A

SECTION DLK

B

C

DOOR & LOCK

D

E

CONTENTS

F

G

H

I

J

DLK

L

M

N

O

P

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

DLK-15

DLK-16

DLK

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

BASIC INSPECTION
DIAGNOSIS AND REPAIR WORKFLOW
Work Flow

INFOID:0000000001280387

OVERALL SEQUENCE

Inspection start

1. Get information for symptom
Get the detailed information about symptom from the customer.

2. Check DTC

Symptom is described.
DTC is detected.

Symptom is not described.
DTC is detected.

Symptom is described.
DTC is not detected.

3. Confirm the symptom
Confirm the symptom described by the customer.

4. Confirm the symptom
Confirm the symptom described by the customer.

5. Perform DTC Confirmation Procedure

6. Detect malfunctioning system by Symptom Table

7. Detect malfunctioning part by Diagnostic Procedure

8. Repair or replace the malfunctioning part

NG
(DTC is detected.)

9. Final check
Check that the symptom is not detected.
Perform DTC Confirmation Procedure again, and then check that the malfunction can be repaired securely.

NG
(Symptom remains.)

OK

INSPECTION END

JMKIA0676GB

DETAILED FLOW

DLK-22

DIAGNOSIS AND REPAIR WORKFLOW

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-169, "DTC Inspection Priority Chart" (Intelligent Key unit), DLK-210, "DTC Inspection Priority Chart" (BCM) and determine trouble diagnosis order.

Is DTC detected?

YES >> GO TO 7.
NO >> Refer to GI-39, "Intermittent Incident".

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

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

>> GO TO 7.

7.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 8.

8.REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 9.

9.FINAL CHECK

When DTC was detected in step 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.

Are all malfunctions corrected?

NO (DTC is detected)>>GO TO 7.
NO (Symptom remains)>>GO TO 6.
YES   >> **INSPECTION END**

INSPECTION AND ADJUSTMENT
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000001280388

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:0000000001280389

Refer to the CONSULT-III Operation Manual-NATS.

FUNCTION DIAGNOSIS

DOOR LOCK FUNCTION

DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH : System Diagram

INFOID:0000000001280390

DOOR LOCK AND UNLOCK SWITCH OPERATION

JMKIA0563GB

DOOR LOCK AND UNLOCK SWITCH INDICATOR OPERATION

JMKIA0408GB

DOOR LOCK AND UNLOCK SWITCH : System Description

INFOID:0000000001280391

DOOR LOCK AND UNLOCK SWITCH OPERATION

Functions are available by operating the door lock and unlock switch on driver door. 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 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 to turn OFF the indicator will run for 1 minute after locking with Intelligent Key, door request switch or auto door lock.

30 Minutes Timer
A timer to turn OFF the indicator 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.

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

DOOR LOCK AND UNLOCK SWITCH : Component Parts Location

INFOID:0000000001394648

JMKIA0647ZZ

1. BCM
   M65, M66, M67

2. IPDM E/R
   E11, E13

3. Intelligent Key unit
   M40

4. Passenger side anti-hijack relay
   M90

5. Power window main switch (door lock and unlock switch)
   D5, D6

6. Inside key antenna (instrument center)
   M56

7. Inside key antenna (console)
   M252

8. Inside key antenna (rear seat)
   B45

9. Intelligent Key warning buzzer
   E25

10. 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

JMKIA0648ZZ

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. Front door switch (driver side)
   B34

7. Front door lock actuator (driver side)
   D9

8. Rear door lock actuator LH
   D85

9. Out side key antenna and front door request switch (driver side)
   D10

10. Out side key antenna and front door request switch (driver side)
    D10

11. Back door opener switch assembly (request switch)
    D187

12. Back door opener switch assembly (opener switch)
    D187

13. Back door lock assembly
    D190

14. Fuel lid opener actuator
    B58

15. Out side key antenna (back door)
    D191

I. Inside the combination meter

J. Inside the combination meter

K. View with steering column cover removed

L. View with luggage side lower finisher (RH) removed.

DOOR LOCK AND UNLOCK SWITCH : Component Description

INFOID:0000000001280393

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:0000000001280394

INTELLIGENT KEY OPERATION

JMKIA0564GB

INTELLIGENT KEY : System Description

INFOID:0000000001280395

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-67, "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.

DOOR LOCK FUNCTION

ANTI-HIJACK MODE

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 .

INTELLIGENT KEY : Component Parts Location

INFOID:0000000001394651

JMKIA0647ZZ

1. BCM
   M65, M66, M67

2. IPDM E/R
   E11, E13

3. Intelligent Key unit
   M40

4. Passenger side anti-hijack relay
   M90

5. Power window main switch (door lock and unlock switch)
   D5, D6

6. Inside key antenna (instrument center)
   M56

7. Inside key antenna (console)
   M252

8. Inside key antenna (rear seat)
   B45

9. Intelligent Key warning buzzer
   E25

10. 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

JMKIA0648ZZ

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. Front door switch (driver side)
    B34

7. Front door lock actuator (driver side)
   D9

8. Rear door lock actuator LH
   D85

9. Out side key antenna and front door request switch (driver side)
   D10

10. Out side key antenna and front door request switch (driver side)
    D10

11. Back door opener switch assembly (request switch)
    D187

12. Back door opener switch assembly (opener switch)
    D187

13. Back door lock assembly
D190

14. Fuel lid opener actuator
B58

15. Out side key antenna (back door)
D191

I. Inside the combination meter

J. Inside the combination meter

K. View with steering column cover re-
moved

L. View with luggage side lower finisher
(RH) removed.

INTELLIGENT KEY : Component Description

INFOID:0000000001280397

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:0000000001280398

DOOR REQUEST SWITCH OPERATION

JMKIA0565GB

DOOR REQUEST SWITCH : System Description

INFOID:0000000001280399

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-67, "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 is OFF or LOCK position • 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 is OFF or LOCK position • 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.

JMKIA0666ZZ

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 back door only and back door can be opened with back door opener switch. Pressing back door opener switch a second time within 5 seconds will unlock all doors.
NOTE:
Anti-hijack mode can be set to OFF with CONSULT-III and Intelligent Key. For the setting information, refer to DLK-67, "CONSULT-III Function (INTELLIGENT KEY)".

DOOR REQUEST SWITCH : Component Parts Location

INFOID:0000000001394652

JMKIA0647ZZ

1. BCM
   M65, M66, M67

2. IPDM E/R
   E11, E13

3. Intelligent Key unit
   M40

4. Passenger side anti-hijack relay
   M90

5. Power window main switch (door lock and unlock switch)
   D5, D6

6. Inside key antenna (instrument center)
   M56

7. Inside key antenna (console)
   M252

8. Inside key antenna (rear seat)
   B45

9. Intelligent Key warning buzzer
   E25

10. 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

JMKIA0648ZZ

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. Front door switch (driver side)
   B34
7. Front door lock actuator (driver side)
   D9
8. Rear door lock actuator LH
   D85
9. Out side key antenna and front door request switch (driver side)
   D10
10. Out side key antenna and front door request switch (driver side)
    D10
11. Back door opener switch assembly (request switch)
    D187
12. Back door opener switch assembly (opener switch)
    D187
13. Back door lock assembly
    D190
14. Fuel lid opener actuator
    B58
15. Out side key antenna (back door)
    D191
I. Inside the combination meter
J. Inside the combination meter
K. View with steering column cover removed
L. View with luggage side lower finisher (RH) removed.

DOOR REQUEST SWITCH : Component Description

INFOID:0000000001280401

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:0000000001280402

KEY REMINDER OPERATION

JMKIA0566GB

KEY REMINDER : System Description

INFOID:0000000001280403

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:0000000001394653

JMKIA0647ZZ

1. BCM
   M65, M66, M67

2. IPDM E/R
   E11, E13

3. Intelligent Key unit
   M40

4. Passenger side anti-hijack relay
   M90

5. Power window main switch (door lock and unlock switch)
   D5, D6

6. Inside key antenna (instrument center)
   M56

7. Inside key antenna (console)
   M252

8. Inside key antenna (rear seat)
   B45

9. Intelligent Key warning buzzer
   E25

10. 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

JMKIA0648ZZ

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. Front door switch (driver side)
   B34

7. Front door lock actuator (driver side)
   D9

8. Rear door lock actuator LH
   D85

9. Out side key antenna and front door request switch (driver side)
   D10

10. Out side key antenna and front door request switch (driver side)
    D10

11. Back door opener switch assembly (request switch)
    D187

12. Back door opener switch assembly (opener switch)
    D187

13. Back door lock assembly
    D190

14. Fuel lid opener actuator
    B58

15. Out side key antenna (back door)
    D191

| I. | Inside the combination meter | J. | Inside the combination meter | K. | View with steering column cover removed |

L.   View with luggage side lower finisher
      (RH) removed.

KEY REMINDER : Component Description

INFOID:0000000001280405

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:0000000001280406

AUTO DOOR LOCK OPERATION

JMKIA0567GB

AUTO DOOR LOCK : System Description

INFOID:0000000001280407

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-67, "CONSULT-III Function (INTELLIGENT KEY)".

AUTO DOOR LOCK : Component Parts Location

INFOID:0000000001394654

JMKIA0647ZZ

1. BCM
   M65, M66, M67

2. IPDM E/R
   E11, E13

3. Intelligent Key unit
   M40

4. Passenger side anti-hijack relay
   M90

5. Power window main switch (door lock and unlock switch)
   D5, D6

6. Inside key antenna (instrument center)
   M56

7. Inside key antenna (console)
   M252

8. Inside key antenna (rear seat)
   B45

9. Intelligent Key warning buzzer
   E25

10. 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

JMKIA0648ZZ

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. Front door switch (driver side)
   B34

7. Front door lock actuator (driver side)
   D9

8. Rear door lock actuator LH
   D85

9. Out side key antenna and front door request switch (driver side)
   D10

10. Out side key antenna and front door request switch (driver side)
    D10

11. Back door opener switch assembly (request switch)
    D187

12. Back door opener switch assembly (opener switch)
    D187

13. Back door lock assembly
    D190

14. Fuel lid opener actuator
    B58

15. Out side key antenna (back door)
    D191

I. Inside the combination meter

J. Inside the combination meter

K. View with steering column cover removed

L. View with luggage side lower finisher (RH) removed.

AUTO DOOR LOCK : Component Description

INFOID:0000000001280409

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:0000000001280410

VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION

JMKIA0568GB

VEHICLE SPEED SENSING AUTO DOOR LOCK : System Description

INFOID:0000000001280411

VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION
When the vehicle speed exceeds 25 km/h (16 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:0000000001394655

JMKIA0647ZZ

1. BCM
   M65, M66, M67

2. IPDM E/R
   E11, E13

3. Intelligent Key unit
   M40

4. Passenger side anti-hijack relay
   M90

5. Power window main switch (door lock and unlock switch)
   D5, D6

6. Inside key antenna (instrument center)
   M56

7. Inside key antenna (console)
   M252

8. Inside key antenna (rear seat)
   B45

9. Intelligent Key warning buzzer
   E25

10. 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

JMKIA0648ZZ

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. Front door switch (driver side)
   B34

7. Front door lock actuator (driver side)
   D9

8. Rear door lock actuator LH
   D85

9. Out side key antenna and front door
   request switch (driver side)
   D10

10. Out side key antenna and front door re-
    quest switch (driver side)
    D10

11. Back door opener switch assembly (re-
    quest switch)
    D187

12. Back door opener switch assembly
    (opener switch)
    D187

13. Back door lock assembly
    D190

14. Fuel lid opener actuator
    B58

15. Out side key antenna (back door)
    D191

I. Inside the combination meter

J. Inside the combination meter

K. View with steering column cover re-
   moved

L. View with luggage side lower finisher
   (RH) removed.

VEHICLE SPEED SENSING AUTO DOOR LOCK : Component Description

INFOID:0000000001280413

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:0000000001280414

AIR BAG INTERLOCK UNLOCK OPERATION

JMKIA0569GB

AIR BAG INTERLOCK UNLOCK : System Description

INFOID:0000000001280415

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:0000000001394656

JMKIA0647ZZ

1. BCM
   M65, M66, M67

2. IPDM E/R
   E11, E13

3. Intelligent Key unit
   M40

4. Passenger side anti-hijack relay
   M90

5. Power window main switch (door lock and unlock switch)
   D5, D6

6. Inside key antenna (instrument center)
   M56

7. Inside key antenna (console)
   M252

8. Inside key antenna (rear seat)
   B45

9. Intelligent Key warning buzzer
   E25

10. 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

JMKIA0648ZZ

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. Front door switch (driver side)
   B34

7. Front door lock actuator (driver side)
   D9

8. Rear door lock actuator LH
   D85

9. Out side key antenna and front door
   request switch (driver side)
   D10

10. Out side key antenna and front door re-
    quest switch (driver side)
    D10

11. Back door opener switch assembly (re-
    quest switch)
    D187

12. Back door opener switch assembly
    (opener switch)
    D187

13. Back door lock assembly
    D190

14. Fuel lid opener actuator
    B58

15. Out side key antenna (back door)
    D191

I. Inside the combination meter

J. Inside the combination meter

K. View with steering column cover re-
    moved

L. View with luggage side lower finisher
    (RH) removed.

AIR BAG INTERLOCK UNLOCK : Component Description

INFOID:0000000001280417

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.

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

BACK DOOR OPENER FUNCTION
BACK DOOR OPENER SWITCH

BACK DOOR OPENER SWITCH : System Diagram

INFOID:0000000001280418

BACK DOOR OPENER OPERATION

```
Back door opener switch  ──▶  BCM  ──▶  Back door opener actuator
```

JMKIA0402GB

BACK DOOR OPENER SWITCH : System Description

INFOID:0000000001280419

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:0000000001394657

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

JMKIA0647ZZ

1. BCM
   M65, M66, M67

2. IPDM E/R
   E11, E13

3. Intelligent Key unit
   M40

4. Passenger side anti-hijack relay
   M90

5. Power window main switch (door lock and unlock switch)
   D5, D6

6. Inside key antenna (instrument center)
   M56

7. Inside key antenna (console)
   M252

8. Inside key antenna (rear seat)
   B45

9. Intelligent Key warning buzzer
   E25

10. 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

JMKIA0648ZZ

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. Front door switch (driver side)
    B34

7. Front door lock actuator (driver side)
    D9

8. Rear door lock actuator LH
    D85

9. Out side key antenna and front door
    request switch (driver side)
    D10

10. Out side key antenna and front door re-
    quest switch (driver side)
    D10

11. Back door opener switch assembly (re-
    quest switch)
    D187

12. Back door opener switch assembly
    (opener switch)
    D187

13. Back door lock assembly
    D190

14. Fuel lid opener actuator
    B58

15. Out side key antenna (back door)
    D191

I. Inside the combination meter

J. Inside the combination meter

K. View with steering column cover re-
    moved

L. View with luggage side lower finisher
    (RH) removed.

BACK DOOR OPENER SWITCH : Component Description

INFOID:0000000001280421

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.

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

WARNING FUNCTION

System Diagram

INFOID:0000000001280422

INTELLIGENT KEY WARNING OPERATION

JMKIA0409GB

BACK DOOR OPEN WARNING OPERATION

JMKIA0410GB

System Description

INFOID:0000000001280423

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.

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.	"KEY" (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.	"KEY" (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.)	"KEY" (RED blinking)	Active for 3 seconds (pipipi···	—

| 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:0000000001394658

JMKIA0647ZZ

1. BCM
   M65, M66, M67

2. IPDM E/R
   E11, E13

3. Intelligent Key unit
   M40

4. Passenger side anti-hijack relay
   M90

5. Power window main switch (door lock and unlock switch)
   D5, D6

6. Inside key antenna (instrument center)
   M56

7. Inside key antenna (console)
   M252

8. Inside key antenna (rear seat)
   B45

9. Intelligent Key warning buzzer
   E25

10. 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

JMKIA0648ZZ

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. Front door switch (driver side)
   B34

7. Front door lock actuator (driver side)
   D9

8. Rear door lock actuator LH
   D85

9. Out side key antenna and front door request switch (driver side)
   D10

10. Out side key antenna and front door request switch (driver side)
    D10

11. Back door opener switch assembly (request switch)
    D187

12. Back door opener switch assembly (opener switch)
    D187

13. Back door lock assembly
    D190

14. Fuel lid opener actuator
    B58

15. Out side key antenna (back door)
    D191

I. Inside the combination meter

J. Inside the combination meter

K. View with steering column cover removed

L. View with luggage side lower finisher (RH) removed.

Component Description

INFOID:0000000001280425

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

HAZARD AND BUZZER REMINDER FUNCTION

System Diagram
INFOID:0000000001280426

HAZARD & BUZZER REMINDER FUNCTION

JMKIA0506GB

System Description
INFOID:0000000001280427

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-67, "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	—

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:0000000001394659

JMKIA0647ZZ

1. BCM
   M65, M66, M67

2. IPDM E/R
   E11, E13

3. Intelligent Key unit
   M40

4. Passenger side anti-hijack relay
   M90

5. Power window main switch (door lock and unlock switch)
   D5, D6

6. Inside key antenna (instrument center)
   M56

7. Inside key antenna (console)
   M252

8. Inside key antenna (rear seat)
   B45

9. Intelligent Key warning buzzer
   E25

10. 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

JMKIA0648ZZ

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. Front door switch (driver side)
   B34

7. Front door lock actuator (driver side)
   D9

8. Rear door lock actuator LH
   D85

9. Out side key antenna and front door request switch (driver side)
   D10

10. Out side key antenna and front door request switch (driver side)
    D10

11. Back door opener switch assembly (request switch)
    D187

12. Back door opener switch assembly (opener switch)
    D187

13. Back door lock assembly
    D190

14. Fuel lid opener actuator
    B58

15. Out side key antenna (back door)
    D191

I. Inside the combination meter

J. Inside the combination meter

K. View with steering column cover removed

L. View with luggage side lower finisher (RH) removed.

Component Description

INFOID:0000000001280429

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.

DIAGNOSIS SYSTEM (BCM)
COMMON ITEM

COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM)
INFOID:0000000001569648

APPLICATION ITEM
CONSULT-III can display each diagnostic item using the diagnostic test modes shown following.

Diagnosis mode	Function description
ECU Identification	BCM part number is displayed.
Self-Diagnostic Results	Displays the diagnosis results judged by BCM. Refer to DLK-211, "DTC Index".
Data Monitor	BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Work Support	Changes the setting for each system function.
Configuration	• Read and save the vehicle specification. • Write the vehicle specification when replacing BCM.
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM.

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

×: Applicable item

System	CONSULT-III 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 control	INT LAMP	×	×	×
Remote keyless entry system	MULTI REMOTE ENT	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER		×	×
Air conditioner	AIR CONDITONER		×	
Intelligent Key system	INTELLIGENT KEY		×	
Combination switch	COMB SW		×	
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door open	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
Signal buffer system	SIGNAL BUFFER		×	×
—	PTC HEATER*			

*: This item is displayed, but is not function.

DOOR LOCK

DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)
INFOID:0000000001280431

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.
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

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:0000000001280432*

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:0000000001280433*

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].

DIAGNOSIS SYSTEM (INTELLIGENT KEY UNIT)

CONSULT-III Function (INTELLIGENT KEY)

INFOID:0000000001557124

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-60.	
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-169, "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, LED (on Intelligent Key) blinks. • ROOM ANT1: Inside key antenna (console) transmissions can be detected by Intelligent Key, when "ROOM ANT1" is selected. • ROOM ANT2: Inside key antenna (instrument center/rear seat) transmissions can be detected by Intelligent Key, when "ROOM ANT2"is selected. • DRIVER ANT: Outside key antenna (driver side) transmissions can be detected by Intelligent Key, when "DRIVER ANT" is selected. • ASSIST ANT: Outside key antenna (passenger side) transmissions can be detected by Intelligent Key, when "ASSIST ANT" is selected. • BK DOOR ANT: Outside key antenna (rear bumper) transmissions can be detected by 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

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.

COMPONENT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000001559403

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-25, "CAN Communication Signal Chart".

DTC Logic

INFOID:0000000001280437

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:0000000001559404

1.PERFORM SELF DIAGNOSTIC

1. Turn ignition switch ON and wait for 2 seconds or more.
2. Check "Self Diagnostic Result" of Intelligent Key unit.

Is "CAN COMM CIRCUIT" displayed?

YES   >> Refer to LAN-13, "Trouble Diagnosis Flow Chart".
NO   >> Refer to GI-39, "Intermittent Incident".

U1010 CONTROL UNIT (CAN)

Description
INFOID:0000000001280439

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-25, "CAN Communication Signal Chart".

DTC Logic
INFOID:0000000001280440

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:0000000001280441

1.REPLACE INTELLIGENT KEY UNIT

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

>> Replace Intelligent Key unit.

Special Repair Requirement
INFOID:0000000001280442

1.REQUIRED WORK WHEN REPLACING INTELLIGENT KEY UNIT

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

>> Work end.

POWER SUPPLY AND GROUND CIRCUIT
INTELLIGENT KEY UNIT

INTELLIGENT KEY UNIT : Diagnosis Procedure

INFOID:0000000001280447

1.CHECK FUSE AND FUSIBLE LINK

Check that the following fuse is not blown.

Terminal No.	Signal name	Fuse No.
11	Battery power supply	14 (10A)
6	Ignition power supply	1 (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			
Connector	Terminal	Ground	
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:0000000001280448

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	10 (10A)
57		J (50A)
3	Ignition power supply	1 (10A)
4	ACC power supply	20 (10A)

POWER SUPPLY AND GROUND CIRCUIT

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			Condition	Voltage (Approx.)
(+)		(−)		
BCM				
Connector	Terminal			
M66	41	Ground	Turn ignition switch OFF	Battery voltage
M67	57			
M65	3		Turn ignition switch ON	
	4		Turn ignition switch ACC	

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		Exists

Does continuity exist?

YES   >> BCM power supply and ground circuit are OK.

NO   >> Repair harness or connector.

DOOR LOCK AND UNLOCK SWITCH

Description

INFOID:0000000001280449

Transmits door lock/unlock operation to BCM.

Component Function Check

INFOID:0000000001280450

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-74, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001280451

1.CHECK DOOR LOCK AND UNLOCK SWITCH INPUT SIGNAL

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

Terminal			Signal (Reference value)
(+)		(–)	
Power window main switch (door lock and unlock switch) connector	Terminal		
D5	6	Ground	
D6	18		

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 power window main switch (door lock and unlock switch) connector.

BCM connector	Terminal	Power window main switch (door lock and unlock switch) connector	Terminal	Continuity
M65	32	D5	6	Exists
	34	D6	18	

DLK-74

A

4. Check continuity between BCM connector and ground.

B

BCM connector	Terminal		Continuity
M65	32	Ground	Does not exist
	34		

C

Is the inspection result normal?

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

D

3.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

Check continuity between power window main switch (door lock and unlock switch) connector and ground.

E

Power window main switch (door lock and unlock switch) connector	Terminal	Ground	Continuity
D6	17		Exists

F

Is the inspection result normal?

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

G

4.CHECK BCM OUTPUT SIGNAL

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

H

Terminal			Signal (Reference value)
(+)		(−)	
BCM connector	Terminal		
M65	32	Ground	
	34		

I

J

DLK

Is the inspection result normal?

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

L

5.CHECK DOOR LOCK AND UNLOCK SWITCH

Check power window main switch (door lock and unlock switch).
Refer to DLK-75, "Component Inspection".

M

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace power window main switch (door lock and unlock switch). Refer to PWC-83, "Removal and Installation".

N

6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

O

>> INSPECTION END

Component Inspection

INFOID:0000000001280452

P

1.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch.

Power window main switch	Terminal		Condition	Continuity
D5	6	17	LOCK	Exists
D6	18		UNLOCK	

Is the inspection result normal?

YES   >> Door lock and unlock switch is OK.
NO   >> Replace power windou main switch. Refer to PWC-83, "Removal and Installation".

DOOR REQUEST SWITCH
DRIVER SIDE

DRIVER SIDE : Description
INFOID:0000000001280457

Transmits lock/unlock operation to Intelligent Key unit.

DRIVER SIDE : Component Function Check
INFOID:0000000001280458

1.CHECK FUNCTION

⊡**With CONSULT-III**
Check door request switch "DR REQ SW" in "Data Monitor" mode with CONSULT-III.

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:0000000001280459

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 6.
NO   >> GO TO 2.

2.CHECK FRONT DOOR REQUEST SWITCH CIRCUIT

1. Disconnect Intelligent Key unit connector.
2. Check continuity between Intelligent Key unit harness connector and outside key antenna and front door request switch (driver side) harness connector.

Intelligent Key unit connector	Terminal	Outside key antenna and front door request switch (driver side)	Terminal	Continuity
M40	5	D30	3	Exists

3. Check continuity between Intelligent Key unit harness 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 outside key antenna and front door request switch (driver side).

DLK-77

3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between outside key antenna and front door request switch (driver side) harness connector and ground.

Outside key antenna and front door request switch (driver side) connector	Terminal	Ground	Continuity
D30	4		Exists

Is the inspection result normal?

YES   >> GO TO 4.
NO   >> Repair or replace outside key antenna and front door request switch (driver side) ground circuit.

4.CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

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

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

Is the inspection result normal?

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

5.CHECK DOOR REQUEST SWITCH

Check outside key antenna and front door request switch (driver side).
Refer to DLK-78, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES   >> GO TO 6.
NO   >> Replace front outside handle (driver side). Refer to DLK-282, "OUTSIDE HANDLE : Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

DRIVER SIDE : Component Inspection   INFOID:0000000001280460

1.CHECK DOOR REQUEST SWITCH

Check outside key antenna and front door request switch (driver side).

Terminal		Door request switch condition	Continuity
Outside key antenna and front door request switch (driver side)			
3	4	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES   >> Door request switch is OK.
NO   >> Replace front outside handle (driver side). Refer to DLK-282, "OUTSIDE HANDLE : Removal and Installation".

PASSENGER SIDE

PASSENGER SIDE : Description   INFOID:0000000001280461

Transmits lock/unlock operation to Intelligent Key unit.

PASSENGER SIDE : Component Function Check

INFOID:0000000001280462

1.CHECK FUNCTION

With CONSULT-III

Check door request switch "AS REQ SW" in "Data Monitor" mode with CONSULT-III.

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:0000000001280463

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 6.
NO   >> GO TO 2.

2.CHECK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect Intelligent Key unit connector.
2. Check continuity between Intelligent Key unit harness connector and outside key antenna and front door request switch (passenger side) harness connector.

Intelligent Key unit connector	Terminal	Outside key antenna and front door request switch (passenger side) connector	Terminal	Continuity
M40	25	D69	3	Exists

3. Check continuity between Intelligent Key unit harness 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 outside key antenna and front door request switch (passenger side).

3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between outside key antenna and front door request switch (passenger side) harness connector and ground.

Outside key antenna and front door request switch (passenger side) connector	Terminal	Ground	Continuity
D69	4		Exists

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace outside key antenna and front door request switch (passenger side) ground circuit.

4.CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

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

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

Is the inspection result normal?

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

5.CHECK DOOR REQUEST SWITCH

Check outside key antenna and front door request switch (passenger side).
Refer to DLK-82, "BACK DOOR : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace front outside handle (passenger side). Refer to DLK-282, "OUTSIDE HANDLE : Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

PASSENGER SIDE : Component Inspection   INFOID:0000000001280464

1.CHECK DOOR REQUEST SWITCH

Check outside key antenna and front door request switch (passenger side).

Terminal		Door request switch condition	Continuity
Outside key antenna and front door request switch (passenger side)			
3	4	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Door request switch is OK.
NO >> Replace front outside handle (passenger side). Refer to DLK-282, "OUTSIDE HANDLE : Removal and Installation".

BACK DOOR

BACK DOOR : Description   INFOID:0000000001280465

Transmits lock/unlock operation to Intelligent Key unit.

BACK DOOR : Component Function Check

INFOID:0000000001280466

1.CHECK FUNCTION

With CONSULT-III

Check door request switch "BD/TR REQ SW" in "Data Monitor" mode with CONSULT-III.

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:0000000001280467

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 6.
NO >> GO TO 2.

2.CHECK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect Intelligent Key unit connector.
2. Check continuity between Intelligent Key unit harness connector and back door opener switch assembly (request switch) harness connector.

Intelligent Key unit connector	Terminal	Back door opener switch (request switch) connector	Terminal	Continuity
M40	29	D186	3	Exists

3. Check continuity between Intelligent Key unit harness 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 opener switch assembly (request switch).

3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

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

Back door opener switch assembly (request switch) connector	Terminal	Ground	Continuity
D186	4		Exists

Is the inspection result normal?

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

4.CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

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

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

Is the inspection result normal?

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

5.CHECK DOOR REQUEST SWITCH

Check back door opener switch assembly (request switch).
Refer to DLK-82, "BACK DOOR : Component Inspection".

Is the inspection result normal?

YES   >> GO TO 6.
NO   >> Replace back door opener switch assembly (request switch). Refer to DLK-299, "Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

BACK DOOR : Component Inspection   *INFOID:0000000001280468*

1.CHECK DOOR REQUEST SWITCH

Check back door opener switch assembly (request switch).

Terminal		Door request switch condition	Continuity
Back door opener switch assembly (request switch)			
3	4	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES   >> Back door request switch is OK.
NO   >> Replace back door opener switch assembly (request switch). Refer to DLK-299, "Removal and Installation".

DOOR SWITCH
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001280469

Detects door open/closed condition.

DRIVER SIDE : Component Function Check

INFOID:0000000001280470

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   >> Front door switch (driver side) is OK.
NO   >> Refer to DLK-83, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001280471

1.CHECK DOOR SWITCH INPUT SIGNAL

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

Terminals			Door condition	Voltage (V) (Approx.)
(+)		(−)		
BCM connector	Terminal			
M65	15	Ground	OPEN	0
			CLOSE	

JPMIA0011GB

Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

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

BCM connector	Terminal	Front door switch (driver side) connector	Terminal	Continuity
M65	15	B34	2	Exists

3. Check continuity between BCM harness connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	15		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 front door switch (driver side).
Refer to DLK-84, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES   >> GO TO 4.
NO   >> Replace front door switch (driver side). Refer to DLK-292, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

DRIVER SIDE : Component Inspection   INFOID:0000000001280472

1.CHECK DOOR SWITCH

Check front door switch (driver side).

Terminal		Door switch condition	Continuity
front door switch (driver side)			
2	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES   >> Front door switch (driver side) is OK.
NO   >> Replace front door switch (driver side). Refer to DLK-292, "Removal and Installation".

PASSENGER SIDE

PASSENGER SIDE : Description   INFOID:0000000001280473

Detects door open/closed condition.

PASSENGER SIDE : Component Function Check   INFOID:0000000001280474

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   >> Front door switch (passenger side) is OK.
NO   >> Refer to DLK-84, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure   INFOID:0000000001280475

1.CHECK DOOR SWITCH INPUT SIGNAL

1.   Turn ignition switch OFF.

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

Terminals		(−)	Door condition	Voltage (V) (Approx.)
(+)				
BCM connector	Terminal			
M65	14	Ground	OPEN	0
			CLOSE	

Is the inspection result normal?

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

2. CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector and front door switch (passenger side) connector.
2. Check continuity between BCM harness connector and front door switch (passenger side) harness connector.

BCM connector	Terminal	Front door switch (passenger side) connector	Terminal	Continuity
M65	14	B27	2	Exists

3. Check continuity between BCM harness connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	14		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 front door switch (passenger side).
Refer to DLK-85, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES   >> GO TO 4.
NO   >> Replace front door switch (passenger side). Refer to DLK-292, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

PASSENGER SIDE : Component Inspection   INFOID:0000000001280476

1. CHECK DOOR SWITCH

Check front door switch (passenger side).

Terminal		Door switch condition	Continuity
Front door switch (passenger side)			
2	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES   >> Front door switch (passenger side) is OK.
NO   >> Replace front door switch (passenger side). Refer to DLK-292, "Removal and Installation".

REAR LH

REAR LH : Description

INFOID:0000000001280477

Detects door open/closed condition.

REAR LH : Component Function Check

INFOID:0000000001280478

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

REAR LH : Diagnosis Procedure

INFOID:0000000001280479

1.CHECK DOOR SWITCH INPUT SIGNAL

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

Terminals			Door condition	Voltage (V) (Approx.)
(+)		(−)		
BCM connector	Terminal			
M65	16	Ground	OPEN	0
			CLOSE	

JPMIA0011GB

Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

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

BCM connector	Terminal	Rear door switch LH connector	Terminal	Continuity
M65	16	B71	2	Exists

3. Check continuity between BCM harness connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	16		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

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

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace rear door switch LH. Refer to DLK-292, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

REAR LH : Component Inspection

INFOID:0000000001280480

1.CHECK DOOR SWITCH

Check rear door switch LH.

Terminal		Door switch condition	Continuity
Rear door switch LH			
2	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Rear door switch LH is OK.
NO >> Replace rear door switch LH. Refer to DLK-292, "Removal and Installation".

REAR RH

REAR RH : Description

INFOID:0000000001280481

Detects door open/close condition.

REAR RH : Component Function Check

INFOID:0000000001280482

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 >> Rear door switch RH is OK.
NO >> Refer to DLK-88, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000001280483

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	12	Ground	OPEN	0
			CLOSE	

JPMIA0011GB

Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

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

BCM connector	Terminal	Rear door switch RH connector	Terminal	Continuity
M65	12	B53	2	Exists

3. Check continuity between BCM harness 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 between BCM and door switch.

3.CHECK DOOR SWITCH

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

Is the inspection result normal?

YES   >> GO TO 4.
NO   >> Replace rear door switch RH. Refer to DLK-290, "DOOR LOCK : Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

      >> INSPECTION END

REAR RH : Component Inspection

INFOID:0000000001280484

1.CHECK DOOR SWITCH

Check rear door switch RH.

Terminal		Door switch condition	Continuity
Rear door switch RH			
2	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES   >> Rear door switch RH is OK.
NO   >> Replace rear door switch RH. Refer to DLK-290, "DOOR LOCK : Removal and Installation".

BACK DOOR

BACK DOOR : Description   *INFOID:0000000001280485*

Detects back door open condition.

BACK DOOR : Component Function Check   *INFOID:0000000001280486*

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:0000000001280487*

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

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

Terminals			Back door condition	Voltage (V) (Approx.)
(+)		(−)		
BCM connector	Terminal			
M65	13	Ground	OPEN	0
			CLOSE	Battery voltage

Is the inspection result normal?

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

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

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

BCM connector	Terminal	Back door lock assembly (door switch) connector	Terminal	Continuity
M65	13	D190	2	Exists

3.   Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	13		Does not exist

Is the inspection result normal?

YES   >> GO TO 3.
NO   >> Repair or replace harness between BCM and back door lock assembly (door switch).

3.CHECK BACK DOOR LOCK ASSEMBLY GROUND CIRCUIT

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

Back door lock assembly (door switch) connector	Terminal	Ground	Continuity
D190	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 harness connector and ground.

Terminals			Voltage (V) (Approx.)
(+)		(−)	
BCM connector	Terminal		
M65	13	Ground	Battery voltage

Is the inspection result normal?

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

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   >> GO TO 6.
NO   >> Replace back door lock assembly (door switch). Refer to DLK-290, "DOOR LOCK : Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

BACK DOOR : Component Inspection   *INFOID:0000000001280488*

1.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

Check back door lock assembly (door switch).

Terminal		Back door condition	Continuity
Back door lock assembly (door switch)			
2	1	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. Refer to DLK-290, "DOOR LOCK : Removal and Installation".

KEY SWITCH

Description

INFOID:0000000001280489

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:0000000001280490

1.CHECK KEY SWITCH INPUT SIGNAL

Check key switch ("KEY SW") in "Data Monitor" mode with CONSULT-III.

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:0000000001280491

1.CHECK KEY SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect Intelligent Key unit connector 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	5	Ground	Insert mechanical key into key cylinder	Battery voltage
			Remove mechanical key from key cylinder	0

Is the inspection result normal?

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

2.CHECK KEY SWITCH POWER SUPPLY CIRCUIT

1. Remove mechanical key from key cylinder.
2. Disconnect ignition knob switch, key switch and key lock solenoid connector.
3. Check voltage between ignition knob switch, key switch and key lock solenoid harness connector and ground.

Terminals			Voltage (V) (Approx.)
(+)		(–)	
Ignition knob switch, key switch and key lock solenoid 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 ignition knob switch, key switch and key lock solenoid harness connector.

Intelligent Key unit connector	Terminal	Ignition knob switch, key switch and key lock solenoid connector	Terminal	Continuity
M40	7	M25	1	Exists

2. Check continuity between BCM harness connector and ignition knob switch, key switch and key lock solenoid harness connector.

BCM connector	Terminal	Ignition knob switch, key switch and key lock solenoid connector	Terminal	Continuity
M65	5	M25	1	Exists

3. Check continuity between ignition knob switch, key switch and key lock solenoid harness connector and ground.

Ignition knob switch, key switch and key lock solenoid 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.
Refer to DLK-92, "Component Inspection".

Is the inspection result normal?

yes   >> GO TO 5.
NO   >> Replace key cylinder assembly.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

Component Inspection   *INFOID:0000000001280492*

COMPONENT INSPECTION

1.CHECK KEY SWITCH

Check continuity between ignition knob switch, key switch and key lock solenoid terminals.

Terminal	Condition	Continuity
Ignition knob switch, key switch and key lock solenoid		

1	2	Insert mechanical key into key cylinder	Exists
		Remove mechanical key from key cylinder	Does not exist

<u>Is the inspection result normal?</u>

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

IGNITION KNOB SWITCH

Description
INFOID:0000000001280493

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

Component Function Check
INFOID:0000000001280494

1.CHECK IGNITION KNOB SWITCH INPUT SIGNAL

Check ignition knob switch ("PUSH SW") in "Data Monitor" mode with CONSULT-III.

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 DLK-94, "Diagnosis Procedure".

Diagnosis Procedure
INFOID:0000000001280495

1.CHECK IGNITION KNOB SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect Intelligent Key unit 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   >> GO TO 5.
NO   >> GO TO 2.

2.CHECK IGNITION KNOB SWITCH POWER SUPPLY CIRCUIT

1. Disconnect ignition knob switch, key switch and key lock solenoid connector.
2. Check voltage between ignition knob switch, key switch and key lock solenoid harness connector and ground.

Terminals			Voltage (V) (Approx.)
(+)		(−)	
Ignition knob switch, key switch and key lock solenoid 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, key switch and key lock solenoid harness connector.

Intelligent Key unit connector	Terminal	Ignition knob switch, key switch and key lock solenoid connector	Terminal	Continuity
M40	27	M25	3	Exists

2. Check continuity between ignition knob switch, key switch and key lock solenoid connector and ground.

Ignition knob switch, key switch and key lock solenoid 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.
Refer to DLK-95, "Component Inspection".

Is the inspection result normal?

YES   >> GO TO 5.
NO   >> Replace ignition knob switch, key switch and key lock solenoid.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000001280496

1.CHECK IGNITION KNOB SWITCH

Check continuity between ignition knob switch, key switch and key lock solenoid terminals under the following conditions.

Ignition knob switch, key switch and key lock solenoid		Condition	Continuity
Terminal			
3	4	Ignition knob switch is pressed	Exists
		Ignition knob switch is released	Does not exist

Is the inspection result normal?

YES   >> Ignition knob switch, key switch and key lock solenoid is OK.
NO   >> Replace ignition knob switch, key switch and key lock solenoid.

DOOR LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001280497

Locks/unlocks the door with the signal from BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000001280498

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 >> Front door lock actuator (driver side) is OK.
NO >> Refer to DLK-96, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001280499

1.CHECK BCM OUTPUT SIGNAL

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

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

BCM connector	Terminal	Front door lock actuator (driver side) connector	Terminal	Continuity
M67	56	D29	1	Exists
	60		2	

3. Check continuity between BCM harness connector and ground.

BCM connector	Terminal		Continuity
M67	56	Ground	Does not exist
	60		

Is the inspection result normal?

YES >> GO TO 6.

A

NO   >> GO TO 3.

3.CHECK DOOR LOCK ACTUATOR CIRCUIT 2

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

B

BCM connector	Terminal	Passenger side anti-hijack relay connector	Terminal	Continuity
M67	56	M90	3	Exists

C

3. Check continuity between BCM harness connector and ground.

D

BCM connector	Terminal	Ground	Continuity
M67	56		Does not exist

E

Is the inspection result normal?

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

F

4.CHECK DOOR LOCK ACTUATOR CIRCUIT 3

Check passenger side anti-hijack relay.

G

Passenger side relay connector	Terminal		Continuity
M90	3	4	Exists

H

Is the inspection result normal?

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

I

5.CHECK DOOR LOCK ACTUATOR CIRCUIT 4

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

J

Passenger side anti-hijack relay connector	Terminal	Front door lock actuator (driver side) connector	Terminal	Continuity
M90	4	D29	1	Exists

DLK

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

L

Passenger side anti-hijack relay connector	Terminal	Ground	Continuity
M90	4		Does not exist

M

Is the inspection result normal?

YES   >> GO TO 6.
NO   >> Repair or replace harness.

N

6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

O

>> INSPECTION END

PASSENGER SIDE

PASSENGER SIDE : Description   INFOID:0000000001280502

P

Locks/unlocks the door with the signal from BCM.

DOOR LOCK ACTUATOR

PASSENGER SIDE : Component Function Check

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 >> Front door lock actuator (passenger side) is OK.
 NO >> Refer to DLK-98, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

1.CHECK BCM OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM harness 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 connector and front door lock actuator (passenger side) connector.
2. Check continuity between BCM harness connector and front door lock actuator (passenger side) harness connector.

BCM connector	Terminal	Front door lock actuator (passenger side) connector	Terminal	Continuity
M67	56	D68	2	Exists
	54		1	

3. Check continuity between BCM harness connector and ground.

BCM connector	Terminal		Continuity
M67	56	Ground	Does not exist
	54		

Is the inspection result normal?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

REAR LH

REAR LH : Description
INFOID:0000000001280506

Locks/unlocks the door with the signal from BCM.

REAR LH : Component Function Check
INFOID:0000000001280507

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

REAR LH : Diagnosis Procedure
INFOID:0000000001280508

1.CHECK BCM OUTPUT SIGNAL

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

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

BCM connector	Terminal	Rear door lock actuator LH connector	Terminal	Continuity
M67	56	D115	1	Exists
	54		2	

3. Check continuity between BCM harness connector and ground.

BCM connector	Terminal		Continuity
M67	56	Ground	Does not exist
	54		

Is the inspection result normal?
　YES　>> GO TO 6.
　NO　　>> GO TO 3.

3.CHECK DOOR LOCK ACTUATOR CIRCUIT 2

1. Disconnect passenger side anti-hijack relay connector.

2. Check continuity between BCM harness connector and passenger side anti-hijack relay harness connector.

BCM connector	Terminal	Passenger side anti-hijack relay connector	Terminal	Continuity
M67	56	M90	3	Exists

3. Check continuity between BCM harness 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 3

Check passenger side anti-hijack relay.

Passenger side anti-hijack relay connector	Terminal		Continuity
M90	3	4	Exists

Is the inspection result normal?

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

5. CHECK DOOR LOCK ACTUATOR CIRCUIT 4

1. Check continuity between passenger side anti-hijack relay harness connector and rear door lock actuator LH harness connector.

Passenger side anti-hijack relay connector	Terminal	Rear door lock actuator LH connector	Terminal	Continuity
M90	4	D115	1	Exists

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

Passenger side anti-hijack relay connector	Terminal	Ground	Continuity
M90	4		Does not exist

Is the inspection result normal?

YES   >> GO TO 6.
NO   >> Repair or replace harness.

6. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

REAR RH

REAR RH : Description   *INFOID:0000000001280510*

Locks/unlocks the door with the signal from BCM.

REAR RH : Component Function Check   *INFOID:0000000001280511*

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-101, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000001280512

1.CHECK BCM OUTPUT SIGNAL

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

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

BCM connector	Terminal	Rear door lock actuator RH connector	Terminal	Continuity
M67	56	D95	2	Exists
	54		1	

4. Check continuity between BCM harness connector and ground.

BCM connector	Terminal		Continuity
M67	56	Ground	Does not exist
	54		

Is the inspection result normal?

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

3.CHECK DOOR LOCK ACTUATOR CIRCUIT 2

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

BCM connector	Terminal	Anti-hijack relay connector	Terminal	Continuity
M67	56	M90	3	Exists

3. Check continuity between BCM harness 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 3

Check passenger side 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 4

1.　Check continuity between passenger side anti-hijack relay harness connector and rear door lock actuator RH harness connector.

Passenger side anti-hijack relay connector	Terminal	Rear door lock actuator RH connector	Terminal	Continuity
M90	3	D95	3	Exists

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

Passenger side anti-hijack relay connector	Terminal	Ground	Continuity
M90	3		Does not exist

Is the inspection result normal?

　YES　>> GO TO 6.
　NO　　>> Repair or replace harness.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

　　　　>> INSPECTION END

BACK DOOR OPENER ACTUATOR

Description
INFOID:0000000001280514

Opens the back door with the signal from BCM.

Component Function Check
INFOID:0000000001280515

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 opener actuator operation

Is the inspection result normal?

  YES   >> Back door opener actuator is OK.
  NO   >> Refer to DLK-103, "Diagnosis Procedure".

Diagnosis Procedure
INFOID:0000000001280516

1.CHECK BCM OUTPUT SIGNAL

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

BCM connector	Terminal	Back door lock assembly connector	Terminal	Continuity
M66	45	D190	4	Exists

4. Check continuity between BCM harness 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 harness connector and ground.

Back door lock assembly connector	Terminal	Ground	Continuity
D190	3		Exists

Is the inspection result normal?

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

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

FUEL LID OPENER ACTUATOR

Description
INFOID:0000000001297520

Locks/unlocks the fuel lid with the signal from BCM.

Component Function Check
INFOID:0000000001297521

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 fuel lid opener actuator are unlocked
	:DR UNLK	The fuel lid opener actuator is unlocked
	:LOCK	The fuel lid opener actuator are locked

Is the inspection result normal?

YES >> Fuel lid opener actuator is OK.
NO >> Refer to DLK-105, "Diagnosis Procedure".

Diagnosis Procedure
INFOID:0000000001297522

1.CHECK BCM OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM harness 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 FUEL LID OPENER ACTUATOR CIRCUIT 1

1. Disconnect BCM connector and fuel lid opener actuator connector.
2. Check continuity between BCM harness connector and fuel lid opener actuator harness connector.

BCM connector	Terminal	Fuel lid opener actuator connector	Terminal	Continuity
M67	56	B58	2	Exists
	60		1	

3. Check continuity between BCM harness connector and ground.

BCM connector	Terminal		Continuity
M67	56	Ground	Does not exist
	60		

Is the inspection result normal?

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

3.CHECK FUEL LID OPENER ACTUATOR CIRCUIT 2

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

BCM connector	Terminal	Passenger side anti-hijack relay connector	Terminal	Continuity
M67	56	M90	3	Exists

3.   Check continuity between BCM harness 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 FUEL LID OPENER ACTUATOR CIRCUIT 3

Check passenger side of anti-hijack relay.

Passenger side anti-hijack relay connector	Terminal		Continuity
M90	3	4	Exists

Is the inspection result normal?

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

5.CHECK DOOR LOCK ACTUATOR CIRCUIT 4

1.   Check continuity between passenger side anti-hijack relay harness connector and fuel lid opener actuator harness connector.

Passenger side anti-hijack relay connector	Terminal	Fuel lid opener actuator connector	Terminal	Continuity
M90	4	B58	2	Exists

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

Passenger side anti-hijack relay connector	Terminal	Ground	Continuity
M90	4		Does not exist

Is the inspection result normal?

YES   >> GO TO 6.
NO   >> Repair or replace harness.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

BACK DOOR OPENER SWITCH

Description
INFOID:0000000001280518

Sends the back door opening signal to BCM.

Component Function Check
INFOID:0000000001280519

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

<u>Is the inspection result normal?</u>

YES   >> Back door opener switch is OK.
NO   >> Refer to <u>DLK-107, "Diagnosis Procedure"</u>.

Diagnosis Procedure
INFOID:0000000001280520

1.CHECK BCM INPUT SIGNAL

Check voltage between BCM harness connector and ground.

Terminals			Condition of back door opener switch	Voltage (V) (Approx.)
(+)		(−)		
BCM connector	Terminal			
M65	29	Ground	Pressed	0
			Released	Battery voltage

<u>Is the inspection result normal?</u>

YES   >> GO TO 5.
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 assembly (opener switch) connector.
3. Check continuity between BCM harness connector and back door opener switch assembly (opener switch) harness connector.

BCM connector	Terminal	Back door opener switch assembly (opener switch) connector	Terminal	Continuity
M65	29	D186	1	Exists

4. Check continuity between BCM harness connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	29		Does not exist

<u>Is the inspection result normal?</u>

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

3.CHECK BCM OUTPUT SIGNAL

Check voltage between BCM harness connector and ground.

Terminals			Voltage (V) (Approx.)
(+)		(−)	
BCM connector	Terminal		
M65	29	Ground	Battery voltage

<u>Is the inspection result normal?</u>

YES   >> GO TO 4.
NO   >> GO TO 6.

4.CHECK BACK DOOR OPENER SWITCH GROUND CIRCUIT

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

Back door opener switch assembly (opener switch) connector	Terminal	Ground	Continuity
D186	2		Exists

<u>Is the inspection result normal?</u>

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

5.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch assembly (opener switch).
Refer to DLK-108, "Component Inspection".

<u>Is the inspection result normal?</u>

YES   >> GO TO 6.
NO   >> Replace back door opener switch assembly. Refer to DLK-300, "Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

Component Inspection   *INFOID:0000000001280521*

1.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch assembly (opener switch).

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

<u>Is the inspection result normal?</u>

YES   >> Back door opener switch assembly (opener switch) is OK.
NO   >> Replace back door opener switch assembly. Refer to DLK-300, "Removal and Installation".

OUTSIDE KEY ANTENNA
DRIVER SIDE

DRIVER SIDE : Description   *INFOID:0000000001280522*

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

DRIVER SIDE : Component Function Check   *INFOID:0000000001280523*

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, LED (on Intelligent Key) blinks.

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

Is the inspection result normal?

YES   >> Outside key antenna (driver side) is OK.
NO   >> Refer to DLK-115, "BACK DOOR : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure   *INFOID:0000000001280524*

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

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.	(V) 15 10 5 0 — 1 s — JMKIA0397ZZ
					When Intelligent Key is not in the antenna detection area.	(V) 15 10 5 0 — 1 s — JMKIA0514ZZ
	Driver side (-)	20			When Intelligent Key is in the antenna detection area.	(V) 15 10 5 0 — 1 s — JMKIA0395ZZ
					When Intelligent Key is not in the antenna detection area.	(V) 15 10 5 0 — 1 s — JMKIA0515ZZ

Is the inspection result normal?

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

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and outside key antenna and front door request switch (driver side) connector.
2. Check continuity between Intelligent Key unit harness connector and outside key antenna and front door request switch (driver side) harness connector.

Intelligent Key unit connector	Terminal	Outside key antenna and front door request switch (driver side) connector	Terminal	Continuity
M40	19	D30	1	Exists
	20		2	

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

DLK-110

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 (driver side).

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 harness connector and ground with oscilloscope.

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

Is the inspection result normal?

YES >> Replace outside key antenna and front door request switch (driver side). Refer to DLK-296, "DRIVER SIDE : Removal and Installation".

NO >> GO TO 4.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

PASSENGER SIDE

PASSENGER SIDE : Description   *INFOID:0000000001280525*

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

PASSENGER SIDE : Component Function Check   *INFOID:0000000001280526*

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, LED (on Intelligent Key) blinks.

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

Is the inspection result normal?

YES   >> Outside key antenna (passenger side) is OK.
NO   >> Refer to DLK-112, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure   *INFOID:0000000001280527*

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

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.	(graph) JMKIA0397ZZ
					When Intelligent Key is not in the antenna detection area.	(graph) JMKIA0514ZZ
	Passenger side (-)	38			When Intelligent Key is in the antenna detection area.	(graph) JMKIA0395ZZ
					When Intelligent Key is not in the antenna detection area.	(graph) JMKIA0515ZZ

Is the inspection result normal?

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

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and outside key antenna and front door request switch (passenger side) connector.
2. Check continuity between Intelligent Key unit harness connector and outside key antenna and front door request switch (passenger side) harness connector.

Intelligent Key unit connector	Terminal	Outside key antenna and front door request switch (passenger side) connector	Terminal	Continuity
M40	37	D69	1	Exists
	38		2	

3. Check continuity between Intelligent Key unit harness 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 and front door request switch (passenger side).

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 harness connector and ground with oscilloscope.

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 and front door request switch (passenger side). Refer to DLK-296, "PASSENGER SIDE : Removal and Installation".

A

NO   >> GO TO 4.

4.CHECK INTERMITTENT INCIDENT

B

Refer to GI-39, "Intermittent Incident".

C

>> INSPECTION END

BACK DOOR

BACK DOOR : Description   *INFOID:0000000001280528*

D

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

E

BACK DOOR : Component Function Check   *INFOID:0000000001280529*

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL

F

⊞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, LED (on Intelligent Key) blinks.

G

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

H

Is the inspection result normal?

YES   >> Outside key antenna (back door) is OK.
NO   >> Refer to DLK-115, "BACK DOOR : Diagnosis Procedure".

I

BACK DOOR : Diagnosis Procedure   *INFOID:0000000001280530*

J

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

DLK

L

M

N

O

P

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
			Request switch is pressed — When Intelligent Key is not in the antenna detection area.	JMKIA0514ZZ
M40 (Rear bumper (-))	18	Ground	Request switch is pressed — When Intelligent Key is in the antenna detection area.	JMKIA0395ZZ
			Request switch is pressed — When Intelligent Key is not in the antenna detection area.	JMKIA0515ZZ

Is the inspection result normal?

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

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

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

Intelligent Key unit connector	Terminal	Outside key antenna (back door) connector	Terminal	Continuity
M40	17	D191	1	Exists
	18		2	

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

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 (back door).

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 (back door) connector.
3. Check signal between Intelligent Key unit harness connector and ground with oscilloscope.

Terminal				Condition	Signal (Reference value)
(+)		(−)			
Intelligent Key unit connector	Terminal				
M40	17 Rear bumper (+)	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
	18 Rear bumper (-)			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 (back door). Refer to DLK-296, "BACK DOOR : Removal and Installation".
NO   >> GO TO 4.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

INSIDE KEY ANTENNA
INSTRUMENT CENTER

INSTRUMENT CENTER : Description

INFOID:0000000001280531

Detects whether Intelligent Key is inside the vehicle.

INSTRUMENT CENTER : Component Function Check

INFOID:0000000001280532

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, LED (on Intelligent Key) blinks.

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

Is the inspection result normal?

YES >> Inside key antenna (instrument center) is OK.
NO >> Refer to DLK-119, "INSTRUMENT CENTER : Diagnosis Procedure".

INSTRUMENT CENTER : Diagnosis Procedure

INFOID:0000000001280533

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

Terminals			Condition	Signal (Reference value)
(+)		(−)		
Intelligent Key unit connector	Terminal			
M40	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
	34			When Intelligent Key is in the antenna detection area.
				JMKIA0392ZZ
				When Intelligent Key is not in the antenna detection area.
				JMKIA0390ZZ

(Note: the (+) terminal rows are "Instrument center (+)" with terminal 33, and "Instrument center (-)" with terminal 34.)

Is the inspection result normal?

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

2.CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and inside key antenna (instrument center) connector.
2. Check continuity between Intelligent Key unit harness connector and inside key antenna (instrument center) harness connector.

Intelligent Key unit connector	Terminal	Inside key antenna (instrument center) connector	Terminal	Continuity
M40	33	M56	1	Exists
	34		2	

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

DLK-120

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 (instrument center).

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 (instrument center) connector.
3. Check signal between Intelligent Key unit harness connector and ground with oscilloscope.

Terminals (+) Intelligent Key unit connector	Terminal	(−)	Condition	Signal (Reference value)
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
M40				
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 (instrument center). Refer to DLK-293, "INSTRUMENT CENTER : Removal and Installation".

NO   >> GO TO 4.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

CONSOLE

CONSOLE : Description
INFOID:0000000001280534

Detects whether Intelligent Key is inside the vehicle.

CONSOLE : Component Function Check
INFOID:0000000001280535

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, LED (on Intelligent Key) blinks.

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

Is the inspection result normal?

YES   >> Inside key antenna (console) is OK.
NO   >> Refer to DLK-122, "CONSOLE : Diagnosis Procedure".

CONSOLE : Diagnosis Procedure
INFOID:0000000001280536

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

Terminal			Condition	Signal (Reference value)
(+)		(−)		
Intelligent Key unit connector	Terminal			
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
M40 Console (-)	16	Ground		When Intelligent Key is in the antenna detection area. JMKIA0392ZZ
				When Intelligent Key is not in the antenna detection area. JMKIA0390ZZ

<u>Is the inspection result normal?</u>

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

2.CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and inside key antenna (console) connector.
2. Check continuity between Intelligent Key unit harness connector and inside key antenna (console) harness connector.

Intelligent Key unit connector	Terminal	Inside key antenna (console) connector	Terminal	Continuity
M40	15	M252	1	Exists
	16		2	

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

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 (console).

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 (console) connector.
3. Check signal between Intelligent Key unit harness connector and ground with oscilloscope.

Terminal			Condition	Signal (Reference value)
(+)		(−)		
Intelligent Key unit connector	Terminal			
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 (console). Refer to DLK-294, "CONSOLE : Removal and Installation".
NO   >> GO TO 4.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

A

        >> INSPECTION END

REAR SEAT

B

REAR SEAT : Description   *INFOID:0000000001280537*

Detects whether Intelligent Key is inside the vehicle.

C

REAR SEAT : Component Function Check   *INFOID:0000000001280538*

D

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, LED (on Intelligent Key) blinks.

E

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

F

Is the inspection result normal?

YES   >> Inside key antenna (rear seat) is OK.
NO   >> Refer to DLK-125, "REAR SEAT : Diagnosis Procedure".

G

REAR SEAT : Diagnosis Procedure   *INFOID:0000000001280539*

H

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

I

J

DLK

L

M

N

O

P

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

2.CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and inside key antenna (rear seat) connector.
2. Check continuity between Intelligent Key unit harness connector and inside key antenna (rear seat) harness connector.

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

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

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

<u>Is the inspection result normal?</u>

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

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 (rear seat) connector.
3. Check signal between Intelligent Key unit harness connector and ground with oscilloscope.

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

<u>Is the inspection result normal?</u>

YES   >> Replace inside key antenna (rear seat). Refer to <u>DLK-295, "REAR : Removal and Installation"</u>.
NO   >> GO TO 4.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

ANTI-HIJACK RELAY
PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001280540

Receives anti-hijack signal from Intelligent Key unit.

PASSENGER SIDE : Component Function Check

INFOID:0000000001280541

1.CHECK FUNCTION

1. All doors are locked using Intelligent Key or door request switch.
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 .

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001280542

1.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL 1

Check voltage between Intelligent Key unit harness 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   >> GO TO 6.

2.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL 2

Check voltage between Intelligent Key unit harness 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 harness 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 harness 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 harness 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 harness 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 >> GO TO 6.

5.CHECK PASSENGER SIDE ANTI-HIJACK RELAY

Check passenger side anti-hijack relay.
Refer to DLK-130, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace passenger side anti-hijack relay. Refer to DLK-28, "DOOR LOCK AND UNLOCK SWITCH : Component Parts Location".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

PASSENGER SIDE : Component Inspection

INFOID:0000000001280543

1.CHECK ANTI-HIJACK RELAY

Check continuity passenger side anti-hijack relay terminals.

Passenger side anti-hijack relay connector	Terminal		Condition	Continuity
M90	4	3	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-28, "DOOR LOCK AND UNLOCK SWITCH : Component Parts Location".

INTELLIGENT KEY WARNING BUZZER

Description
INFOID:0000000001280544

Answers back and warns about an inappropriate operation.

Component Function Check
INFOID:0000000001280545

1.CHECK FUNCTION

With CONSULT-III
Check Intelligent Key warning buzzer "OUTSIDE BUZZER" in "Active Test" mode with CONSULT-III.
Is the inspection result normal?
  YES >> Intelligent Key warning buzzer is OK.
  NO   >> Refer to DLK-131, "Diagnosis Procedure".

Diagnosis Procedure
INFOID:0000000001280546

1.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL 1

Check voltage between Intelligent Key unit harness 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 5.
  NO   >> GO TO 2.

2.CHECK INTELLIGENT KEY WARNING BUZZER POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect Intelligent Key warning buzzer connector.
3. Check voltage between Intelligent Key warning buzzer harness 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 harness connector and Intelligent Key unit harness 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 harness 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-132, "Component Inspection".

Is the inspection result normal?

YES   >> GO TO 5.
NO   >> Replace Intelligent Key warning buzzer. Refer to DLK-298, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

    >> INSPECTION END

Component Inspection

INFOID:0000000001280547

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.
NO   >> Replace Intelligent Key warning buzzer. Refer to DLK-298, "Removal and Installation".

BUZZER (COMBINATION METER)

Description
INFOID:0000000001280548

Performs operation method guide and warning with buzzer.

Component Function Check
INFOID:0000000001280549

1.CHECK FUNCTION

With CONSULT-III

Check the operation with "INSIDE BUZZER" in "Active Test" with CONSULT-III.

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-133, "Diagnosis Procedure".

Diagnosis Procedure
INFOID:0000000001280550

1.CHECK BUZZER (COMBINATION METER) CIRCUIT

Refer to DLK-133, "Component Function Check".

Is the inspection result normal?

Yes >> GO TO 2.
No >> Repair or replace buzzer (combination meter) circuit.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

KEY WARNING LAMP

Description
INFOID:0000000001280551

Performs operation method guide and warning together with buzzer.

Component Function Check
INFOID:0000000001280552

1.CHECK FUNCTION

⊞**With CONSULT-III**
Check the operation with "INDICATOR" in "Active Test" mode with CONSULT-III.

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-134, "Diagnosis Procedure".

Diagnosis Procedure
INFOID:0000000001280553

1.CHECK KEY WARNING LAMP CIRCUIT

Refer to DLK-134, "Component Function Check" .

Is the inspection result normal?

Yes   >> GO TO 2.
No   >> Repair or replace key warning lamp circuit.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

     >> INSPECTION END

LOCK WARNING LAMP

Description
INFOID:0000000001280554

Performs operation method guide and warning together with buzzer.

Component Function Check
INFOID:0000000001280555

1.CHECK FUNCTION

Ⓐ**With CONSULT-III**
Check the operation with "INDICATOR" in "Active Test" mode with CONSULT-III.

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-135, "Diagnosis Procedure".

Diagnosis Procedure
INFOID:0000000001280556

1.CHECK LOCK WARNING LAMP CIRCUIT

Refer to DLK-135, "Component Function Check".
Is the inspection result normal?

Yes   >> GO TO 2.
No   >> Repair or replace lock warning lamp circuit.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

HAZARD WARNING LAMPS

Description
INFOID:0000000001280557

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

Component Function Check
INFOID:0000000001280558

1.CHECK FUNCTION

⊞With CONSULT-III
Check hazard warning lamp "FLASHER" in "Active Test" mode with CONSULT-III.
Is the inspection result normal?

 YES   >> Hazard warning lamp circuit is OK.
 NO   >> Refer to DLK-136, "Diagnosis Procedure".

Diagnosis Procedure
INFOID:0000000001280559

1.CHECK HAZARD SWITCH CIRCUIT

Check hazard switch circuit.
Refer to DLK-136, "Component Function Check".
Is the inspection result normal?

 YES   >> GO TO 2.
 NO   >> Repair or replace hazard warning switch circuit.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

VEHICLE SPEED SIGNAL CIRCUIT

Description
INFOID:0000000001280560

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

Component Function Check
INFOID:0000000001280561

1.CHECK FUNCTION

Check that all doors are automatically locked at the vehicle speed of more than 25 km/h (16 MPH).

Is the inspection result normal?

  YES   >> Vehicle speed signal circuit is OK.
  NO   >> Refer to DLK-137, "Diagnosis Procedure".

Diagnosis Procedure
INFOID:0000000001280562

1.CHECK VEHICLE SPEED SIGNAL CIRCUIT

Check vehicle speed signal "VEHICLE SPEED" in "Data Monitor" mode with CONSULT-III.

Is the inspection result normal?

  YES   >> GO TO 2.
  NO   >> Repair or replace vehicle speed signal circuit.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

       >> INSPECTION END

INTELLIGENT KEY BATTERY

Description

INFOID:0000000001280563

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:0000000001280564

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-138, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001280565

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-138, "Component Function Check".

OCC0607D

ECU DIAGNOSIS

INTELLIGENT KEY UNIT

Reference Value

INFOID:0000000001280576

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
DOOR BK SW	Back door	Close	OFF
		Open	ON
VEHICLE SPEED	While driving		Equivalent to speedometer reading

TERMINAL LAYOUT

JMKIA0415ZZ

PHYSICAL VALUES

Terminal No. +	Terminal No. −	Wire color	Description — Signal name	Input/ Output	Condition		Value [V] (Approx.)
1	Ground	LG	Steering lock unit power supply	Output	—		5
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

DLK-140

Terminal No.		Wire color	Description		Condition		Value [V] (Approx.)
+	−		Signal name	Input/ Output			
14	Ground	W	Inside key antenna (-) (rear seat)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0392ZZ
						When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0390ZZ
15	Ground	SB	Inside key antenna (+) (console)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0393ZZ
						When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0391ZZ
16	Ground	BR	Inside key antenna (-) (console)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0392ZZ
						When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0390ZZ

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

| 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	(V) 15 10 5 0 1 s JMKIA0397ZZ
						When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s 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	(V) 15 10 5 0 1 s JMKIA0395ZZ
						When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s 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	(V) 15 10 5 0 1 s JMKIA0397ZZ
						When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0514ZZ

DLK-142

Terminal No.		Wire color	Description		Condition		Value [V] (Approx.)
+	−		Signal name	Input/ Output			
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	(V) 15 10 5 0 — 1 s — JMKIA0395ZZ
						When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 — 1 s — 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
26	Ground	R	Stop lamp switch	Input	Depress the brake pedal		Battery voltage
					Release the brake pedal		0
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
28	Ground	O	Unlock sensor	Input	Lock (ON)		5
					Unlock (OFF)		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	(V) 6 4 2 0 — 100 ms — 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

| 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	(V) 15 10 5 0 ⊢→ ←⊣ 1 s JMKIA0395ZZ
						When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 ⊢→ ←⊣ 1 s 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-16, "System Description".

Wiring Diagram - POWER DOOR LOCK CONTROL SYSTEM -

INFOID:0000000001280577

JCKWA0345GE

2007/02/28

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

JCKWA0346GE

POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	–
3	O	–
78	Y	–
88	BR	–
97	V	–

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
15	P	–
16	V	–
31	GR	–

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
6	V	–
14	O	–

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

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	–[LHD models]

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

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	P	–[LHD models]

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

H.S.

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

Connector No.	B58
Connector Name	FUEL LID OPENER ACTUATOR
Connector Type	M04FW-LC

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	UNLOCK
2	V	LOCK

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

H.S.

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

JCKWA0347GE

POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No. D1
Connector Name WIRE TO WIRE
Connector Type TH24FW-NH

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
8	G	–
20	BR	–

Connector No. D9
Connector Name FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
Connector Type E06FGY-RS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	G	–

Connector No. B88
Connector Name WIRE TO WIRE
Connector Type NS12MW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
6	O	–

Connector No. D6
Connector Name POWER WINDOW MAIN SWITCH
Connector Type NS03FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
17	B	–
18	G	–

Connector No. B86
Connector Name WIRE TO WIRE
Connector Type NS12MW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
6	O	–

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

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	–

Connector No. B77
Connector Name WIRE TO WIRE
Connector Type NS10MW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
8	V	–

Connector No. D2
Connector Name WIRE TO WIRE
Connector Type NS16FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	G	–
12	B	–

JCKWA0348GE

POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	D85
Connector Name	REAR DOOR LOCK ACTUATOR LH
Connector Type	E06FGY-RS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	G	–

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
8	V	–

Connector No.	D81
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
6	G	–

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	NS08FBR-CS

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

Connector No.	D48
Connector Name	FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Type	E06FGY-RS

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

Connector No.	D105
Connector Name	REAR DOOR LOCK ACTUATOR RH
Connector Type	E06FGY-RS

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	–
2	V	–

Connector No.	D42
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	O	–
8	V	–

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
6	G	–

JCKWA0349GE

POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

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.	M18
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
8	P	–
20	BR	–

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

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

Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
6	V	–
14	O	–[LHD models]

Connector No.	D190
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS04FW-CS

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

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
15	P	–
16	V	–[LHD models]
31	GR	–[LHD models]

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	NS08MBR-CS

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

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	–[LHD models]
3	G	–[LHD models]
78	LG	–
88	BR	–
97	V	–

JCKWA0350GE

POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	M19
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	G	–
12	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	LG	–
2	R	–

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW

H.S.

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	TK20FY-EX-SC

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
19	R	DEPLOYMENT INFORMATION[LHD models with side air bag]

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

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
5	LG	KEY SW[With Intelligent Key]
12	LG	DOOR SW (RR)
13	V	DOOR SW (BACK)[LHD models]
14	BR	DOOR SW (AS)[LHD models]
15	P	DOOR SW (DR)[LHD models]
16	GR	DOOR SW (RL)[LHD models]
21	P	CAN-L
22	L	CAN-H
28	R	SHOCK DETECT SIG[LHD models with side air bag]
32	BR	LOCK UNLOCK SW (UNLOCK)
34	P	LOCK UNLOCK SW (UNLOCK)[LHD models]

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR

H.S.

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

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
54	O	DOOR UNLOCK OUTPUT (OTHER)[LHD models]
55	B	GND
56	V	DOOR LOCK OUTPUT (ALL)
57	Y	BAT(F/L)
60	G	DOOR UNLOCK/RELEASE OUTPUT(DR)[LHD models]

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4

H.S.

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

JCKWA0351GE

POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	M82
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	O	–
8	V	–

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

H.S.

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

JCKWA0352GE

Wiring Diagram - INTELLIGENT KEY CONTROL SYSTEM -

INFOID:0000000001280578

JCKWA0377GE

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

JCKWA0378GE

JCKWA0379GE

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

JCKWA0380GE

INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

Connector No.	B8
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
2	B	-
3	P	-
4	R	-
9	L	-
10	SB	-
11	BR	-

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

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

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
6	V	-
14	O	-
16	W	-

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

Terminal No.	Color of Wire	Signal Name [Specification]
2	P	-[LHD models]

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
3	B	-
4	P	-
5	R	-
15	P	-
16	V	-
20	L	-
21	SB	-
22	BR	-
31	GR	-

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

Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-[LHD models]

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
3	O	-
78	Y	-
88	BR	-
97	V	-

Connector No.	B9
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
2	SHIELD	-
3	P	-
4	R	-
9	L	-
10	SB	-
11	BR	-

JCKWA0381GE

INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

Connector B77 — WIRE TO WIRE — NS10MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
4	W	–
8	V	–

Connector D1 — WIRE TO WIRE — TH24FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
10	GR	–
11	BR	–
22	W	–
23	O	–

Connector B71 — REAR DOOR SWITCH LH — A03FW

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

Connector B88 — WIRE TO WIRE — NS12MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
6	O	–

Connector B58 — FUEL LID OPENER ACTUATOR — M04FW-LC

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	UNLOCK
2	V	LOCK

Connector B86 — WIRE TO WIRE — NS12MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
6	O	–

Connector B53 — REAR DOOR SWITCH RH — A03FW

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

Connector B78 — WIRE TO WIRE — TH16MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
4	R	–
5	BR	–
6	SB	–

JCKWA0382GE

INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

Connector No.	D42
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	O	—
6	B	—
8	V	—
12	BR	—
13	P	—
14	V	—

Connector No.	D85
Connector Name	REAR DOOR LOCK ACTUATOR LH
Connector Type	E06FGY-RS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	—
2	G	—

Connector No.	D10
Connector Name	OUTSIDE KEY ANTENNA AND FRONT DOOR REQUEST SWITCH (DRIVER SIDE)
Connector Type	RH04MB

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	—
2	O	—
3	GR	—
4	B	—

Connector No.	D81
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	—
6	G	—

Connector No.	D9
Connector Name	FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
Connector Type	E06FGY-RS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	—
2	G	—
3	W	—
4	B	—

Connector No.	D49
Connector Name	OUTSIDE KEY ANTENNA AND FRONT DOOR REQUEST SWITCH (PASSENGER SIDE)
Connector Type	RH04MB

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	—
2	P	—
3	BR	—
4	B	—

Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	—
2	G	—
12	B	—

Connector No.	D48
Connector Name	FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Type	E06FGY-RS

Terminal No.	Color of Wire	Signal Name [Specification]
1	O	—
2	V	—

JCKWA0383GE

INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

Connector No.	D153
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
4	R	–
5	W	–
6	SB	–

Connector No.	D183
Connector Name	WIRE TO WIRE
Connector Type	TH16MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
4	R	–
5	W	–
6	SB	–

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	NS08FBR-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
7	W	–

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	NS08MBR-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
7	W	–

Connector No.	D105
Connector Name	REAR DOOR LOCK ACTUATOR RH
Connector Type	E06FGY-RS

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	–
2	V	–

Connector No.	D158
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
4	R	–
5	W	–
6	SB	–

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
6	G	–

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
4	W	–[LHD models]
8	V	–

JCKWA0384GE

INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

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

Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	—
3	LG	—

Connector No. M13
Connector Name WIRE TO WIRE
Connector Type TH32FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	—
4	B	—
5	Y	—
15	P	—
16	V	— [LHD models]
20	W	—
21	SB	—
22	BR	—
31	GR	— [LHD models]

Connector No. D191
Connector Name OUTSIDE KEY ANTENNA (BACK DOOR)
Connector Type RK02FGY

Terminal No.	Color of Wire	Signal Name [Specification]
1	W	—
2	R	—

Connector No. M11
Connector Name WIRE TO WIRE
Connector Type TH80FW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	— [LHD models]
3	LG	— [LHD models]
78	BR	—
88	V	—
97		

Connector No. D190
Connector Name BACK DOOR LOCK ASSEMBLY
Connector Type NS04FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	—
2	V	—
3	B	—
4	W	—

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. D186
Connector Name BACK DOOR OPENER SWITCH ASSEMBLY
Connector Type TK06MW-1V

Terminal No.	Color of Wire	Signal Name [Specification]
3	SB	PASSIVE UNIT
4	B	GND

Connector No. E105
Connector Name WIRE TO WIRE
Connector Type TH80FW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	—
71	Y	—
72	LG	—

JCKWA0385GE

INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

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	LG	–
2	R	–
3	G	–[LHD models]
4	BR	–

Connector No. M56
Connector Name INSIDE KEY ANTENNA (INSTRUMENT CENTER)
Connector Type RK02FGY

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

Connector No. M19
Connector Name WIRE TO WIRE
Connector Type NS16MW–CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	G	–
12	B	–

Connector No. M40
Connector Name INTELLIGENT KEY UNIT
Connector Type TH40FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
16	G	CONSOLE (-)
17	BR	BACK DOOR (+)
18	Y	BACK DOOR (-)
19	BR	DRIVER DOOR (+)
20	O	DRIVER DOOR (-)
25	BR	REQUEST SW (AS)
27	G	KNOB SW[LHD models]
28	O	DR LOCK STATE SW
29	SB	REQUEST SW (BD)
33	L	INSTRUMENT (+)
34	P	INSTRUMENT (-)
37	V	PASSENGER DOOR (+)
38	P	PASSENGER DOOR (-)[LHD models]
40	V	AS ANTI HIJACK

Terminal No.	Color of Wire	Signal Name [Specification]
2	L	CAN-H
3	P	CAN-L
4	LG	BUZZER
5	GR	REQUEST SW (DR)
6	W	IGN SW
7	LG	KEY SW
11	R	BATT+[LHD models]
12	B	GND
13	B	REAR SEAT (+)
14	W	REAR SEAT (-)
15	R	CONSOLE (+)

Connector No. M18
Connector Name WIRE TO WIRE
Connector Type TH24MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
10	GR	–
11	BR	–
22	–	–
23	O	–

Connector No. M14
Connector Name WIRE TO WIRE
Connector Type NS16FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
6	V	–
14	O	–[LHD models]
16	V	–[LHD models]

Connector No. M34
Connector Name COMBINATION METER
Connector Type SAB40FW

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
3	B	GND
21	L	CAN-H
22	P	CAN-L
23	B	GND

JCKWA0386GE

INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB

Terminal No.	Color of Wire	Signal Name [Specification]
54	O	DOOR UNLOCK OUTPUT (OTHER)[LHD models]
55	B	GND
56	V	DOOR LOCK OUTPUT (ALL)
57	Y	BAT(F/L)
60	G	DOOR UNLOCK/RELEASE OUTPUT(DR)[LHD models]

Connector No.	M97
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
5	G	–
6	B	–
11	R	–
12	B	–

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR

Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(FUSE)
42	V	ROOM LAMP POWER SUPPLY
45	V	BACK DOOR OPEN OUTPUT[LHD models]
47	BR	FRASHER OUTPUT (LH)
48	GR	FRASHER OUTPUT (RH)
52	R	ROOM LAMP CONTROL

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	Y	–
3	Y	–
4	V	–

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

Terminal No.	Color of Wire	Signal Name [Specification]
3	W	IGN SW
4	SB	ACC SW
5	LG	KEY SW[With Intelligent Key]
12	V	DOOR SW (RR)
13	V	DOOR SW (BACK)[LHD models]
14	BR	DOOR SW (AS)[LHD models]
15	P	DOOR SW (DR)[LHD models]
16	GR	DOOR SW (RL)[LHD models]
21	P	CAN-L
22	L	CAN-H
33	W	HAZARD SW[With xenon headlamp and daytime light system]

(Other M65 signal table fragment)

Terminal No.	Color of Wire	Signal Name [Specification]
33	Y	HAZARD SW[Except with xenon headlamp and daytime light system]

Connector No.	M82
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	O	–
6	B	–
8	V	–
12	BR	–
13	P	–
14	V	–

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	–
71	Y	–
72	LG	–

JCKWA0387GE

INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

Connector No.	M251
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
5	G	–
6	SHIELD	–
11	R	–
12	SHIELD	–

Connector No.	M252
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Type	RK02FGY

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	–
2	G	–

JCKWA0388GE

Wiring Diagram - BACK DOOR OPENER CONTROL SYSTEM -

INFOID:0000000001280579

BACK DOOR OPENER SYSTEM

2007/02/28

JCKWA0409GE

Connector No. D151
Connector Name WIRE TO WIRE
Connector Type NS08FBR-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	—
4	LG	—
7	W	—

Connector No. D190
Connector Name BACK DOOR LOCK ASSEMBLY
Connector Type NS04FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	—
2	V	—
3	B	—
4	W	—

Connector No. B77
Connector Name WIRE TO WIRE
Connector Type NS10MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
4	W	—
8	V	—
10	G	—

Connector No. D186
Connector Name BACK DOOR OPENER SWITCH ASSEMBLY
Connector Type TK06MW-1V

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BCM
2	B	GND

Connector No. B4
Connector Name WIRE TO WIRE
Connector Type NS16MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
16	W	—

Connector No. D181
Connector Name WIRE TO WIRE
Connector Type NS08MBR-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	—
4	G	—
7	W	—

BACK DOOR OPENER SYSTEM

Connector No. B3
Connector Name WIRE TO WIRE
Connector Type TH32MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
16	V	—
32	G	—

Connector No. D157
Connector Name WIRE TO WIRE
Connector Type NS10FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
4	W	—[LHD models]
4	V	—[RHD models]
8	V	—
10	G	—

JCKWA0410GE

BACK DOOR OPENER SYSTEM

Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
16	V	-[LHD models]
16	P	-[RHD models]

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4

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

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
16	V	-[LHD models]
16	Y	-[RHD models]
32	O	-

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB

Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND
57	Y	BAT(F/L)

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.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR

Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(FUSE)
45	V	BACK DOOR OPEN OUTPUT[LHD models]
45	P	BACK DOOR OPEN OUTPUT[RHD models]

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

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

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

Terminal No.	Color of Wire	Signal Name [Specification]
13	V	DOOR SW (BACK)[LHD models]
13	Y	DOOR SW (BACK)[RHD models]
21	P	CAN-L
22	L	CAN-H
29	O	BACK DOOR OPEN SW

JCKWA0411GE

Fail Safe

INFOID:0000000001280580

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:0000000001280581

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:0000000001280582

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-70
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: ID DISCORD BCM-I-KEY	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-57

< ECU DIAGNOSIS >

BCM (BODY CONTROL MODULE)

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000001557105

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
VEHICLE SPEED	While driving	Equivalent to speedometer reading
IGN ON SW	Ignition switch OFF or ACC	Off
	Ignition switch ON	On
KEY ON SW	Mechanical key is removed from key cylinder	Off
	Mechanical key is inserted to key cylinder	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-DR	Driver's door closed	Off
	Driver's door opened	On
DOOR SW-AS	Passenger door closed	Off
	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
	Rear LH door opened	On
BACK DOOR SW	Back door closed	Off
	Back door opened	On
I-KEY LOCK	"LOCK" button of Intelligent Key or door request switch are not pressed	Off
	"LOCK" button of Intelligent Key or door request switch are pressed	On
I-KEY UNLOCK	"UNLOCK" button of Intelligent Key or door request switch are not pressed	Off
	"UNLOCK" button of Intelligent Key or door request switch are pressed	On
PUSH SW	Return to ignition switch to "LOCK" position	Off
	Press ignition switch	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
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
UNLOCK SHOCK	Other than the following	Off
	During the unlock operation interlocked with air bag	On
UNLOCK WITH DR	**NOTE:** The item is indicated, but not monitored	On
		Off

Monitor Item	Condition	Value/Status
LOCK WITH SPEED	Vehicle speed sensing auto door lock function does not operate	Off
	Vehicle speed sensing auto door lock function is operating	On
ACC ON SW	Ignition switch OFF	Off
	Ignition switch ACC or ON	On
REAR DEF SW	Rear window defogger switch OFF	Off
	Rear window defogger switch ON	On
TAIL LAMP SW	Lighting switch OFF	Off
	Lighting switch 1ST	On
TURN SIGNAL R	Turn signal switch OFF	Off
	Turn signal switch RH	On
TURN SIGNAL L	Turn signal switch OFF	Off
	Turn signal switch LH	On
HI BEAM SW	Lighting switch OFF	Off
	Lighting switch HI	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
PASSING SW	Other than lighting switch PASS	Off
	Lighting switch PASS	On
AUTO LIGHT SW	Lighting switch OFF	Off
	Lighting switch AUTO	On
FR FOG SW	Front fog lamp switch OFF	Off
	Front fog lamp switch ON	On
RR FOG SW	Rear fog lamp switch OFF	Off
	Rear fog lamp switch ON	On
ENGINE RUN	Engine stopped	Off
	Engine running	On
LIT-SEN FAIL	Light & rain sensor is in normal condition	OK
	Light & rain sensor is with error	NOTOK
AUT LIGHT SYS	Outside of the room is dark	On
	Outside of the room is bright	Off
HD LIGHT TIME	—	Displays a setting time of the follow me home function set by the work support
IGN SW CAN	Ignition switch OFF or ACC	Off
	Ignition switch ON	On
FR WIPER HI	Front wiper switch OFF	Off
	Front wiper switch HI	On
FR WIPER LOW	Front wiper switch OFF	Off
	Front wiper switch LO	On
FR WIPER INT	Front wiper switch OFF	Off
	Front wiper switch INT	On
FR WASHER SW	Front washer switch OFF	Off
	Front washer switch ON	On

DLK-171

Monitor Item	Condition	Value/Status
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	1 - 7
FR WIPER STOP	Any position other than front wiper stop position	Off
	Front wiper stop position	On
RR WIPER ON	Rear wiper switch OFF	Off
	Rear wiper switch ON	On
RR WIPER INT	Rear wiper switch OFF	Off
	Rear wiper switch INT	On
RR WIPER STOP	Rear wiper stop position	Off
	Other than rear wiper stop position	On
RR WASHER SW	Rear washer switch OFF	Off
	Rear washer switch ON	On
REVERSE SW CAN	**NOTE:** The item is indicated, but not monitored	Off
		On
H/L WASH SW	When headlamp washer switch is not pressed	Off
	When headlamp washer switch is pressed	On
FAN ON SIG	Blower fan motor switch OFF	Off
	Blower fan motor switch ON (other than OFF)	On
AIR COND SW	Compressor ON is not requested from auto amp. (A/C indicator OFF, blower fan motor switch OFF or etc.)	Off
	Compressor ON is requested from auto amp. (A/C indicator ON and blower fan motor switch ON).	On
HAZARD SW	Hazard switch OFF	Off
	Hazard switch ON	On
BRAKE SW	Brake pedal is not depressed	Off
	Brake pedal is depressed	On
TRNK OPNR SW	When back door opener switch is not pressed	Off
	When back door opener switch is pressed	On
HOOD SW	Close the hood **NOTE:** Vehicles without theft warning system are OFF-fixed	Off
	Open the hood	On
AUTO RELOCK	Auto lock function does not operate	Off
	Auto lock function is operating	On
GLS BREAK SEN	The vehicle without glass break sensor	Off
	The vehicle with glass break sensor	On
OIL PRESS SW	• Ignition switch OFF or ACC • Engine running	Off
	Ignition switch ON	On

TERMINAL LAYOUT

M66

41 42 43 44 45 46 47 48 49 50 51 52

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

M65

60 59 58 57 56 55 54 53

M67

JSMIA0031GB

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-28, "COMB SW : CONSULT-III Function (BCM - COMB SW)".**
- **BCM reads the status of the combination switch at 10 ms internal normally. Refer to BCS-9, "System Description".**

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	−	Signal name	Input/Output		
1 (W)	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
2 (G)	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
3 (W)	Ground	Ignition power supply	Input	Ignition switch OFF or ACC	0 V
				Ignition switch ON or START	Battery voltage
4 (SB)	Ground	ACC power supply	Input	Ignition switch OFF	0 V
				Ignition switch ON or ACC	Battery voltage
5 (LG)[*1] (R)[*2]	Ground	Key switch	Input	Insert mechanical key into ignition key cylinder	Battery voltage
				Remove mechanical key from ignition key cylinder	0 V

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	−	Signal name	Input/Output		
6 (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 washer 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

Terminal No. (Wire color)		Description		Condition			Value (Approx.)
+	−	Signal name	Input/Output				
7 (GR)	Ground	Combination switch INPUT 4	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)		(V) 15 10 5 0 ←→1ms JPMIA0165GB 1.4 V
					Lighting switch 1ST (Wiper intermittent dial 4)		(V) 15 10 5 0 ←→1ms JPMIA0166GB 1.3 V
					Lighting switch AUTO (Wiper intermittent dial 4)		(V) 15 10 5 0 ←→1ms JPMIA0168GB 1.3 V
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 6		(V) 15 10 5 0 ←→1ms JPMIA0169GB 1.3 V
					Rear wiper INT (Wiper intermittent dial 4)		(V) 15 10 5 0 ←→1ms JPMIA0196GB 1.3 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	−	Signal name	Input/ Output			
8 (V)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	JPMIA0165GB 1.4 V
					Turn signal switch RH	JPMIA0166GB 1.3 V
					Turn signal switch LH	JPMIA0167GB 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		
9 (G)[*3] (B)[*4]	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4) — All switch OFF	JPMIA0165GB 1.4 V
				Lighting switch 2ND	JPMIA0166GB 1.3 V
				Lighting switch PASS	JPMIA0167GB 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			
10 (BR)	Ground	Combination switch INPUT 5	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 ← 1ms JPMIA0165GB 1.3 V
					Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 ← 1ms JPMIA0167GB 1.3 V
					Rear fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 ← 1ms JPMIA0168GB 1.3 V
					Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 ← 1ms 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	(V) 15 10 5 0 ← 1ms JPMIA0196GB 1.3 V
11 (B)	Ground	Audio link	Input/Output	—	—	—

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	−	Signal name	Input/Output			
12 (LG)	Ground	Rear door switch RH	Input	Rear door switch RH	OFF (When rear door RH closed)	PKID0924E 11.2 V
					ON (When rear door RH opened)	0 V
13 (V)	Ground	Back door switch	Input	Back door switch	OFF (When back door closed)	PKID0924E 11.2 V
					ON (When back door opened)	0 V
14 (P)*3 (BR)*4	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closed)	PKID0924E 11.2 V
					ON (When passenger door opened)	0 V
15 (BR)*3 (P)*4	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closed)	PKID0924E 11.2 V
					ON (When driver door opened)	0 V

Terminal No. (Wire color) +	−	Description Signal name	Input/ Output	Condition		Value (Approx.)
16 (GR)	Ground	Rear door switch LH	Input	Rear door switch LH	OFF (When rear door LH closed)	PKID0924E 11.2 V
					ON (When rear door LH opened)	0 V
17 (L)	Ground	Door lock status indicator	Output	Door lock status indicator	ON	12 V
					OFF	0 V
20 (SB)	Ground	Rear window defogger switch	Input	Rear window defogger switch	Not pressed	JPMIA0154GB 1.1 V
					While pressing	0 V
21 (P)	—	CAN-L	Input/ Output	—		—
22 (L)	—	CAN-H	Input/ Output	—		—
23 (V)	Ground	Security indicator	Output	Security indicator	ON	0 V
					Blinking	JPMIA0014GB 10.3 V
					OFF	12 V
24 (GR)	Ground	Light & rain sensor serial link	Input/ Output		Ignition switch OFF or ACC	12 V
					Ignition switch ON	JPMIA0156GB 8.7 V
25 (G)	Ground	Alarm link	Output	—		—

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
+	−	Signal name	Input/ Output			
26 (GR)[5] (LG)[6]	Ground	Blower fan motor switch	Input	Blower fan motor switch	OFF	(V) 15 10 5 0 ← 10 ms → PKID0924E 11.2 V
					ON (other than OFF)	0 V
27 (P)[5] (Y)[6]	Ground	A/C switch	Input	Ignition switch ON	Compressor ON is not requested from auto amp. (A/C indicator OFF, blower fan motor switch OFF or etc.)	(V) 15 10 5 0 ← 10 ms → PKID0924E 11.2 V
					Compressor ON is requested from auto amp. (A/C indicator ON and blower fan motor switch ON).	0 V
28 (LG)[7] (R)[8]	Ground	Shock detect sensor	Input	Ignition switch OFF or ACC		0 V
				Ignition switch ON		(V) 15 10 5 0 ← 1.0s → JPMIA0155GB 6.0 V
29 (LG)[3] (O)[4]	Ground	Back door opener switch	Input	Back door opener switch	Not pressed	(V) 15 10 5 0 ← 10ms → JPMIA0154GB 1.2 V
					Pressed	0 V
32 (BR)	Ground	Door lock/unlock switch (Unlock)	Input	Door lock/un-lock switch	Not pressed	(V) 15 10 5 0 ← 10ms → JPMIA0154GB 1.2 V
					Pressed to the unlock side	0 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	−	Signal name	Input/ Output			
33 (W)*9 (Y)*10	Ground	Hazard switch	Input	Hazard switch	OFF	(V) 15 10 5 0 →‖←10ms JPMIA0154GB 1.3 V
					ON	0 V
34 (SB)*3 (P)*4	Ground	Door lock/unlock switch (Lock)	Input	Door lock/un-lock switch	Not pressed	(V) 15 10 5 0 →‖←10ms JPMIA0154GB 1.2 V
					Pressed to the lock side	0 V
35 (G)	Ground	Headlamp washer switch	Input	Headlamp washer switch	Not pressed	(V) 15 10 5 0 →‖←10ms JPMIA0154GB 1.2 V
					Pressed to the lock side	0 V
36 (G)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Turn signal switch RH	(V) 15 10 5 0 →‖←2ms JPMIA0164GB 9.1 V
					Lighting switch 2ND	
					Lighting switch HI	
					Lighting switch 1ST	
37 (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)	(V) 15 10 5 0 →‖←2ms JPMIA0161GB 9.1 V
					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	
					Rear wiper switch ON (Wiper intermittent dial 4)	

Terminal No. (Wire color) +	−	Description — Signal name	Input/ Output	Condition		Value (Approx.)
38 (W)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Front wiper switch LO	JPMIA0162GB 9.3 V
					Front wiper switch MIST	
					Front wiper switch INT	
					Lighting switch AUTO	
					Rear fog lamp switch ON	
39 (Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Turn signal switch LH	JPMIA0163GB 9.3 V
					Lighting switch PASS	
					Lighting switch 2ND	
					Front fog lamp switch ON	
40 (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
					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	
					Rear wiper switch INT (Wiper intermittent dial 4)	
41 (LG)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
42 (V)	Ground	Interior room lamp power supply	Output	Interior room lamp battery saver activation		0 V
				Interior room lamp battery saver no activation		12 V
43 (SB)	Ground	Rear wiper motor	Output	Rear wiper switch OFF		0 V
				Rear wiper switch ON		12 V
44 (B)	Ground	Rear wiper auto stop	Input	Ignition switch ON	Rear wiper stop position	JPMIA0197GB
					Any position other than rear wiper stop position	0 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	−	Signal name	Input/Output			
45 (V)	Ground	Back door lock actuator	Output	Back door opener switch	Pressed	SKIA9232E
					Not pressed	0 V
47 (BR)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	PKID0926E 6.5 V
48 (GR)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	PKID0926E 6.5 V
49 (Y)	Ground	Rear fog lamp	Output	Rear fog lamp	OFF	0 V
					ON	12 V
50 (G)	Ground	Unlock sensor	Input	Driver's door	Unlock	5 V
					lock	0 V
51 (R)	Ground	Stop lamp switch	Input	Depress the brake pedal		Battery voltage
				Release the brake pedal		0 V
52 (R)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	12 V
					ON	0 V
53 (L)	Ground	Power window power supply (IGN)	Output	Ignition switch	OFF or ACC	0 V
					ON	12 V
54 (O)	Ground	Door unlock (All other than driver's door)	Output	Door lock/unlock switch	Pressed to the unlock side	SKIA9232E
					Not pressed	0 V
55 (B)	Ground	Ground	—	Ignition switch ON		0 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	−	Signal name	Input/ Output			
56 (V)	Ground	Door lock (All) and fuel lid lock	Output	Door lock/un-lock switch	Not pressed	0 V
					Pressed to the lock side	SKIA9232E
57 (Y)	Ground	Battery power sup-ply	Input	Ignition switch OFF		Battery voltage
58 (P)	Ground	Power window pow-er supply (BAT)	Output	Ignition switch OFF		12 V
59 (R)	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		12 V
60 (G)	Ground	Driver's door unlock and fuel lid unlock	Output	Door lock/un-lock switch	Pressed to the unlock side	SKIA9232E
					Not pressed	0 V

*1: With Intelligent Key

*2: Without Intelligent Key

*3: RHD models

*4: LHD models

*5: With gasoline engine

*6: With diesel engine

*7: RHD models with side air bag

*8: LHD models with side air bag

*9: With xenon headlamp and daytime light system

*10: Except with xenon headlamp and daytime light system

Wiring Diagram - POWER DOOR LOCK CONTROL SYSTEM -

INFOID:0000000001557467

POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

JCKWA0345GE

2007/02/28

JCKWA0346GE

POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
3	O	-
78	Y	-
88	BR	-
97	V	-

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH

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

Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	V	-
31	GR	-

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS

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

Terminal No.	Color of Wire	Signal Name [Specification]
6	V	-
14	O	-

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

1 2 3

Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-[LHD models]

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

1 2 3

Terminal No.	Color of Wire	Signal Name [Specification]
2	P	-[LHD models]

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

1 2 3

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

Connector No.	B58
Connector Name	FUEL LID OPENER ACTUATOR
Connector Type	M04FW-LC

2 1

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	UNLOCK
2	V	LOCK

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

1 2 3

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

JCKWA0347GE

POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
8	G	–
20	BR	–

Connector No.	B88
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
6	O	–

Connector No.	B86
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
6	O	–

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
8	V	–

Connector No.	D9
Connector Name	FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
Connector Type	E06FGY-RS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	G	–

Connector No.	D6
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS03FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
17	B	–
18	G	–

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

Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	–

Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	G	–
12	B	–

JCKWA0348GE

POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

D85 — REAR DOOR LOCK ACTUATOR LH — E06FGY-RS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	G	–

D81 — WIRE TO WIRE — NS12FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
6	G	–

D48 — FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE) — E06FGY-RS

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

D42 — WIRE TO WIRE — NS16FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	O	–
8	V	–

D157 — WIRE TO WIRE — NS10FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
8	V	–

D151 — WIRE TO WIRE — NS08FBR-CS

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

D105 — REAR DOOR LOCK ACTUATOR RH — E06FGY-RS

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	–
2	V	–

D101 — WIRE TO WIRE — NS12FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
6	G	–

JCKWA0349GE

POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

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.	M18
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
8	P	–
20	BR	–

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

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

Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
6	V	–
14	O	–[LHD models]

Connector No.	D190
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS04FW-CS

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

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
15	P	–
16	V	–[LHD models]
31	GR	–[LHD models]

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	NS08MBR-CS

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

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	–[LHD models]
3	G	–[LHD models]
78	LG	–
88	BR	–
97	V	–

JCKWA0350GE

POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	M59
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	TK20FY-EX-SC

Terminal No.	Color of Wire	Signal Name [Specification]
19	R	DEPLOYMENT INFORMATION[LHD models] with side air bag]

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
5	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.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB

Terminal No.	Color of Wire	Signal Name [Specification]
54	O	DOOR UNLOCK OUTPUT (OTHER)[LHD models]
55	B	GND
56	V	DOOR LOCK OUTPUT (ALL)
57	Y	BAT(F/L)
60	G	DOOR UNLOCK/RELEASE OUTPUT(DR)[LHD models]

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	LG	–
2	R	–

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR

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

Connector No.	M19
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	G	–
12	B	–

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

Terminal No.	Color of Wire	Signal Name [Specification]
5	LG	KEY SW(With Intelligent Key)
12	LG	DOOR SW (RR)
13	V	DOOR SW (BACK)[LHD models]
14	BR	DOOR SW (AS)[LHD models]
15	P	DOOR SW (DR)[LHD models]
16	GR	DOOR SW (RL)[LHD models]
21	P	CAN-L
22	L	CAN-H
28	R	SHOCK DETECT SIG[LHD models with side air bag]
32	BR	LOCK UNLOCK SW (UNLOCK)
34	P	LOCK UNLOCK SW (UNLOCK)[LHD models]

JCKWA0351GE

POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)

Connector No.	M82
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	O	–
8	V	–

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

H.S.

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

JCKWA0352GE

Wiring Diagram - INTELLIGENT KEY CONTROL SYSTEM -

INFOID:0000000001557468

JCKWA0377GE

2007/02/28

JCKWA0378GE

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

BACK DOOR OPENER SWITCH ASSEMBLY (REQUEST SWITCH) (D186)

(D187)

(D183)
(D153) 6
(D158) 6
(B78)
(B9) 10
(B8)
(B3)
(M13) 21

29

IGNITION KNOB SWITCH, KEY SWITCH AND KEY LOCK SOLENOID (M25)

IGNITION KNOB SWITCH

KEY SWITCH

4 3 27

2 1 7

INTELLIGENT KEY UNIT (M40)

40

OUTSIDE KEY ANTENNA AND FRONT DOOR REQUEST SWITCH (PASSENGER SIDE) (D49)

(M82) (D42) 12 25
13 38
14 37
1 2 3 4
(D42) (M82) 6

(M35)

10A 14

11

OUTSIDE KEY ANTENNA AND FRONT DOOR REQUEST SWITCH (DRIVER SIDE) (D10)

(M82) 10 5
23 20
11 19
1 2 3 4
(D2) (M19) 12

INTELLIGENT KEY WARNING BUZZER (E25)

(M77) (E105) 71
1
3 (E105) (M77) 72

4

(M18) (D1)
22 28

6

To CAN system

3

2

JCKWA0379GE

JCKWA0380GE

INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

Connector No.	B8
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
2	B	-
3	P	-
4	R	-
9	L	-
10	SB	-
11	BR	-

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

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

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
6	V	-
14	O	-
16	W	-

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

Terminal No.	Color of Wire	Signal Name [Specification]
2	P	-[LHD models]

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
3	B	-
4	P	-
5	R	-
15	P	-
16	V	-
20	L	-
21	SB	-
22	BR	-
31	GR	-

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

Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-[LHD models]

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
3	O	-
78	Y	-
88	BR	-
97	V	-

Connector No.	B9
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
2	SHIELD	-
3	P	-
4	R	-
9	L	-
10	SB	-
11	BR	-

JCKWA0381GE

INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

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

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

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

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

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
4	W	–
8	V	–

Connector No.	B58
Connector Name	FUEL LID OPENER ACTUATOR
Connector Type	M04FW-LC

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	UNLOCK
2	V	LOCK

Connector No.	B86
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
6	O	–

Connector No.	B88
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
6	O	–

Connector No.	B78
Connector Name	WIRE TO WIRE
Connector Type	TH16MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
4	R	–
5	BR	–
6	SB	–

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
10	GR	–
11	BR	–
22	W	–
23	O	–

JCKWA0382GE

DLK-200

INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK)

Connector No.	D42
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-
6	B	-
8	V	-
12	BR	-
13	P	-
14	V	-

Connector No.	D85
Connector Name	REAR DOOR LOCK ACTUATOR LH
Connector Type	E06FGY-RS

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

Connector No.	D10
Connector Name	OUTSIDE KEY ANTENNA AND FRONT DOOR REQUEST SWITCH (DRIVER SIDE)
Connector Type	RH04MB

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

Connector No.	D81
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
6	G	-

Connector No.	D9
Connector Name	FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
Connector Type	E06FGY-RS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	G	-
3	W	-
4	B	-

Connector No.	D49
Connector Name	OUTSIDE KEY ANTENNA AND FRONT DOOR REQUEST SWITCH (PASSENGER SIDE)
Connector Type	RH04MB

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	P	-
3	BR	-
4	B	-

Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	G	-
12	B	-

Connector No.	D48
Connector Name	FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Type	E06FGY-RS

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

JCKWA0383GE

INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

Connector No.	D153
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
4	R	–
5	W	–
6	SB	–

Connector No.	D183
Connector Name	WIRE TO WIRE
Connector Type	TH16MW-NH

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
4	R	–
5	W	–
6	SB	–

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	NS08FBR-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
7	W	–

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	NS08MBR-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
7	W	–

Connector No.	D105
Connector Name	REAR DOOR LOCK ACTUATOR RH
Connector Type	E06FGY-RS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	–
2	V	–

Connector No.	D158
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
4	R	–
5	W	–
6	SB	–

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
6	G	–

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
4	W	–[LHD models]
8	V	–

JCKWA0384GE

INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

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

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

Connector No.	D191
Connector Name	OUTSIDE KEY ANTENNA (BACK DOOR)
Connector Type	RK02FGY

Terminal No.	Color of Wire	Signal Name [Specification]
1	W	–
2	R	–

Connector No.	D190
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS04FW-CS

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

Connector No.	D186
Connector Name	BACK DOOR OPENER SWITCH ASSEMBLY
Connector Type	TK06MW-1V

Terminal No.	Color of Wire	Signal Name [Specification]
3	SB	PASSIVE UNIT
4	B	GND

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	–
4	B	–
5	Y	–
15	P	–
16	V	–[LHD models]
20	W	–
21	SB	–
22	BR	–
31	GR	–[LHD models]

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	–[LHD models]
3	G	–[LHD models]
78	LG	–
88	BR	–
97	V	–

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.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	–
71	Y	–
72	LG	–

JCKWA0385GE

INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

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	LG	–
2	R	–
3	G	–[LHD models]
4	BR	

Connector No.	M56
Connector Name	INSIDE KEY ANTENNA (INSTRUMENT CENTER)
Connector Type	RK02FGY

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

Connector No.	M19
Connector Name	WIRE TO WIRE
Connector Type	NS16MW–CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	G	–
12	B	–

16	G	CONSOLE (–)
17	BR	BACK DOOR (+)
18	Y	BACK DOOR (–)
19	BR	DRIVER DOOR (+)
20	O	DRIVER DOOR (–)
25	BR	REQUEST SW (AS)
27	G	KNOB SW[LHD models]
28	O	DR LOCK STATE SW
29	SB	REQUEST SW (BD)
33	L	INSTRUMENT (+)
34	P	INSTRUMENT (–)
37	V	PASSENGER DOOR (+)
38	P	PASSENGER DOOR (–)[LHD models]
40	V	AS ANTI HIJACK

Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Type	NS16FW–CS

Terminal No.	Color of Wire	Signal Name [Specification]
6	V	–
14	O	–[LHD models]
16	V	–[LHD models]

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TH24MW–NH

Terminal No.	Color of Wire	Signal Name [Specification]
10	GR	–
11	BR	–
22	BR	–
23	O	–

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW–NH

Terminal No.	Color of Wire	Signal Name [Specification]
2	L	CAN-H
3	P	CAN-L
4	LG	BUZZER
5	GR	REQUEST SW (DR)
6	W	IGN SW
7	LG	KEY SW
11	R	BATT+[LHD models]
12	B	GND
13	B	REAR SEAT (+)
14	W	REAR SEAT (–)
15	R	CONSOLE (+)

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
3	B	GND
21	L	CAN-H
22	P	CAN-L
23	B	GND

JCKWA0386GE

DLK-204

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
54	O	DOOR UNLOCK OUTPUT (OTHER)[LHD models]
55	B	GND
56	V	DOOR LOCK OUTPUT (ALL)
57	Y	BAT(F/L)
60	G	DOOR UNLOCK/RELEASE OUTPUT(DR)[LHD models]

Connector No.	M97
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
5	G	–
6	B	–
11	R	–
12	B	–

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(FUSE)
42	V	ROOM LAMP POWER SUPPLY
45	V	BACK DOOR OPEN OUTPUT[LHD models]
47	BR	FRASHER OUTPUT (LH)
48	GR	FRASHER OUTPUT (RH)
52	R	ROOM LAMP CONTROL

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

H.S.

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

INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

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

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
3	W	IGN SW
4	SB	ACC SW
5	LG	KEY SW[With Intelligent Key]
12	LG	DOOR SW (RR)
13	V	DOOR SW (BACK)[LHD models]
14	BR	DOOR SW (AS)[LHD models]
15	P	DOOR SW (DR)[LHD models]
16	GR	DOOR SW (RL)[LHD models]
21	P	CAN-L
22	L	CAN-H
33	W	HAZARD SW[With xenon headlamp and daytime light system]
33	Y	HAZARD SW[Except with xenon headlamp and daytime light system]

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	–
71	Y	–
72	LG	–

Connector No.	M82
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	O	–
6	B	–
8	V	–
12	BR	–
13	P	–
14	V	–

JCKWA0387GE

INTELLIGENT KEY SYSTEM (WITHOUT SUPER LOCK SYSTEM)

Connector No.	M251
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
5	G	–
6	SHIELD	–
11	R	–
12	SHIELD	–

Connector No.	M252
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Type	RK02FGY

2	1

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	–
2	G	–

JCKWA0388GE

DLK-206

Wiring Diagram - BACK DOOR OPENER CONTROL SYSTEM -

INFOID:0000000001557469

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

BACK DOOR OPENER SYSTEM

JCKWA0409GE

2007/02/28

Connector D151

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	NS08FBR-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
4	LG	–
7	W	–

Connector D190

Connector No.	D190
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS04FW-CS

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

Connector B77

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
4	W	–
8	V	–
10	G	–

Connector D186

Connector No.	D186
Connector Name	BACK DOOR OPENER SWITCH ASSEMBLY
Connector Type	TK06MW-1V

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BCM
2	B	GND

Connector B4

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
16	W	–

Connector D181

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	NS08MBR-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
4	G	–
7	W	–

BACK DOOR OPENER SYSTEM

Connector B3

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
16	V	–
32	G	–

Connector D157

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
4	W	–[LHD models]
4	V	–[RHD models]
8	V	–
10	G	–

JCKWA0410GE

BACK DOOR OPENER SYSTEM

Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
16	V	–[LHD models]
16	P	–[RHD models]

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

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

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
16	V	–[LHD models]
16	Y	–[RHD models]
32	O	–

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB

Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND
57	Y	BAT(F/L)

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.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR

Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(FUSE)
45	V	BACK DOOR OPEN OUTPUT[LHD models]
45	P	BACK DOOR OPEN OUTPUT[RHD models]

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

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

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

Terminal No.	Color of Wire	Signal Name [Specification]
13	V	DOOR SW (BACK)[LHD models]
13	Y	DOOR SW (BACK)[RHD models]
21	P	CAN-L
22	L	CAN-H
29	O	BACK DOOR OPEN SW

JCKWA0411GE

Fail Safe

INFOID:0000000001557107

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC is detected.

DTC	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 MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper auto stop signal.
When the rear wiper auto stop signal does not change more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation
1. Turn ignition switch OFF.
2. Pass more than 1 minute after the rear wiper stop.
3. Turn ignition switch ON.
4. Operate the rear wiper switch.

HIGH FLASHER OPERATION

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.

FAIL-SAFE CONTROL BY LIGHT & RAIN SENSOR MALFUNCTION

BCM detects the light & rain sensor serial link error and the light & rain sensor malfunction.
BCM controls the following fail-safe when light & rain sensor has a malfunction.

Fail-safe Control
• 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:0000000001557108

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:0000000001557109

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.

DTC	TIME		Fail-safe	Reference
U1000: CAN COMM CIRCUIT	0	1 - 39	—	BCS-33
U1010: CONTROL UNIT (CAN)	0	1 - 39	—	BCS-34
B2190: NATS ANTENNA AMP	CRNT	PAST	×	• With Intelligent Key system: SEC-41 • Without Intelligent Key system: SEC-254
B2191: DIFFERENCE OF KEY	CRNT	PAST	×	• With Intelligent Key system: SEC-43 • Without Intelligent Key system: SEC-256
B2192: ID DISCORD BCM-ECM	CRNT	PAST	×	• With Intelligent Key system: SEC-38 • Without Intelligent Key system: SEC-251
B2193: CHAIN OF BCM-ECM	CRNT	PAST	×	• With Intelligent Key system: SEC-40 • Without Intelligent Key system: SEC-253
B2194: DISCORD BCM-I-KEY	CRNT	PAST	×	SEC-53
B2195: ANTI SCANNING	CRNT	PAST	×	• With Intelligent Key system: SEC-54 • Without Intelligent Key system: SEC-264
B2196: DONGLE NG	CRNT	PAST	×	• With Intelligent Key system: SEC-55 • Without Intelligent Key system: SEC-265

SYMPTOM DIAGNOSIS
DOOR LOCK
Symptom Table

INFOID:0000000001515567

The diagnostics item numbers show the sequence for inspection. Inspection in order from item 1.

NO.	Function	Operation condition	Symptom	Diagnostic Item	Reference page
1	Door lock and unlock switch function	Press door lock and unlock switch.	Door does not lock/unlock	All doors	DLK-214
				Driver side	DLK-215
				Passenger side	DLK-215
				Rear LH	DLK-216
				Rear RH	DLK-216
2	Intelligent Key function	Press Intelligent Key button.	Door does not lock/unlock	—	DLK-217
			Anti-hijack function does not operate	—	DLK-218
3	Door request switch function	Press driver side door request switch.	Door does not lock/unlock	—	DLK-219
		Press passenger side door request switch.		—	DLK-219
		Press back door request switch.		—	DLK-220
		Press driver side door request switch, when all doors are locked.	Anti-hijack function does not operate	Driver side door	DLK-222
		Press passenger side door request switch, when all doors are locked.		Passenger side door	DLK-222
4	Key reminder function	Lock all doors with door lock and unlock switch, when Intelligent Key is inside of the vehicle.	Key reminder function does not operate	—	DLK-224
5	Auto door lock function	Unlock all doors and wait more than 2 minutes.	Auto door lock operation does not operate	—	DLK-225
6	Vehicle speed sensing auto door lock function	Vehicle speed is more than 25km/h.	Vehicle speed sensing auto door lock operation does not operate	—	DLK-226
7	Back door opener function	Press back door opener switch.	Back door does not open	—	DLK-227

NO.	Function	Operation condition	Symptom	Diagnostic Item	Reference page
8	Warning function	Door is opened under the following condition. • Ignition knob is OFF or LOCK position.	Ignition knob return forgotten warning does not operate	—	DLK-228
		Driver side door is opened under the following conditions. • Ignition switch is OFF position. • Mechanical key is inserts into ignition key cylinder.	Ignition key warning does not operate	—	DLK-229
		Door is opened under the following condition. • Ignition knob is between ACC and OFF position or ignition knob is pressed in while ignition switch is in LOCK position.	OFF position warning does not operate	Warning lamp	DLK-230
				Buzzer (Combination meter)	DLK-230
		Door is opened under the following conditions and wait more than 5 seconds. • Engine is running. • Take Intelligent Key out of the vehicle.	Take away warning does not operate	Warning lamp	DLK-231
		Any door open to all door close under the following conditions. • Engine is running. • Take Intelligent Key out of the vehicle.		Intelligent Key warning buzzer	DLK-232
				Warning lamp	DLK-232
		Take away through window Intelligent Key under the following condition and wait more than 30 seconds. • Engine is running.		Buzzer (Combination meter)	DLK-233
				Warning lamp	DLK-233
		Turn ignition switch ON position, when Intelligent Key battery is low voltage.	Intelligent Key low battery warning does not operate	Warning lamp	DLK-234
		Press door request switch under the following conditions. • Door is opened. • Ignition switch is in ACC or OFF position or ignition knob is pressed in LOCK position or mechanical key is inserts into ignition key cylinder. • Intelligent Key is inside vehicle.	Door lock operation warning chime does not operate	—	DLK-235
		Press Intelligent Key button under the following conditions. • Door is opened. • Ignition switch is in ACC or OFF position or ignition knob is pressed in LOCK position or mechanical key is inserts into ignition key cylinder.		—	DLK-236
		Press back door opener switch under the following conditions. • Door is locked with door lock and unlock switch. • Speed sensing lock or only driver side is unlocked with anti-hijack function.	Back door open warning does not operate	—	DLK-237
9	Hazard and buzzer reminder function	Press door request switch or Intelligent Key button.	Buzzer reminder operation does not operate	—	DLK-238
		Press door request switch or Intelligent Key button.	Hazard reminder operation does not operate	—	DLK-239

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

ALL DOOR

ALL DOOR : Description
INFOID:0000000001515568

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

ALL DOOR : Diagnosis Procedure
INFOID:0000000001515569

1.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check power supply and ground circuit.
Refer to DLK-72, "BCM : Diagnosis Procedure" (BCM).

Is the inspection result normal?

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

2.CHECK INTELLIGENT KEY BATTERY

Check Intelligent Key battery.
Refer to DLK-138, "Component Function Check".

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-84, "PASSENGER SIDE : Component Function Check" (passenger side).
Refer to DLK-86, "REAR LH : Component Function Check" (rear LH).
Refer to DLK-87, "REAR RH : Component Function Check" (rear RH).
Refer to DLK-89, "BACK DOOR : Component Function Check" (back door).

Is the inspection result normal?

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

4.CHECK INTELLIGENT KEY BATTERY

Check Intelligent Key battery.
Refer to DLK-138, "Component Function Check".

Is the inspection result normal?

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

5.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001515570

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001515571

1.CHECK DOOR LOCK ACTUATOR

Check door lock actuator (driver side).
Refer to DLK-96, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

  YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
  NO   >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001515572

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001515573

1.CHECK DOOR LOCK ACTUATOR

Check door lock actuator (passenger side).
Refer to DLK-98, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

  YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
  NO   >> GO TO 1.

REAR LH

REAR LH : Description
INFOID:0000000001515574

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

REAR LH : Diagnosis Procedure
INFOID:0000000001515575

1.CHECK DOOR LOCK ACTUATOR

Check door lock actuator LH.
Refer to DLK-99, "REAR LH : Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

REAR RH

REAR RH : Description
INFOID:0000000001515576

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

REAR RH : Diagnosis Procedure
INFOID:0000000001515577

1.CHECK DOOR LOCK ACTUATOR

Check door lock actuator RH.
Refer to DLK-100, "REAR RH : Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

Description

INFOID:0000000001515578

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

Diagnosis Procedure

INFOID:0000000001515579

1.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check power supply and ground circuit.
Refer to DLK-72, "INTELLIGENT KEY UNIT : Diagnosis Procedure" (Intelligent Key unit).

Is the inspection result normal?

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

2.CHECK DRIVER SIDE DOOR SWITCH

Check drive side door switch.
Refer to DLK-83, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

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

3.CHECK KEY SWITCH

Check key switch.
Refer to DLK-91, "Component Function Check".

Is the inspection result normal?

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

4.CHECK IGNITION KNOB SWITCH

Check ignition knob switch.
Refer to DLK-94, "Component Function Check".

Is the inspection result normal?

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

5.CHECK INTELLIGENT KEY BATTERY

Check Intelligent Key battery.
Refer to DLK-138, "Component Function Check".

Is the inspection result normal?

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

6.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

ANTI-HIJACK FUNCTION DOES NOT OPERATE WITH INTELLIGENT KEY

Description
INFOID:0000000001515580

NOTE:
• Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

Diagnosis Procedure
INFOID:0000000001515581

1.CHECK "SELECTIVE UNLOCK FUNCTION" SETTING IN "WORK SUPPORT"

Check "SELECTIVE UNLOCK FUNCTION" setting in "Work Support".
Refer to DLK-67, "CONSULT-III Function (INTELLIGENT KEY)".

Is the inspection result normal?

YES   >> GO TO 2.
NO   >> Set "SELECTIVE UNLOCK FUNCTION" of "Work Support". Refer to DLK-67, "CONSULT-III Function (INTELLIGENT KEY)".

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO   >> GO TO 1.

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001515584

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001515585

1.CHECK "LOCK/UNLOCK BY I-KEY" SETTING IN "WORK SUPPORT"

Check "LOCK/UNLOCK BY I-KEY"setting in "Work Support".
Refer to DLK-67, "CONSULT-III Function (INTELLIGENT KEY)".

Is the inspection result normal?

YES   >> GO TO 2.
NO   >> Set "LOCK/UNLOCK BY I-KEY" of "Work Support". Refer to DLK-67, "CONSULT-III Function (INTELLIGENT KEY)".

2.CHECK DOOR REQUEST SWITCH

Check door request switch.
Refer to DLK-77, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

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

3.CHECK OUTSIDE KEY ANTENNA

Check outside key antenna.
Refer to DLK-109, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

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

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES   >> Check Intermittent Incident. Refer to GI-39, "Intermittent Incident".
NO   >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001515586

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

PASSENGER SIDE : Diagnosis Procedure
INFOID:0000000001515587

1.CHECK DOOR REQUEST SWITCH

Check door request switch.
Refer to DLK-79, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?

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

2.CHECK OUTSIDE KEY ANTENNA

Check outside key antenna.
Refer to DLK-112, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?

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

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

 YES   >> Check Intermittent Incident. Refer to GI-39, "Intermittent Incident".
 NO   >> GO TO 1.

BACK DOOR

BACK DOOR : Description
INFOID:0000000001515588

NOTE:
• Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
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.

BACK DOOR : Diagnosis Procedure
INFOID:0000000001515589

1.CHECK DOOR REQUEST SWITCH

Check back door request switch.
Refer to DLK-81, "BACK DOOR : Component Function Check".

Is the inspection result normal?

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

2.CHECK OUTSIDE KEY ANTENNA

Check outside key antenna.
Refer to DLK-115, "BACK DOOR : Component Function Check".

Is the inspection result normal?

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

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES   >> Check Intermittent Incident. Refer to GI-39, "Intermittent Incident".
NO   >> GO TO 1.

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

ANTI-HIJACK FUNCTION DOES NOT OPERATE WITH DOOR REQUEST SWITCH
DRIVER SIDE

DRIVER SIDE : Description
INFOID:0000000001548077

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

DRIVER SIDE : Diagnosis Procedure
INFOID:0000000001548076

1.CHECK "SELECTIVE UNLOCK FUNCTION" SETTING IN "WORK SUPPORT"

Check "SELECTIVE UNLOCK FUNCTION" setting in "Work Support".
Refer to DLK-67, "CONSULT-III Function (INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.
NO   >> Set "SELECTIVE UNLOCK FUNCTION" of "Work Support". Refer to DLK-67, "CONSULT-III Function (INTELLIGENT KEY)".

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO   >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Description
INFOID:0000000001515590

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

PASSENGER SIDE : Diagnosis Procedure
INFOID:0000000001515591

1.CHECK PASSENGER SIDE ANTI-HIJACK RELAY

Check passenger side anti-hijack relay.
Refer to DLK-129, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

   YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
   NO   >> GO TO 1.

KEY REMINDER FUNCTION DOES NOT OPERATE

Description

INFOID:0000000001515592

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Understand the operation when does it work, refer to DLK-37, "KEY REMINDER : System Description".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)
- Request switch operation and door lock and unlock switch operation are normal.

Diagnosis Procedure

INFOID:0000000001515593

1.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-83, "DRIVER SIDE : Component Function Check". (Driver side)
Refer to DLK-84, "PASSENGER SIDE : Component Function Check". (Passenger side)
Refer to DLK-86, "REAR LH : Component Function Check". (Rear LH)
Refer to DLK-87, "REAR RH : Component Function Check". (Rear RH)
Refer to DLK-89, "BACK DOOR : Component Function Check". (Back door)

Is the inspection result normal?

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

2.CHECK INSIDE KEY ANTENNA

Check inside key antenna.
Refer to DLK-119, "INSTRUMENT CENTER : Component Function Check". (Instrument center)
Refer to DLK-122, "CONSOLE : Component Function Check". (Console)
Refer to DLK-125, "REAR SEAT : Component Function Check". (Rear seat)

Is the inspection result normal?

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

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO   >> GO TO 1.

AUTO DOOR LOCK OPERATION DOES NOT OPERATE

Description
INFOID:0000000001515594

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-22, "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-40, "AUTO DOOR LOCK : System Description".

Conditions of Vehicle (Operating Conditions)
- Request switch operation and door lock and unlock switch operation are normal.

Diagnosis Procedure
INFOID:0000000001515595

1.CHECK "AUTO RELOCK TIMER" SETTING IN "WORK SUPPORT"

Check "AUTO RELOCK TIMER" setting in "Work Support".
Refer to DLK-67, "CONSULT-III Function (INTELLIGENT KEY)".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO   >> GO TO 1.

VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

Description
INFOID:0000000001515596

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Understand the operation when does it work, refer to DLK-43, "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.

Conditions of Vehicle (Operating Conditions)
- Request switch operation and door lock and unlock switch operation are normal.

Diagnosis Procedure
INFOID:0000000001515597

1.CHECK VEHICLE SPEED SIGNAL

Check vehicle speed signal.
Refer to DLK-137, "Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

  YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
  NO   >> GO TO 1.

BACK DOOR DOES NOT OPENED

Description

INFOID:0000000001515598

NOTE:
• Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)
• Door lock function is normal.
• Vehicle speed is less than 5 km/h (3MPH).
• All doors are unlocked.

Diagnosis Procedure

INFOID:0000000001515599

1.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.
Refer to DLK-107, "Component Function Check".

Is the inspection result normal?

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

2.CHECK BACK DOOR OPENER ACTUATOR

Check back door opener actuator.
Refer to DLK-103, "Component Function Check".

Is the inspection result normal?

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

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO   >> GO TO 1.

IGNITION KNOB RETURN FORGOTTEN WARNING DOES NOT OPERATE

Description

INFOID:0000000001515600

NOTE:
• Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
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-54, "System Description".
• Door lock function is normal.

Diagnosis Procedure

INFOID:0000000001515601

1.CHECK BUZZER (COMBINATION METER)

Check buzzer (combination meter).
Refer to DLK-133, "Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO   >> GO TO 1.

IGNITION KEY WARNING DOES NOT OPERATE

Description
INFOID:0000000001515602

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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-54, "System Description".
- Door lock function is normal.

Diagnosis Procedure
INFOID:0000000001515603

1.CHECK BUZZER (COMBINATION METER)

Check buzzer (combination meter).
Refer to DLK-133, "Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

OFF POSITION WARNING DOES NOT OPERATE
WARNING LAMP

WARNING LAMP : Description
INFOID:0000000001515604

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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-54, "System Description".
- Door lock function is normal.

WARNING LAMP : Diagnosis Procedure
INFOID:0000000001515605

1. CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-131, "Component Function Check".

Is the inspection result normal?

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

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

BUZZER (COMBINATION METER)

BUZZER (COMBINATION METER) : Description
INFOID:0000000001515606

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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-54, "System Description".
- Door lock function is normal.

BUZZER (COMBINATION METER) : Diagnosis Procedure
INFOID:0000000001515607

1. CHECK BUZZER (COMBINATION METER)

Check buzzer (combination meter).
Refer to DLK-133, "Component Function Check".

Is the inspection result normal?

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

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

TAKE AWAY WARNING DOES NOT OPERATE (DOOR IS OPENED)
WARNING LAMP

WARNING LAMP : Description

INFOID:0000000001515616

NOTE:
• Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
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-54, "System Description".
• Door lock function is normal.

WARNING LAMP : Diagnosis Procedure

INFOID:0000000001515617

1.CHECK KEY WARNING LAMP

Check KEY warning lamp.
Refer to DLK-134, "Component Function Check".
Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.
Is the result normal?

  YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
  NO   >> GO TO 1.

TAKE AWAY WARNING DOES NOT OPERATE (ANY DOOR OPEN TO ALL DOORS CLOSE)

WARNING LAMP

WARNING LAMP : Description

INFOID:0000000001515612

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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-54, "System Description".
- Door lock function is normal.

WARNING LAMP : Diagnosis Procedure

INFOID:0000000001515613

1.CHECK KEY WARNING LAMP

Check KEY warning lamp.
Refer to DLK-134, "Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO   >> GO TO 1.

INTELLIGENT KEY WARNING BUZZER

INTELLIGENT KEY WARNING BUZZER : Description

INFOID:0000000001515614

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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-54, "System Description".
- Door lock function is normal.

INTELLIGENT KEY WARNING BUZZER : Diagnosis Procedure

INFOID:0000000001515615

1.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-131, "Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO   >> GO TO 1.

TAKE AWAY WARNING DOES NOT OPERATE (TAKE AWAY THROUGH WINDOW)
WARNING LAMP

WARNING LAMP : Description
INFOID:0000000001515618

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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-54, "System Description".
- Door lock function is normal.

WARNING LAMP : Diagnosis Procedure
INFOID:0000000001515619

1.CHECK KEY WARNING LAMP

Check KEY warning lamp.
Refer to DLK-134, "Component_Function_Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO   >> GO TO 1.

BUZZER (COMBINATION METER)

BUZZER (COMBINATION METER) : Description
INFOID:0000000001515620

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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-54, "System Description".
- Door lock function is normal.

BUZZER (COMBINATION METER) : Diagnosis Procedure
INFOID:0000000001515621

1.CHECK BUZZER (COMBINATION METER)

Check buzzer (combination meter).
Refer to DLK-133, "Component_Function_Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO   >> GO TO 1.

INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

Description

INFOID:0000000001515622

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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-54, "System Description".
- Door lock function is normal.

Diagnosis Procedure

INFOID:0000000001515623

1.CHECK "LOW BATT OF KEY FOB WARN" SETTING IN "WORK SUPPORT"

Check "LOW BATT OF KEY FOB WARN" setting in "Work Support".
Refer to DLK-67, "CONSULT-III Function (INTELLIGENT KEY)".

Is the inspection result normal?

  YES   >> GO TO 2.
  NO   >> Set "LOW BATT OF KEY FOB WARN" setting in "Work Support". Refer to DLK-67, "CONSULT-III Function (INTELLIGENT KEY)".

2.CHECK INTELLIGENT KEY BATTERY

Check Intelligent Key battery.
Refer to DLK-138, "Component Function Check".

Is the inspection result normal?

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

3.CHECK KEY WARNING LAMP

Check KEY warning lamp.
Refer to DLK-134, "Component Function Check".

Is the inspection result normal?

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

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

  YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
  NO   >> GO TO 1.

DOOR LOCK OPERATION WARNING CHIME DOES NOT OPERATE WITH DOOR REQUEST SWITCH

Description

INFOID:0000000001515626

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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-54, "System Description".
- Door lock function is normal.

Diagnosis Procedure

INFOID:0000000001515627

1.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-131, "Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

DOOR LOCK OPERATION WARNING CHIME DOES NOT OPERATE WITH INTELLIGENT KEY

Description

INFOID:0000000001515624

NOTE:
• Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
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-54, "System Description".
• Door lock function is normal.

Diagnosis Procedure

INFOID:0000000001515625

1.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-131, "Component Function Check".
Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.
Is the result normal?

YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO   >> GO TO 1.

BACK DOOR OPEN WARNING DOES NOT OPERATE

Description

INFOID:0000000001515628

NOTE:
• Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
Conditions of Vehicle (Operating Conditions)
• Door lock function and back door opener function is normal.

Diagnosis Procedure

INFOID:0000000001515629

1.CHECK BUZZER (COMBINATION METER)

Check buzzer (combination meter).
Refer to DLK-133, "Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

BUZZER REMINDER OPERATION DOES NOT OPERATE

Description
INFOID:0000000001515630

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

Diagnosis Procedure
INFOID:0000000001515631

1.CHECK SETTING OF BUZZER REMINDER WITH CONSULT-III

Check "ANSWER BACK WITH I-KEY LOCK" and "ANSWER BACK WITH I-KEY UNLOCK" setting in "Work Support".
Refer to DLK-67, "CONSULT-III Function (INTELLIGENT KEY)".

Is the inspection result normal?

YES   >> GO TO 2.
NO   >> Set "ANSWER BACK WITH I-KEY LOCK" and "ANSWER BACK WITH I-KEY UNLOCK" setting in "WORK SUPPORT". Refer to DLK-67, "CONSULT-III Function (INTELLIGENT KEY)".

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO   >> GO TO 1.

HAZARD REMINDER OPERATION DOES NOT OPERATE

Description
INFOID:0000000001515632

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-22, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)
- "HAZARD ANSWER BACK" is ON when setting on CONSULT-III.
- Door lock function is normal.

Diagnosis Procedure
INFOID:0000000001515633

1.CHECK SETTING OF BUZZER REMINDER WITH CONSULT-III

Check "HAZARD ANSWER BACK" setting in "Work Support".
Refer to DLK-67, "CONSULT-III Function (INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set "HAZARD ANSWER BACK" setting in "Work Support". Refer to DLK-67, "CONSULT-III Function (INTELLIGENT KEY)".

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000001537518

CUSTOMER INTERVIEW
↓
Duplicate the Noise and Test Drive.
↓
Check Related Service Bulletins.
↓
Locate the Noise and Identify the Root Cause.
↓
Repair the Cause.
↓
NG → Confirm Repair.
↓ OK
Inspection End

SBT842

CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of the customer's comments; refer to DLK-244, "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.

A

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.

B

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.

C

• If it is difficult to duplicate the noise, drive the vehicle slowly on an undulating or rough road to stress the vehicle body.

D

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).

E

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.

F

• 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.

G

• 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.

H

Refer to DLK-242, "Inspection Procedure".

REPAIR THE CAUSE

• If the cause is a loose component, tighten the component securely.

I

• If the cause is insufficient clearance between components:
- separate components by repositioning or loosening and retightening the component, if possible.

J

- 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:

DLK

• URETHANE PADS
  Insulates connectors, harness, etc.
• INSULATOR (Foam blocks)
  Insulates components from contact. Can be used to fill space behind a panel.

L

• 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.

M

• UHMW(TEFLON) TAPE
  Insulates where slight movement is present. Ideal for instrument panel applications.

N

• SILICONE GREASE
  Used in place of UHMW tape that will be visible or not fit.
  Note: Will only last a few months.

O

• SILICONE SPRAY
  Use when grease cannot be applied.
• DUCT TAPE
  Use to eliminate movement.

P

CONFIRM THE REPAIR

Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.

Inspection Procedure

INFOID:0000000001537519

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

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. Cluster lid A and instrument panel
2. Acrylic lens and combination meter housing
3. Instrument panel to front pillar garnish
4. Instrument panel to windshield
5. Instrument panel mounting pins
6. Wiring harnesses behind the combination meter
7. A/C defroster duct and duct joint

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

CAUTION:
Do not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will not be able to recheck the repair.

CENTER CONSOLE

Components to pay attention to include:

1. Shifter assembly cover to finisher
2. A/C control unit and cluster lid C
3. Wiring harnesses behind audio and A/C control unit

The instrument panel repair and isolation procedures also apply to the center console.

DOORS

Pay attention to the:

1. Finisher and inner panel making a slapping noise
2. Inside handle escutcheon to door finisher
3. Wiring harnesses tapping
4. Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks to repair the noise.

TRUNK

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

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

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

SUNROOF/HEADLINING

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

1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
2. Sunvisor shaft shaking in the holder
3. Front or rear windshield touching headlining and squeaking

Again, pressing on the components to stop the noise while duplicating the conditions can isolate most of these incidents. Repairs usually consist of insulating with felt cloth tape.

SEATS

When isolating seat noise it is important to note the position the seat is in and the load placed on the seat when the noise is present. These conditions should be duplicated when verifying and isolating the cause of the noise.

Cause of seat noise include:

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

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

UNDERHOOD

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

Causes of transmitted underhood noise include:

1. Any component mounted to the engine wall
2. Components that pass through the engine wall
3. Engine wall mounts and connectors
4. Loose radiator mounting pins
5. Hood bumpers out of adjustment
6. Hood striker out of adjustment

These noises can be difficult to isolate since they cannot be reached from the interior of the vehicle. The best method is to secure, move or insulate one component at a time and test drive the vehicle. Also, engine RPM or load can be changed to isolate the noise. Repairs can usually be made by moving, adjusting, securing, or insulating the component causing the noise.

Diagnostic Worksheet

INFOID:0000000001537520

**SQUEAK & RATTLE
DIAGNOSTIC WORKSHEET**

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

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

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

PIIB8740E

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

_____

_____

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

☐ anytime

☐ 1st time in the morning

☐ only when it is cold outside

☐ only when it is hot outside

☐ after sitting out in the rain

☐ when it is raining or wet

☐ dry or dusty conditions

☐ other:

III. WHEN DRIVING:

☐ through driveways

☐ over rough roads

☐ over speed bumps

☐ only about _____ mph

☐ on acceleration

☐ coming to a stop

☐ on turns: left, right or either (circle)

☐ with passengers or cargo

☐ other: _____

☐ after driving _____ miles or _____ minutes

IV. WHAT TYPE OF NOISE

☐ squeak (like tennis shoes on a clean floor)

☐ creak (like walking on an old wooden floor)

☐ rattle (like shaking a baby rattle)

☐ knock (like a knock at the door)

☐ tick (like a clock second hand)

☐ thump (heavy, muffled knock noise)

☐ buzz (like a bumble bee)

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

_____

_____

_____

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

VIN: _____   Customer Name: _____

W.O.# _____   Date: _____

This form must be attached to Work Order

PIIB8742E

DLK-245

PRECAUTION
PRECAUTIONS

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

INFOID:0000000001524327

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the "SRS AIRBAG" and "SEAT BELT" 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 AIRBAG".**
- **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:0000000001524328

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:0000000001280618

A

B

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

C

D

PIIB3706J

Work

INFOID:0000000001280619

E

- 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.

F

G

H

I

J

DLK

L

M

N

O

P

PREPARATION

PREPARATION

Commercial Service Tools

INFOID:0000000001280620

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

ON-VEHICLE REPAIR
HOOD
HOOD ASSEMBLY

HOOD ASSEMBLY : Exploded View   *INFOID:0000000001280622*

REMOVAL

JMKIA0541ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT

JMKIA0542GB

1.	Hood assembly	2.	Hood bumper rubber side	3.	Hood hinge
4.	Hood lock assembly	5.	Front grille	6.	Front bumper
7.	Front combination lamp	8.	Front fender		

Refer to GI-4, "Components" for symbols in the figure.

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000001280623

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
   - Clamp
   - Hood support rod
   - Grommet
   - Radiator core seal
   - Hood bumper rubber center
   - Hood bumper rubber side

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-251, "HOOD ASSEMBLY : Adjustment".**

HOOD ASSEMBLY : Adjustment

INFOID:0000000001280624

mm(in)

Portion				Standard
Hood – Front grill	**A – A**	**E**	**Clearance**	**4.0 – 8.0 (0.157 – 0.315)**
		F	**Surface height**	**- 0.4 – 4.0 (- 0.016 – 0.157)**
Hood – Front bumper	**B – B**	**G**	**Clearance**	**4.0 – 8.0 (0.157 – 0.315)**
		H	**Surface height**	**- 0.4 – 4.0 (- 0.016 – 0.157)**
Hood – Front combination lamp	**C – C**	**I**	**Clearance**	**1.8 – 6.2 (0.071 – 0.244)**
		J	**Surface height**	**- 1.3 – 2.7 (- 0.051 – 0.106)**
Hood – Front fender	**D – D**	**K**	**Clearance**	**2.6 – 4.6 (0.102 – 0.181)**
		L	**Surface height**	**- 1.0 – 1.0 (- 0.039 – 0.039)**

1. Check the clearance and the surface height between the hood and each part by visually and touching. (Fitting standard dimension in the table below should be satisfied.)

2. Remove the front grille. Refer to EXT-18, "Removal and Installation".

3. In case any parts are out of specification, adjust them according to the procedures shown below.

4. Remove the hood lock and adjust the height by rotating the hood bumper rubber side until the hood becomes 1 to1.5 mm (0.04 to 0.059 in) lower than the fender.

5. 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.

6. 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)].

PIIB5794E

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)

7. After adjustment tighten lock bolts to the specified torque.

HOOD HINGE

HOOD HINGE : Exploded View

INFOID:0000000001280625

SEC. 650

JMKIA0541ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

HOOD HINGE : Removal and Installation

INFOID:0000000001280626

REMOVAL

1. Remove the hood assembly. Refer to <u>DLK-250, "HOOD ASSEMBLY : Removal and Installation"</u>.
2. Remove the front fender. Refer to <u>DLK-258, "Removal and Installation"</u>.
3. Remove the hood hinge mounting bolts, and then remove the hood hinge.

INSTALLATION
Install in the reverse order of removal.
CAUTION:
- **Before installation of hood hinge, apply anticorrosive agent onto the mounting surface of the vehicle body.**
- **After installation, apply touch-up paint (the body color) onto the head of the hinge mounting bolts and nuts.**
- **After installation, perform hood fitting adjustment. Refer to <u>DLK-251, "HOOD ASSEMBLY : Adjustment"</u>.**

HOOD SUPPORT ROD

HOOD SUPPORT ROD : Exploded View
INFOID:0000000001298150

JMKIA0541ZZ

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

Refer to <u>GI-4, "Components"</u> for symbols in the figure.

HOOD SUPPORT ROD : Removal and Installation
INFOID:0000000001280628

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:0000000001280629

SEC. 650

JMKIA0543ZZ

| 1. | Hood lock assembly | 2. | Hood lock control cable | 3. | Hood lock opener |

⌒ :Clip

Refer to GI-4, "Components" for symbols in the figure.

HOOD LOCK CONTROL : Removal and Installation

INFOID:0000000001280630

REMOVAL

1. Remove the hood lock opener mounting bolts, and then remove the hood lock opener.
2. Remove the front grille. Refer to EXT-18, "Removal and Installation".
3. Remove the fender protector. Refer to EXT-21, "Removal and Installation".
4. Remove the hood lock mounting bolts, and then remove the hood lock.
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.**

A

• **Check that the cable is not offset from the positioning grommet, and apply the sealant to the grommet (at *mark) properly.**

B

C

PIIB5801E

D

• **Check that the hood lock control cable is properly engaged with the hood lock.**
• **After installation, perform hood fitting adjustment. Refer to DLK-251, "HOOD ASSEMBLY : Adjustment".**

E

• **After installation, perform the hood lock control inspection. Refer to DLK-255, "HOOD LOCK CONTROL : Inspection".**

HOOD LOCK CONTROL : Inspection

INFOID:0000000001280631

F

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

G

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.

H

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.

I

J

5. Check the hood lock lubrication condition. If necessary, apply body grease to the hood lock.

DLK

L

M

N

O

P

RADIATOR CORE SUPPORT

Exploded View

INFOID:0000000001280632

JMKIA0544ZZ

1. Radiator core support upper center	2. Radiator core support upper RH	3. Radiator core support upper LH
4. Radiator core support lower	5. Radiator core support side RH	6. Radiator core support side LH
7. Hood lock support stay assembly	8. Front bumper fascia center bracket	9. Sensor bracket
10. Air guide RH	11. Air guide LH	12. Air guide upper RH (M9R model)
13. Air guide lower RH (M9R model)	14. Air guide upper LH (M9R model)	15. Air guide lower LH (M9R model)

Removal and Installation

INFOID:0000000001280633

REMOVAL

1. Remove the front bumper fascia and the energy absorber. Refer to EXT-13, "Removal and Installation".
2. Remove the bumper reinforcement. Refer to EXT-13, "Removal and Installation".
3. Disconnect the liquid tank connector. Refer to HA-66, "Exploded View".
4. Remove the front combination lamp. Refer to EXL-213, "Removal and Installation" (XENON TYPE), EXL-409, "Removal and Installation" (HALOGEN TYPE).
5. Remove the washer tank. Refer to WW-104, "Removal and Installation".
6. Remove the air inlet hose (LH) and air inlet tube (LH). Refer to EM-266, "Exploded View" (M9R model).
7. Remove the charge air cooler. Refer to EM-266, "Removal and Installation" (M9R model).
8. Disconnect the hood lock control cable clamp, and then remove the hood lock assembly. Refer to DLK-254, "HOOD LOCK CONTROL : Removal and Installation".
9. Remove the air guide mounting clips, and remove the air guide (LH/RH).
10. Remove the horn. Refer to HRN-6, "Removal and Installation".

11. Remove the Intelligent Key warning buzzer (with Intelligent Key systems). Refer to DLK-298, "Removal and Installation".

12. Disconnect the harness clips from the hood lock stay.

13. Remove the hood lock stay mounting bolts, and then remove the hood lock stay.

14. Remove the crush zone sensor. Refer to SR-15, "Removal and Installation".

15. Place securely the hood support rod inside the engine mounting bracket hole.
    CAUTION:
    Check that the hood is securely fix.

16. Remove the radiator core support upper side (RH,LH) mounting bolts, and remove the radiator core support side (RH,LH).

17. Remove the radiator core support upper center mounting bolts, and remove the radiator core support upper center.

18. Disconnect the harness clamp from radiator core support side (LH).

19. Remove the radiator core support lower assembly mounting bolts.

20. Remove the radiator core support lower assembly while other worker is holding the radiator and condenser assembly to prevent the radiator and condenser from falling.
    CAUTION:
    Operate with two workers, because of its heavy weight.

21. Put some wooden blocks (B) under the radiator and condenser, and use a rope (A) to suspend it to prevent it from falling.
    CAUTION:
    Operate with two workers, because of its heavy weight.

JMKIA0698ZZ

22. Remove the radiator core support side (RH,LH) mounting nuts, and remove the radiator core support side (RH,LH) from radiator core support lower.

INSTALLATION
Install in the reverse order of removal.

FRONT FENDER

Exploded View

SEC. 630

JMKIA0545ZZ

1. Front fender
2. Front fender finisher

Removal and Installation

REMOVAL

1. Remove the fillet molding. Refer to EXT-24, "Removal and Installation".
2. Remove the front grille. Refer to EXT-18, "Removal and Installation".
3. Remove the front bumper fascia. Refer to EXT-13, "Removal and Installation".
4. Remove the front combination lamp. Refer to EXL-213, "Removal and Installation" (XENON TYPE), EXL-409, "Removal and Installation" (HALOGEN TYPE).
5. Remove the inner fender protector. Refer to EXT-21, "Removal and Installation".
6. Remove the front fender finisher.
7. Remove the side turn signal lamp. Refer to EXL-222, "Removal and Installation".
8. Remove the mounting bolts and remove the front fender.
   CAUTION:
   Use a shop cloth to protect the body from being damaged during removal.

INSTALLATION
Install in the reverse order of removal.
CAUTION:
- **After installation, check the front fender adjustment. Refer to DLK-251, "HOOD ASSEMBLY : Adjustment" and DLK-261, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply the touch-up paint (the body color) onto the head of the front fender mounting bolts.**

FRONT DOOR
DOOR ASSEMBLY

DOOR ASSEMBLY : Exploded View

INFOID:0000000001280636

REMOVAL

JMKIA0546ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT

JMKIA0547GB

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR ASSEMBLY : Removal and Installation   *INFOID:0000000001280637*

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

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.

INSTALLATION

Install in the reverse order of removal.

CAUTION:
- **Check the front door open/close operation after installation.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **When removing and installing the front door assembly, perform the fitting adjustment. Refer to DLK-261, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**

DOOR ASSEMBLY : Adjustment

INFOID:0000000001280638

CLEARANCE, SURFACE HEIGHT AND SURFACE MISMATCH ADJUSTMENT

mm(in)

Portion		Clearance	Surface height
Front fender – Front door	**A – A**	**3.4 – 5.4 (0.134 – 0.213)**	**- 1.0 – 1.0 (- 0.039 – 0.039)**
Front door – Rear door	**B – B**	**3.5 – 5.5 (0.138 – 0.217)**	**- 1.0 – 1.0 (- 0.039 – 0.039)**
Front door – Rear door	**G – G**	**3.0 – 6.0 (0.118 – 0.236)**	**- 1.0 – 1.0 (- 0.039 – 0.039)**

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-258, "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-258, "Removal and Installation".
    CAUTION:
    After installation, check the front fender adjustment. Refer to DLK-261, "DOOR 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:0000000001280639

JMKIA0546ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR STRIKER : Removal and Installation

INFOID:0000000001280640

REMOVAL
Remove the TORX bolts, and then remove the door striker.

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-261, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Exploded View

INFOID:0000000001298151

SEC. 800

JMKIA0546ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR HINGE : Removal and Installation

INFOID:0000000001280642

REMOVAL

1. Remove the front door assembly. Refer to DLK-260, "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:
- **Check the front door open/close operation after installation.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **When removing and installing the front door assembly, perform the fitting adjustment. Refer to DLK-261, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**

DOOR CHECK LINK

DOOR CHECK LINK : Exploded View

INFOID:0000000001298152

JMKIA0546ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR CHECK LINK : Removal and Installation

INFOID:0000000001280644

REMOVAL

1. Fully close the front door window.
2. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
3. Remove the front door speaker. Refer to AV-38, "Removal and Installation".
4. Remove the mounting bolts of the door check link on the vehicle.
5. Remove the mounting bolts of the door check link on the door panel.
6. Take the door check link out from the hole of the door panel.

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:0000000001280645

REMOVAL

SEC. 820

JMKIA0548ZZ

1. Rear door panel
2. Door hinge (upper)
3. Door hinge (lower)
4. Door check link
5. Seal
6. Hole cover
7. Door bumper rubber
8. Door striker
9. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT

JMKIA0547GB

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000001280646

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

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.

INSTALLATION

Install in the reverse order of removal.

CAUTION:
- **Check the rear door lock/unlock operation after installation.**
- **Check the rear door open/close operation after installation.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **After installation, perform the fitting adjustment. Refer to DLK-267, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**

DOOR ASSEMBLY : Adjustment

INFOID:0000000001280647

CLEARANCE, SURFACE HEIGHT AND SURFACE MISMATCH ADJUSTMENT

mm(in)

Portion		Clearance	Surface height
Front door – Rear door	**B – B**	**3.5 – 5.5 (0.138 – 0.217)**	**-1.0 – 1.0 (-0.039 – 0.039)**
Rear door – Body side outer	**C – C**	**3.5 – 5.5 (0.138 – 0.217)**	**-1.0 – 1.0 (-0.039 – 0.039)**
Front door – Rear door	**G – G**	**3.0 – 6.0 (0.118 – 0.236)**	**-1.5 – 1.5 (-0.059 – 0.059)**

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 lower garnish. Refer to INT-16, "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 lower garnish. Refer to INT-16, "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:0000000001280648

SEC. 820

JMKIA0548ZZ

1. Rear door panel
2. Door hinge (upper)
3. Door hinge (lower)
4. Door check link
5. Seal
6. Hole cover
7. Door bumper rubber
8. Door striker
9. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

DOOR STRIKER : Removal and Installation

INFOID:0000000001280649

REMOVAL
Remove the TORX bolts, and then remove the door striker.

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-267, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Exploded View

INFOID:0000000001298153

JMKIA0548ZZ

1.	Rear door panel	2.	Door hinge (upper)	3.	Door hinge (lower)
4.	Door check link	5.	Seal	6.	Hole cover
7.	Door bumper rubber	8.	Door striker	9.	TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

DOOR HINGE : Removal and Installation

INFOID:0000000001280651

REMOVAL

1. Remove the center pillar lower garnish. Refer to INT-16, "Removal and Installation".
2. Remove the rear door assembly. Refer to DLK-266, "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:
- **Check the rear door open/close operation after installation.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **When removing and installing the rear door assembly, perform the fitting adjustment. Refer to DLK-267, "DOOR ASSEMBLY : Adjustment".**
- **After installing, apply the touch-up paint (the body color) onto the head of the hinge mounting nuts.**

DOOR CHECK LINK

DOOR CHECK LINK : Exploded View

INFOID:0000000001298154

SEC. 820

JMKIA0548ZZ

1. Rear door panel	2. Door hinge (upper)	3. Door hinge (lower)
4. Door check link	5. Seal	6. Hole cover
7. Door bumper rubber	8. Door striker	9. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

DOOR CHECK LINK : Removal and Installation

INFOID:0000000001280653

REMOVAL

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Remove the rear door speaker.
3. Remove the mounting bolts of the check link on the vehicle.
4. Remove the door check link mounting bolts on the door panel.
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:0000000001280654

REMOVAL

JMKIA0549GB

1. Back door assembly
2. Back door hinge
3. Back door stay
4. Back door striker
5. Back door stay stud ball
6. Bumper rubber
7. Bumper rubber bracket
8. Back door lock assembly
9. Emergency lever
10. Back door lock cover (RH handle)
11. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

JMKIA0550GB

1. Back door
2. Roof
3. Rear combination lamp
4. Body side outer
5. Back door hinge
6. Bumper rubber
7. Back door striker
8. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR ASSEMBLY : Removal and Installation

INFOID:0000000001280655

REMOVAL

1. Remove the back door finisher inner (upper, lower, side LH). Refer to INT-31, "Removal and Installation".
2. Disconnect the connectors in the back door, and then remove the grommet, and pull out the harness.

3. Remove the grommet, and then disconnect the connectors (1), and pull out the washer tube (2) at (A).

JMKIA0557ZZ

4. Pull the harness out of the back door.

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

    A : Jack

    B : Shop cloth

JMKIA0555ZZ

6. Remove the back door stay bracket mounting bolts on the back door.

7. Remove the back door hinge mounting nuts 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:
- **Check the back door open/close operation after installation.**
- **Check the back door lock/unlock operation after installation.**
- **After installation, perform fitting adjustment. Refer to DLK-273, "BACK DOOR ASSEMBLY : Adjustment".**

BACK DOOR ASSEMBLY : Adjustment

INFOID:0000000001280656

mm(in)

Portion				Standard
Back door panel – Roof panel	A – A	E	Clearance	5.0 – 7.0 (0.197 – 0.276)
		F	Surface height	-0.3 – 1.7 (-0.012 – 0.067)
Back door panel – Rear combination lamp	B – B	G	Clearance	4.0 – 8.0 (0.157 – 0.315)
Back door panel – Rear combination lamp	C – C	H	Clearance	4.0 – 8.0 (0.157 – 0.315)
Back door panel – Body side outer	D – D	I	Clearance	5.0 – 7.0 (0.197 – 0.276)
		J	Surface height	-1.0 – 1.1 (0.039 – 0.043)

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:0000000001280657

SEC. 900

JMKIA0549GB

10.0 (1.0, 89)

1. Back door assembly	2. Back door hinge	3. Back door stay
4. Back door striker	5. Back door stay stud ball	6. Bumper rubber
7. Bumper rubber bracket	8. Back door lock assembly	9. Emergency lever
10. Back door lock cover (RH handle)	11. TORX bolt	

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR STRIKER : Removal and Installation

INFOID:0000000001280658

REMOVAL
Remove the TORX bolts, and then remove the back door striker.

INSTALLATION
Install in the reverse order of removal.
CAUTION:
• **Check the back door open/close operation after installation.**
• **When removing and installing the back door striker, be sure to perform the fitting adjustment. Refer to DLK-273, "BACK DOOR ASSEMBLY : Adjustment".**

BACK DOOR HINGE

BACK DOOR HINGE : Exploded View

INFOID:0000000001298155

SEC. 900

JMKIA0549GB

1. Back door assembly
2. Back door hinge
3. Back door stay
4. Back door striker
5. Back door stay stud ball
6. Bumper rubber
7. Bumper rubber bracket
8. Back door lock assembly
9. Emergency lever
10. Back door lock cover (RH handle)
11. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR HINGE : Removal and Installation

INFOID:0000000001280660

REMOVAL

1. Remove the back door assembly. Refer to DLK-272, "BACK DOOR ASSEMBLY : Removal and Installation".
2. Remove the back door weather-strip. Refer to DLK-277, "BACK DOOR WEATHER-STRIP : Removal and Installation".
3. Remove the luggage side lower finisher. Refer to INT-28, "Removal and Installation".
4. Remove the luggage side upper finisher. Refer to INT-28, "Removal and Installation".
5. Using remover tool, remove the headlining clip at the rear side of the headlining. Refer to INT-22, "NORMAL ROOF : Exploded View" (NORMAL ROOF), INT-25, "SUNROOF : Exploded View" (SUNROOF).
6. Remove the rear side of the headlining.
7. 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:
- **Check the back door open/close operation after installation.**
- **Check the hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **When removing and installing the back door assembly, perform the fitting adjustment. Refer to DLK-273, "BACK DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the hinge mounting nuts.**

BACK DOOR STAY

BACK DOOR STAY : Exploded View

INFOID:0000000001298156

SEC. 900

JMKIA0549GB

1. Back door assembly
2. Back door hinge
3. Back door stay
4. Back door striker
5. Back door stay stud ball
6. Bumper rubber
7. Bumper rubber bracket
8. Back door lock assembly
9. Emergency lever
10. Back door lock cover (RH handle)
11. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR STAY : Removal and Installation

INFOID:0000000001280662

REMOVAL

1. Remove the mounting bolts (body side), and then remove the back door stay bracket.
2. Remove the stud ball (back door side), and then remove the back door stay.

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:0000000001280663

REMOVAL

SEC. 900

JMKIA0556ZZ

1. Back door weather-strip
A. Mark (upper)
B. Mark (lower)

BACK DOOR WEATHER-STRIP : Removal and Installation

INFOID:0000000001280664

REMOVAL
Pull up and remove engagement with body from the weather-strip joint.
CAUTION:
After removal, do not pull strongly on the weather-strip.

INSTALLATION
1. Working from the upper section, align the weather-strip mark with vehicle center position mark and install the weather-strip onto the vehicle.
2. For the lower section, align the weather-strip seam with center of the back door striker.
3. After installation, pull the weather-strip gently to ensure that there is no loose section.
   NOTE:
   Make sure that the weather-strip is fit tightly at each corner and the luggage rear plate.

FRONT DOOR LOCK
DOOR LOCK

DOOR LOCK : Exploded View

INFOID:0000000001280665

SEC. 805

⑤ 6.0 (0.61, 53)

⑩ 5.8 (0.59, 51)

JMKIA0551GB

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

⬅ :Vehicle front

Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK : Removal and Installation

INFOID:0000000001280666

REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Disconnect the inside handle knob cable and the lock knob cable.
3. Remove the front door glass. Refer to GW-17, "Removal and Installation".
4. Remove the front door module assembly. Refer to GW-17, "Exploded View".
5. Disconnect the door antenna and the door request switch connector and remove the harness clamp (models with Intelligent Key system).

A

B

C

D

6. Remove the door side grommet, and loosen the TORX bolt.
   CAUTION:
   Do not forcibly remove the TORX bolt.

JMKIA0020ZZ

E

F

G

7. Reach in to separate the door key cylinder rod connection (on the handle) (driver side).

   1. Door key cylinder assembly
   2. Key rod

JMKIA0553ZZ

H

I

J

8. While pulling the outside handle, remove door key cylinder assembly.

JMKIA0560ZZ

DLK

L

M

N

O

9. Disconnect front door request switch harness connector (models with Intelligent Key system).
10. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.

JMKIA0524ZZ

P

DLK-279

11. Remove the front gasket (1) and the rear gasket (2).

JMKIA0667ZZ

12. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.

PIIB5814E

13. Reach in to separate the outside handle cable connection.

14. Remove the door lock assembly TORX bolts.

15. Disconnect the door lock actuator connector, and then remove the door lock assembly.

16. Remove the key rod from door lock assembly.

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:0000000001298157

JMKIA0551GB

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

⟵ :Vehicle front

Refer to GI-4, "Components" for symbols in the figure.

INSIDE HANDLE : Removal and Installation

INFOID:0000000001280668

REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the inside handle mounting bolts.
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:0000000001298158

SEC. 805

JMKIA0551GB

1. Outside handle assembly
2. Door key cylinder assembly (driver side)
   Outside handle escutcheon (passenger side)
3. Front gasket

4. Rear gasket
5. TORX bolt
6. Outside handle bracket

7. Key rod
8. Door lock assembly
9. Inside handle

10. TORX bolt

⟵ :Vehicle front

Refer to GI-4, "Components" for symbols in the figure.

OUTSIDE HANDLE : Removal and Installation

INFOID:0000000001280670

REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Disconnect the inside handle knob cable and the lock knob cable.
3. Remove the front door glass. Refer to GW-17, "Removal and Installation".
4. Remove the front door module assembly. Refer to GW-17, "Exploded View".
5. Disconnect the connector and remove the harness clamp (models with Intelligent Key system).

A

6. Remove the door side grommet, and loosen the TORX bolt.
   CAUTION:
   Do not forcibly remove the TORX bolt.

B

C

JMKIA0020ZZ

D

7. Reach in to separate the door key cylinder rod connection (on the handle) (driver side).

E

   1. Door key cylinder assembly
   2. Key rod

F

G

JMKIA0553ZZ

H

8. Disconnect the door key cylinder switch harness connector.

I

9. While pulling the outside handle, remove the door key cylinder assembly (driver side) or outside handle escutcheon (passenger side).

J

DLK

JMKIA0560ZZ

L

10. Disconnect the front door request switch harness connector (models with Intelligent Key system).

M

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

N

O

JMKIA0524ZZ

P

DLK-283

12. Remove the front gasket (1) and rear gasket (2).

JMKIA0667ZZ

13. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.

PIIB5814E

14. 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.**

REAR DOOR LOCK
DOOR LOCK

DOOR LOCK : Exploded View

INFOID:0000000001280671

SEC. 825

6. 6.0 (0.61, 53)

9. 5.8 (0.59, 51)

JMKIA0552GB

1.	Outside handle assembly	2.	Outside handle escutcheon	3.	Front gasket
4.	Rear gasket	5.	Outside handle bracket	6.	TORX bolt
7.	Door lock assembly	8.	Inside handle	9.	TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK : Removal and Installation

INFOID:0000000001280672

REMOVAL

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Disconnect the inside handle knob cable.
3. Remove the door sealing screen. Refer to GW-23, "Removal and Installation".
4. Remove the lower partition sash. Refer to GW-17, "Removal and Installation".
5. Remove the corner piece assembly. Refer to GW-17, "Removal and Installation".
6. Remove the door lock assembly TORX bolts.
7. Disconnect the door lock actuator connector.

8. Slide the door lock assembly from the inside the door panel until the outside handle escutcheon TORX bolt can be seen.

JMKIA0554ZZ

9. While pulling the outside handle, remove the outside handle escutcheon.

JMKIA0560ZZ

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

JMKIA0524ZZ

11. Remove the front gasket (1) and the rear gasket (2).

JMKIA0667ZZ

12. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.

PIIB5814E

DLK-286

13. Reach in to separate the outside handle cable connection.

14. Remove the door lock assembly.

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:0000000001298159

SEC. 825

⑥ 6.0 (0.61, 53)

⑨ 5.8 (0.59, 51)

JMKIA0552GB

1.	Outside handle assembly	2.	Outside handle escutcheon	3.	Front gasket
4.	Rear gasket	5.	Outside handle bracket	6.	TORX bolt
7.	Door lock assembly	8.	Inside handle	9.	TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

INSIDE HANDLE : Removal and Installation

INFOID:0000000001280674

REMOVAL

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".

2. Remove the inside handle mounting screws.

3. Disconnect the inside handle 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:0000000001298160

SEC. 825

6 ⊙ 6.0 (0.61, 53)

9 ⊙ 5.8 (0.59, 51)

JMKIA0552GB

1.	Outside handle assembly	2.	Outside handle escutcheon	3.	Front gasket
4.	Rear gasket	5.	Outside handle bracket	6.	TORX bolt
7.	Door lock assembly	8.	Inside handle	9.	TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

OUTSIDE HANDLE : Removal and Installation

INFOID:0000000001280676

REMOVAL

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Disconnect the inside handle knob cable.
3. Remove the door sealing screen. Refer to GW-23, "Removal and Installation".
4. Remove the lower partition sash. Refer to GW-17, "Removal and Installation".
5. Remove the corner piece assembly. Refer to GW-17, "Removal and Installation".
6. Remove the door lock assembly TORX bolts.
7. Disconnect the door lock actuator connector.
8. Slide the door lock assembly from the inside the door panel until the outside handle escutcheon TORX bolt can be seen.

JMKIA0554ZZ

A

B

C

D

9. While pulling the outside handle, remove the outside handle escutcheon.

JMKIA0560ZZ

E

F

G

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

JMKIA0524ZZ

H

I

J

11. Remove the front gasket (1) and the rear gasket (2).

JMKIA0667ZZ

DLK

L

M

N

12. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.

PIIB5814E

O

13. 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.**

P

BACK DOOR LOCK
DOOR LOCK

DOOR LOCK : Exploded View

INFOID:0000000001298161

SEC. 900

JMKIA0549GB

1. Back door assembly
2. Back door hinge
3. Back door stay
4. Back door striker
5. Back door stay stud ball
6. Bumper rubber
7. Bumper rubber bracket
8. Back door lock assembly
9. Emergency lever
10. Back door lock cover (RH handle)
11. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK : Removal and Installation

INFOID:0000000001280678

REMOVAL

1. Remove the back door trim finisher lower. Refer to INT-31, "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:0000000001280679

SEC. 780•905

JMKIA0559ZZ

1. Fuel filler cap holder	2. Bumper rubber	3. Fuel filler lid lock actuator
4. Fuel filler lid lock seal	5. Fuel filler lid assembly	6. TORX bolt
7. Spring		

FUEL FILLER LID : Removal and Installation

INFOID:0000000001280680

REMOVAL
1. Fully open the fuel filler lid.
2. Remove the filler cap.
3. Remove the TORX bolts, and then remove the fuel filler lid assembly.
4. Remove the following parts after removing the fuel filler lid assembly.
   • Fuel filler cap holder
   • Bumper rubber
   • Spring

INSTALLATION
Install in the reverse order of removal.
CAUTION:
• **Check the fuel filler lid open/close operation after installation.**
• **After installation, apply the touch-up paint (the body color) onto the head of the mounting screws.**
NOTE:
After installation, perform fitting adjustment.

mm(in)

	Clearance	Evenness
Fuel filler lid— – Body side outer	2.0 – 4.0 (0.079 – 0.157)	−1.0 – 1.0 (−0.039 – 0.039)

DOOR SWITCH

Exploded View
INFOID:0000000001495975

SEC. 251

JMKIA0451ZZ

1.   Door switch (driver side)

Removal and Installation
INFOID:0000000001495976

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).

JMKIA0452ZZ

INSTALLATION
Install in the reverse order of removal.

INSIDE KEY ANTENNA
INSTRUMENT CENTER

INSTRUMENT CENTER : Exploded View

INFOID:0000000001495977

JMKIA0677ZZ

1.   Inside key antenna (instrument center)

INSTRUMENT CENTER : Removal and Installation

INFOID:0000000001495978

REMOVAL

1. Instrument lower cover RH. Refer to IP-12, "Removal and Installation".

2. Remove the inside key antenna (instrument center) mounting
    screw (A), and then remove inside key antenna (instrument cen-
    ter) (1).

JMKIA0637ZZ

INSTALLATION
Install in the reverse order of removal.
CONSOLE

CONSOLE : Exploded View   *INFOID:0000000001495979*

SEC. 253

JMKIA0678ZZ

1.   Inside key antenna (console)

CONSOLE : Removal and Installation   *INFOID:0000000001495980*

REMOVAL

1.   Remove the center console. Refer to IP-21, "Removal and Installation".
2.   Remove the inside key antenna mounting screw (A), and then remove inside key antenna (console) (1).

JMKIA0632ZZ

INSTALLATION
Install in the reverse order of removal.

REAR

REAR : Exploded View   *INFOID:0000000001495981*

SEC. 253

JMKIA0679ZZ

1.   Inside key antenna (rear seat)

DLK-294

A

REAR : Removal and Installation
INFOID:0000000001495982

B

REMOVAL

1. Remove the luggage floor spacer. Refer to <u>INT-28, "Removal and Installation"</u>.

C

2. Remove the inside key antenna (rear seat) mounting clips (A), and then remove inside key antenna (rear seat) (1).

D

E

JMKIA0635ZZ

F

INSTALLATION

Install in the reverse order of removal.

G

H

I

J

DLK

L

M

N

O

P

OUTSIDE KEY ANTENNA
DRIVER SIDE

DRIVER SIDE : Exploded View   *INFOID:0000000001495983*

Refer to DLK-282, "OUTSIDE HANDLE : Removal and Installation".

DRIVER SIDE : Removal and Installation   *INFOID:0000000001495984*

REMOVAL
Remove the front outside handle LH. Refer to DLK-575, "OUTSIDE HANDLE : Removal and Installation".

INSTALLATION
Install in the reverse order of removal.
PASSENGER SIDE

PASSENGER SIDE : Exploded View   *INFOID:0000000001495985*

Refer to DLK-282, "OUTSIDE HANDLE : Exploded View".

PASSENGER SIDE : Removal and Installation   *INFOID:0000000001495986*

REMOVAL
Remove the front outside handle RH. Refer to DLK-282, "OUTSIDE HANDLE : Removal and Installation".

INSTALLATION
Install in the reverse order of removal.
BACK DOOR

BACK DOOR : Exploded View   *INFOID:0000000001495987*

SEC. 253

JMKIA0680ZZ

1.   Outside key antenna (back door)   2.   Back door lower finisher

BACK DOOR : Removal and Installation   *INFOID:0000000001495988*

REMOVAL

1.   Remove the back door lower finisher. Refer to EXT-36, "Removal and Installation".

2. Remove the outside key antenna (back door) (1) from back door finisher (2).

JMKIA0652ZZ

INSTALLATION

Install in the reverse order of removal.

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

INTELLIGENT KEY WARNING BUZZER

Exploded View
INFOID:0000000001495989

SEC. 253

JMKIA0685ZZ

1.   Intelligent Key warning buzzer

Removal and Installation
INFOID:0000000001495990

REMOVAL

1. Remove the front grille. Refer to EXT-18, "Removal and Installation".
2. Remove the Intelligent Key warning buzzer using flat-bladed screw driver (A) etc.

JMKIA0634ZZ

INSTALLATION
Install in the reverse order of removal.

BACK DOOR REQUEST SWITCH

Exploded View

INFOID:0000000001495991

SEC. 251•900

JMKIA0651ZZ

1.	Back door opener switch assembly	2.	Back door finisher

Removal and Installation

INFOID:0000000001495992

REMOVAL

1. Remove the back door finisher. Refer to EXT-34, "Removal and Installation".
2. Remove the back door opener switch assembly mounting bolt (A).
3. Remove the back door opener switch assembly (2) from back door finisher (1).

JMKIA0638ZZ

INSTALLATION
Install in the reverse order of removal.

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

BACK DOOR OPENER SWITCH

Exploded View   *INFOID:0000000001495993*

Refer to DLK-592, "Exploded View".

Removal and Installation   *INFOID:0000000001495994*

REMOVAL
Refer to DLK-592, "Removal and Installation".

INSTALLATION
Install in the reverse order of removal.

INTELLIGENT KEY BATTERY

Exploded View
INFOID:0000000001495995

Refer to DLK-138, "Diagnosis Procedure".

Removal and Installation
INFOID:0000000001495996

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-138, "Component Function Check".

INSTALLATION
Install in the reverse order of removal.

INTELLIGENT KEY UNIT

Exploded View
INFOID:0000000001495997

SEC. 253

JMKIA0684ZZ

1.   Intelligent Key unit M40

Removal and Installation
INFOID:0000000001495998

REMOVAL

1.   Remove lower instrument panel (driver side). Refer to 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-25, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

JMKIA0686ZZ

INSTALLATION

Install in the reverse order of removal.

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000001569819

OVERALL SEQUENCE

```
                        ┌─────────────────────┐
                        │  Inspection start   │
                        └─────────────────────┘
                                  │
                                  ▼
        ┌──────────────────────────────────────────────┐
        │ 1. Get information for symptom               │
        │ Get the detailed information about symptom   │
        │ from the customer.                           │
        └──────────────────────────────────────────────┘
                                  │
                                  ▼
                    ┌──────────────────────┐
                    │    2. Check DTC      │
                    └──────────────────────┘
```

Symptom is described.   Symptom is not described.   Symptom is described.
DTC is detected.   DTC is detected.   DTC is not detected.

```
┌──────────────────────────────┐        ┌──────────────────────────────┐
│ 3. Confirm the symptom       │        │ 4. Confirm the symptom       │
│ Confirm the symptom          │        │ Confirm the symptom          │
│ described by the customer.   │        │ described by the customer.   │
└──────────────────────────────┘        └──────────────────────────────┘

┌──────────────────────────────────────┐   ┌──────────────────────────────────┐
│ 5. Perform DTC Confirmation Procedure │   │ 6. Detect malfunctioning system  │
└──────────────────────────────────────┘   │    by Symptom Table              │
                                            └──────────────────────────────────┘

                ┌──────────────────────────────────────┐
                │ 7. Detect malfunctioning part by     │
                │    Diagnostic Procedure              │
                └──────────────────────────────────────┘
                                  │
                                  ▼
                ┌──────────────────────────────────────┐
                │ 8. Repair or replace the             │
                │    malfunctioning part               │
                └──────────────────────────────────────┘
                                  │
                                  ▼
```

NG   ┌──────────────────────────────────────┐   NG
(DTC is detected.) │ 9. Final check   │   (Symptom remains.)
                    │ Check that the symptom is not   │
                    │ detected.   │
                    │ Perform DTC Confirmation Procedure   │
                    │ again, and then check that the   │
                    │ malfunction can be repaired securely.│
                    └──────────────────────────────────────┘
                                  │ OK
                                  ▼
                        ┌─────────────────────┐
                        │   INSPECTION END   │
                        └─────────────────────┘
```

JMKIA0676GB

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-458, "DTC Inspection Priority Chart" (Intelligent Key unit), DLK-499, "DTC Inspection Priority Chart" (BCM) and determine trouble diagnosis order.

Is DTC detected?

YES >> GO TO 7.
NO >> Refer to GI-39, "Intermittent Incident".

## 6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

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

>> GO TO 7.

## 7.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 8.

## 8.REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 9.

## 9.FINAL CHECK

When DTC was detected in step 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.

Are all malfunctions corrected?

NO (DTC is detected)>>GO TO 7.
NO (Symptom remains)>>GO TO 6.
YES    >> **INSPECTION END**

# INSPECTION AND ADJUSTMENT
## ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

### ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

*INFOID:0000000001280712*

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:0000000001280713*

Refer to the CONSULT-III Operation Manual-NATS.

# FUNCTION DIAGNOSIS

## DOOR LOCK FUNCTION

### DOOR LOCK AND UNLOCK SWITCH

#### DOOR LOCK AND UNLOCK SWITCH : System Diagram                 INFOID:0000000001280714

DOOR LOCK AND UNLOCK SWITCH OPERATION



JMKIA0563GB

DOOR LOCK AND UNLOCK SWITCH INDICATOR OPERATION



JMKIA0408GB

#### DOOR LOCK AND UNLOCK SWITCH : System Description              INFOID:0000000001280715

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.<br>• Except driver side doors are closed.<br>• Doors are not locked with Intelligent Key or door request switch. |
| Unlock operation | Following all conditions are satisfied.<br>• 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.
Door lock and unlock switch indicator have the following 2 functions.

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:0000000001280716*



JMKIA0649ZZ

1. BCM
   M65, M66, M67

2. IPDM E/R
   E11, E13

3. Intelligent Key unit
   M40

4. Passenger side anti-hijack relay
   M90

5. Door lock and unlock switch
   M89

6. Inside key antenna (instrument center)
   M56

7. Inside key antenna (console)
   M252

8. Inside key antenna (rear seat)
   B45

9. Intelligent Key warning buzzer
   E25

10. Air bag diagnosis sensor unit
    M59

A. Over the glove box

B. Engine room LH

C. Over the instrument lower panel (driver side)

D. View with lower instrument cover removed

E. View with center console removed

F. View with luggage floor spacer removed

G. View with front bumper fascia removed

H. View with center console removed

JMKIA0648ZZ

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. Front door switch (passenger side)
   B27

7. Front door lock actuator (passenger
   side)
   D9

8. Rear door lock actuator LH
   D85

9. Out side key antenna and front door
   request switch (driver side)
   D10

10. Out side key antenna and front door re-
    quest switch (driver side)
    D10

11. Back door opener switch assembly (re-
    quest switch)
    D187

12. Back door opener switch assembly
    (opener switch)
    D187

13. Back door lock assembly
    D190

14. Fuel lid opener actuator
    B58

15. Out side key antenna (back door)
    D191

I. Inside the combination meter

J. Inside the combination meter

K. View with steering column cover re-
   moved

L. Luggage side lower finisher (RH) re-
   moved.

# DOOR LOCK FUNCTION

< FUNCTION DIAGNOSIS >                                                    **[WITH I-KEY & SUPER LOCK]**

## DOOR LOCK AND UNLOCK SWITCH : Component Description
*INFOID:0000000001280717*

| 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:0000000001280718*



JMKIA0564GB

## INTELLIGENT KEY : System Description
*INFOID:0000000001280719*

### 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-349, "CONSULT-III Function (INTELLIGENT KEY)".

### OPERATION CONDITION

| Remote controller operation | Operation condition |
|---|---|
| Lock | • All doors are closed<br>• Key switch is OFF (key is removed from ignition key cylinder)<br>• Ignition knob switch is OFF (Ignition switch is not pressed)<br>• No Intelligent Keys are inside the vehicle. |
| Unlock | • Key switch is OFF (key is removed from ignition key cylinder)<br>• 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.

**DLK-311**

## SUPER LOCK OPERATION

Super lock provides a higher anti-theft performance than a conventional power door lock system. The super lock system is controlled by BCM.

When super lock is set, all doors can not be opened from the inside.

## 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-625, "MULTIREMOTE ENT : CONSULT-III Function (BCM - MULTIREMOTE ENT)".

## INTELLIGENT KEY : Component Parts Location

*INFOID:0000000001393925*



JMKIA0649ZZ

1. BCM
   M65, M66, M67

2. IPDM E/R
   E11, E13

3. Intelligent Key unit
   M40

4. Passenger side anti-hijack relay
   M90

5. Door lock and unlock switch
   M89

6. Inside key antenna (instrument center)
   M56

7. Inside key antenna (console)
   M252

8. Inside key antenna (rear seat)
   B45

9. Intelligent Key warning buzzer
   E25

10. Air bag diagnosis sensor unit
    M59

A. Over the glove box

B. Engine room LH

C. Over the instrument lower panel (driver side)

D. View with lower instrument cover removed

E. View with center console removed

F. View with luggage floor spacer removed

G. View with front bumper fascia removed

H. View with center console removed



JMKIA0648ZZ

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.  Front door switch (passenger side)
    B27

7.  Front door lock actuator (passenger
    side)
    D9

8.  Rear door lock actuator LH
    D85

9.  Out side key antenna and front door
    request switch (driver side)
    D10

10. Out side key antenna and front door re-
    quest switch (driver side)
    D10

11. Back door opener switch assembly (re-
    quest switch)
    D187

12. Back door opener switch assembly
    (opener switch)
    D187

13. Back door lock assembly
    D190

14. Fuel lid opener actuator
    B58

15. Out side key antenna (back door)
    D191

I.  Inside the combination meter

J.  Inside the combination meter

K.  View with steering column cover re-
    moved

L.  Luggage side lower finisher (RH) re-
    moved.

## INTELLIGENT KEY : Component Description

*INFOID:0000000001280721*

| 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:0000000001280722*

DOOR REQUEST SWITCH OPERATION



JMKIA0565GB

## DOOR REQUEST SWITCH : System Description

*INFOID:0000000001280723*

### 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-349, "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<br>• Key switch is OFF (Key is removed from ignition key cylinder)<br>• Ignition knob is OFF or LOCK position<br>• No Intelligent Keys are inside the vehicle<br>• Intelligent Key is within outside key antenna detection area |
| Unlock Operation | • Key switch is OFF (Key is removed from ignition key cylinder)<br>• Ignition knob is OFF or lock position (Ignition switch is not pressed)<br>• Intelligent Key is not inside the vehicle*<br>• 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

# DOOR LOCK FUNCTION

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.



JMKIA0666ZZ

## 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 OPERATION

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 super lock is set, all doors cannot be opened from inside.

## 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 back door only and back door can be opened with back door opener switch. Pressing back door opener switch a second time within 5 seconds will unlock all doors.

**NOTE:**

Anti-hijack mode can be set to ON or OFF with CONSULT-III. For the setting information, refer to DLK-349, "CONSULT-III Function (INTELLIGENT KEY)".

## DOOR REQUEST SWITCH : Component Parts Location

*INFOID:0000000001393926*



JMKIA0649ZZ

1. BCM
   M65, M66, M67

2. IPDM E/R
   E11, E13

3. Intelligent Key unit
   M40

4. Passenger side anti-hijack relay
   M90

5. Door lock and unlock switch
   M89

6. Inside key antenna (instrument center)
   M56

7. Inside key antenna (console)
   M252

8. Inside key antenna (rear seat)
   B45

9. Intelligent Key warning buzzer
   E25

10. Air bag diagnosis sensor unit
    M59

A. Over the glove box

B. Engine room LH

C. Over the instrument lower panel (driver side)

D. View with lower instrument cover removed

E. View with center console removed

F. View with luggage floor spacer removed

G. View with front bumper fascia removed

H. View with center console removed

JMKIA0648ZZ

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.  Front door switch (passenger side)
    B27

7.  Front door lock actuator (passenger
    side)
    D9

8.  Rear door lock actuator LH
    D85

9.  Out side key antenna and front door
    request switch (driver side)
    D10

10. Out side key antenna and front door re-
    quest switch (driver side)
    D10

11. Back door opener switch assembly (re-
    quest switch)
    D187

12. Back door opener switch assembly
    (opener switch)
    D187

13. Back door lock assembly
    D190

14. Fuel lid opener actuator
    B58

15. Out side key antenna (back door)
    D191

I.  Inside the combination meter

J.  Inside the combination meter

K.  View with steering column cover re-
    moved

L.  Luggage side lower finisher (RH) re-
    moved.

## DOOR REQUEST SWITCH : Component Description

*INFOID:0000000001280725*

| 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:0000000001280726*



### KEY REMINDER : System Description

*INFOID:0000000001280727*

**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<br>• Door lock operation<br>• Driver side door is opened<br>• 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<br>• Intelligent Key is inside the vehicle<br>• Any door is opened<br>• All doors are locked by door lock and unlock switch. | • All doors unlock<br>• 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:0000000001393927*



JMKIA0649ZZ

# DOOR LOCK FUNCTION

< FUNCTION DIAGNOSIS >

**[WITH I-KEY & SUPER LOCK]**

1.  BCM
    M65, M66, M67

2.  IPDM E/R
    E11, E13

3.  Intelligent Key unit
    M40

4.  Passenger side anti-hijack relay
    M90

5.  Door lock and unlock switch
    M89

6.  Inside key antenna (instrument center)
    M56

7.  Inside key antenna (console)
    M252

8.  Inside key antenna (rear seat)
    B45

9.  Intelligent Key warning buzzer
    E25

10. Air bag diagnosis sensor unit
    M59

A.  Over the glove box

B.  Engine room LH

C.  Over the instrument lower panel (driver side)

D.  View with lower instrument cover removed

E.  View with center console removed

F.  View with luggage floor spacer removed

G.  View with front bumper fascia removed

H.  View with center console removed



JMKIA0648ZZ

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.  Front door switch (passenger side)
    B27
7.  Front door lock actuator (passenger side)
    D9
8.  Rear door lock actuator LH
    D85
9.  Out side key antenna and front door request switch (driver side)
    D10
10. Out side key antenna and front door request switch (driver side)
    D10
11. Back door opener switch assembly (request switch)
    D187
12. Back door opener switch assembly (opener switch)
    D187
13. Back door lock assembly
    D190
14. Fuel lid opener actuator
    B58
15. Out side key antenna (back door)
    D191
I.  Inside the combination meter
J.  Inside the combination meter
K.  View with steering column cover removed
L.  Luggage side lower finisher (RH) removed.

## KEY REMINDER : Component Description                        *INFOID:0000000001280729*

| 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:0000000001280730*

AUTO DOOR LOCK OPERATION



JMKIA0567GB

## AUTO DOOR LOCK : System Description                        *INFOID:0000000001280731*

### 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-349, "CONSULT-III Function (INTELLIGENT KEY)".

## AUTO DOOR LOCK : Component Parts Location

*INFOID:0000000001393928*



JMKIA0649ZZ

1. BCM
   M65, M66, M67

2. IPDM E/R
   E11, E13

3. Intelligent Key unit
   M40

4. Passenger side anti-hijack relay
   M90

5. Door lock and unlock switch
   M89

6. Inside key antenna (instrument center)
   M56

7. Inside key antenna (console)
   M252

8. Inside key antenna (rear seat)
   B45

9. Intelligent Key warning buzzer
   E25

10. Air bag diagnosis sensor unit
    M59

# DOOR LOCK FUNCTION

< FUNCTION DIAGNOSIS >

**[WITH I-KEY & SUPER LOCK]**

A.  Over the glove box

B.  Engine room LH

C.  Over the instrument lower panel (driver side)

D.  View with lower instrument cover removed

E.  View with center console removed

F.  View with luggage floor spacer removed

G.  View with front bumper fascia removed

H.  View with center console removed



JMKIA0648ZZ

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.  Front door switch (passenger side)
    B27

7.  Front door lock actuator (passenger side)
    D9

8.  Rear door lock actuator LH
    D85

9.  Out side key antenna and front door request switch (driver side)
    D10

10. Out side key antenna and front door request switch (driver side)
    D10

11. Back door opener switch assembly (request switch)
    D187

12. Back door opener switch assembly (opener switch)
    D187

13. Back door lock assembly
    D190

14. Fuel lid opener actuator
    B58

15. Out side key antenna (back door)
    D191

I. Inside the combination meter      J. Inside the combination meter      K. View with steering column cover re-
                                                                            moved

L. Luggage side lower finisher (RH) re-
   moved.

## AUTO DOOR LOCK : Component Description

*INFOID:0000000001280733*

| 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:0000000001280734*

VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION



JMKIA0568GB

## VEHICLE SPEED SENSING AUTO DOOR LOCK : System Description

*INFOID:0000000001280735*

VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION
When the vehicle speed exceeds more than 25km/h (16 MPH), 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:0000000001393929



JMKIA0649ZZ

1. BCM
   M65, M66, M67

2. IPDM E/R
   E11, E13

3. Intelligent Key unit
   M40

4. Passenger side anti-hijack relay
   M90

5. Door lock and unlock switch
   M89

6. Inside key antenna (instrument center)
   M56

7. Inside key antenna (console)
   M252

8. Inside key antenna (rear seat)
   B45

9. Intelligent Key warning buzzer
   E25

10. Air bag diagnosis sensor unit
    M59

A. Over the glove box

B. Engine room LH

C. Over the instrument lower panel (driver side)

D. View with lower instrument cover removed

E. View with center console removed

F. View with luggage floor spacer removed

G. View with front bumper fascia removed

H. View with center console removed

JMKIA0648ZZ

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. Front door switch (passenger side)
   B27

7. Front door lock actuator (passenger
   side)
   D9

8. Rear door lock actuator LH
   D85

9. Out side key antenna and front door
   request switch (driver side)
   D10

10. Out side key antenna and front door re-
    quest switch (driver side)
    D10

11. Back door opener switch assembly (re-
    quest switch)
    D187

12. Back door opener switch assembly
    (opener switch)
    D187

13. Back door lock assembly
    D190

14. Fuel lid opener actuator
    B58

15. Out side key antenna (back door)
    D191

I.  Inside the combination meter

J.  Inside the combination meter

K.  View with steering column cover re-
    moved

L.  Luggage side lower finisher (RH) re-
    moved.

## VEHICLE SPEED SENSING AUTO DOOR LOCK : Component  Description

*INFOID:0000000001280737*

| 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:0000000001280738*

### AIR BAG INTERLOCK UNLOCK OPERATION



JMKIA0569GB

## AIR BAG INTERLOCK UNLOCK : System Description

*INFOID:0000000001280739*

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:0000000001393930*



JMKIA0649ZZ

| 1. | BCM<br>M65, M66, M67 | 2. | IPDM E/R<br>E11, E13 | 3. | Intelligent Key unit<br>M40 |
|----|---------------------|----|---------------------|----|----------------------------|
| 4. | Passenger side anti-hijack relay<br>M90 | 5. | Door lock and unlock switch<br>M89 | 6. | Inside key antenna (instrument center)<br>M56 |
| 7. | Inside key antenna (console)<br>M252 | 8. | Inside key antenna (rear seat)<br>B45 | 9. | Intelligent Key warning buzzer<br>E25 |
| 10. | Air bag diagnosis sensor unit<br>M59 | | | | |
| A. | Over the glove box | B. | Engine room LH | C. | Over the instrument lower panel (driver side) |
| D. | View with lower instrument cover removed | E. | View with center console removed | F. | View with luggage floor spacer removed |
| G. | View with front bumper fascia removed | H. | View with center console removed | | |

JMKIA0648ZZ

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. Front door switch (passenger side)
   B27

7. Front door lock actuator (passenger side)
   D9

8. Rear door lock actuator LH
   D85

9. Out side key antenna and front door request switch (driver side)
   D10

10. Out side key antenna and front door request switch (driver side)
    D10

11. Back door opener switch assembly (request switch)
    D187

12. Back door opener switch assembly (opener switch)
    D187

13. Back door lock assembly
    D190

14. Fuel lid opener actuator
    B58

15. Out side key antenna (back door)
    D191

I. Inside the combination meter

J. Inside the combination meter

K. View with steering column cover removed

L. Luggage side lower finisher (RH) removed.

## AIR BAG INTERLOCK UNLOCK : Component Description

*INFOID:0000000001280741*

| 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. |

# BACK DOOR OPENER FUNCTION
## BACK DOOR OPENER SWITCH

### BACK DOOR OPENER SWITCH : System Diagram

*INFOID:0000000001280742*

BACK DOOR OPENER OPERATION



| Back door opener switch | → | BCM | → | Back door opener actuator |

JMKIA0402GB

### BACK DOOR OPENER SWITCH : System Description

*INFOID:0000000001280743*

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).<br>• All doors are unlocked. |

## BACK DOOR OPENER SWITCH : Component Parts Location

*INFOID:0000000001393931*



JMKIA0649ZZ

1. BCM
   M65, M66, M67

2. IPDM E/R
   E11, E13

3. Intelligent Key unit
   M40

4. Passenger side anti-hijack relay
   M90

5. Door lock and unlock switch
   M89

6. Inside key antenna (instrument center)
   M56

7. Inside key antenna (console)
   M252

8. Inside key antenna (rear seat)
   B45

9. Intelligent Key warning buzzer
   E25

10. Air bag diagnosis sensor unit
    M59

A. Over the glove box

B. Engine room LH

C. Over the instrument lower panel (driver side)

D. View with lower instrument cover removed

E. View with center console removed

F. View with luggage floor spacer removed

G. View with front bumper fascia removed

H. View with center console removed

JMKIA0648ZZ

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. Front door switch (passenger side)
   B27

7. Front door lock actuator (passenger side)
   D9

8. Rear door lock actuator LH
   D85

9. Out side key antenna and front door request switch (driver side)
   D10

10. Out side key antenna and front door request switch (driver side)
    D10

11. Back door opener switch assembly (request switch)
    D187

12. Back door opener switch assembly (opener switch)
    D187

13. Back door lock assembly
    D190

14. Fuel lid opener actuator
    B58

15. Out side key antenna (back door)
    D191

I. Inside the combination meter

J. Inside the combination meter

K. View with steering column cover removed

L. Luggage side lower finisher (RH) removed.

## BACK DOOR OPENER SWITCH : Component Description

*INFOID:0000000001280745*

| 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. |

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

# WARNING FUNCTION

## System Diagram

*INFOID:0000000001280746*

### INTELLIGENT KEY WARNING OPERATION



JMKIA0409GB

### BACK DOOR OPEN WARNING OPERATION



JMKIA0410GB

## System Description

*INFOID:0000000001280747*

### 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.

| 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.<br>• Ignition knob: OFF or LOCK (knob is pressed).<br>• 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.<br>• Ignition switch: OFF position.<br>• Key switch: ON (inserted)<br>• Door switch (driver side): ON (Door is open). | — | Active for 5 seconds (pipipipi, pipipipi···) | — |
| OFF position warning | | When all the conditions below are met.<br>• Ignition switch is between ACC and OFF position or ignition knob is pressed in while ignition switch is in LOCK position.<br>• 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.<br>• Ignition switch: Except LOCK position.<br>• Door switch: ON to OFF (Door is open to closed).<br>• Intelligent Key cannot be detected inside the vehicle. | "KEY" (RED blinking) | — | Active (pi, pi, pi) |
| | Door is open | When all the conditions below are met.<br>• Door switch: ON (Door is open)<br>• Key ID verification every 5 seconds when registered Intelligent Key can not be detected inside the vehicle. | "KEY" (RED blinking) | — | — |
| | Take away through window | When all the conditions below are met.<br>• Key ID verification: OK<br>• 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.)<br>• Key switch: OFF (Key is removed from ignition key cylinder.) | "KEY" (RED blinking) | Active for 3 seconds (pipipi··· | — |

**DLK-337**

| 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.<br>• Door switch: ON (Any door is open).<br>• 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.<br>• 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.<br>• Door switch: ON (Any door is open).<br>• 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.<br>• Ignition knob is pushed in LOCK position. (Ignition knob switch is ON)<br>• Ignition key is removed from ignition key cylinder. (Key switch is OFF)<br>• Intelligent Key is detected inside of the vehicle.<br>• 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.<br>• Ignition knob is pushed. (Ignition knob switch is ON)<br>• Ignition key is removed from ignition key cylinder. (Key switch is OFF)<br>• Intelligent Key is not detected inside of the vehicle. |
| | | Blinking | All the following conditions are satisfied.<br>• Take away warning is operating.<br>• 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.<br>• Ignition switch is ON.<br>• 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:0000000001393933*



JMKIA0649ZZ

1. BCM
   M65, M66, M67

2. IPDM E/R
   E11, E13

3. Intelligent Key unit
   M40

4. Passenger side anti-hijack relay
   M90

5. Door lock and unlock switch
   M89

6. Inside key antenna (instrument center)
   M56

7. Inside key antenna (console)
   M252

8. Inside key antenna (rear seat)
   B45

9. Intelligent Key warning buzzer
   E25

10. Air bag diagnosis sensor unit
    M59

A. Over the glove box

B. Engine room LH

C. Over the instrument lower panel (driver side)

D. View with lower instrument cover removed

E. View with center console removed

F. View with luggage floor spacer removed

G. View with front bumper fascia removed

H. View with center console removed

JMKIA0648ZZ

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. Front door switch (passenger side)
   B27

7. Front door lock actuator (passenger
   side)
   D9

8. Rear door lock actuator LH
   D85

9. Out side key antenna and front door
   request switch (driver side)
   D10

10. Out side key antenna and front door re-
    quest switch (driver side)
    D10

11. Back door opener switch assembly (re-
    quest switch)
    D187

12. Back door opener switch assembly
    (opener switch)
    D187

13. Back door lock assembly
    D190

14. Fuel lid opener actuator
    B58

15. Out side key antenna (back door)
    D191

I. Inside the combination meter

J. Inside the combination meter

K. View with steering column cover re-
   moved

L. Luggage side lower finisher (RH) re-
   moved.

## Component Description

*INFOID:0000000001280749*

| 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 |

# HAZARD AND BUZZER REMINDER FUNCTION

## System Diagram                                          *INFOID:0000000001280750*

### HAZARD & BUZZER REMINDER FUNCTION



JMKIA0506GB

## System Description                                      *INFOID:0000000001280751*

### 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-349, "CON-SULT-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 | — |

| 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:0000000001393934*



JMKIA0649ZZ

1. BCM
   M65, M66, M67

2. IPDM E/R
   E11, E13

3. Intelligent Key unit
   M40

4. Passenger side anti-hijack relay
   M90

5. Door lock and unlock switch
   M89

6. Inside key antenna (instrument center)
   M56

7. Inside key antenna (console)
   M252

8. Inside key antenna (rear seat)
   B45

9. Intelligent Key warning buzzer
   E25

10. Air bag diagnosis sensor unit
    M59

A. Over the glove box

B. Engine room LH

C. Over the instrument lower panel (driver side)

D. View with lower instrument cover removed

E. View with center console removed

F. View with luggage floor spacer removed

G. View with front bumper fascia removed

H. View with center console removed



JMKIA0648ZZ

A

1. Combination meter
   M34

2. Lock warning lamp
   M34

3. Key warning lamp
   M34

B

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. Front door switch (passenger side)
   B27

C

7. Front door lock actuator (passenger side)
   D9

8. Rear door lock actuator LH
   D85

9. Out side key antenna and front door request switch (driver side)
   D10

10. Out side key antenna and front door request switch (driver side)
    D10

11. Back door opener switch assembly (request switch)
    D187

12. Back door opener switch assembly (opener switch)
    D187

D

13. Back door lock assembly
    D190

14. Fuel lid opener actuator
    B58

15. Out side key antenna (back door)
    D191

I. Inside the combination meter

J. Inside the combination meter

K. View with steering column cover removed

E

L. Luggage side lower finisher (RH) removed.

F

## Component Description

*INFOID:0000000001280753*

G

| 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. |

H

I

J

DLK

L

M

N

O

P

# DIAGNOSIS SYSTEM (BCM)
## COMMON ITEM

### COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM)          *INFOID:0000000001569649*

#### APPLICATION ITEM
CONSULT-III can display each diagnostic item using the diagnostic test modes shown following.

| Diagnosis mode | Function description |
|---|---|
| ECU Identification | BCM part number is displayed. |
| Self-Diagnostic Results | Displays the diagnosis results judged by BCM. Refer to DLK-500, "DTC Index". |
| Data Monitor | BCM input/output signals are displayed. |
| Active Test | The signals used to activate each device are forcibly supplied from BCM. |
| Work Support | Changes the setting for each system function. |
| Configuration | • Read and save the vehicle specification.<br>• Write the vehicle specification when replacing BCM. |
| CAN Diag Support Monitor | Monitors the reception status of CAN communication viewed from BCM. |

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

×: Applicable item

| System | CONSULT-III 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 control | INT LAMP | × | × | × |
| Remote keyless entry system | MULTI REMOTE ENT | × | × | × |
| Exterior lamp | HEAD LAMP | × | × | × |
| Wiper and washer | WIPER | × | × | × |
| Turn signal and hazard warning lamps | FLASHER | | × | × |
| Air conditioner | AIR CONDITONER | | × | |
| Intelligent Key system | INTELLIGENT KEY | | × | |
| Combination switch | COMB SW | | × | |
| Immobilizer | IMMU | | × | × |
| Interior room lamp battery saver | BATTERY SAVER | × | × | × |
| Back door open | TRUNK | | × | × |
| Vehicle security system | THEFT ALM | × | × | × |
| Signal buffer system | SIGNAL BUFFER | | × | × |
| — | PTC HEATER* | | | |

*: This item is displayed, but is not function.

## DOOR LOCK

### DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)          *INFOID:0000000001280755*

#### 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. |
| 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.<br>• ON: During the unlock operation interlock with air bag.<br>• OFF: Other than above. |
| SHOCK SENSOR | Indicates [NOMAL/ON/OFF] condition of circuit between BCM and air bag diagnosis sensor unit.<br>• NORMAL: Ignition switch ON. (BCM is receiving normal condition signal from air bag diagnosis sensor unit.)<br>• ON: During the receiving of air bag deployment signal from air bag diagnosis sensor unit.<br>• 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

| Test item | Description |
|---|---|
| SECURITY DOOR LOCK SET | Anti hijack function mode can be changed in this mode.<br>• ON: Anti hijack mode is active.<br>• OFF: Anti hijack mode is inactive. |

## INTELLIGENT KEY

## INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)    *INFOID:0000000001280756*

### 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:0000000001280757*

### 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]. |

# DIAGNOSIS SYSTEM (INTELLIGENT KEY UNIT)

## CONSULT-III Function (INTELLIGENT KEY)

*INFOID:0000000001280758*

### 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-342. | |
| 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-458, "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.<br>• ALL UNLK: All door lock actuators are unlocked.<br>• DR UNLK: Door lock actuator (driver side) is unlocked.<br>• AS UNLK: Door lock actuator (passenger side) is unlocked.<br>• BK UNLK: This item is indicated, but inactive.<br>• LOCK: All door lock actuator is locked. |
| ANTENNA | This test is able to check Intelligent Key antenna operation.<br>When the following condition are met, LED (on Intelligent Key) blinks.<br>• ROOM ANT1: Inside key antenna (console) transmissions can be detected by Intelligent Key, when "ROOM ANT1" is selected.<br>• ROOM ANT2: Inside key antenna (instrument center/rear seat) transmissions can be detected by Intelligent Key, when "ROOM ANT2"is selected.<br>• DRIVER ANT: Outside key antenna (driver side) transmissions can be detected by Intelligent Key, when "DRIVER ANT" is selected.<br>• ASSIST ANT: Outside key antenna (passenger side) transmissions can be detected by Intelligent Key, when "ASSIST ANT" is selected.<br>• BK DOOR ANT: Outside key antenna (rear bumper) transmissions can be detected by Intelligent Key, when "BK DOOR ANT" is selected. |
| OUTSIDE BUZZER | This test is able to check Intelligent Key warning buzzer operation.<br>• ON<br>• OFF |
| INSIDE BUZZER | This test is able to check warning chime in combination meter operation.<br>• TAKE OUT: Take away warning chime sounds.<br>• KNOB: Ignition knob switch warning chime sounds.<br>• KEY: Key warning chime sounds.<br>• OFF |

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

[1]: The item is only for MT model.

# COMPONENT DIAGNOSIS

## U1000 CAN COMM CIRCUIT

### Description

*INFOID:0000000001559416*

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-25, "CAN Communication Signal Chart".

### DTC Logic

*INFOID:0000000001559417*

#### 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.<br>• Transmission<br>• Receiving (BCM)<br>• Receiving (IPDM E/R)<br>• Receiving (ECM)<br>• Receiving (METER/M&A)<br>• Receiving (MULTI AV) |

### Diagnosis Procedure

*INFOID:0000000001559418*

#### 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-13, "Trouble Diagnosis Flow Chart".
NO >> Refer to GI-39, "Intermittent Incident".

# U1010 CONTROL UNIT (CAN)

## Description
*INFOID:0000000001559419*

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-25, "CAN Communication Signal Chart".

## DTC Logic
*INFOID:0000000001559420*

### 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:0000000001559421*

### 1.REPLACE INTELLIGENT KEY UNIT

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

>> Replace Intelligent Key unit.

## Special Repair Requirement
*INFOID:0000000001559422*

### 1.REQUIRED WORK WHEN REPLACING INTELLIGENT KEY UNIT

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

>> Work end.

## POWER SUPPLY AND GROUND CIRCUIT
## INTELLIGENT KEY UNIT

### INTELLIGENT KEY UNIT : Diagnosis Procedure

*INFOID:0000000001298174*

### 1.CHECK FUSE AND FUSIBLE LINK

Check that the following fuse is not blown.

| Terminal No. | Signal name | Fuse No. |
|---|---|---|
| 11 | Battery power supply | 14 (10A) |
| 6 | Ignition power supply | 1 (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:0000000001298175*

### 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 | 10 (10A) |
| 57 | | J (50A) |
| 3 | Ignition power supply | 1 (10A) |
| 4 | ACC power supply | 20 (10A) |

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 | | (−) | Condition | Voltage (Approx.) |
|---|---|---|---|---|
| (+) | | | | |
| BCM | | | | |
| Connector | Terminal | | | |
| M66 | 41 | Ground | Turn ignition switch OFF | Battery voltage |
| M67 | 57 | | | |
| M65 | 3 | | Turn ignition switch ON | |
| | 4 | | Turn ignition switch ACC | |

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 | | Exists |

Does continuity exist?

  YES    >> BCM power supply and ground circuit are OK.

  NO    >> Repair harness or connector.

# DOOR LOCK AND UNLOCK SWITCH

## Description

Transmits door lock/unlock operation to BCM.

## Component Function Check

### 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-356, "Diagnosis Procedure".

## Diagnosis Procedure

### 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 harness connector and ground.

| Terminal | | | Signal (Reference value) |
|---|---|---|---|
| (+) | | (−) | |
| Door lock and unlock switch connector | Terminal | | |
| M89 | 1 | Ground |  |
| | 2 | | |

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 harness connector and door lock and unlock switch harness connector.

| BCM connector | Terminal | Door lock and unlock switch connector | Terminal | Continuity |
|---|---|---|---|---|
| M65 | 32 | M89 | 2 | Exists |
| | 34 | | 1 | |

4. Check continuity between BCM harness connector and ground.

**DLK-356**

| BCM connector | Terminal | | Continuity |
|---|---|---|---|
| M65 | 32 | Ground | Does not exist |
| | 34 | | |

<u>Is the inspection result normal?</u>

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 harness connector and ground.

| Door lock and unlock switch connector | Terminal | | Continuity |
|---|---|---|---|
| M89 | 3 | Ground | Exists |

<u>Is the inspection result normal?</u>

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

## 4.CHECK BCM OUTPUT SIGNAL

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

| Terminal | | | Signal (Reference value) |
|---|---|---|---|
| (+) | | (−) | |
| BCM connector | Terminal | | |
| M65 | 32 | Ground |  |
| | 34 | | |

JPMIA0154GB

<u>Is the inspection result normal?</u>

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

## 5.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch
Refer to DLK-357, "Component Inspection".

<u>Is the inspection result normal?</u>

YES >> GO TO 6.
NO >> Replace door lock and unlock switch. Refer to DLK-596, "Removal and Installation".

## 6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

## Component Inspection

*INFOID:0000000001298179*

## 1.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch.

| Door lock and unlock switch | Terminal | | Condition | Continuity |
|---|---|---|---|---|
| M89 | 1 | 3 | LOCK | Exists |
| | 2 | | UNLOCK | |

Is the inspection result normal?

YES    >> Door lock and unlock switch is OK.
NO     >> Replace door lock and unlock switch. Refer to DLK-596, "Removal and Installation".

## DOOR LOCK AND UNLOCK SWITCH INDICATOR

### Description                                                                     *INFOID:0000000001280776*

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:0000000001280777*

#### 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-359, "Diagnosis Procedure".

### Diagnosis Procedure                                                             *INFOID:0000000001280778*

#### 1.CHECK DOOR LOCK AND UNLOCK SWITCH INDICATOR INPUT SIGNAL

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

| Terminal | | | Condition | Voltage (Approx.) |
|---|---|---|---|---|
| (+) | | (−) | | |
| Door lock and unlock switch connector | Terminal | | | |
| M89 | 6 | Ground | Door lock operation is accomplished | Battery voltage |
| | | | Any door is OPEN | 0 |

Is the inspection result normal?

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

#### 2.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

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

| BCM connector | Terminal | Door lock and unlock switch connector | Terminal | Continuity |
|---|---|---|---|---|
| M65 | 17 | M89 | 6 | Exists |

3.   Check continuity between BCM harness connector and ground.

| BCM connector | Terminal | Ground | Continuity |
|---|---|---|---|
| M65 | 17 | | 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 harness connector and ground.

| Door lock and unlock switch connector | Terminal | Ground | Continuity |
|---|---|---|---|
| M89 | 4 | | Exists |

Is the inspection result normal?

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

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

     >> INSPECTION END

## DOOR REQUEST SWITCH
## DRIVER SIDE

### DRIVER SIDE : Description
*INFOID:0000000001298180*

Transmits lock/unlock operation to Intelligent Key unit.

### DRIVER SIDE : Component Function Check
*INFOID:0000000001298181*

#### 1.CHECK FUNCTION

⊞**With CONSULT-III**
Check door request switch "DR REQ SW" in "Data Monitor" mode with CONSULT-III.

| 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-361, "DRIVER SIDE : Diagnosis Procedure".

### DRIVER SIDE : Diagnosis Procedure
*INFOID:0000000001298182*

#### 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 6.
NO     >> GO TO 2.

#### 2.CHECK FRONT DOOR REQUEST SWITCH CIRCUIT

1.  Disconnect Intelligent Key unit connector.
2.  Check continuity between Intelligent Key unit harness connector and outside key antenna and front door request switch (driver side) harness connector.

| Intelligent Key unit connector | Terminal | Outside key antenna and front door request switch (driver side) | Terminal | Continuity |
|---|---|---|---|---|
| M40 | 5 | D30 | 3 | Exists |

3.  Check continuity between Intelligent Key unit harness 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 outside key antenna and front door request switch (driver side).

## 3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between outside key antenna and front door request switch (driver side) harness connector and ground.

| Outside key antenna and front door request switch (driver side) connector | Terminal | Ground | Continuity |
|---|---|---|---|
| D30 | 4 | | Exists |

Is the inspection result normal?

YES  >> GO TO 4.
NO  >> Repair or replace outside key antenna and front door request switch (driver side) ground circuit.

## 4.CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

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

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

Is the inspection result normal?

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

## 5.CHECK DOOR REQUEST SWITCH

Check outside key antenna and front door request switch (driver side).
Refer to DLK-362, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES  >> GO TO 6.
NO  >> Replace front outside handle (driver side). Refer to DLK-575, "OUTSIDE HANDLE : Removal and Installation".

## 6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".


>> INSPECTION END

## DRIVER SIDE : Component Inspection                          INFOID:0000000001298183

## 1.CHECK DOOR REQUEST SWITCH

Check outside key antenna and front door request switch (driver side).

| Terminal | | Door request switch condition | Continuity |
|---|---|---|---|
| Outside key antenna and front door request switch (driver side) | | | |
| 3 | 4 | Pressed | Exists |
| | | Released | Does not exist |

Is the inspection result normal?

YES  >> Door request switch is OK.
NO  >> Replace front outside handle (driver side). Refer to DLK-575, "OUTSIDE HANDLE : Removal and Installation".

## PASSENGER SIDE

## PASSENGER SIDE : Description                               INFOID:0000000001298184

Transmits lock/unlock operation to Intelligent Key unit.

# DOOR REQUEST SWITCH

< COMPONENT DIAGNOSIS >

**[WITH I-KEY & SUPER LOCK]**

## PASSENGER SIDE : Component Function Check

*INFOID:0000000001298185*

### 1.CHECK FUNCTION

**⬚With CONSULT-III**
Check door request switch "AS REQ SW" in "Data Monitor" mode with CONSULT-III.

| 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-365, "BACK DOOR : Diagnosis Procedure".

## PASSENGER SIDE : Diagnosis Procedure

*INFOID:0000000001298186*

### 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 6.
NO >> GO TO 2.

### 2.CHECK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect Intelligent Key unit connector.
2. Check continuity between Intelligent Key unit harness connector and outside key antenna and front door request switch (passenger side) harness connector.

| Intelligent Key unit connector | Terminal | Outside key antenna and front door request switch (passenger side) connector | Terminal | Continuity |
| --- | --- | --- | --- | --- |
| M40 | 25 | D69 | 3 | Exists |

3. Check continuity between Intelligent Key unit harness 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 outside key antenna and front door request switch (passenger side).

### 3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between outside key antenna and front door request switch (passenger side) harness connector and ground.

| Outside key antenna and front door request switch (passenger side) connector | Terminal | Ground | Continuity |
|---|---|---|---|
| D69 | 4 | | Exists |

Is the inspection result normal?

YES   >> GO TO 4.
NO    >> Repair or replace outside key antenna and front door request switch (passenger side) ground circuit.

## 4.CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

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

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

Is the inspection result normal?

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

## 5.CHECK DOOR REQUEST SWITCH

Check outside key antenna and front door request switch (passenger side).
Refer to DLK-366, "BACK DOOR : Component Inspection".

Is the inspection result normal?

YES   >> GO TO 6.
NO    >> Replace front outside handle (passenger side). Refer to DLK-575, "OUTSIDE HANDLE : Removal and Installation".

## 6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".


>> INSPECTION END

## PASSENGER SIDE : Component Inspection                          INFOID:0000000001298187

## 1.CHECK DOOR REQUEST SWITCH

Check outside key antenna and front door request switch (passenger side).

| Terminal | | Door request switch condition | Continuity |
|---|---|---|---|
| Outside key antenna and front door request switch (passenger side) | | | |
| 3 | 4 | Pressed | Exists |
| | | Released | Does not exist |

Is the inspection result normal?

YES   >> Door request switch is OK.
NO    >> Replace front outside handle (passenger side). Refer to DLK-575, "OUTSIDE HANDLE : Removal and Installation".

# BACK DOOR

## BACK DOOR : Description                                        INFOID:0000000001298188

Transmits lock/unlock operation to Intelligent Key unit.

# DOOR REQUEST SWITCH

< COMPONENT DIAGNOSIS >

**[WITH I-KEY & SUPER LOCK]**

## BACK DOOR : Component Function Check

*INFOID:0000000001298189*

### 1.CHECK FUNCTION

**⬚With CONSULT-III**

Check door request switch "BD/TR REQ SW" in "Data Monitor" mode with CONSULT-III.

| 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-365, "BACK DOOR : Diagnosis Procedure".

## BACK DOOR : Diagnosis Procedure

*INFOID:0000000001298190*

### 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 6.
NO    >> GO TO 2.

### 2.CHECK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect Intelligent Key unit connector.
2. Check continuity between Intelligent Key unit harness connector and back door opener switch assembly (request switch) harness connector.

| Intelligent Key unit connector | Terminal | Back door opener switch (request switch) connector | Terminal | Continuity |
| --- | --- | --- | --- | --- |
| M40 | 29 | D186 | 3 | Exists |

3. Check continuity between Intelligent Key unit harness 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 opener switch assembly (request switch).

### 3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

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

| Back door opener switch assembly (request switch) connector | Terminal | Ground | Continuity |
| --- | --- | --- | --- |
| D186 | 4 | | Exists |

**DLK-365**

Is the inspection result normal?

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

## 4.CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

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

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

Is the inspection result normal?

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

## 5.CHECK DOOR REQUEST SWITCH

Check back door opener switch assembly (request switch).
Refer to DLK-366, "BACK DOOR : Component Inspection".

Is the inspection result normal?

YES     >> GO TO 6.
NO      >> Replace back door opener switch assembly (request switch). Refer to DLK-592, "Removal and Installation".

## 6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

## BACK DOOR : Component Inspection                           *INFOID:0000000001298191*

## 1.CHECK DOOR REQUEST SWITCH

Check back door opener switch assembly (request switch).

| Terminal | | Door request switch condition | Continuity |
|---|---|---|---|
| Back door opener switch assembly (request switch) | | | |
| 3 | 4 | Pressed | Exists |
| | | Released | Does not exist |

Is the inspection result normal?

YES     >> Back door request switch is OK.
NO      >> Replace back door opener switch assembly (request switch). Refer to DLK-592, "Removal and Installation".

## DOOR SWITCH
## DRIVER SIDE

### DRIVER SIDE : Description
*INFOID:0000000001298192*

Detects door open/closed condition.

### DRIVER SIDE : Component Function Check
*INFOID:0000000001298193*

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 >> Front door switch (driver side) is OK.
NO >> Refer to .

### DRIVER SIDE : Diagnosis Procedure
*INFOID:0000000001298194*

1.CHECK DOOR SWITCH INPUT SIGNAL

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

| Terminals | | | Door condition | Voltage (V) (Approx.) |
|---|---|---|---|---|
| (+) | | (−) | | |
| BCM connector | Terminal | | | |
| M65 | 15 | Ground | OPEN | 0 |
| | | | CLOSE |  |

JPMIA0011GB

Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

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

| BCM connector | Terminal | Front door switch (driver side) connector | Terminal | Continuity |
|---|---|---|---|---|
| M65 | 15 | B34 | 2 | Exists |

3. Check continuity between BCM harness connector and ground.

| BCM connector | Terminal | Ground | Continuity |
|---------------|----------|--------|------------|
| M65 | 15 | | 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 front door switch (driver side).
Refer to DLK-368, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES    >> GO TO 4.
NO     >> Replace front door switch (driver side). Refer to DLK-585, "Removal and Installation".

## 4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

## DRIVER SIDE : Component Inspection                                    INFOID:0000000001298195

## 1.CHECK DOOR SWITCH

Check front door switch (driver side).

| Terminal | | Door switch condition | Continuity |
|----------|---|-----------------------|------------|
| front door switch (driver side) | | | |
| 2 | Ground part of door switch | Pressed | Exists |
| | | Released | Does not exist |

Is the inspection result normal?

YES    >> Front door switch (driver side) is OK.
NO     >> Replace front door switch (driver side). Refer to DLK-585, "Removal and Installation".

## PASSENGER SIDE

## PASSENGER SIDE : Description                                          INFOID:0000000001298196

Detects door open/closed condition.

## PASSENGER SIDE : Component Function Check                             INFOID:0000000001298197

## 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    >> Front door switch (passenger side) is OK.
NO     >> Refer to DLK-368, "PASSENGER SIDE : Diagnosis Procedure".

## PASSENGER SIDE : Diagnosis Procedure                                  INFOID:0000000001298198

## 1.CHECK DOOR SWITCH INPUT SIGNAL

1.   Turn ignition switch OFF.

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

| Terminals | | (−) | Door condition | Voltage (V) (Approx.) |
| (+) | | | | |
| BCM connector | Terminal | | | |
|---|---|---|---|---|
| M65 | 14 | Ground | OPEN | 0 |
| | | | CLOSE |  |

JPMIA0011GB

Is the inspection result normal?

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

## 2.CHECK DOOR SWITCH CIRCUIT

1.  Disconnect BCM connector and front door switch (passenger side) connector.
2.  Check continuity between BCM harness connector and front door switch (passenger side) harness connector.

| BCM connector | Terminal | Front door switch (passenger side) connector | Terminal | Continuity |
|---|---|---|---|---|
| M65 | 14 | B27 | 2 | Exists |

3.  Check continuity between BCM harness connector and ground.

| BCM connector | Terminal | Ground | Continuity |
|---|---|---|---|
| M65 | 14 | | 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 front door switch (passenger side).
Refer to DLK-369, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

  YES    >> GO TO 4.
  NO     >> Replace front door switch (passenger side). Refer to DLK-585, "Removal and Installation".

## 4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".


        >> INSPECTION END

## PASSENGER SIDE : Component Inspection                         INFOID:0000000001298199

## 1.CHECK DOOR SWITCH

Check front door switch (passenger side).

| Terminal | | Door switch condition | Continuity |
|---|---|---|---|
| Front door switch (passenger side) | | | |
| 2 | Ground part of door switch | Pressed | Exists |
| | | Released | Does not exist |

Is the inspection result normal?

YES   >> Front door switch (passenger side) is OK.
NO    >> Replace front door switch (passenger side). Refer to DLK-585, "Removal and Installation".

## REAR LH

### REAR LH : Description                                                      *INFOID:0000000001298200*

Detects door open/closed condition.

### REAR LH : Component Function Check                                         *INFOID:0000000001298201*

## 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   >> Rear door switch LH is OK.
NO    >> Refer to DLK-370, "REAR LH : Diagnosis Procedure".

### REAR LH : Diagnosis Procedure                                             *INFOID:0000000001298202*

## 1.CHECK DOOR SWITCH INPUT SIGNAL

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

| Terminals | | | Door condition | Voltage (V) (Approx.) |
|---|---|---|---|---|
| (+) | | (−) | | |
| BCM connector | Terminal | | | |
| M65 | 16 | Ground | OPEN | 0 |
| | | | CLOSE |  |

JPMIA0011GB

Is the inspection result normal?

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

## 2.CHECK DOOR SWITCH CIRCUIT

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

| BCM connector | Terminal | Rear door switch LH connector | Terminal | Continuity |
|---|---|---|---|---|
| M65 | 16 | B71 | 2 | Exists |

3. Check continuity between BCM harness connector and ground.

| BCM connector | Terminal | Ground | Continuity |
|---|---|---|---|
| M65 | 16 | | Does not exist |

Is the inspection result normal?

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

## 3.CHECK DOOR SWITCH

Check rear door switch LH.
Refer to DLK-371, "REAR LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace rear door switch LH. Refer to DLK-585, "Removal and Installation".

## 4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

## REAR LH : Component Inspection

*INFOID:0000000001298203*

## 1.CHECK DOOR SWITCH

Check rear door switch LH.

| Terminal | | Door switch condition | Continuity |
|---|---|---|---|
| Rear door switch LH | | | |
| 2 | Ground part of door switch | Pressed | Exists |
| | | Released | Does not exist |

Is the inspection result normal?

YES >> Rear door switch LH is OK.
NO >> Replace rear door switch LH. Refer to DLK-585, "Removal and Installation".

## REAR RH

## REAR RH : Description

*INFOID:0000000001298204*

Detects door open/close condition.

## REAR RH : Component Function Check

*INFOID:0000000001298205*

## 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 >> Rear door switch RH is OK.
NO >> Refer to DLK-372, "REAR RH : Diagnosis Procedure".

## REAR RH : Diagnosis Procedure

*INFOID:0000000001298206*

## 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 | 12 | Ground | OPEN | 0 |
| | | | CLOSE |  |

JPMIA0011GB

Is the inspection result normal?

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

## 2.CHECK DOOR SWITCH CIRCUIT

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

| BCM connector | Terminal | Rear door switch RH connector | Terminal | Continuity |
|---|---|---|---|---|
| M65 | 12 | B53 | 2 | Exists |

3. Check continuity between BCM harness 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 between BCM and door switch.

## 3.CHECK DOOR SWITCH

Check rear door switch RH.
Refer to DLK-372, "REAR RH : Component Inspection".

Is the inspection result normal?

YES    >> GO TO 4.
NO     >> Replace rear door switch RH. Refer to DLK-585, "Removal and Installation".

## 4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".


>> INSPECTION END

## REAR RH : Component Inspection

*INFOID:0000000001298207*

## 1.CHECK DOOR SWITCH

Check rear door switch RH.

| Terminal | | Door switch condition | Continuity |
|---|---|---|---|
| Rear door switch RH | | | |
| 2 | Ground part of door switch | Pressed | Exists |
| | | Released | Does not exist |

Is the inspection result normal?

YES    >> Rear door switch RH is OK.
NO     >> Replace rear door switch RH. Refer to .

## BACK DOOR

## BACK DOOR : Description                                    INFOID:0000000001298208

Detects back door open condition.

## BACK DOOR : Component Function Check                        INFOID:0000000001298209

### 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 .

## BACK DOOR : Diagnosis Procedure                            INFOID:0000000001298210

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

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

| Terminals | | | Back door condition | Voltage (V) (Approx.) |
|---|---|---|---|---|
| (+) | | (−) | | |
| BCM connector | Terminal | | | |
| M65 | 13 | Ground | OPEN | 0 |
| | | | CLOSE | Battery voltage |

Is the inspection result normal?

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

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

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

| BCM connector | Terminal | Back door lock assembly (door switch) connector | Terminal | Continuity |
|---|---|---|---|---|
| M65 | 13 | D190 | 2 | Exists |

3.  Check continuity between BCM connector and ground.

| BCM connector | Terminal | Ground | Continuity |
|---|---|---|---|
| M65 | 13 | | Does not exist |

Is the inspection result normal?

YES    >> GO TO 3.
NO     >> Repair or replace harness between BCM and back door lock assembly (door switch).

## 3.CHECK BACK DOOR LOCK ASSEMBLY GROUND CIRCUIT

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

| Back door lock assembly (door switch) connector | Terminal | Ground | Continuity |
|---|---|---|---|
| D190 | 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 harness connector and ground.

| Terminals | | | Voltage (V) (Approx.) |
|---|---|---|---|
| (+) | | (−) | |
| BCM connector | Terminal | | |
| M65 | 13 | Ground | Battery voltage |

Is the inspection result normal?

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

## 5.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

Check back door lock assembly (door switch).
Refer to DLK-374, "BACK DOOR : Component Inspection".

Is the inspection result normal?

YES    >> GO TO 6.
NO     >> Replace back door lock assembly (door switch). Refer to DLK-583, "DOOR LOCK : Removal and Installation".

## 6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".


>> INSPECTION END

## BACK DOOR : Component Inspection                          *INFOID:0000000001298211*

## 1.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

Check back door lock assembly (door switch).

| Terminal | | Back door condition | Continuity |
|---|---|---|---|
| Back door lock assembly (door switch) | | | |
| 2 | 1 | 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. Refer to DLK-583, "DOOR LOCK : Removal and Installation".

# KEY SWITCH

## Description

*INFOID:0000000001298212*

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:0000000001298213*

### 1.CHECK KEY SWITCH INPUT SIGNAL

Check key switch ("KEY SW") in "Data Monitor" mode with CONSULT-III.

| 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-375, "Diagnosis Procedure".

## Diagnosis Procedure

*INFOID:0000000001298214*

### 1.CHECK KEY SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect Intelligent Key unit connector 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 | 5 | Ground | Insert mechanical key into key cylinder | Battery voltage |
| | | | Remove mechanical key from key cylinder | 0 |

Is the inspection result normal?

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

### 2.CHECK KEY SWITCH POWER SUPPLY CIRCUIT

1. Remove mechanical key from key cylinder.
2. Disconnect ignition knob switch, key switch and key lock solenoid connector.
3. Check voltage between ignition knob switch, key switch and key lock solenoid harness connector and ground.

| Terminals | | | Voltage (V) (Approx.) |
|---|---|---|---|
| (+) | | (−) | |
| Ignition knob switch, key switch and key lock solenoid 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 ignition knob switch, key switch and key lock solenoid harness connector.

| Intelligent Key unit connector | Terminal | Ignition knob switch, key switch and key lock solenoid connector | Terminal | Continuity |
|---|---|---|---|---|
| M40 | 7 | M25 | 1 | Exists |

2.  Check continuity between BCM harness connector and ignition knob switch, key switch and key lock solenoid harness connector.

| BCM connector | Terminal | Ignition knob switch, key switch and key lock solenoid connector | Terminal | Continuity |
|---|---|---|---|---|
| M65 | 5 | M25 | 1 | Exists |

3.  Check continuity between ignition knob switch, key switch and key lock solenoid harness connector and ground.

| Ignition knob switch, key switch and key lock solenoid 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.
Refer to DLK-376, "Component Inspection".

Is the inspection result normal?

yes   >> GO TO 5.
NO    >> Replace key cylinder assembly.

## 5.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

## Component Inspection                                    INFOID:0000000001298215

## COMPONENT INSPECTION

## 1.CHECK KEY SWITCH

Check continuity between ignition knob switch, key switch and key lock solenoid terminals.

| Terminal | Condition | Continuity |
|---|---|---|
| Ignition knob switch, key switch and key lock solenoid | | |

| 1 | 2 | Insert mechanical key into key cylinder | Exists |
|---|---|---|---|
| | | Remove mechanical key from key cylinder | Does not exist |

<u>Is the inspection result normal?</u>

YES &gt;&gt; Key switch is OK.
NO &gt;&gt; Replace key cylinder assembly.

# IGNITION KNOB SWITCH

## Description
*INFOID:0000000001298216*

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

## Component Function Check
*INFOID:0000000001298217*

### 1.CHECK IGNITION KNOB SWITCH INPUT SIGNAL

Check ignition knob switch ("PUSH SW") in "Data Monitor" mode with CONSULT-III.

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

<u>Is the inspection result normal?</u>

YES   &gt;&gt; Ignition knob switch is OK.
NO   &gt;&gt; Refer to <span style="color:green">DLK-378, "Diagnosis Procedure"</span>.

## Diagnosis Procedure
*INFOID:0000000001298218*

### 1.CHECK IGNITION KNOB SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect Intelligent Key unit 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 |

<u>Is the inspection result normal?</u>

YES   &gt;&gt; GO TO 5.
NO   &gt;&gt; GO TO 2.

### 2.CHECK IGNITION KNOB SWITCH POWER SUPPLY CIRCUIT

1. Disconnect ignition knob switch, key switch and key lock solenoid connector.
2. Check voltage between ignition knob switch, key switch and key lock solenoid harness connector and ground.

| Terminals | | | Voltage (V) (Approx.) |
|---|---|---|---|
| **(+)** | | **(−)** | |
| Ignition knob switch, key switch and key lock solenoid connector | Terminal | | |
| M25 | 4 | Ground | Battery voltage |

<u>Is the inspection result normal?</u>

YES   &gt;&gt; GO TO 3.
NO   &gt;&gt; Repair or replace harness.

### 3.CHECK IGNITION KNOB SWITCH SIGNAL CIRCUIT

1. Check continuity between Intelligent Key unit harness connector and ignition knob switch, key switch and key lock solenoid harness connector.

| Intelligent Key unit connector | Terminal | Ignition knob switch, key switch and key lock solenoid connector | Terminal | Continuity |
|---|---|---|---|---|
| M40 | 27 | M25 | 3 | Exists |

2. Check continuity between ignition knob switch, key switch and key lock solenoid connector and ground.

| Ignition knob switch, key switch and key lock solenoid 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.
Refer to DLK-379, "Component Inspection".

Is the inspection result normal?

YES    >> GO TO 5.
NO     >> Replace ignition knob switch, key switch and key lock solenoid.

## 5.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".


>> INSPECTION END

## Component Inspection

*INFOID:0000000001298219*

## 1.CHECK IGNITION KNOB SWITCH

Check continuity between ignition knob switch, key switch and key lock solenoid terminals under the following conditions.

| Ignition knob switch, key switch and key lock solenoid | | Condition | Continuity |
|---|---|---|---|
| Terminal | | | |
| 3 | 4 | Ignition knob switch is pressed | Exists |
| | | Ignition knob switch is released | Does not exist |

Is the inspection result normal?

YES    >> Ignition knob switch, key switch and key lock solenoid is OK.
NO     >> Replace ignition knob switch, key switch and key lock solenoid.

## DOOR LOCK ACTUATOR
## DRIVER SIDE

### DRIVER SIDE : Description

INFOID:0000000001480684

Locks/unlocks the door with the signal from BCM.

### DRIVER SIDE : Component Function Check

INFOID:0000000001480685

## 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    >> Front door lock actuator (driver side) is OK.
NO     >> Refer to DLK-380, "DRIVER SIDE : Diagnosis Procedure".

### DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001480686

## 1.CHECK BCM OUTPUT SIGNAL

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

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

| BCM connector | Terminal | Front door lock actuator (driver side) connector | Terminal | Continuity |
|---|---|---|---|---|
| M67 | 56 | D29 | 1 | Exists |
| | 60 | | 2 | |

3.    Check continuity between BCM harness connector and ground.

| BCM connector | Terminal | | Continuity |
|---|---|---|---|
| M67 | 56 | Ground | Does not exist |
| | 60 | | |

Is the inspection result normal?

YES    >> GO TO 6.

NO >> GO TO 3.

## 3.CHECK DOOR LOCK ACTUATOR CIRCUIT 2

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

| BCM connector | Terminal | Passenger side anti-hijack relay connector | Terminal | Continuity |
|---|---|---|---|---|
| M67 | 56 | M90 | 3 | Exists |

3. Check continuity between BCM harness 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 3

Check passenger side anti-hijack relay.

| Passenger side relay connector | Terminal | | Continuity |
|---|---|---|---|
| M90 | 3 | 4 | Exists |

Is the inspection result normal?

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

## 5.CHECK DOOR LOCK ACTUATOR CIRCUIT 4

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

| Passenger side anti-hijack relay connector | Terminal | Front door lock actuator (driver side) connector | Terminal | Continuity |
|---|---|---|---|---|
| M90 | 4 | D29 | 1 | Exists |

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

| Passenger side anti-hijack relay connector | Terminal | Ground | Continuity |
|---|---|---|---|
| M90 | 4 | | Does not exist |

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace harness.

## 6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

## PASSENGER SIDE

## PASSENGER SIDE : Description

*INFOID:0000000001480688*

Locks/unlocks the door with the signal from BCM.

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

## PASSENGER SIDE : Component Function Check
*INFOID:0000000001480689*

### 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 >> Front door lock actuator (passenger side) is OK.
NO >> Refer to DLK-382, "PASSENGER SIDE : Diagnosis Procedure".

## PASSENGER SIDE : Diagnosis Procedure
*INFOID:0000000001480690*

### 1.CHECK BCM OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM harness 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 connector and front door lock actuator (passenger side) connector.
2. Check continuity between BCM harness connector and front door lock actuator (passenger side) harness connector.

| BCM connector | Terminal | Front door lock actuator (passenger side) connector | Terminal | Continuity |
|---|---|---|---|---|
| M67 | 56 | D68 | 2 | Exists |
| | 54 | | 1 | |

3. Check continuity between BCM harness connector and ground.

| BCM connector | Terminal | | Continuity |
|---|---|---|---|
| M67 | 56 | Ground | Does not exist |
| | 54 | | |

Is the inspection result normal?

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

### 3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

# DOOR LOCK ACTUATOR

< COMPONENT DIAGNOSIS >

**[WITH I-KEY & SUPER LOCK]**

## REAR LH

### REAR LH : Description

*INFOID:0000000001480692*

Locks/unlocks the door with the signal from BCM.

### REAR LH : Component Function Check

*INFOID:0000000001480693*

## 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    &gt;&gt; Rear door lock actuator LH is OK.
NO     &gt;&gt; Refer to DLK-383, "REAR LH : Diagnosis Procedure".

### REAR LH : Diagnosis Procedure

*INFOID:0000000001480694*

## 1.CHECK BCM OUTPUT SIGNAL

1.  Turn ignition switch OFF.
2.  Check voltage between BCM harness 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    &gt;&gt; GO TO 6.
NO     &gt;&gt; GO TO 2.

## 2.CHECK DOOR LOCK ACTUATOR CIRCUIT 1

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

| BCM connector | Terminal | Rear door lock actuator LH connector | Terminal | Continuity |
|---|---|---|---|---|
| M67 | 56 | D115 | 1 | Exists |
| | 54 | | 2 | |

3.  Check continuity between BCM harness connector and ground.

| BCM connector | Terminal | | Continuity |
|---|---|---|---|
| M67 | 56 | Ground | Does not exist |
| | 54 | | |

Is the inspection result normal?

YES    &gt;&gt; GO TO 6.
NO     &gt;&gt; GO TO 3.

## 3.CHECK DOOR LOCK ACTUATOR CIRCUIT 2

1.  Disconnect passenger side anti-hijack relay connector.

2. Check continuity between BCM harness connector and passenger side anti-hijack relay harness connector.

| BCM connector | Terminal | Passenger side anti-hijack relay connector | Terminal | Continuity |
|---|---|---|---|---|
| M67 | 56 | M90 | 3 | Exists |

3. Check continuity between BCM harness 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 3

Check passenger side anti-hijack relay.

| Passenger side anti-hijack relay connector | Terminal | | Continuity |
|---|---|---|---|
| M90 | 3 | 4 | Exists |

Is the inspection result normal?

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

## 5. CHECK DOOR LOCK ACTUATOR CIRCUIT 4

1. Check continuity between passenger side anti-hijack relay harness connector and rear door lock actuator LH harness connector.

| Passenger side anti-hijack relay connector | Terminal | Rear door lock actuator LH connector | Terminal | Continuity |
|---|---|---|---|---|
| M90 | 4 | D115 | 1 | Exists |

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

| Passenger side anti-hijack relay connector | Terminal | Ground | Continuity |
|---|---|---|---|
| M90 | 4 | | Does not exist |

Is the inspection result normal?

YES    >> GO TO 6.
NO     >> Repair or replace harness.

## 6. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

# REAR RH

## REAR RH : Description                                                        INFOID:0000000001480696

Locks/unlocks the door with the signal from BCM.

## REAR RH : Component Function Check                                           INFOID:0000000001480697

## 1. CHECK FUNCTION

With CONSULT-III

A

Check "DOOR LOCK/UNLOCK" in "Active Test" mode with CONSULT-III.

B

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

C

Is the inspection result normal?

YES    >> Door lock actuator is OK.
NO     >> Refer to .

## REAR RH : Diagnosis Procedure                                  *INFOID:0000000001480698*

D

### 1.CHECK BCM OUTPUT SIGNAL

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

E

| 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 |

F

G

Is the inspection result normal?

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

H

### 2.CHECK DOOR LOCK ACTUATOR CIRCUIT 1

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

I

J

| BCM connector | Terminal | Rear door lock actuator RH connector | Terminal | Continuity |
|---|---|---|---|---|
| M67 | 56 | D95 | 2 | Exists |
| | 54 | | 1 | |

DLK

4. Check continuity between BCM harness connector and ground.

L

| BCM connector | Terminal | | Continuity |
|---|---|---|---|
| M67 | 56 | Ground | Does not exist |
| | 54 | | |

M

Is the inspection result normal?

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

N

### 3.CHECK DOOR LOCK ACTUATOR CIRCUIT 2

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

O

| BCM connector | Terminal | Anti-hijack relay connector | Terminal | Continuity |
|---|---|---|---|---|
| M67 | 56 | M90 | 3 | Exists |

P

3. Check continuity between BCM harness 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 3

Check passenger side 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 4

1.  Check continuity between passenger side anti-hijack relay harness connector and rear door lock actuator RH harness connector.

| Passenger side anti-hijack relay connector | Terminal | Rear door lock actuator RH connector | Terminal | Continuity |
|---|---|---|---|---|
| M90 | 3 | D95 | 3 | Exists |

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

| Passenger side anti-hijack relay connector | Terminal | Ground | Continuity |
|---|---|---|---|
| M90 | 3 | | Does not exist |

Is the inspection result normal?

YES    >> GO TO 6.
NO     >> Repair or replace harness.

## 6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".


>> INSPECTION END

A

## SUPER LOCK ACTUATOR
## DRIVER SIDE

B

### DRIVER SIDE : Description                                        *INFOID:0000000001298292*

The super lock system is controlled by BCM.

C

### DRIVER SIDE : Component Function Check                          *INFOID:0000000001298293*

## 1.CHECK FUNCTION

D

ⓘ**With CONSULT-III**
Check "SUPER LOCK" in "Active Test" mode with CONSULT-III.

E

| Test item | | Condition |
|---|---|---|
| SUPER LOCK | :LOCK (SET) | The super lock actuator is locked (SET) |
| | :UNLOCK (RELEASE) | The super lock actuator is unlocked (RELEASE) |

F

Is the inspection result normal?

  YES    >> Front super lock actuator (driver side) is OK.
  NO     >> Refer to DLK-387, "DRIVER SIDE : Diagnosis Procedure".

G

### DRIVER SIDE : Diagnosis Procedure                              *INFOID:0000000001298294*

## 1.CHECK OUTPUT SIGNAL

H

Check voltage between BCM connector and ground.

I

| Terminals | | | Condition | Voltage (V) (Approx.) |
|---|---|---|---|---|
| (+) | | (−) | | |
| BCM connector | Terminal | | | |
| M67 | 60 | Ground | UNLOCK (RELEASE) | 0 → Battery voltage → 0 |
| | 59 | | LOCK (SET) | |

J

Is the inspection result normal?

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

**DLK**

## 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.

L

M

| BCM connector | Terminal | Door lock actuator connector | Terminal | Continuity |
|---|---|---|---|---|
| M67 | 59 | D29 | 1 | Exists |
| | 60 | | 2 | |

N

4. Check continuity between BCM connector and ground.

O

| BCM connector | Terminal | | Continuity |
|---|---|---|---|
| M67 | 59 | Ground | Does not exist |
| | 60 | | |

P

Is the inspection result normal?

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

## 3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END.

# PASSENGER SIDE

## PASSENGER SIDE : Description

*INFOID:0000000001298296*

The super lock system is controlled by BCM.

## PASSENGER SIDE : Component Function Check

*INFOID:0000000001298297*

### 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 >> Front super lock actuator (passenger side) is OK.
NO >> Refer to DLK-388, "PASSENGER SIDE : Diagnosis Procedure".

## PASSENGER SIDE : Diagnosis Procedure

*INFOID:0000000001298298*

### 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 front door lock actuator (passenger side) connector.
3. Check continuity between BCM connector and front door lock actuator (passenger side) connector.

| BCM connector | Terminal | Front door lock actuator (passenger side) connector | Terminal | Continuity |
|---|---|---|---|---|
| M67 | 59 | D68 | 1 | Exists |
| | 54 | | 2 | |

4. Check continuity between BCM connector and ground.

| BCM connector | Terminal | | Continuity |
|---|---|---|---|
| M67 | 59 | Ground | Does not exist |
| | 54 | | |

Is the inspection result normal?

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

## 3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END.

# REAR LH

## REAR LH : Description

*INFOID:0000000001298300*

The super lock system is controlled by BCM.

## REAR LH : Component Function Check

*INFOID:0000000001298301*

## 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    >> Rear super lock actuator LH is OK.
  NO     >> Refer to DLK-389, "REAR LH : Diagnosis Procedure".

## REAR LH : Diagnosis Procedure

*INFOID:0000000001298302*

## 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 | Rear door lock actuator (passenger side) connector | Terminal | Continuity |
|---|---|---|---|---|
| M67 | 59 | D115 | 1 | Exists |
| | 54 | | 2 | |

4. Check continuity between BCM connector and ground.

| BCM connector | Terminal | | Continuity |
|---|---|---|---|
| M67 | 59 | Ground | Does not exist |
| | 54 | | |

Is the inspection result normal?

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

## 3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END.

# REAR RH

## REAR RH : Description                                                              *INFOID:0000000001298304*

The super lock system is controlled by BCM.

## REAR RH : Component Function Check                                                 *INFOID:0000000001298305*

### 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    >> Rear super lock actuator RH is OK.
  NO     >> Refer to DLK-390, "REAR RH : Diagnosis Procedure".

## REAR RH : Diagnosis Procedure                                                     *INFOID:0000000001298306*

### 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 | Rear door lock actuator RH connector | Terminal | Continuity |
|---|---|---|---|---|
| M67 | 59 | D95 | 1 | Exists |
| | 54 | | 2 | |

4.  Check continuity between BCM connector and ground.

| BCM connector | Terminal | | Continuity |
|---|---|---|---|
| M67 | 59 | Ground | Does not exist |
| | 54 | | |

Is the inspection result normal?

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

## 3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END.

## BACK DOOR OPENER ACTUATOR

### Description

*INFOID:0000000001298236*

Opens the back door with the signal from BCM.

### Component Function Check

*INFOID:0000000001298237*

### 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 opener actuator operation |

Is the inspection result normal?
  YES    >> Back door opener actuator is OK.
  NO     >> Refer to DLK-392, "Diagnosis Procedure".

### Diagnosis Procedure

*INFOID:0000000001298238*

### 1.CHECK BCM OUTPUT SIGNAL

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

| BCM connector | Terminal | Back door lock assembly connector | Terminal | Continuity |
|---|---|---|---|---|
| M66 | 45 | D190 | 4 | Exists |

4.   Check continuity between BCM harness 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 harness connector and ground.

| Back door lock assembly connector | Terminal | Ground | Continuity |
|---|---|---|---|
| D190 | 3 | | Exists |

Is the inspection result normal?

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

## 4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

## FUEL LID OPENER ACTUATOR

### Description
*INFOID:0000000001298240*

Locks/unlocks the fuel lid with the signal from BCM.

### Component Function Check
*INFOID:0000000001298241*

## 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 fuel lid opener actuator are unlocked |
| | :DR UNLK | The fuel lid opener actuator is unlocked |
| | :LOCK | The fuel lid opener actuator are locked |

Is the inspection result normal?

YES >> Fuel lid opener actuator is OK.
NO >> Refer to DLK-394, "Diagnosis Procedure".

### Diagnosis Procedure
*INFOID:0000000001298242*

## 1.CHECK BCM OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM harness 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 FUEL LID OPENER ACTUATOR CIRCUIT 1

1. Disconnect BCM connector and fuel lid opener actuator connector.
2. Check continuity between BCM harness connector and fuel lid opener actuator harness connector.

| BCM connector | Terminal | Fuel lid opener actuator connector | Terminal | Continuity |
|---|---|---|---|---|
| M67 | 56 | B58 | 2 | Exists |
| | 60 | | 1 | |

3. Check continuity between BCM harness connector and ground.

| BCM connector | Terminal | | Continuity |
|---|---|---|---|
| M67 | 56 | Ground | Does not exist |
| | 60 | | |

Is the inspection result normal?

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

## 3.CHECK FUEL LID OPENER ACTUATOR CIRCUIT 2

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

| BCM connector | Terminal | Passenger side anti-hijack relay connector | Terminal | Continuity |
|---|---|---|---|---|
| M67 | 56 | M90 | 3 | Exists |

3. Check continuity between BCM harness 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 FUEL LID OPENER ACTUATOR CIRCUIT 3

Check passenger side of anti-hijack relay.

| Passenger side anti-hijack relay connector | Terminal | | Continuity |
|---|---|---|---|
| M90 | 3 | 4 | Exists |

Is the inspection result normal?

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

## 5.CHECK DOOR LOCK ACTUATOR CIRCUIT 4

1. Check continuity between passenger side anti-hijack relay harness connector and fuel lid opener actuator harness connector.

| Passenger side anti-hijack relay connector | Terminal | Fuel lid opener actuator connector | Terminal | Continuity |
|---|---|---|---|---|
| M90 | 4 | B58 | 2 | Exists |

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

| Passenger side anti-hijack relay connector | Terminal | Ground | Continuity |
|---|---|---|---|
| M90 | 4 | | Does not exist |

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace harness.

## 6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

# BACK DOOR OPENER SWITCH

## Description
INFOID:0000000001298244

Sends the back door opening signal to BCM.

## Component Function Check
INFOID:0000000001298245

## 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    >> Back door opener switch is OK.
NO     >> Refer to DLK-396, "Diagnosis Procedure".

## Diagnosis Procedure
INFOID:0000000001298246

## 1.CHECK BCM INPUT SIGNAL

Check voltage between BCM harness connector and ground.

| Terminals | | (−) | Condition of back door opener switch | Voltage (V) (Approx.) |
|---|---|---|---|---|
| (+) | | | | |
| BCM connector | Terminal | | | |
| M65 | 29 | Ground | Pressed | 0 |
| | | | Released | Battery voltage |

Is the inspection result normal?

YES    >> GO TO 5.
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 assembly (opener switch) connector.
3. Check continuity between BCM harness connector and back door opener switch assembly (opener switch) harness connector.

| BCM connector | Terminal | Back door opener switch assembly (opener switch) connector | Terminal | Continuity |
|---|---|---|---|---|
| M65 | 29 | D186 | 1 | Exists |

4. Check continuity between BCM harness 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.

## 3.CHECK BCM OUTPUT SIGNAL

Check voltage between BCM harness connector and ground.

| Terminals | | | Voltage (V) (Approx.) |
|---|---|---|---|
| (+) | | (–) | |
| BCM connector | Terminal | | |
| M65 | 29 | Ground | Battery voltage |

Is the inspection result normal?

YES >> GO TO 4.
NO >> GO TO 6.

## 4.CHECK BACK DOOR OPENER SWITCH GROUND CIRCUIT

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

| Back door opener switch assembly (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 assembly (opener switch).
Refer to DLK-397, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace back door opener switch assembly. Refer to DLK-593, "Removal and Installation".

## 6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

## Component Inspection

INFOID:0000000001298247

## 1.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch assembly (opener switch).

| Back door opener switch assembly (opener switch) | 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 assembly (opener switch) is OK.
NO >> Replace back door opener switch assembly. Refer to DLK-593, "Removal and Installation".

# OUTSIDE KEY ANTENNA
## DRIVER SIDE

### DRIVER SIDE : Description                              *INFOID:0000000001298248*

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

### DRIVER SIDE : Component Function Check                *INFOID:0000000001298249*

#### 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, LED (on Intelligent Key) blinks.

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

Is the inspection result normal?

YES   >> Outside key antenna (driver side) is OK.
NO    >> Refer to DLK-404, "BACK DOOR : Diagnosis Procedure".

### DRIVER SIDE : Diagnosis Procedure                     *INFOID:0000000001298250*

#### 1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

# OUTSIDE KEY ANTENNA

| 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   >> GO TO 4.
   NO   >> GO TO 2.

## 2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and outside key antenna and front door request switch (driver side) connector.
2. Check continuity between Intelligent Key unit harness connector and outside key antenna and front door request switch (driver side) harness connector.

| Intelligent Key unit connector | Terminal | Outside key antenna and front door request switch (driver side) connector | Terminal | Continuity |
|---|---|---|---|---|
| M40 | 19 | D30 | 1 | Exists |
| | 20 | | 2 | |

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

**DLK-399**

| 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 (driver side).

## 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 harness connector and ground with oscilloscope.

| Terminals | | | Condition | Signal (Reference value) |
|---|---|---|---|---|
| (+) | | (−) | | |
| Intelligent Key unit connector | Terminal | | | |
| M40 | 19 | Ground | When Intelligent Key is in the antenna detection area. | (V) 15 10 5 0  1 s  JMKIA0397ZZ |
| Driver side (+) | | | Door request switch is pressed | |
| | | | When Intelligent Key is not in the antenna detection area. | (V) 15 10 5 0  1 s  JMKIA0514ZZ |
| | 20 | | When Intelligent Key is in the antenna detection area. | (V) 15 10 5 0  1 s  JMKIA0395ZZ |
| Driver side (-) | | | Door request switch is pressed | |
| | | | When Intelligent Key is not in the antenna detection area. | (V) 15 10 5 0  1 s  JMKIA0515ZZ |

Is the inspection result normal?

YES >> Replace outside key antenna and front door request switch (driver side). Refer to DLK-575, "OUTSIDE HANDLE : Removal and Installation".

NO >> GO TO 4.

A

### 4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

B

>> INSPECTION END

## PASSENGER SIDE

C

### PASSENGER SIDE : Description                                    *INFOID:0000000001298251*

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

D

### PASSENGER SIDE : Component Function Check                      *INFOID:0000000001298252*

E

### 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, LED (on Intelligent Key) blinks.

F

G

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

Is the inspection result normal?

H

YES >> Outside key antenna (passenger side) is OK.
NO  >> Refer to DLK-401, "PASSENGER SIDE : Diagnosis Procedure".

I

### PASSENGER SIDE : Diagnosis Procedure                           *INFOID:0000000001298253*

### 1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

J

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

DLK

L

M

N

O

P

| 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   >> GO TO 4.
NO    >> GO TO 2.

## 2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and outside key antenna and front door request switch (passenger side) connector.
2. Check continuity between Intelligent Key unit harness connector and outside key antenna and front door request switch (passenger side) harness connector.

| Intelligent Key unit connector | Terminal | Outside key antenna and front door request switch (passenger side) connector | Terminal | Continuity |
| --- | --- | --- | --- | --- |
| M40 | 37 | D69 | 1 | Exists |
| | 38 | | 2 | |

3. Check continuity between Intelligent Key unit harness 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 and front door request switch (passenger side).

## 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 harness connector and ground with oscilloscope.

| Terminal | | | Condition | Signal (Reference value) |
|---|---|---|---|---|
| (+) | | (−) | | |
| Intelligent Key unit connector | Terminal | | | |
| M40<br><br>Passenger side (+) | 37 | Ground | Door request switch is pressed<br><br>When Intelligent Key is in the antenna detection area. | (V)<br>15<br>10<br>5<br>0<br>1 s<br>JMKIA0514ZZ |
| | | | When Intelligent Key is not in the antenna detection area. | (V)<br>15<br>10<br>5<br>0<br>1 s<br>JMKIA0514ZZ |
| Passenger side (-) | 38 | | When Intelligent Key is in the antenna detection area. | (V)<br>15<br>10<br>5<br>0<br>1 s<br>JMKIA0395ZZ |
| | | | When Intelligent Key is not in the antenna detection area. | (V)<br>15<br>10<br>5<br>0<br>1 s<br>JMKIA0515ZZ |

Is the inspection result normal?

YES    >> Replace outside key antenna and front door request switch (passenger side). Refer to DLK-575, "OUTSIDE HANDLE : Removal and Installation".

NO      >> GO TO 4.

# 4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

# BACK DOOR

## BACK DOOR : Description                                                        *INFOID:0000000001298254*

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

## BACK DOOR : Component Function Check                                            *INFOID:0000000001298255*

# 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, LED (on Intelligent Key) blinks.

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

Is the inspection result normal?

YES    >> Outside key antenna (back door) is OK.
NO     >> Refer to DLK-404, "BACK DOOR : Diagnosis Procedure".

## BACK DOOR : Diagnosis Procedure                                                *INFOID:0000000001298256*

# 1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

1.  Turn ignition switch OFF.
2.  Check signal between Intelligent Key unit harness 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   >> GO TO 4.
   NO    >> GO TO 2.

## 2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

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

| Intelligent Key unit connector | Terminal | Outside key antenna (back door) connector | Terminal | Continuity |
|---|---|---|---|---|
| M40 | 17 | D191 | 1 | Exists |
| | 18 | | 2 | |

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

| 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 (back door).

## 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 (back door) connector.
3. Check signal between Intelligent Key unit harness connector and ground with oscilloscope.

| Terminal | | | Condition | Signal (Reference value) |
|---|---|---|---|---|
| (+) | | (−) | | |
| Intelligent Key unit connector | Terminal | | | |
| M40 | 17 (Rear bumper (+)) | Ground | Door request switch is pressed | When Intelligent Key is in the antenna detection area. <br> (V) 15 10 5 0 / 1 s / JMKIA0514ZZ |
| | | | | When Intelligent Key is not in the antenna detection area. <br> (V) 15 10 5 0 / 1 s / JMKIA0514ZZ |
| | 18 (Rear bumper (-)) | | | When Intelligent Key is in the antenna detection area. <br> (V) 15 10 5 0 / 1 s / JMKIA0395ZZ |
| | | | | When Intelligent Key is not in the antenna detection area. <br> (V) 15 10 5 0 / 1 s / JMKIA0515ZZ |

Is the inspection result normal?

YES >> Replace outside key antenna (back door). Refer to EXT-36, "Removal and Installation".
NO >> GO TO 4.

## 4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

# INSIDE KEY ANTENNA
## INSTRUMENT CENTER

### INSTRUMENT CENTER : Description                    *INFOID:0000000001298257*

Detects whether Intelligent Key is inside the vehicle.

### INSTRUMENT CENTER : Component Function Check        *INFOID:0000000001298258*

#### 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, LED (on Intelligent Key) blinks.

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

Is the inspection result normal?

YES   >> Inside key antenna (instrument center) is OK.
NO    >> Refer to DLK-408, "INSTRUMENT CENTER : Diagnosis Procedure".

### INSTRUMENT CENTER : Diagnosis Procedure           *INFOID:0000000001298259*

#### 1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

| Terminals | | | Condition | Signal (Reference value) |
| --- | --- | --- | --- | --- |
| (+) | | (−) | | |
| Intelligent Key unit connector | Terminal | | | |
| M40 | Instrument center (+) 33 | Ground | • All doors are closed<br>• 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     >> GO TO 4.
NO      >> GO TO 2.

## 2.CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and inside key antenna (instrument center) connector.
2. Check continuity between Intelligent Key unit harness connector and inside key antenna (instrument center) harness connector.

| Intelligent Key unit connector | Terminal | Inside key antenna (instrument center) connector | Terminal | Continuity |
| --- | --- | --- | --- | --- |
| M40 | 33 | M56 | 1 | Exists |
| | 34 | | 2 | |

3. Check continuity between Intelligent Key unit harness 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 (instrument center).

## 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 (instrument center) connector.
3.   Check signal between Intelligent Key unit harness connector and ground with oscilloscope.

| Terminals | | | Condition | Signal (Reference value) |
|---|---|---|---|---|
| (+) | | (−) | | |
| Intelligent Key unit connector | Terminal | | | |
| M40 | Instrument center (+) | 33 | Ground | • All doors are closed<br>• 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 (instrument center). Refer to DLK-586, "INSTRUMENT CENTER : Removal and Installation".

NO       >> GO TO 4.

## 4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

## CONSOLE

### CONSOLE : Description                                    *INFOID:0000000001298260*

Detects whether Intelligent Key is inside the vehicle.

### CONSOLE : Component Function Check                       *INFOID:0000000001298261*

## 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, LED (on Intelligent Key) blinks.

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

Is the inspection result normal?

YES    >> Inside key antenna (console) is OK.
NO     >> Refer to DLK-411, "CONSOLE : Diagnosis Procedure".

### CONSOLE : Diagnosis Procedure                           *INFOID:0000000001298262*

## 1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

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

Is the inspection result normal?

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

## 2.CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and inside key antenna (console) connector.
2. Check continuity between Intelligent Key unit harness connector and inside key antenna (console) harness connector.

| Intelligent Key unit connector | Terminal | Inside key antenna (console) connector | Terminal | Continuity |
|---|---|---|---|---|
| M40 | 15 | M252 | 1 | Exists |
| | 16 | | 2 | |

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

| 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 (console).

## 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 (console) connector.
3. Check signal between Intelligent Key unit harness connector and ground with oscilloscope.

| Terminal | | | Condition | Signal (Reference value) |
|---|---|---|---|---|
| (+) | | (−) | | |
| Intelligent Key unit connector | Terminal | | | |
| 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 (console). Refer to .
NO >> GO TO 4.

## 4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

## REAR SEAT

### REAR SEAT : Description
*INFOID:0000000001298263*

Detects whether Intelligent Key is inside the vehicle.

### REAR SEAT : Component Function Check
*INFOID:0000000001298264*

## 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, LED (on Intelligent Key) blinks.

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

Is the inspection result normal?

YES    >> Inside key antenna (rear seat) is OK.
NO     >> Refer to DLK-414, "REAR SEAT : Diagnosis Procedure".

### REAR SEAT : Diagnosis Procedure
*INFOID:0000000001298265*

## 1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

| 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    >> GO TO 4.
    NO     >> GO TO 2.

## 2.CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and inside key antenna (rear seat) connector.
2. Check continuity between Intelligent Key unit harness connector and inside key antenna (rear seat) harness connector.

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

3. Check continuity between Intelligent Key unit harness 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 (rear seat).

## 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 (rear seat) connector.
3. Check signal between Intelligent Key unit harness connector and ground with oscilloscope.

| Terminal | | | Condition | Signal (Reference value) |
|---|---|---|---|---|
| (+) | | (−) | | |
| Intelligent Key unit connector | Terminal | | | |
| M40 | | Ground | • All doors are closed<br>• Ignition knob switch is pressed | |
| Rear seat (+) | 13 | | When Intelligent Key is in the antenna detection area. | (V) 15 10 5 0 / 1 s / JMKIA0393ZZ |
| | | | When Intelligent Key is not in the antenna detection area. | (V) 15 10 5 0 / 1 s / JMKIA0391ZZ |
| Rear seat (-) | 14 | | When Intelligent Key is in the antenna detection area. | (V) 15 10 5 0 / 1 s / JMKIA0392ZZ |
| | | | When Intelligent Key is not in the antenna detection area. | (V) 15 10 5 0 / 1 s / JMKIA0390ZZ |

Is the inspection result normal?

YES >> Replace inside key antenna (rear seat). Refer to <u>DLK-588, "REAR : Removal and Installation"</u>.
NO >> GO TO 4.

## 4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

## ANTI-HIJACK RELAY
## PASSENGER SIDE

### PASSENGER SIDE : Description
*INFOID:0000000001298266*

Receives anti-hijack signal from Intelligent Key unit.

### PASSENGER SIDE : Component Function Check
*INFOID:0000000001298267*

**1.**CHECK FUNCTION

1. All doors are locked using Intelligent Key or door request switch.
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-418, "PASSENGER SIDE : Diagnosis Procedure".

### PASSENGER SIDE : Diagnosis Procedure
*INFOID:0000000001298268*

**1.**CHECK INTELLIGENT KEY UNIT INPUT SIGNAL 1

Check voltage between Intelligent Key unit harness 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 >> GO TO 6.

**2.**CHECK INTELLIGENT KEY UNIT INPUT SIGNAL 2

Check voltage between Intelligent Key unit harness 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 harness 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 harness 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 harness 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 harness 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 >> GO TO 6.

## 5.CHECK PASSENGER SIDE ANTI-HIJACK RELAY

Check passenger side anti-hijack relay.
Refer to DLK-419, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace passenger side anti-hijack relay. Refer to DLK-309, "DOOR LOCK AND UNLOCK SWITCH : Component Parts Location".

## 6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

## PASSENGER SIDE : Component Inspection

INFOID:0000000001298269

## 1.CHECK ANTI-HIJACK RELAY

Check continuity passenger side anti-hijack relay terminals.

| Passenger side anti-hijack relay connector | Terminal | | Condition | Continuity |
|---|---|---|---|---|
| M90 | 4 | 3 | 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-309, "DOOR LOCK AND UNLOCK SWITCH : Component Parts Location".

# INTELLIGENT KEY WARNING BUZZER

## Description
INFOID:0000000001298270

Answers back and warns about an inappropriate operation.

## Component Function Check
INFOID:0000000001298271

### 1.CHECK FUNCTION

 **With CONSULT-III**
Check Intelligent Key warning buzzer "OUTSIDE BUZZER" in "Active Test" mode with CONSULT-III.
Is the inspection result normal?
 YES  >> Intelligent Key warning buzzer is OK.
 NO  >> Refer to DLK-420, "Diagnosis Procedure".

## Diagnosis Procedure
INFOID:0000000001298272

### 1.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL 1

Check voltage between Intelligent Key unit harness 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 5.
 NO  >> GO TO 2.

### 2.CHECK INTELLIGENT KEY WARNING BUZZER POWER SUPPLY CIRCUIT

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

**DLK-420**

A

B

| 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.

C

## 4.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-421, "Component Inspection".

D

Is the inspection result normal?

   YES    >> GO TO 5.

   NO     >> Replace Intelligent Key warning buzzer. Refer to DLK-591, "Removal and Installation".

E

## 5.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

F

        >> INSPECTION END

## Component Inspection

*INFOID:0000000001298273*

G

## 1.CHECK INTELLIGENT KEY WARNING BUZZER

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

H

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

I

Is the inspection result normal?

   YES    >> Intelligent Key warning buzzer is OK.

   NO     >> Replace Intelligent Key warning buzzer. Refer to DLK-591, "Removal and Installation".

J

DLK

L

M

N

O

P

# BUZZER (COMBINATION METER)

## Description
*INFOID:0000000001298274*

Performs operation method guide and warning with buzzer.

## Component Function Check
*INFOID:0000000001298275*

### 1.CHECK FUNCTION

**With CONSULT-III**
Check the operation with "INSIDE BUZZER" in "Active Test" with CONSULT-III.

| 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-422, "Diagnosis Procedure".

## Diagnosis Procedure
*INFOID:0000000001298276*

### 1.CHECK BUZZER (COMBINATION METER) CIRCUIT

Refer to WCS-16, "Component Function Check".
Is the inspection result normal?

Yes >> GO TO 2.
No >> Repair or replace buzzer (combination meter) circuit.

### 2.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

# KEY WARNING LAMP

## Description
*INFOID:0000000001298277*

Performs operation method guide and warning together with buzzer.

## Component Function Check
*INFOID:0000000001298278*

## 1.CHECK FUNCTION

**With CONSULT-III**

Check the operation with "INDICATOR" in "Active Test" mode with CONSULT-III.

| 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-423, "Diagnosis Procedure".

## Diagnosis Procedure
*INFOID:0000000001298279*

## 1.CHECK KEY WARNING LAMP CIRCUIT

Refer to MWI-24, "Diagnosis Description" .

Is the inspection result normal?

Yes >> GO TO 2.
No  >> Repair or replace key warning lamp circuit.

## 2.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

DLK

## LOCK WARNING LAMP

### Description                                                    *INFOID:0000000001298280*

Performs operation method guide and warning together with buzzer.

### Component Function Check                                       *INFOID:0000000001298281*

## 1.CHECK FUNCTION

**With CONSULT-III**
Check the operation with "INDICATOR" in "Active Test" mode with CONSULT-III.

| 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-424, "Diagnosis Procedure".

### Diagnosis Procedure                                            *INFOID:0000000001298282*

## 1.CHECK LOCK WARNING LAMP CIRCUIT

Refer to MWI-24, "Diagnosis Description".
Is the inspection result normal?

Yes    >> GO TO 2.
No     >> Repair or replace lock warning lamp circuit.

## 2.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".


>> INSPECTION END

## HAZARD WARNING LAMPS

### Description                                                          *INFOID:0000000001298283*

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

### Component Function Check                                             *INFOID:0000000001298284*

#### 1.CHECK FUNCTION

**With CONSULT-III**
Check hazard warning lamp "FLASHER" in "Active Test" mode with CONSULT-III.
Is the inspection result normal?

YES    >> Hazard warning lamp circuit is OK.
NO     >> Refer to DLK-425, "Diagnosis Procedure".

### Diagnosis Procedure                                                 *INFOID:0000000001298285*

#### 1.CHECK HAZARD SWITCH CIRCUIT

Check hazard switch circuit.
Refer to EXL-84, "Component Function Check".
Is the inspection result normal?

YES    >> GO TO 2.
NO     >> Repair or replace hazard warning switch circuit.

#### 2.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

# VEHICLE SPEED SIGNAL CIRCUIT

## Description

*INFOID:0000000001298286*

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

## Component Function Check

*INFOID:0000000001298287*

### 1.CHECK FUNCTION

Check that all doors are automatically locked at the vehicle speed of more than 25 km/h (16 MPH).

Is the inspection result normal?

YES    >> Vehicle speed signal circuit is OK.
NO     >> Refer to DLK-426, "Diagnosis Procedure".

## Diagnosis Procedure

*INFOID:0000000001298288*

### 1.CHECK VEHICLE SPEED SIGNAL CIRCUIT

Check vehicle speed signal "VEHICLE SPEED" in "Data Monitor" mode with CONSULT-III.

Is the inspection result normal?

YES    >> GO TO 2.
NO     >> Repair or replace vehicle speed signal circuit.

### 2.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

     >> INSPECTION END

# INTELLIGENT KEY BATTERY

## Description
*INFOID:0000000001298289*

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:0000000001298290*

### 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-427, "Diagnosis Procedure".

## Diagnosis Procedure
*INFOID:0000000001298291*

### 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-594, "Removal and Installation".



OCC0607D

# ECU DIAGNOSIS
## INTELLIGENT KEY UNIT
### Reference Value

*INFOID:0000000001329197*

### 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 |
| DOOR BK SW | Back door | Close | OFF |
| | | Open | ON |
| VEHICLE SPEED | While driving | | Equivalent to speedometer reading |

## TERMINAL LAYOUT



JMKIA0415ZZ

## PHYSICAL VALUES

| Terminal No. | | Wire color | Description | | Condition | | Value [V] (Approx.) |
|---|---|---|---|---|---|---|---|
| + | − | | Signal name | Input/ Output | | | |
| 1 | Ground | LG | Steering lock unit power supply | Output | — | | 5 |
| 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 |

| Terminal No. | | Wire color | Description | | Condition | | Value [V] (Approx.) |
| + | − | | Signal name | Input/ Output | | | |
|---|---|---|---|---|---|---|---|
| 14 | Ground | W | Inside key antenna (-) (rear seat) | Output | Ignition knob is pressed. | When Intelligent Key is in the antenna detection area | (V) 15 10 5 0 ←1 s→ JMKIA0392ZZ |
| | | | | | | When Intelligent Key is not in the antenna detection area | (V) 15 10 5 0 ←1 s→ JMKIA0390ZZ |
| 15 | Ground | SB | Inside key antenna (+) (console) | Output | Ignition knob is pressed. | When Intelligent Key is in the antenna detection area | (V) 15 10 5 0 ←1 s→ JMKIA0393ZZ |
| | | | | | | When Intelligent Key is not in the antenna detection area | (V) 15 10 5 0 ←1 s→ JMKIA0391ZZ |
| 16 | Ground | BR | Inside key antenna (-) (console) | Output | Ignition knob is pressed. | When Intelligent Key is in the antenna detection area | (V) 15 10 5 0 ←1 s→ JMKIA0392ZZ |
| | | | | | | When Intelligent Key is not in the antenna detection area | (V) 15 10 5 0 ←1 s→ 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 | (V) 15 10 5 0  1 s  JMKIA0397ZZ |
| | | | | | | When Intelligent Key is not in the antenna detection area | (V) 15 10 5 0  1 s  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 | (V) 15 10 5 0  1 s  JMKIA0395ZZ |
| | | | | | | When Intelligent Key is not in the antenna detection area | (V) 15 10 5 0  1 s  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 | (V) 15 10 5 0  1 s  JMKIA0397ZZ |
| | | | | | | When Intelligent Key is not in the antenna detection area | (V) 15 10 5 0  1 s  JMKIA0514ZZ |

| Terminal No. + | Terminal No. − | Wire color | Description Signal name | 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 |
| 26 | Ground | R | Stop lamp switch | Input | Depress the brake pedal | | Battery voltage |
| | | | | | Release the brake pedal | | 0 |
| 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 |
| 28 | Ground | O | Unlock sensor | Input | Lock (ON) | | 5 |
| | | | | | Unlock (OFF) | | 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. + | Terminal No. − | Wire color | Description Signal name | Description Input/ Output | Condition | Value [V] (Approx.) |
|---|---|---|---|---|---|---|
| 33 | Ground | O | Inside key antenna (+) (instrument center) | Output | Ignition knob is pressed. | When Intelligent Key is in the antenna detection area — (V) 15 10 5 0 / 1 s / JMKIA0393ZZ |
| | | | | | | When Intelligent Key is not in the antenna detection area — (V) 15 10 5 0 / 1 s / JMKIA0391ZZ |
| 34 | Ground | G | Inside key antenna (-) (instrument center) | Output | Ignition knob is pressed. | When Intelligent Key is in the antenna detection area — (V) 15 10 5 0 / 1 s / JMKIA0392ZZ |
| | | | | | | When Intelligent Key is not in the antenna detection area — (V) 15 10 5 0 / 1 s / 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 — (V) 15 10 5 0 / 1 s / JMKIA0397ZZ |
| | | | | | | When Intelligent Key is in the antenna detection area — (V) 15 10 5 0 / 1 s / JMKIA0514ZZ |

DLK

| 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 | (V) 15 10 5 0   1 s   JMKIA0395ZZ |
| | | | | | | When Intelligent Key is not in the antenna detection area | (V) 15 10 5 0   1 s   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-16, "System Description".

**DLK-434**

## Wiring Diagram - SUPER LOCK CONTROL SYSTEM -

*INFOID:0000000001558752*



JCKWA0361GE

JCKWA0362GE

SUPER LOCK SYSTEM (WITH INTELLIGENT KEY)

| Connector No. | B1 |
| --- | --- |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH80MW–CS16–TM4 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 1 | G | – |
| 3 | O | – |
| 4 | R | – |
| 78 | Y | – |
| 88 | BR | – |
| 97 | V | – |

| Connector No. | B3 |
| --- | --- |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH32MW–NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 15 | P | – |
| 16 | V | – |
| 31 | GR | – |

| Connector No. | B4 |
| --- | --- |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16MW–CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 6 | V | – |
| 14 | O | – |
| 15 | L | – |

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 2 | P | – [RHD models] |

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 2 | BR | – [RHD models] |

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 2 | Y | – |

| Connector No. | B58 |
| --- | --- |
| Connector Name | FUEL LID OPENER ACTUATOR |
| Connector Type | M04FW–LC |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 1 | G | UNLOCK |
| 2 | V | LOCK |

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

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

JCKWA0363GE

## SUPER LOCK SYSTEM (WITH INTELLIGENT KEY)

| Connector No. | B91 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS02FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | L | — |

| Connector No. | D21 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH24FW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 8 | G | — |
| 20 | BR | — |
| 22 | P | — |

| Connector No. | B89 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS12MW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | — |
| 2 | R | — |
| 6 | G | — |

| Connector No. | B95 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS02MW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | R | — |

| Connector No. | B87 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS12MW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | — |
| 2 | L | — |
| 6 | O | — |

| Connector No. | B94 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS02FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | R | — |

| Connector No. | B77 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS10MW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 8 | V | — |

| Connector No. | B92 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS02MW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | L | — |

JCKWA0364GE

## SUPER LOCK SYSTEM (WITH INTELLIGENT KEY)

| Connector No. | D25 |
|---|---|
| Connector Name | POWER WINDOW MAIN SWITCH |
| Connector Type | NS16FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 6 | BR | — |

| Connector No. | D26 |
|---|---|
| Connector Name | POWER WINDOW MAIN SWITCH |
| Connector Type | NS03FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 17 | B | — |
| 18 | G | — |

| Connector No. | D29 |
|---|---|
| Connector Name | FRONT DOOR LOCK ACTUATOR (DRIVER SIDE) |
| Connector Type | FEA04FB-FHA2-LC |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | BR | — |
| 2 | O | — |
| 3 | SB | — |
| 4 | P | — |
| 5 | B | — |

| Connector No. | D22 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | SB | — |
| 8 | BR | — |
| 10 | O | — |
| 12 | B | — |

| Connector No. | D62 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | O | — |
| 3 | R | — |
| 8 | V | — |

| Connector No. | D68 |
|---|---|
| Connector Name | FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE) |
| Connector Type | FEA04FB-FHA2-LC |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | R | — |
| 2 | O | — |
| 3 | V | — |

| Connector No. | D91 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS12FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | — |
| 2 | R | — |
| 6 | G | — |

| Connector No. | D95 |
|---|---|
| Connector Name | REAR DOOR LOCK ACTUATOR RH |
| Connector Type | FEA04FB-FHA2-LC |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | R | — |
| 2 | G | — |
| 3 | V | — |

JCKWA0365GE

SUPER LOCK SYSTEM (WITH INTELLIGENT KEY)

| Connector No. | D111 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS12FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |
| 2 | R | – |
| 6 | G | – |

| Connector No. | D115 |
|---|---|
| Connector Name | REAR DOOR LOCK ACTUATOR LH |
| Connector Type | FEA04FB-FHA2-LC |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | R | – |
| 2 | G | – |
| 3 | V | – |

| Connector No. | D151 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS08FBR-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |

| Connector No. | D157 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS10FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 8 | V | – |

| Connector No. | D181 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS08MBR-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |

| Connector No. | D190 |
|---|---|
| Connector Name | BACK DOOR LOCK ASSEMBLY |
| Connector Type | NS04FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | B | – |
| 2 | V | – |

| Connector No. | E105 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH80FW-CS16-TM4 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 5 | Y | – |

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

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

JCKWA0366GE

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

SUPER LOCK SYSTEM (WITH INTELLIGENT KEY)

| Connector No. | M20 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH24MW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 8 | SB | – |
| 20 | BR | – |
| 22 | G | – [With Intelligent Key] |

| Connector No. | M59 |
| Connector Name | AIR BAG DIAGNOSIS SENSOR UNIT |
| Connector Type | TK20FY-EX-SC |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 19 | LG | DEPLOYMENT INFORMATION[RHD models with side air bag] |

| Connector No. | M14 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 6 | V | – |
| 14 | G | – [RHD models] |
| 15 | R | – |

| 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. | M13 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH32FW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 15 | P | – |
| 16 | Y | – [RHD models] |
| 31 | R | – [RHD models] |

| 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 | LG | – |
| 2 | R | – |

| Connector No. | M11 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH80FW-CS16-TM4 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | O | – [RHD models] |
| 3 | O | – [RHD models] |
| 4 | R | – |
| 78 | LG | – |
| 88 | BR | – |
| 97 | V | – |

| Connector No. | M21 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16MW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |
| 8 | R | – |
| 10 | O | – |
| 12 | B | – |

JCKWA0367GE

## SUPER 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] |
| --- | --- | --- |
| 5 | LG | KEY SW [With Intelligent Key] |
| 12 | LG | DOOR SW (RR) |
| 13 | Y | DOOR SW (BACK) [RHD models] |
| 14 | P | DOOR SW (AS) [RHD models] |
| 15 | BR | DOOR SW (DR) [RHD models] |
| 16 | R | DOOR SW (RL) [RHD models] |
| 17 | L | DOOR LOCK INDICATOR |
| 21 | P | CAN-L |
| 22 | L | CAN-H |
| 28 | LG | SHOCK DETECT SIG [RHD models with side air bag] |
| 32 | BR | LOCK UNLOCK SW (UNLOCK) |

| Connector No. | M77 |
| --- | --- |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH80MW-CS16-TM4 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 5 | Y | - |

| | LOCK UNLOCK SW (LOCK) [RHD models] |
| --- | --- |
| 34 | SB |

| Connector No. | M66 |
| --- | --- |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | FEA12FBR |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 41 | LG | BAT (FUSE) |
| 50 | G | EXTRA INPUT I [RHD models with Intelligent Key] |

| Connector No. | M84 |
| --- | --- |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16MW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 1 | G | - |
| 3 | R | - |
| 8 | V | - |

| Connector No. | M69 |
| --- | --- |
| Connector Name | DOOR LOCK AND UNLOCK SWITCH |
| Connector Type | TK10FW |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 1 | P | - |
| 2 | BR | - |
| 3 | B | - |
| 4 | B | - |
| 6 | L | - |

| Connector No. | M67 |
| --- | --- |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | FHA08FB |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 54 | G | DOOR UNLOCK OUTPUT (OTHER) [RHD models] |
| 55 | B | GND |
| 56 | V | DOOR LOCK OUTPUT (ALL) |
| 57 | Y | BAT (F/L) |
| 59 | R | SUPER LOCK SET OUTPUT |
| 60 | O | DOOR UNLOCK/RELEASE OUTPUT (DR) [RHD models] |

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

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

JCKWA0368GE

JCKWA0389GE

2007/02/28

JCKWA0390GE

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P



JCKWA0391GE

JCKWA0392GE

**Connector No.** B8
**Connector Name** WIRE TO WIRE
**Connector Type** TH12FW-NH

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | B | – |
| 3 | P | – |
| 4 | R | – |
| 9 | L | – |
| 10 | SB | – |
| 11 | BR | – |

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | P | – |
| 2 | L | – |

**Connector No.** B4
**Connector Name** WIRE TO WIRE
**Connector Type** NS16MW-CS

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 6 | V | – |
| 14 | O | – |
| 15 | L | – |
| 16 | W | – |

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | BR | –[RHD models] |

## INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

**Connector No.** B3
**Connector Name** WIRE TO WIRE
**Connector Type** TH32MW-NH

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 3 | B | – |
| 4 | P | – |
| 5 | R | – |
| 15 | P | – |
| 16 | V | – |
| 20 | L | – |
| 21 | SB | – |
| 22 | BR | – |
| 31 | GR | – |

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | P | –[RHD models] |

**Connector No.** B1
**Connector Name** WIRE TO WIRE
**Connector Type** TH80MW-CS16-TM4

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | G | – |
| 3 | O | – |
| 4 | R | – |
| 78 | Y | – |
| 88 | BR | – |
| 97 | V | – |

**Connector No.** B9
**Connector Name** WIRE TO WIRE
**Connector Type** TH12MW-NH

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | SHIELD | – |
| 3 | P | – |
| 4 | R | – |
| 9 | L | – |
| 10 | SB | – |
| 11 | BR | – |

JCKWA0393GE

INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

**B53**

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

H.S.

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | Y | – |

**B58**

| Connector No. | B58 |
|---|---|
| Connector Name | FUEL LID OPENER ACTUATOR |
| Connector Type | M04FW–LC |

H.S.

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | G | UNLOCK |
| 2 | V | LOCK |

**B71**

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

H.S.

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

**B77**

| Connector No. | B77 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS10MW–CS |

H.S.

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 4 | W | – |
| 8 | V | – |

**B78**

| Connector No. | B78 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH16MW–NH |

H.S.

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 4 | R | – |
| 5 | BR | – |
| 6 | SB | – |

**B87**

| Connector No. | B87 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS12MW–CS |

H.S.

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |
| 2 | L | – |
| 6 | O | – |

**B89**

| Connector No. | B89 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS12MW–CS |

H.S.

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |
| 2 | R | – |
| 6 | G | – |

**B91**

| Connector No. | B91 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS02FW–CS |

H.S.

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | L | – |

JCKWA0394GE

INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

| Connector No. | D21 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH24FW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 10 | GR | — |
| 11 | BR | — |
| 22 | P | — |
| 23 | O | — |

| Connector No. | D62 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | O | — |
| 3 | R | — |
| 6 | B | — |
| 8 | V | — |
| 12 | BR | — |
| 13 | P | — |
| 14 | V | — |

| Connector No. | B95 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS02MW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | R | — |

| Connector No. | D30 |
| Connector Name | OUTSIDE KEY ANTENNA AND FRONT DOOR REQUEST SWITCH (DRIVER SIDE) |
| Connector Type | RH04MB |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | BR | — |
| 2 | O | — |
| 3 | GR | — |
| 4 | B | — |

| Connector No. | B94 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS02FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | R | — |

| Connector No. | D29 |
| Connector Name | FRONT DOOR LOCK ACTUATOR (DRIVER SIDE) |
| Connector Type | FEA04FB-FHA2-LC |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | BR | — |
| 2 | O | — |
| 3 | SB | — |
| 4 | P | — |
| 5 | B | — |

| Connector No. | B92 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS02MW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | L | — |

| Connector No. | D22 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | SB | — |
| 8 | BR | — |
| 10 | O | — |
| 12 | B | — |

JCKWA0395GE

## INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

| Connector No. | D95 |
|---|---|
| Connector Name | REAR DOOR LOCK ACTUATOR RH |
| Connector Type | FEA04FB-FHA2-LC |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | R | – |
| 2 | G | – |
| 3 | V | – |

| Connector No. | D153 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH16FW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 4 | R | – |
| 5 | W | – |
| 6 | SB | – |

| Connector No. | D91 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS12FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |
| 2 | R | – |
| 6 | G | – |

| Connector No. | D151 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS08FBR-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |
| 7 | W | – |

| Connector No. | D69 |
|---|---|
| Connector Name | OUTSIDE KEY ANTENNA AND FRONT DOOR REQUEST SWITCH (PASSENGER SIDE) |
| Connector Type | RH04MB |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |
| 2 | P | – |
| 3 | BR | – |
| 4 | B | – |

| Connector No. | D115 |
|---|---|
| Connector Name | REAR DOOR LOCK ACTUATOR LH |
| Connector Type | FEA04FB-FHA2-LC |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | R | – |
| 2 | G | – |
| 3 | V | – |

| Connector No. | D68 |
|---|---|
| Connector Name | FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE) |
| Connector Type | FEA04FB-FHA2-LC |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | R | – |
| 2 | O | – |
| 3 | V | – |

| Connector No. | D111 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS12FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |
| 2 | R | – |
| 6 | G | – |

JCKWA0396GE

**DLK-450**

## INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

| Connector No. | D157 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS10FW-CS |

H.S.

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 4 | V | — [RHD models] |
| 8 | V | — |

| Connector No. | D158 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH16FW-NH |

H.S.

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 4 | R | — |
| 5 | W | — |
| 6 | SB | — |

| Connector No. | D181 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS08MBR-CS |

H.S.

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | — |
| 7 | W | — |

| Connector No. | D183 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH16MW-NH |

H.S.

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 4 | R | — |
| 5 | W | — |
| 6 | SB | — |

| Connector No. | D186 |
|---|---|
| Connector Name | BACK DOOR OPENER SWITCH ASSEMBLY |
| Connector Type | TK06MW-1V |

H.S.

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 3 | SB | PASSIVE UNIT |
| 4 | B | GND |

| Connector No. | D190 |
|---|---|
| Connector Name | BACK DOOR LOCK ASSEMBLY |
| Connector Type | NS04FW-CS |

H.S.

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | B | — |
| 2 | V | — |
| 3 | B | — |
| 4 | W | — |

| Connector No. | D191 |
|---|---|
| Connector Name | OUTSIDE KEY ANTENNA (BACK DOOR) |
| Connector Type | RK02FGY |

H.S.

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

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

H.S.

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | Y | — |
| 3 | LG | — |

JCKWA0397GE

## INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

| Connector No. | M13 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH32FW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 3 | SHIELD | – |
| 4 | B | – |
| 5 | Y | – |
| 15 | P | – |
| 16 | Y | –[RHD models] |
| 20 | W | – |
| 21 | SB | – |
| 22 | BR | – |
| 31 | R | –[RHD models] |

| 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 | LG | – |
| 2 | R | –[RHD models] |
| 3 | L | – |
| 4 | BR | – |

| Connector No. | M11 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH80FW-CS16-TM4 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | O | –[RHD models] |
| 3 | O | –[RHD models] |
| 4 | R | – |
| 78 | LG | – |
| 88 | BR | – |
| 97 | V | – |

| Connector No. | M21 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16MW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |
| 8 | R | – |
| 10 | O | – |
| 12 | B | – |

| 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. | M20 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH24MW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 10 | GR | – |
| 11 | BR | –[With Intelligent Key] |
| 22 | G | – |
| 23 | O | – |

| Connector No. | E105 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH80FW-CS16-TM4 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 5 | Y | – |
| 71 | Y | – |
| 72 | LG | – |

| Connector No. | M14 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 6 | V | – |
| 14 | G | –[RHD models] |
| 15 | R | – |
| 16 | P | –[RHD models] |

JCKWA0398GE

## INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

**Connector No.** M56
**Connector Name** INSIDE KEY ANTENNA (INSTRUMENT CENTER)
**Connector Type** RK02FGY

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | L | — |
| 2 | P | — |

**Connector No.** M77
**Connector Name** WIRE TO WIRE
**Connector Type** TH80MW-CS16-TM4

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 5 | Y | — |
| 71 | Y | — |
| 72 | LG | — |

**Connector No.** M40
**Connector Name** INTELLIGENT KEY UNIT
**Connector Type** TH40FW-NH

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | L | CAN-H |
| 3 | P | CAN-L |
| 4 | LG | BUZZER |
| 5 | GR | REQUEST SW (DR) |
| 6 | W | IGN SW |
| 7 | LG | KEY SW |
| 11 | BR | BATT+[RHD models] |
| 12 | B | GND |
| 13 | B | REAR SEAT (+) |
| 14 | W | REAR SEAT (–) |
| 15 | R | CONSOLE (+) |
| 16 | G | CONSOLE (–) |
| 17 | BR | BACK DOOR (+) |
| 18 | Y | BACK DOOR (–) |
| 19 | BR | DRIVER DOOR (+) |
| 20 | O | DRIVER DOOR (–) |
| 25 | BR | REQUEST SW (AS) |
| 27 | L | KNOB SW[RHD models] |
| 29 | SB | REQUEST SW (BD) |
| 33 | L | INSTRUMENT (+) |
| 34 | P | INSTRUMENT (–) |
| 37 | V | PASSENGER DOOR (+) |
| 38 | P | PASSENGER DOOR (–)[RHD models] |
| 40 | V | AS ANTI HIJACK |

**Connector No.** M34
**Connector Name** COMBINATION METER
**Connector Type** SAB40FW

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | G | BAT |
| 3 | B | GND |
| 21 | L | CAN-H |
| 22 | P | CAN-L |
| 23 | B | GND |

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 3 | W | IGN SW |
| 4 | SB | ACC SW |
| 5 | LG | KEY SW[With Intelligent Key] |
| 12 | LG | DOOR SW (RR) |
| 13 | Y | DOOR SW (BACK)[RHD models] |
| 14 | P | DOOR SW (AS)[RHD models] |
| 15 | BR | DOOR SW (DR)[RHD models] |
| 16 | R | DOOR SW (RL)[RHD models] |
| 21 | P | CAN-L |
| 22 | L | CAN-H |
| 33 | Y | HAZARD SW[except with xenon headlamp and daytime light system] |

**Connector No.** M66
**Connector Name** BCM (BODY CONTROL MODULE)
**Connector Type** FEA12FBR

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 41 | LG | BAT(FUSE) |
| 42 | V | ROOM LAMP POWER SUPPLY |
| 45 | P | BACK DOOR OPEN OUTPUT[RHD models] |
| 47 | BR | FRASHER OUTPUT (LH) |
| 48 | GR | FRASHER OUTPUT (RH) |
| 50 | G | EXTRA INPUT1[RHD models with Intelligent Key] |
| 52 | R | ROOM LAMP CONTROL |

**Connector No.** M67
**Connector Name** BCM (BODY CONTROL MODULE)
**Connector Type** FHA08FB

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 54 | G | DOOR UNLOCK OUTPUT (OTHER)[RHD models] |
| 55 | B | GND |
| 56 | V | DOOR LOCK OUTPUT (ALL) |
| 57 | V | BAT(F/L) |
| 59 | R | SUPER LOCK SET OUTPUT |
| 60 | O | DOOR UNLOCK/RELEASE OUTPUT(DR)[RHD models] |

JCKWA0399GE

INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

| Connector No. | M251 |
| --- | --- |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH12MW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 5 | G | – |
| 6 | SHIELD | – |
| 11 | R | – |
| 12 | SHIELD | – |

| Connector No. | M97 |
| --- | --- |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH12FW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 5 | G | – |
| 6 | B | – |
| 11 | R | – |
| 12 | B | – |

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

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

| Connector No. | M84 |
| --- | --- |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16MW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 1 | G | – |
| 3 | R | – |
| 6 | B | – |
| 8 | V | – |
| 12 | BR | – |
| 13 | W | – |
| 14 | V | – |

| Connector No. | M252 |
| --- | --- |
| Connector Name | INSIDE KEY ANTENNA (CONSOLE) |
| Connector Type | RK02FGY |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 1 | R | – |
| 2 | G | – |

JCKWA0400GE

**DLK-454**

## Wiring Diagram - BACK DOOR OPENER CONTROL SYSTEM -

*INFOID:0000000001558754*

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P



**BACK DOOR OPENER SYSTEM**

2007/02/28

JCKWA0409GE

## BACK DOOR OPENER SYSTEM

**Connector No.** D151
**Connector Name** WIRE TO WIRE
**Connector Type** NS08FBR-CS

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |
| 4 | LG | – |
| 7 | W | – |

**Connector No.** D190
**Connector Name** BACK DOOR LOCK ASSEMBLY
**Connector Type** NS04FW-CS

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | B | – |
| 2 | V | – |
| 3 | B | – |
| 4 | W | – |

**Connector No.** B77
**Connector Name** WIRE TO WIRE
**Connector Type** NS10MW-CS

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 4 | W | – |
| 8 | V | – |
| 10 | G | – |

**Connector No.** D186
**Connector Name** BACK DOOR OPENER SWITCH ASSEMBLY
**Connector Type** TK06MW-1V

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | G | BCM |
| 2 | B | GND |

**Connector No.** B4
**Connector Name** WIRE TO WIRE
**Connector Type** NS16MW-CS

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 16 | W | – |

**Connector No.** D181
**Connector Name** WIRE TO WIRE
**Connector Type** NS08MBR-CS

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |
| 4 | G | – |
| 7 | W | – |

**Connector No.** B3
**Connector Name** WIRE TO WIRE
**Connector Type** TH32MW-NH

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 16 | V | – |
| 32 | G | – |

**Connector No.** D157
**Connector Name** WIRE TO WIRE
**Connector Type** NS10FW-CS

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 4 | W | –[LHD models] |
| 4 | V | –[RHD models] |
| 8 | V | – |
| 10 | G | – |

JCKWA0410GE

| Connector No. | M14 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 16 | V | –[LHD models] |
| 16 | P | –[RHD models] |

| Connector No. | M77 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH80MW-CS16-TM4 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 5 | Y | – |

| Connector No. | M13 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH32FW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 16 | V | –[LHD models] |
| 16 | Y | –[RHD models] |
| 32 | O | – |

| Connector No. | M67 |
|---|---|
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | FHA08FB |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 55 | B | GND |
| 57 | Y | BAT(F/L) |

| 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. | M66 |
|---|---|
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | FEA12FBR |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 41 | LG | BAT(FUSE) |
| 45 | V | BACK DOOR OPEN OUTPUT[LHD models] |
| 45 | P | BACK DOOR OPEN OUTPUT[RHD models] |

## BACK DOOR OPENER SYSTEM

| Connector No. | E105 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH80FW-CS16-TM4 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 5 | Y | – |

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 13 | V | DOOR SW (BACK)[LHD models] |
| 13 | Y | DOOR SW (BACK)[RHD models] |
| 21 | P | CAN-L |
| 22 | L | CAN-H |
| 29 | O | BACK DOOR OPEN SW |

JCKWA0411GE

## Fail Safe

*INFOID:0000000001329201*

| 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<br>• Inhibits engine cranking (BCM)<br>• Fuel cut (ECM) | Erase DTC |
| B2590: NATS MALFUNCTION | • Inhibits steering look unlocking<br>• Inhibits engine cranking (BCM)<br>• Fuel cut (ECM) | Erase DTC |

## DTC Inspection Priority Chart

*INFOID:0000000001329202*

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<br>• U1010: CONTROL UNIT (CAN)<br>• B2552: INTELIGENT KEY |
| 2 | • B2013: STRG COMM 1<br>• B2590: NATS MALFUNCTION |

## DTC Index

*INFOID:0000000001329203*

**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.<br>Refer to DLK-352 |
| 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: ID DISCORD BCM-I-KEY | The ID verification result between Intelligent key unit and BCM are NG. Or Intelligent Key unit cannot communicate with BCM. | × | Check NATS<br>Refer to SEC-57 |

# BCM (BODY CONTROL MODULE)

## Reference Value

*INFOID:0000000001557098*

### VALUES ON THE DIAGNOSIS TOOL

| Monitor Item | Condition | Value/Status |
|---|---|---|
| VEHICLE SPEED | While driving | Equivalent to speedometer reading |
| IGN ON SW | Ignition switch OFF or ACC | Off |
| | Ignition switch ON | On |
| KEY ON SW | Mechanical key is removed from key cylinder | Off |
| | Mechanical key is inserted to key cylinder | 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-DR | Driver's door closed | Off |
| | Driver's door opened | On |
| DOOR SW-AS | Passenger door closed | Off |
| | Passenger door opened | On |
| DOOR SW-RR | Rear RH door closed | Off |
| | Rear RH door opened | On |
| DOOR SW-RL | Rear LH door closed | Off |
| | Rear LH door opened | On |
| BACK DOOR SW | Back door closed | Off |
| | Back door opened | On |
| I-KEY LOCK | "LOCK" button of Intelligent Key or door request switch are not pressed | Off |
| | "LOCK" button of Intelligent Key or door request switch are pressed | On |
| I-KEY UNLOCK | "UNLOCK" button of Intelligent Key or door request switch are not pressed | Off |
| | "UNLOCK" button of Intelligent Key or door request switch are pressed | On |
| PUSH SW | Return to ignition switch to "LOCK" position | Off |
| | Press ignition switch | 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 |
| 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 |
| UNLOCK SHOCK | Other than the following | Off |
| | During the unlock operation interlocked with air bag | On |
| UNLOCK WITH DR | **NOTE:** The item is indicated, but not monitored | On |
| | | Off |

| Monitor Item | Condition | Value/Status |
|---|---|---|
| LOCK WITH SPEED | Vehicle speed sensing auto door lock function does not operate | Off |
| | Vehicle speed sensing auto door lock function is operating | On |
| ACC ON SW | Ignition switch OFF | Off |
| | Ignition switch ACC or ON | On |
| REAR DEF SW | Rear window defogger switch OFF | Off |
| | Rear window defogger switch ON | On |
| TAIL LAMP SW | Lighting switch OFF | Off |
| | Lighting switch 1ST | On |
| TURN SIGNAL R | Turn signal switch OFF | Off |
| | Turn signal switch RH | On |
| TURN SIGNAL L | Turn signal switch OFF | Off |
| | Turn signal switch LH | On |
| HI BEAM SW | Lighting switch OFF | Off |
| | Lighting switch HI | 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 |
| PASSING SW | Other than lighting switch PASS | Off |
| | Lighting switch PASS | On |
| AUTO LIGHT SW | Lighting switch OFF | Off |
| | Lighting switch AUTO | On |
| FR FOG SW | Front fog lamp switch OFF | Off |
| | Front fog lamp switch ON | On |
| RR FOG SW | Rear fog lamp switch OFF | Off |
| | Rear fog lamp switch ON | On |
| ENGINE RUN | Engine stopped | Off |
| | Engine running | On |
| LIT-SEN FAIL | Light & rain sensor is in normal condition | OK |
| | Light & rain sensor is with error | NOTOK |
| AUT LIGHT SYS | Outside of the room is dark | On |
| | Outside of the room is bright | Off |
| HD LIGHT TIME | — | Displays a setting time of the follow me home function set by the work support |
| IGN SW CAN | Ignition switch OFF or ACC | Off |
| | Ignition switch ON | On |
| FR WIPER HI | Front wiper switch OFF | Off |
| | Front wiper switch HI | On |
| FR WIPER LOW | Front wiper switch OFF | Off |
| | Front wiper switch LO | On |
| FR WIPER INT | Front wiper switch OFF | Off |
| | Front wiper switch INT | On |
| FR WASHER SW | Front washer switch OFF | Off |
| | Front washer switch ON | On |

| Monitor Item | Condition | Value/Status |
|---|---|---|
| INT VOLUME | Wiper intermittent dial is in a dial position 1 - 7 | 1 - 7 |
| FR WIPER STOP | Any position other than front wiper stop position | Off |
| | Front wiper stop position | On |
| RR WIPER ON | Rear wiper switch OFF | Off |
| | Rear wiper switch ON | On |
| RR WIPER INT | Rear wiper switch OFF | Off |
| | Rear wiper switch INT | On |
| RR WIPER STOP | Rear wiper stop position | Off |
| | Other than rear wiper stop position | On |
| RR WASHER SW | Rear washer switch OFF | Off |
| | Rear washer switch ON | On |
| REVERSE SW CAN | **NOTE:**<br>The item is indicated, but not monitored | Off |
| | | On |
| H/L WASH SW | When headlamp washer switch is not pressed | Off |
| | When headlamp washer switch is pressed | On |
| FAN ON SIG | Blower fan motor switch OFF | Off |
| | Blower fan motor switch ON (other than OFF) | On |
| AIR COND SW | Compressor ON is not requested from auto amp.<br>(A/C indicator OFF, blower fan motor switch OFF or etc.) | Off |
| | Compressor ON is requested from auto amp.<br>(A/C indicator ON and blower fan motor switch ON). | On |
| HAZARD SW | Hazard switch OFF | Off |
| | Hazard switch ON | On |
| BRAKE SW | Brake pedal is not depressed | Off |
| | Brake pedal is depressed | On |
| TRNK OPNR SW | When back door opener switch is not pressed | Off |
| | When back door opener switch is pressed | On |
| HOOD SW | Close the hood<br>**NOTE:**<br>Vehicles without theft warning system are OFF-fixed | Off |
| | Open the hood | On |
| AUTO RELOCK | Auto lock function does not operate | Off |
| | Auto lock function is operating | On |
| GLS BREAK SEN | The vehicle without glass break sensor | Off |
| | The vehicle with glass break sensor | On |
| OIL PRESS SW | • Ignition switch OFF or ACC<br>• Engine running | Off |
| | Ignition switch ON | On |

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

## TERMINAL LAYOUT

M66

| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |

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

M65

| 60 | 59 | 58 | 57 | 56 | 55 | 54 | 53 |

M67

JSMIA0031GB

## 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-28, "COMB SW : CONSULT-III Function (BCM - COMB SW)".**
- **BCM reads the status of the combination switch at 10 ms internal normally. Refer to BCS-9, "System Description".**

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
|---|---|---|---|---|---|
| + | − | Signal name | Input/ Output | | |
| 1 (W) | 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 |
| 2 (G) | 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 |
| 3 (W) | Ground | Ignition power supply | Input | Ignition switch OFF or ACC | 0 V |
| | | | | Ignition switch ON or START | Battery voltage |
| 4 (SB) | Ground | ACC power supply | Input | Ignition switch OFF | 0 V |
| | | | | Ignition switch ON or ACC | Battery voltage |
| 5 (LG)[*1] (R)[*2] | Ground | Key switch | Input | Insert mechanical key into ignition key cylinder | Battery voltage |
| | | | | Remove mechanical key from ignition key cylinder | 0 V |

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | − | Signal name | Input/ Output | | | |
| 6 (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 washer 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 |

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
|---|---|---|---|---|---|
| + | − | Signal name | Input/Output | | |
| 7 (GR) | Ground | Combination switch INPUT 4 | Input | Combination switch | All switch OFF (Wiper intermittent dial 4)  JPMIA0165GB 1.4 V |
| | | | | | Lighting switch 1ST (Wiper intermittent dial 4)  JPMIA0166GB 1.3 V |
| | | | | | Lighting switch AUTO (Wiper intermittent dial 4)  JPMIA0168GB 1.3 V |
| | | | | | Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 6  JPMIA0169GB 1.3 V |
| | | | | | Rear wiper INT (Wiper intermittent dial 4)  JPMIA0196GB 1.3 V |

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
| + | − | Signal name | Input/Output | | |
|---|---|---|---|---|---|
| 8 (V) | Ground | Combination switch INPUT 1 | Input | Combination switch (Wiper intermittent dial 4) | All switch OFF <br><br> JPMIA0165GB <br> 1.4 V |
| | | | | | Turn signal switch RH <br><br> JPMIA0166GB <br> 1.3 V |
| | | | | | Turn signal switch LH <br><br> JPMIA0167GB <br> 1.3 V |
| | | | | | Front wiper switch LO <br><br> JPMIA0168GB <br> 1.3 V |
| | | | | | Front washer switch ON <br><br> JPMIA0196GB <br> 1.3 V |

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
|---|---|---|---|---|---|
| + | − | Signal name | Input/Output | | |
| 9 (G)*3 (B)*4 | Ground | Combination switch INPUT 2 | Input | Combination switch (Wiper intermittent dial 4) | All switch OFF <br> (V) 15 10 5 0 ←→1ms JPMIA0165GB <br> 1.4 V |
| | | | | | Lighting switch 2ND <br> (V) 15 10 5 0 ←→1ms JPMIA0166GB <br> 1.3 V |
| | | | | | Lighting switch PASS <br> (V) 15 10 5 0 ←→1ms JPMIA0167GB <br> 1.3 V |
| | | | | | Front wiper switch INT <br> (V) 15 10 5 0 ←→1ms JPMIA0168GB <br> 1.3 V |
| | | | | | Front wiper switch HI <br> (V) 15 10 5 0 ←→1ms JPMIA0196GB <br> 1.3 V |

| Terminal No. (Wire color) | | Description | | Condition | | | Value (Approx.) |
|---|---|---|---|---|---|---|---|
| + | − | Signal name | Input/ Output | | | | |
| 10 (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 |
| 11 (B) | Ground | Audio link | Input/ Output | — | — | | — |

| Terminal No. (Wire color) + | − | Signal name | Input/ Output | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| 12 (LG) | Ground | Rear door switch RH | Input | Rear door switch RH | OFF (When rear door RH closed) | (V) 15 10 5 0 ← 10 ms → PKID0924E 11.2 V |
| | | | | | ON (When rear door RH opened) | 0 V |
| 13 (V) | Ground | Back door switch | Input | Back door switch | OFF (When back door closed) | (V) 15 10 5 0 ← 10 ms → PKID0924E 11.2 V |
| | | | | | ON (When back door opened) | 0 V |
| 14 (P)*3 (BR)*4 | Ground | Passenger door switch | Input | Passenger door switch | OFF (When passenger door closed) | (V) 15 10 5 0 ← 10 ms → PKID0924E 11.2 V |
| | | | | | ON (When passenger door opened) | 0 V |
| 15 (BR)*3 (P)*4 | Ground | Driver door switch | Input | Driver door switch | OFF (When driver door closed) | (V) 15 10 5 0 ← 10 ms → PKID0924E 11.2 V |
| | | | | | ON (When driver door opened) | 0 V |

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | − | Signal name | Input/ Output | | | |
| 16 (GR) | Ground | Rear door switch LH | Input | Rear door switch LH | OFF (When rear door LH closed) |  PKID0924E 11.2 V |
| | | | | | ON (When rear door LH opened) | 0 V |
| 17 (L) | Ground | Door lock status indicator | Output | Door lock status indicator | ON | 12 V |
| | | | | | OFF | 0 V |
| 20 (SB) | Ground | Rear window defogger switch | Input | Rear window defogger switch | Not pressed |  JPMIA0154GB 1.1 V |
| | | | | | While pressing | 0 V |
| 21 (P) | — | CAN-L | Input/ Output | — | | — |
| 22 (L) | — | CAN-H | Input/ Output | — | | — |
| 23 (V) | Ground | Security indicator | Output | Security indicator | ON | 0 V |
| | | | | | Blinking |  JPMIA0014GB 10.3 V |
| | | | | | OFF | 12 V |
| 24 (GR) | Ground | Light & rain sensor serial link | Input/ Output | | Ignition switch OFF or ACC | 12 V |
| | | | | | Ignition switch ON |  JPMIA0156GB 8.7 V |
| 25 (G) | Ground | Alarm link | Output | — | | — |

| Terminal No. (Wire color) + | Terminal No. (Wire color) − | Description Signal name | Description Input/Output | Condition | Condition | Value (Approx.) |
|---|---|---|---|---|---|---|
| 26 (GR)[*5] (LG)[*6] | Ground | Blower fan motor switch | Input | Blower fan motor switch | OFF |  PKID0924E 11.2 V |
| | | | | | ON (other than OFF) | 0 V |
| 27 (P)[*5] (Y)[*6] | Ground | A/C switch | Input | Ignition switch ON | Compressor ON is not requested from auto amp. (A/C indicator OFF, blower fan motor switch OFF or etc.) |  PKID0924E 11.2 V |
| | | | | | Compressor ON is requested from auto amp. (A/C indicator ON and blower fan motor switch ON). | 0 V |
| 28 (LG)[*7] (R)[*8] | Ground | Shock detect sensor | Input | Ignition switch OFF or ACC | | 0 V |
| | | | | Ignition switch ON | |  JPMIA0155GB 6.0 V |
| 29 (LG)[*3] (O)[*4] | Ground | Back door opener switch | Input | Back door opener switch | Not pressed |  JPMIA0154GB 1.2 V |
| | | | | | Pressed | 0 V |
| 32 (BR) | Ground | Door lock/unlock switch (Unlock) | Input | Door lock/unlock switch | Not pressed |  JPMIA0154GB 1.2 V |
| | | | | | Pressed to the unlock side | 0 V |

**DLK-471**

| Terminal No. (Wire color) + | Terminal No. (Wire color) − | Description Signal name | Description Input/Output | Condition | Condition | Value (Approx.) |
|---|---|---|---|---|---|---|
| 33 (W)[*9] (Y)[*10] | Ground | Hazard switch | Input | Hazard switch | OFF | (V) 15 10 5 0 →‖←10ms JPMIA0154GB 1.3 V |
| | | | | | ON | 0 V |
| 34 (SB)[*3] (P)[*4] | Ground | Door lock/unlock switch (Lock) | Input | Door lock/un-lock switch | Not pressed | (V) 15 10 5 0 →‖←10ms JPMIA0154GB 1.2 V |
| | | | | | Pressed to the lock side | 0 V |
| 35 (G) | Ground | Headlamp washer switch | Input | Headlamp washer switch | Not pressed | (V) 15 10 5 0 →‖←10ms JPMIA0154GB 1.2 V |
| | | | | | Pressed to the lock side | 0 V |
| 36 (G) | Ground | Combination switch OUTPUT 5 | Output | Combination switch (Wiper intermittent dial 4) | All switch OFF | 0 V |
| | | | | | Turn signal switch RH | (V) 15 10 5 0 →‖←2ms JPMIA0164GB 9.1 V |
| | | | | | Lighting switch 2ND | |
| | | | | | Lighting switch HI | |
| | | | | | Lighting switch 1ST | |
| 37 (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) | (V) 15 10 5 0 →‖←2ms JPMIA0161GB 9.1 V |
| | | | | | 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 | |
| | | | | | Rear wiper switch ON (Wiper intermittent dial 4) | |

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | − | Signal name | Input/Output | | | |
| 38 (W) | Ground | Combination switch OUTPUT 3 | Output | Combination switch (Wiper intermittent dial 4) | All switch OFF | 0 V |
| | | | | | Front wiper switch LO |   9.3 V |
| | | | | | Front wiper switch MIST | |
| | | | | | Front wiper switch INT | |
| | | | | | Lighting switch AUTO | |
| | | | | | Rear fog lamp switch ON | |
| 39 (Y) | Ground | Combination switch OUTPUT 4 | Output | Combination switch (Wiper intermittent dial 4) | All switch OFF | 0 V |
| | | | | | Turn signal switch LH |   9.3 V |
| | | | | | Lighting switch PASS | |
| | | | | | Lighting switch 2ND | |
| | | | | | Front fog lamp switch ON | |
| 40 (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) |   9.1 V |
| | | | | | 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 | |
| | | | | | Rear wiper switch INT (Wiper intermittent dial 4) | |
| 41 (LG) | Ground | Battery power supply | Input | Ignition switch OFF | | Battery voltage |
| 42 (V) | Ground | Interior room lamp power supply | Output | Interior room lamp battery saver activation | | 0 V |
| | | | | Interior room lamp battery saver no activation | | 12 V |
| 43 (SB) | Ground | Rear wiper motor | Output | Rear wiper switch OFF | | 0 V |
| | | | | Rear wiper switch ON | | 12 V |
| 44 (B) | Ground | Rear wiper auto stop | Input | Ignition switch ON | Rear wiper stop position |  |
| | | | | | Any position other than rear wiper stop position | 0 V |

JPMIA0162GB

JPMIA0163GB

JPMIA0160GB

JPMIA0197GB

| Terminal No. (Wire color) + | − | Description Signal name | Input/ Output | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| 45 (V) | Ground | Back door lock actuator | Output | Back door opener switch | Pressed |  SKIA9232E |
| | | | | | Not pressed | 0 V |
| 47 (BR) | Ground | Turn signal LH | Output | Ignition switch ON | Turn signal switch OFF | 0 V |
| | | | | | Turn signal switch LH |  PKID0926E  6.5 V |
| 48 (GR) | Ground | Turn signal RH | Output | Ignition switch ON | Turn signal switch OFF | 0 V |
| | | | | | Turn signal switch RH |  PKID0926E  6.5 V |
| 49 (Y) | Ground | Rear fog lamp | Output | Rear fog lamp | OFF | 0 V |
| | | | | | ON | 12 V |
| 50 (G) | Ground | Unlock sensor | Input | Driver's door | Unlock | 5 V |
| | | | | | lock | 0 V |
| 51 (R) | Ground | Stop lamp switch | Input | Depress the brake pedal | | Battery voltage |
| | | | | Release the brake pedal | | 0 V |
| 52 (R) | Ground | Room lamp timer control | Output | Interior room lamp | OFF | 12 V |
| | | | | | ON | 0 V |
| 53 (L) | Ground | Power window power supply (IGN) | Output | Ignition switch | OFF or ACC | 0 V |
| | | | | | ON | 12 V |
| 54 (O) | Ground | Door unlock (All other than driver's door) | Output | Door lock/unlock switch | Pressed to the unlock side |  SKIA9232E |
| | | | | | Not pressed | 0 V |
| 55 (B) | Ground | Ground | — | Ignition switch ON | | 0 V |

| Terminal No. (Wire color) + | Terminal No. (Wire color) − | Description Signal name | Description Input/Output | Condition | Condition | Value (Approx.) |
|---|---|---|---|---|---|---|
| 56 (V) | Ground | Door lock (All) and fuel lid lock | Output | Door lock/unlock switch | Not pressed | 0 V |
| | | | | | Pressed to the lock side |  SKIA9232E |
| 57 (Y) | Ground | Battery power supply | Input | Ignition switch OFF | | Battery voltage |
| 58 (P) | Ground | Power window power supply (BAT) | Output | Ignition switch OFF | | 12 V |
| 59 (R) | 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 | | 12 V |
| 60 (G) | Ground | Driver's door unlock and fuel lid unlock | Output | Door lock/unlock switch | Pressed to the unlock side |  SKIA9232E |
| | | | | | Not pressed | 0 V |

*1: With Intelligent Key

*2: Without Intelligent Key

*3: RHD models

*4: LHD models

*5: With gasoline engine

*6: With diesel engine

*7: RHD models with side air bag

*8: LHD models with side air bag

*9: With xenon headlamp and daytime light system

*10: Except with xenon headlamp and daytime light system

## Wiring Diagram - SUPER LOCK CONTROL SYSTEM -

INFOID:0000000001280914



JCKWA0361GE

2007/02/28

DLK-477

## SUPER LOCK SYSTEM (WITH INTELLIGENT KEY)

| Connector No. | B1 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH80MW-CS16-TM4 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | G | – |
| 3 | O | – |
| 4 | R | – |
| 78 | Y | – |
| 88 | BR | – |
| 97 | V | – |

| Connector No. | B3 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH32MW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 15 | P | – |
| 16 | V | – |
| 31 | GR | – |

| Connector No. | B4 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16MW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 6 | V | – |
| 14 | O | – |
| 15 | L | – |

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | P | – [RHD models] |

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | BR | – [RHD models] |

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | Y | – |

| Connector No. | B58 |
|---|---|
| Connector Name | FUEL LID OPENER ACTUATOR |
| Connector Type | M04FW-LC |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | G | UNLOCK |
| 2 | V | LOCK |

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

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

JCKWA0363GE

SUPER LOCK SYSTEM (WITH INTELLIGENT KEY)

**Connector No. B91**
Connector Name: WIRE TO WIRE
Connector Type: NS02FW-CS

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | L | – |

**Connector No. D21**
Connector Name: WIRE TO WIRE
Connector Type: TH24FW-NH

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 8 | G | – |
| 20 | BR | – |
| 22 | P | – |

**Connector No. B89**
Connector Name: WIRE TO WIRE
Connector Type: NS12MW-CS

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |
| 2 | R | – |
| 6 | G | – |

**Connector No. B95**
Connector Name: WIRE TO WIRE
Connector Type: NS02MW-CS

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | R | – |

**Connector No. B87**
Connector Name: WIRE TO WIRE
Connector Type: NS12MW-CS

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |
| 2 | L | – |
| 6 | O | – |

**Connector No. B94**
Connector Name: WIRE TO WIRE
Connector Type: NS02FW-CS

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | R | – |

**Connector No. B77**
Connector Name: WIRE TO WIRE
Connector Type: NS10MW-CS

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 8 | V | – |

**Connector No. B92**
Connector Name: WIRE TO WIRE
Connector Type: NS02MW-CS

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | L | – |

JCKWA0364GE

## SUPER LOCK SYSTEM (WITH INTELLIGENT KEY)

**Connector No.** D29
**Connector Name** FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
**Connector Type** FEA04FB-FHA2-LC

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | BR | — |
| 2 | O | — |
| 3 | SB | — |
| 4 | P | — |
| 5 | B | — |

**Connector No.** D95
**Connector Name** REAR DOOR LOCK ACTUATOR RH
**Connector Type** FEA04FB-FHA2-LC

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | R | — |
| 2 | G | — |
| 3 | V | — |

**Connector No.** D26
**Connector Name** POWER WINDOW MAIN SWITCH
**Connector Type** NS03FW-CS

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 17 | B | — |
| 18 | G | — |

**Connector No.** D91
**Connector Name** WIRE TO WIRE
**Connector Type** NS12FW-CS

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | — |
| 2 | R | — |
| 6 | G | — |

**Connector No.** D25
**Connector Name** POWER WINDOW MAIN SWITCH
**Connector Type** NS16FW-CS

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 6 | BR | — |

**Connector No.** D68
**Connector Name** FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)
**Connector Type** FEA04FB-FHA2-LC

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | R | — |
| 2 | O | — |
| 3 | V | — |

**Connector No.** D22
**Connector Name** WIRE TO WIRE
**Connector Type** NS16FW-CS

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | SB | — |
| 8 | BR | — |
| 10 | O | — |
| 12 | B | — |

**Connector No.** D62
**Connector Name** WIRE TO WIRE
**Connector Type** NS16FW-CS

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | O | — |
| 3 | R | — |
| 8 | V | — |

JCKWA0365GE

**DLK-480**

SUPER LOCK SYSTEM (WITH INTELLIGENT KEY)

**Connector D157**

| Connector No. | D157 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS10FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 8 | V | – |

**Connector M4**

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

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

**Connector D151**

| Connector No. | D151 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS08FBR-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |

**Connector E105**

| Connector No. | E105 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH80FW-CS16-TM4 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 5 | Y | – |

**Connector D115**

| Connector No. | D115 |
|---|---|
| Connector Name | REAR DOOR LOCK ACTUATOR LH |
| Connector Type | FEA04FB-FHA2-LC |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | R | – |
| 2 | G | – |
| 3 | V | – |

**Connector D190**

| Connector No. | D190 |
|---|---|
| Connector Name | BACK DOOR LOCK ASSEMBLY |
| Connector Type | NS04FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | B | – |
| 2 | V | – |

**Connector D111**

| Connector No. | D111 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS12FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |
| 2 | R | – |
| 6 | G | – |

**Connector D181**

| Connector No. | D181 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS08MBR-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |

JCKWA0366GE

## SUPER LOCK SYSTEM (WITH INTELLIGENT KEY)

| Connector No. | M11 |
| --- | --- |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH80FW-CS16-TM4 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 1 | V | −[RHD models] |
| 3 | O | −[RHD models] |
| 4 | R | − |
| 78 | LG | − |
| 88 | BR | − |
| 97 | V | − |

| Connector No. | M13 |
| --- | --- |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH32FW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 15 | P | − |
| 16 | Y | −[RHD models] |
| 31 | R | −[RHD models] |

| Connector No. | M14 |
| --- | --- |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 6 | V | − |
| 14 | G | −[RHD models] |
| 15 | R | − |

| Connector No. | M20 |
| --- | --- |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH24MW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 8 | SB | − |
| 20 | BR | − |
| 22 | G | −[With Intelligent Key] |

| Connector No. | M21 |
| --- | --- |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16MW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 1 | V | − |
| 8 | R | − |
| 10 | O | − |
| 12 | 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 | LG | − |
| 2 | R | − |

| 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 | TK20FY-EX-SC |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 19 | LG | DEPLOYMENT INFORMATION[RHD models with side air bag] |

JCKWA0367GE

**Connector No.** M67
**Connector Name** BCM (BODY CONTROL MODULE)
**Connector Type** FHA08FB

| 60 | 59 | 58 | 57 | 56 | 55 | 54 | 53 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 54 | G | DOOR UNLOCK OUTPUT (OTHER)[RHD models] |
| 55 | B | GND |
| 56 | Y | DOOR LOCK OUTPUT (ALL) |
| 57 | Y | BAT(F/L) |
| 59 | R | SUPER LOCK SET OUTPUT |
| 60 | O | DOOR UNLOCK/RELEASE OUTPUT(DR)[RHD models] |

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

| 3 | 5 |
| 2 | 4 | 1 |

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

**Connector No.** M66
**Connector Name** BCM (BODY CONTROL MODULE)
**Connector Type** FEA12FBR

| 52 | 51 | 50 | 49 | 48 | 47 | 46 | 45 | 44 | 43 | 42 | 41 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 41 | LG | BAT(FUSE) |
| 50 | G | EXTRA INPUT1[RHD models with Intelligent Key] |

**Connector No.** M89
**Connector Name** DOOR LOCK AND UNLOCK SWITCH
**Connector Type** TK10FW

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | P | - |
| 2 | BR | - |
| 3 | B | - |
| 4 | B | - |
| 6 | L | - |

**Connector No.** M84
**Connector Name** WIRE TO WIRE
**Connector Type** NS16MW-CS

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | G | - |
| 3 | R | - |
| 8 | V | - |

## SUPER LOCK SYSTEM (WITH INTELLIGENT KEY)

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

| 34 | SB | LOCK UNLOCK SW (LOCK)[RHD models] |

| 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] |
|---|---|---|
| 5 | LG | KEY SW[With Intelligent Key] |
| 12 | LG | DOOR SW (RR) |
| 13 | Y | DOOR SW (BACK)[RHD models] |
| 14 | P | DOOR SW (AS)[RHD models] |
| 15 | BR | DOOR SW (DR)[RHD models] |
| 16 | R | DOOR SW (RL)[RHD models] |
| 17 | L | DOOR LOCK INDICATOR |
| 21 | P | CAN-L |
| 22 | L | CAN-H |
| 28 | LG | SHOCK DETECT SIG[RHD models with side air bag] |
| 32 | BR | LOCK UNLOCK SW (UNLOCK) |

**Connector No.** M77
**Connector Name** WIRE TO WIRE
**Connector Type** TH80MW-CS16-TM4

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 5 | Y | - |

JCKWA0368GE

## Wiring Diagram - INTELLIGENT KEY CONTROL SYSTEM -

*INFOID:0000000001280915*



JCKWA0389GE

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

JCKWA0390GE

JCKWA0391GE

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

JCKWA0392GE

## INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

| Connector No. | B8 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH12FW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | B | – |
| 3 | P | – |
| 4 | R | – |
| 9 | L | – |
| 10 | SB | – |
| 11 | BR | – |

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | P | – |
| 2 | L | – |

| Connector No. | B4 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16MW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 6 | V | – |
| 14 | O | – |
| 15 | L | – |
| 16 | W | – |

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | BR | – [RHD models] |

| Connector No. | B3 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH32MW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 3 | B | – |
| 4 | P | – |
| 5 | R | – |
| 15 | P | – |
| 16 | V | – |
| 20 | L | – |
| 21 | SB | – |
| 22 | BR | – |
| 31 | GR | – |

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | P | – [RHD models] |

| Connector No. | B1 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH80MW-CS16-TM4 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | G | – |
| 3 | O | – |
| 4 | R | – |
| 78 | Y | – |
| 88 | BR | – |
| 97 | V | – |

| Connector No. | B9 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH12MW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | SHIELD | – |
| 3 | P | – |
| 4 | R | – |
| 9 | L | – |
| 10 | SB | – |
| 11 | BR | – |

JCKWA0393GE

INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

| Connector No. | B77 |
| --- | --- |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS10MW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 4 | W | – |
| 8 | V | – |

| Connector No. | B91 |
| --- | --- |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS02FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 2 | L | – |

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

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

| Connector No. | B89 |
| --- | --- |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS12MW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 1 | V | – |
| 2 | R | – |
| 6 | G | – |

| Connector No. | B58 |
| --- | --- |
| Connector Name | FUEL LID OPENER ACTUATOR |
| Connector Type | M04FW-LC |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 1 | G | UNLOCK |
| 2 | V | LOCK |

| Connector No. | B87 |
| --- | --- |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS12MW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 1 | V | – |
| 2 | L | – |
| 6 | O | – |

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 2 | Y | – |

| Connector No. | B78 |
| --- | --- |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH16MW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
| --- | --- | --- |
| 4 | R | – |
| 5 | BR | – |
| 6 | SB | – |

JCKWA0394GE

INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

**Connector No.** B92
**Connector Name** WIRE TO WIRE
**Connector Type** NS02MW-CS

H.S.

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | L | – |

**Connector No.** B94
**Connector Name** WIRE TO WIRE
**Connector Type** NS02FW-CS

H.S.

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | R | – |

**Connector No.** B95
**Connector Name** WIRE TO WIRE
**Connector Type** NS02MW-CS

H.S.

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | R | – |

**Connector No.** D21
**Connector Name** WIRE TO WIRE
**Connector Type** TH24FW-NH

H.S.

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 10 | GR | – |
| 11 | BR | – |
| 22 | P | – |
| 23 | O | – |

**Connector No.** D22
**Connector Name** WIRE TO WIRE
**Connector Type** NS16FW-CS

H.S.

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | SB | – |
| 8 | BR | – |
| 10 | O | – |
| 12 | B | – |

**Connector No.** D29
**Connector Name** FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
**Connector Type** FEA04FB-FHA2-LC

H.S.

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | BR | – |
| 2 | O | – |
| 3 | SB | – |
| 4 | P | – |
| 5 | B | – |

**Connector No.** D30
**Connector Name** OUTSIDE KEY ANTENNA AND FRONT DOOR REQUEST SWITCH (DRIVER SIDE)
**Connector Type** RH04MB

H.S.

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | BR | – |
| 2 | O | – |
| 3 | GR | – |
| 4 | B | – |

**Connector No.** D62
**Connector Name** WIRE TO WIRE
**Connector Type** NS16FW-CS

H.S.

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | O | – |
| 3 | R | – |
| 6 | B | – |
| 8 | V | – |
| 12 | BR | – |
| 13 | P | – |
| 14 | V | – |

JCKWA0395GE

INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

| Connector No. | D95 |
|---|---|
| Connector Name | REAR DOOR LOCK ACTUATOR RH |
| Connector Type | FEA04FB-FHA2-LC |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | R | – |
| 2 | G | – |
| 3 | V | – |

| Connector No. | D153 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH16FW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 4 | R | – |
| 5 | W | – |
| 6 | SB | – |

| Connector No. | D91 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS12FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |
| 2 | R | – |
| 6 | G | – |

| Connector No. | D151 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS08FBR-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |
| 7 | W | – |

| Connector No. | D69 |
|---|---|
| Connector Name | OUTSIDE KEY ANTENNA AND FRONT DOOR REQUEST SWITCH (PASSENGER SIDE) |
| Connector Type | RH04MB |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |
| 2 | P | – |
| 3 | BR | – |
| 4 | B | – |

| Connector No. | D115 |
|---|---|
| Connector Name | REAR DOOR LOCK ACTUATOR LH |
| Connector Type | FEA04FB-FHA2-LC |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | R | – |
| 2 | G | – |
| 3 | V | – |

| Connector No. | D68 |
|---|---|
| Connector Name | FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE) |
| Connector Type | FEA04FB-FHA2-LC |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | R | – |
| 2 | O | – |
| 3 | V | – |

| Connector No. | D111 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS12FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |
| 2 | R | – |
| 6 | G | – |

JCKWA0396GE

INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

| Connector No. | D183 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH16MW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 4 | R | — |
| 5 | W | — |
| 6 | SB | — |

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | Y | — |
| 3 | LG | — |

| Connector No. | D181 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS08MBR-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | — |
| 7 | W | — |

| Connector No. | D191 |
|---|---|
| Connector Name | OUTSIDE KEY ANTENNA (BACK DOOR) |
| Connector Type | RK02FGY |

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

| Connector No. | D158 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH16FW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 4 | R | — |
| 5 | W | — |
| 6 | SB | — |

| Connector No. | D190 |
|---|---|
| Connector Name | BACK DOOR LOCK ASSEMBLY |
| Connector Type | NS04FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | B | — |
| 2 | V | — |
| 3 | B | — |
| 4 | W | — |

| Connector No. | D157 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS10FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 4 | V | — [RHD models] |
| 8 | V | — |

| Connector No. | D186 |
|---|---|
| Connector Name | BACK DOOR OPENER SWITCH ASSEMBLY |
| Connector Type | TK06MW-1V |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 3 | SB | PASSIVE UNIT |
| 4 | B | GND |

JCKWA0397GE

## INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

**Connector No.** M13
**Connector Name** WIRE TO WIRE
**Connector Type** TH32FW-NH

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 3 | SHIELD | - |
| 4 | B | - |
| 5 | Y | - |
| 15 | P | - |
| 16 | Y | -[RHD models] |
| 20 | W | - |
| 21 | SB | - |
| 22 | BR | - |
| 31 | R | -[RHD models] |

**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 | LG | - |
| 2 | R | - |
| 3 | L | - |
| 4 | BR | -[RHD models] |

**Connector No.** M11
**Connector Name** WIRE TO WIRE
**Connector Type** TH80FW-CS16-TM4

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | O | -[RHD models] |
| 3 | O | -[RHD models] |
| 4 | R | - |
| 78 | LG | - |
| 88 | BR | - |
| 97 | V | - |

**Connector No.** M21
**Connector Name** WIRE TO WIRE
**Connector Type** NS16MW-CS

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | - |
| 8 | R | - |
| 10 | O | - |
| 12 | B | - |

**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.** M20
**Connector Name** WIRE TO WIRE
**Connector Type** TH24MW-NH

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 10 | GR | - |
| 11 | BR | - |
| 22 | G | -[With Intelligent Key] |
| 23 | O | - |

**Connector No.** E105
**Connector Name** WIRE TO WIRE
**Connector Type** TH80FW-CS16-TM4

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 5 | Y | - |
| 71 | Y | - |
| 72 | LG | - |

**Connector No.** M14
**Connector Name** WIRE TO WIRE
**Connector Type** NS16FW-CS

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 6 | V | - |
| 14 | G | -[RHD models] |
| 15 | R | - |
| 16 | P | -[RHD models] |

JCKWA0398GE

# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

**[WITH I-KEY & SUPER LOCK]**

## INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

### Connector M56 — INSIDE KEY ANTENNA (INSTRUMENT CENTER) — Type RK02FGY

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | L | – |
| 2 | P | – |

### Connector M40 — INTELLIGENT KEY UNIT — Type TH40FW-NH

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 16 | G | CONSOLE (-) |
| 17 | BR | BACK DOOR (+) |
| 18 | Y | BACK DOOR (-) |
| 19 | BR | DRIVER DOOR (+) |
| 20 | O | DRIVER DOOR (-) |
| 25 | BR | REQUEST SW (AS) |
| 27 | L | KNOB SW[RHD models] |
| 29 | SB | REQUEST SW (BD) |
| 33 | L | INSTRUMENT (+) |
| 34 | P | INSTRUMENT (-) |
| 37 | V | PASSENGER DOOR (+) |
| 38 | P | PASSENGER DOOR (-)[RHD models] |
| 40 | V | AS ANTI HIJACK |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | L | CAN-H |
| 3 | P | CAN-L |
| 4 | LG | BUZZER |
| 5 | GR | REQUEST SW (DR) |
| 6 | W | IGN SW |
| 7 | LG | KEY SW |
| 11 | BR | BATT+[RHD models] |
| 12 | B | GND |
| 13 | B | REAR SEAT (+) |
| 14 | W | REAR SEAT (-) |
| 15 | R | CONSOLE (+) |

### Connector M34 — COMBINATION METER — Type SAB40FW

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | G | BAT |
| 3 | B | GND |
| 21 | L | CAN-H |
| 22 | P | CAN-L |
| 23 | B | GND |

### Connector M65 — BCM (BODY CONTROL MODULE) — Type AAB40FB

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 3 | W | IGN SW |
| 4 | SB | ACC SW |
| 5 | LG | KEY SW(With Intelligent Key) |
| 12 | LG | DOOR SW (RR) |
| 13 | Y | DOOR SW (BACK)[RHD models] |
| 14 | P | DOOR SW (AS)[RHD models] |
| 15 | BR | DOOR SW (DR)[RHD models] |
| 16 | R | DOOR SW (RL)[RHD models] |
| 21 | P | CAN-L |
| 22 | L | CAN-H |
| 33 | Y | HAZARD SW[Except with xenon headlamp and daytime light system] |

### Connector M77 — WIRE TO WIRE — Type TH80MW-CS16-TM4

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 5 | Y | – |
| 71 | Y | – |
| 72 | LG | – |

### Connector M67 — BCM (BODY CONTROL MODULE) — Type FHA08FB

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 54 | G | DOOR UNLOCK OUTPUT (OTHER)[RHD models] |
| 55 | B | GND |
| 56 | V | DOOR LOCK OUTPUT (ALL) |
| 57 | V | BAT(F/L) |
| 59 | R | SUPER LOCK SET OUTPUT |
| 60 | O | DOOR UNLOCK/RELEASE OUTPUT(DR)[RHD models] |

### Connector M66 — BCM (BODY CONTROL MODULE) — Type FEA12FBR

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 41 | LG | BAT(FUSE) |
| 42 | V | ROOM LAMP POWER SUPPLY |
| 45 | P | BACK DOOR OPEN OUTPUT[RHD models] |
| 47 | BR | FRASHER OUTPUT (LH) |
| 48 | GR | FRASHER OUTPUT (RH) |
| 50 | G | EXTRA INPUT[RHD models with Intelligent Key] |
| 52 | R | ROOM LAMP CONTROL |

JCKWA0399GE

INTELLIGENT KEY SYSTEM (WITH SUPER LOCK SYSTEM)

| Connector No. | M251 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH12MW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 5 | G | – |
| 6 | SHIELD | – |
| 11 | R | – |
| 12 | SHIELD | – |

| Connector No. | M97 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH12FV-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 5 | G | – |
| 6 | B | – |
| 11 | R | – |
| 12 | B | – |

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

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

| Connector No. | M84 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16MW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | G | – |
| 3 | R | – |
| 6 | B | – |
| 8 | V | – |
| 12 | BR | – |
| 13 | W | – |
| 14 | V | – |

| Connector No. | M252 |
| Connector Name | INSIDE KEY ANTENNA (CONSOLE) |
| Connector Type | RK02FGY |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | R | – |
| 2 | G | – |

JCKWA0400GE

A
B
C
D
E
F
G
H
I
J
DLK
L
M
N
O
P

BACK DOOR OPENER SYSTEM

JCKWA0409GE

2007/02/28

| Connector No. | D151 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS08FBR-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |
| 4 | LG | – |
| 7 | W | – |

| Connector No. | D190 |
|---|---|
| Connector Name | BACK DOOR LOCK ASSEMBLY |
| Connector Type | NS04FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | B | – |
| 2 | V | – |
| 3 | B | – |
| 4 | W | – |

| Connector No. | B77 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS10MW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 4 | W | – |
| 8 | V | – |
| 10 | G | – |

| Connector No. | D186 |
|---|---|
| Connector Name | BACK DOOR OPENER SWITCH ASSEMBLY |
| Connector Type | TK06MW-1V |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | G | BCM |
| 2 | B | GND |

| Connector No. | B4 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16MW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 16 | W | – |

| Connector No. | D181 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS08MBR-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | V | – |
| 4 | G | – |
| 7 | W | – |

## BACK DOOR OPENER SYSTEM

| Connector No. | B3 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH32MW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 16 | V | – |
| 32 | G | – |

| Connector No. | D157 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS10FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 4 | W | – [LHD models] |
| 4 | V | – [RHD models] |
| 8 | V | – |
| 10 | G | – |

JCKWA0410GE

BACK DOOR OPENER SYSTEM

| Connector No. | M14 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 16 | V | −[LHD models] |
| 16 | P | −[RHD models] |

| Connector No. | M77 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH60MW-CS16-TM4 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 5 | Y | − |

| Connector No. | M13 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH32FW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 16 | V | −[LHD models] |
| 16 | Y | −[RHD models] |
| 32 | O | − |

| Connector No. | M67 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | FHA08FB |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 55 | B | GND |
| 57 | Y | BAT(F/L) |

| 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. | M66 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | FEA12FBR |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 41 | LG | BAT(FUSE) |
| 45 | V | BACK DOOR OPEN OUTPUT[LHD models] |
| 45 | P | BACK DOOR OPEN OUTPUT[RHD models] |

| Connector No. | E105 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH80FW-CS16-TM4 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 5 | V | − |

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 13 | V | DOOR SW (BACK)[LHD models] |
| 13 | Y | DOOR SW (BACK)[RHD models] |
| 21 | P | CAN-L |
| 22 | L | CAN-H |
| 29 | O | BACK DOOR OPEN SW |

JCKWA0411GE

## Fail Safe

*INFOID:0000000001557100*

### FAIL-SAFE CONTROL BY DTC
BCM performs fail-safe control when any DTC is detected.

| DTC | Fail-safe | Cancellation |
|---|---|---|
| B2190: NATS ANTENNA AMP | • Inhibits engine cranking<br>• Inhibits steering lock unlocking (Intelligent Key unit)<br>• Fuel cut (ECM) | Erase DTC |
| B2191: DIFFERENCE OF KEY | • Inhibits engine cranking<br>• Inhibits steering lock unlocking (Intelligent Key unit)<br>• 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<br>• Inhibits steering lock unlocking (Intelligent Key unit)<br>• Fuel cut (ECM) | Erase DTC |
| B2195: ANTI SCANNING | • Inhibits engine cranking<br>• Inhibits steering lock unlocking (Intelligent Key unit)<br>• Fuel cut (ECM) | Erase DTC |
| B2196: DONGLE NG | • Inhibits engine cranking<br>• Inhibits steering lock unlocking (Intelligent Key unit)<br>• Fuel cut (ECM) | Erase DTC |

## REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper auto stop signal.
When the rear wiper auto stop signal does not change more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation
1. Turn ignition switch OFF.
2. Pass more than 1 minute after the rear wiper stop.
3. Turn ignition switch ON.
4. Operate the rear wiper switch.

## HIGH FLASHER OPERATION

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.

## FAIL-SAFE CONTROL BY LIGHT & RAIN SENSOR MALFUNCTION

BCM detects the light & rain sensor serial link error and the light & rain sensor malfunction.
BCM controls the following fail-safe when light & rain sensor has a malfunction.

Fail-safe Control
• 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:0000000001557101

| Priority | DTC |
|---|---|
| 1 | • U1000: CAN COMM CIRCUIT<br>• U1010: CONTROL UNIT (CAN) |
| 2 | • B2190: NATS ANTENNA AMP<br>• B2191: DIFFERNCE OF KEY<br>• B2192: ID DISCORD BCM-ECM<br>• B2193: CHAIN OF BCM-ECM<br>• B2194: DISCORD BCM-I-KEY<br>• B2195: ANTI SCANNING<br>• B2196: DONGLE NG |

## DTC Index

**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.

| DTC | TIME | | Fail-safe | Reference |
|---|---|---|---|---|
| U1000: CAN COMM CIRCUIT | 0 | 1 - 39 | — | BCS-33 |
| U1010: CONTROL UNIT (CAN) | 0 | 1 - 39 | — | BCS-34 |
| B2190: NATS ANTENNA AMP | CRNT | PAST | × | • With Intelligent Key system: SEC-41<br>• Without Intelligent Key system: SEC-254 |
| B2191: DIFFERENCE OF KEY | CRNT | PAST | × | • With Intelligent Key system: SEC-43<br>• Without Intelligent Key system: SEC-256 |
| B2192: ID DISCORD BCM-ECM | CRNT | PAST | × | • With Intelligent Key system: SEC-38<br>• Without Intelligent Key system: SEC-251 |
| B2193: CHAIN OF BCM-ECM | CRNT | PAST | × | • With Intelligent Key system: SEC-40<br>• Without Intelligent Key system: SEC-253 |
| B2194: DISCORD BCM-I-KEY | CRNT | PAST | × | SEC-53 |
| B2195: ANTI SCANNING | CRNT | PAST | × | • With Intelligent Key system: SEC-54<br>• Without Intelligent Key system: SEC-264 |
| B2196: DONGLE NG | CRNT | PAST | × | • With Intelligent Key system: SEC-55<br>• Without Intelligent Key system: SEC-265 |

# SYMPTOM DIAGNOSIS

## DOOR LOCK

### Symptom Table

*INFOID:0000000001470370*

The diagnostics item numbers show the sequence for inspection. Inspection in order from item 1.

| NO. | Function | Operation condition | Symptom | Diagnostic Item | Reference page |
|---|---|---|---|---|---|
| 1 | Door lock and unlock switch function | Press door lock and unlock switch. | Door does not lock/unlock | All doors | DLK-503 |
| | | | | Driver side | DLK-503 |
| | | | | Passenger side | DLK-504 |
| | | | | Rear LH | DLK-504 |
| | | | | Rear RH | DLK-505 |
| | | Open the door inside the vehicle. | Door does not inside the vehicle. | Driver side | DLK-506 |
| | | | | Passenger side | DLK-506 |
| | | | | Rear LH | DLK-506 |
| | | | | Rear RH | DLK-507 |
| | | Lock all doors with Intelligent Key or door request switch. | Door lock and unlock switch indicator does not illuminate. | — | DLK-508 |
| 2 | Intelligent Key function | Press Intelligent Key button. | Door does not lock/unlock | — | DLK-509 |
| | | | Anti-hijack function does not operate | — | DLK-510 |
| 3 | Door request switch function | Press driver side door request switch. | Door does not lock/unlock | — | DLK-511 |
| | | Press passenger side door request switch. | | — | DLK-511 |
| | | Press back door request switch. | | — | DLK-512 |
| | | Press driver side door request switch, when all doors are locked. | Anti-hijack function does not operate | Driver side door | DLK-514 |
| | | Press passenger side door request switch, when all doors are locked. | | Passenger side door | DLK-514 |
| 4 | Key reminder function | Lock all doors with door lock and unlock switch, when Intelligent Key is inside of the vehicle. | Key reminder function does not operate | — | DLK-516 |
| 5 | Auto door lock function | Unlock all doors and wait more than 2 minutes. | Auto door lock operation does not operate | — | DLK-517 |
| 6 | Vehicle speed sensing auto door lock function | Vehicle speed is more than 25km/h. | Vehicle speed sensing auto door lock operation does not operate | — | DLK-518 |
| 7 | Back door opener function | Press back door opener switch. | Back door does not open | — | DLK-519 |

| NO. | Function | Operation condition | Symptom | Diagnostic Item | Reference page |
|---|---|---|---|---|---|
| 8 | Warning function | Door is opened under the following condition.<br>• Ignition knob is OFF or LOCK position. | Ignition knob return forgotten warning does not operate | — | DLK-520 |
| | | Driver side door is opened under the following conditions.<br>• Ignition switch is OFF position.<br>• Mechanical key is inserts into ignition key cylinder. | Ignition key warning does not operate | — | DLK-521 |
| | | Door is opened under the following condition.<br>• Ignition knob is between ACC and OFF position or ignition knob is pressed in while ignition switch is in LOCK position. | OFF position warning does not operate | Warning lamp | DLK-522 |
| | | | | Buzzer (Combination meter) | DLK-522 |
| | | Door is opened under the following conditions and wait more than 5 seconds.<br>• Engine is running.<br>• Take Intelligent Key out of the vehicle. | Take away warning does not operate | Warning lamp | DLK-523 |
| | | Any door open to all door close under the following conditions.<br>• Engine is running.<br>• Take Intelligent Key out of the vehicle. | | Intelligent Key warning buzzer | DLK-524 |
| | | | | Warning lamp | DLK-524 |
| | | Take away through window Intelligent Key under the following condition and wait more than 30 seconds.<br>• Engine is running. | | Buzzer (Combination meter) | DLK-525 |
| | | | | Warning lamp | DLK-525 |
| | | Turn ignition switch ON position, when Intelligent Key battery is low voltage. | Intelligent Key low battery warning does not operate | — | DLK-527 |
| | | Press door request switch under the following conditions.<br>• Door is opened.<br>• Ignition switch is in ACC or OFF position or ignition knob is pressed in LOCK position or mechanical key is inserts into ignition key cylinder.<br>• Intelligent Key is inside vehicle. | Door lock operation warning chime does not operate | — | DLK-528 |
| | | Press Intelligent Key button under the following conditions.<br>• Door is opened.<br>• Ignition switch is in ACC or OFF position or ignition knob is pressed in LOCK position or mechanical key is inserts into ignition key cylinder. | | — | DLK-529 |
| | | Press back door opener switch under the following conditions.<br>• Door is locked with door lock and unlock switch.<br>• Speed sensing lock or only driver side is unlocked with anti-hijack function. | Back door open warning does not operate | — | DLK-530 |
| 9 | Hazard and buzzer reminder function | Press door request switch or Intelligent Key button. | Buzzer reminder operation does not operate | — | DLK-531 |
| | | Press door request switch or Intelligent Key button. | Hazard reminder operation does not operate | — | DLK-532 |

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

## ALL DOOR

### ALL DOOR : Description

*INFOID:0000000001470371*

**NOTE:**
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-303, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

### ALL DOOR : Diagnosis Procedure

*INFOID:0000000001470372*

## 1.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check power supply and ground circuit.
Refer to DLK-354, "BCM : Diagnosis Procedure" (BCM).
Is the inspection result normal?

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

## 2.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch.
Refer to DLK-356, "Component Function Check".
Is the inspection result normal?

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

## 3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-368, "PASSENGER SIDE : Component Function Check" (passenger side).
Refer to DLK-370, "REAR LH : Component Function Check" (rear LH).
Refer to DLK-371, "REAR RH : Component Function Check" (rear RH).
Refer to DLK-373, "BACK DOOR : Component Function Check" (back door).
Is the inspection result normal?

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

## 4.CONFIRM THE OPERATION

Confirm the operation again.
Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

## DRIVER SIDE

### DRIVER SIDE : Description

*INFOID:0000000001470399*

**NOTE:**
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-303, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

## DRIVER SIDE : Diagnosis Procedure                          *INFOID:0000000001470400*

### 1.CHECK DOOR LOCK ACTUATOR

Check door lock actuator (driver side).
Refer to DLK-380, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

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

### 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

  YES    >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
  NO     >> GO TO 1.

## PASSENGER SIDE

## PASSENGER SIDE : Description                              *INFOID:0000000001470401*

**NOTE:**
• Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-303, "Work Flow".
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

## PASSENGER SIDE : Diagnosis Procedure                      *INFOID:0000000001470402*

### 1.CHECK DOOR LOCK ACTUATOR

Check door lock actuator (passenger side).
Refer to DLK-382, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?

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

### 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

  YES    >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
  NO     >> GO TO 1.

## REAR LH

## REAR LH : Description                                      *INFOID:0000000001470403*

**NOTE:**
• Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-303, "Work Flow".
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

## REAR LH : Diagnosis Procedure
*INFOID:0000000001470404*

### 1.CHECK DOOR LOCK ACTUATOR

Check door lock actuator LH.
Refer to DLK-383, "REAR LH : Component Function Check".

<u>Is the inspection result normal?</u>

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

### 2.CONFIRM THE OPERATION

Confirm the operation again.

<u>Is the result normal?</u>

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

# REAR RH

## REAR RH : Description
*INFOID:0000000001470546*

**NOTE:**
• Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-303, "Work Flow".
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
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.

## REAR RH : Diagnosis Procedure
*INFOID:0000000001470547*

### 1.CHECK DOOR LOCK ACTUATOR

Check door lock actuator RH.
Refer to DLK-384, "REAR RH : Component Function Check".

<u>Is the inspection result normal?</u>

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

### 2.CONFIRM THE OPERATION

Confirm the operation again.

<u>Is the result normal?</u>

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

# DOOR DOES NOT OPEN FROM INSIDE THE VEHICLE
## DRIVER SIDE

## DRIVER SIDE : Description                                    *INFOID:0000000001515936*

**NOTE:**
• Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-303, "Work Flow".
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
Conditions of Vehicle (Operating Conditions)
• Doors are locked by Intelligent Key or door request switch.

## DRIVER SIDE : Diagnosis Procedure                            *INFOID:0000000001515937*

### 1.CHECK SUPER LOCK ACTUATOR

Check super lock actuator (driver side).
Refer to DLK-387, "DRIVER SIDE : Component Function Check".
Is the inspection result normal?

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

### 2.CONFIRM THE OPERATION

Confirm the operation again.
Is the result normal?

YES    >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO     >> GO TO 1.

## PASSENGER SIDE

## PASSENGER SIDE : Description                                 *INFOID:0000000001515938*

**NOTE:**
• Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-303, "Work Flow".
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
Conditions of Vehicle (Operating Conditions)
• Doors are locked by Intelligent Key or door request switch.

## PASSENGER SIDE : Diagnosis Procedure                         *INFOID:0000000001515939*

### 1.CHECK SUPER LOCK ACTUATOR

Check super lock actuator (passenger side).
Refer to DLK-388, "PASSENGER SIDE : Component Function Check".
Is the inspection result normal?

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

### 2.CONFIRM THE OPERATION

Confirm the operation again.
Is the result normal?

YES    >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO     >> GO TO 1.

## REAR LH

## REAR LH : Description                                        *INFOID:0000000001515940*

**NOTE:**
• Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-303, "Work Flow".

- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)

- Doors are locked by Intelligent Key or door request switch.

## REAR LH : Diagnosis Procedure                          *INFOID:0000000001515941*

### 1.CHECK SUPER LOCK ACTUATOR

Check super lock actuator LH.
Refer to DLK-389, "REAR LH : Component Function Check".

Is the inspection result normal?

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

### 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES    >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO     >> GO TO 1.

## REAR RH

## REAR RH : Description                                   *INFOID:0000000001515942*

**NOTE:**
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-303, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)

- Doors are locked by Intelligent Key or door request switch.

## REAR RH : Diagnosis Procedure                          *INFOID:0000000001515943*

### 1.CHECK SUPER LOCK ACTUATOR

Check super lock actuator RH.
Refer to DLK-390, "REAR RH : Component Function Check".

Is the inspection result normal?

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

### 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES    >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO     >> GO TO 1.

# DOOR LOCK AND UNLOCK SWITCH INDICATOR DOES NOT ILLUMINATE

## Description

*INFOID:0000000001524139*

**NOTE:**
• Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-303, "Work Flow".
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)
• Door lock function is normal.

## Diagnosis Procedure

*INFOID:0000000001524140*

### 1.CHECK DOOR LOCK AND UNLOCK SWITCH INDICATOR

Check door lock and unlock switch indicator.
Refer to DLK-359, "Component Function Check".

Is the inspection result normal?

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

### 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES    >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO     >> GO TO 1.

# DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

## Description

*INFOID:0000000001470544*

**NOTE:**
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-303, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

## Diagnosis Procedure

*INFOID:0000000001470545*

### 1.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check power supply and ground circuit.
Refer to DLK-354, "INTELLIGENT KEY UNIT : Diagnosis Procedure" (Intelligent Key unit).

Is the inspection result normal?

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

### 2.CHECK DRIVER SIDE DOOR SWITCH

Check drive side door switch.
Refer to DLK-367, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

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

### 3.CHECK KEY SWITCH

Check key switch.
Refer to DLK-375, "Component Function Check".

Is the inspection result normal?

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

### 4.CHECK IGNITION KNOB SWITCH

Check ignition knob switch.
Refer to DLK-378, "Component Function Check".

Is the inspection result normal?

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

### 5.CHECK INTELLIGENT KEY BATTERY

Check Intelligent Key battery.
Refer to DLK-427, "Component Function Check".

Is the inspection result normal?

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

### 6.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES    >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO     >> GO TO 1.

# ANTI-HIJACK FUNCTION DOES NOT OPERATE WITH INTELLIGENT KEY

## Description
*INFOID:0000000001470542*

**NOTE:**
• Before performing the diagnosis in the following table, check "Work Flow". Refer to <u>DLK-303, "Work Flow"</u>.
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
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.

## Diagnosis Procedure
*INFOID:0000000001470543*

### 1.CHECK "SELECTIVE UNLOCK FUNCTION" SETTING IN "WORK SUPPORT"

Check "SELECTIVE UNLOCK FUNCTION" setting in "WORK SUPPORT".
Refer to <u>DLK-349, "CONSULT-III Function (INTELLIGENT KEY)"</u>.
Is the inspection result normal?

YES    >> GO TO 2.
NO     >> Set "SELECTIVE UNLOCK FUNCTION" of "WORK SUPPORT". Refer to <u>DLK-349, "CONSULT-III Function (INTELLIGENT KEY)"</u>.

### 2.CONFIRM THE OPERATION

Confirm the operation again.
Is the result normal?

YES    >> Check intermittent incident. Refer to <u>GI-39, "Intermittent Incident"</u>.
NO     >> GO TO 1.

# DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH
## DRIVER SIDE

### DRIVER SIDE : Description
*INFOID:0000000001470538*

**NOTE:**
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-303, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

### DRIVER SIDE : Diagnosis Procedure
*INFOID:0000000001470539*

**1.**CHECK "LOCK/UNLOCK BY I-KEY" SETTING IN "WORK SUPPORT"

Check "LOCK/UNLOCK BY I-KEY""WORK SUPPORT".
Refer to DLK-349, "CONSULT-III Function (INTELLIGENT KEY)".

Is the inspection result normal?

YES    >> GO TO 2.
NO     >> Set "LOCK/UNLOCK BY I-KEY" of "WORK SUPPORT". Refer to DLK-349, "CONSULT-III Function (INTELLIGENT KEY)".

**2.**CHECK DOOR REQUEST SWITCH

Check door request switch.
Refer to DLK-361, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

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

**3.**CHECK OUTSIDE KEY ANTENNA

Check outside key antenna.
Refer to DLK-398, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

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

**4.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES    >> Check Intermittent Incident. Refer to GI-39, "Intermittent Incident".
NO     >> GO TO 1.

## PASSENGER SIDE

### PASSENGER SIDE : Description
*INFOID:0000000001470536*

**NOTE:**
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-303, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

## PASSENGER SIDE : Diagnosis Procedure
*INFOID:0000000001470537*

### 1.CHECK DOOR REQUEST SWITCH

Check door request switch.
Refer to DLK-363, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?
  YES  >> GO TO 2.
  NO   >> Repair or replace the malfunctioning parts.

### 2.CHECK OUTSIDE KEY ANTENNA

Check outside key antenna.
Refer to DLK-401, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?
  YES  >> GO TO 3.
  NO   >> Repair or replace the malfunctioning parts.

### 3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?
  YES  >> Check Intermittent Incident. Refer to GI-39, "Intermittent Incident".
  NO   >> GO TO 1.

## BACK DOOR

## BACK DOOR : Description
*INFOID:0000000001470534*

**NOTE:**
• Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-303, "Work Flow".
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
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.

## BACK DOOR : Diagnosis Procedure
*INFOID:0000000001470535*

### 1.CHECK DOOR REQUEST SWITCH

Check back door request switch.
Refer to DLK-365, "BACK DOOR : Component Function Check".

Is the inspection result normal?
  YES  >> GO TO 2.
  NO   >> Repair or replace the malfunctioning parts.

### 2.CHECK OUTSIDE KEY ANTENNA

Check outside key antenna.
Refer to DLK-404, "BACK DOOR : Component Function Check".

Is the inspection result normal?
  YES  >> GO TO 3.
  NO   >> Repair or replace the malfunctioning parts.

### 3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES    >> Check Intermittent Incident. Refer to GI-39, "Intermittent Incident".
NO     >> GO TO 1.

# ANTI-HIJACK FUNCTION DOES NOT OPERATE WITH DOOR REQUEST SWITCH
## DRIVER SIDE

### DRIVER SIDE : Description
*INFOID:0000000001548078*

**NOTE:**
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-303, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

### DRIVER SIDE : Diagnosis Procedure
*INFOID:0000000001548079*

**1.**CHECK "SELECTIVE UNLOCK FUNCTION" SETTING IN "WORK SUPPORT"

Check "SELECTIVE UNLOCK FUNCTION" setting in "WORK SUPPORT".
Refer to DLK-349, "CONSULT-III Function (INTELLIGENT KEY)".
Is the inspection result normal?

YES >> GO TO 2.
NO  >> Set "SELECTIVE UNLOCK FUNCTION" of "WORK SUPPORT". Refer to DLK-349, "CONSULT-III Function (INTELLIGENT KEY)".

**2.**CONFIRM THE OPERATION

Confirm the operation again.
Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO  >> GO TO 1.

## PASSENGER SIDE

### PASSENGER SIDE : Description
*INFOID:0000000001548080*

**NOTE:**
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-303, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

### PASSENGER SIDE : Diagnosis Procedure
*INFOID:0000000001548081*

**1.**CHECK PASSENGER SIDE ANTI-HIJACK RELAY

Check passenger side anti-hijack relay.
Refer to DLK-418, "PASSENGER SIDE : Component Function Check".
Is the inspection result normal?

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

**2.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

   YES     >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
   NO      >> GO TO 1.

# KEY REMINDER FUNCTION DOES NOT OPERATE

## Description

INFOID:0000000001470530

**NOTE:**
• Before performing the diagnosis in the following table, check "Work Flow". Refer to <u>DLK-303, "Work Flow"</u>.
• Understand the operation when does it work, refer to <u>DLK-319, "KEY REMINDER : System Description"</u>.
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
Conditions of Vehicle (Operating Conditions)
• Request switch operation and door lock and unlock switch operation are normal.

## Diagnosis Procedure

*INFOID:0000000001470531*

## 1.CHECK DOOR SWITCH

Check door switch.
Refer to <u>DLK-367, "DRIVER SIDE : Component Function Check"</u>. (Driver side)
Refer to <u>DLK-368, "PASSENGER SIDE : Component Function Check"</u>. (Passenger side)
Refer to <u>DLK-370, "REAR LH : Component Function Check"</u>. (Rear LH)
Refer to <u>DLK-371, "REAR RH : Component Function Check"</u>. (Rear RH)
Refer to <u>DLK-373, "BACK DOOR : Component Function Check"</u>. (Back door)

Is the inspection result normal?

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

## 2.CHECK INSIDE KEY ANTENNA

Check inside key antenna.
Refer to <u>DLK-408, "INSTRUMENT CENTER : Component Function Check"</u>. (Instrument center)
Refer to <u>DLK-411, "CONSOLE : Component Function Check"</u>. (Console)
Refer to <u>DLK-414, "REAR SEAT : Component Function Check"</u>. (Rear seat)

Is the inspection result normal?

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

## 3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES    >> Check intermittent incident. Refer to <u>GI-39, "Intermittent Incident"</u>.
NO     >> GO TO 1.

## AUTO DOOR LOCK OPERATION DOES NOT OPERATE

### Description
*INFOID:0000000001470528*

**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-303, "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-322, "AUTO DOOR LOCK : System Description".

Conditions of Vehicle (Operating Conditions)
- Request switch operation and door lock and unlock switch operation are normal.

### Diagnosis Procedure
*INFOID:0000000001470529*

1.CHECK "AUTO LOCK SET" SETTING IN "WORK SUPPORT"

Check "AUTO LOCK SET" setting in "WORK SUPPORT".
Refer to DLK-349, "CONSULT-III Function (INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set "AUTO LOCK SET" setting in "WORK SUPPORT". Refer to DLK-349, "CONSULT-III Function (INTELLIGENT KEY)"

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

# VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

## Description

*INFOID:0000000001470526*

**NOTE:**
- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-303, "Work Flow".
- Understand the operation when does it work, refer to DLK-325, "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.

Conditions of Vehicle (Operating Conditions)
- Request switch operation and door lock and unlock switch operation are normal.

## Diagnosis Procedure

*INFOID:0000000001470527*

## 1.CHECK VEHICLE SPEED SIGNAL

Check vehicle speed signal.
Refer to DLK-426, "Component Function Check".

Is the inspection result normal?

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

## 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

A

# BACK DOOR DOES NOT OPENED

B

## Description
*INFOID:0000000001470524*

**NOTE:**
- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-303, "Work Flow".

C

- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)
- Door lock function is normal.
- Vehicle speed is less than 5 km/h (3MPH).

D

- All doors are unlocked.

## Diagnosis Procedure
*INFOID:0000000001470525*

E

### 1.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.
Refer to DLK-396, "Component Function Check".

F

Is the inspection result normal?

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

G

### 2.CHECK BACK DOOR OPENER ACTUATOR

Check back door opener actuator.
Refer to DLK-392, "Component Function Check".

H

Is the inspection result normal?

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

I

### 3.CONFIRM THE OPERATION

Confirm the operation again.

J

Is the result normal?

YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO    >> GO TO 1.

DLK

L

M

N

O

P

# IGNITION KNOB RETURN FORGOTTEN WARNING DOES NOT OPERATE

## Description

<span style="float:right">*INFOID:0000000001470522*</span>

**NOTE:**
- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-303, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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-336, "System Description".
- Door lock function is normal.

## Diagnosis Procedure

<span style="float:right">*INFOID:0000000001470523*</span>

### 1.CHECK BUZZER (COMBINATION METER)

Check buzzer (combination meter).
Refer to DLK-422, "Component Function Check".

Is the inspection result normal?

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

### 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES  >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO  >> GO TO 1.

## IGNITION KEY WARNING DOES NOT OPERATE

### Description

*INFOID:0000000001470520*

**NOTE:**
- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-303, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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-336, "System Description".
- Door lock function is normal.

### Diagnosis Procedure

*INFOID:0000000001470521*

1.**CHECK BUZZER (COMBINATION METER)**

Check buzzer (combination meter).
Refer to DLK-422, "Component Function Check".
Is the inspection result normal?

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

2.**CONFIRM THE OPERATION**

Confirm the operation again.
Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

# OFF POSITION WARNING DOES NOT OPERATE
## WARNING LAMP

### WARNING LAMP : Description

*INFOID:0000000001470463*

**NOTE:**
- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to <u>DLK-303, "Work Flow"</u>.
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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 <u>DLK-336, "System Description"</u>.
- Door lock function is normal.

### WARNING LAMP : Diagnosis Procedure

*INFOID:0000000001470464*

### 1.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to <u>DLK-420, "Component Function Check"</u>.
<u>Is the inspection result normal?</u>

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

### 2.CONFIRM THE OPERATION

Confirm the operation again.
<u>Is the result normal?</u>

YES      >> Check intermittent incident. Refer to <u>GI-39, "Intermittent Incident"</u>.
NO       >> GO TO 1.

## BUZZER (COMBINATION METER)

### BUZZER (COMBINATION METER) : Description

*INFOID:0000000001470465*

**NOTE:**
- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to <u>DLK-303, "Work Flow"</u>.
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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 <u>DLK-336, "System Description"</u>.
- Door lock function is normal.

### BUZZER (COMBINATION METER) : Diagnosis Procedure

*INFOID:0000000001470466*

### 1.CHECK BUZZER (COMBINATION METER)

Check buzzer (combination meter).
Refer to <u>DLK-422, "Component Function Check"</u>.
<u>Is the inspection result normal?</u>

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

### 2.CONFIRM THE OPERATION

Confirm the operation again.
<u>Is the result normal?</u>

YES      >> Check intermittent incident. Refer to <u>GI-39, "Intermittent Incident"</u>.
NO       >> GO TO 1.

## TAKE AWAY WARNING DOES NOT OPERATE (DOOR IS OPENED)

## WARNING LAMP

### WARNING LAMP : Description

INFOID:0000000001470437

**NOTE:**
- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-303, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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-336, "System Description".
- Door lock function is normal.

### WARNING LAMP : Diagnosis Procedure

INFOID:0000000001470438

## 1.CHECK KEY WARNING LAMP

Check KEY warning lamp.
Refer to DLK-423, "Component Function Check".

Is the inspection result normal?

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

## 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES    >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO     >> GO TO 1.

## TAKE AWAY WARNING DOES NOT OPERATE (ANY DOOR OPEN TO ALL DOORS CLOSE)
### WARNING LAMP

### WARNING LAMP : Description                                                      *INFOID:0000000001470439*

**NOTE:**
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-303, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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-336, "System Description".
- Door lock function is normal.

### WARNING LAMP : Diagnosis Procedure                                              *INFOID:0000000001470440*

## 1.CHECK KEY WARNING LAMP

Check KEY warning lamp.
Refer to DLK-423, "Component Function Check".

Is the inspection result normal?

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

## 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

  YES    >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
  NO    >> GO TO 1.

### INTELLIGENT KEY WARNING BUZZER

### INTELLIGENT KEY WARNING BUZZER : Description                                    *INFOID:0000000001470441*

**NOTE:**
- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-303, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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-336, "System Description".
- Door lock function is normal.

### INTELLIGENT KEY WARNING BUZZER : Diagnosis Procedure                            *INFOID:0000000001470442*

## 1.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-420, "Component Function Check".

Is the inspection result normal?

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

## 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

  YES    >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
  NO    >> GO TO 1.

## TAKE AWAY WARNING DOES NOT OPERATE (TAKE AWAY THROUGH WINDOW)
## WARNING LAMP

### WARNING LAMP : Description
*INFOID:0000000001470417*

**NOTE:**
- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to <u>DLK-303, "Work Flow"</u>.
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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 <u>DLK-336, "System Description"</u>.
- Door lock function is normal.

### WARNING LAMP : Diagnosis Procedure
*INFOID:0000000001470418*

**1.**CHECK KEY WARNING LAMP

Check KEY warning lamp.
Refer to <u>DLK-423, "Component Function Check"</u>.
<u>Is the inspection result normal?</u>

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

**2.**CONFIRM THE OPERATION

Confirm the operation again.
<u>Is the result normal?</u>

YES    >> Check intermittent incident. Refer to <u>GI-39, "Intermittent Incident"</u>.
NO     >> GO TO 1.

## BUZZER (COMBINATION METER)

### BUZZER (COMBINATION METER) : Description
*INFOID:0000000001470435*

**NOTE:**
- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to <u>DLK-303, "Work Flow"</u>.
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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 <u>DLK-336, "System Description"</u>.
- Door lock function is normal.

### BUZZER (COMBINATION METER) : Diagnosis Procedure
*INFOID:0000000001470436*

**1.**CHECK BUZZER (COMBINATION METER)

Check buzzer (combination meter).
Refer to <u>DLK-422, "Component Function Check"</u>.
<u>Is the inspection result normal?</u>

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

**2.**CONFIRM THE OPERATION

Confirm the operation again.
<u>Is the result normal?</u>

YES    >> Check intermittent incident. Refer to <u>GI-39, "Intermittent Incident"</u>.

# TAKE AWAY WARNING DOES NOT OPERATE (TAKE AWAY THROUGH WIN-DOW)

< SYMPTOM DIAGNOSIS >

**[WITH I-KEY & SUPER LOCK]**

NO      >> GO TO 1.

# INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

## Description
*INFOID:0000000001470415*

**NOTE:**
- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-303, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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-336, "System Description".
- Door lock function is normal.

## Diagnosis Procedure
*INFOID:0000000001470416*

### 1.CHECK "LOW BATT OF KEY FOB WARN" SETTING IN "WORK SUPPORT"

Check "LOW BATT OF KEY FOB WARN" setting in "WORK SUPPORT".
Refer to DLK-349, "CONSULT-III Function (INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set "LOW BATT OF KEY FOB WARN" setting in "WORK SUPPORT". Refer to DLK-349, "CONSULT-III Function (INTELLIGENT KEY)".

### 2.CHECK INTELLIGENT KEY BATTERY

Check Intelligent Key battery.
Refer to DLK-427, "Component Function Check".

Is the inspection result normal?

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

### 3.CHECK KEY WARNING LAMP

Check KEY warning lamp.
Refer to DLK-423, "Component Function Check".

Is the inspection result normal?

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

### 4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

# DOOR LOCK OPERATION WARNING CHIME DOES NOT OPERATE WITH DOOR REQUEST SWITCH

## Description
*INFOID:0000000001470411*

**NOTE:**
- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-303, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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-336, "System Description".
- Door lock function is normal.

## Diagnosis Procedure
*INFOID:0000000001470412*

## 1.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-420, "Component Function Check".

Is the inspection result normal?

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

## 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

## DOOR LOCK OPERATION WARNING CHIME DOES NOT OPERATE WITH INTELLIGENT KEY

### Description

*INFOID:0000000001470413*

**NOTE:**
• Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-303, "Work Flow".
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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-336, "System Description".
• Door lock function is normal.

### Diagnosis Procedure

*INFOID:0000000001470414*

## 1.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-420, "Component Function Check".

Is the inspection result normal?

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

## 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES    >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO     >> GO TO 1.

# BACK DOOR OPEN WARNING DOES NOT OPERATE

## Description
*INFOID:0000000001470409*

**NOTE:**
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-303, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)
- Door lock function and back door opener function is normal.

## Diagnosis Procedure
*INFOID:0000000001470410*

## 1.CHECK BUZZER (COMBINATION METER)

Check buzzer (combination meter).
Refer to DLK-422, "Component Function Check".

Is the inspection result normal?

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

## 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

# BUZZER REMINDER OPERATION DOES NOT OPERATE

## Description

*INFOID:0000000001470407*

**NOTE:**
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-303, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

## Diagnosis Procedure

*INFOID:0000000001470408*

### 1.CHECK SETTING OF BUZZER REMINDER WITH CONSULT-III

Check "ANSWER BACK WITH I-KEY LOCK" and "ANSWER BACK WITH I-KEY UNLOCK" setting in "WORK SUPPORT".
Refer to DLK-349, "CONSULT-III Function (INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set "ANSWER BACK WITH I-KEY LOCK" and "ANSWER BACK WITH I-KEY UNLOCK" setting in "WORK SUPPORT". Refer to DLK-349, "CONSULT-III Function (INTELLIGENT KEY)".

### 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

# HAZARD REMINDER OPERATION DOES NOT OPERATE

## Description

*INFOID:0000000001470405*

**NOTE:**
- Before performing the diagnosis in the following table, check "Work Flow". Refer to <u>DLK-303, "Work Flow"</u>.
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)
- "HAZARD ANSWER BACK" is ON when setting on CONSULT-III.
- Door lock function is normal.

## Diagnosis Procedure

*INFOID:0000000001470406*

## 1.CHECK SETTING OF BUZZER REMINDER WITH CONSULT-III

Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT".
Refer to <u>DLK-349, "CONSULT-III Function (INTELLIGENT KEY)"</u>.

<u>Is the inspection result normal?</u>

YES    >> GO TO 2.
NO     >> Set "HAZARD ANSWER BACK" setting in "WORK SUPPORT". Refer to <u>DLK-349, "CONSULT-III Function (INTELLIGENT KEY)"</u>.

## 2.CONFIRM THE OPERATION

Confirm the operation again.

<u>Is the result normal?</u>

YES    >> Check intermittent incident. Refer to <u>GI-39, "Intermittent Incident"</u>.
NO     >> GO TO 1.

## SQUEAK AND RATTLE TROUBLE DIAGNOSES

### Work Flow

*INFOID:0000000001537521*



```
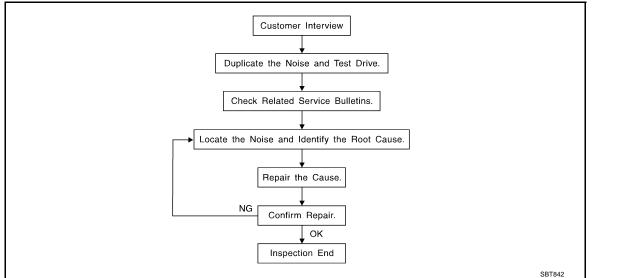                    Customer Interview
                           │
                           ▼
              Duplicate the Noise and Test Drive.
                           │
                           ▼
               Check Related Service Bulletins.
                           │
                           ▼
      ┌──► Locate the Noise and Identify the Root Cause.
      │                    │
      │                    ▼
      │               Repair the Cause.
      │                    │
      │      NG            ▼
      └─────────────  Confirm Repair.
                           │ OK
                           ▼
                      Inspection End
```

SBT842

CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of the customer's comments; refer to DLK-875, "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.

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-873, "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

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:0000000001537522

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

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. Cluster lid A and instrument panel
2. Acrylic lens and combination meter housing
3. Instrument panel to front pillar garnish
4. Instrument panel to windshield
5. Instrument panel mounting pins
6. Wiring harnesses behind the combination meter
7. A/C defroster duct and duct joint

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

CAUTION:

Do not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will not be able to recheck the repair.

CENTER CONSOLE

Components to pay attention to include:

1. Shifter assembly cover to finisher
2. A/C control unit and cluster lid C
3. Wiring harnesses behind audio and A/C control unit

The instrument panel repair and isolation procedures also apply to the center console.

DOORS

Pay attention to the:

1. Finisher and inner panel making a slapping noise
2. Inside handle escutcheon to door finisher
3. Wiring harnesses tapping
4. Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks to repair the noise.

TRUNK

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

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

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

SUNROOF/HEADLINING

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

1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
2. Sunvisor shaft shaking in the holder
3. Front or rear windshield touching headlining and squeaking

Again, pressing on the components to stop the noise while duplicating the conditions can isolate most of these incidents. Repairs usually consist of insulating with felt cloth tape.

SEATS

When isolating seat noise it is important to note the position the seat is in and the load placed on the seat when the noise is present. These conditions should be duplicated when verifying and isolating the cause of the noise.

Cause of seat noise include:

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

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

UNDERHOOD

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

Causes of transmitted underhood noise include:

1. Any component mounted to the engine wall
2. Components that pass through the engine wall
3. Engine wall mounts and connectors
4. Loose radiator mounting pins
5. Hood bumpers out of adjustment
6. Hood striker out of adjustment

These noises can be difficult to isolate since they cannot be reached from the interior of the vehicle. The best method is to secure, move or insulate one component at a time and test drive the vehicle. Also, engine RPM or load can be changed to isolate the noise. Repairs can usually be made by moving, adjusting, securing, or insulating the component causing the noise.

Diagnostic Worksheet

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

DLK-537

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

III. WHEN DRIVING: ### IV. WHAT TYPE OF NOISE

☐ through driveways   ☐ squeak (like tennis shoes on a clean floor)
☐ over rough roads   ☐ creak (like walking on an old wooden floor)
☐ over speed bumps   ☐ rattle (like shaking a baby rattle)
☐ only about _____ mph   ☐ knock (like a knock at the door)
☐ on acceleration   ☐ tick (like a clock second hand)
☐ coming to a stop   ☐ thump (heavy, muffled knock noise)
☐ on turns: left, right or either (circle)   ☐ buzz (like a bumble bee)
☐ with passengers or cargo
☐ other: _____
☐ after driving _____ miles or _____ minutes

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

DLK-538

PRECAUTION

PRECAUTIONS

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

INFOID:0000000001524329

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the "SRS AIRBAG" and "SEAT BELT" 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 AIRBAG".**
- **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:0000000001524330

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:0000000001451702

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

PIIB3706J

Work

INFOID:0000000001451703

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

PREPARATION
PREPARATION
Commercial Service Tools

INFOID:0000000001451704

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

ON-VEHICLE REPAIR
HOOD
HOOD ASSEMBLY

HOOD ASSEMBLY : Exploded View   *INFOID:0000000001451705*

REMOVAL

JMKIA0541ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT

JMKIA0542GB

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

Refer to GI-4, "Components" for symbols in the figure.

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000001451706

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
   • Clamp
   • Hood support rod
   • Grommet
   • Radiator core seal
   • Hood bumper rubber center
   • Hood bumper rubber side

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-881, "HOOD ASSEMBLY : Adjustment".**

HOOD ASSEMBLY : Adjustment

INFOID:0000000001451707

mm(in)

Portion				Standard
Hood – Front grill	**A – A**	**E**	**Clearance**	**4.0 – 8.0 (0.157 – 0.315)**
		F	**Surface height**	**- 0.4 – 4.0 (- 0.016 – 0.157)**
Hood – Front bumper	**B – B**	**G**	**Clearance**	**4.0 – 8.0 (0.157 – 0.315)**
		H	**Surface height**	**- 0.4 – 4.0 (- 0.016 – 0.157)**
Hood – Front combination lamp	**C – C**	**I**	**Clearance**	**1.8 – 6.2 (0.071 – 0.244)**
		J	**Surface height**	**- 1.3 – 2.7 (- 0.051 – 0.106)**
Hood – Front fender	**D – D**	**K**	**Clearance**	**2.6 – 4.6 (0.102 – 0.181)**
		L	**Surface height**	**- 1.0 – 1.0 (- 0.039 – 0.039)**

1. Check the clearance and the surface height between the hood and each part by visually and touching. (Fitting standard dimension in the table below should be satisfied.)

2. Remove the front grille. Refer to EXT-18, "Removal and Installation".

3. In case any parts are out of specification, adjust them according to the procedures shown below.

4. Remove the hood lock and adjust the height by rotating the hood bumper rubber side until the hood becomes 1 to1.5 mm (0.04 to 0.059 in) lower than the fender.

5. 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.

6. 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)].

PIIB5794E

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)**

7.   After adjustment tighten lock bolts to the specified torque.

HOOD HINGE

HOOD HINGE : Exploded View

INFOID:0000000001451708

SEC. 650

JMKIA0541ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

HOOD HINGE : Removal and Installation

INFOID:0000000001451709

REMOVAL

1. Remove the hood assembly. Refer to DLK-880, "HOOD ASSEMBLY : Removal and Installation".
2. Remove the front fender. Refer to DLK-888, "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:
- **Before installation of hood hinge, apply anticorrosive agent onto the mounting surface of the vehicle body.**
- **After installation, apply touch-up paint (the body color) onto the head of the hinge mounting bolts and nuts.**
- **After installation, perform hood fitting adjustment. Refer to DLK-881, "HOOD ASSEMBLY : Adjustment".**

HOOD SUPPORT ROD

HOOD SUPPORT ROD : Exploded View   INFOID:0000000001451711

SEC. 650

JMKIA0541ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

HOOD SUPPORT ROD : Removal and Installation   INFOID:0000000001451712

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:0000000001451713

SEC. 650

JMKIA0543ZZ

| 1. | Hood lock assembly | 2. | Hood lock control cable | 3. | Hood lock opener |

⌐⌐ :Clip

Refer to GI-4, "Components" for symbols in the figure.

HOOD LOCK CONTROL : Removal and Installation

INFOID:0000000001451714

REMOVAL

1. Remove the hood lock opener mounting bolts, and then remove the hood lock opener.
2. Remove the front grille. Refer to EXT-18, "Removal and Installation".
3. Remove the fender protector. Refer to EXT-21, "Removal and Installation".
4. Remove the hood lock mounting bolts, and then remove the hood lock.
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.**

PIIB5801E

- **Check that the hood lock control cable is properly engaged with the hood lock.**
- **After installation, perform hood fitting adjustment. Refer to DLK-881, "HOOD ASSEMBLY : Adjustment".**
- **After installation, perform the hood lock control inspection. Refer to DLK-885, "HOOD LOCK CONTROL : Inspection".**

HOOD LOCK CONTROL : Inspection

INFOID:0000000001451715

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.

RADIATOR CORE SUPPORT

Exploded View

INFOID:0000000001451716

SEC. 625

JMKIA0544ZZ

1. Radiator core support upper center
2. Radiator core support upper RH
3. Radiator core support upper LH
4. Radiator core support lower
5. Radiator core support side RH
6. Radiator core support side LH
7. Hood lock support stay assembly
8. Front bumper fascia center bracket
9. Sensor bracket
10. Air guide RH
11. Air guide LH
12. Air guide upper RH (M9R model)
13. Air guide lower RH (M9R model)
14. Air guide upper LH (M9R model)
15. Air guide lower LH (M9R model)

Removal and Installation

INFOID:0000000001451717

REMOVAL

1. Remove the front bumper fascia and the energy absorber. Refer to EXT-13, "Removal and Installation".
2. Remove the bumper reinforcement. Refer to EXT-13, "Removal and Installation".
3. Disconnect the liquid tank connector. Refer to HA-66, "Exploded View".
4. Remove the front combination lamp. Refer to EXL-213, "Removal and Installation" (XENON TYPE), EXL-409, "Removal and Installation" (HALOGEN TYPE).
5. Remove the washer tank. Refer to WW-104, "Removal and Installation".
6. Remove the air inlet hose (LH) and air inlet tube (LH). Refer to EM-266, "Exploded View" (M9R model).
7. Remove the charge air cooler. Refer to EM-266, "Removal and Installation" (M9R model).
8. Disconnect the hood lock control cable clamp, and then remove the hood lock assembly. Refer to DLK-884, "HOOD LOCK CONTROL : Removal and Installation".
9. Remove the air guide mounting clips, and remove the air guide (LH/RH).
10. Remove the horn. Refer to HRN-6, "Removal and Installation".

11. Remove the Intelligent Key warning buzzer (with Intelligent Key systems). Refer to DLK-298, "Removal and Installation".

12. Disconnect the harness clips from the hood lock stay.

13. Remove the hood lock stay mounting bolts, and then remove the hood lock stay.

14. Remove the crush zone sensor. Refer to SR-15, "Removal and Installation".

15. Place securely the hood support rod inside the engine mounting bracket hole.
    CAUTION:
    Check that the hood is securely fix.

16. Remove the radiator core support upper side (RH,LH) mounting bolts, and remove the radiator core support side (RH,LH).

17. Remove the radiator core support upper center mounting bolts, and remove the radiator core support upper center.

18. Disconnect the harness clamp from radiator core support side (LH).

19. Remove the radiator core support lower assembly mounting bolts.

20. Remove the radiator core support lower assembly while other worker is holding the radiator and condenser assembly to prevent the radiator and condenser from falling.
    CAUTION:
    Operate with two workers, because of its heavy weight.

21. Put some wooden blocks (B) under the radiator and condenser, and use a rope (A) to suspend it to prevent it from falling.
    CAUTION:
    Operate with two workers, because of its heavy weight.

JMKIA0698ZZ

22. Remove the radiator core support side (RH,LH) mounting nuts, and remove the radiator core support side (RH,LH) from radiator core support lower.

INSTALLATION

Install in the reverse order of removal.

FRONT FENDER

Exploded View

INFOID:0000000001451718

SEC. 630

JMKIA0545ZZ

1. Front fender
2. Front fender finisher

Removal and Installation

INFOID:0000000001451719

REMOVAL

1. Remove the fillet molding. Refer to EXT-24, "Removal and Installation".
2. Remove the front grille. Refer to EXT-18, "Removal and Installation".
3. Remove the front bumper fascia. Refer to EXT-13, "Removal and Installation".
4. Remove the front combination lamp. Refer to EXL-213, "Removal and Installation" (XENON TYPE),EXL-409, "Removal and Installation" (HALOGEN TYPE).
5. Remove the inner fender protector. Refer to EXT-21, "Removal and Installation".
6. Remove the front fender finisher.
7. Remove the side turn signal lamp. Refer to EXL-222, "Removal and Installation".
8. Remove the mounting bolts and remove the front fender.
   CAUTION:
   Use a shop cloth to protect the body from being damaged during removal.

INSTALLATION

Install in the reverse order of removal.
CAUTION:
- **After installation, check the front fender adjustment. Refer to DLK-881, "HOOD ASSEMBLY : Adjustment" and DLK-891, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply the touch-up paint (the body color) onto the head of the front fender mounting bolts.**

FRONT DOOR
DOOR ASSEMBLY

DOOR ASSEMBLY : Exploded View

INFOID:0000000001451720

REMOVAL

JMKIA0546ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT

JMKIA0547GB

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000001451721

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

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.

INSTALLATION

Install in the reverse order of removal.

CAUTION:
- **Check the front door open/close operation after installation.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **When removing and installing the front door assembly, perform the fitting adjustment. Refer to DLK-891, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**

DOOR ASSEMBLY : Adjustment

INFOID:0000000001451722

CLEARANCE, SURFACE HEIGHT AND SURFACE MISMATCH ADJUSTMENT

mm(in)

Portion		Clearance	Surface height
Front fender – Front door	**A – A**	**3.4 – 5.4 (0.134 – 0.213)**	**- 1.0 – 1.0 (- 0.039 – 0.039)**
Front door – Rear door	**B – B**	**3.5 – 5.5 (0.138 – 0.217)**	**- 1.0 – 1.0 (- 0.039 – 0.039)**
Front door – Rear door	**G – G**	**3.0 – 6.0 (0.118 – 0.236)**	**- 1.0 – 1.0 (- 0.039 – 0.039)**

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-888, "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-888, "Removal and Installation".
    CAUTION:
    After installation, check the front fender adjustment. Refer to DLK-891, "DOOR 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:0000000001451723

JMKIA0546ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR STRIKER : Removal and Installation

INFOID:0000000001451724

REMOVAL
Remove the TORX bolts, and then remove the door striker.

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-891, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Exploded View

JMKIA0546ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR HINGE : Removal and Installation

REMOVAL

1. Remove the front door assembly. Refer to DLK-890, "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:
• **Check the front door open/close operation after installation.**
• **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
• **When removing and installing the front door assembly, perform the fitting adjustment. Refer to DLK-891, "DOOR ASSEMBLY : Adjustment".**
• **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**

DOOR CHECK LINK

DOOR CHECK LINK : Exploded View

INFOID:0000000001451729

JMKIA0546ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR CHECK LINK : Removal and Installation

INFOID:0000000001451730

REMOVAL

1. Fully close the front door window.
2. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
3. Remove the front door speaker. Refer to AV-38, "Removal and Installation".
4. Remove the mounting bolts of the door check link on the vehicle.
5. Remove the mounting bolts of the door check link on the door panel.
6. Take the door check link out from the hole of the door panel.

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:0000000001451731

REMOVAL

SEC. 820

JMKIA0548ZZ

1. Rear door panel	2. Door hinge (upper)	3. Door hinge (lower)
4. Door check link	5. Seal	6. Hole cover
7. Door bumper rubber	8. Door striker	9. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT

JMKIA0547GB

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR ASSEMBLY : Removal and Installation   *INFOID:0000000001451732*

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

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.

INSTALLATION

Install in the reverse order of removal.

CAUTION:
- **Check the rear door lock/unlock operation after installation.**
- **Check the rear door open/close operation after installation.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **After installation, perform the fitting adjustment. Refer to DLK-897, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**

DOOR ASSEMBLY : Adjustment   INFOID:0000000001451733

CLEARANCE, SURFACE HEIGHT AND SURFACE MISMATCH ADJUSTMENT

mm(in)

Portion		Clearance	Surface height
Front door – Rear door	**B – B**	**3.5 – 5.5 (0.138 – 0.217)**	**-1.0 – 1.0 (-0.039 – 0.039)**
Rear door – Body side outer	**C – C**	**3.5 – 5.5 (0.138 – 0.217)**	**-1.0 – 1.0 (-0.039 – 0.039)**
Front door – Rear door	**G – G**	**3.0 – 6.0 (0.118 – 0.236)**	**-1.5 – 1.5 (-0.059 – 0.059)**

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 lower garnish. Refer to INT-16, "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 lower garnish. Refer to INT-16, "Removal and Installation".

DOOR STRIKER ADJUSTMENT

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

DOOR STRIKER

A

DOOR STRIKER : Exploded View

INFOID:0000000001451734

B

C

D

E

F

G

H

I

JMKIA0548ZZ

1. Rear door panel
2. Door hinge (upper)
3. Door hinge (lower)
4. Door check link
5. Seal
6. Hole cover
7. Door bumper rubber
8. Door striker
9. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

J

DOOR STRIKER : Removal and Installation

INFOID:0000000001451735

DLK

REMOVAL
Remove the TORX bolts, and then remove the door striker.

L

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-897, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

M

N

O

P

DOOR HINGE : Exploded View

INFOID:0000000001451737

SEC. 820

JMKIA0548ZZ

1.	Rear door panel	2.	Door hinge (upper)	3.	Door hinge (lower)
4.	Door check link	5.	Seal	6.	Hole cover
7.	Door bumper rubber	8.	Door striker	9.	TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

DOOR HINGE : Removal and Installation

INFOID:0000000001451738

REMOVAL

1. Remove the center pillar lower garnish. Refer to INT-16, "Removal and Installation".
2. Remove the rear door assembly. Refer to DLK-896, "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:
• **Check the rear door open/close operation after installation.**
• **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
• **When removing and installing the rear door assembly, perform the fitting adjustment. Refer to DLK-897, "DOOR ASSEMBLY : Adjustment".**
• **After installing, apply the touch-up paint (the body color) onto the head of the hinge mounting nuts.**

DOOR CHECK LINK

DOOR CHECK LINK : Exploded View

SEC. 820

JMKIA0548ZZ

1. Rear door panel
2. Door hinge (upper)
3. Door hinge (lower)
4. Door check link
5. Seal
6. Hole cover
7. Door bumper rubber
8. Door striker
9. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

DOOR CHECK LINK : Removal and Installation

REMOVAL

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Remove the rear door speaker.
3. Remove the mounting bolts of the check link on the vehicle.
4. Remove the door check link mounting bolts on the door panel.
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:0000000001451742

REMOVAL

JMKIA0549GB

1. Back door assembly	2. Back door hinge	3. Back door stay
4. Back door striker	5. Back door stay stud ball	6. Bumper rubber
7. Bumper rubber bracket	8. Back door lock assembly	9. Emergency lever
10. Back door lock cover (RH handle)	11. TORX bolt	

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT

JMKIA0550GB

1. Back door
2. Roof
3. Rear combination lamp
4. Body side outer
5. Back door hinge
6. Bumper rubber
7. Back door striker
8. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR ASSEMBLY : Removal and Installation

INFOID:0000000001451743

REMOVAL

1. Remove the back door finisher inner (upper, lower, side LH). Refer to INT-31, "Removal and Installation".
2. Disconnect the connectors in the back door, and then remove the grommet, and pull out the harness.

3. Remove the grommet, and then disconnect the connectors (1), and pull out the washer tube (2) at (A).

JMKIA0557ZZ

4. Pull the harness out of the back door.

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

    A   : Jack

    B   : Shop cloth

JMKIA0555ZZ

6. Remove the back door stay bracket mounting bolts on the back door.

7. Remove the back door hinge mounting nuts 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:
• **Check the back door open/close operation after installation.**
• **Check the back door lock/unlock operation after installation.**
• **After installation, perform fitting adjustment. Refer to DLK-903, "BACK DOOR ASSEMBLY : Adjustment".**

BACK DOOR ASSEMBLY : Adjustment

INFOID:0000000001451744

mm(in)

Portion				Standard
Back door panel – Roof panel	**A – A**	**E**	**Clearance**	**5.0 – 7.0 (0.197 – 0.276)**
		F	**Surface height**	**-0.3 – 1.7 (-0.012 – 0.067)**
Back door panel – Rear combination lamp	**B – B**	**G**	**Clearance**	**4.0 – 8.0 (0.157 – 0.315)**
Back door panel – Rear combination lamp	**C – C**	**H**	**Clearance**	**4.0 – 8.0 (0.157 – 0.315)**
Back door panel – Body side outer	**D – D**	**I**	**Clearance**	**5.0 – 7.0 (0.197 – 0.276)**
		J	**Surface height**	**-1.0 – 1.1 (0.039 – 0.043)**

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.

DLK-566

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:0000000001451745

SEC. 900

JMKIA0549GB

1.	Back door assembly	2.	Back door hinge	3.	Back door stay
4.	Back door striker	5.	Back door stay stud ball	6.	Bumper rubber
7.	Bumper rubber bracket	8.	Back door lock assembly	9.	Emergency lever
10.	Back door lock cover (RH handle)	11.	TORX bolt		

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR STRIKER : Removal and Installation

INFOID:0000000001451746

REMOVAL
Remove the TORX bolts, and then remove the back door striker.

INSTALLATION
Install in the reverse order of removal.
CAUTION:
- **Check the back door open/close operation after installation.**
- **When removing and installing the back door striker, be sure to perform the fitting adjustment. Refer to DLK-903, "BACK DOOR ASSEMBLY : Adjustment".**

BACK DOOR HINGE

BACK DOOR HINGE : Exploded View
INFOID:0000000001451748

JMKIA0549GB

1. Back door assembly
2. Back door hinge
3. Back door stay
4. Back door striker
5. Back door stay stud ball
6. Bumper rubber
7. Bumper rubber bracket
8. Back door lock assembly
9. Emergency lever
10. Back door lock cover (RH handle)
11. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR HINGE : Removal and Installation
INFOID:0000000001451749

REMOVAL

1. Remove the back door assembly. Refer to DLK-902, "BACK DOOR ASSEMBLY : Removal and Installation".
2. Remove the back door weather-strip. Refer to DLK-907, "BACK DOOR WEATHER-STRIP : Removal and Installation".
3. Remove the luggage side lower finisher. Refer to INT-28, "Removal and Installation".
4. Remove the luggage side upper finisher. Refer to INT-28, "Removal and Installation".
5. Using remover tool, remove the headlining clip at the rear side of the headlining. Refer to INT-22, "NORMAL ROOF : Exploded View" (NORMAL ROOF), INT-25, "SUNROOF : Exploded View" (SUNROOF).
6. Remove the rear side of the headlining.
7. 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:
- **Check the back door open/close operation after installation.**
- **Check the hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **When removing and installing the back door assembly, perform the fitting adjustment. Refer to DLK-903, "BACK DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the hinge mounting nuts.**

BACK DOOR STAY

BACK DOOR STAY : Exploded View

INFOID:0000000001451751

SEC. 900

JMKIA0549GB

1. Back door assembly	2. Back door hinge	3. Back door stay
4. Back door striker	5. Back door stay stud ball	6. Bumper rubber
7. Bumper rubber bracket	8. Back door lock assembly	9. Emergency lever
10. Back door lock cover (RH handle)	11. TORX bolt	

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR STAY : Removal and Installation

INFOID:0000000001451752

REMOVAL

1. Remove the mounting bolts (body side), and then remove the back door stay bracket.
2. Remove the stud ball (back door side), and then remove the back door stay.

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:0000000001451753

REMOVAL

SEC. 900

JMKIA0556ZZ

1. Back door weather-strip

A. Mark (upper)

B. Mark (lower)

BACK DOOR WEATHER-STRIP : Removal and Installation

INFOID:0000000001451754

REMOVAL

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

CAUTION:

After removal, do not pull strongly on the weather-strip.

INSTALLATION

1. Working from the upper section, align the weather-strip mark with vehicle center position mark and install the weather-strip onto the vehicle.
2. For the lower section, align the weather-strip seam with center of the back door striker.
3. After installation, pull the weather-strip gently to ensure that there is no loose section.
   NOTE:
   Make sure that the weather-strip is fit tightly at each corner and the luggage rear plate.

FRONT DOOR LOCK
DOOR LOCK

DOOR LOCK : Exploded View

INFOID:0000000001451755

SEC. 805

⑤ 6.0 (0.61, 53)

⑩ 5.8 (0.59, 51)

JMKIA0551GB

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

⟨⟩ :Vehicle front

Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK : Removal and Installation

INFOID:0000000001451756

REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Disconnect the inside handle knob cable and the lock knob cable.
3. Remove the front door glass. Refer to GW-17, "Removal and Installation".
4. Remove the front door module assembly. Refer to GW-17, "Exploded View".
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 loosen the TORX bolt.
   CAUTION:
   Do not forcibly remove the TORX bolt.

JMKIA0020ZZ

7. Reach in to separate the door key cylinder rod connection (on the handle) (driver side).

    1.   Door key cylinder assembly

    2.   Key rod

JMKIA0553ZZ

8. While pulling the outside handle, remove door key cylinder assembly.

JMKIA0560ZZ

9. Disconnect front door request switch harness connector (models with Intelligent Key system).

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

JMKIA0524ZZ

11. Remove the front gasket (1) and the rear gasket (2).

JMKIA0667ZZ

12. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.

PIIB5814E

13. Reach in to separate the outside handle cable connection.

14. Remove the door lock assembly TORX bolts.

15. Disconnect the door lock actuator connector, and then remove the door lock assembly.

16. Remove the key rod from door lock assembly.

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:0000000001451758

SEC. 805

⑤ 🔧 6.0 (0.61, 53)

⑩ 🔧 5.8 (0.59, 51)

JMKIA0551GB

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

⬅ :Vehicle front

Refer to GI-4, "Components" for symbols in the figure.

INSIDE HANDLE : Removal and Installation

INFOID:0000000001451759

REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the inside handle mounting bolts.
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:0000000001451761

SEC. 805

5 🔧 6.0 (0.61, 53)

10 🔧 5.8 (0.59, 51)

JMKIA0551GB

1. Outside handle assembly
2. Door key cylinder assembly (driver side)
   Outside handle escutcheon (passenger side)
3. Front gasket

4. Rear gasket
5. TORX bolt
6. Outside handle bracket

7. Key rod
8. Door lock assembly
9. Inside handle

10. TORX bolt

⟵ :Vehicle front

Refer to GI-4, "Components" for symbols in the figure.

OUTSIDE HANDLE : Removal and Installation

INFOID:0000000001451762

REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Disconnect the inside handle knob cable and the lock knob cable.
3. Remove the front door glass. Refer to GW-17, "Removal and Installation".
4. Remove the front door module assembly. Refer to GW-17, "Exploded View".
5. Disconnect the connector and remove the harness clamp (models with Intelligent Key system).

6. Remove the door side grommet, and loosen the TORX bolt.
   CAUTION:
   Do not forcibly remove the TORX bolt.

   JMKIA0020ZZ

7. Reach in to separate the door key cylinder rod connection (on the handle) (driver side).

   1. Door key cylinder assembly
   2. Key rod

   JMKIA0553ZZ

8. Disconnect the door key cylinder switch harness connector.
9. While pulling the outside handle, remove the door key cylinder assembly (driver side) or outside handle escutcheon (passenger side).

   JMKIA0560ZZ

10. Disconnect the front door request switch harness connector (models with Intelligent Key system).
11. While pulling the outside handle, slide toward rear of vehicle to remove the outside handle (1).

   JMKIA0524ZZ

12. Remove the front gasket (1) and rear gasket (2).

JMKIA0667ZZ

13. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.

PIIB5814E

14. 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.**

REAR DOOR LOCK
DOOR LOCK

DOOR LOCK : Exploded View

INFOID:0000000001451763

JMKIA0552GB

1.	Outside handle assembly	2.	Outside handle escutcheon	3.	Front gasket
4.	Rear gasket	5.	Outside handle bracket	6.	TORX bolt
7.	Door lock assembly	8.	Inside handle	9.	TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK : Removal and Installation

INFOID:0000000001451764

REMOVAL

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Disconnect the inside handle knob cable.
3. Remove the door sealing screen. Refer to GW-23, "Removal and Installation".
4. Remove the lower partition sash. Refer to GW-17, "Removal and Installation".
5. Remove the corner piece assembly. Refer to GW-17, "Removal and Installation".
6. Remove the door lock assembly TORX bolts.
7. Disconnect the door lock actuator connector.

REAR DOOR LOCK

< ON-VEHICLE REPAIR >

[WITH I-KEY & SUPER LOCK]

8. Slide the door lock assembly from the inside the door panel until the outside handle escutcheon TORX bolt can be seen.

JMKIA0554ZZ

9. While pulling the outside handle, remove the outside handle escutcheon.

JMKIA0560ZZ

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

JMKIA0524ZZ

11. Remove the front gasket (1) and the rear gasket (2).

JMKIA0667ZZ

12. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.

PIIB5814E

DLK-579

13. Reach in to separate the outside handle cable connection.
14. Remove the door lock assembly.

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:0000000001451766

JMKIA0552GB

1. Outside handle assembly	2. Outside handle escutcheon	3. Front gasket
4. Rear gasket	5. Outside handle bracket	6. TORX bolt
7. Door lock assembly	8. Inside handle	9. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

INSIDE HANDLE : Removal and Installation
INFOID:0000000001451767

REMOVAL
1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Remove the inside handle mounting screws.
3. Disconnect the inside handle 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:0000000001451769

JMKIA0552GB

1. Outside handle assembly
2. Outside handle escutcheon
3. Front gasket
4. Rear gasket
5. Outside handle bracket
6. TORX bolt
7. Door lock assembly
8. Inside handle
9. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

OUTSIDE HANDLE : Removal and Installation

INFOID:0000000001451770

REMOVAL

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Disconnect the inside handle knob cable.
3. Remove the door sealing screen. Refer to GW-23, "Removal and Installation".
4. Remove the lower partition sash. Refer to GW-17, "Removal and Installation".
5. Remove the corner piece assembly. Refer to GW-17, "Removal and Installation".
6. Remove the door lock assembly TORX bolts.
7. Disconnect the door lock actuator connector.
8. Slide the door lock assembly from the inside the door panel until the outside handle escutcheon TORX bolt can be seen.

JMKIA0554ZZ

9. While pulling the outside handle, remove the outside handle escutcheon.

JMKIA0560ZZ

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

JMKIA0524ZZ

11. Remove the front gasket (1) and the rear gasket (2).

JMKIA0667ZZ

12. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.

PIIB5814E

13. 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.**

BACK DOOR LOCK
DOOR LOCK

DOOR LOCK : Exploded View

INFOID:0000000001451771

SEC. 900

JMKIA0549GB

1. Back door assembly
2. Back door hinge
3. Back door stay
4. Back door striker
5. Back door stay stud ball
6. Bumper rubber
7. Bumper rubber bracket
8. Back door lock assembly
9. Emergency lever
10. Back door lock cover (RH handle)
11. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK : Removal and Installation

INFOID:0000000001451773

REMOVAL

1. Remove the back door trim finisher lower. Refer to INT-31, "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:0000000001451774

SEC. 780•905

JMKIA0559ZZ

1. Fuel filler cap holder
2. Bumper rubber
3. Fuel filler lid lock actuator
4. Fuel filler lid lock seal
5. Fuel filler lid assembly
6. TORX bolt
7. Spring

FUEL FILLER LID : Removal and Installation

INFOID:0000000001451775

REMOVAL

1. Fully open the fuel filler lid.
2. Remove the filler cap.
3. Remove the TORX bolts, and then remove the fuel filler lid assembly.
4. Remove the following parts after removing the fuel filler lid assembly.
   - Fuel filler cap holder
   - Bumper rubber
   - Spring

INSTALLATION

Install in the reverse order of removal.
CAUTION:
- **Check the fuel filler lid open/close operation after installation.**
- **After installation, apply the touch-up paint (the body color) onto the head of the mounting screws.**
NOTE:
After installation, perform fitting adjustment.

mm(in)

	Clearance	Evenness
Fuel filler lid— – Body side outer	2.0 – 4.0 (0.079 – 0.157)	−1.0 – 1.0 (−0.039 – 0.039)

DOOR SWITCH

Exploded View

INFOID:0000000001281004

SEC. 251

JMKIA0451ZZ

1.   Door switch (driver side)

Removal and Installation

INFOID:0000000001281005

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).

JMKIA0452ZZ

INSTALLATION
Install in the reverse order of removal.

INSIDE KEY ANTENNA
INSTRUMENT CENTER

INSTRUMENT CENTER : Exploded View

INFOID:0000000001281006

JMKIA0677ZZ

1.   Inside key antenna (instrument center)

INSTRUMENT CENTER : Removal and Installation

INFOID:0000000001281007

REMOVAL

1. Instrument lower cover RH. Refer to IP-12, "Removal and Installation".

2. Remove the inside key antenna (instrument center) mounting screw (A), and then remove inside key antenna (instrument center) (1).

JMKIA0637ZZ

INSTALLATION
Install in the reverse order of removal.
CONSOLE

INSIDE KEY ANTENNA

< ON-VEHICLE REPAIR >

CONSOLE : Exploded View

INFOID:0000000001281008

SEC. 253

JMKIA0678ZZ

1. Inside key antenna (console)

CONSOLE : Removal and Installation

INFOID:0000000001281009

REMOVAL

1. Remove the center console. Refer to IP-21, "Removal and Installation".
2. Remove the inside key antenna mounting screw (A), and then remove inside key antenna (console) (1).

JMKIA0632ZZ

INSTALLATION
Install in the reverse order of removal.

REAR

REAR : Exploded View

INFOID:0000000001281010

SEC. 253

JMKIA0679ZZ

1. Inside key antenna (rear seat)

DLK-587

REAR : Removal and Installation

INFOID:0000000001281011

REMOVAL

1. Remove the luggage floor spacer. Refer to INT-28, "Removal and Installation".

2. Remove the inside key antenna (rear seat) mounting clips (A), and then remove inside key antenna (rear seat) (1).

JMKIA0635ZZ

INSTALLATION
Install in the reverse order of removal.

OUTSIDE KEY ANTENNA
DRIVER SIDE

DRIVER SIDE : Exploded View
INFOID:0000000001281012

Refer to DLK-575, "OUTSIDE HANDLE : Exploded View".

DRIVER SIDE : Removal and Installation
INFOID:0000000001281013

REMOVAL
Remove the front outside handle LH. Refer to DLK-575, "OUTSIDE HANDLE : Removal and Installation".

INSTALLATION
Install in the reverse order of removal.

PASSENGER SIDE

PASSENGER SIDE : Exploded View
INFOID:0000000001281014

Refer to DLK-575, "OUTSIDE HANDLE : Exploded View".

PASSENGER SIDE : Removal and Installation
INFOID:0000000001281015

REMOVAL
Remove the front outside handle RH. Refer to DLK-575, "OUTSIDE HANDLE : Removal and Installation".

INSTALLATION
Install in the reverse order of removal.

BACK DOOR

BACK DOOR : Exploded View
INFOID:0000000001281016

SEC. 253

JMKIA0680ZZ

1.   Outside key antenna (back door)   2.   Back door lower finisher

BACK DOOR : Removal and Installation
INFOID:0000000001281017

REMOVAL

1.   Remove the back door lower finisher. Refer to EXT-36, "Removal and Installation".

2. Remove the outside key antenna (back door) (1) from back door finisher (2).

JMKIA0652ZZ

INSTALLATION
Install in the reverse order of removal.

A

INTELLIGENT KEY WARNING BUZZER

Exploded View

INFOID:0000000001281018

B

C

D

E

SEC. 253

JMKIA0685ZZ

F

1.   Intelligent Key warning buzzer

G

Removal and Installation

INFOID:0000000001281019

REMOVAL

H

1. Remove the front grille. Refer to EXT-18, "Removal and Installation".
2. Remove the Intelligent Key warning buzzer using flat-bladed screw driver (A) etc.

I

J

JMKIA0634ZZ

INSTALLATION
Install in the reverse order of removal.

L

M

N

O

P

DLK-591

BACK DOOR REQUEST SWITCH

Exploded View

SEC. 251•900

JMKIA0651ZZ

1.	Back door opener switch assembly	2.	Back door finisher

Removal and Installation

REMOVAL

1. Remove the back door finisher. Refer to EXT-34, "Removal and Installation".
2. Remove the back door opener switch assembly mounting bolt (A).
3. Remove the back door opener switch assembly (2) from back door finisher (1).

JMKIA0638ZZ

INSTALLATION
Install in the reverse order of removal.

A

BACK DOOR OPENER SWITCH

Exploded View
INFOID:0000000001281022

B

Refer to DLK-592, "Exploded View".

Removal and Installation
INFOID:0000000001281023

C

REMOVAL
Refer to DLK-592, "Removal and Installation".

INSTALLATION
Install in the reverse order of removal.

D

E

F

G

H

I

J

DLK

L

M

N

O

P

INTELLIGENT KEY BATTERY

Exploded View

Refer to DLK-594, "Removal and Installation".

Removal and Installation

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.**

MIIB0661E

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-427, "Component Function Check".

MIIB0662E

INSTALLATION
Install in the reverse order of removal.

A

INTELLIGENT KEY UNIT

Exploded View
INFOID:0000000001281026

B

C

D

E

F

SEC. 253

JMKIA0684ZZ

1.   Intelligent Key unit M40

G

Removal and Installation
INFOID:0000000001281027

REMOVAL
1. Remove lower instrument panel (driver side). Refer to 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-306, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

H

I

J

DLK

JMKIA0686ZZ

INSTALLATION
Install in the reverse order of removal.

L

M

N

O

P

DOOR LOCK AND UNLOCK SWITCH

Exploded View

INFOID:0000000001450371

SEC. 251

JMKIA0650ZZ

1. Switch bracket
2. Door lock and unlock switch

Removal and Installation

INFOID:0000000001450372

Remove the door lock and unlock switch (1) from switch bracket (2) using flat-bladed screw driver (A) etc.

△ : **Pawl**

JMKIA0687ZZ

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000001569820

OVERALL SEQUENCE

```
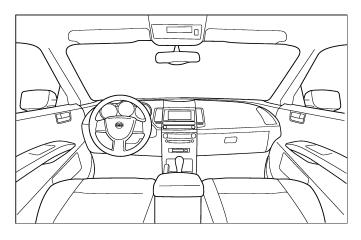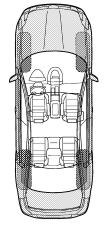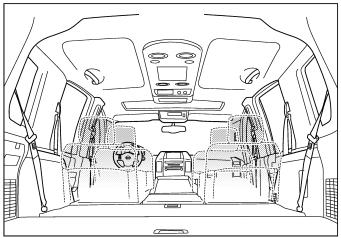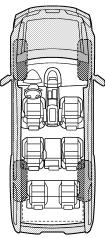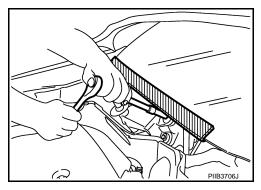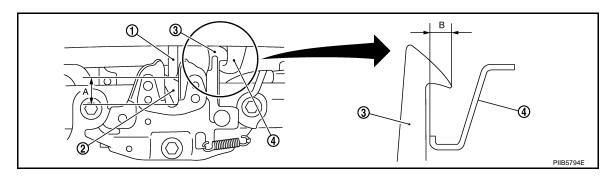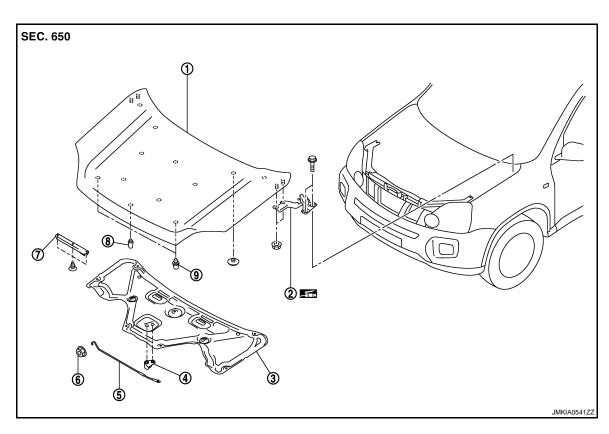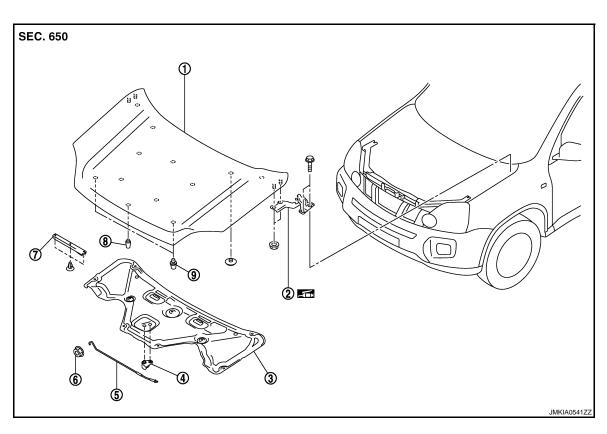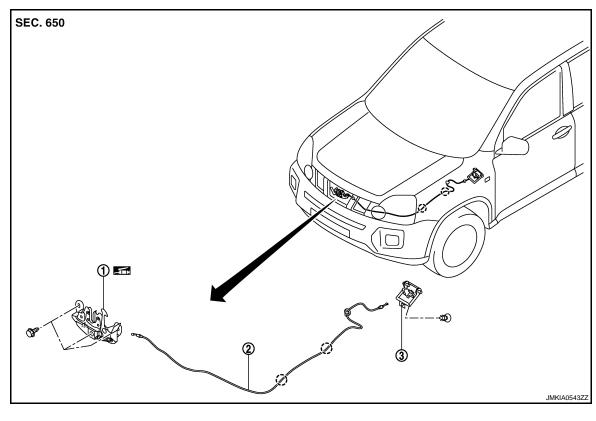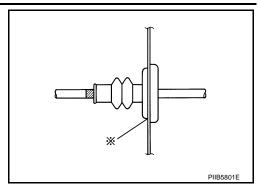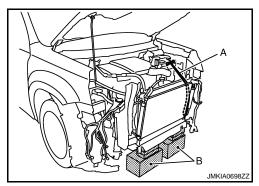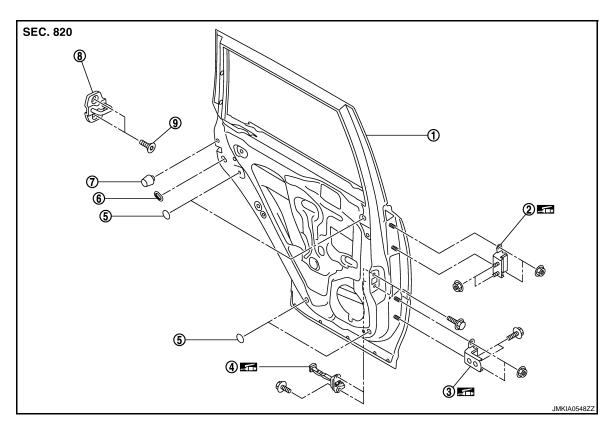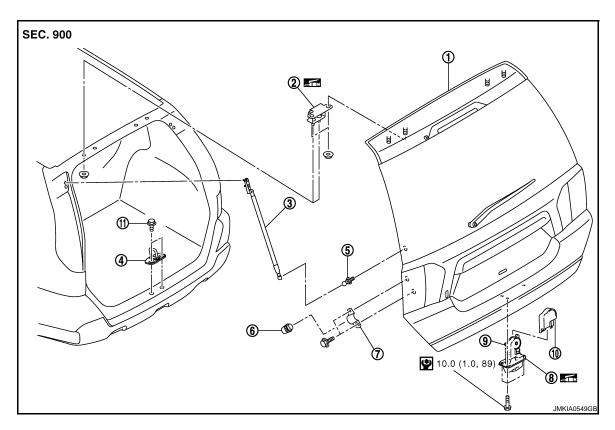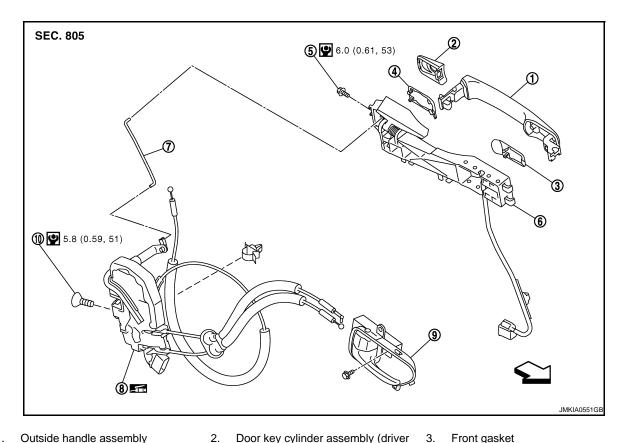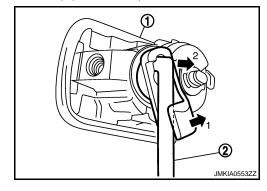                          ┌─────────────────────┐
                          │   Inspection start  │
                          └─────────────────────┘
                                     │
                                     ▼
           ┌──────────────────────────────────────────────────┐
           │ 1. Get information for symptom                   │
           │ Get the detailed information about symptom from the│
           │ customer.                                        │
           └──────────────────────────────────────────────────┘
                                     │
                                     ▼
                          ┌─────────────────────┐
                          │   2. Check DTC      │
                          └─────────────────────┘
```

Symptom is described.   Symptom is not described.   Symptom is described.
DTC is detected.   DTC is detected.   DTC is not detected.

```
┌──────────────────────────────┐              ┌──────────────────────────────┐
│ 3. Confirm the symptom       │              │ 4. Confirm the symptom       │
│ Confirm the symptom described by the│       │ Confirm the symptom described by the│
│ customer.                    │              │ customer.                    │
└──────────────────────────────┘              └──────────────────────────────┘

┌──────────────────────────────────┐          ┌──────────────────────────────────┐
│ 5. Perform DTC Confirmation Procedure│      │ 6. Detect malfunctioning system by│
│                                  │          │       Symptom Table              │
└──────────────────────────────────┘          └──────────────────────────────────┘

              ┌──────────────────────────────────────────┐
              │ 7. Detect malfunctioning part by Diagnostic│
              │        Procedure                          │
              └──────────────────────────────────────────┘

              ┌──────────────────────────────────────────┐
              │ 8. Repair or replace the malfunctioning part│
              └──────────────────────────────────────────┘
```

NG   ┌──┐   NG
(DTC is detected.)   │ 9. Final check   │   (Symptom remains.)
                            │ Check that the symptom is not detected.   │
                            │ Perform DTC Confirmation Procedure again, and then│
                            │ check that the malfunction can be repaired securely.│
                            └──┘

                                          OK

                          ┌─────────────────────┐
                          │   INSPECTION END   │
                          └─────────────────────┘
```

JMKIA0676GB

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-690, "DTC Inspection Priority Chart" (BCM) and determine trouble diagnosis order.

Is DTC detected?

YES   >> GO TO 7.
NO   >> Refer to GI-39, "Intermittent Incident".

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

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

>> GO TO 7.

7.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 8.

8.REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 9.

9.FINAL CHECK

When DTC was detected in step 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.

Are all malfunctions corrected?

  NO (DTC is detected)>>GO TO 7.

  NO (Symptom remains)>>GO TO 6.

  YES   >> **INSPECTION END**

INSPECTION AND ADJUSTMENT
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000001281031

Perform the system initialization when replacing or registering Keyfob and ignition key.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:0000000001281032

Refer to the CONSULT-III Operation Manual-NATS.

FUNCTION DIAGNOSIS

DOOR LOCK FUNCTION
DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH : System Diagram

INFOID:0000000001281033

DOOR LOCK AND UNLOCK SWITCH OPERATION

JMKIA0563GB

DOOR LOCK AND UNLOCK SWITCH : System Description

INFOID:0000000001281034

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 : Component Parts Location
INFOID:0000000001281035

JMKIA0658ZZ

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

JMKIA0659ZZ

1. Combination meter
   M34
2. Key switch
   M24
3. Power window main switch (Door lock and unlock switch) D5,D6
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 assembly (opener switch) D186
8. Back door lock assembly D190
9. Fuel lid opener actuator B58
D. View with steering column cover removed
E. View with luggage side lower finisher (RH) removed.

DOOR LOCK AND UNLOCK SWITCH : Component Description

INFOID:0000000001281036

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:0000000001281037

KEYFOB OPERATION

JMKIA0570GB

KEYFOB : System Description

INFOID:0000000001281038

KEYFOB OPERATION

The multi remote control system can be locked and unlocked by pressing door lock and unlock button of keyfob.

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-625, "MULTIREMOTE ENT : CONSULT-III Function (BCM - MULTIREMOTE ENT)".

KEYFOB : Component Parts Location

INFOID:0000000001394631

JMKIA0658ZZ

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

JMKIA0659ZZ

1. Combination meter
    M34

2. Key switch
    M24

3. Power window main switch (Door
    lock and unlock switch) D5,D6

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 assembly
    (opener switch) D186

8. Back door lock assembly D190

9. Fuel lid opener actuator B58

D. View with steering column cover re-
    moved

E. View with luggage side lower finisher (RH)
    removed.

KEYFOB : Component Description

INFOID:0000000001281040

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:0000000001281041

AUTO DOOR LOCK OPERATION

JMKIA0571GB

AUTO DOOR LOCK : System Description

INFOID:0000000001281042

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-625, "MULTIREMOTE ENT : CONSULT-III Function (BCM - MULTIREMOTE ENT)".

AUTO DOOR LOCK : Component Parts Location

INFOID:0000000001394632

JMKIA0658ZZ

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

JMKIA0659ZZ

1. Combination meter
   M34
2. Key switch
   M24
3. Power window main switch (Door lock and unlock switch) D5,D6
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 assembly (opener switch) D186
8. Back door lock assembly D190
9. Fuel lid opener actuator B58
D. View with steering column cover removed
E. View with luggage side lower finisher (RH) removed.

AUTO DOOR LOCK : Component Description

INFOID:0000000001281044

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:0000000001281045

VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION

JMKIA0568GB

VEHICLE SPEED SENSING AUTO DOOR LOCK : System Description
INFOID:0000000001281046

VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION
When the vehicle speed exceeds more than 25 km/h (16 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:0000000001394634

JMKIA0658ZZ

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

JMKIA0659ZZ

1. Combination meter
    M34

2. Key switch
    M24

3. Power window main switch (Door lock and unlock switch) D5,D6

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 assembly (opener switch) D186

8. Back door lock assembly D190

9. Fuel lid opener actuator B58

D. View with steering column cover removed

E. View with luggage side lower finisher (RH) removed.

VEHICLE SPEED SENSING AUTO DOOR LOCK : Component Description

INFOID:0000000001281048

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:0000000001281049

AIR BAG INTERLOCK UNLOCK OPERATION

JMKIA0569GB

AIR BAG INTERLOCK UNLOCK : System Description

INFOID:0000000001281050

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:0000000001394635

JMKIA0658ZZ

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

JMKIA0659ZZ

1. Combination meter
   M34

2. Key switch
   M24

3. Power window main switch (Door lock and unlock switch) D5,D6

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 assembly (opener switch) D186

8. Back door lock assembly D190

9. Fuel lid opener actuator B58

D. View with steering column cover removed

E. View with luggage side lower finisher (RH) removed.

AIR BAG INTERLOCK UNLOCK : Component Description

INFOID:0000000001281052

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.

BACK DOOR OPENER FUNCTION
BACK DOOR OPENER SWITCH

BACK DOOR OPENER SWITCH : System Diagram

INFOID:0000000001281053

BACK DOOR OPENER OPERATION

```
┌─────────────────────────────────────────────────────────────────────────┐
│                                                                           │
│                                                                           │
│   ┌──────────────────────┐      ┌──────┐      ┌──────────────────────┐   │
│   │ Back door opener switch│ ───▶ │ BCM  │ ───▶ │ Back door opener actuator│ │
│   └──────────────────────┘      └──────┘      └──────────────────────┘   │
│                                                                           │
│                                                                           │
│                                                              JMKIA0402GB  │
└─────────────────────────────────────────────────────────────────────────┘
```

BACK DOOR OPENER SWITCH : System Description

INFOID:0000000001281054

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:0000000001394636

JMKIA0658ZZ

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

JMKIA0659ZZ

1. Combination meter M34
2. Key switch M24
3. Power window main switch (Door lock and unlock switch) D5,D6
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 assembly (opener switch) D186
8. Back door lock assembly D190
9. Fuel lid opener actuator B58
D. View with steering column cover removed
E. View with luggage side lower finisher (RH) removed.

BACK DOOR OPENER SWITCH : Component Description

INFOID:0000000001281056

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:0000000001281057

BACK DOOR OPEN WARNING

JMKIA0410GB

KEY REMINDER OPERATION

JMKIA0673GB

System Description

INFOID:0000000001281058

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.

WARNING FUNCTION

Component Parts Location

JMKIA0658ZZ

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

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

JMKIA0659ZZ

1. Combination meter
   M34
2. Key switch
   M24
3. Power window main switch (Door lock and unlock switch) D5,D6
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 assembly (opener switch) D186
8. Back door lock assembly D190
9. Fuel lid opener actuator B58

D. View with steering column cover removed
E. View with luggage side lower finisher (RH) removed.

Component Description

INFOID:0000000001281060

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

HAZARD REMINDER FUNCTION

System Diagram   *INFOID:0000000001281061*

HAZARD REMINDER FUNCTION

JMKIA0510GB

System Description   *INFOID:0000000001281062*

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-625, "MULTIREMOTE ENT : CON-SULT-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:0000000001394640

JMKIA0658ZZ

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

JMKIA0659ZZ

1. Combination meter
   M34
2. Key switch
   M24
3. Power window main switch (Door lock and unlock switch) D5,D6
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 assembly (opener switch) D186
8. Back door lock assembly D190
9. Fuel lid opener actuator B58
D. View with steering column cover removed
E. View with luggage side lower finisher (RH) removed.

Component Description

INFOID:0000000001281064

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:0000000001569652

APPLICATION ITEM
CONSULT-III can display each diagnostic item using the diagnostic test modes shown following.

Diagnosis mode	Function description
ECU Identification	BCM part number is displayed.
Self-Diagnostic Results	Displays the diagnosis results judged by BCM. Refer to DLK-691, "DTC Index".
Data Monitor	BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Work Support	Changes the setting for each system function.
Configuration	• Read and save the vehicle specification. • Write the vehicle specification when replacing BCM.
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM.

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

×: Applicable item

System	CONSULT-III 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 control	INT LAMP	×	×	×
Remote keyless entry system	MULTI REMOTE ENT	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER		×	×
Air conditioner	AIR CONDITONER		×	
Intelligent Key system	INTELLIGENT KEY		×	
Combination switch	COMB SW		×	
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door open	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
Signal buffer system	SIGNAL BUFFER		×	×
—	PTC HEATER*			

*: This item is displayed, but is not function.

DOOR LOCK

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

INFOID:0000000001281066

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.
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

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:0000000001281067

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.
MEMORY 1	Indicates [ON/OFF] condition of remote controller ID code registration.
MEMORY 2	Indicates [ON/OFF] condition of remote controller ID code registration.
MEMORY 3	Indicates [ON/OFF] condition of remote controller ID code registration.
MEMORY 4	Indicates [ON/OFF] condition of remote controller ID code registration.
MEMORY 5	Indicates [ON/OFF] condition of remote controller ID code registration.

ACTIVE TEST

Test item	Description
DOOR LOCK	This test is able to check warning chime in combination meter operation. [ALL LOCK/ALL UN-LOCK/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

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-620, "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:0000000001281068

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].

COMPONENT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000001298310

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-25, "CAN Communication Signal Chart".

DTC Logic

INFOID:0000000001298311

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.	In CAN communication system, any item (or items) of the following listed below is malfunctioning. • Transmission • Receiving (IPDM E/R) • Receiving (ECM) • Receiving (METER/M&A) • Receiving (MULTI AV)

Diagnosis Procedure

INFOID:0000000001298312

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-13, "Trouble Diagnosis Flow Chart".
NO   >> Refer to GI-39, "Intermittent Incident".

U1010 CONTROL UNIT (CAN)

Description
INFOID:0000000001298313

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-25, "CAN Communication Signal Chart".

DTC Logic
INFOID:0000000001298314

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:0000000001298315

1.REPLACE BCM

When DTC [U1010] is detected, replace BCM.

>> Replace BCM.

Special Repair Requirement
INFOID:0000000001298316

1.REQUIRED WORK WHEN REPLACING INTELLIGENT KEY UNIT

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

>> Work end.

POWER SUPPLY AND GROUND CIRCUIT
BCM

BCM : Diagnosis Procedure

INFOID:0000000001298318

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	10 (10A)
57		J (50A)
4	ACC power supply	20 (10A)

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			Condition	Voltage (Approx.)
(+)		(−)		
BCM				
Connector	Terminal			
M66	41	Ground	Turn ignition switch OFF	Battery voltage
M67	57			
M65	4		Turn ignition switch ACC	

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		Exists

Does continuity exist?

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

DOOR LOCK AND UNLOCK SWITCH

Description
INFOID:0000000001298319

Transmits door lock/unlock operation to BCM.

Component Function Check
INFOID:0000000001298320

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-630, "Diagnosis Procedure".

Diagnosis Procedure
INFOID:0000000001298321

1.CHECK DOOR LOCK AND UNLOCK SWITCH INPUT SIGNAL

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

Terminal			Signal (Reference value)
(+)		(−)	
Power window main switch (door lock and unlock switch) connector	Terminal		
D5	6	Ground	
D6	18		

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 power window main switch (door lock and unlock switch) connector.

BCM connector	Terminal	Power window main switch (door lock and unlock switch) connector	Terminal	Continuity
M65	32	D5	6	Exists
	34	D6	18	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M65	32	Ground	Does not exist
	34		

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 power window main switch (door lock and unlock switch) connector and ground.

Power window main switch (door lock and unlock switch) connector	Terminal		Continuity
D6	17	Ground	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	32	Ground	
	34		

JPMIA0154GB

Is the inspection result normal?

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

5.CHECK DOOR LOCK AND UNLOCK SWITCH

Check power window main switch (door lock and unlock switch).
Refer to DLK-631, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace power window main switch (door lock and unlock switch). Refer to PWC-83, "Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

Component Inspection   INFOID:0000000001298322

1.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch.

Power window main switch	Terminal		Condition	Continuity
D5	6	17	LOCK	Exists
D6	18		UNLOCK	

Is the inspection result normal?

YES   >> Door lock and unlock switch is OK.
NO   >> Replace power windou main switch. Refer to PWC-83, "Removal and Installation".

A

B

DOOR SWITCH
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001298496

C

Detects door open/closed condition.

DRIVER SIDE : Component Function Check

INFOID:0000000001298497

D

1.CHECK FUNCTION

⬚ **With CONSULT-III**
Check door switches "DOOR SW-DR" in "Data Monitor" mode with CONSULT-III.

E

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

F

Is the inspection result normal?

YES >> Front door switch (driver side) is OK.
NO >> Refer to DLK-633, "DRIVER SIDE : Diagnosis Procedure".

G

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001298498

1.CHECK DOOR SWITCH INPUT SIGNAL

H

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

I

Terminals			Door condition	Voltage (V) (Approx.)
(+)		(−)		
BCM connector	Terminal			
M65	15	Ground	OPEN	0
			CLOSE	(V) 15 10 5 0 ← 10 ms → JPMIA0011GB

J

DLK

L

M

Is the inspection result normal?

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

N

2.CHECK DOOR SWITCH CIRCUIT

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

O

P

BCM connector	Terminal	Front door switch (driver side) connector	Terminal	Continuity
M65	15	B34	2	Exists

3. Check continuity between BCM harness connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	15		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 front door switch (driver side).
Refer to DLK-634, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES   >> GO TO 4.
NO   >> Replace front door switch (driver side). Refer to DLK-292, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

DRIVER SIDE : Component Inspection   *INFOID:0000000001298499*

1.CHECK DOOR SWITCH

Check front door switch (driver side).

Terminal		Door switch condition	Continuity
front door switch (driver side)			
2	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES   >> Front door switch (driver side) is OK.
NO   >> Replace front door switch (driver side). Refer to DLK-292, "Removal and Installation".

PASSENGER SIDE

PASSENGER SIDE : Description   *INFOID:0000000001298500*

Detects door open/closed condition.

PASSENGER SIDE : Component Function Check   *INFOID:0000000001298501*

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   >> Front door switch (passenger side) is OK.
NO   >> Refer to DLK-634, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure   *INFOID:0000000001298502*

1.CHECK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.

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

Terminals		(−)	Door condition	Voltage (V) (Approx.)
(+)				
BCM connector	Terminal			
M65	14	Ground	OPEN	0
			CLOSE	

JPMIA0011GB

Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector and front door switch (passenger side) connector.
2. Check continuity between BCM harness connector and front door switch (passenger side) harness connector.

BCM connector	Terminal	Front door switch (passenger side) connector	Terminal	Continuity
M65	14	B27	2	Exists

3. Check continuity between BCM harness connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	14		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 front door switch (passenger side).
Refer to DLK-635, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace front door switch (passenger side). Refer to DLK-292, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

PASSENGER SIDE : Component Inspection   *INFOID:0000000001298503*

1.CHECK DOOR SWITCH

Check front door switch (passenger side).

Terminal		Door switch condition	Continuity
Front door switch (passenger side)			
2	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES   >> Front door switch (passenger side) is OK.
NO   >> Replace front door switch (passenger side). Refer to DLK-753, "Removal and Installation".

REAR LH

REAR LH : Description   *INFOID:0000000001298504*

Detects door open/closed condition.

REAR LH : Component Function Check   *INFOID:0000000001298505*

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   >> Rear door switch LH is OK.
NO   >> Refer to DLK-636, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure   *INFOID:0000000001298506*

1.CHECK DOOR SWITCH INPUT SIGNAL

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

Terminals			Door condition	Voltage (V) (Approx.)
(+)		(−)		
BCM connector	Terminal			
M65	16	Ground	OPEN	0
			CLOSE	

JPMIA0011GB

Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

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

BCM connector	Terminal	Rear door switch LH connector	Terminal	Continuity
M65	16	B71	2	Exists

3. Check continuity between BCM harness connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	16		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check rear door switch LH.
Refer to DLK-637, "REAR LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace rear door switch LH. Refer to DLK-753, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

REAR LH : Component Inspection   INFOID:0000000001298507

1.CHECK DOOR SWITCH

Check rear door switch LH.

Terminal		Door switch condition	Continuity
Rear door switch LH			
2	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Rear door switch LH is OK.
NO >> Replace rear door switch LH. Refer to DLK-753, "Removal and Installation".

REAR RH

REAR RH : Description   INFOID:0000000001298508

Detects door open/close condition.

REAR RH : Component Function Check   INFOID:0000000001298509

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 >> Rear door switch RH is OK.
NO >> Refer to DLK-638, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000001298510

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	12	Ground	OPEN	0
			CLOSE	

Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

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

BCM connector	Terminal	Rear door switch RH connector	Terminal	Continuity
M65	12	B53	2	Exists

3. Check continuity between BCM harness 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 between BCM and door switch.

3.CHECK DOOR SWITCH

Check rear door switch RH.
Refer to DLK-638, "REAR RH : Component Inspection".

Is the inspection result normal?

YES   >> GO TO 4.
NO   >> Replace rear door switch RH. Refer to DLK-753, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

REAR RH : Component Inspection

INFOID:0000000001298511

1.CHECK DOOR SWITCH

Check rear door switch RH.

Terminal		Door switch condition	Continuity
Rear door switch RH			
2	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES   >> Rear door switch RH is OK.
NO   >> Replace rear door switch RH. Refer to DLK-290, "DOOR LOCK : Removal and Installation".

BACK DOOR

BACK DOOR : Description   *INFOID:0000000001298512*

Detects back door open condition.

BACK DOOR : Component Function Check   *INFOID:0000000001298513*

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-639, "BACK DOOR : Diagnosis Procedure".

BACK DOOR : Diagnosis Procedure   *INFOID:0000000001298514*

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

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

Terminals			Back door condition	Voltage (V) (Approx.)
(+)		(−)		
BCM connector	Terminal			
M65	13	Ground	OPEN	0
			CLOSE	Battery voltage

Is the inspection result normal?

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

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

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

BCM connector	Terminal	Back door lock assembly (door switch) connector	Terminal	Continuity
M65	13	D190	2	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	13		Does not exist

Is the inspection result normal?

YES   >> GO TO 3.
NO   >> Repair or replace harness between BCM and back door lock assembly (door switch).

3.CHECK BACK DOOR LOCK ASSEMBLY GROUND CIRCUIT

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

Back door lock assembly (door switch) connector	Terminal	Ground	Continuity
D190	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 harness connector and ground.

Terminals			Voltage (V) (Approx.)
(+)		(−)	
BCM connector	Terminal		
M65	13	Ground	Battery voltage

Is the inspection result normal?

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

5.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

Check back door lock assembly (door switch).
Refer to DLK-640, "BACK DOOR : Component Inspection".

Is the inspection result normal?

YES   >> GO TO 6.
NO   >> Replace back door lock assembly (door switch). Refer to DLK-290, "DOOR LOCK : Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

            >> INSPECTION END

BACK DOOR : Component Inspection   *INFOID:0000000001298515*

1.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

Check back door lock assembly (door switch).

Terminal		Back door condition	Continuity
Back door lock assembly (door switch)			
2	1	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. Refer to DLK-290, "DOOR LOCK : Removal and Installation".

A

KEY SWITCH

Description

INFOID:0000000001298516

B

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:0000000001298517

C

1.CHECK KEY SWITCH INPUT SIGNAL

D

Check key switch ("KEY ON SW") in "Data Monitor" mode with CONSULT-III. Refer to DLK-64, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

E

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

F

Is the inspection result normal?

YES   >> Key switch is OK.
NO   >> Refer to DLK-641, "Diagnosis Procedure".

G

Diagnosis Procedure

INFOID:0000000001298518

1.CHECK KEY SWITCH INPUT SIGNAL

H

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

I

Terminals			Condition	Voltage (V) (Approx.)
(+)		(−)		
BCM connector	Terminal			
M65	5	Ground	Insert mechanical key into key cylinder	Battery voltage
			Remove mechanical key from key cylinder	0

J

DLK

Is the inspection result normal?

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

L

2.CHECK KEY SWITCH POWER SUPPLY CIRCUIT

M

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

N

Terminals			Voltage (V) (Approx.)
(+)		(−)	
Key switch connector	Terminal		
M24	2	Ground	Battery voltage

O

Is the inspection result normal?

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

P

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	5	M24	1	Exists

2. Check continuity between ignition knob switch, key switch and key lock solenoid connector and ground.

Key switch connector	Terminal	Ground	Continuity
M24	1	Ground	Does not exist

<u>Is the inspection result normal?</u>

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

4.CHECK KEY SWITCH

Check key switch function.
Refer to DLK-642, "Component Inspection".

<u>Is the inspection result normal?</u>

yes   >> GO TO 5.
NO   >> Replace key cylinder assembly.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident"

>> INSPECTION END

Component Inspection

INFOID:0000000001298519

COMPONENT INSPECTION

1.CHECK KEY SWITCH

Check continuity between key switch terminals.

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

<u>Is the inspection result normal?</u>

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

DOOR LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Description   *INFOID:0000000001298522*

Locks/unlocks the door with the signal from BCM.

DRIVER SIDE : Component Function Check   *INFOID:0000000001298523*

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   >> Front door lock actuator (driver side) is OK.
NO   >> Refer to DLK-643, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure   *INFOID:0000000001298524*

1. CHECK BCM 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 3.
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	1	Exists
	60		2	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M67	56	Ground	Does not exist
	60		

Is the inspection result normal?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident"

>> INSPECTION END

PASSENGER SIDE

PASSENGER SIDE : Description
INFOID:0000000001298526

Locks/unlocks the door with the signal from BCM.

PASSENGER SIDE : Component Function Check
INFOID:0000000001298527

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   >> Front door lock actuator (passenger side) is OK.
  NO   >> Refer to DLK-644, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure
INFOID:0000000001298528

1.CHECK BCM 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	Front door lock actuator (passenger side) connector	Terminal	Continuity
M67	56	D48	2	Exists
	54		1	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M67	56	Ground	Does not exist
	54		

DLK-644

Is the inspection result normal?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident"

>> INSPECTION END

REAR LH

REAR LH : Description   INFOID:0000000001298530

Locks/unlocks the door with the signal from BCM.

REAR LH : Component Function Check   INFOID:0000000001298531

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   >> Rear door lock actuator LH is OK.
NO   >> Refer to DLK-645, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure   INFOID:0000000001298532

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

BCM connector	Terminal	Rear door lock actuator LH connector	Terminal	Continuity
M67	56	D85	1	Exists
	54		2	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M67	56	Ground	Does not exist
	54		

Is the inspection result normal?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident"

>> INSPECTION END

REAR RH

REAR RH : Description

INFOID:0000000001298534

Locks/unlocks the door with the signal from BCM.

REAR RH : Component Function Check

INFOID:0000000001298535

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-646, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000001298536

1.CHECK BCM 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. 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	Rear door lock actuator RH connector	Terminal	Continuity
M67	56	D105	2	Exists
	54		1	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M67	56	Ground	Does not exist
	54		

Is the inspection result normal?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident"

      >> INSPECTION END

BACK DOOR OPENER ACTUATOR

Description

INFOID:0000000001298538

Opens the back door with the signal from BCM.

Component Function Check

INFOID:0000000001298539

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 opener actuator operation

Is the inspection result normal?
  YES   >> Back door opener actuator is OK.
  NO   >> Refer to DLK-648, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001298540

1.CHECK BCM OUTPUT SIGNAL

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

BCM connector	Terminal	Back door lock assembly connector	Terminal	Continuity
M66	45	D190	4	Exists

4. Check continuity between BCM harness connector and ground.

BCM connector	Terminal		Continuity
M66	45	Ground	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 harness connector and ground.

Back door lock assembly connector	Terminal		Continuity
D190	3	Ground	Exists

Is the inspection result normal?

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

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

FUEL LID OPENER ACTUATOR

Description
INFOID:0000000001298542

Locks/unlocks the fuel lid with the signal from BCM.

Component Function Check
INFOID:0000000001298543

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 fuel lid opener actuator are unlocked
	:DR UNLK	The fuel lid opener actuator is unlocked
	:LOCK	The fuel lid opener actuator are locked

Is the inspection result normal?
 YES   >> Fuel lid opener actuator is OK.
 NO   >> Refer to DLK-650, "Diagnosis Procedure".

Diagnosis Procedure
INFOID:0000000001298544

1.CHECK BCM 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 3.
 NO   >> GO TO 2.

2.CHECK FUEL LID OPENER ACTUATOR CIRCUIT

1. Disconnect BCM and fuel lid opener actuator connector.
2. Check continuity between BCM connector and fuel lid opener actuator connector.

BCM connector	Terminal	Fuel lid opener actuator connector	Terminal	Continuity
M67	56	B58	2	Exists
	60		1	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M67	56	Ground	Does not exist
	60		

Is the inspection result normal?
 YES   >> GO TO 3.
 NO   >> Repair or replace harness.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident"

>> INSPECTION END

BACK DOOR OPENER SWITCH

Description
INFOID:0000000001298546

Sends the back door opening signal to BCM.

Component Function Check
INFOID:0000000001298547

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   >> Back door opener switch is OK.
  NO   >> Refer to DLK-652, "Diagnosis Procedure".

Diagnosis Procedure
INFOID:0000000001298548

1.CHECK BCM INPUT SIGNAL

Check voltage between BCM harness connector and ground.

Terminals		(−)	Condition of back door opener switch	Voltage (V) (Approx.)
(+)				
BCM connector	Terminal			
M65	29	Ground	Pressed	0
			Released	Battery voltage

Is the inspection result normal?

  YES   >> GO TO 5.
  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 assembly (opener switch) connector.
3. Check continuity between BCM harness connector and back door opener switch assembly (opener switch) harness connector.

BCM connector	Terminal	Back door opener switch assembly (opener switch) connector	Terminal	Continuity
M65	29	D186	1	Exists

4. Check continuity between BCM harness 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.

3.CHECK BCM OUTPUT SIGNAL

Check voltage between BCM harness connector and ground.

Terminals		(−)	Voltage (V) (Approx.)
(+)			
BCM connector	Terminal		
M65	29	Ground	Battery voltage

Is the inspection result normal?

YES   >> GO TO 4.
NO   >> GO TO 6.

4.CHECK BACK DOOR OPENER SWITCH GROUND CIRCUIT

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

Back door opener switch assembly (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 assembly (opener switch).
Refer to DLK-653, "Component Inspection".

Is the inspection result normal?

YES   >> GO TO 6.
NO   >> Replace back door opener switch assembly. Refer to DLK-754, "Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000001298549

1.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch assembly (opener switch).

Back door opener switch assembly (opener switch)	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 assembly (opener switch) is OK.
NO   >> Replace back door opener switch assembly. Refer to DLK-754, "Removal and Installation".

BUZZER (COMBINATION METER)

Description
INFOID:0000000001298550

Performs operation method guide and warning with buzzer.

Component Function Check
INFOID:0000000001298551

1.CHECK FUNCTION

⊞With CONSULT-III
Check the operation with "INSIDE BUZZER" in "Active Test" with CONSULT-III.

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-654, "Diagnosis Procedure".

Diagnosis Procedure
INFOID:0000000001298552

1.CHECK BUZZER (COMBINATION METER) CIRCUIT

Refer to DLK-654, "Component Function Check".

Is the inspection result normal?

Yes   >> GO TO 2.
No   >> Repair or replace buzzer (combination meter) circuit.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

    >> INSPECTION END

HAZARD WARNING LAMPS

Description

INFOID:0000000001298553

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

Component Function Check

INFOID:0000000001298554

1.CHECK FUNCTION

⬚**With CONSULT-III**
Check hazard warning lamp "FLASHER" in "Active Test" mode with CONSULT-III.
Is the inspection result normal?
  YES   >> Hazard warning lamp circuit is OK.
  NO   >> Refer to DLK-655, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001298555

1.CHECK HAZARD SWITCH CIRCUIT

Check hazard switch circuit.
Refer to EXL-84, "Component Function Check".
Is the inspection result normal?
  YES   >> GO TO 2.
  NO   >> Repair or replace hazard warning switch circuit.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

          >> INSPECTION END

VEHICLE SPEED SIGNAL CIRCUIT

Description   *INFOID:0000000001298556*

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

Component Function Check   *INFOID:0000000001298557*

1.CHECK FUNCTION

Check that all doors are automatically locked at the vehicle speed of more than 25 km/h (16 MPH).

Is the inspection result normal?

YES   >> Vehicle speed signal circuit is OK.
NO   >> Refer to DLK-656, "Diagnosis Procedure".

Diagnosis Procedure   *INFOID:0000000001298558*

1.CHECK VEHICLE SPEED SIGNAL CIRCUIT

Check vehicle speed signal "VEHICLE SPEED" in "Data Monitor" mode with CONSULT-III.

Is the inspection result normal?

YES   >> GO TO 2.
NO   >> Repair or replace vehicle speed signal circuit.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

KEYFOB BATTERY

Description

INFOID:0000000001281142

Remote door lock and unlock control entry function available when operating on button.
• Door lock and unlock

Component Function Check

INFOID:0000000001281143

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-657, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001281144

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-755, "Exploded View".

OCC0607D

ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000001551320

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
VEHICLE SPEED	While driving	Equivalent to speedometer reading
IGN ON SW	Ignition switch OFF or ACC	Off
	Ignition switch ON	On
KEY ON SW	Mechanical key is removed from key cylinder	Off
	Mechanical key is inserted to key cylinder	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-DR	Driver's door closed	Off
	Driver's door opened	On
DOOR SW-AS	Passenger door closed	Off
	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
	Rear LH door opened	On
BACK DOOR SW	Back door closed	Off
	Back door opened	On
I-KEY LOCK	"LOCK" button of Intelligent Key or door request switch are not pressed	Off
	"LOCK" button of Intelligent Key or door request switch are pressed	On
I-KEY UNLOCK	"UNLOCK" button of Intelligent Key or door request switch are not pressed	Off
	"UNLOCK" button of Intelligent Key or door request switch are pressed	On
PUSH SW	Return to ignition switch to "LOCK" position	Off
	Press ignition switch	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
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
UNLOCK SHOCK	Other than the following	Off
	During the unlock operation interlocked with air bag	On

Monitor Item	Condition	Value/Status
UNLOCK WITH DR	**NOTE:** The item is indicated, but not monitored	On
		Off
LOCK WITH SPEED	Vehicle speed sensing auto door lock function does not operate	Off
	Vehicle speed sensing auto door lock function is operating	On
ACC ON SW	Ignition switch OFF	Off
	Ignition switch ACC or ON	On
REAR DEF SW	Rear window defogger switch OFF	Off
	Rear window defogger switch ON	On
TAIL LAMP SW	Lighting switch OFF	Off
	Lighting switch 1ST	On
TURN SIGNAL R	Turn signal switch OFF	Off
	Turn signal switch RH	On
TURN SIGNAL L	Turn signal switch OFF	Off
	Turn signal switch LH	On
HI BEAM SW	Lighting switch OFF	Off
	Lighting switch HI	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
PASSING SW	Other than lighting switch PASS	Off
	Lighting switch PASS	On
AUTO LIGHT SW	Lighting switch OFF	Off
	Lighting switch AUTO	On
FR FOG SW	Front fog lamp switch OFF	Off
	Front fog lamp switch ON	On
RR FOG SW	Rear fog lamp switch OFF	Off
	Rear fog lamp switch ON	On
ENGINE RUN	Engine stopped	Off
	Engine running	On
LIT-SEN FAIL	Light & rain sensor is in normal condition	OK
	Light & rain sensor is with error	NOTOK
AUT LIGHT SYS	Outside of the room is dark	On
	Outside of the room is bright	Off
HD LIGHT TIME	—	Displays a setting time of the follow me home function set by the work support
IGN SW CAN	Ignition switch OFF or ACC	Off
	Ignition switch ON	On
FR WIPER HI	Front wiper switch OFF	Off
	Front wiper switch HI	On
FR WIPER LOW	Front wiper switch OFF	Off
	Front wiper switch LO	On
FR WIPER INT	Front wiper switch OFF	Off
	Front wiper switch INT	On

Monitor Item	Condition	Value/Status
FR WASHER SW	Front washer switch OFF	Off
	Front washer switch ON	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	1 - 7
FR WIPER STOP	Any position other than front wiper stop position	Off
	Front wiper stop position	On
RR WIPER ON	Rear wiper switch OFF	Off
	Rear wiper switch ON	On
RR WIPER INT	Rear wiper switch OFF	Off
	Rear wiper switch INT	On
RR WIPER STOP	Rear wiper stop position	Off
	Other than rear wiper stop position	On
RR WASHER SW	Rear washer switch OFF	Off
	Rear washer switch ON	On
REVERSE SW CAN	**NOTE:** The item is indicated, but not monitored	Off
		On
H/L WASH SW	When headlamp washer switch is not pressed	Off
	When headlamp washer switch is pressed	On
FAN ON SIG	Blower fan motor switch OFF	Off
	Blower fan motor switch ON (other than OFF)	On
AIR COND SW	Compressor ON is not requested from auto amp. (A/C indicator OFF, blower fan motor switch OFF or etc.)	Off
	Compressor ON is requested from auto amp. (A/C indicator ON and blower fan motor switch ON).	On
HAZARD SW	Hazard switch OFF	Off
	Hazard switch ON	On
BRAKE SW	Brake pedal is not depressed	Off
	Brake pedal is depressed	On
TRNK OPNR SW	When back door opener switch is not pressed	Off
	When back door opener switch is pressed	On
HOOD SW	Close the hood **NOTE:** Vehicles without theft warning system are OFF-fixed	Off
	Open the hood	On
AUTO RELOCK	Auto lock function does not operate	Off
	Auto lock function is operating	On
GLS BREAK SEN	The vehicle without glass break sensor	Off
	The vehicle with glass break sensor	On
OIL PRESS SW	• Ignition switch OFF or ACC • Engine running	Off
	Ignition switch ON	On

DLK-660

TERMINAL LAYOUT

M66

41 42 43 44 45 46 47 48 49 50 51 52

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

M65

60 59 58 57 56 55 54 53

M67

JSMIA0031GB

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-28, "COMB SW : CONSULT-III Function (BCM - COMB SW)".**
- **BCM reads the status of the combination switch at 10 ms internal normally. Refer to BCS-9, "System Description".**

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	−	Signal name	Input/ Output		
1 (W)	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
2 (G)	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
3 (W)	Ground	Ignition power supply	Input	Ignition switch OFF or ACC	0 V
				Ignition switch ON or START	Battery voltage
4 (SB)	Ground	ACC power supply	Input	Ignition switch OFF	0 V
				Ignition switch ON or ACC	Battery voltage
5 (LG)[*1] (R)[*2]	Ground	Key switch	Input	Insert mechanical key into ignition key cylinder	Battery voltage
				Remove mechanical key from ignition key cylinder	0 V

BCM (BODY CONTROL MODULE)

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	−	Signal name	Input/ Output		
6 (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 washer 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

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
+	−	Signal name	Input/ Output		
7 (GR)	Ground	Combination switch INPUT 4	Input	Combination switch	**All switch OFF** (Wiper intermittent dial 4) JPMIA0165GB 1.4 V
					Lighting switch 1ST (Wiper intermittent dial 4) JPMIA0166GB 1.3 V
					Lighting switch AUTO (Wiper intermittent dial 4) JPMIA0168GB 1.3 V
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 6 JPMIA0169GB 1.3 V
					Rear wiper INT (Wiper intermittent dial 4) JPMIA0196GB 1.3 V

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	−	Signal name	Input/ Output		
8 (V)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4) — All switch OFF	(V) 15 10 5 0 — 1ms — JPMIA0165GB — 1.4 V
				Turn signal switch RH	(V) 15 10 5 0 — 1ms — JPMIA0166GB — 1.3 V
				Turn signal switch LH	(V) 15 10 5 0 — 1ms — JPMIA0167GB — 1.3 V
				Front wiper switch LO	(V) 15 10 5 0 — 1ms — JPMIA0168GB — 1.3 V
				Front washer switch ON	(V) 15 10 5 0 — 1ms — JPMIA0196GB — 1.3 V

Terminal No. (Wire color)		Description			Condition	Value (Approx.)
+	−	Signal name	Input/Output			
9 (G)[3] (B)[4]	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	JPMIA0165GB 1.4 V
					Lighting switch 2ND	JPMIA0166GB 1.3 V
					Lighting switch PASS	JPMIA0167GB 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			
10 (BR)	Ground	Combination switch INPUT 5	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 →←1ms JPMIA0165GB 1.3 V
					Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 →←1ms JPMIA0167GB 1.3 V
					Rear fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 →←1ms JPMIA0168GB 1.3 V
					Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 →←1ms 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	(V) 15 10 5 0 →←1ms JPMIA0196GB 1.3 V
11 (B)	Ground	Audio link	Input/ Output	—	—	—

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	−	Signal name	Input/ Output		
12 (LG)	Ground	Rear door switch RH	Input	Rear door switch RH	OFF (When rear door RH closed) (V) 15 10 5 0 ← 10 ms → PKID0924E 11.2 V
					ON (When rear door RH opened) — 0 V
13 (V)	Ground	Back door switch	Input	Back door switch	OFF (When back door closed) (V) 15 10 5 0 ← 10 ms → PKID0924E 11.2 V
					ON (When back door opened) — 0 V
14 (P)[*3] (BR)[*4]	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closed) (V) 15 10 5 0 ← 10 ms → PKID0924E 11.2 V
					ON (When passenger door opened) — 0 V
15 (BR)[*3] (P)[*4]	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closed) (V) 15 10 5 0 ← 10 ms → PKID0924E 11.2 V
					ON (When driver door opened) — 0 V

Terminal No. (Wire color) +	−	Description Signal name	Input/ Output	Condition		Value (Approx.)
16 (GR)	Ground	Rear door switch LH	Input	Rear door switch LH	OFF (When rear door LH closed)	PKID0924E 11.2 V
					ON (When rear door LH opened)	0 V
17 (L)	Ground	Door lock status indicator	Output	Door lock status indicator	ON	12 V
					OFF	0 V
20 (SB)	Ground	Rear window defogger switch	Input	Rear window defogger switch	Not pressed	JPMIA0154GB 1.1 V
					While pressing	0 V
21 (P)	—	CAN-L	Input/ Output	—		—
22 (L)	—	CAN-H	Input/ Output	—		—
23 (V)	Ground	Security indicator	Output	Security indicator	ON	0 V
					Blinking	JPMIA0014GB 10.3 V
					OFF	12 V
24 (GR)	Ground	Light & rain sensor serial link	Input/ Output		Ignition switch OFF or ACC	12 V
				Ignition switch ON		JPMIA0156GB 8.7 V
25 (G)	Ground	Alarm link	Output	—		—

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	−	Signal name	Input/ Output			
26 (GR)[5] (LG)[6]	Ground	Blower fan motor switch	Input	Blower fan motor switch	OFF	(V) 15 10 5 0 — 10 ms — PKID0924E 11.2 V
					ON (other than OFF)	0 V
27 (P)[5] (Y)[6]	Ground	A/C switch	Input	Ignition switch ON	Compressor ON is not requested from auto amp. (A/C indicator OFF, blower fan motor switch OFF or etc.)	(V) 15 10 5 0 — 10 ms — PKID0924E 11.2 V
					Compressor ON is requested from auto amp. (A/C indicator ON and blower fan motor switch ON).	0 V
28 (LG)[7] (R)[8]	Ground	Shock detect sensor	Input	Ignition switch OFF or ACC		0 V
				Ignition switch ON		(V) 15 10 5 0 — 1.0s JPMIA0155GB 6.0 V
29 (LG)[3] (O)[4]	Ground	Back door opener switch	Input	Back door opener switch	Not pressed	(V) 15 10 5 0 — 10ms JPMIA0154GB 1.2 V
					Pressed	0 V
32 (BR)	Ground	Door lock/unlock switch (Unlock)	Input	Door lock/unlock switch	Not pressed	(V) 15 10 5 0 — 10ms JPMIA0154GB 1.2 V
					Pressed to the unlock side	0 V

Terminal No. (Wire color) +	Terminal No. (Wire color) −	Description Signal name	Description Input/ Output	Condition	Condition	Value (Approx.)
33 (W)[*9] (Y)[*10]	Ground	Hazard switch	Input	Hazard switch	OFF	(V) 15 10 5 0 →←10ms JPMIA0154GB 1.3 V
					ON	0 V
34 (SB)[*3] (P)[*4]	Ground	Door lock/unlock switch (Lock)	Input	Door lock/un-lock switch	Not pressed	(V) 15 10 5 0 →←10ms JPMIA0154GB 1.2 V
					Pressed to the lock side	0 V
35 (G)	Ground	Headlamp washer switch	Input	Headlamp washer switch	Not pressed	(V) 15 10 5 0 →←10ms JPMIA0154GB 1.2 V
					Pressed to the lock side	0 V
36 (G)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Turn signal switch RH	(V) 15 10 5 0 →←2ms JPMIA0164GB 9.1 V
					Lighting switch 2ND	
					Lighting switch HI	
					Lighting switch 1ST	
37 (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)	(V) 15 10 5 0 →←2ms JPMIA0161GB 9.1 V
					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	
					Rear wiper switch ON (Wiper intermittent dial 4)	

Terminal No. (Wire color) +	Terminal No. (Wire color) −	Description Signal name	Description Input/ Output	Condition		Value (Approx.)
38 (W)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Front wiper switch LO	9.3 V
					Front wiper switch MIST	
					Front wiper switch INT	
					Lighting switch AUTO	
					Rear fog lamp switch ON	
39 (Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Turn signal switch LH	9.3 V
					Lighting switch PASS	
					Lighting switch 2ND	
					Front fog lamp switch ON	
40 (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)	9.1 V
					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	
					Rear wiper switch INT (Wiper intermittent dial 4)	
41 (LG)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
42 (V)	Ground	Interior room lamp power supply	Output	Interior room lamp battery saver activation		0 V
				Interior room lamp battery saver no activation		12 V
43 (SB)	Ground	Rear wiper motor	Output	Rear wiper switch OFF		0 V
				Rear wiper switch ON		12 V
44 (B)	Ground	Rear wiper auto stop	Input	Ignition switch ON	Rear wiper stop position	
					Any position other than rear wiper stop position	0 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	−	Signal name	Input/ Output			
45 (V)	Ground	Back door lock actuator	Output	Back door opener switch	Pressed	SKIA9232E
					Not pressed	0 V
47 (BR)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	PKID0926E 6.5 V
48 (GR)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	PKID0926E 6.5 V
49 (Y)	Ground	Rear fog lamp	Output	Rear fog lamp	OFF	0 V
					ON	12 V
50 (G)	Ground	Unlock sensor	Input	Driver's door	Unlock	5 V
					lock	0 V
51 (R)	Ground	Stop lamp switch	Input	Depress the brake pedal		Battery voltage
				Release the brake pedal		0 V
52 (R)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	12 V
					ON	0 V
53 (L)	Ground	Power window power supply (IGN)	Output	Ignition switch	OFF or ACC	0 V
					ON	12 V
54 (O)	Ground	Door unlock (All other than driver's door)	Output	Door lock/unlock switch	Pressed to the unlock side	SKIA9232E
					Not pressed	0 V
55 (B)	Ground	Ground	—	Ignition switch ON		0 V

DLK-673

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >   **[WITHOUT I-KEY & SUPER LOCK]**

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	−	Signal name	Input/Output			
56 (V)	Ground	Door lock (All) and fuel lid lock	Output	Door lock/un-lock switch	Not pressed	0 V
					Pressed to the lock side	(V) 15 10 5 0 ← 0.1s SKIA9232E
57 (Y)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
58 (P)	Ground	Power window power supply (BAT)	Output	Ignition switch OFF		12 V
59 (R)	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		12 V
60 (G)	Ground	Driver's door unlock and fuel lid unlock	Output	Door lock/un-lock switch	Pressed to the unlock side	(V) 15 10 5 0 ← 0.1s SKIA9232E
					Not pressed	0 V

*1: With Intelligent Key

*2: Without Intelligent Key

*3: RHD models

*4: LHD models

*5: With gasoline engine

*6: With diesel engine

*7: RHD models with side air bag

*8: LHD models with side air bag

*9: With xenon headlamp and daytime light system

*10: Except with xenon headlamp and daytime light system

DLK-674

Wiring Diagram - POWER DOOR LOCK CONTROL SYSTEM -

INFOID:0000000001281146

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

JCKWA0353GE

2007/02/28

BCM (BODY CONTROL MODULE)
(M65) , (M66) , (M67)

13

16 (M13) (B3)   8 (B77) (D157)   1 (D151) (D181)   2 BACK DOOR LOCK ASSEMBLY (BACK DOOR SWITCH) (D190) 1   (D187)

12   78   2 REAR DOOR SWITCH RH (B53)

14   88 (M11) (B1)   2 FRONT DOOR SWITCH (PASSENGER SIDE) (B27)

JCKWA0354GE

POWER DOOR LOCK SYSTEM (WITHOUT INTELLIGENT KEY)

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	–
3	O	–
78	Y	–
88	BR	–
97	V	–

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
15	P	–
16	V	–
31	GR	–

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
6	V	–
14	O	–

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

Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	– [LHD models]

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

Terminal No.	Color of Wire	Signal Name [Specification]
2	P	– [LHD models]

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

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

Connector No.	B58
Connector Name	FUEL LID OPENER ACTUATOR
Connector Type	M04FW-LC

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	UNLOCK
2	V	LOCK

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

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

JCKWA0355GE

POWER DOOR LOCK SYSTEM (WITHOUT INTELLIGENT KEY)

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH

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]
8	G	–
20	BR	–

Connector No.	D9
Connector Name	FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
Connector Type	E06FGY-RS

H.S.

| 1 | 2 | 3 | 4 | 5 | 6 |

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	G	–

Connector No.	B88
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	V	–
6	O	–

Connector No.	D6
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS03FW-CS

H.S.

| 17 | 18 | 19 |

Terminal No.	Color of Wire	Signal Name [Specification]
17	B	–
18	G	–

Connector No.	B86
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	V	–
6	O	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	–

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
8	V	–

Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	G	–
12	B	–

JCKWA0356GE

POWER DOOR LOCK SYSTEM (WITHOUT INTELLIGENT KEY)

Connector No.	D42
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	O	—
8	V	—

Connector No.	D81
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	—
6	G	—

Connector No.	D85
Connector Name	REAR DOOR LOCK ACTUATOR LH
Connector Type	E06FGY-RS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	—
2	G	—

Connector No.	D48
Connector Name	FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Type	E06FGY-RS

Terminal No.	Color of Wire	Signal Name [Specification]
1	O	—
2	V	—

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	—
6	G	—

Connector No.	D105
Connector Name	REAR DOOR LOCK ACTUATOR RH
Connector Type	E06FGY-RS

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	—
2	V	—

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	NS08FBR-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	—

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
8	V	—

JCKWA0357GE

POWER DOOR LOCK SYSTEM (WITHOUT INTELLIGENT KEY)

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. M18
Connector Name WIRE TO WIRE
Connector Type TH24MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
8	P	–
20	BR	–

Connector No. E105
Connector Name WIRE TO WIRE
Connector Type TH80FW-CS16-TM4

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

Connector No. M14
Connector Name WIRE TO WIRE
Connector Type NS16FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
6	V	–
14	O	–[LHD models]

Connector No. D190
Connector Name BACK DOOR LOCK ASSEMBLY
Connector Type NS04FW-CS

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

Connector No. M13
Connector Name WIRE TO WIRE
Connector Type TH32FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
15	P	–
16	V	–[LHD models]
31	GR	–[LHD models]

Connector No. D181
Connector Name WIRE TO WIRE
Connector Type NS08MBR-CS

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

Connector No. M11
Connector Name WIRE TO WIRE
Connector Type TH80FW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	–[LHD models]
3	G	–[LHD models]
78	LG	–
88	BR	–
97	V	–

JCKWA0358GE

Connector No.	M59
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	TK20FY-EX-SC

Terminal No.	Color of Wire	Signal Name [Specification]
19	R	DEPLOYMENT INFORMATION[LHD models with side air bag]

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
5	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.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB

Terminal No.	Color of Wire	Signal Name [Specification]
54	O	DOOR UNLOCK OUTPUT (OTHER)[LHD models]
55	B	GND
56	V	DOOR LOCK OUTPUT (ALL)
57	V	BAT(F/L)
60	G	DOOR UNLOCK/RELEASE OUTPUT(DR)[LHD models]

POWER DOOR LOCK SYSTEM (WITHOUT INTELLIGENT KEY)

Connector No.	M24
Connector Name	KEY SWITCH
Connector Type	TK02MBR-P

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	–
2	Y	–

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR

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

Connector No.	M19
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	G	–
12	B	–

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

Terminal No.	Color of Wire	Signal Name [Specification]
5	R	KEY SW[Without Intelligent Key]
12	LG	DOOR SW (RR)
13	V	DOOR SW (BACK)[LHD models]
14	BR	DOOR SW (AS)[LHD models]
15	P	DOOR SW (DR)[LHD models]
16	GR	DOOR SW (RL)[LHD models]
21	P	CAN-L
22	L	CAN-H
28	R	SHOCK DETECT SIG[LHD models with side air bag]
32	BR	LOCK UNLOCK SW (UNLOCK)
34	P	LOCK UNLOCK SW (UNLOCK)[LHD models]

JCKWA0359GE

DLK-681

POWER DOOR LOCK SYSTEM (WITHOUT INTELLIGENT KEY)

Connector No.	M82
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
1	O	–
8	V	–

JCKWA0360GE

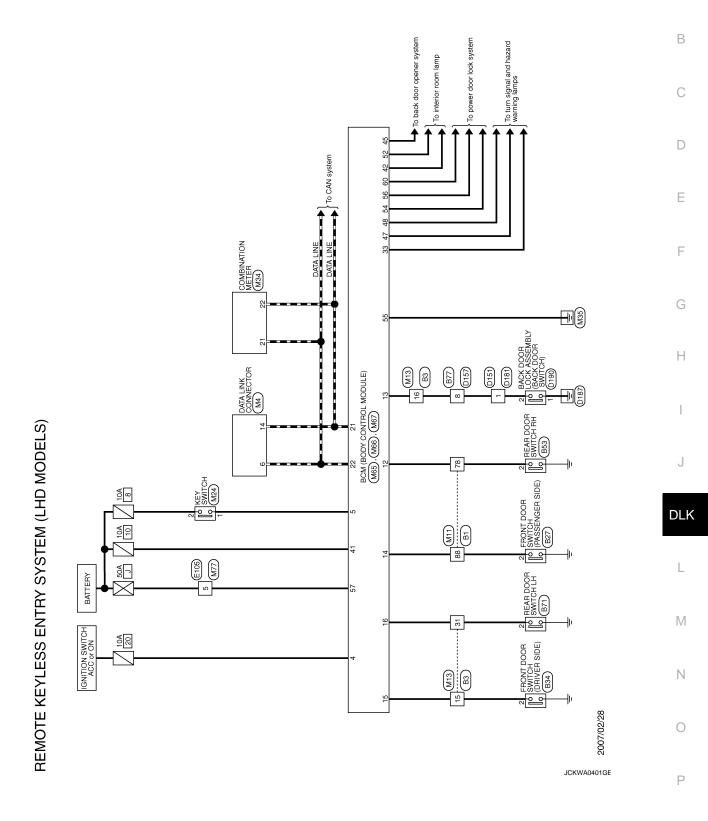## Wiring Diagram - REMOTE KEYLESS ENTRY CONTROL SYSTEM -   *INFOID:0000000001281147*

JCKWA0401GE

REMOTE KEYLESS ENTRY SYSTEM (LHD MODELS)

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
78	Y	–
88	BR	–

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
15	P	–
16	V	–
31	GR	–

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

Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	–[LHD models]

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

Terminal No.	Color of Wire	Signal Name [Specification]
2	P	–[LHD models]

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

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

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

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

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
8	V	–

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	NS08FBR-CS

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

JCKWA0402GE

DLK-684

REMOTE KEYLESS ENTRY SYSTEM (LHD MODELS)

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	—

Connector No.	M24
Connector Name	KEY SWITCH
Connector Type	TK02MBR-P

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	—
2	Y	—

Connector No.	D190
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS04FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	—
2	V	—

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
15	P	—
16	V	—[LHD models]
31	GR	—[LHD models]

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	NS08MBR-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	—

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
78	LG	—
88	BR	—

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
8	V	—

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

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

JCKWA0403GE

REMOTE KEYLESS ENTRY SYSTEM (LHD MODELS)

Connector No. M66
Connector Name BCM (BODY CONTROL MODULE)
Connector Type FEA12FBR

Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(FUSE)
42	V	ROOM LAMP POWER SUPPLY
45	V	BACK DOOR OPEN OUTPUT[LHD models]
47	BR	FRASHER OUTPUT (LH)
48	GR	FRASHER OUTPUT (RH)
52	R	ROOM LAMP CONTROL

33	Y	HAZARD SW[Except with xenon headlamp and daytime light system]

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

Terminal No.	Color of Wire	Signal Name [Specification]
4	SB	ACC SW
5	LG	KEY SW[With Intelligent Key]
12	LG	DOOR SW (RR)
13	V	DOOR SW (BACK)[LHD models]
14	BR	DOOR SW (AS)[LHD models]
15	P	DOOR SW (DR)[LHD models]
16	GR	DOOR SW (RL)[LHD models]
21	P	CAN-L
22	L	CAN-H
33	W	HAZARD SW[With xenon headlamp and daytime light system]

Connector No. M77
Connector Name WIRE TO WIRE
Connector Type TH80MW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
5	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. M67
Connector Name BCM (BODY CONTROL MODULE)
Connector Type FHA08FB

Terminal No.	Color of Wire	Signal Name [Specification]
54	O	DOOR UNLOCK OUTPUT (OTHER)[LHD models]
55	B	GND
56	V	DOOR LOCK OUTPUT (ALL)
57	Y	BAT(F/L)
60	G	DOOR UNLOCK RELEASE OUTPUT(DR)[LHD models]

JCKWA0404GE

Wiring Diagram - BACK DOOR OPENER CONTROL SYSTEM -

INFOID:0000000001281148

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

BACK DOOR OPENER SYSTEM

2007/02/28

JCKWA0409GE

BACK DOOR OPENER SYSTEM

Connector No. D151
Connector Name WIRE TO WIRE
Connector Type NS08FBR-CS

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
4	LG	–
7	W	–

Connector No. D190
Connector Name BACK DOOR LOCK ASSEMBLY
Connector Type NS04FW-CS

H.S.

| 1 | 2 | 3 | 4 |

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

Connector No. B77
Connector Name WIRE TO WIRE
Connector Type NS10MW-CS

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
4	W	–
8	V	–
10	G	–

Connector No. D186
Connector Name BACK DOOR OPENER SWITCH ASSEMBLY
Connector Type TK06MW-IV

H.S.

| 1 | | 6 |
| 2 | 3 | 4 | 5 |

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BCM
2	B	GND

Connector No. B4
Connector Name WIRE TO WIRE
Connector Type NS16MW-CS

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
16	W	–

Connector No. D181
Connector Name WIRE TO WIRE
Connector Type NS08MBR-CS

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
4	G	–
7	W	–

Connector No. B3
Connector Name WIRE TO WIRE
Connector Type TH32MW-NH

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 |

Terminal No.	Color of Wire	Signal Name [Specification]
16	V	–
32	G	–

Connector No. D157
Connector Name WIRE TO WIRE
Connector Type NS10FW-CS

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
4	W	–[LHD models]
4	V	–[RHD models]
8	V	–
10	G	–

JCKWA0410GE

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
16	V	–[LHD models]
16	P	–[RHD models]

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4

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

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
16	V	–[LHD models]
16	Y	–[RHD models]
32	O	–

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB

Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND
57	Y	BAT(F/L)

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.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR

Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(FUSE)
45	L	BACK DOOR OPEN OUTPUT[LHD models]
45	P	BACK DOOR OPEN OUTPUT[RHD models]

BACK DOOR OPENER SYSTEM

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
5	V	–

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

Terminal No.	Color of Wire	Signal Name [Specification]
13	V	DOOR SW (BACK)[LHD models]
13	Y	DOOR SW (BACK)[RHD models]
21	P	CAN-L
22	L	CAN-H
29	O	BACK DOOR OPEN SW

JCKWA0411GE

Fail Safe

INFOID:0000000001551322

FAIL-SAFE CONTROL BY DTC
BCM performs fail-safe control when any DTC is detected.

DTC	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 MOTOR PROTECTION
BCM detects the rear wiper stopping position according to the rear wiper auto stop signal.
When the rear wiper auto stop signal does not change more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation
1. Turn ignition switch OFF.
2. Pass more than 1 minute after the rear wiper stop.
3. Turn ignition switch ON.
4. Operate the rear wiper switch.

HIGH FLASHER OPERATION
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.

FAIL-SAFE CONTROL BY LIGHT & RAIN SENSOR MALFUNCTION
BCM detects the light & rain sensor serial link error and the light & rain sensor malfunction.
BCM controls the following fail-safe when light & rain sensor has a malfunction.

Fail-safe Control
• 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:0000000001551323

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:0000000001551324

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.

DTC	TIME		Fail-safe	Reference
U1000: CAN COMM CIRCUIT	0	1 - 39	—	BCS-33
U1010: CONTROL UNIT (CAN)	0	1 - 39	—	BCS-34
B2190: NATS ANTENNA AMP	CRNT	PAST	×	• With Intelligent Key system: SEC-41 • Without Intelligent Key system: SEC-254
B2191: DIFFERENCE OF KEY	CRNT	PAST	×	• With Intelligent Key system: SEC-43 • Without Intelligent Key system: SEC-256
B2192: ID DISCORD BCM-ECM	CRNT	PAST	×	• With Intelligent Key system: SEC-38 • Without Intelligent Key system: SEC-251
B2193: CHAIN OF BCM-ECM	CRNT	PAST	×	• With Intelligent Key system: SEC-40 • Without Intelligent Key system: SEC-253
B2194: DISCORD BCM-I-KEY	CRNT	PAST	×	SEC-53
B2195: ANTI SCANNING	CRNT	PAST	×	• With Intelligent Key system: SEC-54 • Without Intelligent Key system: SEC-264
B2196: DONGLE NG	CRNT	PAST	×	• With Intelligent Key system: SEC-55 • Without Intelligent Key system: SEC-265

SYMPTOM DIAGNOSIS
DOOR LOCK
Symptom Table

INFOID:0000000001515650

The diagnostics item numbers show the sequence for inspection. Inspection in order from item 1.

NO.	Function	Operation condition	Symptom	Diagnostic Item	Reference page
1	Door lock and unlock switch function	Press door lock and unlock switch.	Door does not lock/unlock	All doors	DLK-693
				Driver side	DLK-693
				Passenger side	DLK-694
				Rear LH	DLK-694
				Rear RH	DLK-695
2	Key reminder function	Open the door, when mechanical key is inserts into ignition key cylinder.	Key reminder function does not operate	—	DLK-696
3	Auto door lock function	Unlock all doors and wait more than 2 minutes.	Auto door lock operation does not operate	—	DLK-697
4	Vehicle speed sensing auto door lock function	Vehicle speed is more than 25km/h.	Vehicle speed sensing auto door lock operation does not operate	—	DLK-698
5	Back door opener function	Press back door opener switch.	Back door does not open	—	DLK-699
6	Warning function	Press back door opener switch under the following conditions. • Door is locked with door lock and unlock switch. • Speed sensing lock or only driver side is unlocked with anti-hijack function.	Back door open warning does not operate	—	DLK-700
7	Hazard reminder function	Press Key fob button.	Hazard reminder operation does not operate	—	DLK-701

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

ALL DOOR

ALL DOOR : Description   INFOID:0000000001515651

NOTE:
• Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-597, "Work Flow".
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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 key fob.

ALL DOOR : Diagnosis Procedure   INFOID:0000000001515652

1.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check power supply and ground circuit.
Refer to DLK-629, "BCM : Diagnosis Procedure" .
Is the inspection result normal?
  YES   >> GO TO 2.
  NO   >> Repair or replace the malfunctioning parts.

2.CHECK KEY FOB BATTERY

Check key fob battery.
Refer to DLK-657, "Component Function Check".
Is the inspection result normal?
  YES   >> GO TO 3.
  NO   >> Repair or replace the malfunctioning parts.

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-634, "PASSENGER SIDE : Component Function Check" (passenger side).
Refer to DLK-636, "REAR LH : Component Function Check" (rear LH).
Refer to DLK-637, "REAR RH : Component Function Check" (rear RH).
Refer to DLK-639, "BACK DOOR : Component Function Check" (back door).
Is the inspection result normal?
  YES   >> GO TO 4.
  NO   >> Repair or replace the malfunctioning parts.

4.CONFIRM THE OPERATION

Confirm the operation again.
Is the result normal?
  YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
  NO   >> GO TO 1.

DRIVER SIDE

DRIVER SIDE : Description   INFOID:0000000001515653

NOTE:
• Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-597, "Work Flow".
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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 key fob.

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001515654

1.CHECK DOOR LOCK ACTUATOR

Check door lock actuator (driver side).
Refer to DLK-643, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO   >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001515655

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-597, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001515656

1.CHECK DOOR LOCK ACTUATOR

Check door lock actuator (passenger side).
Refer to DLK-644, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO   >> GO TO 1.

REAR LH

REAR LH : Description

INFOID:0000000001515657

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-597, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

REAR LH : Diagnosis Procedure

INFOID:0000000001515658

1.CHECK DOOR LOCK ACTUATOR

Check door lock actuator LH.
Refer to DLK-645, "REAR LH : Component Function Check".
Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.
Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

REAR RH

REAR RH : Description

INFOID:0000000001515659

NOTE:
• Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-597, "Work Flow".
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

REAR RH : Diagnosis Procedure

INFOID:0000000001515660

1.CHECK DOOR LOCK ACTUATOR

Check door lock actuator RH.
Refer to DLK-646, "REAR RH : Component Function Check".
Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.
Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

KEY REMINDER FUNCTION DOES NOT OPERATE

Description

INFOID:0000000001515675

NOTE:
- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-597, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)
- Request switch operation and door lock and unlock switch operation are normal.

Diagnosis Procedure

INFOID:0000000001515676

1.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-633, "DRIVER SIDE : Component Function Check". (Driver side)

Is the inspection result normal?

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

2.CHECK KEY SWITCH

Check key switch.
Refer to DLK-641, "Component Function Check".

Is the inspection result normal?

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

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

AUTO DOOR LOCK OPERATION DOES NOT OPERATE

Description
INFOID:0000000001515677

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-597, "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-607, "AUTO DOOR LOCK : System Description".

Conditions of Vehicle (Operating Conditions)
- Request switch operation and door lock and unlock switch operation are normal.

Diagnosis Procedure
INFOID:0000000001515678

1.CHECK "AUTO LOCK SET" SETTING IN "WORK SUPPORT"

Check "AUTO LOCK SET" setting in "WORK SUPPORT".
Refer to DLK-623, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO   >> GO TO 1.

VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

Description
INFOID:0000000001515679

NOTE:
- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-597, "Work Flow".
- Understand the operation when does it work, refer to DLK-610, "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.

Conditions of Vehicle (Operating Conditions)
- Request switch operation and door lock and unlock switch operation are normal.

Diagnosis Procedure
INFOID:0000000001515680

1.CHECK VEHICLE SPEED SIGNAL

Check vehicle speed signal.
Refer to DLK-656, "Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO   >> GO TO 1.

BACK DOOR DOES NOT OPENED

Description

INFOID:0000000001515681

NOTE:
- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-597, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)
- Door lock function is normal.
- Vehicle speed is less than 5 km/h (3MPH).
- All doors are unlocked.

Diagnosis Procedure

INFOID:0000000001515682

1.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.
Refer to DLK-652, "Component Function Check".

Is the inspection result normal?

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

2.CHECK BACK DOOR OPENER ACTUATOR

Check back door opener actuator.
Refer to DLK-648, "Component Function Check".

Is the inspection result normal?

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

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

BACK DOOR OPEN WARNING DOES NOT OPERATE

Description
INFOID:0000000001515711

NOTE:
• Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-597, "Work Flow".
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
Conditions of Vehicle (Operating Conditions)
• Door lock function and back door opener function is normal.

Diagnosis Procedure
INFOID:0000000001515712

1.CHECK BUZZER (COMBINATION METER)

Check buzzer (combination meter).
Refer to DLK-654, "Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO   >> GO TO 1.

HAZARD REMINDER OPERATION DOES NOT OPERATE

Description
INFOID:0000000001515715

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-597, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)
- "HAZARD ANSWER BACK" is ON when setting on CONSULT-III.
- Door lock function is normal.

Diagnosis Procedure
INFOID:0000000001515716

1.CHECK SETTING OF BUZZER REMINDER WITH CONSULT-III

Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT".
Refer to DLK-625, "MULTIREMOTE ENT : CONSULT-III Function (BCM - MULTIREMOTE ENT)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set "HAZARD ANSWER BACK" setting in "WORK SUPPORT". Refer to DLK-625, "MULTIRE-MOTE ENT : CONSULT-III Function (BCM - MULTIREMOTE ENT)".

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow
<div align="right">INFOID:0000000001537524</div>

SBT842

CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of the customer's comments; refer to DLK-875, "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.

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-873, "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

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:0000000001537525

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

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. Cluster lid A and instrument panel
2. Acrylic lens and combination meter housing
3. Instrument panel to front pillar garnish
4. Instrument panel to windshield
5. Instrument panel mounting pins
6. Wiring harnesses behind the combination meter
7. A/C defroster duct and duct joint

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

CAUTION:
Do not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will not be able to recheck the repair.

CENTER CONSOLE

Components to pay attention to include:

1. Shifter assembly cover to finisher
2. A/C control unit and cluster lid C
3. Wiring harnesses behind audio and A/C control unit

The instrument panel repair and isolation procedures also apply to the center console.

DOORS

Pay attention to the:

1. Finisher and inner panel making a slapping noise
2. Inside handle escutcheon to door finisher
3. Wiring harnesses tapping
4. Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks to repair the noise.

TRUNK

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

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

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

SUNROOF/HEADLINING

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

1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
2. Sunvisor shaft shaking in the holder
3. Front or rear windshield touching headlining and squeaking

Again, pressing on the components to stop the noise while duplicating the conditions can isolate most of these incidents. Repairs usually consist of insulating with felt cloth tape.

SEATS

When isolating seat noise it is important to note the position the seat is in and the load placed on the seat when the noise is present. These conditions should be duplicated when verifying and isolating the cause of the noise.

Cause of seat noise include:

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

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

UNDERHOOD

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

Causes of transmitted underhood noise include:

1. Any component mounted to the engine wall
2. Components that pass through the engine wall
3. Engine wall mounts and connectors
4. Loose radiator mounting pins
5. Hood bumpers out of adjustment
6. Hood striker out of adjustment

These noises can be difficult to isolate since they cannot be reached from the interior of the vehicle. The best method is to secure, move or insulate one component at a time and test drive the vehicle. Also, engine RPM or load can be changed to isolate the noise. Repairs can usually be made by moving, adjusting, securing, or insulating the component causing the noise.

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

Diagnostic Worksheet

INFOID:0000000001537526

**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

A

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

_____

_____

B

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

C

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

D

III. WHEN DRIVING: ### IV. WHAT TYPE OF NOISE

E

☐ through driveways   ☐ squeak (like tennis shoes on a clean floor)
☐ over rough roads   ☐ creak (like walking on an old wooden floor)
☐ over speed bumps   ☐ rattle (like shaking a baby rattle)
☐ only about _____ mph   ☐ knock (like a knock at the door)
☐ on acceleration   ☐ tick (like a clock second hand)
☐ coming to a stop   ☐ thump (heavy, muffled knock noise)
☐ on turns: left, right or either (circle) ☐ buzz (like a bumble bee)
☐ with passengers or cargo
☐ other: _____
☐ after driving _____ miles or _____ minutes

F

G

H

I

TO BE COMPLETED BY DEALERSHIP PERSONNEL
Test Drive Notes:

_____

_____

_____

J

DLK

	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	☐	☐	_____

L

M

VIN: _____   Customer Name: _____
W.O.# _____   Date: _____

N

This form must be attached to Work Order

PIIB8742E

O

P

DLK-707

PRECAUTION

PRECAUTIONS

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

INFOID:0000000001524331

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the "SRS AIRBAG" and "SEAT BELT" 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 AIRBAG".**
- **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 for Procedure without Cowl Top Cover

INFOID:0000000001451783

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

PIIB3706J

Work

INFOID:0000000001451784

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

PREPARATION

PREPARATION

Commercial Service Tools

INFOID:0000000001451785

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

ON-VEHICLE REPAIR

HOOD
HOOD ASSEMBLY

HOOD ASSEMBLY : Exploded View
INFOID:0000000001451790

REMOVAL

JMKIA0541ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT

JMKIA0542GB

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

Refer to GI-4, "Components" for symbols in the figure.

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000001451791

REMOVAL

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

HOOD

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
   - Clamp
   - Hood support rod
   - Grommet
   - Radiator core seal
   - Hood bumper rubber center
   - Hood bumper rubber side

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-881, "HOOD ASSEMBLY : Adjustment".**

HOOD ASSEMBLY : Adjustment

INFOID:0000000001451792

mm(in)

Portion				Standard
Hood – Front grill	**A – A**	**E**	**Clearance**	**4.0 – 8.0 (0.157 – 0.315)**
		F	**Surface height**	**- 0.4 – 4.0 (- 0.016 – 0.157)**
Hood – Front bumper	**B – B**	**G**	**Clearance**	**4.0 – 8.0 (0.157 – 0.315)**
		H	**Surface height**	**- 0.4 – 4.0 (- 0.016 – 0.157)**
Hood – Front combination lamp	**C – C**	**I**	**Clearance**	**1.8 – 6.2 (0.071 – 0.244)**
		J	**Surface height**	**- 1.3 – 2.7 (- 0.051 – 0.106)**
Hood – Front fender	**D – D**	**K**	**Clearance**	**2.6 – 4.6 (0.102 – 0.181)**
		L	**Surface height**	**- 1.0 – 1.0 (- 0.039 – 0.039)**

1. Check the clearance and the surface height between the hood and each part by visually and touching. (Fitting standard dimension in the table below should be satisfied.)

2. Remove the front grille. Refer to EXT-18, "Removal and Installation".

3. In case any parts are out of specification, adjust them according to the procedures shown below.

4. Remove the hood lock and adjust the height by rotating the hood bumper rubber side until the hood becomes 1 to1.5 mm (0.04 to 0.059 in) lower than the fender.

5. 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.

6. 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)].

PIIB5794E

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)

7. After adjustment tighten lock bolts to the specified torque.

HOOD HINGE

HOOD HINGE : Exploded View   *INFOID:0000000001451793*

SEC. 650

JMKIA0541ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

HOOD HINGE : Removal and Installation   *INFOID:0000000001451794*

REMOVAL

1. Remove the hood assembly. Refer to DLK-880, "HOOD ASSEMBLY : Removal and Installation".
2. Remove the front fender. Refer to DLK-888, "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:
- **Before installation of hood hinge, apply anticorrosive agent onto the mounting surface of the vehicle body.**
- **After installation, apply touch-up paint (the body color) onto the head of the hinge mounting bolts and nuts.**
- **After installation, perform hood fitting adjustment. Refer to DLK-881, "HOOD ASSEMBLY : Adjustment".**

HOOD SUPPORT ROD

HOOD SUPPORT ROD : Exploded View
INFOID:0000000001451796

JMKIA0541ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

HOOD SUPPORT ROD : Removal and Installation
INFOID:0000000001451797

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:0000000001451798

SEC. 650

JMKIA0543ZZ

1.	Hood lock assembly	2.	Hood lock control cable	3.	Hood lock opener

⌐⌐ :Clip

Refer to GI-4, "Components" for symbols in the figure.

HOOD LOCK CONTROL : Removal and Installation

INFOID:0000000001451799

REMOVAL

1. Remove the hood lock opener mounting bolts, and then remove the hood lock opener.
2. Remove the front grille. Refer to EXT-18, "Removal and Installation".
3. Remove the fender protector. Refer to EXT-21, "Removal and Installation".
4. Remove the hood lock mounting bolts, and then remove the hood lock.
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.**

PIIB5801E

- **Check that the hood lock control cable is properly engaged with the hood lock.**
- **After installation, perform hood fitting adjustment. Refer to DLK-881, "HOOD ASSEMBLY : Adjustment".**
- **After installation, perform the hood lock control inspection. Refer to DLK-885, "HOOD LOCK CONTROL : Inspection".**

HOOD LOCK CONTROL : Inspection

INFOID:0000000001451800

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.

RADIATOR CORE SUPPORT

Exploded View

INFOID:0000000001451801

SEC. 625

JMKIA0544ZZ

1.	Radiator core support upper center	2.	Radiator core support upper RH	3.	Radiator core support upper LH
4.	Radiator core support lower	5.	Radiator core support side RH	6.	Radiator core support side LH
7.	Hood lock support stay assembly	8.	Front bumper fascia center bracket	9.	Sensor bracket
10.	Air guide RH	11.	Air guide LH	12.	Air guide upper RH (M9R model)
13.	Air guide lower RH (M9R model)	14.	Air guide upper LH (M9R model)	15.	Air guide lower LH (M9R model)

Removal and Installation

INFOID:0000000001451802

REMOVAL

1. Remove the front bumper fascia and the energy absorber. Refer to EXT-13, "Removal and Installation".
2. Remove the bumper reinforcement. Refer to EXT-13, "Removal and Installation".
3. Disconnect the liquid tank connector. Refer to HA-66, "Exploded View".
4. Remove the front combination lamp. Refer to EXL-213, "Removal and Installation" (XENON TYPE), EXL-409, "Removal and Installation" (HALOGEN TYPE).
5. Remove the washer tank. Refer to WW-104, "Removal and Installation".
6. Remove the air inlet hose (LH) and air inlet tube (LH). Refer to EM-266, "Exploded View" (M9R model).
7. Remove the charge air cooler. Refer to EM-266, "Removal and Installation" (M9R model).
8. Disconnect the hood lock control cable clamp, and then remove the hood lock assembly. Refer to DLK-884, "HOOD LOCK CONTROL : Removal and Installation".
9. Remove the air guide mounting clips, and remove the air guide (LH/RH).
10. Remove the horn. Refer to HRN-6, "Removal and Installation".

11. Remove the Intelligent Key warning buzzer (with Intelligent Key systems). Refer to DLK-298, "Removal and Installation".

12. Disconnect the harness clips from the hood lock stay.

13. Remove the hood lock stay mounting bolts, and then remove the hood lock stay.

14. Remove the crush zone sensor. Refer to SR-15, "Removal and Installation".

15. Place securely the hood support rod inside the engine mounting bracket hole.
    CAUTION:
    Check that the hood is securely fix.

16. Remove the radiator core support upper side (RH,LH) mounting bolts, and remove the radiator core support side (RH,LH).

17. Remove the radiator core support upper center mounting bolts, and remove the radiator core support upper center.

18. Disconnect the harness clamp from radiator core support side (LH).

19. Remove the radiator core support lower assembly mounting bolts.

20. Remove the radiator core support lower assembly while other worker is holding the radiator and condenser assembly to prevent the radiator and condenser from falling.
    CAUTION:
    Operate with two workers, because of its heavy weight.

21. Put some wooden blocks (B) under the radiator and condenser, and use a rope (A) to suspend it to prevent it from falling.
    CAUTION:
    Operate with two workers, because of its heavy weight.

JMKIA0698ZZ

22. Remove the radiator core support side (RH,LH) mounting nuts, and remove the radiator core support side (RH,LH) from radiator core support lower.

INSTALLATION
Install in the reverse order of removal.

FRONT FENDER

Exploded View

INFOID:0000000001451803

SEC. 630

JMKIA0545ZZ

1. Front fender
2. Front fender finisher

Removal and Installation

INFOID:0000000001451804

REMOVAL

1. Remove the fillet molding. Refer to EXT-24, "Removal and Installation".
2. Remove the front grille. Refer to EXT-18, "Removal and Installation".
3. Remove the front bumper fascia. Refer to EXT-13, "Removal and Installation".
4. Remove the front combination lamp. Refer to EXL-213, "Removal and Installation" (XENON TYPE),EXL-409, "Removal and Installation" (HALOGEN TYPE).
5. Remove the inner fender protector. Refer to EXT-21, "Removal and Installation".
6. Remove the front fender finisher.
7. Remove the side turn signal lamp. Refer to EXL-222, "Removal and Installation".
8. Remove the mounting bolts and remove the front fender.
   CAUTION:
   Use a shop cloth to protect the body from being damaged during removal.

INSTALLATION

Install in the reverse order of removal.
CAUTION:
- **After installation, check the front fender adjustment. Refer to DLK-881, "HOOD ASSEMBLY : Adjustment" and DLK-891, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply the touch-up paint (the body color) onto the head of the front fender mounting bolts.**

FRONT DOOR
DOOR ASSEMBLY

DOOR ASSEMBLY : Exploded View

INFOID:0000000001451805

REMOVAL

JMKIA0546ZZ

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

Refer to <u>GI-4, "Components"</u> for symbols in the figure.

ADJUSTMENT

JMKIA0547GB

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000001451806

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

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.

INSTALLATION

Install in the reverse order of removal.

CAUTION:
- **Check the front door open/close operation after installation.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **When removing and installing the front door assembly, perform the fitting adjustment. Refer to DLK-891, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**
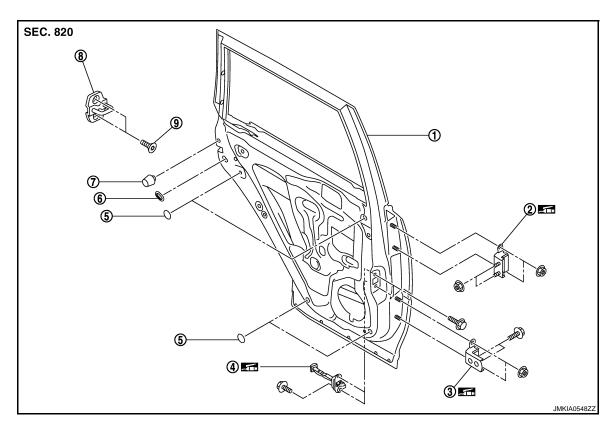
DOOR ASSEMBLY : Adjustment

INFOID:0000000001451807

CLEARANCE, SURFACE HEIGHT AND SURFACE MISMATCH ADJUSTMENT

mm(in)

Portion		Clearance	Surface height
Front fender – Front door	**A – A**	**3.4 – 5.4 (0.134 – 0.213)**	**- 1.0 – 1.0 (- 0.039 – 0.039)**
Front door – Rear door	**B – B**	**3.5 – 5.5 (0.138 – 0.217)**	**- 1.0 – 1.0 (- 0.039 – 0.039)**
Front door – Rear door	**G – G**	**3.0 – 6.0 (0.118 – 0.236)**	**- 1.0 – 1.0 (- 0.039 – 0.039)**

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-888, "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-888, "Removal and Installation".
    CAUTION:
    After installation, check the front fender adjustment. Refer to DLK-891, "DOOR 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:0000000001451808

SEC. 800

JMKIA0546ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR STRIKER : Removal and Installation

INFOID:0000000001451809

REMOVAL
Remove the TORX bolts, and then remove the door striker.

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-891, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Exploded View

JMKIA0546ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR HINGE : Removal and Installation

REMOVAL

1. Remove the front door assembly. Refer to DLK-890, "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:
• **Check the front door open/close operation after installation.**
• **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
• **When removing and installing the front door assembly, perform the fitting adjustment. Refer to DLK-891, "DOOR ASSEMBLY : Adjustment".**
• **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**

DOOR CHECK LINK

DOOR CHECK LINK : Exploded View

INFOID:0000000001451814

SEC. 800

JMKIA0546ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR CHECK LINK : Removal and Installation

INFOID:0000000001451815

REMOVAL

1. Fully close the front door window.
2. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
3. Remove the front door speaker. Refer to AV-38, "Removal and Installation".
4. Remove the mounting bolts of the door check link on the vehicle.
5. Remove the mounting bolts of the door check link on the door panel.
6. Take the door check link out from the hole of the door panel.

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:0000000001451816

REMOVAL

JMKIA0548ZZ

1.	Rear door panel	2.	Door hinge (upper)	3.	Door hinge (lower)
4.	Door check link	5.	Seal	6.	Hole cover
7.	Door bumper rubber	8.	Door striker	9.	TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT

JMKIA0547GB

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000001451817

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

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.

INSTALLATION

Install in the reverse order of removal.

CAUTION:
- **Check the rear door lock/unlock operation after installation.**
- **Check the rear door open/close operation after installation.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **After installation, perform the fitting adjustment. Refer to DLK-897, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**

DOOR ASSEMBLY : Adjustment

INFOID:0000000001451818

CLEARANCE, SURFACE HEIGHT AND SURFACE MISMATCH ADJUSTMENT

mm(in)

Portion		Clearance	Surface height
Front door – Rear door	B – B	3.5 – 5.5 (0.138 – 0.217)	-1.0 – 1.0 (-0.039 – 0.039)
Rear door – Body side outer	C – C	3.5 – 5.5 (0.138 – 0.217)	-1.0 – 1.0 (-0.039 – 0.039)
Front door – Rear door	G – G	3.0 – 6.0 (0.118 – 0.236)	-1.5 – 1.5 (-0.059 – 0.059)

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 lower garnish. Refer to INT-16, "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 lower garnish. Refer to INT-16, "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:0000000001451819

SEC. 820

JMKIA0548ZZ

1.	Rear door panel	2.	Door hinge (upper)	3.	Door hinge (lower)
4.	Door check link	5.	Seal	6.	Hole cover
7.	Door bumper rubber	8.	Door striker	9.	TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

DOOR STRIKER : Removal and Installation

INFOID:0000000001451820

REMOVAL

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

INSTALLATION

Install in the reverse order of removal.

CAUTION:
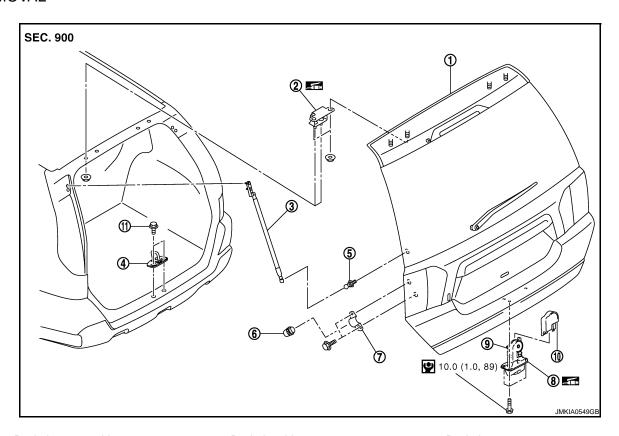- **Check the rear door open/close operation after installation.**
- **When removing and installing the door striker, be sure to perform the fitting adjustment. Refer to DLK-897, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Exploded View

SEC. 820

JMKIA0548ZZ

1. Rear door panel
2. Door hinge (upper)
3. Door hinge (lower)
4. Door check link
5. Seal
6. Hole cover
7. Door bumper rubber
8. Door striker
9. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

DOOR HINGE : Removal and Installation

REMOVAL

1. Remove the center pillar lower garnish. Refer to INT-16, "Removal and Installation".
2. Remove the rear door assembly. Refer to DLK-896, "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:
• **Check the rear door open/close operation after installation.**
• **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
• **When removing and installing the rear door assembly, perform the fitting adjustment. Refer to DLK-897, "DOOR ASSEMBLY : Adjustment".**
• **After installing, apply the touch-up paint (the body color) onto the head of the hinge mounting nuts.**

DOOR CHECK LINK

DOOR CHECK LINK : Exploded View

INFOID:0000000001451825

SEC. 820

JMKIA0548ZZ

1.	Rear door panel	2.	Door hinge (upper)	3.	Door hinge (lower)
4.	Door check link	5.	Seal	6.	Hole cover
7.	Door bumper rubber	8.	Door striker	9.	TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

DOOR CHECK LINK : Removal and Installation

INFOID:0000000001451826

REMOVAL

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Remove the rear door speaker.
3. Remove the mounting bolts of the check link on the vehicle.
4. Remove the door check link mounting bolts on the door panel.
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:0000000001451827

REMOVAL

JMKIA0549GB

1. Back door assembly	2. Back door hinge	3. Back door stay
4. Back door striker	5. Back door stay stud ball	6. Bumper rubber
7. Bumper rubber bracket	8. Back door lock assembly	9. Emergency lever
10. Back door lock cover (RH handle)	11. TORX bolt	

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT

JMKIA0550GB

1. Back door
2. Roof
3. Rear combination lamp
4. Body side outer
5. Back door hinge
6. Bumper rubber
7. Back door striker
8. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR ASSEMBLY : Removal and Installation
INFOID:0000000001451828

REMOVAL

1. Remove the back door finisher inner (upper, lower, side LH). Refer to INT-31, "Removal and Installation".
2. Disconnect the connectors in the back door, and then remove the grommet, and pull out the harness.

3. Remove the grommet, and then disconnect the connectors (1), and pull out the washer tube (2) at (A).

JMKIA0557ZZ

4. Pull the harness out of the back door.

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

    A   : Jack

    B   : Shop cloth

JMKIA0555ZZ

6. Remove the back door stay bracket mounting bolts on the back door.

7. Remove the back door hinge mounting nuts 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:
• **Check the back door open/close operation after installation.**
• **Check the back door lock/unlock operation after installation.**
• **After installation, perform fitting adjustment. Refer to DLK-903, "BACK DOOR ASSEMBLY : Adjustment".**

BACK DOOR ASSEMBLY : Adjustment

INFOID:0000000001451829

mm(in)

Portion				Standard
Back door panel – Roof panel	**A – A**	**E**	**Clearance**	**5.0 – 7.0 (0.197 – 0.276)**
		F	**Surface height**	**-0.3 – 1.7 (-0.012 – 0.067)**
Back door panel – Rear combination lamp	**B – B**	**G**	**Clearance**	**4.0 – 8.0 (0.157 – 0.315)**
Back door panel – Rear combination lamp	**C – C**	**H**	**Clearance**	**4.0 – 8.0 (0.157 – 0.315)**
Back door panel – Body side outer	**D – D**	**I**	**Clearance**	**5.0 – 7.0 (0.197 – 0.276)**
		J	**Surface height**	**-1.0 – 1.1 (0.039 – 0.043)**

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:0000000001451830

SEC. 900

JMKIA0549GB

10.0 (1.0, 89)

1. Back door assembly	2. Back door hinge	3. Back door stay
4. Back door striker	5. Back door stay stud ball	6. Bumper rubber
7. Bumper rubber bracket	8. Back door lock assembly	9. Emergency lever
10. Back door lock cover (RH handle)	11. TORX bolt	

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR STRIKER : Removal and Installation

INFOID:0000000001451831

REMOVAL
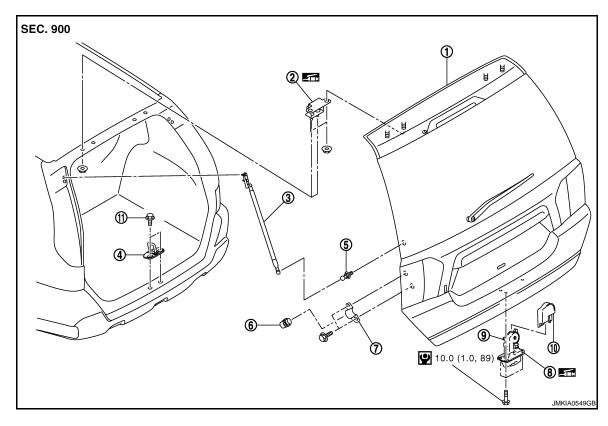Remove the TORX bolts, and then remove the back door striker.

INSTALLATION
Install in the reverse order of removal.
CAUTION:
- **Check the back door open/close operation after installation.**
- **When removing and installing the back door striker, be sure to perform the fitting adjustment. Refer to DLK-903, "BACK DOOR ASSEMBLY : Adjustment".**

BACK DOOR HINGE

BACK DOOR HINGE : Exploded View

INFOID:0000000001451833

SEC. 900

JMKIA0549GB

1. Back door assembly
2. Back door hinge
3. Back door stay
4. Back door striker
5. Back door stay stud ball
6. Bumper rubber
7. Bumper rubber bracket
8. Back door lock assembly
9. Emergency lever
10. Back door lock cover (RH handle)
11. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR HINGE : Removal and Installation

INFOID:0000000001451834

REMOVAL

1. Remove the back door assembly. Refer to DLK-902, "BACK DOOR ASSEMBLY : Removal and Installation".
2. Remove the back door weather-strip. Refer to DLK-907, "BACK DOOR WEATHER-STRIP : Removal and Installation".
3. Remove the luggage side lower finisher. Refer to INT-28, "Removal and Installation".
4. Remove the luggage side upper finisher. Refer to INT-28, "Removal and Installation".
5. Using remover tool, remove the headlining clip at the rear side of the headlining. Refer to INT-22, "NORMAL ROOF : Exploded View" (NORMAL ROOF), INT-25, "SUNROOF : Exploded View" (SUNROOF).
6. Remove the rear side of the headlining.
7. 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:
• **Check the back door open/close operation after installation.**
• **Check the hinge rotating part for poor lubrication. If necessary, apply body grease.**
• **When removing and installing the back door assembly, perform the fitting adjustment. Refer to DLK-903, "BACK DOOR ASSEMBLY : Adjustment".**
• **After installation, apply touch-up paint (the body color) onto the head of the hinge mounting nuts.**

BACK DOOR STAY

BACK DOOR STAY : Exploded View

INFOID:0000000001451836

SEC. 900

JMKIA0549GB

1. Back door assembly	2. Back door hinge	3. Back door stay
4. Back door striker	5. Back door stay stud ball	6. Bumper rubber
7. Bumper rubber bracket	8. Back door lock assembly	9. Emergency lever
10. Back door lock cover (RH handle)	11. TORX bolt	

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR STAY : Removal and Installation

INFOID:0000000001451837

REMOVAL

1. Remove the mounting bolts (body side), and then remove the back door stay bracket.
2. Remove the stud ball (back door side), and then remove the back door stay.

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:0000000001451838

REMOVAL

SEC. 900

JMKIA0556ZZ

1.   Back door weather-strip

A.   Mark (upper)

B.   Mark (lower)

BACK DOOR WEATHER-STRIP : Removal and Installation

INFOID:0000000001451839

REMOVAL

Pull up and remove engagement with body from the weather-strip joint.
CAUTION:
After removal, do not pull strongly on the weather-strip.

INSTALLATION

1.   Working from the upper section, align the weather-strip mark with vehicle center position mark and install the weather-strip onto the vehicle.
2.   For the lower section, align the weather-strip seam with center of the back door striker.
3.   After installation, pull the weather-strip gently to ensure that there is no loose section.
     NOTE:
     Make sure that the weather-strip is fit tightly at each corner and the luggage rear plate.

FRONT DOOR LOCK

DOOR LOCK

DOOR LOCK : Exploded View

INFOID:0000000001451840

SEC. 805

⑤ 6.0 (0.61, 53)

⑩ 5.8 (0.59, 51)

JMKIA0551GB

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

⟵ :Vehicle front

Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK : Removal and Installation

INFOID:0000000001451841

REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Disconnect the inside handle knob cable and the lock knob cable.
3. Remove the front door glass. Refer to GW-17, "Removal and Installation".
4. Remove the front door module assembly. Refer to GW-17, "Exploded View".
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 loosen the TORX bolt.
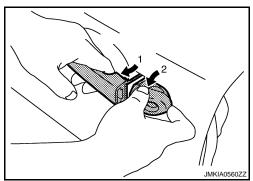   **CAUTION:**
   Do not forcibly remove the TORX bolt.

JMKIA0020ZZ
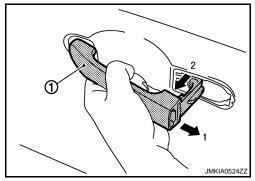
7. Reach in to separate the door key cylinder rod connection (on the handle) (driver side).

   1. Door key cylinder assembly
   2. Key rod

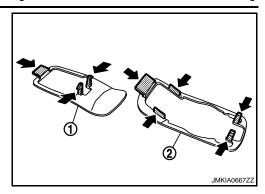JMKIA0553ZZ

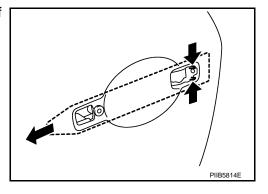8. While pulling the outside handle, remove door key cylinder assembly.

JMKIA0560ZZ

9. Disconnect front door request switch harness connector (models with Intelligent Key system).

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

JMKIA0524ZZ

A

11. Remove the front gasket (1) and the rear gasket (2).

B

C

JMKIA0667ZZ

D

12. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.

E

F

G

PIIB5814E

13. Reach in to separate the outside handle cable connection.

H

14. Remove the door lock assembly TORX bolts.

15. Disconnect the door lock actuator connector, and then remove the door lock assembly.

I

16. Remove the key rod from door lock assembly.

INSTALLATION

Install in the reverse order of removal.

J

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.**
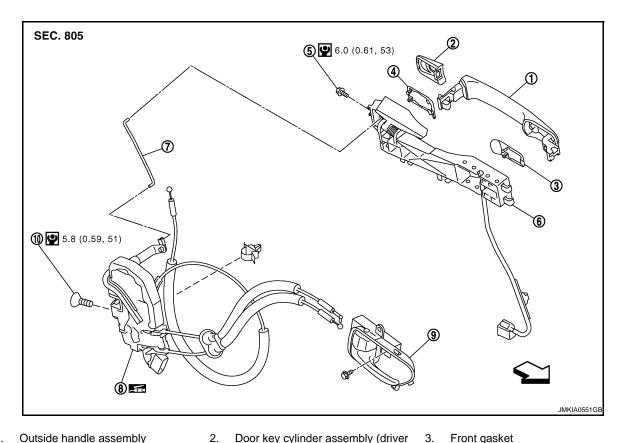
DLK

INSIDE HANDLE

L

M

N

O

P

INSIDE HANDLE : Exploded View

INFOID:0000000001451843

JMKIA0551GB

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

⟵ :Vehicle front

Refer to GI-4, "Components" for symbols in the figure.

INSIDE HANDLE : Removal and Installation

INFOID:0000000001451844

REMOVAL
1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the inside handle mounting bolts.
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
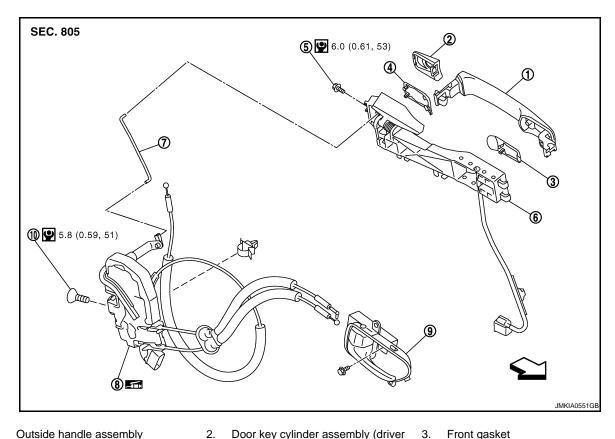
OUTSIDE HANDLE : Exploded View
INFOID:0000000001451846

JMKIA0551GB

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

⟵ :Vehicle front

Refer to GI-4, "Components" for symbols in the figure.

OUTSIDE HANDLE : Removal and Installation
INFOID:0000000001451847

REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Disconnect the inside handle knob cable and the lock knob cable.
3. Remove the front door glass. Refer to GW-17, "Removal and Installation".
4. Remove the front door module assembly. Refer to GW-17, "Exploded View".
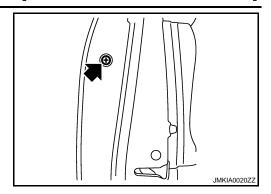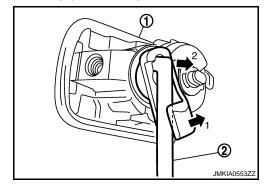5. Disconnect the connector and remove the harness clamp (models with Intelligent Key system).

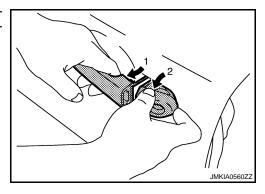6. Remove the door side grommet, and loosen the TORX bolt.
   CAUTION:
   Do not forcibly remove the TORX bolt.

JMKIA0020ZZ
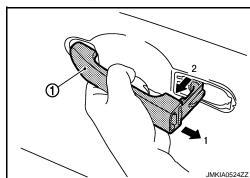
7. Reach in to separate the door key cylinder rod connection (on the handle) (driver side).

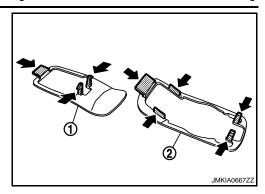   1. Door key cylinder assembly
   2. Key rod

JMKIA0553ZZ

8. Disconnect the door key cylinder switch harness connector.
9. While pulling the outside handle, remove the door key cylinder assembly (driver side) or outside handle escutcheon (passenger side).
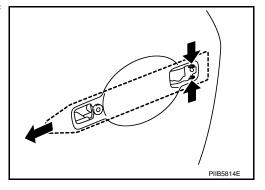

JMKIA0560ZZ

10. Disconnect the front door request switch harness connector (models with Intelligent Key system).
11. While pulling the outside handle, slide toward rear of vehicle to remove the outside handle (1).

JMKIA0524ZZ

DLK-744

12. Remove the front gasket (1) and rear gasket (2).

JMKIA0667ZZ

13. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.

PIIB5814E

14. 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.**
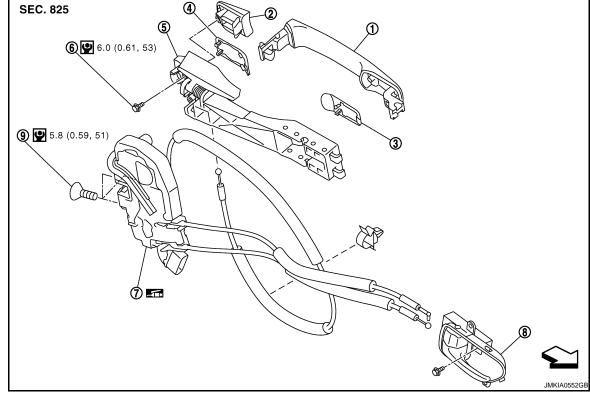- **Check the door open/close operation after installation.**

REAR DOOR LOCK
DOOR LOCK

DOOR LOCK : Exploded View

INFOID:0000000001451848

JMKIA0552GB

1. Outside handle assembly
2. Outside handle escutcheon
3. Front gasket
4. Rear gasket
5. Outside handle bracket
6. TORX bolt
7. Door lock assembly
8. Inside handle
9. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK : Removal and Installation

INFOID:0000000001451849

REMOVAL

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Disconnect the inside handle knob cable.
3. Remove the door sealing screen. Refer to GW-23, "Removal and Installation".
4. Remove the lower partition sash. Refer to GW-17, "Removal and Installation".
5. Remove the corner piece assembly. Refer to GW-17, "Removal and Installation".
6. Remove the door lock assembly TORX bolts.
7. Disconnect the door lock actuator connector.

REAR DOOR LOCK

8. Slide the door lock assembly from the inside the door panel until the outside handle escutcheon TORX bolt can be seen.

JMKIA0554ZZ

9. While pulling the outside handle, remove the outside handle escutcheon.

JMKIA0560ZZ

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

JMKIA0524ZZ

11. Remove the front gasket (1) and the rear gasket (2).

JMKIA0667ZZ

12. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.

PIIB5814E

DLK-747

13. Reach in to separate the outside handle cable connection.

14. Remove the door lock assembly.

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:0000000001451851

JMKIA0552GB

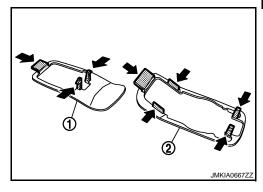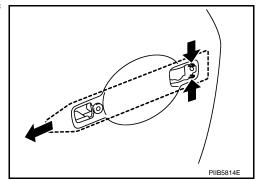|		
1. Outside handle assembly	2. Outside handle escutcheon	3. Front gasket
4. Rear gasket	5. Outside handle bracket	6. TORX bolt
7. Door lock assembly	8. Inside handle	9. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

INSIDE HANDLE : Removal and Installation

INFOID:0000000001451852

REMOVAL

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".

2. Remove the inside handle mounting screws.

3. Disconnect the inside handle 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

A

B

OUTSIDE HANDLE : Exploded View

INFOID:0000000001451854

JMKIA0552GB

C

D

E

F

G

H

I

J

1. Outside handle assembly
2. Outside handle escutcheon
3. Front gasket
4. Rear gasket
5. Outside handle bracket
6. TORX bolt
7. Door lock assembly
8. Inside handle
9. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

OUTSIDE HANDLE : Removal and Installation

INFOID:0000000001451855

REMOVAL

L

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Disconnect the inside handle knob cable.
3. Remove the door sealing screen. Refer to GW-23, "Removal and Installation".

M

4. Remove the lower partition sash. Refer to GW-17, "Removal and Installation".
5. Remove the corner piece assembly. Refer to GW-17, "Removal and Installation".
6. Remove the door lock assembly TORX bolts.

N

7. Disconnect the door lock actuator connector.
8. Slide the door lock assembly from the inside the door panel until the outside handle escutcheon TORX bolt can be seen.

O

JMKIA0554ZZ

P

9. While pulling the outside handle, remove the outside handle escutcheon.

JMKIA0560ZZ

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

JMKIA0524ZZ

11. Remove the front gasket (1) and the rear gasket (2).

JMKIA0667ZZ

12. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.

PIIB5814E

13. 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.**

BACK DOOR LOCK
DOOR LOCK

DOOR LOCK : Exploded View

INFOID:0000000001451856

SEC. 900

JMKIA0549GB

1. Back door assembly
2. Back door hinge
3. Back door stay
4. Back door striker
5. Back door stay stud ball
6. Bumper rubber
7. Bumper rubber bracket
8. Back door lock assembly
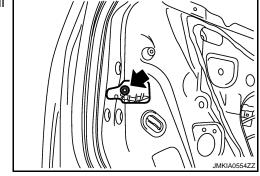9. Emergency lever
10. Back door lock cover (RH handle)
11. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK : Removal and Installation

INFOID:0000000001451858

REMOVAL

1. Remove the back door trim finisher lower. Refer to INT-31, "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:0000000001451859

SEC. 780•905

JMKIA0559ZZ

1. Fuel filler cap holder	2. Bumper rubber	3. Fuel filler lid lock actuator
4. Fuel filler lid lock seal	5. Fuel filler lid assembly	6. TORX bolt
7. Spring		

FUEL FILLER LID : Removal and Installation

INFOID:0000000001451860

REMOVAL

1. Fully open the fuel filler lid.
2. Remove the filler cap.
3. Remove the TORX bolts, and then remove the fuel filler lid assembly.
4. Remove the following parts after removing the fuel filler lid assembly.
   - Fuel filler cap holder
   - Bumper rubber
   - Spring

INSTALLATION

Install in the reverse order of removal.
CAUTION:
- **Check the fuel filler lid open/close operation after installation.**
- **After installation, apply the touch-up paint (the body color) onto the head of the mounting screws.**
NOTE:
After installation, perform fitting adjustment.

mm(in)

	Clearance	Evenness
Fuel filler lid— – Body side outer	2.0 – 4.0 (0.079 – 0.157)	−1.0 – 1.0 (−0.039 – 0.039)

DOOR SWITCH

Exploded View
INFOID:0000000001495971

SEC. 251

JMKIA0451ZZ

1.   Door switch (driver side)

Removal and Installation
INFOID:0000000001495972

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).

JMKIA0452ZZ

INSTALLATION
Install in the reverse order of removal.

BACK DOOR OPENER SWITCH

Exploded View
INFOID:0000000001495969

SEC. 251•900

JMKIA0651ZZ

1. Back door opener switch assembly   2. Back door finisher

Removal and Installation
INFOID:0000000001495970

REMOVAL

1. Remove the back door finisher. Refer to INT-31, "Removal and Installation".
2. Remove the back door opener switch assembly mounting bolt (A).
3. Remove the back door opener switch assembly (2) from back door finisher (1).

JMKIA0638ZZ

INSTALLATION
Install in the reverse order of removal.

KEYFOB BATTERY

Exploded View

INFOID:0000000001281233

Refer to DLK-755, "Removal and Installation".

Removal and Installation

INFOID:0000000001281234

REMOVAL

1. Remove installation screw (7) on the rear of keyfob.
2. Place the key with the lower case (6) facing up. Set a screw-driver (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-657, "Component Function Check".

MIIB0663E

INSTALLATION

Install in the reverse order of removal.

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000001569838

OVERALL SEQUENCE


```
                        ┌─────────────────────┐
                        │   Inspection start  │
                        └─────────────────────┘
                                   │
                        ┌─────────────────────────────────────┐
                        │ 1. Get information for symptom       │
                        │ Get the detailed information about   │
                        │ symptom from the customer.           │
                        └─────────────────────────────────────┘
                                   │
                        ┌─────────────────────┐
          ┌─────────────│   2. Check DTC      │─────────────┐
          │             └─────────────────────┘             │
          │                        │                        │
  Symptom is described.   Symptom is not described.   Symptom is described.
  DTC is detected.        DTC is detected.            DTC is not detected.
          │                        │                        │
 ┌──────────────────────┐           │           ┌──────────────────────┐
 │ 3. Confirm the       │           │           │ 4. Confirm the       │
 │    symptom           │           │           │    symptom           │
 │ Confirm the symptom  │           │           │ Confirm the symptom  │
 │ described by the     │           │           │ described by the     │
 │ customer.            │           │           │ customer.            │
 └──────────────────────┘           │           └──────────────────────┘
          │                         │                      │
 ┌──────────────────────────────────┐   ┌──────────────────────────────────┐
 │ 5. Perform DTC Confirmation       │   │ 6. Detect malfunctioning system  │
 │    Procedure                      │   │    by Symptom Table              │
 └──────────────────────────────────┘   └──────────────────────────────────┘
          │                                        │
          └──────────────┬─────────────────────────┘
                ┌──────────────────────────────────┐
                │ 7. Detect malfunctioning part by  │
                │    Diagnostic Procedure           │
                └──────────────────────────────────┘
                                │
                ┌──────────────────────────────────┐
                │ 8. Repair or replace the          │
                │    malfunctioning part            │
                └──────────────────────────────────┘
                                │
                ┌──────────────────────────────────┐
   NG           │ 9. Final check                    │      NG
(DTC is         │ Check that the symptom is not     │  (Symptom remains.)
 detected.)     │ detected.                         │
                │ Perform DTC Confirmation          │
                │ Procedure again, and then check   │
                │ that the malfunction can be       │
                │ repaired securely.                │
                └──────────────────────────────────┘
                                │ OK
                        ┌─────────────────────┐
                        │   INSPECTION END    │
                        └─────────────────────┘
```

JMKIA0676GB

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-856, "DTC Inspection Priority Chart" (BCM) and determine trouble diagnosis order.

Is DTC detected?

YES   >> GO TO 7.
NO   >> Refer to GI-39, "Intermittent Incident".

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

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

>> GO TO 7.

7.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 8.

8.REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 9.

9.FINAL CHECK

When DTC was detected in step 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.

Are all malfunctions corrected?

NO (DTC is detected)>>GO TO 7.
NO (Symptom remains)>>GO TO 6.
YES   >> **INSPECTION END**

INSPECTION AND ADJUSTMENT
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000001281236

Perform the system initialization when replacing or registering Keyfob and ignition key.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:0000000001281237

Refer to the CONSULT-III Operation Manual-NATS.

FUNCTION DIAGNOSIS

DOOR LOCK FUNCTION
DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH : System Diagram

INFOID:0000000001281238

DOOR LOCK AND UNLOCK SWITCH OPERATION

JMKIA0563GB

DOOR LOCK AND UNLOCK SWITCH INDICATOR OPERATION

JMKIA0503GB

DOOR LOCK AND UNLOCK SWITCH : System Description

INFOID:0000000001281239

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 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 is locked. If any door is opened, the indicator will turn OFF.
Door lock and unlock switch indicator have the following 2 functions.

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:0000000001281240*

JMKIA0656ZZ

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

JMKIA0657ZZ

1. Combination meter M34	2. Key switch M25	3. Door lock and unlock switch 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 (back door switch) D190	9. Fuel lid opener actuator B58
D. View with steering column cover re- moved		

DOOR LOCK AND UNLOCK SWITCH : Component Description

INFOID:0000000001281241

Item	Function
BCM	Controls the door lock and unlock function.
Door switch	Detects door state (open or closed).

A

B

Item	Function
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:0000000001281242

C

D

E

F

G

H

KEYFOB OPERATION

JMKIA0668GB

KEYFOB : System Description

INFOID:0000000001281243

I

KEYFOB OPERATION
The the multi remote control system can be locked and unlocked pressing door lock and unlock button of key-fob.

J

OPERATION CONDITION

Remote controller operation	Operation condition
Lock/unlock	Key switch is OFF (key is removed from ignition key cylinder).

DLK

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.

L

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.

M

SUPER LOCK OPERATION
Super lock provides a higher anti-theft performance than a conventional power door lock system. The super lock system is controlled by BCM.
When super lock is set, all doors cannot be opened from inside.

N

O

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-784, "MULTIREMOTE ENT : CONSULT-III Function (BCM - MULTIREMOTE ENT)".

P

KEYFOB : Component Parts Location

INFOID:0000000001388721

JMKIA0656ZZ

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

JMKIA0657ZZ

1. Combination meter
   M34
2. Key switch
   M25
3. Door lock and unlock switch
   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 (back door switch)
   D190
9. Fuel lid opener actuator
   B58
D. View with steering column cover re-
   moved

KEYFOB : Component Description
INFOID:0000000001281245

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:0000000001281246

AUTO RELOCK OPERATION

JMKIA0571GB

AUTO DOOR LOCK : System Description

INFOID:0000000001281247

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-784, "MULTIREMOTE ENT : CONSULT-III Function (BCM - MULTIREMOTE ENT)".

AUTO DOOR LOCK : Component Parts Location

INFOID:0000000001388723

JMKIA0656ZZ

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

JMKIA0657ZZ

1. Combination meter
   M34
2. Key switch
   M25
3. Door lock and unlock switch
   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 (back door switch)
   D190
9. Fuel lid opener actuator
   B58
D. View with steering column cover removed

AUTO DOOR LOCK : Component Description

INFOID:0000000001281249

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:0000000001281250

VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION

JMKIA0568GB

VEHICLE SPEED SENSING AUTO DOOR LOCK : System Description

INFOID:0000000001281251

VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION

When the vehicle speed exceeds more than 25 km/h (16 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:0000000001388724

JMKIA0656ZZ

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

JMKIA0657ZZ

1. Combination meter
   M34

2. Key switch
   M25

3. Door lock and unlock switch
   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 (back door switch)
   D190

9. Fuel lid opener actuator
   B58

D. View with steering column cover re-
   moved

VEHICLE SPEED SENSING AUTO DOOR LOCK : Component Description

INFOID:0000000001281253

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:0000000001281254

AIR BAG INTERLOCK UNLOCK OPERATION

JMKIA0569GB

AIR BAG INTERLOCK UNLOCK : System Description

INFOID:0000000001281255

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:0000000001388725

JMKIA0656ZZ

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

JMKIA0657ZZ

1. Combination meter
   M34

2. Key switch
   M25

3. Door lock and unlock switch
   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 (back door switch)
   D190

9. Fuel lid opener actuator
   B58

D. View with steering column cover re-
   moved

AIR BAG INTERLOCK UNLOCK : Component Description

INFOID:0000000001281257

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.

BACK DOOR OPENER FUNCTION
BACK DOOR OPENER SWITCH

BACK DOOR OPENER SWITCH : System Diagram

INFOID:0000000001281258

BACK DOOR OPENER OPERATION

| Back door opener switch | → | BCM | → | Back door opener actuator |

JMKIA0402GB

BACK DOOR OPENER SWITCH : System Description

INFOID:0000000001281259

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:0000000001393920

JMKIA0656ZZ

| 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 |

JMKIA0657ZZ

1. Combination meter
   M34
2. Key switch
   M25
3. Door lock and unlock switch
   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 (back door switch)
   D190
9. Fuel lid opener actuator
   B58

D. View with steering column cover removed

BACK DOOR OPENER SWITCH : Component Description

INFOID:0000000001281261

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

BACK DOOR OPEN WARNING

JMKIA0410GB

KEY REMINDER OPERATION

JMKIA0673GB

System Description

BACK DOOR OPEN WARNING OPERATION
Back door opener switch is operated, when door 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:0000000001393921

JMKIA0656ZZ

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

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

JMKIA0657ZZ

1. Combination meter
   M34

2. Key switch
   M25

3. Door lock and unlock switch
   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 (back door switch)
   D190

9. Fuel lid opener actuator
   B58

D. View with steering column cover removed

Component Description

INFOID:0000000001281265

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

HAZARD REMINDER FUNCTION

System Diagram

INFOID:0000000001281266

HAZARD REMINDER FUNCTION

JMKIA0510GB

System Description

INFOID:0000000001281267

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-782, "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:0000000001393922

JMKIA0656ZZ

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

JMKIA0657ZZ

1. Combination meter
   M34

2. Key switch
   M25

3. Door lock and unlock switch
   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 (back door switch)
   D190

9. Fuel lid opener actuator
   B58

D. View with steering column cover removed

Component Description

INFOID:0000000001281269

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:0000000001569653

APPLICATION ITEM
CONSULT-III can display each diagnostic item using the diagnostic test modes shown following.

Diagnosis mode	Function description
ECU Identification	BCM part number is displayed.
Self-Diagnostic Results	Displays the diagnosis results judged by BCM. Refer to DLK-857, "DTC Index".
Data Monitor	BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Work Support	Changes the setting for each system function.
Configuration	• Read and save the vehicle specification. • Write the vehicle specification when replacing BCM.
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM.

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

×: Applicable item

System	CONSULT-III sub system selection item	WORK SUPPORT	DATA MONITOR	ACTIVE TEST
—	BCM	×		
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER	×	×	×
Warning chime	BUZZER		×	×
Interior room lamp control	INT LAMP	×	×	×
Remote keyless entry system	MULTI REMOTE ENT	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER		×	×
Air conditioner	AIR CONDITONER		×	
Intelligent Key system	INTELLIGENT KEY		×	
Combination switch	COMB SW		×	
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door open	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
Signal buffer system	SIGNAL BUFFER		×	×
—	PTC HEATER*			

*: This item is displayed, but is not function.

DOOR LOCK

DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)   INFOID:0000000001398980

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.
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

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:0000000001398981

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.
MEMORY 1	Indicates [ON/OFF] condition of remote controller ID code registration.
MEMORY 2	Indicates [ON/OFF] condition of remote controller ID code registration.
MEMORY 3	Indicates [ON/OFF] condition of remote controller ID code registration.
MEMORY 4	Indicates [ON/OFF] condition of remote controller ID code registration.
MEMORY 5	Indicates [ON/OFF] condition of remote controller ID code registration.

ACTIVE TEST

Test item	Description
DOOR LOCK	This test is able to check warning chime in combination meter operation. [ALL LOCK/ALL UN-LOCK/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

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-779, "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:0000000001398982

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].

COMPONENT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000001450378

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-25, "CAN Communication Signal Chart".

DTC Logic

INFOID:0000000001450379

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.	In CAN communication system, any item (or items) of the following listed below is malfunctioning. • Transmission • Receiving (IPDM E/R) • Receiving (ECM) • Receiving (METER/M&A) • Receiving (MULTI AV)

Diagnosis Procedure

INFOID:0000000001450380

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-13, "Trouble Diagnosis Flow Chart".
NO   >> Refer to GI-39, "Intermittent Incident".

U1010 CONTROL UNIT (CAN)

Description
INFOID:0000000001450381

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-25, "CAN Communication Signal Chart".

DTC Logic
INFOID:0000000001450382

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:0000000001450383

1.REPLACE BCM

When DTC [U1010] is detected, replace BCM.

>> Replace BCM.

Special Repair Requirement
INFOID:0000000001450384

1.REQUIRED WORK WHEN REPLACING INTELLIGENT KEY UNIT

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

>> Work end.

POWER SUPPLY AND GROUND CIRCUIT
BCM

BCM : Diagnosis Procedure
INFOID:0000000001298754

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	10 (10A)
57		J (50A)
4	ACC power supply	20 (10A)

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		(−)	Condition	Voltage (Approx.)
(+) BCM				
Connector	Terminal			
M66	41	Ground	Turn ignition switch OFF	Battery voltage
M67	57			
M65	4		Turn ignition switch ACC	

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		Exists

Does continuity exist?

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

DOOR LOCK AND UNLOCK SWITCH

Description
INFOID:0000000001450402

Transmits door lock/unlock operation to BCM.

Component Function Check
INFOID:0000000001450403

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-789, "Diagnosis Procedure".

Diagnosis Procedure
INFOID:0000000001450404

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 harness connector and ground.

Terminal			Signal (Reference value)
(+)		(−)	
Door lock and unlock switch connector	Terminal		
M89	1	Ground	
	2		

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 harness connector and door lock and unlock switch harness connector.

BCM connector	Terminal	Door lock and unlock switch connector	Terminal	Continuity
M65	32	M89	2	Exists
	34		1	

4.   Check continuity between BCM harness connector and ground.

BCM connector	Terminal		Continuity
M65	32	Ground	Does not exist
	34		

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 harness connector and ground.

Door lock and unlock switch connector	Terminal		Continuity
M89	3	Ground	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 harness connector and ground.

Terminal			Signal
(+)		(−)	(Reference value)
BCM connector	Terminal		
M65	32	Ground	
	34		

JPMIA0154GB

Is the inspection result normal?

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

5.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch
Refer to DLK-790, "Component Inspection".

Is the inspection result normal?

  YES   >> GO TO 6.
  NO   >> Replace door lock and unlock switch. Refer to DLK-925, "Exploded View".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

      >> INSPECTION END

Component Inspection

INFOID:0000000001450405

1.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch.

Door lock and unlock switch	Terminal		Condition	Continuity
M89	1	3	LOCK	Exists
	2		UNLOCK	

Is the inspection result normal?

   YES   >> Door lock and unlock switch is OK.
   NO   >> Replace door lock and unlock switch. Refer to DLK-925, "Exploded View".

DOOR LOCK AND UNLOCK SWITCH INDICATOR

Description

INFOID:0000000001480714

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:0000000001480715

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-792, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001480716

1.CHECK DOOR LOCK AND UNLOCK SWITCH INDICATOR INPUT SIGNAL

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

Terminal			Condition	Voltage (Approx.)
(+)		(−)		
Door lock and unlock switch connector	Terminal			
M89	6	Ground	Door lock operation is accomplished	Battery voltage
			Any door is OPEN	0

Is the inspection result normal?
  YES   >> GO TO 3.
  NO   >> GO TO 2.

2.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

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

BCM connector	Terminal	Door lock and unlock switch connector	Terminal	Continuity
M65	17	M89	6	Exists

3. Check continuity between BCM harness connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	17		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 harness connector and ground.

Door lock and unlock switch connector	Terminal	Ground	Continuity
M89	4		Exists

<u>Is the inspection result normal?</u>

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

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

DOOR SWITCH
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001298572

Detects door open/closed condition.

DRIVER SIDE : Component Function Check

INFOID:0000000001298573

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   >> Front door switch (driver side) is OK.
NO   >> Refer to DLK-794, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001298574

1.CHECK DOOR SWITCH INPUT SIGNAL

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

Terminals			Door condition	Voltage (V) (Approx.)
(+)		(−)		
BCM connector	Terminal			
M65	15	Ground	OPEN	0
			CLOSE	

JPMIA0011GB

Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

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

BCM connector	Terminal	Front door switch (driver side) connector	Terminal	Continuity
M65	15	B34	2	Exists

3. Check continuity between BCM harness connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	15		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 front door switch (driver side).
Refer to DLK-795, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES   >> GO TO 4.
NO   >> Replace front door switch (driver side). Refer to DLK-292, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

DRIVER SIDE : Component Inspection   INFOID:0000000001298575

1.CHECK DOOR SWITCH

Check front door switch (driver side).

Terminal		Door switch condition	Continuity
front door switch (driver side)			
2	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES   >> Front door switch (driver side) is OK.
NO   >> Replace front door switch (driver side). Refer to DLK-292, "Removal and Installation".

PASSENGER SIDE

PASSENGER SIDE : Description   INFOID:0000000001298576

Detects door open/closed condition.

PASSENGER SIDE : Component Function Check   INFOID:0000000001298577

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   >> Front door switch (passenger side) is OK.
NO   >> Refer to DLK-795, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure   INFOID:0000000001298578

1.CHECK DOOR SWITCH INPUT SIGNAL

1.   Turn ignition switch OFF.

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

Terminals			Door condition	Voltage (V) (Approx.)
(+)		(−)		
BCM connector	Terminal			
M65	14	Ground	OPEN	0
			CLOSE	

JPMIA0011GB

Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector and front door switch (passenger side) connector.
2. Check continuity between BCM harness connector and front door switch (passenger side) harness connector.

BCM connector	Terminal	Front door switch (passenger side) connector	Terminal	Continuity
M65	14	B27	2	Exists

3. Check continuity between BCM harness connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	14		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 front door switch (passenger side).
Refer to DLK-796, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

 YES >> GO TO 4.
 NO   >> Replace front door switch (passenger side). Refer to DLK-292, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

        >> INSPECTION END

PASSENGER SIDE : Component Inspection   *INFOID:0000000001298579*

1.CHECK DOOR SWITCH

Check front door switch (passenger side).

Terminal		Door switch condition	Continuity
Front door switch (passenger side)			
2	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES   >> Front door switch (passenger side) is OK.
NO   >> Replace front door switch (passenger side). Refer to DLK-922, "Removal and Installation".

REAR LH

REAR LH : Description
INFOID:0000000001298580

Detects door open/closed condition.

REAR LH : Component Function Check
INFOID:0000000001298581

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   >> Rear door switch LH is OK.
NO   >> Refer to DLK-797, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure
INFOID:0000000001298582

1.CHECK DOOR SWITCH INPUT SIGNAL

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

Terminals			Door condition	Voltage (V) (Approx.)
(+)		(−)		
BCM connector	Terminal			
M65	16	Ground	OPEN	0
			CLOSE	(V) 15 10 5 0 ◄►◄► 10 ms JPMIA0011GB

Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

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

BCM connector	Terminal	Rear door switch LH connector	Terminal	Continuity
M65	16	B71	2	Exists

3. Check continuity between BCM harness connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	16		Does not exist

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check rear door switch LH.
Refer to DLK-798, "REAR LH : Component Inspection".

Is the inspection result normal?

YES   >> GO TO 4.
NO   >> Replace rear door switch LH. Refer to DLK-922, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

REAR LH : Component Inspection   *INFOID:0000000001298583*

1.CHECK DOOR SWITCH

Check rear door switch LH.

Terminal		Door switch condition	Continuity
Rear door switch LH			
2	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES   >> Rear door switch LH is OK.
NO   >> Replace rear door switch LH. Refer to DLK-922, "Removal and Installation".

REAR RH

REAR RH : Description   *INFOID:0000000001298584*

Detects door open/close condition.

REAR RH : Component Function Check   *INFOID:0000000001298585*

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   >> Rear door switch RH is OK.
NO   >> Refer to DLK-799, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000001298586

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	12	Ground	OPEN	0
			CLOSE	

JPMIA0011GB

Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

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

BCM connector	Terminal	Rear door switch RH connector	Terminal	Continuity
M65	12	B53	2	Exists

3. Check continuity between BCM harness 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 between BCM and door switch.

3.CHECK DOOR SWITCH

Check rear door switch RH.
Refer to DLK-799, "REAR RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace rear door switch RH. Refer to DLK-922, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

REAR RH : Component Inspection

INFOID:0000000001298587

1.CHECK DOOR SWITCH

Check rear door switch RH.

Terminal		Door switch condition	Continuity
Rear door switch RH			
2	Ground part of door switch	Pressed	Exists
		Released	Does not exist

Is the inspection result normal?

YES >> Rear door switch RH is OK.
NO >> Replace rear door switch RH. Refer to DLK-290, "DOOR LOCK : Removal and Installation".

BACK DOOR

BACK DOOR : Description   INFOID:0000000001298588

Detects back door open condition.

BACK DOOR : Component Function Check   INFOID:0000000001298589

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-800, "BACK DOOR : Diagnosis Procedure".

BACK DOOR : Diagnosis Procedure   INFOID:0000000001298590

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

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

Terminals			Back door condition	Voltage (V) (Approx.)
(+)		(−)		
BCM connector	Terminal			
M65	13	Ground	OPEN	0
			CLOSE	Battery voltage

Is the inspection result normal?

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

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

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

BCM connector	Terminal	Back door lock assembly (door switch) connector	Terminal	Continuity
M65	13	D190	2	Exists

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M65	13		Does not exist

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between BCM and back door lock assembly (door switch).

3.CHECK BACK DOOR LOCK ASSEMBLY GROUND CIRCUIT

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

Back door lock assembly (door switch) connector	Terminal	Ground	Continuity
D190	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 harness connector and ground.

Terminals			Voltage (V) (Approx.)
(+)		(−)	
BCM connector	Terminal		
M65	13	Ground	Battery voltage

Is the inspection result normal?

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

5.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

Check back door lock assembly (door switch).
Refer to DLK-801, "BACK DOOR : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace back door lock assembly (door switch). Refer to DLK-290, "DOOR LOCK : Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

BACK DOOR : Component Inspection

INFOID:0000000001298591

1.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

Check back door lock assembly (door switch).

Terminal		Back door condition	Continuity
Back door lock assembly (door switch)			
2	1	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. Refer to DLK-290, "DOOR LOCK : Removal and Installation".

KEY SWITCH

Description
INFOID:0000000001301148

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:0000000001301149

1.CHECK KEY SWITCH INPUT SIGNAL

Check key switch ("KEY ON SW") in "Data Monitor" mode with CONSULT-III. Refer to DLK-782, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Monitor item	Condition	
KEY ON 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-802, "Diagnosis Procedure".

Diagnosis Procedure
INFOID:0000000001301150

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	5	Ground	Insert mechanical key into key cylinder	Battery voltage
			Remove mechanical key from key cylinder	0

Is the inspection result normal?

YES >> GO TO 5.
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		
M24	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	5	M24	1	Exists

2.   Check continuity between ignition knob switch, key switch and key lock solenoid connector and ground.

Key switch connector	Terminal	Ground	Continuity
M24	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-803, "Component Inspection".

Is the inspection result normal?

yes   >> GO TO 5.
NO   >> Replace key cylinder assembly.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident"

>> INSPECTION END

Component Inspection

INFOID:0000000001301151

COMPONENT INSPECTION

1.CHECK KEY SWITCH

Check continuity between key switch terminals.

Terminal		Condition	Continuity
Key switch			
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 cylinder assembly.

DOOR LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Description   INFOID:0000000001470504

Locks/unlocks the door with the signal from BCM.

DRIVER SIDE : Component Function Check   INFOID:0000000001470505

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   >> Front door lock actuator (driver side) is OK.
  NO   >> Refer to DLK-804, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure   INFOID:0000000001470506

1.CHECK BCM 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 3.
  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	1	Exists
	60		2	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M67	56	Ground	Does not exist
	60		

Is the inspection result normal?
  YES   >> GO TO 3.
  NO   >> Repair or replace harness.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident"

>> INSPECTION END

PASSENGER SIDE

PASSENGER SIDE : Description   *INFOID:0000000001470508*

Locks/unlocks the door with the signal from BCM.

PASSENGER SIDE : Component Function Check   *INFOID:0000000001470509*

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   >> Front door lock actuator (passenger side) is OK.
NO   >> Refer to DLK-805, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure   *INFOID:0000000001470510*

1.CHECK BCM 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	$0 \rightarrow$ Battery voltage $\rightarrow 0$
	54		Unlock	$0 \rightarrow$ Battery voltage $\rightarrow 0$

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	Front door lock actuator (passenger side) connector	Terminal	Continuity
M67	56	D48	2	Exists
	54		1	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M67	56	Ground	Does not exist
	54		

Is the inspection result normal?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident"

        >> INSPECTION END

REAR LH

REAR LH : Description
INFOID:0000000001470512

Locks/unlocks the door with the signal from BCM.

REAR LH : Component Function Check
INFOID:0000000001470513

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   >> Rear door lock actuator LH is OK.
  NO   >> Refer to DLK-806, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure
INFOID:0000000001470514

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

BCM connector	Terminal	Rear door lock actuator LH connector	Terminal	Continuity
M67	56	D85	1	Exists
	54		2	

3. Check continuity between BCM connector and ground.

DOOR LOCK ACTUATOR

< COMPONENT DIAGNOSIS >

[WITHOUT I-KEY, WITH SUPER LOCK]

BCM connector	Terminal		Continuity
M67	56	Ground	Does not exist
	54		

Is the inspection result normal?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident"

          >> INSPECTION END

REAR RH

REAR RH : Description

INFOID:0000000001470516

Locks/unlocks the door with the signal from BCM.

REAR RH : Component Function Check

INFOID:0000000001470517

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-807, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000001470518

1.CHECK BCM 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.   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.

DLK

DLK-807

BCM connector	Terminal	Rear door lock actuator RH connector	Terminal	Continuity
M67	56	D105	2	Exists
	54		1	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M67	56	Ground	Does not exist
	54		

Is the inspection result normal?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident"

>> INSPECTION END

SUPER LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001281330

The super lock system is controlled by BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000001281331

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   >> Front super lock actuator (driver side) is OK.
  NO   >> Refer to DLK-809, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001281332

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		Continuity
M67	59	Ground	Does not exist
	60		

Is the inspection result normal?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END.

PASSENGER SIDE

PASSENGER SIDE : Description   INFOID:0000000001281335

The super lock system is controlled by BCM.

PASSENGER SIDE : Component Function Check   INFOID:0000000001281336

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   >> Front super lock actuator (passenger side) is OK.
NO   >> Refer to DLK-810, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure   INFOID:0000000001281337

1.CHECK OUTPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			Condition	Voltage (V) (Approx.)
(+)		(−)		
BCM connector	Terminal			
M67	54	Ground	UNLOCK (RELEASE)	$0 \rightarrow$ Battery voltage $\rightarrow 0$
	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	Front door lock actuator (passenger side) connector	Terminal	Continuity
M67	59	D68	1	Exists
	54		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M67	59	Ground	Does not exist
	54		

Is the inspection result normal?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

      >> INSPECTION END.

REAR LH

REAR LH : Description

INFOID:0000000001281339

The super lock system is controlled by BCM.

REAR LH : Component Function Check

INFOID:0000000001281340

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   >> Rear super lock actuator LH is OK.
NO   >> Refer to DLK-811, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000001281341

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	Rear door lock actuator (passenger side) connector	Terminal	Continuity
M67	59	D115	1	Exists
	54		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M67	59	Ground	Does not exist
	54		

Is the inspection result normal?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

        >> INSPECTION END.

REAR RH

REAR RH : Description   *INFOID:0000000001281343*

The super lock system is controlled by BCM.

REAR RH : Component Function Check   *INFOID:0000000001281344*

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   >> Rear super lock actuator RH is OK.
  NO   >> Refer to DLK-812, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure   *INFOID:0000000001281345*

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	Rear door lock actuator RH connector	Terminal	Continuity
M67	59	D95	1	Exists
	54		2	

4. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M67	59	Ground	Does not exist
	54		

<u>Is the inspection result normal?</u>

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

        >> INSPECTION END.

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

BACK DOOR OPENER ACTUATOR

Description
INFOID:0000000001298612

Opens the back door with the signal from BCM.

Component Function Check
INFOID:0000000001298613

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 opener actuator operation

Is the inspection result normal?
  YES   >> Back door opener actuator is OK.
  NO   >> Refer to DLK-814, "Diagnosis Procedure".

Diagnosis Procedure
INFOID:0000000001298614

1.CHECK BCM OUTPUT SIGNAL

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

BCM connector	Terminal	Back door lock assembly connector	Terminal	Continuity
M66	45	D190	4	Exists

4. Check continuity between BCM harness 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 harness connector and ground.

Back door lock assembly connector	Terminal	Ground	Continuity
D190	3		Exists

Is the inspection result normal?

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

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

FUEL LID OPENER ACTUATOR

Description

INFOID:0000000001301308

Locks/unlocks the fuel lid with the signal from BCM.

Component Function Check

INFOID:0000000001301309

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 fuel lid opener actuator are unlocked
	:DR UNLK	The fuel lid opener actuator is unlocked
	:LOCK	The fuel lid opener actuator are locked

Is the inspection result normal?

YES   >> Fuel lid opener actuator is OK.
NO   >> Refer to DLK-816, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001301310

1.CHECK BCM 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 3.
NO   >> GO TO 2.

2.CHECK FUEL LID OPENER ACTUATOR CIRCUIT

1. Disconnect BCM and fuel lid opener actuator connector.
2. Check continuity between BCM connector and fuel lid opener actuator connector.

BCM connector	Terminal	Fuel lid opener actuator connector	Terminal	Continuity
M67	56	B58	2	Exists
	60		1	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M67	56	Ground	Does not exist
	60		

Is the inspection result normal?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident"

>> INSPECTION END

BACK DOOR OPENER SWITCH

Description
INFOID:0000000001298620

Sends the back door opening signal to BCM.

Component Function Check
INFOID:0000000001298621

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 >> Back door opener switch is OK.
NO >> Refer to DLK-818, "Diagnosis Procedure".

Diagnosis Procedure
INFOID:0000000001298622

1.CHECK BCM INPUT SIGNAL

Check voltage between BCM harness connector and ground.

Terminals			Condition of back door opener switch	Voltage (V) (Approx.)
(+)		(−)		
BCM connector	Terminal			
M65	29	Ground	Pressed	0
			Released	Battery voltage

Is the inspection result normal?

YES >> GO TO 5.
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 assembly (opener switch) connector.
3. Check continuity between BCM harness connector and back door opener switch assembly (opener switch) harness connector.

BCM connector	Terminal	Back door opener switch assembly (opener switch) connector	Terminal	Continuity
M65	29	D186	1	Exists

4. Check continuity between BCM harness 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.

3.CHECK BCM OUTPUT SIGNAL

Check voltage between BCM harness connector and ground.

Terminals			Voltage (V) (Approx.)
(+)		(−)	
BCM connector	Terminal		
M65	29	Ground	Battery voltage

Is the inspection result normal?

  YES   >> GO TO 4.
  NO   >> GO TO 6.

4.CHECK BACK DOOR OPENER SWITCH GROUND CIRCUIT

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

Back door opener switch assembly (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 assembly (opener switch).
Refer to DLK-819, "Component Inspection".

Is the inspection result normal?

  YES   >> GO TO 6.
  NO   >> Replace back door opener switch assembly. Refer to DLK-923, "Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

  >> INSPECTION END

Component Inspection   INFOID:0000000001298623

1.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch assembly (opener switch).

Back door opener switch assembly (opener switch)	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 assembly (opener switch) is OK.
  NO   >> Replace back door opener switch assembly. Refer to DLK-923, "Removal and Installation".

BUZZER (COMBINATION METER)

Description
INFOID:0000000001298624

Performs operation method guide and warning with buzzer.

Component Function Check
INFOID:0000000001298625

1.CHECK FUNCTION

With CONSULT-III
Check the operation with "INSIDE BUZZER" in "Active Test" with CONSULT-III.

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-820, "Diagnosis Procedure".

Diagnosis Procedure
INFOID:0000000001298626

1.CHECK BUZZER (COMBINATION METER) CIRCUIT

Refer to DLK-820, "Component Function Check".
Is the inspection result normal?

Yes   >> GO TO 2.
No   >> Repair or replace buzzer (combination meter) circuit.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

HAZARD WARNING LAMPS

Description

INFOID:0000000001298627

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

Component Function Check

INFOID:0000000001298628

1.CHECK FUNCTION

With CONSULT-III

Check hazard warning lamp "FLASHER" in "Active Test" mode with CONSULT-III.

Is the inspection result normal?

YES >> Hazard warning lamp circuit is OK.
NO >> Refer to DLK-821, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001298629

1.CHECK HAZARD SWITCH CIRCUIT

Check hazard switch circuit.
Refer to DLK-821, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace hazard warning switch circuit.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

VEHICLE SPEED SIGNAL CIRCUIT

Description
INFOID:0000000001298630

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

Component Function Check
INFOID:0000000001298631

1.CHECK FUNCTION

Check that all doors are automatically locked at the vehicle speed of more than 25 km/h (16 MPH).

Is the inspection result normal?

YES   >> Vehicle speed signal circuit is OK.
NO   >> Refer to DLK-822, "Diagnosis Procedure".

Diagnosis Procedure
INFOID:0000000001298632

1.CHECK VEHICLE SPEED SIGNAL CIRCUIT

Check vehicle speed signal "VEHICLE SPEED" in "Data Monitor" mode with CONSULT-III.

Is the inspection result normal?

YES   >> GO TO 2.
NO   >> Repair or replace vehicle speed signal circuit.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

KEYFOB BATTERY

Description
INFOID:0000000001281364

Remote door lock and unlock control entry function available when operating on button.
• Door lock and unlock

Component Function Check
INFOID:0000000001281365

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-823, "Diagnosis Procedure".

Diagnosis Procedure
INFOID:0000000001281366

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-924, "Exploded
　　　　　　　View".

OCC0607D

< ECU DIAGNOSIS >

BCM (BODY CONTROL MODULE)

ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000001557111

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
VEHICLE SPEED	While driving	Equivalent to speedometer reading
IGN ON SW	Ignition switch OFF or ACC	Off
	Ignition switch ON	On
KEY ON SW	Mechanical key is removed from key cylinder	Off
	Mechanical key is inserted to key cylinder	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-DR	Driver's door closed	Off
	Driver's door opened	On
DOOR SW-AS	Passenger door closed	Off
	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
	Rear LH door opened	On
BACK DOOR SW	Back door closed	Off
	Back door opened	On
I-KEY LOCK	"LOCK" button of Intelligent Key or door request switch are not pressed	Off
	"LOCK" button of Intelligent Key or door request switch are pressed	On
I-KEY UNLOCK	"UNLOCK" button of Intelligent Key or door request switch are not pressed	Off
	"UNLOCK" button of Intelligent Key or door request switch are pressed	On
PUSH SW	Return to ignition switch to "LOCK" position	Off
	Press ignition switch	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
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
UNLOCK SHOCK	Other than the following	Off
	During the unlock operation interlocked with air bag	On

Monitor Item	Condition	Value/Status
UNLOCK WITH DR	**NOTE:** The item is indicated, but not monitored	On
		Off
LOCK WITH SPEED	Vehicle speed sensing auto door lock function does not operate	Off
	Vehicle speed sensing auto door lock function is operating	On
ACC ON SW	Ignition switch OFF	Off
	Ignition switch ACC or ON	On
REAR DEF SW	Rear window defogger switch OFF	Off
	Rear window defogger switch ON	On
TAIL LAMP SW	Lighting switch OFF	Off
	Lighting switch 1ST	On
TURN SIGNAL R	Turn signal switch OFF	Off
	Turn signal switch RH	On
TURN SIGNAL L	Turn signal switch OFF	Off
	Turn signal switch LH	On
HI BEAM SW	Lighting switch OFF	Off
	Lighting switch HI	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
PASSING SW	Other than lighting switch PASS	Off
	Lighting switch PASS	On
AUTO LIGHT SW	Lighting switch OFF	Off
	Lighting switch AUTO	On
FR FOG SW	Front fog lamp switch OFF	Off
	Front fog lamp switch ON	On
RR FOG SW	Rear fog lamp switch OFF	Off
	Rear fog lamp switch ON	On
ENGINE RUN	Engine stopped	Off
	Engine running	On
LIT-SEN FAIL	Light & rain sensor is in normal condition	OK
	Light & rain sensor is with error	NOTOK
AUT LIGHT SYS	Outside of the room is dark	On
	Outside of the room is bright	Off
HD LIGHT TIME	—	Displays a setting time of the follow me home function set by the work support
IGN SW CAN	Ignition switch OFF or ACC	Off
	Ignition switch ON	On
FR WIPER HI	Front wiper switch OFF	Off
	Front wiper switch HI	On
FR WIPER LOW	Front wiper switch OFF	Off
	Front wiper switch LO	On
FR WIPER INT	Front wiper switch OFF	Off
	Front wiper switch INT	On

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

Monitor Item	Condition	Value/Status
FR WASHER SW	Front washer switch OFF	Off
	Front washer switch ON	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	1 - 7
FR WIPER STOP	Any position other than front wiper stop position	Off
	Front wiper stop position	On
RR WIPER ON	Rear wiper switch OFF	Off
	Rear wiper switch ON	On
RR WIPER INT	Rear wiper switch OFF	Off
	Rear wiper switch INT	On
RR WIPER STOP	Rear wiper stop position	Off
	Other than rear wiper stop position	On
RR WASHER SW	Rear washer switch OFF	Off
	Rear washer switch ON	On
REVERSE SW CAN	**NOTE:** The item is indicated, but not monitored	Off
		On
H/L WASH SW	When headlamp washer switch is not pressed	Off
	When headlamp washer switch is pressed	On
FAN ON SIG	Blower fan motor switch OFF	Off
	Blower fan motor switch ON (other than OFF)	On
AIR COND SW	Compressor ON is not requested from auto amp. (A/C indicator OFF, blower fan motor switch OFF or etc.)	Off
	Compressor ON is requested from auto amp. (A/C indicator ON and blower fan motor switch ON).	On
HAZARD SW	Hazard switch OFF	Off
	Hazard switch ON	On
BRAKE SW	Brake pedal is not depressed	Off
	Brake pedal is depressed	On
TRNK OPNR SW	When back door opener switch is not pressed	Off
	When back door opener switch is pressed	On
HOOD SW	Close the hood **NOTE:** Vehicles without theft warning system are OFF-fixed	Off
	Open the hood	On
AUTO RELOCK	Auto lock function does not operate	Off
	Auto lock function is operating	On
GLS BREAK SEN	The vehicle without glass break sensor	Off
	The vehicle with glass break sensor	On
OIL PRESS SW	• Ignition switch OFF or ACC • Engine running	Off
	Ignition switch ON	On

TERMINAL LAYOUT

JSMIA0031GB

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-28, "COMB SW : CONSULT-III Function (BCM - COMB SW)".**
- **BCM reads the status of the combination switch at 10 ms internal normally. Refer to BCS-9, "System Description".**

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	−	Signal name	Input/ Output		
1 (W)	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
2 (G)	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
3 (W)	Ground	Ignition power supply	Input	Ignition switch OFF or ACC	0 V
				Ignition switch ON or START	Battery voltage
4 (SB)	Ground	ACC power supply	Input	Ignition switch OFF	0 V
				Ignition switch ON or ACC	Battery voltage
5 (LG)[*1] (R)[*2]	Ground	Key switch	Input	Insert mechanical key into ignition key cylinder	Battery voltage
				Remove mechanical key from ignition key cylinder	0 V

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	−	Signal name	Input/Output		
6 (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 washer 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

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	−	Signal name	Input/Output		
7 (GR)	Ground	Combination switch INPUT 4	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)
					JPMIA0165GB
					1.4 V
					Lighting switch 1ST (Wiper intermittent dial 4)
					JPMIA0166GB
					1.3 V
					Lighting switch AUTO (Wiper intermittent dial 4)
					JPMIA0168GB
					1.3 V
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 6
					JPMIA0169GB
					1.3 V
					Rear wiper INT (Wiper intermittent dial 4)
					JPMIA0196GB
					1.3 V

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	−	Signal name	Input/ Output		
8 (V)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF JPMIA0165GB 1.4 V
					Turn signal switch RH JPMIA0166GB 1.3 V
					Turn signal switch LH JPMIA0167GB 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		
9 (G)*3 (B)*4	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF JPMIA0165GB 1.4 V
					Lighting switch 2ND JPMIA0166GB 1.3 V
					Lighting switch PASS JPMIA0167GB 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		
10 (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
11 (B)	Ground	Audio link	Input/Output	—	—

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	−	Signal name	Input/ Output		
12 (LG)	Ground	Rear door switch RH	Input	Rear door switch RH	**OFF** (When rear door RH closed) (V) 15 10 5 0 10 ms PKID0924E 11.2 V
					ON (When rear door RH opened) → 0 V
13 (V)	Ground	Back door switch	Input	Back door switch	**OFF** (When back door closed) (V) 15 10 5 0 10 ms PKID0924E 11.2 V
					ON (When back door opened) → 0 V
14 (P)[*3] (BR)[*4]	Ground	Passenger door switch	Input	Passenger door switch	**OFF** (When passenger door closed) (V) 15 10 5 0 10 ms PKID0924E 11.2 V
					ON (When passenger door opened) → 0 V
15 (BR)[*3] (P)[*4]	Ground	Driver door switch	Input	Driver door switch	**OFF** (When driver door closed) (V) 15 10 5 0 10 ms PKID0924E 11.2 V
					ON (When driver door opened) → 0 V

Terminal No. (Wire color) +	−	Description Signal name	Input/Output	Condition		Value (Approx.)
16 (GR)	Ground	Rear door switch LH	Input	Rear door switch LH	OFF (When rear door LH closed)	PKID0924E 11.2 V
					ON (When rear door LH opened)	0 V
17 (L)	Ground	Door lock status indicator	Output	Door lock status indicator	ON	12 V
					OFF	0 V
20 (SB)	Ground	Rear window defogger switch	Input	Rear window defogger switch	Not pressed	JPMIA0154GB 1.1 V
					While pressing	0 V
21 (P)	—	CAN-L	Input/Output	—		—
22 (L)	—	CAN-H	Input/Output	—		—
23 (V)	Ground	Security indicator	Output	Security indicator	ON	0 V
					Blinking	JPMIA0014GB 10.3 V
					OFF	12 V
24 (GR)	Ground	Light & rain sensor serial link	Input/Output		Ignition switch OFF or ACC	12 V
					Ignition switch ON	JPMIA0156GB 8.7 V
25 (G)	Ground	Alarm link	Output	—		—

Terminal No. (Wire color) +	−	Signal name	Input/ Output	Condition		Value (Approx.)
26 (GR)*5 (LG)*6	Ground	Blower fan motor switch	Input	Blower fan motor switch	OFF	11.2 V
					ON (other than OFF)	0 V
27 (P)*5 (Y)*6	Ground	A/C switch	Input	Ignition switch ON	Compressor ON is not requested from auto amp. (A/C indicator OFF, blower fan motor switch OFF or etc.)	11.2 V
					Compressor ON is requested from auto amp. (A/C indicator ON and blower fan motor switch ON).	0 V
28 (LG)*7 (R)*8	Ground	Shock detect sensor	Input	Ignition switch OFF or ACC		0 V
				Ignition switch ON		6.0 V
29 (LG)*3 (O)*4	Ground	Back door opener switch	Input	Back door opener switch	Not pressed	1.2 V
					Pressed	0 V
32 (BR)	Ground	Door lock/unlock switch (Unlock)	Input	Door lock/unlock switch	Not pressed	1.2 V
					Pressed to the unlock side	0 V

Terminal No. (Wire color) +	Terminal No. (Wire color) −	Description Signal name	Description Input/Output	Condition	Condition	Value (Approx.)
33 (W)[*9] (Y)[*10]	Ground	Hazard switch	Input	Hazard switch	OFF	JPMIA0154GB 1.3 V
					ON	0 V
34 (SB)[*3] (P)[*4]	Ground	Door lock/unlock switch (Lock)	Input	Door lock/unlock switch	Not pressed	JPMIA0154GB 1.2 V
					Pressed to the lock side	0 V
35 (G)	Ground	Headlamp washer switch	Input	Headlamp washer switch	Not pressed	JPMIA0154GB 1.2 V
					Pressed to the lock side	0 V
36 (G)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Turn signal switch RH	JPMIA0164GB 9.1 V
					Lighting switch 2ND	
					Lighting switch HI	
					Lighting switch 1ST	
37 (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 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	
					Rear wiper switch ON (Wiper intermittent dial 4)	

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	−	Signal name	Input/ Output			
38 (W)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Front wiper switch LO	JPMIA0162GB 9.3 V
					Front wiper switch MIST	
					Front wiper switch INT	
					Lighting switch AUTO	
					Rear fog lamp switch ON	
39 (Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Turn signal switch LH	JPMIA0163GB 9.3 V
					Lighting switch PASS	
					Lighting switch 2ND	
					Front fog lamp switch ON	
40 (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
					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	
					Rear wiper switch INT (Wiper intermittent dial 4)	
41 (LG)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
42 (V)	Ground	Interior room lamp power supply	Output	Interior room lamp battery saver activation		0 V
				Interior room lamp battery saver no activation		12 V
43 (SB)	Ground	Rear wiper motor	Output	Rear wiper switch OFF		0 V
				Rear wiper switch ON		12 V
44 (B)	Ground	Rear wiper auto stop	Input	Ignition switch ON	Rear wiper stop position	JPMIA0197GB
					Any position other than rear wiper stop position	0 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	−	Signal name	Input/Output			
45 (V)	Ground	Back door lock actuator	Output	Back door opener switch	Pressed	SKIA9232E
					Not pressed	0 V
47 (BR)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	PKID0926E 6.5 V
48 (GR)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	PKID0926E 6.5 V
49 (Y)	Ground	Rear fog lamp	Output	Rear fog lamp	OFF	0 V
					ON	12 V
50 (G)	Ground	Unlock sensor	Input	Driver's door	Unlock	5 V
					lock	0 V
51 (R)	Ground	Stop lamp switch	Input	Depress the brake pedal		Battery voltage
				Release the brake pedal		0 V
52 (R)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	12 V
					ON	0 V
53 (L)	Ground	Power window power supply (IGN)	Output	Ignition switch	OFF or ACC	0 V
					ON	12 V
54 (O)	Ground	Door unlock (All other than driver's door)	Output	Door lock/unlock switch	Pressed to the unlock side	SKIA9232E
					Not pressed	0 V
55 (B)	Ground	Ground	—	Ignition switch ON		0 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	−	Signal name	Input/ Output			
56 (V)	Ground	Door lock (All) and fuel lid lock	Output	Door lock/un-lock switch	Not pressed	0 V
					Pressed to the lock side	(V) 15 10 5 0 0.1s SKIA9232E
57 (Y)	Ground	Battery power sup-ply	Input	Ignition switch OFF		Battery voltage
58 (P)	Ground	Power window pow-er supply (BAT)	Output	Ignition switch OFF		12 V
59 (R)	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		12 V
60 (G)	Ground	Driver's door unlock and fuel lid unlock	Output	Door lock/un-lock switch	Pressed to the unlock side	(V) 15 10 5 0 0.1s SKIA9232E
					Not pressed	0 V

*1: With Intelligent Key

*2: Without Intelligent Key

*3: RHD models

*4: LHD models

*5: With gasoline engine

*6: With diesel engine

*7: RHD models with side air bag

*8: LHD models with side air bag

*9: With xenon headlamp and daytime light system

*10: Except with xenon headlamp and daytime light system

Wiring Diagram - SUPER LOCK CONTROL SYSTEM -

INFOID:0000000001281368

JCKWA0369GE

2007/02/28

JCKWA0370GE

SUPER LOCK SYSTEM (WITHOUT INTELLIGENT KEY)

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

Terminal No.	Color of Wire	Signal Name [Specification]
2	P	–[RHD models]

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

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

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
6	V	–
14	O	–
15	L	–

Connector No.	B58
Connector Name	FUEL LID OPENER ACTUATOR
Connector Type	M04FW-LC

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	UNLOCK
2	V	LOCK

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
15	P	–
16	V	–
31	GR	–

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

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

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	–
3	O	–
4	R	–
78	Y	–
88	BR	–
97	V	–

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

Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	–[RHD models]

JCKWA0371GE

SUPER LOCK SYSTEM (WITHOUT INTELLIGENT KEY)

Connector No.	B91
Connector Name	WIRE TO WIRE
Connector Type	NS02FW-CS

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

Connector No.	D21
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
8	G	–
20	BR	–
22	P	–

Connector No.	B89
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	R	–
6	G	–

Connector No.	B95
Connector Name	WIRE TO WIRE
Connector Type	NS02MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
2	R	–

Connector No.	B87
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS

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

Connector No.	B94
Connector Name	WIRE TO WIRE
Connector Type	NS02FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
2	R	–

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
8	V	–

Connector No.	B92
Connector Name	WIRE TO WIRE
Connector Type	NS02MW-CS

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

JCKWA0372GE

SUPER LOCK SYSTEM (WITHOUT INTELLIGENT KEY)

Connector No. D22
Connector Name WIRE TO WIRE
Connector Type NS16FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	—
8	BR	—
10	O	—
12	B	—

Connector No. D25
Connector Name POWER WINDOW MAIN SWITCH
Connector Type NS16FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	—

Connector No. D26
Connector Name POWER WINDOW MAIN SWITCH
Connector Type NS03FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
17	B	—
18	G	—

Connector No. D29
Connector Name FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
Connector Type FEA04FB-FHA2-LC

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	—
2	O	—
3	SB	—
4	P	—
5	B	—

Connector No. D62
Connector Name WIRE TO WIRE
Connector Type NS16FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	O	—
3	R	—
8	V	—

Connector No. D68
Connector Name FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Type FEA04FB-FHA2-LC

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	—
2	O	—
3	V	—

Connector No. D91
Connector Name WIRE TO WIRE
Connector Type NS12FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	—
2	R	—
6	G	—

Connector No. D95
Connector Name REAR DOOR LOCK ACTUATOR RH
Connector Type FEA04FB-FHA2-LC

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	—
2	G	—
3	V	—

JCKWA0373GE

SUPER LOCK SYSTEM (WITHOUT INTELLIGENT KEY)

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
8	V	—

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.	D151
Connector Name	WIRE TO WIRE
Connector Type	NS08FBR-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	—

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	—

Connector No.	D115
Connector Name	REAR DOOR LOCK ACTUATOR LH
Connector Type	FEA04FB-FHA2-LC

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	—
2	G	—
3	V	—

Connector No.	D190
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS04FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	—
2	V	—

Connector No.	D111
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	—
2	R	—
6	G	—

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	NS08MBR-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	—

JCKWA0374GE

SUPER LOCK SYSTEM (WITHOUT INTELLIGENT KEY)

Connector No. M20
Connector Name WIRE TO WIRE
Connector Type TH24MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
8	SB	–
20	BR	–
22	B	–[Without Intelligent Key]

Connector No. M14
Connector Name WIRE TO WIRE
Connector Type NS16FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
6	V	–
14	G	–[RHD models]
15	R	–

Connector No. M13
Connector Name WIRE TO WIRE
Connector Type TH32FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
15	P	–
16	Y	–[RHD models]
31	R	–[RHD models]

Connector No. M11
Connector Name WIRE TO WIRE
Connector Type TH80FW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
1	O	–[RHD models]
3	O	–[RHD models]
4	R	–
78	LG	–
88	BR	–
97	V	–

Connector No. M59
Connector Name AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type TK20FY-EX-SC

Terminal No.	Color of Wire	Signal Name [Specification]
19	LG	DEPLOYMENT INFORMATION[RHD models with side air bag]

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. M24
Connector Name KEY SWITCH
Connector Type TK02MBR-P

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	–
2	Y	–

Connector No. M21
Connector Name WIRE TO WIRE
Connector Type NS16MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
8	R	–
10	O	–
12	B	–

JCKWA0375GE

Connector No. M67
Connector Name BCM (BODY CONTROL MODULE)
Connector Type FHA08FB

60 59 58 57 56 55 54 53

Terminal No.	Color of Wire	Signal Name [Specification]
54	G	DOOR UNLOCK OUTPUT (OTHER)[RHD models]
55	B	GND
56	V	DOOR LOCK OUTPUT (ALL)
57	Y	BAT(F/L)
59	R	SUPER LOCK SET OUTPUT
60	O	DOOR UNLOCK/RELEASE OUTPUT(DR)[RHD models]

Connector No. M66
Connector Name BCM (BODY CONTROL MODULE)
Connector Type FEA12FBR

52 51 50 49 48 47 46 45 44 43 42 41

Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(FUSE)
50	G	EXTRA INPUT1[RHD models with Intelligent Key]

Connector No. M69
Connector Name DOOR LOCK AND UNLOCK SWITCH
Connector Type TK10FW

7 2 5 / 4 1 8 3 6

Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-
2	BR	-
3	B	-
4	B	-
6	L	-

SUPER LOCK SYSTEM (WITHOUT INTELLIGENT KEY)

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

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]
5	R	KEY SW[Without Intelligent Key]
12	LG	DOOR SW (RR)
13	Y	DOOR SW (BACK)[RHD models]
14	P	DOOR SW (AS)[RHD models]
15	BR	DOOR SW (DR)[RHD models]
16	R	DOOR SW (RL)[RHD models]
17	L	DOOR LOCK INDICATOR
21	P	CAN-L
22	L	CAN-H
28	LG	SHOCK DETECT SIG[RHD models with side air bag]
32	BR	LOCK UNLOCK SW (UNLOCK)
34	SB	LOCK UNLOCK SW (LOCK)[RHD models]

Connector No. M84
Connector Name WIRE TO WIRE
Connector Type NS16MW-CS

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

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
3	R	-
8	V	-

Connector No. M77
Connector Name WIRE TO WIRE
Connector Type TH80MW-CS16-TM4

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

JCKWA0376GE

Wiring Diagram - REMOTE KEYLESS ENTRY CONTROL SYSTEM -

INFOID:0000000001281369

JCKWA0405GE

REMOTE KEYLESS ENTRY SYSTEM (RHD MODELS)

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
78	Y	–
88	BR	–

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
15	P	–
16	V	–
31	GR	–

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

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	P	– [RHD models]

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

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	– [RHD models]

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

H.S.

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

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

H.S.

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

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
8	V	–

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	NS08FBR-CS

H.S.

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

JCKWA0406GE

REMOTE KEYLESS ENTRY SYSTEM (RHD MODELS)

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.

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

Connector No.	M24
Connector Name	KEY SWITCH
Connector Type	TK02MBR-P

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	–
2	Y	–

Connector No.	D190
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS04FW-CS

H.S.

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

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
15	P	–
16	Y	–[RHD models]
31	R	–[RHD models]

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	NS08MBR-CS

H.S.

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

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
78	LG	–
88	BR	–

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
8	V	–

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	–

JCKWA0407GE

REMOTE KEYLESS ENTRY SYSTEM (RHD MODELS)

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB

Terminal No.	Color of Wire	Signal Name [Specification]
54	G	DOOR UNLOCK OUTPUT (OTHER)[RHD models]
55	B	GND
56	V	DOOR LOCK OUTPUT (ALL)
57	Y	BAT(F/L)
59	R	SUPER LOCK SET OUTPUT
60	O	DOOR UNLOCK/RELEASE OUTPUT(DR)[RHD models]

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR

Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(FUSE)
42	V	ROOM LAMP POWER SUPPLY
45	P	BACK DOOR OPEN OUTPUT[RHD models]
47	BR	FRASHER OUTPUT (LH)
48	GR	FRASHER OUTPUT (RH)
52	R	ROOM LAMP CONTROL

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

Terminal No.	Color of Wire	Signal Name [Specification]
4	SB	ACC SW
5	LG	KEY SW[Without Intelligent Key]
12	LG	DOOR SW (RR)
13	Y	DOOR SW (BACK)[RHD models]
14	P	DOOR SW (AS)[RHD models]
15	BR	DOOR SW (DR)[RHD models]
16	R	DOOR SW (RL)[RHD models]
21	P	CAN-L
22	L	CAN-H
33	Y	HAZARD SW(Except with xenon headlamp and daytime light system]

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.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

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

JCKWA0408GE

Wiring Diagram - BACK DOOR OPENER CONTROL SYSTEM -

INFOID:0000000001281370

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

BACK DOOR OPENER SYSTEM

2007/02/28

JCKWA0409GE

BACK DOOR OPENER SYSTEM

Connector No. D151
Connector Name WIRE TO WIRE
Connector Type NS08FBR-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
4	LG	–
7	W	–

Connector No. D190
Connector Name BACK DOOR LOCK ASSEMBLY
Connector Type NS04FW-CS

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

Connector No. B77
Connector Name WIRE TO WIRE
Connector Type NS10MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
4	W	–
8	V	–
10	G	–

Connector No. D186
Connector Name BACK DOOR OPENER SWITCH ASSEMBLY
Connector Type TK06MW-1V

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BCM
2	B	GND

Connector No. B4
Connector Name WIRE TO WIRE
Connector Type NS16MW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
16	W	–

Connector No. D181
Connector Name WIRE TO WIRE
Connector Type NS08MBR-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
4	G	–
7	W	–

Connector No. B3
Connector Name WIRE TO WIRE
Connector Type TH32MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
16	V	–
32	G	–

Connector No. D157
Connector Name WIRE TO WIRE
Connector Type NS10FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
4	W	–[LHD models]
4	V	–[RHD models]
8	V	–
10	G	–

JCKWA0410GE

A

B

C

D

E

F

G

H

I

J

DLK

L

M

N

O

P

Connector No. M14
Connector Name WIRE TO WIRE
Connector Type NS16FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
16	V	–[LHD models]
16	P	–[RHD models]

Connector No. M77
Connector Name WIRE TO WIRE
Connector Type TH80MW-CS16-TM4

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

Connector No. M13
Connector Name WIRE TO WIRE
Connector Type TH32FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
16	V	–[LHD models]
16	Y	–[RHD models]
32	O	–

Connector No. M67
Connector Name BCM (BODY CONTROL MODULE)
Connector Type FHA08FB

Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND
57	Y	BAT(F/L)

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. M66
Connector Name BCM (BODY CONTROL MODULE)
Connector Type FEA12FBR

Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(FUSE)
45	V	BACK DOOR OPEN OUTPUT[LHD models]
45	P	BACK DOOR OPEN OUTPUT[RHD models]

BACK DOOR OPENER SYSTEM

Connector No. E105
Connector Name WIRE TO WIRE
Connector Type TH80FW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
5	V	–

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

Terminal No.	Color of Wire	Signal Name [Specification]
13	V	DOOR SW (BACK)[LHD models]
13	Y	DOOR SW (BACK)[RHD models]
21	P	CAN-L
22	L	CAN-H
29	O	BACK DOOR OPEN SW

JCKWA0411GE

Fail Safe

INFOID:0000000001557113

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC is detected.

DTC	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 MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper auto stop signal.
When the rear wiper auto stop signal does not change more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation
1. Turn ignition switch OFF.
2. Pass more than 1 minute after the rear wiper stop.
3. Turn ignition switch ON.
4. Operate the rear wiper switch.

HIGH FLASHER OPERATION

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.

FAIL-SAFE CONTROL BY LIGHT & RAIN SENSOR MALFUNCTION

BCM detects the light & rain sensor serial link error and the light & rain sensor malfunction.
BCM controls the following fail-safe when light & rain sensor has a malfunction.

Fail-safe Control
• 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:0000000001557114

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:0000000001557115

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.

DTC	TIME		Fail-safe	Reference
U1000: CAN COMM CIRCUIT	0	1 - 39	—	BCS-33
U1010: CONTROL UNIT (CAN)	0	1 - 39	—	BCS-34
B2190: NATS ANTENNA AMP	CRNT	PAST	×	• With Intelligent Key system: SEC-41 • Without Intelligent Key system: SEC-254
B2191: DIFFERENCE OF KEY	CRNT	PAST	×	• With Intelligent Key system: SEC-43 • Without Intelligent Key system: SEC-256
B2192: ID DISCORD BCM-ECM	CRNT	PAST	×	• With Intelligent Key system: SEC-38 • Without Intelligent Key system: SEC-251
B2193: CHAIN OF BCM-ECM	CRNT	PAST	×	• With Intelligent Key system: SEC-40 • Without Intelligent Key system: SEC-253
B2194: DISCORD BCM-I-KEY	CRNT	PAST	×	SEC-53
B2195: ANTI SCANNING	CRNT	PAST	×	• With Intelligent Key system: SEC-54 • Without Intelligent Key system: SEC-264
B2196: DONGLE NG	CRNT	PAST	×	• With Intelligent Key system: SEC-55 • Without Intelligent Key system: SEC-265

SYMPTOM DIAGNOSIS

DOOR LOCK

Symptom Table

INFOID:0000000001515880

The diagnostics item numbers show the sequence for inspection. Inspection in order from item 1.

NO.	Function	Operation condition	Symptom	Diagnostic Item	Reference page
1	Door lock and unlock switch function	Press door lock and unlock switch.	Door does not lock/unlock	All doors	DLK-859
				Driver side	DLK-859
				Passenger side	DLK-860
				Rear LH	DLK-860
				Rear RH	DLK-861
		Open the door from inside the vehicle.	Door does not open from inside the vehicle.	Driver side	DLK-862
				Passenger side	DLK-862
				Rear LH	DLK-862
				Rear RH	DLK-863
		Lock all doors with key fob.	Door lock and unlock switch indicator does not illuminate.	—	DLK-864
2	Key reminder function	Open the door, when mechanical key is inserts into ignition key cylinder.	Key reminder function does not operate	—	DLK-865
3	Auto door lock function	Unlock all doors and wait more than 2 minutes.	Auto door lock operation does not operate	—	DLK-866
4	Vehicle speed sensing auto door lock function	Vehicle speed is more than 25km/h.	Vehicle speed sensing auto door lock operation does not operate	—	DLK-867
5	Back door opener function	Press back door opener switch.	Back door does not open	—	DLK-868
6	Warning function	Press back door opener switch under the following conditions. • Door is locked with door lock and unlock switch. • Speed sensing lock or only driver side is unlocked with anti-hijack function.	Back door open warning does not operate	—	DLK-869
7	Hazard reminder function	Press Key fob button.	Hazard reminder operation does not operate	—	DLK-870

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

ALL DOOR

ALL DOOR : Description

INFOID:0000000001515881

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-756, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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 key fob.

ALL DOOR : Diagnosis Procedure

INFOID:0000000001515882

1.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check power supply and ground circuit.
Refer to DLK-788, "BCM : Diagnosis Procedure" .
Is the inspection result normal?

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

2.CHECK KEY FOB BATTERY

Check key fob battery.
Refer to DLK-823, "Component Function Check".
Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-795, "PASSENGER SIDE : Component Function Check" (passenger side).
Refer to DLK-797, "REAR LH : Component Function Check" (rear LH).
Refer to DLK-798, "REAR RH : Component Function Check" (rear RH).
Refer to DLK-800, "BACK DOOR : Component Function Check" (back door).
Is the inspection result normal?

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

4.CONFIRM THE OPERATION

Confirm the operation again.
Is the result normal?

YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO   >> GO TO 1.

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001515883

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-756, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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 key fob.

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001515884

1.CHECK DOOR LOCK ACTUATOR

Check door lock actuator (driver side).
Refer to DLK-804, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

  YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
  NO   >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001515885

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-756, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001515886

1.CHECK DOOR LOCK ACTUATOR

Check door lock actuator (passenger side).
Refer to DLK-644, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

  YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
  NO   >> GO TO 1.

REAR LH

REAR LH : Description

INFOID:0000000001515887

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-756, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

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.

REAR LH : Diagnosis Procedure

INFOID:0000000001515888

1.CHECK DOOR LOCK ACTUATOR

Check door lock actuator LH.
Refer to DLK-645, "REAR LH : Component Function Check".
Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.
Is the result normal?

 YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
 NO >> GO TO 1.

REAR RH

REAR RH : Description

INFOID:0000000001515889

NOTE:
• Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-756, "Work Flow".
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
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.

REAR RH : Diagnosis Procedure

INFOID:0000000001515890

1.CHECK DOOR LOCK ACTUATOR

Check door lock actuator RH.
Refer to DLK-646, "REAR RH : Component Function Check".
Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.
Is the result normal?

 YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
 NO >> GO TO 1.

DOOR DOES NOT OPEN FROM INSIDE THE VEHICLE
DRIVER SIDE

DRIVER SIDE : Description
INFOID:0000000001515924

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-756, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)
- Doors are locked by key fob.

DRIVER SIDE : Diagnosis Procedure
INFOID:0000000001515925

1.CHECK SUPER LOCK ACTUATOR

Check super lock actuator (driver side).
Refer to DLK-809, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION
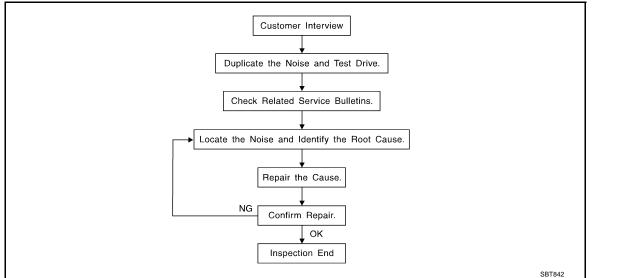
Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Description
INFOID:0000000001515926

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-756, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)
- Doors are locked by key fob.

PASSENGER SIDE : Diagnosis Procedure
INFOID:0000000001515927

1.CHECK SUPER LOCK ACTUATOR

Check super lock actuator (passenger side).
Refer to DLK-810, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

REAR LH

REAR LH : Description
INFOID:0000000001515928

NOTE:
- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-756, "Work Flow".

- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)

- Doors are locked by key fob.

REAR LH : Diagnosis Procedure   *INFOID:0000000001515929*

1.CHECK SUPER LOCK ACTUATOR

Check super lock actuator LH.
Refer to DLK-811, "REAR LH : Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

  YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
  NO   >> GO TO 1.

REAR RH

REAR RH : Description   *INFOID:0000000001515930*

NOTE:

- Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-756, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)

- Doors are locked by key fob.

REAR RH : Diagnosis Procedure   *INFOID:0000000001515931*

1.CHECK SUPER LOCK ACTUATOR

Check super lock actuator RH.
Refer to DLK-812, "REAR RH : Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

  YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
  NO   >> GO TO 1.

DOOR LOCK AND UNLOCK SWITCH INDICATOR DOES NOT ILLUMINATE

Description

INFOID:0000000001524141

NOTE:
• Before performing the diagnosis in the following table, check "Work Flow". Refer to <u>DLK-756, "Work Flow"</u>.
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
Conditions of Vehicle (Operating Conditions)
• Door lock function is normal.

Diagnosis Procedure

INFOID:0000000001524142

1.CHECK DOOR LOCK AND UNLOCK SWITCH INDICATOR

Check door lock and unlock switch indicator.
Refer to <u>DLK-792, "Component Function Check"</u>.

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES   >> Check intermittent incident. Refer to <u>GI-39, "Intermittent Incident"</u>.
NO   >> GO TO 1.

KEY REMINDER FUNCTION DOES NOT OPERATE

Description

INFOID:0000000001515891

NOTE:
- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-756, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)
- Request switch operation and door lock and unlock switch operation are normal.

Diagnosis Procedure

INFOID:0000000001515892

1.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-794, "DRIVER SIDE : Component Function Check". (Driver side)

Is the inspection result normal?

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

2.CHECK KEY SWITCH

Check key switch.
Refer to DLK-802, "Component Function Check".

Is the inspection result normal?

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

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

  YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
  NO   >> GO TO 1.

AUTO DOOR LOCK OPERATION DOES NOT OPERATE

Description

INFOID:0000000001515893

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-756, "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-766, "AUTO DOOR LOCK : System Description".

Conditions of Vehicle (Operating Conditions)
- Request switch operation and door lock and unlock switch operation are normal.

Diagnosis Procedure

INFOID:0000000001515894

1.CHECK "AUTO LOCK SET" SETTING IN "WORK SUPPORT"

Check "AUTO LOCK SET" setting in "WORK SUPPORT".
Refer to DLK-782, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPER-ATE

Description

INFOID:0000000001515895

NOTE:
• Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-756, "Work Flow".
• Understand the operation when does it work, refer to DLK-769, "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.
Conditions of Vehicle (Operating Conditions)
• Request switch operation and door lock and unlock switch operation are normal.

Diagnosis Procedure

INFOID:0000000001515896

1.CHECK VEHICLE SPEED SIGNAL

Check vehicle speed signal.
Refer to DLK-822, "Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO   >> GO TO 1.

BACK DOOR DOES NOT OPENED

Description

INFOID:0000000001515897

NOTE:
- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-756, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)
- Door lock function is normal.
- Vehicle speed is less than 5 km/h (3MPH).
- All doors are unlocked.

Diagnosis Procedure

INFOID:0000000001515898

1.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.
Refer to DLK-814, "Component Function Check".

Is the inspection result normal?

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

2.CHECK BACK DOOR OPENER ACTUATOR

Check back door opener actuator.
Refer to DLK-814, "Component Function Check".

Is the inspection result normal?

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

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

BACK DOOR OPEN WARNING DOES NOT OPERATE

Description
INFOID:0000000001515899

NOTE:
• Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-756, "Work Flow".
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)
• Door lock function and back door opener function is normal.

Diagnosis Procedure
INFOID:0000000001515900

1.CHECK BUZZER (COMBINATION METER)

Check buzzer (combination meter).
Refer to DLK-820, "Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

  YES   >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
  NO   >> GO TO 1.

HAZARD REMINDER OPERATION DOES NOT OPERATE

Description

INFOID:0000000001515901

NOTE:
• Before performing the diagnosis in the following table, check "Work Flow". Refer to DLK-756, "Work Flow".
• Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)
• "HAZARD ANSWER BACK" is ON when setting on CONSULT-III.
• Door lock function is normal.

Diagnosis Procedure

INFOID:0000000001515902

1.CHECK SETTING OF BUZZER REMINDER WITH CONSULT-III

Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT".
Refer to DLK-784, "MULTIREMOTE ENT : CONSULT-III Function (BCM - MULTIREMOTE ENT)".

Is the inspection result normal?

YES >> GO TO 2.
NO   >> Set "HAZARD ANSWER BACK" setting in "WORK SUPPORT". Refer to DLK-784, "MULTIRE-MOTE ENT : CONSULT-III Function (BCM - MULTIREMOTE ENT)".

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO   >> GO TO 1.

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow
INFOID:0000000001537527

CUSTOMER INTERVIEW
↓
Duplicate the Noise and Test Drive.
↓
Check Related Service Bulletins.
↓
Locate the Noise and Identify the Root Cause.
↓
Repair the Cause.
↓
NG — Confirm Repair.
↓ OK
Inspection End

SBT842

CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of the customer's comments; refer to DLK-875, "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.

SQUEAK AND RATTLE TROUBLE DIAGNOSES

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.

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-873, "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

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:0000000001537528

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

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. Cluster lid A and instrument panel
2. Acrylic lens and combination meter housing
3. Instrument panel to front pillar garnish
4. Instrument panel to windshield
5. Instrument panel mounting pins
6. Wiring harnesses behind the combination meter
7. A/C defroster duct and duct joint

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

CAUTION:
Do not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will not be able to recheck the repair.

CENTER CONSOLE

Components to pay attention to include:

1. Shifter assembly cover to finisher
2. A/C control unit and cluster lid C
3. Wiring harnesses behind audio and A/C control unit

The instrument panel repair and isolation procedures also apply to the center console.

DOORS

Pay attention to the:

1. Finisher and inner panel making a slapping noise
2. Inside handle escutcheon to door finisher
3. Wiring harnesses tapping
4. Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks to repair the noise.

TRUNK

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

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

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

SUNROOF/HEADLINING

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

1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
2. Sunvisor shaft shaking in the holder
3. Front or rear windshield touching headlining and squeaking

Again, pressing on the components to stop the noise while duplicating the conditions can isolate most of these incidents. Repairs usually consist of insulating with felt cloth tape.

SEATS

When isolating seat noise it is important to note the position the seat is in and the load placed on the seat when the noise is present. These conditions should be duplicated when verifying and isolating the cause of the noise.

Cause of seat noise include:

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

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

UNDERHOOD

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

Causes of transmitted underhood noise include:

1. Any component mounted to the engine wall
2. Components that pass through the engine wall
3. Engine wall mounts and connectors
4. Loose radiator mounting pins
5. Hood bumpers out of adjustment
6. Hood striker out of adjustment

These noises can be difficult to isolate since they cannot be reached from the interior of the vehicle. The best method is to secure, move or insulate one component at a time and test drive the vehicle. Also, engine RPM or load can be changed to isolate the noise. Repairs can usually be made by moving, adjusting, securing, or insulating the component causing the noise.

Diagnostic Worksheet

INFOID:0000000001537529

**SQUEAK & RATTLE
DIAGNOSTIC WORKSHEET**

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

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

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

PIIB8740E

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

_____

_____

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

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

III. WHEN DRIVING: ### IV. WHAT TYPE OF NOISE

☐ through driveways   ☐ squeak (like tennis shoes on a clean floor)
☐ over rough roads   ☐ creak (like walking on an old wooden floor)
☐ over speed bumps   ☐ rattle (like shaking a baby rattle)
☐ only about _____ mph   ☐ knock (like a knock at the door)
☐ on acceleration   ☐ tick (like a clock second hand)
☐ coming to a stop   ☐ thump (heavy, muffled knock noise)
☐ on turns: left, right or either (circle) ☐ buzz (like a bumble bee)
☐ with passengers or cargo
☐ other: _____
☐ after driving _____ miles or _____ minutes

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

DLK-876

PRECAUTION

PRECAUTIONS

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

INFOID:0000000001524332

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the "SRS AIRBAG" and "SEAT BELT" 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 AIRBAG".**
- **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 for Procedure without Cowl Top Cover

INFOID:0000000001451940

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

PIIB3706J

Work

INFOID:0000000001451941

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

PREPARATION
PREPARATION
Commercial Service Tools

INFOID:0000000001451942

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

ON-VEHICLE REPAIR

HOOD
HOOD ASSEMBLY

HOOD ASSEMBLY : Exploded View
INFOID:0000000001451864

REMOVAL

SEC. 650

JMKIA0541ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT

JMKIA0542GB

1.	Hood assembly	2.	Hood bumper rubber side	3.	Hood hinge
4.	Hood lock assembly	5.	Front grille	6.	Front bumper
7.	Front combination lamp	8.	Front fender		

Refer to GI-4, "Components" for symbols in the figure.

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000001451865

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
   - Clamp
   - Hood support rod
   - Grommet
   - Radiator core seal
   - Hood bumper rubber center
   - Hood bumper rubber side

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-881, "HOOD ASSEMBLY : Adjustment".**

HOOD ASSEMBLY : Adjustment

INFOID:0000000001451866

mm(in)

Portion				Standard
Hood – Front grill	**A – A**	**E**	**Clearance**	**4.0 – 8.0 (0.157 – 0.315)**
		F	**Surface height**	**- 0.4 – 4.0 (- 0.016 – 0.157)**
Hood – Front bumper	**B – B**	**G**	**Clearance**	**4.0 – 8.0 (0.157 – 0.315)**
		H	**Surface height**	**- 0.4 – 4.0 (- 0.016 – 0.157)**
Hood – Front combination lamp	**C – C**	**I**	**Clearance**	**1.8 – 6.2 (0.071 – 0.244)**
		J	**Surface height**	**- 1.3 – 2.7 (- 0.051 – 0.106)**
Hood – Front fender	**D – D**	**K**	**Clearance**	**2.6 – 4.6 (0.102 – 0.181)**
		L	**Surface height**	**- 1.0 – 1.0 (- 0.039 – 0.039)**

1. Check the clearance and the surface height between the hood and each part by visually and touching. (Fitting standard dimension in the table below should be satisfied.)

2. Remove the front grille. Refer to EXT-18, "Removal and Installation".

3. In case any parts are out of specification, adjust them according to the procedures shown below.

4. Remove the hood lock and adjust the height by rotating the hood bumper rubber side until the hood becomes 1 to1.5 mm (0.04 to 0.059 in) lower than the fender.

5. 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.

6. 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)].

PIIB5794E

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)

7. After adjustment tighten lock bolts to the specified torque.

HOOD HINGE

HOOD HINGE : Exploded View

INFOID:0000000001451867

SEC. 650

JMKIA0541ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

HOOD HINGE : Removal and Installation

INFOID:0000000001451868

REMOVAL

HOOD

1. Remove the hood assembly. Refer to DLK-880, "HOOD ASSEMBLY : Removal and Installation".
2. Remove the front fender. Refer to DLK-888, "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:
- **Before installation of hood hinge, apply anticorrosive agent onto the mounting surface of the vehicle body.**
- **After installation, apply touch-up paint (the body color) onto the head of the hinge mounting bolts and nuts.**
- **After installation, perform hood fitting adjustment. Refer to DLK-881, "HOOD ASSEMBLY : Adjustment".**

HOOD SUPPORT ROD

HOOD SUPPORT ROD : Exploded View

INFOID:0000000001451870

SEC. 650

JMKIA0541ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

HOOD SUPPORT ROD : Removal and Installation

INFOID:0000000001451871

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

DLK-883

Install in the reverse order of removal.

HOOD LOCK CONTROL

HOOD LOCK CONTROL : Exploded View

INFOID:0000000001451872

SEC. 650

JMKIA0543ZZ

1. Hood lock assembly	2. Hood lock control cable	3. Hood lock opener

⌒ :Clip

Refer to GI-4, "Components" for symbols in the figure.

HOOD LOCK CONTROL : Removal and Installation

INFOID:0000000001451873

REMOVAL

1. Remove the hood lock opener mounting bolts, and then remove the hood lock opener.
2. Remove the front grille. Refer to EXT-18, "Removal and Installation".
3. Remove the fender protector. Refer to EXT-21, "Removal and Installation".
4. Remove the hood lock mounting bolts, and then remove the hood lock.
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.**

PIIB5801E

- **Check that the hood lock control cable is properly engaged with the hood lock.**
- **After installation, perform hood fitting adjustment. Refer to DLK-881, "HOOD ASSEMBLY : Adjustment".**
- **After installation, perform the hood lock control inspection. Refer to DLK-885, "HOOD LOCK CONTROL : Inspection".**

HOOD LOCK CONTROL : Inspection

INFOID:0000000001451874

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.

RADIATOR CORE SUPPORT

Exploded View

INFOID:0000000001451875

JMKIA0544ZZ

1.	Radiator core support upper center	2.	Radiator core support upper RH	3.	Radiator core support upper LH
4.	Radiator core support lower	5.	Radiator core support side RH	6.	Radiator core support side LH
7.	Hood lock support stay assembly	8.	Front bumper fascia center bracket	9.	Sensor bracket
10.	Air guide RH	11.	Air guide LH	12.	Air guide upper RH (M9R model)
13.	Air guide lower RH (M9R model)	14.	Air guide upper LH (M9R model)	15.	Air guide lower LH (M9R model)

Removal and Installation

INFOID:0000000001451876

REMOVAL

1. Remove the front bumper fascia and the energy absorber. Refer to EXT-13, "Removal and Installation".
2. Remove the bumper reinforcement. Refer to EXT-13, "Removal and Installation".
3. Disconnect the liquid tank connector. Refer to HA-66, "Exploded View".
4. Remove the front combination lamp. Refer to EXL-213, "Removal and Installation" (XENON TYPE), EXL-409, "Removal and Installation" (HALOGEN TYPE).
5. Remove the washer tank. Refer to WW-104, "Removal and Installation".
6. Remove the air inlet hose (LH) and air inlet tube (LH). Refer to EM-266, "Exploded View" (M9R model).
7. Remove the charge air cooler. Refer to EM-266, "Removal and Installation" (M9R model).
8. Disconnect the hood lock control cable clamp, and then remove the hood lock assembly. Refer to DLK-884, "HOOD LOCK CONTROL : Removal and Installation".
9. Remove the air guide mounting clips, and remove the air guide (LH/RH).
10. Remove the horn. Refer to HRN-6, "Removal and Installation".

11. Remove the Intelligent Key warning buzzer (with Intelligent Key systems). Refer to DLK-298, "Removal and Installation".

12. Disconnect the harness clips from the hood lock stay.

13. Remove the hood lock stay mounting bolts, and then remove the hood lock stay.

14. Remove the crush zone sensor. Refer to SR-15, "Removal and Installation".

15. Place securely the hood support rod inside the engine mounting bracket hole.
    CAUTION:
    Check that the hood is securely fix.

16. Remove the radiator core support upper side (RH,LH) mounting bolts, and remove the radiator core support side (RH,LH).

17. Remove the radiator core support upper center mounting bolts, and remove the radiator core support upper center.

18. Disconnect the harness clamp from radiator core support side (LH).

19. Remove the radiator core support lower assembly mounting bolts.

20. Remove the radiator core support lower assembly while other worker is holding the radiator and condenser assembly to prevent the radiator and condenser from falling.
    CAUTION:
    Operate with two workers, because of its heavy weight.

21. Put some wooden blocks (B) under the radiator and condenser, and use a rope (A) to suspend it to prevent it from falling.
    CAUTION:
    Operate with two workers, because of its heavy weight.

JMKIA0698ZZ

22. Remove the radiator core support side (RH,LH) mounting nuts, and remove the radiator core support side (RH,LH) from radiator core support lower.

INSTALLATION
Install in the reverse order of removal.

FRONT FENDER

Exploded View

SEC. 630

JMKIA0545ZZ

1.   Front fender   2.   Front fender finisher

Removal and Installation

REMOVAL
1.   Remove the fillet molding. Refer to EXT-24, "Removal and Installation".
2.   Remove the front grille. Refer to EXT-18, "Removal and Installation".
3.   Remove the front bumper fascia. Refer to EXT-13, "Removal and Installation".
4.   Remove the front combination lamp. Refer to EXL-213, "Removal and Installation" (XENON TYPE),EXL-409, "Removal and Installation" (HALOGEN TYPE).
5.   Remove the inner fender protector. Refer to EXT-21, "Removal and Installation".
6.   Remove the front fender finisher.
7.   Remove the side turn signal lamp. Refer to EXL-222, "Removal and Installation".
8.   Remove the mounting bolts and remove the front fender.
     CAUTION:
     Use a shop cloth to protect the body from being damaged during removal.

INSTALLATION
Install in the reverse order of removal.
CAUTION:
• **After installation, check the front fender adjustment. Refer to DLK-881, "HOOD ASSEMBLY : Adjustment" and DLK-891, "DOOR ASSEMBLY : Adjustment".**
• **After installation, apply the touch-up paint (the body color) onto the head of the front fender mounting bolts.**

FRONT DOOR
DOOR ASSEMBLY

DOOR ASSEMBLY : Exploded View

INFOID:0000000001451879

REMOVAL

JMKIA0546ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT

JMKIA0547GB

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000001451880

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

A

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.

B

INSTALLATION

Install in the reverse order of removal.

C

CAUTION:
- **Check the front door open/close operation after installation.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **When removing and installing the front door assembly, perform the fitting adjustment. Refer to DLK-891, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**

D

E

DOOR ASSEMBLY : Adjustment   INFOID:0000000001451881

F

CLEARANCE, SURFACE HEIGHT AND SURFACE MISMATCH ADJUSTMENT

mm(in)

G

Portion		Clearance	Surface height
Front fender – Front door	A – A	3.4 – 5.4 (0.134 – 0.213)	- 1.0 – 1.0 (- 0.039 – 0.039)
Front door – Rear door	B – B	3.5 – 5.5 (0.138 – 0.217)	- 1.0 – 1.0 (- 0.039 – 0.039)
Front door – Rear door	G – G	3.0 – 6.0 (0.118 – 0.236)	- 1.0 – 1.0 (- 0.039 – 0.039)

H

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.)

I

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-888, "Removal and Installation".

J

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.

DLK

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.

L

9. After adjustment tighten bolts and nuts to the specified torque.
10. Install the front fender. Refer to refer to DLK-888, "Removal and Installation".

M

   CAUTION:
   After installation, check the front fender adjustment. Refer to DLK-891, "DOOR ASSEMBLY : Adjustment".

N

DOOR STRIKER ADJUSTMENT

Adjust the door striker so that it becomes parallel with the lock insertion direction.
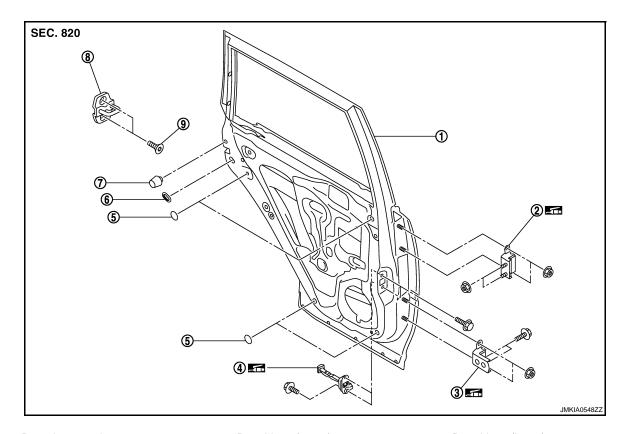
DOOR STRIKER

O

P

DOOR STRIKER : Exploded View

JMKIA0546ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR STRIKER : Removal and Installation

REMOVAL
Remove the TORX bolts, and then remove the door striker.

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-891, "DOOR ASSEMBLY : Adjustment".**
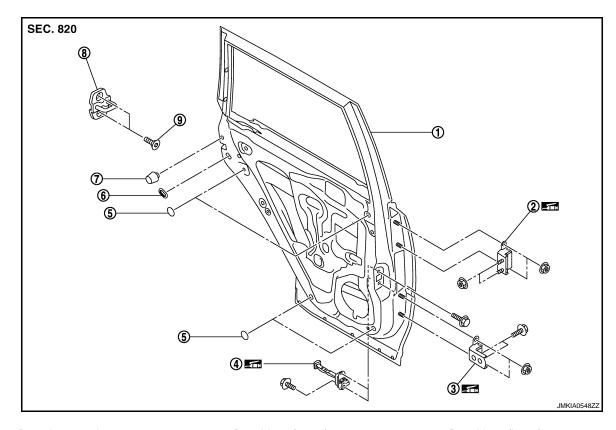
DOOR HINGE

DOOR HINGE : Exploded View

INFOID:0000000001451885

SEC. 800

JMKIA0546ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR HINGE : Removal and Installation

INFOID:0000000001451886

REMOVAL

1. Remove the front door assembly. Refer to DLK-890, "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:
• **Check the front door open/close operation after installation.**
• **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
• **When removing and installing the front door assembly, perform the fitting adjustment. Refer to DLK-891, "DOOR ASSEMBLY : Adjustment".**
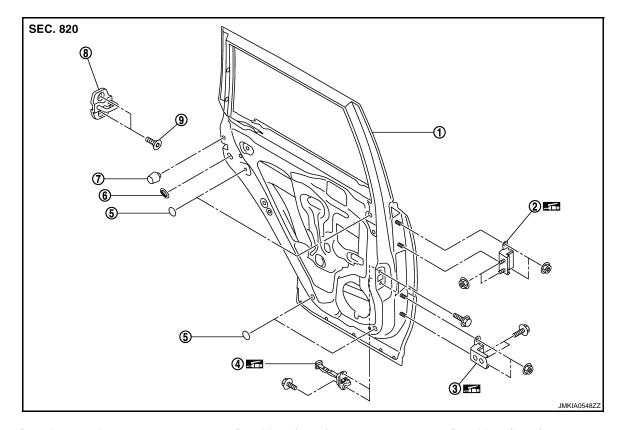• **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**

DOOR CHECK LINK

DOOR CHECK LINK : Exploded View

JMKIA0546ZZ

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR CHECK LINK : Removal and Installation

REMOVAL

1. Fully close the front door window.
2. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
3. Remove the front door speaker. Refer to AV-38, "Removal and Installation".
4. Remove the mounting bolts of the door check link on the vehicle.
5. Remove the mounting bolts of the door check link on the door panel.
6. Take the door check link out from the hole of the door panel.

INSTALLATION

Install in the reverse order of removal.
CAUTION:
Check the front door open/close operation after installation.

REAR DOOR

DOOR ASSEMBLY

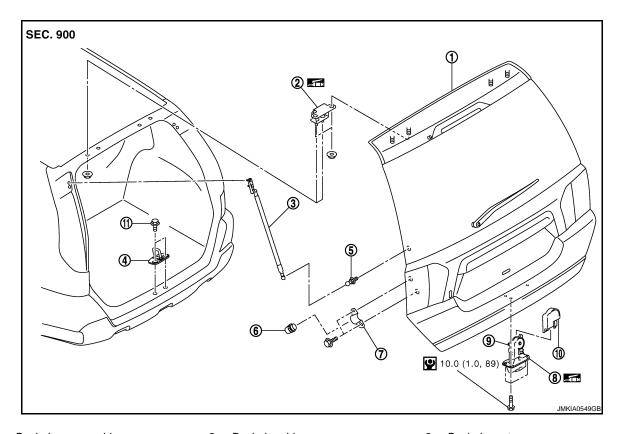### DOOR ASSEMBLY : Exploded View

INFOID:0000000001451890

REMOVAL

JMKIA0548ZZ

1.	Rear door panel	2.	Door hinge (upper)	3.	Door hinge (lower)
4.	Door check link	5.	Seal	6.	Hole cover
7.	Door bumper rubber	8.	Door striker	9.	TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT

24.5 (2.5, 18)

21.0 (2.1, 16)

19.5 (2.0, 14)

25 (2.6, 18)

19.5 (2.0, 14)

21.0 (2.1, 16)

16.7 (1.7, 12)

JMKIA0547GB

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

Refer to GI-4, "Components" for symbols in the figure.

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000001451891

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

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.

INSTALLATION

Install in the reverse order of removal.

CAUTION:
- **Check the rear door lock/unlock operation after installation.**
- **Check the rear door open/close operation after installation.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **After installation, perform the fitting adjustment. Refer to DLK-897, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the door hinge mounting nuts.**

DOOR ASSEMBLY : Adjustment   INFOID:0000000001451892

CLEARANCE, SURFACE HEIGHT AND SURFACE MISMATCH ADJUSTMENT

mm(in)

Portion		Clearance	Surface height
Front door – Rear door	**B – B**	**3.5 – 5.5 (0.138 – 0.217)**	**-1.0 – 1.0 (-0.039 – 0.039)**
Rear door – Body side outer	**C – C**	**3.5 – 5.5 (0.138 – 0.217)**	**-1.0 – 1.0 (-0.039 – 0.039)**
Front door – Rear door	**G – G**	**3.0 – 6.0 (0.118 – 0.236)**	**-1.5 – 1.5 (-0.059 – 0.059)**

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 lower garnish. Refer to INT-16, "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 lower garnish. Refer to INT-16, "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:0000000001451893

SEC. 820

JMKIA0548ZZ

1.	Rear door panel	2.	Door hinge (upper)	3.	Door hinge (lower)
4.	Door check link	5.	Seal	6.	Hole cover
7.	Door bumper rubber	8.	Door striker	9.	TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

DOOR STRIKER : Removal and Installation

INFOID:0000000001451894

REMOVAL
Remove the TORX bolts, and then remove the door striker.

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-897, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Exploded View

INFOID:0000000001451896

JMKIA0548ZZ

1.	Rear door panel	2.	Door hinge (upper)	3.	Door hinge (lower)
4.	Door check link	5.	Seal	6.	Hole cover
7.	Door bumper rubber	8.	Door striker	9.	TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

DOOR HINGE : Removal and Installation

INFOID:0000000001451897

REMOVAL

1. Remove the center pillar lower garnish. Refer to INT-16, "Removal and Installation".
2. Remove the rear door assembly. Refer to DLK-896, "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:
- **Check the rear door open/close operation after installation.**
- **Check the door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **When removing and installing the rear door assembly, perform the fitting adjustment. Refer to DLK-897, "DOOR ASSEMBLY : Adjustment".**
- **After installing, apply the touch-up paint (the body color) onto the head of the hinge mounting nuts.**

DOOR CHECK LINK

DOOR CHECK LINK : Exploded View

INFOID:0000000001451899

SEC. 820

JMKIA0548ZZ

1. Rear door panel
2. Door hinge (upper)
3. Door hinge (lower)
4. Door check link
5. Seal
6. Hole cover
7. Door bumper rubber
8. Door striker
9. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

DOOR CHECK LINK : Removal and Installation

INFOID:0000000001451900

REMOVAL

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Remove the rear door speaker.
3. Remove the mounting bolts of the check link on the vehicle.
4. Remove the door check link mounting bolts on the door panel.
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:0000000001451901

REMOVAL

JMKIA0549GB

1. Back door assembly
2. Back door hinge
3. Back door stay
4. Back door striker
5. Back door stay stud ball
6. Bumper rubber
7. Bumper rubber bracket
8. Back door lock assembly
9. Emergency lever
10. Back door lock cover (RH handle)
11. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

ADJUSTMENT

JMKIA0550GB

1. Back door
2. Roof
3. Rear combination lamp
4. Body side outer
5. Back door hinge
6. Bumper rubber
7. Back door striker
8. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR ASSEMBLY : Removal and Installation   INFOID:0000000001451902

REMOVAL

1. Remove the back door finisher inner (upper, lower, side LH). Refer to INT-31, "Removal and Installation".
2. Disconnect the connectors in the back door, and then remove the grommet, and pull out the harness.

A

3. Remove the grommet, and then disconnect the connectors (1), and pull out the washer tube (2) at (A).

B

C

JMKIA0557ZZ

D

4. Pull the harness out of the back door.

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

E

A : Jack

B : Shop cloth

F

G

JMKIA0555ZZ

H

6. Remove the back door stay bracket mounting bolts on the back door.

7. Remove the back door hinge mounting nuts on the back door and remove the back door assembly.
   CAUTION:
   Perform work with 2 workers, because of its heavy weight.

I

INSTALLATION

Install in the reverse order of removal.
CAUTION:
• **Check the back door open/close operation after installation.**
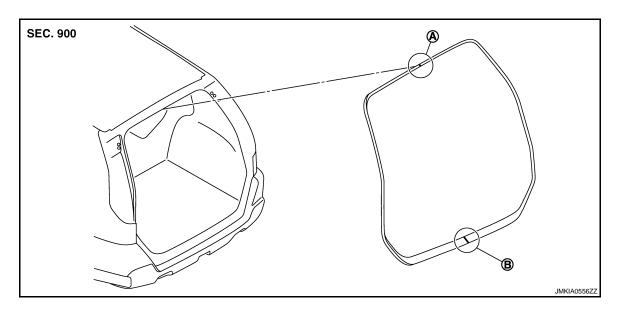• **Check the back door lock/unlock operation after installation.**
• **After installation, perform fitting adjustment. Refer to DLK-903, "BACK DOOR ASSEMBLY : Adjustment".**

J

DLK

BACK DOOR ASSEMBLY : Adjustment   *INFOID:0000000001451903*

L

mm(in)

Portion				Standard
Back door panel – Roof panel	**A – A**	**E**	**Clearance**	**5.0 – 7.0 (0.197 – 0.276)**
		F	**Surface height**	**-0.3 – 1.7 (-0.012 – 0.067)**
Back door panel – Rear combination lamp	**B – B**	**G**	**Clearance**	**4.0 – 8.0 (0.157 – 0.315)**
Back door panel – Rear combination lamp	**C – C**	**H**	**Clearance**	**4.0 – 8.0 (0.157 – 0.315)**
Back door panel – Body side outer	**D – D**	**I**	**Clearance**	**5.0 – 7.0 (0.197 – 0.276)**
		J	**Surface height**	**-1.0 – 1.1 (0.039 – 0.043)**

M

N

O

P

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:0000000001451904

JMKIA0549GB

1. Back door assembly	2. Back door hinge	3. Back door stay
4. Back door striker	5. Back door stay stud ball	6. Bumper rubber
7. Bumper rubber bracket	8. Back door lock assembly	9. Emergency lever
10. Back door lock cover (RH handle)	11. TORX bolt	

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR STRIKER : Removal and Installation

INFOID:0000000001451905

REMOVAL
Remove the TORX bolts, and then remove the back door striker.

INSTALLATION
Install in the reverse order of removal.
CAUTION:
• **Check the back door open/close operation after installation.**
• **When removing and installing the back door striker, be sure to perform the fitting adjustment. Refer to DLK-903, "BACK DOOR ASSEMBLY : Adjustment".**

BACK DOOR HINGE

BACK DOOR HINGE : Exploded View

INFOID:0000000001451907

JMKIA0549GB

1. Back door assembly
2. Back door hinge
3. Back door stay
4. Back door striker
5. Back door stay stud ball
6. Bumper rubber
7. Bumper rubber bracket
8. Back door lock assembly
9. Emergency lever
10. Back door lock cover (RH handle)
11. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR HINGE : Removal and Installation

INFOID:0000000001451908

REMOVAL

1. Remove the back door assembly. Refer to DLK-902, "BACK DOOR ASSEMBLY : Removal and Installation".
2. Remove the back door weather-strip. Refer to DLK-907, "BACK DOOR WEATHER-STRIP : Removal and Installation".
3. Remove the luggage side lower finisher. Refer to INT-28, "Removal and Installation".
4. Remove the luggage side upper finisher. Refer to INT-28, "Removal and Installation".
5. Using remover tool, remove the headlining clip at the rear side of the headlining. Refer to INT-22, "NORMAL ROOF : Exploded View" (NORMAL ROOF), INT-25, "SUNROOF : Exploded View" (SUNROOF).
6. Remove the rear side of the headlining.
7. 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:
- **Check the back door open/close operation after installation.**
- **Check the hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **When removing and installing the back door assembly, perform the fitting adjustment. Refer to DLK-903, "BACK DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the hinge mounting nuts.**

BACK DOOR STAY

BACK DOOR STAY : Exploded View

JMKIA0549GB

1. Back door assembly
2. Back door hinge
3. Back door stay
4. Back door striker
5. Back door stay stud ball
6. Bumper rubber
7. Bumper rubber bracket
8. Back door lock assembly
9. Emergency lever
10. Back door lock cover (RH handle)
11. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR STAY : Removal and Installation

REMOVAL

1. Remove the mounting bolts (body side), and then remove the back door stay bracket.
2. Remove the stud ball (back door side), and then remove the back door stay.

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

REMOVAL

SEC. 900

JMKIA0556ZZ

1. Back door weather-strip
A. Mark (upper)
B. Mark (lower)

BACK DOOR WEATHER-STRIP : Removal and Installation

INFOID:0000000001451913

REMOVAL
Pull up and remove engagement with body from the weather-strip joint.
CAUTION:
After removal, do not pull strongly on the weather-strip.

INSTALLATION
1. Working from the upper section, align the weather-strip mark with vehicle center position mark and install the weather-strip onto the vehicle.
2. For the lower section, align the weather-strip seam with center of the back door striker.
3. After installation, pull the weather-strip gently to ensure that there is no loose section.
   NOTE:
   Make sure that the weather-strip is fit tightly at each corner and the luggage rear plate.

FRONT DOOR LOCK
DOOR LOCK

DOOR LOCK : Exploded View

INFOID:0000000001451914

SEC. 805

JMKIA0551GB

⑤ 6.0 (0.61, 53)

⑩ 5.8 (0.59, 51)

1.	Outside handle assembly	2.	Door key cylinder assembly (driver side) Outside handle escutcheon (passenger side)

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

◁ :Vehicle front

Refer to GI-4, "Components" for symbols in the figure.

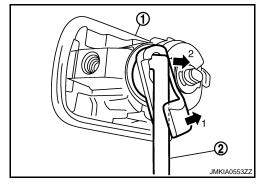### DOOR LOCK : Removal and Installation

INFOID:0000000001451915

REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Disconnect the inside handle knob cable and the lock knob cable.
3. Remove the front door glass. Refer to GW-17, "Removal and Installation".
4. Remove the front door module assembly. Refer to GW-17, "Exploded View".
5. Disconnect the door antenna and the door request switch connector and remove the harness clamp (models with Intelligent Key system).

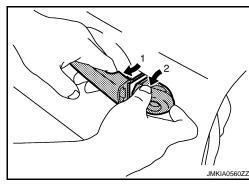6. Remove the door side grommet, and loosen the TORX bolt.
   CAUTION:
   Do not forcibly remove the TORX bolt.

JMKIA0020ZZ

7. Reach in to separate the door key cylinder rod connection (on the handle) (driver side).

   1. Door key cylinder assembly
   2. Key rod

JMKIA0553ZZ
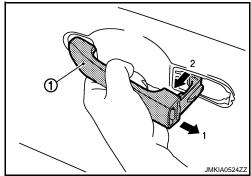
8. While pulling the outside handle, remove door key cylinder assembly.

JMKIA0560ZZ

9. Disconnect front door request switch harness connector (models with Intelligent Key system).

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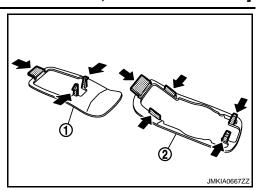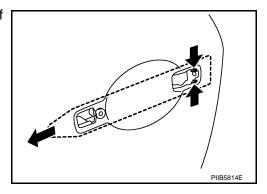

JMKIA0524ZZ

11. Remove the front gasket (1) and the rear gasket (2).

JMKIA0667ZZ

12. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.

PIIB5814E

13. Reach in to separate the outside handle cable connection.

14. Remove the door lock assembly TORX bolts.

15. Disconnect the door lock actuator connector, and then remove the door lock assembly.

16. Remove the key rod from door lock assembly.

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:0000000001451917

JMKIA0551GB

1. Outside handle assembly
2. Door key cylinder assembly (driver side)
   Outside handle escutcheon (passenger side)
3. Front gasket

4. Rear gasket
5. TORX bolt
6. Outside handle bracket

7. Key rod
8. Door lock assembly
9. Inside handle

10. TORX bolt

⬅ :Vehicle front

Refer to GI-4, "Components" for symbols in the figure.

INSIDE HANDLE : Removal and Installation

INFOID:0000000001451918

REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove the inside handle mounting bolts.
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:0000000001451920

SEC. 805

⑤ 6.0 (0.61, 53)

⑩ 5.8 (0.59, 51)

JMKIA0551GB

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

⟵ :Vehicle front

Refer to GI-4, "Components" for symbols in the figure.

OUTSIDE HANDLE : Removal and Installation

INFOID:0000000001451921

REMOVAL

1. Remove the front door finisher. Refer to INT-10, "FRONT DOOR FINISHER : Removal and Installation".
2. Disconnect the inside handle knob cable and the lock knob cable.
3. Remove the front door glass. Refer to GW-17, "Removal and Installation".
4. Remove the front door module assembly. Refer to GW-17, "Exploded View".
5. Disconnect the connector and remove the harness clamp (models with Intelligent Key system).

6. Remove the door side grommet, and loosen the TORX bolt.
   CAUTION:
   Do not forcibly remove the TORX bolt.

JMKIA0020ZZ

7. Reach in to separate the door key cylinder rod connection (on the handle) (driver side).

   1. Door key cylinder assembly
   2. Key rod

JMKIA0553ZZ

8. Disconnect the door key cylinder switch harness connector.
9. While pulling the outside handle, remove the door key cylinder assembly (driver side) or outside handle escutcheon (passenger side).

JMKIA0560ZZ

10. Disconnect the front door request switch harness connector (models with Intelligent Key system).
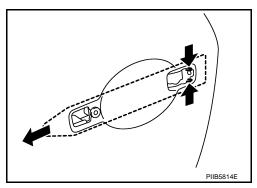11. While pulling the outside handle, slide toward rear of vehicle to remove the outside handle (1).

JMKIA0524ZZ

12. Remove the front gasket (1) and rear gasket (2).

JMKIA0667ZZ

13. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.

PIIB5814E

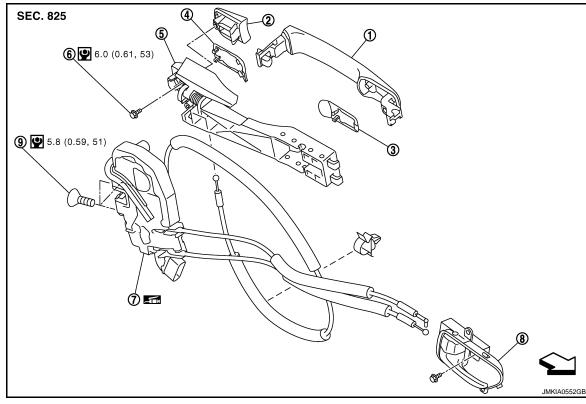14. Reach in to separate the outside handle cable connection.

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.**

REAR DOOR LOCK
DOOR LOCK

DOOR LOCK : Exploded View

INFOID:0000000001451922

SEC. 825

⑥ 6.0 (0.61, 53)

⑨ 5.8 (0.59, 51)

JMKIA0552GB

1. Outside handle assembly	2. Outside handle escutcheon	3. Front gasket
4. Rear gasket	5. Outside handle bracket	6. TORX bolt
7. Door lock assembly	8. Inside handle	9. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK : Removal and Installation

INFOID:0000000001451923

REMOVAL

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Disconnect the inside handle knob cable.
3. Remove the door sealing screen. Refer to GW-23, "Removal and Installation".
4. Remove the lower partition sash. Refer to GW-17, "Removal and Installation".
5. Remove the corner piece assembly. Refer to GW-17, "Removal and Installation".
6. Remove the door lock assembly TORX bolts.
7. Disconnect the door lock actuator connector.

8. Slide the door lock assembly from the inside the door panel until the outside handle escutcheon TORX bolt can be seen.

JMKIA0554ZZ

9. While pulling the outside handle, remove the outside handle escutcheon.

JMKIA0560ZZ

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

JMKIA0524ZZ

11. Remove the front gasket (1) and the rear gasket (2).

JMKIA0667ZZ

12. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.

PIIB5814E

13. Reach in to separate the outside handle cable connection.
14. Remove the door lock assembly.

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:0000000001451925

SEC. 825

⑥ 6.0 (0.61, 53)

⑨ 5.8 (0.59, 51)

JMKIA0552GB

1. Outside handle assembly	2. Outside handle escutcheon	3. Front gasket
4. Rear gasket	5. Outside handle bracket	6. TORX bolt
7. Door lock assembly	8. Inside handle	9. TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

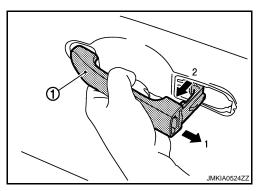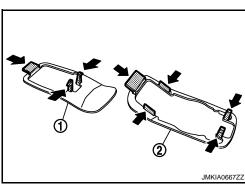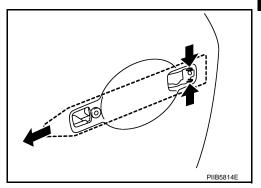### INSIDE HANDLE : Removal and Installation

INFOID:0000000001451926

REMOVAL

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Remove the inside handle mounting screws.
3. Disconnect the inside handle 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.**
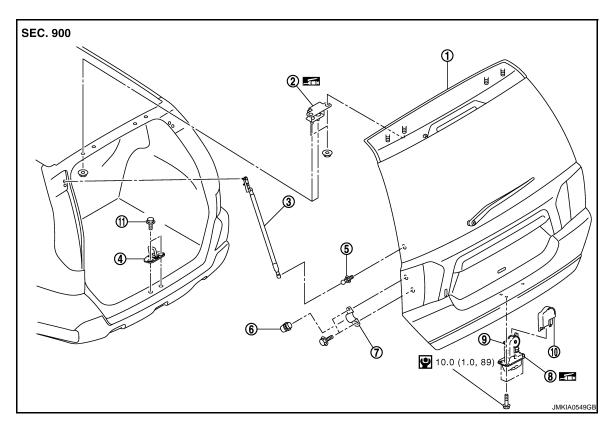- **Check the door open/close operation after installation.**

OUTSIDE HANDLE

OUTSIDE HANDLE : Exploded View

INFOID:0000000001451928

JMKIA0552GB

1.	Outside handle assembly	2.	Outside handle escutcheon	3.	Front gasket
4.	Rear gasket	5.	Outside handle bracket	6.	TORX bolt
7.	Door lock assembly	8.	Inside handle	9.	TORX bolt

Refer to GI-4, "Components" for symbols in the figure.

OUTSIDE HANDLE : Removal and Installation

INFOID:0000000001451929

REMOVAL

1. Remove the rear door finisher. Refer to INT-13, "REAR DOOR FINISHER : Removal and Installation".
2. Disconnect the inside handle knob cable.
3. Remove the door sealing screen. Refer to GW-23, "Removal and Installation".
4. Remove the lower partition sash. Refer to GW-17, "Removal and Installation".
5. Remove the corner piece assembly. Refer to GW-17, "Removal and Installation".
6. Remove the door lock assembly TORX bolts.
7. Disconnect the door lock actuator connector.
8. Slide the door lock assembly from the inside the door panel until the outside handle escutcheon TORX bolt can be seen.

JMKIA0554ZZ

A

B

C

9. While pulling the outside handle, remove the outside handle escutcheon.

JMKIA0560ZZ

D

E

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

F

G

JMKIA0524ZZ

H

I

11. Remove the front gasket (1) and the rear gasket (2).

J

DLK

JMKIA0667ZZ

12. While pulling the outside handle bracket, slide toward rear of vehicle to remove the outside handle bracket.

L

M

N

PIIB5814E

O

13. 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.**

P

DLK-919

BACK DOOR LOCK
DOOR LOCK

DOOR LOCK : Exploded View
INFOID:0000000001451930

JMKIA0549GB

1. Back door assembly	2. Back door hinge	3. Back door stay
4. Back door striker	5. Back door stay stud ball	6. Bumper rubber
7. Bumper rubber bracket	8. Back door lock assembly	9. Emergency lever
10. Back door lock cover (RH handle)	11. TORX bolt	

Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK : Removal and Installation
INFOID:0000000001451932

REMOVAL

1. Remove the back door trim finisher lower. Refer to INT-31, "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.

A

B

FUEL FILLER LID OPENER
FUEL FILLER LID

FUEL FILLER LID : Exploded View

INFOID:0000000001451933

C

SEC. 780•905

JMKIA0559ZZ

1. Fuel filler cap holder
2. Bumper rubber
3. Fuel filler lid lock actuator
4. Fuel filler lid lock seal
5. Fuel filler lid assembly
6. TORX bolt
7. Spring

FUEL FILLER LID : Removal and Installation

INFOID:0000000001451934

DLK

REMOVAL

1. Fully open the fuel filler lid.
2. Remove the filler cap.
3. Remove the TORX bolts, and then remove the fuel filler lid assembly.
4. Remove the following parts after removing the fuel filler lid assembly.
   • Fuel filler cap holder
   • Bumper rubber
   • Spring

INSTALLATION
Install in the reverse order of removal.
CAUTION:
• **Check the fuel filler lid open/close operation after installation.**
• **After installation, apply the touch-up paint (the body color) onto the head of the mounting screws.**
NOTE:
After installation, perform fitting adjustment.

mm(in)

	Clearance	Evenness
Fuel filler lid— – Body side outer	2.0 – 4.0 (0.079 – 0.157)	−1.0 – 1.0 (−0.039 – 0.039)

DLK-921

DOOR SWITCH

Exploded View

SEC. 251

JMKIA0451ZZ

1.   Door switch (driver side)

Removal and Installation
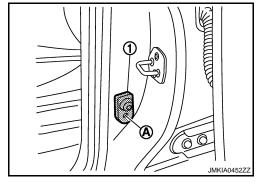
REMOVAL

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).

JMKIA0452ZZ

INSTALLATION
Install in the reverse order of removal.

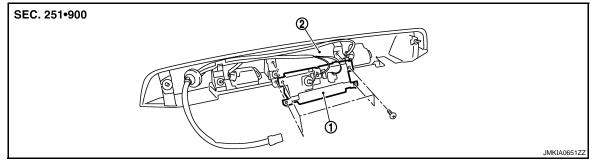# BACK DOOR OPENER SWITCH

Exploded View

INFOID:0000000001495973

SEC. 251•900

JMKIA0651ZZ

1. Back door opener switch assembly   2. Back door finisher

Removal and Installation

INFOID:0000000001495974

REMOVAL

1. Remove the back door finisher. Refer to EXT-34, "Removal and Installation".
2. Remove the back door opener switch assembly mounting bolt (A).
3. Remove the back door opener switch assembly (2) from back door finisher (1).

JMKIA0638ZZ

INSTALLATION
Install in the reverse order of removal.

KEYFOB BATTERY

Exploded View

INFOID:0000000001281455

Refer to DLK-924, "Removal and Installation".

Removal and Installation

INFOID:0000000001281456

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:
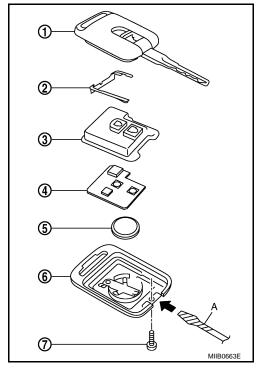   **When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.**
5. After replacement, fit the lower and upper cases together, part (2), (3) and tighten with the screw.
   CAUTION:
   After replacing the battery, Be sure to check that door locking operates normally using the keyfob.
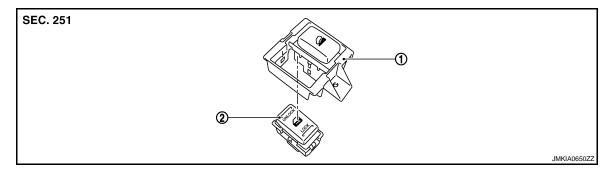   Refer to DLK-823, "Component Function Check".

MIIB0663E

INSTALLATION
Install in the reverse order of removal.
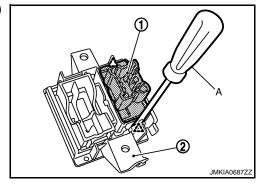
DOOR LOCK AND UNLOCK SWITCH

Exploded View

INFOID:0000000001559274

SEC. 251

JMKIA0650ZZ

1.   Switch bracket   2.   Door lock and unlock switch

Removal and Installation

INFOID:0000000001559275

Remove the door lock and unlock switch (1) from switch bracket (2) using flat-bladed screw driver (A) etc.

△ **: Pawl**

JMKIA0687ZZ