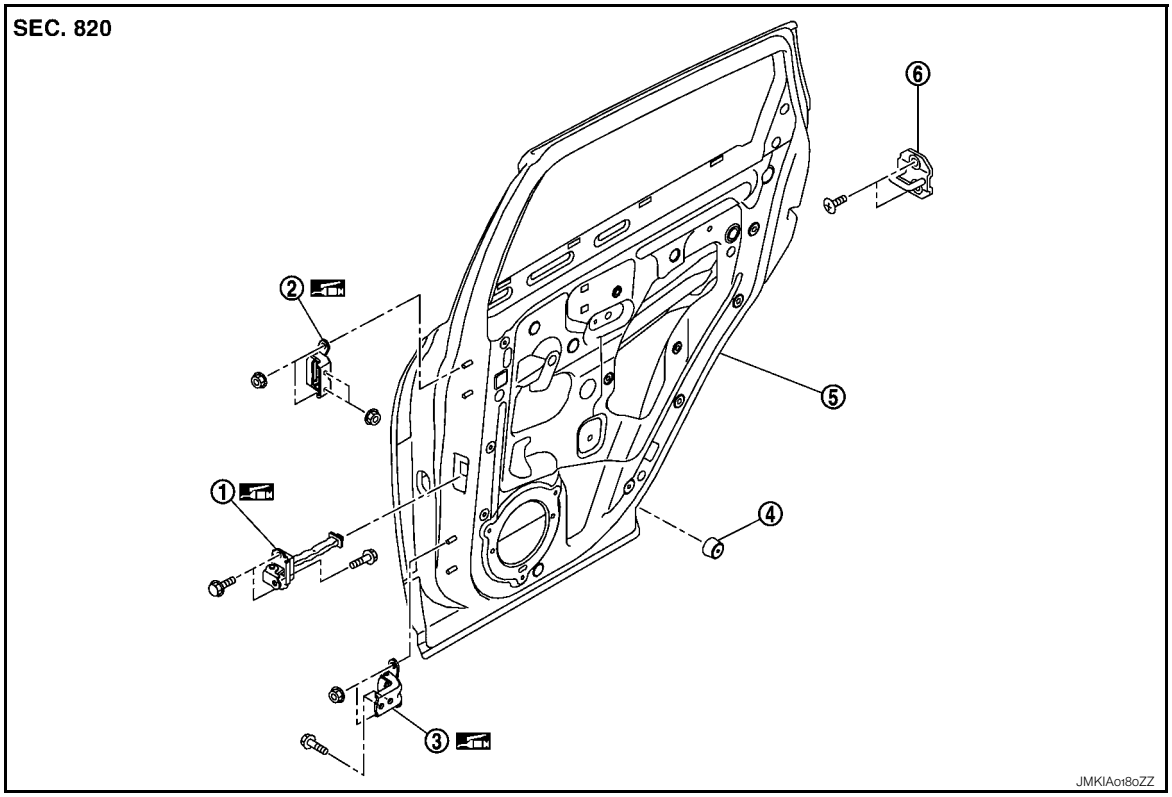
CAUTION:

- **Check the rear door open/close operation after installation.**
- **When removing and installing the door striker, be sure to perform the fitting adjustment. Refer to DLK-848, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Exploded View

INFOID:0000000001098755



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

Refer to GI-4, "Components" for symbols in the figure.

DOOR HINGE : Removal and Installation

INFOID:0000000001098758

REMOVAL

1. Remove the center pillar lower garnish and the center pillar upper garnish. Refer to INT-14, "Removal and Installation".
2. Remove the rear door assembly. Refer to DLK-242, "DOOR ASSEMBLY : Removal and Installation".
3. Remove the rear door hinge mounting bolts and nuts (body side), and then remove the door hinge.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

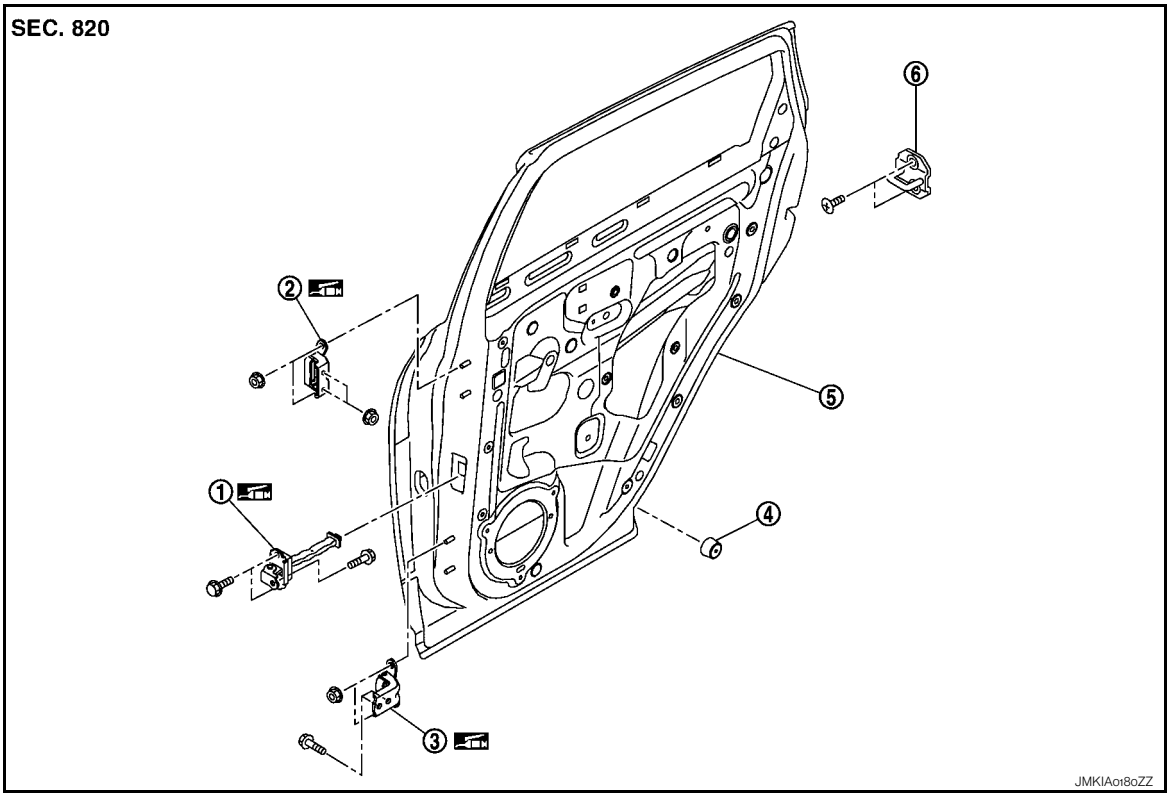
- **When removing and installing the rear door assembly, perform the fitting adjustment. Refer to DLK-848, "DOOR ASSEMBLY : Adjustment".**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **After installing, apply the touch-up paint (the body color) onto the head of the hinge mounting nuts.**
- **Check the rear door open/close operation after installation.**

DOOR CHECK LINK

DOOR CHECK LINK : Exploded View

INFOID:0000000001098760

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

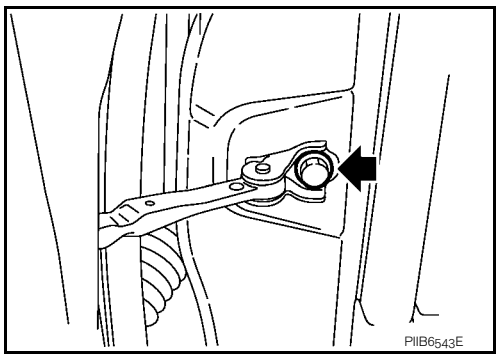
Refer to GI-4, "Components" for symbols in the figure.

DOOR CHECK LINK : Removal and Installation

INFOID:0000000001098762

REMOVAL

1. Remove the rear door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the rear door sealing screen.
3. Remove the mounting bolts of the check link on the vehicle.



4. Remove the door check link cover, and then remove the door check link mounting bolts.
5. Remove the door check link.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check front door open/close operation after installation.

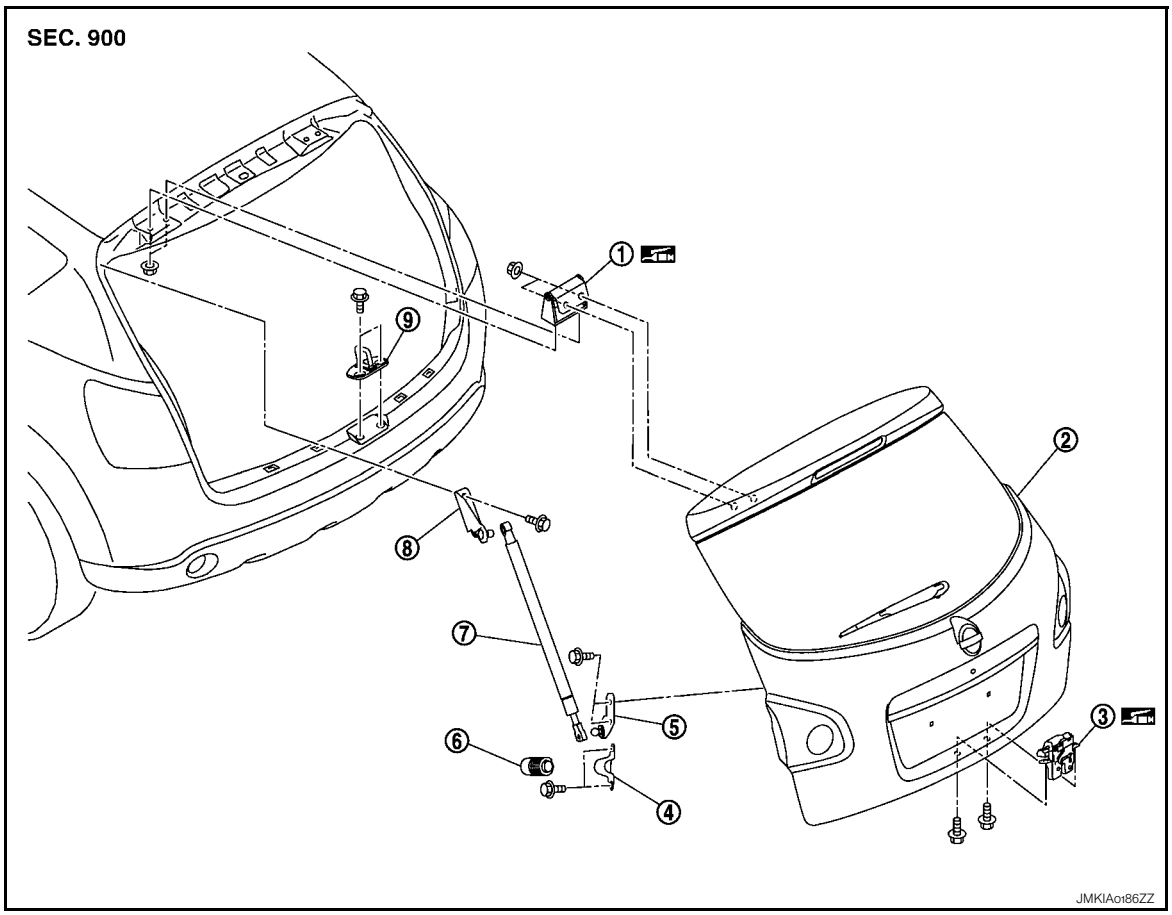
BACK DOOR

BACK DOOR ASSEMBLY

BACK DOOR ASSEMBLY : Exploded View

INFOID:0000000001098767

REMOVAL

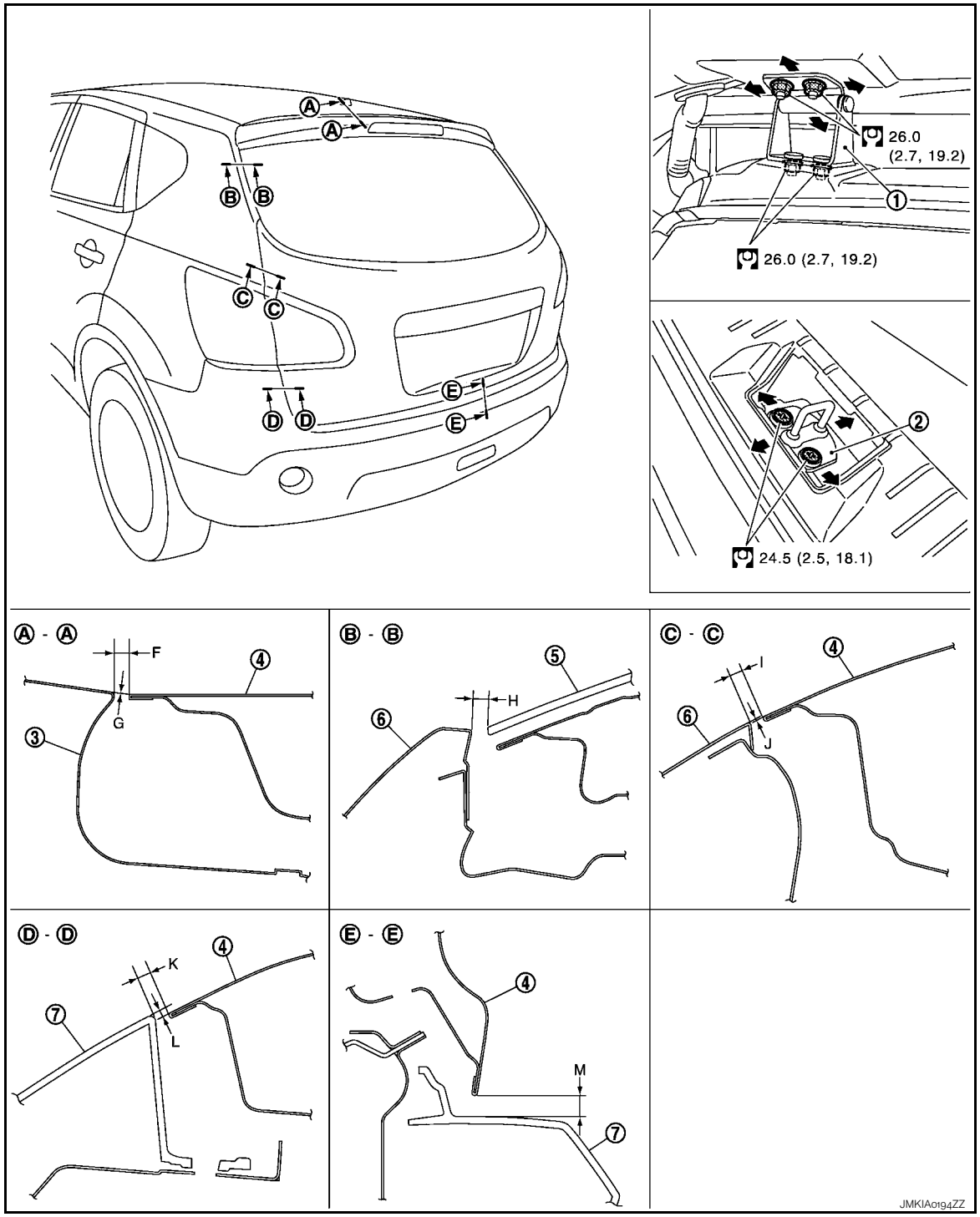


1. Back door hinge
2. Back door assembly
3. Back door lock assembly
4. Bumper rubber bracket
5. Back door stay bracket (lower)
6. Bumper rubber
7. Back door stay
8. Back door stay bracket (upper)
9. Back door striker

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT

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1. Back door hinge
2. Back door striker
3. Roof panel
4. Back door outer
5. Back door glass
6. Body side outer
7. Rear bumper fascia

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR ASSEMBLY : Removal and Installation

INFOID:0000000001098768

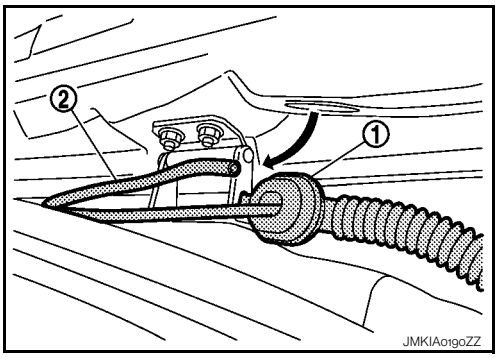
REMOVAL

1. Remove the back door finisher inner. Refer to INT-26, "Removal and Installation".
2. Remove the back door window glass. Refer to GW-17, "Removal and Installation".

NOTE:

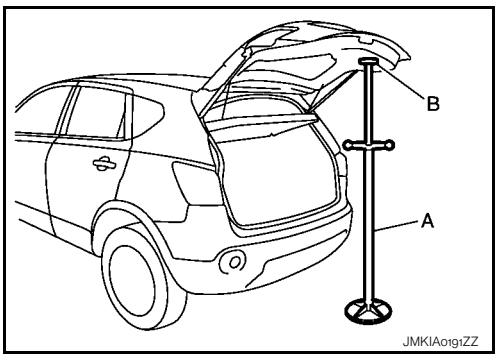
It is necessary to remove back door window glass in order to remove harness, because harness connector interferes with back door window glass pin.

3. Disconnect the connectors in the back door, and then remove the grommet, and pull out hte harness.
4. Remove the parcel shelf. Refer to INT-24, "Removal and Installation".
5. Remove the high-mounted stop lamp. Refer to EXL-183, "Removal and Installation".
6. Remove the grommet (1), and then pull out the washer tube (2) .

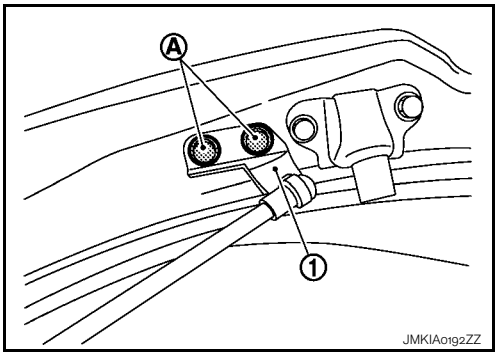


7. Pull the harness out of the back door.
8. Support the back door lock with the proper material to prevent it from falling.

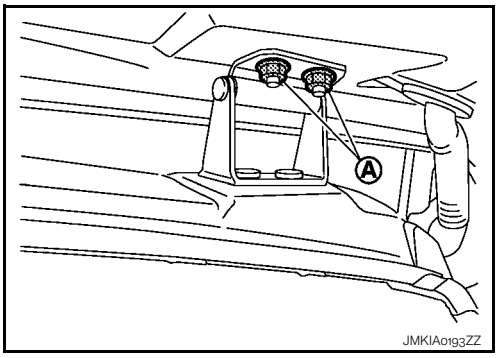
A : Jack
B : Shop cloth



9. Remove the back door stay bracket mounting bolts (A) on the back door.



10. Remove the back door hinge mounting nuts (A) on the back door and remove the back door assembly.
CAUTION:
Perform work with 2 workers, because of its heavy weight.



INSTALLATION
Install in the reverse order of removal.
CAUTION:
- **Perform work with 2 workers, because of its heavy weight.**

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- **After installation, perform fitting adjustment. Refer to DLK-855, "BACK DOOR ASSEMBLY : Adjustment".**
- **Check the back door open/close operation after installation.**
- **Check the back door lock/unlock operation after installation.**

BACK DOOR ASSEMBLY : Adjustment

INFOID:0000000001098769

Portion				Standard	Difference(RH/LH)
Back door panel – Roof panel	A – A	F	Clearance	5.0 – 7.0 mm (0.197 – 0.276 in)	—
		G	Surface height	0.0 – 2.0 mm (0.000 – 0.079 in)	—
Back door glass – Body side outer	B – B	H	Clearance	3.9 – 8.1 mm (0.154 – 0.319 in)	2.1 mm (0.083 in)
		I	Surface height	- 1.0 – 3.1 mm (- 0.039 – 0.122 in)	2.0 mm (0.079 in)
Back door panel – Body side outer	C – C	J	Clearance	3.5 – 6.5 mm (0.138 – 0.256 in)	2.0 mm (0.079 in)
		K	Surface height	- 1.0 – 1.0 mm (- 0.039 – 0.039 in)	—
Back door panel – Rear bumper fascia	D – D	L	Clearance	4.0 – 8.0 mm (0.157 – 0.315 in)	2.0 mm (0.079 in)
		M	Surface height	0.1 – 4.1 mm (0.004 – 0.161 in)	2.1 mm (0.083 in)
Back door panel – Rear bumper fascia	E – E	N	Clearance	5.8 – 10.2 mm (0.228 – 0.402 in)	—

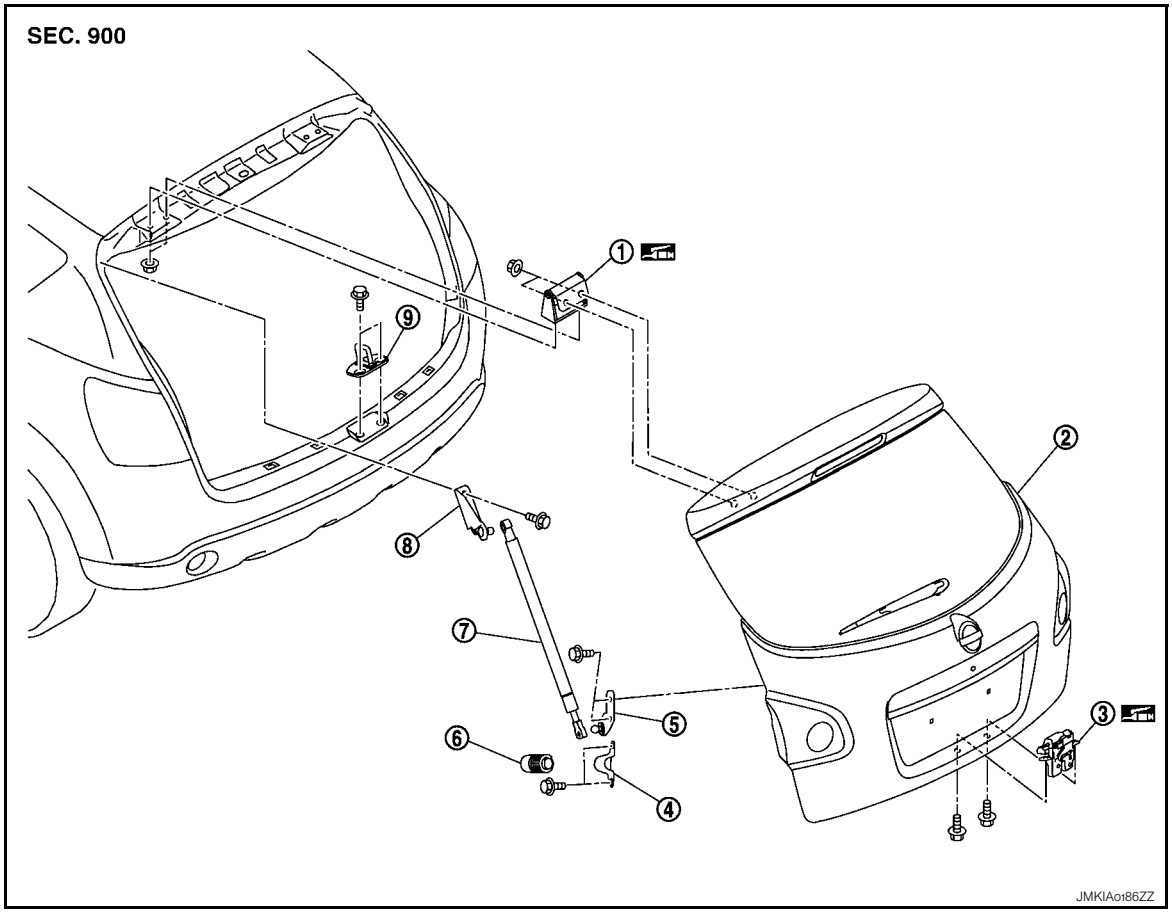
FITTING ADJUSTMENT

1. Check the clearance and the evenness between the back door and each part visually and by touching. (Fitting standard dimension in the table below shall be satisfied.)
2. In case any parts are out of specification, adjust them according to the procedures shown below.
3. Loosen the bumper rubber.
4. Loosen the back door striker mounting bolts.
5. Lift up the back door approximately 100 – 150 mm (3.937 – 5.906 in) height then close it lightly and check that it is engaged firmly with the back door closed.
6. Check the clearance and evenness.
7. Finally tighten the back door striker.

BACK DOOR STRIKER

BACK DOOR STRIKER : Exploded View

INFOID:0000000001098771



1. Back door hinge
2. Back door assembly
3. Back door lock assembly
4. Bumper rubber bracket
5. Back door stay bracket (lower)
6. Bumper rubber
7. Back door stay
8. Back door stay bracket (upper)
9. Back door striker

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR STRIKER : Removal and Installation

INFOID:0000000001098773

REMOVAL

1. Remove the luggage rear plate cap. Refer to INT-24, "Removal and Installation".
2. Remove the mounting bolts, and then remove the back door striker.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

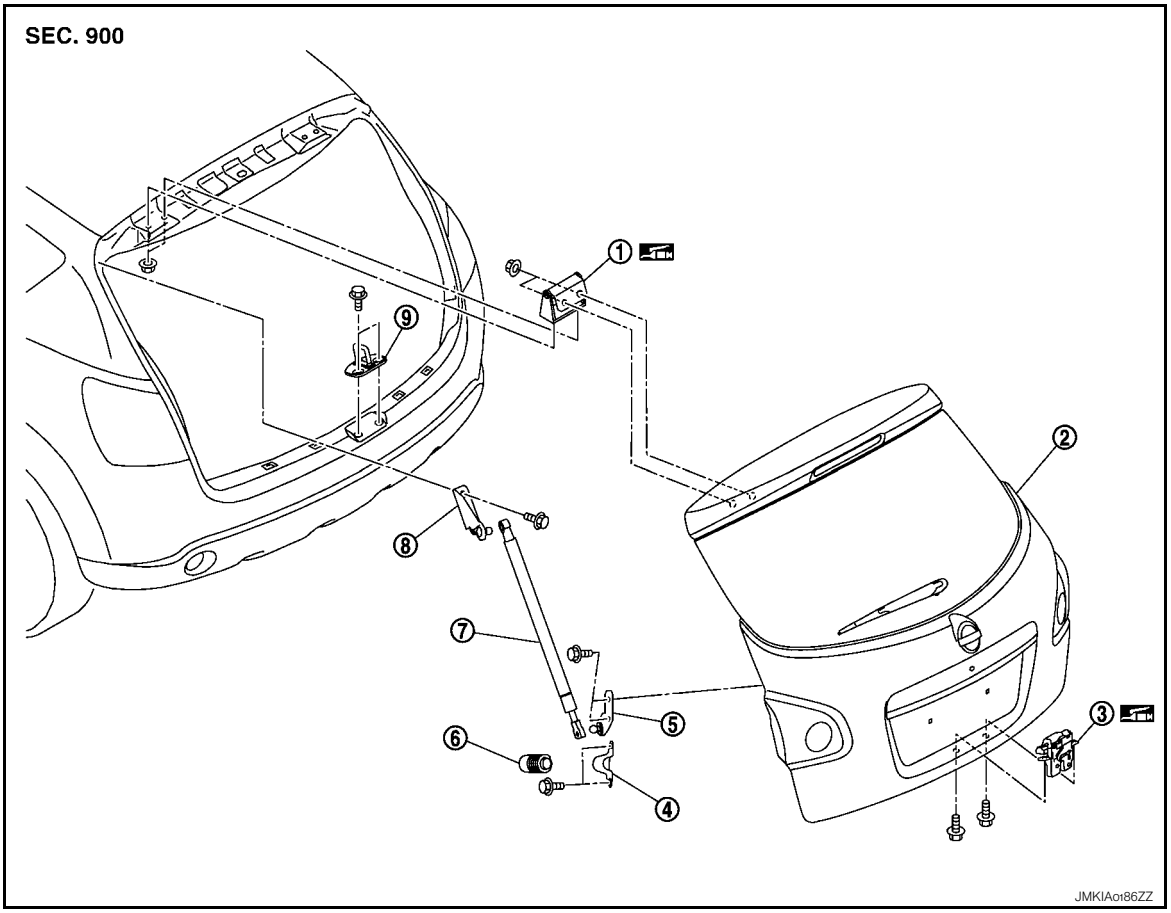
- **When removing and installing the back door striker, be sure to perform the fitting adjustment. Refer to DLK-855, "BACK DOOR ASSEMBLY : Adjustment".**
- **Check the back door open/close operation after installation.**

BACK DOOR HINGE

BACK DOOR HINGE : Exploded View

INFOID:0000000001102427

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1. Back door hinge
2. Back door assembly
3. Back door lock assembly
4. Bumper rubber bracket
5. Back door stay bracket (lower)
6. Bumper rubber
7. Back door stay
8. Back door stay bracket (upper)
9. Back door striker

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR HINGE : Removal and Installation

INFOID:0000000001102428

REMOVAL

1. Remove the back door assembly. Refer to DLK-248, "BACK DOOR ASSEMBLY : Removal and Installation".
2. Remove upper side of the back door weatherstrip. Refer to DLK-254, "BACK DOOR WEATHER-STRIP : Removal and Installation".
3. Remove rear seat belt cover. Refer to INT-21, "Removal and Installation".
4. Using remover tool, remove the headlining clip at the rear side of the headlining. Refer to INT-20, "Exploded View".
5. Remove the rear side of the headlining.
6. Remove the back door hinge mounting nuts (body side), and then remove the back door hinge.

INSTALLATION

Install in the reverse order of removal.

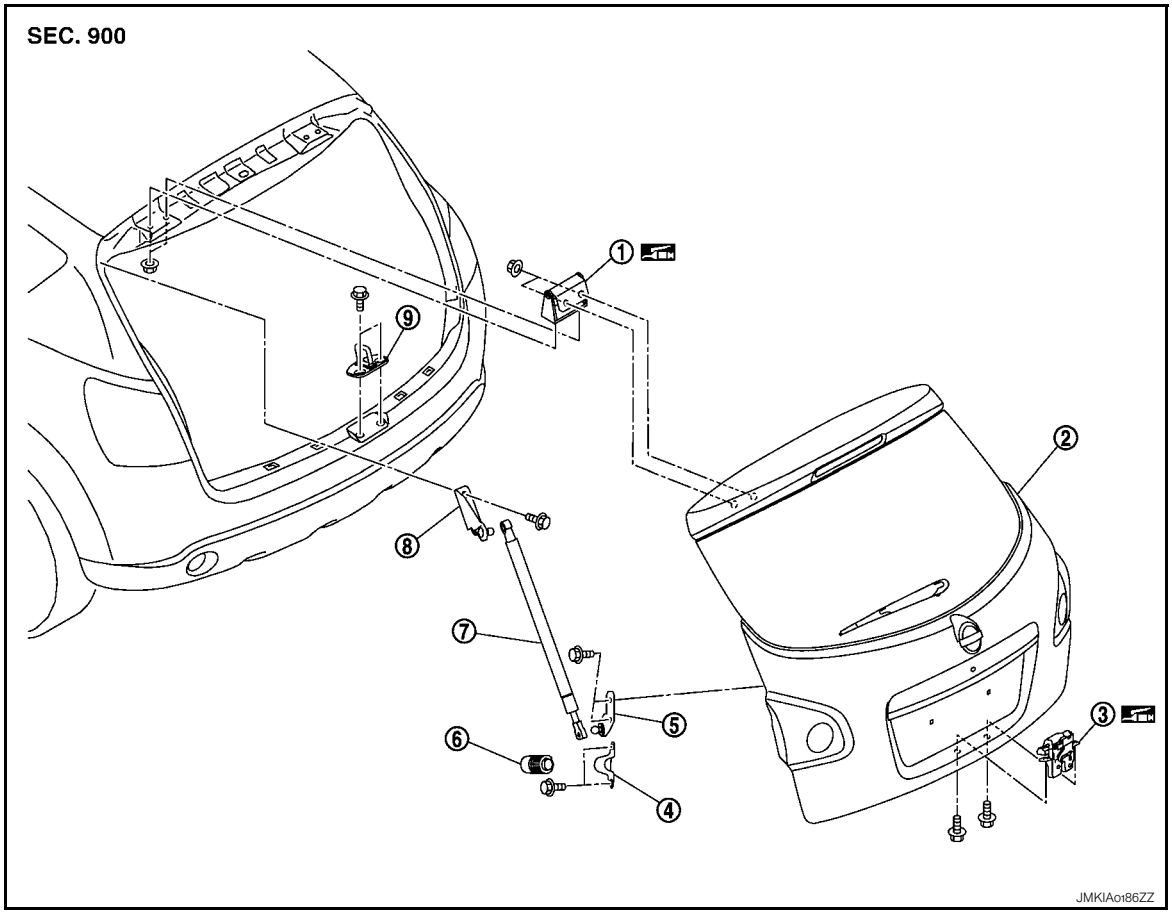
CAUTION:

- **When removing and installing the back door assembly, perform the fitting adjustment. Refer to DLK-250, "BACK DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the hinge mounting nuts.**
- **Check the hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **Check the back door open/close operation after installation.**

BACK DOOR STAY

BACK DOOR STAY : Exploded View

INFOID:0000000001098774



1. Back door hinge
2. Back door assembly
3. Back door lock assembly
4. Bumper rubber bracket
5. Back door stay bracket (lower)
6. Bumper rubber
7. Back door stay
8. Back door stay bracket (upper)
9. Back door striker

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR STAY : Removal and Installation

INFOID:0000000001098777

REMOVAL

1. Remove the stud ball (upper/lower), and then remove the back door stay.
2. Remove the mounting bolts, and then remove the back door stay bracket (upper/lower).

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check the back door open/close operation after installation.

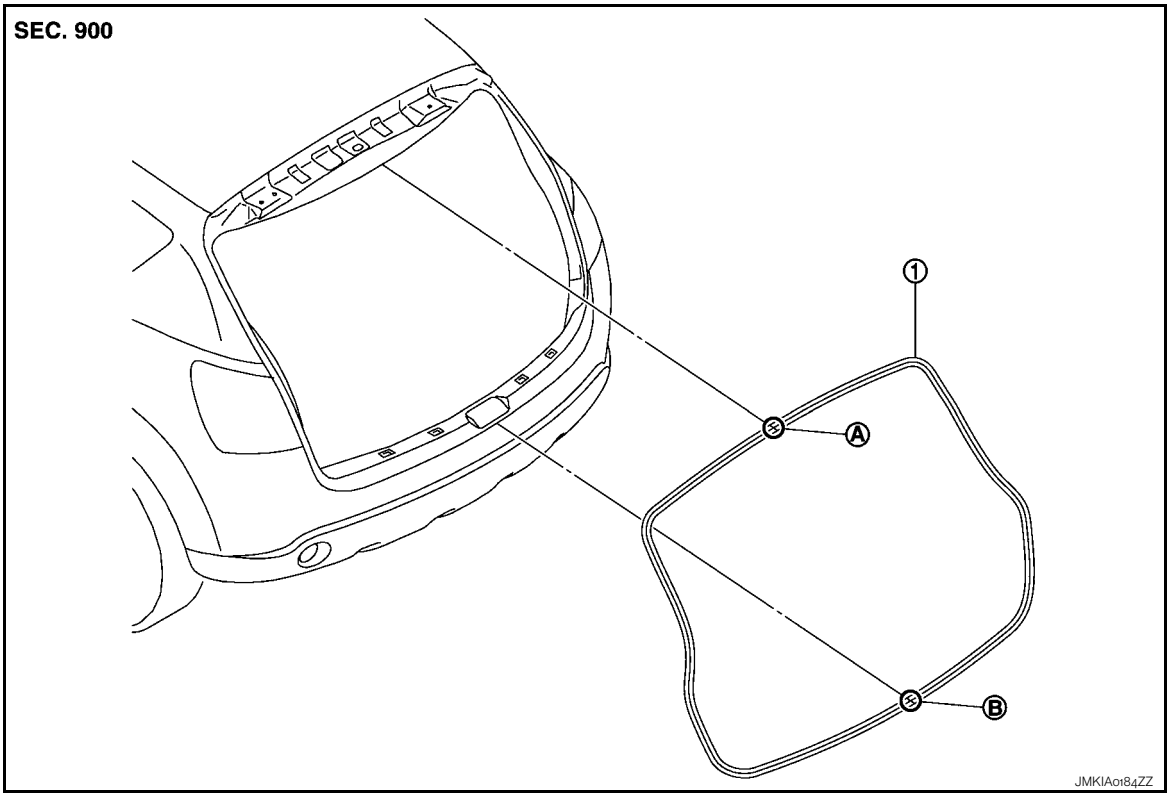
BACK DOOR WEATHER-STRIP

BACK DOOR WEATHER-STRIP : Exploded View

INFOID:0000000001098778

REMOVAL

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1. Back door weatherstrip
A. Mark (upper)
B. Mark (lower)

BACK DOOR WEATHER-STRIP : Removal and Installation

INFOID:0000000001098780

REMOVAL

Pull up and remove engagement with body from the weatherstrip joint.

CAUTION:

After removal, do not pull strongly on the weather-strip.

INSTALLATION

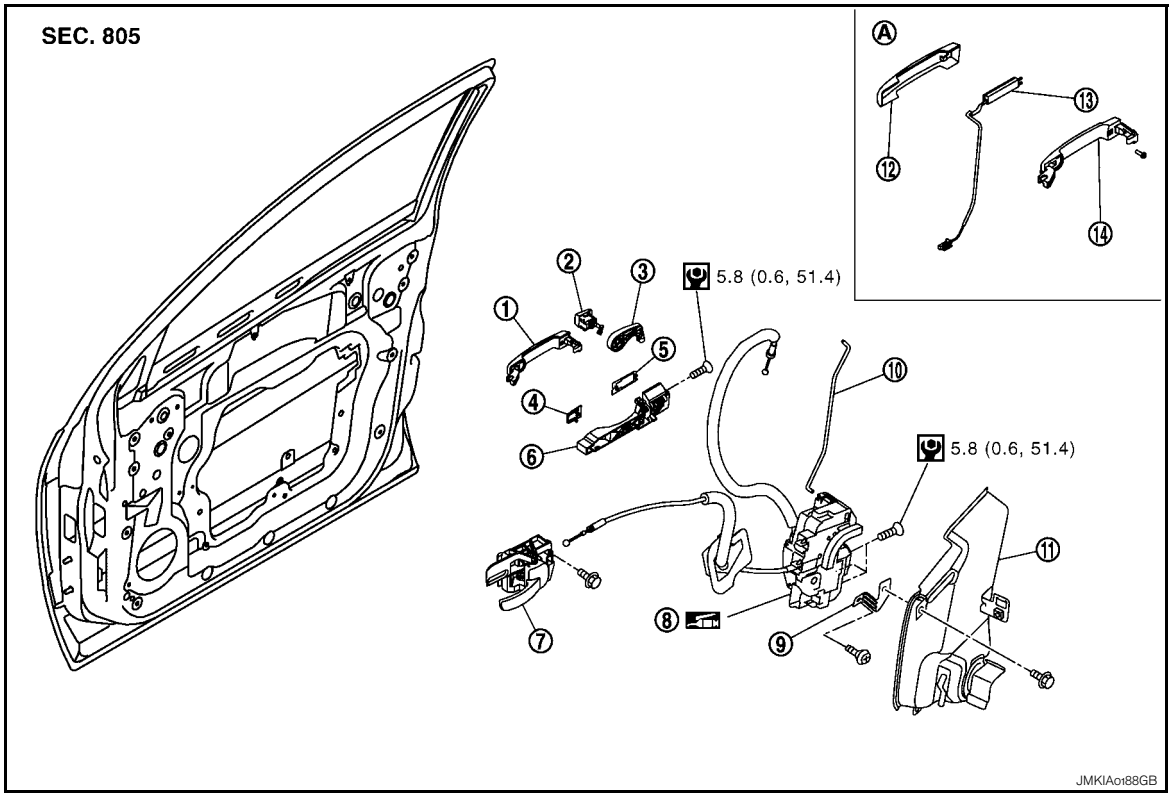
1. Working from the upper section, align the weatherstrip mark with vehicle center position mark and install the weatherstrip onto the vehicle.
2. For the lower section, align the weatherstrip seam with center of the back door striker.
3. After installation, pull the weatherstrip gently to ensure that there is no loose section.
   NOTE:
   Make sure that the weatherstrip is fit tlightly at each corner and the luggage rear plate.

FRONT DOOR LOCK

DOOR LOCK

DOOR LOCK : Exploded View

INFOID:0000000001098781



1. Outside handle assembly
2. Door key cylinder
3. Key cylinder lever
4. Front gasket
5. Rear gasket
6. Outside handle bracket
7. Inside handle
8. Door lock assembly
9. Key cylinder rod
10. Key rod protector
11. Key rod protector assembly (RH handle only)
12. Outside handle cover
13. Antenna
14. Outside handle base

A: Intelligent Key only

Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK : Removal and Installation

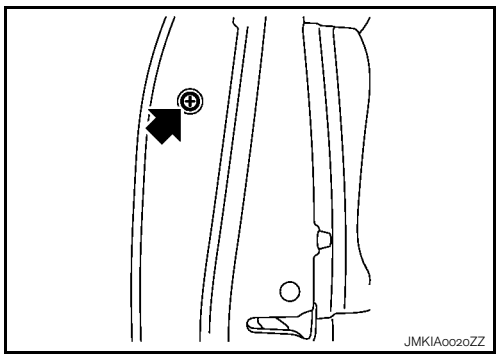
INFOID:0000000001098782

REMOVAL

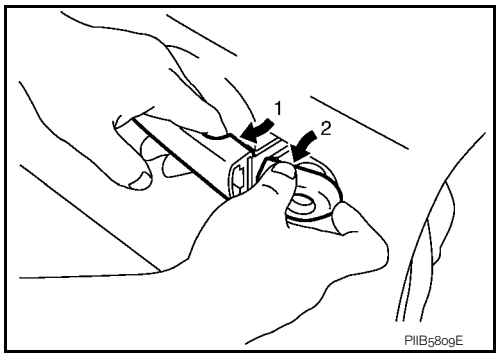
1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the inside handle mounting bolt, and then disconnect the inside handle knob cable and the lock knob cable.
3. Remove the front door glass. Refer to GW-19, "Removal and Installation".
4. Remove the front door module assembly. Refer to GW-22, "Removal and Installation".
5. Disconnect the door antenna and the door request switch connector and remove the harness clamp (models with Intelligent Key system).

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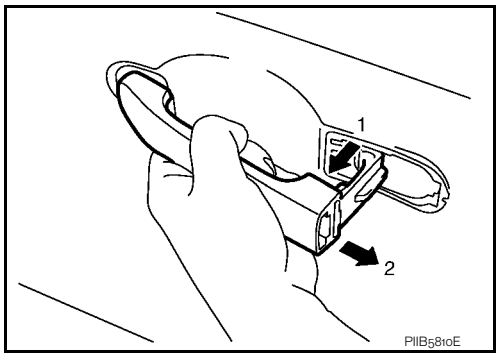
6. Remove the door side grommet, and remove the door key cylinder assembly (driver side) and outside handle escutcheon (passenger side) mounting bolts from grommet hole.
CAUTION:
Do not forcibly remove the bolts (TORX: T10).



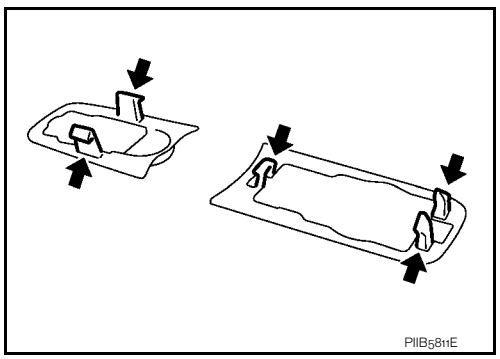
7. Reach in to separate the key cylinder rod connection (on the handle).
8. Disconnect the door key cylinder switch harness connector.
9. Remove the key cylinder lever from the door key cylinder.
10. While pulling the outside handle, remove door key cylinder assembly.



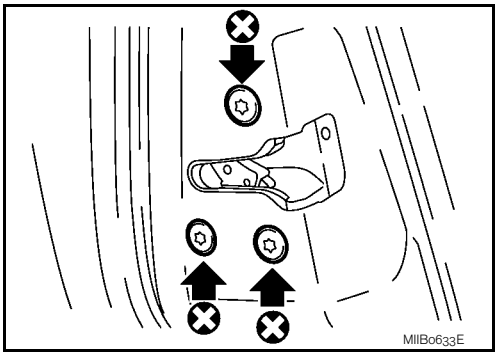
11. Disconnect front door request switch harness connector (models with Intelligent Key system).
12. While pulling outside handle, slide toward rear of vehicle to remove outside handle.



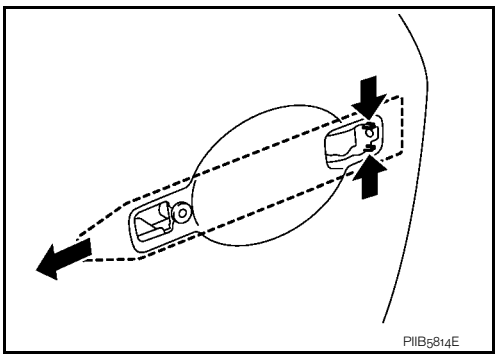
13. Remove the front gasket and the rear gasket.



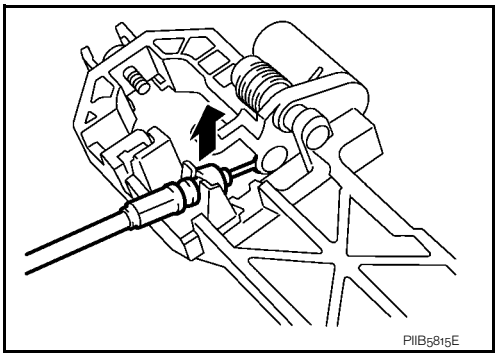
14. Remove the door lock assembly mounting bolts (TORX: T30).
15. Disconnect the door lock actuator connector, and then remove the door lock assembly.



16. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.



17. Reach in to separate the outside handle cable connection.



INSTALLATION

Install in the reverse order of removal.

CAUTION:

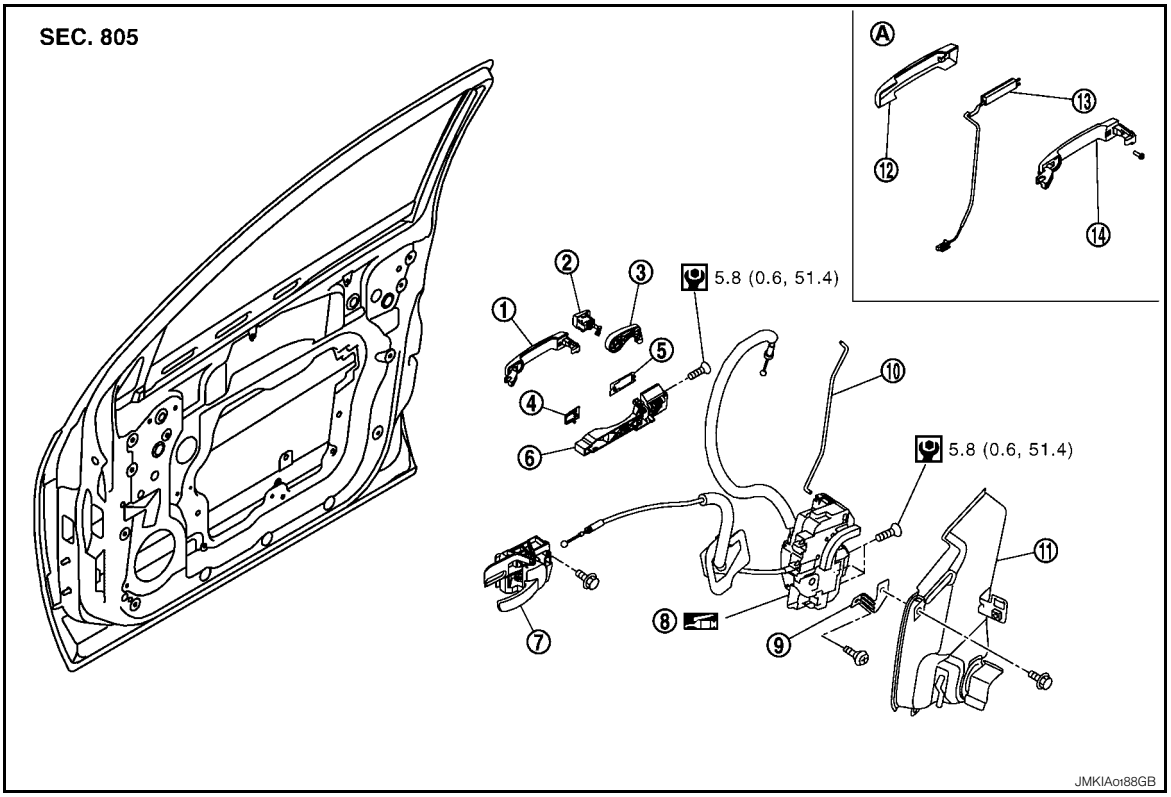
- **To install each rod, rotate the rod holder until a click is felt.**
- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

INSIDE HANDLE

INSIDE HANDLE : Exploded View

INFOID:0000000001098787

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1. Outside handle assembly
2. Door key cylinder
3. Key cylinder lever
4. Front gasket
5. Rear gasket
6. Outside handle bracket
7. Inside handle
8. Door lock assembly
9. Key cylinder rod
10. Key rod protector
11. Key rod protector assembly (RH handle only)
12. Outside handle cover
13. Antenna
14. Outside handle base

A: Intelligent Key only

Refer to GI-4, "Components" for symbols in the figure.

INSIDE HANDLE : Removal and Installation

INFOID:0000000001098788

REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the inside handle mounting bolt.
3. Disconnect the inside handle knob cable and the lock knob cable, and then remove the inside handle.

INSTALLATION

Install in the reverse order of removal.

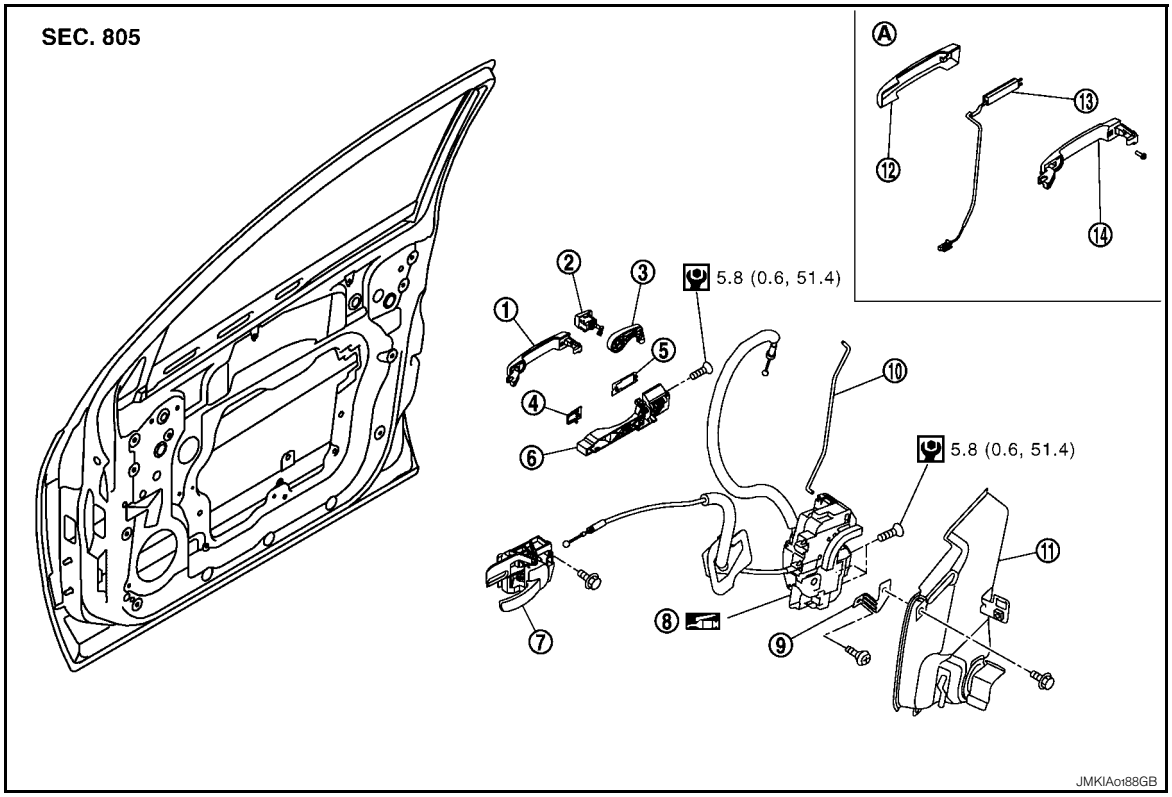
CAUTION:

- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

OUTSIDE HANDLE

OUTSIDE HANDLE : Exploded View

INFOID:0000000001098789



1. Outside handle assembly
2. Door key cylinder
3. Key cylinder lever
4. Front gasket
5. Rear gasket
6. Outside handle bracket
7. Inside handle
8. Door lock assembly
9. Key cylinder rod
10. Key rod protector
11. Key rod protector assembly (RH handle only)
12. Outside handle cover
13. Antenna
14. Outside handle base

A: Intelligent Key only

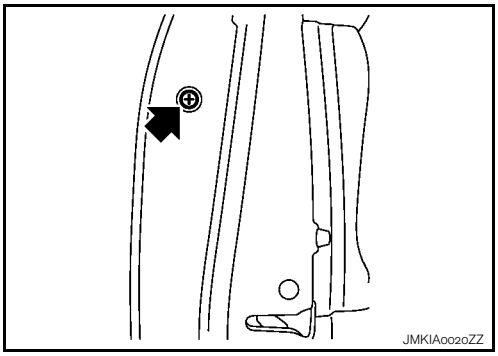
Refer to GI-4, "Components" for symbols in the figure.

OUTSIDE HANDLE : Removal and Installation

INFOID:0000000001098790

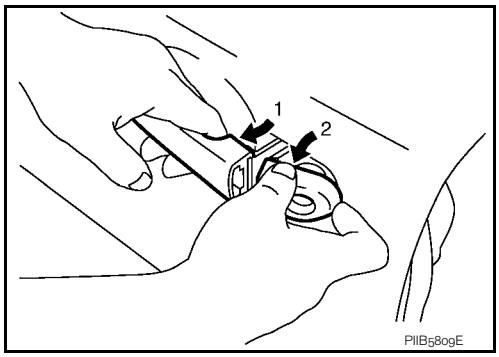
REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the inside handle mounting bolt, and disconnect the inside handle knob cable and the lock knob cable.
3. Remove the front door glass. Refer to GW-19, "Removal and Installation".
4. Remove the front door module assembly. Refer to GW-22, "Removal and Installation".
5. Disconnect the door antenna and the door request switch connector and remove the harness clamp (models with Intelligent Key system).
6. Remove the door side grommet, and remove the door key cylinder assembly (driver side) and the outside handle escutcheon (passenger side) mounting bolts from the grommet hole.
   CAUTION:
   Do not forcibly remove the bolts (TORX: T10).

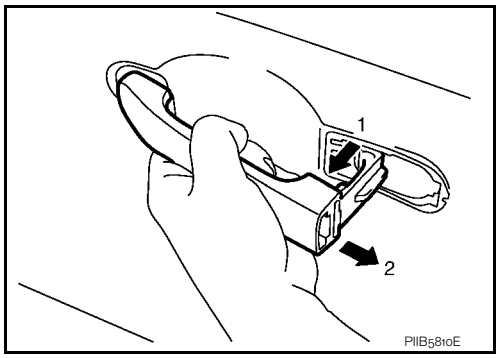


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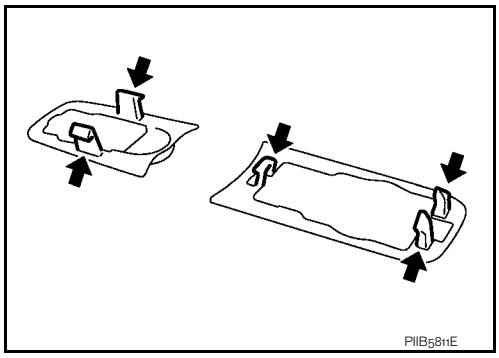
7. Reach in to separate the key cylinder rod connection (on the handle).
8. Disconnect the door key cylinder switch harness connector.
9. Remove the key cylinder lever from the door key cylinder.
10. While pulling the outside handle, remove the door key cylinder assembly.



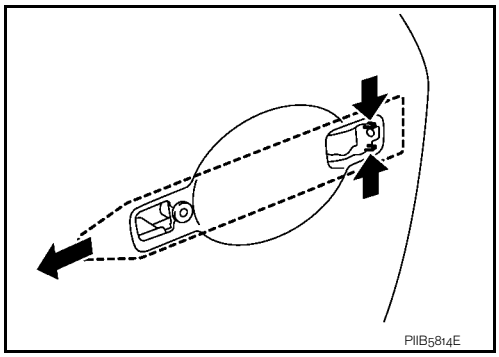
11. Disconnect the front door request switch harness connector (models with Intelligent Key system).
12. While pulling the outside handle, slide toward rear of vehicle to remove the outside handle.



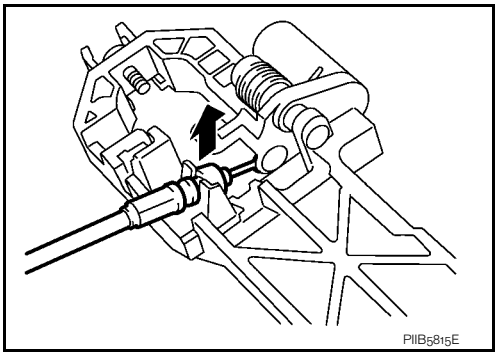
13. Remove the front gasket and rear gasket.



14. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.



15. Reach in to separate the outside handle cable connection.



INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **To install each rod, rotate the rod holder until a click is felt.**
- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

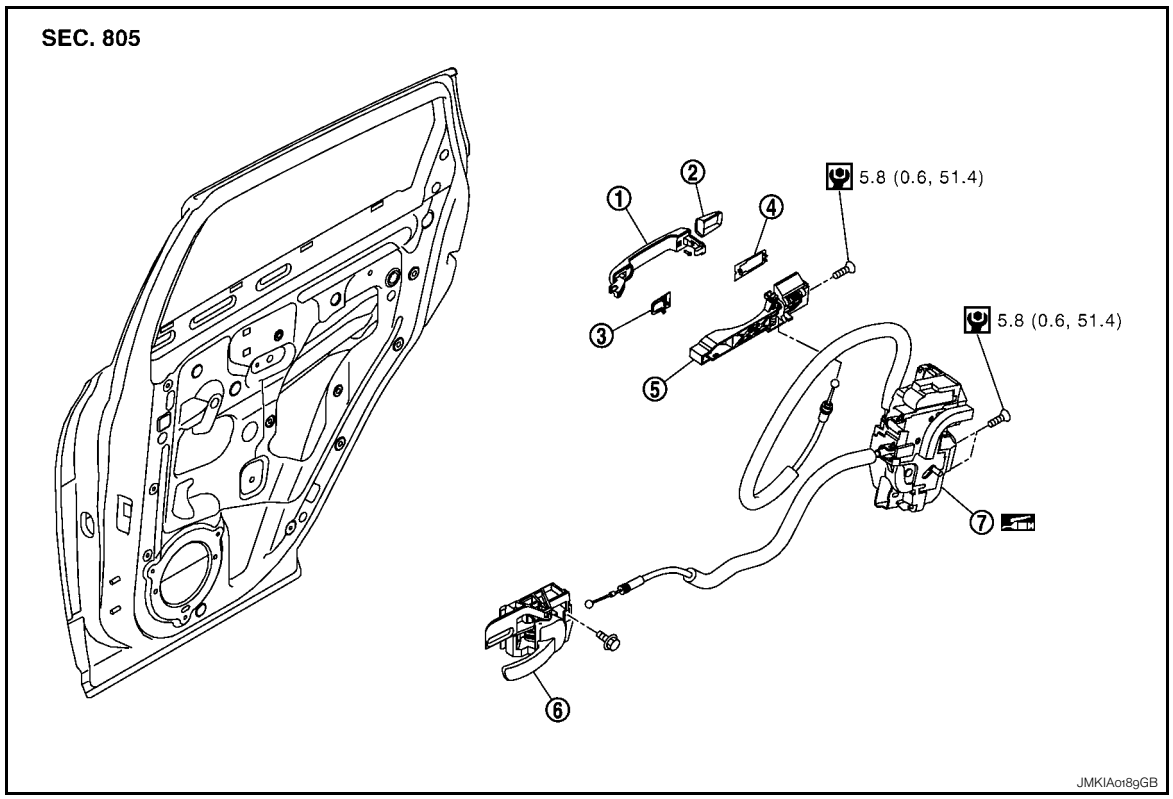
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REAR DOOR LOCK

DOOR LOCK

DOOR LOCK : Exploded View

INFOID:0000000001098793



1. Outside handle
2. Outside handle escutcheon
3. Front gasket
4. Rear gasket
5. Outside handle bracket
6. Inside handle
7. Door lock assembly

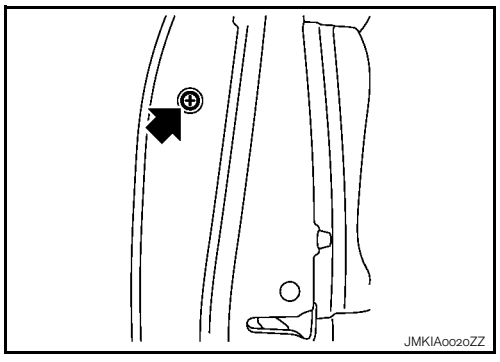
Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK : Removal and Installation

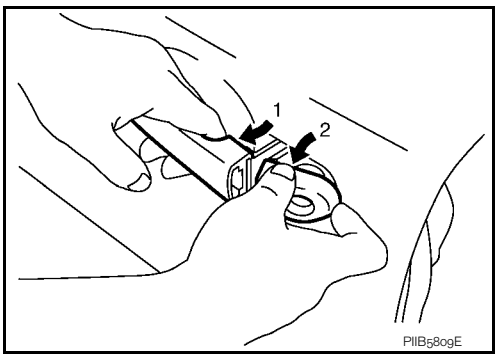
INFOID:0000000001098794

REMOVAL

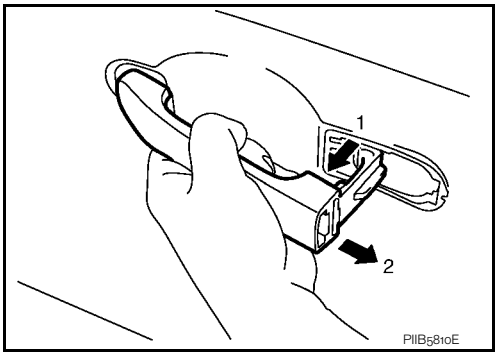
1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Fully close the front door window.
3. Remove the door sealing screen.
4. Remove the inside handle mounting bolt, and then disconnect the inside handle knob cable and the lock knob cable.
5. Remove the door side grommet, and remove the door key cylinder assembly (driver side) and the outside handle escutcheon (passenger side) mounting bolts from the grommet hole.
   CAUTION:
   Do not forcibly remove the bolts (TORX: T10).



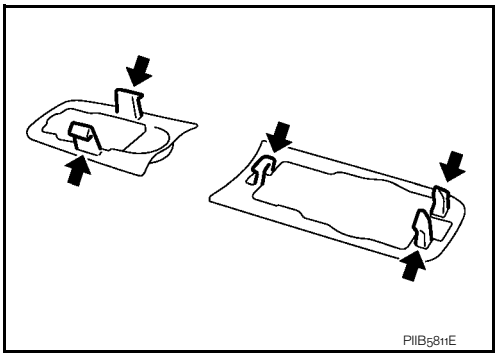
6. While pulling the outside handle, remove the door key cylinder assembly.



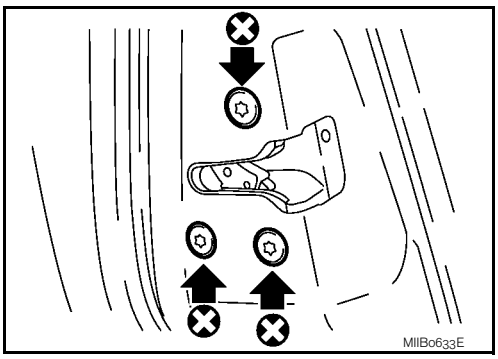
7. While pulling the outside handle, slide toward rear of vehicle to remove the outside handle.



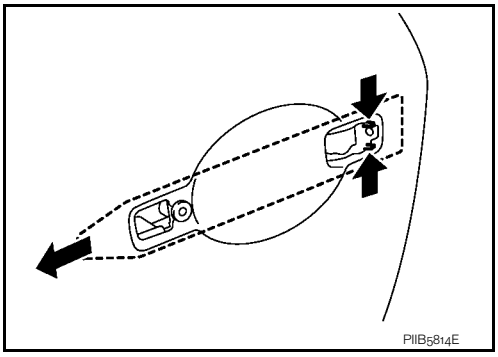
8. Remove the front gasket and the rear gasket.



9. Remove the door lock assembly mounting bolts (TORX: T30).
10. Disconnect the door lock actuator connector, and then remove the door lock assembly.

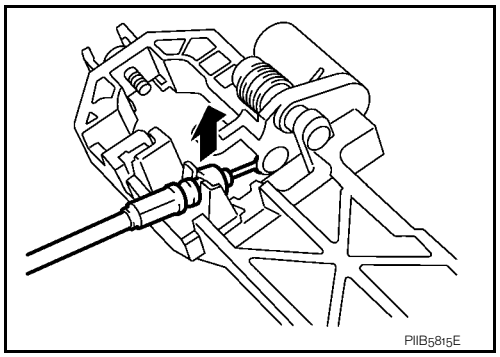


11. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.



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12. Reach in to separate the outside handle cable connection.



INSTALLATION

Install in the reverse order of removal.

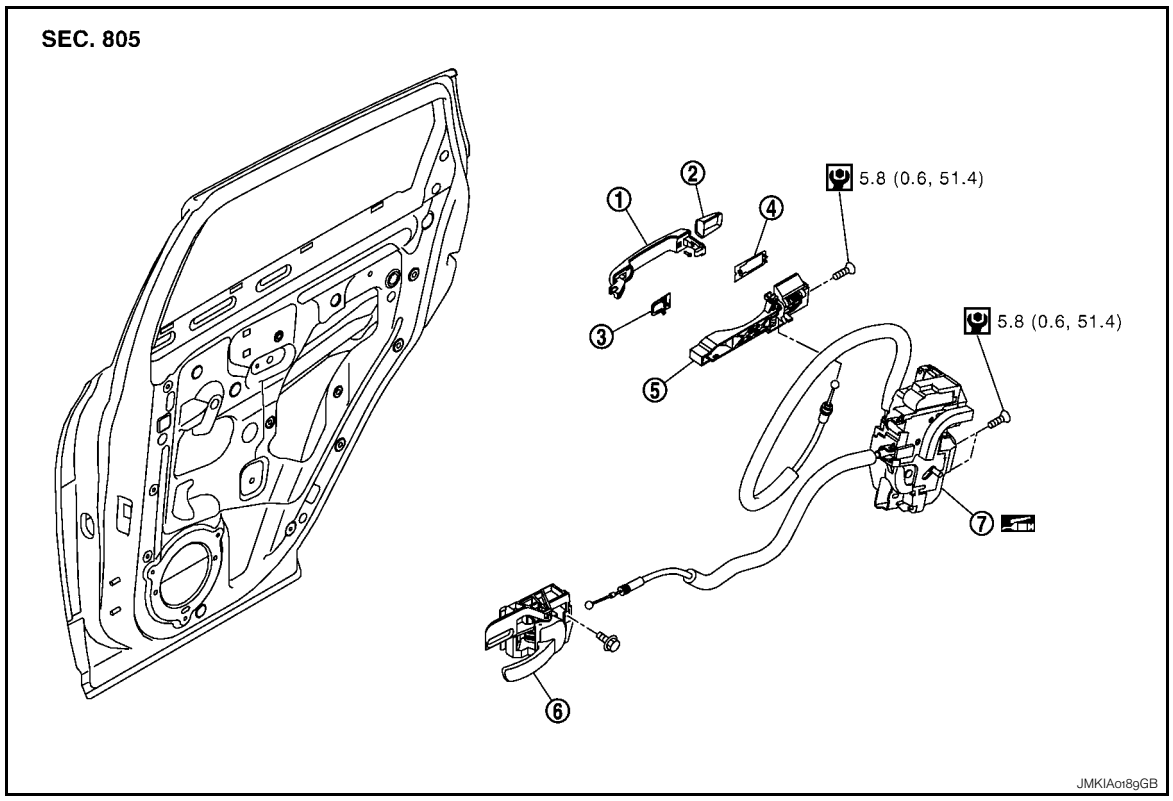
CAUTION:

- **To install each rod, rotate the rod holder until a click is felt.**
- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

INSIDE HANDLE

INSIDE HANDLE : Exploded View

INFOID:0000000001098797



1. Outside handle
2. Outside handle escutcheon
3. Front gasket
4. Rear gasket
5. Outside handle bracket
6. Inside handle
7. Door lock assembly

Refer to GI-4, "Components" for symbols in the figure.

INSIDE HANDLE : Removal and Installation

INFOID:0000000001098798

REMOVAL

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Remove the door sealing screen.

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3. Remove the inside handle mounting bolt, and then disconnect the inside handle knob cable and the lock knob cable.
4. Remove the inside handle.

INSTALLATION

Install in the reverse order of removal.

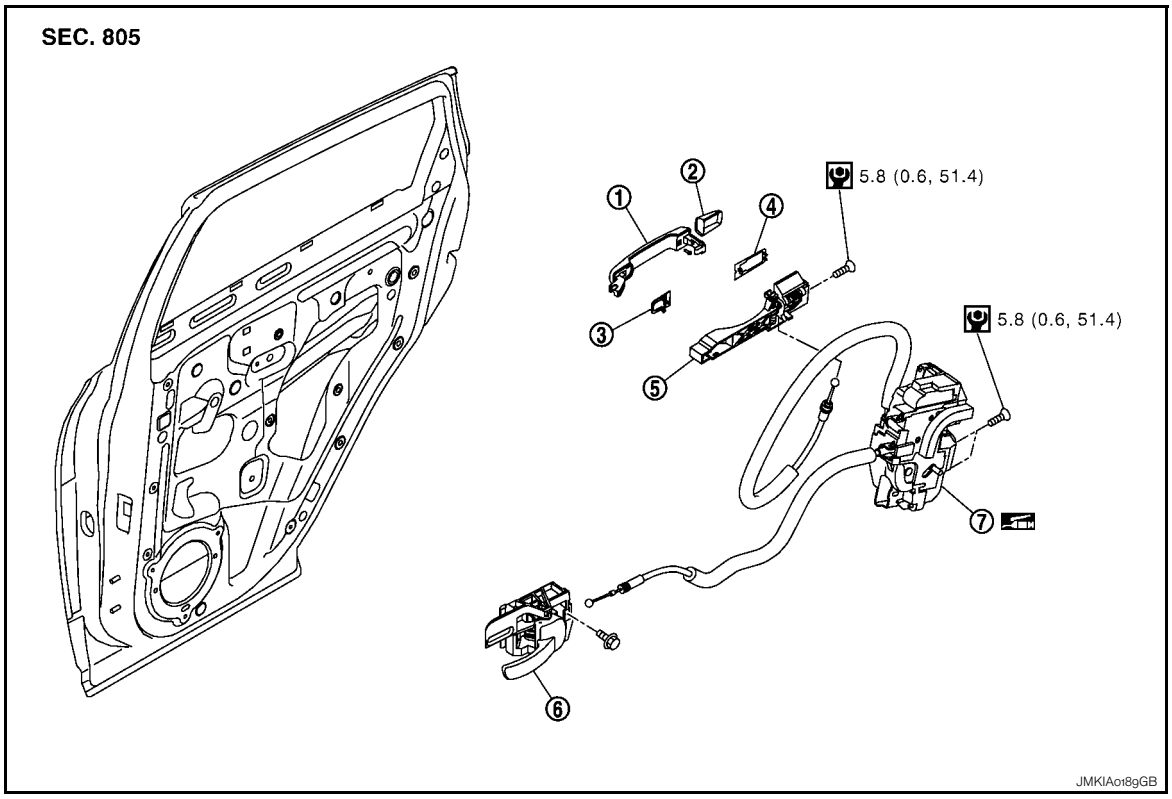
CAUTION:

- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

OUTSIDE HANDLE

OUTSIDE HANDLE : Exploded View

INFOID:0000000001098799



1. Outside handle
2. Outside handle escutcheon
3. Front gasket
4. Rear gasket
5. Outside handle bracket
6. Inside handle
7. Door lock assembly

Refer to GI-4, "Components" for symbols in the figure.

OUTSIDE HANDLE : Removal and Installation

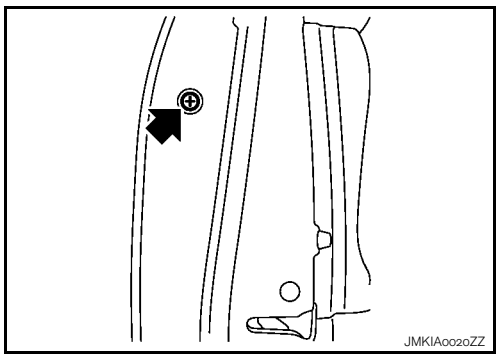
INFOID:0000000001098800

REMOVAL

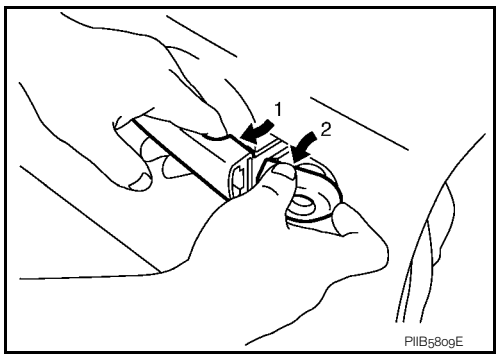
1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Fully close the front door window.
3. Remove the door sealing screen.
4. Remove the inside handle mounting bolt, disconnect the inside handle knob cable and the lock knob cable.

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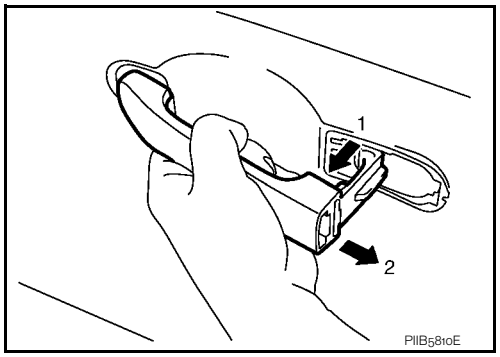
5. Remove the door side grommet, and remove the door key cylinder assembly (driver side) and the outside handle escutcheon (passenger side) mounting bolts from the grommet hole.
CAUTION:
Do not forcibly remove the bolts (TORX: T10).



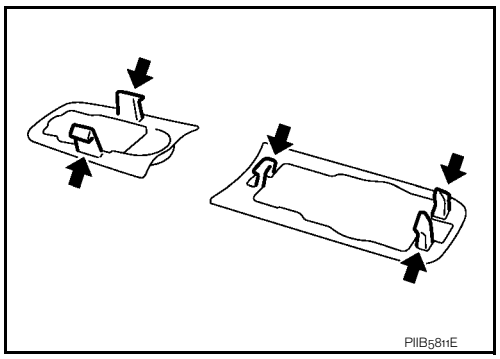
6. While pulling the outside handle, and then remove the door key cylinder assembly.



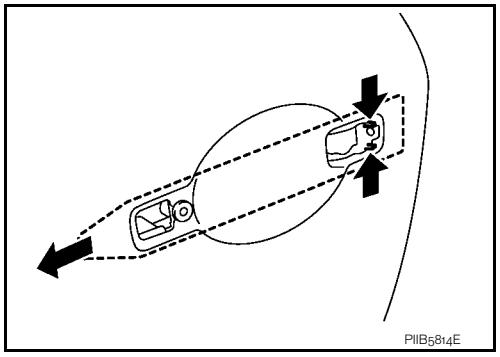
7. While pulling the outside handle, slide toward rear of vehicle to remove the outside handle.



8. Remove the front gasket and the rear gasket.

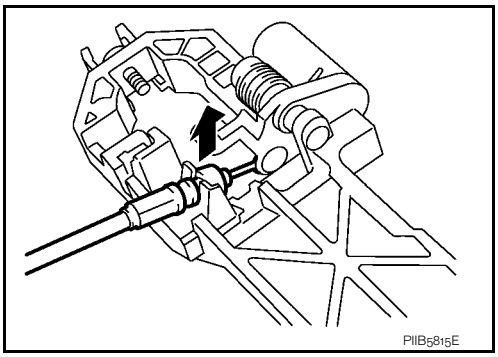


9. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.



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10. Reach in to separate the outside handle cable connection.



INSTALLATION

Install in the reverse order of removal.

CAUTION:

- **Check the door lock/unlock operation after installation.**
- **Check the door open/close operation after installation.**

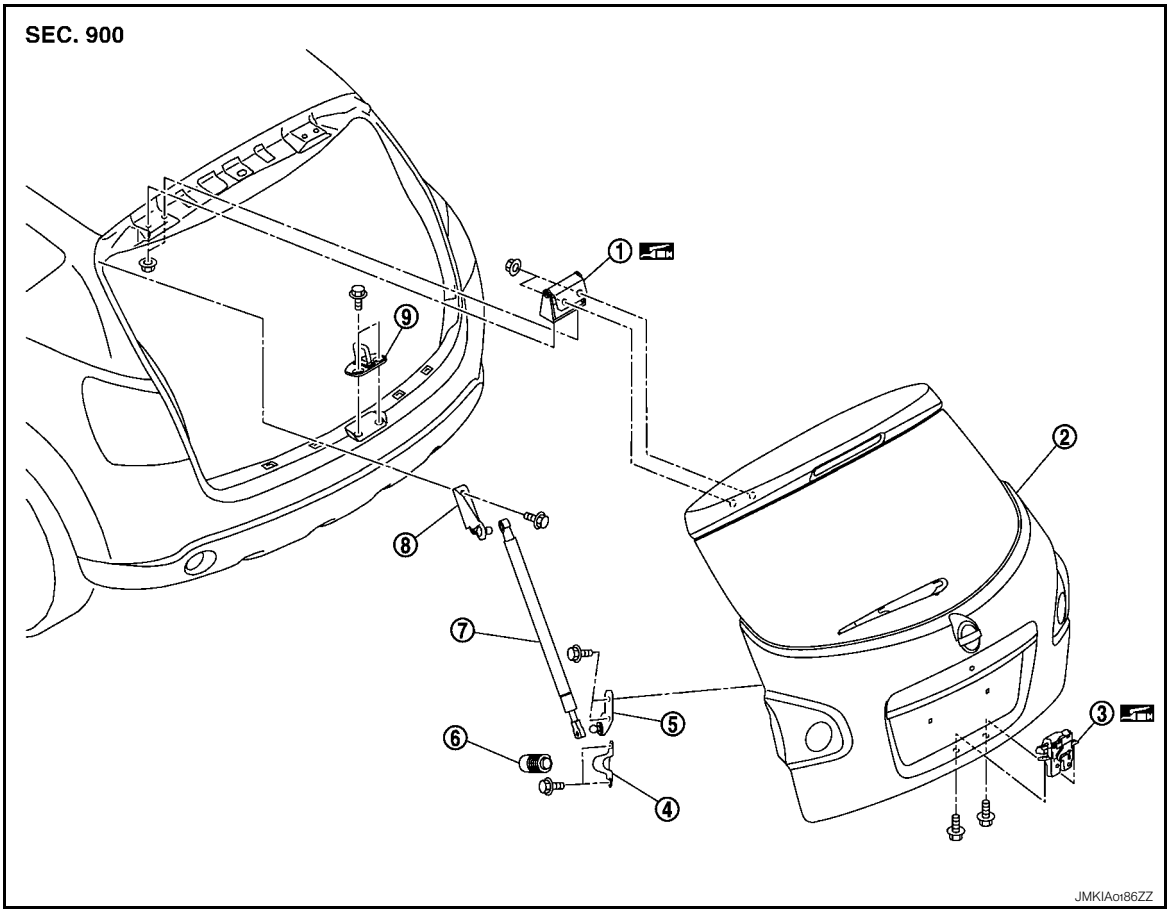
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BACK DOOR LOCK

DOOR LOCK

DOOR LOCK : Exploded View

INFOID:0000000001098805



1. Back door hinge
2. Back door assembly
3. Back door lock assembly
4. Bumper rubber bracket
5. Back door stay bracket (lower)
6. Bumper rubber
7. Back door stay
8. Back door stay bracket (upper)
9. Back door striker

Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK : Removal and Installation

INFOID:0000000001098806

REMOVAL

1. Remove the back door trim finisher lower. Refer to INT-26, "Removal and Installation".
2. Disconnect the back door lock assembly and back door opener switch connectors.
3. Remove the back door lock mounting bolts, and then remove the back door lock and actuator.

INSTALLTION

Install in the reverse order of removal.

CAUTION:

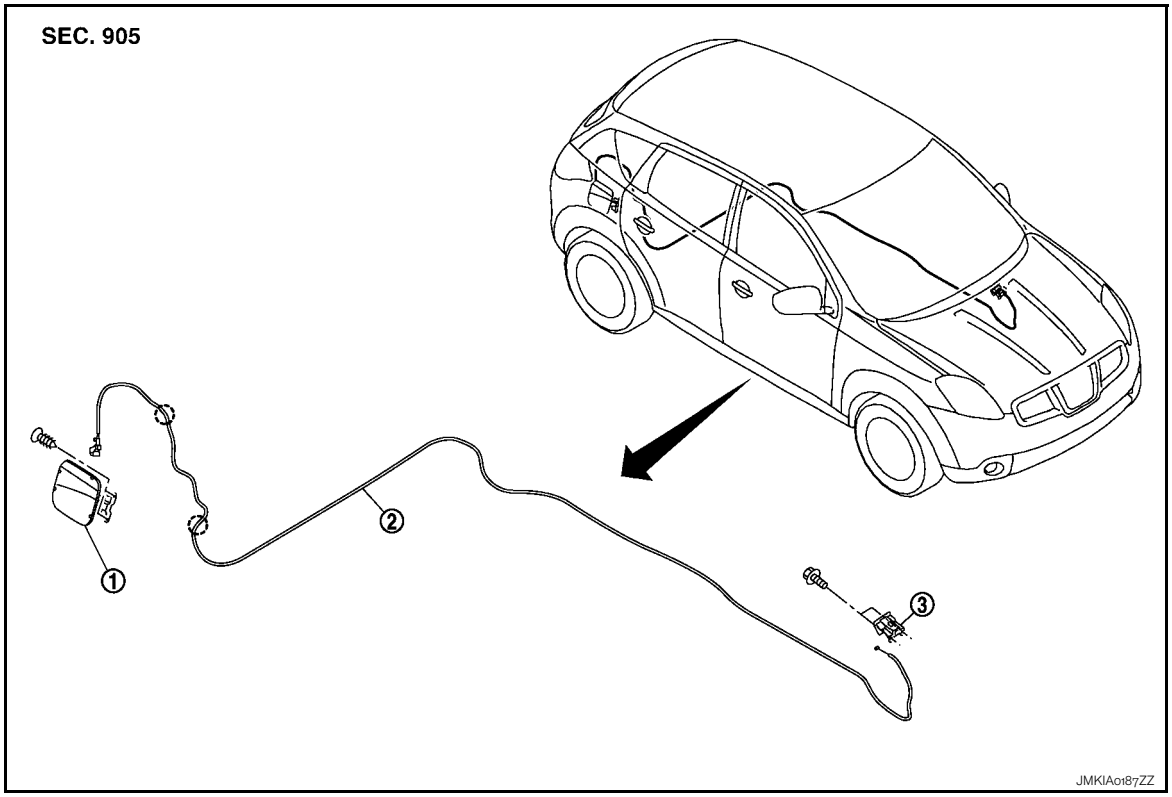
Check the back door lock/unlock operation after installation.

FUEL FILLER LID OPENER

FUEL FILLER LID

FUEL FILLER LID : Exploded View

INFOID:0000000001098811



1. Fuel filler lid assembly
2. Fuel filler opener cable
3. Fuel opener lever

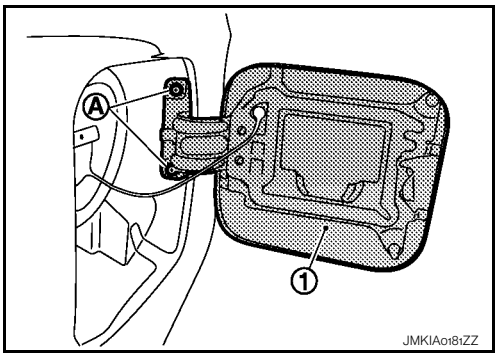
: Clip

FUEL FILLER LID : Removal and Installation

INFOID:0000000001098812

REMOVAL

1. Fully open the fuel filler lid.
2. Remove the filler cap.
3. Remove the mounting screws (A), and then remove the fuel filler lid (1).



INSTALLATION

Install in the reverse order of removal.

CAUTION:

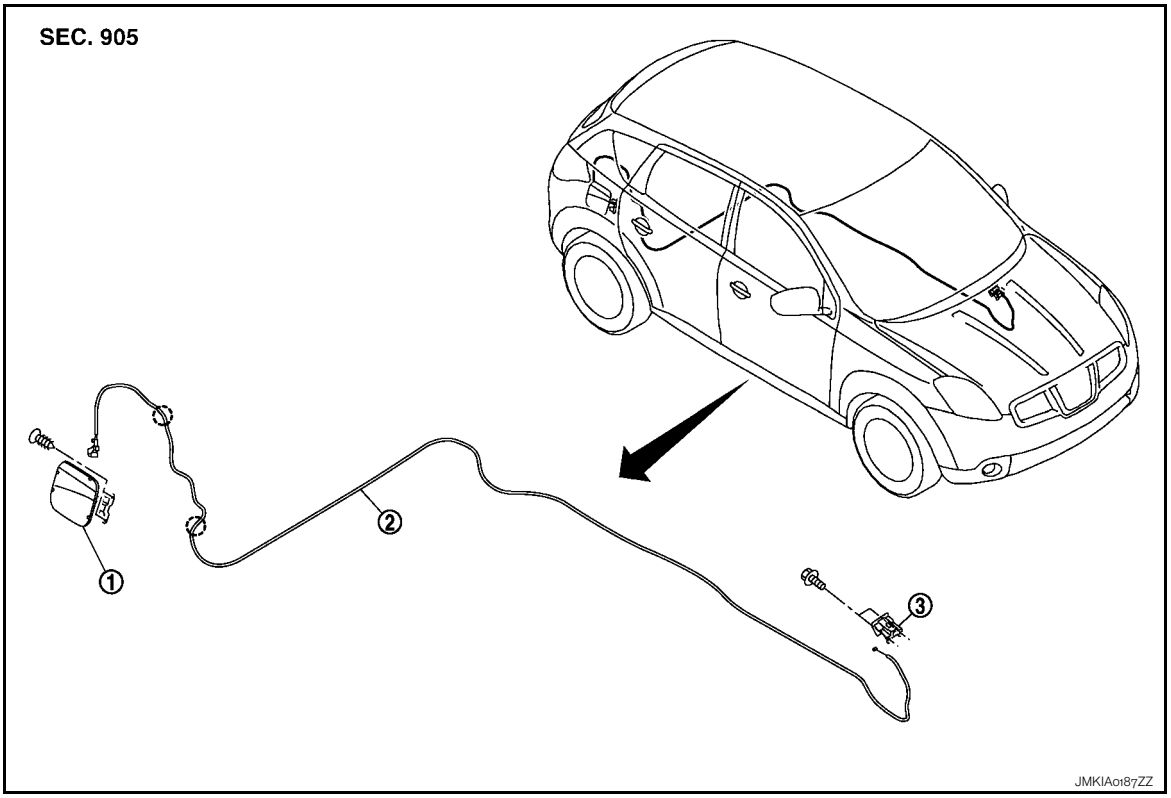
After installation, apply the touch-up paint (the body color) onto the head of the mounting screws.

FUEL FILLER OPENER CABLE

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FUEL FILLER OPENER CABLE : Exploded View

INFOID:0000000001098813



1. Fuel filler lid assembly
2. Fuel filler opener cable
3. Fuel opener lever

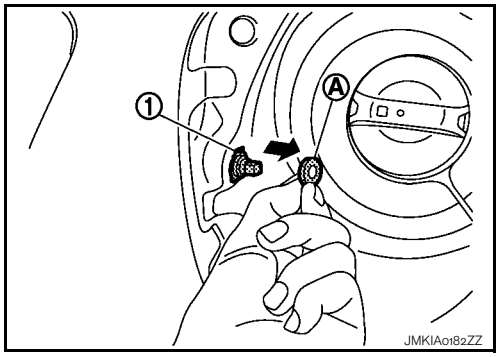
: Clip

FUEL FILLER OPENER CABLE : Removal and Installation

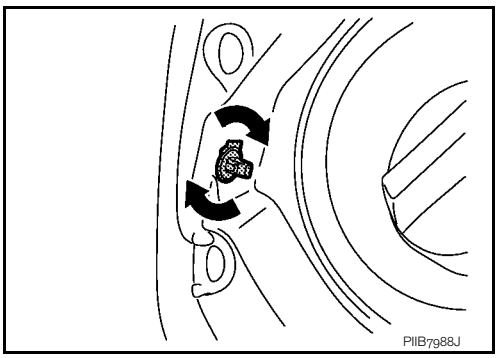
INFOID:0000000001098814

REMOVAL

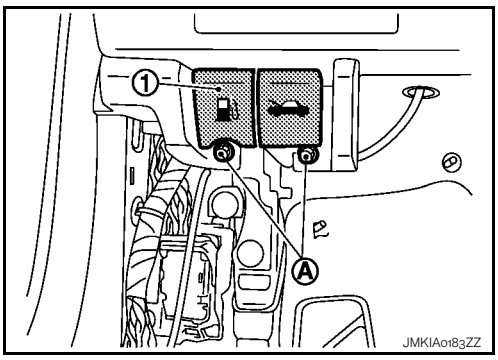
1. Remove the rear seat cushion, rear seatback, seatback lower support, and seatback mounting outer bracket. Refer to SE-31, "Removal and Installation".
2. Remove the dash side finisher, front kicking plate inner, rear kicking plate inner, center pillar lower garnish, and luggage side lower finisher (front). Refer to INT-14, "Removal and Installation".
3. Remove the parcel shelf, luggage floor carpet, luggage floor spacer, luggage rear plate, luggage side lower finisher, and rear pillar finisher. Refer to INT-24, "Removal and Installation".
4. Remove the fuel filler lock seal (1).



5. Rotate the fuel filler lock, and then remove the fuel filler lock.



6. Remove the fuel filler opener cable mounting clips and the clamps.
7. Remove the mounting bolts, and then remove the fuel filler lid opener lever.



8. Remove the fuel filler opener cable.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

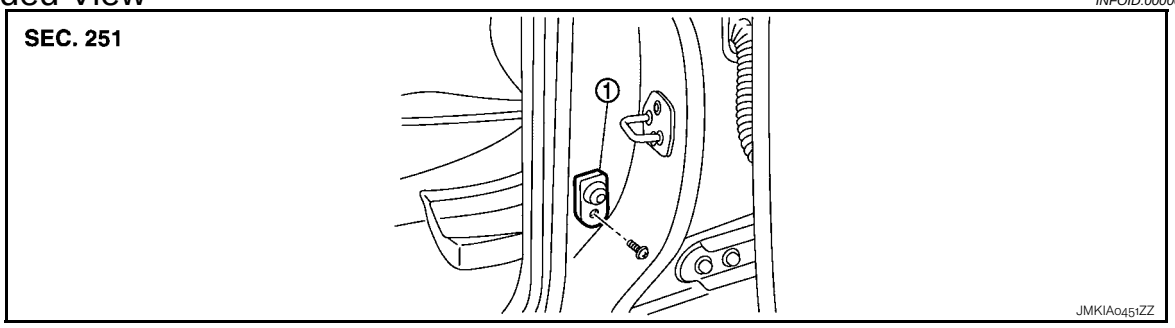
Check the fuel filler lid open/close operation after installation.

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DOOR SWITCH

Exploded View

INFOID:0000000001095599



1. Door switch (driver side)

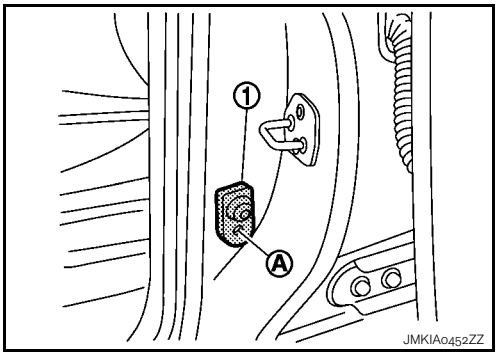
Refer to DLK-877, "Removal and Installation".

Removal and Installation

INFOID:0000000001095600

REMOVAL

1. Remove the door switch mounting bolt (A), and then remove door switch (1).
   NOTE:
   The same procedure is also performed for door switch (passenger side, rear LH and rear RH).



INSTALLATION

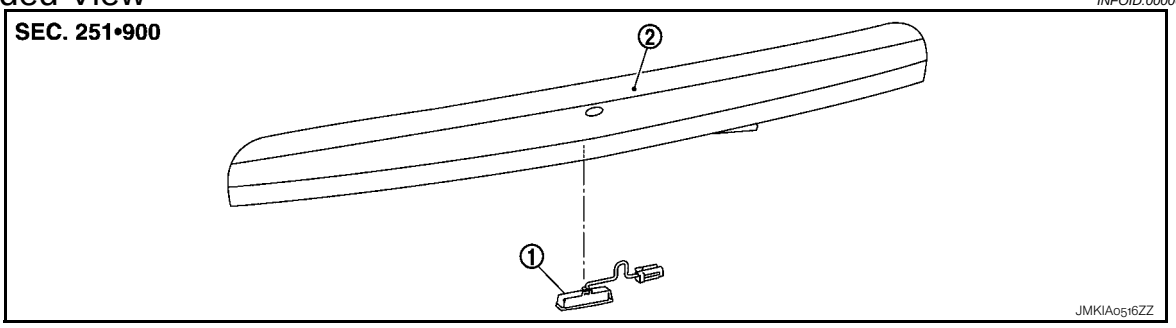
Install in the reverse order of removal.

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BACK DOOR OPENER SWITCH

Exploded View

INFOID:0000000001116794



1. Back door opener switch
2. Back door finisher

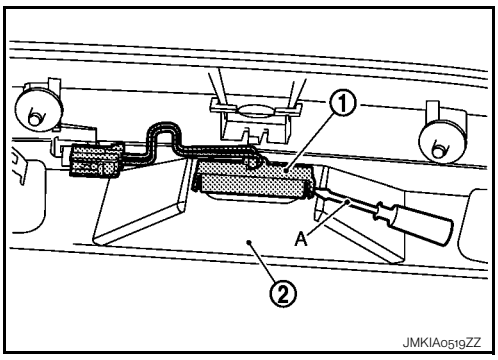
Refer to DLK-878, "Removal and Installation".

Removal and Installation

INFOID:0000000001116795

REMOVAL

1. Remove the back door finisher.
   Refer to EXT-31, "Exploded View" and EXT-31, "Removal and Installation".
2. Remove the back door opener switch (1) from back door finisher (2) using flat-bladed screw driver (A) etc.



INSTALLATION

Install in the reverse order of removal.

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KEYFOB BATTERY

Exploded View

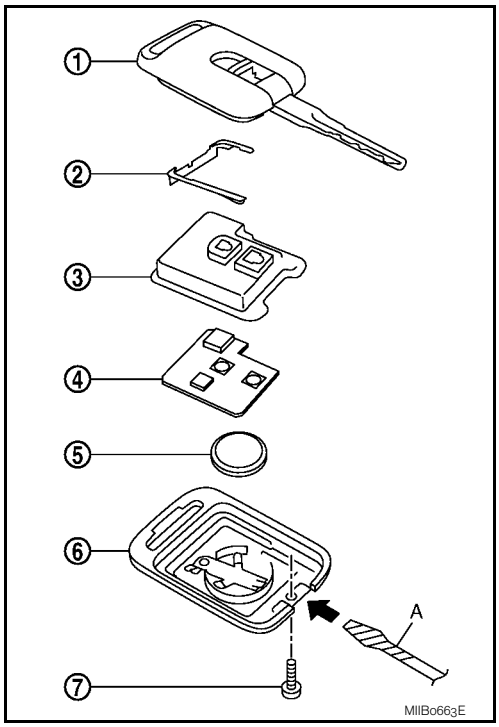
INFOID:0000000001115846

Refer to DLK-879, "Removal and Installation".

Removal and Installation

INFOID:0000000001115847

REMOVAL



1. Remove installation screw (7) on the rear of keyfob.
2. Place the key with the lower case (6) facing up. Set a screwdriver (A) wrapped with tape into illustration of the lower case (6) and separate the lower case (6) from the upper case (1).
   CAUTION:
   - **Do not touch the circuit board or battery terminal.**
   - **The keyfob is water-resistant. However, if it does get wet, immediately wipe it dry.**
3. When replacing the circuit board assembly, remove circuit board assembly from the upper case (1).
   [Circuit board assembly: Switch rubber (3) + Board surface (4)]
   CAUTION:
   Do not touch the printed circuits directly.
4. Remove the battery (5) from the lower case (6) and replace it.

   Battery replacement : Coin-type lithium battery (CR2032)

   CAUTION:
   When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.
5. After replacement, fit the lower and upper cases together, part (2), (3) and tighten with the screw.
   CAUTION:
   After replacing the battery, Be sure to check that door locking operates normally using the keyfob.
   Refer to DLK-612, "Component Function Check".

INSTALLATION

Install in the reverse order of removal.